Appendix A

Project Renderings

Figure 1 Conceptual Site Rendering – View of Building B1 from High Street Facing South



Source: KTGY

Figure 2 Conceptual Site Rendering – View of Building A from High Street Facing Southwest



Source: KTGY

Figure 3 Conceptual Site Rendering – Village Green and Commercial Buildings



Source: KTGY

Appendix B

Preliminary Hydrologic and Hydraulic/Stormwater Quality Report

PRELIMINARY HYDROLOGIC AND HYDRAULIC/ STORMWATER QUALITY REPORT

for

High Street Depot
High Street
Moorpark, CA 93021

Prepared For:

DalyGroup Inc
31255 Cedar Valley Drive
Westlake Village, CA 91362
805.309.6100

Prepared By:

CCE Design Associates Inc
711 E. Daily Drive
Suite 107
Camarillo, CA 93010
805.738.5434

PRELIMINARY HYDROLOGIC AND HYDRAULIC / STORMWATER QUALITY REPORT

for

High Street Depot
High Street
Moorpark, CA 93021

Date:	June 18, 2019
Project Manager:	Randy Chapman, P.E. RCE No. 69614
Project Engineer:	Ben Bourne
CCE Job Number:	2018-0028

Prepared By: _____

Randy Chapman, P.E. Date
CCE Design Associates, Inc

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2. Introduction

PURPOSE

The purpose of this project is to validate the grading and drainage design for the proposed High Street Depot Station project. The project will involve grading of an existing vacant parcel to create a mixed-use project of approximately 91 apartment units and "town plaza" commercial space.

SITE LOCATION

This project encompasses two parcels adjacent to High Street between Moorpark Avenue and Magnolia Street. The assessor's parcel number is 512-0-090-115. This site is bounded on the south by the Moorpark Metrolink rail station, to the north by High Street, to the west by the Moorpark Chamber of Commerce, and to the east by a vacant lot that is in the process of being developed into additional parking for the rail station

DESCRIPTION

The existing site is located on approximately 2.15 acres. The parcel contains several vacant buildings and intermittent hardscape that will be demolished and removed to create room for this project. Drainage patterns in the area trend gently from east to west, with slopes of approximately 1% within High Street.

The project, as proposed, intends to convert the existing space into a mixed-use site consisting of 91 residential units and approximately 13,656 square feet of commercial space, including a "Plaza" green space, LID BMPs, landscaping, and associated parking and sidewalk hardscape. Overall drainage patterns will remain relatively unchanged; however, storm drain inlets will be added to collect parking areas along the southern portion of the site and new LID BMPs (bioretention areas and biofiltration planter boxes) integrated into the building and landscaping design, streetscape, and parking lot areas. Storm drain inlets will be collected by a new onsite storm drain system which will discharge into the existing storm drain within High Street which drains to Moorpark Storm Drain No. 1.

As it relates to flood control, the project is located within the Calleguas Creek Watershed (Zone 3) and drains to Moorpark Storm Drain No. 1. Per requirements imposed by the Ventura County Watershed Protection District and per findings within the "Gabbert & Walnut Canyon Channels Flood Control Deficiency Study" prepared in 1997, updated in 2005, and adopted by the City of Moorpark, the project is required to mitigate post-development peak flowrates to 90-pecent or below that of the pre-development flowrate. This is proposed to be accomplished through the inclusion of new underground detention devices. Additionally, the site is not located within a FEMA Special Flood Hazard Area (SFHA); however, the site is located within a shaded Zone X (within the 500-year floodplain). Flood zone information and designation is per Flood Insurance Rate Map (FIRM) number 06111C0817E dated January 20, 2010.

The site, being located within the Downtown Specific Plan area, is subject to the current 2011 Ventura County Technical Guidance Manual (Order R4-2010-0108). This project proposes to implement Low Impact Development (LID) Best Management Practices (BMPs) to the maximum extent possible and will treat the full stormwater quality design volume (SQDV) per guidelines within the current VC TGM.

Lastly, as the surrounding area and watershed are largely built out, there are no anticipated substantial changes to drainage patterns in the area from future development. Rather, as sites redevelop and fall under current MS4 requirements, drainage patterns in the area will likely improve.

3. References

- "Ventura County Hydrology Manual," Ventura County Watershed Protection District, Revised 2017.
- "Ventura County Technical Guidance Manual for Stormwater Quality Control Measures," Ventura County Watershed Protection District, 2011, Errata Update 2018.
- "Technical Guidance Manual for Stormwater Quality Control Measures," Ventura County Watershed Protection District, Revised 2002.

4. Objectives

The objectives of this report are to determine the existing and proposed stormwater flow rates for this project based on existing topography, land use and impervious cover, and to design drainage infrastructure to convey and mitigate as required proposed storm runoff, as well as to meet stormwater treatment measures in an acceptable manner to the City of Moorpark. This report will address the following items:

- Hydrology – This report will discuss existing and proposed peak runoff flowrates as anticipated from the development of this project.
- Hydraulics – This report will validate the sizing of proposed storm drain facilities associates with the development of the site.
- Stormwater Treatment – This report will detail proposed LID BMPs to be implemented as part of the development to treat stormwater runoff per City and County requirements.
- Flood Control – This project will be designed in a manner to exceed the FEMA 100-year storm event elevation and will provide detention pursuant to city and county requirements.

5. Procedure

This study was prepared using the design criteria and methodology developed by the Ventura County Watershed Protection District. Calculations presented within this study were determined using the Ventura County Watershed Protection District Modified Rational Method Hydrology Program (VCRat v.2.64). As the minimum input area for VCRat is 5 acres and the total project is only comprised of approximately 2.15 acres, areas were input using a factor of 10 and all results were scaled down accordingly.

In regard to hydrologic calculations, the existing condition (pre-development) peak flowrate was determined using the VCRat TC Calculator to establish the allowable discharge rate for the project, which was determined to be 90-percent of the pre-development peak flowrate.

For calculation of the proposed condition (post-development) peak flowrate, the site was divided into two separate tributary areas; the East Tributary and the West Tributary. The dividing line was taken at the center of the Plaza Green area with all area west of that high point elevation being collected be a storm drain system within the westerly parking lot and driveway, and all area east of that high point

being collected by a separate storm drain system located within the easterly parking lot. Each storm drain system will have its own detention system comprised of an oversized reach of pipe (see Section 7 below), and separate connection to the existing storm drain system within High Street.

6. Hydrology

The following inputs were utilized to calculate the existing condition (pre-development) 100-year storm event peak runoff flowrate:

- Total Area: 2.15 ac
- Flood Zone: 3
- Rainfall Zone: J'
- Development Type: Commercial
- Soil Type: 5.00
- Percent Impervious: 30
- Time of concentration: 9 minutes

The resultant peak flowrate was determined to be 4.62 cfs. See Attachment A of this report for supporting calculations.

The following inputs were utilized to calculate the East Tributary proposed condition (post-development) 100-year storm event peak runoff flowrate:

- Total Area: 0.67 ac
- Flood Zone: 3
- Rainfall Zone: J'
- Development Type: Commercial
- Soil Type: 5.00
- Percent Impervious: 80
- Time of concentration: 13 minutes

The resultant peak flowrate was determined to be 1.74 cfs. See Attachment B-1 of the report for supporting calculations.

The following inputs were utilized to calculate the West Tributary proposed condition (post-development) 100-year storm event peak runoff flowrate:

- Total Area: 1.47 ac
- Flood Zone: 3
- Rainfall Zone: J'
- Development Type: Commercial
- Soil Type: 5.00
- Percent Impervious: 80
- Time of concentration: 16 minutes

The resultant peak flowrate was determined to be 3.34 cfs. See Attachment B-2 of the report for supporting calculations.

The following summarizes the hydrologic results from each subarea:

Area ID	Area (ac)	Q_{100} (cfs)
East (Proposed)	0.68	1.74
West (Proposed)	1.47	3.34
Total (Proposed)	2.15	5.08
Existing	2.15	4.62

7. Flood Control (Detention)

Per findings within the "Gabbert & Walnut Canyon Channels Flood Control Deficiency Study" and due to the limited capacity of existing downstream conveyance facilities, the Ventura County Watershed Protection District has established that the allowable peak discharge flowrate for this project is 90-percent or less of the pre-development peak flowrate. As the pre-development peak flowrate for this project has been determined to be 4.62 cfs (see Section 6), the allowable peak discharge flowrate for this project is 4.16 cfs.

This project proposes to mitigate the increase in peak runoff flowrate caused by increased impervious cover by providing underground storage, or detention, through the inclusion of oversized storm drainpipe with orifice plates to restrict outflow to the allowable rates as defined by this report. Per Section 6 of this report, the East Tributary proposed condition yields a 100-year storm peak flowrate of 1.74 cfs and the West Tributary proposed condition yields a 100-year storm peak flowrate of 3.34 cfs, combining for a total 100-year storm event peak discharge flowrate for the proposed condition of 5.08 cfs. As the allowable peak discharge flowrate for the project is 4.16 cfs, the additional 0.92 cfs will be mitigated through onsite detention, specifically through the inclusion of 65-feet of oversized 36-inch pipe within the East Tributary and 450-feet of oversized 30-inch pipe within the West Tributary. The reach of oversized pipe within the East Tributary is proposed to be located within the Plaza Green area and will restrict proposed peak flowrates to 1.48 cfs, and the reach of oversized pipe within the West Tributary is proposed to be located within the western drive aisle of the parking lot and will restrict proposed peak flowrates to 2.61 cfs, yielding a total peak flowrate in the proposed condition of 4.09 cfs. Detention sizing calculations are contained within Attachment C of this report and specific locations of oversized pipe are shown on the Hydrology Map found within Attachment F.

As this is a preliminary report, calculations were only run for the 100-year storm event to ensure adequate space is available to implement detention devices as required. At the time of final design, all relevant storm events will be calculated, and orifice control devices will be sufficiently designed to restrict outflow during all applicable storm events.

8. Stormwater Quality

Stormwater quality for this project is in accordance with the 2011 Ventura County Technical Guidance Manual (TGM) and intends to treat the full stormwater quality design volume (SQDV) onsite through the inclusion of Low Impact Development (LID) Best Management Practices (BMPs).

SITE CONDITIONS

As previously stated in this report, the site is relatively flat and slopes are generally 5% or less, suggesting infiltration or other retention BMPs are an effective option; however, site geotechnical

conditions and design elements render infiltration as infeasible as the site is subject to liquefaction and is adjacent to existing and future railroad right-of-way.

SITE DESIGN PRINCIPLES AND TECHNIQUES

Site design principles and techniques have been applied to this proposed development to reduce the hydrologic and water quality impacts typically associated with new development. The following is a list of site design features incorporated in this project and a brief explanation of how they were implemented:

- Site planning –The site has also been laid out in a manner to effectively disconnect impervious surface so that 5% Effective Impervious Area (EIA) is achieved.
- Protect and restore natural areas – Existing natural areas were preserved to the maximum extent possible. The Village Green plaza area adjacent to the commercial buildings, along with areas adjacent to the parking lots, have been designed to be natural, pervious areas.
- Minimize land disturbance – To be implemented during construction activities.
- Minimize impervious cover – Landscape areas were included throughout the site where practical.

SOURCE CONTROL MEASURES

Source Control Measures are operational practices that reduce potential pollutants at the source. Applicable Source Control Measures for this project are storm drainage signage (S-1) which are to be added to all storm drain inlets, and proper design of outdoor trash storage and waste handling areas (S-3).

TREATMENT CONTROL BMPS

As previously discussed with City staff, mechanical treatment, specifically through the inclusion of stormfilters, is highly discouraged and an approach more in line with current Low Impact Development (LID) standards is preferred for treatment of the proposed project. With that in mind, the proposed treatment scheme as presented herein attempts to utilize LID Best Management Practices (BMPs) to the maximum extent possible in order to promote natural treatment processes and volume mitigation. In addition, the project will match pre/post flowrates discharging from the site through the inclusion of onsite detention (see Section 7 above).

Due to the linear nature of the site and the proposed site layout, stormwater treatment of the site is broken into three separate locations which are as follows; treatment of building roof areas, treatment of parking / drive-aisle areas, and treatment of street frontage areas. Each are discussed in detail below.

Building Roof Areas:

Treatment of the building roof areas is proposed to be accomplished through the inclusion of flow-through planter boxes (BIO-2 per the TGM). Building roof areas will be collected by roof drains and conveyed through downspouts to proposed planter boxes located adjacent to the buildings. Planter boxes will be sized to treat the full SQDV per the current VC TGM sizing criteria. Sizing calculations for planter boxes are contained within Attachment D of this report.

Parking / Drive-Aisle Areas:

Treatment of the parking / drive-aisle areas is proposed to be accomplished through the inclusion of bio-retention areas with underdrains (BIO-1 per the TGM). Parking stalls along the southerly side of the drive-aisle are proposed to be constructed of pervious pavement in order to render the area 'ineffective' and essentially function as pervious area. Due to the mixed-use nature of the site plan, the existing geotechnical constraints that are being mitigated, and the adjacent railroad right-of-way, there isn't adequate area available to treat this entire area through the inclusion of surface bio-retention; therefore, this project proposes to treat to the maximum extent possible with the bio-retention, and use an 'in-lieu' approach to treat the remaining area. The 'in-lieu' method intends to treat the equivalent area within High Street with biofiltration. As only a small portion of Parking / Drive-Aisle – 1 cannot be met by onsite bioretention, an equivalent area within High Street will be treated by the inclusion of a linear stormwater biofiltration system (BIO-5) within the street frontage as described below. The entire Parking / Drive-Aisle – 2 is proposed to be treated with the 'in-lieu' approach by creating a bioretention area (BIO-1) at the location of the bulb-out along High Street, which will collect and treat and equivalent area of street runoff. Sizing calculations are contained within Attachment D of this report.

Street Frontage Areas:

Treatment of the street frontage areas is proposed to be met through the inclusion of linear biofiltration (BIO-5 per the TGM), specifically through the use of the StormTreat Linear Stormwater Treatment device. The StormTreat is listed in the VC TGM as an approved proprietary biofiltration device and lends itself well to this project based on its linear nature.

Please refer to Attachment E for detailed specification sheets for stormwater quality treatment devices.

9. Summary and Conclusions

This project proposes to construct a new mixed-use development of approximately 2.15 acres on the south side of High Street in between Moorpark Avenue and Magnolia Street within the City of Moorpark in Ventura County, CA. The existing site is currently unoccupied and consists of vacant buildings and intermittent hardscape. As part of the development of the site, a series of new drainage inlets and underground storm drain facilities will be constructed to safely convey runoff away from new structures.

The project will install new underground detention facilities in the fashion of oversized storm drainpipe with orifice controls in order to release post-development peak flowrates at 90-percent or less of that of the pre-development peak flowrate. Additionally, the proposed grading design and new underground drainage system are designed to provide protection from flooding pursuant to City of Moorpark, County of Ventura, and FEMA requirements.

And lastly, the project will implement LID BMPs which will improve water quality and help to mitigate volume. Specifically, treatment will be through the inclusion of bioretention planters, flow-through planter boxes, and proprietary biofiltration.

10. Attachments

Attachment A Existing Hydrology Calculations
Attachment B Proposed Hydrology Calculations
1. East Tributary
2. West Tributary

Attachment C Detention Calculations (PondPack Results)
1. East Tributary
2. West Tributary

Attachment D Stormwater Quality Treatment Calculations
Attachment E BMP Specification Sheets
Attachment F Hydrology Map

DESIGN ASSOCIATES INC

Attachment A

Existing Hydrology Calculations

VENTURA COUNTY WATERSHED PROTECTION DISTRICT
TIME OF CONCENTRATION
TC Program Version: 2.64.0.30
Project: Moorpark Depot
Date: 12:00:00 AM
Engineer: Randy Chapman
Consultant: CCE Design Associates

Watershed Name: Watershed

Sub-Area Name: SubArea
Computing Tc for all rainfall frequencies for sub-area SubArea...

Tc for frequency = 10.00: 12.754 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 12.754 min. = 13 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 2.15
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 30
SUB AREA OUTPUT

Intensity (in/hr): 1.550
C Total: 0.650
Sum Q Segments (cfs): 2.16
Q Total (cfs): 2.16
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 765.26
Time of Concentration (min): 12.754

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 4.7580
Flow Type: Overland
Length (ft): 115
Top Elevation (ft): 520.5
Bottom Elevation (ft): 520.1
Contributing Area (acres): 0.15
Percent of Sub-Area (%): 7.0

Overland Type: Valley
Development Type: Undeveloped
Map Slope: 0.0035
Effective Slope: 0.0035
Q for Flow Path (cfs): 0.15
Avg Velocity (ft/s): 0.40
Passed Scour Check: YES
Scour Velocity (ft/sec): 0.65
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 7.9964
Flow Type: Street
Length (ft): 940
Top Elevation (ft): 520.1
Bottom Elevation (ft): 513.7
Contributing Area (acres): 2
Percent of Sub-Area (%): 93.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0068
Q for Flow Path (cfs): 2.01
Q Top (cfs): 0.15
Q Bottom (cfs): 2.16
Velocity Top (ft/s): 0.88
Velocity Bottom (ft/s): 1.73
Avg Velocity (ft/s): 1.31
Wave Velocity (ft/s): 1.96

Tc for frequency = 25.00: 10.937 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 10.937 min. = 11 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 2.15
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 30
SUB AREA OUTPUT

Intensity (in/hr): 2.169
C Total: 0.711
Sum Q Segments (cfs): 3.31
Q Total (cfs): 3.31
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 656.25
Time of Concentration (min): 10.937

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 3.7533
Flow Type: Overland
Length (ft): 115
Top Elevation (ft): 520.5
Bottom Elevation (ft): 520.1
Contributing Area (acres): 0.15
Percent of Sub-Area (%): 7.0
Overland Type: Valley
Development Type: Undeveloped
Map Slope: 0.0035
Effective Slope: 0.0035
Q for Flow Path (cfs): 0.23
Avg Velocity (ft/s): 0.51
Passed Scour Check: YES
Scour Velocity (ft/sec): 0.69
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 7.1842
Flow Type: Street

Length (ft): 940
Top Elevation (ft): 520.1
Bottom Elevation (ft): 513.7
Contributing Area (acres): 2
Percent of Sub-Area (%): 93.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0068
Q for Flow Path (cfs): 3.08
Q Top (cfs): 0.23
Q Bottom (cfs): 3.31
Velocity Top (ft/s): 0.98
Velocity Bottom (ft/s): 1.92
Avg Velocity (ft/s): 1.45
Wave Velocity (ft/s): 2.18

Tc for frequency = 50.00: 10.021 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 10.021 min. = 10 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 2.15
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 30
SUB AREA OUTPUT

Intensity (in/hr): 2.604
C Total: 0.732
Sum Q Segments (cfs): 4.10
Q Total (cfs): 4.10
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 601.25
Time of Concentration (min): 10.021

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 3.2111
Flow Type: Overland
Length (ft): 115
Top Elevation (ft): 520.5
Bottom Elevation (ft): 520.1
Contributing Area (acres): 0.15
Percent of Sub-Area (%): 7.0
Overland Type: Valley
Development Type: Undeveloped
Map Slope: 0.0035
Effective Slope: 0.0035
Q for Flow Path (cfs): 0.29
Avg Velocity (ft/s): 0.60
Passed Scour Check: YES
Scour Velocity (ft/sec): 0.71
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 6.8097
Flow Type: Street

Length (ft): 940
Top Elevation (ft): 520.1
Bottom Elevation (ft): 513.7
Contributing Area (acres): 2
Percent of Sub-Area (%): 93.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0068
Q for Flow Path (cfs): 3.81
Q Top (cfs): 0.29
Q Bottom (cfs): 4.10
Velocity Top (ft/s): 1.04
Velocity Bottom (ft/s): 2.03
Avg Velocity (ft/s): 1.53
Wave Velocity (ft/s): 2.30

Tc for frequency = 100.00: 9.023 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 9.023 min. = 9 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 2.15
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 30
SUB AREA OUTPUT

Intensity (in/hr): 2.873
C Total: 0.748
Sum Q Segments (cfs): 4.62
Q Total (cfs): 4.62
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 541.35
Time of Concentration (min): 9.023

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 2.4150
Flow Type: Overland
Length (ft): 115
Top Elevation (ft): 520.5
Bottom Elevation (ft): 520.1
Contributing Area (acres): 0.15
Percent of Sub-Area (%): 7.0
Overland Type: Valley
Development Type: Undeveloped
Map Slope: 0.0035
Effective Slope: 0.0035
Q for Flow Path (cfs): 0.32
Avg Velocity (ft/s): 0.79
Passed Scour Check: YES
Scour Velocity (ft/sec): 0.73
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 6.6076
Flow Type: Street

Length (ft): 940
Top Elevation (ft): 520.1
Bottom Elevation (ft): 513.7
Contributing Area (acres): 2
Percent of Sub-Area (%): 93.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0068
Q for Flow Path (cfs): 4.30
Q Top (cfs): 0.32
Q Bottom (cfs): 4.62
Velocity Top (ft/s): 1.07
Velocity Bottom (ft/s): 2.09
Avg Velocity (ft/s): 1.58
Wave Velocity (ft/s): 2.37

DESIGN ASSOCIATES INC

Attachment B

Proposed Hydrology Calculations

DESIGN ASSOCIATES INC

Attachment B-1

East Tributary

VENTURA COUNTY WATERSHED PROTECTION DISTRICT
TIME OF CONCENTRATION
TC Program Version: 2.64.0.30
Project: Moorpark Depot
Date: 12:00:00 AM
Engineer: Randy Chapman
Consultant: CCE Design Associates

Watershed Name: Watershed

Sub-Area Name: SubArea
Computing Tc for all rainfall frequencies for sub-area SubArea...

Tc for frequency = 10.00: 16.973 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 16.973 min. = 17 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 0.67
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 1.391
C Total: 0.855
Sum Q Segments (cfs): 0.80
Q Total (cfs): 0.80
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 1,018.38
Time of Concentration (min): 16.973

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 1.2667
Flow Type: Overland
Length (ft): 38
Top Elevation (ft): 520.6
Bottom Elevation (ft): 520.5
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 6.0

Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0026
Effective Slope: 0.0026
Q for Flow Path (cfs): 0.05
Avg Velocity (ft/s): 0.50
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 13.4839
Flow Type: Channel
Length (ft): 200
Top Elevation (ft): 520.5
Bottom Elevation (ft): 519.5
Contributing Area (acres): 0.6
Percent of Sub-Area (%): 89.6
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0050
Q for Flow Path (cfs): 0.71
Q Top (cfs): 0.05
Q Bottom (cfs): 0.76
Velocity Top (ft/s): 0.08
Velocity Bottom (ft/s): 0.22
Avg Velocity (ft/s): 0.15
Wave Velocity (ft/s): 0.25
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 2.2224
Flow Type: Pipe
Length (ft): 146
Top Elevation (ft): 515
Bottom Elevation (ft): 513.54
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 4.5
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 9
Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0100
Q for Flow Path (cfs): 0.04
Q Top (cfs): 0.76
Q Bottom (cfs): 0.80
Avg Velocity (ft/s): 0.83
Wave Velocity (ft/s): 1.09

Tc for frequency = 25.00: 15.687 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 15.687 min. = 16 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 0.67
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 1.779
C Total: 0.872
Sum Q Segments (cfs): 1.04
Q Total (cfs): 1.04
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 941.20
Time of Concentration (min): 15.687

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 1.2414
Flow Type: Overland
Length (ft): 38
Top Elevation (ft): 520.6
Bottom Elevation (ft): 520.5
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 6.0
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0026
Effective Slope: 0.0026
Q for Flow Path (cfs): 0.06
Avg Velocity (ft/s): 0.51
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 12.2553
Flow Type: Channel
Length (ft): 200

Top Elevation (ft): 520.5
Bottom Elevation (ft): 519.5
Contributing Area (acres): 0.6
Percent of Sub-Area (%): 89.6
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0050
Q for Flow Path (cfs): 0.93
Q Top (cfs): 0.06
Q Bottom (cfs): 0.99
Velocity Top (ft/s): 0.09
Velocity Bottom (ft/s): 0.24
Avg Velocity (ft/s): 0.16
Wave Velocity (ft/s): 0.27
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 2.1899
Flow Type: Pipe
Length (ft): 146
Top Elevation (ft): 515
Bottom Elevation (ft): 513.54
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 4.5
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 9
Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0100
Q for Flow Path (cfs): 0.05
Q Top (cfs): 0.99
Q Bottom (cfs): 1.04
Avg Velocity (ft/s): 0.88
Wave Velocity (ft/s): 1.11

Tc for frequency = 50.00: 14.244 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 14.244 min. = 14 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 0.67
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.162
C Total: 0.881
Sum Q Segments (cfs): 1.28
Q Total (cfs): 1.28
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 854.64
Time of Concentration (min): 14.244

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 0.6333
Flow Type: Overland
Length (ft): 38
Top Elevation (ft): 520.6
Bottom Elevation (ft): 520.5
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 6.0
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0026
Effective Slope: 0.0026
Q for Flow Path (cfs): 0.08
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 11.4208
Flow Type: Channel
Length (ft): 200

Top Elevation (ft): 520.5
Bottom Elevation (ft): 519.5
Contributing Area (acres): 0.6
Percent of Sub-Area (%): 89.6
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0050
Q for Flow Path (cfs): 1.14
Q Top (cfs): 0.08
Q Bottom (cfs): 1.22
Velocity Top (ft/s): 0.09
Velocity Bottom (ft/s): 0.26
Avg Velocity (ft/s): 0.18
Wave Velocity (ft/s): 0.29
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 2.1899
Flow Type: Pipe
Length (ft): 146
Top Elevation (ft): 515
Bottom Elevation (ft): 513.54
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 4.5
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 9
Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0100
Q for Flow Path (cfs): 0.06
Q Top (cfs): 1.22
Q Bottom (cfs): 1.28
Avg Velocity (ft/s): 0.92
Wave Velocity (ft/s): 1.11

Tc for frequency = 100.00: 12.594 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 12.594 min. = 13 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 0.67
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.492
C Total: 0.886
Sum Q Segments (cfs): 1.48
Q Total (cfs): 1.48
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 755.64
Time of Concentration (min): 12.594

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 0.6333
Flow Type: Overland
Length (ft): 38
Top Elevation (ft): 520.6
Bottom Elevation (ft): 520.5
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 6.0
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0026
Effective Slope: 0.0026
Q for Flow Path (cfs): 0.09
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 10.9053
Flow Type: Channel
Length (ft): 200

Top Elevation (ft): 520.5
Bottom Elevation (ft): 519.5
Contributing Area (acres): 0.6
Percent of Sub-Area (%): 89.6
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0050
Q for Flow Path (cfs): 1.32
Q Top (cfs): 0.09
Q Bottom (cfs): 1.41
Velocity Top (ft/s): 0.10
Velocity Bottom (ft/s): 0.27
Avg Velocity (ft/s): 0.18
Wave Velocity (ft/s): 0.31
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 1.0554
Flow Type: Pipe
Length (ft): 146
Top Elevation (ft): 515
Bottom Elevation (ft): 513.54
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 4.5
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 12
Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0100
Q for Flow Path (cfs): 0.07
Q Top (cfs): 1.41
Q Bottom (cfs): 1.48
Avg Velocity (ft/s): 1.71
Wave Velocity (ft/s): 2.31

Ventura County Watershed Protection District
Modified Rational Method Hydrology Program (VCRat v2.64)

Modified Rational Model Results Report

Job: 1 Project: High Street Depot – East Tributary Proposed

Project Description

VCRat version: 2.64.0.30
VCRain version: 201601
DOS EXE version: PC 2.64-201605
VCRain Curve Set: VCWPD 2016 Revised Curve Set
Curve A: REV1: South Mountain to Moorpark
Curve B: None
Curve C: None
Curve D: None

Ventura County Watershed Protection District
Modified Rational Method Hydrology Program (VCRat v2.64)

Job: 1 Project: High Street Depot – East Tributary Proposed

Model Results

SUBAREA DATA AND RESULTS							ACCUMULATED DATA			ROUTING AFTER ACCUMULATION				
NODE ID	SOIL TYPE	RAIN ZONE	TC N VALUES (MIN)	% IMP	AREA (AC)	FLOW (CFS)	AREA (AC)	FLOW (CFS)	TIME (MIN)	CHANNEL TYPE	LENGTH (FT)	SLOPE (FT/FT)	SIZE (FT)	H:V (Z)
			CHNL SIDES	VEL (FT/S)	DEPTH (FT)									
1A	050	A100	13 80	7	17	7	17	1154	PIPE	10	0.00100	2.75	----	-----
			----- -----	--	--									
2A	---	---	-- --	---	---	7	17	1154	-------	----	-------	---	----	-----
			----- -----	--	--									

****

* INCOMING HYDROGRAPH PEAK (cfs): 17.39 VOLUME (acre-ft): 3.18 *

* NO HYDROGRAPH ADJUSTMENT *

* RUNOFF FACTOR(in): 6.14 *

* FATTENED HYDROGRAPH PEAK (cfs): 17.39 VOLUME (acre-ft): 3.58 *

****

2A	---	---	-- --	---	---	7	17	----	-------	----	-------	---	----	-----
			----- -----	--	--									
3A	---	---	-- --	---	---	7	17	1154	-------	----	-------	---	----	-----
			----- -----	--	--									

Issue/Warning Messages

TYPE	ERR NO	PROCEDURE	LOCATION	MESSAGE

NO ISSUES OR WARNINGS DETECTED

HYDROGRAPH FATTENED AT 2A

****

* INCOMING HYDROGRAPH PEAK (cfs): 17.39 VOLUME (acre-ft): 3.18

*

* NO HYDROGRAPH ADJUSTMENT

*

* RUNOFF FACTOR(in): 6.14

*

* FATTENED HYDROGRAPH PEAK (cfs): 17.39 VOLUME (acre-ft): 3.58

*

****

TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)	TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)
0	0.00	0.00	0.00	100	0.75	0.75	0.76
200	0.75	0.75	0.77	300	0.75	0.75	0.78
400	0.75	0.75	0.78	500	0.75	0.75	0.79
600	0.87	0.87	0.91	700	1.21	1.21	1.28
800	1.21	1.21	1.31	900	1.60	1.60	1.76
1000	2.30	2.30	2.59	1050	2.95	2.95	3.38
1100	3.82	3.82	4.52	1110	5.69	5.69	6.38
1120	7.50	7.50	8.17	1130	7.78	7.78	8.54
1131	7.74	7.74	8.51	1132	7.70	7.70	8.49
1133	7.66	7.66	8.46	1134	7.62	7.62	8.44
1135	7.61	7.61	8.44	1136	7.56	7.56	8.41
1137	7.54	7.54	8.41	1138	7.49	7.49	8.38
1139	7.47	7.47	8.37	1140	7.43	7.43	8.35
1141	7.45	7.45	8.39	1142	7.50	7.50	8.44
1143	7.53	7.53	8.49	1144	7.61	7.61	8.58
1145	7.94	7.94	8.89	1146	8.33	8.33	9.25
1147	8.65	8.65	9.56	1148	9.02	9.02	9.90
1149	10.49	10.49	11.23	1150	12.15	12.15	12.73
1151	13.69	13.69	14.10	1152	15.35	15.35	15.59

1153	16.92	16.92	16.97	1154	17.39	17.39	17.39
1155	17.38	17.38	17.38	1156	17.36	17.36	17.36
1157	17.26	17.26	17.27	1158	16.95	16.95	17.00
1159	16.60	16.60	16.69	1160	16.33	16.33	16.44
1161	15.97	15.97	16.12	1162	14.56	14.56	14.85
1163	12.91	12.91	13.37	1164	11.44	11.44	12.03
1165	9.52	9.52	10.29	1166	7.67	7.67	8.61
1167	6.88	6.88	7.88	1168	6.62	6.62	7.62
1169	6.25	6.25	7.27	1170	6.08	6.08	7.10
1171	5.75	5.75	6.79	1172	5.48	5.48	6.53
1173	5.15	5.15	6.20	1174	4.86	4.86	5.92
1175	4.50	4.50	5.58	1176	4.22	4.22	5.30
1177	3.88	3.88	4.98	1178	3.81	3.81	4.90
1179	3.75	3.75	4.82	1180	3.66	3.66	4.73
1181	3.62	3.62	4.67	1182	3.54	3.54	4.59
1183	3.47	3.47	4.51	1184	3.42	3.42	4.45
1185	3.35	3.35	4.37	1186	3.27	3.27	4.28
1187	3.22	3.22	4.22	1188	3.15	3.15	4.14
1189	3.04	3.04	4.02	1190	2.97	2.97	3.95
1191	2.91	2.91	3.88	1192	2.85	2.85	3.81
1193	2.79	2.79	3.74	1194	2.71	2.71	3.65
1195	2.68	2.68	3.61	1196	2.61	2.61	3.54
1197	2.54	2.54	3.46	1198	2.49	2.49	3.40
1199	2.42	2.42	3.32	1200	2.34	2.34	3.24

Hydrograph Printouts

TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)	TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)
1201	2.31	2.31	3.20	1202	2.31	2.31	3.18

1203	2.29	2.29	3.15	1204	2.28	2.28	3.14
1205	2.29	2.29	3.13	1206	2.30	2.30	3.14
1207	2.31	2.31	3.14	1208	2.29	2.29	3.10
1209	2.28	2.28	3.09	1210	2.28	2.28	3.08
1211	2.30	2.30	3.09	1212	2.31	2.31	3.09
1213	2.31	2.31	3.08	1214	2.29	2.29	3.05
1215	2.28	2.28	3.03	1216	2.29	2.29	3.03
1217	2.30	2.30	3.04	1218	2.31	2.31	3.04
1219	2.29	2.29	3.00	1220	2.28	2.28	3.00
1221	2.28	2.28	2.99	1222	2.30	2.30	3.00
1223	2.31	2.31	3.00	1224	2.29	2.29	2.97
1225	2.22	2.22	2.90	1226	2.14	2.14	2.82
1227	2.05	2.05	2.72	1228	1.97	1.97	2.64
1229	1.90	1.90	2.57	1230	1.80	1.80	2.46
1231	1.73	1.73	2.38	1232	1.64	1.64	2.29
1233	1.56	1.56	2.21	1234	1.49	1.49	2.13
1235	1.39	1.39	2.03	1236	1.31	1.31	1.95
1237	1.22	1.22	1.86	1238	1.20	1.20	1.83
1239	1.21	1.21	1.83	1240	1.22	1.22	1.84
1241	1.23	1.23	1.85	1242	1.20	1.20	1.81
1243	1.20	1.20	1.81	1244	1.20	1.20	1.80
1245	1.22	1.22	1.81	1246	1.23	1.23	1.81
1247	1.21	1.21	1.79	1248	1.20	1.20	1.78
1249	1.20	1.20	1.77	1250	1.22	1.22	1.79
1251	1.23	1.23	1.79	1252	1.21	1.21	1.76
1253	1.20	1.20	1.75	1254	1.20	1.20	1.75
1255	1.22	1.22	1.76	1256	1.23	1.23	1.76
1257	1.21	1.21	1.74	1258	1.20	1.20	1.73
1259	1.20	1.20	1.72	1260	1.22	1.22	1.74
1261	1.21	1.21	1.72	1262	1.20	1.20	1.71
1263	1.21	1.21	1.71	1264	1.20	1.20	1.70
1265	1.22	1.22	1.72	1266	1.21	1.21	1.70
1267	1.20	1.20	1.69	1268	1.21	1.21	1.69
1269	1.20	1.20	1.68	1270	1.22	1.22	1.70
1271	1.21	1.21	1.68	1272	1.20	1.20	1.67
1273	1.21	1.21	1.67	1274	1.22	1.22	1.68
1275	1.23	1.23	1.68	1276	1.21	1.21	1.66
1277	1.20	1.20	1.65	1278	1.20	1.20	1.65

1279	1.22	1.22	1.66	1280	1.23	1.23	1.67
1281	1.21	1.21	1.64	1282	1.20	1.20	1.63
1283	1.20	1.20	1.63	1284	1.22	1.22	1.64
1285	1.23	1.23	1.65	1286	1.21	1.21	1.62
1287	1.20	1.20	1.62	1288	1.20	1.20	1.61
1289	1.22	1.22	1.63	1290	1.23	1.23	1.63
1291	1.21	1.21	1.61	1292	1.20	1.20	1.60
1293	1.20	1.20	1.60	1294	1.22	1.22	1.61
1295	1.23	1.23	1.62	1296	1.21	1.21	1.59
1297	1.18	1.18	1.57	1298	1.14	1.14	1.52
1299	1.11	1.11	1.49	1300	1.09	1.09	1.46
1310	0.75	0.75	1.11	1320	0.75	0.75	1.09
1330	0.77	0.77	1.08	1340	0.75	0.75	1.05
1350	0.75	0.75	1.03	1360	0.75	0.75	1.01
1370	0.75	0.75	1.00	1380	0.77	0.77	1.00
1390	0.75	0.75	0.98	1400	0.75	0.75	0.96
1420	0.76	0.76	0.95	1440	0.75	0.75	0.93
1460	0.75	0.75	0.91	1500	0.75	0.75	0.89

Hydrograph Printouts

HYDROGRAPH PRINTOUT AT: 3A

TOTAL AREA TO HYDROGRAPH:	7	acres
HYDROGRAPH PEAK:	17	cfs
TIME OF PEAK:	1154	minutes
HYDROGRAPH VOLUME:	3.58	acre-ft

TIME (min)	FLOW (cfs)	TIME (min)	FLOW (cfs)	TIME (min)	FLOW (cfs)	TIME (min)	FLOW (cfs)	TIME (min)	FLOW (cfs)
0	0.00	100	0.76	200	0.77	300	0.78	400	0.78
500	0.79	600	0.91	700	1.28	800	1.31	900	1.76
1000	2.59	1050	3.38	1100	4.52	1110	6.38	1120	8.17
1130	8.54	1131	8.51	1132	8.49	1133	8.46	1134	8.44
1135	8.44	1136	8.41	1137	8.41	1138	8.38	1139	8.37
1140	8.35	1141	8.39	1142	8.44	1143	8.49	1144	8.58
1145	8.89	1146	9.25	1147	9.56	1148	9.90	1149	11.23
1150	12.73	1151	14.10	1152	15.59	1153	16.97	1154	17.39
1155	17.38	1156	17.36	1157	17.27	1158	17.00	1159	16.69
1160	16.44	1161	16.12	1162	14.85	1163	13.37	1164	12.03
1165	10.29	1166	8.61	1167	7.88	1168	7.62	1169	7.27
1170	7.10	1171	6.79	1172	6.53	1173	6.20	1174	5.92
1175	5.58	1176	5.30	1177	4.98	1178	4.90	1179	4.82
1180	4.73	1181	4.67	1182	4.59	1183	4.51	1184	4.45
1185	4.37	1186	4.28	1187	4.22	1188	4.14	1189	4.02
1190	3.95	1191	3.88	1192	3.81	1193	3.74	1194	3.65
1195	3.61	1196	3.54	1197	3.46	1198	3.40	1199	3.32
1200	3.24	1201	3.20	1202	3.18	1203	3.15	1204	3.14
1205	3.13	1206	3.14	1207	3.14	1208	3.10	1209	3.09
1210	3.08	1211	3.09	1212	3.09	1213	3.08	1214	3.05
1215	3.03	1216	3.03	1217	3.04	1218	3.04	1219	3.00
1220	3.00	1221	2.99	1222	3.00	1223	3.00	1224	2.97
1225	2.90	1226	2.82	1227	2.72	1228	2.64	1229	2.57
1230	2.46	1231	2.38	1232	2.29	1233	2.21	1234	2.13
1235	2.03	1236	1.95	1237	1.86	1238	1.83	1239	1.83
1240	1.84	1241	1.85	1242	1.81	1243	1.81	1244	1.80
1245	1.81	1246	1.81	1247	1.79	1248	1.78	1249	1.77
1250	1.79	1251	1.79	1252	1.76	1253	1.75	1254	1.75
1255	1.76	1256	1.76	1257	1.74	1258	1.73	1259	1.72
1260	1.74	1261	1.72	1262	1.71	1263	1.71	1264	1.70
1265	1.72	1266	1.70	1267	1.69	1268	1.69	1269	1.68
1270	1.70	1271	1.68	1272	1.67	1273	1.67	1274	1.68
1275	1.68	1276	1.66	1277	1.65	1278	1.65	1279	1.66
1280	1.67	1281	1.64	1282	1.63	1283	1.63	1284	1.64
1285	1.65	1286	1.62	1287	1.62	1288	1.61	1289	1.63

1290	1.63	1291	1.61	1292	1.60	1293	1.60	1294	1.61
1295	1.62	1296	1.59	1297	1.57	1298	1.52	1299	1.49
1300	1.46	1310	1.11	1320	1.09	1330	1.08	1340	1.05
1350	1.03	1360	1.01	1370	1.00	1380	1.00	1390	0.98
1400	0.96	1420	0.95	1440	0.93	1460	0.91	1500	0.89

VCRat Model Input

Model Lines

```
005     1  001A Header place holder
005     1  002A Header place holder
005     1  003A Header place holder
999
999
006     1  001A 050080000713A97400010000100                    G1
006     1  002A 010      099A97                              1
110
111            1.00000    6.14
110
006     1  003A 010      099A97                              1  2
999
```

DESIGN ASSOCIATES INC

Attachment B-2

West Tributary

VENTURA COUNTY WATERSHED PROTECTION DISTRICT
TIME OF CONCENTRATION
TC Program Version: 2.64.0.30
Project: Moorpark Depot
Date: 12:00:00 AM
Engineer: Randy Chapman
Consultant: CCE Design Associates

Watershed Name: Watershed

Sub-Area Name: SubArea
Computing Tc for all rainfall frequencies for sub-area SubArea...

Tc for frequency = 10.00: 20.214 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 20.214 min. = 20 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 1.47
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 1.290
C Total: 0.847
Sum Q Segments (cfs): 1.61
Q Total (cfs): 1.61
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 1,212.87
Time of Concentration (min): 20.214

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 1.3333
Flow Type: Overland
Length (ft): 40

Top Elevation (ft): 517.1
Bottom Elevation (ft): 517
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 2.7
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0025
Effective Slope: 0.0025
Q for Flow Path (cfs): 0.04
Avg Velocity (ft/s): 0.50
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 17.8912
Flow Type: Channel
Length (ft): 432
Top Elevation (ft): 520
Bottom Elevation (ft): 514.5
Contributing Area (acres): 1.4
Percent of Sub-Area (%): 95.2
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0127
Q for Flow Path (cfs): 1.53
Q Top (cfs): 0.04
Q Bottom (cfs): 1.57
Velocity Top (ft/s): 0.10
Velocity Bottom (ft/s): 0.38
Avg Velocity (ft/s): 0.24
Wave Velocity (ft/s): 0.40
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 0.9899
Flow Type: Pipe
Length (ft): 101
Top Elevation (ft): 510.5
Bottom Elevation (ft): 509.99
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 2.0
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 12

Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0050
Q for Flow Path (cfs): 0.03
Q Top (cfs): 1.57
Q Bottom (cfs): 1.61
Avg Velocity (ft/s): 1.35
Wave Velocity (ft/s): 1.70

Tc for frequency = 25.00: 18.736 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 18.736 min. = 19 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 1.47
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 1.635
C Total: 0.868
Sum Q Segments (cfs): 2.08
Q Total (cfs): 2.08
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 1,124.15
Time of Concentration (min): 18.736

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 1.3070
Flow Type: Overland
Length (ft): 40
Top Elevation (ft): 517.1
Bottom Elevation (ft): 517
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 2.7
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0025
Effective Slope: 0.0025
Q for Flow Path (cfs): 0.06
Avg Velocity (ft/s): 0.51
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 16.4389
Flow Type: Channel
Length (ft): 432
Top Elevation (ft): 520
Bottom Elevation (ft): 514.5
Contributing Area (acres): 1.4
Percent of Sub-Area (%): 95.2
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0127
Q for Flow Path (cfs): 1.99
Q Top (cfs): 0.06
Q Bottom (cfs): 2.04
Velocity Top (ft/s): 0.11
Velocity Bottom (ft/s): 0.42
Avg Velocity (ft/s): 0.26
Wave Velocity (ft/s): 0.44
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 0.9899
Flow Type: Pipe
Length (ft): 101
Top Elevation (ft): 510.5
Bottom Elevation (ft): 509.99
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 2.0
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 12
Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0050
Q for Flow Path (cfs): 0.04
Q Top (cfs): 2.04
Q Bottom (cfs): 2.08
Avg Velocity (ft/s): 1.41
Wave Velocity (ft/s): 1.70

Tc for frequency = 50.00: 16.554 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 16.554 min. = 17 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 1.47
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 1.958
C Total: 0.877
Sum Q Segments (cfs): 2.53
Q Total (cfs): 2.53
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 993.22
Time of Concentration (min): 16.554

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 0.6667
Flow Type: Overland
Length (ft): 40
Top Elevation (ft): 517.1
Bottom Elevation (ft): 517
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 2.7
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0025
Effective Slope: 0.0025
Q for Flow Path (cfs): 0.07
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 15.3411
Flow Type: Channel
Length (ft): 432
Top Elevation (ft): 520
Bottom Elevation (ft): 514.5
Contributing Area (acres): 1.4
Percent of Sub-Area (%): 95.2
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0127
Q for Flow Path (cfs): 2.41
Q Top (cfs): 0.07
Q Bottom (cfs): 2.47
Velocity Top (ft/s): 0.12
Velocity Bottom (ft/s): 0.45
Avg Velocity (ft/s): 0.28
Wave Velocity (ft/s): 0.47
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 0.5460
Flow Type: Pipe
Length (ft): 101
Top Elevation (ft): 510.5
Bottom Elevation (ft): 509.99
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 2.0
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 15
Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0050
Q for Flow Path (cfs): 0.05
Q Top (cfs): 2.47
Q Bottom (cfs): 2.53
Avg Velocity (ft/s): 2.38
Wave Velocity (ft/s): 3.08

Tc for frequency = 100.00: 15.808 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 15.808 min. = 16 min.

SUB AREA INPUT DATA

Sub Area Name: SubArea
Total Area (ac): 1.47
Flood Zone: 3
Rainfall Zone: J'
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 5.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.288
C Total: 0.883
Sum Q Segments (cfs): 2.97
Q Total (cfs): 2.97
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 948.49
Time of Concentration (min): 15.808

DATA FOR FLOW PATH 1

Flow Path Name: Initial
FLOW PATH TRAVEL TIME (min): 0.6667
Flow Type: Overland
Length (ft): 40
Top Elevation (ft): 517.1
Bottom Elevation (ft): 517
Contributing Area (acres): 0.04
Percent of Sub-Area (%): 2.7
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0025
Effective Slope: 0.0025
Q for Flow Path (cfs): 0.08
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: Gutter
FLOW PATH TRAVEL TIME (min): 14.5955
Flow Type: Channel
Length (ft): 432
Top Elevation (ft): 520
Bottom Elevation (ft): 514.5
Contributing Area (acres): 1.4
Percent of Sub-Area (%): 95.2
Bottom Width (ft): 15
Side Slope (H:V): 12
Manning's N: 0.15
Map Slope: 0.0127
Q for Flow Path (cfs): 2.83
Q Top (cfs): 0.08
Q Bottom (cfs): 2.91
Velocity Top (ft/s): 0.13
Velocity Bottom (ft/s): 0.47
Avg Velocity (ft/s): 0.30
Wave Velocity (ft/s): 0.49
DATA FOR FLOW PATH 3

Flow Path Name: Pipe
FLOW PATH TRAVEL TIME (min): 0.5460
Flow Type: Pipe
Length (ft): 101
Top Elevation (ft): 510.5
Bottom Elevation (ft): 509.99
Contributing Area (acres): 0.03
Percent of Sub-Area (%): 2.0
Initial Pipe Diameter (in): 18
Calculated Pipe Diameter (in): 15
Used Pipe Diameter (in): 18
Manning's N: 0.015
Map Slope: 0.0050
Q for Flow Path (cfs): 0.06
Q Top (cfs): 2.91
Q Bottom (cfs): 2.97
Avg Velocity (ft/s): 2.45
Wave Velocity (ft/s): 3.08

Ventura County Watershed Protection District
Modified Rational Method Hydrology Program (VCRat v2.64)

Modified Rational Model Results Report

Job: 1 Project: High Street Depot _West Tributary Proposed

Project Description

VCRat version: 2.64.0.30
VCRain version: 201601
DOS EXE version: PC 2.64-201605
VCRain Curve Set: VCWPD 2016 Revised Curve Set
Curve A: REV1: South Mountain to Moorpark
Curve B: None
Curve C: None
Curve D: None

Ventura County Watershed Protection District
Modified Rational Method Hydrology Program (VCRat v2.64)

Job: 1 Project: High Street Depot _West Tributary Proposed

Model Results

NODE ID	SOIL TYPE	RAIN ZONE	TC (MIN)	% IMP	AREA (AC)	FLOW (CFS)	AREA (AC)	FLOW (CFS)	TIME (MIN)	CHANNEL TYPE	LENGTH (FT)	SLOPE (FT/FT)	SIZE (FT)	H:V (Z)	N VALUES CHNL	N VALUES SIDES	VEL (FT/S)	DEPTH (FT)
1A	050	A100	16	80	15	33	15	33	1156	PIPE	10	0.00100	3.50	----	-----	-----	--	--
2A	---	---	--	--	---	---	15	33	1156	-------	----	-------	---	----	-----	-----	--	--

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* INCOMING HYDROGRAPH PEAK (cfs): 33.47 VOLUME (acre-ft): 6.83 *

* NO HYDROGRAPH ADJUSTMENT *

* RUNOFF FACTOR(in): 6.14 *

* FATTENED HYDROGRAPH PEAK (cfs): 33.47 VOLUME (acre-ft): 7.67 *

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2A	---	---	--	--	---	---	15	33	----	-------	----	-------	---	----	-----	-----	--	--
3A	---	---	--	--	---	---	15	33	1156	-------	----	-------	---	----	-----	-----	--	--

Issue/Warning Messages

TYPE	ERR NO	PROCEDURE	LOCATION	MESSAGE

NO ISSUES OR WARNINGS DETECTED

HYDROGRAPH FATTENED AT 2A

****

* INCOMING HYDROGRAPH PEAK (cfs): 33.47 VOLUME (acre-ft): 6.83

*

* NO HYDROGRAPH ADJUSTMENT

*

* RUNOFF FACTOR(in): 6.14

*

* FATTENED HYDROGRAPH PEAK (cfs): 33.47 VOLUME (acre-ft): 7.67

*

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TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)	TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)
0	0.00	0.00	0.00	100	1.61	1.61	1.63
200	1.61	1.61	1.66	300	1.61	1.61	1.66
400	1.61	1.61	1.68	500	1.61	1.61	1.69
600	1.85	1.85	1.96	700	2.59	2.59	2.73
800	2.60	2.60	2.81	900	3.43	3.43	3.77
1000	4.92	4.92	5.53	1050	6.33	6.33	7.23
1100	8.19	8.19	9.64	1110	11.43	11.43	12.86
1120	15.58	15.58	16.91	1130	16.71	16.71	18.16
1131	16.63	16.63	18.11	1132	16.57	16.57	18.07
1133	16.49	16.49	18.02	1134	16.42	16.42	17.98
1135	16.39	16.39	17.98	1136	16.28	16.28	17.91
1137	16.25	16.25	17.90	1138	16.17	16.17	17.86
1139	16.13	16.13	17.85	1140	16.05	16.05	17.81
1141	16.09	16.09	17.88	1142	16.17	16.17	17.97
1143	16.22	16.22	18.05	1144	16.30	16.30	18.15
1145	16.84	16.84	18.66	1146	17.43	17.43	19.22
1147	18.02	18.02	19.78	1148	18.69	18.69	20.39
1149	21.28	21.28	22.71	1150	24.18	24.18	25.29
1151	26.82	26.82	27.63	1152	29.73	29.73	30.19

1153	32.40	32.40	32.53	1154	33.37	33.37	33.39
1155	33.35	33.35	33.36	1156	33.47	33.47	33.47
1157	33.35	33.35	33.36	1158	33.23	33.23	33.26
1159	33.19	33.19	33.22	1160	33.13	33.13	33.18
1161	32.63	32.63	32.73	1162	32.04	32.04	32.21
1163	31.55	31.55	31.78	1164	30.94	30.94	31.23
1165	28.02	28.02	28.64	1166	24.60	24.60	25.60
1167	21.54	21.54	22.86	1168	18.12	18.12	19.79
1169	14.92	14.92	16.91	1170	13.53	13.53	15.63
1171	13.11	13.11	15.22	1172	12.44	12.44	14.59
1173	12.18	12.18	14.32	1174	11.57	11.57	13.73
1175	11.10	11.10	13.28	1176	10.45	10.45	12.66
1177	9.87	9.87	12.10	1178	9.13	9.13	11.40
1179	8.58	8.58	10.87	1180	7.98	7.98	10.29
1181	7.88	7.88	10.16	1182	7.75	7.75	10.01
1183	7.62	7.62	9.86	1184	7.53	7.53	9.75
1185	7.41	7.41	9.61	1186	7.28	7.28	9.46
1187	7.19	7.19	9.35	1188	7.07	7.07	9.20
1189	6.83	6.83	8.95	1190	6.64	6.64	8.75
1191	6.44	6.44	8.54	1192	6.22	6.22	8.30
1193	6.09	6.09	8.15	1194	5.96	5.96	8.01
1195	5.90	5.90	7.93	1196	5.79	5.79	7.80
1197	5.65	5.65	7.65	1198	5.57	5.57	7.54
1199	5.44	5.44	7.40	1200	5.32	5.32	7.26

Hydrograph Printouts

TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)	TIME (min)	PRE-ADJ (cfs)	PRE-FAT (cfs)	FATTENED (cfs)
1201	5.26	5.26	7.18	1202	5.15	5.15	7.06

1203	5.01	5.01	6.90	1204	4.93	4.93	6.80
1205	4.91	4.91	6.77	1206	4.92	4.92	6.75
1207	4.91	4.91	6.72	1208	4.92	4.92	6.71
1209	4.92	4.92	6.68	1210	4.92	4.92	6.66
1211	4.92	4.92	6.64	1212	4.92	4.92	6.62
1213	4.92	4.92	6.60	1214	4.92	4.92	6.58
1215	4.92	4.92	6.56	1216	4.92	4.92	6.55
1217	4.92	4.92	6.53	1218	4.92	4.92	6.51
1219	4.92	4.92	6.49	1220	4.92	4.92	6.47
1221	4.92	4.92	6.46	1222	4.92	4.92	6.44
1223	4.92	4.92	6.42	1224	4.92	4.92	6.41
1225	4.81	4.81	6.29	1226	4.67	4.67	6.14
1227	4.48	4.48	5.94	1228	4.32	4.32	5.78
1229	4.21	4.21	5.66	1230	4.07	4.07	5.51
1231	3.95	3.95	5.38	1232	3.78	3.78	5.20
1233	3.61	3.61	5.03	1234	3.47	3.47	4.88
1235	3.35	3.35	4.75	1236	3.22	3.22	4.61
1237	3.06	3.06	4.44	1238	2.88	2.88	4.26
1239	2.75	2.75	4.12	1240	2.62	2.62	3.99
1241	2.60	2.60	3.96	1242	2.58	2.58	3.92
1243	2.60	2.60	3.92	1244	2.62	2.62	3.93
1245	2.60	2.60	3.90	1246	2.61	2.61	3.90
1247	2.57	2.57	3.85	1248	2.60	2.60	3.87
1249	2.61	2.61	3.86	1250	2.61	2.61	3.85
1251	2.61	2.61	3.84	1252	2.57	2.57	3.79
1253	2.60	2.60	3.81	1254	2.61	2.61	3.81
1255	2.61	2.61	3.79	1256	2.61	2.61	3.79
1257	2.57	2.57	3.74	1258	2.60	2.60	3.75
1259	2.61	2.61	3.76	1260	2.61	2.61	3.74
1261	2.58	2.58	3.70	1262	2.56	2.56	3.68
1263	2.61	2.61	3.71	1264	2.61	2.61	3.70
1265	2.61	2.61	3.69	1266	2.57	2.57	3.65
1267	2.56	2.56	3.63	1268	2.60	2.60	3.66
1269	2.61	2.61	3.66	1270	2.61	2.61	3.65
1271	2.57	2.57	3.60	1272	2.56	2.56	3.59
1273	2.60	2.60	3.62	1274	2.61	2.61	3.61
1275	2.61	2.61	3.60	1276	2.57	2.57	3.56
1277	2.60	2.60	3.58	1278	2.61	2.61	3.59

1279	2.60	2.60	3.57	1280	2.61	2.61	3.57
1281	2.57	2.57	3.52	1282	2.60	2.60	3.54
1283	2.61	2.61	3.55	1284	2.61	2.61	3.53
1285	2.61	2.61	3.53	1286	2.57	2.57	3.48
1287	2.60	2.60	3.51	1288	2.61	2.61	3.51
1289	2.61	2.61	3.50	1290	2.61	2.61	3.50
1291	2.57	2.57	3.45	1292	2.60	2.60	3.47
1293	2.61	2.61	3.48	1294	2.61	2.61	3.46
1295	2.61	2.61	3.46	1296	2.57	2.57	3.42
1297	2.56	2.56	3.40	1298	2.50	2.50	3.33
1299	2.40	2.40	3.23	1300	2.36	2.36	3.19
1310	1.72	1.72	2.50	1320	1.61	1.61	2.35
1330	1.64	1.64	2.33	1340	1.61	1.61	2.26
1350	1.61	1.61	2.22	1360	1.61	1.61	2.19
1370	1.61	1.61	2.16	1380	1.64	1.64	2.16
1390	1.61	1.61	2.10	1400	1.61	1.61	2.08
1420	1.61	1.61	2.03	1440	1.61	1.61	2.00
1460	1.61	1.61	1.96	1500	1.61	1.61	1.91

Hydrograph Printouts

HYDROGRAPH PRINTOUT AT: 3A

TOTAL AREA TO HYDROGRAPH: 15 acres
HYDROGRAPH PEAK: 33 cfs
TIME OF PEAK: 1156 minutes
HYDROGRAPH VOLUME: 7.67 acre-ft

TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW

(min)	(cfs)	(min)	(cfs)	(min)	(cfs)	(min)	(cfs)	(min)	(cfs)
0	0.00	100	1.63	200	1.66	300	1.66	400	1.68
500	1.69	600	1.96	700	2.73	800	2.81	900	3.77
1000	5.53	1050	7.23	1100	9.64	1110	12.86	1120	16.91
1130	18.16	1131	18.11	1132	18.07	1133	18.02	1134	17.98
1135	17.98	1136	17.91	1137	17.90	1138	17.86	1139	17.85
1140	17.81	1141	17.88	1142	17.97	1143	18.05	1144	18.15
1145	18.66	1146	19.22	1147	19.78	1148	20.39	1149	22.71
1150	25.29	1151	27.63	1152	30.19	1153	32.53	1154	33.39
1155	33.36	1156	33.47	1157	33.36	1158	33.26	1159	33.22
1160	33.18	1161	32.73	1162	32.21	1163	31.78	1164	31.23
1165	28.64	1166	25.60	1167	22.86	1168	19.79	1169	16.91
1170	15.63	1171	15.22	1172	14.59	1173	14.32	1174	13.73
1175	13.28	1176	12.66	1177	12.10	1178	11.40	1179	10.87
1180	10.29	1181	10.16	1182	10.01	1183	9.86	1184	9.75
1185	9.61	1186	9.46	1187	9.35	1188	9.20	1189	8.95
1190	8.75	1191	8.54	1192	8.30	1193	8.15	1194	8.01
1195	7.93	1196	7.80	1197	7.65	1198	7.54	1199	7.40
1200	7.26	1201	7.18	1202	7.06	1203	6.90	1204	6.80
1205	6.77	1206	6.75	1207	6.72	1208	6.71	1209	6.68
1210	6.66	1211	6.64	1212	6.62	1213	6.60	1214	6.58
1215	6.56	1216	6.55	1217	6.53	1218	6.51	1219	6.49
1220	6.47	1221	6.46	1222	6.44	1223	6.42	1224	6.41
1225	6.29	1226	6.14	1227	5.94	1228	5.78	1229	5.66
1230	5.51	1231	5.38	1232	5.20	1233	5.03	1234	4.88
1235	4.75	1236	4.61	1237	4.44	1238	4.26	1239	4.12
1240	3.99	1241	3.96	1242	3.92	1243	3.92	1244	3.93
1245	3.90	1246	3.90	1247	3.85	1248	3.87	1249	3.86
1250	3.85	1251	3.84	1252	3.79	1253	3.81	1254	3.81
1255	3.79	1256	3.79	1257	3.74	1258	3.75	1259	3.76
1260	3.74	1261	3.70	1262	3.68	1263	3.71	1264	3.70
1265	3.69	1266	3.65	1267	3.63	1268	3.66	1269	3.66
1270	3.65	1271	3.60	1272	3.59	1273	3.62	1274	3.61
1275	3.60	1276	3.56	1277	3.58	1278	3.59	1279	3.57
1280	3.57	1281	3.52	1282	3.54	1283	3.55	1284	3.53
1285	3.53	1286	3.48	1287	3.51	1288	3.51	1289	3.50
1290	3.50	1291	3.45	1292	3.47	1293	3.48	1294	3.46

1295	3.46	1296	3.42	1297	3.40	1298	3.33	1299	3.23
1300	3.19	1310	2.50	1320	2.35	1330	2.33	1340	2.26
1350	2.22	1360	2.19	1370	2.16	1380	2.16	1390	2.10
1400	2.08	1420	2.03	1440	2.00	1460	1.96	1500	1.91

VCRat Model Input

Model Lines

```
005     1  001A Header place holder
005     1  002A Header place holder
005     1  003A Header place holder
999
999
006     1  001A 050080001516A97400010000100                   G1
006     1  002A 010      099A97                            1
110
111            1.00000    6.14
110
006     1  003A 010      099A97                            1  2
999
```

DESIGN ASSOCIATES INC

Attachment C

Detention Calculations

DESIGN ASSOCIATES INC

Attachment C-1

East Tributary

Project Summary	
Title	
Engineer	
Company	
Date	5/28/2019

Notes

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Subsection: User Notifications

User Notifications?	No user notifications generated.

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
CM-1	Base	0	0.385	19.233	1.74

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
O-1	Base	0	0.377	19.350	1.48

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
PO-1 (IN)	Base	0	0.377	19.250	1.74	(N/A)	(N/A)
PO-1 (OUT)	Base	0	0.377	19.350	1.48	102.70	0.010

Peak Discharge	1.74 ft³/s
Time to Peak	19.233 hours
Hydrograph Volume	0.385 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	0.08	0.08	0.08	0.08
0.083	0.08	0.08	0.08	0.08	0.08
0.167	0.08	0.08	0.08	0.08	0.08
0.250	0.08	0.08	0.08	0.08	0.08
0.333	0.08	0.08	0.08	0.08	0.08
0.417	0.08	0.08	0.08	0.08	0.08
0.500	0.08	0.08	0.08	0.08	0.08
0.583	0.08	0.08	0.08	0.08	0.08
0.667	0.08	0.08	0.08	0.08	0.08
0.750	0.08	0.08	0.08	0.08	0.08
0.833	0.08	0.08	0.08	0.08	0.08
0.917	0.08	0.08	0.08	0.08	0.08
1.000	0.08	0.08	0.08	0.08	0.08
1.083	0.08	0.08	0.08	0.08	0.08
1.167	0.08	0.08	0.08	0.08	0.08
1.250	0.08	0.08	0.08	0.08	0.08
1.333	0.08	0.08	0.08	0.08	0.08
1.417	0.08	0.08	0.08	0.08	0.08
1.500	0.08	0.08	0.08	0.08	0.08
1.583	0.08	0.08	0.08	0.08	0.08
1.667	0.08	0.08	0.08	0.08	0.08
1.750	0.08	0.08	0.08	0.08	0.08
1.833	0.08	0.08	0.08	0.08	0.08
1.917	0.08	0.08	0.08	0.08	0.08
2.000	0.08	0.08	0.08	0.08	0.08
2.083	0.08	0.08	0.08	0.08	0.08
2.167	0.08	0.08	0.08	0.08	0.08
2.250	0.08	0.08	0.08	0.08	0.08
2.333	0.08	0.08	0.08	0.08	0.08
2.417	0.08	0.08	0.08	0.08	0.08
2.500	0.08	0.08	0.08	0.08	0.08
2.583	0.08	0.08	0.08	0.08	0.08
2.667	0.08	0.08	0.08	0.08	0.08
2.750	0.08	0.08	0.08	0.08	0.08
2.833	0.08	0.08	0.08	0.08	0.08
2.917	0.08	0.08	0.08	0.08	0.08
3.000	0.08	0.08	0.08	0.08	0.08
3.083	0.08	0.08	0.08	0.08	0.08
3.167	0.08	0.08	0.08	0.08	0.08

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
3.250	0.08	0.08	0.08	0.08	0.08
3.333	0.08	0.08	0.08	0.08	0.08
3.417	0.08	0.08	0.08	0.08	0.08
3.500	0.08	0.08	0.08	0.08	0.08
3.583	0.08	0.08	0.08	0.08	0.08
3.667	0.08	0.08	0.08	0.08	0.08
3.750	0.08	0.08	0.08	0.08	0.08
3.833	0.08	0.08	0.08	0.08	0.08
3.917	0.08	0.08	0.08	0.08	0.08
4.000	0.08	0.08	0.08	0.08	0.08
4.083	0.08	0.08	0.08	0.08	0.08
4.167	0.08	0.08	0.08	0.08	0.08
4.250	0.08	0.08	0.08	0.08	0.08
4.333	0.08	0.08	0.08	0.08	0.08
4.417	0.08	0.08	0.08	0.08	0.08
4.500	0.08	0.08	0.08	0.08	0.08
4.583	0.08	0.08	0.08	0.08	0.08
4.667	0.08	0.08	0.08	0.08	0.08
4.750	0.08	0.08	0.08	0.08	0.08
4.833	0.08	0.08	0.08	0.08	0.08
4.917	0.08	0.08	0.08	0.08	0.08
5.000	0.08	0.08	0.08	0.08	0.08
5.083	0.08	0.08	0.08	0.08	0.08
5.167	0.08	0.08	0.08	0.08	0.08
5.250	0.08	0.08	0.08	0.08	0.08
5.333	0.08	0.08	0.08	0.08	0.08
5.417	0.08	0.08	0.08	0.08	0.08
5.500	0.08	0.08	0.08	0.08	0.08
5.583	0.08	0.08	0.08	0.08	0.08
5.667	0.08	0.08	0.08	0.08	0.08
5.750	0.08	0.08	0.08	0.08	0.08
5.833	0.08	0.08	0.08	0.08	0.08
5.917	0.08	0.08	0.08	0.08	0.08
6.000	0.08	0.08	0.08	0.08	0.08
6.083	0.08	0.08	0.08	0.08	0.08
6.167	0.08	0.08	0.08	0.08	0.08
6.250	0.08	0.08	0.08	0.08	0.08
6.333	0.08	0.08	0.08	0.08	0.08
6.417	0.08	0.08	0.08	0.08	0.08
6.500	0.08	0.08	0.08	0.08	0.08
6.583	0.08	0.08	0.08	0.08	0.08
6.667	0.08	0.08	0.08	0.08	0.08
6.750	0.08	0.08	0.08	0.08	0.08
6.833	0.08	0.08	0.08	0.08	0.08

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
6.917	0.08	0.08	0.08	0.08	0.08
7.000	0.08	0.08	0.08	0.08	0.08
7.083	0.08	0.08	0.08	0.08	0.08
7.167	0.08	0.08	0.08	0.08	0.08
7.250	0.08	0.08	0.08	0.08	0.08
7.333	0.08	0.08	0.08	0.08	0.08
7.417	0.08	0.08	0.08	0.08	0.08
7.500	0.08	0.08	0.08	0.08	0.08
7.583	0.08	0.08	0.08	0.08	0.08
7.667	0.08	0.08	0.08	0.08	0.08
7.750	0.08	0.08	0.08	0.08	0.08
7.833	0.08	0.08	0.08	0.08	0.08
7.917	0.08	0.08	0.08	0.08	0.08
8.000	0.08	0.08	0.08	0.08	0.08
8.083	0.08	0.08	0.08	0.08	0.08
8.167	0.08	0.08	0.08	0.08	0.08
8.250	0.08	0.08	0.08	0.08	0.08
8.333	0.08	0.09	0.09	0.09	0.09
8.417	0.09	0.09	0.09	0.09	0.09
8.500	0.09	0.09	0.09	0.09	0.09
8.583	0.09	0.09	0.09	0.09	0.09
8.667	0.09	0.09	0.09	0.09	0.09
8.750	0.09	0.09	0.09	0.09	0.09
8.833	0.09	0.09	0.09	0.09	0.09
8.917	0.09	0.09	0.09	0.09	0.09
9.000	0.09	0.09	0.09	0.09	0.09
9.083	0.09	0.09	0.09	0.09	0.09
9.167	0.09	0.09	0.09	0.09	0.09
9.250	0.09	0.09	0.09	0.09	0.09
9.333	0.09	0.09	0.09	0.09	0.09
9.417	0.09	0.09	0.09	0.09	0.09
9.500	0.09	0.09	0.09	0.09	0.09
9.583	0.09	0.09	0.09	0.09	0.09
9.667	0.09	0.09	0.09	0.09	0.09
9.750	0.09	0.09	0.09	0.09	0.09
9.833	0.09	0.09	0.09	0.09	0.09
9.917	0.09	0.09	0.09	0.09	0.09
10.000	0.09	0.13	0.13	0.13	0.13
10.083	0.13	0.13	0.13	0.13	0.13
10.167	0.13	0.13	0.13	0.13	0.13
10.250	0.13	0.13	0.13	0.13	0.13
10.333	0.13	0.13	0.13	0.13	0.13
10.417	0.13	0.13	0.13	0.13	0.13
10.500	0.13	0.13	0.13	0.13	0.13

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
10.583	0.13	0.13	0.13	0.13	0.13
10.667	0.13	0.13	0.13	0.13	0.13
10.750	0.13	0.13	0.13	0.13	0.13
10.833	0.13	0.13	0.13	0.13	0.13
10.917	0.13	0.13	0.13	0.13	0.13
11.000	0.13	0.13	0.13	0.13	0.13
11.083	0.13	0.13	0.13	0.13	0.13
11.167	0.13	0.13	0.13	0.13	0.13
11.250	0.13	0.13	0.13	0.13	0.13
11.333	0.13	0.13	0.13	0.13	0.13
11.417	0.13	0.13	0.13	0.13	0.13
11.500	0.13	0.13	0.13	0.13	0.13
11.583	0.13	0.13	0.13	0.13	0.13
11.667	0.13	0.13	0.13	0.13	0.13
11.750	0.13	0.13	0.13	0.13	0.13
11.833	0.13	0.13	0.13	0.13	0.13
11.917	0.13	0.13	0.13	0.13	0.13
12.000	0.13	0.13	0.13	0.13	0.13
12.083	0.13	0.13	0.13	0.13	0.13
12.167	0.13	0.13	0.13	0.13	0.13
12.250	0.13	0.13	0.13	0.13	0.13
12.333	0.13	0.13	0.13	0.13	0.13
12.417	0.13	0.13	0.13	0.13	0.13
12.500	0.13	0.13	0.13	0.13	0.13
12.583	0.13	0.13	0.13	0.13	0.13
12.667	0.13	0.13	0.13	0.13	0.13
12.750	0.13	0.13	0.13	0.13	0.13
12.833	0.13	0.13	0.13	0.13	0.13
12.917	0.13	0.13	0.13	0.13	0.13
13.000	0.13	0.13	0.13	0.13	0.13
13.083	0.13	0.13	0.13	0.13	0.13
13.167	0.13	0.13	0.13	0.13	0.13
13.250	0.13	0.13	0.13	0.13	0.13
13.333	0.13	0.18	0.18	0.18	0.18
13.417	0.18	0.18	0.18	0.18	0.18
13.500	0.18	0.18	0.18	0.18	0.18
13.583	0.18	0.18	0.18	0.18	0.18
13.667	0.18	0.18	0.18	0.18	0.18
13.750	0.18	0.18	0.18	0.18	0.18
13.833	0.18	0.18	0.18	0.18	0.18
13.917	0.18	0.18	0.18	0.18	0.18
14.000	0.18	0.18	0.18	0.18	0.18
14.083	0.18	0.18	0.18	0.18	0.18
14.167	0.18	0.18	0.18	0.18	0.18

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
14.250	0.18	0.18	0.18	0.18	0.18
14.333	0.18	0.18	0.18	0.18	0.18
14.417	0.18	0.18	0.18	0.18	0.18
14.500	0.18	0.18	0.18	0.18	0.18
14.583	0.18	0.18	0.18	0.18	0.18
14.667	0.18	0.18	0.18	0.18	0.18
14.750	0.18	0.18	0.18	0.18	0.18
14.833	0.18	0.18	0.18	0.18	0.18
14.917	0.18	0.18	0.18	0.18	0.18
15.000	0.18	0.26	0.26	0.26	0.26
15.083	0.26	0.26	0.26	0.26	0.26
15.167	0.26	0.26	0.26	0.26	0.26
15.250	0.26	0.26	0.26	0.26	0.26
15.333	0.26	0.26	0.26	0.26	0.26
15.417	0.26	0.26	0.26	0.26	0.26
15.500	0.26	0.26	0.26	0.26	0.26
15.583	0.26	0.26	0.26	0.26	0.26
15.667	0.26	0.26	0.26	0.26	0.26
15.750	0.26	0.26	0.26	0.26	0.26
15.833	0.26	0.26	0.26	0.26	0.26
15.917	0.26	0.26	0.26	0.26	0.26
16.000	0.26	0.26	0.26	0.26	0.26
16.083	0.26	0.26	0.26	0.26	0.26
16.167	0.26	0.26	0.26	0.26	0.26
16.250	0.26	0.26	0.26	0.26	0.26
16.333	0.26	0.26	0.26	0.26	0.26
16.417	0.26	0.26	0.26	0.26	0.26
16.500	0.26	0.26	0.26	0.26	0.26
16.583	0.26	0.26	0.26	0.26	0.26
16.667	0.26	0.34	0.34	0.34	0.34
16.750	0.34	0.34	0.34	0.34	0.34
16.833	0.34	0.34	0.34	0.34	0.34
16.917	0.34	0.34	0.34	0.34	0.34
17.000	0.34	0.34	0.34	0.34	0.34
17.083	0.34	0.34	0.34	0.34	0.34
17.167	0.34	0.34	0.34	0.34	0.34
17.250	0.34	0.34	0.34	0.34	0.34
17.333	0.34	0.34	0.34	0.34	0.34
17.417	0.34	0.34	0.34	0.34	0.34
17.500	0.34	0.45	0.45	0.45	0.45
17.583	0.45	0.45	0.45	0.45	0.45
17.667	0.45	0.45	0.45	0.45	0.45
17.750	0.45	0.45	0.45	0.45	0.45
17.833	0.45	0.45	0.45	0.45	0.45

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
17.917	0.45	0.45	0.45	0.45	0.45
18.000	0.45	0.45	0.45	0.45	0.45
18.083	0.45	0.45	0.45	0.45	0.45
18.167	0.45	0.45	0.45	0.45	0.45
18.250	0.45	0.45	0.45	0.45	0.45
18.333	0.45	0.64	0.64	0.64	0.64
18.417	0.64	0.64	0.64	0.64	0.64
18.500	0.64	0.82	0.82	0.82	0.82
18.583	0.82	0.82	0.82	0.82	0.82
18.667	0.82	0.85	0.85	0.85	0.85
18.750	0.85	0.85	0.85	0.85	0.85
18.833	0.85	0.85	0.85	0.85	0.84
18.917	0.84	0.84	0.84	0.84	0.84
19.000	0.84	0.84	0.84	0.85	0.86
19.083	0.89	0.93	0.96	0.99	1.12
19.167	1.27	1.41	1.56	1.70	1.74
19.250	1.74	1.74	1.73	1.70	1.67
19.333	1.64	1.61	1.49	1.34	1.20
19.417	1.03	0.86	0.79	0.76	0.73
19.500	0.71	0.68	0.65	0.62	0.59
19.583	0.56	0.53	0.50	0.49	0.48
19.667	0.47	0.47	0.46	0.45	0.45
19.750	0.44	0.43	0.42	0.41	0.40
19.833	0.40	0.39	0.38	0.37	0.37
19.917	0.36	0.35	0.35	0.34	0.33
20.000	0.32	0.32	0.32	0.32	0.31
20.083	0.31	0.31	0.31	0.31	0.31
20.167	0.31	0.31	0.31	0.31	0.31
20.250	0.30	0.30	0.30	0.30	0.30
20.333	0.30	0.30	0.30	0.30	0.30
20.417	0.29	0.28	0.27	0.26	0.26
20.500	0.25	0.24	0.23	0.22	0.21
20.583	0.20	0.20	0.19	0.18	0.18
20.667	0.18	0.19	0.18	0.18	0.18
20.750	0.18	0.18	0.18	0.18	0.18
20.833	0.18	0.18	0.18	0.18	0.18
20.917	0.18	0.18	0.17	0.17	0.17
21.000	0.17	0.17	0.17	0.17	0.17
21.083	0.17	0.17	0.17	0.17	0.17
21.167	0.17	0.17	0.17	0.17	0.17
21.250	0.17	0.17	0.17	0.17	0.17
21.333	0.17	0.16	0.16	0.16	0.16
21.417	0.17	0.16	0.16	0.16	0.16
21.500	0.16	0.16	0.16	0.16	0.16

Subsection: Read Hydrograph
Scenario: Base
Label: CM-1

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
21.583	0.16	0.16	0.16	0.15	0.15
21.667	0.15	0.15	0.15	0.15	0.15
21.750	0.15	0.15	0.15	0.15	0.15
21.833	0.11	0.11	0.11	0.11	0.11
21.917	0.11	0.11	0.11	0.11	0.11
22.000	0.11	0.11	0.11	0.11	0.11
22.083	0.11	0.11	0.11	0.11	0.11
22.167	0.11	0.11	0.11	0.11	0.11
22.250	0.11	0.11	0.11	0.11	0.11
22.333	0.11	0.11	0.11	0.11	0.11
22.417	0.11	0.11	0.11	0.11	0.11
22.500	0.10	0.10	0.10	0.10	0.10
22.583	0.10	0.10	0.10	0.10	0.10
22.667	0.10	0.10	0.10	0.10	0.10
22.750	0.10	0.10	0.10	0.10	0.10
22.833	0.10	0.10	0.10	0.10	0.10
22.917	0.10	0.10	0.10	0.10	0.10
23.000	0.10	0.10	0.10	0.10	0.10
23.083	0.10	0.10	0.10	0.10	0.10
23.167	0.10	0.10	0.10	0.10	0.10
23.250	0.10	0.10	0.10	0.10	0.10
23.333	0.10	0.10	0.10	0.10	0.10
23.417	0.10	0.10	0.10	0.10	0.10
23.500	0.10	0.10	0.10	0.10	0.10
23.583	0.10	0.10	0.10	0.10	0.10
23.667	0.10	0.10	0.10	0.10	0.10
23.750	0.10	0.10	0.10	0.10	0.10
23.833	0.10	0.10	0.10	0.10	0.10
23.917	0.10	0.10	0.10	0.10	0.10
24.000	0.09	0.09	0.09	0.09	0.09
24.083	0.09	0.09	0.09	0.09	0.09
24.167	0.09	0.09	0.09	0.09	0.09
24.250	0.09	0.09	0.09	0.09	0.09
24.333	0.09	0.09	0.09	0.09	0.09
24.417	0.09	0.09	0.09	0.09	0.09
24.500	0.09	0.09	0.09	0.09	0.09
24.583	0.09	0.09	0.09	0.09	0.09
24.667	0.09	0.09	0.09	0.09	0.09
24.750	0.09	0.09	0.09	0.09	0.09
24.833	0.09	0.09	0.09	0.09	0.09
24.917	0.09	0.09	0.09	0.09	0.09
25.000	0.09	(N/A)	(N/A)	(N/A)	(N/A)

Summary for Hydrograph Addition at 'O-1'

Upstream Link	Upstream Node
Outlet-2	PO-1

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft^3/s)
Flow (From)	Outlet-2	0.377	19.350	1.48
Flow (In)	O-1	0.377	19.350	1.48

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	100.00	100.10	100.17	100.18	100.18
0.250	100.18	100.18	100.18	100.18	100.18
0.500	100.18	100.18	100.18	100.18	100.18
0.750	100.18	100.18	100.18	100.18	100.18
1.000	100.18	100.18	100.18	100.18	100.18
1.250	100.18	100.18	100.18	100.18	100.18
1.500	100.18	100.18	100.18	100.18	100.18
1.750	100.18	100.18	100.18	100.18	100.18
2.000	100.18	100.18	100.18	100.18	100.18
2.250	100.18	100.18	100.18	100.18	100.18
2.500	100.18	100.18	100.18	100.18	100.18
2.750	100.18	100.18	100.18	100.18	100.18
3.000	100.18	100.18	100.18	100.18	100.18
3.250	100.18	100.18	100.18	100.18	100.18
3.500	100.18	100.18	100.18	100.18	100.18
3.750	100.18	100.18	100.18	100.18	100.18
4.000	100.18	100.18	100.18	100.18	100.18
4.250	100.18	100.18	100.18	100.18	100.18
4.500	100.18	100.18	100.18	100.18	100.18
4.750	100.18	100.18	100.18	100.18	100.18
5.000	100.18	100.18	100.18	100.18	100.18
5.250	100.18	100.18	100.18	100.18	100.18
5.500	100.18	100.18	100.18	100.18	100.18
5.750	100.18	100.18	100.18	100.18	100.18
6.000	100.18	100.18	100.18	100.18	100.18
6.250	100.18	100.18	100.18	100.18	100.18
6.500	100.18	100.18	100.18	100.18	100.18
6.750	100.19	100.19	100.19	100.19	100.19
7.000	100.19	100.19	100.19	100.19	100.19
7.250	100.19	100.19	100.19	100.19	100.19
7.500	100.19	100.19	100.19	100.19	100.19
7.750	100.19	100.19	100.19	100.19	100.19
8.000	100.19	100.19	100.19	100.19	100.19
8.250	100.19	100.19	100.19	100.20	100.20
8.500	100.20	100.20	100.20	100.20	100.20
8.750	100.20	100.20	100.20	100.20	100.20
9.000	100.20	100.20	100.20	100.20	100.20
9.250	100.20	100.20	100.20	100.20	100.20
9.500	100.20	100.20	100.20	100.20	100.20
9.750	100.20	100.20	100.20	100.20	100.20
10.000	100.20	100.22	100.24	100.24	100.24
10.250	100.24	100.24	100.24	100.24	100.24
10.500	100.24	100.24	100.24	100.24	100.24

Subsection: Time vs. Elevation
Label: PO-1 (OUT)

Scenario: Base

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.750	100.24	100.24	100.24	100.24	100.24
11.000	100.24	100.24	100.24	100.24	100.24
11.250	100.24	100.24	100.24	100.24	100.24
11.500	100.24	100.24	100.24	100.24	100.24
11.750	100.24	100.24	100.24	100.24	100.24
12.000	100.24	100.24	100.24	100.24	100.24
12.250	100.24	100.24	100.24	100.24	100.24
12.500	100.24	100.24	100.24	100.24	100.24
12.750	100.24	100.24	100.24	100.24	100.24
13.000	100.24	100.24	100.24	100.24	100.24
13.250	100.24	100.24	100.26	100.29	100.29
13.500	100.29	100.29	100.29	100.29	100.29
13.750	100.29	100.29	100.29	100.29	100.29
14.000	100.29	100.29	100.29	100.29	100.29
14.250	100.29	100.29	100.29	100.29	100.29
14.500	100.29	100.29	100.29	100.29	100.29
14.750	100.29	100.29	100.29	100.29	100.29
15.000	100.29	100.32	100.35	100.36	100.36
15.250	100.36	100.36	100.36	100.36	100.36
15.500	100.36	100.36	100.36	100.36	100.36
15.750	100.36	100.36	100.36	100.36	100.36
16.000	100.36	100.36	100.36	100.36	100.36
16.250	100.36	100.36	100.36	100.36	100.36
16.500	100.36	100.36	100.36	100.36	100.39
16.750	100.41	100.42	100.42	100.42	100.42
17.000	100.42	100.42	100.42	100.42	100.42
17.250	100.42	100.42	100.42	100.42	100.42
17.500	100.42	100.45	100.49	100.49	100.49
17.750	100.49	100.49	100.49	100.49	100.49
18.000	100.49	100.49	100.49	100.49	100.49
18.250	100.49	100.49	100.56	100.65	100.68
18.500	100.70	100.77	100.88	100.93	100.97
18.750	101.01	101.04	101.05	101.05	101.05
19.000	101.04	101.04	101.08	101.20	101.53
19.250	101.99	102.41	102.70	102.62	102.17
19.500	101.71	101.34	101.02	100.77	100.60
19.750	100.51	100.47	100.45	100.44	100.43
20.000	100.41	100.40	100.40	100.40	100.40
20.250	100.39	100.39	100.39	100.39	100.38
20.500	100.36	100.34	100.32	100.30	100.29
20.750	100.29	100.29	100.29	100.29	100.29
21.000	100.29	100.28	100.28	100.28	100.28
21.250	100.28	100.28	100.28	100.28	100.27

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
21.500	100.27	100.27	100.27	100.27	100.26
21.750	100.26	100.26	100.24	100.22	100.22
22.000	100.22	100.22	100.22	100.22	100.22
22.250	100.22	100.22	100.22	100.22	100.22
22.500	100.22	100.21	100.21	100.21	100.21
22.750	100.21	100.21	100.21	100.21	100.21
23.000	100.21	100.21	100.21	100.21	100.21
23.250	100.21	100.21	100.21	100.21	100.21
23.500	100.21	100.21	100.21	100.21	100.21
23.750	100.21	100.21	100.21	100.21	100.21
24.000	100.21	(N/A)	(N/A)	(N/A)	(N/A)

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.000
1.000	0.000	0.000	0.000	0.000	0.000
1.250	0.000	0.000	0.000	0.000	0.000
1.500	0.000	0.000	0.000	0.000	0.000
1.750	0.000	0.000	0.000	0.000	0.000
2.000	0.000	0.000	0.000	0.000	0.000
2.250	0.000	0.000	0.000	0.000	0.000
2.500	0.000	0.000	0.000	0.000	0.000
2.750	0.000	0.000	0.000	0.000	0.000
3.000	0.000	0.000	0.000	0.000	0.000
3.250	0.000	0.000	0.000	0.000	0.000
3.500	0.000	0.000	0.000	0.000	0.000
3.750	0.000	0.000	0.000	0.000	0.000
4.000	0.000	0.000	0.000	0.000	0.000
4.250	0.000	0.000	0.000	0.000	0.000
4.500	0.000	0.000	0.000	0.000	0.000
4.750	0.000	0.000	0.000	0.000	0.000
5.000	0.000	0.000	0.000	0.000	0.000
5.250	0.000	0.000	0.000	0.000	0.000
5.500	0.000	0.000	0.000	0.000	0.000
5.750	0.000	0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000	0.000	0.000
6.250	0.000	0.000	0.000	0.000	0.000
6.500	0.000	0.000	0.000	0.000	0.000
6.750	0.000	0.000	0.000	0.000	0.000
7.000	0.000	0.000	0.000	0.000	0.000
7.250	0.000	0.000	0.000	0.000	0.000
7.500	0.000	0.000	0.000	0.000	0.000
7.750	0.000	0.000	0.000	0.000	0.000
8.000	0.000	0.000	0.000	0.000	0.000
8.250	0.000	0.000	0.000	0.000	0.000
8.500	0.000	0.000	0.000	0.000	0.000
8.750	0.000	0.000	0.000	0.000	0.000
9.000	0.000	0.000	0.000	0.000	0.000
9.250	0.000	0.000	0.000	0.000	0.000
9.500	0.000	0.000	0.000	0.000	0.000
9.750	0.000	0.000	0.000	0.000	0.000
10.000	0.000	0.000	0.000	0.000	0.000
10.250	0.000	0.000	0.000	0.000	0.000
10.500	0.000	0.000	0.000	0.000	0.000

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.750	0.000	0.000	0.000	0.000	0.000
11.000	0.000	0.000	0.000	0.000	0.000
11.250	0.000	0.000	0.000	0.000	0.000
11.500	0.000	0.000	0.000	0.000	0.000
11.750	0.000	0.000	0.000	0.000	0.000
12.000	0.000	0.000	0.000	0.000	0.000
12.250	0.000	0.000	0.000	0.000	0.000
12.500	0.000	0.000	0.000	0.000	0.000
12.750	0.000	0.000	0.000	0.000	0.000
13.000	0.000	0.000	0.000	0.000	0.000
13.250	0.000	0.000	0.000	0.001	0.001
13.500	0.001	0.001	0.001	0.001	0.001
13.750	0.001	0.001	0.001	0.001	0.001
14.000	0.001	0.001	0.001	0.001	0.001
14.250	0.001	0.001	0.001	0.001	0.001
14.500	0.001	0.001	0.001	0.001	0.001
14.750	0.001	0.001	0.001	0.001	0.001
15.000	0.001	0.001	0.001	0.001	0.001
15.250	0.001	0.001	0.001	0.001	0.001
15.500	0.001	0.001	0.001	0.001	0.001
15.750	0.001	0.001	0.001	0.001	0.001
16.000	0.001	0.001	0.001	0.001	0.001
16.250	0.001	0.001	0.001	0.001	0.001
16.500	0.001	0.001	0.001	0.001	0.001
16.750	0.001	0.001	0.001	0.001	0.001
17.000	0.001	0.001	0.001	0.001	0.001
17.250	0.001	0.001	0.001	0.001	0.001
17.500	0.001	0.001	0.001	0.001	0.001
17.750	0.001	0.001	0.001	0.001	0.001
18.000	0.001	0.001	0.001	0.001	0.001
18.250	0.001	0.001	0.001	0.002	0.002
18.500	0.002	0.002	0.003	0.003	0.003
18.750	0.003	0.003	0.003	0.003	0.003
19.000	0.003	0.003	0.003	0.004	0.005
19.250	0.007	0.009	0.010	0.010	0.008
19.500	0.006	0.005	0.003	0.002	0.002
19.750	0.001	0.001	0.001	0.001	0.001
20.000	0.001	0.001	0.001	0.001	0.001
20.250	0.001	0.001	0.001	0.001	0.001
20.500	0.001	0.001	0.001	0.001	0.001
20.750	0.001	0.001	0.001	0.001	0.001
21.000	0.001	0.001	0.001	0.001	0.001
21.250	0.001	0.001	0.000	0.000	0.000

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
21.500	0.000	0.000	0.000	0.000	0.000
21.750	0.000	0.000	0.000	0.000	0.000
22.000	0.000	0.000	0.000	0.000	0.000
22.250	0.000	0.000	0.000	0.000	0.000
22.500	0.000	0.000	0.000	0.000	0.000
22.750	0.000	0.000	0.000	0.000	0.000
23.000	0.000	0.000	0.000	0.000	0.000
23.250	0.000	0.000	0.000	0.000	0.000
23.500	0.000	0.000	0.000	0.000	0.000
23.750	0.000	0.000	0.000	0.000	0.000
24.000	0.000	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Pipe Volume
Label: PO-1

Scenario: Base

Volume Results (Pipe)	
Pipe Storage Upstream Invert	100.00 ft
Pipe Storage Downstream Invert	100.00 ft
Pipe Storage Length	65.00 ft
Pipe Storage Diameter	36.0 in
Pipe Storage Number of Barrels	1
Pipe Storage Slice Width	10.00 ft
Pipe Storage Vertical Increment	0.10 ft

Elevation (ft)	Perpendicular Downstream Depth (ft)	Perpendicular Downstream Area (ft²)	Wetted Length (ft)	Filled Length (ft)	Perpendicular Upstream Depth (ft)	Perpendicular Upstream Area (ft²)	Total Volume (ac-ft)
100.00	0.00	0.0	65.00	0.00	0.00	0.0	0.000
100.10	0.10	0.1	65.00	0.00	0.10	0.1	0.000
100.20	0.20	0.2	65.00	0.00	0.20	0.2	0.000
100.30	0.30	0.4	65.00	0.00	0.30	0.4	0.001
100.40	0.40	0.6	65.00	0.00	0.40	0.6	0.001
100.50	0.50	0.8	65.00	0.00	0.50	0.8	0.001
100.60	0.60	1.0	65.00	0.00	0.60	1.0	0.001
100.70	0.70	1.3	65.00	0.00	0.70	1.3	0.002
100.80	0.80	1.5	65.00	0.00	0.80	1.5	0.002
100.90	0.90	1.8	65.00	0.00	0.90	1.8	0.003
101.00	1.00	2.1	65.00	0.00	1.00	2.1	0.003
101.10	1.10	2.3	65.00	0.00	1.10	2.3	0.004
101.20	1.20	2.6	65.00	0.00	1.20	2.6	0.004
101.30	1.30	2.9	65.00	0.00	1.30	2.9	0.004
101.40	1.40	3.2	65.00	0.00	1.40	3.2	0.005
101.50	1.50	3.5	65.00	0.00	1.50	3.5	0.005
101.60	1.60	3.8	65.00	0.00	1.60	3.8	0.006
101.70	1.70	4.1	65.00	0.00	1.70	4.1	0.006
101.80	1.80	4.4	65.00	0.00	1.80	4.4	0.007
101.90	1.90	4.7	65.00	0.00	1.90	4.7	0.007
102.00	2.00	5.0	65.00	0.00	2.00	5.0	0.007
102.10	2.10	5.3	65.00	0.00	2.10	5.3	0.008
102.20	2.20	5.6	65.00	0.00	2.20	5.6	0.008
102.30	2.30	5.8	65.00	0.00	2.30	5.8	0.009
102.40	2.40	6.1	65.00	0.00	2.40	6.1	0.009
102.50	2.50	6.3	65.00	0.00	2.50	6.3	0.009
102.60	2.60	6.5	65.00	0.00	2.60	6.5	0.010
102.70	2.70	6.7	65.00	0.00	2.70	6.7	0.010
102.80	2.80	6.9	65.00	0.00	2.80	6.9	0.010
102.90	2.90	7.0	65.00	0.00	2.90	7.0	0.010
103.00	3.00	7.1	65.00	65.00	3.00	7.1	0.011

Requested Pond Water Surface Elevations	
Minimum (Headwater)	100.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	103.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	100.00	103.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	100.00 ft
Orifice Diameter	6.0 in
Orifice Coefficient	0.600

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

Subsection: Individual Outlet Curves
Scenario: Base
Label: Composite Outlet Structure - 1

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)
100.00	0.00	(N/A)	0.00
100.10	0.02	(N/A)	0.00
100.20	0.09	(N/A)	0.00
100.30	0.19	(N/A)	0.00
100.40	0.31	(N/A)	0.00
100.50	0.47	(N/A)	0.00
100.60	0.56	(N/A)	0.00
100.70	0.63	(N/A)	0.00
100.80	0.70	(N/A)	0.00
100.90	0.76	(N/A)	0.00
101.00	0.82	(N/A)	0.00
101.10	0.87	(N/A)	0.00
101.20	0.92	(N/A)	0.00
101.30	0.97	(N/A)	0.00
101.40	1.01	(N/A)	0.00
101.50	1.06	(N/A)	0.00
101.60	1.10	(N/A)	0.00
101.70	1.14	(N/A)	0.00
101.80	1.18	(N/A)	0.00
101.90	1.21	(N/A)	0.00
102.00	1.25	(N/A)	0.00
102.10	1.29	(N/A)	0.00
102.20	1.32	(N/A)	0.00
102.30	1.35	(N/A)	0.00
102.40	1.39	(N/A)	0.00
102.50	1.42	(N/A)	0.00
102.60	1.45	(N/A)	0.00
102.70	1.48	(N/A)	0.00
102.80	1.51	(N/A)	0.00
102.90	1.54	(N/A)	0.00
103.00	1.57	(N/A)	0.00

Computation Messages

Upstream HW &
DNstream TW < Inv.El
CRIT.DEPTH CONTROL
Vh= .025ft Dcr= .074ft
CRIT.DEPTH Hev= .00ft

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages
CRIT.DEPTH CONTROL
Vh= .053ft Dcr= .146ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .083ft Dcr= .217ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .116ft Dcr= .283ft
CRIT.DEPTH Hev= .00ft
H =.25
H =.35
H =.45
H =.55
H =.65
H =.75
H =.85
H =.95
H =1.05
H =1.15
H =1.25
H =1.35
H =1.45
H =1.55
H =1.65
H =1.75
H =1.85
H =1.95
H =2.05
H =2.15
H =2.25
H =2.35
H =2.45
H =2.55
H =2.65
H =2.75

Subsection: Composite Rating Curve
Label: Composite Outlet Structure - 1

Scenario: Base

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)
100.00	0.00	(N/A)	0.00
100.10	0.02	(N/A)	0.00
100.20	0.09	(N/A)	0.00
100.30	0.19	(N/A)	0.00
100.40	0.31	(N/A)	0.00
100.50	0.47	(N/A)	0.00
100.60	0.56	(N/A)	0.00
100.70	0.63	(N/A)	0.00
100.80	0.70	(N/A)	0.00
100.90	0.76	(N/A)	0.00
101.00	0.82	(N/A)	0.00
101.10	0.87	(N/A)	0.00
101.20	0.92	(N/A)	0.00
101.30	0.97	(N/A)	0.00
101.40	1.01	(N/A)	0.00
101.50	1.06	(N/A)	0.00
101.60	1.10	(N/A)	0.00
101.70	1.14	(N/A)	0.00
101.80	1.18	(N/A)	0.00
101.90	1.21	(N/A)	0.00
102.00	1.25	(N/A)	0.00
102.10	1.29	(N/A)	0.00
102.20	1.32	(N/A)	0.00
102.30	1.35	(N/A)	0.00
102.40	1.39	(N/A)	0.00
102.50	1.42	(N/A)	0.00
102.60	1.45	(N/A)	0.00
102.70	1.48	(N/A)	0.00
102.80	1.51	(N/A)	0.00
102.90	1.54	(N/A)	0.00
103.00	1.57	(N/A)	0.00

Contributing Structures
None Contributing
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1

Subsection: Composite Rating Curve
Label: Composite Outlet Structure - 1

Scenario: Base

Composite Outflow Summary

Contributing Structures
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1

Peak Discharge	1.48 ft³/s
Time to Peak	19.350 hours
Hydrograph Volume	0.377 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	0.02	0.07	0.07	0.08
0.250	0.08	0.08	0.08	0.08	0.08
0.500	0.08	0.08	0.08	0.08	0.08
0.750	0.08	0.08	0.08	0.08	0.08
1.000	0.08	0.08	0.08	0.08	0.08
1.250	0.08	0.08	0.08	0.08	0.08
1.500	0.08	0.08	0.08	0.08	0.08
1.750	0.08	0.08	0.08	0.08	0.08
2.000	0.08	0.08	0.08	0.08	0.08
2.250	0.08	0.08	0.08	0.08	0.08
2.500	0.08	0.08	0.08	0.08	0.08
2.750	0.08	0.08	0.08	0.08	0.08
3.000	0.08	0.08	0.08	0.08	0.08
3.250	0.08	0.08	0.08	0.08	0.08
3.500	0.08	0.08	0.08	0.08	0.08
3.750	0.08	0.08	0.08	0.08	0.08
4.000	0.08	0.08	0.08	0.08	0.08
4.250	0.08	0.08	0.08	0.08	0.08
4.500	0.08	0.08	0.08	0.08	0.08
4.750	0.08	0.08	0.08	0.08	0.08
5.000	0.08	0.08	0.08	0.08	0.08
5.250	0.08	0.08	0.08	0.08	0.08
5.500	0.08	0.08	0.08	0.08	0.08
5.750	0.08	0.08	0.08	0.08	0.08
6.000	0.08	0.08	0.08	0.08	0.08
6.250	0.08	0.08	0.08	0.08	0.08
6.500	0.08	0.08	0.08	0.08	0.08
6.750	0.08	0.08	0.08	0.08	0.08
7.000	0.08	0.08	0.08	0.08	0.08
7.250	0.08	0.08	0.08	0.08	0.08
7.500	0.08	0.08	0.08	0.08	0.08
7.750	0.08	0.08	0.08	0.08	0.08
8.000	0.08	0.08	0.08	0.08	0.08
8.250	0.08	0.08	0.08	0.09	0.09
8.500	0.09	0.09	0.09	0.09	0.09
8.750	0.09	0.09	0.09	0.09	0.09
9.000	0.09	0.09	0.09	0.09	0.09
9.250	0.09	0.09	0.09	0.09	0.09
9.500	0.09	0.09	0.09	0.09	0.09

Subsection: Diverted Hydrograph
Scenario: Base
Label: Outlet-2

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
9.750	0.09	0.09	0.09	0.09	0.09
10.000	0.09	0.11	0.13	0.13	0.13
10.250	0.13	0.13	0.13	0.13	0.13
10.500	0.13	0.13	0.13	0.13	0.13
10.750	0.13	0.13	0.13	0.13	0.13
11.000	0.13	0.13	0.13	0.13	0.13
11.250	0.13	0.13	0.13	0.13	0.13
11.500	0.13	0.13	0.13	0.13	0.13
11.750	0.13	0.13	0.13	0.13	0.13
12.000	0.13	0.13	0.13	0.13	0.13
12.250	0.13	0.13	0.13	0.13	0.13
12.500	0.13	0.13	0.13	0.13	0.13
12.750	0.13	0.13	0.13	0.13	0.13
13.000	0.13	0.13	0.13	0.13	0.13
13.250	0.13	0.13	0.15	0.17	0.18
13.500	0.18	0.18	0.18	0.18	0.18
13.750	0.18	0.18	0.18	0.18	0.18
14.000	0.18	0.18	0.18	0.18	0.18
14.250	0.18	0.18	0.18	0.18	0.18
14.500	0.18	0.18	0.18	0.18	0.18
14.750	0.18	0.18	0.18	0.18	0.18
15.000	0.18	0.21	0.26	0.26	0.26
15.250	0.26	0.26	0.26	0.26	0.26
15.500	0.26	0.26	0.26	0.26	0.26
15.750	0.26	0.26	0.26	0.26	0.26
16.000	0.26	0.26	0.26	0.26	0.26
16.250	0.26	0.26	0.26	0.26	0.26
16.500	0.26	0.26	0.26	0.26	0.30
16.750	0.34	0.34	0.34	0.34	0.34
17.000	0.34	0.34	0.34	0.34	0.34
17.250	0.34	0.34	0.34	0.34	0.34
17.500	0.34	0.40	0.45	0.45	0.45
17.750	0.45	0.45	0.45	0.45	0.45
18.000	0.45	0.45	0.45	0.45	0.45
18.250	0.45	0.45	0.52	0.60	0.62
18.500	0.63	0.68	0.75	0.78	0.80
18.750	0.83	0.84	0.84	0.85	0.84
19.000	0.84	0.84	0.86	0.92	1.07
19.250	1.25	1.39	1.48	1.45	1.31
19.500	1.14	0.99	0.83	0.68	0.56
19.750	0.48	0.43	0.40	0.38	0.36
20.000	0.33	0.32	0.31	0.31	0.31
20.250	0.31	0.30	0.30	0.30	0.29
20.500	0.26	0.23	0.21	0.19	0.18

Subsection: Diverted Hydrograph
Scenario: Base
Label: Outlet-2

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
20.750	0.18	0.18	0.18	0.18	0.17
21.000	0.17	0.17	0.17	0.17	0.17
21.250	0.17	0.17	0.16	0.16	0.16
21.500	0.16	0.16	0.16	0.15	0.15
21.750	0.15	0.15	0.13	0.11	0.11
22.000	0.11	0.11	0.11	0.11	0.11
22.250	0.11	0.11	0.11	0.11	0.11
22.500	0.10	0.10	0.10	0.10	0.10
22.750	0.10	0.10	0.10	0.10	0.10
23.000	0.10	0.10	0.10	0.10	0.10
23.250	0.10	0.10	0.10	0.10	0.10
23.500	0.10	0.10	0.10	0.10	0.10
23.750	0.10	0.10	0.10	0.10	0.10
24.000	0.09	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation-Volume-Flow Table (Pond) Scenario: Base
Label: PO-1

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	100.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
100.00	0.00	0.000	0.000	0.00	0.00	0.00
100.10	0.02	0.000	0.000	0.00	0.02	0.08
100.20	0.09	0.000	0.000	0.00	0.09	0.23
100.30	0.19	0.001	0.000	0.00	0.19	0.45
100.40	0.31	0.001	0.000	0.00	0.31	0.72
100.50	0.47	0.001	0.000	0.00	0.47	1.03
100.60	0.56	0.002	0.000	0.00	0.56	1.29
100.70	0.63	0.002	0.000	0.00	0.63	1.54
100.80	0.70	0.002	0.000	0.00	0.70	1.79
100.90	0.76	0.003	0.000	0.00	0.76	2.05
101.00	0.82	0.003	0.000	0.00	0.82	2.31
101.10	0.87	0.004	0.000	0.00	0.87	2.57
101.20	0.92	0.004	0.000	0.00	0.92	2.83
101.30	0.97	0.004	0.000	0.00	0.97	3.09
101.40	1.01	0.005	0.000	0.00	1.01	3.35
101.50	1.06	0.005	0.000	0.00	1.06	3.61
101.60	1.10	0.006	0.000	0.00	1.10	3.87
101.70	1.14	0.006	0.000	0.00	1.14	4.12
101.80	1.18	0.007	0.000	0.00	1.18	4.37
101.90	1.21	0.007	0.000	0.00	1.21	4.62
102.00	1.25	0.007	0.000	0.00	1.25	4.87
102.10	1.29	0.008	0.000	0.00	1.29	5.10
102.20	1.32	0.008	0.000	0.00	1.32	5.33
102.30	1.35	0.009	0.000	0.00	1.35	5.55
102.40	1.39	0.009	0.000	0.00	1.39	5.76
102.50	1.42	0.009	0.000	0.00	1.42	5.96
102.60	1.45	0.010	0.000	0.00	1.45	6.15
102.70	1.48	0.010	0.000	0.00	1.48	6.32
102.80	1.51	0.010	0.000	0.00	1.51	6.47
102.90	1.54	0.010	0.000	0.00	1.54	6.59
103.00	1.57	0.011	0.000	0.00	1.57	6.67

Subsection: Level Pool Pond Routing Summary
Label: PO-1 (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	100.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	0.050 hours

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.74 ft³/s	Time to Peak (Flow, In)	19.250 hours
Flow (Peak Outlet)	1.48 ft³/s	Time to Peak (Flow, Outlet)	19.350 hours

Elevation (Water Surface, Peak)	102.70 ft
Volume (Peak)	0.010 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.377 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.377 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.1 %

Peak Discharge	1.48 ft³/s
Time to Peak	19.350 hours
Hydrograph Volume	0.377 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	0.02	0.07	0.07	0.08
0.250	0.08	0.08	0.08	0.08	0.08
0.500	0.08	0.08	0.08	0.08	0.08
0.750	0.08	0.08	0.08	0.08	0.08
1.000	0.08	0.08	0.08	0.08	0.08
1.250	0.08	0.08	0.08	0.08	0.08
1.500	0.08	0.08	0.08	0.08	0.08
1.750	0.08	0.08	0.08	0.08	0.08
2.000	0.08	0.08	0.08	0.08	0.08
2.250	0.08	0.08	0.08	0.08	0.08
2.500	0.08	0.08	0.08	0.08	0.08
2.750	0.08	0.08	0.08	0.08	0.08
3.000	0.08	0.08	0.08	0.08	0.08
3.250	0.08	0.08	0.08	0.08	0.08
3.500	0.08	0.08	0.08	0.08	0.08
3.750	0.08	0.08	0.08	0.08	0.08
4.000	0.08	0.08	0.08	0.08	0.08
4.250	0.08	0.08	0.08	0.08	0.08
4.500	0.08	0.08	0.08	0.08	0.08
4.750	0.08	0.08	0.08	0.08	0.08
5.000	0.08	0.08	0.08	0.08	0.08
5.250	0.08	0.08	0.08	0.08	0.08
5.500	0.08	0.08	0.08	0.08	0.08
5.750	0.08	0.08	0.08	0.08	0.08
6.000	0.08	0.08	0.08	0.08	0.08
6.250	0.08	0.08	0.08	0.08	0.08
6.500	0.08	0.08	0.08	0.08	0.08
6.750	0.08	0.08	0.08	0.08	0.08
7.000	0.08	0.08	0.08	0.08	0.08
7.250	0.08	0.08	0.08	0.08	0.08
7.500	0.08	0.08	0.08	0.08	0.08
7.750	0.08	0.08	0.08	0.08	0.08
8.000	0.08	0.08	0.08	0.08	0.08
8.250	0.08	0.08	0.08	0.09	0.09
8.500	0.09	0.09	0.09	0.09	0.09
8.750	0.09	0.09	0.09	0.09	0.09
9.000	0.09	0.09	0.09	0.09	0.09
9.250	0.09	0.09	0.09	0.09	0.09
9.500	0.09	0.09	0.09	0.09	0.09

Subsection: Pond Routed Hydrograph (total out) Scenario: Base
Label: PO-1 (OUT)

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
9.750	0.09	0.09	0.09	0.09	0.09
10.000	0.09	0.11	0.13	0.13	0.13
10.250	0.13	0.13	0.13	0.13	0.13
10.500	0.13	0.13	0.13	0.13	0.13
10.750	0.13	0.13	0.13	0.13	0.13
11.000	0.13	0.13	0.13	0.13	0.13
11.250	0.13	0.13	0.13	0.13	0.13
11.500	0.13	0.13	0.13	0.13	0.13
11.750	0.13	0.13	0.13	0.13	0.13
12.000	0.13	0.13	0.13	0.13	0.13
12.250	0.13	0.13	0.13	0.13	0.13
12.500	0.13	0.13	0.13	0.13	0.13
12.750	0.13	0.13	0.13	0.13	0.13
13.000	0.13	0.13	0.13	0.13	0.13
13.250	0.13	0.13	0.15	0.17	0.18
13.500	0.18	0.18	0.18	0.18	0.18
13.750	0.18	0.18	0.18	0.18	0.18
14.000	0.18	0.18	0.18	0.18	0.18
14.250	0.18	0.18	0.18	0.18	0.18
14.500	0.18	0.18	0.18	0.18	0.18
14.750	0.18	0.18	0.18	0.18	0.18
15.000	0.18	0.21	0.26	0.26	0.26
15.250	0.26	0.26	0.26	0.26	0.26
15.500	0.26	0.26	0.26	0.26	0.26
15.750	0.26	0.26	0.26	0.26	0.26
16.000	0.26	0.26	0.26	0.26	0.26
16.250	0.26	0.26	0.26	0.26	0.26
16.500	0.26	0.26	0.26	0.26	0.30
16.750	0.34	0.34	0.34	0.34	0.34
17.000	0.34	0.34	0.34	0.34	0.34
17.250	0.34	0.34	0.34	0.34	0.34
17.500	0.34	0.40	0.45	0.45	0.45
17.750	0.45	0.45	0.45	0.45	0.45
18.000	0.45	0.45	0.45	0.45	0.45
18.250	0.45	0.45	0.52	0.60	0.62
18.500	0.63	0.68	0.75	0.78	0.80
18.750	0.83	0.84	0.84	0.85	0.84
19.000	0.84	0.84	0.86	0.92	1.07
19.250	1.25	1.39	1.48	1.45	1.31
19.500	1.14	0.99	0.83	0.68	0.56
19.750	0.48	0.43	0.40	0.38	0.36
20.000	0.33	0.32	0.31	0.31	0.31
20.250	0.31	0.30	0.30	0.30	0.29
20.500	0.26	0.23	0.21	0.19	0.18

Subsection: Pond Routed Hydrograph (total out) Scenario: Base
Label: PO-1 (OUT)

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
20.750	0.18	0.18	0.18	0.18	0.17
21.000	0.17	0.17	0.17	0.17	0.17
21.250	0.17	0.17	0.16	0.16	0.16
21.500	0.16	0.16	0.16	0.15	0.15
21.750	0.15	0.15	0.13	0.11	0.11
22.000	0.11	0.11	0.11	0.11	0.11
22.250	0.11	0.11	0.11	0.11	0.11
22.500	0.10	0.10	0.10	0.10	0.10
22.750	0.10	0.10	0.10	0.10	0.10
23.000	0.10	0.10	0.10	0.10	0.10
23.250	0.10	0.10	0.10	0.10	0.10
23.500	0.10	0.10	0.10	0.10	0.10
23.750	0.10	0.10	0.10	0.10	0.10
24.000	0.09	(N/A)	(N/A)	(N/A)	(N/A)

Summary for Hydrograph Addition at 'PO-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	CM-1

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft^3/s)
Flow (From)	CM-1	0.385	19.233	1.74
Flow (In)	PO-1	0.377	19.250	1.74

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DESIGN ASSOCIATES INC

Attachment C-2

West Tributary

Project Summary	
Title	
Engineer	
Company	
Date	5/28/2019

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Subsection: User Notifications

User Notifications?	No user notifications generated.

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
CM-1	Base	0	0.825	19.267	3.35

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
O-1	Base	0	0.805	19.450	2.61

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
PO-1 (IN)	Base	0	0.808	19.250	3.34	(N/A)	(N/A)
PO-1 (OUT)	Base	0	0.805	19.450	2.61	101.88	0.041

Peak Discharge	3.35 ft³/s
Time to Peak	19.267 hours
Hydrograph Volume	0.825 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	0.16	0.16	0.16	0.16
0.083	0.16	0.16	0.16	0.16	0.16
0.167	0.16	0.16	0.16	0.16	0.16
0.250	0.16	0.16	0.16	0.16	0.16
0.333	0.16	0.16	0.16	0.16	0.16
0.417	0.16	0.16	0.16	0.16	0.16
0.500	0.16	0.16	0.16	0.16	0.16
0.583	0.16	0.16	0.16	0.16	0.16
0.667	0.16	0.16	0.16	0.16	0.16
0.750	0.16	0.16	0.16	0.16	0.16
0.833	0.16	0.16	0.16	0.16	0.16
0.917	0.16	0.16	0.16	0.16	0.16
1.000	0.16	0.16	0.16	0.16	0.16
1.083	0.16	0.16	0.16	0.16	0.16
1.167	0.16	0.16	0.16	0.16	0.16
1.250	0.16	0.16	0.16	0.16	0.16
1.333	0.16	0.16	0.16	0.16	0.16
1.417	0.16	0.16	0.16	0.16	0.16
1.500	0.16	0.16	0.16	0.16	0.16
1.583	0.16	0.16	0.16	0.16	0.16
1.667	0.16	0.17	0.17	0.17	0.17
1.750	0.17	0.17	0.17	0.17	0.17
1.833	0.17	0.17	0.17	0.17	0.17
1.917	0.17	0.17	0.17	0.17	0.17
2.000	0.17	0.17	0.17	0.17	0.17
2.083	0.17	0.17	0.17	0.17	0.17
2.167	0.17	0.17	0.17	0.17	0.17
2.250	0.17	0.17	0.17	0.17	0.17
2.333	0.17	0.17	0.17	0.17	0.17
2.417	0.17	0.17	0.17	0.17	0.17
2.500	0.17	0.17	0.17	0.17	0.17
2.583	0.17	0.17	0.17	0.17	0.17
2.667	0.17	0.17	0.17	0.17	0.17
2.750	0.17	0.17	0.17	0.17	0.17
2.833	0.17	0.17	0.17	0.17	0.17
2.917	0.17	0.17	0.17	0.17	0.17
3.000	0.17	0.17	0.17	0.17	0.17
3.083	0.17	0.17	0.17	0.17	0.17
3.167	0.17	0.17	0.17	0.17	0.17

Subsection: Read Hydrograph
Scenario: Base
Label: CM-1

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
3.250	0.17	0.17	0.17	0.17	0.17
3.333	0.17	0.17	0.17	0.17	0.17
3.417	0.17	0.17	0.17	0.17	0.17
3.500	0.17	0.17	0.17	0.17	0.17
3.583	0.17	0.17	0.17	0.17	0.17
3.667	0.17	0.17	0.17	0.17	0.17
3.750	0.17	0.17	0.17	0.17	0.17
3.833	0.17	0.17	0.17	0.17	0.17
3.917	0.17	0.17	0.17	0.17	0.17
4.000	0.17	0.17	0.17	0.17	0.17
4.083	0.17	0.17	0.17	0.17	0.17
4.167	0.17	0.17	0.17	0.17	0.17
4.250	0.17	0.17	0.17	0.17	0.17
4.333	0.17	0.17	0.17	0.17	0.17
4.417	0.17	0.17	0.17	0.17	0.17
4.500	0.17	0.17	0.17	0.17	0.17
4.583	0.17	0.17	0.17	0.17	0.17
4.667	0.17	0.17	0.17	0.17	0.17
4.750	0.17	0.17	0.17	0.17	0.17
4.833	0.17	0.17	0.17	0.17	0.17
4.917	0.17	0.17	0.17	0.17	0.17
5.000	0.17	0.17	0.17	0.17	0.17
5.083	0.17	0.17	0.17	0.17	0.17
5.167	0.17	0.17	0.17	0.17	0.17
5.250	0.17	0.17	0.17	0.17	0.17
5.333	0.17	0.17	0.17	0.17	0.17
5.417	0.17	0.17	0.17	0.17	0.17
5.500	0.17	0.17	0.17	0.17	0.17
5.583	0.17	0.17	0.17	0.17	0.17
5.667	0.17	0.17	0.17	0.17	0.17
5.750	0.17	0.17	0.17	0.17	0.17
5.833	0.17	0.17	0.17	0.17	0.17
5.917	0.17	0.17	0.17	0.17	0.17
6.000	0.17	0.17	0.17	0.17	0.17
6.083	0.17	0.17	0.17	0.17	0.17
6.167	0.17	0.17	0.17	0.17	0.17
6.250	0.17	0.17	0.17	0.17	0.17
6.333	0.17	0.17	0.17	0.17	0.17
6.417	0.17	0.17	0.17	0.17	0.17
6.500	0.17	0.17	0.17	0.17	0.17
6.583	0.17	0.17	0.17	0.17	0.17
6.667	0.17	0.17	0.17	0.17	0.17
6.750	0.17	0.17	0.17	0.17	0.17
6.833	0.17	0.17	0.17	0.17	0.17

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
6.917	0.17	0.17	0.17	0.17	0.17
7.000	0.17	0.17	0.17	0.17	0.17
7.083	0.17	0.17	0.17	0.17	0.17
7.167	0.17	0.17	0.17	0.17	0.17
7.250	0.17	0.17	0.17	0.17	0.17
7.333	0.17	0.17	0.17	0.17	0.17
7.417	0.17	0.17	0.17	0.17	0.17
7.500	0.17	0.17	0.17	0.17	0.17
7.583	0.17	0.17	0.17	0.17	0.17
7.667	0.17	0.17	0.17	0.17	0.17
7.750	0.17	0.17	0.17	0.17	0.17
7.833	0.17	0.17	0.17	0.17	0.17
7.917	0.17	0.17	0.17	0.17	0.17
8.000	0.17	0.17	0.17	0.17	0.17
8.083	0.17	0.17	0.17	0.17	0.17
8.167	0.17	0.17	0.17	0.17	0.17
8.250	0.17	0.17	0.17	0.17	0.17
8.333	0.17	0.20	0.20	0.20	0.20
8.417	0.20	0.20	0.20	0.20	0.20
8.500	0.20	0.20	0.20	0.20	0.20
8.583	0.20	0.20	0.20	0.20	0.20
8.667	0.20	0.20	0.20	0.20	0.20
8.750	0.20	0.20	0.20	0.20	0.20
8.833	0.20	0.20	0.20	0.20	0.20
8.917	0.20	0.20	0.20	0.20	0.20
9.000	0.20	0.20	0.20	0.20	0.20
9.083	0.20	0.20	0.20	0.20	0.20
9.167	0.20	0.20	0.20	0.20	0.20
9.250	0.20	0.20	0.20	0.20	0.20
9.333	0.20	0.20	0.20	0.20	0.20
9.417	0.20	0.20	0.20	0.20	0.20
9.500	0.20	0.20	0.20	0.20	0.20
9.583	0.20	0.20	0.20	0.20	0.20
9.667	0.20	0.20	0.20	0.20	0.20
9.750	0.20	0.20	0.20	0.20	0.20
9.833	0.20	0.20	0.20	0.20	0.20
9.917	0.20	0.20	0.20	0.20	0.20
10.000	0.20	0.27	0.27	0.27	0.27
10.083	0.27	0.27	0.27	0.27	0.27
10.167	0.27	0.27	0.27	0.27	0.27
10.250	0.27	0.27	0.27	0.27	0.27
10.333	0.27	0.27	0.27	0.27	0.27
10.417	0.27	0.27	0.27	0.27	0.27
10.500	0.27	0.27	0.27	0.27	0.27

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
10.583	0.27	0.27	0.27	0.27	0.27
10.667	0.27	0.27	0.27	0.27	0.27
10.750	0.27	0.27	0.27	0.27	0.27
10.833	0.27	0.27	0.27	0.27	0.27
10.917	0.27	0.27	0.27	0.27	0.27
11.000	0.27	0.27	0.27	0.27	0.27
11.083	0.27	0.27	0.27	0.27	0.27
11.167	0.27	0.27	0.27	0.27	0.27
11.250	0.27	0.27	0.27	0.27	0.27
11.333	0.27	0.27	0.27	0.27	0.27
11.417	0.27	0.27	0.27	0.27	0.27
11.500	0.27	0.27	0.27	0.27	0.27
11.583	0.27	0.27	0.27	0.27	0.27
11.667	0.27	0.28	0.28	0.28	0.28
11.750	0.28	0.28	0.28	0.28	0.28
11.833	0.28	0.28	0.28	0.28	0.28
11.917	0.28	0.28	0.28	0.28	0.28
12.000	0.28	0.28	0.28	0.28	0.28
12.083	0.28	0.28	0.28	0.28	0.28
12.167	0.28	0.28	0.28	0.28	0.28
12.250	0.28	0.28	0.28	0.28	0.28
12.333	0.28	0.28	0.28	0.28	0.28
12.417	0.28	0.28	0.28	0.28	0.28
12.500	0.28	0.28	0.28	0.28	0.28
12.583	0.28	0.28	0.28	0.28	0.28
12.667	0.28	0.28	0.28	0.28	0.28
12.750	0.28	0.28	0.28	0.28	0.28
12.833	0.28	0.28	0.28	0.28	0.28
12.917	0.28	0.28	0.28	0.28	0.28
13.000	0.28	0.28	0.28	0.28	0.28
13.083	0.28	0.28	0.28	0.28	0.28
13.167	0.28	0.28	0.28	0.28	0.28
13.250	0.28	0.28	0.28	0.28	0.28
13.333	0.28	0.38	0.38	0.38	0.38
13.417	0.38	0.38	0.38	0.38	0.38
13.500	0.38	0.38	0.38	0.38	0.38
13.583	0.38	0.38	0.38	0.38	0.38
13.667	0.38	0.38	0.38	0.38	0.38
13.750	0.38	0.38	0.38	0.38	0.38
13.833	0.38	0.38	0.38	0.38	0.38
13.917	0.38	0.38	0.38	0.38	0.38
14.000	0.38	0.38	0.38	0.38	0.38
14.083	0.38	0.38	0.38	0.38	0.38
14.167	0.38	0.38	0.38	0.38	0.38

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
14.250	0.38	0.38	0.38	0.38	0.38
14.333	0.38	0.38	0.38	0.38	0.38
14.417	0.38	0.38	0.38	0.38	0.38
14.500	0.38	0.38	0.38	0.38	0.38
14.583	0.38	0.38	0.38	0.38	0.38
14.667	0.38	0.38	0.38	0.38	0.38
14.750	0.38	0.38	0.38	0.38	0.38
14.833	0.38	0.38	0.38	0.38	0.38
14.917	0.38	0.38	0.38	0.38	0.38
15.000	0.38	0.55	0.55	0.55	0.55
15.083	0.55	0.55	0.55	0.55	0.55
15.167	0.55	0.55	0.55	0.55	0.55
15.250	0.55	0.55	0.55	0.55	0.55
15.333	0.55	0.55	0.55	0.55	0.55
15.417	0.55	0.55	0.55	0.55	0.55
15.500	0.55	0.55	0.55	0.55	0.55
15.583	0.55	0.55	0.55	0.55	0.55
15.667	0.55	0.55	0.55	0.55	0.55
15.750	0.55	0.55	0.55	0.55	0.55
15.833	0.55	0.55	0.55	0.55	0.55
15.917	0.55	0.55	0.55	0.55	0.55
16.000	0.55	0.55	0.55	0.55	0.55
16.083	0.55	0.55	0.55	0.55	0.55
16.167	0.55	0.55	0.55	0.55	0.55
16.250	0.55	0.55	0.55	0.55	0.55
16.333	0.55	0.55	0.55	0.55	0.55
16.417	0.55	0.55	0.55	0.55	0.55
16.500	0.55	0.55	0.55	0.55	0.55
16.583	0.55	0.55	0.55	0.55	0.55
16.667	0.55	0.72	0.72	0.72	0.72
16.750	0.72	0.72	0.72	0.72	0.72
16.833	0.72	0.72	0.72	0.72	0.72
16.917	0.72	0.72	0.72	0.72	0.72
17.000	0.72	0.72	0.72	0.72	0.72
17.083	0.72	0.72	0.72	0.72	0.72
17.167	0.72	0.72	0.72	0.72	0.72
17.250	0.72	0.72	0.72	0.72	0.72
17.333	0.72	0.72	0.72	0.72	0.72
17.417	0.72	0.72	0.72	0.72	0.72
17.500	0.72	0.96	0.96	0.96	0.96
17.583	0.96	0.96	0.96	0.96	0.96
17.667	0.96	0.96	0.96	0.96	0.96
17.750	0.96	0.96	0.96	0.96	0.96
17.833	0.96	0.96	0.96	0.96	0.96

Subsection: Read Hydrograph
Label: CM-1

Scenario: Base

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
17.917	0.96	0.96	0.96	0.96	0.96
18.000	0.96	0.96	0.96	0.96	0.96
18.083	0.96	0.96	0.96	0.96	0.96
18.167	0.96	0.96	0.96	0.96	0.96
18.250	0.96	0.96	0.96	0.96	0.96
18.333	0.96	1.29	1.29	1.29	1.29
18.417	1.29	1.29	1.29	1.29	1.29
18.500	1.29	1.69	1.69	1.69	1.69
18.583	1.69	1.69	1.69	1.69	1.69
18.667	1.69	1.82	1.82	1.82	1.82
18.750	1.82	1.82	1.82	1.82	1.82
18.833	1.82	1.81	1.81	1.80	1.80
18.917	1.80	1.79	1.79	1.79	1.79
19.000	1.78	1.79	1.80	1.81	1.82
19.083	1.87	1.92	1.98	2.04	2.27
19.167	2.53	2.76	3.02	3.25	3.34
19.250	3.34	3.35	3.34	3.33	3.32
19.333	3.32	3.27	3.22	3.18	3.12
19.417	2.86	2.56	2.29	1.98	1.69
19.500	1.56	1.52	1.46	1.43	1.37
19.583	1.33	1.27	1.21	1.14	1.09
19.667	1.03	1.02	1.00	0.99	0.98
19.750	0.96	0.95	0.94	0.92	0.90
19.833	0.88	0.85	0.83	0.82	0.80
19.917	0.79	0.78	0.77	0.75	0.74
20.000	0.73	0.72	0.71	0.69	0.68
20.083	0.68	0.68	0.67	0.67	0.67
20.167	0.67	0.66	0.66	0.66	0.66
20.250	0.66	0.66	0.65	0.65	0.65
20.333	0.65	0.65	0.64	0.64	0.64
20.417	0.63	0.61	0.59	0.58	0.57
20.500	0.55	0.54	0.52	0.50	0.49
20.583	0.48	0.46	0.44	0.43	0.41
20.667	0.40	0.40	0.39	0.39	0.39
20.750	0.39	0.39	0.39	0.39	0.39
20.833	0.39	0.38	0.38	0.38	0.38
20.917	0.38	0.38	0.37	0.38	0.38
21.000	0.37	0.37	0.37	0.37	0.37
21.083	0.37	0.37	0.36	0.37	0.37
21.167	0.37	0.36	0.36	0.36	0.36
21.250	0.36	0.36	0.36	0.36	0.36
21.333	0.36	0.35	0.35	0.36	0.35
21.417	0.35	0.35	0.35	0.35	0.35
21.500	0.35	0.35	0.35	0.35	0.35

Subsection: Read Hydrograph
Scenario: Base
Label: CM-1

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.017 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
21.583	0.35	0.34	0.34	0.33	0.32
21.667	0.32	0.32	0.32	0.32	0.32
21.750	0.32	0.32	0.32	0.32	0.32
21.833	0.25	0.25	0.25	0.25	0.25
21.917	0.25	0.25	0.25	0.25	0.25
22.000	0.24	0.24	0.24	0.24	0.24
22.083	0.24	0.24	0.24	0.24	0.24
22.167	0.23	0.23	0.23	0.23	0.23
22.250	0.23	0.23	0.23	0.23	0.23
22.333	0.23	0.23	0.23	0.23	0.23
22.417	0.23	0.23	0.23	0.23	0.23
22.500	0.22	0.22	0.22	0.22	0.22
22.583	0.22	0.22	0.22	0.22	0.22
22.667	0.22	0.22	0.22	0.22	0.22
22.750	0.22	0.22	0.22	0.22	0.22
22.833	0.22	0.22	0.22	0.22	0.22
22.917	0.22	0.22	0.22	0.22	0.22
23.000	0.22	0.22	0.22	0.22	0.22
23.083	0.22	0.22	0.22	0.22	0.22
23.167	0.21	0.21	0.21	0.21	0.21
23.250	0.21	0.21	0.21	0.21	0.21
23.333	0.21	0.21	0.21	0.21	0.21
23.417	0.21	0.21	0.21	0.21	0.21
23.500	0.21	0.21	0.21	0.21	0.21
23.583	0.21	0.21	0.21	0.21	0.21
23.667	0.20	0.20	0.20	0.20	0.20
23.750	0.20	0.20	0.20	0.20	0.20
23.833	0.20	0.20	0.20	0.20	0.20
23.917	0.20	0.20	0.20	0.20	0.20
24.000	0.20	0.20	0.20	0.20	0.20
24.083	0.20	0.20	0.20	0.20	0.20
24.167	0.20	0.20	0.20	0.20	0.20
24.250	0.20	0.20	0.20	0.20	0.20
24.333	0.20	0.20	0.20	0.20	0.20
24.417	0.20	0.20	0.20	0.20	0.20
24.500	0.20	0.20	0.20	0.20	0.20
24.583	0.20	0.20	0.20	0.20	0.20
24.667	0.20	0.20	0.20	0.20	0.20
24.750	0.20	0.20	0.20	0.20	0.20
24.833	0.20	0.20	0.20	0.20	0.20
24.917	0.20	0.20	0.20	0.20	0.20
25.000	0.19	(N/A)	(N/A)	(N/A)	(N/A)

Summary for Hydrograph Addition at 'O-1'

Upstream Link	Upstream Node
Outlet-2	PO-1

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft^3/s)
Flow (From)	Outlet-2	0.805	19.450	2.61
Flow (In)	O-1	0.805	19.450	2.61

Subsection: Time vs. Elevation
Label: PO-1 (OUT)

Scenario: Base

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	100.00	100.05	100.12	100.15	100.18
0.250	100.20	100.21	100.22	100.23	100.23
0.500	100.23	100.23	100.24	100.24	100.24
0.750	100.24	100.24	100.24	100.24	100.24
1.000	100.24	100.24	100.24	100.24	100.24
1.250	100.24	100.24	100.24	100.24	100.24
1.500	100.24	100.24	100.24	100.24	100.24
1.750	100.24	100.24	100.24	100.24	100.24
2.000	100.24	100.24	100.24	100.24	100.24
2.250	100.24	100.24	100.24	100.24	100.24
2.500	100.24	100.24	100.24	100.24	100.24
2.750	100.24	100.24	100.24	100.24	100.24
3.000	100.24	100.24	100.24	100.24	100.24
3.250	100.24	100.24	100.24	100.24	100.24
3.500	100.24	100.24	100.24	100.24	100.24
3.750	100.24	100.24	100.24	100.24	100.24
4.000	100.24	100.24	100.24	100.24	100.24
4.250	100.24	100.24	100.24	100.24	100.24
4.500	100.24	100.24	100.24	100.24	100.24
4.750	100.24	100.24	100.24	100.24	100.24
5.000	100.24	100.24	100.24	100.24	100.24
5.250	100.24	100.24	100.24	100.24	100.24
5.500	100.24	100.24	100.24	100.24	100.24
5.750	100.24	100.24	100.24	100.24	100.24
6.000	100.24	100.24	100.24	100.24	100.24
6.250	100.24	100.24	100.24	100.24	100.24
6.500	100.24	100.24	100.24	100.24	100.24
6.750	100.24	100.24	100.24	100.24	100.24
7.000	100.24	100.24	100.24	100.24	100.24
7.250	100.24	100.24	100.24	100.24	100.24
7.500	100.24	100.24	100.24	100.24	100.24
7.750	100.24	100.24	100.24	100.24	100.24
8.000	100.24	100.24	100.24	100.24	100.24
8.250	100.24	100.24	100.25	100.25	100.26
8.500	100.26	100.26	100.26	100.26	100.26
8.750	100.26	100.26	100.26	100.26	100.26
9.000	100.26	100.26	100.26	100.26	100.26
9.250	100.26	100.26	100.26	100.26	100.26
9.500	100.26	100.26	100.26	100.26	100.26
9.750	100.26	100.26	100.26	100.26	100.26
10.000	100.26	100.27	100.29	100.30	100.30
10.250	100.31	100.31	100.31	100.31	100.31
10.500	100.32	100.32	100.32	100.32	100.32

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.750	100.32	100.32	100.32	100.32	100.32
11.000	100.32	100.32	100.32	100.32	100.32
11.250	100.32	100.32	100.32	100.32	100.32
11.500	100.32	100.32	100.32	100.32	100.32
11.750	100.32	100.32	100.32	100.32	100.32
12.000	100.32	100.32	100.32	100.32	100.32
12.250	100.32	100.32	100.32	100.32	100.32
12.500	100.32	100.32	100.32	100.32	100.32
12.750	100.32	100.32	100.32	100.32	100.32
13.000	100.32	100.32	100.32	100.32	100.32
13.250	100.32	100.32	100.33	100.35	100.36
13.500	100.36	100.37	100.37	100.37	100.37
13.750	100.37	100.37	100.37	100.38	100.38
14.000	100.38	100.38	100.38	100.38	100.38
14.250	100.38	100.38	100.38	100.38	100.38
14.500	100.38	100.38	100.38	100.38	100.38
14.750	100.38	100.38	100.38	100.38	100.38
15.000	100.38	100.39	100.42	100.43	100.44
15.250	100.45	100.46	100.46	100.46	100.46
15.500	100.46	100.46	100.46	100.46	100.46
15.750	100.46	100.46	100.46	100.46	100.46
16.000	100.46	100.46	100.46	100.46	100.46
16.250	100.46	100.46	100.46	100.46	100.46
16.500	100.46	100.46	100.46	100.46	100.48
16.750	100.50	100.52	100.52	100.53	100.53
17.000	100.54	100.54	100.54	100.54	100.54
17.250	100.54	100.54	100.54	100.54	100.54
17.500	100.54	100.56	100.59	100.61	100.62
17.750	100.63	100.63	100.63	100.64	100.64
18.000	100.64	100.64	100.64	100.64	100.64
18.250	100.64	100.64	100.66	100.70	100.72
18.500	100.74	100.78	100.83	100.87	100.91
18.750	100.95	100.98	101.00	101.02	101.03
19.000	101.04	101.05	101.07	101.12	101.23
19.250	101.41	101.59	101.74	101.86	101.88
19.500	101.76	101.60	101.45	101.30	101.15
19.750	101.02	100.91	100.81	100.73	100.67
20.000	100.62	100.59	100.57	100.55	100.54
20.250	100.53	100.52	100.52	100.51	100.51
20.500	100.49	100.48	100.46	100.44	100.42
20.750	100.41	100.40	100.39	100.39	100.38
21.000	100.38	100.38	100.38	100.37	100.37
21.250	100.37	100.37	100.37	100.36	100.36

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
21.500	100.36	100.36	100.36	100.36	100.35
21.750	100.35	100.35	100.34	100.33	100.32
22.000	100.31	100.31	100.30	100.30	100.30
22.250	100.30	100.29	100.29	100.29	100.29
22.500	100.29	100.29	100.29	100.28	100.28
22.750	100.28	100.28	100.28	100.28	100.28
23.000	100.28	100.28	100.28	100.28	100.28
23.250	100.28	100.28	100.28	100.27	100.27
23.500	100.27	100.27	100.27	100.27	100.27
23.750	100.27	100.27	100.27	100.27	100.27
24.000	100.27	(N/A)	(N/A)	(N/A)	(N/A)

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.001	0.001	0.002
0.250	0.002	0.002	0.002	0.002	0.002
0.500	0.002	0.002	0.002	0.002	0.002
0.750	0.002	0.002	0.002	0.003	0.003
1.000	0.003	0.003	0.003	0.003	0.003
1.250	0.003	0.003	0.003	0.003	0.003
1.500	0.003	0.003	0.003	0.003	0.003
1.750	0.003	0.003	0.003	0.003	0.003
2.000	0.003	0.003	0.003	0.003	0.003
2.250	0.003	0.003	0.003	0.003	0.003
2.500	0.003	0.003	0.003	0.003	0.003
2.750	0.003	0.003	0.003	0.003	0.003
3.000	0.003	0.003	0.003	0.003	0.003
3.250	0.003	0.003	0.003	0.003	0.003
3.500	0.003	0.003	0.003	0.003	0.003
3.750	0.003	0.003	0.003	0.003	0.003
4.000	0.003	0.003	0.003	0.003	0.003
4.250	0.003	0.003	0.003	0.003	0.003
4.500	0.003	0.003	0.003	0.003	0.003
4.750	0.003	0.003	0.003	0.003	0.003
5.000	0.003	0.003	0.003	0.003	0.003
5.250	0.003	0.003	0.003	0.003	0.003
5.500	0.003	0.003	0.003	0.003	0.003
5.750	0.003	0.003	0.003	0.003	0.003
6.000	0.003	0.003	0.003	0.003	0.003
6.250	0.003	0.003	0.003	0.003	0.003
6.500	0.003	0.003	0.003	0.003	0.003
6.750	0.003	0.003	0.003	0.003	0.003
7.000	0.003	0.003	0.003	0.003	0.003
7.250	0.003	0.003	0.003	0.003	0.003
7.500	0.003	0.003	0.003	0.003	0.003
7.750	0.003	0.003	0.003	0.003	0.003
8.000	0.003	0.003	0.003	0.003	0.003
8.250	0.003	0.003	0.003	0.003	0.003
8.500	0.003	0.003	0.003	0.003	0.003
8.750	0.003	0.003	0.003	0.003	0.003
9.000	0.003	0.003	0.003	0.003	0.003
9.250	0.003	0.003	0.003	0.003	0.003
9.500	0.003	0.003	0.003	0.003	0.003
9.750	0.003	0.003	0.003	0.003	0.003
10.000	0.003	0.003	0.003	0.003	0.004
10.250	0.004	0.004	0.004	0.004	0.004
10.500	0.004	0.004	0.004	0.004	0.004

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.750	0.004	0.004	0.004	0.004	0.004
11.000	0.004	0.004	0.004	0.004	0.004
11.250	0.004	0.004	0.004	0.004	0.004
11.500	0.004	0.004	0.004	0.004	0.004
11.750	0.004	0.004	0.004	0.004	0.004
12.000	0.004	0.004	0.004	0.004	0.004
12.250	0.004	0.004	0.004	0.004	0.004
12.500	0.004	0.004	0.004	0.004	0.004
12.750	0.004	0.004	0.004	0.004	0.004
13.000	0.004	0.004	0.004	0.004	0.004
13.250	0.004	0.004	0.004	0.004	0.004
13.500	0.005	0.005	0.005	0.005	0.005
13.750	0.005	0.005	0.005	0.005	0.005
14.000	0.005	0.005	0.005	0.005	0.005
14.250	0.005	0.005	0.005	0.005	0.005
14.500	0.005	0.005	0.005	0.005	0.005
14.750	0.005	0.005	0.005	0.005	0.005
15.000	0.005	0.005	0.006	0.006	0.006
15.250	0.006	0.006	0.006	0.006	0.006
15.500	0.006	0.006	0.006	0.006	0.006
15.750	0.006	0.006	0.006	0.006	0.006
16.000	0.006	0.006	0.006	0.006	0.006
16.250	0.006	0.006	0.006	0.006	0.006
16.500	0.006	0.006	0.006	0.006	0.007
16.750	0.007	0.008	0.008	0.008	0.008
17.000	0.008	0.008	0.008	0.008	0.008
17.250	0.008	0.008	0.008	0.008	0.008
17.500	0.008	0.008	0.009	0.010	0.010
17.750	0.010	0.010	0.010	0.010	0.010
18.000	0.010	0.010	0.010	0.010	0.010
18.250	0.010	0.010	0.011	0.012	0.012
18.500	0.013	0.013	0.015	0.016	0.017
18.750	0.018	0.018	0.019	0.019	0.020
19.000	0.020	0.020	0.021	0.022	0.025
19.250	0.030	0.034	0.038	0.040	0.041
19.500	0.038	0.034	0.031	0.027	0.023
19.750	0.019	0.017	0.014	0.012	0.011
20.000	0.010	0.009	0.009	0.008	0.008
20.250	0.008	0.008	0.008	0.007	0.007
20.500	0.007	0.007	0.006	0.006	0.006
20.750	0.005	0.005	0.005	0.005	0.005
21.000	0.005	0.005	0.005	0.005	0.005
21.250	0.005	0.005	0.005	0.005	0.005

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
21.500	0.005	0.005	0.005	0.004	0.004
21.750	0.004	0.004	0.004	0.004	0.004
22.000	0.004	0.004	0.003	0.003	0.003
22.250	0.003	0.003	0.003	0.003	0.003
22.500	0.003	0.003	0.003	0.003	0.003
22.750	0.003	0.003	0.003	0.003	0.003
23.000	0.003	0.003	0.003	0.003	0.003
23.250	0.003	0.003	0.003	0.003	0.003
23.500	0.003	0.003	0.003	0.003	0.003
23.750	0.003	0.003	0.003	0.003	0.003
24.000	0.003	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Pipe Volume
Label: PO-1

Scenario: Base

Volume Results (Pipe)	
Pipe Storage Upstream Invert	100.00 ft
Pipe Storage Downstream Invert	100.00 ft
Pipe Storage Length	450.00 ft
Pipe Storage Diameter	30.0 in
Pipe Storage Number of Barrels	1
Pipe Storage Slice Width	10.00 ft
Pipe Storage Vertical Increment	0.10 ft

Elevation (ft)	Perpendicular Downstream Depth (ft)	Perpendicular Downstream Area (ft²)	Wetted Length (ft)	Filled Length (ft)	Perpendicular Upstream Depth (ft)	Perpendicular Upstream Area (ft²)	Total Volume (ac-ft)
100.00	0.00	0.0	450.00	0.00	0.00	0.0	0.000
100.10	0.10	0.1	450.00	0.00	0.10	0.1	0.001
100.20	0.20	0.2	450.00	0.00	0.20	0.2	0.002
100.30	0.30	0.3	450.00	0.00	0.30	0.3	0.003
100.40	0.40	0.5	450.00	0.00	0.40	0.5	0.005
100.50	0.50	0.7	450.00	0.00	0.50	0.7	0.007
100.60	0.60	0.9	450.00	0.00	0.60	0.9	0.009
100.70	0.70	1.1	450.00	0.00	0.70	1.1	0.012
100.80	0.80	1.4	450.00	0.00	0.80	1.4	0.014
100.90	0.90	1.6	450.00	0.00	0.90	1.6	0.016
101.00	1.00	1.8	450.00	0.00	1.00	1.8	0.019
101.10	1.10	2.1	450.00	0.00	1.10	2.1	0.021
101.20	1.20	2.3	450.00	0.00	1.20	2.3	0.024
101.30	1.30	2.6	450.00	0.00	1.30	2.6	0.027
101.40	1.40	2.8	450.00	0.00	1.40	2.8	0.029
101.50	1.50	3.1	450.00	0.00	1.50	3.1	0.032
101.60	1.60	3.3	450.00	0.00	1.60	3.3	0.034
101.70	1.70	3.6	450.00	0.00	1.70	3.6	0.037
101.80	1.80	3.8	450.00	0.00	1.80	3.8	0.039
101.90	1.90	4.0	450.00	0.00	1.90	4.0	0.041
102.00	2.00	4.2	450.00	0.00	2.00	4.2	0.043
102.10	2.10	4.4	450.00	0.00	2.10	4.4	0.045
102.20	2.20	4.6	450.00	0.00	2.20	4.6	0.047
102.30	2.30	4.7	450.00	0.00	2.30	4.7	0.049
102.40	2.40	4.8	450.00	0.00	2.40	4.8	0.050
102.50	2.50	4.9	450.00	450.00	2.50	4.9	0.051
102.50	2.50	4.9	450.00	450.00	2.50	4.9	0.051

Requested Pond Water Surface Elevations	
Minimum (Headwater)	100.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	102.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	100.00	102.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	100.00 ft
Orifice Diameter	9.0 in
Orifice Coefficient	0.600

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = ()

Upstream ID =
Downstream ID =

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)
Contributing Structures			

Subsection: Composite Rating Curve
Label: Composite Outlet Structure - 1

Scenario: Base

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
100.00	0.00	(N/A)	0.00
100.10	0.03	(N/A)	0.00
100.20	0.11	(N/A)	0.00
100.30	0.24	(N/A)	0.00
100.40	0.42	(N/A)	0.00
100.50	0.63	(N/A)	0.00
100.60	0.86	(N/A)	0.00
100.70	1.12	(N/A)	0.00
100.80	1.39	(N/A)	0.00
100.90	1.54	(N/A)	0.00
101.00	1.68	(N/A)	0.00
101.10	1.81	(N/A)	0.00
101.20	1.93	(N/A)	0.00
101.30	2.05	(N/A)	0.00
101.40	2.15	(N/A)	0.00
101.50	2.26	(N/A)	0.00
101.60	2.35	(N/A)	0.00
101.70	2.45	(N/A)	0.00
101.80	2.54	(N/A)	0.00
101.90	2.63	(N/A)	0.00
102.00	2.71	(N/A)	0.00
102.10	2.79	(N/A)	0.00
102.20	2.87	(N/A)	0.00
102.30	2.95	(N/A)	0.00
102.40	3.03	(N/A)	0.00
102.50	3.10	(N/A)	0.00

Contributing Structures
None Contributing
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1

Subsection: Composite Rating Curve
Label: Composite Outlet Structure - 1

Scenario: Base

Composite Outflow Summary

Contributing Structures
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1
Orifice - 1

Subsection: Diverted Hydrograph
Label: Outlet-2

Scenario: Base

Peak Discharge	2.61 ft³/s
Time to Peak	19.450 hours
Hydrograph Volume	0.805 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	0.01	0.04	0.07	0.09
0.250	0.11	0.13	0.14	0.15	0.15
0.500	0.15	0.16	0.16	0.16	0.16
0.750	0.16	0.16	0.16	0.16	0.16
1.000	0.16	0.16	0.16	0.16	0.16
1.250	0.16	0.16	0.16	0.16	0.16
1.500	0.16	0.16	0.16	0.16	0.16
1.750	0.16	0.16	0.17	0.17	0.17
2.000	0.17	0.17	0.17	0.17	0.17
2.250	0.17	0.17	0.17	0.17	0.17
2.500	0.17	0.17	0.17	0.17	0.17
2.750	0.17	0.17	0.17	0.17	0.17
3.000	0.17	0.17	0.17	0.17	0.17
3.250	0.17	0.17	0.17	0.17	0.17
3.500	0.17	0.17	0.17	0.17	0.17
3.750	0.17	0.17	0.17	0.17	0.17
4.000	0.17	0.17	0.17	0.17	0.17
4.250	0.17	0.17	0.17	0.17	0.17
4.500	0.17	0.17	0.17	0.17	0.17
4.750	0.17	0.17	0.17	0.17	0.17
5.000	0.17	0.17	0.17	0.17	0.17
5.250	0.17	0.17	0.17	0.17	0.17
5.500	0.17	0.17	0.17	0.17	0.17
5.750	0.17	0.17	0.17	0.17	0.17
6.000	0.17	0.17	0.17	0.17	0.17
6.250	0.17	0.17	0.17	0.17	0.17
6.500	0.17	0.17	0.17	0.17	0.17
6.750	0.17	0.17	0.17	0.17	0.17
7.000	0.17	0.17	0.17	0.17	0.17
7.250	0.17	0.17	0.17	0.17	0.17
7.500	0.17	0.17	0.17	0.17	0.17
7.750	0.17	0.17	0.17	0.17	0.17
8.000	0.17	0.17	0.17	0.17	0.17
8.250	0.17	0.17	0.17	0.18	0.18
8.500	0.19	0.19	0.19	0.19	0.19
8.750	0.19	0.20	0.20	0.20	0.20
9.000	0.20	0.20	0.20	0.20	0.20
9.250	0.20	0.20	0.20	0.20	0.20
9.500	0.20	0.20	0.20	0.20	0.20

Subsection: Diverted Hydrograph
Label: Outlet-2

Scenario: Base

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
9.750	0.20	0.20	0.20	0.20	0.20
10.000	0.20	0.21	0.23	0.24	0.25
10.250	0.26	0.26	0.27	0.27	0.27
10.500	0.27	0.27	0.27	0.27	0.27
10.750	0.27	0.27	0.27	0.27	0.27
11.000	0.27	0.27	0.27	0.27	0.27
11.250	0.27	0.27	0.27	0.27	0.27
11.500	0.27	0.27	0.27	0.27	0.27
11.750	0.28	0.28	0.28	0.28	0.28
12.000	0.28	0.28	0.28	0.28	0.28
12.250	0.28	0.28	0.28	0.28	0.28
12.500	0.28	0.28	0.28	0.28	0.28
12.750	0.28	0.28	0.28	0.28	0.28
13.000	0.28	0.28	0.28	0.28	0.28
13.250	0.28	0.28	0.30	0.32	0.34
13.500	0.35	0.36	0.37	0.37	0.37
13.750	0.37	0.38	0.38	0.38	0.38
14.000	0.38	0.38	0.38	0.38	0.38
14.250	0.38	0.38	0.38	0.38	0.38
14.500	0.38	0.38	0.38	0.38	0.38
14.750	0.38	0.38	0.38	0.38	0.38
15.000	0.38	0.41	0.46	0.49	0.51
15.250	0.53	0.54	0.54	0.55	0.55
15.500	0.55	0.55	0.55	0.55	0.55
15.750	0.55	0.55	0.55	0.55	0.55
16.000	0.55	0.55	0.55	0.55	0.55
16.250	0.55	0.55	0.55	0.55	0.55
16.500	0.55	0.55	0.55	0.55	0.58
16.750	0.63	0.67	0.69	0.70	0.71
17.000	0.71	0.72	0.72	0.72	0.72
17.250	0.72	0.72	0.72	0.72	0.72
17.500	0.72	0.77	0.84	0.89	0.92
17.750	0.93	0.95	0.95	0.96	0.96
18.000	0.96	0.96	0.96	0.96	0.96
18.250	0.96	0.96	1.03	1.13	1.19
18.500	1.22	1.32	1.43	1.49	1.55
18.750	1.61	1.65	1.68	1.71	1.72
19.000	1.73	1.75	1.77	1.83	1.97
19.250	2.17	2.34	2.48	2.59	2.61
19.500	2.51	2.36	2.21	2.04	1.87
19.750	1.71	1.55	1.40	1.19	1.04
20.000	0.93	0.84	0.78	0.74	0.71
20.250	0.69	0.68	0.67	0.66	0.64
20.500	0.62	0.58	0.55	0.51	0.47

Subsection: Diverted Hydrograph
Scenario: Base
Label: Outlet-2

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
20.750	0.44	0.42	0.41	0.40	0.39
21.000	0.39	0.38	0.38	0.37	0.37
21.250	0.37	0.36	0.36	0.36	0.36
21.500	0.35	0.35	0.35	0.34	0.34
21.750	0.33	0.33	0.31	0.29	0.28
22.000	0.27	0.26	0.25	0.24	0.24
22.250	0.24	0.24	0.23	0.23	0.23
22.500	0.23	0.23	0.23	0.22	0.22
22.750	0.22	0.22	0.22	0.22	0.22
23.000	0.22	0.22	0.22	0.22	0.22
23.250	0.21	0.21	0.21	0.21	0.21
23.500	0.21	0.21	0.21	0.21	0.21
23.750	0.21	0.21	0.20	0.20	0.20
24.000	0.20	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation-Volume-Flow Table (Pond) Scenario: Base
Label: PO-1

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	100.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
100.00	0.00	0.000	0.000	0.00	0.00	0.00
100.10	0.03	0.001	0.000	0.00	0.03	0.36
100.20	0.11	0.002	0.000	0.00	0.11	1.03
100.30	0.24	0.003	0.000	0.00	0.24	1.91
100.40	0.42	0.005	0.000	0.00	0.42	2.95
100.50	0.63	0.007	0.000	0.00	0.63	4.13
100.60	0.86	0.009	0.000	0.00	0.86	5.39
100.70	1.12	0.012	0.000	0.00	1.12	6.75
100.80	1.39	0.014	0.000	0.00	1.39	8.16
100.90	1.54	0.016	0.000	0.00	1.54	9.50
101.00	1.68	0.019	0.000	0.00	1.68	10.85
101.10	1.81	0.021	0.000	0.00	1.81	12.21
101.20	1.93	0.024	0.000	0.00	1.93	13.58
101.30	2.05	0.027	0.000	0.00	2.05	14.94
101.40	2.15	0.029	0.000	0.00	2.15	16.30
101.50	2.26	0.032	0.000	0.00	2.26	17.63
101.60	2.35	0.034	0.000	0.00	2.35	18.94
101.70	2.45	0.037	0.000	0.00	2.45	20.22
101.80	2.54	0.039	0.000	0.00	2.54	21.46
101.90	2.63	0.041	0.000	0.00	2.63	22.64
102.00	2.71	0.043	0.000	0.00	2.71	23.76
102.10	2.79	0.045	0.000	0.00	2.79	24.80
102.20	2.87	0.047	0.000	0.00	2.87	25.75
102.30	2.95	0.049	0.000	0.00	2.95	26.57
102.40	3.03	0.050	0.000	0.00	3.03	27.24
102.50	3.10	0.051	0.000	0.00	3.10	27.64

Subsection: Level Pool Pond Routing Summary
Label: PO-1 (IN)

Scenario: Base

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	100.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	0.050 hours

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.34 ft³/s	Time to Peak (Flow, In)	19.250 hours
Flow (Peak Outlet)	2.61 ft³/s	Time to Peak (Flow, Outlet)	19.450 hours

Elevation (Water Surface, Peak)	101.88 ft
Volume (Peak)	0.041 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.808 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.805 ac-ft
Volume (Retained)	0.002 ac-ft
Volume (Unrouted)	-0.001 ac-ft
Error (Mass Balance)	0.1 %

Peak Discharge	2.61 ft³/s
Time to Peak	19.450 hours
Hydrograph Volume	0.805 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	0.01	0.04	0.07	0.09
0.250	0.11	0.13	0.14	0.15	0.15
0.500	0.15	0.16	0.16	0.16	0.16
0.750	0.16	0.16	0.16	0.16	0.16
1.000	0.16	0.16	0.16	0.16	0.16
1.250	0.16	0.16	0.16	0.16	0.16
1.500	0.16	0.16	0.16	0.16	0.16
1.750	0.16	0.16	0.17	0.17	0.17
2.000	0.17	0.17	0.17	0.17	0.17
2.250	0.17	0.17	0.17	0.17	0.17
2.500	0.17	0.17	0.17	0.17	0.17
2.750	0.17	0.17	0.17	0.17	0.17
3.000	0.17	0.17	0.17	0.17	0.17
3.250	0.17	0.17	0.17	0.17	0.17
3.500	0.17	0.17	0.17	0.17	0.17
3.750	0.17	0.17	0.17	0.17	0.17
4.000	0.17	0.17	0.17	0.17	0.17
4.250	0.17	0.17	0.17	0.17	0.17
4.500	0.17	0.17	0.17	0.17	0.17
4.750	0.17	0.17	0.17	0.17	0.17
5.000	0.17	0.17	0.17	0.17	0.17
5.250	0.17	0.17	0.17	0.17	0.17
5.500	0.17	0.17	0.17	0.17	0.17
5.750	0.17	0.17	0.17	0.17	0.17
6.000	0.17	0.17	0.17	0.17	0.17
6.250	0.17	0.17	0.17	0.17	0.17
6.500	0.17	0.17	0.17	0.17	0.17
6.750	0.17	0.17	0.17	0.17	0.17
7.000	0.17	0.17	0.17	0.17	0.17
7.250	0.17	0.17	0.17	0.17	0.17
7.500	0.17	0.17	0.17	0.17	0.17
7.750	0.17	0.17	0.17	0.17	0.17
8.000	0.17	0.17	0.17	0.17	0.17
8.250	0.17	0.17	0.17	0.18	0.18
8.500	0.19	0.19	0.19	0.19	0.19
8.750	0.19	0.20	0.20	0.20	0.20
9.000	0.20	0.20	0.20	0.20	0.20
9.250	0.20	0.20	0.20	0.20	0.20
9.500	0.20	0.20	0.20	0.20	0.20

Subsection: Pond Routed Hydrograph (total out) Scenario: Base
Label: PO-1 (OUT)

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
9.750	0.20	0.20	0.20	0.20	0.20
10.000	0.20	0.21	0.23	0.24	0.25
10.250	0.26	0.26	0.27	0.27	0.27
10.500	0.27	0.27	0.27	0.27	0.27
10.750	0.27	0.27	0.27	0.27	0.27
11.000	0.27	0.27	0.27	0.27	0.27
11.250	0.27	0.27	0.27	0.27	0.27
11.500	0.27	0.27	0.27	0.27	0.27
11.750	0.28	0.28	0.28	0.28	0.28
12.000	0.28	0.28	0.28	0.28	0.28
12.250	0.28	0.28	0.28	0.28	0.28
12.500	0.28	0.28	0.28	0.28	0.28
12.750	0.28	0.28	0.28	0.28	0.28
13.000	0.28	0.28	0.28	0.28	0.28
13.250	0.28	0.28	0.30	0.32	0.34
13.500	0.35	0.36	0.37	0.37	0.37
13.750	0.37	0.38	0.38	0.38	0.38
14.000	0.38	0.38	0.38	0.38	0.38
14.250	0.38	0.38	0.38	0.38	0.38
14.500	0.38	0.38	0.38	0.38	0.38
14.750	0.38	0.38	0.38	0.38	0.38
15.000	0.38	0.41	0.46	0.49	0.51
15.250	0.53	0.54	0.54	0.55	0.55
15.500	0.55	0.55	0.55	0.55	0.55
15.750	0.55	0.55	0.55	0.55	0.55
16.000	0.55	0.55	0.55	0.55	0.55
16.250	0.55	0.55	0.55	0.55	0.55
16.500	0.55	0.55	0.55	0.55	0.58
16.750	0.63	0.67	0.69	0.70	0.71
17.000	0.71	0.72	0.72	0.72	0.72
17.250	0.72	0.72	0.72	0.72	0.72
17.500	0.72	0.77	0.84	0.89	0.92
17.750	0.93	0.95	0.95	0.96	0.96
18.000	0.96	0.96	0.96	0.96	0.96
18.250	0.96	0.96	1.03	1.13	1.19
18.500	1.22	1.32	1.43	1.49	1.55
18.750	1.61	1.65	1.68	1.71	1.72
19.000	1.73	1.75	1.77	1.83	1.97
19.250	2.17	2.34	2.48	2.59	2.61
19.500	2.51	2.36	2.21	2.04	1.87
19.750	1.71	1.55	1.40	1.19	1.04
20.000	0.93	0.84	0.78	0.74	0.71
20.250	0.69	0.68	0.67	0.66	0.64
20.500	0.62	0.58	0.55	0.51	0.47

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
20.750	0.44	0.42	0.41	0.40	0.39
21.000	0.39	0.38	0.38	0.37	0.37
21.250	0.37	0.36	0.36	0.36	0.36
21.500	0.35	0.35	0.35	0.34	0.34
21.750	0.33	0.33	0.31	0.29	0.28
22.000	0.27	0.26	0.25	0.24	0.24
22.250	0.24	0.24	0.23	0.23	0.23
22.500	0.23	0.23	0.23	0.22	0.22
22.750	0.22	0.22	0.22	0.22	0.22
23.000	0.22	0.22	0.22	0.22	0.22
23.250	0.21	0.21	0.21	0.21	0.21
23.500	0.21	0.21	0.21	0.21	0.21
23.750	0.21	0.21	0.20	0.20	0.20
24.000	0.20	(N/A)	(N/A)	(N/A)	(N/A)

Summary for Hydrograph Addition at 'PO-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	CM-1

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft^3/s)
Flow (From)	CM-1	0.825	19.267	3.35
Flow (In)	PO-1	0.808	19.250	3.34

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DESIGN ASSOCIATES INC

Attachment D

Stormwater Quality Treatment Calculations

BMP Sizing Worksheet
BIO-2 Planter Box - Building A

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.10	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	0.005	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	0.095	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	0.09	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	0.905	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	0.0625	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	222	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	222	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	2.50	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	4.8	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Building A

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	221.75	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

BMP Sizing Worksheet
BIO-2 Planter Box - Building B1

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.17	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	**0.0085**	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	**0.1615**	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	**0.153**	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	**0.905**	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	**0.0625**	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	**377**	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	**377**	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	**2.50**	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	**4.8**	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Building B1

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	376.97	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

BMP Sizing Worksheet
BIO-2 Planter Box - Building B2

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.11	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	**0.0055**	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	**0.1045**	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	**0.099**	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	**0.905**	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	**0.0625**	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	**244**	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	**244**	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	**2.50**	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	**4.8**	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Building B2

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	243.92	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

BMP Sizing Worksheet
BIO-2 Planter Box - Building F

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.11	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	**0.0055**	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	**0.1045**	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	**0.099**	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	**0.905**	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	**0.0625**	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	**244**	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	**244**	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	**2.50**	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	**4.8**	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Building F

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	243.92	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

BMP Sizing Worksheet
BIO-2 Planter Box - Commercial 1

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.03	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	**0.0015**	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	**0.0285**	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	**0.027**	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	**0.905**	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	**0.0625**	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	**67**	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	**67**	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	**2.50**	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	**4.8**	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Commercial 1

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	66.52	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

BMP Sizing Worksheet
BIO-2 Planter Box - Commercial 2

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.09	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	**0.0045**	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	**0.0855**	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	**0.081**	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	**0.905**	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	**0.0625**	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	**200**	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	**200**	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	**2.50**	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	**4.8**	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Commercial 2

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	199.57	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

BMP Sizing Worksheet
BIO-2 Planter Box - Commercial 3

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.02	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	**0.001**	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	**0.019**	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	**0.018**	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	**0.905**	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	**0.0625**	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	**44**	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	**44**	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	**2.50**	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	**4.8**	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Commercial 3

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	44.35	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

BMP Sizing Worksheet
BIO-2 Planter Box - Parking

Step 1: Determine water quality design volume			
1-1. Enter Project area (acres), *Aproject*	Aproject =	0.67	acres
1-2. Enter the maximum allowable percent of the Project area that may be effective impervious area (%) (refer to permit), ranges from 5-30%, *%allowable*	%allowable =	5	%
1-3. Determine the maximum allowable effective impervious area (acres), *EIAallowable = (Aproject)*(%allowable)*	EIAallowable =	**0.0335**	acres
1-4. Enter Project impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.95	
1-5. Determine the Project Total Impervious area (acres), *TIA=Aproject*Imp*	TIA =	**0.6365**	acres
1-6. Determine the total area from which runoff must be retained (acres), *Aretain=TIA-EIAallowable*	Aretain =	**0.603**	acres
1-7. Determine pervious runoff coefficient using Table E-1, *Cp*	Cp =	0.05	
1-8. Calculate runoff coefficient, *C = 0.95*imp + Cp (1-imp)*	C =	**0.905**	
1-9. Enter design rainfall depth of the storm (in), *Pi*	Pi =	0.75	in
1-10. Calculate rainfall depth (ft), *P = Pi/12*	P =	**0.0625**	ft
1-11. Calculate water quality design volume (ft^3), *SQDV = 43560×C*P*Aretain*	**SQDV =**	**1486**	**ft^3**
Step 2: Determine the design percolation rate			
2-1. Enter the design saturated hydraulic conductivity of the amended filter media (in/hr, 2.5 recommended), Kdesign	Kdesign =	2.50	in/hr
Step 3: Calculate the surface area			
3-1. Enter water quality design volume (ft^3), *SQDV*	SQDV =	**1486**	ft^3
3-2. Enter design saturated hydraulic conductivity (in/hr), *Kdesign*	Kdesign =	**2.50**	in/hr
3-3. Enter the ponding depth (max 1.5 ft for Bioretention, 1.0 ft for Planter Box) above area, *dp*	dp =	1	ft
3-4. Calculate the drawdown time for the ponded water to filter through media (hours), *t ponding = (dp / Kdesign) * 12*	t ponding =	**4.8**	hrs
3-5. Enter the storm duration for routing calculations (use 3 hours), *Trouting*	Trouting =	3	hrs

BMP Sizing Worksheet
BIO-2 Planter Box - Parking

3-6. Calculate depth of water (ft) filtered by using the min. of the following two equations: d filtered,1 = (Kdesign * Trouting) / 12	d filtered,1 =	0.63	ft
d filtered,2 = dp / 2	d filtered,2 =	0.50	ft
3-7. Enter the resultant depth (the minimum of the two calculated above), *d filtered*	d filtered =		ft
3-8. Calculate the infiltrating surface area as follows (ft^2): Areq = SQDV / (dp + d filtered)	**Areq =**	1485.71	ft^2
Infiltration will be met through a proprietary device, therefore, neither the infiltration basin design or the infiltration trench design apply to this application.			

*Taken from the Technical Guidance Manual for Stormwater Quality Control Measures 2011

DESIGN ASSOCIATES INC

Attachment E

BMP Specification Sheets

BIO-1: Bioretention with Underdrain

Bioretention stormwater treatment facilities are landscaped shallow depressions that capture and filter stormwater runoff. These facilities function as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. The facilities normally consist of a ponding area, mulch layer, planting soils, and plantings. As stormwater passes down through the planting soil, pollutants are filtered, adsorbed, and biodegraded by the soil and plants. Bioretention with an underdrain is a treatment control measures that can be used for areas with low permeability native soils or steep slopes. Bioretention may be designed without an underdrain to serve as a retention BMP in areas of high soil permeability (see INF-3 Bioretention) or partial retention/ partial biofiltration BMP (see INF-7: Bioinfiltration).





Bioretention in Parking Lots

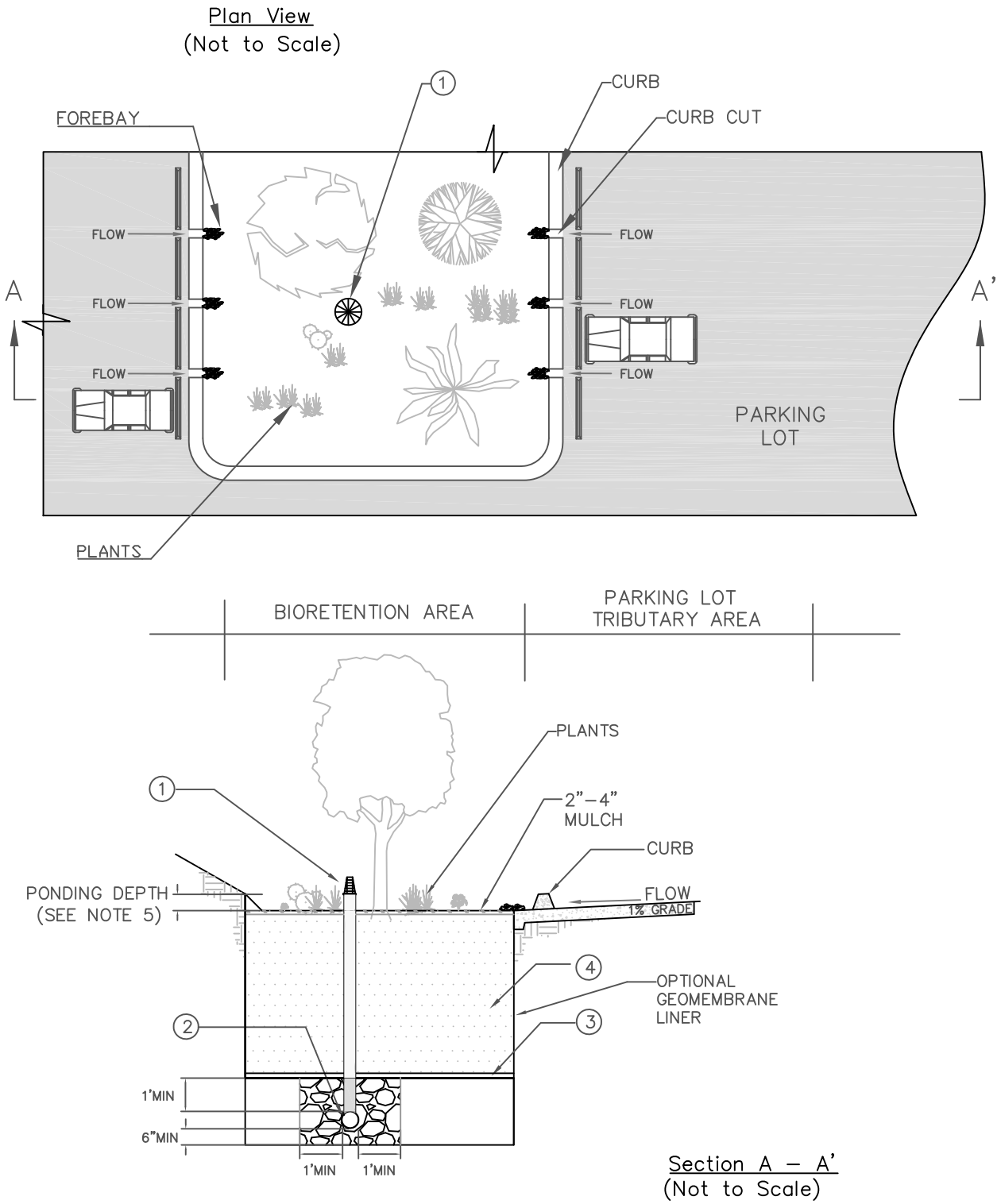
Photo Credits: Geosyntec Consultants

Application

- Parking lots
- Roadway parkways and medians
- School entrances, courtyards, and walkways
- Playgrounds and sports fields

Preventative Maintenance

- Repair small eroded areas
- Remove trash and debris and rake surface soils
- Remove accumulated fine sediments, dead leaves, and trash
- Remove weeds and prune back excess plant growth
- Remove sediment and debris accumulation near inlet and outlet structures
- Periodically observe function under wet weather conditions



NOTES:

① OVERFLOW DEVICE: VERTICAL RISER OR EQUIVALENT.
② PERFORATED 6" MIN PVC PIPE UNDERDRAIN.
③ OPTIONAL CHOKING GRAVEL LAYER.
④ 2' MIN PLANTING MIX; 3' PREFERRED.
⑤ PONDING DEPTH 18" WITH FENCE; 6" WITHOUT FENCE.

Geosyntec consultants

Figure 6-10: Bioretention with Underdrain

BIO-2: Planter Box

Planter boxes are bioretention treatment control measures that are completely contained within an impermeable structure with an underdrain (they do not infiltrate). These facilities function as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. The facilities normally consist of a ponding area, mulch layer, planting soils, plantings, and an underdrain within the planter box. As stormwater passes down through the planting soil, pollutants are filtered, adsorbed, and biodegraded by the soil and plants. Planter boxes are comprised of a variety of materials, usually chosen to be the same material as the adjacent building or sidewalk.

Planter boxes may be placed adjacent to or near buildings, other structures, or sidewalks. Planter boxes can be used directly adjacent to buildings beneath downspouts as long as the boxes are properly lined on the building side and the overflow outlet discharges away from the building to ensure water does not percolate into footings or foundations. They can also be placed further away from buildings by conveying roof runoff in shallow engineered open conveyances, shallow pipes, or other innovative drainage structures.



Planter boxes extending along a building wall

Photo Credit: Geosyntec Consultants

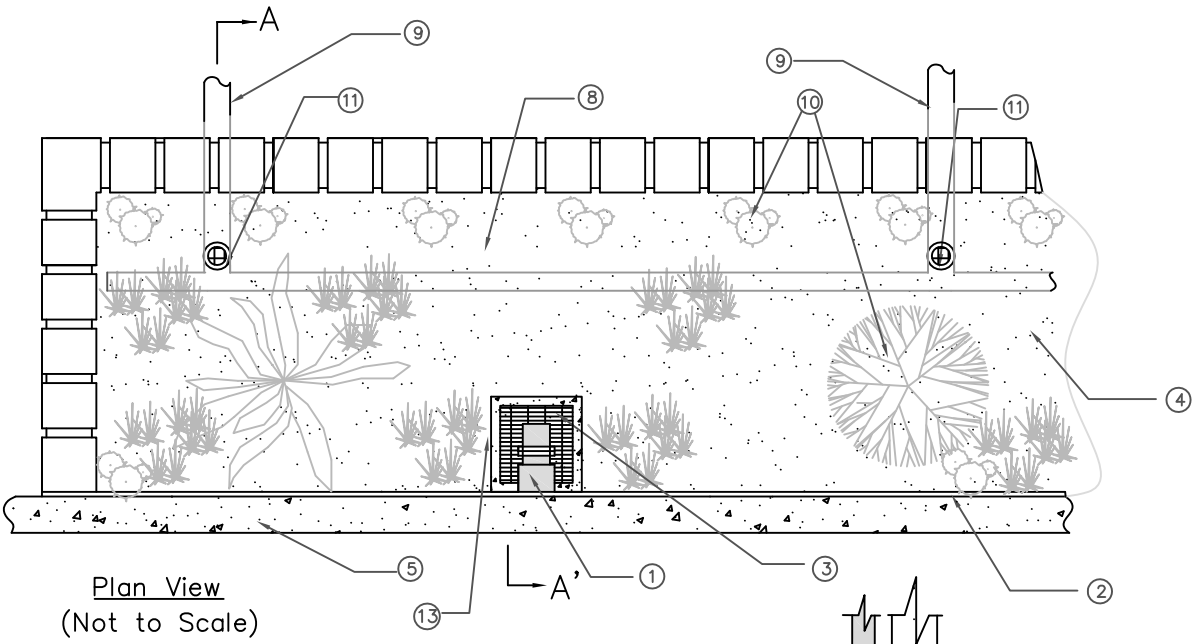
Application

- Areas adjacent to buildings and sidewalks
- Building entrances, courtyards, and walkways

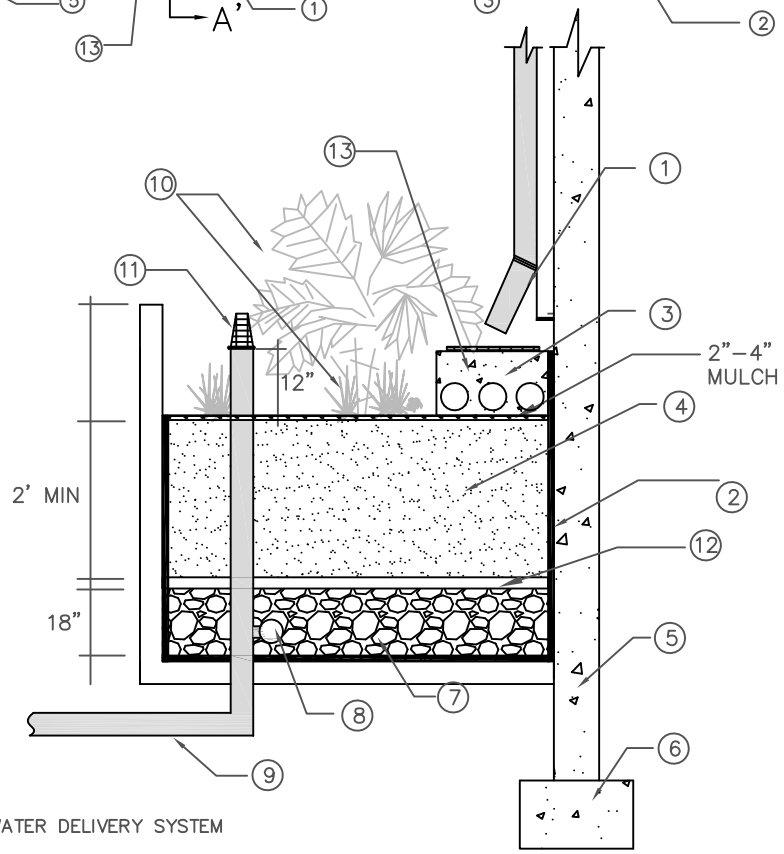
Preventative Maintenance

- Repair small eroded areas
- Remove trash and debris and rake surface soils
- Remove accumulated fine sediments, dead leaves, and trash
- Remove weeds and prune back excess plant growth
- Remove sediment and debris accumulation near inlet and outlet structures

  Periodically observe function under wet weather conditions



Plan View
(Not to Scale)



Section A – A'
(Not to Scale)

NOTES:

1. ROOF DOWNSPOUT OR OTHER STORMWATER DELIVERY SYSTEM
2. WATERPROOF BARRIER
3. SHALLOW ENERGY DISSIPATOR BASIN DISPERSES FLOW AT SOIL SURFACE
4. SOIL MIX (SEE PLANTING MEDIA SECTION)
5. BUILDING
6. FOUNDATION. INSTALL FOUNDATION DRAINS AS NEEDED
7. GRAVEL BEDDING (SEE UNDERDRAIN)
8. PERFORATED PIPE SHALL RUN ENTIRE LENGTH OF PLANTER
9. CONNECTION TO DOWNSTREAM CONVEYANCE SYSTEM
10. PLANTS
11. SET OVERFLOW 2" BELOW THE TOP OF THE PLANTER
12. OPTIONAL CHOKING GRAVEL LAYER

Geosyntec consultants

Figure 6-11: Planter Box

StormTreat systems



A nature-based stormwater treatment system integrating a bioretention system and our own soil media that provides filtration, adsorption, and biochemical processing of pollutants. Its modular linear design easily adapts to a wide range of site constraints – it fits virtually anywhere!

Maintenance is simple with annual sediment inspections (and removal as necessary) in the pretreatment device. The vegetated bioretention system self-maintains soil permeability within the biofilter by breaking down organic solids to gases and constantly creating macropore structure.

Dimensions and Capacity:

Length – 24 feet

Width – 4 feet (at lands surface)

Depth – 4 feet

Overall Footprint Installed – 432 square feet (including subsurface pretreatment and storage)

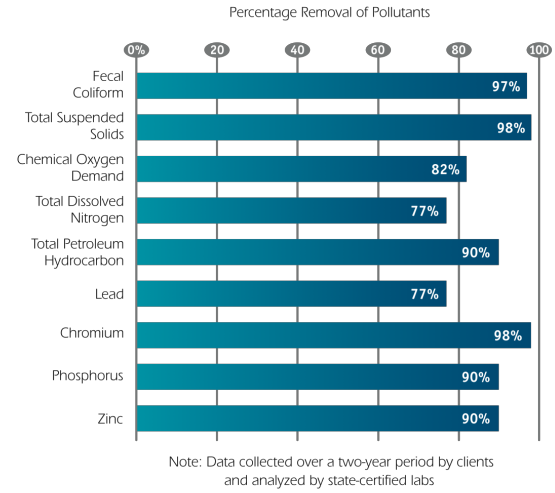
Water Quality Volume Treated: 907 cubic feet (6800 gallons)

Installation and Assembly:

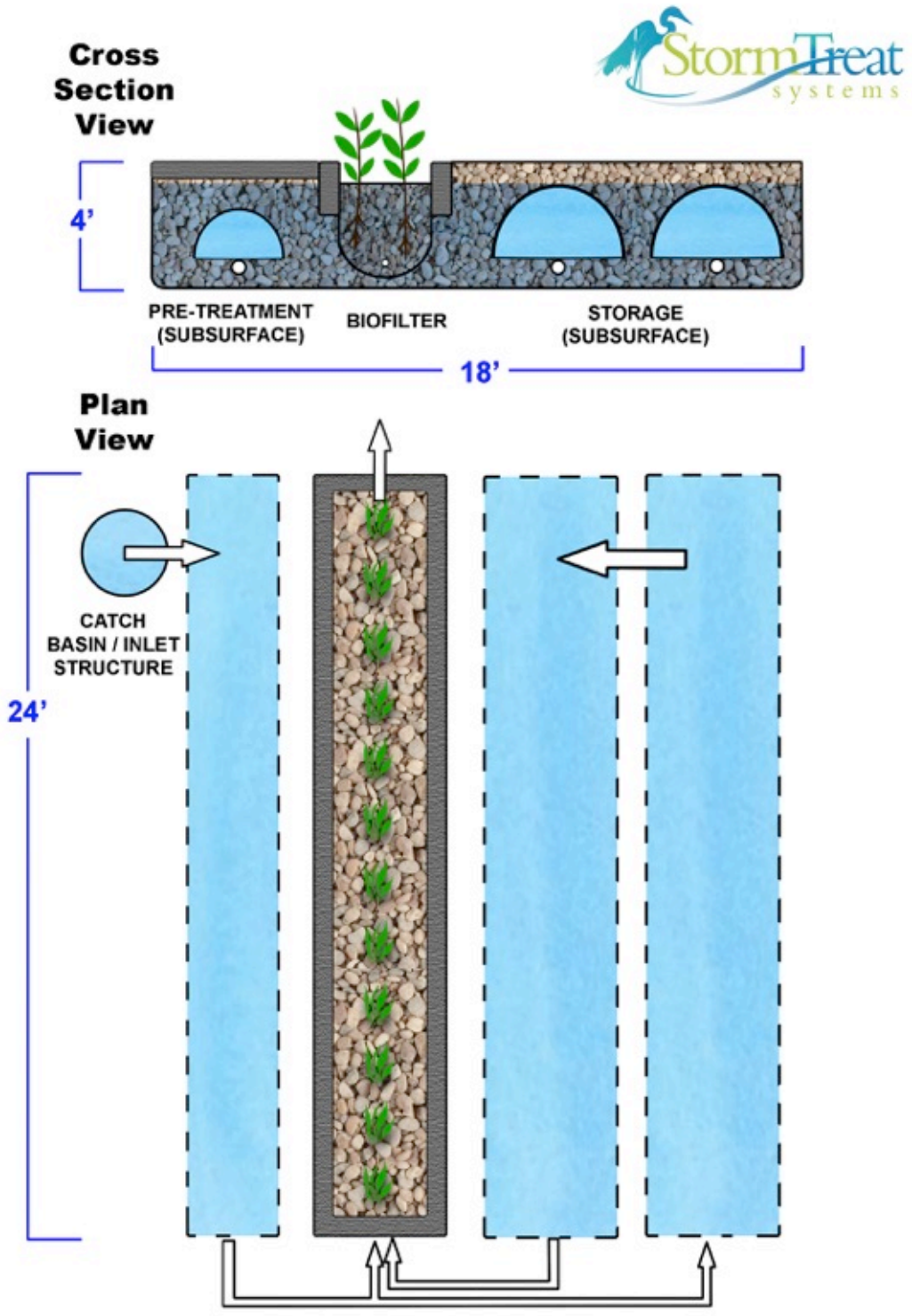
The StormTreat System is shipped to the construction site as modular components along with our own soil media mix and plants. A StormTreat representative will assist with installation and planting. The site contractor will provide excavation services and approximately 6.5 yards of clean, washed 3/8-inch diameter stone for each StormTreat System unit.

Performance Data

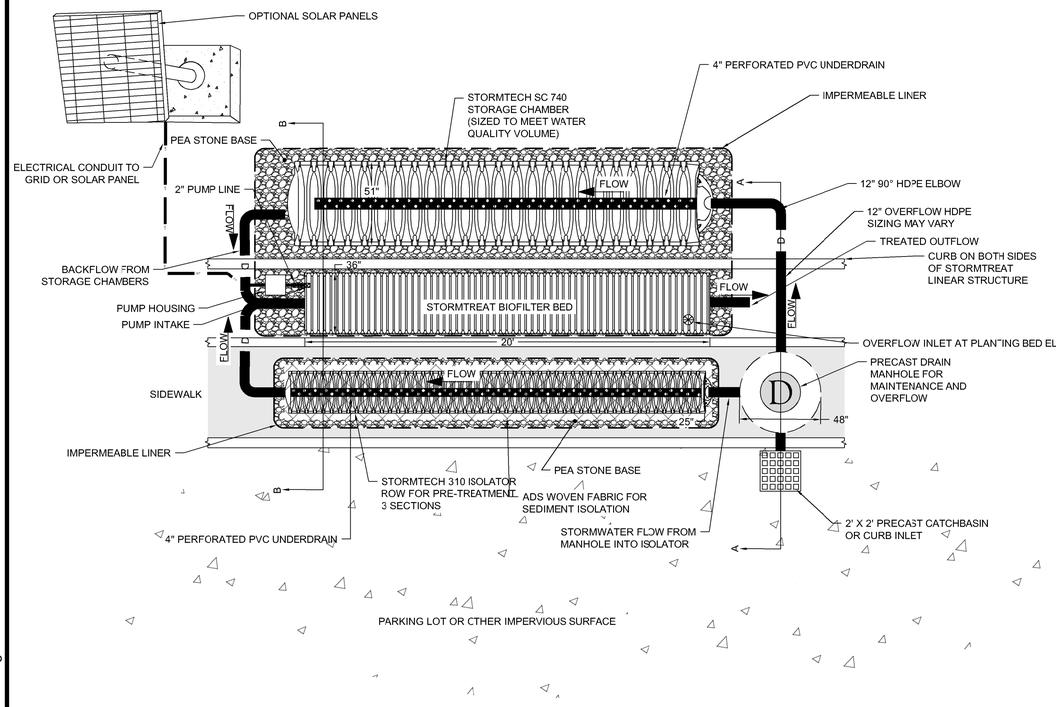
Verified by the Massachusetts Stategic Envirotechnology Partnership (STEP)



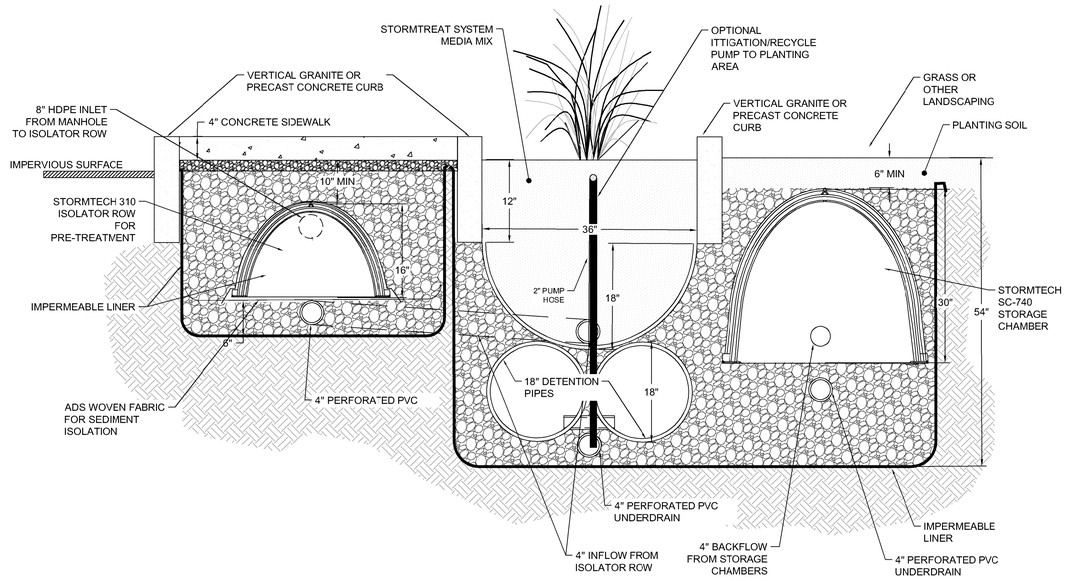
Note: Data collected over a two-year period by clients and analyzed by state-certified labs



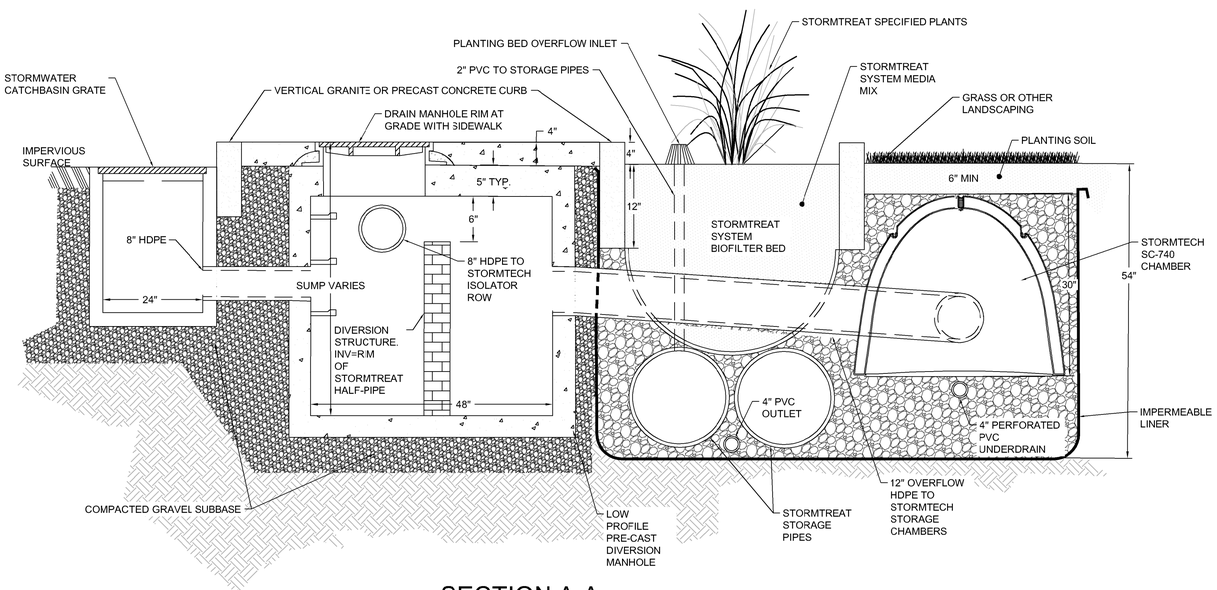
Contact Information: Scott Horsley 508-364-7818 scott@stormtreat.com



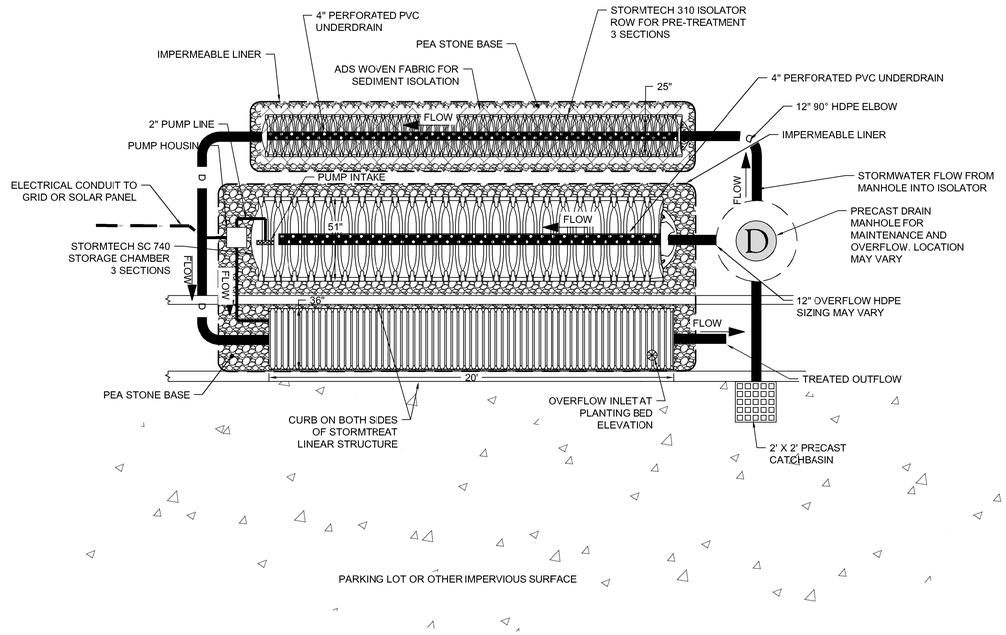
PLAN VIEW
NOT TO SCALE



SECTION B-B
NOT TO SCALE



SECTION A-A
NOT TO SCALE



PLAN VIEW - NO SIDEWALK
NOT TO SCALE

last modified: 01/31/18 printed: 01/31/18 by bk H:\Projects\2018\18003 StormTreat BMP Drawings\Drawings\STORMTREAT SYSTEMS DE.dwg

Revisions

Rev.	Date	By	Appr	Description

Horsley Witten Group, Inc.
Sustainable Environmental Solutions
www.horsleywitten.com
90 Route 6A
Sandwich, MA 02563
508-833-6600 voice
508-833-3150 fax

Checked By: Walter
Drawn By: Vasia
Designed By: Vasia
Date: January, 2018

Plan Set: STORMTREAT LINEAR STORMWATER TREATMENT

Plan Title: DETAIL DRAWINGS

Prepared For:
StormTreat Systems
Scott Horsley
Cotuit, MA
Phone: (508) 833-1033

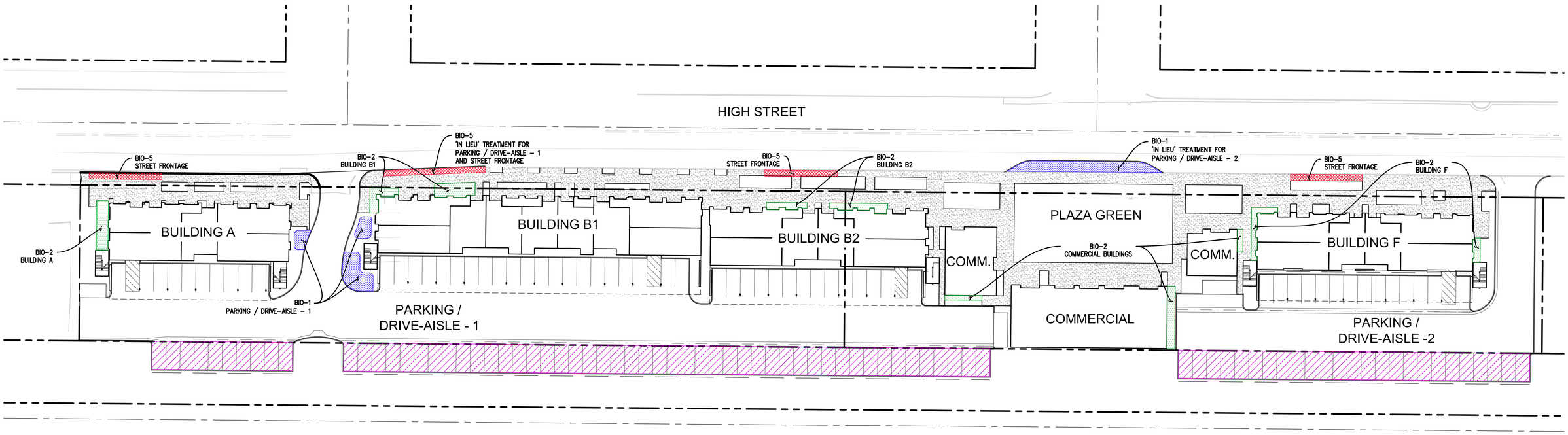
Prepared By:
Horsley Witten Group
90 Route 6A
Sandwich, MA 02563
Phone: (508) 833-6600
Fax: (508) 833-3150
Dated: February, 2006

Registration:

DRAFT
NOT FOR CONSTRUCTION

Project Number:	Sheet :
---	1 of 1

Sheet Number:
C - 1



STORMWATER TREATMENT LEGEND

- BIO-1: BIORETENTION WITH UNDERDRAIN
- BIO-2: PLANTER BOX
- BIO-5: PROPRIETARY BIOTREATMENT W/ DETENTION (STORMTREAT LINEAR STORMWATER TREATMENT OR APPROVED EQUAL)
- PERVIOUS PAVEMENT

0 15 30 60 90

Scale 1" = 30'

6				
5				
4				
3				
2				
1				
△	DESCRIPTION OF REVISION	R.C.E.	APP'D	DATE

REGISTERED PROFESSIONAL ENGINEER — RANDY CHAPMAN — No. 69814 EXP. 6/30/20 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
CCE DESIGN ASSOCIATES, INC.
711 E. DAILY DRIVE, SUITE 107
CAMARILLO, CA 93010
805.738.5434
www.ccedesignassociates.com
RANDY CHAPMAN R.C.E. NO. EXP. DATE DATE

DESIGNED BY: RC/BB
DRAWN BY: RC/BB
CHECKED BY:
APPROVED BY:

ENGINEERING REVIEWED BY:

CITY ENGINEER DATE
SEAN CORIGAN, PE C39479
EXPIRATION DATE 12-31-17

CITY OF MOORPARK

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

GRADING PERMIT NO.

ENGINEERING PROJECT NO.

HIGH STREET DEPOT

HIGH STREET

STORMWATER TREATMENT PLAN

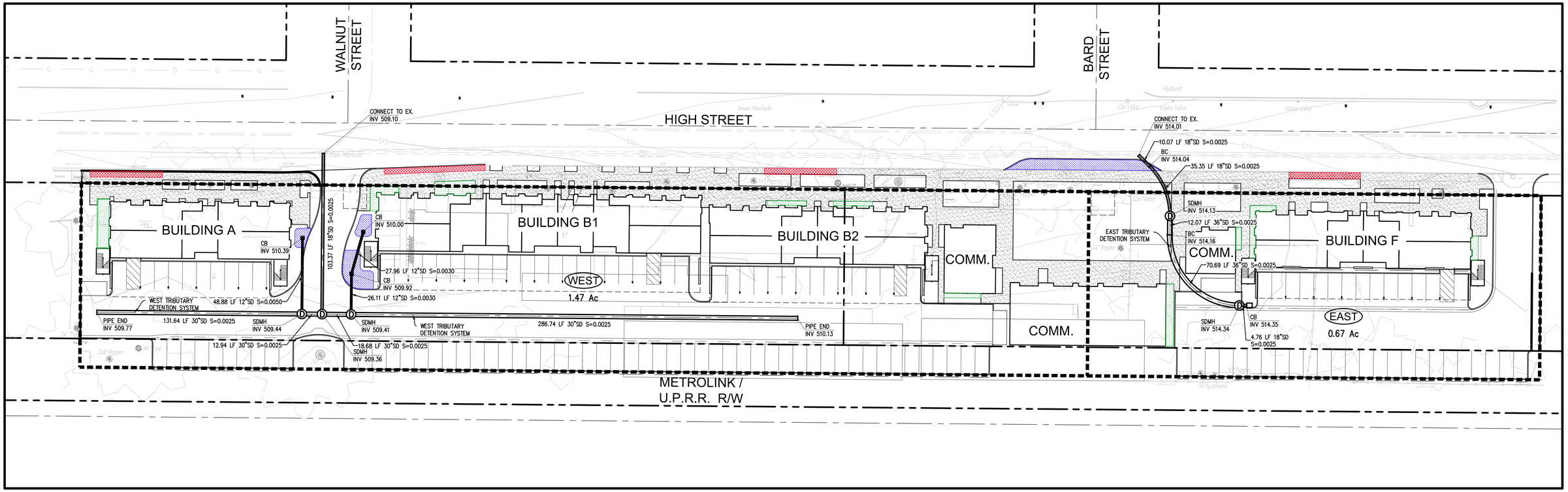
SHEET 1 OF 1

DRAWING NO.

DESIGN ASSOCIATES INC

Attachment F

Hydrology Map



HYDROLOGY AND HYDRAULICS NOTES AND LEGEND

- 1A / 1424 SF — HYDROLOGY TRIBUTARY AREA IDENTIFICATION; AREA OF TRIBUTARY AREA
- STORM DRAIN LINE
- CATCH BASIN
- TRIBUTARY AREA BOUNDARY

HYDROLOGY SUMMARY TABLE

AREA ID	AREA (Ac)	Q100 (cfs)
EXISTING	2.15	4.62
EAST (PROPOSED)	0.68	1.74
WEST (PROPOSED)	1.47	3.34
TOTAL (PROPOSED)	2.15	3.34
EAST (DETAINED)	0.68	1.48
WEST (DETAINED)	1.47	2.61
TOTAL (PROPOSED)	2.15	4.09

0 15 30 60 90
Scale 1" = 30'

	DESCRIPTION OF REVISION	R.C.E.	APP'D	DATE
6				
5				
4				
3				
2				
1				
△				

REGISTERED PROFESSIONAL ENGINEER — RANDY CHAPMAN — No. 69614 EXP. 6/30/20 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
CCE DESIGN ASSOCIATES, INC.
450 ROSEWOOD AVENUE, SUITE 202
CAMARILLO, CA 93010
805.738.5434
www.ccedesignassociates.com
RANDY CHAPMAN R.C.E. NO. EXP. DATE DATE:

DESIGNED BY: RC/BB
DRAWN BY: RC/BB
CHECKED BY:
APPROVED BY:

ENGINEERING REVIEWED BY:

CITY ENGINEER DATE
SEAN CORIGAN, PE C39479
EXPIRATION DATE 12-31-17

CITY OF MOORPARK

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

GRADING PERMIT NO.
ENGINEERING PROJECT NO.

HIGH STREET DEPOT

HIGH STREET

PRELIMINARY HYDROLOGY MAP

SHEET 1 OF 1
DRAWING NO.

Appendix C

Air Quality and Greenhouse Gas Modeling

High Street Station - 2021

Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	8.87	1000sqft	0.20	8,870.00	0
Parking Lot	139.00	Space	0.71	30,927.60	0
City Park	0.17	Acre	0.17	7,187.00	0
High Turnover (Sit Down Restaurant)	3.82	1000sqft	0.09	3,824.00	0
High Turnover (Sit Down Restaurant)	2.79	1000sqft	0.06	2,794.00	0
Apartments Mid Rise	91.00	Dwelling Unit	0.92	69,834.00	302
Strip Mall	8.40	1000sqft	0.00	8,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	353.65	**CH4 Intensity (lb/MWhr)**	0.015	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted for 2030 RPS.

Land Use - Based on client info and CDOF population numbers.
City park proxy for plaza.
Conservative assumption that all ground-floor commercial space is retail.

Construction Phase - Extended AC phase to last half of BC phase.

Trips and VMT -

Demolition - Based on Google Earth approximations.

Architectural Coating - VCAPCD Rule 74.2

Vehicle Trips - City park used as proxy for landscaping and plaza.
Based on trip generation rates from traffic study.

Area Coating - VCAPCD 74.2

Energy Use - Commercial electricity energy reduced by 30% for 2019 Standards.

Water And Wastewater - Reduced indoor water use by 20% to account for CALGreen compliance.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Energy Mitigation - Solar PV system required for low-rise residential buildings.

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstructionPhase	NumDays	10.00	129.00
tblEnergyUse	T24E	8.71	6.10
tblEnergyUse	T24E	2.93	2.05

tblLandUse	LandUseSquareFeet	55,600.00	30,927.60
tblLandUse	LandUseSquareFeet	7,405.20	7,187.00
tblLandUse	LandUseSquareFeet	3,820.00	3,824.00
tblLandUse	LandUseSquareFeet	2,790.00	2,794.00
tblLandUse	LandUseSquareFeet	91,000.00	69,834.00
tblLandUse	LotAcreage	1.25	0.71
tblLandUse	LotAcreage	2.39	0.92
tblLandUse	LotAcreage	0.19	0.00
tblLandUse	Population	278.00	302.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.015
tblProjectCharacteristics	CO2IntensityFactor	702.44	353.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	127.15	112.18
tblVehicleTrips	WD_TR	44.32	37.75
tblWater	IndoorWaterUseRate	5,929,016.33	4,743,213.06
tblWater	IndoorWaterUseRate	2,006,357.84	1,605,086.27
tblWater	IndoorWaterUseRate	622,209.18	497,767.34

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1100	0.9036	0.7294	1.4900e-003	0.0616	0.0442	0.1059	0.0196	0.0420	0.0616	0.0000	129.3990	129.3990	0.0228	0.0000	129.9683
2021	0.6497	1.6181	1.6016	3.3400e-003	0.0798	0.0757	0.1555	0.0214	0.0727	0.0941	0.0000	288.5822	288.5822	0.0411	0.0000	289.6095
Maximum	**0.6497**	**1.6181**	**1.6016**	**3.3400e-003**	**0.0798**	**0.0757**	**0.1555**	**0.0214**	**0.0727**	**0.0941**	**0.0000**	**288.5822**	**288.5822**	**0.0411**	**0.0000**	**289.6095**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1100	0.9036	0.7294	1.4900e-003	0.0616	0.0442	0.1059	0.0196	0.0420	0.0616	0.0000	129.3989	129.3989	0.0228	0.0000	129.9682
2021	0.6497	1.6181	1.6016	3.3400e-003	0.0798	0.0757	0.1555	0.0214	0.0727	0.0941	0.0000	288.5820	288.5820	0.0411	0.0000	289.6093
Maximum	**0.6497**	**1.6181**	**1.6016**	**3.3400e-003**	**0.0798**	**0.0757**	**0.1555**	**0.0214**	**0.0727**	**0.0941**	**0.0000**	**288.5820**	**288.5820**	**0.0411**	**0.0000**	**289.6093**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent 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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2020	11-30-2020	0.7549	0.7549
2	12-1-2020	2-28-2021	0.6842	0.6842
3	3-1-2021	5-31-2021	0.8919	0.8919
4	6-1-2021	8-31-2021	0.8829	0.8829
5	9-1-2021	9-30-2021	0.0486	0.0486
		Highest	0.8919	0.8919

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3985	7.8100e-003	0.6779	4.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	1.1066	1.1066	1.0700e-003	0.0000	1.1335
Energy	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	257.9218	257.9218	7.5000e-003	3.6500e-003	259.1956
Mobile	0.3772	1.4527	4.0075	0.0130	1.1920	0.0113	1.2033	0.3188	0.0105	0.3294	0.0000	1,194.1181	1,194.1181	0.0526	0.0000	1,195.4325
Waste						0.0000	0.0000		0.0000	0.0000	26.2569	0.0000	26.2569	1.5517	0.0000	65.0503
Water						0.0000	0.0000		0.0000	0.0000	2.1719	22.2301	24.4020	0.2240	5.4600e-003	31.6284
Total	**0.7906**	**1.5934**	**4.7771**	**0.0139**	**1.1920**	**0.0254**	**1.2174**	**0.3188**	**0.0246**	**0.3434**	**28.4288**	**1,475.3766**	**1,503.8054**	**1.8369**	**9.1100e-003**	**1,552.4404**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3985	7.8100e-003	0.6779	4.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	1.1066	1.1066	1.0700e-003	0.0000	1.1335
Energy	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	219.4259	219.4259	5.8700e-003	3.3200e-003	220.5616
Mobile	0.3484	1.2458	3.1904	9.3900e-003	0.8344	8.5300e-003	0.8429	0.2232	7.9500e-003	0.2311	0.0000	863.3190	863.3190	0.0416	0.0000	864.3583
Waste						0.0000	0.0000		0.0000	0.0000	26.2569	0.0000	26.2569	1.5517	0.0000	65.0503
Water						0.0000	0.0000		0.0000	0.0000	2.1719	22.2301	24.4020	0.2240	5.4600e-003	31.6284
Total	**0.7618**	**1.3865**	**3.9600**	**0.0103**	**0.8344**	**0.0226**	**0.8570**	**0.2232**	**0.0220**	**0.2452**	**28.4288**	**1,106.0816**	**1,134.5104**	**1.8243**	**8.7800e-003**	**1,182.7321**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.65**	**12.99**	**17.10**	**25.99**	**30.00**	**10.92**	**29.60**	**30.00**	**10.49**	**28.60**	**0.00**	**25.03**	**24.56**	**0.69**	**3.62**	**23.81**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/1/2020	5	3	
3	Grading	Grading	10/2/2020	10/9/2020	5	6	
4	Building Construction	Building Construction	10/10/2020	8/13/2021	5	220	
5	Architectural Coating	Architectural Coating	3/22/2021	9/16/2021	5	129	
6	Paving	Paving	8/14/2021	8/27/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.91

Residential Indoor: 141,414; Residential Outdoor: 47,138; Non-Residential Indoor: 22,527; Non-Residential Outdoor: 7,509; Striped Parking Area: 2,388 (Architectural Coating – sqft)

OffRoad Equipment

High Street Station - 2021 - Ventura County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	107.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	91.00	20.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0117	0.0000	0.0117	1.7800e-003	0.0000	1.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0677	21.0677	5.4200e-003	0.0000	21.2031
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**	**0.0117**	**0.0115**	**0.0232**	**1.7800e-003**	**0.0108**	**0.0125**	**0.0000**	**21.0677**	**21.0677**	**5.4200e-003**	**0.0000**	**21.2031**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9000e-004	0.0148	3.2100e-003	4.0000e-005	9.2000e-004	6.0000e-005	9.8000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	3.9857	3.9857	3.8000e-004	0.0000	3.9952
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	4.8000e-004	3.2000e-004	3.4700e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8981	0.8981	2.0000e-005	0.0000	0.8987
Total	**8.7000e-004**	**0.0151**	**6.6800e-003**	**5.0000e-005**	**1.9700e-003**	**7.0000e-005**	**2.0400e-003**	**5.3000e-004**	**7.0000e-005**	**6.0000e-004**	**0.0000**	**4.8838**	**4.8838**	**4.0000e-004**	**0.0000**	**4.8939**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0117	0.0000	0.0117	1.7800e-003	0.0000	1.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0676	21.0676	5.4200e-003	0.0000	21.2030
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**	**0.0117**	**0.0115**	**0.0232**	**1.7800e-003**	**0.0108**	**0.0125**	**0.0000**	**21.0676**	**21.0676**	**5.4200e-003**	**0.0000**	**21.2030**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9000e-004	0.0148	3.2100e-003	4.0000e-005	9.2000e-004	6.0000e-005	9.8000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	3.9857	3.9857	3.8000e-004	0.0000	3.9952
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	4.8000e-004	3.2000e-004	3.4700e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8981	0.8981	2.0000e-005	0.0000	0.8987
Total	**8.7000e-004**	**0.0151**	**6.6800e-003**	**5.0000e-005**	**1.9700e-003**	**7.0000e-005**	**2.0400e-003**	**5.3000e-004**	**7.0000e-005**	**6.0000e-004**	**0.0000**	**4.8838**	**4.8838**	**4.0000e-004**	**0.0000**	**4.8939**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e-003	0.0299	0.0169	4.0000e-005		1.1700e-003	1.1700e-003		1.0700e-003	1.0700e-003	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.4800e-003**	**0.0299**	**0.0169**	**4.0000e-005**	**2.3900e-003**	**1.1700e-003**	**3.5600e-003**	**2.6000e-004**	**1.0700e-003**	**1.3300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0829	0.0829	0.0000	0.0000	0.0830
Total	**4.0000e-005**	**3.0000e-005**	**3.2000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**0.0000**	**0.0830**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e-003	0.0299	0.0169	4.0000e-005		1.1700e-003	1.1700e-003		1.0700e-003	1.0700e-003	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.4800e-003**	**0.0299**	**0.0169**	**4.0000e-005**	**2.3900e-003**	**1.1700e-003**	**3.5600e-003**	**2.6000e-004**	**1.0700e-003**	**1.3300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0829	0.0829	0.0000	0.0000	0.0830
Total	**4.0000e-005**	**3.0000e-005**	**3.2000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**0.0000**	**0.0830**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7700e-003	0.0640	0.0298	6.0000e-005		2.9700e-003	2.9700e-003		2.7300e-003	2.7300e-003	0.0000	5.4333	5.4333	1.7600e-003	0.0000	5.4773
Total	**5.7700e-003**	**0.0640**	**0.0298**	**6.0000e-005**	**0.0197**	**2.9700e-003**	**0.0226**	**0.0101**	**2.7300e-003**	**0.0128**	**0.0000**	**5.4333**	**5.4333**	**1.7600e-003**	**0.0000**	**5.4773**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	1.1000e-004	7.0000e-005	8.0000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.2073	0.2073	1.0000e-005	0.0000	0.2074
Total	**1.1000e-004**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2073**	**0.2073**	**1.0000e-005**	**0.0000**	**0.2074**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7700e-003	0.0640	0.0298	6.0000e-005		2.9700e-003	2.9700e-003		2.7300e-003	2.7300e-003	0.0000	5.4333	5.4333	1.7600e-003	0.0000	5.4773
Total	**5.7700e-003**	**0.0640**	**0.0298**	**6.0000e-005**	**0.0197**	**2.9700e-003**	**0.0226**	**0.0101**	**2.7300e-003**	**0.0128**	**0.0000**	**5.4333**	**5.4333**	**1.7600e-003**	**0.0000**	**5.4773**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	1.1000e-004	7.0000e-005	8.0000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.2073	0.2073	1.0000e-005	0.0000	0.2074
Total	**1.1000e-004**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2073**	**0.2073**	**1.0000e-005**	**0.0000**	**0.2074**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0675	0.5143	0.4395	7.4000e-004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2551	61.2551	0.0124	0.0000	61.5659
Total	**0.0675**	**0.5143**	**0.4395**	**7.4000e-004**		**0.0280**	**0.0280**		**0.0268**	**0.0268**	**0.0000**	**61.2551**	**61.2551**	**0.0124**	**0.0000**	**61.5659**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.0200e-003	0.0641	0.0171	1.5000e-004	3.9300e-003	3.8000e-004	4.3100e-003	1.1300e-003	3.7000e-004	1.5000e-003	0.0000	14.6950	14.6950	1.2100e-003	0.0000	14.7252
Worker	9.9000e-003	6.6700e-003	0.0717	2.1000e-004	0.0217	1.6000e-004	0.0218	5.7500e-003	1.4000e-004	5.8900e-003	0.0000	18.5451	18.5451	5.0000e-004	0.0000	18.5576
Total	**0.0119**	**0.0707**	**0.0888**	**3.6000e-004**	**0.0256**	**5.4000e-004**	**0.0261**	**6.8800e-003**	**5.1000e-004**	**7.3900e-003**	**0.0000**	**33.2400**	**33.2400**	**1.7100e-003**	**0.0000**	**33.2828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0675	0.5143	0.4395	7.4000e-004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2550	61.2550	0.0124	0.0000	61.5658
Total	**0.0675**	**0.5143**	**0.4395**	**7.4000e-004**		**0.0280**	**0.0280**		**0.0268**	**0.0268**	**0.0000**	**61.2550**	**61.2550**	**0.0124**	**0.0000**	**61.5658**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.0200e-003	0.0641	0.0171	1.5000e-004	3.9300e-003	3.8000e-004	4.3100e-003	1.1300e-003	3.7000e-004	1.5000e-003	0.0000	14.6950	14.6950	1.2100e-003	0.0000	14.7252
Worker	9.9000e-003	6.6700e-003	0.0717	2.1000e-004	0.0217	1.6000e-004	0.0218	5.7500e-003	1.4000e-004	5.8900e-003	0.0000	18.5451	18.5451	5.0000e-004	0.0000	18.5576
Total	**0.0119**	**0.0707**	**0.0888**	**3.6000e-004**	**0.0256**	**5.4000e-004**	**0.0261**	**6.8800e-003**	**5.1000e-004**	**7.3900e-003**	**0.0000**	**33.2400**	**33.2400**	**1.7100e-003**	**0.0000**	**33.2828**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1646	1.2902	1.1723	2.0100e-003		0.0658	0.0658		0.0630	0.0630	0.0000	167.1572	167.1572	0.0329	0.0000	167.9794
Total	**0.1646**	**1.2902**	**1.1723**	**2.0100e-003**		**0.0658**	**0.0658**		**0.0630**	**0.0630**	**0.0000**	**167.1572**	**167.1572**	**0.0329**	**0.0000**	**167.9794**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.6400e-003	0.1570	0.0423	4.1000e-004	0.0107	4.4000e-004	0.0112	3.0900e-003	4.2000e-004	3.5100e-003	0.0000	39.8363	39.8363	3.1700e-003	0.0000	39.9155
Worker	0.0253	0.0164	0.1805	5.4000e-004	0.0591	4.2000e-004	0.0595	0.0157	3.8000e-004	0.0161	0.0000	49.0857	49.0857	1.2400e-003	0.0000	49.1168
Total	**0.0300**	**0.1734**	**0.2227**	**9.5000e-004**	**0.0698**	**8.6000e-004**	**0.0706**	**0.0188**	**8.0000e-004**	**0.0196**	**0.0000**	**88.9221**	**88.9221**	**4.4100e-003**	**0.0000**	**89.0323**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1646	1.2902	1.1723	2.0100e-003		0.0658	0.0658		0.0630	0.0630	0.0000	167.1570	167.1570	0.0329	0.0000	167.9792
Total	**0.1646**	**1.2902**	**1.1723**	**2.0100e-003**		**0.0658**	**0.0658**		**0.0630**	**0.0630**	**0.0000**	**167.1570**	**167.1570**	**0.0329**	**0.0000**	**167.9792**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.6400e-003	0.1570	0.0423	4.1000e-004	0.0107	4.4000e-004	0.0112	3.0900e-003	4.2000e-004	3.5100e-003	0.0000	39.8363	39.8363	3.1700e-003	0.0000	39.9155
Worker	0.0253	0.0164	0.1805	5.4000e-004	0.0591	4.2000e-004	0.0595	0.0157	3.8000e-004	0.0161	0.0000	49.0857	49.0857	1.2400e-003	0.0000	49.1168
Total	**0.0300**	**0.1734**	**0.2227**	**9.5000e-004**	**0.0698**	**8.6000e-004**	**0.0706**	**0.0188**	**8.0000e-004**	**0.0196**	**0.0000**	**88.9221**	**88.9221**	**4.4100e-003**	**0.0000**	**89.0323**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.0985	0.1172	1.9000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.0000	16.4685	16.4685	1.1300e-003	0.0000	16.4967
Total	**0.4443**	**0.0985**	**0.1172**	**1.9000e-004**		**6.0700e-003**	**6.0700e-003**		**6.0700e-003**	**6.0700e-003**	**0.0000**	**16.4685**	**16.4685**	**1.1300e-003**	**0.0000**	**16.4967**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0200e-003	2.6000e-003	0.0286	9.0000e-005	9.3600e-003	7.0000e-005	9.4300e-003	2.4900e-003	6.0000e-005	2.5500e-003	0.0000	7.7795	7.7795	2.0000e-004	0.0000	7.7844
Total	**4.0200e-003**	**2.6000e-003**	**0.0286**	**9.0000e-005**	**9.3600e-003**	**7.0000e-005**	**9.4300e-003**	**2.4900e-003**	**6.0000e-005**	**2.5500e-003**	**0.0000**	**7.7795**	**7.7795**	**2.0000e-004**	**0.0000**	**7.7844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.0985	0.1172	1.9000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.0000	16.4685	16.4685	1.1300e-003	0.0000	16.4967
Total	**0.4443**	**0.0985**	**0.1172**	**1.9000e-004**		**6.0700e-003**	**6.0700e-003**		**6.0700e-003**	**6.0700e-003**	**0.0000**	**16.4685**	**16.4685**	**1.1300e-003**	**0.0000**	**16.4967**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0200e-003	2.6000e-003	0.0286	9.0000e-005	9.3600e-003	7.0000e-005	9.4300e-003	2.4900e-003	6.0000e-005	2.5500e-003	0.0000	7.7795	7.7795	2.0000e-004	0.0000	7.7844
Total	**4.0200e-003**	**2.6000e-003**	**0.0286**	**9.0000e-005**	**9.3600e-003**	**7.0000e-005**	**9.4300e-003**	**2.4900e-003**	**6.0000e-005**	**2.5500e-003**	**0.0000**	**7.7795**	**7.7795**	**2.0000e-004**	**0.0000**	**7.7844**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3200e-003	0.0532	0.0589	9.0000e-005		2.9100e-003	2.9100e-003		2.6900e-003	2.6900e-003	0.0000	7.7524	7.7524	2.4600e-003	0.0000	7.8138
Paving	1.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5100e-003**	**0.0532**	**0.0589**	**9.0000e-005**		**2.9100e-003**	**2.9100e-003**		**2.6900e-003**	**2.6900e-003**	**0.0000**	**7.7524**	**7.7524**	**2.4600e-003**	**0.0000**	**7.8138**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.6000e-004	1.7000e-004	1.8500e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5026	0.5026	1.0000e-005	0.0000	0.5029
Total	**2.6000e-004**	**1.7000e-004**	**1.8500e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5026**	**0.5026**	**1.0000e-005**	**0.0000**	**0.5029**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3200e-003	0.0532	0.0589	9.0000e-005		2.9100e-003	2.9100e-003		2.6900e-003	2.6900e-003	0.0000	7.7524	7.7524	2.4600e-003	0.0000	7.8138
Paving	1.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5100e-003**	**0.0532**	**0.0589**	**9.0000e-005**		**2.9100e-003**	**2.9100e-003**		**2.6900e-003**	**2.6900e-003**	**0.0000**	**7.7524**	**7.7524**	**2.4600e-003**	**0.0000**	**7.8138**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.6000e-004	1.7000e-004	1.8500e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5026	0.5026	1.0000e-005	0.0000	0.5029
Total	**2.6000e-004**	**1.7000e-004**	**1.8500e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5026**	**0.5026**	**1.0000e-005**	**0.0000**	**0.5029**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3484	1.2458	3.1904	9.3900e-003	0.8344	8.5300e-003	0.8429	0.2232	7.9500e-003	0.2311	0.0000	863.3190	863.3190	0.0416	0.0000	864.3583
Unmitigated	0.3772	1.4527	4.0075	0.0130	1.1920	0.0113	1.2033	0.3188	0.0105	0.3294	0.0000	1,194.1181	1,194.1181	0.0526	0.0000	1,195.4325

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	666.12	581.49	533.26	1,754,689	1,228,282
City Park	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	428.53	604.97	503.63	538,900	377,230
High Turnover (Sit Down Restaurant)	312.98	441.85	367.83	393,594	275,516
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	317.10	353.14	171.61	464,265	324,985
Total	1,724.73	1,981.45	1,576.33	3,151,448	2,206,014

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
City Park	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
High Turnover (Sit Down Restaurant)	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Other Asphalt Surfaces	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Parking Lot	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Strip Mall	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

High Street Station - 2021 - Ventura County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	71.4545	71.4545	3.0300e-003	6.1000e-004	71.7109
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	109.9504	109.9504	4.6600e-003	9.3000e-004	110.3450
NaturalGas Mitigated	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9714	147.9714	2.8400e-003	2.7100e-003	148.8507
NaturalGas Unmitigated	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9714	147.9714	2.8400e-003	2.7100e-003	148.8507

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.0399e+006	5.6100e-003	0.0479	0.0204	3.1000e-004		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	55.4930	55.4930	1.0600e-003	1.0200e-003	55.8227
City Park	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
High Turnover (Sit Down Restaurant)	724540	3.9100e-003	0.0355	0.0298	2.1000e-004		2.7000e-003	2.7000e-003		2.7000e-003	2.7000e-003	0.0000	38.6642	38.6642	7.4000e-004	7.1000e-004	38.8940
High Turnover (Sit Down Restaurant)	991640	5.3500e-003	0.0486	0.0408	2.9000e-004		3.6900e-003	3.6900e-003		3.6900e-003	3.6900e-003	0.0000	52.9177	52.9177	1.0100e-003	9.7000e-004	53.2321
Other Asphalt Surfaces	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
Strip Mall	16800	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8965	0.8965	2.0000e-005	2.0000e-005	0.9018
Total		**0.0150**	**0.1329**	**0.0917**	**8.1000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**147.9714**	**147.9714**	**2.8300e-003**	**2.7200e-003**	**148.8507**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.0399e+006	5.6100e-003	0.0479	0.0204	3.1000e-004		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	55.4930	55.4930	1.0600e-003	1.0200e-003	55.8227
City Park	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
High Turnover (Sit Down Restaurant)	724540	3.9100e-003	0.0355	0.0298	2.1000e-004		2.7000e-003	2.7000e-003		2.7000e-003	2.7000e-003	0.0000	38.6642	38.6642	7.4000e-004	7.1000e-004	38.8940
High Turnover (Sit Down Restaurant)	991640	5.3500e-003	0.0486	0.0408	2.9000e-004		3.6900e-003	3.6900e-003		3.6900e-003	3.6900e-003	0.0000	52.9177	52.9177	1.0100e-003	9.7000e-004	53.2321
Other Asphalt Surfaces	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
Strip Mall	16800	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8965	0.8965	2.0000e-005	2.0000e-005	0.9018
Total		**0.0150**	**0.1329**	**0.0917**	**8.1000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**147.9714**	**147.9714**	**2.8300e-003**	**2.7200e-003**	**148.8507**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	361752	58.0298	2.4600e-003	4.9000e-004	58.2380
City Park	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	129507	20.7747	8.8000e-004	1.8000e-004	20.8492
High Turnover (Sit Down Restaurant)	94624.4	15.1790	6.4000e-004	1.3000e-004	15.2334
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10824.7	1.7364	7.0000e-005	1.0000e-005	1.7427
Strip Mall	88712.4	14.2306	6.0000e-004	1.2000e-004	14.2817
Total		**109.9504**	**4.6500e-003**	**9.3000e-004**	**110.3450**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	327469	52.5303	2.2300e-003	4.5000e-004	52.7188
City Park	-34282.9	-5.4994	-0.0002	-0.0001	-5.5192
High Turnover (Sit Down Restaurant)	60341.5	9.6796	4.1000e-004	8.0000e-005	9.7143
High Turnover (Sit Down Restaurant)	95224.6	15.2753	6.5000e-004	1.3000e-004	15.3301
Other Asphalt Surfaces	-34282.9	-5.4994	-0.0002	-0.0001	-5.5192
Parking Lot	-23458.2	-3.7630	-0.0002	0.0000	-3.7765
Strip Mall	54429.5	8.7312	3.7000e-004	7.0000e-005	8.7625
Total		**71.4545**	**3.0400e-003**	**6.0000e-004**	**71.7109**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3985	7.8100e-003	0.6779	4.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	1.1066	1.1066	1.0700e-003	0.0000	1.1335
Unmitigated	0.3985	7.8100e-003	0.6779	4.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	1.1066	1.1066	1.0700e-003	0.0000	1.1335

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0439					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3340					0.0000	0.0000		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		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0206	7.8100e-003	0.6779	4.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	1.1066	1.1066	1.0700e-003	0.0000	1.1335
Total	**0.3985**	**7.8100e-003**	**0.6779**	**4.0000e-005**		**3.7400e-003**	**3.7400e-003**		**3.7400e-003**	**3.7400e-003**	**0.0000**	**1.1066**	**1.1066**	**1.0700e-003**	**0.0000**	**1.1335**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0439					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3340					0.0000	0.0000		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		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0206	7.8100e-003	0.6779	4.0000e-005		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	1.1066	1.1066	1.0700e-003	0.0000	1.1335
Total	**0.3985**	**7.8100e-003**	**0.6779**	**4.0000e-005**		**3.7400e-003**	**3.7400e-003**		**3.7400e-003**	**3.7400e-003**	**0.0000**	**1.1066**	**1.1066**	**1.0700e-003**	**0.0000**	**1.1335**

7.0 Water Detail

7.1 Mitigation Measures Water

High Street Station - 2021 - Ventura County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.4020	0.2240	5.4600e-003	31.6284
Unmitigated	24.4020	0.2240	5.4600e-003	31.6284

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.74321 / 3.73786	18.0737	0.1553	3.7900e-003	23.0846
City Park	0 / 0.202552	0.3610	2.0000e-005	0.0000	0.3623
High Turnover (Sit Down Restaurant)	1.60509 / 0.128065	4.0901	0.0525	1.2700e-003	5.7785
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.497767 / 0.381354	1.8773	0.0163	4.0000e-004	2.4031
Total		**24.4020**	**0.2240**	**5.4600e-003**	**31.6284**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.74321 / 3.73786	18.0737	0.1553	3.7900e-003	23.0846
City Park	0 / 0.202552	0.3610	2.0000e-005	0.0000	0.3623
High Turnover (Sit Down Restaurant)	1.60509 / 0.128065	4.0901	0.0525	1.2700e-003	5.7785
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.497767 / 0.381354	1.8773	0.0163	4.0000e-004	2.4031
Total		**24.4020**	**0.2240**	**5.4600e-003**	**31.6284**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	26.2569	1.5517	0.0000	65.0503
Unmitigated	26.2569	1.5517	0.0000	65.0503

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.86	8.4972	0.5022	0.0000	21.0515
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
High Turnover (Sit Down Restaurant)	78.66	15.9673	0.9436	0.0000	39.5582
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.82	1.7904	0.1058	0.0000	4.4356
Total		**26.2569**	**1.5517**	**0.0000**	**65.0503**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.86	8.4972	0.5022	0.0000	21.0515
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
High Turnover (Sit Down Restaurant)	78.66	15.9673	0.9436	0.0000	39.5582
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.82	1.7904	0.1058	0.0000	4.4356
Total		**26.2569**	**1.5517**	**0.0000**	**65.0503**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

High Street Station - 2021

Ventura County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	8.87	1000sqft	0.20	8,870.00	0
Parking Lot	139.00	Space	0.71	30,927.60	0
City Park	0.17	Acre	0.17	7,187.00	0
High Turnover (Sit Down Restaurant)	3.82	1000sqft	0.09	3,824.00	0
High Turnover (Sit Down Restaurant)	2.79	1000sqft	0.06	2,794.00	0
Apartments Mid Rise	91.00	Dwelling Unit	0.92	69,834.00	302
Strip Mall	8.40	1000sqft	0.00	8,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	353.65	**CH4 Intensity (lb/MWhr)**	0.015	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

High Street Station - 2021 - Ventura County, Winter

Project Characteristics - Adjusted for 2030 RPS.

Land Use - Based on client info and CDOF population numbers.
City park proxy for plaza.
Conservative assumption that all ground-floor commercial space is retail.

Construction Phase - Extended AC phase to last half of BC phase.

Trips and VMT -

Demolition - Based on Google Earth approximations.

Architectural Coating - VCAPCD Rule 74.2

Vehicle Trips - City park used as proxy for landscaping and plaza.
Based on trip generation rates from traffic study.

Area Coating - VCAPCD 74.2

Energy Use - Commercial electricity energy reduced by 30% for 2019 Standards.

Water And Wastewater - Reduced indoor water use by 20% to account for CALGreen compliance.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Energy Mitigation - Solar PV system required for low-rise residential buildings.

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstructionPhase	NumDays	10.00	129.00
tblEnergyUse	T24E	8.71	6.10
tblEnergyUse	T24E	2.93	2.05

tblLandUse	LandUseSquareFeet	55,600.00	30,927.60
tblLandUse	LandUseSquareFeet	7,405.20	7,187.00
tblLandUse	LandUseSquareFeet	3,820.00	3,824.00
tblLandUse	LandUseSquareFeet	2,790.00	2,794.00
tblLandUse	LandUseSquareFeet	91,000.00	69,834.00
tblLandUse	LotAcreage	1.25	0.71
tblLandUse	LotAcreage	2.39	0.92
tblLandUse	LotAcreage	0.19	0.00
tblLandUse	Population	278.00	302.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.015
tblProjectCharacteristics	CO2IntensityFactor	702.44	353.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	127.15	112.18
tblVehicleTrips	WD_TR	44.32	37.75
tblWater	IndoorWaterUseRate	5,929,016.33	4,743,213.06
tblWater	IndoorWaterUseRate	2,006,357.84	1,605,086.27
tblWater	IndoorWaterUseRate	622,209.18	497,767.34

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.7356	22.4375	17.9702	0.0370	6.6345	1.1594	7.6252	3.3893	1.0827	4.3008	0.0000	3,517.5091	3,517.5091	0.7691	0.0000	3,530.7594
2021	9.4167	19.7332	19.6511	0.0410	1.0306	0.9232	1.9539	0.2764	0.8883	1.1647	0.0000	3,906.6534	3,906.6534	0.5671	0.0000	3,920.0239
Maximum	**9.4167**	**22.4375**	**19.6511**	**0.0410**	**6.6345**	**1.1594**	**7.6252**	**3.3893**	**1.0827**	**4.3008**	**0.0000**	**3,906.6534**	**3,906.6534**	**0.7691**	**0.0000**	**3,920.0239**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.7356	22.4375	17.9702	0.0370	6.6345	1.1594	7.6252	3.3893	1.0827	4.3008	0.0000	3,517.5091	3,517.5091	0.7691	0.0000	3,530.7594
2021	9.4167	19.7332	19.6511	0.0410	1.0306	0.9232	1.9539	0.2764	0.8883	1.1647	0.0000	3,906.6534	3,906.6534	0.5671	0.0000	3,920.0239
Maximum	**9.4167**	**22.4375**	**19.6511**	**0.0410**	**6.6345**	**1.1594**	**7.6252**	**3.3893**	**1.0827**	**4.3008**	**0.0000**	**3,906.6534**	**3,906.6534**	**0.7691**	**0.0000**	**3,920.0239**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent 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 PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824
Energy	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674
Mobile	2.4627	9.3077	26.2889	0.0811	7.6183	0.0721	7.6904	2.0346	0.0672	2.1018		8,215.2212	8,215.2212	0.3759		8,224.6175
Total	**4.8438**	**10.1226**	**34.3240**	**0.0860**	**7.6183**	**0.1703**	**7.7886**	**2.0346**	**0.1654**	**2.2000**	**0.0000**	**9,122.5314**	**9,122.5314**	**0.4061**	**0.0164**	**9,137.5672**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824
Energy	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674
Mobile	2.2816	7.9995	21.1912	0.0586	5.3328	0.0547	5.3875	1.4242	0.0510	1.4752		5,939.4066	5,939.4066	0.3000		5,946.9056
Total	**4.6626**	**8.8143**	**29.2263**	**0.0635**	**5.3328**	**0.1529**	**5.4857**	**1.4242**	**0.1492**	**1.5734**	**0.0000**	**6,846.7167**	**6,846.7167**	**0.3302**	**0.0164**	**6,859.8553**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.74**	**12.92**	**14.85**	**26.14**	**30.00**	**10.21**	**29.57**	**30.00**	**9.81**	**28.48**	**0.00**	**24.95**	**24.95**	**18.69**	**0.00**	**24.93**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/1/2020	5	3	
3	Grading	Grading	10/2/2020	10/9/2020	5	6	
4	Building Construction	Building Construction	10/10/2020	8/13/2021	5	220	
5	Architectural Coating	Architectural Coating	3/22/2021	9/16/2021	5	129	
6	Paving	Paving	8/14/2021	8/27/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.91

Residential Indoor: 141,414; Residential Outdoor: 47,138; Non-Residential Indoor: 22,527; Non-Residential Outdoor: 7,509; Striped Parking Area: 2,388 (Architectural Coating – sqft)

OffRoad Equipment

High Street Station - 2021 - Ventura County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	107.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	91.00	20.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1721	0.0000	1.1721	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**1.1721**	**1.1525**	**2.3246**	**0.1775**	**1.0761**	**1.2536**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0397	1.4577	0.3336	3.9800e-003	0.0932	6.1500e-003	0.0993	0.0255	5.8900e-003	0.0314		435.2828	435.2828	0.0429		436.3548
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	0.0538	0.0335	0.3508	9.9000e-004	0.1068	7.5000e-004	0.1076	0.0283	6.9000e-004	0.0290		98.1989	98.1989	2.6600e-003		98.2654
Total	**0.0935**	**1.4912**	**0.6844**	**4.9700e-003**	**0.2000**	**6.9000e-003**	**0.2069**	**0.0538**	**6.5800e-003**	**0.0604**		**533.4817**	**533.4817**	**0.0455**		**534.6202**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1721	0.0000	1.1721	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**1.1721**	**1.1525**	**2.3246**	**0.1775**	**1.0761**	**1.2536**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0397	1.4577	0.3336	3.9800e-003	0.0932	6.1500e-003	0.0993	0.0255	5.8900e-003	0.0314		435.2828	435.2828	0.0429		436.3548
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	0.0538	0.0335	0.3508	9.9000e-004	0.1068	7.5000e-004	0.1076	0.0283	6.9000e-004	0.0290		98.1989	98.1989	2.6600e-003		98.2654
Total	**0.0935**	**1.4912**	**0.6844**	**4.9700e-003**	**0.2000**	**6.9000e-003**	**0.2069**	**0.0538**	**6.5800e-003**	**0.0604**		**533.4817**	**533.4817**	**0.0455**		**534.6202**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149		2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**1.6521**	**19.9196**	**11.2678**	**0.0245**	**1.5908**	**0.7771**	**2.3678**	**0.1718**	**0.7149**	**0.8867**		**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0331	0.0206	0.2159	6.1000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.3000e-004	0.0179		60.4301	60.4301	1.6400e-003		60.4710
Total	**0.0331**	**0.0206**	**0.2159**	**6.1000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.3000e-004**	**0.0179**		**60.4301**	**60.4301**	**1.6400e-003**		**60.4710**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149	0.0000	2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**1.6521**	**19.9196**	**11.2678**	**0.0245**	**1.5908**	**0.7771**	**2.3678**	**0.1718**	**0.7149**	**0.8867**	**0.0000**	**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0331	0.0206	0.2159	6.1000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.3000e-004	0.0179		60.4301	60.4301	1.6400e-003		60.4710
Total	**0.0331**	**0.0206**	**0.2159**	**6.1000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.3000e-004**	**0.0179**		**60.4301**	**60.4301**	**1.6400e-003**		**60.4710**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.9110	0.9110		1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**1.9219**	**21.3418**	**9.9355**	**0.0206**	**6.5523**	**0.9902**	**7.5425**	**3.3675**	**0.9110**	**4.2784**		**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0414	0.0257	0.2698	7.6000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		75.5376	75.5376	2.0500e-003		75.5888
Total	**0.0414**	**0.0257**	**0.2698**	**7.6000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**75.5376**	**75.5376**	**2.0500e-003**		**75.5888**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.9110	0.9110	0.0000	1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**1.9219**	**21.3418**	**9.9355**	**0.0206**	**6.5523**	**0.9902**	**7.5425**	**3.3675**	**0.9110**	**4.2784**	**0.0000**	**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0414	0.0257	0.2698	7.6000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		75.5376	75.5376	2.0500e-003		75.5888
Total	**0.0414**	**0.0257**	**0.2698**	**7.6000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**75.5376**	**75.5376**	**2.0500e-003**		**75.5888**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014
Total	**2.2879**	**17.4336**	**14.8972**	**0.0250**		**0.9482**	**0.9482**		**0.9089**	**0.9089**		**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0708	2.1449	0.6175	5.0400e-003	0.1352	0.0132	0.1484	0.0389	0.0126	0.0515		541.2291	541.2291	0.0468		542.4000
Worker	0.3769	0.2341	2.4555	6.9000e-003	0.7475	5.2800e-003	0.7528	0.1983	4.8600e-003	0.2032		687.3922	687.3922	0.0186		687.8580
Total	**0.4478**	**2.3791**	**3.0730**	**0.0119**	**0.8827**	**0.0185**	**0.9012**	**0.2372**	**0.0175**	**0.2547**		**1,228.6213**	**1,228.6213**	**0.0655**		**1,230.2580**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.8877	2,288.8877	0.4646		2,300.5014
Total	**2.2879**	**17.4336**	**14.8972**	**0.0250**		**0.9482**	**0.9482**		**0.9089**	**0.9089**	**0.0000**	**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0708	2.1449	0.6175	5.0400e-003	0.1352	0.0132	0.1484	0.0389	0.0126	0.0515		541.2291	541.2291	0.0468		542.4000
Worker	0.3769	0.2341	2.4555	6.9000e-003	0.7475	5.2800e-003	0.7528	0.1983	4.8600e-003	0.2032		687.3922	687.3922	0.0186		687.8580
Total	**0.4478**	**2.3791**	**3.0730**	**0.0119**	**0.8827**	**0.0185**	**0.9012**	**0.2372**	**0.0175**	**0.2547**		**1,228.6213**	**1,228.6213**	**0.0655**		**1,230.2580**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0597	1.9262	0.5592	5.0000e-003	0.1352	5.6700e-003	0.1409	0.0389	5.4300e-003	0.0443		537.6470	537.6470	0.0449		538.7691
Worker	0.3536	0.2109	2.2636	6.6900e-003	0.7475	5.1800e-003	0.7527	0.1983	4.7700e-003	0.2031		666.7401	666.7401	0.0170		667.1639
Total	**0.4133**	**2.1371**	**2.8228**	**0.0117**	**0.8827**	**0.0109**	**0.8936**	**0.2372**	**0.0102**	**0.2474**		**1,204.3871**	**1,204.3871**	**0.0618**		**1,205.9330**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0597	1.9262	0.5592	5.0000e-003	0.1352	5.6700e-003	0.1409	0.0389	5.4300e-003	0.0443		537.6470	537.6470	0.0449		538.7691
Worker	0.3536	0.2109	2.2636	6.6900e-003	0.7475	5.1800e-003	0.7527	0.1983	4.7700e-003	0.2031		666.7401	666.7401	0.0170		667.1639
Total	**0.4133**	**2.1371**	**2.8228**	**0.0117**	**0.8827**	**0.0109**	**0.8936**	**0.2372**	**0.0102**	**0.2474**		**1,204.3871**	**1,204.3871**	**0.0618**		**1,205.9330**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**6.8884**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0699	0.0417	0.4478	1.3200e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		131.8827	131.8827	3.3500e-003		131.9665
Total	**0.0699**	**0.0417**	**0.4478**	**1.3200e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**131.8827**	**131.8827**	**3.3500e-003**		**131.9665**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**6.8884**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0699	0.0417	0.4478	1.3200e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		131.8827	131.8827	3.3500e-003		131.9665
Total	**0.0699**	**0.0417**	**0.4478**	**1.3200e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**131.8827**	**131.8827**	**3.3500e-003**		**131.9665**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3017**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**		**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0583	0.0348	0.3731	1.1000e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		109.9022	109.9022	2.7900e-003		109.9721
Total	**0.0583**	**0.0348**	**0.3731**	**1.1000e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**109.9022**	**109.9022**	**2.7900e-003**		**109.9721**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3017**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**	**0.0000**	**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0583	0.0348	0.3731	1.1000e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		109.9022	109.9022	2.7900e-003		109.9721
Total	**0.0583**	**0.0348**	**0.3731**	**1.1000e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**109.9022**	**109.9022**	**2.7900e-003**		**109.9721**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2816	7.9995	21.1912	0.0586	5.3328	0.0547	5.3875	1.4242	0.0510	1.4752		5,939.4066	5,939.4066	0.3000		5,946.9056
Unmitigated	2.4627	9.3077	26.2889	0.0811	7.6183	0.0721	7.6904	2.0346	0.0672	2.1018		8,215.2212	8,215.2212	0.3759		8,224.6175

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	666.12	581.49	533.26	1,754,689	1,228,282
City Park	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	428.53	604.97	503.63	538,900	377,230
High Turnover (Sit Down Restaurant)	312.98	441.85	367.83	393,594	275,516
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	317.10	353.14	171.61	464,265	324,985
Total	1,724.73	1,981.45	1,576.33	3,151,448	2,206,014

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
City Park	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
High Turnover (Sit Down Restaurant)	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Other Asphalt Surfaces	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Parking Lot	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Strip Mall	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

High Street Station - 2021 - Ventura County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674
NaturalGas Unmitigated	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2849.04	0.0307	0.2626	0.1117	1.6800e-003		0.0212	0.0212		0.0212	0.0212		335.1809	335.1809	6.4200e-003	6.1400e-003	337.1728
City Park	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
High Turnover (Sit Down Restaurant)	1985.04	0.0214	0.1946	0.1635	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.5343	233.5343	4.4800e-003	4.2800e-003	234.9221
High Turnover (Sit Down Restaurant)	2716.82	0.0293	0.2664	0.2237	1.6000e-003		0.0202	0.0202		0.0202	0.0202		319.6260	319.6260	6.1300e-003	5.8600e-003	321.5254
Other Asphalt Surfaces	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
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
Strip Mall	46.0274	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4150	5.4150	1.0000e-004	1.0000e-004	5.4472
Total		**0.0819**	**0.7280**	**0.5027**	**4.4800e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.7562**	**893.7562**	**0.0171**	**0.0164**	**899.0674**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.84904	0.0307	0.2626	0.1117	1.6800e-003		0.0212	0.0212		0.0212	0.0212		335.1809	335.1809	6.4200e-003	6.1400e-003	337.1728
City Park	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
High Turnover (Sit Down Restaurant)	1.98504	0.0214	0.1946	0.1635	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.5343	233.5343	4.4800e-003	4.2800e-003	234.9221
High Turnover (Sit Down Restaurant)	2.71682	0.0293	0.2664	0.2237	1.6000e-003		0.0202	0.0202		0.0202	0.0202		319.6260	319.6260	6.1300e-003	5.8600e-003	321.5254
Other Asphalt Surfaces	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
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
Strip Mall	0.0460274	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4150	5.4150	1.0000e-004	1.0000e-004	5.4472
Total		**0.0819**	**0.7280**	**0.5027**	**4.4800e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.7562**	**893.7562**	**0.0171**	**0.0164**	**899.0674**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824
Unmitigated	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2403					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8303					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	0.2286	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416		13.5540	13.5540	0.0131		13.8824
Total	**2.2991**	**0.0868**	**7.5324**	**4.0000e-004**		**0.0416**	**0.0416**		**0.0416**	**0.0416**	**0.0000**	**13.5540**	**13.5540**	**0.0131**	**0.0000**	**13.8824**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2403					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8303					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	0.2286	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416		13.5540	13.5540	0.0131		13.8824
Total	**2.2991**	**0.0868**	**7.5324**	**4.0000e-004**		**0.0416**	**0.0416**		**0.0416**	**0.0416**	**0.0000**	**13.5540**	**13.5540**	**0.0131**	**0.0000**	**13.8824**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

High Street Station - 2021

Ventura County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	8.87	1000sqft	0.20	8,870.00	0
Parking Lot	139.00	Space	0.71	30,927.60	0
City Park	0.17	Acre	0.17	7,187.00	0
High Turnover (Sit Down Restaurant)	3.82	1000sqft	0.09	3,824.00	0
High Turnover (Sit Down Restaurant)	2.79	1000sqft	0.06	2,794.00	0
Apartments Mid Rise	91.00	Dwelling Unit	0.92	69,834.00	302
Strip Mall	8.40	1000sqft	0.00	8,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	353.65	**CH4 Intensity (lb/MWhr)**	0.015	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

High Street Station - 2021 - Ventura County, Summer

Project Characteristics - Adjusted for 2030 RPS.

Land Use - Based on client info and CDOF population numbers.
City park proxy for plaza.
Conservative assumption that all ground-floor commercial space is retail.

Construction Phase - Extended AC phase to last half of BC phase.

Trips and VMT -

Demolition - Based on Google Earth approximations.

Architectural Coating - VCAPCD Rule 74.2

Vehicle Trips - City park used as proxy for landscaping and plaza.
Based on trip generation rates from traffic study.

Area Coating - VCAPCD 74.2

Energy Use - Commercial electricity energy reduced by 30% for 2019 Standards.

Water And Wastewater - Reduced indoor water use by 20% to account for CALGreen compliance.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Energy Mitigation - Solar PV system required for low-rise residential buildings.

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstructionPhase	NumDays	10.00	129.00
tblEnergyUse	T24E	8.71	6.10
tblEnergyUse	T24E	2.93	2.05

tblLandUse	LandUseSquareFeet	55,600.00	30,927.60
tblLandUse	LandUseSquareFeet	7,405.20	7,187.00
tblLandUse	LandUseSquareFeet	3,820.00	3,824.00
tblLandUse	LandUseSquareFeet	2,790.00	2,794.00
tblLandUse	LandUseSquareFeet	91,000.00	69,834.00
tblLandUse	LotAcreage	1.25	0.71
tblLandUse	LotAcreage	2.39	0.92
tblLandUse	LotAcreage	0.19	0.00
tblLandUse	Population	278.00	302.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.015
tblProjectCharacteristics	CO2IntensityFactor	702.44	353.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	127.15	112.18
tblVehicleTrips	WD_TR	44.32	37.75
tblWater	IndoorWaterUseRate	5,929,016.33	4,743,213.06
tblWater	IndoorWaterUseRate	2,006,357.84	1,605,086.27
tblWater	IndoorWaterUseRate	622,209.18	497,767.34

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.6873	22.4155	17.9596	0.0374	6.6345	1.1592	7.6252	3.3893	1.0826	4.3008	0.0000	3,566.0570	3,566.0570	0.7692	0.0000	3,579.2520
2021	9.3629	19.6990	19.6586	0.0415	1.0306	0.9229	1.9535	0.2764	0.8880	1.1644	0.0000	3,960.8430	3,960.8430	0.5674	0.0000	3,974.1651
Maximum	**9.3629**	**22.4155**	**19.6586**	**0.0415**	**6.6345**	**1.1592**	**7.6252**	**3.3893**	**1.0826**	**4.3008**	**0.0000**	**3,960.8430**	**3,960.8430**	**0.7692**	**0.0000**	**3,974.1651**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.6873	22.4155	17.9596	0.0374	6.6345	1.1592	7.6252	3.3893	1.0826	4.3008	0.0000	3,566.0570	3,566.0570	0.7692	0.0000	3,579.2520
2021	9.3629	19.6990	19.6586	0.0415	1.0306	0.9229	1.9535	0.2764	0.8880	1.1644	0.0000	3,960.8430	3,960.8430	0.5674	0.0000	3,974.1651
Maximum	**9.3629**	**22.4155**	**19.6586**	**0.0415**	**6.6345**	**1.1592**	**7.6252**	**3.3893**	**1.0826**	**4.3008**	**0.0000**	**3,960.8430**	**3,960.8430**	**0.7692**	**0.0000**	**3,974.1651**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent 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 PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824
Energy	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674
Mobile	2.6155	9.0077	25.2926	0.0847	7.6183	0.0711	7.6894	2.0346	0.0662	2.1008		8,578.8705	8,578.8705	0.3649		8,587.9933
Total	**4.9965**	**9.8226**	**33.3277**	**0.0896**	**7.6183**	**0.1693**	**7.7876**	**2.0346**	**0.1644**	**2.1990**	**0.0000**	**9,486.1807**	**9,486.1807**	**0.3952**	**0.0164**	**9,500.9430**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824
Energy	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674
Mobile	2.4319	7.7992	19.8091	0.0613	5.3328	0.0537	5.3865	1.4242	0.0500	1.4742		6,209.0874	6,209.0874	0.2870		6,216.2625
Total	**4.8129**	**8.6141**	**27.8442**	**0.0661**	**5.3328**	**0.1519**	**5.4847**	**1.4242**	**0.1482**	**1.5724**	**0.0000**	**7,116.3975**	**7,116.3975**	**0.3173**	**0.0164**	**7,129.2122**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.67**	**12.30**	**16.45**	**26.16**	**30.00**	**10.28**	**29.57**	**30.00**	**9.87**	**28.49**	**0.00**	**24.98**	**24.98**	**19.72**	**0.00**	**24.96**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/1/2020	5	3	
3	Grading	Grading	10/2/2020	10/9/2020	5	6	
4	Building Construction	Building Construction	10/10/2020	8/13/2021	5	220	
5	Architectural Coating	Architectural Coating	3/22/2021	9/16/2021	5	129	
6	Paving	Paving	8/14/2021	8/27/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.91

Residential Indoor: 141,414; Residential Outdoor: 47,138; Non-Residential Indoor: 22,527; Non-Residential Outdoor: 7,509; Striped Parking Area: 2,388 (Architectural Coating – sqft)

OffRoad Equipment

High Street Station - 2021 - Ventura County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	107.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	91.00	20.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1721	0.0000	1.1721	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**1.1721**	**1.1525**	**2.3246**	**0.1775**	**1.0761**	**1.2536**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0385	1.4407	0.3109	4.0400e-003	0.0932	5.9900e-003	0.0992	0.0255	5.7300e-003	0.0312		442.2890	442.2890	0.0414		443.3250
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	0.0475	0.0285	0.3593	1.0400e-003	0.1068	7.5000e-004	0.1076	0.0283	6.9000e-004	0.0290		103.1961	103.1961	2.7500e-003		103.2649
Total	**0.0860**	**1.4692**	**0.6702**	**5.0800e-003**	**0.2000**	**6.7400e-003**	**0.2067**	**0.0538**	**6.4200e-003**	**0.0603**		**545.4851**	**545.4851**	**0.0442**		**546.5899**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1721	0.0000	1.1721	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**1.1721**	**1.1525**	**2.3246**	**0.1775**	**1.0761**	**1.2536**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0385	1.4407	0.3109	4.0400e-003	0.0932	5.9900e-003	0.0992	0.0255	5.7300e-003	0.0312		442.2890	442.2890	0.0414		443.3250
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	0.0475	0.0285	0.3593	1.0400e-003	0.1068	7.5000e-004	0.1076	0.0283	6.9000e-004	0.0290		103.1961	103.1961	2.7500e-003		103.2649
Total	**0.0860**	**1.4692**	**0.6702**	**5.0800e-003**	**0.2000**	**6.7400e-003**	**0.2067**	**0.0538**	**6.4200e-003**	**0.0603**		**545.4851**	**545.4851**	**0.0442**		**546.5899**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149		2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**1.6521**	**19.9196**	**11.2678**	**0.0245**	**1.5908**	**0.7771**	**2.3678**	**0.1718**	**0.7149**	**0.8867**		**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0292	0.0176	0.2211	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.3000e-004	0.0179		63.5053	63.5053	1.7000e-003		63.5476
Total	**0.0292**	**0.0176**	**0.2211**	**6.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.3000e-004**	**0.0179**		**63.5053**	**63.5053**	**1.7000e-003**		**63.5476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149	0.0000	2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**1.6521**	**19.9196**	**11.2678**	**0.0245**	**1.5908**	**0.7771**	**2.3678**	**0.1718**	**0.7149**	**0.8867**	**0.0000**	**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0292	0.0176	0.2211	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.3000e-004	0.0179		63.5053	63.5053	1.7000e-003		63.5476
Total	**0.0292**	**0.0176**	**0.2211**	**6.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.3000e-004**	**0.0179**		**63.5053**	**63.5053**	**1.7000e-003**		**63.5476**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.9110	0.9110		1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**1.9219**	**21.3418**	**9.9355**	**0.0206**	**6.5523**	**0.9902**	**7.5425**	**3.3675**	**0.9110**	**4.2784**		**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0365	0.0220	0.2764	8.0000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.3816	79.3816	2.1200e-003		79.4346
Total	**0.0365**	**0.0220**	**0.2764**	**8.0000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**79.3816**	**79.3816**	**2.1200e-003**		**79.4346**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.9110	0.9110	0.0000	1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**1.9219**	**21.3418**	**9.9355**	**0.0206**	**6.5523**	**0.9902**	**7.5425**	**3.3675**	**0.9110**	**4.2784**	**0.0000**	**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0365	0.0220	0.2764	8.0000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.3816	79.3816	2.1200e-003		79.4346
Total	**0.0365**	**0.0220**	**0.2764**	**8.0000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**79.3816**	**79.3816**	**2.1200e-003**		**79.4346**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014
Total	**2.2879**	**17.4336**	**14.8972**	**0.0250**		**0.9482**	**0.9482**		**0.9089**	**0.9089**		**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0670	2.1431	0.5476	5.1600e-003	0.1352	0.0128	0.1480	0.0389	0.0123	0.0512		554.7970	554.7970	0.0440		555.8962
Worker	0.3325	0.1997	2.5148	7.2500e-003	0.7475	5.2800e-003	0.7528	0.1983	4.8600e-003	0.2032		722.3723	722.3723	0.0193		722.8544
Total	**0.3995**	**2.3428**	**3.0624**	**0.0124**	**0.8827**	**0.0181**	**0.9008**	**0.2372**	**0.0171**	**0.2543**		**1,277.1693**	**1,277.1693**	**0.0633**		**1,278.7506**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.8877	2,288.8877	0.4646		2,300.5014
Total	**2.2879**	**17.4336**	**14.8972**	**0.0250**		**0.9482**	**0.9482**		**0.9089**	**0.9089**	**0.0000**	**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0670	2.1431	0.5476	5.1600e-003	0.1352	0.0128	0.1480	0.0389	0.0123	0.0512		554.7970	554.7970	0.0440		555.8962
Worker	0.3325	0.1997	2.5148	7.2500e-003	0.7475	5.2800e-003	0.7528	0.1983	4.8600e-003	0.2032		722.3723	722.3723	0.0193		722.8544
Total	**0.3995**	**2.3428**	**3.0624**	**0.0124**	**0.8827**	**0.0181**	**0.9008**	**0.2372**	**0.0171**	**0.2543**		**1,277.1693**	**1,277.1693**	**0.0633**		**1,278.7506**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**		**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0562	1.9292	0.4944	5.1200e-003	0.1352	5.3700e-003	0.1406	0.0389	5.1400e-003	0.0440		551.1714	551.1714	0.0422		552.2262
Worker	0.3117	0.1799	2.3240	7.0300e-003	0.7475	5.1800e-003	0.7527	0.1983	4.7700e-003	0.2031		700.6900	700.6900	0.0176		701.1295
Total	**0.3678**	**2.1091**	**2.8184**	**0.0122**	**0.8827**	**0.0106**	**0.8933**	**0.2372**	**9.9100e-003**	**0.2471**		**1,251.8614**	**1,251.8614**	**0.0598**		**1,253.3557**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	**2.0451**	**16.0275**	**14.5629**	**0.0250**		**0.8173**	**0.8173**		**0.7831**	**0.7831**	**0.0000**	**2,288.9355**	**2,288.9355**	**0.4503**		**2,300.1935**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0562	1.9292	0.4944	5.1200e-003	0.1352	5.3700e-003	0.1406	0.0389	5.1400e-003	0.0440		551.1714	551.1714	0.0422		552.2262
Worker	0.3117	0.1799	2.3240	7.0300e-003	0.7475	5.1800e-003	0.7527	0.1983	4.7700e-003	0.2031		700.6900	700.6900	0.0176		701.1295
Total	**0.3678**	**2.1091**	**2.8184**	**0.0122**	**0.8827**	**0.0106**	**0.8933**	**0.2372**	**9.9100e-003**	**0.2471**		**1,251.8614**	**1,251.8614**	**0.0598**		**1,253.3557**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**6.8884**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0617	0.0356	0.4597	1.3900e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		138.5980	138.5980	3.4800e-003		138.6850
Total	**0.0617**	**0.0356**	**0.4597**	**1.3900e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**138.5980**	**138.5980**	**3.4800e-003**		**138.6850**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6695					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**6.8884**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0617	0.0356	0.4597	1.3900e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		138.5980	138.5980	3.4800e-003		138.6850
Total	**0.0617**	**0.0356**	**0.4597**	**1.3900e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**138.5980**	**138.5980**	**3.4800e-003**		**138.6850**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3017**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**		**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0514	0.0297	0.3831	1.1600e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		115.4984	115.4984	2.9000e-003		115.5708
Total	**0.0514**	**0.0297**	**0.3831**	**1.1600e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**115.4984**	**115.4984**	**2.9000e-003**		**115.5708**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.2384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3017**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**	**0.0000**	**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/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	0.0514	0.0297	0.3831	1.1600e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		115.4984	115.4984	2.9000e-003		115.5708
Total	**0.0514**	**0.0297**	**0.3831**	**1.1600e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**115.4984**	**115.4984**	**2.9000e-003**		**115.5708**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4319	7.7992	19.8091	0.0613	5.3328	0.0537	5.3865	1.4242	0.0500	1.4742		6,209.0874	6,209.0874	0.2870		6,216.2625
Unmitigated	2.6155	9.0077	25.2926	0.0847	7.6183	0.0711	7.6894	2.0346	0.0662	2.1008		8,578.8705	8,578.8705	0.3649		8,587.9933

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	666.12	581.49	533.26	1,754,689	1,228,282
City Park	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	428.53	604.97	503.63	538,900	377,230
High Turnover (Sit Down Restaurant)	312.98	441.85	367.83	393,594	275,516
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	317.10	353.14	171.61	464,265	324,985
Total	1,724.73	1,981.45	1,576.33	3,151,448	2,206,014

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
City Park	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
High Turnover (Sit Down Restaurant)	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Other Asphalt Surfaces	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Parking Lot	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490
Strip Mall	0.588665	0.041515	0.188382	0.110464	0.019030	0.006351	0.019720	0.017925	0.001164	0.001012	0.003904	0.000380	0.001490

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

High Street Station - 2021 - Ventura County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674
NaturalGas Unmitigated	0.0819	0.7280	0.5027	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.7562	893.7562	0.0171	0.0164	899.0674

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2849.04	0.0307	0.2626	0.1117	1.6800e-003		0.0212	0.0212		0.0212	0.0212		335.1809	335.1809	6.4200e-003	6.1400e-003	337.1728
City Park	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
High Turnover (Sit Down Restaurant)	1985.04	0.0214	0.1946	0.1635	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.5343	233.5343	4.4800e-003	4.2800e-003	234.9221
High Turnover (Sit Down Restaurant)	2716.82	0.0293	0.2664	0.2237	1.6000e-003		0.0202	0.0202		0.0202	0.0202		319.6260	319.6260	6.1300e-003	5.8600e-003	321.5254
Other Asphalt Surfaces	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
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
Strip Mall	46.0274	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4150	5.4150	1.0000e-004	1.0000e-004	5.4472
Total		**0.0819**	**0.7280**	**0.5027**	**4.4800e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.7562**	**893.7562**	**0.0171**	**0.0164**	**899.0674**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.84904	0.0307	0.2626	0.1117	1.6800e-003		0.0212	0.0212		0.0212	0.0212		335.1809	335.1809	6.4200e-003	6.1400e-003	337.1728
City Park	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
High Turnover (Sit Down Restaurant)	1.98504	0.0214	0.1946	0.1635	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.5343	233.5343	4.4800e-003	4.2800e-003	234.9221
High Turnover (Sit Down Restaurant)	2.71682	0.0293	0.2664	0.2237	1.6000e-003		0.0202	0.0202		0.0202	0.0202		319.6260	319.6260	6.1300e-003	5.8600e-003	321.5254
Other Asphalt Surfaces	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
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
Strip Mall	0.0460274	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4150	5.4150	1.0000e-004	1.0000e-004	5.4472
Total		**0.0819**	**0.7280**	**0.5027**	**4.4800e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.7562**	**893.7562**	**0.0171**	**0.0164**	**899.0674**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824
Unmitigated	2.2991	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416	0.0000	13.5540	13.5540	0.0131	0.0000	13.8824

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2403					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8303					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	0.2286	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416		13.5540	13.5540	0.0131		13.8824
Total	**2.2991**	**0.0868**	**7.5324**	**4.0000e-004**		**0.0416**	**0.0416**		**0.0416**	**0.0416**	**0.0000**	**13.5540**	**13.5540**	**0.0131**	**0.0000**	**13.8824**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2403					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8303					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	0.2286	0.0868	7.5324	4.0000e-004		0.0416	0.0416		0.0416	0.0416		13.5540	13.5540	0.0131		13.8824
Total	**2.2991**	**0.0868**	**7.5324**	**4.0000e-004**		**0.0416**	**0.0416**		**0.0416**	**0.0416**	**0.0000**	**13.5540**	**13.5540**	**0.0131**	**0.0000**	**13.8824**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

High Street Station - 2030

Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	8.87	1000sqft	0.20	8,870.00	0
Parking Lot	139.00	Space	0.71	30,927.60	0
City Park	0.17	Acre	0.17	7,187.00	0
High Turnover (Sit Down Restaurant)	3.82	1000sqft	0.09	3,824.00	0
High Turnover (Sit Down Restaurant)	2.79	1000sqft	0.06	2,794.00	0
Apartments Mid Rise	91.00	Dwelling Unit	0.92	69,834.00	302
Strip Mall	8.40	1000sqft	0.00	8,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	353.65	**CH4 Intensity (lb/MWhr)**	0.015	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

High Street Station - 2030 - Ventura County, Annual

Project Characteristics - Adjusted for 2030 RPS.

Land Use - Based on client info and CDOF population numbers.
City park proxy for plaza.
Conservative assumption that all ground-floor commercial space is retail.

Construction Phase - Extended AC phase to last half of BC phase.

Trips and VMT -

Demolition - Based on Google Earth approximations.

Architectural Coating - VCAPCD Rule 74.2

Vehicle Trips - City park used as proxy for landscaping and plaza.
Based on trip generation rates from traffic study.

Area Coating - VCAPCD 74.2

Energy Use - Commercial electricity energy reduced by 30% for 2019 Standards.

Water And Wastewater - Reduced indoor water use by 20% to account for CALGreen compliance.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation - Solar PV system required for low-rise residential buildings.

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstructionPhase	NumDays	10.00	129.00
tblEnergyUse	T24E	8.71	6.10
tblEnergyUse	T24E	2.93	2.05

tblLandUse	LandUseSquareFeet	55,600.00	30,927.60
tblLandUse	LandUseSquareFeet	7,405.20	7,187.00
tblLandUse	LandUseSquareFeet	2,790.00	2,794.00
tblLandUse	LandUseSquareFeet	3,820.00	3,824.00
tblLandUse	LandUseSquareFeet	91,000.00	69,834.00
tblLandUse	LotAcreage	1.25	0.71
tblLandUse	LotAcreage	2.39	0.92
tblLandUse	LotAcreage	0.19	0.00
tblLandUse	Population	278.00	302.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.015
tblProjectCharacteristics	CO2IntensityFactor	702.44	353.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	127.15	112.18
tblVehicleTrips	WD_TR	44.32	37.75
tblWater	IndoorWaterUseRate	5,929,016.33	4,743,213.06
tblWater	IndoorWaterUseRate	2,006,357.84	1,605,086.27
tblWater	IndoorWaterUseRate	622,209.18	497,767.34

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1100	0.9036	0.7294	1.4900e-003	0.0616	0.0442	0.1059	0.0196	0.0420	0.0616	0.0000	129.3990	129.3990	0.0228	0.0000	129.9683
2021	0.6497	1.6181	1.6016	3.3400e-003	0.0798	0.0757	0.1555	0.0214	0.0727	0.0941	0.0000	288.5822	288.5822	0.0411	0.0000	289.6095
Maximum	**0.6497**	**1.6181**	**1.6016**	**3.3400e-003**	**0.0798**	**0.0757**	**0.1555**	**0.0214**	**0.0727**	**0.0941**	**0.0000**	**288.5822**	**288.5822**	**0.0411**	**0.0000**	**289.6095**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1100	0.9036	0.7294	1.4900e-003	0.0616	0.0442	0.1059	0.0196	0.0420	0.0616	0.0000	129.3989	129.3989	0.0228	0.0000	129.9682
2021	0.6497	1.6181	1.6016	3.3400e-003	0.0798	0.0757	0.1555	0.0214	0.0727	0.0941	0.0000	288.5820	288.5820	0.0411	0.0000	289.6093
Maximum	**0.6497**	**1.6181**	**1.6016**	**3.3400e-003**	**0.0798**	**0.0757**	**0.1555**	**0.0214**	**0.0727**	**0.0941**	**0.0000**	**288.5820**	**288.5820**	**0.0411**	**0.0000**	**289.6093**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent 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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2020	11-30-2020	0.7549	0.7549
2	12-1-2020	2-28-2021	0.6842	0.6842
3	3-1-2021	5-31-2021	0.8919	0.8919
4	6-1-2021	8-31-2021	0.8829	0.8829
5	9-1-2021	9-30-2021	0.0486	0.0486
		Highest	0.8919	0.8919

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3982	7.7800e-003	0.6754	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1066	1.1066	1.0600e-003	0.0000	1.1331
Energy	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	257.9236	257.9236	7.5000e-003	3.6500e-003	259.1975
Mobile	0.2314	0.9464	2.4519	0.0102	1.1914	6.9700e-003	1.1984	0.3186	6.4600e-003	0.3250	0.0000	946.3180	946.3180	0.0348	0.0000	947.1885
Waste						0.0000	0.0000		0.0000	0.0000	26.2569	0.0000	26.2569	1.5517	0.0000	65.0503
Water						0.0000	0.0000		0.0000	0.0000	2.1719	22.2301	24.4020	0.2240	5.4600e-003	31.6284
Total	**0.6445**	**1.0870**	**3.2190**	**0.0111**	**1.1914**	**0.0211**	**1.2125**	**0.3186**	**0.0205**	**0.3391**	**28.4288**	**1,227.5783**	**1,256.0071**	**1.8191**	**9.1100e-003**	**1,304.1979**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3982	7.7800e-003	0.6754	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1066	1.1066	1.0600e-003	0.0000	1.1331
Energy	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	219.4277	219.4277	5.8700e-003	3.3200e-003	220.5635
Mobile	0.2129	0.8537	1.9317	7.4100e-003	0.8340	5.2900e-003	0.8393	0.2230	4.9000e-003	0.2279	0.0000	685.9418	685.9418	0.0269	0.0000	686.6153
Waste						0.0000	0.0000		0.0000	0.0000	26.2569	0.0000	26.2569	1.5517	0.0000	65.0503
Water						0.0000	0.0000		0.0000	0.0000	2.1719	22.2301	24.4020	0.2240	5.4600e-003	31.6284
Total	**0.6260**	**0.9943**	**2.6988**	**8.2700e-003**	**0.8340**	**0.0194**	**0.8534**	**0.2230**	**0.0190**	**0.2420**	**28.4288**	**928.7063**	**957.1351**	**1.8096**	**8.7800e-003**	**1,004.9906**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.88**	**8.53**	**16.16**	**25.36**	**30.00**	**7.98**	**29.62**	**30.00**	**7.59**	**28.64**	**0.00**	**24.35**	**23.80**	**0.52**	**3.62**	**22.94**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/1/2020	5	3	
3	Grading	Grading	10/2/2020	10/9/2020	5	6	
4	Building Construction	Building Construction	10/10/2020	8/13/2021	5	220	
5	Architectural Coating	Architectural Coating	3/22/2021	9/16/2021	5	129	
6	Paving	Paving	8/14/2021	8/27/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.91

Residential Indoor: 141,414; Residential Outdoor: 47,138; Non-Residential Indoor: 22,527; Non-Residential Outdoor: 7,509; Striped Parking Area: 2,388 (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	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	107.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	91.00	20.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0117	0.0000	0.0117	1.7800e-003	0.0000	1.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0677	21.0677	5.4200e-003	0.0000	21.2031
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**	**0.0117**	**0.0115**	**0.0232**	**1.7800e-003**	**0.0108**	**0.0125**	**0.0000**	**21.0677**	**21.0677**	**5.4200e-003**	**0.0000**	**21.2031**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9000e-004	0.0148	3.2100e-003	4.0000e-005	9.2000e-004	6.0000e-005	9.8000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	3.9857	3.9857	3.8000e-004	0.0000	3.9952
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	4.8000e-004	3.2000e-004	3.4700e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8981	0.8981	2.0000e-005	0.0000	0.8987
Total	**8.7000e-004**	**0.0151**	**6.6800e-003**	**5.0000e-005**	**1.9700e-003**	**7.0000e-005**	**2.0400e-003**	**5.3000e-004**	**7.0000e-005**	**6.0000e-004**	**0.0000**	**4.8838**	**4.8838**	**4.0000e-004**	**0.0000**	**4.8939**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0117	0.0000	0.0117	1.7800e-003	0.0000	1.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0676	21.0676	5.4200e-003	0.0000	21.2030
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**	**0.0117**	**0.0115**	**0.0232**	**1.7800e-003**	**0.0108**	**0.0125**	**0.0000**	**21.0676**	**21.0676**	**5.4200e-003**	**0.0000**	**21.2030**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9000e-004	0.0148	3.2100e-003	4.0000e-005	9.2000e-004	6.0000e-005	9.8000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	3.9857	3.9857	3.8000e-004	0.0000	3.9952
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	4.8000e-004	3.2000e-004	3.4700e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8981	0.8981	2.0000e-005	0.0000	0.8987
Total	**8.7000e-004**	**0.0151**	**6.6800e-003**	**5.0000e-005**	**1.9700e-003**	**7.0000e-005**	**2.0400e-003**	**5.3000e-004**	**7.0000e-005**	**6.0000e-004**	**0.0000**	**4.8838**	**4.8838**	**4.0000e-004**	**0.0000**	**4.8939**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e-003	0.0299	0.0169	4.0000e-005		1.1700e-003	1.1700e-003		1.0700e-003	1.0700e-003	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.4800e-003**	**0.0299**	**0.0169**	**4.0000e-005**	**2.3900e-003**	**1.1700e-003**	**3.5600e-003**	**2.6000e-004**	**1.0700e-003**	**1.3300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0829	0.0829	0.0000	0.0000	0.0830
Total	**4.0000e-005**	**3.0000e-005**	**3.2000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**0.0000**	**0.0830**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e-003	0.0299	0.0169	4.0000e-005		1.1700e-003	1.1700e-003		1.0700e-003	1.0700e-003	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.4800e-003**	**0.0299**	**0.0169**	**4.0000e-005**	**2.3900e-003**	**1.1700e-003**	**3.5600e-003**	**2.6000e-004**	**1.0700e-003**	**1.3300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0829	0.0829	0.0000	0.0000	0.0830
Total	**4.0000e-005**	**3.0000e-005**	**3.2000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**0.0000**	**0.0830**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7700e-003	0.0640	0.0298	6.0000e-005		2.9700e-003	2.9700e-003		2.7300e-003	2.7300e-003	0.0000	5.4333	5.4333	1.7600e-003	0.0000	5.4773
Total	**5.7700e-003**	**0.0640**	**0.0298**	**6.0000e-005**	**0.0197**	**2.9700e-003**	**0.0226**	**0.0101**	**2.7300e-003**	**0.0128**	**0.0000**	**5.4333**	**5.4333**	**1.7600e-003**	**0.0000**	**5.4773**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	1.1000e-004	7.0000e-005	8.0000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.2073	0.2073	1.0000e-005	0.0000	0.2074
Total	**1.1000e-004**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2073**	**0.2073**	**1.0000e-005**	**0.0000**	**0.2074**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7700e-003	0.0640	0.0298	6.0000e-005		2.9700e-003	2.9700e-003		2.7300e-003	2.7300e-003	0.0000	5.4333	5.4333	1.7600e-003	0.0000	5.4773
Total	**5.7700e-003**	**0.0640**	**0.0298**	**6.0000e-005**	**0.0197**	**2.9700e-003**	**0.0226**	**0.0101**	**2.7300e-003**	**0.0128**	**0.0000**	**5.4333**	**5.4333**	**1.7600e-003**	**0.0000**	**5.4773**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	1.1000e-004	7.0000e-005	8.0000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.2073	0.2073	1.0000e-005	0.0000	0.2074
Total	**1.1000e-004**	**7.0000e-005**	**8.0000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2073**	**0.2073**	**1.0000e-005**	**0.0000**	**0.2074**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0675	0.5143	0.4395	7.4000e-004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2551	61.2551	0.0124	0.0000	61.5659
Total	**0.0675**	**0.5143**	**0.4395**	**7.4000e-004**		**0.0280**	**0.0280**		**0.0268**	**0.0268**	**0.0000**	**61.2551**	**61.2551**	**0.0124**	**0.0000**	**61.5659**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.0200e-003	0.0641	0.0171	1.5000e-004	3.9300e-003	3.8000e-004	4.3100e-003	1.1300e-003	3.7000e-004	1.5000e-003	0.0000	14.6950	14.6950	1.2100e-003	0.0000	14.7252
Worker	9.9000e-003	6.6700e-003	0.0717	2.1000e-004	0.0217	1.6000e-004	0.0218	5.7500e-003	1.4000e-004	5.8900e-003	0.0000	18.5451	18.5451	5.0000e-004	0.0000	18.5576
Total	**0.0119**	**0.0707**	**0.0888**	**3.6000e-004**	**0.0256**	**5.4000e-004**	**0.0261**	**6.8800e-003**	**5.1000e-004**	**7.3900e-003**	**0.0000**	**33.2400**	**33.2400**	**1.7100e-003**	**0.0000**	**33.2828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0675	0.5143	0.4395	7.4000e-004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2550	61.2550	0.0124	0.0000	61.5658
Total	**0.0675**	**0.5143**	**0.4395**	**7.4000e-004**		**0.0280**	**0.0280**		**0.0268**	**0.0268**	**0.0000**	**61.2550**	**61.2550**	**0.0124**	**0.0000**	**61.5658**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.0200e-003	0.0641	0.0171	1.5000e-004	3.9300e-003	3.8000e-004	4.3100e-003	1.1300e-003	3.7000e-004	1.5000e-003	0.0000	14.6950	14.6950	1.2100e-003	0.0000	14.7252
Worker	9.9000e-003	6.6700e-003	0.0717	2.1000e-004	0.0217	1.6000e-004	0.0218	5.7500e-003	1.4000e-004	5.8900e-003	0.0000	18.5451	18.5451	5.0000e-004	0.0000	18.5576
Total	**0.0119**	**0.0707**	**0.0888**	**3.6000e-004**	**0.0256**	**5.4000e-004**	**0.0261**	**6.8800e-003**	**5.1000e-004**	**7.3900e-003**	**0.0000**	**33.2400**	**33.2400**	**1.7100e-003**	**0.0000**	**33.2828**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1646	1.2902	1.1723	2.0100e-003		0.0658	0.0658		0.0630	0.0630	0.0000	167.1572	167.1572	0.0329	0.0000	167.9794
Total	**0.1646**	**1.2902**	**1.1723**	**2.0100e-003**		**0.0658**	**0.0658**		**0.0630**	**0.0630**	**0.0000**	**167.1572**	**167.1572**	**0.0329**	**0.0000**	**167.9794**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.6400e-003	0.1570	0.0423	4.1000e-004	0.0107	4.4000e-004	0.0112	3.0900e-003	4.2000e-004	3.5100e-003	0.0000	39.8363	39.8363	3.1700e-003	0.0000	39.9155
Worker	0.0253	0.0164	0.1805	5.4000e-004	0.0591	4.2000e-004	0.0595	0.0157	3.8000e-004	0.0161	0.0000	49.0857	49.0857	1.2400e-003	0.0000	49.1168
Total	**0.0300**	**0.1734**	**0.2227**	**9.5000e-004**	**0.0698**	**8.6000e-004**	**0.0706**	**0.0188**	**8.0000e-004**	**0.0196**	**0.0000**	**88.9221**	**88.9221**	**4.4100e-003**	**0.0000**	**89.0323**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1646	1.2902	1.1723	2.0100e-003		0.0658	0.0658		0.0630	0.0630	0.0000	167.1570	167.1570	0.0329	0.0000	167.9792
Total	**0.1646**	**1.2902**	**1.1723**	**2.0100e-003**		**0.0658**	**0.0658**		**0.0630**	**0.0630**	**0.0000**	**167.1570**	**167.1570**	**0.0329**	**0.0000**	**167.9792**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.6400e-003	0.1570	0.0423	4.1000e-004	0.0107	4.4000e-004	0.0112	3.0900e-003	4.2000e-004	3.5100e-003	0.0000	39.8363	39.8363	3.1700e-003	0.0000	39.9155
Worker	0.0253	0.0164	0.1805	5.4000e-004	0.0591	4.2000e-004	0.0595	0.0157	3.8000e-004	0.0161	0.0000	49.0857	49.0857	1.2400e-003	0.0000	49.1168
Total	**0.0300**	**0.1734**	**0.2227**	**9.5000e-004**	**0.0698**	**8.6000e-004**	**0.0706**	**0.0188**	**8.0000e-004**	**0.0196**	**0.0000**	**88.9221**	**88.9221**	**4.4100e-003**	**0.0000**	**89.0323**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.0985	0.1172	1.9000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.0000	16.4685	16.4685	1.1300e-003	0.0000	16.4967
Total	**0.4443**	**0.0985**	**0.1172**	**1.9000e-004**		**6.0700e-003**	**6.0700e-003**		**6.0700e-003**	**6.0700e-003**	**0.0000**	**16.4685**	**16.4685**	**1.1300e-003**	**0.0000**	**16.4967**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0200e-003	2.6000e-003	0.0286	9.0000e-005	9.3600e-003	7.0000e-005	9.4300e-003	2.4900e-003	6.0000e-005	2.5500e-003	0.0000	7.7795	7.7795	2.0000e-004	0.0000	7.7844
Total	**4.0200e-003**	**2.6000e-003**	**0.0286**	**9.0000e-005**	**9.3600e-003**	**7.0000e-005**	**9.4300e-003**	**2.4900e-003**	**6.0000e-005**	**2.5500e-003**	**0.0000**	**7.7795**	**7.7795**	**2.0000e-004**	**0.0000**	**7.7844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.0985	0.1172	1.9000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.0000	16.4685	16.4685	1.1300e-003	0.0000	16.4967
Total	**0.4443**	**0.0985**	**0.1172**	**1.9000e-004**		**6.0700e-003**	**6.0700e-003**		**6.0700e-003**	**6.0700e-003**	**0.0000**	**16.4685**	**16.4685**	**1.1300e-003**	**0.0000**	**16.4967**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	4.0200e-003	2.6000e-003	0.0286	9.0000e-005	9.3600e-003	7.0000e-005	9.4300e-003	2.4900e-003	6.0000e-005	2.5500e-003	0.0000	7.7795	7.7795	2.0000e-004	0.0000	7.7844
Total	**4.0200e-003**	**2.6000e-003**	**0.0286**	**9.0000e-005**	**9.3600e-003**	**7.0000e-005**	**9.4300e-003**	**2.4900e-003**	**6.0000e-005**	**2.5500e-003**	**0.0000**	**7.7795**	**7.7795**	**2.0000e-004**	**0.0000**	**7.7844**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3200e-003	0.0532	0.0589	9.0000e-005		2.9100e-003	2.9100e-003		2.6900e-003	2.6900e-003	0.0000	7.7524	7.7524	2.4600e-003	0.0000	7.8138
Paving	1.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5100e-003**	**0.0532**	**0.0589**	**9.0000e-005**		**2.9100e-003**	**2.9100e-003**		**2.6900e-003**	**2.6900e-003**	**0.0000**	**7.7524**	**7.7524**	**2.4600e-003**	**0.0000**	**7.8138**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.6000e-004	1.7000e-004	1.8500e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5026	0.5026	1.0000e-005	0.0000	0.5029
Total	**2.6000e-004**	**1.7000e-004**	**1.8500e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5026**	**0.5026**	**1.0000e-005**	**0.0000**	**0.5029**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3200e-003	0.0532	0.0589	9.0000e-005		2.9100e-003	2.9100e-003		2.6900e-003	2.6900e-003	0.0000	7.7524	7.7524	2.4600e-003	0.0000	7.8138
Paving	1.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5100e-003**	**0.0532**	**0.0589**	**9.0000e-005**		**2.9100e-003**	**2.9100e-003**		**2.6900e-003**	**2.6900e-003**	**0.0000**	**7.7524**	**7.7524**	**2.4600e-003**	**0.0000**	**7.8138**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/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	2.6000e-004	1.7000e-004	1.8500e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5026	0.5026	1.0000e-005	0.0000	0.5029
Total	**2.6000e-004**	**1.7000e-004**	**1.8500e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5026**	**0.5026**	**1.0000e-005**	**0.0000**	**0.5029**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2129	0.8537	1.9317	7.4100e-003	0.8340	5.2900e-003	0.8393	0.2230	4.9000e-003	0.2279	0.0000	685.9418	685.9418	0.0269	0.0000	686.6153
Unmitigated	0.2314	0.9464	2.4519	0.0102	1.1914	6.9700e-003	1.1984	0.3186	6.4600e-003	0.3250	0.0000	946.3180	946.3180	0.0348	0.0000	947.1885

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	666.12	581.49	533.26	1,754,689	1,228,282
City Park	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	428.53	604.97	503.63	538,900	377,230
High Turnover (Sit Down Restaurant)	312.98	441.85	367.83	393,594	275,516
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	317.10	353.14	171.61	464,265	324,985
Total	1,724.73	1,981.45	1,576.33	3,151,448	2,206,014

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.611155	0.038739	0.187677	0.096955	0.013383	0.005563	0.020646	0.018593	0.001209	0.001094	0.003654	0.000418	0.000914
City Park	0.611155	0.038739	0.187677	0.096955	0.013383	0.005563	0.020646	0.018593	0.001209	0.001094	0.003654	0.000418	0.000914
High Turnover (Sit Down Restaurant)	0.611155	0.038739	0.187677	0.096955	0.013383	0.005563	0.020646	0.018593	0.001209	0.001094	0.003654	0.000418	0.000914
Other Asphalt Surfaces	0.611155	0.038739	0.187677	0.096955	0.013383	0.005563	0.020646	0.018593	0.001209	0.001094	0.003654	0.000418	0.000914
Parking Lot	0.611155	0.038739	0.187677	0.096955	0.013383	0.005563	0.020646	0.018593	0.001209	0.001094	0.003654	0.000418	0.000914
Strip Mall	0.611155	0.038739	0.187677	0.096955	0.013383	0.005563	0.020646	0.018593	0.001209	0.001094	0.003654	0.000418	0.000914

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

High Street Station - 2030 - Ventura County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	71.4564	71.4564	3.0300e-003	6.1000e-004	71.7128
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	109.9523	109.9523	4.6600e-003	9.3000e-004	110.3468
NaturalGas Mitigated	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9714	147.9714	2.8400e-003	2.7100e-003	148.8507
NaturalGas Unmitigated	0.0150	0.1329	0.0918	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9714	147.9714	2.8400e-003	2.7100e-003	148.8507

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.0399e+006	5.6100e-003	0.0479	0.0204	3.1000e-004		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	55.4930	55.4930	1.0600e-003	1.0200e-003	55.8227
City Park	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
High Turnover (Sit Down Restaurant)	724540	3.9100e-003	0.0355	0.0298	2.1000e-004		2.7000e-003	2.7000e-003		2.7000e-003	2.7000e-003	0.0000	38.6642	38.6642	7.4000e-004	7.1000e-004	38.8940
High Turnover (Sit Down Restaurant)	991640	5.3500e-003	0.0486	0.0408	2.9000e-004		3.6900e-003	3.6900e-003		3.6900e-003	3.6900e-003	0.0000	52.9177	52.9177	1.0100e-003	9.7000e-004	53.2321
Other Asphalt Surfaces	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
Strip Mall	16800	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8965	0.8965	2.0000e-005	2.0000e-005	0.9018
Total		**0.0150**	**0.1329**	**0.0917**	**8.1000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**147.9714**	**147.9714**	**2.8300e-003**	**2.7200e-003**	**148.8507**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.0399e+006	5.6100e-003	0.0479	0.0204	3.1000e-004		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	55.4930	55.4930	1.0600e-003	1.0200e-003	55.8227
City Park	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
High Turnover (Sit Down Restaurant)	724540	3.9100e-003	0.0355	0.0298	2.1000e-004		2.7000e-003	2.7000e-003		2.7000e-003	2.7000e-003	0.0000	38.6642	38.6642	7.4000e-004	7.1000e-004	38.8940
High Turnover (Sit Down Restaurant)	991640	5.3500e-003	0.0486	0.0408	2.9000e-004		3.6900e-003	3.6900e-003		3.6900e-003	3.6900e-003	0.0000	52.9177	52.9177	1.0100e-003	9.7000e-004	53.2321
Other Asphalt Surfaces	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
Strip Mall	16800	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8965	0.8965	2.0000e-005	2.0000e-005	0.9018
Total		**0.0150**	**0.1329**	**0.0917**	**8.1000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**147.9714**	**147.9714**	**2.8300e-003**	**2.7200e-003**	**148.8507**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	361752	58.0298	2.4600e-003	4.9000e-004	58.2380
City Park	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	129519	20.7765	8.8000e-004	1.8000e-004	20.8511
High Turnover (Sit Down Restaurant)	94632.8	15.1803	6.4000e-004	1.3000e-004	15.2348
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10824.7	1.7364	7.0000e-005	1.0000e-005	1.7427
Strip Mall	88704	14.2293	6.0000e-004	1.2000e-004	14.2803
Total		**109.9523**	**4.6500e-003**	**9.3000e-004**	**110.3468**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	327469	52.5303	2.2300e-003	4.5000e-004	52.7188
City Park	-34282.9	-5.4994	-0.0002	-0.0001	-5.5192
High Turnover (Sit Down Restaurant)	60349.9	9.6809	4.1000e-004	8.0000e-005	9.7157
High Turnover (Sit Down Restaurant)	95236	15.2771	6.5000e-004	1.3000e-004	15.3319
Other Asphalt Surfaces	-34282.9	-5.4994	-0.0002	-0.0001	-5.5192
Parking Lot	-23458.2	-3.7630	-0.0002	0.0000	-3.7765
Strip Mall	54421.1	8.7299	3.7000e-004	7.0000e-005	8.7612
Total		**71.4564**	**3.0400e-003**	**6.0000e-004**	**71.7128**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3982	7.7800e-003	0.6754	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1066	1.1066	1.0600e-003	0.0000	1.1331
Unmitigated	0.3982	7.7800e-003	0.6754	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1066	1.1066	1.0600e-003	0.0000	1.1331

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0439					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3340					0.0000	0.0000		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		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0203	7.7800e-003	0.6754	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1066	1.1066	1.0600e-003	0.0000	1.1331
Total	**0.3982**	**7.7800e-003**	**0.6754**	**4.0000e-005**		**3.7500e-003**	**3.7500e-003**		**3.7500e-003**	**3.7500e-003**	**0.0000**	**1.1066**	**1.1066**	**1.0600e-003**	**0.0000**	**1.1331**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0439					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3340					0.0000	0.0000		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		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0203	7.7800e-003	0.6754	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1066	1.1066	1.0600e-003	0.0000	1.1331
Total	**0.3982**	**7.7800e-003**	**0.6754**	**4.0000e-005**		**3.7500e-003**	**3.7500e-003**		**3.7500e-003**	**3.7500e-003**	**0.0000**	**1.1066**	**1.1066**	**1.0600e-003**	**0.0000**	**1.1331**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.4020	0.2240	5.4600e-003	31.6284
Unmitigated	24.4020	0.2240	5.4600e-003	31.6284

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.74321 / 3.73786	18.0737	0.1553	3.7900e-003	23.0846
City Park	0 / 0.202552	0.3610	2.0000e-005	0.0000	0.3623
High Turnover (Sit Down Restaurant)	1.60509 / 0.128065	4.0901	0.0525	1.2700e-003	5.7785
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.497767 / 0.381354	1.8773	0.0163	4.0000e-004	2.4031
Total		**24.4020**	**0.2240**	**5.4600e-003**	**31.6284**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.74321 / 3.73786	18.0737	0.1553	3.7900e-003	23.0846
City Park	0 / 0.202552	0.3610	2.0000e-005	0.0000	0.3623
High Turnover (Sit Down Restaurant)	1.60509 / 0.128065	4.0901	0.0525	1.2700e-003	5.7785
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.497767 / 0.381354	1.8773	0.0163	4.0000e-004	2.4031
Total		**24.4020**	**0.2240**	**5.4600e-003**	**31.6284**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	26.2569	1.5517	0.0000	65.0503
Unmitigated	26.2569	1.5517	0.0000	65.0503

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.86	8.4972	0.5022	0.0000	21.0515
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
High Turnover (Sit Down Restaurant)	78.66	15.9673	0.9436	0.0000	39.5582
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.82	1.7904	0.1058	0.0000	4.4356
Total		**26.2569**	**1.5517**	**0.0000**	**65.0503**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.86	8.4972	0.5022	0.0000	21.0515
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
High Turnover (Sit Down Restaurant)	78.66	15.9673	0.9436	0.0000	39.5582
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.82	1.7904	0.1058	0.0000	4.4356
Total		**26.2569**	**1.5517**	**0.0000**	**65.0503**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solar PV Requirements for Low-Rise Residential Buildings
(2019 California Energy Code Section 150.1(b)14)

Equation 150.1-C	kWPV = (CFA x A)/1000 + (NDwell x B)

Inputs		
Climate Zone		9
A	Adjustment Factor from Table 150.1-C	0.613
B	Dwelling Adjustment Factor from Table 150.1-C	1.36

Unit Type	**Conditioned Floor Area (CFA) per Unit**	**Number of Dwelling Units (Ndwell)**	**kWPV (KWdc Size of the PV System)**
Plan A	677	10	14
Plan B	633	26	36
Plan C	810	8	11
Plan D	770	39	54
Plan E	1262	8	12
Total Size of PV System (kW)		91	126
kW to kWh Conversion Factor			1900
Amount of Electricity Generated (kWh/yr)			239,980

Sources	
Climate Zones	California Energy Commission. "California Building Climate Zone Areas." Last modified: November 2017. https://www.energy.ca.gov/maps/renewable/building_climate_zones.html
2019 California Energy Code	California Energy Commission. 2018. 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. December 2018. https://www.energy.ca.gov/2018publications/CEC-400-2018-020/CEC-400-2018-020-CMF.pdf
kWh per kW PV Solar System (see page 12 of PDF)	United States Department of Energy. 2003. A Consumer's Guide: Get Your Power from the Sun. https://www.nrel.gov/docs/fy04osti/35297.pdf

Table 150.1-C		
Climate Zone	A - CFA	B - Dwelling Units
1	0.793	1.27
2	0.621	1.22
3	0.628	1.12
4	0.586	1.21
5	0.585	1.06
6	0.594	1.23
7	0.572	1.15
8	0.586	1.37
9	0.613	1.36
10	0.627	1.41
11	0.836	1.44
12	0.613	1.40
13	0.894	1.51
14	0.741	1.26
15	1.56	1.47
16	0.59	1.22

N2O Operational GHG Emission Mobile Calculations

Project Code & Title: 18-05844 High Street Station, Moorpark

Vehicle Population Breakdown*	
543735	Gasoline vehicles
29744	Diesel vehicles
94.8%	Gasoline vehicle %
5.2%	Diesel vehicle %

VMT per Vehicle Type	
2206014	Project VMT (CalEEMod output)
2091597	Gasoline vehicle VMT
114417	Diesel vehicle VMT

Gasoline Vehicles	
94.8%	Gasoline vehicle %
0.8537	Tons per year mobile NOX emissions (annual output in CalEEMod)
0.81	Gasoline vehicle tons per year NOX emissions
0.0528	Tons per year N2O emissions for gasoline vehicles**
0.0479	Metric tons per year N2O emissions for gasoline vehicles

Diesel Vehicles	
1.60	grams N2O per gallon of fuel for diesel vehicles**
24.15	Diesel average miles per gallon*
0.06624	grams per mile N2O for diesel vehicles
7578.9	grams per year N2O for diesel vehicles
0.0075789	Metric tons per year N2O emissions for diesel vehicles

CO2e Emissions from N2O	
0.0555	Metric tons per year from gasoline + diesel vehicles
298	GWP of N2O***
16.5	**CO2e emissions per year from N2O emissions from gasoline + diesel vehicles**

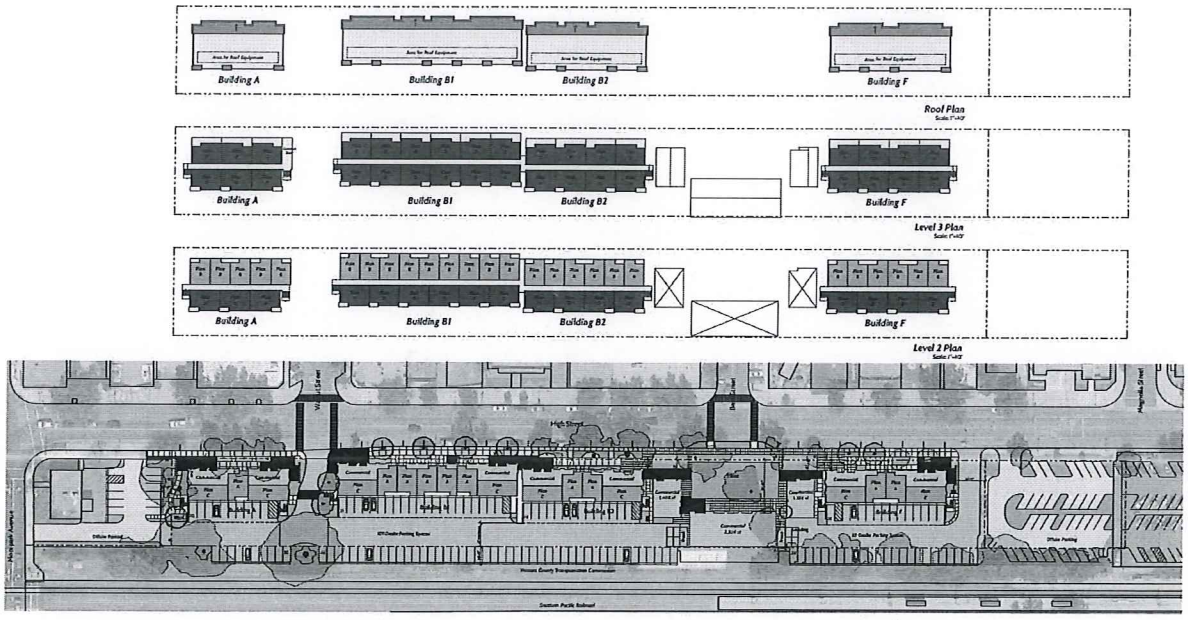
Sources
***Vehicle population source:**
EMFAC2017 (v1.0.2) Emissions Inventory
EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: VENTURA
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2011 Categories
****Methodology source:**
EMFAC2017 Volume III - Technical Documentation
https://www.arb.ca.gov/msei/emfac2011-faq.htm
*****GWP source:**
Intergovernmental Panel on Climate Change (IPCC). 2007.
AR4 Climate Change 2007: The Physical Science Basis.
Contrbution of Working Group I to the Fourth Assessment Report of the
Intergovernmental Panel on Climate Change.

Appendix D

Traffic and Parking Study

MOORPARK RAILROAD DEPOT PROJECT
CITY OF MOORPARK, CALIFORNIA

REVISED TRAFFIC AND PARKING STUDY



December 10, 2019 **ATE Project #18050**

Prepared for:

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, CA 93003

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110-1686 • (805) 687-4418 • FAX (805) 682-8509

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805)687-4418 • main@atesb.com

Since 1978

Richard L. Pool, P.E.
Scott A. Schell, AICP, PTP

December 10, 2019 18050R03.wp

Mr. Joe Power
Rincon Consultants, Inc
180 North Ashwood Avenue
Ventura, CA 93003

REVISED TRAFFIC AND PARKING STUDY FOR THE MOORPARK RAILROAD DEPOT PROJECT, CITY OF MOORPARK

Associated Transportation Engineers has prepared the following revised traffic and parking study for the Moorpark Railroad Depot Project proposed in the City of Moorpark. The revised traffic and parking study addresses the comments provided by Linscott, Law & Greenspan, Engineers on the October 8, 2019 study. We appreciate the opportunity to assist you with this Project.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP.
Vice President

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INTRODUCTION

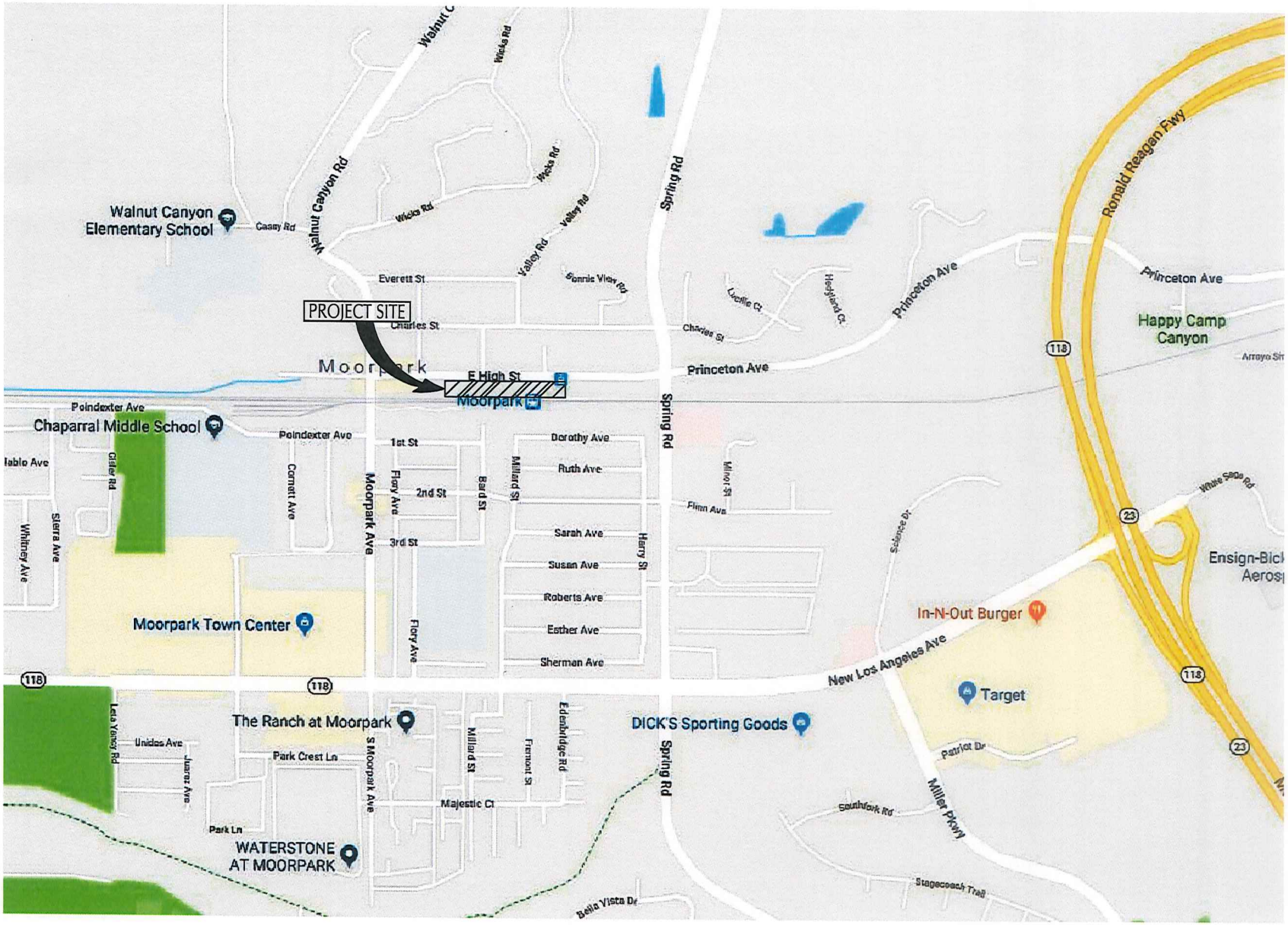
The following revised study contains an analysis of the potential traffic impacts associated with the Moorpark Railroad Depot Project (the Project). The study provides information regarding existing and future traffic conditions within the project study-area and recommends improvements where necessary. The study also reviews the Project's parking requirements.

PROJECT DESCRIPTION

The Project is proposing to construct a Transit-Oriented Development (TOD) infill development consisting of 91 apartment units, 3,824 square feet of brewery space, 2,794 square feet of restaurant space, 8,400 square feet of retail commercial space. A TOD, is a type of community development that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation. Studies have found that TOD commuters typically use transit 2 to 5 times more than other commuters. The TOD transit mode share can vary from 5% to near 50%, which results in increased transit ridership and lower vehicle trip generation and parking demands. In addition, the Project will coordinate with tenants to develop a Transportation Demand Management Plan to reduce vehicle trips and increase transit and bicycle use.

The Project site is located on High Street between Moorpark Avenue and Spring Street in the City of Moorpark. Figure 1 shows the location of the Project site within the City. Regional access to the Project site is provided by State Route 118 via the State Route 118-23/Los Angeles Avenue interchange. Direct access to the project site would be provided by a driveway connection to High Street opposite Walnut Street and a driveway east of Bard Street. Figure 2 illustrates the Project site plan. The Project site is located adjacent to the Metrolink/Amtrak station and parking lot facilities and along the Moorpark City Transit bus routes. The local rail transit and bus transit facilities are less than a quarter mile walk from the Project site. Project pedestrian facilities will connect the Project site to the local transit facilities. These pedestrian facilities will improve the walkability of the High Street corridor adjacent to the Project site.

The Project would redevelop a 2.15 acre site currently occupied by the old granary an other commercial businesses which are no longer operational. The Project site is located within the Moorpark Downtown Specific Plan Area and is currently zoned Old Town Commercial (C-OT). The C-OT zoning designation does not allow residential uses. A Zoning Ordinance Amendment will therefore be required to accommodate residential uses within the C-OT zone.



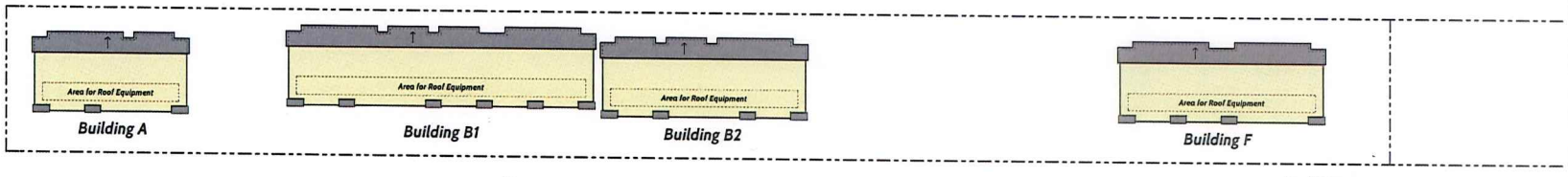
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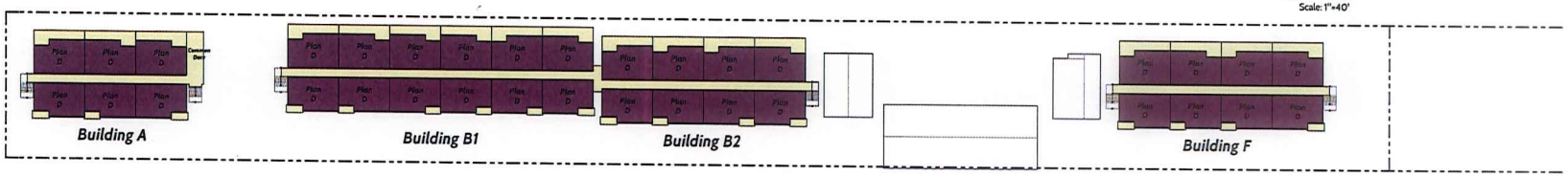
EXISTING STREET NETWORK AND PROJECT SITE LOCATION

FIGURE 1

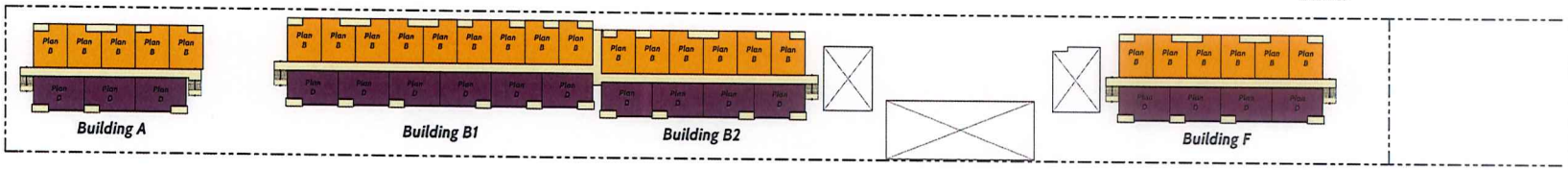
EKM - ATE#18050



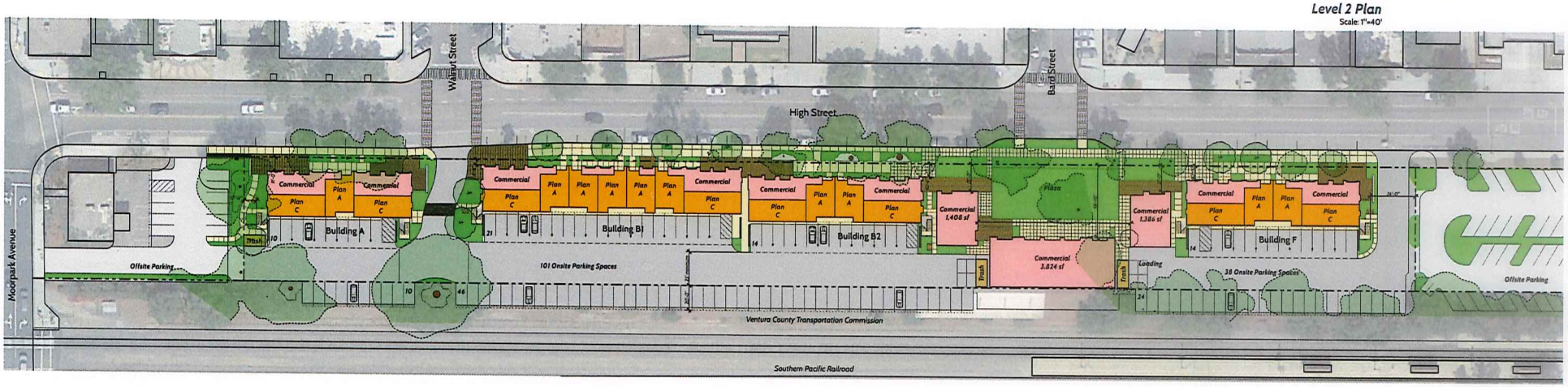
Roof Plan
Scale: 1"=40'



Level 3 Plan
Scale: 1"=40'



Level 2 Plan
Scale: 1"=40'



Ground Plan

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PROJECT SITE PLAN

FIGURE 2

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EXISTING CONDITIONS

Street Network

State Route 118 (Los Angeles Avenue), located south of the Project site, is a 2- to 6-lane highway that extends from the State Route 126 (Santa Paula Freeway) in the City of Ventura to State Route 210 (Foothill Freeway) east of the City of San Fernando. State Route 118 is signalized at Moorpark Avenue and Spring Road.

State Route 23 (Walnut Canyon Road - Moorpark Avenue), located west of the Project site, is a 2 to 3-lane roadway with a center left-turn lane in the study-area. State Route 23 serves as the primary north-south route between the Cities of Moorpark and Fillmore.

Spring Road, located east of the Project site, is a 2 to 4-lane divided arterial roadway that extends south from Walnut Canyon Road to Tierra Rejada Road within the City of Moorpark. Spring Road is signalized at High Street and Los Angeles Avenue.

High Street, located adjacent to the Project site, is a 2-lane arterial roadway that extends west from Walnut Canyon Road becoming Princeton Avenue east of Spring Road. High Street serves primarily commercial land uses. High Street is fully improved with sidewalk, curb and gutter on both sides. High Street is signalized at Moorpark Avenue and Spring Street.

Poindexter Avenue, located south of the Project site, is a 2-lane roadway that extends west from Moorpark Avenue to Gabbert Road. Poindexter Avenue forms an off-set 4-legged intersection with First Street at Moorpark Avenue. Poindexter Avenue serves primarily residential land uses. Poindexter Avenue is signalized at Moorpark Avenue.

First Street, located south of the Project site, is a 2-lane roadway that extends east from Moorpark Avenue to Bard Street. First Street forms an off-set 4-legged intersection with Poindexter Avenue at Moorpark Avenue. First Street serves primarily residential land uses. First Street is signalized at Moorpark Avenue.

Intersection Operations

Because traffic flow on urban arterial roadways is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. In rating intersection operations, "Levels of Service" (LOS) A through F are used, with LOS A indicating free flow operations and LOS F indicating congested operations (more complete definitions of levels of service are included in the Technical Appendix).The City of Moorpark considers LOS C to be the minimum acceptable operating standard for intersections.

Figure 3 illustrates the existing traffic controls and geometries at the study-area intersections. Existing peak hour volumes for the study-area intersections were collected by ATE for this study (traffic count data is contained in the Technical Appendix for reference). The existing A.M. and P.M. peak hour traffic volumes for the study-area intersections are illustrated on Figure 4.

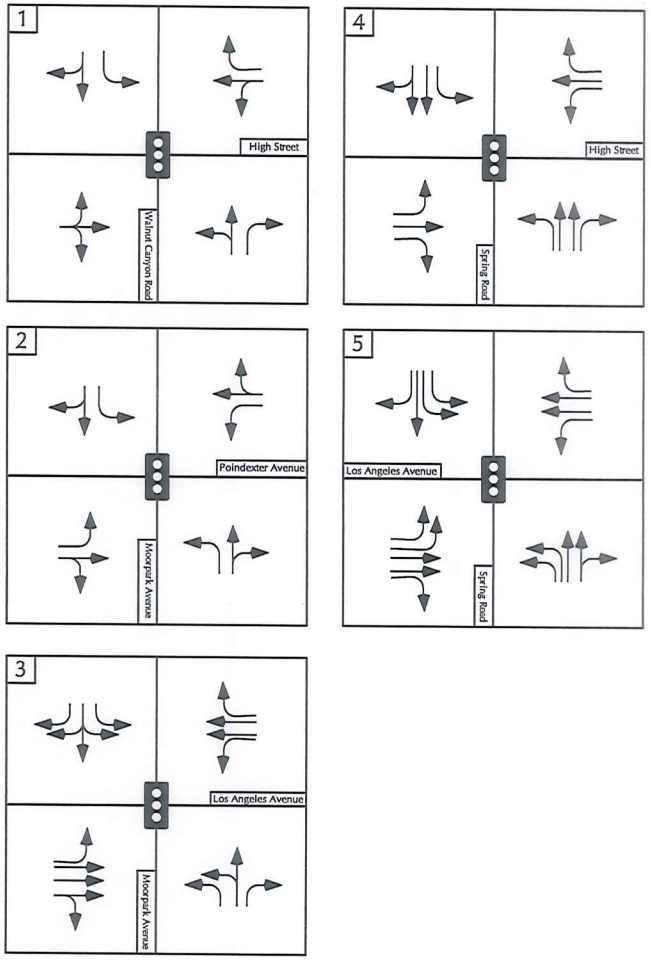
Levels of service were calculated for intersections using the "Intersection Capacity Utilization" (ICU) methodology adopted by the City of Moorpark. Table 1 lists the existing levels of service for the study-area intersections (calculation worksheets are contained in the Technical Appendix).

Table 1
Existing Intersection Levels of Service

	Intersection	A.M. Peak Hour		P.M. Peak Hour	
		V/C	LOS	V/C	LOS
1.	Moorpark Avenue/High Street	0.68	LOS B	0.68	LOS B
2.	Spring Road/High Street	0.63	LOS B	0.72	LOS C
3.	Moorpark Avenue/Poindexter Avenue	0.68	LOS B	0.67	LOS B
4.	Los Angeles Avenue/Moorpark Avenue	0.65	LOS B	0.68	LOS B
5.	Los Angeles Avenue/Spring Road	0.70	LOS B	0.70	LOS B

The data presented in Table 1 show that the study-area intersections currently operate at LOS C or better during the A.M. and P.M. peak hour periods, which meets the City's LOS C standard.





LEGEND

- Signalized Intersection
- Lane Geometry

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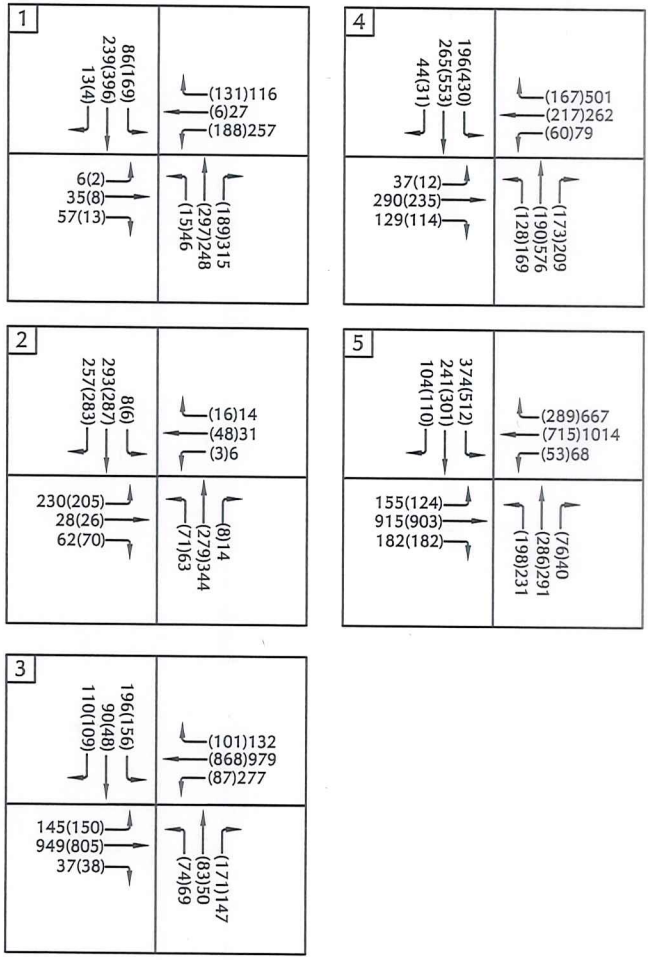
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STUDY-AREA INTERSECTIONS AND EXISTING LANE GEOMETRIES

FIGURE 3

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LEGEND

└(XX)XX - (A.M.)P.M. Peak Hour Volume

N

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EXISTING PEAK TRAFFIC VOLUMES

FIGURE 4

EKM - ATE#18050

THRESHOLDS OF SIGNIFICANCE

Per Policy 2.1 of the City of Moorpark Circulation Element, Level of Service (LOS) C shall be the system performance objective. For facilities already operating at less than LOS C, the system performance objective shall be to maintain or improve the current level of service. The City of Moorpark, "Guidelines for Preparing Traffic and Circulation Studies" states that if a level of service degradation of one level of service or greater is attributable to a project it will be considered significant enough to require mitigation measures. The City's criteria also states that a level of service degradation of less than one level of service may also be considered significant, depending on circumstances.

PROJECT-SPECIFIC ANALYSIS

Project Trip Generation

Trip generation estimates were calculated for the Moorpark Railroad Depot Project based on the rates presented in the Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition for Multi-Family Housing (Land-Use Code #220), Shopping Center (Land-Use Code #820) High Turnover Restaurant (Land-Use Code #932).[1] ATE utilized the average trip generation rates for each land use which is consistent with the trip generation methodology used in the City of Moorpark for other development projects. The "green space" component of the Project is an amenity for the apartment residents and the patrons of the retail commercial and restaurant space not a destination that requires use specific trip generation. Table 2 summarizes the average daily, A.M. and P.M. peak hour trip generation estimates for the Project.

Table 2
Project Trip Generation

Land Use	Size	ADT		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips (In/Out)	Rate	Trips (In/Out)
Apartments	91 units	7.32	666	0.46	42 (10/32)	0.56	51 (32/19)
Brewery	3,824 Sq.Ft.	112.18	429	0.00	0 (0/0)	9.77	37 (23/14)
Restaurant	2,794 Sq.Ft.	112.18	313	9.94	28 (15/13)	9.77	27 (17/10)
Retail Commercial	8,400 Sq.Ft.	37.75	317	0.94	8 (5/3)	3.81	32 (15/17)
Total Trip Generation:			**1,725**		**78 (30/48)**		**147 (87/60)**

[1] Trip Generation, Institute of Transportation Engineers, 10th Edition, 2017.

The data presented in Table 2 show that the Project would generate 1,725 average daily trips (ADT), 78 A.M. peak hour trips, and 147 P.M. peak hour trips.

The trip generation analysis also accounts for the various trip types that would occur at the site, including "Internal Capture" and "External" trips. The following text outlines the trip type definitions and forecasts. The breakdown of project trip types is shown in Table 3.

Internal Capture/External Trips. Internal capture trips are trips made between land uses within the mixed-use project site (for example, residents would also patronize the on-site commercial uses). Internal capture trips would not affect the off-site street network. The ITE mixed-use traffic model[2] was used to determine the number of trips that would be captured on the site. (a copy of the mixed-use model is included in the Technical Appendix for reference).

Transit usage was also evaluated. The effects of TOD on travel and parking have been summarized in TCRP Report 128[3]. The report contains studies conducted on the west coast as well as the east coast. The Lee studies included TOD developments in the suburban locations of Pleasant Hill, San Mateo, and Pleasanton in California. Those studies show that high density transit oriented housing projects located immediately adjacent to transit hubs generate about 15% less vehicular traffic in the A.M. and P.M. peak commute hours when compared to the standard ITE rates. It is important to note that the studies taken at the TOD sites may be served by a more robust transit system (BART- Caltrain plus local bus service) than that provided in the vicinity of the Moorpark Railroad Depot Project site.

---

2 Trip Generation Handbook, 3rd Edition, 2017.

3 Effects of TOD on Housing, Parking and Travel, Transit Cooperative Research Program, Transportation Research Board, 2008.

The mixed use model shows that about 10% of the A.M. peak hour trips and 36% of the P.M. peak hour trips would be internal to the site, and the remaining trips would be external vehicle or transit trips. Based on the TOD data ATE assumed 10% of the Project residential traffic would be transit oriented. ITE mixed-use model does not contain data for the ADT, so internal/external trips were not calculated. Table 3 summarizes the Project trip types.

Table 3
Project Trip Types

Trip Generation	A.M. Peak Hour Trips	P.M. Peak Hour Trips
Total	78	147
Internal Capture Trips (a)	8	54
External Transit Trips (b))	4	3
External Vehicle Trips	66	90

(a) Internal Capture Trips = 10% of total A.M. peak hour trips/36% of total P.M. peak hour trips.
(b) External Transit Trips = 10% of trips.

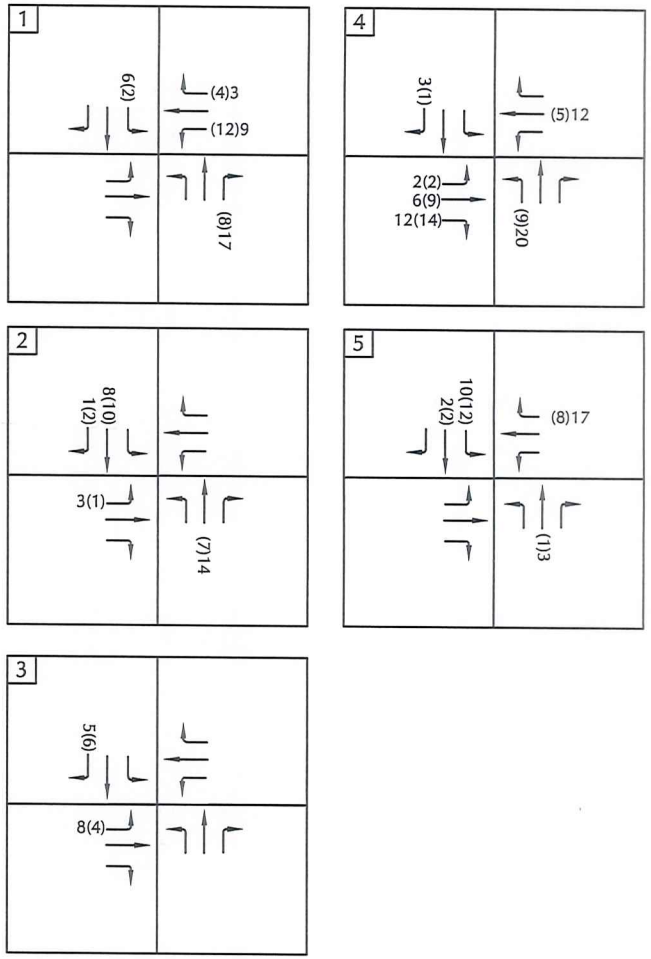
Project Trip Distribution

The external Project-generated vehicle trips were distributed and assigned to the adjacent street network based on percentages illustrated in Table 4 and presented on Figure 5. The trip distribution percentages are based on recent traffic studies, existing traffic patterns observed in the study-area and consideration of the most logical travel routes for drivers accessing the proposed development.

Table 4
Project Trip Distribution

Route	Origin/Destination	Percent
Moorpark Avenue North of High Street	North	10%
Spring Road North of High Street	North	5%
Spring Road South of Los Angeles Avenue	South	5%
Los Angeles Avenue West of Moorpark Avenue	West	15%
Los Angeles Avenue East of Spring Road	East	30%
High Street East of Spring Road	East	20%
Poindexter Avenue West of Moorpark Avenue	West	5%
Local Area Below High Street	Local Internal	10%
	Total	**100%**





LEGEND

└(XX)XX - (A.M.)P.M. Peak Hour Volume

(%) - Distribution Percentage

N
NOT TO SCALE

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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 5

EKM - ATE#18050

Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Existing + Project traffic volumes illustrated on Figure 6. Tables 5 and 6 compare the Existing and Existing + Project levels of service and identify potential project-specific impacts based on City thresholds.

Table 5
Existing and Existing + Project AM Peak Hour Levels of Service

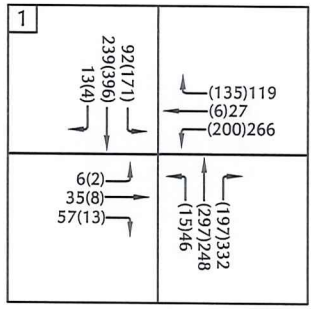
	Intersection	Existing		Existing + Project		LOS Change?	
		ICU	LOS	ICU	LOS	Change	Impact
1.	Moorpark Avenue/High Street	0.68	B	0.69	B	NO	NO
2.	Spring Road/High Street	0.63	B	0.64	B	NO	NO
3.	Moorpark Avenue/Poindexter Avenue	0.68	B	0.69	B	NO	NO
4.	Los Angeles Avenue/Moorpark Avenue	0.65	B	0.65	B	NO	NO
5.	Los Angeles Avenue/Spring Road	0.70	B	0.71	C	YES	NO

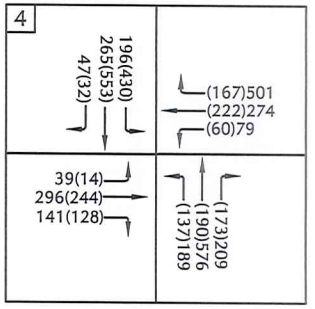
Table 6
Existing and Existing + Project PM Peak Hour Levels of Service

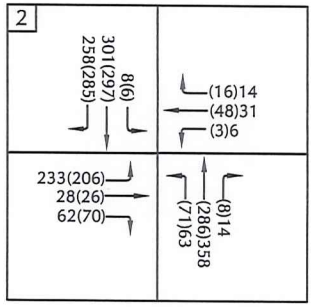
	Intersection	Existing		Existing + Project		LOS Change?	
		ICU	LOS	ICU	LOS	Change	Impact
1.	Moorpark Avenue/High Street	0.68	B	0.69	B	NO	NO
2.	Spring Road/High Street	0.72	C	0.72	C	NO	NO
3.	Moorpark Avenue/Poindexter Avenue	0.67	B	0.67	B	NO	NO
4.	Los Angeles Avenue/Moorpark Avenue	0.68	B	0.69	B	NO	NO
5.	Los Angeles Avenue/Spring Road	0.70	B	0.70	B	NO	NO

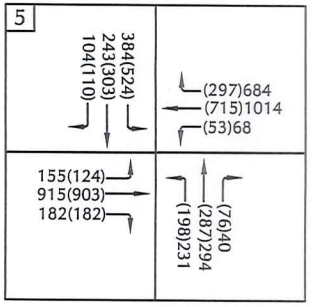
The data presented in Tables 5 and 6 indicate that the study-area intersections would continue to operate at LOS C or better with Project-Added traffic. While the addition of Project-generated traffic to the Los Angeles Avenue/Spring Road study-area intersections would degrade the existing LOS by one level of service, the Project would not generate Project-specific impacts at the study-area intersections based on City of Moorpark thresholds as the intersections would operate acceptably in the LOS B-C range.

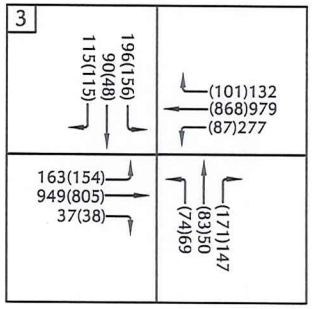












LEGEND

└(XX)XX - (A.M.)P.M. Peak Hour Volume

N

NOT TO SCALE

ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING + PROJECT PEAK HOUR TRAFFIC VOLUMES

FIGURE 6

EKM - ATE#18050

CUMULATIVE ANALYSIS

Traffic Forecasts

Cumulative traffic volumes were forecast for the study-area intersections assuming the development of the approved and pending projects located in the City of Moorpark and the immediate surrounding area that would add traffic to the study-area intersections. The list of approved and pending projects was provided by City staff. Trip generation estimates were developed for the cumulative projects using the rates published in the ITE, Trip Generation, 10th Edition[4]. Table 7 summarizes the average daily, A.M. and P.M. peak hour trip generation for the cumulative projects.

Table 7
Cumulative Development Projects Trip Generation

Project	Land Use	Size	ADT	AM Peak Hour	PM Peak Hour
Triliad Development	Movie Studio	37 Acres	100	10	10
Pacific Communities	Single Family Res.	283 Units	2,694	212	283
Essex Moorpark, LLC	Apartments	200 Units	1,318	92	57
Spring Road, LLC	Condominiums	95 Units	552	42	49
City Ventures	Single Family Res.	110 Units	1,047	82	110
Oakmont Senior Housing	Assisted Living	84 Beds	219	16	22
Birdsall Group, LLC	Single Family Res.	21 Units	200	16	12
Aldersgate Senior Housing	Senior Housing Assisted Living	258 Units 212 Beds	1,468	90	125
Moorpark Hospitality	Hotel	108 Rooms	903	51	65
Grand Moorpark	Condominiums	66 Units	383	29	34
John C. Chiu, FLP-N	Condominiums	60 Units	349	26	31
AHA Scattered Sites	Apartments	56 Units	418	26	31
Hitch Ranch	Single Family Res. Townhomes Multi-Family Res. Church	235 Units 295 Units 225 Units 30,000 S.F.	6,394	495	611
Moorpark 67/Rasmussen	Single Family Res.	138 Units	1,303	102	137
A-B Properties	Industrial	36 Acres	1,865	270	261
National Ready Mix	Batch Plant	10 Acres	600	20	20
CEMEX	Quarry	N/A	980	276	148
Wayne J. Sand & Gravel	Quarry	N/A	504	92	34
Grimes Rock	Quarry	N/A	480	35	14
		Total Trips:	21,777	1,982	2,054

Note: The current cumulative trip generation resulted in fewer trips than what was assumed in the traffic and circulation study for the Aldersgate Senior Living Project prepared by ATE in 2016.

[4] Trip Generation, Institute of Transportation Engineers, 10th Edition, 2017.

The data presented in Table 7 indicate that the cumulative projects would generate a total of 21,777 average daily trips, 1,982 AM peak hour trips and 2,054 PM peak hour trips. The cumulative projects' peak hour traffic volumes were distributed and assigned to the study-area intersections based on the location of each project, recent traffic studies, existing traffic patterns observed in the study area as well as a general knowledge of the population, employment and commercial centers in Moorpark, Ventura, Oxnard, Thousand Oaks and Simi Valley. Cumulative traffic volumes illustrated on Figure 7.

Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Cumulative and Cumulative + Project traffic volumes illustrated on Figures 7 and 8. The Cumulative and Cumulative + Project levels of service for the study-area intersections are compared in Tables 8 and 9 and impacts identified based on City thresholds.

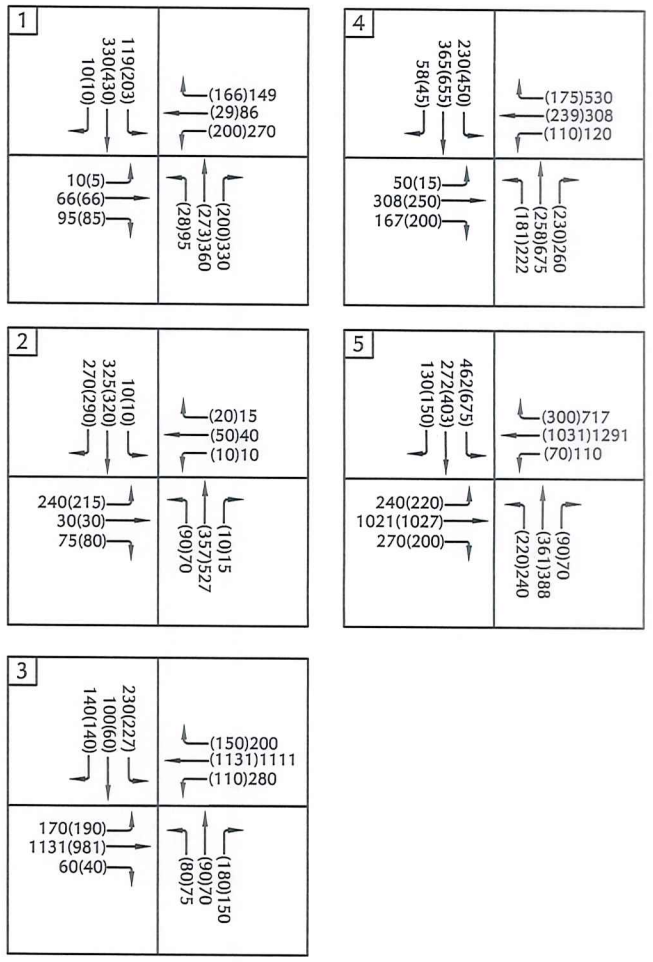
Table 8
Cumulative and Cumulative + Project A.M. Peak Hour Levels of Service

	Intersection	Cumulative		Cumulative + Project		LOS Change?	
		ICU	LOS	ICU	LOS	Change	Impact
1.	Moorpark Ave./High St.	0.80	C	0.81	D	YES	**YES**
2.	Spring Rd./High St.	0.71	C	0.72	C	NO	NO
3.	Moorpark Ave./Poindexter Ave.	0.73	C	0.74	C	NO	NO
4.	Los Angeles Ave./Moorpark Ave.	0.79	C	0.79	C	NO	NO
5.	Los Angeles Ave./Spring Rd.	0.86	D	0.86	D	NO	NO

Table 9
Cumulative and Cumulative + Project P.M. Peak Hour Levels of Service

	Intersection	Cumulative		Cumulative + Project		LOS Change?	
		ICU	LOS	ICU	LOS	Change	Impact
1.	Moorpark Ave./High St.	0.93	E	0.93	E	NO	NO
2.	Spring Rd./High St.	0.80	C	0.80	C	NO	NO
3.	Moorpark Ave./Poindexter Ave.	0.71	C	0.72	C	NO	NO
4.	Los Angeles Ave./Moorpark Ave.	0.76	C	0.77	C	NO	NO
5.	Los Angeles Ave./Spring Rd.	0.83	D	0.84	D	NO	NO





LEGEND

└(XX)XX - (A.M.)P.M. Peak Hour Volume

N

NOT TO SCALE

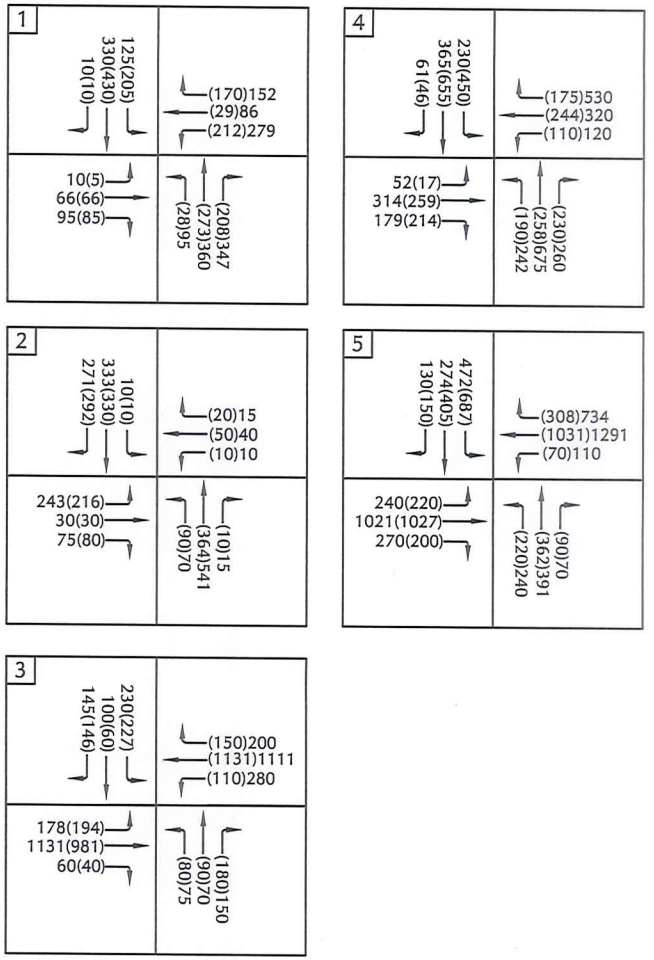
ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE PEAK HOUR TRAFFIC VOLUMES

FIGURE 7

EKM - ATE#18050





LEGEND

└(XX)XX - (A.M.)P.M. Peak Hour Volume

N

NOT TO SCALE

ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE + PROJECT PEAK HOUR TRAFFIC VOLUMES

FIGURE 8

EKM - ATE#18050

The data presented in Tables 8 and 9 indicate that the majority of study-area intersections are forecast to operate in the LOS A-C range during the A.M. and P.M. peak hour periods under Cumulative and Cumulative + Project conditions.

The data indicates that the LOS of the Los Angeles Avenue/Spring Road intersection would operate at LOS D with or without the addition of Project trips. The data also indicates that the LOS of the Moorpark Avenue/High Street intersection would operate in the LOS E range with or without the addition of Project trips during the P.M. peak hour. However, during the A.M. peak hour, the addition of Project-generated traffic to the Moorpark Avenue/High Street intersection would degrade the LOS from C to LOS D, which is considered a cumulative impact based on City of Moorpark thresholds.

SITE ACCESS

Access to the Project site would be provided by a driveway connection to High Street opposite Walnut Street and a connection to High Street east of Bard Street. Given the Project traffic volumes (66 A.M. and 90 P.M. peak hour trips distributed between two driveways) the driveways are expected to operate at acceptable levels of service. Project driveways would be built to City of Moorpark design standards which would accommodate turning movements by both passenger vehicles and trucks.

Pedestrian and Bicycle Facilities

The Project incorporates streetscape improvements along the entire Project frontage. The Project will include new sidewalks, landscaped parkways, enhanced commercial storefront entries, crosswalks at both Walnut Street and Bard Street, a pedestrian bulb-out at Bard Street, way-finding signage and a connection to the existing Metrolink train platform. These facilities will significantly im prove the walkability of the High Street corridor adjacent to the site. High Street adjacent to the Project is designated as a Class II bikeway. Bike racks will also be provided on-site to encourage bicycle use.

PARKING ANALYSIS

City of Moorpark Zoning Ordinance Parking Requirements

The Project is proposing to provide 139 onsite parking spaces. City's Zoning Ordinance parking requirements were calculated for the various components of the Moorpark Railroad Depot Project. Parking in the High Street area (High Street from Moorpark Avenue to Spring Road) must meet 50% of the required parking pursuant to Section 17.32.020 of the Moorpark Municipal Code. In consideration for providing fewer parking spaces than required, a percentage of the parking spaces provided must be open to and available to the general public at all times. All parking provided above 50 percent may be designated as reserved parking. Reserved parking spaces become shared parking spaces after 6:00 P.M. to 2:00 A.M. so that those spaces are available for off-peak parking by the general public. Shared parking is required in accordance with the following standards shown in Table 10.

Table 10
Shared Parking Standards

Percentage of Parking Standard Provided	Percentage of Required Shared Parking
40% to 49%	85%
50%	75%

In lieu of meeting the required parking the applicant may pay a fee based on the estimated value of a fully improved parking space, circulation and landscaping to reduce the required on-site parking by an additional 10 percent to 40 percent of the required parking. The City Council shall establish a fee by resolution to be used to offset a portion of the cost required to construct public parking facilities in the downtown area. In addition, eating and drinking places in the High Street area shall have the same required parking as retail shops and services in the High Street area. The parking space requirement for various Moorpark Railroad Depot tenants are as follows and shown in Table 11.

- Residential - 1 space per studio unit; 1.75 spaces per 1 bedroom unit; 2 spaces/2/3 bedroom unit; guest/0.5 space per unit.
- Restaurant - 1 space per 300 SF of gross floor area.
- Office/Retail Commercial - 1 space per 300 SF of gross floor area.
- Brewery - 1 space per 300 SF of gross floor area.

Table 11
City Zoning Ordinance Parking Requirements

Land Use	Size	Zoning Requirement	Required Parking	Parking Provided
Residential	18 Studio Units	1 space/Unit	18 spaces	139 on-site spaces (58% of required)
	26 One Bedroom Units	1.75 space/Unit	46 spaces	
	39 Two Bedroom Units	2 spaces/Unit	78 spaces	
	8 Three Bedroom Units	2 spaces/Unit	16 spaces	
	Guest Parking	0.5 spaces/Unit	32 spaces	
Restaurant	2,794 SF	1 space/300 SF	9 spaces	
Commercial	8,400 SF	1 space/300 SF	28 spaces	
Brewery	3,824 SF	1 space/300 SF	13 spaces	
		Total Parking Required:	240 spaces	

As shown in Table 11, the City of Moorpark Zoning Ordinance requires 240 spaces for the uses contained in Moorpark Railroad Depot Project. The Moorpark Railroad Depot Project provides 139 on-site parking spaces which is 58 percent of the required parking. Therefore, according to the City's Zoning Ordinance, 75 percent of the parking would be shared parking open to the public.

It should be noted that the Zoning Ordinance requirement does not account for the "shared parking" due to the varying peak parking demands of the tenants within the Moorpark Railroad Depot Project. Nor does it account for the TOD characteristics of the Project which includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a quarter-mile of quality public transportation. This results in lower parking demands generated by the tenant uses. Given the proximity of the adjacent Amtrak/Metrolink station/parking lot it is expected that daily commuters would also be customers for the retail and restaurant tenants and would walk not drive to those uses. Also, there is additional parking located on High Street readily available to customers of the retail and restaurant tenants.

MITIGATION MEASURES

To off-set traffic impacts the Project would be required to pay the Citywide Traffic Mitigation Fee. Though the traffic analysis did not identify any project-specific impacts for the Existing + Project scenario, under cumulative conditions two of the study-area intersections are forecast to operate below the City of Moorpark's LOS C performance objective with or without the Project.

In addition to paying the Citywide Traffic Mitigation Fee, there is an Area of Contribution (AOC) established for the Los Angeles Avenue corridor. The Project will be required to pay the AOC fee based upon the level of traffic added within the corridor. The percent contribution at the study-area intersections is shown in Table 12.

Table 12
Cumulative - Project Percent Contributions

Study Intersection	Project Percent Contribution (%)
Moorpark Avenue/High Street	1.79%
Los Angeles Avenue/Moorpark Avenue	0.35%
Los Angeles Avenue/Spring Road	0.61%

As part of the AOC, the City has identified and programmed improvements in the Capital Improvement Program (CIP) for the Los Angeles Avenue/Spring Road intersection that would mitigate cumulative impacts, as discussed below.

Los Angeles Avenue/Spring Road: The intersection is forecast to operate at LOS D during the A.M. and P.M. peak hour period under Cumulative and Cumulative + Project conditions. The programmed improvement consists of adding an additional through lane on the eastbound and westbound approaches. The mitigated geometrics and peak hour levels of service are shown in Tables 13 and 14.

Table 13
Los Angeles Avenue/Spring Road
Mitigated Intersection Geometry

Scenario	Northbound	Southbound	Eastbound	Westbound
Existing Geometry	L L T TR	L L T R	L L TT R	L TT R
Mitigated Geometry	L L T TR	L L T R	**L L TTT R**	**L TTT R**

Table 14
Los Angeles Avenue/Spring Road
Mitigated A.M. and P.M. Peak Hour Level of Service

Intersection	Peak Period	Cumulative + Project LOS	
		Existing Geometry	With Improvements
Los Angeles Avenue/Spring Road	A.M.	0.86/LOS D	0.76/LOS C
Los Angeles Avenue/Spring Road	P.M.	0.84/LOS D	0.75/LOS C

Implementing the intersection CIP improvements planned by the City of Moorpark would result in LOS C during the A.M. and P.M. peak hour periods under Cumulative + Project conditions.

The City has identified and programmed improvements in the CIP for the Moorpark Avenue/High Street intersection that would mitigate cumulative impacts, as discussed below.

Moorpark Avenue/High Street: The intersection is forecast to operate at LOS D during the A.M. peak hour period under Cumulative + Project conditions. The programmed improvement consists of adding an additional through lane on the southbound approach and providing a left-turn lane, through lane and right-turn lane on the northbound approach. The mitigated geometrics and peak hour levels of service are shown in Tables 15 and 16.

Table 15
Moorpark Avenue/High Street
Mitigated Intersection Geometry

Scenario	Northbound	Southbound	Eastbound	Westbound
Existing Geometry	LT R	L TR	LTR	LT R
Mitigated Geometry	**L T R**	**L T TR**	LTR	LT R

Table 16
Moorpark Avenue/High Street
Mitigated A.M. and P.M. Peak Hour Level of Service

Intersection	Peak Period	Cumulative + Project LOS	
		Existing Geometry	With Improvements
Moorpark Avenue/High Street	A.M.	0.81/LOS D	0.66/LOS B
Moorpark Avenue/High Street	P.M.	0.93/LOS E	0.74/LOS C

Implementing the intersection improvements planned by the City of Moorpark would result in LOS C during the A.M. and P.M. peak hour periods under Cumulative + Project conditions.

ZONE CHANGE TRIP GENERATION COMPARISON

The current Old Town Commercial (C-OT) Zoning designation does not allow residential uses as part of mixed-use developments. A Zoning Ordinance Amendment will therefore be required to accommodate residential uses within C-OT. Trip generation estimates were calculated for the commercial land uses that are currently allowed within the C-OT zoning designation and compared to the Moorpark Railroad Depot Project. Table 17 summarizes the trip generation comparison of the average daily trips, A.M. and P.M. peak hour trips.

Table 17
Trip Generation Comparison

Land Use	Size	ADT		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Allowed Development:							
Office	17,794 Sq.Ft.	9.74	173	1.16	21	1.15	20
Restaurant	17,794 Sq.Ft.	112.18	1,996	9.94	177	9.77	174
			2,169		198		194
Proposed Development:							
Apartments	91 units	7.32	666	0.46	42	0.56	51
Brewery	3,824 Sq,Ft.	112.18	429	0.00	0	9.77	37
Restaurant	2,794 Sq,Ft.	112.18	313	9.94	28	9.77	27
Retail Commercial	8,400 Sq.Ft.	37.75	317	0.94	8	3.81	32
			1,725		78		147
Trip Generation Net Change:			**-444**		**-120**		**-47**

The data presented in Table 17 show that the Moorpark Railroad Depot Project would generate 1,725 ADT, 78 A.M. peak hour trips, and 147 P.M. peak hour trips. Developing the property with the allowed commercial/office uses would generate 2,169 ADT, 198 A.M. peak hour trips, and 194 P.M. peak hour trips. The Zone Change would therefore result in a net decrease of -444 ADT, -120 A.M. peak hour trips, and -47 P.M. peak hour trip.

■ ■ ■

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Scott A. Schell, AICP, PTP, Principal Planner
Darryl F. Nelson, Senior Transportation Planner
Erica K. Monson, Transportation Planner I

References

Trip Generation, Institute of Transportation Engineers, 10th Edition, 2017.

Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 2016.

Guidelines for Preparing Traffic and Circulation Studies, City of Moorpark, November 22, 1993.

Effects of TOD on Housing, Parking and Travel, TCRP Report 128, Transit Cooperative Research Program, 2008.

Persons Contacted

Karen Vaughn, Community Development Director, City of Moorpark

TECHNICAL APPENDIX

CONTENTS:

LEVEL OF SERVICE DEFINITIONS

TRAFFIC COUNT DATA

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Moorpark Avenue/High Street
Reference 2 - Spring Road/High Street
Reference 3 - Moorpark Avenue/Poindexter Avenue
Reference 4 - Los Angeles Avenue/Moorpark Avenue
Reference 5 - Los Angeles Avenue/Spring Road

PROJECT TRIP GENERATION WORKSHEET

LEVEL OF SERVICE DEFINITIONS

DISCUSSION OF INTERSECTION CAPACITY UTILIZATION (ICU)

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. The technique used to compare the volumes and capacity of an intersection is known as Intersection Capacity Utilization (ICU). ICU or volume-to-capacity ratio, usually expressed as a percentage, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity, then 20 percent of the signal cycle is not used.

The ICU calculation assumes that an intersection is signalized and that the signal is ideally timed. Although calculating ICU for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes. It is possible to have an ICU well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient time to satisfy its demand, and excess time exists on other movements. This is an operational problem which should be addressed.

Capacity is often defined in terms of roadway width. However, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Data collected by Kunzman Associates indicates a typical lane, whether a through-lane or a left-turn lane, has a capacity of approximately 1,700 vehicles per hour, with nearly all locations showing a capacity greater than 1,600 vehicles per hour per lane. This finding is published in the August, 1978 issue of ITE Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. For this study, a capacity of 1,600 vehicles per hour per lane will be assumed for left-turn, through, and right-turn lanes as per City policy.

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for less than 10 percent of a cycle, and a penalty of up to five percent is reasonable. On the other hand, during peak hour traffic operation, the yellow times are nearly completely used. In this study, no penalty will be applied for the yellow because the capacities have been assumed to be only 1,600 vehicles per hour per lane when in general they are 1,700-1,800 vehicles per hour per lane.

The ICU technique is an ideal tool to quantify existing as well as future intersection operations. The impact of adding a lane can be quickly determined by examining the effect the lane has on the intersection capacity utilization.

Source: Oxnard Airport Business Park Traffic Study, Kunzman Assoc., City of Oxnard, 1985.

Signalized Intersection Level of Service Definitions

LOS	Delay[a]	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

[a] Average control delay per vehicle in seconds.

Unsignalized Intersection Level of Service Definitions

The HCM[1] uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

[1] Highway Capacity Manual, National Research Board, 2000

TRAFFIC COUNT DATA

Prepared by National Data & Surveying Services

Moorpark Ave & High St

Peak Hour Turning Movement Count

ID: 18-05389-001
City: Moorpark

Day: Thursday
Date: 06/07/2018

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Moorpark Ave — SOUTHBOUND

AM	4	396	169	0	430	AM
NOON	0	0	0	0	0	NOON
PM	13	239	86	0	370	PM

EASTBOUND — High St

AM	NOON	PM	
25	0	84	⇦
0	0	0	↶ 0
2	0	6	↑ 0
8	0	35	→ 0
13	0	57	↷ 0
AM	NOON	PM	

WESTBOUND — High St

PM	NOON	AM	
0	0	0	0 ↷
116	0	131	0 ↑
27	0	6	0 ←
257	0	188	0 ↶
0	0	0	0 ↷
436	0	366	⇨
PM	NOON	AM	

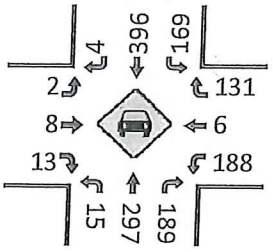
CONTROL: Signalized

TEV	1418 AM	0 NOON	1445 PM
PHF	0.85		0.95

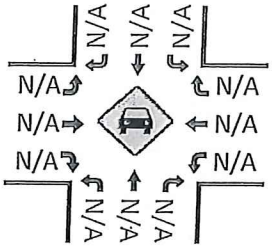
NORTHBOUND — Moorpark Ave

PM	555	2	44	248	315	PM
NOON	0	0	0	0	0	NOON
AM	597	0	15	297	189	AM

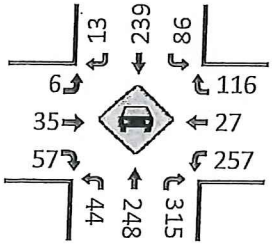
Total Vehicles (AM)



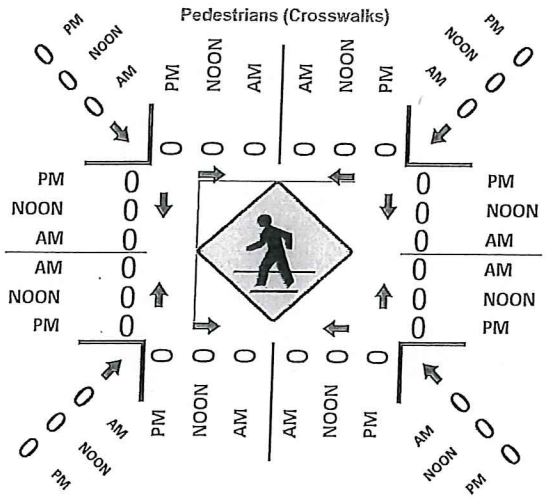
Total Vehicles (NOON)



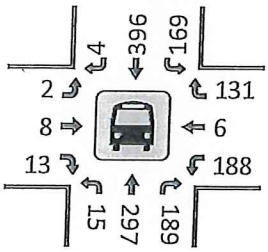
Total Vehicles (PM)



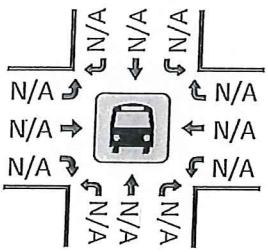
Pedestrians (Crosswalks)



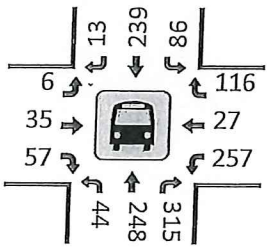
Total Vehicles (AM)



Total Vehicles (NOON)



Total Vehicles (PM)



Prepared by National Data & Surveying Services

Spring Rd & High St

Peak Hour Turning Movement Count

ID: 18-05389-004
City: Moorpark

Day: Thursday
Date: 06/07/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Spring Rd

SOUTHBOUND

AM	31	553	430	0	369	AM
NOON	0	0	0	0	0	NOON
PM	44	265	196	0	1114	PM

EASTBOUND (High St)

AM	NOON	PM	
376	0	475	⇦
0	0	0	↶ 0
12	0	37	↑ 0
235	0	290	→ 0
114	0	129	↷ 0
AM	NOON	PM	

WESTBOUND (High St)

PM	NOON	AM	
501	0	167	0 ↑
262	0	217	0 ←
79	0	60	0 ↰
0	0	0	0 ↷
695	0	838	⇨
PM	NOON	AM	

CONTROL

Signalized

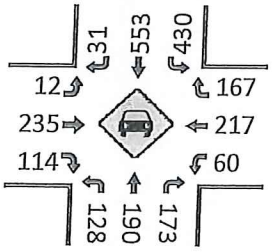
TEV	2310 AM	0 NOON	2757 PM
PHF	0.95		0.94

NORTHBOUND

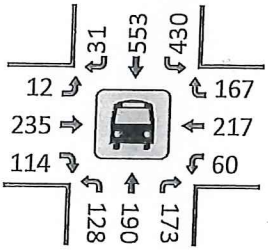
PM	473	0	169	576	209	PM
NOON	0	0	0	0	0	NOON
AM	727	0	128	190	173	AM

Spring Rd

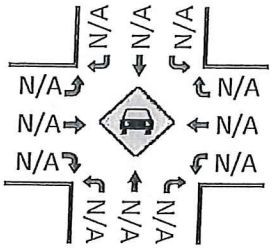
Total Vehicles (AM)



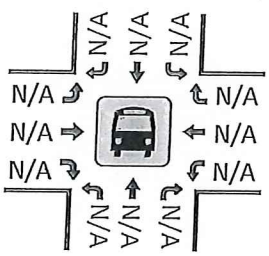
Total Vehicles (AM)



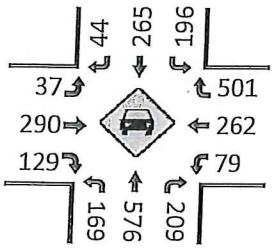
Total Vehicles (NOON)



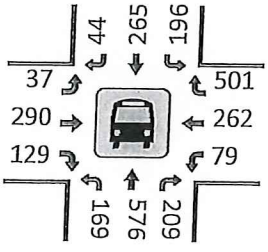
Total Vehicles (NOON)



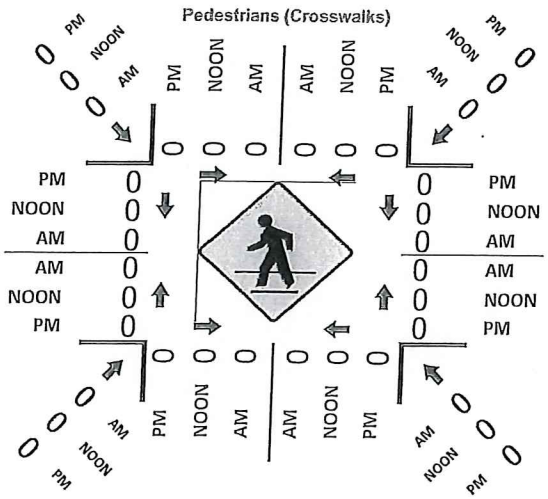
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



Prepared by National Data & Surveying Services

Moorpark Ave & Poindexter Ave/1st St

Peak Hour Turning Movement Count

ID: 18-05389-002
City: Moorpark

Day: Thursday
Date: 06/07/2018

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Moorpark Ave — SOUTHBOUND

AM	283	287	6	0	500	AM
NOON	0	0	0	0	0	NOON
PM	257	293	8	0	588	PM

Poindexter Ave/1st St — EASTBOUND

AM	NOON	PM	
402	0	351	
0	0	0	0
205	0	230	0
26	0	28	0
70	0	62	0
AM	NOON	PM	

CONTROL

Signalized

TEV	1302 AM	0 NOON	1350 PM
PHF	0.90		0.95

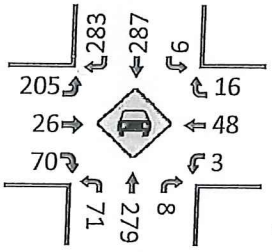
Poindexter Ave/1st St — WESTBOUND

PM	NOON	AM	
14	0	16	0
31	0	48	0
6	0	3	0
0	0	0	0
50	0	40	
PM	NOON	AM	

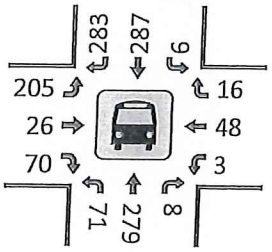
Moorpark Ave — NORTHBOUND

PM	361	0	63	344	14	PM
NOON	0	0	0	0	0	NOON
AM	360	0	71	279	8	AM

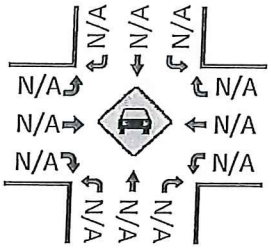
Total Vehicles (AM)



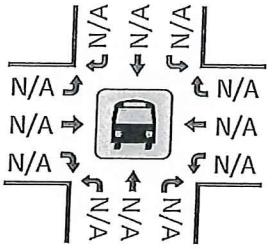
Total Vehicles (AM)



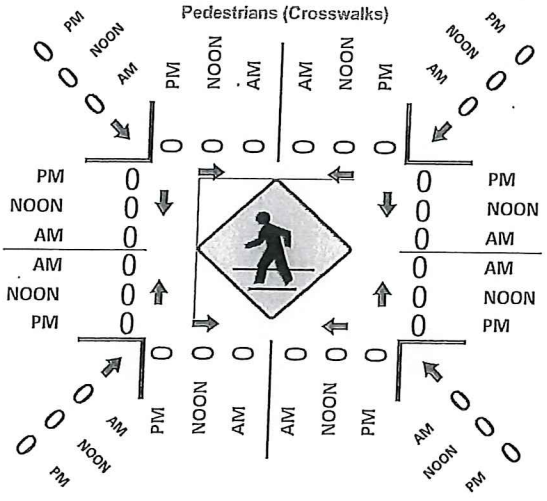
Total Vehicles (NOON)



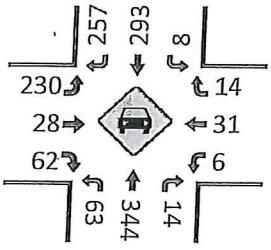
Total Vehicles (NOON)



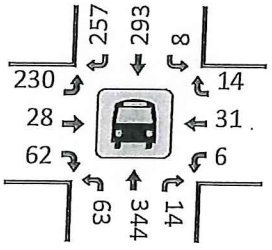
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



Prepared by National Data & Surveying Services

Moorpark Ave & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 18-05389-003
City: Moorpark

Day: Thursday
Date: 06/07/2018

PEAK HOURS: 07:30 AM - 08:30 AM; NONE; 04:30 PM - 05:30 PM

COUNT PERIODS: 07:00 AM - 09:00 AM; NONE; 04:00 PM - 06:00 PM

Moorpark Ave — SOUTHBOUND

AM	109	48	156	0	334	AM
NOON	0	0	0	0	0	NOON
PM	110	90	196	0	327	PM

Los Angeles Ave — EASTBOUND

AM	NOON	PM	
1051	0	1158	
0	0	0	0
150	0	145	0
805	0	949	0
38	0	37	0
AM	NOON	PM	

CONTROL

Signalized

TEV	2690 AM	0 NOON	3181 PM
PHF	0.90		0.96

Los Angeles Ave — WESTBOUND

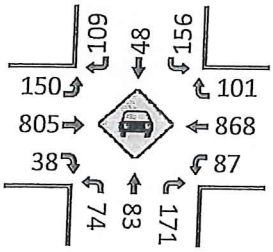
PM	NOON	AM	
132	0	101	0
979	0	868	0
277	0	87	0
0	0	0	0
1292	0	1132	
PM	NOON	AM	

Moorpark Ave — NORTHBOUND

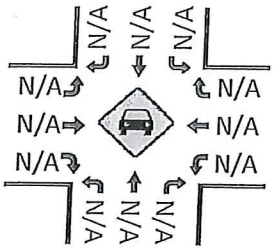
PM	404	0	69	50	147	PM
NOON	0	0	0	0	0	NOON
AM	173	0	74	83	171	AM

Moorpark Ave

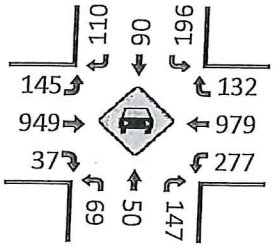
Total Vehicles (AM)



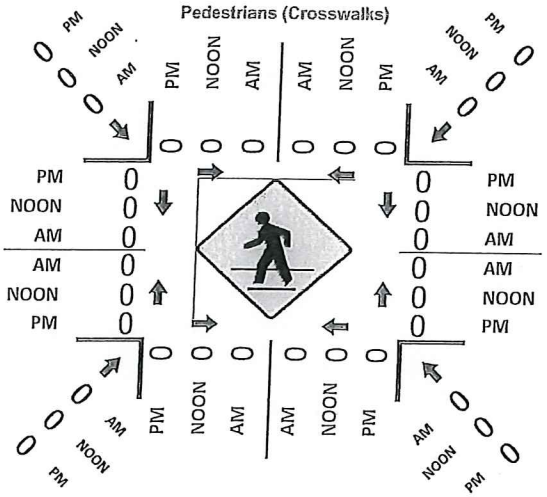
Total Vehicles (NOON)



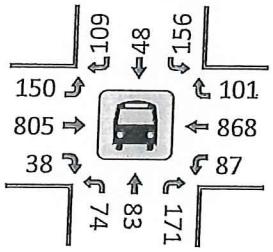
Total Vehicles (PM)



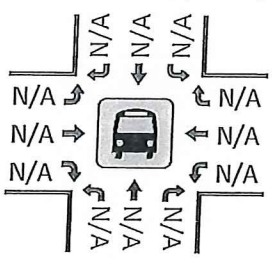
Pedestrians (Crosswalks)



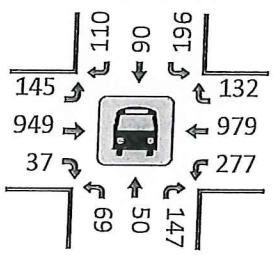
Total Vehicles (AM)



Total Vehicles (NOON)



Total Vehicles (PM)



Prepared by National Data & Surveying Services

Spring Rd & Los Angeles Ave

Peak Hour Turning Movement Count

ID: 18-05389-005
City: Moorpark

Day: Thursday
Date: 06/07/2018

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Spring Rd — SOUTHBOUND

AM	110	301	512	0	699	AM
NOON	0	0	0	0	0	NOON
PM	104	241	374	0	1113	PM

Los Angeles Ave — EASTBOUND

AM	NOON	PM	
1023	0	1349	⇦
0	0	0	↶
124	0	155	↑
903	0	915	→
182	0	182	↷

AM NOON PM

CONTROL

Signalized

TEV	3749 AM	0 NOON	4282 PM
PHF	0.96		0.97

Los Angeles Ave — WESTBOUND

PM	NOON	AM	
667	0	289	↶
1014	0	715	←
61	0	40	↰
7	0	13	↷
1336	0	1504	⇨

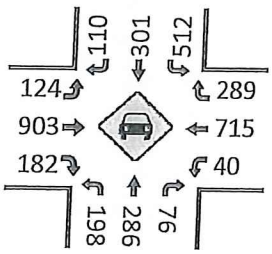
PM NOON AM

Spring Rd — NORTHBOUND

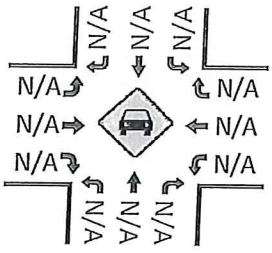
PM	484	0	231	291	40	PM
NOON	0	0	0	0	0	NOON
AM	523	0	198	286	76	AM

Spring Rd

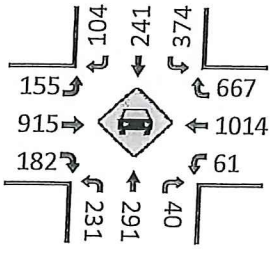
Total Vehicles (AM)



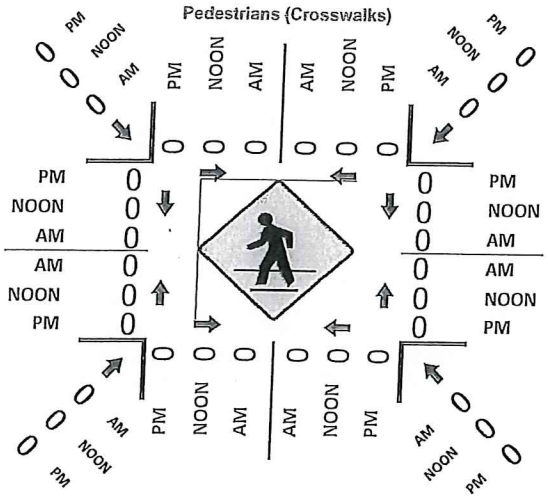
Total Vehicles (NOON)



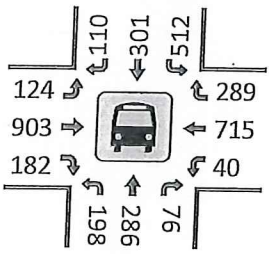
Total Vehicles (PM)



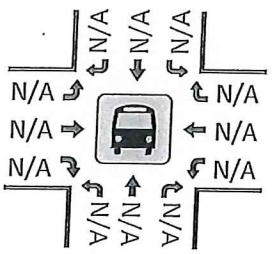
Pedestrians (Crosswalks)



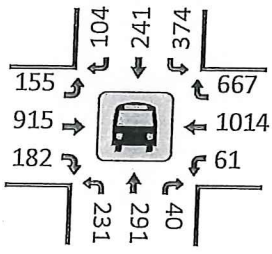
Total Vehicles (AM)



Total Vehicles (NOON)



Total Vehicles (PM)



INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Moorpark Avenue/High Street
Reference 2 - Spring Road/High Street
Reference 3 - Moorpark Avenue/Poindexter Avenue
Reference 4 - Los Angeles Avenue/Moorpark Avenue
Reference 5 - Los Angeles Avenue/Spring Road

#18548 - MOORPARK RAILROAD DEPOT PROJECT REF: 01 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *A.M. PEAK HOUR*

N/S STREET: *WALNUT CANYON ROAD*

E/W STREET: *HIGH STREET*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	15	297	189	169	396	4	2	8	13	188	6	131
(B) PROJECT-ADDED:	0	0	8	2	0	0	0	0	0	12	0	4
(C) CUMULATIVE:	28	273	200	203	430	10	5	66	85	200	29	166

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LT R	L TR	LTR	LT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	15	15	28	28	-	-	-	-
NBT	1	1600	297	297	273	273	0.195 *	0.195 *	0.188 *	0.188 *
NBR	1	1500	189	197	200	208	0.126	0.131	0.133	0.139
SBL	1	1500	169	171	203	205	0.113	0.114	0.135	0.137
SBT	1	1600	396	396	430	430	0.250 *	0.250 *	0.275 *	0.275 *
SBR	0	0	4	4	10	10	-	-	-	-
EBL	0	0	2	2	5	5	-	-	-	-
EBT	1	1600	8	8	66	66	0.014 *	0.014 *	0.098 *	0.098 *
EBR	0	0	13	13	85	85	-	-	-	-
WBL	0	0	188	200	200	212	-	-	-	-
WBT	1	1600	6	6	29	29	0.121 *	0.129 *	0.143 *	0.151 *
WBR	1	1500	131	135	166	170	0.087	0.090	0.111	0.113
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.680**	**0.688**	**0.804**	**0.812**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**D**

NOTES:

Printed: 12/08/19

#18050- MOORPARK RAILROAD DEPOT PROJECT REF: 01 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *P.M. PEAK HOUR*

N/S STREET: *WALNUT CANYON ROAD*

E/W STREET: *HIGH STREET*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	46	248	315	86	239	13	6	35	57	257	27	116
(B) PROJECT-ADDED:	0	0	17	6	0	0	0	0	0	9	0	3
(C) CUMULATIVE:	95	360	330	119	330	10	10	66	95	270	86	149

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LT R	L TR	LTR	LT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	46	46	95	95	-	-	-	-
NBT	1	1600	248	248	360	360	0.184 *	0.184 *	0.284 *	0.284 *
NBR	1	1500	315	332	330	347	0.210	0.221	0.220	0.231
SBL	1	1500	86	92	119	125	0.057	0.061	0.079	0.083
SBT	1	1600	239	239	330	330	0.158 *	0.158 *	0.213 *	0.213 *
SBR	0	0	13	13	10	10	-	-	-	-
EBL	0	0	6	6	10	10	-	-	-	-
EBT	1	1600	35	35	66	66	0.061 *	0.061 *	0.107 *	0.107 *
EBR	0	0	57	57	95	95	-	-	-	-
WBL	0	0	257	266	270	279	-	-	-	-
WBT	1	1600	27	27	86	86	0.178 *	0.183 *	0.223 *	0.228 *
WBR	1	1500	116	119	149	152	0.077	0.079	0.099	0.101
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.681**	**0.686**	**0.927**	**0.932**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**E**	**E**

NOTES:

Printed: 12/08/19

#18548 - MOORPARK RAILROAD DEPOT PROJECT REF: 01 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *A.M. PEAK HOUR*

N/S STREET: *WALNUT CANYON ROAD*

E/W STREET: *HIGH STREET*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	**15**	**297**	**189**	**169**	**396**	**4**	**2**	**8**	**13**	**188**	**6**	**131**
(B) PROJECT-ADDED:	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**4**
(C) CUMULATIVE:	**28**	**273**	**200**	**203**	**430**	**10**	**5**	**66**	**85**	**200**	**29**	**166**

GEOMETRICS

IMPROVED LANE GEOMETRICS	NORTH BOUND L T R	SOUTH BOUND L T TR	EAST BOUND LTR	WEST BOUND LT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	15	15	28	28	0.01	0.01	0.02	0.02
NBT	1	1600	297	297	273	273	0.186 *	0.186 *	0.171 *	0.171 *
NBR	1	1500	189	197	200	208	0.126	0.131	0.133	0.139
SBL	1	1500	169	171	203	205	0.113 *	0.114 *	0.135 *	0.137 *
SBT	2	3200	396	396	430	430	0.125	0.125	0.138	0.138
SBR	0	0	4	4	10	10	-	-	-	-
EBL	0	0	2	2	5	5	-	-	-	-
EBT	1	1600	8	8	66	66	0.014 *	0.014 *	0.098 *	0.098 *
EBR	0	0	13	13	85	85	-	-	-	-
WBL	0	0	188	200	200	212	-	-	-	-
WBT	1	1600	6	6	29	29	0.121 *	0.129 *	0.143 *	0.151 *
WBR	1	1500	131	135	166	170	0.087	0.090	0.111	0.113
		LOST TIME:					0.10	0.10	0.10	0.10
		TOTAL INTERSECTION CAPACITY UTILIZATION:					**0.534**	**0.543**	**0.647**	**0.657**
		SCENARIO LEVEL OF SERVICE:					**A**	**A**	**B**	**B**

NOTES:

Printed: 12/08/19

#18050- MOORPARK RAILROAD DEPOT PROJECT REF: 01 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *P.M. PEAK HOUR*

N/S STREET: *WALNUT CANYON ROAD*

E/W STREET: *HIGH STREET*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	46	248	315	86	239	13	6	35	57	257	27	116
(B) PROJECT-ADDED:	0	0	17	6	0	0	0	0	0	9	0	3
(C) CUMULATIVE:	95	360	330	119	330	10	10	66	95	270	86	149

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
IMPROVED LANE GEOMETRICS	L T R	L T TR	LTR	LT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	46	46	95	95	0.03	0.03	0.06	0.06
NBT	1	1600	248	248	360	360	0.155 *	0.155 *	0.225 *	0.225 *
NBR	1	1500	315	332	330	347	0.210	0.221	0.220	0.231
SBL	1	1500	86	92	119	125	0.057 *	0.061 *	0.079 *	0.083 *
SBT	2	3200	239	239	330	330	0.079	0.079	0.106	0.106
SBR	0	0	13	13	10	10	-	-	-	-
EBL	0	0	6	6	10	10	-	-	-	-
EBT	1	1600	35	35	66	66	0.061 *	0.061 *	0.107 *	0.107 *
EBR	0	0	57	57	95	95	-	-	-	-
WBL	0	0	257	266	270	279	-	-	-	-
WBT	1	1600	27	27	86	86	0.178 *	0.183 *	0.223 *	0.228 *
WBR	1	1500	116	119	149	152	0.077	0.079	0.099	0.101
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.551**	**0.560**	**0.734**	**0.743**
					SCENARIO LEVEL OF SERVICE:		A	A	C	C

NOTES:

Printed: 12/08/19

#18050 - MOORPARK RAILROAD DEPOT PROJECT REF: 02 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *A.M. PEAK HOUR*

N/S STREET: *SPRING STREET*

E/W STREET: *HIGH STREET*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	128	190	173	430	553	31	12	235	114	60	217	167
(B) PROJECT-ADDED:	9	0	0	0	0	1	2	9	14	0	5	0
(C) CUMULATIVE:	181	258	230	450	655	45	15	250	200	110	239	175

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TT R	L T TR	L T R	L T R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	128	137	181	190	0.09	0.09	0.12	0.13
NBT	2	3200	190	190	258	258	0.059 *	0.059 *	0.081 *	0.081 *
NBR	1	1500	173	173	230	230	0.115	0.115	0.153	0.153
SBL	1	1500	430	430	450	450	0.287 *	0.287 *	0.300 *	0.300 *
SBT	2	3200	553	553	655	655	0.183	0.183	0.219	0.219
SBR	0	0	31	32	45	46	-	-	-	-
EBL	1	1500	12	14	15	17	0.01	0.01	0.01	0.01
EBT	1	1600	235	244	250	259	0.147 *	0.153 *	0.156 *	0.162 *
EBR	1	1500	114	128	200	214	0.08	0.09	0.13	0.14
WBL	1	1500	60	60	110	110	0.04 *	0.04 *	0.07 *	0.07 *
WBT	1	1600	217	222	239	244	0.136	0.139	0.149	0.153
WBR	1	1500	150	150	158	158	0.100	0.100	0.105	0.105
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.633**	**0.639**	**0.710**	**0.716**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**C**

NOTES:

Printed: 12/08/19

#18050 - MOORPARK RAILROAD DEPOT PROJECT REF: 02 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *P.M. PEAK HOUR*

N/S STREET: *SPRING STREET*

E/W STREET: *HIGH STREET*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	**169**	**576**	**209**	**196**	**265**	**44**	**37**	**290**	**129**	**79**	**262**	**501**
(B) PROJECT-ADDED:	**20**	**0**	**0**	**0**	**0**	**3**	**2**	**6**	**12**	**0**	**12**	**0**
(C) CUMULATIVE:	**222**	**675**	**260**	**230**	**365**	**58**	**50**	**308**	**167**	**120**	**308**	**530**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T T R	L T TR	L T R	L T R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	169	189	222	242	0.11	0.13	0.15	0.16
NBT	2	3200	576	576	675	675	0.180 *	0.180 *	0.211 *	0.211 *
NBR	1	1500	188	188	234	234	0.125	0.125	0.156	0.156
SBL	1	1500	196	196	230	230	0.131 *	0.131 *	0.153 *	0.153 *
SBT	2	3200	265	265	365	365	0.097	0.098	0.132	0.133
SBR	0	0	44	47	58	61	-	-	-	-
EBL	1	1500	37	39	50	52	0.03 *	0.03 *	0.03 *	0.04 *
EBT	1	1600	290	296	308	314	0.181	0.185	0.193	0.196
EBR	1	1500	129	141	167	179	0.09	0.09	0.11	0.12
WBL	1	1500	79	79	120	120	0.05	0.05	0.08	0.08
WBT	1	1600	262	274	308	320	0.164	0.171	0.193	0.200
WBR	1	1500	431	431	456	456	0.287 *	0.287 *	0.304 *	0.304 *
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.723**	**0.724**	**0.801**	**0.803**
					SCENARIO LEVEL OF SERVICE:		**C**	**C**	**C**	**C**

NOTES:

Printed: 12/08/19

#18050 - MOORPARK RAILROAD DEPOT PROJECT REF: 03 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *A.M. PEAK HOUR*

N/S STREET: *MOORPARK AVENUE*

E/W STREET: *POINDEXTER AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	71	279	8	6	287	283	205	26	70	3	48	16
(B) PROJECT-ADDED:	0	7	0	0	10	2	1	0	0	0	0	0
(C) CUMULATIVE:	90	357	10	10	320	290	215	30	80	10	50	20

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L R	L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	71	71	90	90	0.05 *	0.05 *	0.06 *	0.06 *
NBT	1	1600	279	286	357	364	0.179	0.184	0.229	0.234
NBR	0	0	8	8	10	10	-	-	-	-
SBL	1	1500	6	6	10	10	0.004	0.004	0.007	0.007
SBT	1	1600	287	297	320	330	0.356 *	0.364 *	0.381 *	0.389 *
SBR	0	0	283	285	290	292	-	-	-	-
EBL	1	1500	205	206	215	216	0.14 *	0.14 *	0.14 *	0.14 *
EBT	0	0	26	26	30	30	-	-	-	-
EBR	1	1500	70	70	80	80	0.05	0.05	0.05	0.05
WBL	1	1500	3	3	10	10	0.00	0.00	0.01	0.01
WBT	1	1600	48	48	50	50	0.040 *	0.040 *	0.044 *	0.044 *
WBR	0	0	16	16	20	20	-	-	-	-
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.680**	**0.688**	**0.728**	**0.737**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**C**

NOTES:

Printed: 12/08/19

#18050 - MOORPARK RAILROAD DEPOT PROJECT REF: 03PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *P.M. PEAK HOUR*

N/S STREET: *MOORPARK AVENUE*

E/W STREET: *POINDEXTER AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	63	344	14	8	293	257	230	28	62	6	31	14
(B) PROJECT-ADDED:	0	14	0	0	8	1	3	0	0	0	0	0
(C) CUMULATIVE:	70	527	15	10	325	270	240	30	75	10	40	15

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L R	WEST BOUND L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1500	63	63	70	70	0.04 *	0.04 *	0.05 *	0.05 *
NBT	1	1600	344	358	527	541	0.224	0.233	0.339	0.348
NBR	0	0	14	14	15	15	-	-	-	-
SBL	1	1500	8	8	10	10	0.005	0.005	0.007	0.007
SBT	1	1600	293	301	325	333	0.344 *	0.349 *	0.372 *	0.378 *
SBR	0	0	257	258	270	271	-	-	-	-
EBL	1	1500	230	233	240	243	0.15 *	0.16 *	0.16 *	0.16 *
EBT	0	0	28	28	30	30	-	-	-	-
EBR	1	1500	62	62	75	75	0.04	0.04	0.05	0.05
WBL	1	1500	6	6	10	10	0.00	0.00	0.01	0.01
WBT	1	1600	31	31	40	40	0.028 *	0.028 *	0.034 *	0.034 *
WBR	0	0	14	14	15	15	-	-	-	-
		LOST TIME:					0.10	0.10	0.10	0.10
		TOTAL INTERSECTION CAPACITY UTILIZATION:					**0.667**	**0.674**	**0.713**	**0.721**
		SCENARIO LEVEL OF SERVICE:					**B**	**B**	**C**	**C**

NOTES:

Printed: 12/08/19

#18050 - MOORPARK RAILROAD DEPOT PROJECT

REF: 04 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *A.M. PEAK HOUR*

N/S STREET: *MOORPARK AVENUE*

E/W STREET: *LOS ANGELES AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	74	83	171	156	48	109	150	805	38	87	868	101
(B) PROJECT-ADDED:	0	0	0	0	0	6	4	0	0	0	0	0
(C) CUMULATIVE:	80	90	180	227	60	140	190	981	40	110	1131	150

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L LT R	L LTR R	L TT TR	L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	74	74	80	80	-	-	-	-
NBT	2	3200	83	83	90	90	0.049	0.049	0.053	0.053
NBR	1	1500	171	171	180	180	0.114 *	0.114 *	0.120 *	0.120 *
SBL	0	0	156	156	227	227	-	-	-	-
SBT	3	4800	48	48	60	60	0.065 *	0.066 *	0.089 *	0.090 *
SBR	0	0	109	115	140	146	-	-	-	-
EBL	1	1500	150	154	190	194	0.10 *	0.10 *	0.13 *	0.13 *
EBT	3	4800	805	805	981	981	0.176	0.176	0.213	0.213
EBR	0	0	38	38	40	40	-	-	-	-
WBL	1	1500	87	87	110	110	0.06	0.06	0.07	0.07
WBT	2	3200	868	868	1131	1131	0.271 *	0.271 *	0.353 *	0.353 *
WBR	1	1500	101	101	150	150	0.067	0.067	0.100	0.100
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.650**	**0.654**	**0.789**	**0.792**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**C**

NOTES:

Printed: 12/08/19

#18050- MOORPARK RAILROAD DEPOT PROJECT REF: 04 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *P.M. PEAK HOUR*

N/S STREET: *MOORPARK AVENUE*

E/W STREET: *LOS ANGELES AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	69	50	147	196	90	110	145	949	37	277	979	132
(B) PROJECT-ADDED:	0	0	0	0	0	5	8	0	0	0	0	0
(C) CUMULATIVE:	75	70	150	230	100	140	170	1131	60	280	1131	200

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L LT R	L LTR R	L TT TR	L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	69	69	75	75	-	-	-	-
NBT	2	3200	50	50	70	70	0.037	0.037	0.045	0.045
NBR	1	1500	147	147	150	150	0.098 *	0.098 *	0.100 *	0.100 *
SBL	0	0	196	196	230	230	-	-	-	-
SBT	3	4800	90	90	100	100	0.083 *	0.084 *	0.098 *	0.099 *
SBR	0	0	110	115	140	145	-	-	-	-
EBL	1	1500	145	153	170	178	0.10 *	0.10 *	0.11 *	0.12 *
EBT	3	4800	949	949	1131	1131	0.205	0.205	0.248	0.248
EBR	0	0	37	37	60	60	-	-	-	-
WBL	1	1500	277	277	280	280	0.19	0.19	0.19	0.19
WBT	2	3200	979	979	1131	1131	0.306 *	0.306 *	0.353 *	0.353 *
WBR	1	1500	132	132	200	200	0.088	0.088	0.133	0.133
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.684**	**0.690**	**0.764**	**0.771**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**C**

NOTES:

Printed: 12/08/19

#18050- MOORPARK RAILROAD DEPOT PROJECT

REF: 05 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *A.M. PEAK HOUR*

N/S STREET: *SPRING ROAD*

E/W STREET: *LOS ANGELES AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**198**	**286**	**76**	**512**	**301**	**110**	**124**	**903**	**182**	**53**	**715**	**289**
(B) PROJECT-ADDED:	**0**	**1**	**0**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
(C) CUMULATIVE:	**220**	**361**	**90**	**675**	**403**	**150**	**220**	**1027**	**200**	**70**	**1031**	**300**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL T TR	LL T R	LL TT R	L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3000	198	198	220	220	0.07	0.07	0.07	0.07
NBT	2	3200	286	287	361	362	0.113 *	0.113 *	0.141 *	0.141 *
NBR	0	0	76	76	90	90	-	-	-	-
SBL	2	3000	512	524	675	687	0.171 *	0.175 *	0.225 *	0.229 *
SBT	1	1600	301	303	403	405	0.188	0.189	0.252	0.253
SBR	1	1500	110	110	150	150	0.07	0.07	0.10	0.10
EBL	2	3000	124	124	220	220	0.04	0.04	0.07 *	0.07 *
EBT	2	3200	903	903	1027	1027	0.282 *	0.282 *	0.321	0.321
EBR	1	1500	182	182	200	200	0.12	0.12	0.13	0.13
WBL	1	1500	53	53	70	70	0.04 *	0.04 *	0.05	0.05
WBT	2	3200	715	715	1031	1031	0.223	0.223	0.322 *	0.322 *
WBR	1	1500	289	297	300	308	0.193	0.198	0.200	0.205
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.701**	**0.705**	**0.861**	**0.865**
					SCENARIO LEVEL OF SERVICE:		**B**	**C**	**D**	**D**

NOTES:

Printed: 12/08/19

#18050 - MOORPARK RAILROAD DEPOT PROJECT REF: 05 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *P.M. PEAK HOUR*

N/S STREET: *SPRING ROAD*

E/W STREET: *LOS ANGELES AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**231**	**291**	**40**	**374**	**241**	**104**	**155**	**915**	**182**	**68**	**1014**	**667**
(B) PROJECT-ADDED:	**0**	**3**	**0**	**10**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**17**
(C) CUMULATIVE:	**230**	**240**	**70**	**462**	**272**	**130**	**240**	**1021**	**270**	**110**	**1291**	**717**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
IMPROVED LANE GEOMETRICS	LL T TR	LL T R	LL TTT R	L TTT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3000	231	231	230	230	0.08	0.08	0.08	0.08
NBT	2	3200	291	294	240	243	0.103 *	0.104 *	0.097 *	0.098 *
NBR	0	0	40	40	70	70	-	-	-	-
SBL	2	3000	374	384	462	472	0.125 *	0.128 *	0.154 *	0.157 *
SBT	1	1600	241	243	272	274	0.151	0.152	0.170	0.171
SBR	1	1500	104	104	130	130	0.07	0.07	0.09	0.09
EBL	2	3000	155	155	240	240	0.05 *	0.05 *	0.08 *	0.08 *
EBT	2	3200	915	915	1021	1021	0.286	0.286	0.319	0.319
EBR	1	1500	182	182	270	270	0.12	0.12	0.18	0.18
WBL	1	1500	68	68	110	110	0.05	0.05	0.07	0.07
WBT	2	3200	1014	1014	1291	1291	0.317 *	0.317 *	0.403 *	0.403 *
WBR	1	1500	667	684	717	734	0.445	0.456	0.478	0.489
			LOST TIME:				0.10	0.10	0.10	0.10
			TOTAL INTERSECTION CAPACITY UTILIZATION:				**0.697**	**0.701**	**0.834**	**0.838**
			SCENARIO LEVEL OF SERVICE:				**B**	**B**	**D**	**D**

NOTES:

Printed: 12/08/19

#18050- MOORPARK RAILROAD DEPOT PROJECT REF: 05 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *A.M. PEAK HOUR*

N/S STREET: *SPRING ROAD*

E/W STREET: *LOS ANGELES AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**198**	**286**	**76**	**512**	**301**	**110**	**124**	**903**	**182**	**53**	**715**	**289**
(B) PROJECT-ADDED:	**0**	**1**	**0**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
(C) CUMULATIVE:	**220**	**361**	**90**	**675**	**403**	**150**	**220**	**1027**	**200**	**70**	**1031**	**300**

GEOMETRICS

IMPROVED LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL T TR	LL T R	LL TTT R	L TTT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3000	198	198	220	220	0.07	0.07	0.07	0.07
NBT	2	3200	286	287	361	362	0.113 *	0.113 *	0.141 *	0.141 *
NBR	0	0	76	76	90	90	-	-	-	-
SBL	2	3000	512	524	675	687	0.171 *	0.175 *	0.225 *	0.229 *
SBT	1	1600	301	303	403	405	0.188	0.189	0.252	0.253
SBR	1	1500	110	110	150	150	0.07	0.07	0.10	0.10
EBL	2	3000	124	124	220	220	0.04	0.04	0.07 *	0.07 *
EBT	3	4800	903	903	1027	1027	0.188 *	0.188 *	0.214	0.214
EBR	1	1500	182	182	200	200	0.12	0.12	0.13	0.13
WBL	1	1500	53	53	70	70	0.04 *	0.04 *	0.05	0.05
WBT	3	4800	715	715	1031	1031	0.149	0.149	0.215 *	0.215 *
WBR	1	1500	289	297	300	308	0.193	0.198	0.200	0.205
			LOST TIME:				0.10	0.10	0.10	0.10
			TOTAL INTERSECTION CAPACITY UTILIZATION:				**0.607**	**0.611**	**0.754**	**0.758**
			SCENARIO LEVEL OF SERVICE:				**B**	**B**	**C**	**C**

NOTES:

Printed: 12/08/19

#18050 - MOORPARK RAILROAD DEPOT PROJECT REF: 05 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *JUNE 6, 2018*

TIME PERIOD: *P.M. PEAK HOUR*

N/S STREET: *SPRING ROAD*

E/W STREET: *LOS ANGELES AVENUE*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**231**	**291**	**40**	**374**	**241**	**104**	**155**	**915**	**182**	**68**	**1014**	**667**
(B) PROJECT-ADDED:	**0**	**3**	**0**	**10**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**17**
(C) CUMULATIVE:	**240**	**388**	**70**	**462**	**272**	**130**	**240**	**1021**	**270**	**110**	**1291**	**717**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
IMPROVED GEOMETRIC	LL T TR	LL T R	LL TTT R	L TTT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3000	231	231	240	240	0.08	0.08	0.08	0.08
NBT	2	3200	291	294	388	391	0.103 *	0.104 *	0.143 *	0.144 *
NBR	0	0	40	40	70	70	-	-	-	-
SBL	2	3000	374	384	462	472	0.125 *	0.128 *	0.154 *	0.157 *
SBT	1	1600	241	243	272	274	0.151	0.152	0.170	0.171
SBR	1	1500	104	104	130	130	0.07	0.07	0.09	0.09
EBL	2	3000	155	155	240	240	0.05 *	0.05 *	0.08 *	0.08 *
EBT	3	4800	915	915	1021	1021	0.191	0.191	0.213	0.213
EBR	1	1500	182	182	270	270	0.12	0.12	0.18	0.18
WBL	1	1500	68	68	110	110	0.05	0.05	0.07	0.07
WBT	3	4800	1014	1014	1291	1291	0.211 *	0.211 *	0.269 *	0.269 *
WBR	1	1500	667	684	717	734	0.445	0.456	0.478	0.489
					LOST TIME:		0.10	0.10	0.10	0.10
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.591**	**0.595**	**0.746**	**0.750**
					SCENARIO LEVEL OF SERVICE:		A	A	C	C

NOTES:

Printed: 12/08/19

PROJECT TRIP GENERATION

Associated Transportation Engineers
Trip Generation Worksheet - With In/Out Splits (no office)

MOORPARK PROJECT (#18050)															
Land-Use	Size	ADT		A.M.						P.M.					
		Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
Apartments (a)	91	7.32	666	0.46	42	23%	10	77%	32	0.56	51	63%	32	37%	19
Brewery (b)	3,824	112.18	429	0.00	0	50%	0	50%	0	9.77	37	62%	23	38%	14
Restaurant (b)	2,794	112.18	313	9.94	28	55%	15	45%	13	9.77	27	62%	17	38%	10
Retail/Commercial Space (c)	8,400	37.75	317	0.94	8	62%	5	38%	3	3.81	32	48%	15	52%	17
TOTAL PROJECT TRIPS:			**1,725**		**78**		**30**		**48**		**147**		**87**		**60**

(a) ITE trip generation rates for Multifamily Housing (#220)
(b) ITE trip generation rates for High-Turnover Restaurant (#932)
(c) ITE trip generation rates for Shopping Center (#820)

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RAILROAD DEPOT PROJECT (#18050)	**Organization:**	ATE
Project Location:	MOORPARK	**Performed By:**	DFN
Scenario Description:	PROJECT ADDED TRIPS	**Date:**	9/2/2019
Analysis Year:	2018	**Checked By:**	
Analysis Period:	AM Street Peak Hour	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	#820	8,400	SF	8	5	3
Restaurant	#932	6,618	SF	28	15	13
Cinema/Entertainment				0		
Residential	#220	91	units	42	10	32
Hotel				0		
All Other Land Uses[2]				0		
				78	30	48

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential		10%			10%	
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	3	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	78	30	48
Internal Capture Percentage	10%	13%	8%
External Vehicle-Trips[5]	66	25	41
External Transit-Trips[6]	4	1	3
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	0%	0%
Restaurant	20%	8%
Cinema/Entertainment	N/A	N/A
Residential	10%	9%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RAILROAD DEPOT PROJECT (#18050)	**Organization:**	ATE
Project Location:	MOORPARK	**Performed By:**	DFN
Scenario Description:	PROJECT ADDED TRIPS	**Date:**	9/2/2019
Analysis Year:	2018	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	#820	8,400	SF	32	15	17
Restaurant	#932	6,618	SF	64	40	24
Cinema/Entertainment				0		
Residential	#220	95	units	51	32	19
Hotel				0		
All Other Land Uses[2]				0		
				147	87	60

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential		10%			10%	
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		5	0	4	0
Restaurant	0	8		0	4	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	2	4	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	147	87	60
Internal Capture Percentage	37%	31%	45%
External Vehicle-Trips[5]	90	58	32
External Transit-Trips[6]	3	2	1
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	67%	53%
Restaurant	23%	50%
Cinema/Entertainment	N/A	N/A
Residential	25%	32%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Appendix E

Cultural Resources Assessment Report



High Street Station Mixed Use Development

Cultural Resources Assessment Report

prepared for
Daly Group Inc.
31255 Cedar Valley Drive, Suite 323
Westlake Village, California 91362
Contact: Jasch Janowicz

prepared by
Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93001

June 2018

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers
www.rinconconsultants.com

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1 Executive Summary

Rincon Consultants, Inc. (Rincon) was retained by Daly Group Inc. to prepare an Initial Study and Mitigated Negative Declaration (IS-MND) for the High Street Station Mixed Use Development, located in the city of Moorpark in the Downtown Specific Plan Area, in Ventura County, California. As part of the IS-MND, Rincon was scoped with the preparation of this cultural resources study to identify cultural resources with the potential to be impacted by the proposed project. The study included a cultural resources records search, Native American consultation, an intensive-level pedestrian survey, and historic evaluation of the subject parcel, culminating in the compilation of this report. All work completed in this study was conducted in accordance with the requirements of the California Environmental Quality Act (CEQA) and applicable local regulations.

The proposed project boundary encompasses a 2.15-acre parcel (Assessor Parcel Number: 512-0-090-115). Five built environment resources were identified within the boundary of the proposed project. They include two large grain storage buildings that line the parcel's southern boundary, constructed circa 1956; an additional grain storage building, the facades of which were designed to mimic those of a historic railroad depot constructed in 1979; and two industrial buildings, constructed in 1954 and 1964. According to the current project description, construction of the proposed project requires the demolition of all five of the extant buildings.

The subject parcel was recorded on California Department of Parks and Recreation (DPR) 523 series forms and evaluated for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and as a City of Moorpark Landmark. The subject property appears ineligible for listing in the NRHP, CRHR, or as a City of Moorpark Landmark under any of the applicable significance criteria. Therefore, the subject parcel is not considered an historical resource as defined by CEQA. As a result, the demolition of the buildings on the subject parcel would not result in a significant adverse impact to historical resources.

Although the project site is not considered an historical resource in accordance with CEQA, the proposed project site is bound to the north by a segment of Ventura County Landmark # 72 that consists of a row of pepper trees planted by early Moorpark settlers John Nubee and John Barrett in 1904. Although the proposed project does not include any adjacent street trees, due to the proximity of the trees to the project area, they may be vulnerable to damage during project construction. Trees located near where mechanized equipment will be used can be susceptible to bark removal, branch breakage, or surface grading, all of which can result in significant damage or death of the tree. Therefore, Rincon recommends the implementation of CUL-1 to minimize impacts to this historical resource during construction activities.

No archaeological resources were found within the proposed project boundary. However, 11 cultural resources within 0.5-mile radius of the project APE were identified during the records search. Of these resources, four are prehistoric and seven are historical. Rincon assisted the City of Moorpark with Native American consultation in accordance with California Assembly Bill (AB) 52 by contacting the Native American Heritage Commission (NAHC) and requesting a Sacred Lands File (SLF) search of the project area. The NAHC responded with negative results for the SLF, but in accordance with AB 52, the NAHC provided a list of Native American contacts that was given to the City to initiate the tribal consultation. Although no archaeological resources were identified during the records search, CUL-2 and CUL-3 are recommended in case of unanticipated discoveries.

CUL-1 Avoidance of impacts to Ventura County Landmark #72

Avoidance of impacts to Ventura County Landmark # 72 shall be accomplished through the implementation of the City of Moorpark's Tree Preservation Guidelines (Moorpark Municipal Code 12.12.060). In order to protect trees during construction, a physical barrier (flagging or safety fencing) should be installed around any adjacent pepper trees that are situated near mechanized equipment. Completion of this mitigation measure shall be monitored and enforced by the City of Moorpark.

CUL-2 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA, additional work such as data recovery excavation may be warranted.

CUL-3 Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the state of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify an MLD. The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

2 Introduction

Rincon was retained by Daly Group Inc. to prepare an IS-MND for the High Street Station Mixed Use Development (proposed project), located in Moorpark in the City's Downtown Specific Plan Area, in Ventura County, California (Figure 1). As part of the IS-MND, Rincon was scoped with the preparation of this cultural resources study to identify historical resources with the potential to be impacted by the proposed project. The study included a cultural resources records search, Native American consultation, an intensive-level pedestrian survey, historic evaluation of the subject parcel, and the completion of this report. All activities completed as a component of this study were conducted in accordance with the requirements of the CEQA and applicable local regulations.

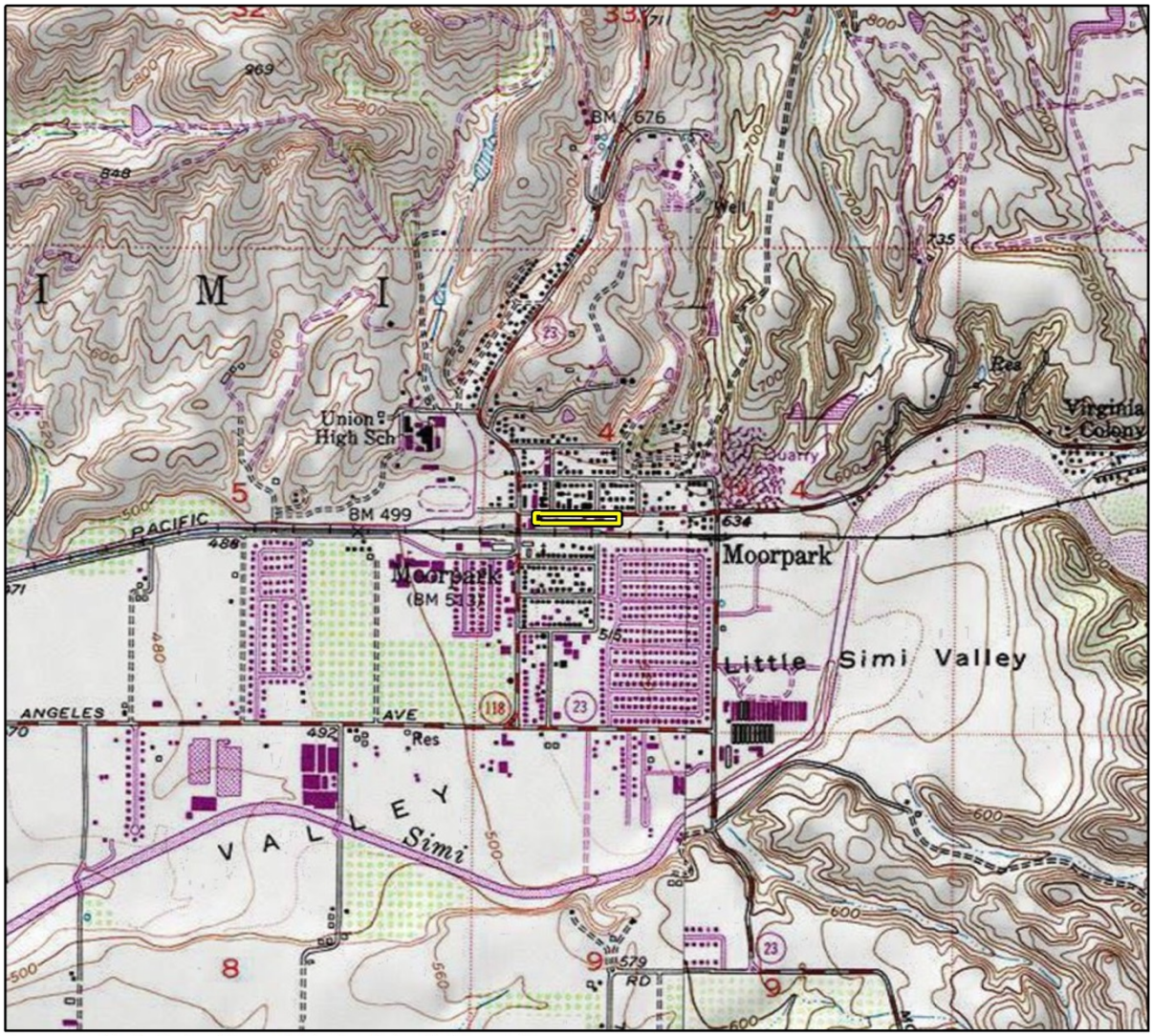
2.1 Project Description

The proposed project site is located Moorpark in the City's Downtown Specific Plan Area. The project site consists of one 2.15-acre parcel, adjacent to (north of) the railroad right-of-way, on High Street (Figure 2). Five buildings are located within the project boundary: three large grain storage buildings and two ancillary buildings. The properties surrounding the project site are primarily of commercial use.

The proposed project is a mixed use development on the 2.15-acre site to include:

- 77 residential units
- Up to 7,243 square feet of commercial space
- Approximately 720 square feet of amenity space
- 140 associated on-site parking spaces
- Approximately 8,725 square feet of circulation area

Figure 1 Project Vicinity



Imagery provided by National Geographic Society, Esri and its licensors © 2018. Moorpark Quadrangle. T02N R19W S04. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Project Location

0 1,000 2,000 Feet

N

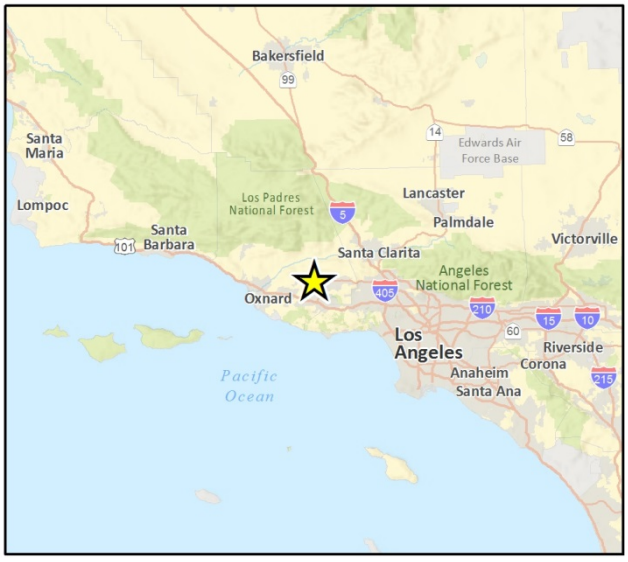


Figure 2 Project Location



Imagery provided by Google and its licensors © 2018.

Fig 2 Project Location

3 Regulatory Setting

This section discusses applicable federal, state, and local laws, ordinances, regulations, and standards governing cultural resources to which the proposed project must adhere before and during implementation.

3.1 Federal

The proposed project does not involve federal funding or permitting (i.e., have a federal nexus) and, therefore, compliance with the provisions of the National Historic Preservation Act of 1966 (NHPA) and other federal laws is provided here for informational purposes only. Projects that have a federal nexus must comply with NHPA, as amended (16 United States Code [U.S.C.] 470f). Cultural resources are considered during federal undertakings chiefly under Section 106 of NHPA through one of its implementing regulations, 36 Code of Federal Regulations (CFR) 800 (Protection of Historic Properties), and the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d) (6) (A) of NHPA. Other relevant federal laws include the Archaeological Data Preservation Act of 1974, American Indian Religious Freedom Act of 1978, Archaeological Resources Protection Act of 1979, and Native American Graves Protection and Repatriation Act of 1989.

The NRHP was established by NHPA as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (CFR 36, CFR 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if any of the following are true:

a. It is associated with events that have made a significant contribution to the broad patterns of our history.

b. It is associated with the lives of persons significant in our past.

c. It embodies the distinctive characteristics of a type, period, or method of installation, or represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.

d. It has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting these criteria, a property must retain historic integrity, defined in National Register Bulletin 15 as the "ability of a property to convey its significance" (National Park Service 1990). In order to assess integrity, the National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined in the following manner in National Register Bulletin 15:

1. **Location.** The place where the historic property was constructed or the place where the historic event occurred
2. **Design.** The combination of elements that create the form, plan, space, structure, and style of a property
3. **Setting.** The physical environment of a historic property
4. **Materials.** Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
5. **Workmanship.** The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory
6. **Feeling.** A property's expression of the aesthetic or historic sense of a particular period of time
7. **Association.** The direct link between an important historic event or person and a historic property

3.2 State

As the lead agency for the proposed project, the City of El Segundo must comply with the provisions of CEQA, which requires a lead agency to determine whether a project may have a significant effect on historical resources (PRC Section 21084.1). An historical resource is one listed, or determined to be eligible for listing, in the CRHR; a resource included in a local register of historical resources; or an object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (*State CEQA Guidelines*, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
2. Is associated with the lives of persons important to our past
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
4. Has yielded, or may be likely to yield, information important in prehistory or history

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person

As of July 1, 2015, 52 of 2014 was enacted and expands CEQA by defining a new resource category: tribal cultural resources. AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1 (in applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe)

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency.

Assembly Bill 52

As of July 1, 2015, AB 52 was enacted and expands CEQA by defining a new resource category called *Tribal Cultural Resources* (TCR). AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a TCR, when feasible (PRC Section 21084.3).

PRC Section 21074(a)(1)(A) and (B) defines TCRs as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources, as defined in PRC Section 5020.1(k)
- A resource determined by the lead agency, at its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe

A resource determined by the lead agency, at its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying

these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe

3.3 Local

In addition to federal and state regulations, projects built in the City of Moorpark are also subject to a number of local regulations relating to historical resources. Chapter 15.38 of the Moorpark Municipal Code pertains specifically to historic preservation within the city. Cited in Section 15.33.010 of the Municipal Code, its purpose is as follows:

> *To provide for the identification, protection, enhancement, perpetuation and use of historic landmarks within the city that reflects special elements of the city's historical heritage and to promote the general welfare by:*
>
> *A. Encouraging public knowledge, understanding, and appreciation of the city's past*
>
> *B. Fostering civic pride in the beauty and personality of the city and in the accomplishments of the city's past*
>
> *C. Safeguarding the heritage of the city by protecting landmarks that reflect the city's history*
>
> *D. Protecting and enhancing property values within the city and increasing economic and financial benefits to the city and its inhabitant*
>
> *E. Identifying as early as possible and resolving conflicts between the preservation of historical landmarks and alternative land uses*
>
> *F. Preserving historic building materials through maintenance and restoration of existing historical landmarks*
>
> *G. Taking whatever steps are reasonable and necessary to safeguard the property rights of the owners whose building or structure is declared to be a landmark*
>
> *H. Promoting the use of landmarks for the education and enjoyment of the people of the city*
>
> *I. Promoting awareness of the economic benefits of historic preservation*
> (Moorpark Municipal Code Section 15.36.10 1994)

The ordinance establishes the procedure for the designation of cultural resources in Moorpark. The criterion for the designation of a landmark is as follows:

> *A building, site, tree or structure may be designated as a landmark if it is found that the proposed landmark meets one or more of the following criteria:*
>
> *1. It is associated with persons or events significant in local, state, or national history.*
>
> *2. It reflects or exemplifies a particular period of national, state, or local history.*
>
> *3. It embodies the distinctive characteristics of a type, style or period of architecture or of a method of construction.*
>
> *4. It is strongly identified with a person or persons who significantly contributed to the culture, history or development of the area.*
>
> *5. It is one of the few remaining examples in the area possessing distinguishing characteristics of an architectural type of specimen.*
>
> *6. It is a notable work of an architect or master builder whose individual work has significantly influenced the development of the area.*

7. It embodies elements of architectural design, detail, materials or craftsmanship that represents a significant architectural innovation.

8. It has a unique location or singular physical characteristics representing an established and familiar visual feature of a neighborhood, community or the area.

9. It has unique design or detailing.

10. It is a particularly good example of a period of style.

11. It contributes to the historical or scenic heritage or historical or scenic properties of the area (to include, but not limited to landscaping, light standards, trees, curbing and signs). (Moorpark Municipal Code Section 15.36.060 1994)

3.3.1 City of Moorpark Historic Trees

Historic trees are discussed in Title 12 of the City of Moorpark Municipal Code. Chapter 12.12.060, *Tree Preservation Guidelines*, provides instruction that pertain specifically to the preservation of trees. These guidelines are provided below, and should be adhered to throughout the construction of the proposed project to ensure protection of the historic trees.

a. Initial project layout, design and grading shall recognize the desirability of preserving native oak trees, historic trees or mature trees with appropriate modifications and adjustments to accommodate preservation and maintenance by locating the best candidates in areas where preservation is feasible. Design of the grading and other improvements shall reflect consideration of the following safeguards:
    1. Location in minimum growing areas as required by individual species
    2. No disruption or removal of structural feeder roots
    3. Fencing of trees at or beyond their driplines during grading and construction activities
    4. No filling, cutting, development or compaction of soils within the dripline
    5. Such other measures required by the species of tree to be preserved as recommended by the consulting arborist, horticulturist or landscape architect
b. It is recognized that the complete preservation of healthy trees may sometimes conflict with normal land developmental considerations such as proper drainage, grading, circulation, safety and provision of utilities. Within a given development, it may not be practical to preserve all healthy trees, and therefore, the city and the developer must be willing to compromise the goal of complete tree preservation in order to address other public safety and design concerns. In such instances, the design of the development must address preservation of the most desirable and significant of the healthy trees and the developer is encouraged to utilize creative land planning techniques to achieve this end.
c. The planning commission of the city, when reviewing development plans, shall determine the adequacy and appropriateness of the proposed preservation plan.
d. Following approval of such a development, the developer shall submit grading, improvement and precise landscaping plans detailing the approved preservation plan. Such plans shall be approved by the city engineer and/or the director of community development, as appropriate. Prior to use inauguration, the preserved trees shall be trimmed for balance, structural integrity, ornamental appearance and treated for any diseases.

e. The precise vertical and horizontal locations plus or minus 1 foot of all mature trees shall be shown on an exhibit as part of the initial application for any project unless that project would involve no exterior construction activities (Ord. 101 § 1, 1988).

4 Natural and Cultural Setting

4.1 Natural Setting

The proposed project is located in Moorpark at an elevation of 515 feet above mean sea level. It is situated in a predominantly urban environment, surrounded by commercial and civic buildings as well as residential neighborhoods. Five buildings are currently located at proposed project site. Vegetation in the proposed project boundary at the time of the survey consisted of sections of grass and mature ornamental trees including pepper and palm trees.

4.2 Cultural Setting

4.2.1 Prehistoric Overview

During the 20th century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of southern California (Moratto 1984, Jones and Klar 2007). A prehistoric chronology was devised for the southern California coastal region based on early studies and focused on data synthesis that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric (Wallace 1955, 1978). Though initially lacking the chronological precision of absolute dates (Moratto 1984:159), Wallace's 1955 synthesis has been modified and improved using thousands of radiocarbon dates obtained by Southern California researchers over recent decades (Byrd and Raab 2007:217; Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The prehistoric chronological sequence for Southern California presented below is a composite based on Wallace (1955) and Warren (1968) as well as later studies, including Koerper and Drover (1983).

Early Man Horizon (ca. 10,000 – 6000 B.C.)

Numerous pre-8000 BC sites have been identified along the mainland coast and Channel Islands of southern California (Moratto 1984; Erlandson 1991; Rick et al. 2001:609; Johnson et al. 2002; Jones and Klar 2007). The Arlington Springs site on Santa Rosa Island produced human femurs dated to approximately 13,000 years ago (Johnson et al. 2002; Arnold et al. 2004). On nearby San Miguel Island, human occupation at Daisy Cave (SMI-261) has been dated to nearly 13,000 years ago and included basketry greater than 12,000 years old, the earliest recorded on the Pacific Coast (Arnold et al. 2004).

Although few Clovis- or Folsom-style fluted points have been found in Southern California, Early Man Horizon sites are generally associated with a greater emphasis on hunting than subsequent horizons (Erlandson et al. 1987; Dillon 2002). Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas and on inland Pleistocene lakeshores (Moratto 1984; Jones et al. 2002). A warm and dry 3,000-year period called the Altithermal began around 6000 BC. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

Milling Stone Horizon (6000–3000 BC)

Wallace defined the Milling Stone Horizon as "marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns" (Wallace 1955:219). The dominance of such artifact types indicate a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources were consumed including small and large terrestrial mammals, sea mammals, birds, shellfish and other littoral and estuarine species, near-shore fishes, yucca, agave, and seeds and other plant products (Reinman 1964; Kowta 1969). Variability in artifact collections over time and from the coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007:220). Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone and in addition to ground stone tools, such as manos and metates, chopping, scraping, and cutting tools, are very common. Kowta attributes the presence of numerous scraper-plane tools in Milling Stone Horizon collections to the processing of agave or yucca for food or fiber (Kowta 1969). The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968).

Two types of artifacts that are considered diagnostic of the Milling Stone period are the cogged stone and discoidal, most of which have been found in sites dating between 4,000 and 1,000 BC (Moratto 1984:149), though possibly as far back as 5,500 BC (Couch et al. 2009). The cogged stone is a ground stone object that has gear-like teeth on the perimeter and is produced from a variety of materials. The function of cogged stones is unknown, but many scholars have postulated ritualistic or ceremonial uses (Eberhart 1961:367; Dixon 1968:64-65;). Similar to cogged stones, discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals were often purposefully buried, or "cached." They are most common in sites along the coastal drainages from southern Ventura County southward and are particularly abundant at some Orange County sites, although a few specimens have been found inland at Cajon Pass (Dixon 1968:63; Moratto 1984:149). Discoidals and cogged stones have been found together at some Orange County sites, such as CA-ORA-83/86/144 (Van Bueren et al. 1989:772) and Los Cerritos Ranch (Dixon 1975). Cogged stones have been collected in Riverside County and their distribution appears to center on the Santa Ana River basin (Eberhart 1961).

Mortuary practices observed at Milling Stone Horizon sites include extended and loosely flexed burials. Flexed burials oriented north were common in Orange and San Diego counties, with reburials common in Los Angeles County (Wallace 1955, 1978; Warren 1968).

Intermediate Horizon (3,000 B.C. – A.D. 500)

Wallace's Intermediate Horizon dates from approximately 3,000 BC-AD 500 and is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods. During the Intermediate Horizon, a noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish, land mammal, and sea mammal remains along the coast. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (Glassow et al. 1988; True 1993). Mortuary practices during the

Intermediate typically included fully flexed burials oriented toward the north or west (Warren 1968:2-3).

Late Prehistoric Horizon (AD 500–Historic Contact)

During Wallace's Late Prehistoric Horizon the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon (Wallace 1955, 1978). More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955:223).

According to Warren (1968), the period between A.D. 500 and European contact is divided into three regional patterns. The Chumash Tradition is present mainly in the region of Santa Barbara and Ventura counties; the Takic or Numic Tradition is present mainly in the Los Angeles and Orange Counties region; and the Yuman Tradition is present mainly in the San Diego region. The seemingly abrupt changes in material culture, burial practices, and subsistence focus at the beginning of the Late Prehistoric period are considered the result of a migration to the coast of peoples from inland desert regions to the east. This Takic or Numic Tradition was formerly referred to as the "Shoshonean wedge" or "Shoshonean intrusion" (Warren 1968); however, the Chumash were not assimilated or replaced and retained cultural identity.

After A.D. 500, a wealth of ornaments, ceremonial, and artistic items characterize the Chumash Tradition (Warren 1968) along the central coast and offshore islands. Ground stone items include bowls, mortars and pestles, balls, grooved stones, doughnut stones, stone beads, pendants, pipes, tubes, and mammal effigies. Projectile points, both large and small, were typically non-stemmed and leaf-shaped, with convex or concave bases. Chipped stone implements also included drills and scrapers. Utilitarian objects were made from bone (e.g., awls, fishhooks, whistles, and tubes) and shell (e.g., fishhooks and abalone shell dishes). Shell beads and ornaments were abundant, and bowls, pestles, pipes, and stone tubes were inlaid with shell beads and engraved. Bowls, pipes, and ornaments were commonly manufactured from steatite.

Characteristic mortuary practices during the Chumash Tradition included burial in crowded cemeteries. Burials are normally flexed, placed face down, and oriented toward the north or west (Warren 1968:5). The interments are typically marked by vertical pieces of whalebone, and have abundant grave goods, such as ornaments, effigies, and utensils.

4.2.2 Ethnographic Overview

The project site lies within an transitional area historically occupied by the Ventureño Chumash, so called after their historic period association with Mission San Buenaventura (Grant 1978a) and the Tataviam or Fernandeño named after their association with the Mission San Fernando. Ethnographic discussions of both groups are provided here.

Chumash

The Chumash spoke six closely related Chumashan languages, which have been divided into three branches—Northern Chumash (consisting only of Obispeño), Central Chumash (consisting of Purisimeño, Ineseño, Barbareño, and Ventureño), and Island Chumash (Jones and Klar 2007:80).

Groups neighboring Chumash territory included the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrielino (Tongva) to the south.

Early Spanish accounts describe the Santa Barbara Channel as heavily populated at the time of contact. Estimates of the total Chumash population range from 8,000-10,000 (Kroeber 1925:551) to 18,000-22,000 (Cook and Heizer 1965: 21). Coastal Chumash lived in hemispherical dwellings made of tule reed mats, or animal skins in rainy weather. These houses could usually lodge as many as 60 people (Brown 2001). The village of šukuw, (or shuku), at Rincon Point, was encountered by Gaspar de Portola in 1769. This village had 60 houses and seven canoes, with an estimated population of 300 (Grant 1978b).

The tomol, or wooden plank canoe, was an especially important tool for the procurement of marine resources and for maintaining trade networks between Coastal and Island Chumash. Sea mammals were hunted with harpoons, while deep-sea fish were caught using nets and hooks and lines. Shellfish were gathered from beach sands using digging sticks, and mussels and abalone were pried from rocks using wood or bone wedges.

The acorn was an especially important resource. Acorn procurement and processing involved the manufacture of baskets for gathering, winnowing, and cooking and the production of mortars and milling stones for grinding. Bow and arrow, spears, traps and other various methods were used for hunting (Hudson and Blackburn 1979). The Chumash also manufactured various other utilitarian and non-utilitarian items. Eating utensils, ornaments, fishhooks, harpoons, and other items were made using bone and shell. *Olivella* shell beads were especially important for trade.

The Chumash were heavily affected by the arrival of Europeans. The Spanish missions and later Mexican and American settlers dramatically altered traditional Chumash lifeways. Chumash population was drastically reduced by the introduction of European diseases. However, many Chumash descendants still inhabit the region.

Tataviam

The Tataviam were not well documented by early ethnographers; however, researchers today generally agree that the Tataviam spoke a Uto-Aztecan language, most likely a Takic language (Hudson 1982). Tataviam territory included the upper Santa Clara River from Piru Creek eastward, extending over the Sawmill Mountains to the southwest edge of the Antelope Valley (King and Blackburn 1978). Their territory was bounded on the west and north and west by various Chumash groups; on the south by the Tongva (Gabrielino and Fernandeño, though some Tataviam were also identified as Fernandeño because of their association with Mission San Fernando); and to the east by the Kitanemuk and Serrano.

Exogamous marriage was common, with Tataviam intermarrying with Tongva, Chumash, and Kitanemuk neighbors (King and Blackburn 1978). King and Blackburn (1978) hypothesize that the Tataviam relied on yucca as a food source more than their neighbors because of the predominance of large south-facing slopes within their territory. Additional food resources included acorns, sage seeds, berries, small mammals, and deer. Settlement size ranged from 10 to 200 persons, with small settlements often ancillary to large villages. Archaeological evidence from Bower's Cave – located between Newhall and Piru – combined with ethnographic evidence suggest their ritual organization was similar to both the Chumash and Gabrielino. By 1810 the Tataviam were virtually completely "missionized" through baptism at Mission San Fernando.

4.3 Historic Overview

Post-European contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present).

Spanish Period (1769–1822)

Spanish exploration of California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in what was then known as Alta (upper) California at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. It was during this time that initial Spanish settlement of the project vicinity began. Portolá passed though the project vicinity and the village of Calleguas in 1770. Juan Bautista de Anza followed Portolá's route in 1774. In 1782, Father Junipero Serra founded Mission San Buenaventura, in what is now downtown Ventura, approximately 20 miles west of the proposed project site, as the crow flies.

Mexican Period (1822–1848)

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. This Act enabled Mexican governors in California to distribute mission lands to individuals in the form of land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). About 20 land grants (ranchos) were located in Ventura County.

The Mexican Period for Ventura County and adjacent areas ended in early January 1847. Mexican forces fought combined US Army and Navy forces in the Battle of the San Gabriel River on January 8 and in the Battle of La Mesa on January 9 (Nevin 1978). American victory in both of these battles confirmed the capture of Los Angeles by American forces (Rolle 2003). On January 10, leaders of the Pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander of California Andrés Pico surrendered all of Alta California to US Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga (Nevin 1978).

American Period (1848–Present)

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of southern California continued to increase during the early American Period. Many ranchos in the county were sold or otherwise acquired by Americans, and most were subdivided into agricultural parcels or towns.

The discovery of gold in northern California in 1848 led to the California Gold Rush (Guinn 1977; Workman 1935:26). The presence of commercial grade oil in what became Ventura County was discovered in 1852 at Rancho Ojai (Franks and Lambert 1985). By 1853, the population of California

exceeded 300,000. Ventura County was officially divided from Santa Barbara County on January 1, 1873. Thousands of settlers and immigrants continued to pour into the state, particularly after the completion of the transcontinental railroad in 1869 and into the real estate "boom of the Eighties" (Dumke 1944). The Saugas to Santa Barbara Branch (or Santa Paula Branch) of the Southern Pacific Railroad was constructed in the mid-1880s, encouraging travel through and settlement of the Santa Clara River Valley, as well as a large distribution network for its citrus and other products (Sperry 2006).

City of Moorpark

The geographic area that encompasses the current-day city of Moorpark was historically part of the 113,000-acre Rancho San José de Nuestra Senora de Altagracia y Simi (commonly known as Rancho Simi) which was granted by Govoner Diego de Borica to Javier, Patricio, and Miguel Pico in 1795. Rancho Simi remained rural in the decades after its granting, primarily utilized for the grazing of cattle. Completed in 1861 and following an extant Chumash trail, a road was established through the Simi Valley to accommodate overland mail delivery. Although rudimentary, the road additionally enabled wagon transport in an area previously inaccessible to such travel and made further development of the region possible (Appleton 2009).

Rancho Simi was transferred several times including an acquisition by the Philadelphia and California Petroleum Company for the exploration of oil. However, oil extraction failed to produce sufficient quantities and by1887, Rancho Simi was subdivided and sold. Robert W. Poindexter, secretary of the Simi Land and Water Company, eventually purchased the land which became Moorpark. Prior to the coming of the Southern Pacific Railroad in 1900, two communities has been established in the vicinity of current-day Moorpark; Poindexter had established Fremontville, located to the west of current-day Moorpark and a group of Methodist ministers had settled Epworth, northwest of current-day Moorpark. During this period, settlers engaged in dry-land farming producing beans, hay and apricots (Winters 2016).

In 1900, Poindexter founded the town of Moorpark under anticipation of the Southern Pacific's arrival. The community was named for the Moorpark apricot, which grew successfully throughout the Simi Valley region (City of Moorpark 2015). From this point forward, beginning with the construction of the original Southern Pacific Railroad Depot, the subject parcel has been in continual use. Following the arrival of the Railroad, further growth within the Moorpark area was enabled. The economy continued to be based in agriculture; however profitability was increased with the option of exporting goods already being quite successfully produced in the Valley. As the system of irrigation became more sophisticated, the variety of crops being produced increased to include citrus and walnuts (Winters 2016).

Agriculture continued to be the backbone of the economy in Moorpark throughout the World War II years. The poultry industry, which arrived in the Valley in the 1920s, also made significant contributions. Moorpark was home to a number of poultry ranches during the period, including Egg City, which was the largest producer of eggs during the 1970s. Consistent with trends throughout Southern California, in particular in areas within close proximity to Los Angeles, following the Second World War, the Simi Valley region saw an increase in large scale suburban development of formally agricultural lands. This trend impacted Moorpark, although less so than in other areas in the region. Moorpark became the first town in the United States to run exclusively off of nuclear power, provided by the Simi Hills sodium reactor, in 1957 (Barnett 2003). The City of Moorpark was incorporated on July 1, 1983.

5 Background Research

5.1 California Historical Resources Information System

On May 29, 2018, Rincon cultural resources personnel conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The search was conducted to identify all previously conducted cultural resources work as well as identify any previously recorded cultural resources within a one-half mile radius of the project APE. The CHRIS search included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic US Geological Survey 7.5- and 15-minute quadrangle maps.

5.1.1 Previously Conducted Cultural Resource Studies

The SCCIC records search identified 31 previous studies within a 0.5-mile radius of the project site (Table 1), one of which included the project APE (VN-01102). Seven were located adjacent to the project APE (VN-00572, VN-01153, VN-01265, VN-02053, VN-2504, VN-03094, VN-03210) (Appendix A).

Table 1 Previously Conducted Studies within 0.5-Mile of the Project Site

SCCIC Report No.	Author	Year	Study	Proximity to Project APE
VN-00112	Desautels, R.	1978	Archaeological Survey Report on a 600+/-Acre Parcel of Land Located in the Moorpark Area of the County of Ventura, California	Outside
VN-00191	Lopez, R.	1979	An Archaeological Reconnaissance of Korwasser Estates, Tract 3271, Moorpark, Ventura County, California (m-2774.3)	Outside
VN-00549	Callison, S.	1979	Cultural Resource Survey for Cup 3600	Outside
VN-00557	Callison, S.	1980	Cultural Resource Survey for Pm-3496	Outside
VN-00558	Callison, S.	1979	Cultural Resources Survey for Pm-3408	Outside
VN-00572	Dames and Moore	1988	Phase 1 Cultural Resources Survey Fiber Optic Cable Project, Burbank to Santa Barbara, California for US Sprint Communications Company	Adjacent
VN-01019	Callison, S.	1979	Cultural Resources Survey of: Tr-2723	Outside
VN-01102	Singer, C.	1977	Preliminary Cultural Resource Survey and Potential Impact Assessment for 13 Areas in Southern Ventura County, California	**Within**

SCCIC Report No.	Author	Year	Study	Proximity to Project APE
VN-01153	Peak and Associates, Inc.	1991	Class 3 Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angeles counties, California	Adjacent
VN-01265	Reed, L.	1992	Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project	Adjacent
VN-01329	Whitley, D. and J. Simon	1994	Phase 1 Archaeological Survey and Cultural Resources Assessment for the Levy Specific Plan Study Area, Ventura County, California	Outside
VN-01377	Knell, E.	1995	Cultural Resource Reconnaissance of Moorpark Specific Plan #2 EIR, Moorpark ,Ventura County, California	Outside
VN-01548	Anonymous	1997	Phase 1 Archaeological Survey and Cultural Resources Assessment for the Moorpark Street Improvements Project Study Area, Ventura County, California	Outside
VN-01619	Unknown	1998	Phase I Archaeological Survey and Cultural Resources Assessment of the Burnette Property, Moorpark, Ventura County, California	Outside
VN-01680	Maxon, P.	1998	Archaeological Test Excavation of CA-VEN-1574 on the Suncal Development, Tentative Tract 5130, Moorpark, Ventura County, California	Outside
VN-02052	Whitley, D. and J. Simms	2000	Phase I Archaeological Survey of the Gisler Fields Project Study Area, Moorpark, Ventura County, California	Outside
VN-02053	Whitley, D. and J. Simms	1999	Phase I Archaeological Survey of the Charles Street Affordable Housing Project Study Area, Moorpark, Ventura County, California	Adjacent
VN-02314	Whitley, D. and J. Simon	2003	Phase I Archaeological Survey of Hitch Ranch, Moorpark, Ventura County, California	Outside
VN-02315	Whitley, D. and J. Simon	2003	Phase I Archaeological Survey of a 15 Acres Study Area in Moorpark, Ventura County, California	Outside
VN-02320	Stone, D.	2004	Phase 1 Archaeological Resources Report, Birkenshaw Site, 251 Moorpark Avenue, Moorpark, California	Outside
VN-02345	Whitley, D.	2004	Limited Archaeological Testing at Sites CA-VEN-1265H, -1267H and -1269H, Moorpark Highlands, Moorpark, Ventura County, California	Outside

SCCIC Report No.	Author	Year	Study	Proximity to Project APE
VN-02390	Jordan, S. and J. Patterson	2006	Archaeological Survey Report for the Southern California Edison Company Replacement of 30 Deteriorated Poles Private and Public Inholdings, Ventura, Los Angeles, and Santa Barbara counties, California	Outside
VN-02504	Arrington, C. and N. Sikes	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II	Adjacent
VN-02521	Schmidt, J.	2007	DWO 6335-6792; AI 6-1190: Essex Properties Overhead Relocation Project, Moorpark Area, Ventura County.	Outside
VN-02852	Whitley, D.	2004	Phase I Archaeological Survey for TTM 5505, Moorpark, Ventura County, California	Outside
VN-02853	Whitley, D.	2003	Phase I Archaeological Survey for the Moorpark Human Services Complex, Moorpark, Ventura County, California	Outside
VN-02981	Maxon, P.	2008	Moorpark Vistas & North Hills Parkway Extension Archaeology	Outside
VN-03094	Foster, J.	2002	Historic Resource Evaluation Report-Mason Avenue At-Grade Crossing and Safety Improvements Project, Los Angeles, California	Adjacent
VN-03210	Carmack, S., B. Campbell, and C. Duran	2015	Housing Authority of Ventura County Moorpark Affordable Housing Project	Adjacent
VN-03251	Simon, J. and R. Rechtman	2014	Phase I Archaeological Survey for TTM 5505, Moorpark, Ventura County, California	Outside
VN-03266	Stone, D. and K. Victorino	2014	Archaeological Survey Report Vistas at Moorpark Ventura County, California	Outside

Source: South Central Coastal Information Center 2018

5.1.1.1 VN-01102

Study VN-01102, *Preliminary Cultural Resource Survey and Potential Impact Assessment for Thirteen Areas in Southern Ventura, California*, conducted by Clay A. Singer in 1977 encompassed the current project APE. The study surveyed 13 areas in southern Ventura including downtown Moorpark, the County Road Division yard, and the reservoir area off of Walnut Canyon Drive. No archaeological sites or historical resources were identified during this study.

5.1.2 Previously Recorded Cultural Resources

The SCCIC records search identified 11 previously recorded cultural resources within a 0.5-mile radius of the project APE (Table 2) (Appendix A). All the resources are outside of the project site.

Table 2 Previously Recorded Cultural Resources within 0.5 Mile of the Proposed Project Site

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded By and Year	Relationship to APE
P-56-000791	CA-VEN-000791	Prehistoric site; possible large habitation site	6Y Determined ineligible for the NR by consensus through Section 106 process- Not evaluated for CR or Local Listing	Kuhn, M. 1984; Dudek 2014	Outside
P-56-001266	CA-VEN-001266H	Historic site; road	No evaluated	Knell, E. and K. Becker 1995	Outside
P-56-001268	CA-VEN-001268H	Historic site; water conveyance system	No evaluated	Knell, E. 1995	Outside
P-56-001269	CA-VEN-001269H	Historic site; foundation	No evaluated	Knell, E. 1995; Whitley, D. 2004	Outside
P-56-001270	CA-VEN-001270H	Historic site; road	No evaluated	Knell, E. 1995	Outside
P-56-001503	CA-VEN-001503	Prehistoric site; lithic scatter	NRHP Status Code 5S3 (appears to be individually eligible for local listing or designation through survey evaluation)	Holguin, B. and L. Nichols 2014	Outside
P-56-001574	CA-VEN-001574	Prehistoric site; lithic scatter	6Y Determined ineligible for the NR by consensus through Section 106 process- Not evaluated for CR or Local Listing (	Maxon, P. 1998; Vitorino, K. 2014	Outside
P-56-100050	N/A	Prehistoric isolate; lithic	Not eligible	Knell, E. and K. Becker 1995	Outside
P-56-152817	N/A	Historic building; public utility building; Tanner Corner	CRHR eligible	Velazquez, C. and C. Velazquez 2000	Outside
P-56-153133	N/A	Historic building; Fire Station No. 42	6Z (Found ineligible for NR, CR or Local designation through survey evaluation)	Carmack, S. 2015	Outside
P-56-153134	N/A	Historic building; 798 Moorpark Avenue	6Z (Found ineligible for NR, CR or Local designation through survey evaluation)	Carmack, S. 2015	Outside

Source: South Central Coastal Information Center 2018

5.2 Historic Aerial and Topo Review

A review was conducted of available online historic aerial photographs and topographic maps on June 6, 2018. According to historic aerial photographs, the project site appears to be in the early stages of development in 1947, with tree plantings visible along the northern boundary (NETRonline 2018). By 1969, structures are visible on the project site with increasing development in the vicinity. The earliest available topographic map of the project site depicts a road at the current location of Moorpark Avenue and a structure near the southwest corner of the project site (Camulos 1903).

Three additional structures are visible south of the railroad to the southeast of the project site (U.S. Geological Survey 1903).

5.3 Native American Heritage Commission

Rincon contacted the NAHC on May 30 and 31, 2018 to request a review of the SLF and to request a list of Native American contacts in accordance with AB 52. On June 4, 2018 the NAHC responded stating that the SLF search was completed with negative results, and included in their response a list of six Native American contacts that may have knowledge of cultural resources in the project area. The SLF results and list of Native American contacts was received by Rincon on June 6, 2018 and was forwarded to the City for use in its AB 52 consultation (Appendix A).

5.4 Archival Research

Rincon completed additional background and archival research in support of the current study in early June 2018. Methods included a review of relevant City of Moorpark documents including but not limited to the City of Moorpark General Plan (1992), the Downtown Specific Plan (1998), and the City's Municipal Code, in particular Chapter 15.36, which deals with historic preservation. Several Phase I Environmental Site Assessment Reports of the subject property were prepared previously and utilized as a source of additional background information for the site.

A variety of primary and secondary source materials were also consulted, including but not limited to historical maps, aerial photographs, and written histories of the area. The following repositories were accessed to identify known historical land uses and the location of research materials pertinent to the project site:

- Office of the Assessor, County of Ventura, County View Geographic Information System
- Historic aerial photographs accessed via NETR Online
- Historic aerial photographs accessed via UC Santa Barbara Library FrameFinder
- Historic U.S. Geological Survey topographic maps
- City of Moorpark Building Permits
- Historical newspaper clippings via Newspapers.com, ProQuest Historical Newspapers.com, and the California Digital Newspaper Collection
- Various historical records via Ancestry.com
- Historic photographs via a variety of sources including but not limited to the Online Archive of California and the Library of Congress

5.5 Survey Methods

Rincon Architectural Historian Rachel Perzel conducted an intensive cultural resource field survey of the proposed project site on June 7, 2018. The field survey consisted of a visual inspection of all built environment features on the affected properties, including buildings, structures, and associated features to assess their overall condition and integrity, and to identify and document potential character-defining features. Ms. Perzel documented the field survey with field notes and digital photographs. The interiors of the affected properties were not accessible at the time of the field survey and observations were limited to those that could be made from the public right-of-way. A windshield survey was also completed of the surrounding neighborhood to identify similar property types. Ms. Perzel visited the City of Moorpark Building Department and obtained copies of

building permits that correspond to the proposed project site. Copies of the field notes and digital photographs from the field survey are on file at Rincon Consultants' Ventura, California office.

6 Findings

As a result of the background research and intensive-level architectural survey, five built environment resources were identified within the proposed project boundary. Much of the project site is developed and covered with asphalt; therefore no archaeological survey was conducted. The property was recorded on California DPR 523 series forms and evaluated for listing in the NRHP, CRHR, and for local designation. The complete set of DPR 523 series forms for the property can be found in Appendix B of this report. The sections that follow include a physical description the property, a summary of its developmental history, and an evaluation of its historical significance.

6.1 Physical Description

The subject parcel is a narrow rectangular property, approximately 2.15-acres in size. It is bound to the north by the sidewalk lining High Street (Figure 3) and to the south by the railroad right-of-way; to its east is a small corner parcel containing one building and to its west is a parcel featuring open space and a large paved parking lot. Boundaries of the parcel are lined with mature trees; the pepper trees situated in the public right-of-way that border the northern project area boundary are known to have been planted by early Moorpark settlers John Nubee and John Barrett in 1904. The peeper trees lining High Street from Walnut Street to Magnolia Avenue are designated as County of Ventura Historical Landmark (Landmark # 72) (County of Ventura 2016). The parcel includes five buildings with dates of construction spanning from 1956-1979 (Figure 4). It is surrounded with a chain-link fence.

Figure 3 Subject Parcel from the Public Right-of Way (Photograph Taken Facing Southwest)



Figure 4 Built Environment Resources Located on the Subject Parcel



Imagery provided by Google and its licensors © 2018.

Centrally located and lining the parcel's southern boundary are two large, rectangular massed buildings constructed on the subject parcel circa 1956 for the purpose of storing grain (chicken feed). The buildings feature a similar utilitarian design. They are one-story structures with tall ceilings, to accommodate large storage silos historically located inside.

Building No. 1

The foundation of Building No.1 is not highly visible, but it appears to be partially composed of formed concrete. Walls of the building are wood- framed; exterior wall surfaces are clad in a combination of corrugated metal and horizontal wood tongue and groove siding (Figure 5). The building's southwest corner is taller than the rest of the building, rising to form a tower-like section (Figure 6). The building contains no windows; entry is via one large, sliding, barn-style door on the north elevation. The building's side gabled roof is framed with a combination of wood and metal. It features a minimal overhang and is clad with corrugated metal panels. It is punctured with several vents.

Figure 5 Building No. 1 (South, Track-Side Elevation)



Figure 6 Building No. 1 (Southwest Corner)



Building No. 2

Building No.2 rests on a concrete block foundation. Its exterior wall surfaces are clad with corrugated metal panels and are void of window openings (Figure 7; Figure 8). On the wall of its south, track-side elevation, the words 'Peterson's Hay & Grain Whse' are faintly visible. The building is topped with a side gabled-roof with a minimal overhang, clad with corrugated metal. A metal-clad awning shelters a portion of the building's north elevation.

Figure 7 Building No. 2 (South, Track-Side Elevation)



Figure 8 Building No. 2 (North Elevation)



Buildings No. 3

Constructed in 1960, Building No. 3 is a one-story, rectangular-plan building located at the northeastern end of the property (Figure 9). The building does not clearly embody a particular architectural style and has been used as a restaurant throughout the decades. The building features a partially enclosed (low-lying, wood-framed, lattice-infilled enclosure) outdoor area that extends from its north façade at approximately one-third of the building's width. The building includes two public entrances in the form of single aluminum doors, both located on the north facade. The simple building features a variety of cladding materials, including plywood and vinyl lap siding laid both horizontally and vertically. Windows throughout are primarily aluminum: on the front facade, single –light, on secondary facades, slider units. The building is topped with a flat or slightly out-sloped roof covered with rolled asphalt roofing. A parapet wall is located on the front façade, screening rooftop mechanical equipment

Figure 9 Building No. 3 (North Elevation)



Buildings No. 4

Added to the parcel in 1964, Building No. 4 is a one-story, rectangular massed building at the northwest of the subject property (Figure 10, Figure 11). Facing north towards High Street, the building does not clearly embody a particular architectural style. Most recently used as a second-hand store, the building features a pair of centrally placed wood doors flanked on either side with large vinyl window units. The building is clad with wood, board and batten siding on its north façade and corrugated metal panels on the rest of its elevations. It is topped with a side-gabled roof covered with corrugated metal, on top of which mechanical equipment is located.

Figure 10 Building No. 4 (North Elevation)



Figure 11 Building No. 4 (West Elevation)



Buildings No. 5

Building No. 5 is an additional grain storage building constructed on the subject parcel in 1979. The structure is centrally located on the parcel, significantly set back from High Street behind a grass lawn (Figure 12). In order to soften the visual appearance of the industrial building, its exterior elevations were designed in the style of the no longer extant Southern Pacific Moorpark railroad depot. The building features one- and two-story segments with walls clad in wood, horizontal tongue and groove siding. The building features faux openings with two-over-two windows and wood trim suggestive of the Western Stick Style. It is topped with side- gabled and intersecting gabled roofs, covered with asphalt shingles.

Figure 12 Building No. 5 (North Elevation)



6.2 Developmental History

Similar to many communities throughout California, the history of Moorpark is linked to the growth and expansion of the railroad. Moorpark's original depot was constructed by the Southern Pacific Railroad Company concurrent with others throughout Ventura County and by 1900, there was daily train service to the community. The presence of the railroad allowed the largely agricultural community of Moorpark to transport both people and goods at rates not possible prior, enabling substantial economic and population growth. A fire destroyed Moorpark's original railroad depot in 1909 and Southern Pacific constructed a replacement in 1910. The second generation depot spanned two current-day parcels, which include the subject parcel and the one to its immediate west (currently occupied by the Chamber of Commerce). By the 1950s, popularity of the commuter trains waned and the Moorpark Depot became a flag stop. In 1958, Southern Pacific announced the depot's closure (Press Courier 1958). The Moorpark Depot was deconstructed by the Railroad in the

mid-1960s. The 1947 aerial image below shows the proposed project boundary outlined in red. Moorpark's Railroad depot can be seen spanning the subject parcel. There were no other large-scale developments on the subject parcel at that time.

Figure 13 1947 Aerial Image Featuring the Subject Parcel Outlined in Red

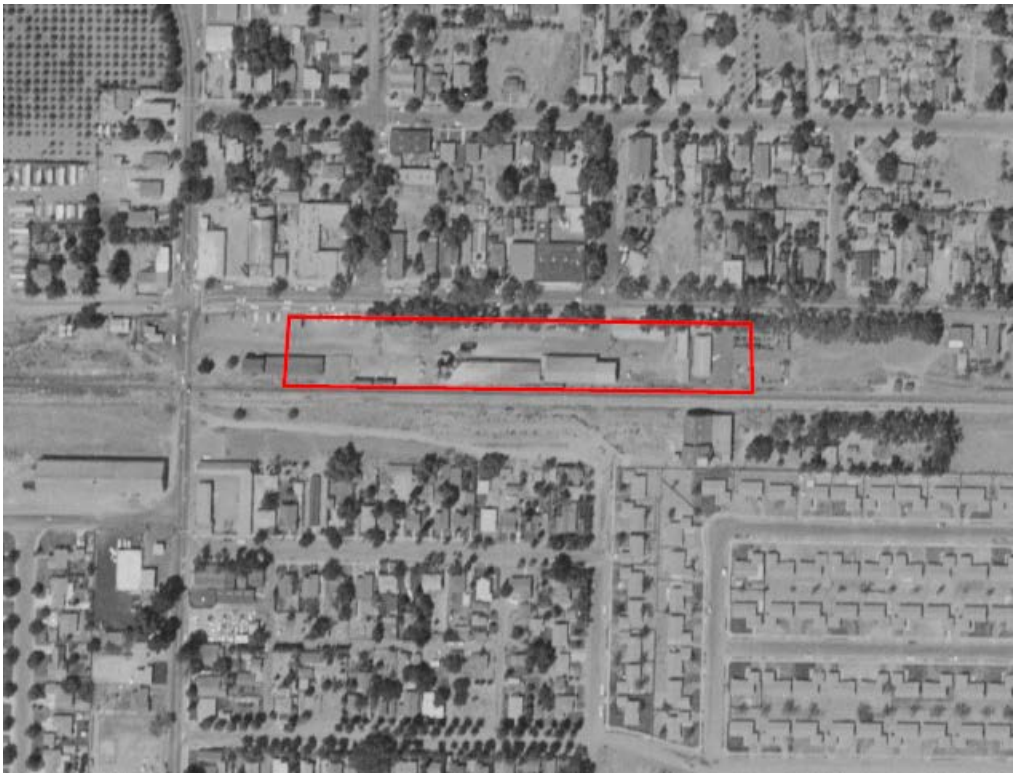


Aside from a portion of the Moorpark Depot, several buildings have been constructed and removed from the subject property throughout the decades.

Of the five extant buildings on the subject parcel, the first to appear are those that line the parcel's southern boundary. These two buildings were constructed in 1956, one by Dennis Johnson and one by Peterson Hay & Grain (County of Ventura Application and Permit 1956). Permit records indicate that at the time of their construction both buildings featured metal wall and roof cladding and were to be used for 'feed storage' and 'storage.' Early in their history, the buildings were expanded and by 1959, they featured a floorplan roughly consistent with that extant today. According to an Accident Prevention Report and Electrical Permit Application from 1969, by that time, it appears that the buildings were owned by S & K Egg Ranch and associated with Fairview Milling, Inc. with Dennis Johnson as a partner (County of Ventura Application and Permit 1969).

Also extant by 1959, the rectangular-planned commercial building was in place, in the northeast of the parcel. Throughout its history, the building appears to have been utilized for various commercial enterprises including a hardware store, electronics store, rental and sales shop, senior citizen meeting space, sheet metal shop, and most recently as a thrift store. Alterations to the building over the years include the replacement of some of its windows and a small addition on its rear elevation (visual observations).

Figure 14 1959 Aerial Image Featuring the Subject Parcel Outlined in Red



In 1960, an application and permit were requested from the County of Ventura for the construction of an 850-square foot, wood-framed building with a flat roof, to serve as an 'ice cream and sandwich store.' The owners of the parcel were stated to be Jerry E. and J.A Stewart (County of Ventura Building Permit Application 1960). Over the decades, the small building appears to have turned over regularly and includes occupations by food-service providers Eppie's Frosti, The Donut Shop, La Playita, and most recently Maria's. A review of city directories indicates that the space was utilized in retail application including as stereo and sporting goods shops at different times throughout its history. Alterations to the building include several small additions to its rear (visual observation).

In 1979, S&K Ranch applied for a building permit to construct an additional grain storage facility on the subject property. The most recent to be added to the parcel, the building served the purpose of 'truck tunnel and hopper housing' (County of Ventura Building Permit Application 1979). This additional grain storage building was located to the immediate northeast of those already on the parcel. Its façade was designed in a manner consistent with Southern Pacific Railroad Depots in an effort to lessen the industrial appearance of the site.

Figure 15 1985 Aerial Image Featuring the Subject Parcel Outlined in Red



6.3 Significance Evaluation

The subject property does not appear eligible for listing in the NRHP, CRHR, or as a City of Moorpark historical landmark.

NRHP-A/CRHR-1

The subject property does not appear eligible for historic designation for associations with significant events. The subject property was first developed circa 1900 with the Moorpark Railroad Depot, a no longer extant building. Since 1900, many structures have occupied and been removed from the site; five buildings are currently extant.

Serving the historical function of grain storage, three of the buildings located on the subject parcel are associated with the poultry industry, which contributed to the economy of the Moorpark area beginning in the 1920s. Although the development of the poultry industry is an important component of the Moorpark area's historical development, the buildings extant on the subject property do not appear to be significant representations of that development. While the grain storage buildings are associated with the poultry industry, they are representative of support structures to the larger industry. The principle activities of the poultry industry, and certainly those of significance, took place primarily on ranches outside of Moorpark's downtown area.

In addition to the grain storage buildings, the subject parcel includes two commercial buildings, the management of which changed fairly regularly throughout the decades. Archival research failed to indicate these commercial buildings may be associated with significant historical events. For the above stated reasons, the subject property appears ineligible for historic designation under Criterion A/1.

NRHP-B/CRHR-2

The subject property does not appear eligible for historic designation for associations with significant persons. The parcel's grain storage buildings are associated with those that constructed, operated, and utilized them. The various buildings have known associations with Peterson Hay & Grain, Dennis Johnson, Fairview Milling Inc., S&K Egg Ranch, and Egg City. While some of these individuals and entities were clearly noteworthy within the context of the regional development of the poultry industry, their contributions are not sufficient to warrant eligibility under this criterion.

The commercial buildings located on the subject property are associated with several decades of owners and employees, in addition to those who patronized them. Archival research failed to indicate that any of the individuals with direct associations to the buildings have made specific contributions to national, state, or local history. For these reasons, the subject property appears ineligible for historic designation under Criterion B/2.

NRHP-C/CRHR-3

The subject property does not appear eligible for historic designation under any of the applicable criteria related to architectural merit. The circa-1956 grain storage buildings located on the subject property are examples of simple, utilitarian buildings; the commercial buildings on the parcel are similarly simple in their design. All of the buildings on the site have been substantially altered throughout their history and none exhibit a particular type, style, or period of architecture or method of construction, nor do they possess a significant degree of detailing. They are not known to be one of the few remaining examples of an architectural type specimen. They do not represent the work of a known master or possess high artistic value.

The circa-1979 grain storage building on the subject parcel was designed in the fashion of a turn-of the-century Southern Pacific railroad depot, loosely exhibiting the qualities of the Western Stick style of architecture. As a resource that is not yet 50 years of age, the building must be of "exceptional importance" to warrant eligibility. The building is a contemporary reproduction of a historical-era structure and does not appear to be of exceptional importance within the context of architectural history.

For the reasons stated above the subject property appears ineligible for historic designation under any criteria related to architectural merit.

NRHP-D/CRHR-4

Archival research failed to indicate that the subject property is likely to yield information deemed important to history or prehistory and therefor appears ineligible for historic designation under Criterion D/4.

City of Moorpark MHL Criterion 1-11

The subject property does not appear eligible for historic designation as a City of Moorpark Historical Landmark under any of the applicable significance criteria. As mentioned in the NRHP/CRHR significance evaluation above, the subject property includes three buildings that historically functioned as ancillary support structures to the poultry industry in addition to two commercial buildings. None of these five buildings appear to be associated with events significant in local, state or national history; nor do they appear to reflect a particular period of national, state or local history (*Criterion 1-2*). While associated with individuals and/or entities that were impactful in the local poultry industry, their contributions do not appear sufficient to merit designation (*Criterion*

4). As utilitarian buildings, none of those on the subject parcel appear eligible for historic designation under any of the criteria related to architecture (*Criterion 3, Criterion 5-7,* and *Criterion 9-10*). While Building No. 5 was designed to embody the characteristics of a railroad depot, it remains a contemporary rendition of an historical-era building and does not appear significant with the context of architectural history. The subject parcel does not appear to represent an established familiar visual feature of a neighborhood, community, or the area (*Criterion 8*); nor does it appear to contribute to the historical or scenic heritage of the area (*Criterion 11*).

The subject building additionally does not appear to be a contributor to any potential or existing historic district.

7 Recommendations

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Section 21084.1). Based on the results of the cultural resources records search, Native American scoping, review of historical maps and aerials, and field survey, no known cultural resources were identified at the project site. The subject property, containing three granary structures and two commercial buildings, was evaluated for listing in the NRHP, the CRHR, and as a City of Moorpark Landmark. Rincon finds that the subject property is not eligible for listing in the NRHP or the CRHR and does not satisfy the criteria for designation as a City of Moorpark Landmark due to a lack of historic significance and numerous alterations that have reduced the integrity of the structures. Therefore, the subject property is not considered an historical resource for the purposes of CEQA.

Although the project site is not considered an historical resource in accordance with CEQA, the proposed project site is bound to the north by a segment of Ventura County Landmark # 72, which consists of a row of pepper trees planted by early Moorpark settlers John Nubee and John Barrett in 1904. Although the proposed project does not include any adjacent street trees, due to their proximity to the project area, they may be vulnerable to damage during project construction. Trees located near mechanized equipment can be susceptible to bark removal, branch breakage, or surface grading, all of which can result in significant damage or death of the tree. Therefore, CUL-1 should be implemented to minimize impacts to this historical resource during construction activities. No archaeological resources were identified during the records search. CUL-2 and CUL-3 are recommended in case of unanticipated discoveries.

If implemented, the following would result in a ***less than significant impact to historical resources*** under CEQA for the current project.

CUL-1 Avoidance of Impacts to Ventura County Landmark # 72

Avoidance of impacts to Ventura County Landmark # 72 shall be accomplished through the implementation of the City of Moorpark's Tree Preservation Guidelines (Moorpark Municipal Code 12.12.060). In order to protect trees during construction, a physical barrier (flagging or safety fencing) should be installed around any adjacent pepper trees that are situated near mechanized equipment. Completion of this mitigation measure shall be monitored and enforced by the City of Moorpark.

CUL-2 Unanticipated Discovery or Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA, additional work such as data recovery excavation may be warranted.

CUL-3 Unanticipated Discovery of Human Remains

If human remains are found, state of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In accordance with this code, in the event of an unanticipated discovery of human remains, the Ventura County Coroner would be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify an MLD. The MLD would complete the inspection of the APE within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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Appendix A

Cultural Resource Records Search & Native American Correspondence

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
Sacramento, CA 95814
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Moorpark Railroad Depot Mixed Use Development

County: Ventura County, California

USGS Quadrangle Name: Moorpark Quadrangle

Township: 02N Range: 19W Section(s): 04

Company/Firm/Agency: Rincon Consultants, Inc.

Contact Person: Lindsay A. Porras

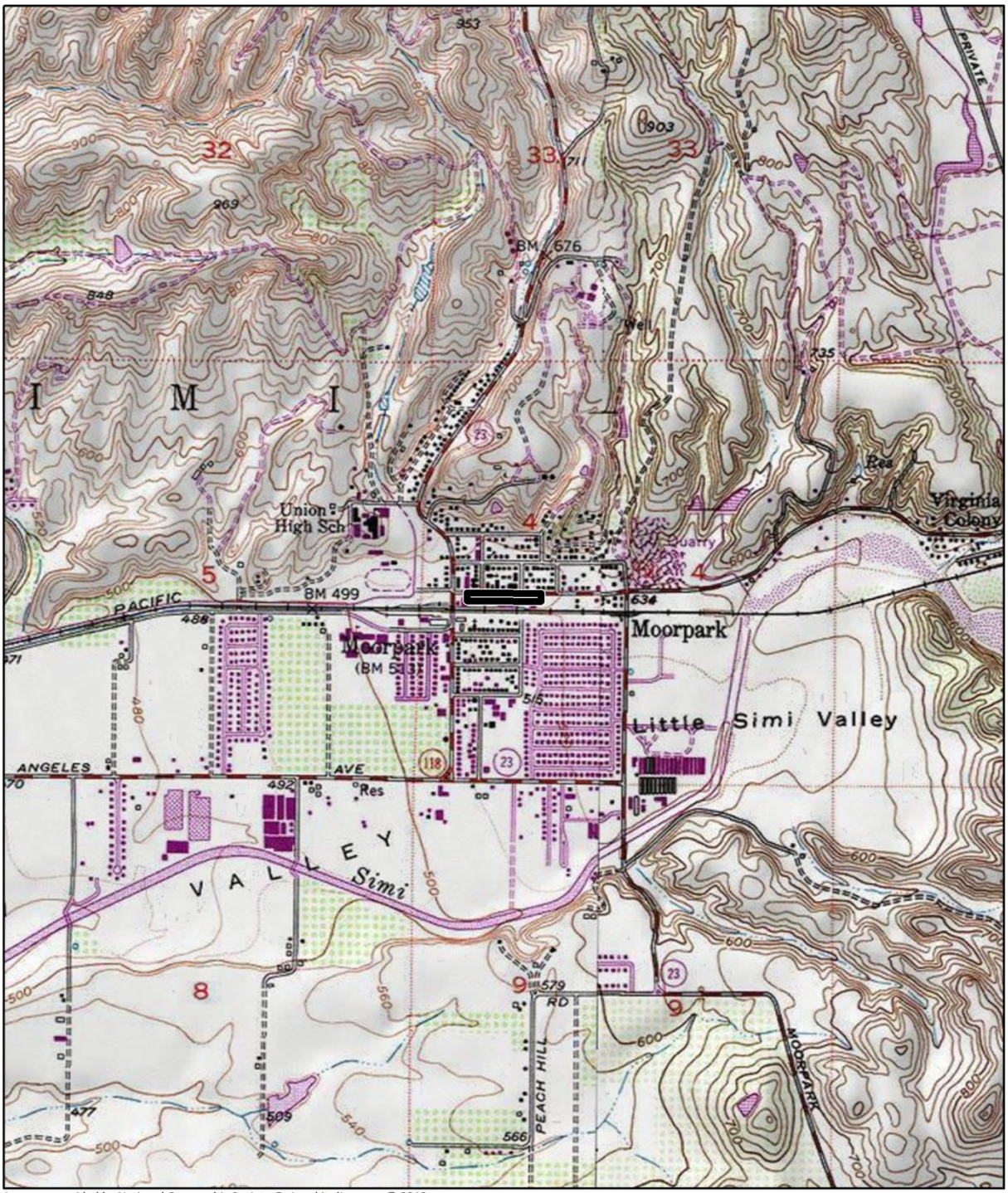
Street Address: 301 9th Street, Suite 310

City: Redlands Zip: 92374

Phone: 909-435-0978

Email: lporras@rinconconsultants.com

Project Description: The project site encompasses 2.15 acres and includes the old granary and other industrial buildings next to the metro link parking lot. The proposed development would include 77 residential units, 6,200 square feet of commercial development, approximately 880 sf of amenity space, and associated parking. This project is subject to the California Environmental Quality Act (CEQA).



Imagery provided by National Geographic Society, Esri and its licensors © 2018. Moorpark Quadrangle. T02N R19W S04. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Area of Potential Effect

Half-Mile Buffer

N

0 1,000 2,000

Feet

CRRecords Search Map

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

June 4, 2018

Lindsay Porras

Rincon Consultants

Sent by Email: lporras@rinconconsultants.com

Re: Moorpark Railroad Depot Mixed Use, Ventura County

Dear Ms. Porras,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at 916-573-1033 or frank.lienert@nahc.ca.gov.

Sincerely,

Frank Lienert
Associate Governmental Program Analyst

Native American Heritage Commission
Native American Contacts
6/4/2018

Santa Ynez Band of Chumash Indians
Kenneth Kahn. Chairperson
P.O. Box 517 Chumash
Santa Ynez , CA 93460
kkahn@santaynezchumash.org
(805) 688-7997

(805) 686-9578 Fax

Barbareno/Ventureno Band of Mission Indians
Julie Lvnn Tumamait-Stenslie. Chair
365 North Poli Ave Chumash
Oiai , CA 93023
itumamait@hotmail.com
(805) 646-6214

Barbareno/Ventureno Band of Mission Indians
Patrick Tumamait
992 El Camino Corto Chumash
Oiai , CA 93023
(805) 216-1253 Cell

Coastal Band of the Chumash Nation
Mia Lopez
, Chumash
No Contact Information
(805) 324-0135

Barbareno/Ventureno Band of Mission Indians
Eleanor Arrellanes
P.O. Box 5687 Chumash
Ventura , CA 93005
(805) 701-3246

Barbareno/Ventureno Band of Mission Indians
Raudel Joe Banuelos. Jr.
331 Mira Flores Court Chumash
Camarillo , CA 93012
(805) 427-0015

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was pr oduced.

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

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed
Moorpark Railroad Depot Mixed Use, Ventura County

Report List

Moorpark RR #18-05844

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00112		1978	Desautels, Roger J.	Archaeological Survey Report on a 600+/- Acre Parcel of Land Located in the Moorpark Area of the County of Ventura, California	Scientific Resource Surveys, Inc.	
VN-00191		1979	Lopez, Robert	An Archaeological Reconnaissance of Korwasser Estates, Tract 3271, Moorpark, Ventura County, California (m-2774.3).	Robert Lopez, Archaeological Consultant	
VN-00549		1979	Callison, Sheila	Cultural Resource Survey for Cup 3600	Ventura County	
VN-00557		1980	Callison, Sheila	Cultural Resource Survey for Pm-3496	Ventura County	
VN-00558		1979	Callison, Sheila	Cultural Resources Survey for Pm-3408	Ventura County	
VN-00572		1988	Dames and Moore	Phase 1 Cultural Resources Survey Fiber Optic Cable Project, Burbank to Santa Barbara, California for Us Sprint Communications Company	Dames & Moore	56-000027, 56-000196, 56-000202, 56-000240, 56-000241, 56-000341, 56-000342, 56-000550, 56-000643, 56-000644, 56-000655, 56-000729, 56-000789, 56-000895, 56-000896, 56-000916, 56-000917, 56-000918
VN-01019		1979	Callison, Sheila	Cultural Resources Survey Of: Tr-2723.	Ventura County	
VN-01102		1977	Singer, Clay A.	Preliminary Cultural Resource Survey and Potential Impact Assessment for Thirteen Areas in Southern Ventura County, California	ARI	56-000003, 56-000004, 56-000005, 56-000013, 56-000014, 56-000031, 56-000032, 56-000033, 56-000075, 56-000076, 56-000077, 56-000087, 56-000135, 56-000136, 56-000137, 56-000138, 56-000140, 56-000142, 56-000148, 56-000149, 56-000150, 56-000158, 56-000163, 56-000164, 56-000165, 56-000458, 56-000478, 56-000479, 56-000481, 56-000490
VN-01153		1991	Peak and Associates, Inc.	Class 3 Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angeles Counties, California	Peak & Associates	56-001089
VN-01265		1992	Reed, L.W.	Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project	Peak and Associates	19-000007, 19-000021, 19-000034, 19-000089, 19-000251, 19-000357, 19-000385, 19-000389, 19-000390, 19-000407, 19-000409, 19-000668, 19-000781, 19-000830, 19-000887, 19-000901, 19-000963, 19-001097, 19-001112, 19-001124, 19-001575, 19-001620

Report List

Moorpark RR #18-05844

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-01329		1994	Whitley, David S. and Joseph M. Simon	Phase 1 Archaeological Survey and Cultural Resources Assessment for the Levy Specific Plan Study Area, Ventura County, California	W & S Consultants	
VN-01377		1995	Knell, Edward J.	Cultural Resource Reconnaissance of Moorpark Specific Plan #2 - Eir, Moorpark , Ventura County, California	RMW Paleo Associates, Inc.	56-001264, 56-001265, 56-001266, 56-001267, 56-001268, 56-001269, 56-001270, 56-100048, 56-100049, 56-100050
VN-01548		1997	Anonymous	Phase 1 Archaeological Survey and Cultural Resources Assessment for the Moorpark Street Improvements Project Study Area, Ventura County, California	W & S Consultants	
VN-01619		1998	Unknown	Phase I Archaeological Survey and Cultural Resources Assessment of the Burnette Property, Moorpark, Ventura County, California	W & S Consultants	
VN-01680		1998	Maxon, Patrick O.	Archaeological Test Excavation of CA-VEN-1574 on the Suncal Development, Tentative Tract 5130, Moorpark, Ventura County, California	RMW Paleo Associates, Inc.	56-001574
VN-02052		2000	Whitley, David S. and Joseph Simms	Phase I Archaeological Survey of the Gisler Fields Project Study Area, Moorpark, Ventura County, California	W&S Consultants	
VN-02053		1999	Whitley, David S. and Joseph Simms	Phase I Archaeological Survey of the Charles Street Affordable Housing Project Study Area, Moorpark, Ventura County, California	W&S Consultants	
VN-02314		2003	Whitley, David S. and Joseph M. Simon	Phase I Archaeological Survey of Hitch Ranch, Moorpark, Ventura County, California	W & S Consultants	
VN-02315		2003	Whitley, David S. and Joseph M. Simon	Phase I Archaeological Survey of a 15 Acres Study Area in Moorpark, Ventura County, California	W & S Consultants	
VN-02320		2004	Stone, David	Phase 1 Archaeological Resources Report, Birkenshaw Site, 251 Moorpark Avenue, Moorpark, California	Stone Archaeological Consulting	
VN-02345		2004	Whitley, David S.	Limited Archaeological Testing at Sites CA-VEN-1265h, -1267h and -1269h, Moorpark Highlands, Moorpark, Ventura County, California	W & S Consultants	56-001265, 56-001267, 56-001269

Report List

Moorpark RR #18-05844

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-02390		2006	Jordan, Stacey C. and Patterson, Joshua D.	Archaeological Survey Report for the Southern California Edison Company Replacement of 30 Deteriorated Poles Private and Public Inholdings, Ventura, Los Angeles, and Santa Barbara Counties, California	Mooney, Jones & Stokes	19-000729, 19-000730, 19-000731, 19-001266, 56-000141, 56-000550, 56-000562, 56-000901, 56-000902, 56-000980, 56-001110, 56-001124, 56-001125
VN-02504		2006	Arrington, Cindy and Nancy Sikes	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and Ii	SWCA Environmental Consultants, Inc.	
VN-02521		2007	Schmidt, James J.	Dwo 6335-6792; Ai 6-1190: Essex Properties Overhead Relocation Project, Moorpark Area, Ventura County.	Compass Rose Archaeological, Inc.	
VN-02852		2004	Whitley, David S.	Phase I Archaeological Survey for TTM 5505, Moorpark, Ventura County, California	W&S Consultants	56-000671, 56-000791, 56-001264, 56-001270, 56-001573, 56-001574
VN-02853		2003	Whitley, David S.	Phase I Archaeological Survey for the Moorpark Human Services Complex, Moorpark, Ventura County, California	W & S Consultants	
VN-02981		2008	Maxon, Patrick	Moorpark Vistas & North Hills Parkway Extension Archaeology	Chambers Group	56-000791, 56-001574
VN-03094		2002	Foster, John A.	Historic Resource Evaluation Report- Mason Avenue At-Grade Crossing and Safety Improvements Project, Los Angeles City, California	Greenwood and Associates	
VN-03210		2015	Carmack, Shannon, Breana Campbell, and Christopher Duran	Housing Authority of Ventura County Moorpark Affordable Housing Project	Rincon Consultants	56-000791, 56-001268, 56-001269, 56-001270, 56-001503, 56-001574, 56-100050, 56-152817, 56-153133, 56-153134
VN-03251		2014	Simon, Jospeh M. and Robert B. Rechtman	Phase I Archaeological Survey for TTM 5505, Moorpark, Ventura County, California	W & S Consultants	
VN-03266		2014	Stone, David and Ken Victorino	ARCHAEOLOGICAL SURVEY REPORT VISTAS AT MOORPARK VENTURA COUNTY, CALIFORNIA	DUDEK	56-000791, 56-001503, 56-001574

Resource List

Moorpark RR #18-05844

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-56-000791	CA-VEN-000791	Resource Name - Moorpark 1	Site	Prehistoric	AP02 (Lithic scatter); AP15 (Habitation debris)	1984 (M. W. Kuhn); 2014 (Ken Victorino, Dudek)	VN-02745, VN-02852, VN-02981, VN-03210, VN-03266
P-56-001266	CA-VEN-001266H	Resource Name - MP-S3H	Site	Historic	AH07 (Roads/trails/railroad grades)	1995 (KNELL/BECKER, RMW Paleo Associates)	LA-07849, VN-01377, VN-02325, VN-02386, VN-02745
P-56-001268	CA-VEN-001268H	Resource Name - MP-S5H	Site	Historic	AH06 (Water conveyance system); HP21 (Dam)	1995 (Edward J. Knell, RMW Paleo Associates)	VN-01377, VN-02745, VN-03210
P-56-001269	CA-VEN-001269H	Resource Name - MP-S6H	Site	Historic	AH02 (Foundations/structure pads); AH05 (Wells/cisterns); AH11 (Walls/fences); AH15 (Standing structures)	1995 (Edward J. Knell, RMW Paleo Associates); 2004 (D. Whitley, W&S Consultants)	VN-01377, VN-02345, VN-02745, VN-03210
P-56-001270	CA-VEN-001270H	Resource Name - MP-S7H	Site	Historic	AH07 (Roads/trails/railroad grades)	1995 (Edward J. Knell, RMW Paleo Associates)	VN-01377, VN-02745, VN-02852, VN-03210
P-56-001503	CA-VEN-001503	Resource Name - VAM-1	Site	Prehistoric	AP02 (Lithic scatter)	2014 (Brian Holguin and Lucas Nichols, Dudek)	VN-03210, VN-03266
P-56-001574	CA-VEN-001574	Resource Name - SunCal 1	Site	Prehistoric	AP02 (Lithic scatter)	1998 (P. Maxon, RMW Paleo Associates); 2014 (Ken Victorino, Dudek)	VN-01680, VN-02745, VN-02852, VN-02890, VN-02981, VN-03210, VN-03266
P-56-100050		Resource Name - MP-I3	Other	Prehistoric	AP02 (Lithic scatter)	1995 (Edward J. Knell an Kenneth M. Becker, RMW Paleo Associates)	VN-01377, VN-03210
P-56-152817		OHP Property Number - 125224; Resource Name - Tanner Corner; Voided - 19-187094	Building	Historic	HP06 (1-3 story commercial building)	2000 (Colin and Victoria Velazquez)	VN-03210
P-56-153133		Resource Name - Fire Station No. 42	Building	Historic	HP09 (Public utility building)	2015 (Shannon Carmack, Rincon)	VN-03210
P-56-153134		Resource Name - 798 Moorpark Ave	Building	Historic	HP06 (1-3 story commercial building)	2015 (Shannon Carmack, Rincon)	VN-03210

Appendix B

Resource Records-DPR 523 Series Forms

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI #**

PRIMARY RECORD

Trinomial
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

 ***Resource Name or #:** County of Ventura Assessor Parcel Number (APN): 512-0-090-115

P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County:** Los Angeles
***b. USGS 7.5' Quad:** Moorpark Quadrangle **Date:** 2018 **T** 02N; **R** 19W ; **¼ of ¼ of Sec** 04 **;** S.B. **B.M.**
c. Address: City: Moorpark Zip: 93021
d. UTM: Zone: ; mE/ mN (G.P.S.)
e. Other Locational Data: APN: 512-0-090-115 Elevation: Approximately 515 feet above sea level

***P3a. Description:** The subject parcel is a narrow rectangular property, approximately 2.15-acres in size. It is bound to the north by the sidewalk lining High Street and to the south by the railroad right-of-way; to its east is a small corner parcel containing one building and to its west is a parcel featuring open space and a large paved parking lot. Boundaries of the parcel are lined with mature trees; the pepper trees situated in the public right-of-way that border the northern project area boundary are known to have been planted by early Moorpark settlers John Nubee and John Barrett in 1904. The peeper trees lining High Street from Walnut Street to Magnolia Avenue are designated as County of Ventura Historical Landmark (Landmark # 72) (County of Ventura 2016). The parcel includes five buildings with dates of construction spanning from 1956-1979. It is surrounded with a chain-link fence.

Centrally located and lining the parcel's southern boundary are two large, rectangular massed buildings constructed on the subject parcel circa 1956 for the purpose of storing grain (chicken feed). The buildings feature a similar utilitarian design. They are one-story structures with tall ceilings, to accommodate large storage silos historically located inside. See Continuation Sheet (page 4 of 10)

***P3b. Resource Attributes:** HP6 (2); HP8 (3)
***P4. Resources Present:** ■Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo: View of subject parcel, taken from the west with 3 of 5 subject buildings visible. Photograph taken on 6/7/2018.

***P6. Date Constructed/Age and Sources:** ■Historic ☐Prehistoric ☐Both
Dates of construction span from 1956-1980 (See *B6 Construction History).

***P7. Owner and Address:**
N/A

***P8. Recorded by:**
Rachel Perzel
Rincon Consultants, Inc.
180 N. Ashwood
Ventura, CA 93003

***P9. Date Recorded:** 6/7/2018

***P10. Survey Type:** Intensive

***P11. Report Citation:** Perzel, Rachel and Lindsay Porras, Chris Duran, Shannon Carmack. 2018. *Cultural Resources Assessment Report for Moorpark Railroad Depot Mixed Use Development*. Rincon Consultants Project No. 18-05844.

***Attachments:** ☐NONE ■Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

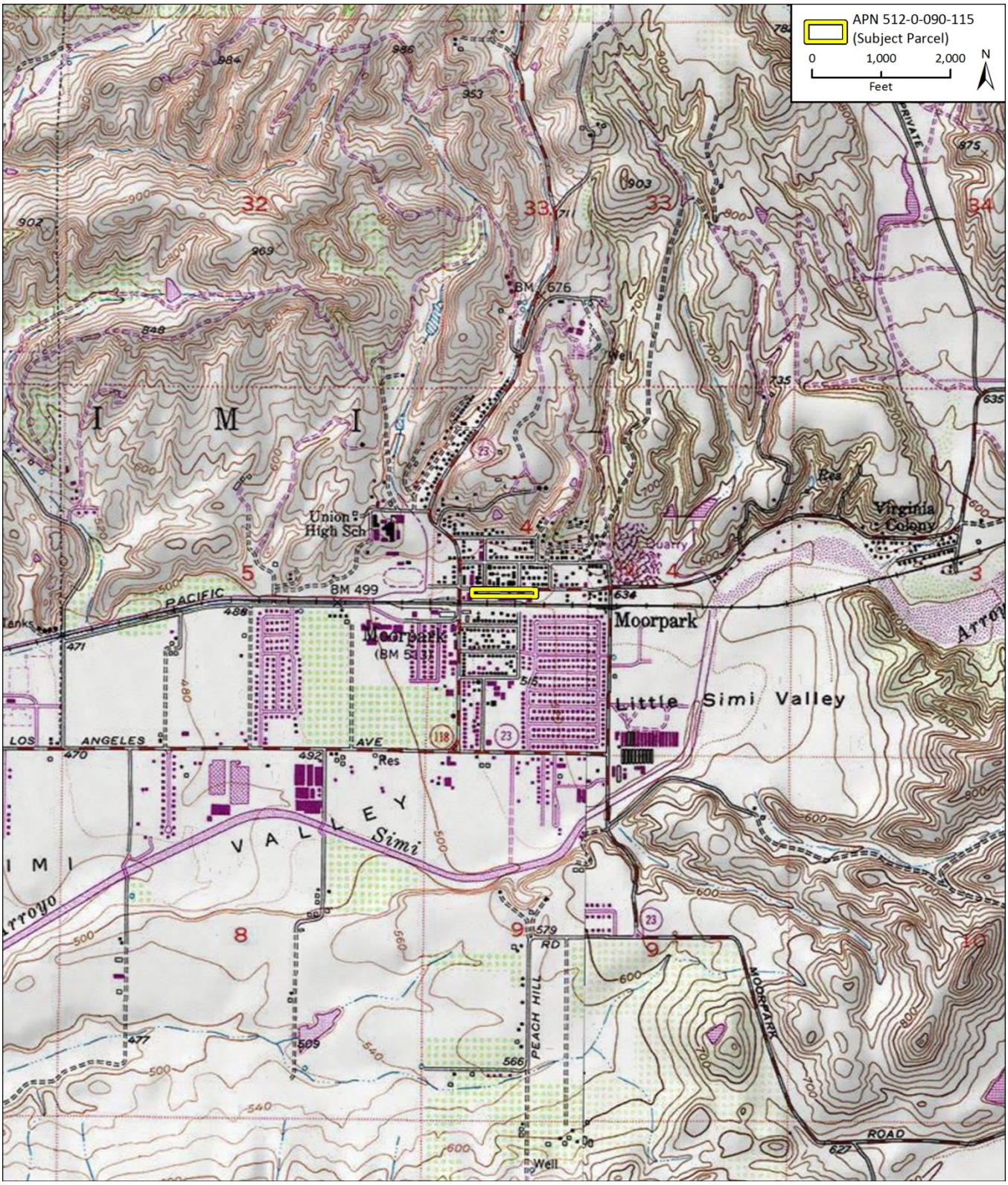
State of California ♦ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 2 **of** 10 *** Resource Name:** County of Ventura Assessor Parcel Number (APN): 512-0-090-115

*** Map Name:** Moorpark Quadrangle *** Scale:** 1:24,000 ***Date of map:** 2018



BUILDING, STRUCTURE, AND OBJECT RECORD

*** Resource Name or #** County of Ventura Assessor Parcel Number (APN): 512-0-090-115 *** NRHP Status Code** 6Z
Page 3 **of** 10

B1. Historic Name: N/A
B2. Common Name: N/A
B3. Original Use: Moorpark Railroad Depot (Demolished circa 1965) B4. Present Use: Vacant
*** B5. Architectural Style:** None of the buildings on the subject parcel clearly embody a particular architectural style

*** B6. Construction History:** Over the decades, several buildings have been constructed and removed from the subject property. Until recently, that which is currently one parcel (the subject parcel), was several parcels accompanied with various street addresses including 68, 104, 192 and 220 High Street. The initial development of the parcel began in 1900, when Southern Pacific Railroad constructed a depot on or near the subject parcel. The depot burned down and was replaced early in its history; the second generation railroad depot, located partially on the subject parcel, was demolished circa 1965. The large, rectangular planned grain-storage buildings lining the parcel's southern boundary were constructed on the parcel in 1956, that to the west by Dennis Johnson, and that to the east by Peterson Hay and Grain (County of Ventura Application and Permit 1956). Early in their history, both buildings were expanded and by 1959 they featured a floorplan roughly consistent with that extant today. The two commercial buildings on the subject parcel were added in 1959 (northeast of parcel) and 1960 (northwest of parcel). They have both been utilized for various commercial enterprises over the years. In 1979, S & K Ranch applied for a building permit for the construction of an additional grain storage facility to be located on the subject property. The most recent to be added to the parcel, the building served the purpose of 'truck tunnel and hopper housing' (County of Ventura Building Permit Application 1979). The additionally grain storage building was located to the immediate northeast of those which were already on the parcel. Its facade was designed in a consistent manner with Southern Pacific Railroad Depots in an effort to lessen the industrial nature of the site.

*** B7. Moved?** ■**No** □**Yes** □**Unknown** **Date:** **Original Location:**
*** B8. Related Features:** N/A
B9a. Architect: various b. Builder: various
*** B10. Significance: Theme** Commercial Development & Industrial Development **Area** City of Moorpark
Period of Significance 1950s **Property Type** Commercial/Industrial **Applicable Criteria**

Similar to many communities throughout California, the history of Moorpark is linked to the growth and expansion of the railroad. Moorpark's original depot was constructed by the Southern Pacific Railroad Company concurrent with others throughout Ventura County and by 1900, there was daily train service to the community. The presence of the railroad allowed the largely agricultural community of Moorpark to transport both people and goods at rates not possible prior, enabling substantial economic and population growth. A fire destroyed Moorpark's original railroad depot in 1909 and Southern Pacific constructed a replacement in 1910. The second generation depot spanned two current-day parcels, which include the subject parcel and the one to its immediate west (currently occupied by the Chamber of Commerce). By the 1950s, popularity of the commuter trains waned and the Moorpark Depot became a flag stop. In 1958, Southern Pacific announced the depot's closure (Press Courier 1958). The Moorpark Depot was deconstructed by the Railroad in the mid-1960s. The 1947 aerial image below shows the proposed project boundary outlined in red. Moorpark's Railroad depot can be seen spanning the subject parcel. There were no other large-scale developments on the subject parcel at that time. See Continuation Sheet (page 5 of 10)



B11. Additional Resource Attributes:
*** B12. References:** See Continuation Sheet (page 7 of 10)
B13. Remarks: N/A
*** B14. Evaluator:** R. Perzel, Rincon Consultants
*** Date of Evaluation:** June 6, 2018

(This space reserved for official comments.)

***P3a. Description Continued (from page 1 of 10):**

Building No. 1
The foundation of Building No.1 is not highly visible, but it appears to be partially composed of formed concrete. Walls of the building are wood- framed; exterior wall surfaces are clad in a combination of corrugated metal and horizontal wood tongue and groove siding. The building's southwest corner is taller than the rest of the building, rising to form a tower-like section. The building contains no windows; entry is via one large, sliding, barn-style door on the north elevation. The building's side gabled roof is framed with a combination of wood and metal. It features a minimal overhang and is clad with corrugated metal panels. It is punctured with several vents.

Building No. 2
Building No.2 rests on a concrete block foundation. Its exterior wall surfaces are clad with corrugated metal panels and are void of window openings. On the wall of its south, track-side elevation, the words 'Peterson's Hay & Grain Whse' are faintly visible. The building is topped with a side gabled-roof with a minimal overhang, clad with corrugated metal. A metal-clad awning shelters a portion of the building's north elevation.

Buildings No. 3
Constructed in 1960, Building No. 3 is a one-story, rectangular-plan building located at the northeastern end of the property. The building does not clearly embody a particular architectural style and has been used as a restaurant throughout the decades. The building features a partially enclosed (low-lying, wood-framed, lattice-infilled enclosure) outdoor area that extends from its north façade at approximately one-third of the building's width. The building includes two public entrances in the form of single aluminum doors, both located on the north facade. The simple building features a variety of cladding materials, including plywood and vinyl lap siding laid both horizontally and vertically. Windows throughout are primarily aluminum: on the front facade, single –light, on secondary facades, slider units. The building is topped with a flat or slightly out-sloped roof covered with rolled asphalt roofing. A parapet wall is located on the front façade, screening rooftop mechanical equipment

Buildings No. 4
Added to the parcel in 1964, Building No. 4 is a one-story, rectangular massed building at the northwest of the subject property. Facing north towards High Street, the building does not clearly embody a particular architectural style. Most recently used as a second-hand store, the building features a pair of centrally placed wood doors flanked on either side with large vinyl window units. The building is clad with wood, board and batten siding on its north façade and corrugated metal panels on the rest of its elevations. It is topped with a side-gabled roof covered with corrugated metal, on top of which mechanical equipment is located.

Buildings No. 5
Building No. 5 is an additional grain storage building constructed on the subject parcel in 1979. The structure is centrally located on the parcel, significantly set back from High Street behind a grass lawn. In order to soften the visual appearance of the industrial building, its exterior elevations were designed in the style of the no longer extant Southern Pacific Moorpark railroad depot. The building features one- and two-story segments with walls clad in wood, horizontal tongue and groove siding. The building features faux openings with two-over-two windows and wood trim suggestive of the Western Stick Style. It is topped with side- gabled and intersecting gabled roofs, covered with asphalt shingles.

*** B10. Significance:** (Continued from page 3)
Aside from a portion of the Moorpark Depot, several buildings have been constructed and removed from the subject property throughout the decades.

Of the five extant buildings on the subject parcel, the first to appear are those that line the parcel's southern boundary. These two buildings were constructed in 1956, one by Dennis Johnson and one by Peterson Hay & Grain (County of Ventura Application and Permit 1956). Permit records indicate that at the time of their construction both buildings featured metal wall and roof cladding and were to be used for 'feed storage' and 'storage.' Early in their history, the buildings were expanded and by 1959, they featured a floorplan roughly consistent with that extant today. According to an Accident Prevention Report and Electrical Permit Application from 1969, by that time, it appears that the buildings were owned by S & K Egg Ranch and associated with Fairview Milling, Inc. with Dennis Johnson as a partner (County of Ventura Application and Permit 1969).

Also extant by 1959, the rectangular-planned commercial building was in place, in the northeast of the parcel. Throughout its history, the building appears to have been utilized for various commercial enterprises including a hardware store, electronics store, rental and sales shop, senior citizen meeting space, sheet metal shop, and most recently as a thrift store. Alterations to the building over the years include the replacement of some of its windows and a small addition on its rear elevation (visual observations).

In 1960, an application and permit were requested from the County of Ventura for the construction of an 850-square foot, wood-framed building with a flat roof, to serve as an 'ice cream and sandwich store.' The owners of the parcel were stated to be Jerry E. and J.A Stewart (County of Ventura Building Permit Application 1960). Over the decades, the small building appears to have turned over regularly and includes occupations by food-service providers Eppie's Frosti, The Donut Shop, La Playita, and most recently Maria's. A review of city directories indicates that the space was utilized in retail application including as stereo and sporting goods shops at different times throughout its history. Alterations to the building include several small additions to its rear (visual observation).

In 1979, S&K Ranch applied for a building permit to construct an additional grain storage facility on the subject property. The most recent to be added to the parcel, the building served the purpose of 'truck tunnel and hopper housing' (County of Ventura Building Permit Application 1979). This additional grain storage building was located to the immediate northeast of those already on the parcel. Its façade was designed in a manner consistent with Southern Pacific Railroad Depots in an effort to lessen the industrial appearance of the site.

The subject property does not appear eligible for listing in the NRHP, CRHR, or as a City of Moorpark historical landmark.

NRHP-A/CRHR-1

The subject property does not appear eligible for historic designation for associations with significant events. The subject property was first developed circa 1900 with the Moorpark Railroad Depot, a no longer extant building. Since 1900, many structures have occupied and been removed from the site; five buildings are currently extant.

Serving the historical function of grain storage, three of the buildings located on the subject parcel are associated with the poultry industry, which contributed to the economy of the Moorpark area beginning in the 1920s. Although the development of the poultry industry is an important component of the Moorpark area's historical development, the buildings extant on the subject property do not appear to be significant representations of that development. While the grain storage buildings are associated with the poultry industry, they are representative of support structures to the larger industry. The principle activities of the poultry industry, and certainly those of significance, took place primarily on ranches outside of Moorpark's downtown area.

In addition to the grain storage buildings, the subject parcel includes two commercial buildings, the management of which changed fairly regularly throughout the decades. Archival research failed to indicate these commercial buildings may be associated with significant historical events. For the above stated reasons, the subject property appears ineligible for historic designation under Criterion A/1.

NRHP-B/CRHR-2

The subject property does not appear eligible for historic designation for associations with significant persons. The parcel's grain storage buildings are associated with those that constructed, operated, and utilized them. The various buildings have known associations with Peterson Hay & Grain, Dennis Johnson, Fairview Milling Inc., S&K Egg Ranch, and Egg City. While some of these individuals and entities were clearly noteworthy within the context of the regional development of the poultry industry, their contributions are not sufficient to warrant eligibility under this criterion.

The commercial buildings located on the subject property are associated with several decades of owners and employees, in addition to those who patronized them. Archival research failed to indicate that any of the individuals with direct associations to the buildings have made specific contributions to national, state, or local history. For these reasons, the subject property appears ineligible for historic designation under Criterion B/2.

NRHP-C/CRHR-3

The subject property does not appear eligible for historic designation under any of the applicable criteria related to architectural merit. The circa-1956 grain storage buildings located on the subject property are examples of simple, utilitarian buildings; the commercial buildings on the parcel are similarly simple in their design. All of the buildings on the site have been substantially altered throughout their history and none exhibit a particular type, style, or period of architecture or method of construction, nor do they possess a significant degree of detailing. They are not known to be one of the few remaining examples of an architectural type specimen. They do not represent the work of a known master or possess high artistic value.

The circa-1979 grain storage building on the subject parcel was designed in the fashion of a turn-of the-century Southern Pacific railroad depot, loosely exhibiting the qualities of the Western Stick style of architecture. As a resource that is not yet 50 years of age, the building must be of "exceptional importance" to warrant eligibility. The building is a contemporary reproduction of a historical-era structure and does not appear to be of exceptional importance within the context of architectural history.

For the reasons stated above the subject property appears ineligible for historic designation under any criteria related to architectural merit.

NRHP-D/CRHR-4

Archival research failed to indicate that the subject property is likely to yield information deemed important to history or prehistory and therefor appears ineligible for historic designation under Criterion D/4.

City of Moorpark MHL Criterion 1-11

The subject property does not appear eligible for historic designation as a City of Moorpark Historical Landmark under any of the applicable significance criteria. As mentioned in the NRHP/CRHR significance evaluation above, the subject property includes three buildings that historically functioned as ancillary support structures to the poultry industry in addition to two commercial buildings. None of these five buildings appear to be associated with events significant in local, state or national history; nor do they appear to reflect a particular period of national, state or local history (Criterion 1-2). While associated with individuals and/or entities that were impactful in the local poultry industry, their contributions do not appear sufficient to merit designation (Criterion

*** B12. References:** (Continued from page 3)

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Maiella, James, Jr.

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Winters, Michael.

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Additional Photographs:



Track (South) Elevation of Building No.1



Track (South) Elevation of Building No.2



North Elevation of Building No.2



Front (north) Elevation of Building No.3



West Elevation of Building No. 4



Front (North) Elevation of Building No. 5

Appendix F

Energy Calculations

City of Moorpark High Street Station Mixed Use Development

Last Updated: December 12, 2019

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529

Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Day	Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Graders	1	8	187	0.41	Site Prep	97.26
Scrapers	1	8	367	0.48	Site Prep	223.48
Tractors/Loaders/Backhoes	1	7	97	0.37	Site Prep	44.29
Concrete/Industrial Saws	1	8	81	0.73	Demo	555.96
Tractors/Loaders/Backhoes	3	8	97	0.37	Demo	1,012.34
Rubber Tired Dozer	1	8	247	0.40	Demo	835.59
Graders	1	8	187	0.41	Grading	194.53
Rubber Tired Dozer	1	8	247	0.40	Grading	250.68
Tractors/Loaders/Backhoes	2	7	97	0.37	Grading	177.16
Cranes	1	8	231	0.29	Building	6,232.20
Forklifts	2	7	89	0.20	Building	3,221.69
Generator Sets	1	8	84	0.74	Building	6,428.90
Tractors/Loaders/Backhoes	1	6	97	0.37	Building	2,783.94
Welders	3	8	46	0.45	Building	6,422.69
Cement and Mortar Mixers	1	8	9	0.56	Paving	23.69
Pavers	1	8	130	0.42	Paving	230.89
Paving Equipment	1	8	132	0.36	Paving	200.95
Rollers	2	8	80	0.38	Paving	285.83
Tractors/Loaders/Backhoes	1	8	97	0.37	Paving	168.72
Air Compressors	1	6	78	0.48	Arch Coating	1,702.90
					Total Fuel Used (Diesel)	**31,093.71**
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	3
Demolition Phase	20
Grading Phase	6
Building Phase	220
Paving Phase	10
Architectural Coating Phase	129

WORKER TRIPS				
Constuction Phase	**MPG [2]**	**Trips**	**Trip Length (miles)**	**Fuel Used (gallons)**
Demolition	24.0	13.0	10.8	117
Site Prep Phase	24.0	8	10.8	10.8
Grading Phase	24.0	10	10.8	27
Building Phase	24.0	90	10.8	8910
Paving Phase	24.0	15	10.8	67.5
Architectural Coating Phase	24.0	18	10.8	1044.9
			Total Fuel Used (Gasoline)	**10177.20**

HAULING AND VENDOR TRIPS				
Trip Class	**MPG [2]**	**Trips**	**Trip Length (miles)**	**Fuel Used (gallons)**
Vendor Trips	7.4	20	7.3	4340.541
Hauling Trips	7.4	107	20	289.189
			Total Fuel Used (Diesel)	**4,629.73**

GRAND TOTAL (DIESEL)	**35,723.44**

Sources:

[1] United States Environmental Protection Agency. 2018. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES2014b* . July 2018. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100UXEN.pdf.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2018. *National Transportation Statistics 2018* . Available at: https://www.bts.gov/sites/bts.dot.gov/files/docs/browse-statistical-products-and-data/national-transportation-statistics/223001/ntsentire2018q4.pdf.

City of Moorpark High Street Station Mixed Use Development

Last Updated: February 1, 2019

Populate one of the following tables (Leave the other blank):

Annual VMT		OR	Daily Vehicle Trips	
Annual VMT:	2206014		Daily Vehicle Trips:	
			Average Trip Distance:	

Fleet Class	Fleet Mix	Fuel Consumption (MPG)	
Light Duty Auto (LDA)	0.588665	Passenger Vehicles	24.0
Light Duty Truck 1 (LDT1)	0.041515	Light-Med Duty Trucks	17.4
Light Duty Truck 2 (LDT2)	0.188382	Heavy Trucks/Other	7.4
Medium Duty Vehicle (MDV)	0.110464	Motorcycles	43.9
Light Heavy Duty 1 (LHD1)	0.019030		
Light Heavy Duty 2 (LHD2)	0.006351		
Medium Heavy Duty (MHD)	0.019720		
Heavy Heavy Duty (HHD)	0.017925		
Other Bus (OBUS)	0.001164		
Urban Bus (UBUS)	0.001012		
School Bus (SBUS)	0.000380		
Motorhome (MH)	0.001490		
Motorcycle (MCY)	0.003904		

Fleet Mix

Vehicle Type	Percent	Fuel Type	Annual VMT: VMT	Vehicle Trips: VMT	Fuel Consumption (Gallons)
Passenger Vehicles	*58.87%*	*Gasoline*	1298603.23	0.00	54108.47
Light-Medium Duty Trucks	*34.04%*	*Gasoline*	750841.13	0.00	43151.79
Heavy Trucks/Other	*6.71%*	*Diesel*	147961.77	0.00	19994.83
Motorcycle	*0.39%*	*Gasoline*	8612.28	0.00	196.18

gasoline	97456.44
diesel	19994.83

Appendix G

Preliminary Geohazard Report

PRELIMINARY GEOHAZARD REPORT
VARIOUS CITY-OWNED PROPERTIES
MOORPARK, CALIFORNIA

Prepared for:
City of Moorpark

January 2018
Job No. 030.004

Oakridge Geoscience, Inc.

PO Box 2540, Camarillo, California 93011
www.Oakridgegeo.com
805-603-4900

January 19, 2018
Project No. 030.004

City of Moorpark
799 Moorpark Avenue
Moorpark, California 93021

Attention: Ms. Jessica Sandifer

Subject: Preliminary Geohazard Report, Various City-Owned Properties, Moorpark, California

Dear Ms. Sandifer:

Oakridge Geoscience, Inc. (OGI) is pleased to provide this preliminary geohazard report for various City-owned properties in Moorpark, California. The purpose of the preliminary geohazard study was to evaluate if seismic related geohazards including liquefaction, dry seismic settlement, and hydroconsolidation (collapse) potential are present at the City-owned properties and discuss potential methods to mitigate the earthquake-induced ground shaking.

This report summarizes the geotechnical data review, field exploration, geotechnical laboratory testing, our evaluations, and our opinions of the site conditions based on the work performed.

Closure

Thank you for the opportunity to provide geotechnical services to the City of Moorpark for this project. Please contact us if you have any questions on the information presented herein or if we can be of further assistance on this project.

SINCERELY,
OAKRIDGE GEOSCIENCE, INC.

REGISTERED GEOLOGIST
LORI E. PRENTICE
EG NO. 2312
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA
7/31/18

Lori E. Prentice, CEG
President

REGISTERED GEOTECHNICAL ENGINEER
RORY A. ROBINSON
No. 2491
Exp. 09/30/2019
GEOTECHNICAL
STATE OF CALIFORNIA

Rory "Tony" Robinson, GE
Principal Geotechnical Engineer

Copies Submitted: (1 electronic copy (pdf) via email)

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1.0 INTRODUCTION

1.1 PROPOSED PROJECT AND PURPOSE

The purpose of this study is to perform a screening-level geotechnical evaluation of the potential for seismic-related geohazards consisting of liquefaction, dry seismic settlement, and hydroconsolidation (collapse) potential at eight locations in the City of Moorpark, and if the potential exists, provide a preliminary estimate of the amount of settlement that could result from the design-level earthquake. In addition, the City requested the study evaluate the potential for stormwater infiltration on the southern side of High Street Site (Remainder High Street site) to cause hydroconsolidation of the onsite soil which could impact proposed improvements to the parking lot as well as future buildings on the existing and adjacent parcels.

Several previous geotechnical studies in the downtown Moorpark area have identified the potential for liquefaction, dry seismic settlement, and hydroconsolidation to occur in the upper 60 feet of the sites. The City requested that OGI evaluate the potential for seismic related geohazards at eight locations (Plate 1) which we have combined into the three general areas listed below:

1) Downtown Moorpark area along High Street;
2) Two sites on Moorpark Avenue and Los Angeles Avenue; and
3) Eight lots on Walnut Canyon Road north of City Hall.

1.2 WORK PERFORMED AND AUTHORIZATION

The work performed for this study consisted of data review, project coordination, field exploration, laboratory testing, and geotechnical evaluation and reporting. The work was performed in general accordance with our revised proposal dated July 6, 2017 and was authorized by receipt of a Professional Services Agreement from the City, dated August 24, 2017.

1.2.1 Data Review and Project Coordination

We reviewed and summarized pertinent data for three existing geotechnical reports provided by the City for three previous projects in the Downtown Moorpark area:

1) Area Housing Authority (AHA) on Moorpark Avenue (Geotechnologies, Inc., 2016);
2) Moorpark Apartments site (Gorian and Associates, 2013a); and
3) Proposed Moorpark Library site on Moorpark Avenue and High Street (OGI, 2017).

The approximate locations of the three previous studies are sites are shown on Plate 1. A summary of pertinent data from each site is presented in Section 2 of this report. Prior to field exploration, we performed a site reconnaissance to locate and mark the exploration locations for coordination with Underground Service Alert.

1.2.2 Field Exploration

To evaluate the subsurface site conditions, OGI advanced 13 cone penetration tests (CPTs) and eight drill holes to define the subsurface stratigraphy and provide data to estimate potential seismic-related hazards. The explorations are summarized in Table 1 below and detailed site maps with CPT and drill hole locations are included in Plates 2a through 2g. The CPT and drill hole logs are included in Appendix A.

Table 1. Summary of Explorations

Location	Approx. Lot Dimensions (feet)	Approx. Area (square feet)	No. of CPTs	No. of Drill Holes
Area 1 - High Street				
Apricot Lane Farms	150 x 100	15,000	1	1
Lot 467	150 x 150	22,500	1	1
Lot 450	190 x 100	19,000	1	1
Remainder High Street Site	550 x 100	55,000	2	1
Area 2 – Moorpark Avenue and Los Angeles Avenue				
347 Moorpark Avenue	120 x 150	18,000	1	1
500 Los Angeles Avenue	200 x 375	75,000	2	1
Area 3 - Walnut Canyon Road				
Southern Block - Lots 1063, 1073, 1083, 1095, 113, 1123	50 x 175 per lot	3,750 per lot	3	1
Northern Block – Lots 1293 (double lot) and 1331	50 x 175 per lot	3,750 per lot	2	1
		Total Explorations:	**13**	**8**

CPTs. Thirteen CPTs were advanced to depths of up to 80 feet each on September 27 and 28, 2017 by Gregg Drilling. The CPT is mounted on a 30-ton 3-axle truck and consists of an about 1.4-inch-diameter rod fitted with a cone at the base. The cone is sequentially connected to 1-meter-long rods and pushed into the subsurface at a constant rate by hydraulic rams using the weight of the truck as resistance. Additional rods are added to the rod length as the depth increases. The cone is equipped with electronic load cells which measure point (tip) resistance to the penetration and frictional resistance between the soils and the cylinder side (sleeve) of the cone. The subsurface stratigraphy and engineering parameters of the penetrated materials are inferred based on correlations of the recorded tip and sleeve properties. The CPT collects nearly continuous data (2-centimeter intervals) and allows for efficient evaluation of seismic-related hazards, engineering properties, and stratigraphy.

Additionally, the CPT was equipped with a piezo-cone which measures excess pore pressure as a result of the penetration to further aid in evaluation of the depth to groundwater at the testing locations. Pore-pressure dissipation tests were performed in CPT-500LAA1, CPT-500LAA2, and CPT-WCRS2. Additionally, shear wave velocities were measured in one location, CPT-RHS1 at the Remainder High Street site. The shear wave velocity data are presented in Appendix A.

Following the completion of each CPT, the rods were withdrawn, and the small-diameter holes were backfilled to the ground surface with fine bentonite chips.

Drill Holes. Eight hollow-stem-auger drill holes were advanced near the locations shown on the detailed site maps (Plates 2a to 2g) by S/G Drilling on September 19 to 21, 2017 using a CME-85 drill rig equipped with 8-inch-diameter augers and a 140-pound automatic trip hammer. The drill holes were advanced to depths of 50 feet or refusal to help in evaluation of the subsurface conditions, to "ground truth" the CPT data, and to collect samples for laboratory testing and evaluation of liquefaction consistent with the guidelines published by the California Division of Mines and Geology (CDMG, now California Geologic Survey [CGS]), Special Publication 117A (CGS, 2008).

The drill holes were sampled at about 5-foot intervals to total depth using a combination of driven modified California and standard penetration test (SPT) samplers. In addition, bulk samples were collected from the near surface materials recovered from the auger flights. Our field geologist logged the recovered samples in general accordance with ASTM D2488 for visual soil classification. Groundwater depths encountered during drilling were measured and recorded on the drilling logs.

Following completion of drilling and sampling at each location, the drill holes were backfilled to the surface with the drill cuttings mixed with cement to create soil-cement and tamped.

1.2.3 Laboratory Testing

Geotechnical laboratory testing was performed on selected earth materials sampled in the drill holes to characterize the materials and estimate relevant preliminary engineering design parameters. The testing consisted of moisture/density relationships, grainsize, Atterberg limits (plasticity), and hydroconsolidation (collapse) potential. The laboratory test results are presented on the drill hole logs (Appendix A) and in Appendix B.

1.2.4 Geotechnical Evaluation and Reporting

We evaluated the field and laboratory geotechnical data, developed preliminary geotechnical engineering recommendations for the project, and prepared this report to summarize our findings, opinions and recommendations. Our report includes the following:

- Summary of soil and groundwater conditions encountered;
- Logs of CPT and drill hole explorations;
- Laboratory test data;
- Summary regional geohazard and local site specific geohazard studies;
- Evaluation of seismic-related hazards including fault rupture, liquefaction, dry seismic settlement and lateral spreading; and
- Potential need for ground improvement.

2.0 FINDINGS

2.1 BACKGROUND

Pertinent data from three geotechnical studies in the Downtown Moorpark area are summarized below. The locations of the three sites are shown on Plate 1 and include:

1. AHA site (Geotechnologies, Inc., 2016);
2. Moorpark Apartments (Gorian and Associates, 2013a); and
3. Proposed Moorpark Library (OGI, 2017).

2.1.1 AHA Site

At the AHA site, Geotechnologies, Inc. reported zones of medium dense granular soils ranging from less than one-foot to about 18-feet thick between depths of 15 to 75 feet. Their report indicated those soils could liquefy in response to the design earthquake event with settlements ranging from about two- to six-inches. On that basis, Geotechnologies recommended ground improvement to a depth of 30 feet to reduce total settlement to less than two inches and differential settlement to less than one inch. Their report indicated the structure could be supported on shallow spread footings following the recommended ground improvement. Alternatively, if the ground improvement could not reduce the total settlement to less than two inches, the structure could be supported on a mat foundation. The report indicated the "most feasible ground improvement techniques could consist of a mixture of soil mixing, stone columns, aggregate piers or earthquake drains." The final ground improvement design was to be performed by a specialized ground improvement contractor.

2.1.2 Moorpark Apartments Site

Gorian and Associates (Gorian, 2006; 2013a; 2013b) prepared a geotechnical study for the Moorpark Apartments site directly west and northwest of the proposed Library Site (Plate 1). Gorian's evaluation of the subsurface conditions indicated the potential for up to nine inches of seismic-related settlement (liquefaction and dry seismic settlement) based on a groundwater level of 15 to 25 feet below the ground surface and an earthquake ground acceleration of 0.68g. Exploration by Gorian was limited to a depth of 50 feet, therefore, subsurface data are not available to evaluate if liquefaction could also occur at deeper depths for that site. We note Gorian (2006) indicates up to 15 inches of dry seismic settlement were estimated from their CPT-3A, but the calculated value was not considered accurate and the soils in the upper portion of the CPT exploration would be mitigated as part of site grading. Gorian recommended ground improvement consisting of overexcavation and recompaction of soils to a depth of 13 to 22 feet below the existing grade to mitigate soils susceptible to seismic-related settlement; the proposed mitigation reduced the estimated vertical seismic settlement to about one-and-a-half to four inches. Gorian also recommended the proposed structures be supported on a "strong mat" type foundation to reduce the potential for differential settlement.

2.1.3 Proposed Moorpark Library Site

OGI, (2017) advanced five CPTs and two drill holes to evaluate the site conditions at the proposed library site on the northwest corner of Moorpark Avenue and High Street. The soil conditions encountered at the site consists primarily of sand and silty sand soil in the upper 40

feet underlain by thinly interbedded silt, clay, and clayey sand from 40 to 75 feet (maximum depth explored). SPT N-values from the upper 25 feet of the drill holes range from 2 to 15 blows per foot (bpf), indicating the granular soils are very loose to medium dense in that zone. The SPT N-values from 25 to 75 feet range from 12 to 22 bpf, indicating the granular soils are medium dense and the fine-grained silt and clay soils are medium stiff within that zone. Groundwater was encountered at a depth of about 37 feet during exploration at the library site. Historic high groundwater levels in the Moorpark area reportedly are about 15 feet below the ground surface.

The project analyses for the library site indicated:

- The site is not located within a fault rupture hazard zone as defined by the State of California, California Geological Survey.
- The site is located in a seismically active area of Ventura County and has an estimated peak ground acceleration PGA_M of 1.03g.
- The combined liquefaction and dry seismic settlement estimated using the program GeoLogisMiki and the procedures developed by Robertson (2009) and Boulanger and Idriss (2014) ranges from about 12 to 34 inches, with an average of about 19 inches in the upper 75 feet at the site.
- A majority of the estimated seismically induced settlement occurs in the granular soil layers in the upper 50 feet of the site; less than two to four inches of settlement is estimated to occur below 50 feet. Based on the liquefaction analyses, the fine-grained silt and clay soil layers do not contribute to liquefaction settlement.
- Estimated hydroconsolidation (collapse) potential ranges from 0.05 to 2.3 percent based on laboratory testing performed on three samples.
- Based on the evaluation, ground improvement using vibro-replacement (stone columns) or cement deep soil mixing (DSM) was recommended to reduce the seismic settlement to less than 2 inches in accordance with California Building Code (CBC) guidelines.

CGS Special Publication 117A (CGS, 2008) and the CBC (2016) typically require projects to have total seismic settlement of no more than two inches and differential settlement of one inch. Sites with estimated settlements of more than two inches are normally required to mitigate settlement to about two inches with ground improvement.

2.2 GEOLOGIC SETTING

The downtown Moorpark area is located within the Transverse Ranges geologic/geomorphic province of California. That province is characterized by generally east-west-trending mountain ranges composed of sedimentary and volcanic rocks ranging in age from Cretaceous to Recent. Major east-trending folds, reverse faults, and left-lateral strike-slip faults reflect regional north-south compression and are characteristic of the Transverse Ranges. Several authors including Dibblee (1992), Weber (1973), and CGS (2000) have mapped the Moorpark area.

As mapped by Dibblee (1992), the earth materials in the downtown Moorpark area consist of alluvial sediments described as “silt, sand, and gravel deposits”. Mapping by the CGS (2000a; 2000b) differentiates the alluvium into several different geologic units including:

$Qya_{1,2}$ - Holocene Age alluvium

$Qyf_{1,2}$ - Holocene Age alluvial fan deposits

The subscript number following the geologic unit denotes the relative age of the deposit. Units with a subscript of 1 are interpreted to be younger than units with a subscript of 2 or 3. Younger geologic units are typically less dense and potentially more susceptible to liquefaction and settlement during a strong earthquake. As described in Section 2.3 below, the CGS indicates all of the Holocene age units are susceptible to liquefaction. As mapped by the CGS, the study sites for this project are mapped as underlain by the following geologic units:

Table 2. Summary of Mapped Geologic Units

Location	Geologic Unit
High Street and 347 Moorpark Avenue	Qya_1
500 Los Angeles Avenue	Qyf_2
Walnut Canyon North and South sites	Qya_2

2.3 REGIONAL GEOLOGIC HAZARDS

Mapping by the CDMG, (now CGS, 2000: Plate 3) indicates the proposed study sites are located in a potential liquefaction area based on a regional evaluation of geologic and geotechnical conditions. Proposed habitable developments within this zone are required to have a site-specific liquefaction evaluation performed in accordance with CGS Special Publication 117A (CGS, 2008). We note that single family residential developments with less than four units can be excluded from the liquefaction evaluation requirement by the governing agency.

2.4 SITE CONDITIONS

The site locations are shown on Plate 1 and Plates 2a through 2g. A summary of the site conditions is provided in the following table:

Table 3. Summary of Site Conditions

Area Designation	Site Conditions
High Street (Apricot Lane Farms, Lot 450, Lot 467, and Remainder High Street)	The sites on High Street are in a relatively level area with elevations ranging from about +515 feet at the Apricot Farms site on the western end of High Street to +535 feet at 467 High Street. The area slopes to the southwest at about 1 percent. The ground surface at the sites consists of soil on most sites with partial asphalt concrete pavement on portions of the Lot 450 and the Remainder of High Street sites from previous site development.
Moorpark Avenue and Los Angeles Avenue	The 347 Moorpark Avenue and 500 Los Angeles Avenue sites are relatively level lots located in the central part of Moorpark. The ground surface elevation at the sites is about 511 and 495 feet respectively. The ground surface is soil at 347 Moorpark Avenue, and asphalt pavement and soil at 500 Los Angeles Avenue.
Walnut Canyon Road North and South (WCRN and WCRS)	The lots are located on the western side of Walnut Canyon Road about 1,000 to 2,000 feet north of City Hall. Walnut Canyon trends generally northeast-southwest along this section and is about 250 to 300 feet wide in an east-west direction. The ground surface consists of soil with some remaining foundations and concrete pads on several of the locations. Elevations range from about +610 feet to +573 feet on WCRN and WCRS, respectively. The ground surface slopes to the southeast at about 3 percent. The Walnut Canyon drainage is channelized within a 5+ foot deep earthen lined channel on the western side of the WCRS lots.

2.5 EARTH MATERIALS

Descriptions of soil conditions presented herein are based on visual classification of samples obtained from our field exploration combined with the results of laboratory testing. As depicted on the drill hole and CPT logs in Appendix A, the subsurface earth materials consist of interbedded granular alluvial deposits of sand, silty to clayey sand, silt, and clay from the ground surface to about 30 to 80 feet (maximum depths explored). As shown on the CPT logs in Appendix A, the sand, silt, and clay layers range from thinly to thickly bedded (several inches to 10+ feet in thickness). Earth materials interpreted to be weathered sandstone bedrock of the Saugus Formation was encountered below the alluvium in several locations, including 467 High Street and Walnut Canyon Road North (Appendix A). In addition, CPTs at 450 High Street, Remainder High Street and Apricot Farms sites refused on dense granular materials that may be Saugus Formation materials or dense granular soil.

The surficial earth materials at each of the sites are mapped as alluvium, however, based on the subsurface exploration performed for this study, the soil stratigraphy and engineering properties of the alluvial sediments varies between the sites. Additionally, the stratigraphy varies between exploration locations on sites with multiple explorations (467 High Street, 500 Los Angeles Avenue, and Walnut Canyon Road North and South). The data suggest the materials

were deposited in an active alluvial environment. The following table briefly summarizes the general soil units at the study sites.

Table 4. Summary of Site Stratigraphy

Project Site	Generalized Soil Description
Apricot Farms	0 – 37 ft.: sand and silty sand, loose to medium dense 37 - 66 ft.: interbedded silt and clay with minor clayey sand lenses, stiff 66 – 72 ft.: dense sand, possibly Saugus Formation
Remainder High Street	Variable lithology between explorations; 0 – 50 ft.: variable, interbedded sand, silt and clay to primarily sand and silty sand, loose to medium dense 50 – 66 ft.: interbedded silt and clay with minor clayey sand lenses, stiff 66 – 72 ft.: dense sand, possibly Saugus Formation
450 High Street	0 – 42 ft.: interbedded sand, silty to clayey sand, loose to medium dense 42 – 57 ft.: interbedded sandy silt and clayey sand, medium dense 57 – 72 ft.: medium dense sand 72 – 76 ft.: dense sand, possibly Saugus Formation
467 High Street	0 – 23 ft.: interbedded sandy silt and silty to clayey sand, loose to medium dense 23 – 30 ft.: very dense clayey sand, possibly Saugus Formation
347 Moorpark Avenue	0 – 18 ft.: interbedded sandy to clayey silt, loose to medium dense 18 – 75 ft.: sand and sand with gravel, medium dense
500 Los Angeles Avenue	Variable lithology between explorations; 0 – 37 ft.: interbedded silty to clayey sand, loose to medium dense 37 – 60 ft.: interbedded sand, silty and clayey sand, medium dense 60 – 75 ft.: sand, medium dense to very dense, with thinly interbedded soft to stiff silt and clay
Walnut Canyon Road North	Variable lithology between explorations; 0 – 18 ft.: sand, silty to clayey sand, loose to medium dense with thinly interbedded silt and clay lenses 18 – 30/42 ft.: sand to silty sand, loose to medium dense 30 - 42 ft. to maximum depth explored 30 to 50 ft.: dense sand and silt, possibly Saugus Formation
Walnut Canyon Road South	Variable lithology between explorations; 0 – 10 ft.: interbedded silty to clayey sand, very loose to lose 10 – 30 ft.: sand to silty sand, loose to medium dense 30 – 53/62 ft.: sand with interbedded silt, dense to very dense, possibly Saugus Formation

2.6 ENGINEERING PROPERTIES

A summary of the general engineering parameters for the earth materials encountered in the explorations advanced for this study consists of:

- Field SPT N-values are presented on the drill hole logs (Appendix A) and vary based on lithology, depth, and groundwater level. Overall, the N-values indicate the granular soils were very loose to medium dense from the ground surface to a depth of about 25 feet, and medium dense from depths of about 25 to 50 feet (Appendix A). N-values interpreted from the CPTs show a similar profile with estimated N-values in granular soils below 50 feet of 20 to 50 indicating those soils are medium dense to dense.
- The moisture content above the groundwater for the granular and fine-grained alluvium generally ranged from about 3 to 8 percent and 11 to 18 percent, respectively. Below the groundwater, the moisture content ranged from about 14 to 20 percent for the granular soils and 20 to 34 percent for the fine-grained soils. As described in Section 2.7 below, groundwater was encountered at depths of about 20 to 38 feet in explorations advanced on High Street, Moorpark Avenue, and Los Angeles Avenue (Appendix A).
- Dry densities of the earth materials tested for this study are presented on the drill hole logs in Appendix A. In general, the dry densities of the tested soil materials in the upper 35 feet of the sites ranged from about 89 to 110 pounds per cubic foot (pcf).
- The results of grainsize analyses indicate fines contents (percent passing No. 200 sieve) ranging from about 3 to 40 percent for the tested granular soil samples and from about 53 to 79 percent for tested cohesive materials.
- Atterberg limits tests (plasticity tests) indicate the tested fine-grained sandy clay layers have liquid limits of 31 to 50 and plasticity indexes of 12 to 19. Those soils classify as low plasticity sandy clay and clay (Appendix B).
- The hydroconsolidation (collapse) potential was measured for 13 samples from depths of 4 to 30 feet in accordance with ASTM D4546, Method B. The test results are presented in Appendix B and are summarized in Table 11. The samples were selected for testing based on unit weight, degree of saturation, void ratio, and fines content (percent passing No. 200 sieve). The test results indicate hydroconsolidation potentials of less than 0.1 percent to 6.9 percent (Appendix B). Additional discussion of collapse potential is provided in Section 3.0 of this report.
- Shear wave velocities measured in CPT-RHS1 (Remainder High Street site) ranged from 610 to 1,524 feet per second (ft/sec). The data are presented in Appendix A and evaluation of the data is presented in Appendix C. The average shear wave velocity in the upper 70 feet of the site is 840 ft/sec, which is consistent with a Site D soil classification (shear wave velocity between 600 ft/sec to 1,200 ft/sec) per ASTM and CBC procedures.

2.7 GROUNDWATER CONDITIONS

Groundwater was encountered at depths of about 20 to 38 feet in the drill holes advanced for this study (Appendix A) and are summarized in Table 5. Dissipation tests were performed in three of the CPTs advanced for this study (CPT-500LAA1, CPT-500LAA3, and CPT-WCRS2). The data are presented in Appendix A and indicate groundwater levels consistent with those measured in the respective sites drill holes. Historically high groundwater levels reported by the CGS (2000) indicate the groundwater levels in the downtown Moorpark area have been within about 15 to 20 feet of the ground surface (Plate 4).

Table 5. Summary of Depths to Groundwater

Location	Latitude/ Longitude	PGA_M	Ground Surface Elevation (approx., feet)	Depth to Groundwater Encountered During Exploration (feet)	Historic High Groundwater Depth (feet)
Apricot Farms	34.2851 -118.8811	1.030	515	33	15
Remainder High Street	34.2852 -118.8788	1.028	518	33	15
450 High Street	34.2851 -118.8763	1.025	528	38	15
547 High Street	34.2856 -118.8756	1.027	535	Not Encountered to 30 feet	20
347 Moorpark Avenue	34.2822 -118.8824	1.016	511	28	15
500 Los Angeles Ave.	34.2782 -118.8875	1.001	495	20	15
Walnut Canyon Road South	34.2904 -188.8829	1.060	573	Not Encountered to 50 feet	Unknown (greater than 15 feet)
Walnut Canyon Road North	34.2928 -118.8808	1.063	610	Not Encountered to 50 feet	Unknown (greater than 15 feet)

2.8 DATA INTERPRETATION AND ANALYSES

Data interpretation for utilized the CPTs and the SPT N-values from the drill holes advanced for this study (Appendix A). Analyses of the CPT data were performed using the computer program GeoLogisMiki. Selected computer printouts from the GeoLogisMiki analyses are presented in Appendix C. A complete pdf file of the analyses can be provided upon request. SPT data were evaluated using an in-house Excel spreadsheet; printouts of the analyses are also provided in Appendix C.

The field SPT N-values presented on the drill hole logs in Appendix A were normalized to 1 ton per square foot (tsf) and corrected for rig efficiency, hammer type, sampler type (no liner), and rod length as described in the Recommended Procedures for Implementation of CGS Special

Publication 117A (CGS, 2008). We also utilized blowcounts measured for the modified California sampler (MCS) in the analyses by dividing the MCS blowcounts by 1.6 to provide an equivalent SPT N-value. The SPT N-value correction factors are summarized in Table 6.

Table 6. SPT N-Value Correction Factors

Correction Factor	Value	Comment
Hammer Efficiency (C_E)	1.3	Auto trip hammer 80% efficiency
Rod Length (C_R)	L<15'=0.75 L<20'=0.85 L<35'=0.95 L>35'=1.0	L= Rod Length (feet)
Sampling Method (C_S)	1.2	--
Modified California Sampler (MCS) blowcounts	MCS/1.6 = SPT N-value	Equivalent SPT N-Value

2.9 POTENTIAL VARIATION OF SUBSURFACE MATERIALS

There is a potential for variation in the consistency, density, and strength/hardness of the materials from what was encountered in our explorations. The potential exists to encounter perched water, zones of poorly consolidated soils, or other conditions not indicated on the exploration logs.

3.0 SEISMIC PARAMETERS AND GEOHAZARDS

3.1 FAULTS

The downtown Moorpark area is located in a seismically active portion of southern California and the site vicinity most likely will be subjected to strong earthquake ground motion during its lifetime. As summarized in the following table, numerous active or potentially active faults are known or postulated to exist within about 15 miles of the High Street area.

Table 7. Nearby Faults

Fault	Approximate Distance (miles)[1]	Maximum Moment Magnitude (Mmax)
Simi-Santa Rosa	2.0	6.9
Oak Ridge	6.1	7.5
San Cayetano	9.3	7.5

[1] Earthquake distances and magnitudes obtained from the USGS website (2017) from central portion of High Street (Remainder High Street Site).

3.2 GROUND RUPTURE POTENTIAL

The sites are not located within a State of California Earthquake Fault Zone (formerly Alquist-Priolo Special Studies Zone) and no known active or potentially active faults cross or trend toward the downtown Moorpark area. The potential for fault rupture to affect the project area is considered low.

3.3 SEISMIC PARAMETERS FOR 2016 CBC

We estimated the probabilistic seismic ground acceleration at the downtown Moorpark area using the USGS web application (USGS; 2017). On the basis of the web-based analyses, the peak horizontal ground acceleration (pga) at the study sites ranges from 1.016 to 1.063g for an earthquake with a 2,475-year return period (2 percent probability of exceedance in 50 years) assuming Site Class D soil conditions. The following table summarizes the probabilistically estimated strong ground motion parameters for the project site.

Table 8. Summary of USGS Probabilistic Seismic Hazard Deaggregation Results

Return Period (years)	Mean Magnitude (Mw)	Mean Source Distance (miles)	Peak Horizontal Ground Acceleration
2,475	6.9	6.1	1.016g to 1.063g

3.3.1 CBC Site Classification

The CBC site classification per ASTM 7-10 procedures is based on the average shear wave velocity, shear strength (S_u), and SPT N-value in the upper 100 feet of the site. Subsurface data for this study extends to a maximum depth of 80 feet as shown in Appendix A. ASCE 7-10 guidelines indicate a stiff soil (Site D classification) has the following parameters:

1. Average shear wave velocity of 600 to 1,200 feet/sec,
2. Average shear strength, Su, of 1,000 to 2,000 psf, and
3. Average SPT N-value of 15 to 50.

The average shear wave velocity in the upper 70 feet of CPT-RHS1 is 840 feet/second. CPT-RHS1 has similar estimated shear wave velocities, shear strengths and N-values to other sites evaluated as part of this study. Shear strengths measured in the field with pocket penetrometers and torvanes indicate a shear strength, Su, of 500 to 4,000 psf with an average value of 1,250 psf. Interpreted shear strengths based on CPT data range from about 600 to over 4,000 psf, with most values in the range of 1,000 to 3,000 psf. The average estimated SPT N-value in the upper 100 feet of each site using the procedure identified in ASCE 7-10 ranges from 8 to 22 as summarized on the following table. Based on a majority of the data, the study sites classify as a Type D soil profile. For this study, we assumed a Site Class D; however, additional studies may be required at several of the sites which have average SPT N-values of less than 15.

Table 9. Average SPT N-Value by Site

Location	Average SPT N-Value
Apricot Farms	14
Remainder High Street	13
450 High Street	8
467 High Street	24
347 Moorpark Avenue	22
500 Los Angeles Avenue	9
Walnut Canyon Road North	28
Walnut Canyon Road South	16

3.4 LIQUEFACTION AND DRY SEISMIC SETTLEMENT POTENTIAL

Liquefaction is described as the sudden loss of soil strength because of a rapid increase in soil pore water pressures due to cyclic loading during a seismic event. In order for liquefaction to occur, three general geotechnical characteristics must be present[1]: 1) groundwater must be present within the potentially liquefiable zone; 2) the potentially liquefiable soil must meet certain grainsize and classification characteristics; and 3) the potentially liquefiable granular soil must be of low to moderate relative density. If those criteria are met and strong ground motion occurs, then those soils may liquefy, depending upon the intensity and cyclic nature of the strong ground motion. Liquefaction that produces surface effects generally occurs in the upper 40 to 50 feet of the soil column, although the phenomenon is not restricted to depths of less than 50 feet.

As described in the Earth Materials section above, the soil profile consists primarily of interbedded granular alluvial deposits of sand, silty to clayey sand, silt and clay. Groundwater was encountered at depths of about 20 to 38 feet during field exploration for this study. Historic high groundwater levels summarized by the CGS (2000) are about 15 to 20 feet below the ground surface. SPT N-values used in the analyses are reported on the drill hole logs.

Research by Boulanger and Idriss[2] (2006) has indicated fine-grained silt and clay soils with Plasticity Index (PI) values of 6 or less can be susceptible to liquefaction and research by Bray and Sancio (2006) indicates low plasticity silt with a PI of up 12 can liquefy during strong earthquake ground shaking. Clay soils with PI of greater than 18 generally exhibit a clay-like behavior and are considered non-liquefiable based on the criteria developed by Bray and Sancio (2006). The fine-grained sandy clay and sandy to silty clay soil layers tested for this study (Appendix B) have fines contents (percent passing the number 200 sieve) of 53 to 79 percent and PI's of above 12, suggesting that the fine-grained soil layers tested are not susceptible to liquefaction in response to strong earthquake ground shaking. Additional site-specific testing

[1] Based on studies by Seed and Idriss (1971) and Youd and Idriss (2000), liquefaction occurs primarily in clean granular soils that classify as sand (SP) and sand with silt (SP-SM). Dense granular soils with fines contents greater than 35% (silty sand - SM and clayey sand - SC) are less likely to liquefy. Liquefaction susceptibility criteria developed by Boulanger and Idriss (2006) indicates that fine-grained soils with a PI of 6 or less can be susceptible to liquefaction. Studies by Bray and Sancio (2006) indicates silty soils with a PI of 12 or less could potentially liquefy.

should be performed to further evaluate the liquefaction susceptibility of the fine-grained soils if the parcels are developed.

Analyses of the CPT data were performed using the program GeoLogisMiki. The input values are summarized below and selected graphics from the analyses are presented in Appendix C:

- The seismic ground motion, PGAM, for the sites ranged from 1.01g to 1.06g for a 2 percent probability of exceedance in 50 years for the project site.
- Historic high groundwater level of 15 to 20 feet below the ground surface.
- CPT evaluation using the procedure recommended by Robertson (2009).
- SPT data evaluation using the procedure recommended by Seed and Idriss (1982).

As depicted on the plots in Appendix C, the CPT-based analyses using the GeoLogisMiki program which incorporates the evaluation procedures developed by (Robertson, 2009) indicates a strain rate (settlement) in the soil up to 5 percent. The primary factors in the evaluation include the soil density, ground acceleration, and soil lithology (clean sands versus clayey sand with high fines content). The estimated vertical liquefaction settlements based on the CPT analyses are summarized in Table 10.

The SPT-based analyses developed by Seed and Idriss (1982) suggest a maximum strain value of 2 percent as summarized in the table below and presented on the Excel datasheets in Appendix C. We note the maximum strain values from the SPT-based analyses produces lower estimated liquefaction settlements than the CPT-based analyses.

Seismically induced settlement or collapse (dry seismic settlement) can occur in soils that are loose, soft, or that are moderately dense, but weakly cemented. The onsite very loose to loose granular and silty soils above the groundwater are susceptible to seismically induced settlement. The estimated seismically induced settlement in the upper 15 to 20 feet of the sites is summarized in Table 10. We note the groundwater is assumed to be at depths of 15 to 20 feet; therefore, soils below that depth are subject to liquefaction potential in the analyses even though the groundwater depth encountered by our explorations was up to about 38 feet below the ground surface.

Overall, the analyses indicate the very loose to medium dense granular soils at the sites are susceptible to liquefaction below the groundwater and dry seismic settlement above the groundwater level. The estimated vertical liquefaction and dry seismic settlements for the sites are summarized in Table 10.

Table 10. Summary of Estimated Vertical Seismic Settlement

Exploration Location	Estimated Liquefaction Settlement based on CPT Analyses[1] (inches)	Estimated Liquefaction Settlement based on SPT Analyses[2] (inches)	Estimated Dry Seismic Settlement[3] (inches)	Total Estimated Seismic Settlement (inches)
CPT-AF	5-1/2	--	4-1/2	10
DH-AF	--	1-1/2	3	4-1/2
CPT-RHS1	7-1/2	--	7	14-1/2
CPT-RHS2	7	--	7	14
RHS1 Shear Wave	11	--	--	11
DH-RHS	--	5	2-1/2	7-1/2
CPT-450HS	13	--		13
DH-450HS	--	6	1-1/2	7-1/2
CPT-467HS	3/4	--	3-1/2	4-1/4
DH-467HS	--	0	3-1/2	3-1/2
CPT-347MA	4	--	3-1/3	7-1/3
DH-347MA	--	4	3-1/3	7-1/3
CPT-500LAA1	11	--	4-1/3	15-1/3
CPT-500LAA2	8	--	4-1/3	12-1/3
DH-500LAA	--	6-1/3	4-1/3	10-2/3
CPT-WCRN1	--	--	11	11
CPT-WCRN2	--	--	8	8
DH-WCRN	--	--	3-1/2	3-1/2
CPT-WCRS1	--	--	12	12
CPT-WCRS1	--	--	15	15
CPT-WCRS1	--	--	18	18
DH-WCRS	--	--	10	10

[1] Appendix C; GeoLogisMiki
[2] Appendix C; excel spreadsheet analyses
[3] Appendix C; upper 15 to 20 feet of drill holes

3.5 SEISMIC SETTLEMENT EVALUATION SUMMARY

Review of the data in Appendix C indicates a range of liquefaction and dry seismic settlement values at the tested sites as summarized below:

3.5.1 South Side of High Street (Apricot Farms, Remainder High Street, and 450 High Street sites)

The estimated liquefaction and dry seismic settlements on the south side of High Street ranges from 7-1/2 to 14-1/2 inches. The analyses are based on CPT, SPT, and shear wave velocity measurements. The analyses indicate liquefaction could occur to depths of about 60 feet at Apricot Farms site and 70 feet at 450 High Street.

3.5.2 467 High Street

The 467 High Street site has about 22 feet of soil above very dense sand/sandstone of the Saugus Formation based on the explorations. The sandstone/very dense sand of the Saugus Formation is non-liquefiable. The estimated historic high groundwater at the site is 20 feet. The estimated dry seismic settlement at the site is 3-1/2 to 4-1/4 inches.

3.5.3 347 Moorpark Avenue

The granular soil at 347 Moorpark Avenue is medium dense to depths of 75 feet with a corresponding lower estimated liquefaction and dry seismic settlement of about 7 inches. The analyses indicate seismic settlement would occur above a depth of 40 feet.

3.5.4 500 Los Angeles Avenue

The explorations at 500 Los Angeles Avenue encountered variable soil units. The estimated seismic settlement ranges from about 10 to 15 inches, with nearly all of the liquefaction occurring above a depth of 50 feet.

3.5.5 Walnut Canyon Road North and South

The explorations for the sites in Walnut Canyon (WCRN and WCRS) encountered primarily granular soil and no groundwater to refusal depths of 60 feet. Historic high groundwater levels are unknown but are likely below a depth of 50 feet. On that basis, liquefaction is not considered an issue for the WCRN and WCRS sites. However, dry seismic settlement of the granular soils is estimated to be 3 to 18 inches based on both the SPT and CPT analyses. In our opinion, the SPT-based settlement estimates of 3 inches for the WCRN and 10 inches for the WCRS sites provide reasonable estimates of potential dry seismic settlement. The SPT-based analyses suggest settlement to a depth of about 20 feet at the WCRN sites and 40 feet at the WCRS sites. The CPT-based analyses indicate estimated settlements of 8 to 18 inches, with potential settlement occurring to the maximum depths explored (40 to 60 feet).

3.6 LATERAL MOVEMENT

The occurrence of lateral spreading is generally associated with sites where liquefaction is possible and: 1) the ground surface is sloping, or 2) there is a free-face condition such as a road cut or riverbank. Existing analytical methods of assessing potential deformations caused by lateral spreading are based on a small number of case histories and generally involve layers of liquefiable soils of greater than about three feet (one meter). The procedures are generally

considered reasonable in assessing risks where significant lateral deformations are possible (deformations of three feet or greater). The ability to reasonably predict small lateral spreading deformations is, however, considered significantly limited.

As depicted on the regional geologic/topographic map for the Moorpark Quadrangle (Dibblee, 1992), with the exception of the sites along Walnut Canyon Road, the ground surface in the vicinity of the project sites slopes to the southwest at a gradient of less than 1 percent. Based on the relatively level surface and lack of nearby free-face, the potential for lateral movement is considered low. The Walnut Canyon sites are not susceptible to liquefaction because groundwater is below 50 feet; therefore, the potential for lateral displacement of the soil at those sites is also considered low. For reference, CGS Special Publication 117A (CGS, 2008) defines large-scale ground displacements as areas that exceed one to three feet horizontally and four to six inches vertically. Site specific studies during design should address the potential for lateral displacement.

3.7 HYDROCONSOLIDATION (COLLAPSE) POTENTIAL

Research by several authors including and Houston et al. (1997; 2001) and Purdue University (Howayek, 2012) indicates hydroconsolidation (collapse) typically occurs in silty and granular soil materials with densities below 105 pcf, degrees of saturation of less than 25 percent, and high void ratios. In the Ventura County area, our experience indicates hydroconsolidation is commonly associated with silty soils with visible pores/voids and high void contents deposited in debris-flow type environments. The depositional environment with high collapse potential previously observed in Ventura, Camarillo, and Simi Valley consists of Holocene- to Late Pleistocene-age alluvial fan deposits above the groundwater. As described above, the proposed study area is underlain by younger to older alluvial/alluvial fan deposits consisting of Holocene- to Late Pleistocene-age sediments.

Based on evaluations of the laboratory index properties (soil density, moisture content, void ratio, and fines content), 13 samples were selected for collapse testing per ASTM D4546, Method B. The results of those tests are presented in Appendix B and are summarized in Table 11 below. Based on published criteria (ASTM D5333), a collapse index of two percent or less is classified as slight, two to six percent is moderate, six to 10 percent is moderately severe, and above 10 percent is severe. Based on the results from the tested samples, the amount of hydroconsolidation ranges from 0.1 to 6.9 percent. The values of less than two percent are considered slight by ASTM D5333 classification and within background levels for soils in Ventura County based on our previous experience. Five samples (two from the Apricot Farms site, two from 467 High Street, and one from Walnut Canyon Road) had potential collapse related settlements above background levels that would warrant additional evaluation and mitigation.

The data for the Remainder High Street site indicate the fine-grained soils encountered in drill hole DH-RHS have 0.3 percent or less of collapse potential. One sample from 19 feet swelled upon addition of water, indicating potential expansive soil conditions. The potential for significant hydroconsolidation/collapse settlement at the Remainder High Street site appears low.

The typical procedure to mitigate shallow collapse potential is to overexcavate and recompact the soil. If ground improvement is performed at the site, the near-surface soils would likely be densified as part of the ground improvement process.

Table 11. Summary of Hydroconsolidation (Collapse) Potential of Onsite Soils

DH Location	Soil Type[1]	Depth (feet)	Dry Density (pcf)	Moisture Content (%)	Degree of Saturation (S), (%)	Void Ratio	Fines Content (%)	Measured Hydro-consolidation (%)
High St Apricot Farms	Sandy Silt (ML)	4	95	2.7	10	0.74		3.5
High St Apricot Farms	Sand w/ Silt (SP-SM)	14	99	4.1	16	0.68	6	6.7
Remainder High St	Clayey Silt (ML)	9	88	16	48	0.87		0.2
Remainder High St	Clay (CL)	19	99	18	71	0.67	54	-0.1 (swell)
Remainder High St	Clayey Sand (SC)	29	112	10.8	60	0.48		0.3
450 High St	Silty Sand (SM)	9	100	8.3	33	0.66	20	0.4
450 High St	Silty Fine Sand (SM)	29	104	6	27	0.59	40	-
467 High St	Sandy Silt (ML)	4	99	5.4	22	0.67		4.9
467 High St	Sandy Silt (ML)	14	105	4.3	20	0.57		1.9
347 Moorpark Ave	Sandy Silt (ML)	4	102	4	17	0.62		0.1
347 Moorpark Ave	Sandy Silt (ML)	14	99	16	63	0.67		<0.1
347 Moorpark Ave	Sand (SP)	24	116	3	19	0.43	3	--
500 LA Ave	Silty Fine Sand (SM)	4	97	8.8	33	0.71	27	1.0
500 LA Ave	Clayey Sand (SC)	14	107	11	53	0.55	27	--
Walnut Cyn Road North	Sand w/ Silt (SP-SM)	4	110	3	16	0.50		2.3
Walnut Cyn Road North	Clayey Sand (SC)	14	117	8	51	0.41		--

DH Location	Soil Type[1]	Depth (feet)	Dry Density (pcf)	Moisture Content (%)	Degree of Saturation (S), (%)	Void Ratio	Fines Content (%)	Measured Hydro-consolidation (%)
Walnut Cyn Road North	Clayey Sand (SC)	24	123	6	46	0.34	32	--
Walnut Cyn Road North	Silty Sand (SM) **Saugus Fm.**	34	107	6	29	0.55	-	--
Walnut Cyn Road South	Sand (SP) to Clayey Sand (SC)	4	107	8	39	0.55	16	--
Walnut Cyn Road South	Sand (SP)	14	101	7.1	30	0.64		1.1
Walnut Cyn Road South	Sand (SP)	24	106	4	19	0.56		--
Walnut Cyn Road South	Clayey Sand (SC)	34	112	7	39	0.48	28	--

[1] Alluvial soil materials, except where noted.

4.0 OPINIONS AND RECOMMENDATIONS

4.1 SUMMARY OF FINDINGS

The geotechnical conditions at the eight sites evaluated for this study indicate:

- The sites are underlain by interbedded very loose to medium dense granular soils and generally medium stiff fine-grained silt and clay soil. Dense granular soil/sandstone of the Saugus Formation was encountered beneath the alluvial soils in the Walnut Canyon Road North and 467 High Street sites. CPTs advanced at the Apricot Farms, Remainder High Street, and 450 High Street sites met refusal at depths of 70+feet on dense granular material that may be Saugus Formation.
- Groundwater was encountered at depths of about 20 to 38 feet during explorations at most sites excluding Walnut Canyon. Groundwater was not encountered to depths explored of 60 feet in Walnut Canyon. Historic high groundwater levels in the Downtown Moorpark area are about 15 to 20 feet below the ground surface.
- The sites are not located within a fault rupture hazard zone as defined by the State of California, California Geological Survey.
- The sites are located in a seismically active area of Ventura County and have estimated peak ground accelerations, PGA_M, of 1.01 to 1.06g.
- CPT and shear wave velocity data were evaluated to estimate liquefaction and dry seismic settlement using the program GeoLogisMiki and the procedures developed by Robertson (2009) and Boulanger and Idriss (2014; Appendix C). SPT data were

evaluated using an in-house Excel spreadsheet based on the procedures developed by Seed and Idriss (1982). The combined liquefaction and dry seismic settlement estimated for the sites ranges from about 7 to 18 inches (Table 10).

- A majority of the estimated seismically induced settlements occur in the granular soil layers in the upper 40 to 50 feet of the sites; however, the CPT-based analyses indicate the liquefaction could occur as deep as 70 feet. Based on the liquefaction analyses, the fine-grained silt and clay soil layers do not contribute to liquefaction settlement.
- Estimated hydroconsolidation (collapse) potential ranges from 0.1 to 6.9 percent based on the laboratory testing on 13 samples. Eight of the values are below 2 percent and are considered background level of hydroconsolidation/collapse of the soil. Hydroconsolidation estimates below 2 percent do not typically require mitigation. Five tested samples from the Apricot Farms, 467 High Street, and Walnut Canyon sites had measured hydroconsolidation values above 2 percent; those estimated values were limited to the upper 15 feet of the soil profiles. The typical mitigation for hydroconsolidation is to remove and replace the soil with compacted fill.
- CGS Special Publication 117A (CGS, 2008) and the California Building Code (CBC) typically require projects to have seismic settlement of no more than two inches total and one inch of differential settlement. Sites with estimated seismic settlements of more than two inches are normally required to mitigate settlement to about two inches with ground improvement. As summarized in Table 10, all of the sites have estimated liquefaction or dry seismic settlements in excess of two inches and likely would require mitigation through ground improvement. Potential ground improvement options are discussed in the following sections. We note the governing agency can choose to exclude single family residential developments with less than four units from the ground improvement requirement.

4.2 GROUND IMPROVEMENT OPTIONS

As discussed above, ground improvement of the soils at the study sites likely will be required to mitigate the amount of estimated settlement to near two inches of total settlement and one inch of differential settlement. Potential ground improvement options could include:

- Overexcavation and recompaction for areas with shallow mitigation requirements and no groundwater such as 467 High Street.
- Vibro replacement, deep soil mixing, rapid impact compaction, and aggregate piers for sites requiring mitigation of liquefaction and dry seismic settlement to depths of 50 feet or more. It also may be cost effective to combine mitigation methods depending on the scale and depth of the improvements.
- Other ground improvement methods such as grouting could be considered by a ground improvement contractor.

Several ground improvement methods to mitigate seismically induced settlements to a depth of about 50 feet are: 1) vibro replacement (VR, also referred to as “stone columns”), and 2) deep soil mixing (DSM). The VR procedure consists of advancing a 30-inch diameter steel

mandrel to the selected depth (approximately 50 feet) using a combination of the weight of the mandrel and vibration. Once the mandrel reaches the selected depth, ¾-inch crushed rock is used to backfill the hole. The gravel is vibrated and "rammed" into the soft soil. The stone columns are placed on a grid pattern with a spacing typically in the range of six to nine feet on center. The soil displaced by the mandrel is "pushed" laterally into the adjacent soil, densifying the soil mass at the site to the point where it will resist liquefying and settlement in response to earthquake ground shaking. CPTs are advanced between columns after the VR is performed to evaluate the increase in soil strength/resistance to liquefaction. VR is an effective method of densifying granular soils to a depth of about 50 feet, but the process does not significantly improve the density of fine-grained silt and clay soils or highly interbedded fine-grained and granular soils.

DSM uses a large diameter auger mounted to a large drill rig or crane to advance the auger to the target depth. Cement is mixed into the soil at a regulated rate of around 10 percent and mixed by the auger using several up and down passes of the auger. The amount of cement added to the soil is determined by laboratory testing to optimize the soil strength versus amount of cement utilized. Once the cement and soil are uniformly mixed, the auger is withdrawn and moved to the next location. The DSM columns can be placed in a variety of patterns (grid, tangent, overlapping) depending on the project requirements. The column configuration will depend on the column diameter selected (typically three to six feet), cement percentage, soil type, and amount of soil improvement required. Once the columns are completed, a grade-beam type foundation can be installed on top of the DSM columns to support the structure. Other column configurations such as tangent columns, overlapping columns, etc. can be utilized depending on project requirements. The advantages of the DSM method are that it can installed to depths of greater than 50 feet and it can improve the strength of fine-grained soils.

4.3 STORMWATER INFILTRATION

Recent regulatory agency requirements mandate stormwater generated on a new project site be infiltrated into the onsite soils. While this concept may have merit from an environmental standpoint, it increases the potential to cause foundation damage to onsite improvements due to higher groundwater levels, reduced soil strength, hydroconsolidation of onsite soils, and moisture infiltration into buried structures. If onsite stormwater disposal is implemented at the sites, the design needs to consider the locations of existing and proposed structures, and impacts to offsite improvements.

The liquefaction analyses performed for this study indicates up to about 12+ inches of liquefaction related settlement could occur in response to the design seismic event. Infiltration of stormwater could increase groundwater levels beneath the site and reduce the shear strength of the soils which would increase the potential for liquefaction related settlement. In addition, the study indicated the potential for hydroconsolidation (collapse) of the onsite soil as high as 6.7 percent in areas not mitigated by ground improvement. A collapse of 2 percent over a depth of 20 to 38 feet (depth above current groundwater level) is equivalent to a collapse settlement of about 5 to 9 inches. Previous experience with collapse related settlements indicates concentrated water infiltration can cause hydroconsolidation of soils with collapse potential. Those concentrated settlements are typically associated with leaking water or sewer pipelines, but in our opinion, concentrated stormwater infiltration in a discrete basin has the potential to cause hydroconsolidation of the soils. Settlement contours from soil hydroconsolidation related

settlement measured in previous forensic studies in the Ventura area documented a radial settlement pattern extending up to about 100 feet from the water infiltration source.

If storm water is infiltrated at the proposed sites, we suggest the project civil engineer consider the above factors in the design process. If concentrated stormwater infiltration is proposed in a discrete basin, that basin should be located away from project structural elements and offsite improvements (including buried utilities) that could be impacted by settlement. A setback distance of at least 100 feet from a discrete infiltration location is likely a reasonable starting point for infiltration design. Another alternative would be a diffuse infiltration system that does not concentrate infiltration in a specific location.

5.0 LIMITATIONS

5.1 REPORT USE

This preliminary report has been prepared for the exclusive use of the City of Moorpark for evaluation of the liquefaction potential and need for ground improvement to mitigate potential settlements that may occur as a result of earthquake-induced ground shaking at various sites within the Downtown Moorpark area. This preliminary report is intended to provide a summary of the site conditions, geohazard assessment, and describe potential ground improvement mitigations. A site specific geotechnical design report will be required prior to site development based on the proposed structure and site conditions at the time of construction. The geotechnical design study should identify the proposed ground improvement option and foundation design.

The findings, conclusions, and recommendations presented herein were prepared in accordance with generally accepted geotechnical engineering practices of the project region. No other warranty, express or implied, is made.

Although information contained in this report may be of some use for other purposes, it may not contain sufficient information for other parties or uses. If any changes are made to the project as described in this report, the conclusions and recommendations in this report shall not be considered valid unless the changes are reviewed and the conclusions and recommendations of this report are modified or validated in writing by OGI.

5.2 HAZARDOUS MATERIALS

This report does not provide information regarding the presence of hazardous/toxic materials in the soil, surface water, groundwater, or atmosphere.

5.3 LOCAL PRACTICE

In performing our professional services, we have used generally accepted geologic and geotechnical engineering principles and have applied the degree of care and skill ordinarily exercised under similar circumstances by reputable geotechnical engineers currently practicing in this or similar localities. No other warranty, express or implied, is made as to the professional advice included in this report.

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PLATES



PROPERTY LOCATIONS

1 - Apricot Lane Farms
2 - Remainder High Street
3 - 450 High Street
4 - 467 High Street
5 - 347 Moorpark Avenue
6 - 500 Los Angeles Avenue
7 - Walnut Canyon Road North
8 - Walnut Canyon Road South

N

0 500'
Approx. Scale (feet)

LOCATION MAP
Moorpark Geohazards Study
Moorpark, California

PLATE 1



APRICOT LANE FARMS SITE
Moorpark Geohazards Study
Moorpark, California

PLATE 2a



REMAINDER HIGH STREET SITE
Moorpark Geohazards Study
Moorpark, California

PLATE 2b



450 and 467 HIGH STREET SITES
Moorpark Geohazards Study
Moorpark, California

PLATE 2c



347 MOORPARK AVENUE
Moorpark Geohazards Study
Moorpark, California

PLATE 2d



500 LOS ANGELES AVENUE
Moorpark Geohazards Study
Moorpark, California

PLATE 2e



Approx. CPT location

Approx. drill hole location

WALNUT CANYON ROAD NORTH SITE
Moorpark Geohazards Study
Moorpark, California

PLATE 2f



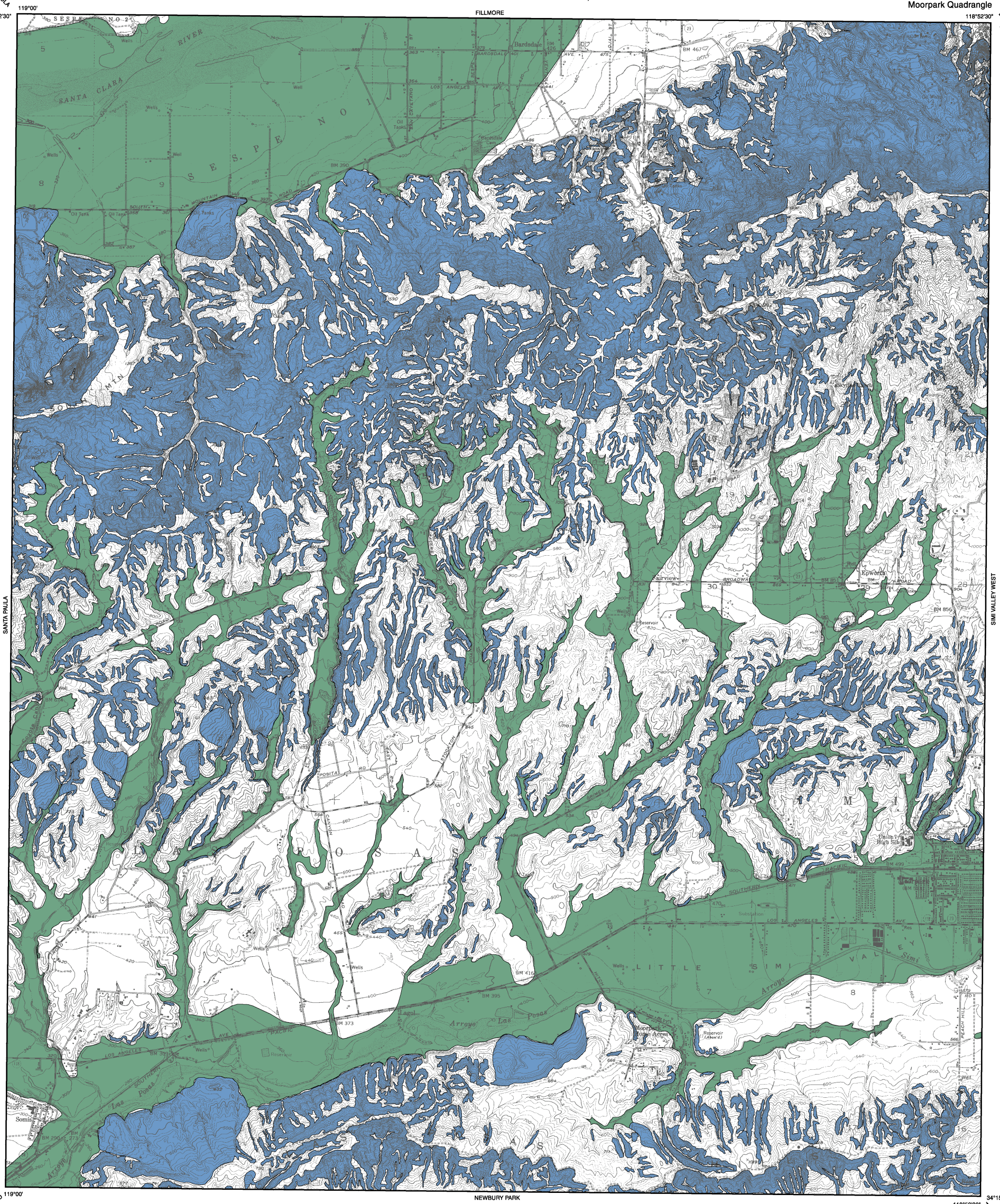
WALNUT CANYON ROAD SOUTH SITE
Moorpark Geohazards Study
Moorpark, California

PLATE 2g

DIVISION OF MINES AND GEOLOGY
JAMES F. DAVIS, STATE GEOLOGIST

STATE OF CALIFORNIA-GRAY DAVIS, GOVERNOR
THE RESOURCES AGENCY-MARY D. NICHOLS, SECRETARY
DEPARTMENT OF CONSERVATION-DARRYL W. YOUNG, DIRECTOR

SEISMIC HAZARD ZONES MAP
Moorpark Quadrangle



Base Map prepared by U.S. Geological Survey, 1951, photorevised 1969

PURPOSE OF MAP

This map will assist cities and counties in fulfilling their responsibilities for protecting the public safety from the effects of earthquake-triggered ground failure as required by the Seismic Hazards Mapping Act (Public Resources Code Sections 2690-2699.6).

For information regarding the scope and recommended methods to be used in conducting the required site investigations, see DMG Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California.

For a general description of the Seismic Hazards Mapping Program, the Seismic Hazards Mapping Act and regulations, and related information, please refer to the draft User's Guide (see http://www.consrv.ca.gov/dmg/shezp/userguid/).

Production of this map was funded by the Federal Emergency Management Agency's Hazard Mitigation Program and the Department of Conservation in cooperation with the Governor's Office of Emergency Services.

IMPORTANT - PLEASE NOTE

1) This map may not show all areas that have the potential for liquefaction, landsliding, strong earthquake ground shaking or other earthquake and geologic hazards. Also, single earthquake capable of causing liquefaction or triggering landslide failure will not uniformly affect the entire area zoned.

2) Liquefaction zones may also contain areas susceptible to the effects of earthquake-induced landslides. This situation typically exists at or near the toe of existing landslides, downslope from rockfall or debris flow source areas, or adjacent to steep stream banks.

3) This map does not show Alquist-Priolo earthquake fault zones, if any, that may exist in this area. Please refer to the latest official map of earthquake fault zones for disclosures and other actions that are required by the Alquist-Priolo Earthquake Fault Zoning Act. For more information on this subject and an index to available maps, see DMG Special Publication 42.

4) Landslide zones on this map were determined, in part, by adapting methods originally developed by the U.S. Geological Survey (USGS). Landslide hazard maps prepared by the USGS typically use experimental approaches to assess earthquake-induced and other types of landslide hazards. Although aspects of these new methodologies may be incorporated in future CDMG seismic hazard zone maps, USGS maps should not be used as substitutes Official SEISMIC HAZARD ZONES maps.

5) U.S. Geological Survey base map standards provide that 90 percent of cultural feature be located within 40 feet (horizontal accuracy) at the scale of this map. The identification and location of liquefaction and earthquake-induced landslide zones are based on available data. However, the quality of data used is varied. The zone boundaries depicted have been drawn as accurately as possible at this scale.

6) Information on this map is not sufficient to serve as a substitute for the geologic and geotechnical site investigations required under Chapters 7.5 and 7.8 of Division 2 of the Public Resources Code.

7) DISCLAIMER: The State of California and the Department of Conservation make no representations or warranties regarding the accuracy of the data from which these maps were derived. Neither the State nor the Department shall be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any with claim by any user or any third party on account of or arising from the use of this map.

SCALE 1:24,000

1 .5 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

STATE OF CALIFORNIA

SEISMIC HAZARD ZONES

Delineated in compliance with
Chapter 7.8, Division 2 of the California Public Resources Code
(Seismic Hazards Mapping Act)

MOORPARK QUADRANGLE

OFFICIAL MAP

Released: November 17, 2000

STATE GEOLOGIST

MAP EXPLANATION

Zones of Required Investigation:

Liquefaction

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-Induced Landslides

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

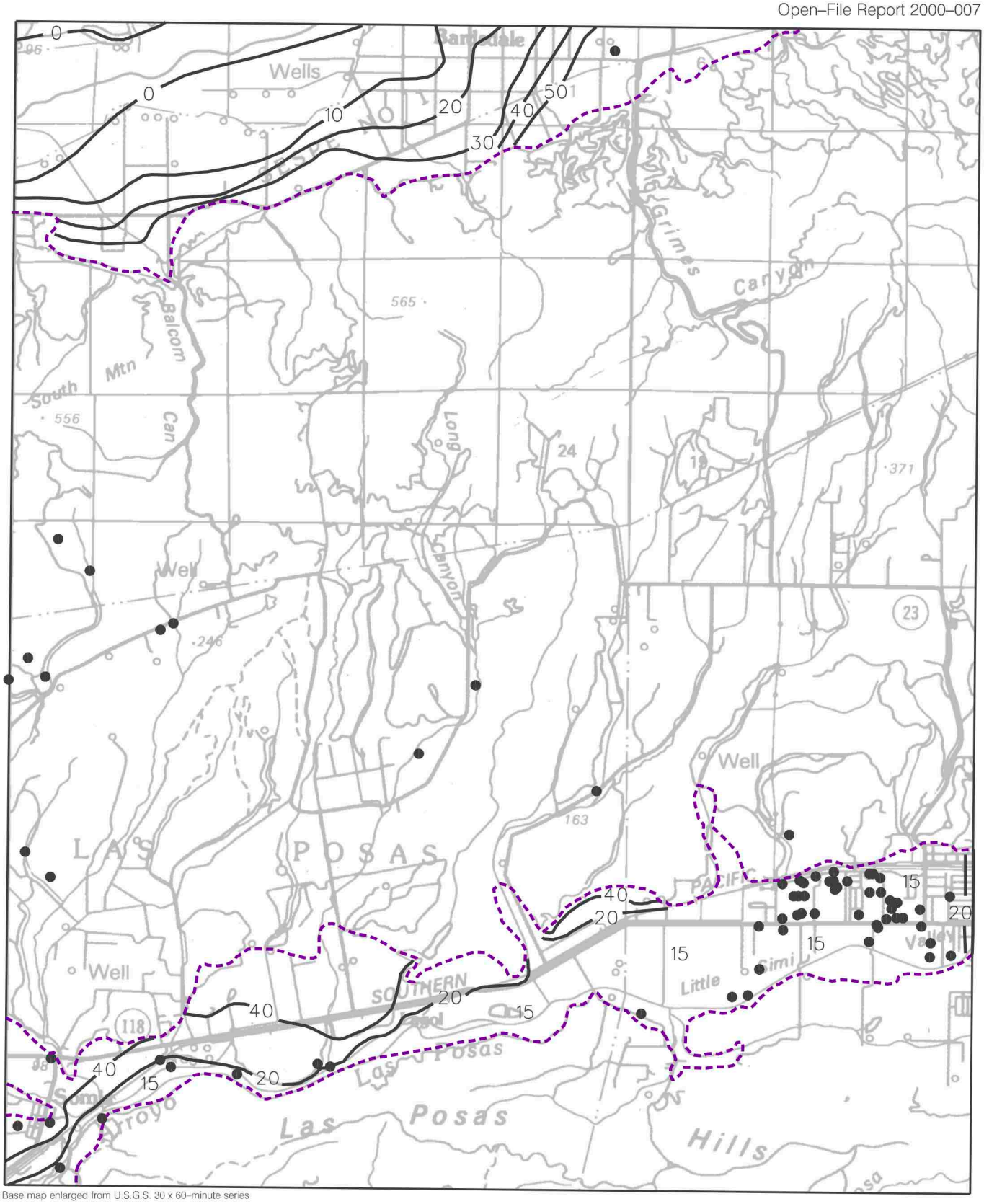
DATA AND METHODOLOGY USED TO DEVELOP
THIS MAP ARE PRESENTED IN THE FOLLOWING:

Seismic Hazard Evaluation of the Moorpark 7.5 minute quadrangle, Ventura County, California: California Division of Mines and Geology, Open-File Report 2000-007.

For additional information on seismic hazards in this map area, the rationale used for zoning, and additional references consulted, refer to DMG's World Wide Web site (http://www.consrv.ca.gov/dmg/).

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Division of Mines and Geology. All rights reserved.

PLATE 3



Base map enlarged from U.S.G.S. 30 x 60–minute series

Plate 1.2 Historically shallow ground–water depths and borehole data points in alluviated valley areas of the Moorpark Quadrangle.

Alluviated Valley

20 Historically shallow ground–water depth contours (in feet)

Borehole Site

15 Historically shallow ground–water depth where same value occurs over a broad area (in feet)

PLATE 4

ONE MILE

Scale

APPENDIX A

LOG OF DRILL HOLE DH-AF

LOCATION: High Street, east of Moorpark Avenue (Apricot Farms Site)

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					ARTIFICIAL FILL (af) 3" base materials at surface Sandy SILT (ML): dry to damp, moderate brown, with gravel					
4			1	(6)	**ALLUVIUM (Qal)** Sandy SILT (ML): very loose, moderate brown, damp, with scattered coarse sand and with few fine voids	95	3			
10			2	10	SAND with Silt (SP-SM): loose, moderate yellowish brown, damp, with minor caliche veining		3		6	
14			3	(28)	- medium dense, with gradational lenses of coarse sand, at 14'	99	4			
18			4	27	Silty Fine SAND (SM): medium dense, pale yellowish brown, damp, with scattered gravel		2		17	

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	33'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 20, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-1a

LOG OF DRILL HOLE DH-AF (continued)

LOCATION: High Street, east of Moorpark Avenue (Apricot Farms Site)
SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					Fine SAND with Silt (SP-SM): medium dense, moderate yellowish brown, damp					
22										
24			5	(39)	- pale yellowish brown, with about 3" to 4"-thick gradational coarse sand to fine gravel lens, at 24-1/2'					
26										
28										
			6	31	SAND with Gravel (SP): dense, pale yellowish brown, damp; blowcounts affected by gravel content					
30					- coarse gravel to about 3" dia. returned to surface by auger flights, below 30'					
32					- water measured at 33' after sampling at 34'					
34					Silty SAND (SM): medium dense, moderate brown, wet		19		24	
			7	15	- sampler full; blowcounts likely affected by full sampler					
36										
38					- clay on inner bit after pulling for sampling at 39'					
					CLAY (CL): stiff, moderate yellowish brown, wet, with fine sand					
			8	12						

CONTRACTOR:	S/G Drilling, Inc.		TOTAL DEPTH (ft): 50.5'
METHOD:	8-in. Hollowstem Auger	NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.	WATER DEPTH (ft): 33'
BACKFILL:	Cuttings with Portland		LOGGED BY: L Prentice
DATE:	September 20, 2017		CHECKED BY: C Prentice

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-1b

LOG OF DRILL HOLE DH-AF (continued)

LOCATION: High Street, east of Moorpark Avenue (Apricot Farms Site)

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					- with sand in sampler shoe, at 40-1/2'					
42										
44					Sandy CLAY (CL): soft to medium stiff, moderate yellowish brown,					PP0.2
			9	6	wet, slightly micaceous		28	31/12	79	PP0.2
46										
48										
					- soft, with very loose clayey sand lenses with gradational contacts, at 49'					
50			10	4						
52										
54										
56										
58										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	33'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 20, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-1c

LOG OF DRILL HOLE DH-RHS

LOCATION: High Street, SE of Bard Street

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
		1	--	**ARTIFICIAL FILL (af)** PMB base materials and wood chips at surface Clayey SAND (SC): moderate brown, damp					
4		2	4	**ALLUVIUM (Qal)** Clayey SAND (SC): very loose, moderate brown, moist		13		35	
10		3	(9)	Silty Fine SAND (SM): loose, pale yellowish brown, damp to moist Clayey SILT (ML): medium stiff, moderate yellowish brown, moist, finely laminated	88	27			
14		4	6	Fine Sandy SILT (ML), loose, pale yellowish brown, interbedded with medium stiff, moderate brown, moist, slightly micaceous Clayey SILT (ML) and loose pale yellowish brown Silty Fine SAND (SM)		25		73	
18				SAND (SP): medium dense, pale yellowish brown, damp					
		5	(17)	CLAY (CL): stiff, moderate brown, moist, with fine caliche veins	103	16			PP3.5

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	33.2'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 20, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-2a

LOG OF DRILL HOLE DH-RHS (continued)

LOCATION: High Street, SE of Bard Street

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
									PP4.0 TV1.8
22									
24		6	8	Sandy Clayey SILT (ML): medium stiff, moderate brown, moist, slightly micaceous		16		54	
26									
28									
30		7	(14)	Clayey SAND (SC): loose, moderate brown, moist to wet, few scattered rounded gravel to 1/2" dia.	112	11			
32									
34				- measured water at 33.2' before sampling at 34'					
		8a	6	Fine SAND (SP): loose, pale yellowish brown, wet					
		8b		Sandy CLAY (CL): medium stiff, moderate brown, wet		31		66	
36									
38									
				- added water to augers					
				Fine SAND (SP): loose, moderate yellowish brown, wet					
		9	11	Silty Fine SAND (SM): loose, moderate brown, wet, slightly micaceous					

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	33.2'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-2b

LOG OF DRILL HOLE DH-RHS (continued)

LOCATION: High Street, SE of Bard Street

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					SAND with Gravel (SP): medium dense, moderate yellowish brown, wet					
42										
44			10	14	SAND (SP): medium dense, pale yellowish brown, wet, medium grained					
46										
48										
50			11	3	Clayey SAND (SC): very loose, moderate brown, wet - sample possibly disturbed by drilling process		15		26	
52										
54										
56										
58										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	33.2'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-2c

LOG OF DRILL HOLE DH-450HS

LOCATION: 450 High Street
SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					ARTIFICIAL FILL (af) 3" a.c. over 9" base materials Clayey to Sandy SILT (ML): moderate to dark brown, damp					
4			1	WOH	**ALLUVIUM (Qal)** Sandy to Clayey SILT (ML): very soft, dark brown, damp		16		54	
10			2	(11)	Silty Fine SAND (SM): loose, pale yellowish brown, damp	99	8			
14			3	8	- with 3"-thick medium stiff, moderate brown clayey silt lens, at 15'		22		67	
			4	(55)	SAND (SP): dense, pale yellowish brown, damp, with gravel and angular rock fragments to 1-1/4" dia.		3		4	

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	38.1'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-3a

LOG OF DRILL HOLE DH-450HS (Continued)

LOCATION: 450 High Street

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					- blowcounts likely affected by gravel content					
22										
24			5	7	Silty to Clayey Fine SAND (SM to SC): loose, moderate brown, moist, slightly micaceous		13		40	
26										
28										
30			6	(29)	Silty Fine SAND (SM) interbedded with Clayey SAND (SC): medium dense, pale yellowish brown and moderate brown, moist	104	6			
32										
34			7	19	SAND (SP): medium dense, moderate yellowish brown, moist, medium to coarse, with fine gravel					
36										
38					- measured water at 38.1' after sampling at 39'					
			8	2	Clayey SAND (SC): very loose, moderate brown, wet, grades to silt					

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	38.1'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-3b

LOG OF DRILL HOLE DH-450HS (Continued)

LOCATION: 450 High Street

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					Fine SAND with Silt (SP-SM): very loose, moderate brown, wet					
42										
					- added water to augers					
44					Clayey SAND (SC): loose, moderate brown, wet, with scattered fine subangular gravel					
			9	8			18		37	
46										
48										
					- medium dense, at 49'					
50			10	14						
52										
54										
56										
58										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	38.1'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-3c

LOG OF DRILL HOLE DH-467HS

LOCATION: 467 High Street
SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					ARTIFICIAL FILL (af) Sandy SILT (ML): dark brown, dry to damp, with clay					
4			1	(9)	**ALLUVIUM (Qal)** Sandy to Clayey SILT (ML): medium stiff, moderate to dark brown, damp, fine sand with few scattered coarse sand to fine gravel, with fine voids	99	5			
10			2	5	Clayey SAND (SC): loose, moderate brown, damp, with few scattered gravel - with 1-1/2"-thick dark brown clay lens, at 9-3/4'		5		17	
14			3	(18)	Sandy SILT (ML): medium dense, moderate yellowish brown, damp, with scattered subangular to subrounded gravel to about 3/4"-dia, and few fine voids	95	2			
			4	30	Clayey SAND (SC): medium dense, dry to damp, with scattered gravel		4		32	

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	30'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-4a

LOG OF DRILL HOLE DH-467HS (Continued)

LOCATION: 467 High Street
SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
22					- harder drilling below about 23'					
					SAUGUS FORMATION (QTs)					
24					Clayey SAND (SC): very dense, moderate brown, damp, with gravel					
			5	32/18:1	- sampler bouncing at 25'		2		13	
26					- very hard drilling below about 26-1/2'					
28										
			6	16/50:5	SAND with Gravel (SP): very dense, damp, gravel to 1"-dia. in sampler					
30					- refusal to sampling at about 30'					
					NOTE: Two teeth worn off of auger bit after pulling augers from hole.					
32										
34										
36										
38										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	30'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-4b

LOG OF DRILL HOLE DH-347MA

LOCATION: 347 Moorpark Avenue

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
			1	--	**ARTIFICIAL FILL (af)** Clayey SILT (ML): pale yellowish brown, with fine sand, and with roots in upper 6" to 8"					
2										
4			2	(10)	**ALLUVIUM (Qal)** Sandy SILT (ML): loose, pale yellowish brown, damp, with scattered fine gravel, few caliche veins, and few fine voids	102	4			
6										
8					- with gravel/cobbles noted during drilling, at about 8'					
10			3	11	SAND with Silt (SP-SM): loose to medium dense, pale yellowish brown, damp, medium grained		2		5	
12										
14					Fine Sandy SILT (ML): loose, pale brown, damp, grades to silty sand					
			4	(12)	Silty Fine SAND (SM): loose, light brown, damp, finely laminated with sandy silt	99	16			
16					Clayey SILT (ML): medium stiff, moderate brown, damp, with common fine iron oxide veins - with medium sand at tip of sample, at 15-1/2'					
18										
			5	39	SAND with Gravel (SP): medium dense, pale brown, damp, gravel fragments to >1-1/2" dia.; blowcounts affected by gravel content		5		4	

CONTRACTOR:	S/G Drilling, Inc.		TOTAL DEPTH (ft): 50.5'
METHOD:	8-in. Hollowstem Auger	NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.	WATER DEPTH (ft): 28.2'
BACKFILL:	Cuttings with Portland		LOGGED BY: L Prentice
DATE:	September 19, 2017		CHECKED BY: C Prentice

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-5a

LOG OF DRILL HOLE DH-347MA (continued)

LOCATION: 347 Moorpark Avenue

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					- gravel/cobbles noted during drilling at about 20' to 20-1/2'					
22										
24					- subrounded gravel 1/2" to 1-1/4" dia., at 24'					
			6	(44)	- blowcounts affected by gravel content	116	3			
26										
28					- wet, at 29'					
					- measured water at 28.2' after sampling at 29'					
					SAND (SP): medium dense, moderate yellowish brown, wet, medium					
30			7	20	to coarse sand, few scattered fine gravel		15		3	
					- subangular to subrounded gravel to 3-1/4" dia. returned to surface by auger flights, below about 30'					
32										
34										
			8	21			7			
36										
38										
					- medium sand, at 39'					
			9	21						

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	28.2'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 19, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-5b

LOG OF DRILL HOLE DH-347MA (continued)

LOCATION: 347 Moorpark Avenue

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
42										
44			10	48	SAND with Gravel (SP): dense, pale yellowish brown, wet, subangular to subrounded gravel to about 1/2" dia. - blowcounts affected by gravel content		10			
46										
48					- with pale yellowish brown clayey sand on inner rod bit prior to sampling at 49'					
50			11	26	SAND (SP): medium dense, pale yellowish brown, wet, medium grained, with scattered fine subrounded gravel		15		3	
52										
54										
56										
58										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	28.2'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 19, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-5c

LOG OF DRILL HOLE DH-500LAA

LOCATION: 500 Los Angeles Avenue

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					ARTIFICIAL FILL (af)					
					SAND with gravel base materials at surface					
					Silty SAND (SM): moderate yellowish brown, moist					
2										
4					**ALLUVIUM (Qal)**					
			1	(3)	Silty Fine SAND (SM): very loose, moderate brown, damp	97	9			
6										
8										
			2	4	Clayey SAND (SC): very loose, moderate brown, damp, with scattered coarse sand/fine gravel		8		27	
10										
12										
14					- loose, damp to moist, at 14'					
			3	(14)		107	11			
16										
18										
			4	12	SAND with Silt (SP-SM): medium dense, moderate yellowish brown, wet, medium grained		18		5	

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	20.7'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 19, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-6a

LOG OF DRILL HOLE DH-500LAA (continued)

LOCATION: 500 Los Angeles Avenue

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					- measured water at 20.7' prior to sampling at 24'; added water to augers					
22										
24			5	(31)			20			
26										
28										
30			6	6	- only recovered 1-1/2" of sample at 29'					
32										
34			7	31	Sand (SP): dense, moderate yellowish brown, wet, medium to coarse - with gravel fragments to about 1-1/2" dia., at 35-1/4'		12		3	
36										
38			8	12	- flowing sands, plugged augers, inner rods stuck in augers, pulled augers from hole to free inner rod; mixed bentonite drill mud and pumped to bottom of hole with tremie pipe; run back in hole with augers to sample and continue drilling; blowcounts may be affected by work to re-establish bottom of hole after pulling augers					

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	20.7'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 19, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-6b

LOG OF DRILL HOLE DH-500LAA (continued)

LOCATION: 500 Los Angeles Avenue

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
42										
44					- clayey sand on inner rod before sampling at 44'					
					Sandy SILT (ML): loose, moderate yellowish brown, wet					
			9	9	Sandy CLAY (CL/CH): stiff, moderate yellowish brown, wet, finely laminated		34	50/30	53	
46										
48										
					CLAY (CL): soft, moderate yellowish brown, wet					
50			10	2						PP0.5 PP0.5
52										
54										
56										
58										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	20.7'
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 19, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-6c

LOG OF DRILL HOLE DH-WCRN

LOCATION: Walnut Canyon Road, Lot 1293

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
					ARTIFICIAL FILL (af) Sandy SILT (ML): grayish brown, damp, with scattered gravel					
4			1	(9)	**ALLUVIUM (Qal)** SAND with Silt (SP-SM): loose, moderate brown, damp, with scattered fine subrounded gravel	110	3			
10			2	15	SAND with Gravel (SP): medium dense, pale yellowish brown, damp, medium grained sand - with 1-1/2"-thick moderate brown clayey sand lens, at 10-1/4'		3		5	
14			3	(17)	Clayey SAND (SC): medium dense, moderate brown, damp to moist, with scattered subrounded to rounded gravel to 3/4"-dia. and few fine voids	117	8		31	
			4	28	SAND (SP): medium dense, pale yellowish brown, damp, with fine gravel - with 2"-thick moderate brown clayey sand lens, at 20'		3		16	

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-7a

LOG OF DRILL HOLE DH-WCRN (Continued)

LOCATION: Walnut Canyon Road, Lot 1293

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
22										
24			5	(36)	Clayey SAND (SC): medium dense, moderate brown, damp, with scattered angular gravel fragments to 1/2"-length, and with very stiff sandy clay lens	123	6			
26										
28										
30			6	27	- pale yellowish brown, with silty sand lenses, at 29'		6		32	
32					- harder drilling, below about 33'					
34			7	(91)	**SAUGUS FORMATION (QTs)** Silty SAND (SM) interbedded with Sandy SILT (ML): very dense, pale yellowish brown, damp	107	6			
36										
38										
			8	40	Sandy SILT (ML): dense, pale yellowish brown, light greenish gray, damp					

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-7b

LOG OF DRILL HOLE DH-WCRN (Continued)

LOCATION: Walnut Canyon Road, Lot 1293

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
42					- with 1" dia. gravel returned to surface by auger flights, below about 42'					
44			9	92:11	Silty SAND (SM): very dense, pale yellowish brown, damp with scattered fine gravel, at 44-3/4'					
46										
48										
50			10	66	- without gravel, at 49'		6		13	
52					NOTE: Two teeth worn off of auger bit after pulling augers from hole.					
54										
56										
58										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-7c

LOG OF DRILL HOLE DH-WCRS

LOCATION: Walnut Canyon Road, Lot 1083
SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
			1	--	**ARTIFICIAL FILL (af)** Silty Fine SAND (SM): moderate yellowish brown, dry to damp, with scattered gravel					
4			2	(5)	**ALLUVIUM (Qal)** SAND (SP): moderate brown, very loose, damp	107	8			
					Clayey SAND (SC): very loose, dark brown, damp, with scattered coarse sand					
10			3	12	- loose, at 9' - 2" dia. subrounded gravel stuck in sampler shoe after sampling - blowcounts affected by gravel		6		16	
14			4	(12)	SAND (SP)/SAND with Clay (SP-SC): loose, moderate brown, moist	101	7			
					SAND with Silt (SP-SM): loose, moderate brown, moist, medium grained					
			5	23	- medium dense, with scattered fine rounded gravel, at 19'		7		9	

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 20, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-8a

LOG OF DRILL HOLE DH-WCRS (continued)

LOCATION: Walnut Canyon Road, Lot 1083

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
22										
24			6	(25)	- interbedded with medium to coarse sand lenses, at 24'	106	4			
26										
28										
					Clayey SAND (SC): loose, moderate brown, moist, with scattered fine gravel		11		28	
30			7	10						
32										
34					- with angular gravel fragments to 1/2" length, at 34-3/4'					
			8	(17)		112	7			
36										
38										
					- increased clay content, at 39'					
			9	11						

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

LOG OF DRILL HOLE DH-WCRS (continued)

LOCATION: Walnut Canyon Road, Lot 1083

SURFACE EL. (ft):

ELEV. (ft) DEPTH (ft)	MATERIAL SYMBOL	SAMPLE	NUMBER	BLOW COUNT	MATERIAL DESCRIPTION	DRY DEN. (pcf)	MOISTURE CONTENT %	PLASTICITY (LL/PI)	% PASSING No. 200	TV or PP (tsf)
42										
44			10	38	SAND with Clay (SP-SC): dense, moderate yellowish brown, moist, with scattered gravel 44 to 44-3/4' - blowcounts possibly affected by gravel content		7		9	
46										
48										
50			11	14	Clayey SAND (SC): medium dense, moderate brown, moist, with scattered fine gravel		11			
52										
54										
56										
58										

CONTRACTOR:	S/G Drilling, Inc.	TOTAL DEPTH (ft):	50.5'
METHOD:	8-in. Hollowstem Auger	WATER DEPTH (ft):	Not Encountered
BACKFILL:	Cuttings with Portland	LOGGED BY:	L Prentice
DATE:	September 21, 2017	CHECKED BY:	C Prentice

NOTE: The log and data presented herein are a simplification of actual subsurface conditions encountered at the time of exploration at the specific location explored. Subsurface conditions may differ at other locations and at this location with the passage of time.

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE A-8c

SUMMARY OF SAMPLING DETAILS

Symbol	Sample Number	Blowcount Push, or Grab	Sampler Type
	1	Bulk	Bulk Sample
	2	23	Standard Penetration Test (SPT) Sampler (1-3/8" ID/2" OD) driven
	3	(23)	Modified California Liner Sampler driven (2-3/8" ID/3" OD)
	4	Push	Thin-walled sampler pushed (2-7/8" ID/3" OD)
	5	(23)	Modified California Liner Sampler (disturbed) driven (2-3/8" ID/3" OD)

Blowcount Informtion

Blowcount	Description
63	63 blows for 1' penetration after initial 6" seating
89:11"	89 blows for 11" penetration after initial 6" seating
33:6"	33 blows for 6" drive after initial 6" seating
Ref	>50 blows for initial 6" seating
(23)	Blowcounts for modified California sampler
WOH	weight of hammer

MATERIAL SYMBOLS AND CLASSIFICATIONS

- Lean CLAY (CL)
- Fat CLAY (CH)
- Sandy CLAY (CL)
- SILT (ML)
- Elastic SILT (MH)
- Clayey SILT (ML)
- Clayey GRAVEL (GP and GW)
- Sandy SILT (ML)
- Silty SAND (SM)
- SAND with Silt (SP-SM and SW-SM)
- SAND (SP and SW)
- Clayey SAND (SC)
- SAND with Clay (SP-SC and SW-SC)
- CLAYSTONE
- SILTSTONE
- SANDSTONE
- VOLCANIC
- DOLOMITIC
- SILICEOUS
- PAVING AND BASE MATERIALS
- CONCRETE
- GRAVEL (GP and GW)
- GRAVEL with Sand (GP and GW)
- SAND with Gravel (SP and SW)
- SAND with Silt and Gravel (SP-SM and SW-SM)
- Silty SAND with Gravel (SM)
- Clayey SAND with Gravel (SC)

Other Symbols

- Groundwater
- Strata break

SUMMARY OF TERMS AND SYMBOLS USED ON LOGS

Summary of Rock Logging Descriptions

Weathering for Intact Rock (after USBR 2001)

Descriptors	Diagnostic Features					General characteristics (strength, excavation, etc.) §
	Chemical weathering-Discoloration And/or oxidation		Mechanical weathering-Grain boundary conditions (disaggregation) primarily for granitics and some coarse-grained sediments	Texture and solutioning		
	Body of rock	Fracture Surfaces		Texture	Leaching	
Fresh	No discoloration, not Oxidized	No discoloration or oxidation	No separation, intact (tight)	No change	No leaching	Hammer rings when crystalline rocks are struck. Almost always rock excavation except for naturally weak or weakly cemented rocks such as siltstones or shales.
Slightly weathered	Discoloration or oxidation is Limited to surface of, or short distance from, fractures; some feldspar crystals are dull	Minor to complete discoloration or oxidation of most surfaces	No visible separation, intact (tight)	Preserved	Minor leaching of some soluble minerals may be noted	Hammer rings when crystalline rocks are stuck. Body of rock not weakened. With few exceptions, such as siltstones or shales, classified as rock excavation.
Moderately Weathered	Discoloration or oxidation extends from fractures usually throughout; Fe-Mg minerals are "rusty" feldspar crystals are "cloudy"	All fracture surfaces are discolored or oxidized	Partial separation of boundaries visible	Generally preserved	Soluble minerals may be mostly leached	Hammer does not ring when rock is struck. Body of rock is slightly weakened. Depending on fracturing, usually is rock excavation except in naturally weak rocks such as siltstones or shales.
Intensely Weathered	Discoloration or oxidation throughout; all feldspars and Fe-Mg minerals are altered to clay to some extent; or chemical alteration produces in situ disaggregation, see grain boundary conditions	All fracture surfaces are discolored or oxidized, surfaces friable	Partial separation, rock is friable; in semiarid conditions granitics are disaggregated	Texture altered by chemical disintegra-tion (hy-dration, argillation)	Leaching of soluble minerals may be complete	Dull sound when struck with hammer, usually can be broken with moderate to heavy manual pressure or by light hammer blow without reference to planes of weakness such as incipient or hairline fractures, or veinlets. Rock is significantly weakened. Usually common excavation.
Decomposed	Discolored or oxidized throughout, but resistant minerals such as quartz may be unaltered; all feldspars and Fe-Mg minerals are completely altered to clay		Complete separation of grain boundaries (disaggregated)	Resembles a soil, partial or complete remnant rock structure may be preserved; leaching of soluble minerals usually complete		Can be granulated by hand. Always common excavation. Resistant minerals such as quartz may be present as "stringers" or "dikes."

Rock Hardness (after USBR 2001)

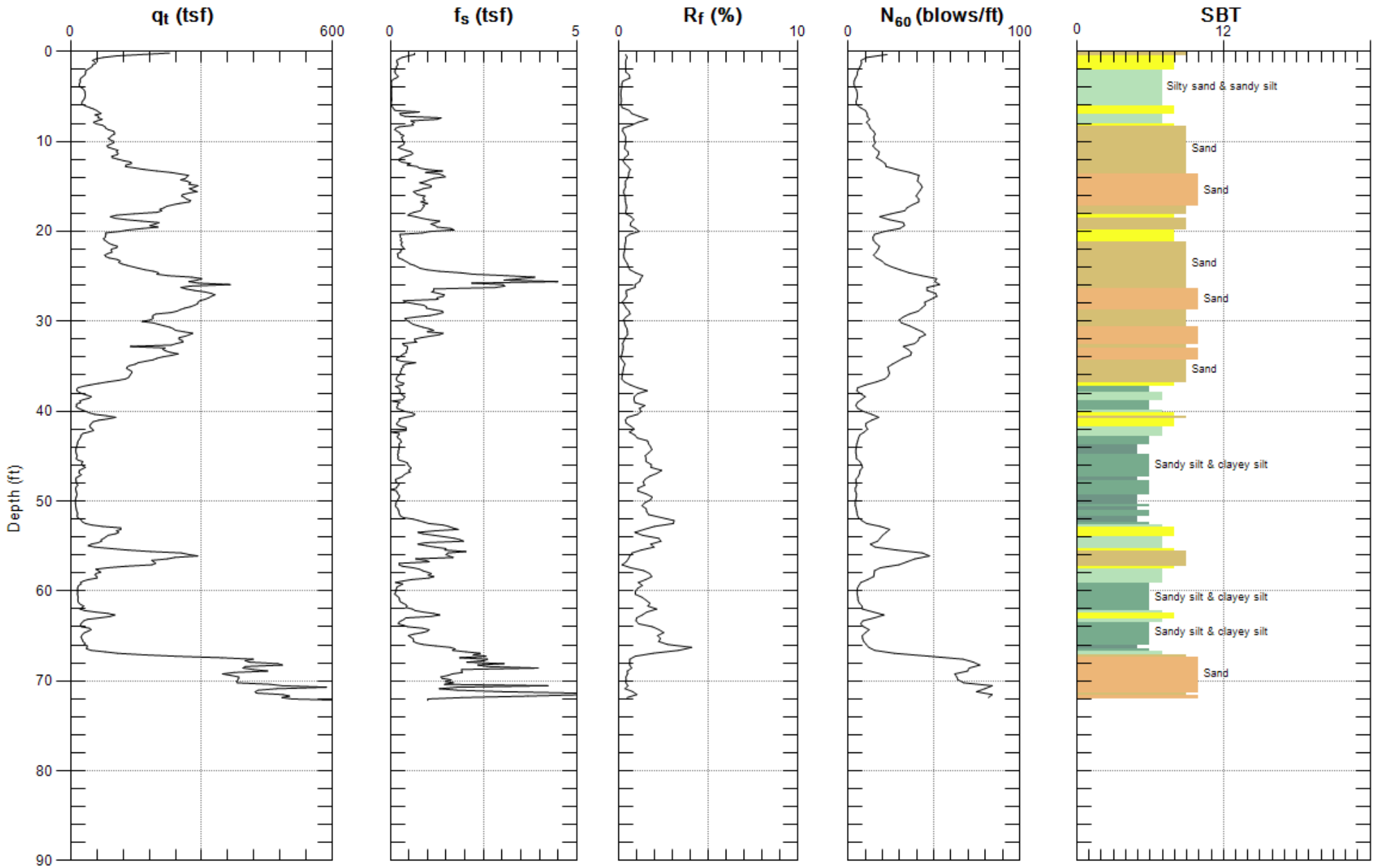
Descriptor	Criteria
Extremely hard	Cannot be scratched with a pocketknife or sharp knife. Can only be chipped with repeated hammer blows.
Very hard	Cannot be scratched with a pocketknife. Breaks with repeated hammer blows.
Hard	Can be scratched with a pocketknife with difficulty (heavy pressure). Breaks with heavy hammer blows.
Moderately hard	Can be scratched with a pocketknife with light or moderate pressure. Breaks with light hammer blow or heavy manual pressure.
Moderately soft	Can be grooved 2 mm (1/6 inch) deep with a pocketknife with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick with light pressure, can be scratched with fingernail. Breaks with light to moderate manual pressure.
Very soft	Can be readily indented, grooved or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

SUMMARY OF ROCK TERMS USED ON LOGS

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-AF

Engineer: CRAIG P.
Date: 9/28/2017 07:27

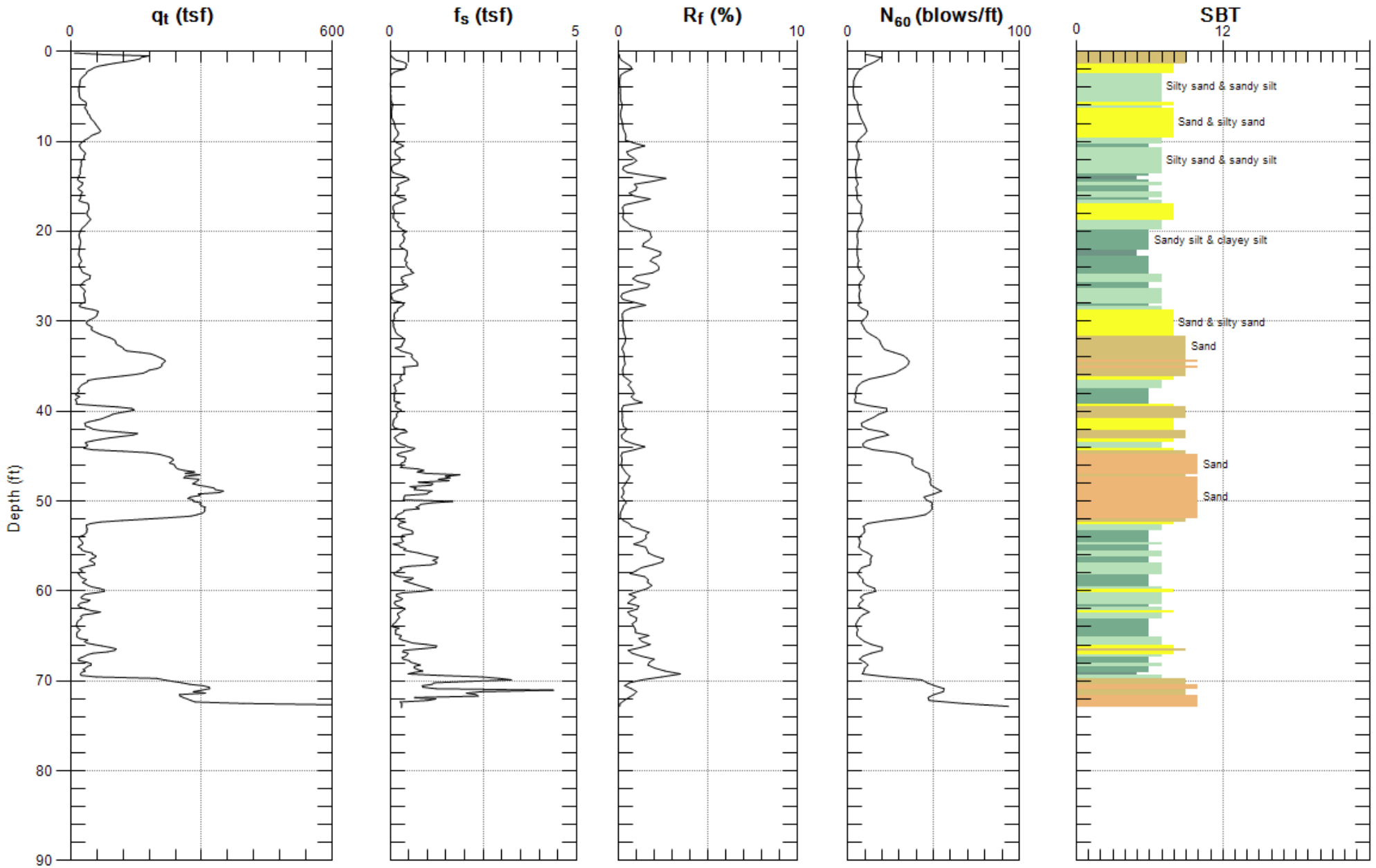


Max. Depth: 72.178 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-RHS1
Engineer: CRAIG P.
Date: 9/28/2017 08:13

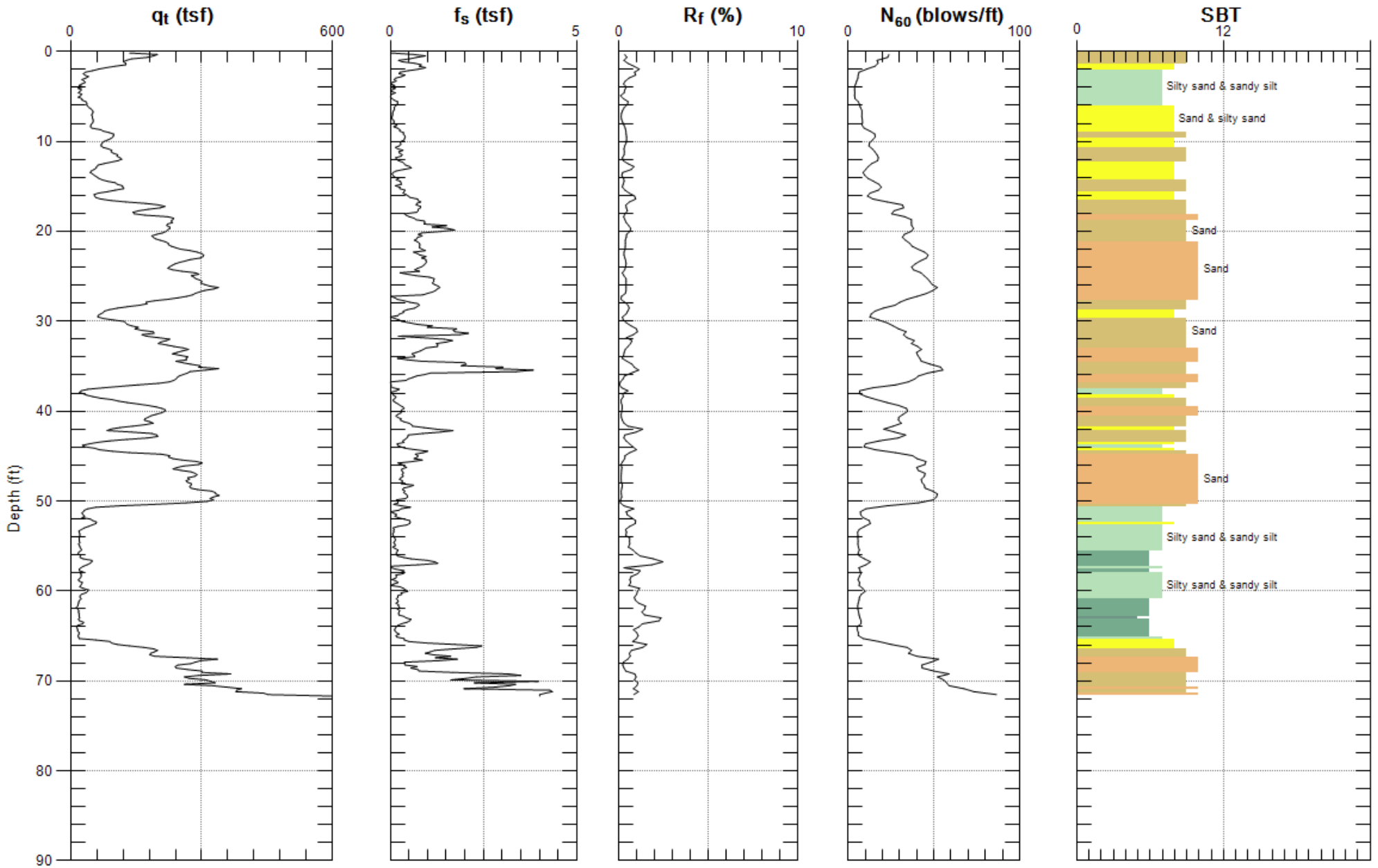


Max. Depth: 72.999 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-RHS2
Engineer: CRAIG P.
Date: 9/28/2017 09:31



Max. Depth: 71.686 (ft)
Avg. Interval: 0.328 (ft)

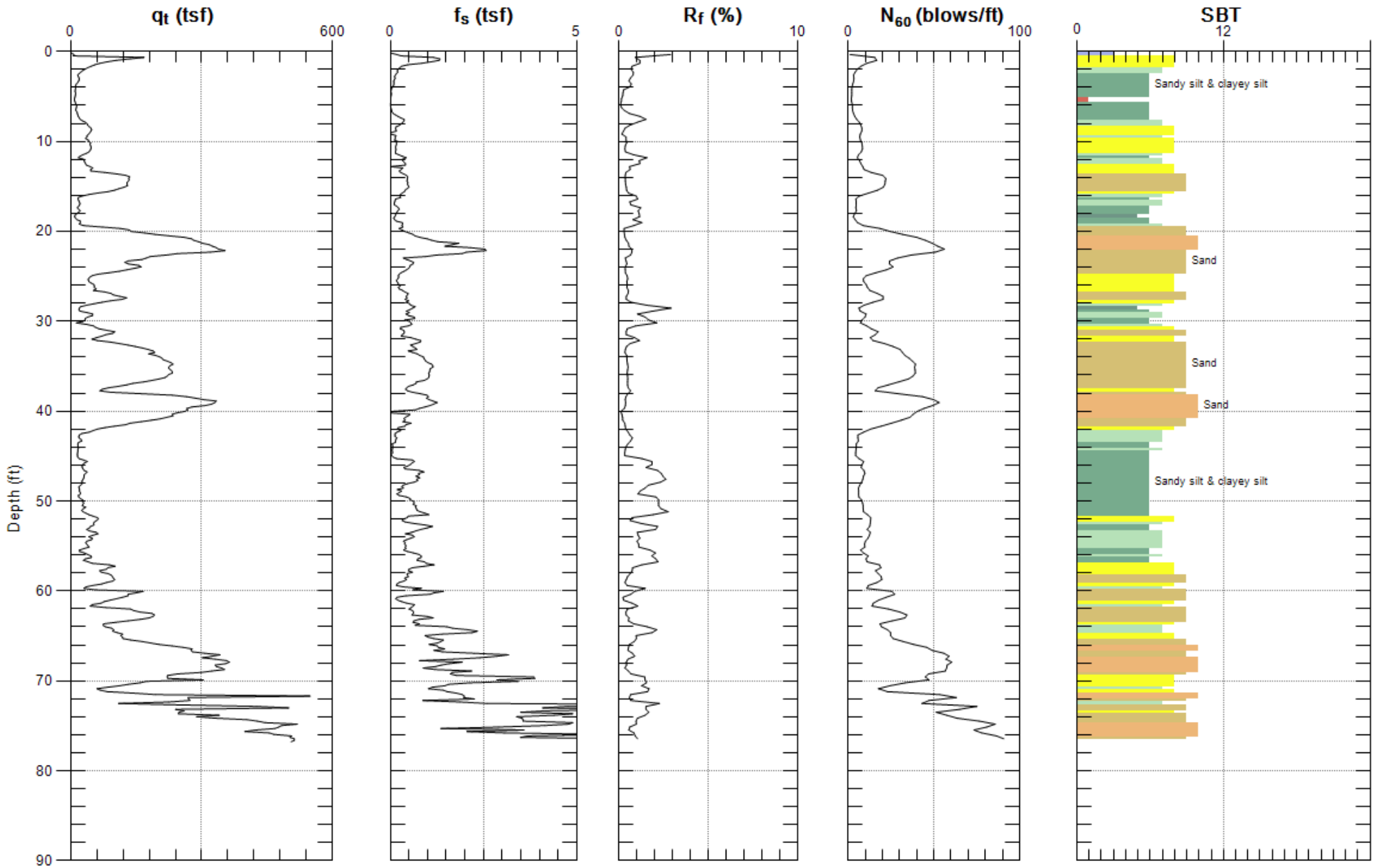
SBT: Soil Behavior Type (Robertson 1990)

GREGG

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-450HS

Engineer: CRAIG P.
Date: 9/28/2017 10:24

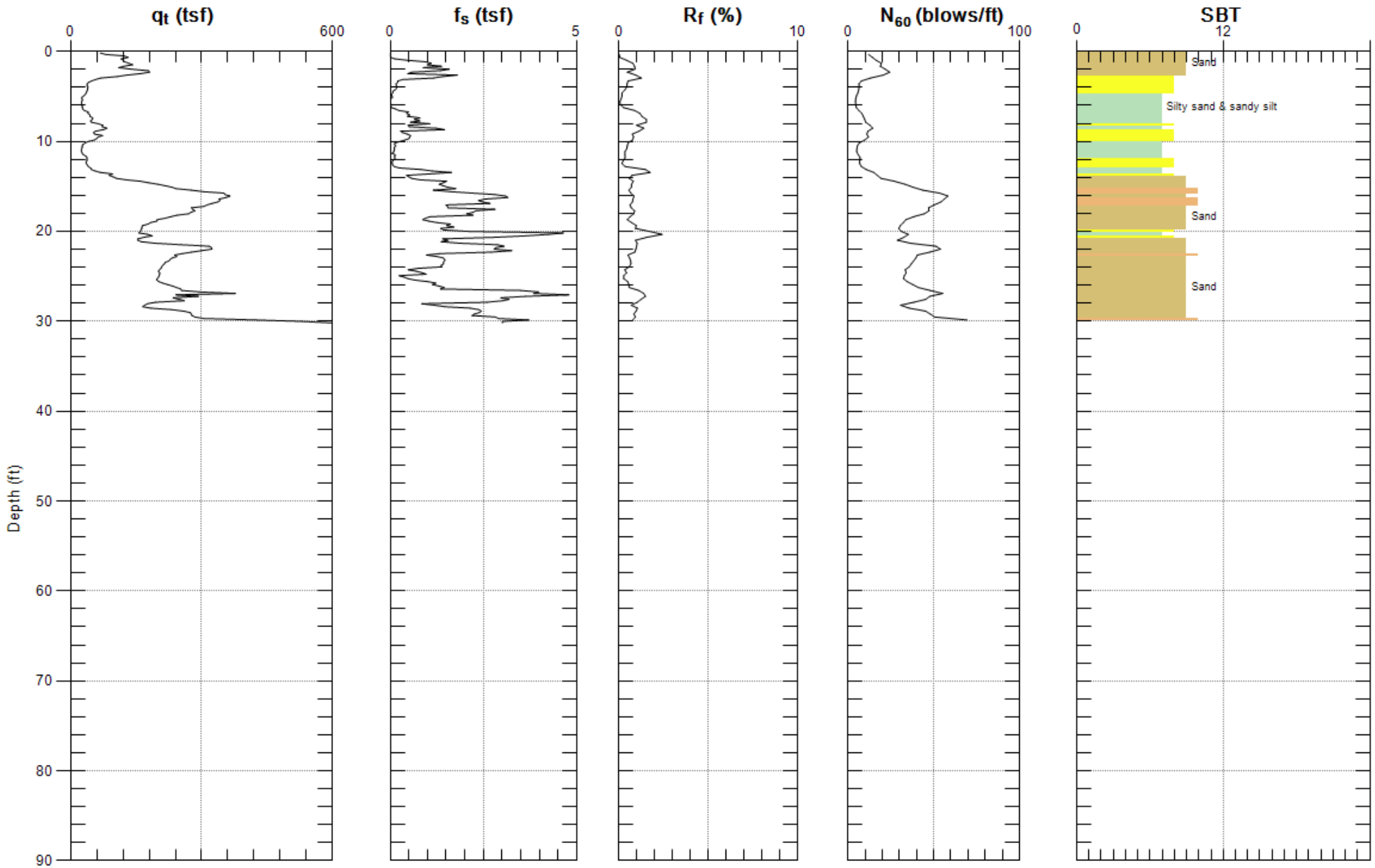


Max. Depth: 76.772 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-467HS
Engineer: CRAIG P.
Date: 9/28/2017 11:09

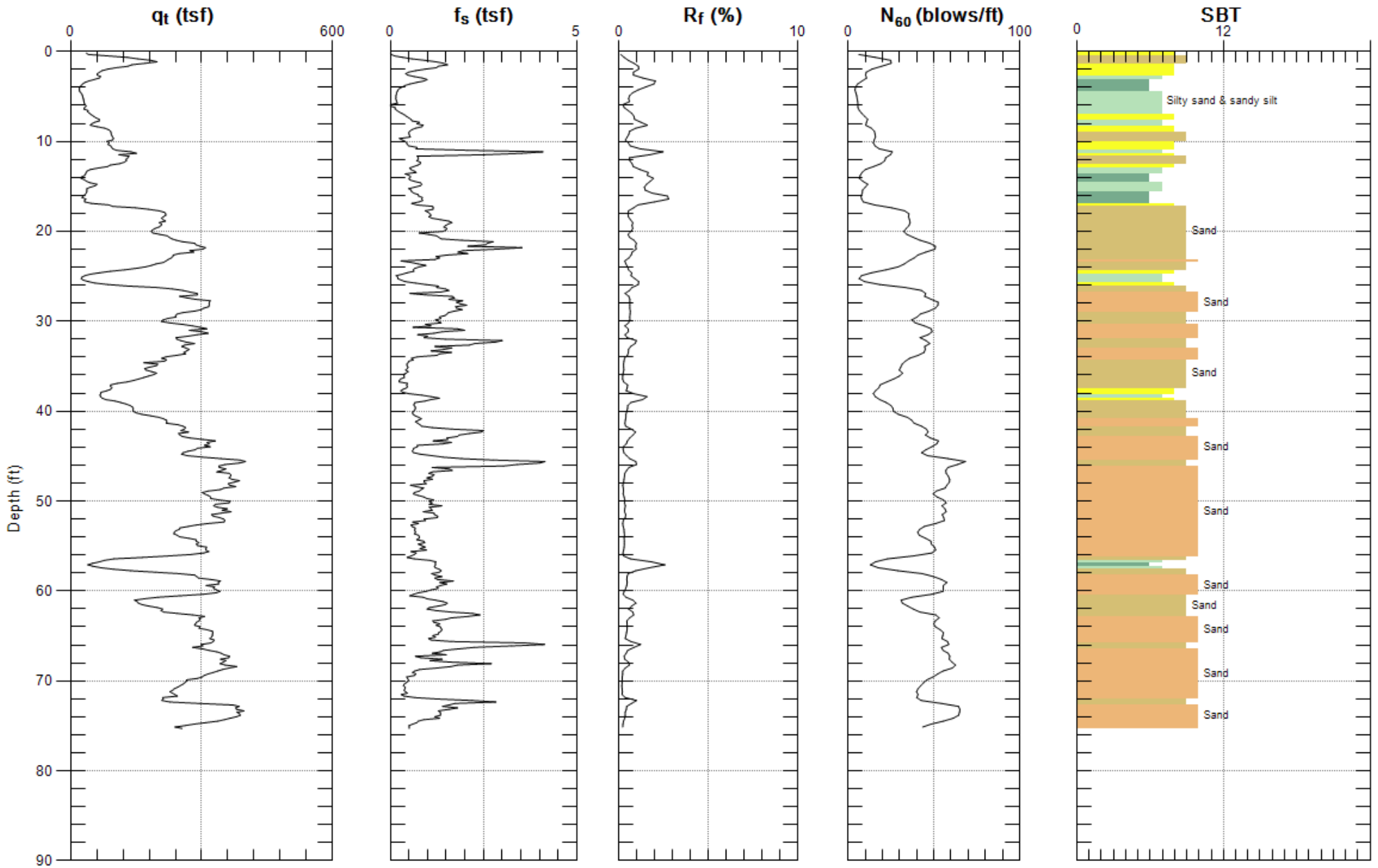


Max. Depth: 30.184 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-347MA
Engineer: CRAIG P.
Date: 9/28/2017 11:47

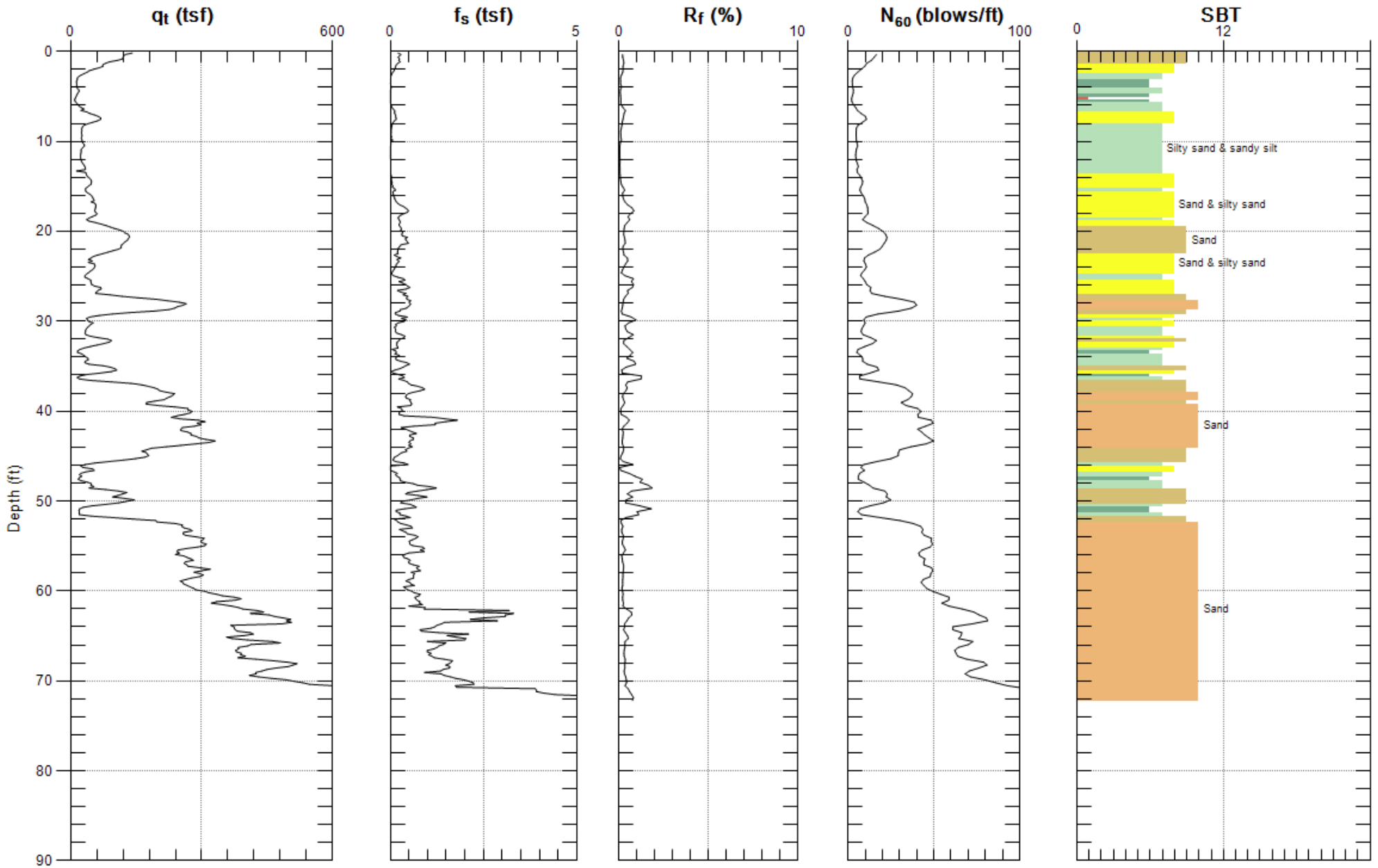


Max. Depth: 75.295 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-500LAA1
Engineer: CRAIG P.
Date: 9/27/2017 02:19

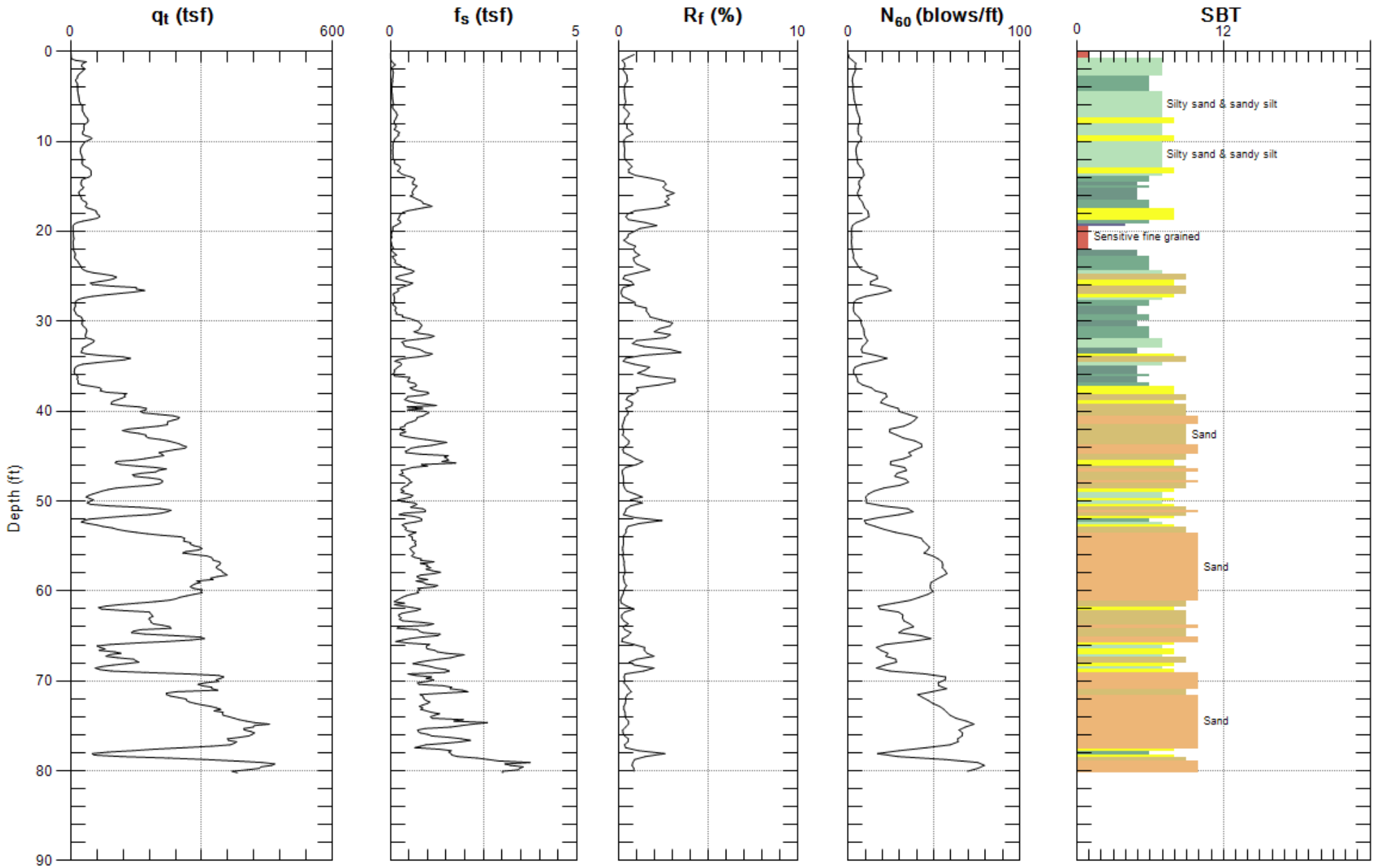


Max. Depth: 72.507 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-500LAA2
Engineer: CRAIG P.
Date: 9/27/2017 01:20

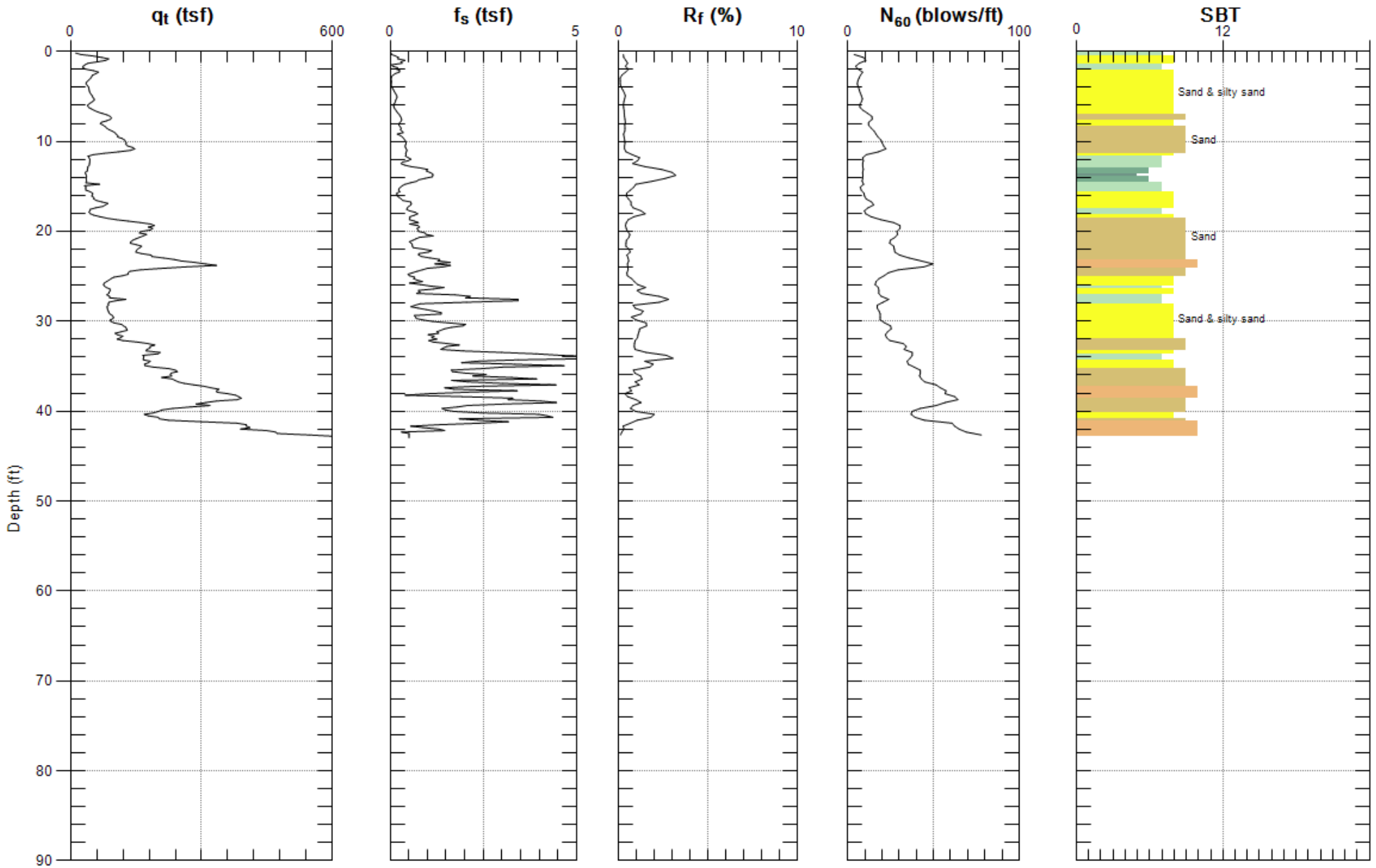


Max. Depth: 80.217 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-WCRN1
Engineer: CRAIG P.
Date: 9/27/2017 09:07

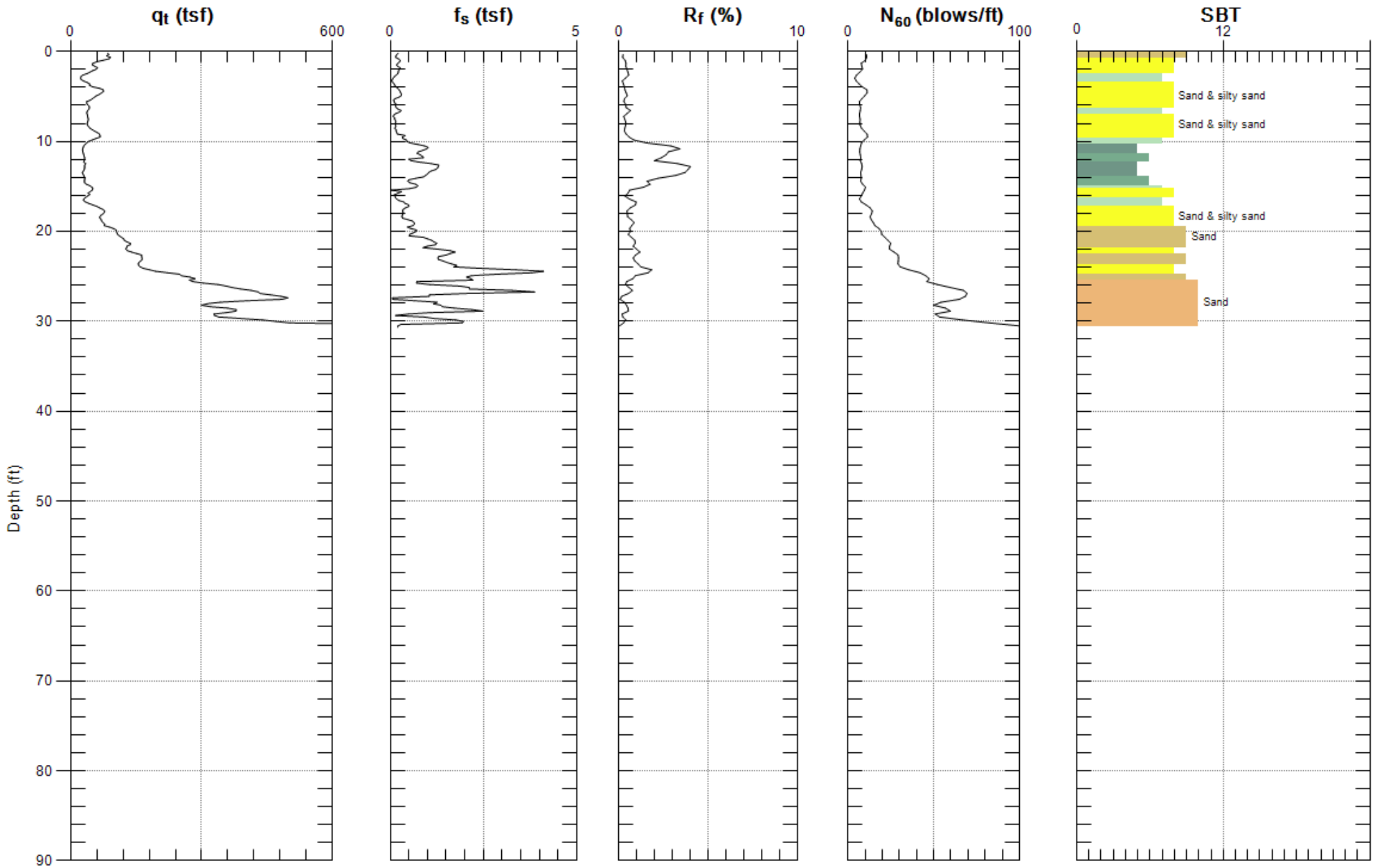


Max. Depth: 42.979 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-WCRN2
Engineer: CRAIG P.
Date: 9/27/2017 08:39



Max. Depth: 30.676 (ft)
Avg. Interval: 0.328 (ft)

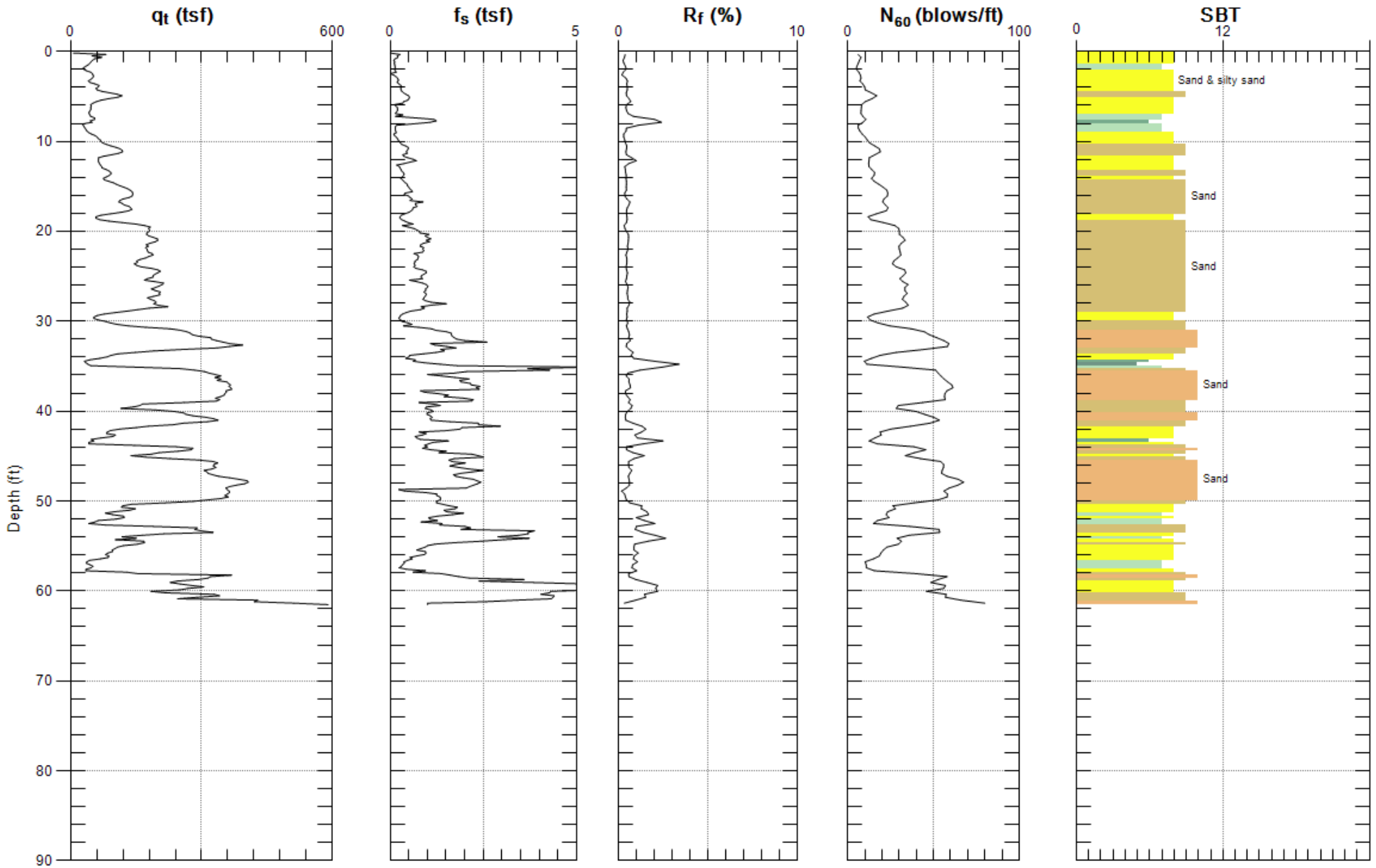
SBT: Soil Behavior Type (Robertson 1990)

GREGG

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-WCRS1

Engineer: CRAIG P.
Date: 9/27/2017 09:52

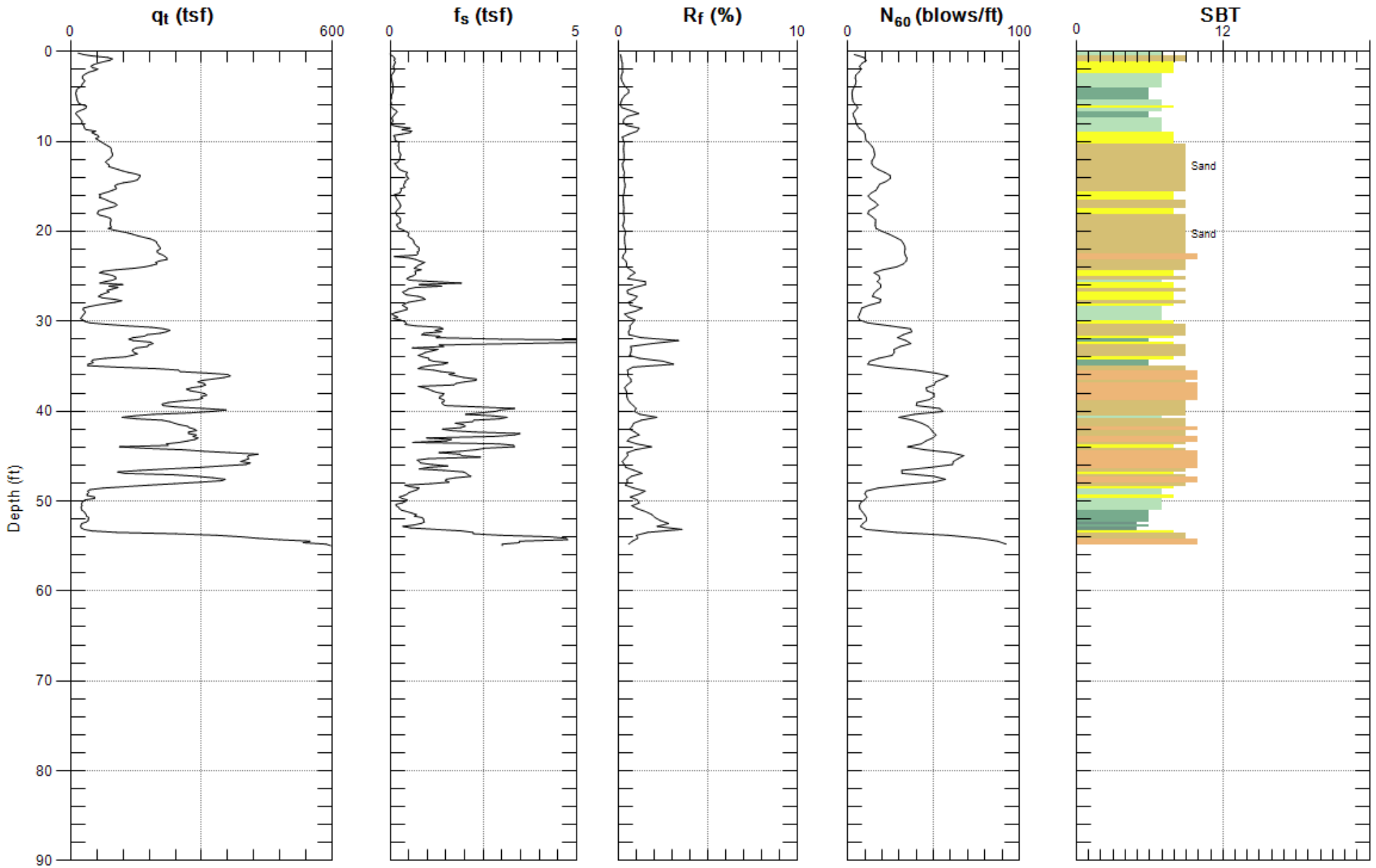


Max. Depth: 61.516 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-WCRS2
Engineer: CRAIG P.
Date: 9/27/2017 10:41



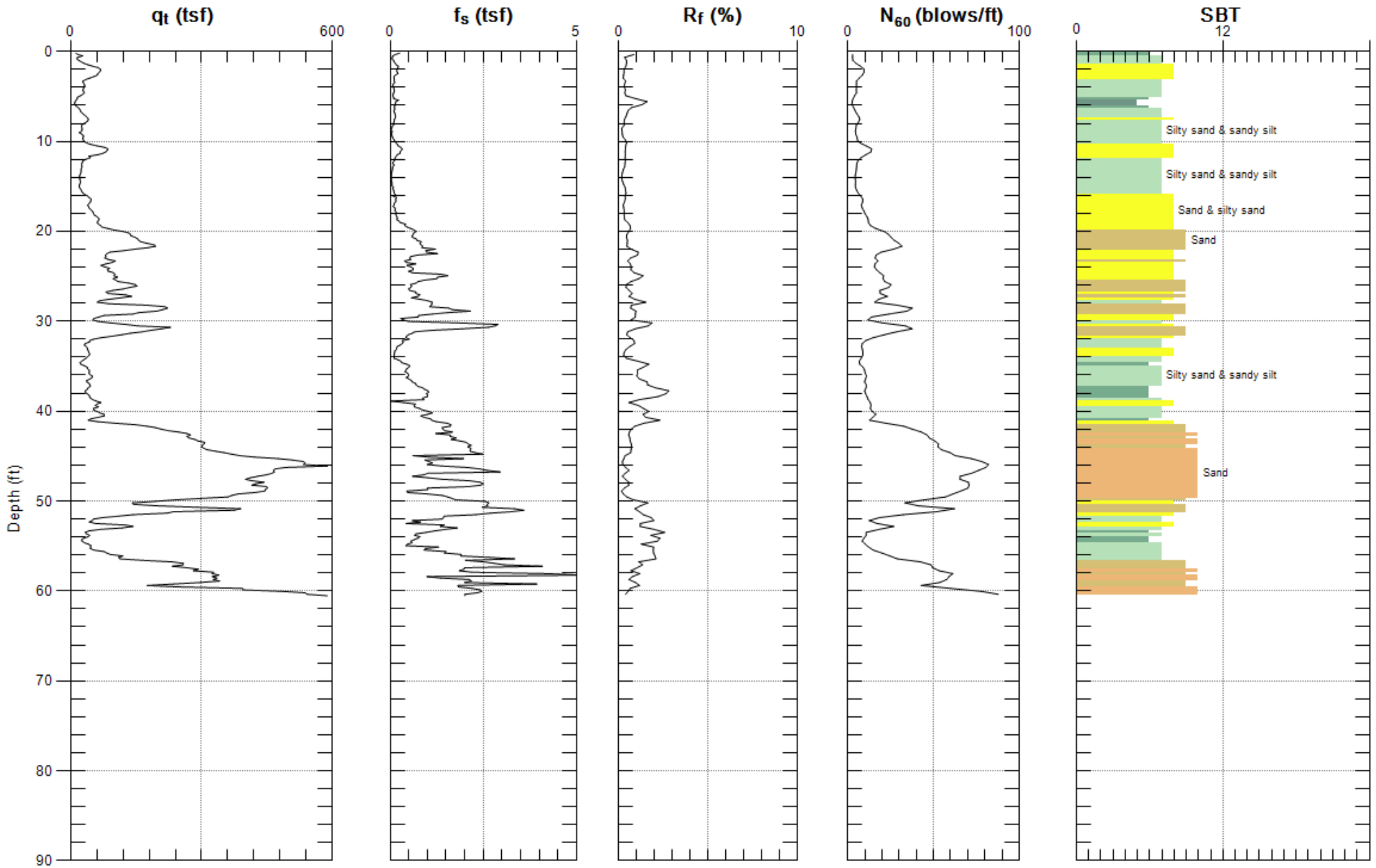
Max. Depth: 54.954 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

OAKRIDGE GEO.

Site: MOOREPARK
Sounding: CPT-WCRS3

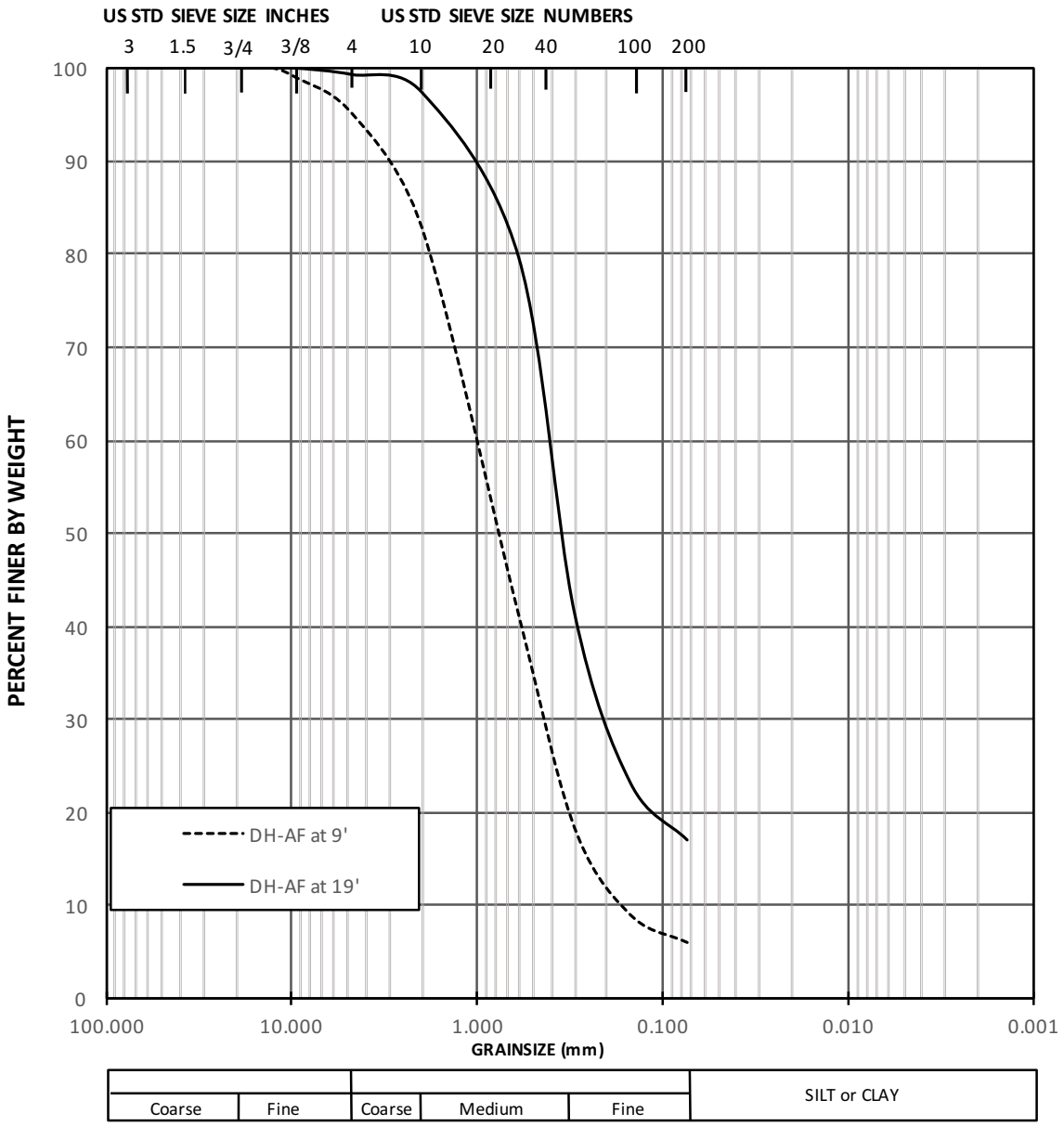
Engineer: CRAIG P.
Date: 9/27/2017 11:35



Max. Depth: 60.531 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

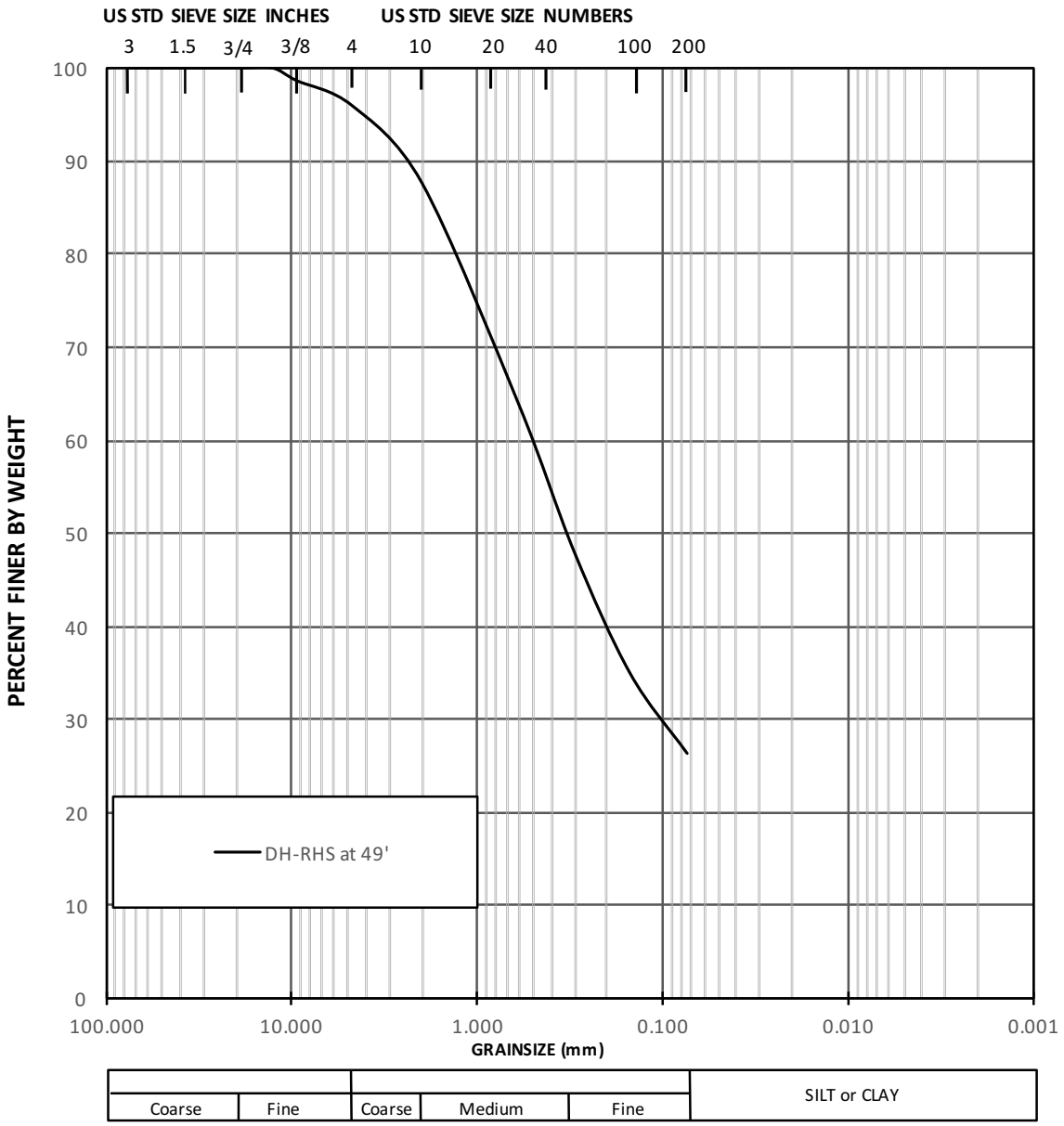
APPENDIX B



LOCATION	DEPTH	CLASSIFICATION	PASSING NO. 200 (%)
DH-AF	9'	SAND with Silt (SP-SM)	6
DH-AF	19'	Silty SAND (SM)	17

GRAINSIZE DISTRIBUTION
Moorpark Geohazards Study
Moorpark, California

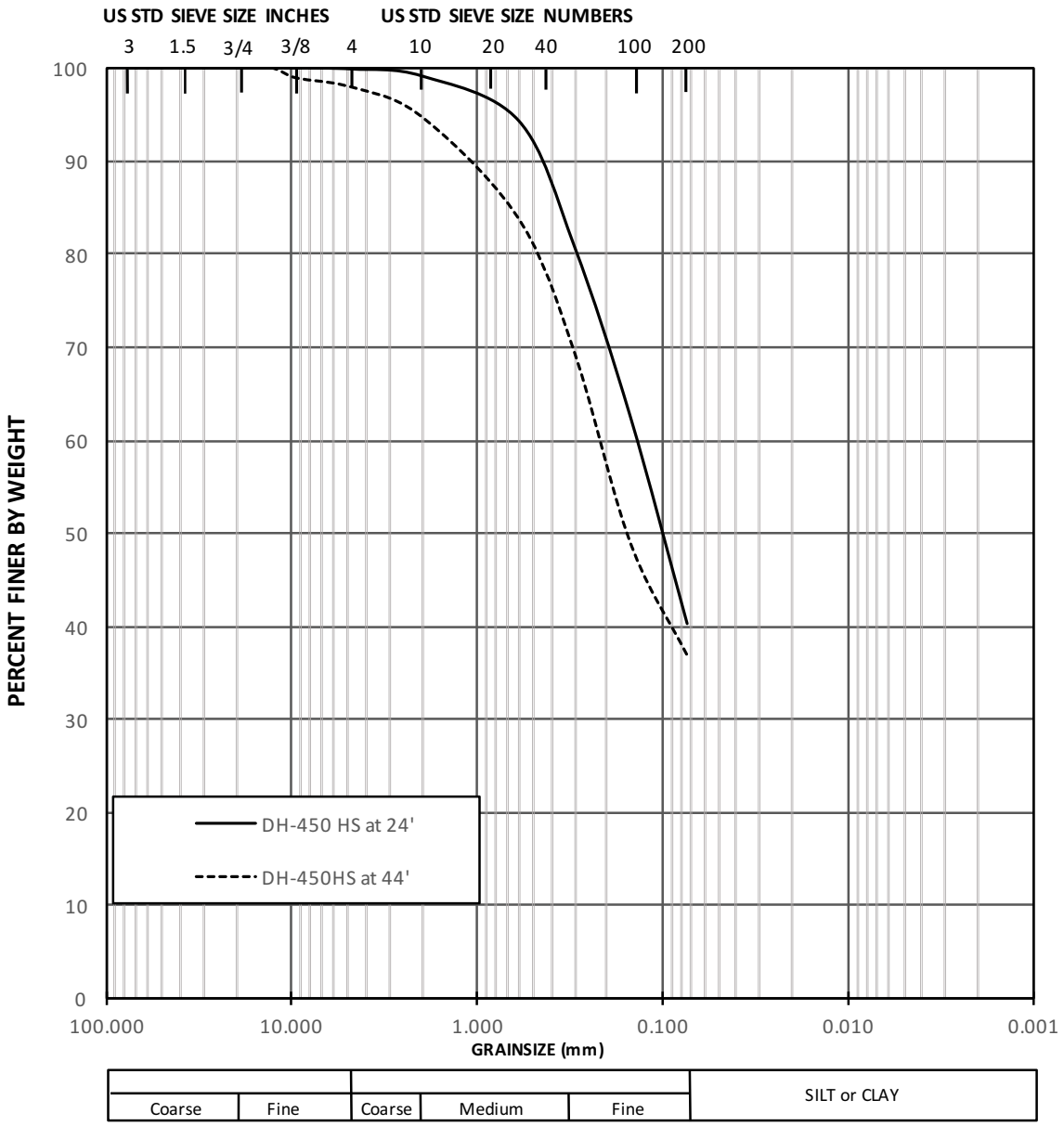
PLATE B-1a



LOCATION	DEPTH	CLASSIFICATION	PASSING NO. 200 (%)
DH-RHS	49'	Clayey SAND (SC)	26

GRAINSIZE DISTRIBUTION
Moorpark Geohazards Study
Moorpark, California

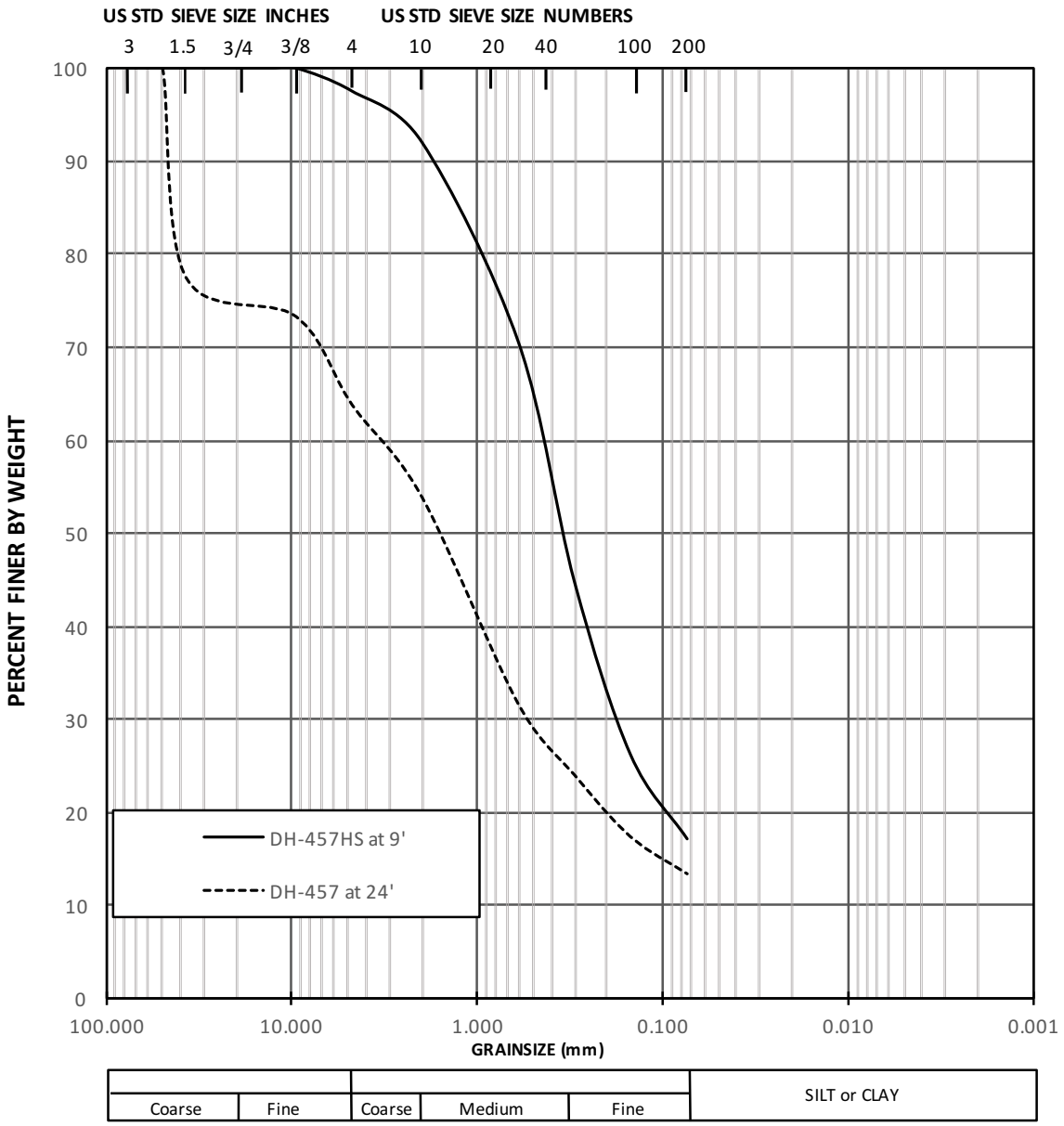
PLATE B-1b



LOCATION	DEPTH	CLASSIFICATION	PASSING NO. 200 (%)
DH-450 HS	24'	Silty to Clayey SAND (SM to SC)	40
DH-450 HS	44'	Clayey SAND (SC)	37

GRAINSIZE DISTRIBUTION
Moorpark Geohazards Study
Moorpark, California

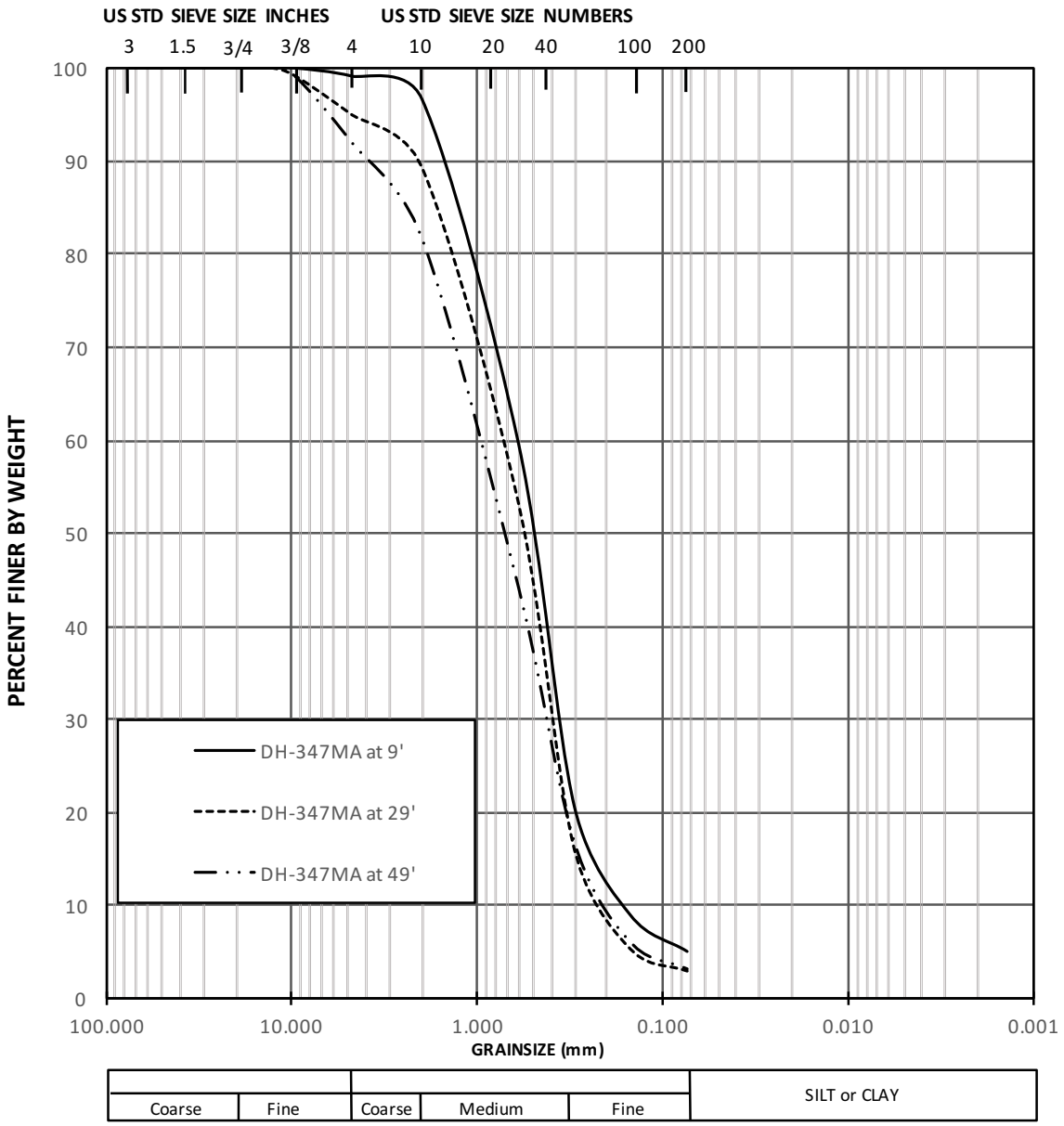
PLATE B-1c



LOCATION	DEPTH	CLASSIFICATION	PASSING NO. 200 (%)
DH-457 HS	9'	Clayey SAND (SC)	17
DH-457 HS	24'	Clayey SAND (SC)	13

GRAINSIZE DISTRIBUTION
Moorpark Geohazards Study
Moorpark, California

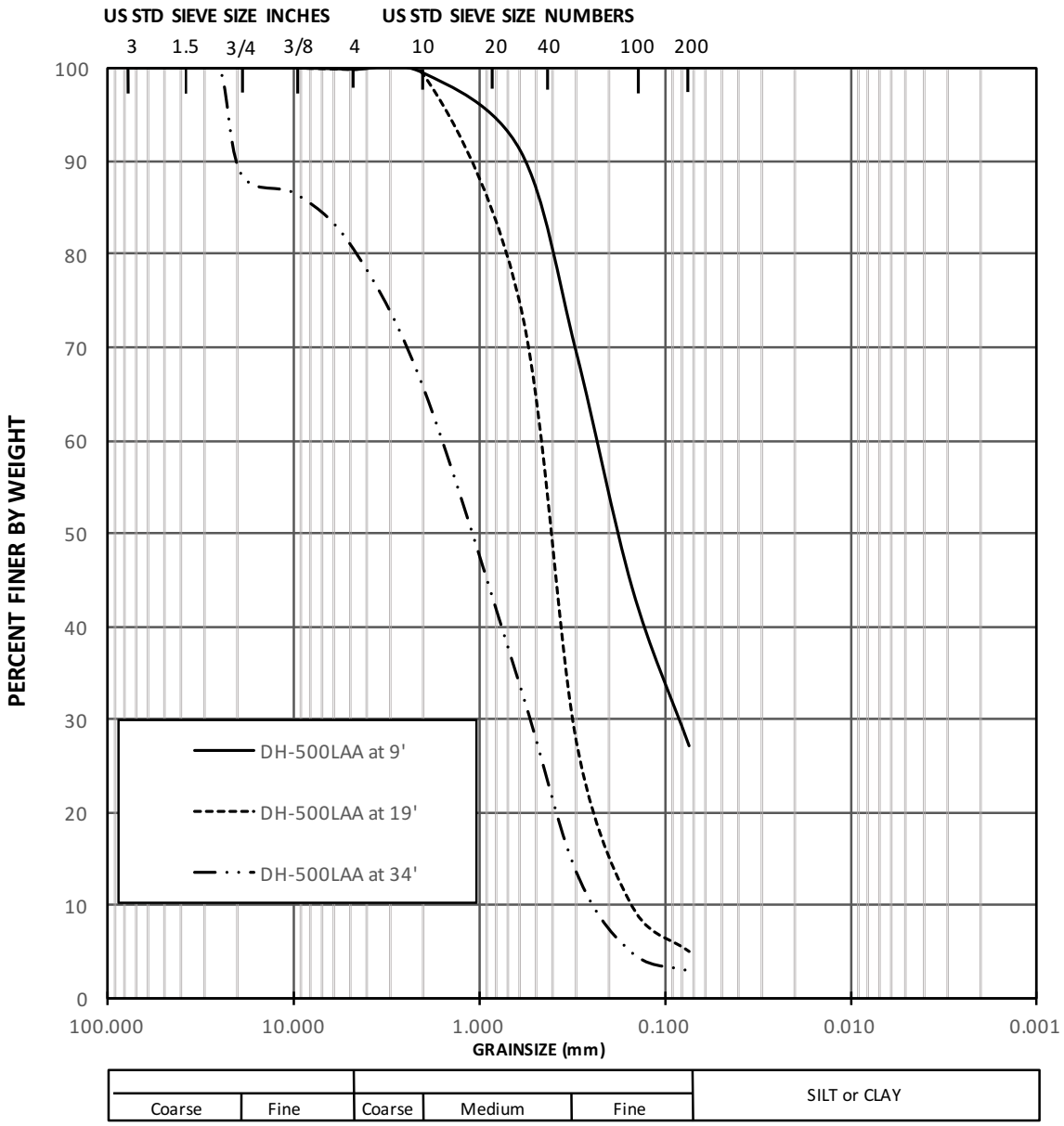
PLATE B-1d



LOCATION	DEPTH	CLASSIFICATION	PASSING NO. 200 (%)
DH-347MA	9'	SAND with Silt (SP-SM)	5
DH-347MA	29'	SAND (SP)	3
DH-347MA	49'	SAND (SP)	3

GRAINSIZE DISTRIBUTION
Moorpark Geohazards Study
Moorpark, California

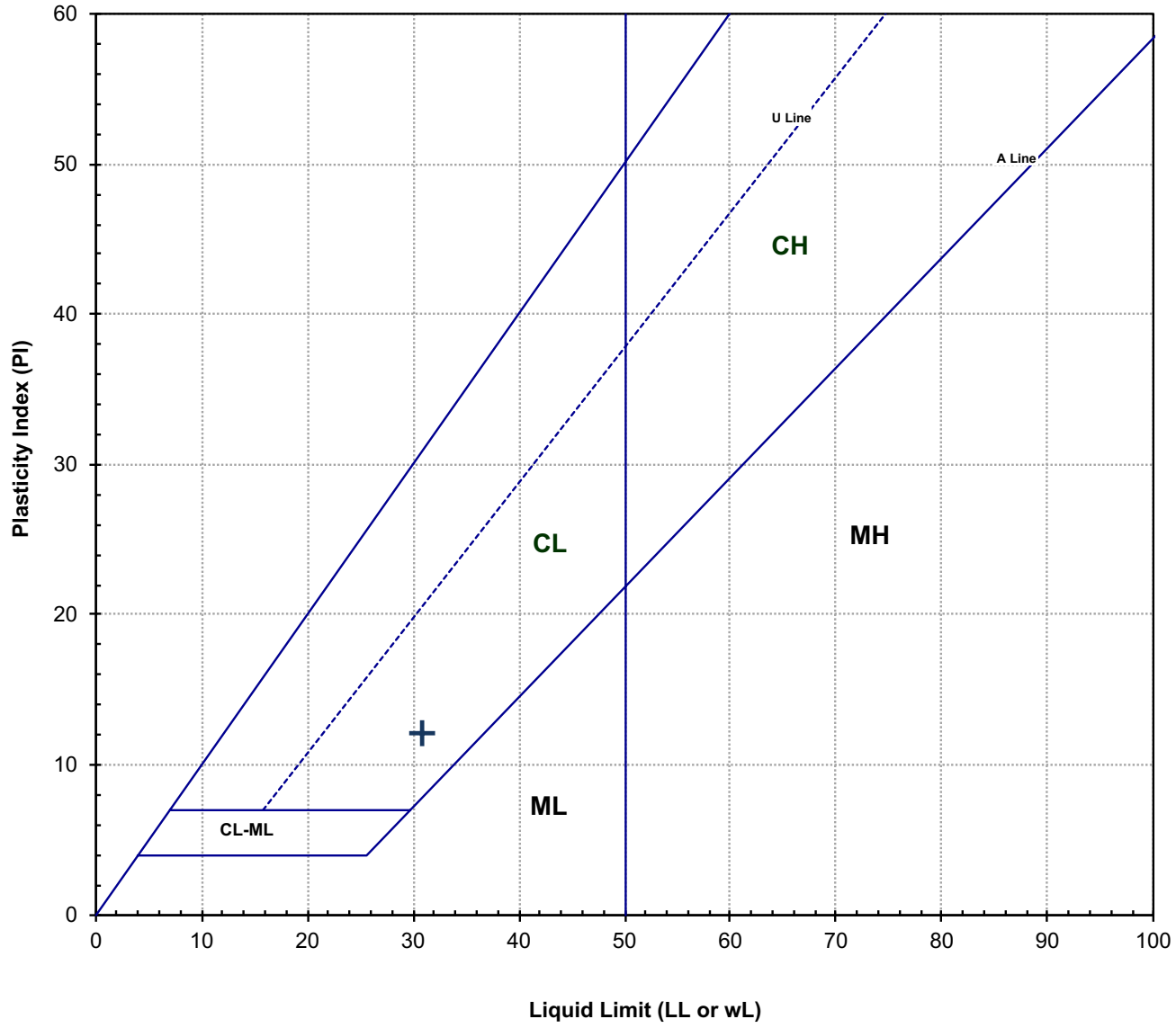
PLATE B-1e



LOCATION	DEPTH	CLASSIFICATION	PASSING NO. 200 (%)
DH-500LAA	9'	Clayey SAND (SC)	27
DH-500LAA	19'	SAND with Silt (SP-SM)	5
DH-500LAA	34'	SAND (SP)	3

GRAINSIZE DISTRIBUTION
Moorpark Geohazards Study
Moorpark, California

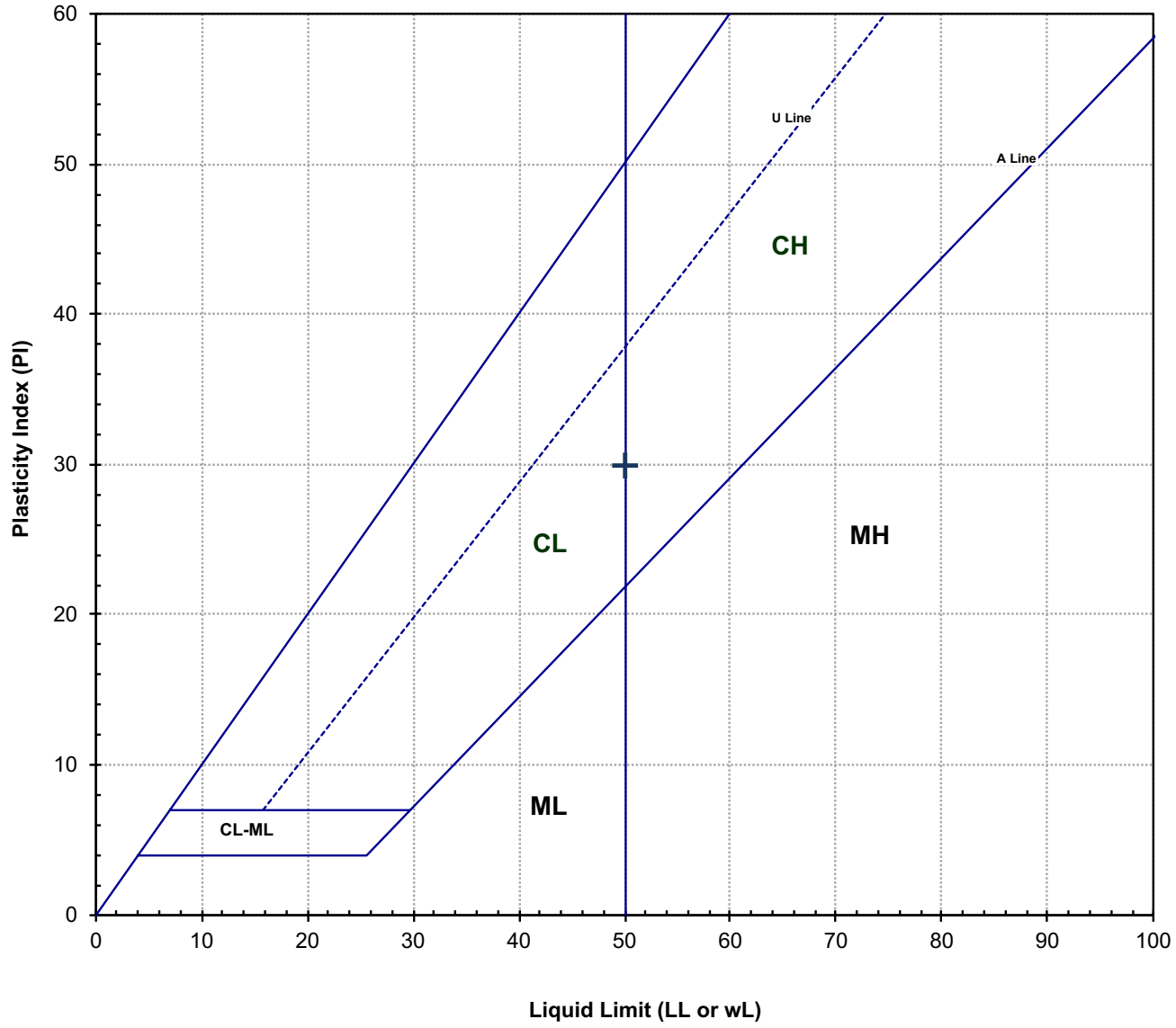
PLATE B-1f



		CLASSIFICATION	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)
LOCATION	DH-AF				
DEPTH	44'	CLAY (CL)	31	19	12

MOORPARK GEOHAZARDS STUDY
Moorpark, California

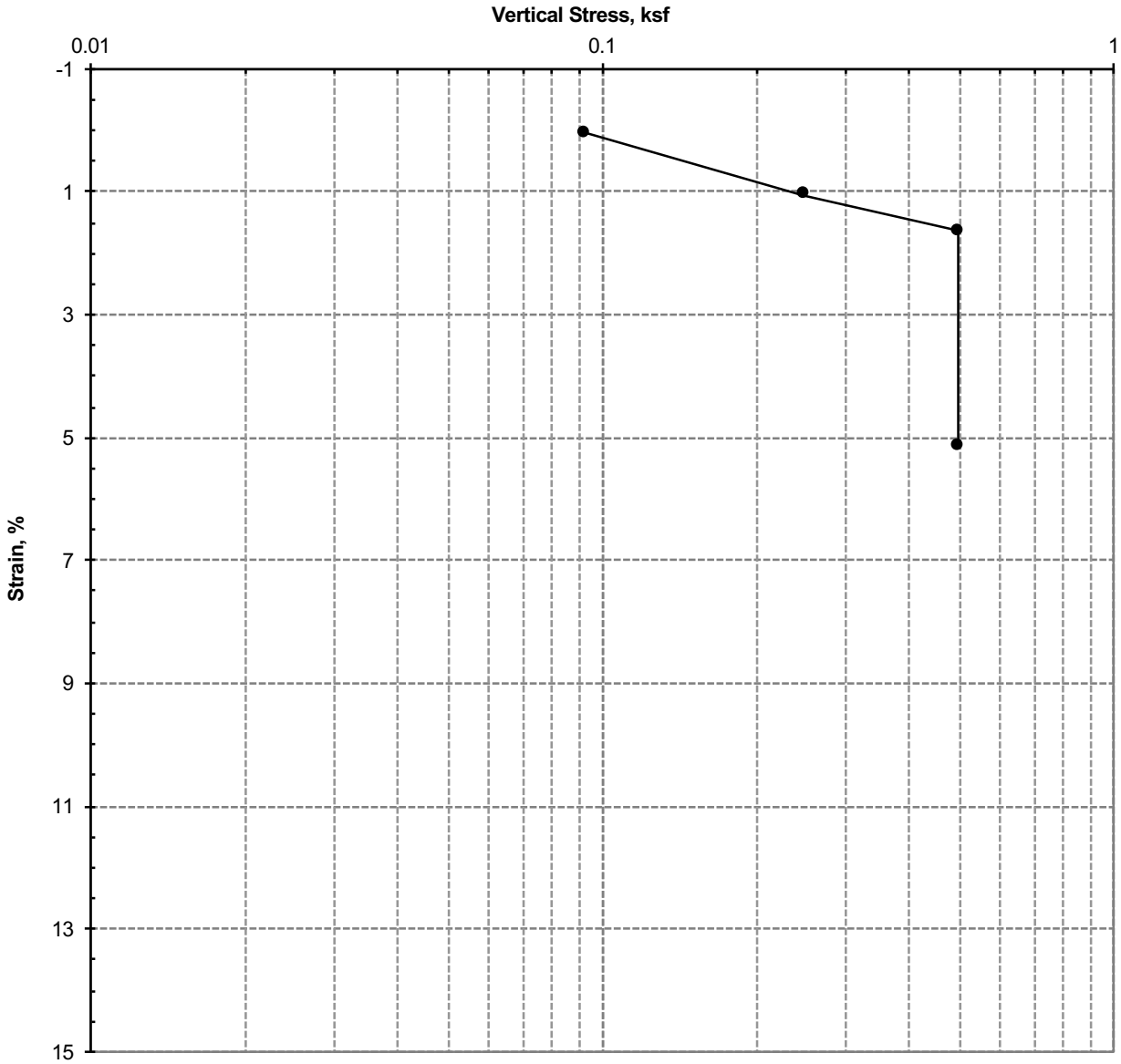
PLATE B-2a



		CLASSIFICATION	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)
LOCATION	DH-500LAA				
DEPTH	44'	Sandy CLAY (CL/CH)	50	20	30

MOORPARK GEOHAZARDS STUDY
Moorpark, California

PLATE B-2b



SAMPLE ID			
	Boring, Sample #, Depth	DH-AF , #1 , 4.0 ft	
	USCS Classification:	Poorly-graded SAND with silt (SP-SM): brown, moist	

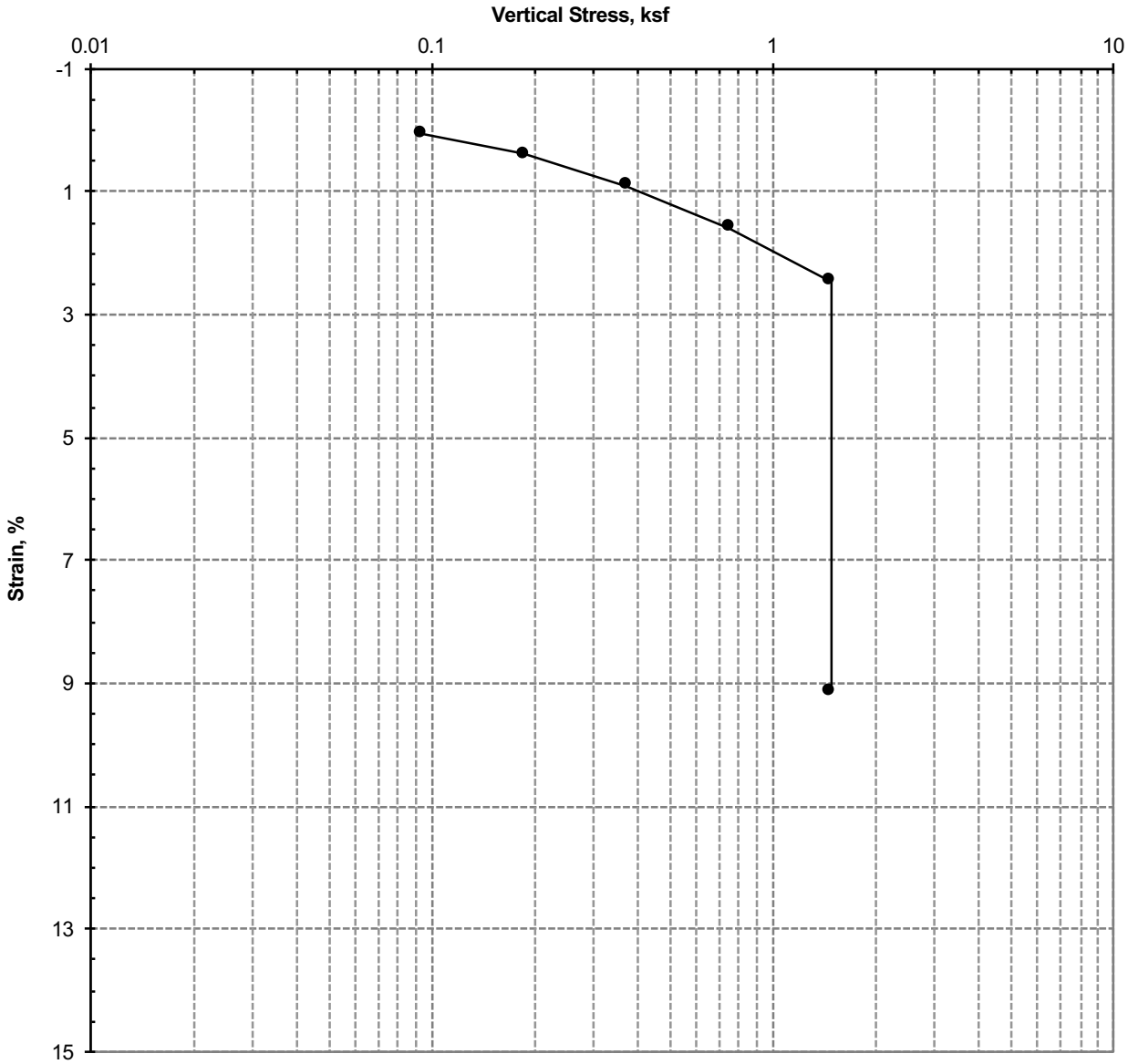
PROPERTIES	Initial	Final
Water Content, %	2.7%	18.7%
Dry Unit Weight, pcf	95.0	100.2
Saturation, %	10%	76%
Void Ratio	0.74	0.65
Diameter, in	2.42	2.42
Height, in	1.00	0.95

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	0.50
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65

REMARKS	
	Test Method: ASTM D4546
	Project: Moorpark Downtown

COLLAPSE TEST

PLATE B-3a



SAMPLE I			
	Boring, Sample #, Depth	DH-AF , #3 , 14.0 ft	
	USCS Classification:	Silty SAND (SM): light brown, moist	

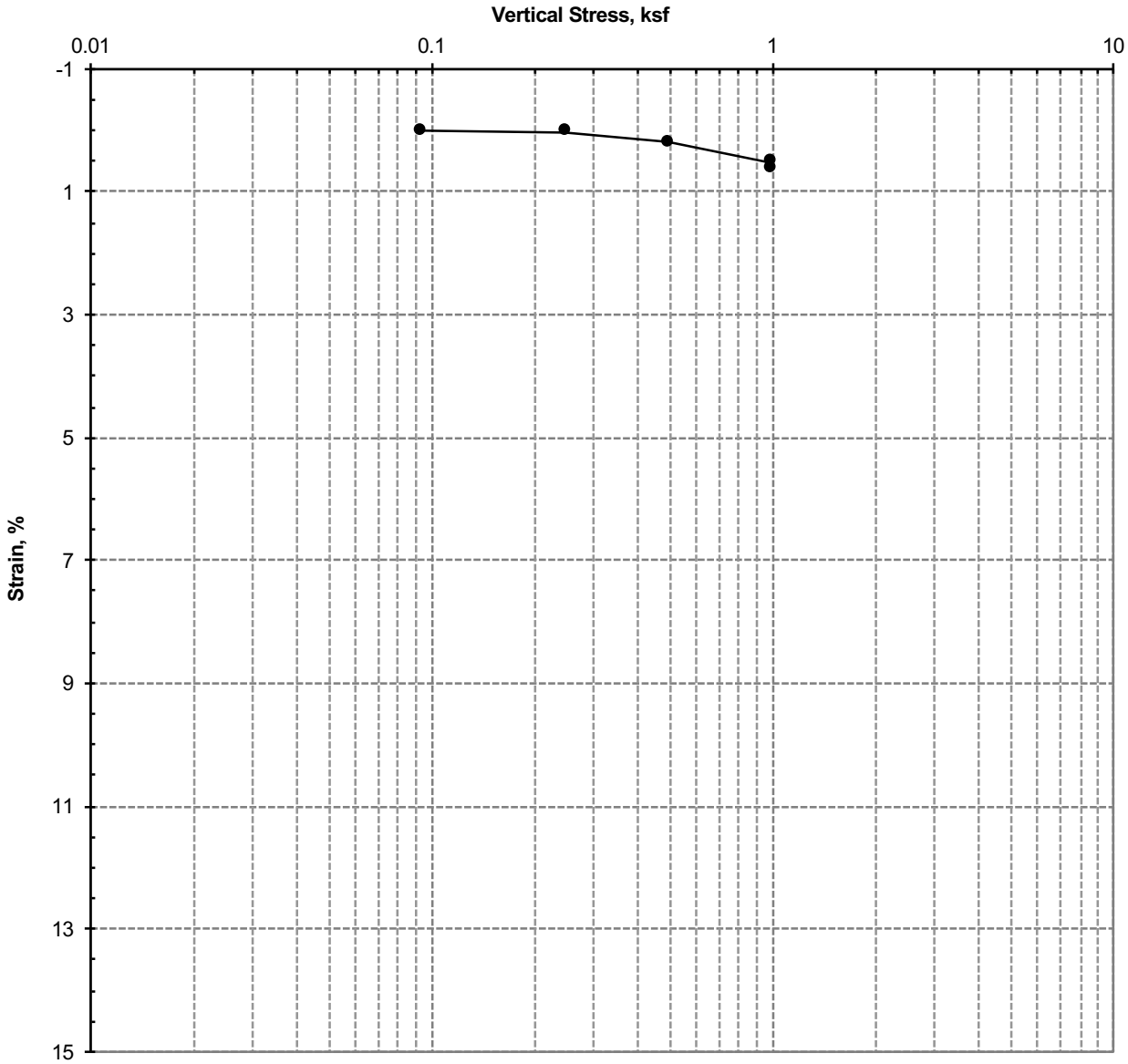
PROPERTIES	Initial	Final
Water Content, %	4.1%	17.6%
Dry Unit Weight, pcf	98.6	108.5
Saturation, %	16%	89%
Void Ratio	0.68	0.52
Diameter, in	2.42	2.42
Height, in	1.00	0.91

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	1.49
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65

REMARKS	
	Test Method: ASTM D4546
	Project: Moorpark Downtown

COLLAPSE TEST

PLATE B-3b



SAMPLE ID			
	Boring, Sample #, Depth	DH-RHS , #3 , 9.0 ft	
	USCS Classification:	SILT (ML): light brown, moist	

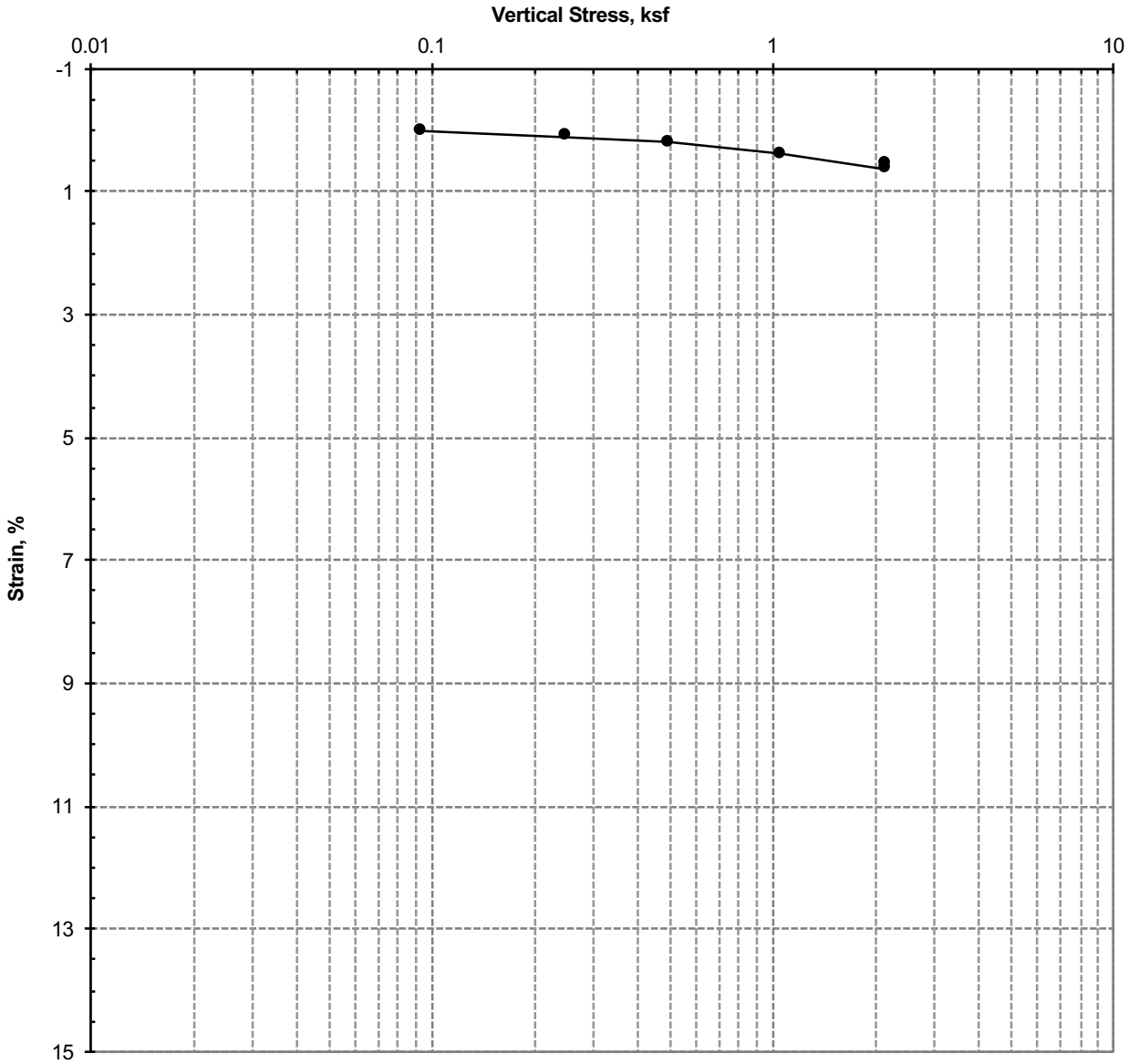
PROPERTIES	Initial	Final
Water Content, %	27.7%	32.1%
Dry Unit Weight, pcf	88.2	88.8
Saturation, %	84%	98%
Void Ratio	0.88	0.86
Diameter, in	2.42	2.42
Height, in	1.00	0.99

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	0.99
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65

REMARKS	
	Test Method: ASTM D4546
	Project: Moorpark Downtown

COLLAPSE TEST

PLATE B-3c



SAMPLE ID			
	Boring, Sample #, Depth	DH-RHS , #5 , 19.0 ft	
	USCS Classification:	Lean CLAY (CL): yellow brown, moist	

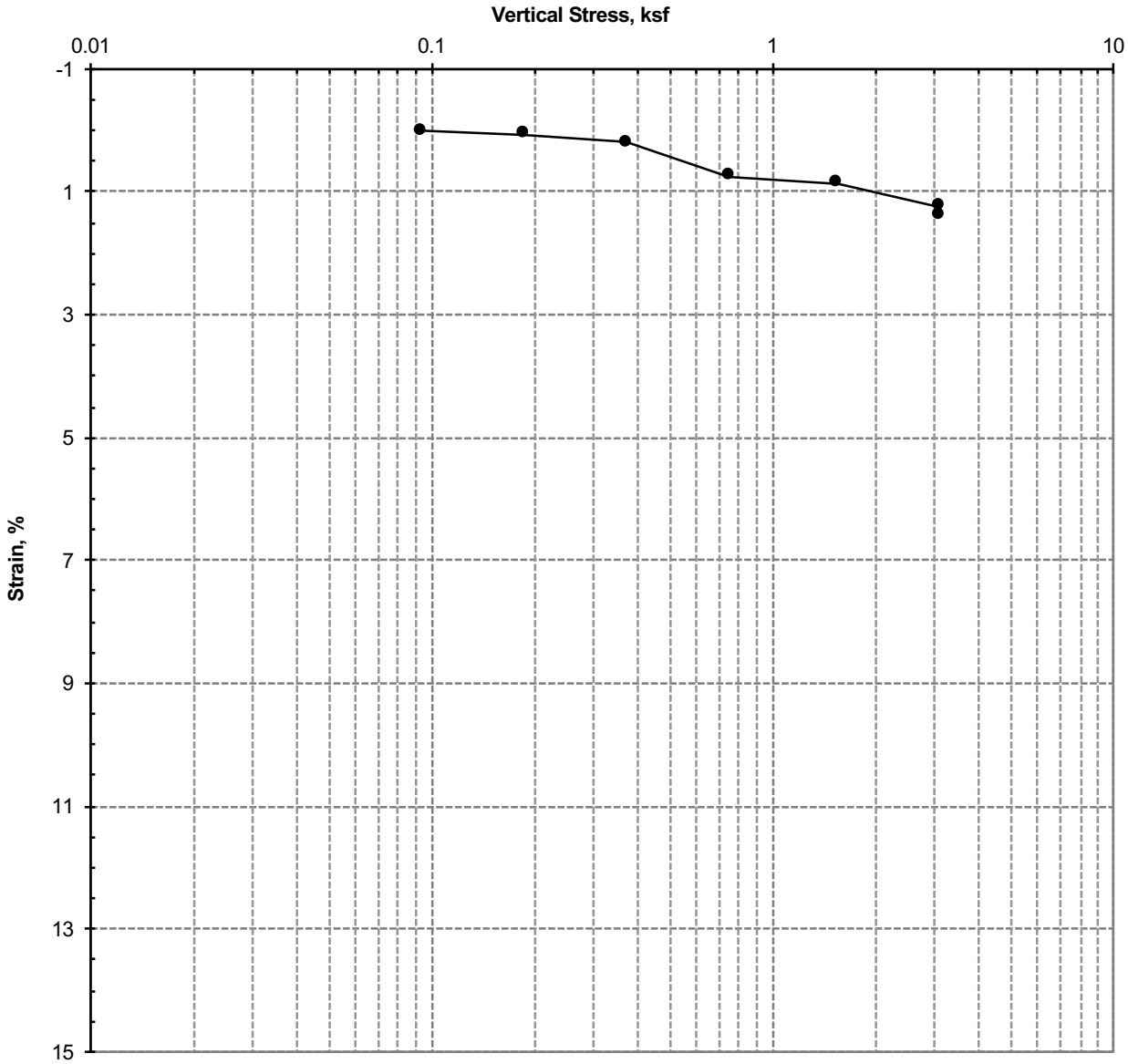
PROPERTIES	Initial	Final
Water Content, %	16.1%	20.6%
Dry Unit Weight, pcf	103.3	103.9
Saturation, %	71%	92%
Void Ratio	0.60	0.59
Diameter, in	2.42	2.42
Height, in	1.00	0.99

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	3.11
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65

REMARKS	
	Test Method: ASTM D4546
	Project: Moorpark Downtown

COLLAPSE TEST

PLATE B-3d

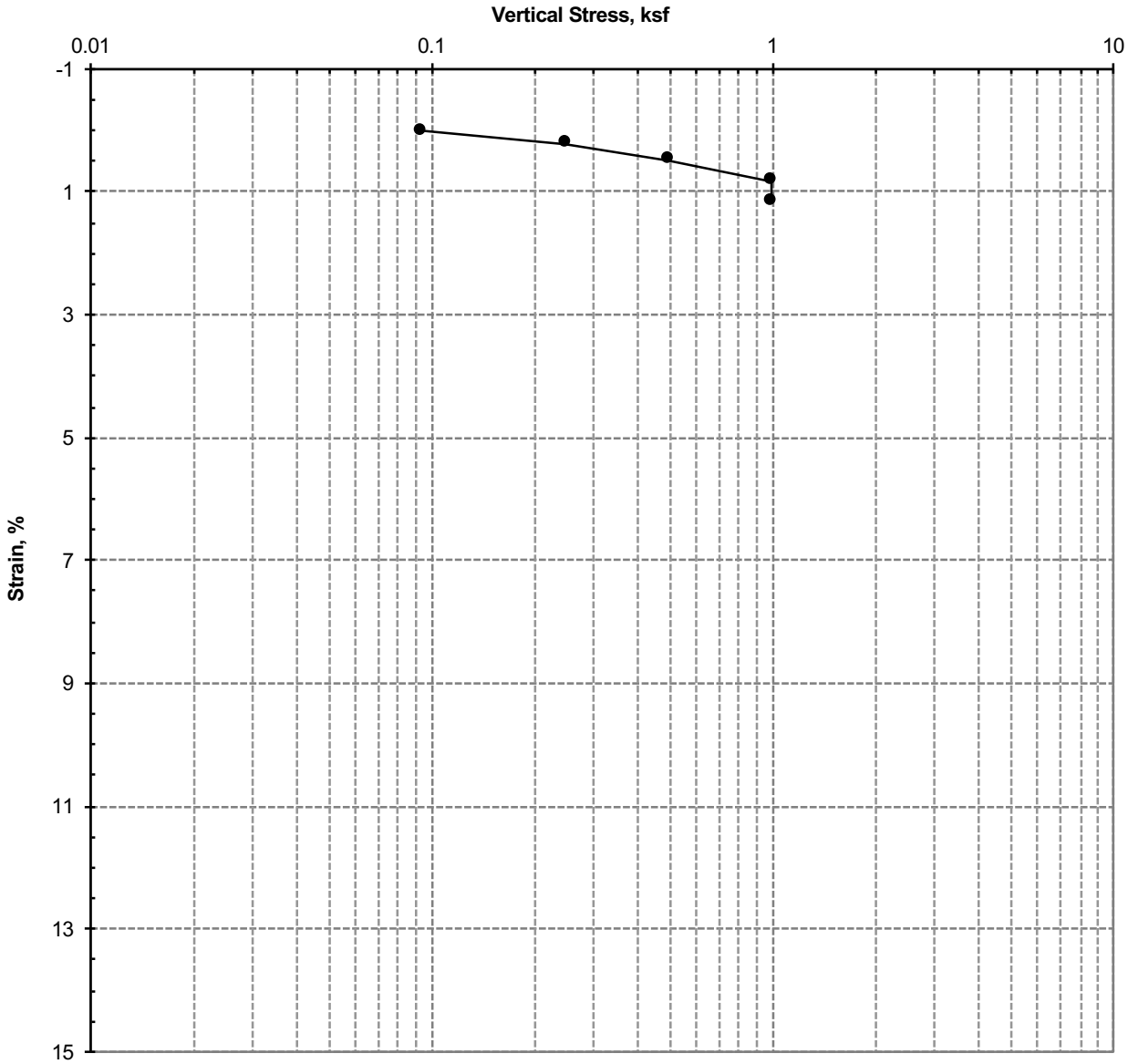


SAMPLE ID			
	Boring, Sample #, Depth	DH-RHS , #7 , 29.0 ft	
	USCS Classification:	Poorly-graded SAND (SP): red yellow, moist, slightly cemented	
PROPERTIES		Initial	Final
	Water Content, %	10.8%	14.6%
	Dry Unit Weight, pcf	111.9	113.5
	Saturation, %	60%	84%
	Void Ratio	0.48	0.46
	Diameter, in	2.42	2.42
	Height, in	1.00	0.99

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	3.11
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65
REMARKS	Test Method: ASTM D4546	
	Project: Moorpark Downtown	

COLLAPSE TEST

PLATE B-3e



SAMPLE ID			
	Boring, Sample #, Depth	450HS , #2 , 9.0 ft	
	USCS Classification:	Silty SAND (SM): light brown, moist	

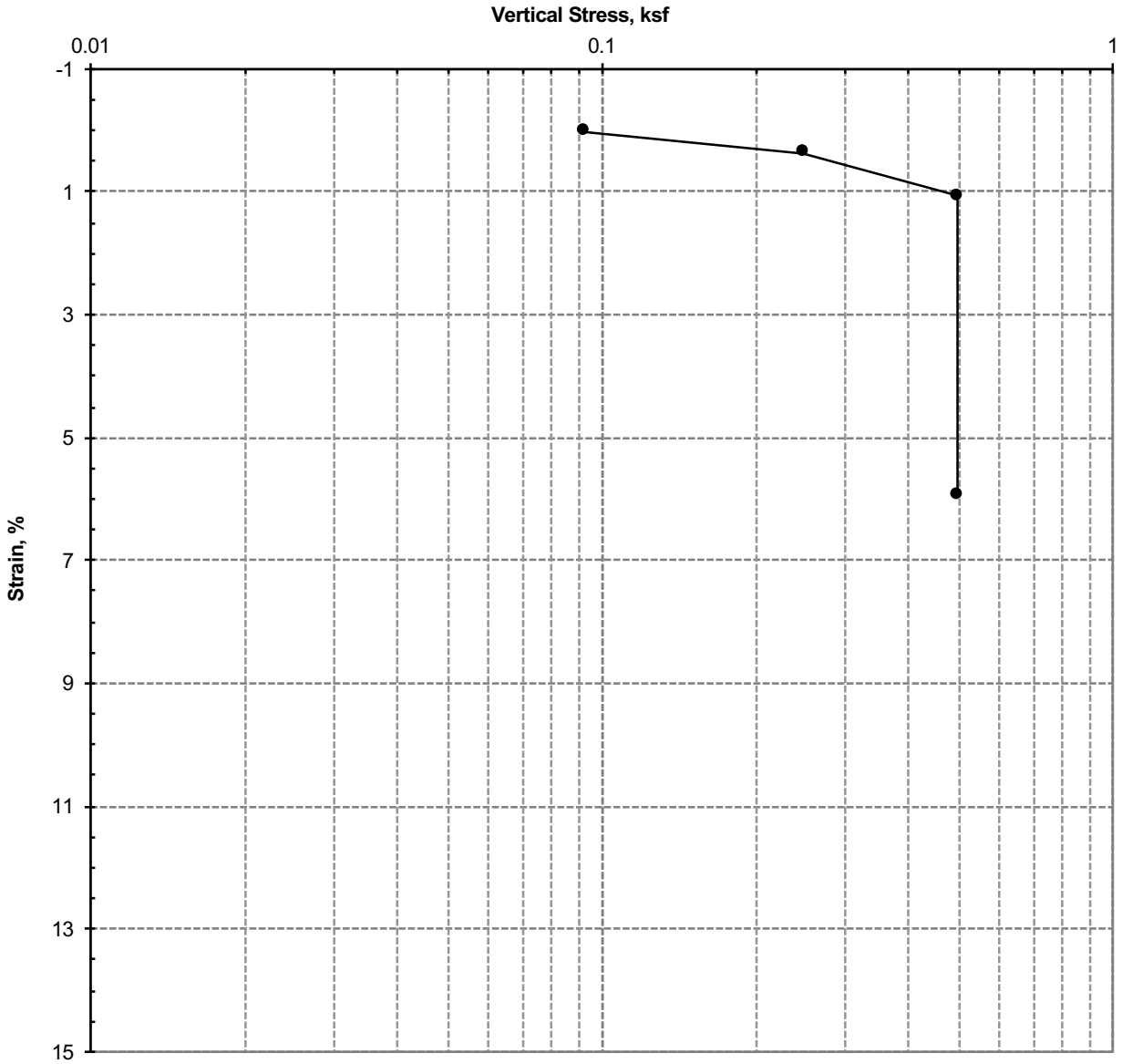
PROPERTIES	Initial	Final
Water Content, %	8.3%	20.2%
Dry Unit Weight, pcf	99.6	100.7
Saturation, %	33%	83%
Void Ratio	0.66	0.64
Diameter, in	2.42	2.42
Height, in	1.00	0.99

SUMMARY	
Preconsolidation Pressure, ksf	---
Inundation Increment, ksf	0.99
Liquid Limit	---
Plastic Limit	---
Plasticity Index	---
Passing #200	---
Estimated Gs	2.65

REMARKS	
Test Method: ASTM D4546	
Project: Moorpark Downtown	

COLLAPSE TEST

PLATE B-3f

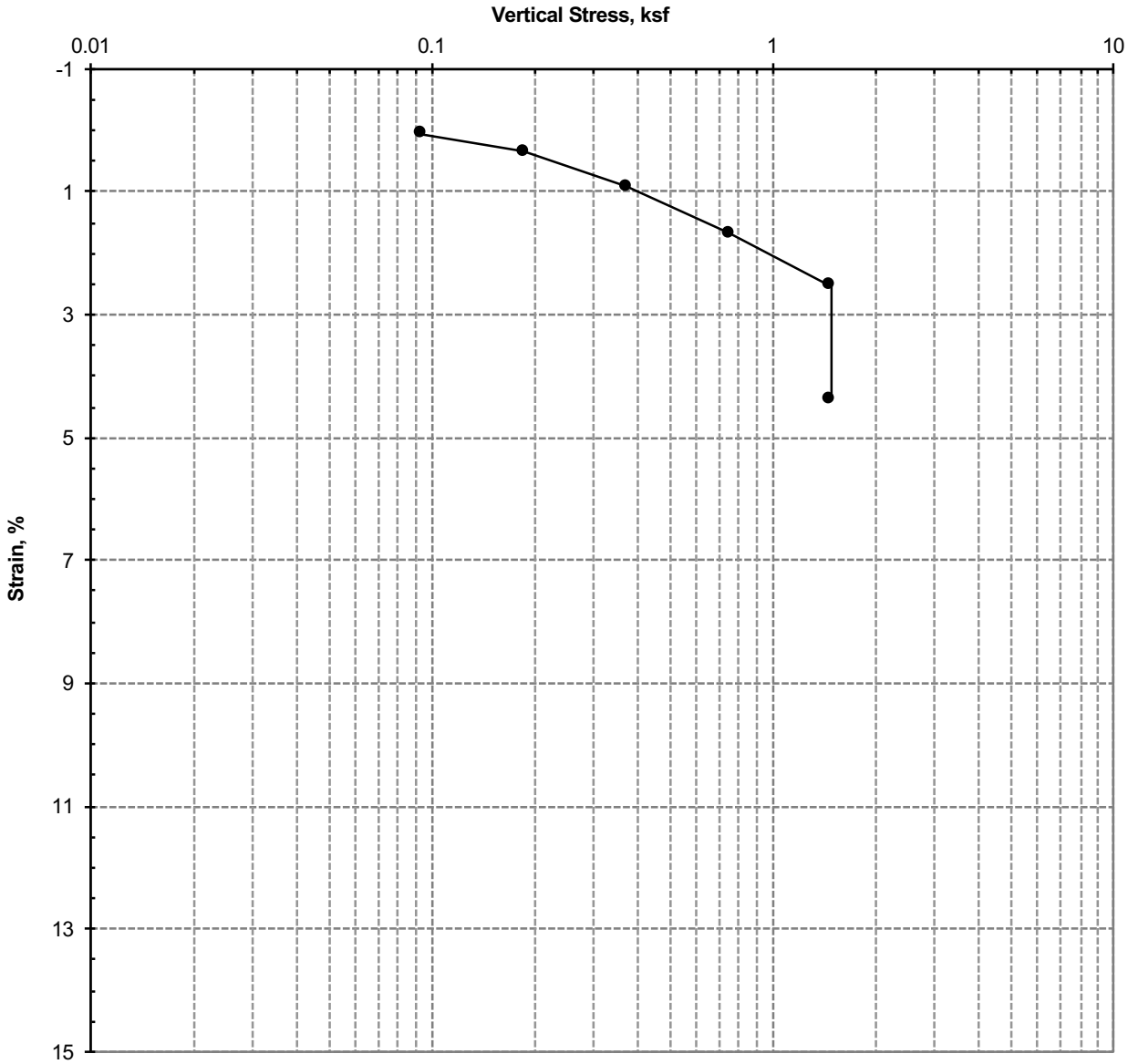


SAMPLE ID			
	Boring, Sample #, Depth	457HS , #1 , 4.0 ft	
	USCS Classification:	Poorly-graded SAND with silt (SP-SM): dark brown, moist	
PROPERTIES		Initial	Final
	Water Content, %	5.4%	21.2%
	Dry Unit Weight, pcf	93.3	99.2
	Saturation, %	18%	84%
	Void Ratio	0.77	0.67
	Diameter, in	2.42	2.42
	Height, in	1.00	0.94

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	0.50
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65
REMARKS	Test Method: ASTM D4546	
	Project: Moorpark Downtown	

COLLAPSE TEST

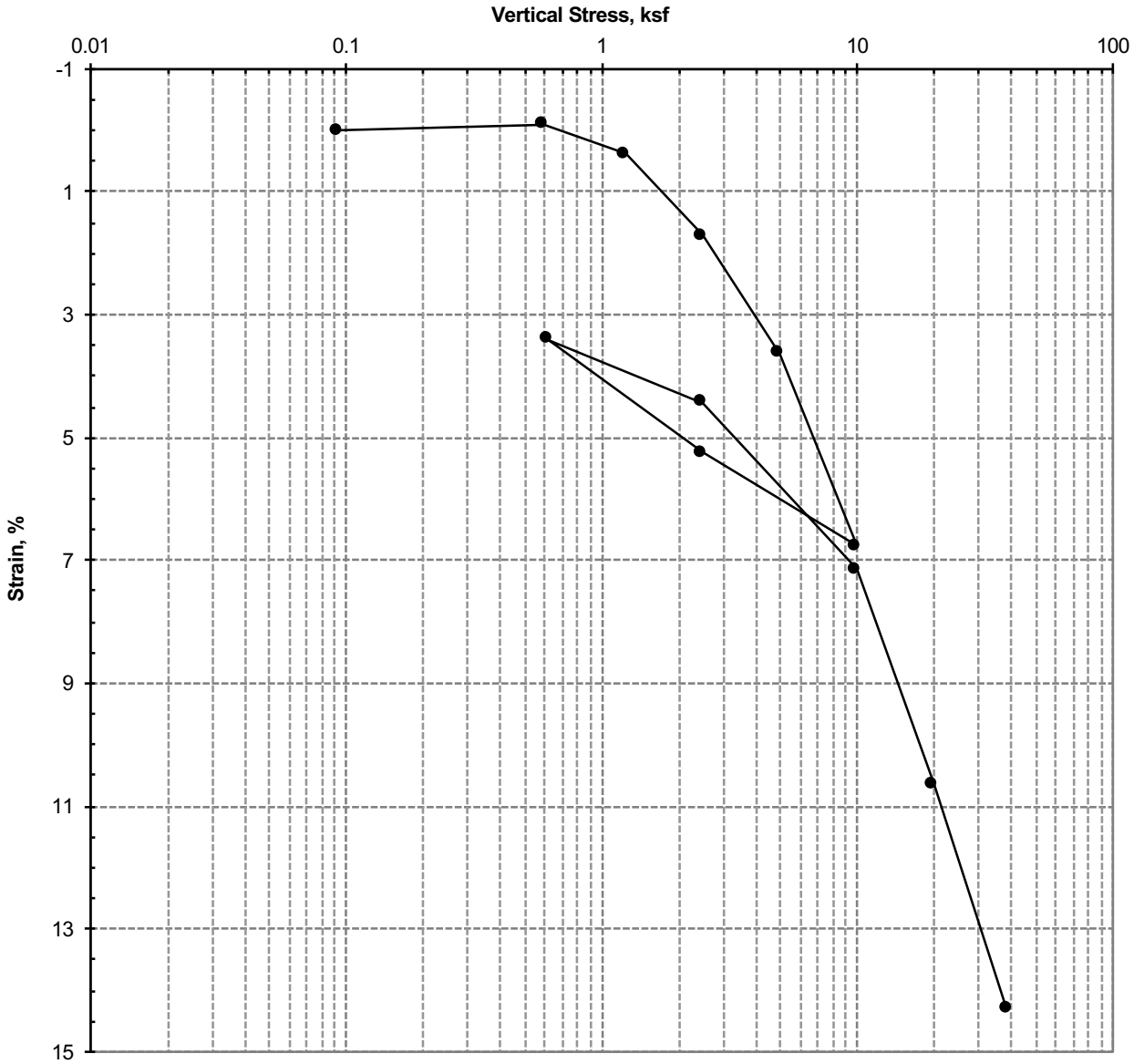
PLATE B-3g



SAMPLE ID				SUMMARY		
	Boring, Sample #, Depth	457HS , #3 , 14.0 ft			Preconsolidation Pressure, ksf	---
	USCS Classification:	Poorly-graded SAND (SP): light brown, moist			Inundation Increment, ksf	1.49
					Liquid Limit	---
PROPERTIES		Initial	Final		Plastic Limit	---
	Water Content, %	2.3%	19.1%		Plasticity Index	---
	Dry Unit Weight, pcf	94.5	98.9		Passing #200	---
	Saturation, %	8%	75%		Estimated Gs	2.65
	Void Ratio	0.75	0.67	REMARKS	Test Method: ASTM D4546	
	Diameter, in	2.42	2.42		Project: Moorpark Downtown	
	Height, in	1.00	0.96			

COLLAPSE TEST

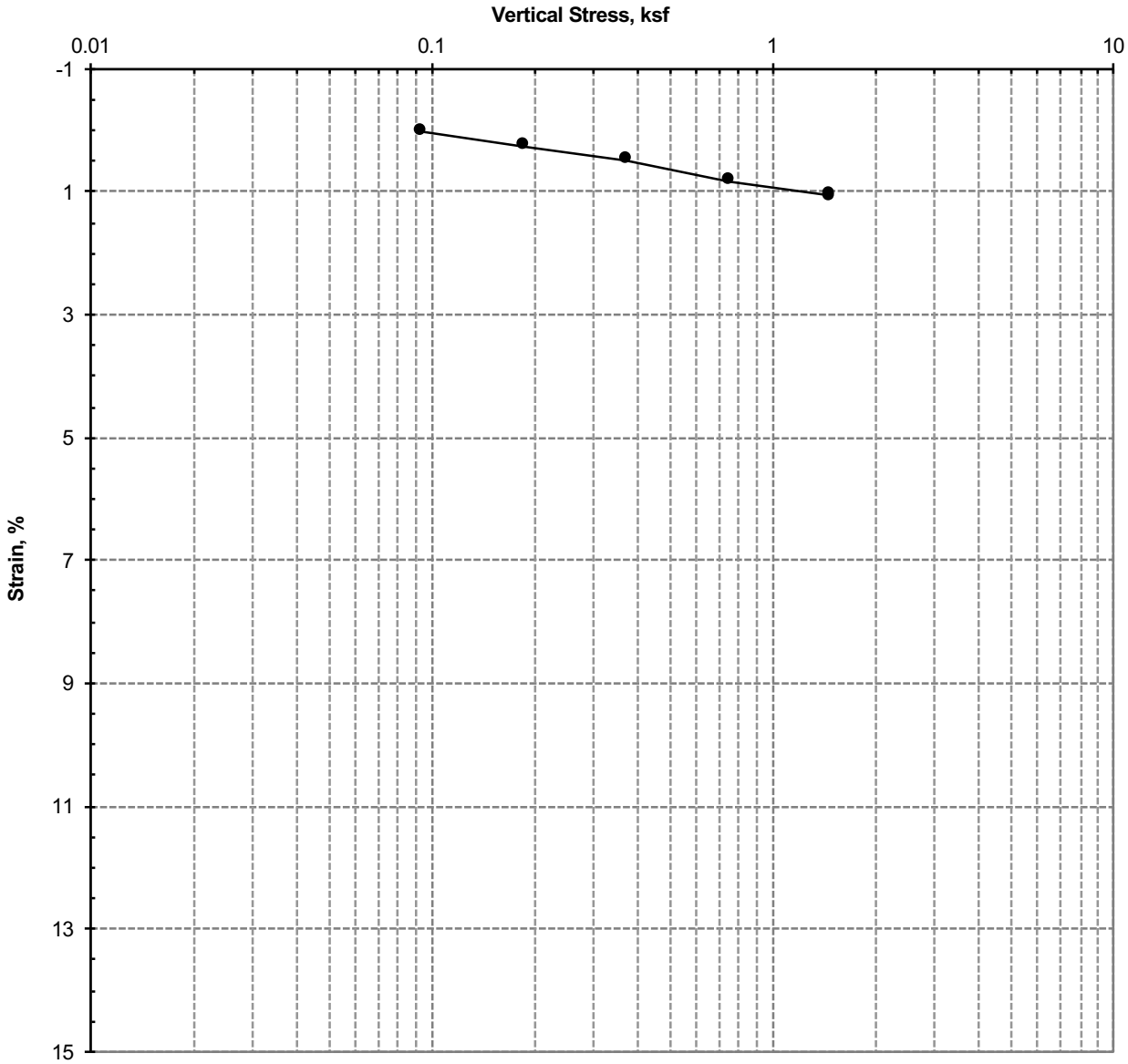
PLATE B-3h



SAMPLE ID				SUMMARY		
	Boring, Sample #, Depth	347MA , #2 , 4.0 ft			Preconsolidation Pressure, ksf	---
	USCS Classification:	Silty SAND (SM): brown, moist			Inundation Increment, ksf	0.10
					Liquid Limit	---
PROPERTIES		Initial	Final		Plastic Limit	---
	Water Content, %	%MC	%MC		Plasticity Index	---
	Dry Unit Weight, pcf	DUW	#VALUE!		Passing #200	---
	Saturation, %	Saturation	#VALUE!		Estimated Gs	2.65
	Void Ratio	Void Ratio	#VALUE!	REMARKS	Test Method: ASTM D4546	
	Diameter, in	2.42	2.42		Project: Moorpark Downtown	
	Height, in	1.00	0.86			

COLLAPSE TEST

PLATE B-3i



SAMPLE I			
	Boring, Sample #, Depth	347MS , #4 , 14.0 ft	
	USCS Classification:	Sandy SILT (ML): light brown, moist	

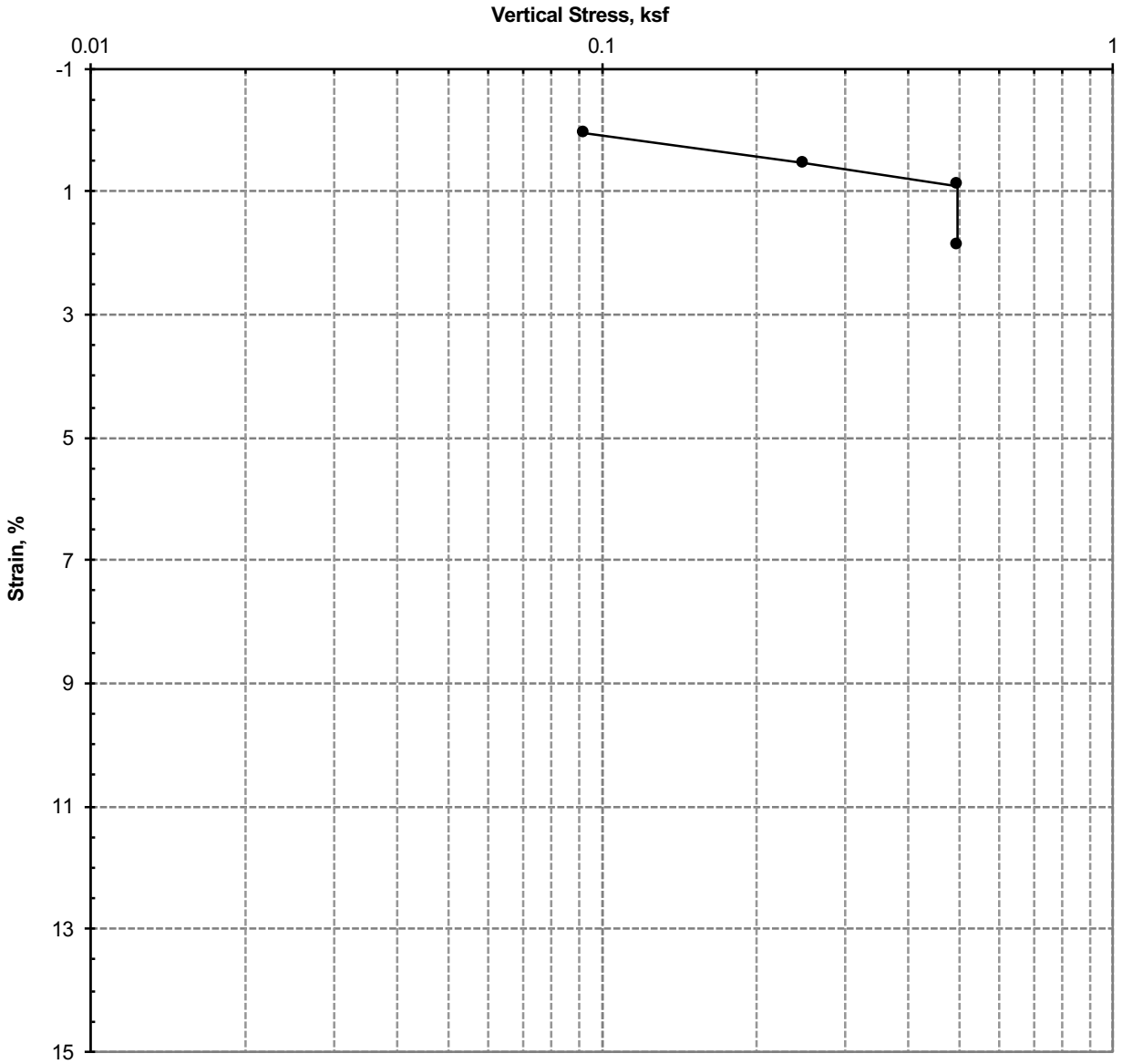
PROPERTIES	Initial	Final
Water Content, %	21.6%	29.4%
Dry Unit Weight, pcf	80.9	81.8
Saturation, %	55%	76%
Void Ratio	1.05	1.02
Diameter, in	2.42	2.42
Height, in	1.00	0.99

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	1.49
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65

REMARKS	
	Test Method: ASTM D4546
	Project: Moorpark Downtown

COLLAPSE TEST

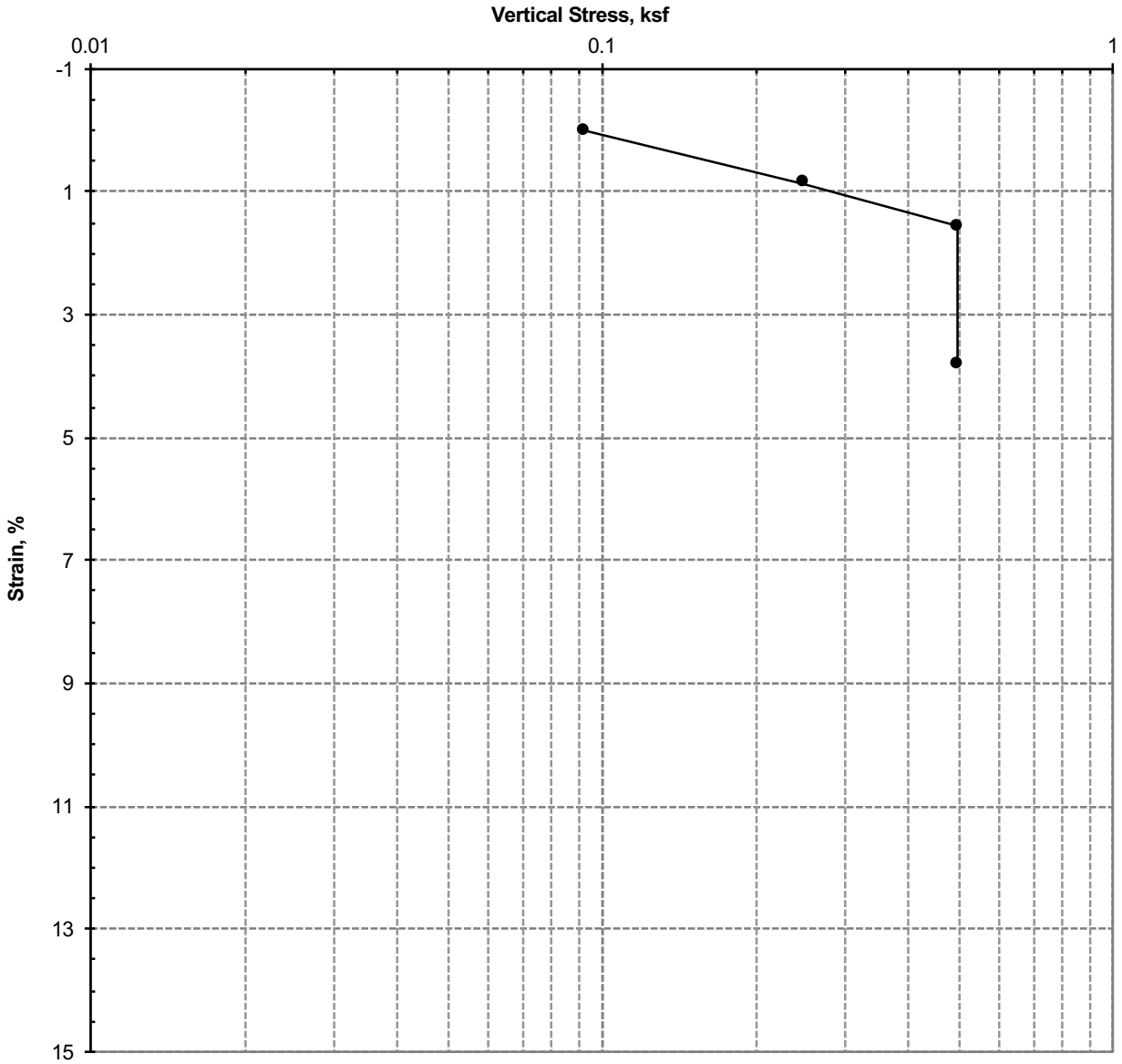
PLATE B-3j



SAMPLE ID				SUMMARY		
	Boring, Sample #, Depth	500LAA , #1 , 5.0 ft			Preconsolidation Pressure, ksf	---
	USCS Classification:	Poorly-graded SAND with silt (SP-SM): light brown, moist			Inundation Increment, ksf	0.50
					Liquid Limit	---
					Plastic Limit	---
PROPERTIES		Initial	Final		Plasticity Index	---
	Water Content, %	8.8%	22.3%		Passing #200	---
	Dry Unit Weight, pcf	96.6	98.4		Estimated Gs	2.65
	Saturation, %	33%	87%	REMARKS	Test Method: ASTM D4546	
	Void Ratio	0.71	0.68		Project: Moorpark Downtown	
	Diameter, in	2.42	2.42			
	Height, in	1.00	0.98			

COLLAPSE TEST

PLATE B-3k



SAMPLE ID			
	Boring, Sample #, Depth	WCRN , #1 , 4.0 ft	
	USCS Classification:	Poorly-graded SAND with silt (SP-SM): brown, moist	

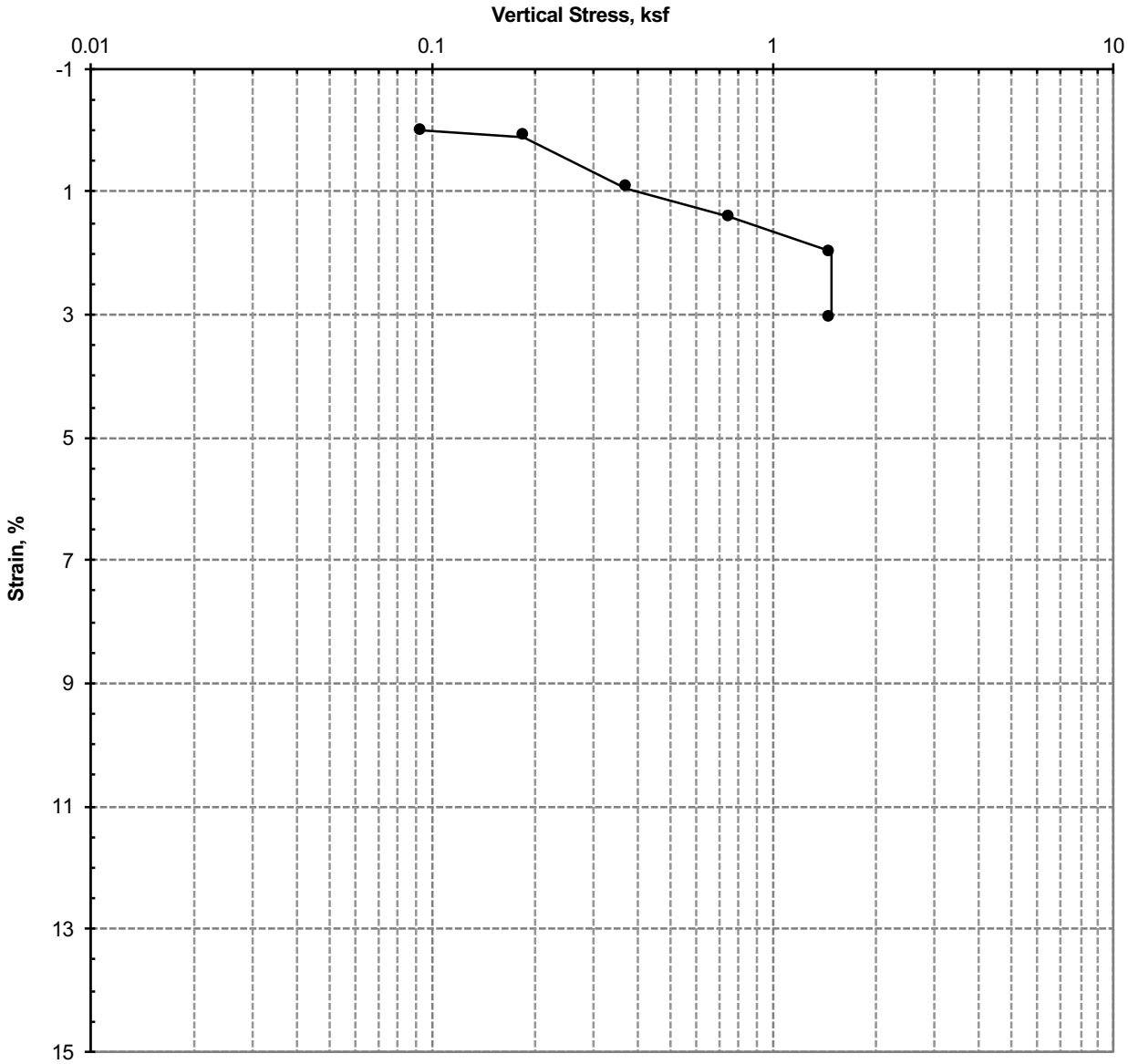
PROPERTIES	Initial	Final
Water Content, %	9.1%	17.1%
Dry Unit Weight, pcf	95.3	99.0
Saturation, %	33%	68%
Void Ratio	0.74	0.67
Diameter, in	2.42	2.42
Height, in	1.00	0.96

SUMMARY	
Preconsolidation Pressure, ksf	---
Inundation Increment, ksf	0.50
Liquid Limit	---
Plastic Limit	---
Plasticity Index	---
Passing #200	---
Estimated Gs	2.65

REMARKS	
Test Method: ASTM D4546	
Project: Moorpark Downtown	

COLLAPSE TEST

PLATE B-3I



SAMPLE ID			
	Boring, Sample #, Depth	WCRS , #4 , 14.0 ft	
	USCS Classification:	Poorly-graded SAND with silt (SP-SM): brown, moist	

PROPERTIES	Initial	Final
Water Content, %	7.1%	19.6%
Dry Unit Weight, pcf	101.1	104.3
Saturation, %	29%	88%
Void Ratio	0.64	0.59
Diameter, in	2.42	2.42
Height, in	1.00	0.97

SUMMARY		
	Preconsolidation Pressure, ksf	---
	Inundation Increment, ksf	1.49
	Liquid Limit	---
	Plastic Limit	---
	Plasticity Index	---
	Passing #200	---
	Estimated Gs	2.65

REMARKS	
	Test Method: ASTM D4546
	Project: Moorpark Downtown

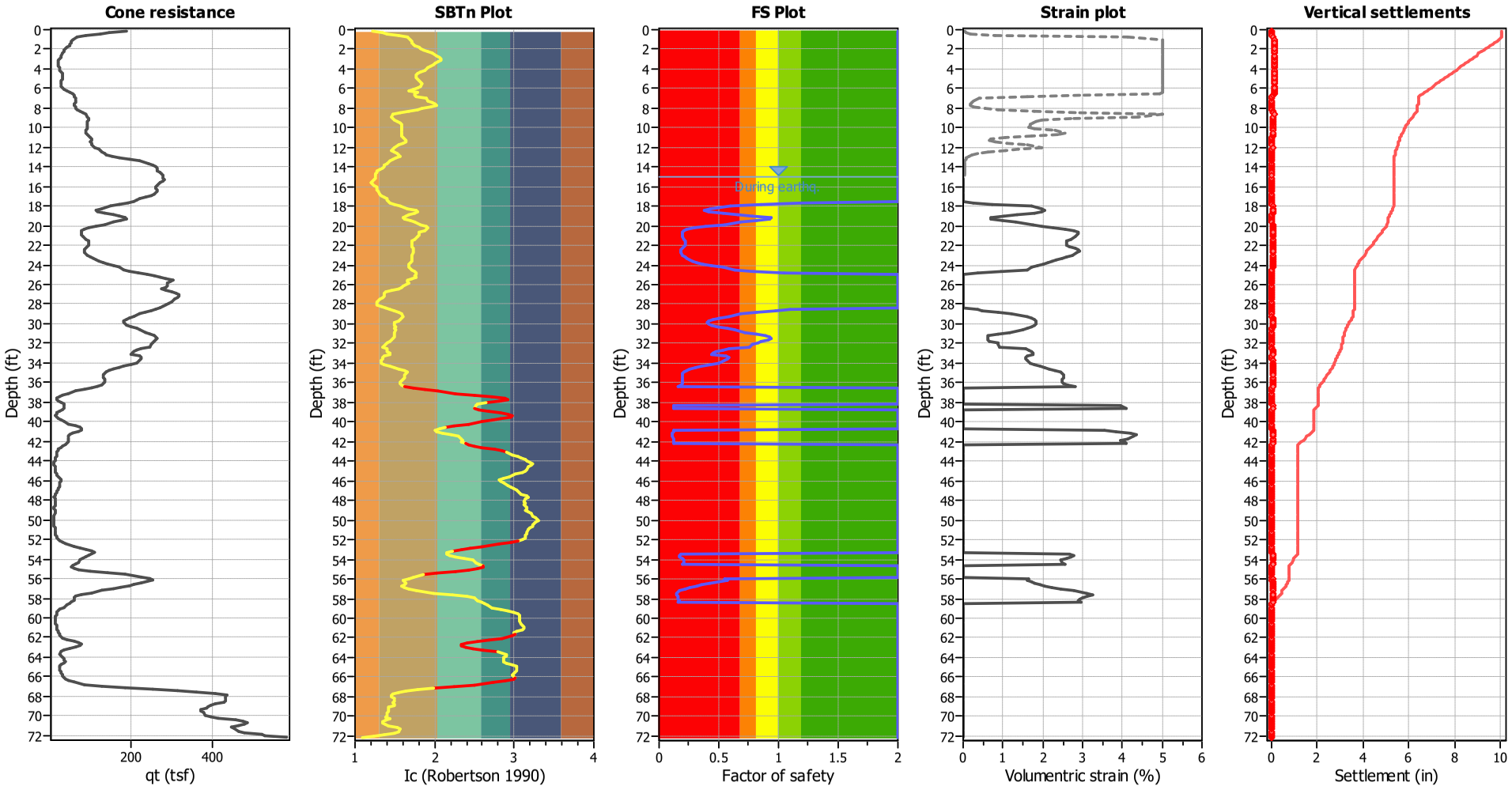
COLLAPSE TEST

PLATE B-3m

APPENDIX C

Post Earthquake Settlement Plots

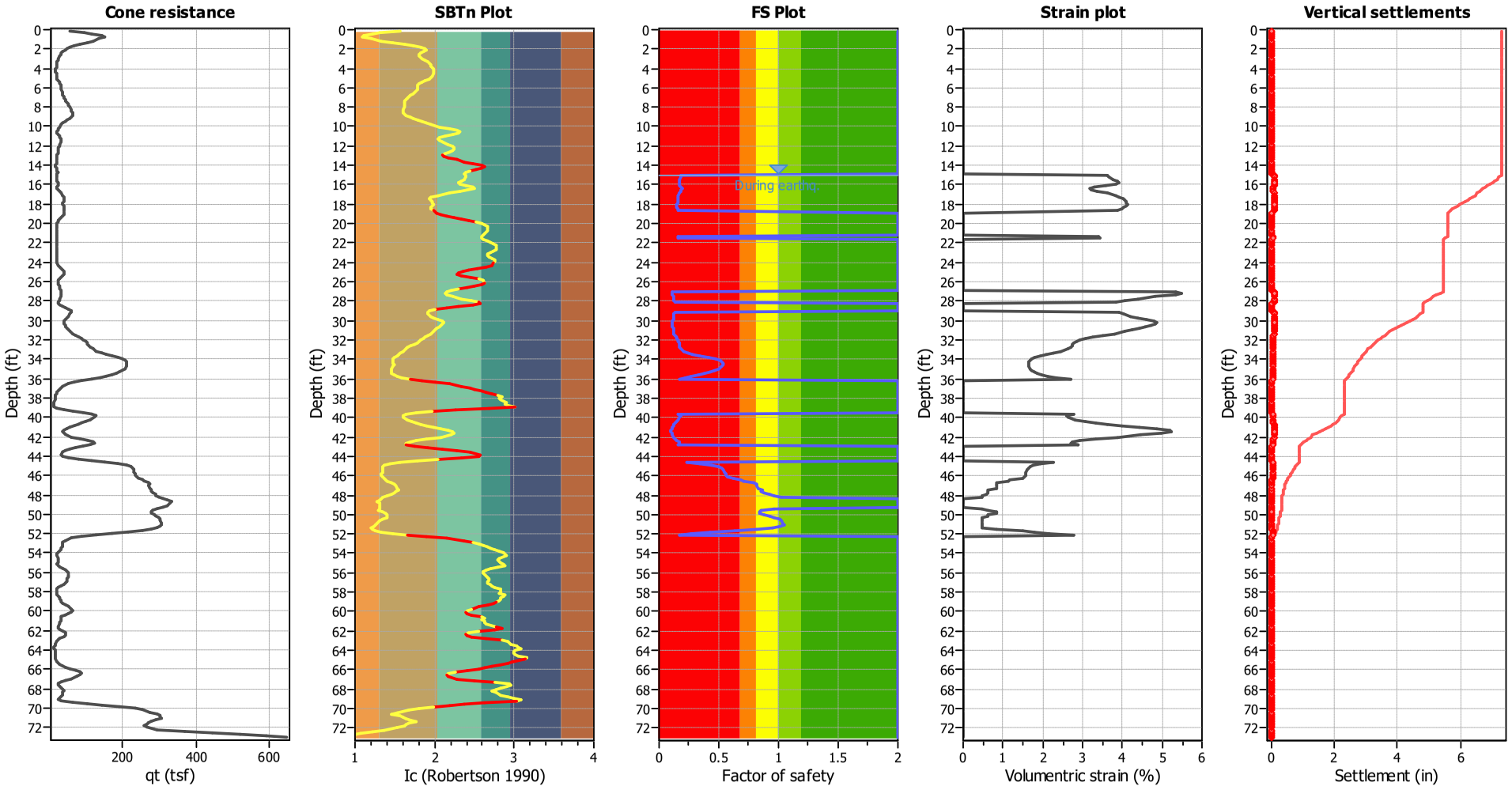
Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

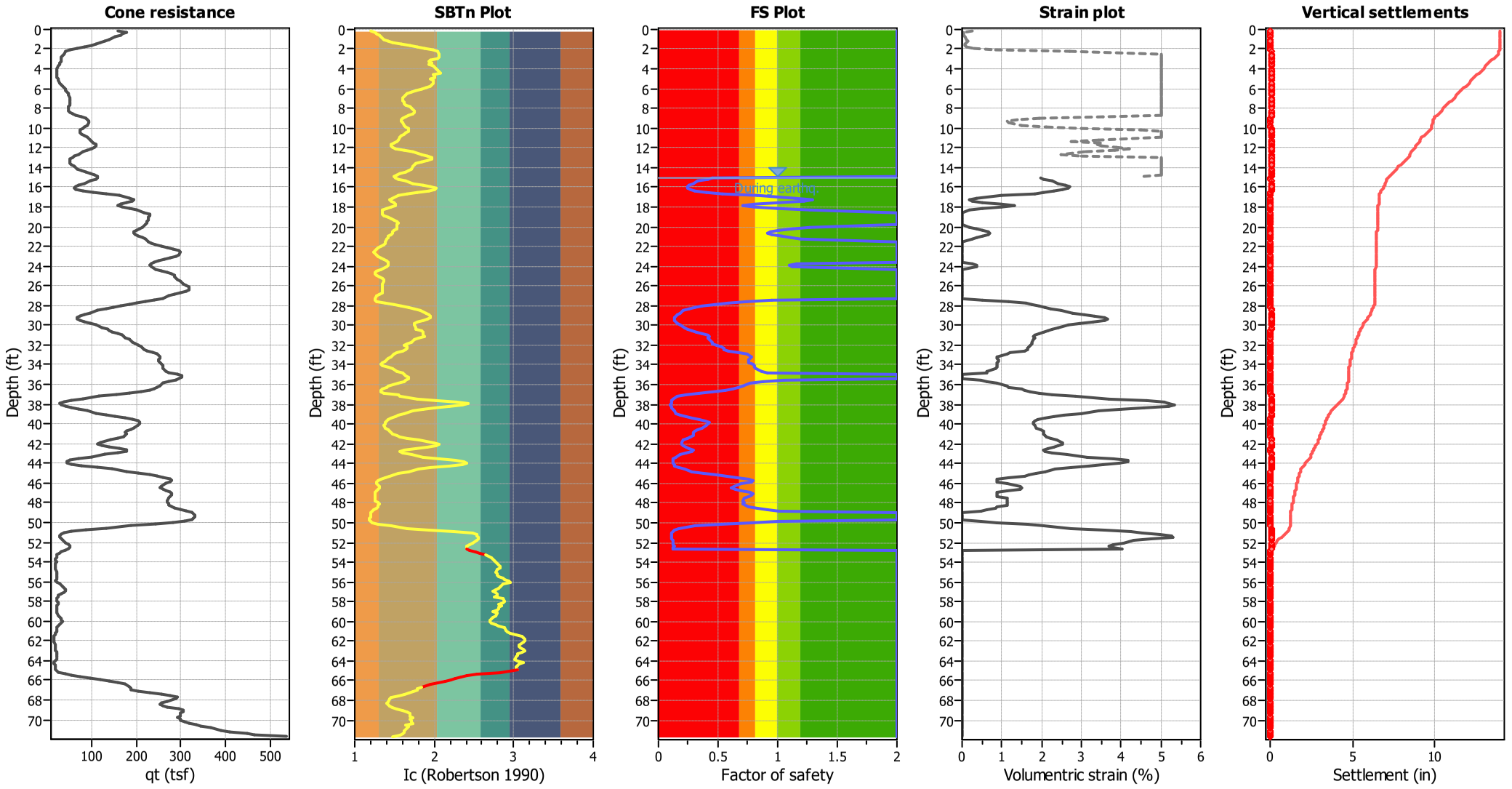
Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

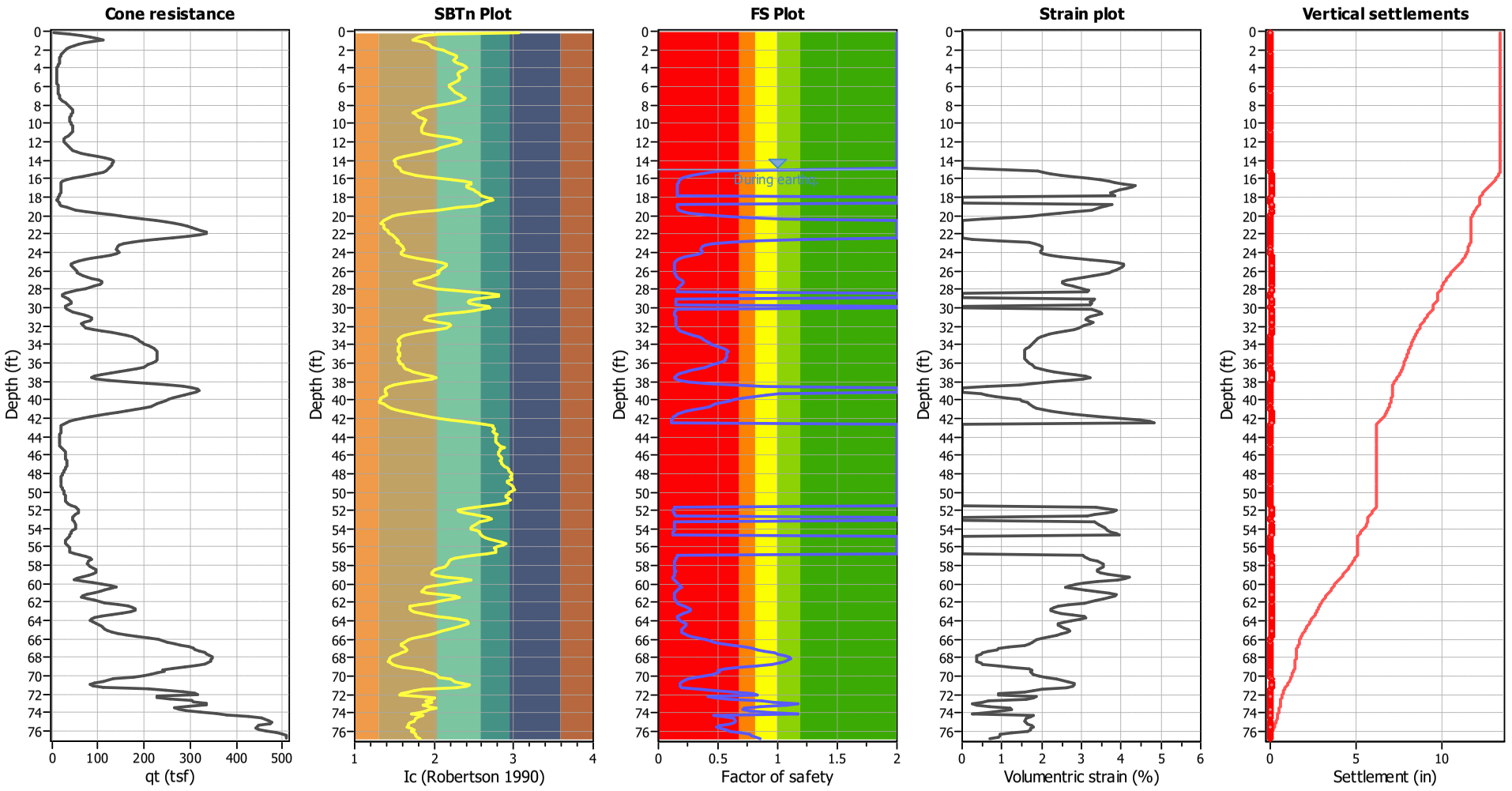
Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

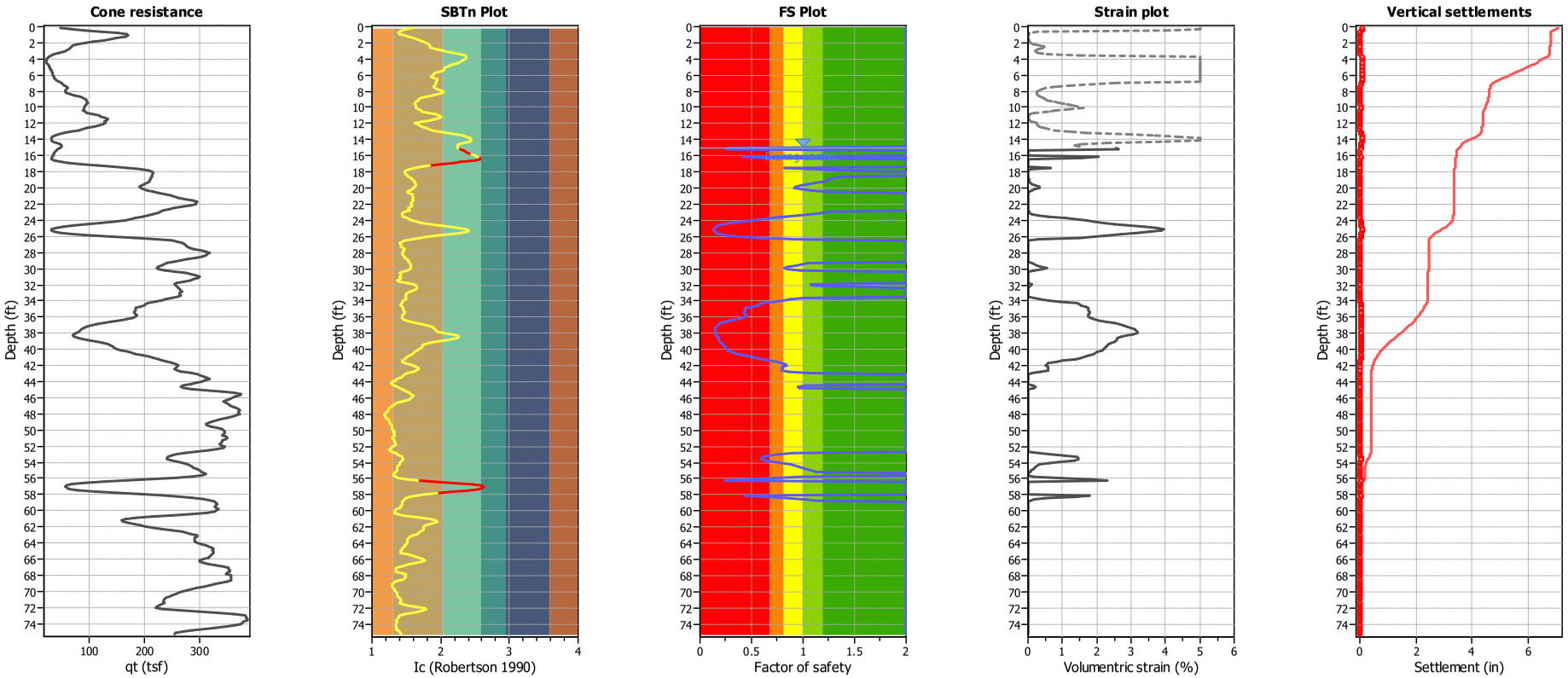
Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
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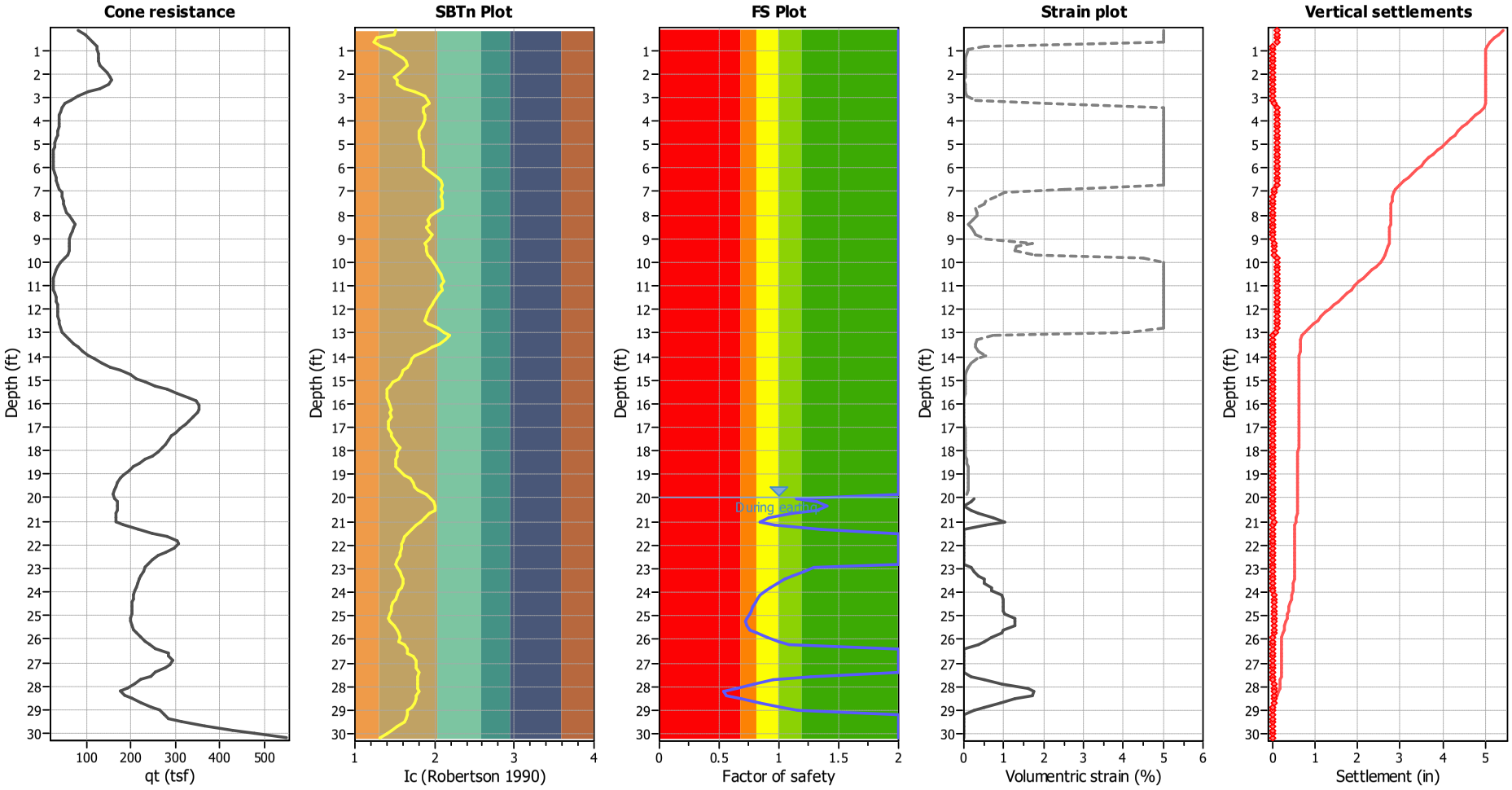
Estimation of post-earthquake settlements



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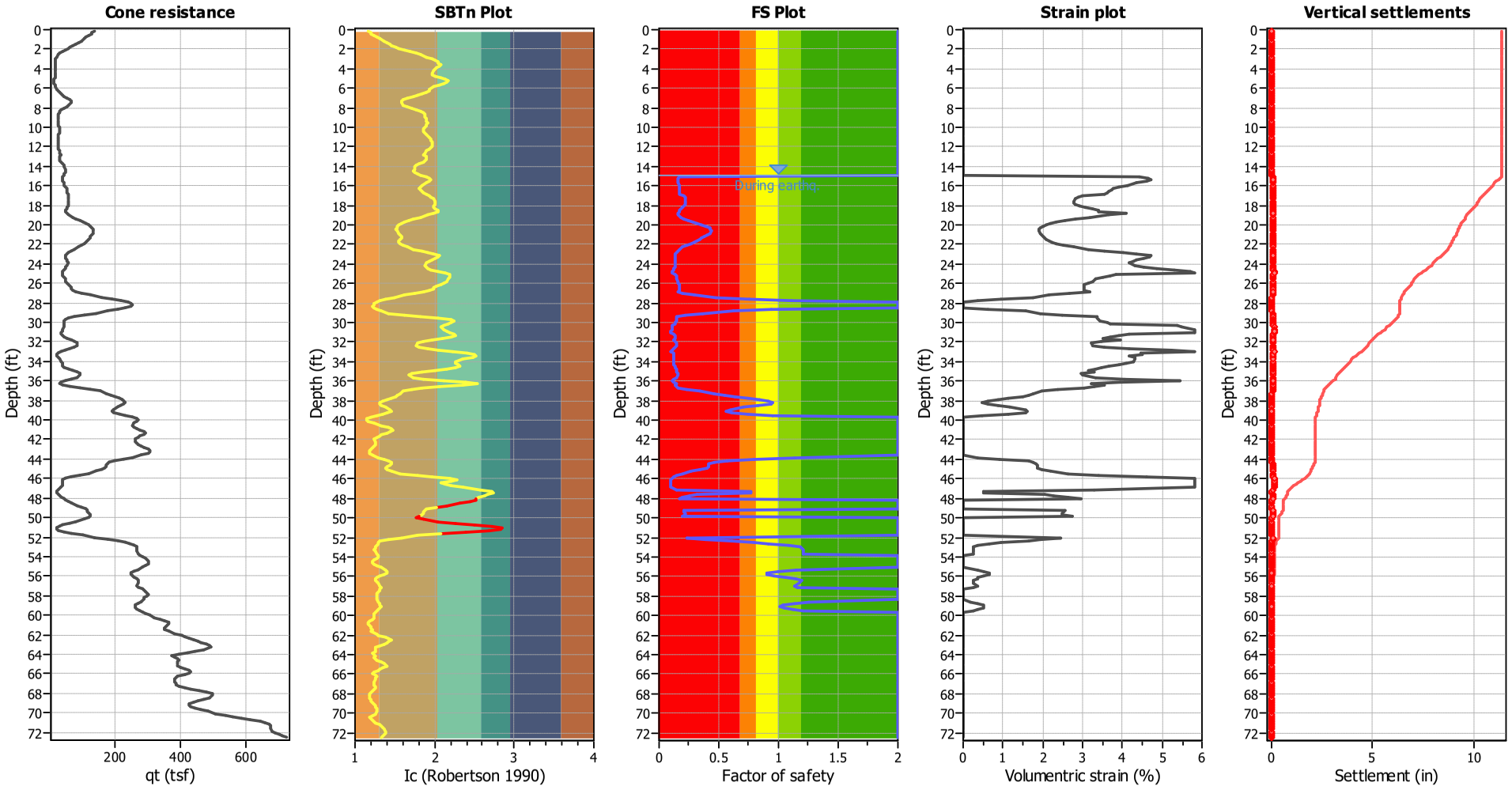
Estimation of post-earthquake settlements



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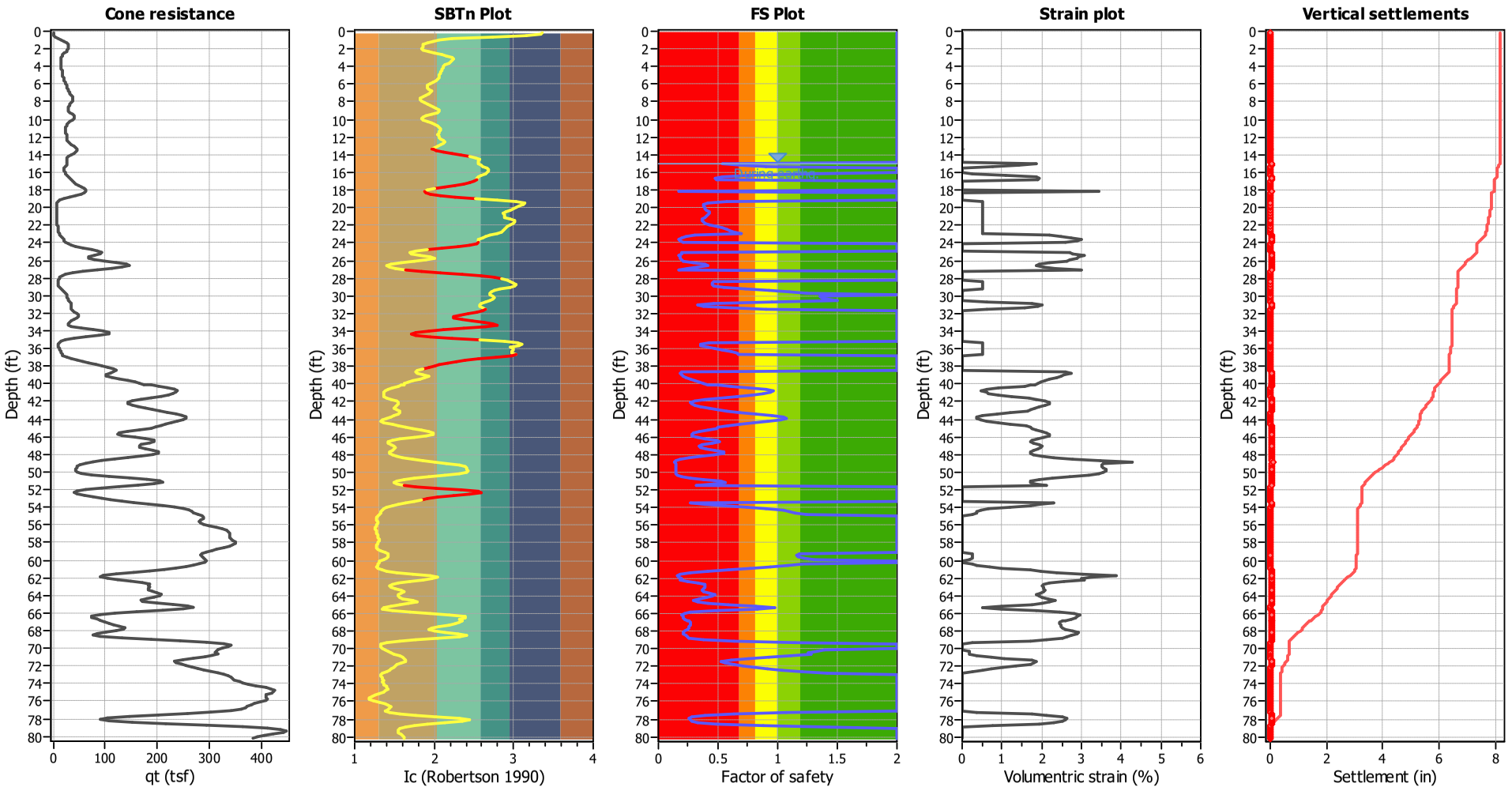
Estimation of post-earthquake settlements



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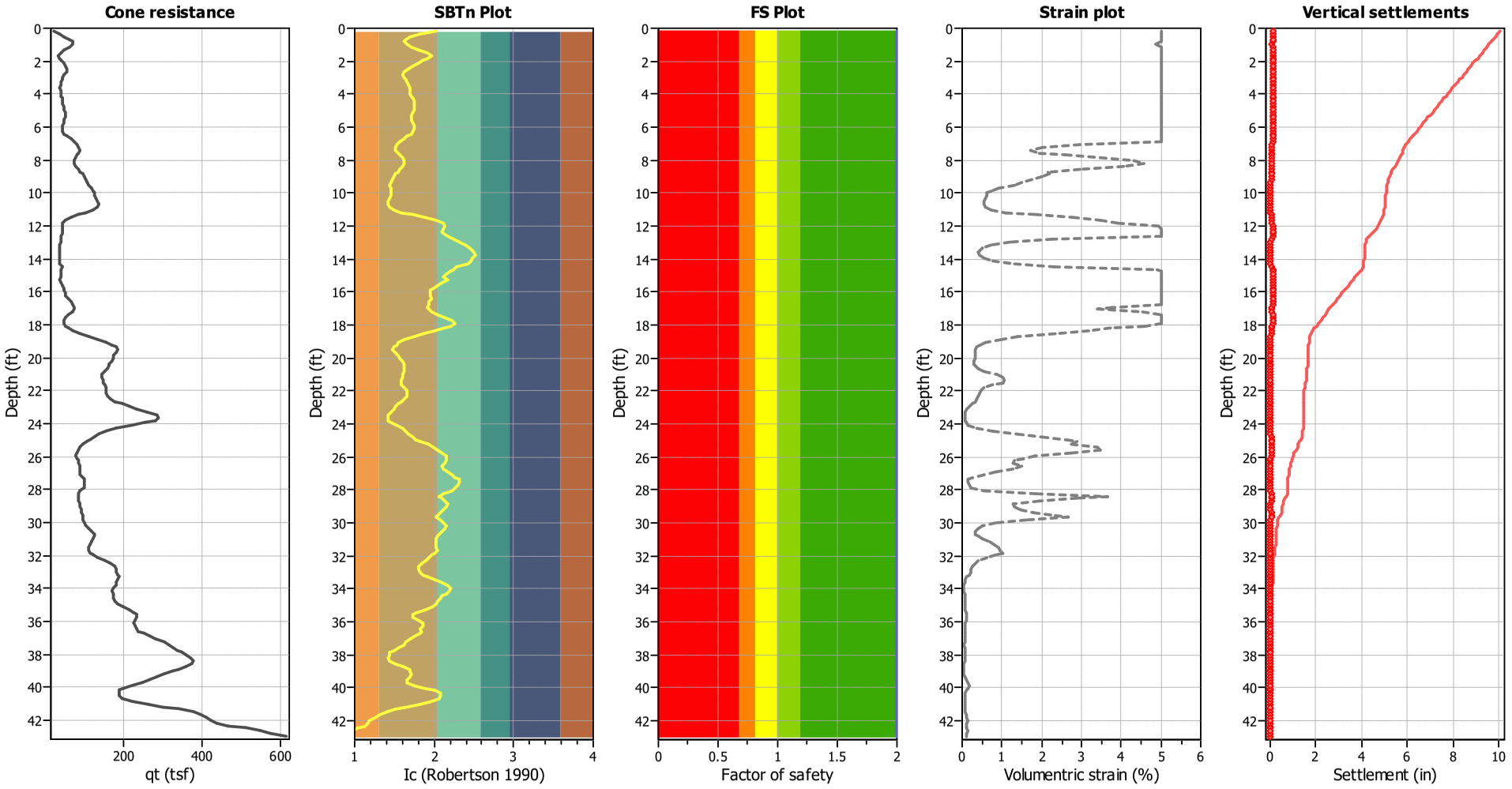
Estimation of post-earthquake settlements



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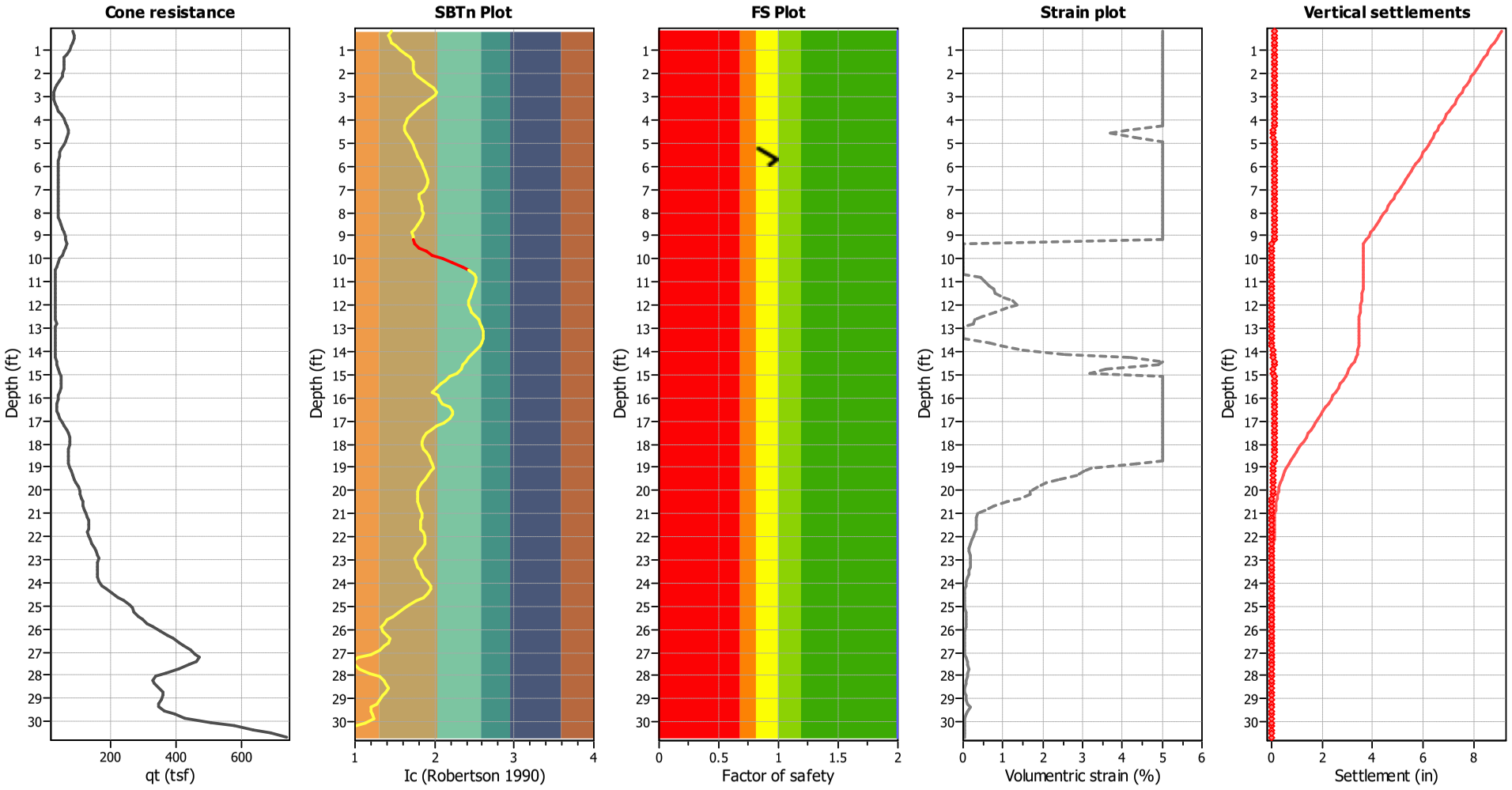
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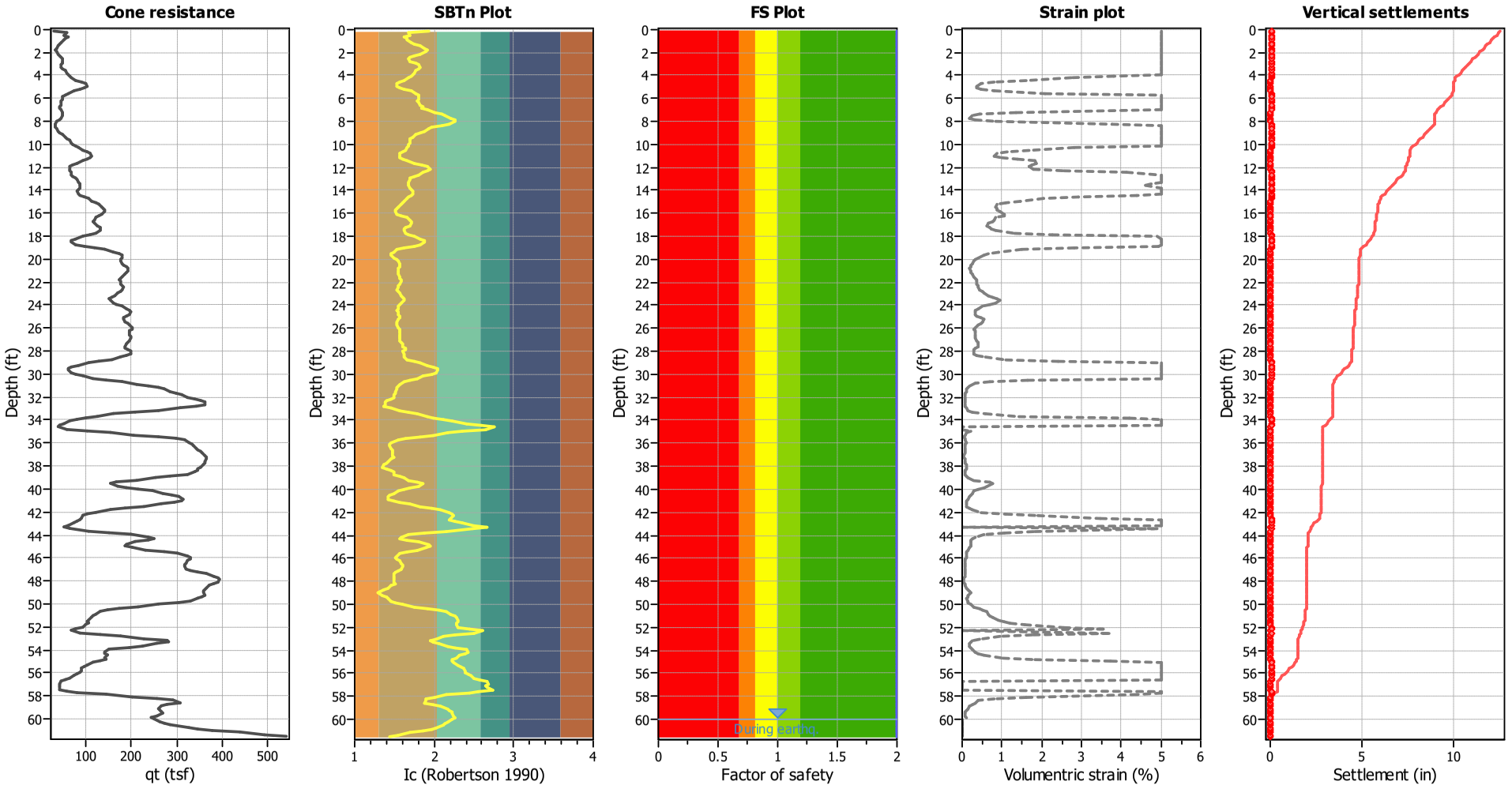
Estimation of post-earthquake settlements



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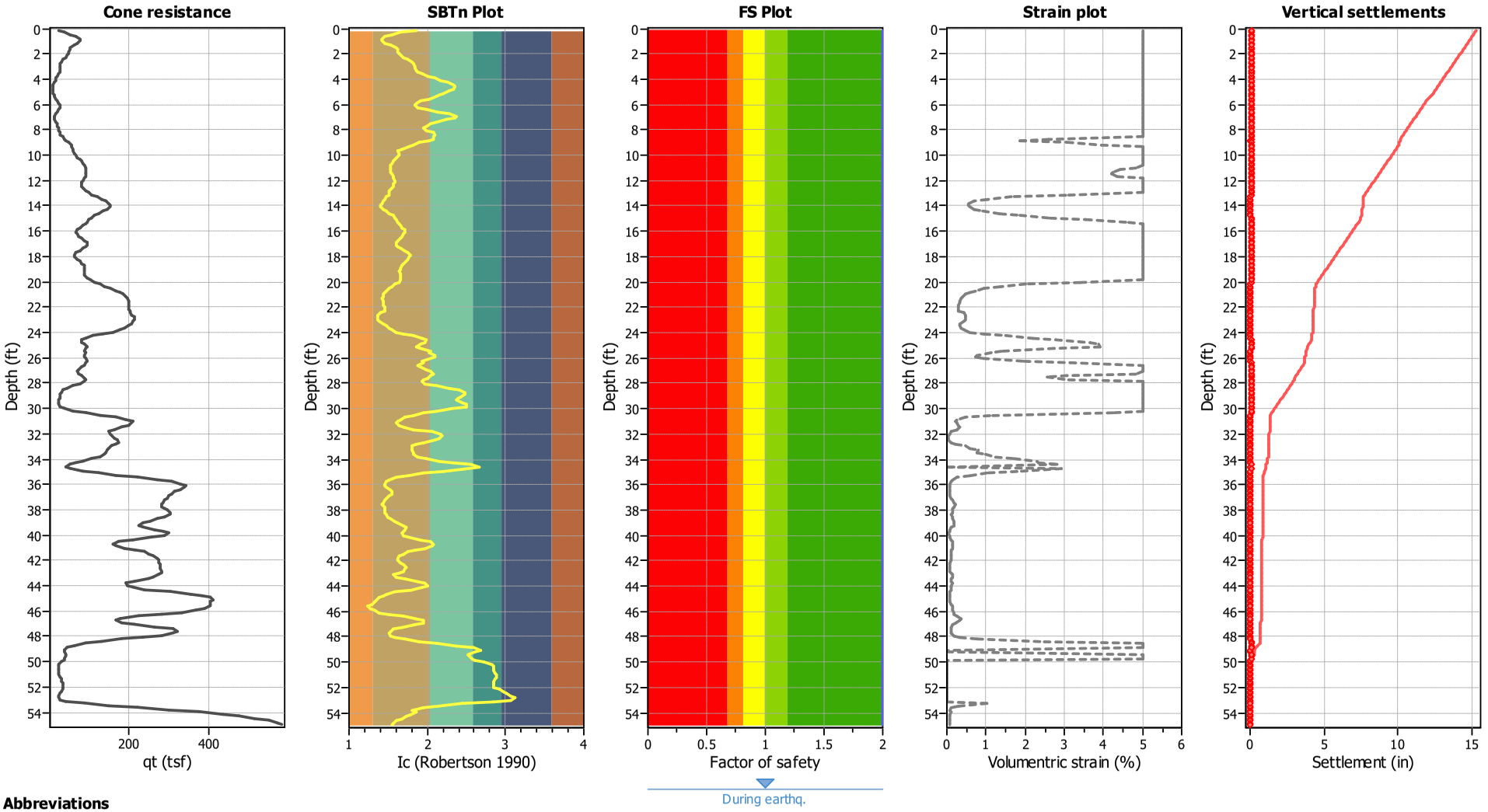
Estimation of post-earthquake settlements



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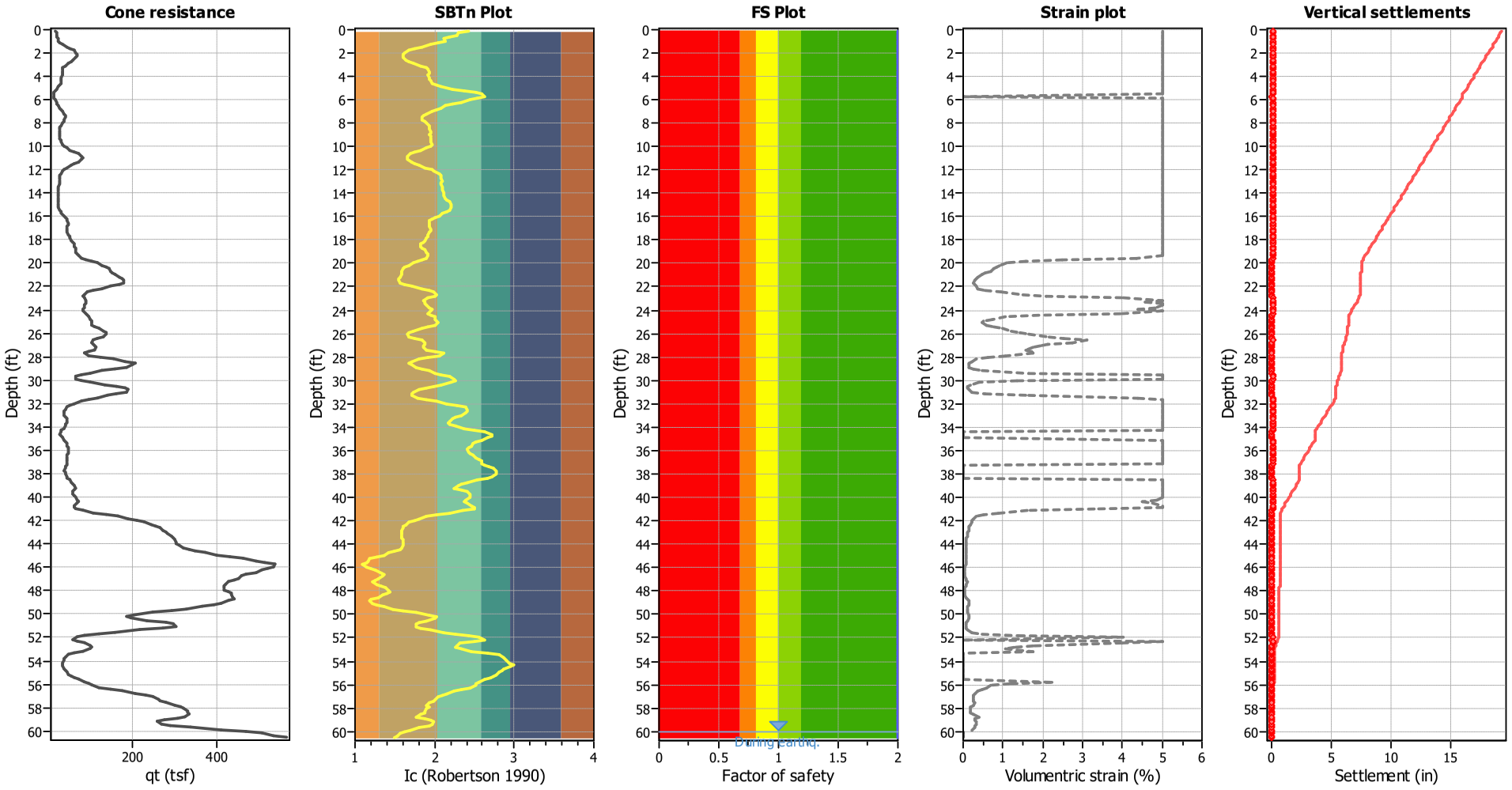
Estimation of post-earthquake settlements



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Estimation of post-earthquake settlements



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Velocity Survey Data

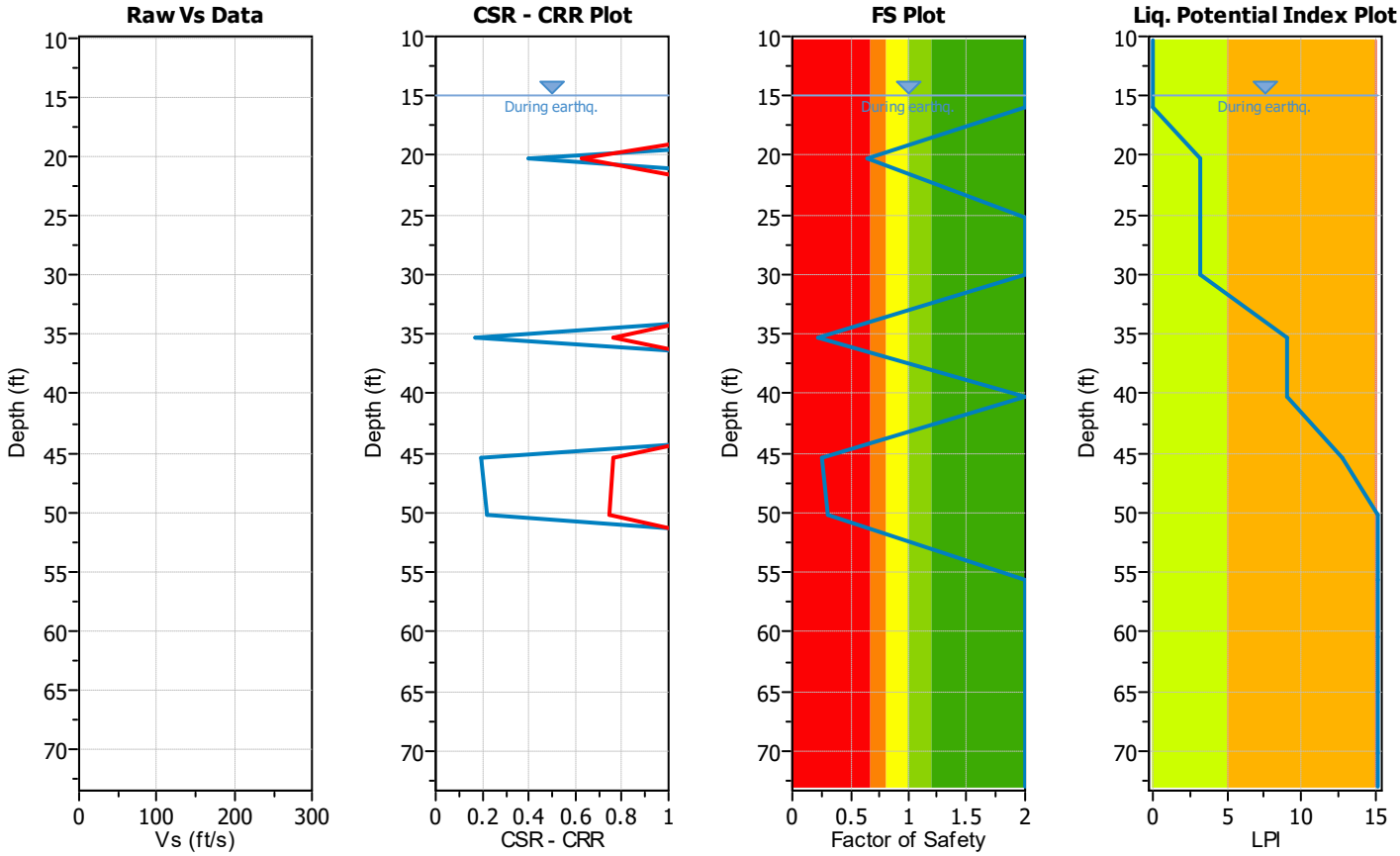
V_s BASED LIQUEFACTION ANALYSIS REPORT

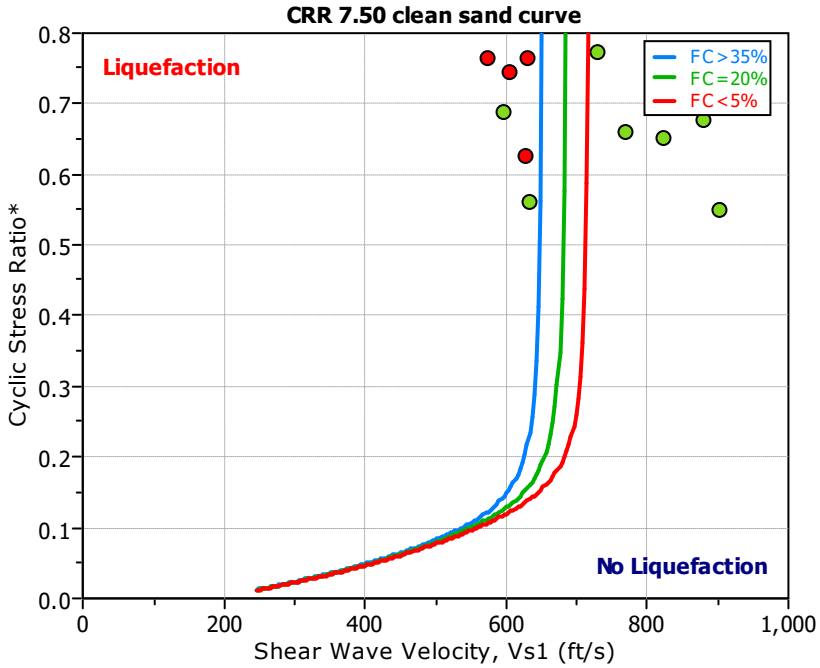
Project title : Downtown Moorpark **V_s Name: RHS-1**

Location : Remainder High Street

:: Input parameters and analysis properties ::

Analysis method:	NCEER 1998 (Youd et al. 2001)
G.W.T. (in-situ):	33.00 ft
G.W.T. (earthq.):	15.00 ft
Earthquake magnitude M_w:	7.00
Peak ground acceleration:	1.03 g
Eq. external load:	0.00 tsf





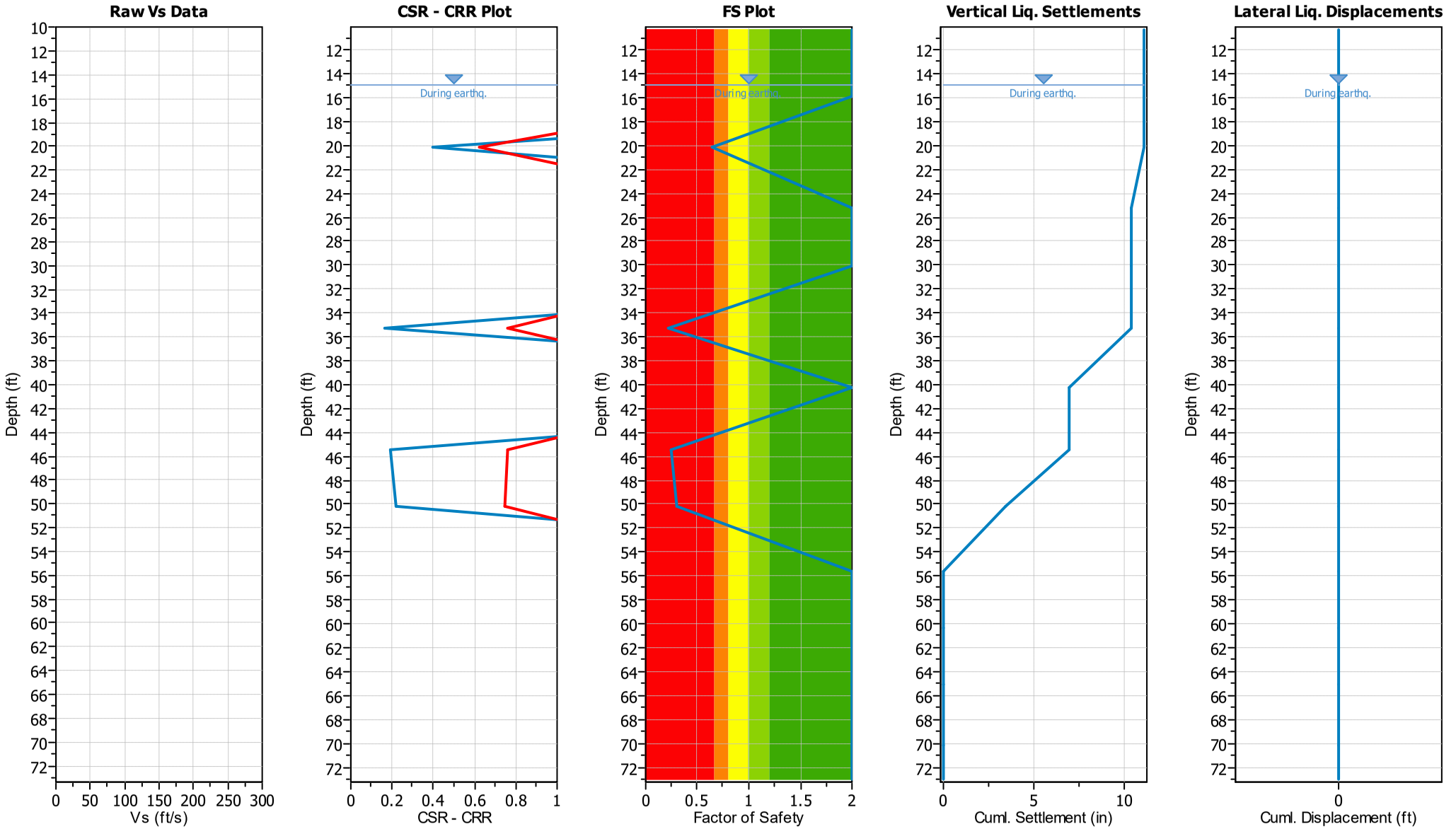
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

:: Overall Liquefaction Assessment Analysis Plots ::



:: Field input data ::

Test Depth (ft)	V_s Field Value (ft/s)	Fines Content (%)	Unit Weight (pcf)	Infl. Thickness (ft)	Can Liquefy
10.33	783.20	60.00	115.00	5.00	Yes
15.91	610.60	40.00	115.00	5.00	No
20.18	643.20	65.00	115.00	5.00	Yes
25.26	645.90	54.00	115.00	5.00	No
30.02	940.20	30.00	129.00	5.00	No
35.27	676.40	66.00	129.00	5.00	Yes
40.19	877.90	20.00	129.00	5.00	Yes
45.44	771.40	5.00	129.00	5.00	Yes
50.20	754.60	30.00	129.00	5.00	Yes
55.61	1524.10	65.00	129.00	5.00	No
60.37	1235.10	65.00	129.00	5.00	No
65.12	1145.90	65.00	129.00	5.00	No
70.21	1016.70	65.00	129.00	5.00	No
73.00	1093.30	5.00	129.00	3.00	No

Abbreviations

Depth: Depth at which test was performed (ft)
Vs Field Value: Measured shear waves velocity (ft/s)
Fines Content: Fines content at test depth (%)
Unit Weight: Unit weight at test depth (pcf)
Infl. Thickness: Thickness of the soil layer to be considered in settlements analysis (ft)
Can Liquefy: User defined switch for excluding/including test depth from the analysis procedure

:: Cyclic Resistance Ratio (CRR) calculation data ::

Depth (ft)	V_s Field Value (ft/s)	Unit Weight (pcf)	σ_v (tsf)	u_o (tsf)	σ'_{vo} (tsf)	Norm. Factor	V_{s1} (ft/s)	Vs_{s1}^* (ft/s)	$CRR_{7.5}$
10.33	783.20	115.00	0.59	0.00	0.59	1.16	904.82	200.00	4.000
15.91	610.60	115.00	0.91	0.00	0.91	1.04	633.22	200.00	4.000
20.18	643.20	115.00	1.16	0.00	1.16	0.98	628.54	200.00	0.399
25.26	645.90	115.00	1.45	0.00	1.45	0.92	596.72	200.00	4.000
30.02	940.20	129.00	1.76	0.00	1.76	0.88	827.96	202.50	4.000
35.27	676.40	129.00	2.10	0.07	2.03	0.85	574.92	200.00	0.167
40.19	877.90	129.00	2.42	0.22	2.19	0.83	731.83	207.50	4.000
45.44	771.40	129.00	2.75	0.39	2.37	0.82	630.83	215.00	0.192
50.20	754.60	129.00	3.06	0.54	2.52	0.80	607.17	202.50	0.222
55.61	1524.10	129.00	3.41	0.71	2.70	0.79	1205.37	200.00	4.000
60.37	1235.10	129.00	3.72	0.85	2.86	0.78	963.00	200.00	4.000
65.12	1145.90	129.00	4.02	1.00	3.02	0.77	881.52	200.00	4.000
70.21	1016.70	129.00	4.35	1.16	3.19	0.76	771.53	200.00	4.000
73.00	1093.30	129.00	4.53	1.25	3.28	0.75	823.72	215.00	4.000

Abbreviations

σ_v: Total stress during SPT test (tsf)
u_o: Water pore pressure during SPT test (tsf)
σ'_{vo}: Effective overburden pressure during SPT test (tsf)
Norm. Factor: overburden-stress correction factor
V_{S1}: Overburden-stress corrected shear wave velocity
V_{s1}^*: Limiting upper value of V_{s1}
$CRR_{7.5}$: Cyclic resistance ratio for M=7.5

:: Cyclic Stress Ratio calculation (CSR fully adjusted and normalized) ::

Depth (ft)	Unit Weight (pcf)	$\sigma_{v,eq}$ (tsf)	$u_{o,eq}$ (tsf)	$\sigma'_{vo,eq}$ (tsf)	r_d	α	CSR	MSF	$CSR_{eq,M=7.5}$	K_{sigma}	CSR^*	FS	
10.33	115.00	0.59	0.00	0.59	0.98	1.00	0.655	1.19	0.549	1.00	0.549	2.000	●
15.91	115.00	0.91	0.03	0.89	0.97	1.00	0.668	1.19	0.560	1.00	0.560	2.000	●
20.18	115.00	1.16	0.16	1.00	0.96	1.00	0.744	1.19	0.624	1.00	0.624	0.640	●
25.26	115.00	1.45	0.32	1.13	0.94	1.00	0.808	1.19	0.677	0.99	0.687	2.000	●
30.02	129.00	1.76	0.47	1.29	0.92	1.00	0.840	1.19	0.704	0.96	0.733	2.000	●
35.27	129.00	2.10	0.63	1.47	0.89	1.00	0.852	1.19	0.714	0.94	0.762	0.219	●
40.19	129.00	2.42	0.79	1.63	0.85	1.00	0.843	1.19	0.707	0.92	0.770	2.000	●
45.44	129.00	2.75	0.95	1.80	0.80	1.00	0.817	1.19	0.685	0.90	0.762	0.251	●
50.20	129.00	3.06	1.10	1.96	0.75	1.00	0.784	1.19	0.657	0.88	0.744	0.299	●
55.61	129.00	3.41	1.27	2.14	0.70	1.00	0.743	1.19	0.623	0.87	0.718	2.000	●
60.37	129.00	3.72	1.42	2.30	0.66	1.00	0.710	1.19	0.595	0.86	0.695	2.000	●
65.12	129.00	4.02	1.56	2.46	0.62	1.00	0.680	1.19	0.570	0.84	0.675	2.000	●
70.21	129.00	4.35	1.72	2.63	0.59	1.00	0.655	1.19	0.549	0.83	0.658	2.000	●
73.00	129.00	4.53	1.81	2.72	0.58	1.00	0.643	1.19	0.539	0.83	0.651	2.000	●

Abbreviations

$\sigma_{v,eq}$: Total overburden pressure at test point, during earthquake (tsf)
$u_{o,eq}$: Water pressure at test point, during earthquake (tsf)
$\sigma'_{vo,eq}$: Effective overburden pressure, during earthquake (tsf)
r_d: Nonlinear shear mass factor
α: Improvement factor due to stone columns
CSR : Cyclic Stress Ratio
MSF : Magnitude Scaling Factor
$CSR_{eq,M=7.5}$: CSR adjusted for M=7.5
K_{sigma}: Effective overburden stress factor
CSR^*: CSR fully adjusted
FS: Calculated factor of safety against soil liquefaction

:: Liquefaction potential according to Iwasaki ::

Depth (ft)	FS	F	wz	Thickness (ft)	I_L
10.33	2.000	0.00	8.43	5.58	0.00
15.91	2.000	0.00	7.58	5.58	0.00
20.18	0.640	0.36	6.92	4.27	3.24
25.26	2.000	0.00	6.15	5.08	0.00
30.02	2.000	0.00	5.42	4.76	0.00
35.27	0.219	0.78	4.62	5.25	5.78
40.19	2.000	0.00	3.88	4.92	0.00
45.44	0.251	0.75	3.07	5.25	3.68
50.20	0.299	0.70	2.35	4.76	2.39
55.61	2.000	0.00	1.53	5.41	0.00
60.37	2.000	0.00	0.80	4.76	0.00
65.12	2.000	0.00	0.08	4.75	0.00
70.21	2.000	0.00	0.00	0.00	0.00
73.00	2.000	0.00	0.00	0.00	0.00

Overall potential I_L : 15.10

I_L = 0.00 - No liquefaction
I_L between 0.00 and 5 - Liquefaction not probable
I_L between 5 and 15 - Liquefaction probable
I_L > 15 - Liquefaction certain

:: Vertical settlements estimation for dry sands ::

Depth (ft)	$V_{s1,cs}$ (ft/s)	$(N_1)_{60,cs}$	τ_{av}	p	G_{max} (tsf)	α	b	γ	ε_{15}	N_c	ε_{Nc} (%)	Δh (ft)	ΔS (in)
10.33	1117.68	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.000

Cumulative settlemetns: 0.000

Abbreviations

$V_{s1,cs}$: Normalized shear wave velocity clean sand equivalent
$(N_1)_{60,cs}$: Estimated normalized corrected clean sand SPT
τ_{av}: Average cyclic shear stress
p: Average stress
G_{max}: Maximum shear modulus (tsf)
α, b: Shear strain formula variables
γ: Average shear strain
ε_{15}: Volumetric strain after 15 cycles
N_c: Number of cycles
ε_{Nc}: Volumetric strain for number of cycles N_c (%)
Δh: Thickness of soil layer (in)
ΔS: Settlement of soil layer (in)

:: Vertical settlements estimation for saturated sands ::

Depth (ft)	$V_{s1,cs}$ (ft/s)	$q_{t1N,cs}$	e_v (%)	Δh (ft)	s (in)
15.91	673.45	29266.67	0.00	5.00	0.000
20.18	667.47	28158.22	1.11	5.00	0.667
25.26	627.97	21623.15	0.00	5.00	0.000
30.02	945.80	127313.62	0.00	5.00	0.000
35.27	601.97	18005.64	5.80	5.00	3.480
40.19	771.28	52648.24	0.00	5.00	0.000
45.44	630.83	22052.17	5.80	5.00	3.480
50.20	635.14	22711.27	5.80	5.00	3.480
55.61	1937.50	2838607.44	0.00	5.00	0.000
60.37	1244.53	417750.36	0.00	5.00	0.000
65.12	1070.51	217635.55	0.00	5.00	0.000
70.21	872.95	89985.12	0.00	5.00	0.000
73.00	823.72	69992.81	0.00	3.00	0.000

Cumulative settlements: 11.106

Abbreviations

$V_{s1,cs}$: Normalized shear wave velocity clean sand equivalent
$q_{t1N,cs}$: Estimated normalized corrected clean sand cone resitance
e_v: Post liquefaction volumetric strain (%)
Δh: Thickness of soil layer to be considered (ft)
s: Estimated settlement (in)

:: Lateral displacements estimation for saturated sands ::

Depth (ft)	$V_{s1,cs}$ (ft/s)	$(N_1)_{60,cs}$	D_r (%)	γ_{max} (%)	d_z (ft)	LDI	LD (ft)
10.33	1117.68	50	100.00	0.00	5.00	0.000	0.00
15.91	673.45	50	100.00	0.00	5.00	0.000	0.00
20.18	667.47	50	100.00	6.20	5.00	0.000	0.00
25.26	627.97	50	100.00	0.00	5.00	0.000	0.00
30.02	945.80	50	100.00	0.00	5.00	0.000	0.00
35.27	601.97	50	100.00	6.20	5.00	0.000	0.00

:: Lateral displacements estimation for saturated sands ::

Depth (ft)	$V_{s1,cs}$ (ft/s)	$(N_1)_{60,cs}$	D_r (%)	γ_{max} (%)	d_z (ft)	LDI	LD (ft)
40.19	771.28	50	100.00	0.00	5.00	0.000	0.00
45.44	630.83	50	100.00	6.20	5.00	0.000	0.00
50.20	635.14	50	100.00	6.20	5.00	0.000	0.00
55.61	1937.50	50	100.00	0.00	5.00	0.000	0.00
60.37	1244.53	50	100.00	0.00	5.00	0.000	0.00
65.12	1070.51	50	100.00	0.00	5.00	0.000	0.00
70.21	872.95	50	100.00	0.00	5.00	0.000	0.00
73.00	823.72	50	100.00	0.00	3.00	0.000	0.00

Cumulative lateral displacements: 0.00

Abbreviations

$V_{s1,cs}$: Normalized shear wave velocity clean sand equivalent
$(N_1)_{60,cs}$: Estimated normalized corrected clean sand SPT
D_r: Relative density (%)
γ_{max}: Maximum amplitude of cyclic shear strain (%)
d_z: Soil layer thickness (ft)
LDI: Lateral displacement index (ft)
LD: Actual estimated displacement (ft)

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Excel Spreadsheet Evaluations

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**Apricot Farms**
PROJECT NUMBER:	**030.004**
DATE OF ANALYSIS:	**12/2/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.03
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	33.0
Historic High Groundwater Level* (ft):	15.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	97	4	4	60	1	0.049	97.0	97.0	0.049	0.049	7.0	0.75	1.000	0.194	2.00	15.3	0.1665	0.1665	0.995	0.5613	**Dry**	0.229
2	97	4	4	60	1	0.097	97.0	97.0	0.097	0.097	7.0	0.75	1.000	0.194	2.00	15.3	0.1665	0.1665	0.991	0.5587	**Dry**	0.229
3	97	4	4	60	1	0.146	97.0	97.0	0.146	0.146	7.0	0.75	1.000	0.194	2.00	15.3	0.1665	0.1665	0.986	0.5561	**Dry**	0.229
4	97	4	4	60	1	0.194	97.0	97.0	0.194	0.194	7.0	0.75	1.000	0.194	2.00	15.3	0.1665	0.1665	0.982	0.5535	**Dry**	0.229
5	97	4	4	60	1	0.243	97.0	97.0	0.243	0.243	7.0	0.75	1.000	0.194	2.00	15.3	0.1665	0.1665	0.977	0.5510	**Dry**	0.229
6	97	4	4	60	1	0.291	97.0	97.0	0.291	0.291	7.0	0.75	1.000	0.194	2.00	15.3	0.1665	0.1665	0.973	0.5484	**Dry**	0.229
7	97	10	9	60	1	0.340	97.0	97.0	0.340	0.340	7.0	0.75	1.000	0.437	1.56	23.1	0.2569	0.2569	0.968	0.5458	**Dry**	0.159
8	97	10	9	60	1	0.388	97.0	97.0	0.388	0.388	7.0	0.75	1.000	0.437	1.56	23.1	0.2569	0.2569	0.963	0.5432	**Dry**	0.159
9	97	10	9	6	1	0.437	97.0	97.0	0.437	0.437	0.2	0.75	1.000	0.437	1.56	16.3	0.1779	0.1779	0.959	0.5406	**Dry**	0.219
10	115	10	9	6	1	0.494	115.0	115.0	0.494	0.494	0.2	0.75	1.000	0.437	1.56	16.3	0.1779	0.1779	0.954	0.5381	**Dry**	0.219
11	115	10	9	6	1	0.552	115.0	115.0	0.552	0.552	0.2	0.75	1.000	0.437	1.56	16.3	0.1779	0.1779	0.950	0.5355	**Dry**	0.219
12	115	10	9	6	1	0.609	115.0	115.0	0.609	0.609	0.2	0.75	1.000	0.437	1.56	16.3	0.1779	0.1779	0.945	0.5329	**Dry**	0.219
13	115	18	14	6	1	0.667	115.0	115.0	0.667	0.667	0.2	0.78	1.000	0.724	1.21	23.8	0.2660	0.2660	0.941	0.5303	**Dry**	0.153
14	115	18	14	6	1	0.724	115.0	115.0	0.724	0.724	0.2	0.78	1.000	0.724	1.21	23.8	0.2660	0.2660	0.936	0.5278	**Dry**	0.153
15	115	18	14	6	1	0.782	115.0	115.0	0.782	0.782	0.2	0.78	1.000	0.724	1.21	23.8	0.2660	0.2660	0.931	0.5252	**Dry**	0.153
16	115	18	14	6	1	0.839	115.0	52.6	0.839	0.808	0.2	0.78	1.000	0.724	1.21	23.8	0.2660	0.2660	0.927	0.5428	**0.490**	0.153
17	115	18	14	6	1	0.897	115.0	52.6	0.897	0.834	0.2	0.78	1.000	0.724	1.21	23.8	0.2660	0.2660	0.922	0.5589	**0.476**	0.153
18	115	27	19	6	1	0.954	115.0	52.6	0.954	0.860	0.2	0.88	1.002	1.012	1.02	33.8	0.4933	Infinite	0.918	0.5737	**Non-Liq.**	0.017
19	115	27	19	17	1	1.012	115.0	52.6	1.012	0.887	2.8	0.88	1.002	1.012	1.02	36.3	0.6639	Infinite	0.913	0.5873	**Non-Liq.**	0.000
20	115	27	19	17	1	1.069	115.0	52.6	1.069	0.913	2.8	0.88	1.002	1.012	1.02	36.3	0.6639	Infinite	0.909	0.5998	**Non-Liq.**	0.000
21	115	27	19	17	1	1.127	115.0	52.6	1.127	0.939	2.8	0.88	1.002	1.012	1.02	36.3	0.6639	Infinite	0.904	0.6113	**Non-Liq.**	0.000
22	115	27	19	17	1	1.184	115.0	52.6	1.184	0.966	2.8	0.88	1.002	1.012	1.02	36.3	0.6639	Infinite	0.899	0.6218	**Non-Liq.**	0.000
23	115	39	24	17	1	1.242	115.0	52.6	1.242	0.992	2.8	0.94	0.972	1.299	0.90	48.7	-1.0921	Infinite	0.895	0.6315	**Non-Liq.**	0.000
24	115	39	24	17	1	1.299	115.0	52.6	1.299	1.018	2.8	0.94	0.972	1.299	0.90	48.7	-1.0921	Infinite	0.890	0.6404	**Non-Liq.**	0.000
25	115	39	24	17	1	1.357	115.0	52.6	1.357	1.045	2.8	0.94	0.972	1.299	0.90	48.7	-1.0921	Infinite	0.886	0.6486	**Non-Liq.**	0.000
26	115	39	24	17	1	1.414	115.0	52.6	1.414	1.071	2.8	0.94	0.972	1.299	0.90	48.7	-1.0921	Infinite	0.881	0.6561	**Non-Liq.**	0.000
27	115	39	24	17	1	1.472	115.0	52.6	1.472	1.097	2.8	0.94	0.972	1.299	0.90	48.7	-1.0921	Infinite	0.877	0.6629	**Non-Liq.**	0.000
28	115	31	29	17	1	1.529	115.0	52.6	1.529	1.123	2.8	0.99	0.941	1.589	0.82	37.4	0.7253	Infinite	0.872	0.6692	**Non-Liq.**	0.000
29	120	31	29	17	1	1.589	120.0	57.6	1.589	1.152	2.8	0.99	0.941	1.589	0.82	37.4	0.7253	Infinite	0.867	0.6745	**Non-Liq.**	0.000
30	120	31	29	17	1	1.649	120.0	57.6	1.649	1.181	2.8	0.99	0.941	1.589	0.82	37.4	0.7253	Infinite	0.863	0.6793	**Non-Liq.**	0.000
31	120	31	29	17	1	1.709	120.0	57.6	1.709	1.210	2.8	0.99	0.941	1.589	0.82	37.4	0.7253	Infinite	0.858	0.6836	**Non-Liq.**	0.000
32	120	31	29	17	1	1.769	120.0	57.6	1.769	1.239	2.8	0.99	0.941	1.589	0.82	37.4	0.7253	Infinite	0.854	0.6875	**Non-Liq.**	0.000
33	120	31	29	17	1	1.829	120.0	57.6	1.829	1.267	2.8	0.99	0.941	1.589	0.82	37.4	0.7253	Infinite	0.849	0.6909	**Non-Liq.**	0.000
34	120	15	34	17	1	1.889	57.6	57.6	1.858	1.296	2.8	1.00	0.915	1.858	0.75	18.4	0.1831	0.1831	0.845	0.6940	**0.264**	0.201
35	120	15	34	17	1	1.949	57.6	57.6	1.887	1.325	2.8	1.00	0.915	1.858	0.75	18.4	0.1831	0.1831	0.840	0.6967	**0.263**	0.201
36	120	15	34	17	1	2.009	57.6	57.6	1.915	1.354	2.8	1.00	0.915	1.858	0.75	18.4	0.1831	0.1831	0.835	0.6990	**0.262**	0.201
37	120	15	34	17	1	2.069	57.6	57.6	1.944	1.383	2.8	1.00	0.915	1.858	0.75	18.4	0.1831	0.1831	0.831	0.7010	**0.261**	0.201
38	120	15	34	17	1	2.129	57.6	57.6	1.973	1.411	2.8	1.00	0.915	1.858	0.75	18.4	0.1831	0.1831	0.826	0.7028	**0.261**	0.201
39	120	12	39	17	0	2.189	57.6	57.6	2.002	1.440	2.8	1.00	0.901	2.002	0.73	14.8	0.1458	--	0.822	0.7042	**--**	0.000
40	120	12	39	17	0	2.249	57.6	57.6	2.031	1.469	2.8	1.00	0.901	2.002	0.73	14.8	0.1458	--	0.817	0.7054	**--**	0.000
41	120	12	39	17	0	2.309	57.6	57.6	2.059	1.498	2.8	1.00	0.901	2.002	0.73	14.8	0.1458	--	0.813	0.7063	**--**	0.000
42	120	12	39	17	0	2.369	57.6	57.6	2.088	1.527	2.8	1.00	0.901	2.002	0.73	14.8	0.1458	--	0.808	0.7070	**--**	0.000
43	120	12	39	17	0	2.429	57.6	57.6	2.117	1.555	2.8	1.00	0.901	2.002	0.73	14.8	0.1458	--	0.803	0.7074	**--**	0.000
44	120	9	44	17	0	2.489	57.6	57.6	2.146	1.584	2.8	1.00	0.888	2.146	0.70	11.5	0.1117	--	0.799	0.7077	**--**	0.000
45	120	9	44	17	0	2.549	57.6	57.6	2.175	1.613	2.8	1.00	0.888	2.146	0.70	11.5	0.1117	--	0.794	0.7077	**--**	0.000
46	120	9	44	17	0	2.609	57.6	57.6	2.203	1.642	2.8	1.00	0.888	2.146	0.70	11.5	0.1117	--	0.790	0.7076	**--**	0.000
47	120	9	44	17	0	2.669	57.6	57.6	2.232	1.671	2.8	1.00	0.888	2.146	0.70	11.5	0.1117	--	0.785	0.7072	**--**	0.000
48	120	9	44	17	0	2.729	57.6	57.6	2.261	1.699	2.8	1.00	0.888	2.146	0.70	11.5	0.1117	--	0.781	0.7068	**--**	0.000
49	120	2	49	17	0	2.789	57.6	57.6	2.290	1.728	2.8	1.00	0.875	2.290	0.68	4.7	0.0561	--	0.776	0.7061	**--**	0.000
50	120	2	49	17	0	2.849	57.6	57.6	2.319	1.757	2.8	1.00	0.875	2.290	0.68	4.7	0.0561	--	0.771	0.7053	**--**	0.000
																					Total Post-Earthquake Shaking Settlement (inches)	**4.354**

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**RHS**
PROJECT NUMBER:	**030.004**
DATE OF ANALYSIS:	**12/2/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.03
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	33.0
Historic High Groundwater Level* (ft):	15.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	97	4	4	30	1	0.049	97.0	97.0	0.049	0.049	5.8	0.75	1.000	0.194	2.00	14.1	0.1540	0.1540	0.995	0.5613	**Dry**	0.239
2	97	4	4	30	1	0.097	97.0	97.0	0.097	0.097	5.8	0.75	1.000	0.194	2.00	14.1	0.1540	0.1540	0.991	0.5587	**Dry**	0.239
3	97	4	4	30	1	0.146	97.0	97.0	0.146	0.146	5.8	0.75	1.000	0.194	2.00	14.1	0.1540	0.1540	0.986	0.5561	**Dry**	0.239
4	97	4	4	30	1	0.194	97.0	97.0	0.194	0.194	5.8	0.75	1.000	0.194	2.00	14.1	0.1540	0.1540	0.982	0.5535	**Dry**	0.239
5	97	4	4	30	1	0.243	97.0	97.0	0.243	0.243	5.8	0.75	1.000	0.194	2.00	14.1	0.1540	0.1540	0.977	0.5510	**Dry**	0.239
6	97	4	4	30	1	0.291	97.0	97.0	0.291	0.291	5.8	0.75	1.000	0.194	2.00	14.1	0.1540	0.1540	0.973	0.5484	**Dry**	0.239
7	103	6	9	30	1	0.343	103.0	103.0	0.343	0.343	5.8	0.75	1.000	0.446	1.54	15.4	0.1678	0.1678	0.968	0.5458	**Dry**	0.228
8	103	6	9	30	1	0.394	103.0	103.0	0.394	0.394	5.8	0.75	1.000	0.446	1.54	15.4	0.1678	0.1678	0.963	0.5432	**Dry**	0.228
9	103	6	9	60	0	0.446	103.0	103.0	0.446	0.446	7.0	0.75	1.000	0.446	1.54	16.6	0.1803	--	0.959	0.5406	**--**	0.000
10	115	6	9	60	0	0.503	115.0	115.0	0.503	0.503	7.0	0.75	1.000	0.446	1.54	16.6	0.1803	--	0.954	0.5381	**--**	0.000
11	115	6	9	60	0	0.561	115.0	115.0	0.561	0.561	7.0	0.75	1.000	0.446	1.54	16.6	0.1803	--	0.950	0.5355	**--**	0.000
12	115	6	9	60	0	0.618	115.0	115.0	0.618	0.618	7.0	0.75	1.000	0.446	1.54	16.6	0.1803	--	0.945	0.5329	**--**	0.000
13	115	6	14	40	1	0.676	115.0	115.0	0.676	0.676	7.0	0.78	1.000	0.733	1.20	14.8	0.1613	0.1613	0.941	0.5303	**Dry**	0.233
14	115	6	14	40	1	0.733	115.0	115.0	0.733	0.733	7.0	0.78	1.000	0.733	1.20	14.8	0.1613	0.1613	0.936	0.5278	**Dry**	0.233
15	115	6	14	40	1	0.791	115.0	115.0	0.791	0.791	7.0	0.78	1.000	0.733	1.20	14.8	0.1613	0.1613	0.931	0.5252	**Dry**	0.233
16	115	6	14	40	1	0.848	115.0	52.6	0.848	0.817	7.0	0.78	1.000	0.733	1.20	14.8	0.1613	0.1613	0.927	0.5426	**Clay**	0.233
17	115	6	14	40	1	0.906	115.0	52.6	0.906	0.843	7.0	0.78	1.000	0.733	1.20	14.8	0.1613	0.1613	0.922	0.5585	**Clay**	0.233
18	115	11	19	65	0	0.963	115.0	52.6	0.963	0.869	7.0	0.88	1.001	1.021	1.02	20.6	0.2252	--	0.918	0.5731	**--**	0.000
19	115	11	19	65	0	1.021	115.0	52.6	1.021	0.896	7.0	0.88	1.001	1.021	1.02	20.6	0.2252	--	0.913	0.5866	**--**	0.000
20	115	11	19	65	0	1.078	115.0	52.6	1.078	0.922	7.0	0.88	1.001	1.021	1.02	20.6	0.2252	--	0.909	0.5990	**--**	0.000
21	115	11	19	65	0	1.136	115.0	52.6	1.136	0.948	7.0	0.88	1.001	1.021	1.02	20.6	0.2252	--	0.904	0.6103	**--**	0.000
22	115	11	19	65	0	1.193	115.0	52.6	1.193	0.975	7.0	0.88	1.001	1.021	1.02	20.6	0.2252	--	0.899	0.6208	**--**	0.000
23	115	8	24	54	0	1.251	115.0	52.6	1.251	1.001	7.0	0.94	0.971	1.308	0.90	16.4	0.1730	--	0.895	0.6304	**--**	0.000
24	115	8	24	54	0	1.308	115.0	52.6	1.308	1.027	7.0	0.94	0.971	1.308	0.90	16.4	0.1730	--	0.890	0.6392	**--**	0.000
25	115	8	24	54	0	1.366	115.0	52.6	1.366	1.054	7.0	0.94	0.971	1.308	0.90	16.4	0.1730	--	0.886	0.6473	**--**	0.000
26	115	8	24	54	0	1.423	115.0	52.6	1.423	1.080	7.0	0.94	0.971	1.308	0.90	16.4	0.1730	--	0.881	0.6547	**--**	0.000
27	115	8	24	54	0	1.481	115.0	52.6	1.481	1.106	7.0	0.94	0.971	1.308	0.90	16.4	0.1730	--	0.877	0.6615	**--**	0.000
28	129	9	29	30	0	1.545	129.0	66.6	1.545	1.139	5.8	0.99	0.939	1.610	0.81	15.8	0.1618	--	0.872	0.6667	**--**	0.000
29	129	9	29	30	1	1.610	129.0	66.6	1.610	1.173	5.8	0.99	0.939	1.610	0.81	15.8	0.1618	0.1618	0.867	0.6713	**0.241**	0.224
30	129	9	29	30	1	1.674	129.0	66.6	1.674	1.206	5.8	0.99	0.939	1.610	0.81	15.8	0.1618	0.1618	0.863	0.6753	**0.240**	0.224
31	129	9	29	30	1	1.739	129.0	66.6	1.739	1.239	5.8	0.99	0.939	1.610	0.81	15.8	0.1618	0.1618	0.858	0.6789	**0.238**	0.224
32	129	9	29	30	1	1.803	129.0	66.6	1.803	1.273	5.8	0.99	0.939	1.610	0.81	15.8	0.1618	0.1618	0.854	0.6820	**0.237**	0.224
33	129	9	29	30	1	1.868	129.0	66.6	1.868	1.306	5.8	0.99	0.939	1.610	0.81	15.8	0.1618	0.1618	0.849	0.6847	**0.236**	0.224
34	129	6	34	66	1	1.932	66.6	66.6	1.901	1.339	7.0	1.00	0.911	1.901	0.75	13.2	0.1310	0.1310	0.845	0.6870	**Clay**	0.255
35	129	6	34	66	0	1.997	66.6	66.6	1.934	1.373	7.0	1.00	0.911	1.901	0.75	13.2	0.1310	--	0.840	0.6889	**--**	0.000
36	129	6	34	66	0	2.061	66.6	66.6	1.967	1.406	7.0	1.00	0.911	1.901	0.75	13.2	0.1310	--	0.835	0.6906	**--**	0.000
37	129	6	34	66	0	2.126	66.6	66.6	2.001	1.439	7.0	1.00	0.911	1.901	0.75	13.2	0.1310	--	0.831	0.6919	**--**	0.000
38	129	6	34	66	0	2.190	66.6	66.6	2.034	1.472	7.0	1.00	0.911	1.901	0.75	13.2	0.1310	--	0.826	0.6929	**--**	0.000
39	129	11	39	20	1	2.255	66.6	66.6	2.067	1.506	3.5	1.00	0.895	2.067	0.72	14.4	0.1402	0.1402	0.822	0.6937	**0.202**	0.237
40	129	11	39	20	1	2.319	66.6	66.6	2.101	1.539	3.5	1.00	0.895	2.067	0.72	14.4	0.1402	0.1402	0.817	0.6942	**0.202**	0.237
41	129	11	39	20	1	2.384	66.6	66.6	2.134	1.572	3.5	1.00	0.895	2.067	0.72	14.4	0.1402	0.1402	0.813	0.6945	**0.202**	0.237
42	129	11	39	20	1	2.448	66.6	66.6	2.167	1.606	3.5	1.00	0.895	2.067	0.72	14.4	0.1402	0.1402	0.808	0.6946	**0.202**	0.237
43	129	11	39	20	1	2.513	66.6	66.6	2.201	1.639	3.5	1.00	0.895	2.067	0.72	14.4	0.1402	0.1402	0.803	0.6945	**0.202**	0.237
44	129	14	44	5	1	2.577	66.6	66.6	2.234	1.672	0.0	1.00	0.880	2.234	0.69	13.3	0.1277	0.1277	0.799	0.6941	**0.184**	0.253
45	129	14	44	5	1	2.642	66.6	66.6	2.267	1.706	0.0	1.00	0.880	2.234	0.69	13.3	0.1277	0.1277	0.794	0.6936	**0.184**	0.253
46	129	14	44	5	1	2.706	66.6	66.6	2.300	1.739	0.0	1.00	0.880	2.234	0.69	13.3	0.1277	0.1277	0.790	0.6929	**0.184**	0.253
47	129	14	44	5	1	2.771	66.6	66.6	2.334	1.772	0.0	1.00	0.880	2.234	0.69	13.3	0.1277	0.1277	0.785	0.6921	**0.185**	0.253
48	129	14	44	5	1	2.835	66.6	66.6	2.367	1.805	0.0	1.00	0.880	2.234	0.69	13.3	0.1277	0.1277	0.781	0.6911	**0.185**	0.253
49	129	3	49	30	1	2.900	66.6	66.6	2.400	1.839	5.8	1.00	0.865	2.400	0.66	8.6	0.0824	0.0824	0.776	0.6900	**0.119**	0.340
50	129	3	49	30	1	2.964	66.6	66.6	2.434	1.872	5.8	1.00	0.865	2.400	0.66	8.6	0.0824	0.0824	0.771	0.6887	**0.120**	0.340
																					Total Post-Earthquake Shaking Settlement (inches)	**7.557**

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**450 HIGH ST**
PROJECT NUMBER:	**030.004**
DATE OF ANALYSIS:	**12/13/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.03
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	38.0
Historic High Groundwater Level* (ft):	15.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	97	1	4	60	0	0.049	97.0	97.0	0.049	0.049	7.0	0.75	1.000	0.194	2.00	9.1	0.1001	--	0.995	0.5613	**--**	0.000
2	97	1	4	60	0	0.097	97.0	97.0	0.097	0.097	7.0	0.75	1.000	0.194	2.00	9.1	0.1001	--	0.991	0.5587	**--**	0.000
3	97	1	4	60	0	0.146	97.0	97.0	0.146	0.146	7.0	0.75	1.000	0.194	2.00	9.1	0.1001	--	0.986	0.5561	**--**	0.000
4	97	1	4	60	0	0.194	97.0	97.0	0.194	0.194	7.0	0.75	1.000	0.194	2.00	9.1	0.1001	--	0.982	0.5535	**--**	0.000
5	97	1	4	60	0	0.243	97.0	97.0	0.243	0.243	7.0	0.75	1.000	0.194	2.00	9.1	0.1001	--	0.977	0.5510	**--**	0.000
6	97	1	4	60	0	0.291	97.0	97.0	0.291	0.291	7.0	0.75	1.000	0.194	2.00	9.1	0.1001	--	0.973	0.5484	**--**	0.000
7	110	7	9	60	0	0.346	110.0	110.0	0.346	0.346	7.0	0.75	1.000	0.456	1.52	18.0	0.1960	--	0.968	0.5458	**--**	0.000
8	110	7	9	60	0	0.401	110.0	110.0	0.401	0.401	7.0	0.75	1.000	0.456	1.52	18.0	0.1960	--	0.963	0.5432	**--**	0.000
9	110	7	9	35	1	0.456	110.0	110.0	0.456	0.456	7.0	0.75	1.000	0.456	1.52	18.0	0.1960	0.1960	0.959	0.5406	**Dry**	0.204
10	115	7	9	35	1	0.514	115.0	115.0	0.514	0.514	7.0	0.75	1.000	0.456	1.52	18.0	0.1960	0.1960	0.954	0.5381	**Dry**	0.204
11	115	7	9	35	1	0.571	115.0	115.0	0.571	0.571	7.0	0.75	1.000	0.456	1.52	18.0	0.1960	0.1960	0.950	0.5355	**Dry**	0.204
12	115	7	9	35	1	0.629	115.0	115.0	0.629	0.629	7.0	0.75	1.000	0.456	1.52	18.0	0.1960	0.1960	0.945	0.5329	**Dry**	0.204
13	115	8	14	35	1	0.686	115.0	115.0	0.686	0.686	7.0	0.78	1.000	0.744	1.19	17.3	0.1883	0.1883	0.941	0.5303	**Dry**	0.211
14	115	8	14	35	1	0.744	115.0	115.0	0.744	0.744	7.0	0.78	1.000	0.744	1.19	17.3	0.1883	0.1883	0.936	0.5278	**Dry**	0.211
15	115	8	14	35	1	0.801	115.0	115.0	0.801	0.801	7.0	0.78	1.000	0.744	1.19	17.3	0.1883	0.1883	0.931	0.5252	**Dry**	0.211
16	115	8	14	35	0	0.859	115.0	52.6	0.859	0.827	7.0	0.78	1.000	0.744	1.19	17.3	0.1883	--	0.927	0.5423	**--**	0.000
17	115	8	14	35	0	0.916	115.0	52.6	0.916	0.854	7.0	0.78	1.000	0.744	1.19	17.3	0.1883	--	0.922	0.5580	**--**	0.000
18	115	34	19	35	0	0.974	115.0	52.6	0.974	0.880	7.0	0.88	1.000	1.031	1.01	48.8	-1.0898	--	0.918	0.5725	**--**	0.000
19	115	34	19	6	1	1.031	115.0	52.6	1.031	0.906	0.2	0.88	1.000	1.031	1.01	42.1	2.4893	Infinite	0.913	0.5858	**Non-Liq.**	0.000
20	115	34	19	6	1	1.089	115.0	52.6	1.089	0.933	0.2	0.88	1.000	1.031	1.01	42.1	2.4893	Infinite	0.909	0.5980	**Non-Liq.**	0.000
21	115	34	19	6	1	1.146	115.0	52.6	1.146	0.959	0.2	0.88	1.000	1.031	1.01	42.1	2.4893	Infinite	0.904	0.6092	**Non-Liq.**	0.000
22	115	34	19	6	1	1.204	115.0	52.6	1.204	0.985	0.2	0.88	1.000	1.031	1.01	42.1	2.4893	Infinite	0.899	0.6196	**Non-Liq.**	0.000
23	115	7	24	6	1	1.261	115.0	52.6	1.261	1.011	0.2	0.94	0.970	1.319	0.90	8.4	0.0907	0.0907	0.895	0.6291	**0.144**	0.343
24	115	7	24	40	1	1.319	115.0	52.6	1.319	1.038	7.0	0.94	0.970	1.319	0.90	15.2	0.1603	0.1603	0.890	0.6378	**Clay**	0.230
25	115	7	24	40	1	1.376	115.0	52.6	1.376	1.064	7.0	0.94	0.970	1.319	0.90	15.2	0.1603	0.1603	0.886	0.6458	**Clay**	0.230
26	115	7	24	40	1	1.434	115.0	52.6	1.434	1.090	7.0	0.94	0.970	1.319	0.90	15.2	0.1603	0.1603	0.881	0.6532	**Clay**	0.230
27	115	7	24	40	1	1.491	115.0	52.6	1.491	1.117	7.0	0.94	0.970	1.319	0.90	15.2	0.1603	0.1603	0.877	0.6600	**Clay**	0.230
28	115	18	29	40	1	1.549	115.0	52.6	1.549	1.143	7.0	0.99	0.940	1.604	0.81	27.0	0.3048	0.3048	0.872	0.6661	**Clay**	0.124
29	110	18	29	40	1	1.604	110.0	47.6	1.604	1.167	7.0	0.99	0.940	1.604	0.81	27.0	0.3048	0.3048	0.867	0.6722	**Clay**	0.124
30	110	18	29	40	1	1.659	110.0	47.6	1.659	1.191	7.0	0.99	0.940	1.604	0.81	27.0	0.3048	0.3048	0.863	0.6778	**Clay**	0.124
31	110	18	29	40	1	1.714	110.0	47.6	1.714	1.214	7.0	0.99	0.940	1.604	0.81	27.0	0.3048	0.3048	0.858	0.6829	**Clay**	0.124
32	110	18	29	40	1	1.769	110.0	47.6	1.769	1.238	7.0	0.99	0.940	1.604	0.81	27.0	0.3048	0.3048	0.854	0.6876	**Clay**	0.124
33	110	19	29	40	1	1.824	110.0	47.6	1.824	1.262	7.0	0.99	0.940	1.604	0.81	28.1	0.3319	0.3319	0.849	0.6918	**Clay**	0.112
34	110	19	34	6	1	1.879	110.0	47.6	1.879	1.286	0.2	1.00	0.913	1.879	0.75	19.9	0.1979	0.1979	0.845	0.6958	**0.284**	0.187
35	110	19	34	6	1	1.934	110.0	47.6	1.934	1.310	0.2	1.00	0.913	1.879	0.75	19.9	0.1979	0.1979	0.840	0.6993	**0.283**	0.187
36	110	19	34	6	1	1.989	110.0	47.6	1.989	1.333	0.2	1.00	0.913	1.879	0.75	19.9	0.1979	0.1979	0.835	0.7025	**0.282**	0.187
37	110	19	34	6	1	2.044	110.0	47.6	2.044	1.357	0.2	1.00	0.913	1.879	0.75	19.9	0.1979	0.1979	0.831	0.7054	**0.281**	0.187
38	110	19	34	6	1	2.099	110.0	47.6	2.099	1.381	0.2	1.00	0.913	1.879	0.75	19.9	0.1979	0.1979	0.826	0.7080	**0.280**	0.187
39	110	2	39	37	1	2.154	47.6	47.6	2.122	1.405	7.0	1.00	0.890	2.122	0.71	8.9	0.0879	0.0879	0.822	0.7103	**Clay**	0.333
40	110	2	39	37	1	2.209	47.6	47.6	2.146	1.429	7.0	1.00	0.890	2.122	0.71	8.9	0.0879	0.0879	0.817	0.7123	**Clay**	0.333
41	110	2	39	37	1	2.264	47.6	47.6	2.170	1.452	7.0	1.00	0.890	2.122	0.71	8.9	0.0879	0.0879	0.813	0.7141	**Clay**	0.333
42	110	2	39	37	1	2.319	47.6	47.6	2.194	1.476	7.0	1.00	0.890	2.122	0.71	8.9	0.0879	0.0879	0.808	0.7156	**Clay**	0.333
43	110	2	39	37	1	2.374	47.6	47.6	2.218	1.500	7.0	1.00	0.890	2.122	0.71	8.9	0.0879	0.0879	0.803	0.7168	**Clay**	0.333
44	110	8	44	37	1	2.429	47.6	47.6	2.241	1.524	7.0	1.00	0.879	2.241	0.69	14.6	0.1398	0.1398	0.799	0.7179	**Clay**	0.235
45	110	8	44	37	1	2.484	47.6	47.6	2.265	1.548	7.0	1.00	0.879	2.241	0.69	14.6	0.1398	0.1398	0.794	0.7187	**Clay**	0.235
46	110	8	44	37	1	2.539	47.6	47.6	2.289	1.571	7.0	1.00	0.879	2.241	0.69	14.6	0.1398	0.1398	0.790	0.7193	**Clay**	0.235
47	110	8	44	37	1	2.594	47.6	47.6	2.313	1.595	7.0	1.00	0.879	2.241	0.69	14.6	0.1398	0.1398	0.785	0.7198	**Clay**	0.235
48	110	8	44	37	1	2.649	47.6	47.6	2.337	1.619	7.0	1.00	0.879	2.241	0.69	14.6	0.1398	0.1398	0.781	0.7200	**Clay**	0.235
49	110	14	49	37	1	2.704	47.6	47.6	2.360	1.643	7.0	1.00	0.869	2.360	0.67	19.9	0.1886	0.1886	0.776	0.7201	**Clay**	0.187
50	110	14	49	37	1	2.759	47.6	47.6	2.384	1.667	7.0	1.00	0.869	2.360	0.67	19.9	0.1886	0.1886	0.771	0.7200	**Clay**	0.187
																					Total Post-Earthquake Shaking Settlement (inches)	**7.595**

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**450 HIGH ST**
PROJECT NUMBER:	**030.004**
DATE OF ANALYSIS:	**12/13/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.03
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	38.0
Historic High Groundwater Level* (ft):	15.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	102	5	4	60	1	0.051	102.0	102.0	0.051	0.051	7.0	0.75	1.000	0.204	2.00	17.4	0.1886	0.1886	0.995	0.5613	**Dry**	0.210
2	102	5	4	60	1	0.102	102.0	102.0	0.102	0.102	7.0	0.75	1.000	0.204	2.00	17.4	0.1886	0.1886	0.991	0.5587	**Dry**	0.210
3	102	5	4	60	1	0.153	102.0	102.0	0.153	0.153	7.0	0.75	1.000	0.204	2.00	17.4	0.1886	0.1886	0.986	0.5561	**Dry**	0.210
4	102	5	4	60	1	0.204	102.0	102.0	0.204	0.204	7.0	0.75	1.000	0.204	2.00	17.4	0.1886	0.1886	0.982	0.5535	**Dry**	0.210
5	102	5	4	60	1	0.255	102.0	102.0	0.255	0.255	7.0	0.75	1.000	0.204	2.00	17.4	0.1886	0.1886	0.977	0.5510	**Dry**	0.210
6	102	5	4	60	1	0.306	102.0	102.0	0.306	0.306	7.0	0.75	1.000	0.204	2.00	17.4	0.1886	0.1886	0.973	0.5484	**Dry**	0.210
7	102	5	9	60	1	0.357	102.0	102.0	0.357	0.357	7.0	0.75	1.000	0.461	1.52	14.8	0.1618	0.1618	0.968	0.5458	**Dry**	0.232
8	102	5	9	60	1	0.408	102.0	102.0	0.408	0.408	7.0	0.75	1.000	0.461	1.52	14.8	0.1618	0.1618	0.963	0.5432	**Dry**	0.232
9	105	5	9	35	1	0.461	105.0	105.0	0.461	0.461	7.0	0.75	1.000	0.461	1.52	14.8	0.1618	0.1618	0.959	0.5406	**Dry**	0.232
10	105	5	9	35	1	0.513	105.0	105.0	0.513	0.513	7.0	0.75	1.000	0.461	1.52	14.8	0.1618	0.1618	0.954	0.5381	**Dry**	0.232
11	105	5	9	35	1	0.566	105.0	105.0	0.566	0.566	7.0	0.75	1.000	0.461	1.52	14.8	0.1618	0.1618	0.950	0.5355	**Dry**	0.232
12	105	5	9	35	1	0.618	105.0	105.0	0.618	0.618	7.0	0.75	1.000	0.461	1.52	14.8	0.1618	0.1618	0.945	0.5329	**Dry**	0.232
13	105	11	14	35	1	0.671	105.0	105.0	0.671	0.671	7.0	0.78	1.000	0.726	1.21	21.4	0.2340	0.2340	0.941	0.5303	**Dry**	0.175
14	110	11	14	35	1	0.726	110.0	110.0	0.726	0.726	7.0	0.78	1.000	0.726	1.21	21.4	0.2340	0.2340	0.936	0.5278	**Dry**	0.175
15	110	11	14	35	1	0.781	110.0	110.0	0.781	0.781	7.0	0.78	1.000	0.726	1.21	21.4	0.2340	0.2340	0.931	0.5252	**Dry**	0.175
16	110	11	14	35	1	0.836	110.0	47.6	0.836	0.804	7.0	0.78	1.000	0.726	1.21	21.4	0.2340	0.2340	0.927	0.5429	**0.431**	0.175
17	110	11	14	35	1	0.891	110.0	47.6	0.891	0.828	7.0	0.78	1.000	0.726	1.21	21.4	0.2340	0.2340	0.922	0.5592	**0.418**	0.175
18	110	30	19	35	1	0.946	110.0	47.6	0.946	0.852	7.0	0.88	1.003	1.003	1.03	44.4	-18.2727	Infinite	0.918	0.5743	**Non-Liq.**	0.000
19	115	30	19	6	1	1.003	115.0	52.6	1.003	0.878	0.2	0.88	1.003	1.003	1.03	37.7	0.8007	Infinite	0.913	0.5880	**Non-Liq.**	0.000
20	115	30	19	6	1	1.061	115.0	52.6	1.061	0.905	0.2	0.88	1.003	1.003	1.03	37.7	0.8007	Infinite	0.909	0.6006	**Non-Liq.**	0.000
21	115	30	19	6	1	1.118	115.0	52.6	1.118	0.931	0.2	0.88	1.003	1.003	1.03	37.7	0.8007	Infinite	0.904	0.6122	**Non-Liq.**	0.000
22	115	30	19	6	1	1.176	115.0	52.6	1.176	0.957	0.2	0.88	1.003	1.003	1.03	37.7	0.8007	Infinite	0.899	0.6229	**Non-Liq.**	0.000
23	130	50	24	13	1	1.241	130.0	67.6	1.241	0.991	1.9	0.94	0.971	1.306	0.90	60.6	-0.2972	Infinite	0.895	0.6316	**Non-Liq.**	0.000
24	130	50	24	13	1	1.306	130.0	67.6	1.306	1.025	1.9	0.94	0.971	1.306	0.90	60.6	-0.2972	Infinite	0.890	0.6395	**Non-Liq.**	0.000
25	130	50	24	13	1	1.371	130.0	67.6	1.371	1.059	1.9	0.94	0.971	1.306	0.90	60.6	-0.2972	Infinite	0.886	0.6466	**Non-Liq.**	0.000
26	130	50	24	13	1	1.436	130.0	67.6	1.436	1.092	1.9	0.94	0.971	1.306	0.90	60.6	-0.2972	Infinite	0.881	0.6529	**Non-Liq.**	0.000
27	130	50	24	13	1	1.501	130.0	67.6	1.501	1.126	1.9	0.94	0.971	1.306	0.90	60.6	-0.2972	Infinite	0.877	0.6586	**Non-Liq.**	0.000
28	130	50	29	13	1	1.566	130.0	67.6	1.566	1.160	1.9	0.99	0.938	1.621	0.81	57.2	-0.3636	Infinite	0.872	0.6636	**Non-Liq.**	0.000
29	110	50	29	13	1	1.621	110.0	47.6	1.621	1.184	1.9	0.99	0.938	1.621	0.81	57.2	-0.3636	Infinite	0.867	0.6696	**Non-Liq.**	0.000
30	110	50	29	13	1	1.676	110.0	47.6	1.676	1.208	1.9	0.99	0.938	1.621	0.81	57.2	-0.3636	Infinite	0.863	0.6751	**Non-Liq.**	0.000
31	0		29	0	0	1.676	0.0	-62.4	1.676	1.176	0.0	0.99	0.938	1.621	0.81	0.0	0.0454	--	0.858	0.6893	--	0.000
32	0		29	0	0	1.676	0.0	-62.4	1.676	1.145	0.0	0.99	0.938	1.621	0.81	0.0	0.0454	--	0.854	0.7043	--	0.000
33	0		29	0	0	1.676	0.0	-62.4	1.676	1.114	0.0	0.99	0.938	1.621	0.81	0.0	0.0454	--	0.849	0.7202	--	0.000
34	0		34	0	0	1.676	0.0	-62.4	1.676	1.083	0.0	1.00	0.933	1.676	0.79	0.0	0.0452	--	0.845	0.7369	--	0.000
35	0		34	0	0	1.676	0.0	-62.4	1.676	1.052	0.0	1.00	0.933	1.676	0.79	0.0	0.0452	--	0.840	0.7547	--	0.000
36	0		34	0	0	1.676	0.0	-62.4	1.676	1.020	0.0	1.00	0.933	1.676	0.79	0.0	0.0452	--	0.835	0.7735	--	0.000
37	0		34	0	0	1.676	0.0	-62.4	1.676	0.989	0.0	1.00	0.933	1.676	0.79	0.0	0.0452	--	0.831	0.7936	--	0.000
38	0		34	0	0	1.676	0.0	-62.4	1.676	0.958	0.0	1.00	0.933	1.676	0.79	0.0	0.0452	--	0.826	0.8149	--	0.000
39	0		39	0	0	1.676	-62.4	-62.4	1.644	0.927	0.0	1.00	0.936	1.644	0.80	0.0	0.0453	--	0.822	0.8377	--	0.000
40	0		39	0	0	1.676	-62.4	-62.4	1.613	0.896	0.0	1.00	0.936	1.644	0.80	0.0	0.0453	--	0.817	0.8620	--	0.000
41	0		39	0	0	1.676	-62.4	-62.4	1.582	0.864	0.0	1.00	0.936	1.644	0.80	0.0	0.0453	--	0.813	0.8882	--	0.000
42	0		39	0	0	1.676	-62.4	-62.4	1.551	0.833	0.0	1.00	0.936	1.644	0.80	0.0	0.0453	--	0.808	0.9162	--	0.000
43	0		39	0	0	1.676	-62.4	-62.4	1.520	0.802	0.0	1.00	0.936	1.644	0.80	0.0	0.0453	--	0.803	0.9465	--	0.000
44	0		44	0	0	1.676	-62.4	-62.4	1.488	0.771	0.0	1.00	0.952	1.488	0.84	0.0	0.0461	--	0.799	0.9792	--	0.000
45	0		44	0	0	1.676	-62.4	-62.4	1.457	0.740	0.0	1.00	0.952	1.488	0.84	0.0	0.0461	--	0.794	1.0147	--	0.000
46	0		44	0	0	1.676	-62.4	-62.4	1.426	0.708	0.0	1.00	0.952	1.488	0.84	0.0	0.0461	--	0.790	1.0533	--	0.000
47	0		44	0	0	1.676	-62.4	-62.4	1.395	0.677	0.0	1.00	0.952	1.488	0.84	0.0	0.0461	--	0.785	1.0954	--	0.000
48	0		44	0	0	1.676	-62.4	-62.4	1.364	0.646	0.0	1.00	0.952	1.488	0.84	0.0	0.0461	--	0.781	1.1417	--	0.000
49	0		49	0	0	1.676	-62.4	-62.4	1.332	0.615	0.0	1.00	0.968	1.332	0.89	0.0	0.0469	--	0.776	1.1926	--	0.000
50	0		49	0	0	1.676	-62.4	-62.4	1.301	0.584	0.0	1.00	0.968	1.332	0.89	0.0	0.0469	--	0.771	1.2489	--	0.000
																					Total Post-Earthquake Shaking Settlement (inches)	**3.529**

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**347 MP AVE**
PROJECT NUMBER:	**030.004**
DATE OF ANALYSIS:	**11/21/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.02
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	28.0
Historic High Groundwater Level* (ft):	15.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	106	6	5	27	1	0.053	106.0	106.0	0.053	0.053	5.1	0.75	1.000	0.265	2.00	17.5	0.1907	0.1907	0.995	0.5558	**Dry**	0.209
2	106	6	5	27	1	0.106	106.0	106.0	0.106	0.106	5.1	0.75	1.000	0.265	2.00	17.5	0.1907	0.1907	0.991	0.5533	**Dry**	0.209
3	106	6	5	27	1	0.159	106.0	106.0	0.159	0.159	5.1	0.75	1.000	0.265	2.00	17.5	0.1907	0.1907	0.986	0.5507	**Dry**	0.209
4	106	6	5	27	1	0.212	106.0	106.0	0.212	0.212	5.1	0.75	1.000	0.265	2.00	17.5	0.1907	0.1907	0.982	0.5482	**Dry**	0.209
5	106	6	5	27	1	0.265	106.0	106.0	0.265	0.265	5.1	0.75	1.000	0.265	2.00	17.5	0.1907	0.1907	0.977	0.5456	**Dry**	0.209
6	106	6	5	27	1	0.318	106.0	106.0	0.318	0.318	5.1	0.75	1.000	0.265	2.00	17.5	0.1907	0.1907	0.973	0.5430	**Dry**	0.209
7	106	11	9	27	1	0.371	106.0	106.0	0.371	0.371	5.1	0.75	1.000	0.477	1.49	22.1	0.2432	0.2432	0.968	0.5405	**Dry**	0.168
8	106	11	9	27	1	0.424	106.0	106.0	0.424	0.424	5.1	0.75	1.000	0.477	1.49	22.1	0.2432	0.2432	0.963	0.5379	**Dry**	0.168
9	106	11	9	5	1	0.477	106.0	106.0	0.477	0.477	0.0	0.75	1.000	0.477	1.49	17.0	0.1844	0.1844	0.959	0.5354	**Dry**	0.214
10	112	11	9	5	1	0.533	112.0	112.0	0.533	0.533	0.0	0.75	1.000	0.477	1.49	17.0	0.1844	0.1844	0.954	0.5328	**Dry**	0.214
11	112	11	9	5	1	0.589	112.0	112.0	0.589	0.589	0.0	0.75	1.000	0.477	1.49	17.0	0.1844	0.1844	0.950	0.5303	**Dry**	0.214
12	112	11	9	5	1	0.645	112.0	112.0	0.645	0.645	0.0	0.75	1.000	0.477	1.49	17.0	0.1844	0.1844	0.945	0.5277	**Dry**	0.214
13	112	8	14	5	1	0.701	112.0	112.0	0.701	0.701	0.0	0.78	1.000	0.757	1.18	10.2	0.1120	0.1120	0.941	0.5252	**Dry**	0.310
14	112	8	14	5	1	0.757	112.0	112.0	0.757	0.757	0.0	0.78	1.000	0.757	1.18	10.2	0.1120	0.1120	0.936	0.5226	**Dry**	0.310
15	115	8	14	5	1	0.815	115.0	115.0	0.815	0.815	0.0	0.78	1.000	0.757	1.18	10.2	0.1120	0.1120	0.931	0.5201	**Dry**	0.310
16	115	8	14	5	1	0.872	115.0	52.6	0.872	0.841	0.0	0.78	1.000	0.757	1.18	10.2	0.1120	0.1120	0.927	0.5367	**0.209**	0.310
17	115	8	14	5	1	0.930	115.0	52.6	0.930	0.867	0.0	0.78	1.000	0.757	1.18	10.2	0.1120	0.1120	0.922	0.5520	**0.203**	0.310
18	115	8	14	5	1	0.987	115.0	52.6	0.987	0.893	0.0	0.78	1.000	0.757	1.18	10.2	0.1120	0.1120	0.918	0.5661	**0.198**	0.310
19	119	39	14	5	1	1.047	119.0	56.6	1.047	0.922	0.0	0.78	1.000	0.757	1.18	49.8	-0.8950	Infinite	0.913	0.5789	**Non-Liq.**	0.000
20	119	39	19	5	1	1.106	119.0	56.6	1.106	0.950	0.0	0.88	0.999	1.047	1.01	47.6	-1.4666	Infinite	0.909	0.5906	**Non-Liq.**	0.000
21	119	39	19	5	1	1.166	119.0	56.6	1.166	0.978	0.0	0.88	0.999	1.047	1.01	47.6	-1.4666	Infinite	0.904	0.6013	**Non-Liq.**	0.000
22	119	39	19	5	1	1.225	119.0	56.6	1.225	1.007	0.0	0.88	0.999	1.047	1.01	47.6	-1.4666	Infinite	0.899	0.6112	**Non-Liq.**	0.000
23	119	39	19	5	1	1.285	119.0	56.6	1.285	1.035	0.0	0.88	0.999	1.047	1.01	47.6	-1.4666	Infinite	0.895	0.6202	**Non-Liq.**	0.000
24	119	28	24	5	1	1.344	119.0	56.6	1.344	1.063	0.0	0.94	0.967	1.344	0.89	32.4	0.4088	Infinite	0.890	0.6284	**Non-Liq.**	0.051
25	119	28	24	5	1	1.404	119.0	56.6	1.404	1.092	0.0	0.94	0.967	1.344	0.89	32.4	0.4088	Infinite	0.886	0.6359	**Non-Liq.**	0.051
26	119	28	24	5	1	1.463	119.0	56.6	1.463	1.120	0.0	0.94	0.967	1.344	0.89	32.4	0.4088	Infinite	0.881	0.6428	**Non-Liq.**	0.051
27	119	28	24	5	1	1.523	119.0	56.6	1.523	1.148	0.0	0.94	0.967	1.344	0.89	32.4	0.4088	Infinite	0.877	0.6491	**Non-Liq.**	0.051
28	119	28	24	5	1	1.582	119.0	56.6	1.582	1.176	0.0	0.94	0.967	1.344	0.89	32.4	0.4088	Infinite	0.872	0.6548	**Non-Liq.**	0.051
29	119	20	29	3	1	1.642	56.6	56.6	1.610	1.205	0.0	0.99	0.939	1.610	0.81	22.2	0.2296	0.2296	0.867	0.6599	**0.348**	0.167
30	119	20	29	3	1	1.701	56.6	56.6	1.639	1.233	0.0	0.99	0.939	1.610	0.81	22.2	0.2296	0.2296	0.863	0.6647	**0.345**	0.167
31	119	20	29	3	1	1.761	56.6	56.6	1.667	1.261	0.0	0.99	0.939	1.610	0.81	22.2	0.2296	0.2296	0.858	0.6689	**0.343**	0.167
32	119	20	29	3	1	1.820	56.6	56.6	1.695	1.290	0.0	0.99	0.939	1.610	0.81	22.2	0.2296	0.2296	0.854	0.6727	**0.341**	0.167
33	119	20	29	3	1	1.880	56.6	56.6	1.724	1.318	0.0	0.99	0.939	1.610	0.81	22.2	0.2296	0.2296	0.849	0.6762	**0.340**	0.167
34	119	21	34	3	1	1.939	56.6	56.6	1.752	1.346	0.0	1.00	0.925	1.752	0.78	22.5	0.2302	0.2302	0.845	0.6792	**0.339**	0.164
35	119	21	34	3	1	1.999	56.6	56.6	1.780	1.375	0.0	1.00	0.925	1.752	0.78	22.5	0.2302	0.2302	0.840	0.6819	**0.338**	0.164
36	119	21	34	3	1	2.058	56.6	56.6	1.808	1.403	0.0	1.00	0.925	1.752	0.78	22.5	0.2302	0.2302	0.835	0.6843	**0.336**	0.164
37	119	21	34	3	1	2.118	56.6	56.6	1.837	1.431	0.0	1.00	0.925	1.752	0.78	22.5	0.2302	0.2302	0.831	0.6864	**0.335**	0.164
38	119	21	34	3	1	2.177	56.6	56.6	1.865	1.459	0.0	1.00	0.925	1.752	0.78	22.5	0.2302	0.2302	0.826	0.6882	**0.334**	0.164
39	119	21	39	3	1	2.237	56.6	56.6	1.893	1.488	0.0	1.00	0.911	1.893	0.75	21.7	0.2167	0.2167	0.822	0.6897	**0.314**	0.172
40	119	21	39	3	1	2.296	56.6	56.6	1.922	1.516	0.0	1.00	0.911	1.893	0.75	21.7	0.2167	0.2167	0.817	0.6910	**0.314**	0.172
41	119	21	39	3	1	2.356	56.6	56.6	1.950	1.544	0.0	1.00	0.911	1.893	0.75	21.7	0.2167	0.2167	0.813	0.6920	**0.313**	0.172
42	119	21	39	3	1	2.415	56.6	56.6	1.978	1.573	0.0	1.00	0.911	1.893	0.75	21.7	0.2167	0.2167	0.808	0.6928	**0.313**	0.172
43	119	21	39	3	1	2.475	56.6	56.6	2.007	1.601	0.0	1.00	0.911	1.893	0.75	21.7	0.2167	0.2167	0.803	0.6934	**0.312**	0.172
44	119	48	44	3	1	2.534	56.6	56.6	2.035	1.629	0.0	1.00	0.898	2.035	0.72	47.8	-1.2685	Infinite	0.799	0.6938	**Non-Liq.**	0.000
45	119	48	44	3	1	2.594	56.6	56.6	2.063	1.658	0.0	1.00	0.898	2.035	0.72	47.8	-1.2685	Infinite	0.794	0.6939	**Non-Liq.**	0.000
46	119	48	44	3	1	2.653	56.6	56.6	2.091	1.686	0.0	1.00	0.898	2.035	0.72	47.8	-1.2685	Infinite	0.790	0.6939	**Non-Liq.**	0.000
47	119	48	44	3	1	2.713	56.6	56.6	2.120	1.714	0.0	1.00	0.898	2.035	0.72	47.8	-1.2685	Infinite	0.785	0.6937	**Non-Liq.**	0.000
48	119	48	44	3	1	2.772	56.6	56.6	2.148	1.742	0.0	1.00	0.898	2.035	0.72	47.8	-1.2685	Infinite	0.781	0.6934	**Non-Liq.**	0.000
49	119	26	49	3	1	2.832	56.6	56.6	2.176	1.771	0.0	1.00	0.885	2.176	0.70	25.0	0.2529	0.2529	0.776	0.6929	**0.365**	0.142
50	119	26	49	3	1	2.891	56.6	56.6	2.205	1.799	0.0	1.00	0.885	2.176	0.70	25.0	0.2529	0.2529	0.771	0.6922	**0.365**	0.142
																					Total Post-Earthquake Shaking Settlement (inches)	**7.354**

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**500LA AVE**
PROJECT NUMBER:	**030.00**
DATE OF ANALYSIS:	**10/30/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.00
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	21.0
Historic High Groundwater Level* (ft):	15.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	107	2	4	27	1	0.054	107.0	107.0	0.054	0.054	5.1	0.75	1.000	0.214	2.00	9.3	0.1021	0.1021	0.995	0.5449	**Dry**	0.327
2	107	2	4	27	1	0.107	107.0	107.0	0.107	0.107	5.1	0.75	1.000	0.214	2.00	9.3	0.1021	0.1021	0.991	0.5424	**Dry**	0.327
3	107	2	4	27	1	0.161	107.0	107.0	0.161	0.161	5.1	0.75	1.000	0.214	2.00	9.3	0.1021	0.1021	0.986	0.5399	**Dry**	0.327
4	107	2	4	27	1	0.214	107.0	107.0	0.214	0.214	5.1	0.75	1.000	0.214	2.00	9.3	0.1021	0.1021	0.982	0.5374	**Dry**	0.327
5	107	2	4	27	1	0.268	107.0	107.0	0.268	0.268	5.1	0.75	1.000	0.214	2.00	9.3	0.1021	0.1021	0.977	0.5349	**Dry**	0.327
6	107	2	4	27	1	0.321	107.0	107.0	0.321	0.321	5.1	0.75	1.000	0.214	2.00	9.3	0.1021	0.1021	0.973	0.5324	**Dry**	0.327
7	107	4	9	27	1	0.375	107.0	107.0	0.375	0.375	5.1	0.75	1.000	0.482	1.48	11.3	0.1232	0.1232	0.968	0.5299	**Dry**	0.290
8	107	4	9	27	1	0.428	107.0	107.0	0.428	0.428	5.1	0.75	1.000	0.482	1.48	11.3	0.1232	0.1232	0.963	0.5274	**Dry**	0.290
9	107	4	9	27	1	0.482	107.0	107.0	0.482	0.482	5.1	0.75	1.000	0.482	1.48	11.3	0.1232	0.1232	0.959	0.5249	**Dry**	0.290
10	112	4	9	27	1	0.538	112.0	112.0	0.538	0.538	5.1	0.75	1.000	0.482	1.48	11.3	0.1232	0.1232	0.954	0.5224	**Dry**	0.290
11	112	4	9	27	1	0.594	112.0	112.0	0.594	0.594	5.1	0.75	1.000	0.482	1.48	11.3	0.1232	0.1232	0.950	0.5199	**Dry**	0.290
12	112	4	9	27	1	0.650	112.0	112.0	0.650	0.650	5.1	0.75	1.000	0.482	1.48	11.3	0.1232	0.1232	0.945	0.5174	**Dry**	0.290
13	112	9	14	27	1	0.706	112.0	112.0	0.706	0.706	5.1	0.78	1.000	0.762	1.18	16.6	0.1806	0.1806	0.941	0.5149	**Dry**	0.217
14	112	9	14	27	1	0.762	112.0	112.0	0.762	0.762	5.1	0.78	1.000	0.762	1.18	16.6	0.1806	0.1806	0.936	0.5124	**Dry**	0.217
15	119	9	14	27	1	0.821	119.0	119.0	0.821	0.821	5.1	0.78	1.000	0.762	1.18	16.6	0.1806	0.1806	0.931	0.5099	**Dry**	0.217
16	119	9	14	27	1	0.881	119.0	56.6	0.881	0.849	5.1	0.78	1.000	0.762	1.18	16.6	0.1806	0.1806	0.927	0.5260	**0.343**	0.217
17	119	9	14	27	1	0.940	119.0	56.6	0.940	0.878	5.1	0.78	1.000	0.762	1.18	16.6	0.1806	0.1806	0.922	0.5408	**0.334**	0.217
18	119	9	19	27	1	1.000	119.0	56.6	1.000	0.906	5.1	0.88	0.997	1.062	1.00	16.0	0.1741	0.1741	0.918	0.5543	**0.314**	0.222
19	125	12	19	5	1	1.062	125.0	62.6	1.062	0.937	0.0	0.88	0.997	1.062	1.00	14.5	0.1582	0.1582	0.913	0.5664	**0.279**	0.235
20	125	12	19	5	1	1.125	125.0	62.6	1.125	0.969	0.0	0.88	0.997	1.062	1.00	14.5	0.1582	0.1582	0.909	0.5775	**0.274**	0.235
21	125	12	19	5	1	1.187	125.0	62.6	1.187	1.000	0.0	0.88	0.997	1.062	1.00	14.5	0.1582	0.1582	0.904	0.5875	**0.269**	0.235
22	125	12	19	5	1	1.250	62.6	62.6	1.218	1.031	0.0	0.88	0.997	1.062	1.00	14.5	0.1582	0.1582	0.899	0.5966	**0.265**	0.235
23	125	12	24	5	1	1.312	62.6	62.6	1.250	1.062	0.0	0.94	0.973	1.281	0.91	14.2	0.1510	0.1510	0.895	0.6049	**0.250**	0.238
24	125	19	24	5	1	1.375	62.6	62.6	1.281	1.094	0.0	0.94	0.973	1.281	0.91	22.5	0.2421	0.2421	0.890	0.6125	**0.395**	0.164
25	125	19	24	5	1	1.437	62.6	62.6	1.312	1.125	0.0	0.94	0.973	1.281	0.91	22.5	0.2421	0.2421	0.886	0.6193	**0.391**	0.164
26	125	19	24	5	1	1.500	62.6	62.6	1.344	1.156	0.0	0.94	0.973	1.281	0.91	22.5	0.2421	0.2421	0.881	0.6255	**0.387**	0.164
27	125	19	24	5	1	1.562	62.6	62.6	1.375	1.188	0.0	0.94	0.973	1.281	0.91	22.5	0.2421	0.2421	0.877	0.6311	**0.384**	0.164
28	125	19	29	5	1	1.625	62.6	62.6	1.406	1.219	0.0	0.99	0.957	1.437	0.86	22.3	0.2355	0.2355	0.872	0.6362	**0.370**	0.166
29	125	6	29	5	1	1.687	62.6	62.6	1.437	1.250	0.0	0.99	0.957	1.437	0.86	7.0	0.0777	0.0777	0.867	0.6407	**0.121**	0.382
30	125	6	29	5	1	1.750	62.6	62.6	1.469	1.282	0.0	0.99	0.957	1.437	0.86	7.0	0.0777	0.0777	0.863	0.6448	**0.120**	0.382
31	125	6	29	5	1	1.812	62.6	62.6	1.500	1.313	0.0	0.99	0.957	1.437	0.86	7.0	0.0777	0.0777	0.858	0.6485	**0.120**	0.382
32	125	6	29	5	1	1.875	62.6	62.6	1.531	1.344	0.0	0.99	0.957	1.437	0.86	7.0	0.0777	0.0777	0.854	0.6517	**0.119**	0.382
33	125	6	34	5	1	1.937	62.6	62.6	1.563	1.375	0.0	1.00	0.941	1.594	0.81	6.7	0.0740	0.0740	0.849	0.6546	**0.113**	0.396
34	125	31	34	5	1	2.000	62.6	62.6	1.594	1.407	0.0	1.00	0.941	1.594	0.81	34.9	0.5211	Infinite	0.845	0.6572	**Non-Liq.**	0.000
35	125	31	34	5	1	2.062	62.6	62.6	1.625	1.438	0.0	1.00	0.941	1.594	0.81	34.9	0.5211	Infinite	0.840	0.6594	**Non-Liq.**	0.000
36	125	31	34	5	1	2.125	62.6	62.6	1.657	1.469	0.0	1.00	0.941	1.594	0.81	34.9	0.5211	Infinite	0.835	0.6613	**Non-Liq.**	0.000
37	125	31	34	5	1	2.187	62.6	62.6	1.688	1.501	0.0	1.00	0.941	1.594	0.81	34.9	0.5211	Infinite	0.831	0.6629	**Non-Liq.**	0.000
38	125	31	39	5	1	2.250	62.6	62.6	1.719	1.532	0.0	1.00	0.925	1.750	0.78	33.3	0.4311	Infinite	0.826	0.6642	**Non-Liq.**	0.030
39	125	12	39	5	1	2.312	62.6	62.6	1.750	1.563	0.0	1.00	0.925	1.750	0.78	12.9	0.1301	0.1301	0.822	0.6653	**0.196**	0.261
40	125	12	39	5	1	2.375	62.6	62.6	1.782	1.595	0.0	1.00	0.925	1.750	0.78	12.9	0.1301	0.1301	0.817	0.6661	**0.195**	0.261
41	125	12	39	5	1	2.437	62.6	62.6	1.813	1.626	0.0	1.00	0.925	1.750	0.78	12.9	0.1301	0.1301	0.813	0.6667	**0.195**	0.261
42	125	12	39	5	1	2.500	62.6	62.6	1.844	1.657	0.0	1.00	0.925	1.750	0.78	12.9	0.1301	0.1301	0.808	0.6672	**0.195**	0.261
43	125	12	44	5	1	2.562	62.6	62.6	1.876	1.688	0.0	1.00	0.910	1.907	0.74	12.3	0.1226	0.1226	0.803	0.6674	**0.184**	0.271
44	125	9	44	5	1	2.625	62.6	62.6	1.907	1.720	0.0	1.00	0.910	1.907	0.74	9.3	0.0927	0.0927	0.799	0.6674	**0.139**	0.328
45	125	9	44	5	0	2.687	62.6	62.6	1.938	1.751	0.0	1.00	0.910	1.907	0.74	9.3	0.0927	--	0.794	0.6672	**--**	0.000
46	125	9	44	5	0	2.750	62.6	62.6	1.970	1.782	0.0	1.00	0.910	1.907	0.74	9.3	0.0927	--	0.790	0.6669	**--**	0.000
47	125	9	44	5	0	2.812	62.6	62.6	2.001	1.814	0.0	1.00	0.910	1.907	0.74	9.3	0.0927	--	0.785	0.6664	**--**	0.000
48	125	9	49	5	0	2.875	62.6	62.6	2.032	1.845	0.0	1.00	0.895	2.063	0.72	8.9	0.0880	--	0.781	0.6657	**--**	0.000
49	125	2	49	5	0	2.937	62.6	62.6	2.063	1.876	0.0	1.00	0.895	2.063	0.72	2.0	0.0470	--	0.776	0.6650	**--**	0.000
50	125	2	49	5	0	3.000	62.6	62.6	2.095	1.908	0.0	1.00	0.895	2.063	0.72	2.0	0.0470	--	0.771	0.6640	**--**	0.000
																					Total Post-Earthquake Shaking Settlement (inches)	**10.609**

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**WCRN**
PROJECT NUMBER:	**030.004**
DATE OF ANALYSIS:	**12/13/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.06
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	60.0
Historic High Groundwater Level* (ft):	60.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	113	6	4	60	1	0.057	113.0	113.0	0.057	0.057	7.0	0.75	1.000	0.226	2.00	19.4	0.2113	0.2113	0.995	0.5776	**Dry**	0.192
2	113	6	4	60	1	0.113	113.0	113.0	0.113	0.113	7.0	0.75	1.000	0.226	2.00	19.4	0.2113	0.2113	0.991	0.5750	**Dry**	0.192
3	113	6	4	60	1	0.170	113.0	113.0	0.170	0.170	7.0	0.75	1.000	0.226	2.00	19.4	0.2113	0.2113	0.986	0.5723	**Dry**	0.192
4	113	6	4	60	1	0.226	113.0	113.0	0.226	0.226	7.0	0.75	1.000	0.226	2.00	19.4	0.2113	0.2113	0.982	0.5697	**Dry**	0.192
5	113	6	4	12	1	0.283	113.0	113.0	0.283	0.283	1.6	0.75	1.000	0.226	2.00	14.1	0.1533	0.1533	0.977	0.5670	**Dry**	0.240
6	113	6	4	12	1	0.339	113.0	113.0	0.339	0.339	1.6	0.75	1.000	0.226	2.00	14.1	0.1533	0.1533	0.973	0.5643	**Dry**	0.240
7	113	15	9	12	1	0.396	113.0	113.0	0.396	0.396	1.6	0.75	1.000	0.509	1.44	24.0	0.2701	0.2701	0.968	0.5617	**Dry**	0.151
8	113	15	9	12	1	0.452	113.0	113.0	0.452	0.452	1.6	0.75	1.000	0.509	1.44	24.0	0.2701	0.2701	0.963	0.5590	**Dry**	0.151
9	113	15	9	6	1	0.509	113.0	113.0	0.509	0.509	0.2	0.75	1.000	0.509	1.44	22.6	0.2502	0.2502	0.959	0.5564	**Dry**	0.163
10	113	15	9	6	1	0.565	113.0	113.0	0.565	0.565	0.2	0.75	1.000	0.509	1.44	22.6	0.2502	0.2502	0.954	0.5537	**Dry**	0.163
11	113	15	9	6	1	0.622	113.0	113.0	0.622	0.622	0.2	0.75	1.000	0.509	1.44	22.6	0.2502	0.2502	0.950	0.5511	**Dry**	0.163
12	113	15	9	6	1	0.678	113.0	113.0	0.678	0.678	0.2	0.75	1.000	0.509	1.44	22.6	0.2502	0.2502	0.945	0.5484	**Dry**	0.163
13	125	11	14	6	1	0.741	125.0	125.0	0.741	0.741	0.2	0.78	1.000	0.803	1.15	13.9	0.1515	0.1515	0.941	0.5458	**Dry**	0.242
14	125	11	14	35	1	0.803	125.0	125.0	0.803	0.803	7.0	0.78	1.000	0.803	1.15	20.6	0.2254	0.2254	0.936	0.5431	**Dry**	0.181
15	125	11	14	35	1	0.866	125.0	125.0	0.866	0.866	7.0	0.78	1.000	0.803	1.15	20.6	0.2254	0.2254	0.931	0.5405	**Dry**	0.181
16	125	11	14	35	1	0.928	125.0	125.0	0.928	0.928	7.0	0.78	1.000	0.803	1.15	20.6	0.2254	0.2254	0.927	0.5378	**Dry**	0.181
17	125	11	14	35	1	0.991	125.0	125.0	0.991	0.991	7.0	0.78	1.000	0.803	1.15	20.6	0.2254	0.2254	0.922	0.5352	**Dry**	0.181
18	125	28	19	6	1	1.053	125.0	125.0	1.053	1.053	0.2	0.88	0.992	1.111	0.98	33.4	0.4704	Infinite	0.918	0.5325	**Dry**	0.026
19	115	28	19	6	1	1.111	115.0	115.0	1.111	1.111	0.2	0.88	0.992	1.111	0.98	33.4	0.4704	Infinite	0.913	0.5299	**Dry**	0.026
20	115	28	19	6	1	1.168	115.0	115.0	1.168	1.168	0.2	0.88	0.992	1.111	0.98	33.4	0.4704	Infinite	0.909	0.5272	**Dry**	0.026
21	115	28	19	6	1	1.226	115.0	115.0	1.226	1.226	0.2	0.88	0.992	1.111	0.98	33.4	0.4704	Infinite	0.904	0.5246	**Dry**	0.026
22	115	28	19	6	1	1.283	115.0	115.0	1.283	1.283	0.2	0.88	0.992	1.111	0.98	33.4	0.4704	Infinite	0.899	0.5219	**Dry**	0.026
23	129	23	24	32	1	1.348	129.0	129.0	1.348	1.348	6.3	0.94	0.960	1.412	0.87	32.3	0.3993	Infinite	0.895	0.5192	**Dry**	0.054
24	129	23	24	32	1	1.412	129.0	129.0	1.412	1.412	6.3	0.94	0.960	1.412	0.87	32.3	0.3993	Infinite	0.890	0.5166	**Dry**	0.054
25	129	23	24	32	1	1.477	129.0	129.0	1.477	1.477	6.3	0.94	0.960	1.412	0.87	32.3	0.3993	Infinite	0.886	0.5139	**Dry**	0.054
26	129	23	24	32	1	1.541	129.0	129.0	1.541	1.541	6.3	0.94	0.960	1.412	0.87	32.3	0.3993	Infinite	0.881	0.5113	**Dry**	0.054
27	129	23	24	32	1	1.606	129.0	129.0	1.606	1.606	6.3	0.94	0.960	1.412	0.87	32.3	0.3993	Infinite	0.877	0.5086	**Dry**	0.054
28	129	27	29	32	1	1.670	129.0	129.0	1.670	1.670	6.3	0.99	0.927	1.735	0.78	35.2	0.5318	Infinite	0.872	0.5060	**Dry**	0.000
29	129	27	29	32	1	1.735	129.0	129.0	1.735	1.735	6.3	0.99	0.927	1.735	0.78	35.2	0.5318	Infinite	0.867	0.5033	**Dry**	0.000
30	129	27	29	32	1	1.799	129.0	129.0	1.799	1.799	6.3	0.99	0.927	1.735	0.78	35.2	0.5318	Infinite	0.863	0.5007	**Dry**	0.000
31	129	27	29	32	1	1.864	129.0	129.0	1.864	1.864	6.3	0.99	0.927	1.735	0.78	35.2	0.5318	Infinite	0.858	0.4980	**Dry**	0.000
32	129	27	29	32	1	1.928	129.0	129.0	1.928	1.928	6.3	0.99	0.927	1.735	0.78	35.2	0.5318	Infinite	0.854	0.4954	**Dry**	0.000
33	129	57	29	13	1	1.993	129.0	129.0	1.993	1.993	1.9	0.99	0.927	1.735	0.78	62.8	-0.2487	Infinite	0.849	0.4927	**Dry**	0.000
34	115	57	34	13	1	2.050	115.0	115.0	2.050	2.050	1.9	1.00	0.896	2.050	0.72	58.4	-0.3173	Infinite	0.845	0.4901	**Dry**	0.000
35	115	57	34	13	1	2.108	115.0	115.0	2.108	2.108	1.9	1.00	0.896	2.050	0.72	58.4	-0.3173	Infinite	0.840	0.4874	**Dry**	0.000
36	115	57	34	13	1	2.165	115.0	115.0	2.165	2.165	1.9	1.00	0.896	2.050	0.72	58.4	-0.3173	Infinite	0.835	0.4848	**Dry**	0.000
37	115	57	34	13	1	2.223	115.0	115.0	2.223	2.223	1.9	1.00	0.896	2.050	0.72	58.4	-0.3173	Infinite	0.831	0.4821	**Dry**	0.000
38	115	57	34	13	1	2.280	115.0	115.0	2.280	2.280	1.9	1.00	0.896	2.050	0.72	58.4	-0.3173	Infinite	0.826	0.4795	**Dry**	0.000
39	115	40	39	60	1	2.338	115.0	115.0	2.338	2.338	7.0	1.00	0.871	2.338	0.67	44.1	1533.1842	Infinite	0.822	0.4768	**Dry**	0.000
40	115	40	39	60	1	2.395	115.0	115.0	2.395	2.395	7.0	1.00	0.871	2.338	0.67	44.1	1533.1842	Infinite	0.817	0.4741	**Dry**	0.000
41	115	40	39	60	1	2.453	115.0	115.0	2.453	2.453	7.0	1.00	0.871	2.338	0.67	44.1	1533.1842	Infinite	0.813	0.4715	**Dry**	0.000
42	115	40	39	60	1	2.510	115.0	115.0	2.510	2.510	7.0	1.00	0.871	2.338	0.67	44.1	1533.1842	Infinite	0.808	0.4688	**Dry**	0.000
43	115	40	39	60	1	2.568	115.0	115.0	2.568	2.568	7.0	1.00	0.871	2.338	0.67	44.1	1533.1842	Infinite	0.803	0.4662	**Dry**	0.000
44	115	92	44	13	1	2.625	115.0	115.0	2.625	2.625	1.9	1.00	0.846	2.625	0.63	82.5	-0.1083	Infinite	0.799	0.4635	**Dry**	0.000
45	115	92	44	13	1	2.683	115.0	115.0	2.683	2.683	1.9	1.00	0.846	2.625	0.63	82.5	-0.1083	Infinite	0.794	0.4609	**Dry**	0.000
46	115	92	44	13	1	2.740	115.0	115.0	2.740	2.740	1.9	1.00	0.846	2.625	0.63	82.5	-0.1083	Infinite	0.790	0.4582	**Dry**	0.000
47	115	92	44	13	1	2.798	115.0	115.0	2.798	2.798	1.9	1.00	0.846	2.625	0.63	82.5	-0.1083	Infinite	0.785	0.4556	**Dry**	0.000
48	115	92	44	13	1	2.855	115.0	115.0	2.855	2.855	1.9	1.00	0.846	2.625	0.63	82.5	-0.1083	Infinite	0.781	0.4529	**Dry**	0.000
49	115	66	49	13	1	2.913	115.0	115.0	2.913	2.913	1.9	1.00	0.824	2.913	0.60	56.8	-0.3299	Infinite	0.776	0.4503	**Dry**	0.000
50	115	66	49	13	1	2.970	115.0	115.0	2.970	2.970	1.9	1.00	0.824	2.913	0.60	56.8	-0.3299	Infinite	0.771	0.4476	**Dry**	0.000
																					Total Post-Earthquake Shaking Settlement (inches)	**3.565**

OAKRIDGE GEOSCIENCE, INC.

PLATE NUMBER:	**WCRS**
PROJECT NUMBER:	**030.004**
DATE OF ANALYSIS:	**12/13/17**

EARTHQUAKE PARAMETERS

Design Earthquake Magnitude* (Mm):	7.00
Design Horizontal Acceleration* (g):	1.06
Calculated Magnitude Weight Factor:	0.842

GROUNDWATER PARAMETERS

Current Groundwater Level (ft):	60.0
Historic High Groundwater Level* (ft):	60.0

* Based on the applicable CDMG Seismic Hazard Evaluation Report

ENERGY & ROD CORRECTIONS

Energy Correction (CE) for N60:	1.20
Rod Length Correction (CR) (0 or 1):	1
Bore Diameter Correction (CB):	1.15
Sampler Correction (CS):	1.00
Use K Sigma (0 or 1):	1

Methodology after: Seed, H.B., and Idriss, I.M., 1982;
Seed, H.B., and others, 1985;
& Tokimatsu, K., and Seed, H.B., 1987

LIQUEFACTION ANALYSIS

Layer Depth (ft)	Soil Total Unit Wt. (pcf)	Field SPT Count (N)	Depth of SPT (ft)	Fines Content (%)	Liquefaction Susceptibility (0 or 1)	Total Stress (tsf)	Current Eff. Unit Wt. (psf)	Historic Eff. Unit Wt. (psf)	Current Eff. Stress (tsf)	Historic Eff. Stress (tsf)	Fines Content Correction	Rod Length Correction	K Sigma Correction Factor	Eff. Stress for SPT (tsf)	Depth Correction Cn	Final Corrected (N1)60	Computed CSR M=7.5	Corrected Resistance CRR	rd Factor	Induced CSR	Liquefaction Safety Factor	Calculated Settlement (inches)
1	115	3	4	16	1	0.058	115.0	115.0	0.058	0.058	2.6	0.75	1.000	0.230	2.00	8.8	0.0971	0.0971	0.995	0.5776	**Dry**	0.336
2	115	3	4	16	1	0.115	115.0	115.0	0.115	0.115	2.6	0.75	1.000	0.230	2.00	8.8	0.0971	0.0971	0.991	0.5750	**Dry**	0.336
3	115	3	4	16	1	0.173	115.0	115.0	0.173	0.173	2.6	0.75	1.000	0.230	2.00	8.8	0.0971	0.0971	0.986	0.5723	**Dry**	0.336
4	115	3	4	16	1	0.230	115.0	115.0	0.230	0.230	2.6	0.75	1.000	0.230	2.00	8.8	0.0971	0.0971	0.982	0.5697	**Dry**	0.336
5	115	3	4	16	1	0.288	115.0	115.0	0.288	0.288	2.6	0.75	1.000	0.230	2.00	8.8	0.0971	0.0971	0.977	0.5670	**Dry**	0.336
6	115	3	4	16	1	0.345	115.0	115.0	0.345	0.345	2.6	0.75	1.000	0.230	2.00	8.8	0.0971	0.0971	0.973	0.5643	**Dry**	0.336
7	113	12	9	16	1	0.402	113.0	113.0	0.402	0.402	2.6	0.75	1.000	0.515	1.43	20.4	0.2222	0.2222	0.968	0.5617	**Dry**	0.183
8	113	12	9	16	1	0.458	113.0	113.0	0.458	0.458	2.6	0.75	1.000	0.515	1.43	20.4	0.2222	0.2222	0.963	0.5590	**Dry**	0.183
9	113	12	9	16	1	0.515	113.0	113.0	0.515	0.515	2.6	0.75	1.000	0.515	1.43	20.4	0.2222	0.2222	0.959	0.5564	**Dry**	0.183
10	113	12	9	16	1	0.571	113.0	113.0	0.571	0.571	2.6	0.75	1.000	0.515	1.43	20.4	0.2222	0.2222	0.954	0.5537	**Dry**	0.183
11	113	12	9	16	1	0.628	113.0	113.0	0.628	0.628	2.6	0.75	1.000	0.515	1.43	20.4	0.2222	0.2222	0.950	0.5511	**Dry**	0.183
12	113	12	9	16	1	0.684	113.0	113.0	0.684	0.684	2.6	0.75	1.000	0.515	1.43	20.4	0.2222	0.2222	0.945	0.5484	**Dry**	0.183
13	110	8	14	16	1	0.739	110.0	110.0	0.739	0.739	2.6	0.78	1.000	0.794	1.15	12.5	0.1371	0.1371	0.941	0.5458	**Dry**	0.267
14	110	8	14	10	1	0.794	110.0	110.0	0.794	0.794	1.2	0.78	1.000	0.794	1.15	11.1	0.1219	0.1219	0.936	0.5431	**Dry**	0.293
15	110	8	14	10	1	0.849	110.0	110.0	0.849	0.849	1.2	0.78	1.000	0.794	1.15	11.1	0.1219	0.1219	0.931	0.5405	**Dry**	0.293
16	110	8	14	6	1	0.904	110.0	110.0	0.904	0.904	0.2	0.78	1.000	0.794	1.15	10.2	0.1119	0.1119	0.927	0.5378	**Dry**	0.310
17	110	8	14	6	1	0.959	110.0	110.0	0.959	0.959	0.2	0.78	1.000	0.794	1.15	10.2	0.1119	0.1119	0.922	0.5352	**Dry**	0.310
18	110	23	19	6	1	1.014	110.0	110.0	1.014	1.014	0.2	0.88	0.996	1.069	0.99	28.0	0.3488	0.3488	0.918	0.5325	**Dry**	0.113
19	110	23	19	6	1	1.069	110.0	110.0	1.069	1.069	0.2	0.88	0.996	1.069	0.99	28.0	0.3488	0.3488	0.913	0.5299	**Dry**	0.113
20	110	23	19	6	1	1.124	110.0	110.0	1.124	1.124	0.2	0.88	0.996	1.069	0.99	28.0	0.3488	0.3488	0.909	0.5272	**Dry**	0.113
21	110	23	19	6	1	1.179	110.0	110.0	1.179	1.179	0.2	0.88	0.996	1.069	0.99	28.0	0.3488	0.3488	0.904	0.5246	**Dry**	0.113
22	110	23	19	6	1	1.234	110.0	110.0	1.234	1.234	0.2	0.88	0.996	1.069	0.99	28.0	0.3488	0.3488	0.899	0.5219	**Dry**	0.113
23	115	16	24	6	1	1.292	115.0	115.0	1.292	1.292	0.2	0.94	0.966	1.349	0.89	18.7	0.1965	0.1965	0.895	0.5192	**Dry**	0.198
24	115	16	24	6	1	1.349	115.0	115.0	1.349	1.349	0.2	0.94	0.966	1.349	0.89	18.7	0.1965	0.1965	0.890	0.5166	**Dry**	0.198
25	115	16	24	6	1	1.407	115.0	115.0	1.407	1.407	0.2	0.94	0.966	1.349	0.89	18.7	0.1965	0.1965	0.886	0.5139	**Dry**	0.198
26	115	16	24	6	1	1.464	115.0	115.0	1.464	1.464	0.2	0.94	0.966	1.349	0.89	18.7	0.1965	0.1965	0.881	0.5113	**Dry**	0.198
27	115	16	24	6	1	1.522	115.0	115.0	1.522	1.522	0.2	0.94	0.966	1.349	0.89	18.7	0.1965	0.1965	0.877	0.5086	**Dry**	0.198
28	115	10	29	6	1	1.579	115.0	115.0	1.579	1.579	0.2	0.99	0.936	1.639	0.80	11.2	0.1149	0.1149	0.872	0.5060	**Dry**	0.291
29	120	10	29	28	1	1.639	120.0	120.0	1.639	1.639	5.4	0.99	0.936	1.639	0.80	16.4	0.1667	0.1667	0.867	0.5033	**Dry**	0.219
30	120	10	29	28	1	1.699	120.0	120.0	1.699	1.699	5.4	0.99	0.936	1.639	0.80	16.4	0.1667	0.1667	0.863	0.5007	**Dry**	0.219
31	120	10	29	28	1	1.759	120.0	120.0	1.759	1.759	5.4	0.99	0.936	1.639	0.80	16.4	0.1667	0.1667	0.858	0.4980	**Dry**	0.219
32	120	10	29	28	1	1.819	120.0	120.0	1.819	1.819	5.4	0.99	0.936	1.639	0.80	16.4	0.1667	0.1667	0.854	0.4954	**Dry**	0.219
33	120	11	34	28	1	1.879	120.0	120.0	1.879	1.879	5.4	1.00	0.907	1.939	0.74	16.6	0.1636	0.1636	0.849	0.4927	**Dry**	0.217
34	120	11	34	28	1	1.939	120.0	120.0	1.939	1.939	5.4	1.00	0.907	1.939	0.74	16.6	0.1636	0.1636	0.845	0.4901	**Dry**	0.217
35	120	11	34	28	1	1.999	120.0	120.0	1.999	1.999	5.4	1.00	0.907	1.939	0.74	16.6	0.1636	0.1636	0.840	0.4874	**Dry**	0.217
36	120	11	34	28	1	2.059	120.0	120.0	2.059	2.059	5.4	1.00	0.907	1.939	0.74	16.6	0.1636	0.1636	0.835	0.4848	**Dry**	0.217
37	120	11	34	28	1	2.119	120.0	120.0	2.119	2.119	5.4	1.00	0.907	1.939	0.74	16.6	0.1636	0.1636	0.831	0.4821	**Dry**	0.217
38	120	11	34	28	1	2.179	120.0	120.0	2.179	2.179	5.4	1.00	0.907	1.939	0.74	16.6	0.1636	0.1636	0.826	0.4795	**Dry**	0.217
39	120	11	39	28	1	2.239	120.0	120.0	2.239	2.239	5.4	1.00	0.879	2.239	0.69	15.8	0.1513	0.1513	0.822	0.4768	**Dry**	0.224
40	120	11	39	28	1	2.299	120.0	120.0	2.299	2.299	5.4	1.00	0.879	2.239	0.69	15.8	0.1513	0.1513	0.817	0.4741	**Dry**	0.224
41	120	11	39	28	1	2.359	120.0	120.0	2.359	2.359	5.4	1.00	0.879	2.239	0.69	15.8	0.1513	0.1513	0.813	0.4715	**Dry**	0.224
42	120	11	39	28	1	2.419	120.0	120.0	2.419	2.419	5.4	1.00	0.879	2.239	0.69	15.8	0.1513	0.1513	0.808	0.4688	**Dry**	0.224
43	120	38	44	28	1	2.479	120.0	120.0	2.479	2.479	5.4	1.00	0.853	2.539	0.65	39.2	0.8972	Infinite	0.803	0.4662	**Dry**	0.000
44	120	38	44	9	1	2.539	120.0	120.0	2.539	2.539	0.9	1.00	0.853	2.539	0.65	34.8	0.4690	Infinite	0.799	0.4635	**Dry**	0.000
45	120	38	44	9	1	2.599	120.0	120.0	2.599	2.599	0.9	1.00	0.853	2.539	0.65	34.8	0.4690	Infinite	0.794	0.4609	**Dry**	0.000
46	120	38	44	9	1	2.659	120.0	120.0	2.659	2.659	0.9	1.00	0.853	2.539	0.65	34.8	0.4690	Infinite	0.790	0.4582	**Dry**	0.000
47	120	38	44	9	1	2.719	120.0	120.0	2.719	2.719	0.9	1.00	0.853	2.539	0.65	34.8	0.4690	Infinite	0.785	0.4556	**Dry**	0.000
48	120	38	44	9	1	2.779	120.0	120.0	2.779	2.779	0.9	1.00	0.853	2.539	0.65	34.8	0.4690	Infinite	0.781	0.4529	**Dry**	0.000
49	120	14	49	28	1	2.839	120.0	120.0	2.839	2.839	5.4	1.00	0.830	2.839	0.61	17.2	0.1548	0.1548	0.776	0.4503	**Dry**	0.212
50	120	14	49	28	1	2.899	120.0	120.0	2.899	2.899	5.4	1.00	0.830	2.839	0.61	17.2	0.1548	0.1548	0.771	0.4476	**Dry**	0.212
																					Total Post-Earthquake Shaking Settlement (inches)	**9.935**

Appendix H

Phase I Environmental Site Assessment



Phase I Environmental Site Assessment

High Street Station Mixed Use Development, Moorpark, California

prepared for
Daly Group Inc.

prepared by
Rincon Consultants, Inc.

June 12, 2018

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers
www.rinconconsultants.com

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455
FAX 644 4240

info@rinconconsultants.com
www.rinconconsultants.com

June 12, 2018
Project 18-05844

Mr. Jasch Janowicz
Daly Group Inc.
31255 Cedar Valley Drive, Suite 323
Westlake Village, CA 91362
Via email: jjanowicz@dalygroupinc.com

Subject: **Phase I Environmental Site Assessment**
High Street Station Mixed Use Development
Moorpark, California

Dear Mr. Janowicz:

This report presents the findings of a Phase I Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for the High Street Station Mixed Use Development in Moorpark, California. The Phase I ESA was performed in accordance with our proposal and contract dated May 16, 2018.

The accompanying report presents our findings and provides an opinion regarding the presence of recognized environmental conditions. Our work program for this project, as referenced in our contract, is intended to meet the guidelines outlined in the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* (ASTM Standard E-1527-13). Our scope of services, pursuant to ASTM practice, did not include any inquiries with respect to asbestos, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, vapor intrusion or other indoor air quality, mold, or high voltage power lines.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,

RINCON CONSULTANTS, INC.

Sarah A. Larese
Senior Environmental Scientist

Walt Hamann, PG, CEG, CHG
Vice President, Environmental Services

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Executive Summary

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the High Street Station Mixed Use Development in Moorpark, California (Figure 1, Vicinity Map). The Phase I ESA was performed for Daly Group Inc. by Rincon Consultants, Inc. (Rincon). Daly Group Inc. has requested this assessment and will use the information for the purposes of purchasing and redeveloping the subject property. The subject property is currently occupied by five vacant buildings which include a former restaurant, a former thrift store and several structures associated with a former onsite grain storage/milling facility.

Rincon performed a reconnaissance of the subject property on June 5, 2018. The purpose of the reconnaissance was to observe existing conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property. The use, storage or disposal of hazardous materials on the subject property was not observed during the site reconnaissance, except for the following small quantities:

- The storage area at the former Maria's Restaurant contains small quantities of oil based protective enamel, contact cement, polyurethane, and paint & primer.
- One unmarked 55-gallon drum with unknown contents located adjacent to the former "One More Time" thrift shop (220 E High St.) on the subject property.

Rincon did not observe indications of releases from these containers.

Adjacent businesses/properties include various commercial and retail properties to the north, The City of Moorpark Chamber of Commerce (18 E High St.) to the west, a dirt lot used for parking to the east and the railroad right-of-way to the south.

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property was not listed in any of the databases searched by EDR. Two adjacent properties were listed in databases searched by EDR. Further information regarding the adjacent property listings is in the Additional Environmental Record Sources section of this report.

Historical sources reviewed as part of the Phase I ESA include aerial photographs, topographic maps, city directories and former Phase I ESA reports for the subject property. The 2017 Phase I ESA completed by EFI Global for the entire APN of which the subject property is a part of indicated the following historical use of the property:

"the southwest portion of the subject property was developed with a two-story train depot building in 1910 associated with the south adjoining Southern Pacific Railroad. . . The remaining portions of the subject property consisted of vacant, unused land at this time. This train depot structure remained onsite until 1964 when it was demolished due to disinterest in passenger rail. In 1949, a small cafe structure was constructed to the north of the train depot along East High Street (68 East High Street) and was occupied by the Redwood Cafe and Bar-B-Que Joint. This building was demolished in 2008. Sometime between 1947 and 1954 two grain mills/grain storage structures were constructed on the southern perimeter of the subject property along with four large silos associated with Egg City (a poultry production facility elsewhere in Moorpark). By 1956, these grain

storage structures were replaced with the existing storage grain structures (192 East High Street) observed onsite today. The four large silos remained onsite until 2008 when they were removed. In 1954, the existing commercial structure located near the northeast/northcentral portion of the property (220/222 East High Street) was constructed. Historical occupants have included a hardware store, electronics store, rental and sales shop, senior citizens meeting space, sheet metal shop, and thrift store. In 1958, two commercial/light industrial structures were constructed on the east side of the subject property (224/226 East High Street). These structures were originally built as a chicken hatching farm but later became used for retail, various commercial, and medical office purposes. In addition, the 226 East High Street building was utilized by Tony's Auto & Truck Repair in at least 1993. These buildings were demolished sometime between 1998 and 2003. In 1964, the existing restaurant building located near the northwest/ northcentral portion of the property (104 East High Street) was constructed. Former occupants have included Eppie's Frosti, The Donut Shop, La Playita, Maria's, and some retail occupants including a stereo shop and sporting goods shop . . . The last structure to be built on the subject property was the granary building (192 East High Street) which processed feed for Egg City (a poultry production facility located approximately three-quarters of a mile southwest of the subject property). The granary building was constructed to look like a train depot and was labeled "False Depot" to hide the four silos located behind the building."

In February 2017 FCG Environmental performed hazardous materials surveys at Maria's Restaurant Building and the Old Granary Building and Grain Elevator Façade Building, which included asbestos bulk sampling and lead-based paint testing. According to the report none of the painted surfaces or coatings tested were found to contain lead at concentrations above the regulatory level of 1.0 milligrams per square centimeter (mg/cm^2). Asbestos Containing Materials (ACM) were identified in both structures and would require abatement or special handling as part of proposed demolition activities.

Based on the findings of this Phase I ESA, it is our opinion that there are no Recognized Environmental Conditions (RECs) in connection with the subject property. However, there are two Potential RECs in connection with the adjacent properties as follows.

Potential Recognized Environmental Conditions

1. Existing railroad tracks adjacent to south of the subject property.
2. The presence of a former gasoline service station located adjacent to the west of the subject property.

Existing railroad tracks adjacent to south of the subject property. A railroad right-of-way has been present adjacent to the south of the subject property since at least 1903. Railroad ties were historically treated with creosote, and the track beds were historically treated with herbicides for weed management. Therefore, hydrocarbons, metals, herbicides, and semi volatile organic compounds from the railroad activities are potentially present in the soils surrounding the railroad tracks. The presence of the adjacent railroad is a potential REC.

To evaluate the adjacent railroad tracks, we recommend a shallow soil sampling assessment on the southern portion of the subject property adjacent to the railroad tracks to determine if hydrocarbons, metals, herbicides, and semi volatile organic compounds from the railroad activities are present in the shallow soil near the railroad tracks. In addition, based on the historical agricultural use of the area, we also recommend that soil samples be analyzed for pesticides, as these chemicals may have been transported via railcars/railroad tracks.

The presence of a former gasoline service station located adjacent to the west of the subject property. The A & P ARCO site was formerly located adjacent to the west of the subject property where the existing Moorpark Chamber of Commerce building is located. According to the EDR Hist Auto database, in 1976 the site was occupied by A & P ARCO and in use as a gasoline service station. The site was not listed in the GeoTracker or EnviroStor databases. In addition, records for the site were not identified on the VCEHD website. In the 2017 Phase I ESA report, a document titled Soils Exploration by Testing Laboratory Inc. was referenced with information pertaining to the former gasoline service station (18 E High Street). The document states, "*The underground tanks have been removed and the locations are not within the proposed building area*." However, the document shows no indication of soil sampling for contaminants in the location of the former USTs. Based on the documents reviewed and the lack of assessment data for the former USTs, there is the potential for contaminated soil gas migration and vapor intrusion of contaminants originating from the former gasoline service station onto the subject property. The presence of the adjacent former gasoline station is a potential REC.

To evaluate the former adjacent gasoline station to the west, we recommend that a soil vapor assessment be conducted on the subject property adjacent to the former gasoline station, to determine if there is VOC-impacted soil vapor migrating beneath the subject property from the adjacent property.

Introduction

This report presents the findings of a Phase I ESA conducted for the property located at the High Street Station Mixed Use Development in Moorpark, California (Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. (Rincon) for Daly Group Inc. in general conformance with ASTM E 1527-13, our contract dated May 17, 2018 and our proposal dated May 16, 2018. The following sections present our findings and provide our opinion as to the presence of recognized environmental conditions on the subject property.

Purpose

Daly Group Inc. has requested this assessment and will use the information for the purposes of purchasing and redeveloping the subject property. The purpose of this Phase I ESA was to determine if there are recognized environmental conditions on the subject property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A recognized environmental condition (REC) is defined pursuant to ASTM E 1527-13 as,

> "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; 3) under conditions that pose a material threat of a future release to the environment".

A Controlled REC is defined pursuant to ASTM E 1527-13 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). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report".

A Historical REC is defined pursuant to ASTM E 1527-13 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 regulatory authority, without subjecting the property to any required controls (for example, use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in

> the regulatory criteria). If the EP [Environmental Professional] considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition".

A *de minimis* condition is defined pursuant to ASTM E 1527-13 as,

> "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions".

Scope of Services

The scope of services conducted during this study is outlined below:

- Performed a reconnaissance of the subject property to identify obvious indicators of the existence of hazardous materials.
- Observed adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtained and reviewed an environmental records database search to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Reviewed files for the subject property and immediately adjacent properties as identified in the database report, as applicable.
- Reviewed the current U.S. Geological Survey (USGS) topographic map to obtain information about the subject property and regional topography and uses of the subject property and surrounding sites.
- Reviewed additional pertinent record sources (e.g., California Division of Oil and Gas records, online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Reviewed reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provided a user interview questionnaire to a representative of the client, the user of the Phase I ESA.
- Provided a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by the client.
- Conducted interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Reviewed available client-provided information (e.g., previous environmental reports, title documentation).

Significant Assumptions, Limitations, Deviations, Exceptions, Special Terms, and Conditions

This work is intended to adhere to good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No guarantee or warranties, expressed or implied are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce the client's risks, but no techniques commonly employed can eliminate these risks altogether.

In addition, pursuant to ASTM E 1527-13 practice, our scope of services did not include any inquiries with respect to asbestos containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high voltage power lines.

User Reliance

Daly Group Inc. has requested this assessment and will use the information for the purposes of purchasing and redeveloping the subject property. This Phase I ESA was prepared for use solely and exclusively by Daly Group Inc. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

Site Description

Location

The subject property is a 2.15-acre parcel located south of East High Street, north of the railroad right-of-way, east of Moorpark Avenue and west of Spring Road in California (Figure 2, Site Map). The property is identified as a portion of Assessor's Parcel Number (APN) 512-0-090-115. The following addresses are associated with the subject property: 192, 220, 222, 224, 226 E High Street, Moorpark, California.

Subject Property and Vicinity General Characteristics

The subject property is currently occupied by five vacant buildings which include a former restaurant, a former thrift store and several structures associated with the former onsite grain storage/milling facility. Adjacent businesses/properties include various commercial and retail properties to the north, The City of Moorpark Chamber of Commerce (18 E High St.) to the west, a dirt lot used for parking to the east and the railroad right-of-way to the south.

The current adjacent land uses are described in Table 1 and depicted on Figure 3, Adjacent Land Use Map.

Table 1 Current Uses of Adjacent Properties

Area	Use
Northern Properties	East High St. followed by commercial-retail use.
Eastern Properties	Unpaved parking lot.
Southern Properties	Railroad right-of-way, Metro station and associated parking lot.
Western Properties	Moorpark Chamber of Commerce (18 E High St.) and associated parking lot.

Descriptions of Structures, Roads, Other Improvements on the Site

During the site reconnaissance, five vacant buildings were observed on the subject property:

- 104 E High St. - One single-story building with associated unpaved parking lot located in the northwest portion of the subject property (formerly Maria's Restaurant).
- 192 E High St. –Three two-story buildings located in the central portion of the subject property (formerly granary mill /storage buildings) consisting of: a truck tunnel containing a floor scale, a storage building containing about 10 grain storage tanks (reportedly empty) and two screw driven fill tanks, and a large sheet metal building on a raised slab foundation.
- 220 E High St. – One single-story building with a partly paved back yard located in the northeast portion of the subject property (formerly One More Time thrift shop).

A chain-link fence was noted around the perimeter of the three granary mill buildings. One More Time thrift store contained a chain-link fence around the perimeter of the back yard. Maria's Restaurant did not have a fence surrounding the perimeter.

The unpaved parking lot on the eastern portion of the subject property includes a driveway accessing an adjacent unpaved parking lot to the east. A public sidewalk runs east-west along E High Street, north of the subject property boundary.

Access to the subject property is available from three driveways on E High Street.

The following utility providers service the subject property:

- Electrical Service – None (previously Southern California Edison)
- Natural Gas – Southern California Gas Company
- Water Service – Ventura County Waterworks District
- Sewer – Ventura County Waterworks District
- Solid Waste – Waste Management

User-Provided Information

As described in ASTM E 1527-13 Section 6, Daly Group Inc. was interviewed for actual knowledge pertaining to the subject property to help identify recognized environmental conditions. Jasch Janowicz of Daly Group Inc., completed the User Questionnaire as provided by ASTM Appendix X3 prior to completion of the site reconnaissance. A copy of the completed questionnaire is included as Appendix A.

Based on our review of the completed questionnaire, the user reviewed the following sources of information and is unaware of information regarding the following:

- Recorded land title records (or judicial records, where appropriate) that identify any environmental liens filed or recorded against the subject property
- Recorded land title records (or judicial records, where appropriate) that identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the subject property under federal, tribal, state or local law
- Title Report that identifies information pertaining to environmental cleanup liens or AULs for the subject property

Based on our review of the completed questionnaire, the user is unaware of information regarding the following:

- Specialized knowledge or experience related to the subject property or nearby properties
- Commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases
- Obvious indicators that point to the presence or likely presence of releases at the subject property
- Pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the subject property
- Pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property
- Notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products

Additionally, the user indicated that the purchase price being paid for the subject property reasonably reflects the fair market value of the property, and he is not aware of a reduction in value for the subject property relative to any known environmental issues.

The following documents regarding the subject property were provided by the City of Moorpark (the current property owner):

- *Phase I Environmental Site Assessment, 192 East High Street, Moorpark, California, A.G.I. Geotechnical, Inc., November 30, 2007.*

This 2007 Phase I ESA was completed for the entire APN of which the subject property is a part. The currently adjacent properties to the west and east of the current subject property were included as part of the site in the 2007 Phase I ESA. The report indicates the following:

> "AGI recommends a Phase II Environments Study be performed on the eastern portion of the site in the vicinity of 220/222 East High Street (presently One More Time Thrift Shop) and the former location of 224/226 East High Street, just east of the thrift shop. Several documents and historical records indicate that enterprises associated with hazardous materials (e.g., solvents, fuels, paints) occupied this portion of the property.
>
> 1. A Zoning clearance on file at the City of Moorpark Department of Building and Safety dated November 20, 1989 listed the proposed use of 224/226 East High Street as "Auto Detailing".
> 2. A Memo dated October 6, 1993 on file at the City of Moorpark Department of Building and Safety outlines the storage of paints, thinner, gas, and unidentified materials at 224/226 East High Street.
> 3. The 1993 GTE Phone Directory listed Tony's Auto and Truck Repair at 226 East High Street. "

According to the report, "These documents show the potential of adverse environmental impact to the subject property at this location (224/226 East High Street) from past storage and use of hazardous materials. The present potential for hazardous materials contamination from other properties appears to be low. At the time of the border zone reconnaissance there was no evidence which would indicate any environmental hazards from possible nearby sources. We reviewed the data provided by the government agencies in the EDR report and found that any "open cases" being studied by the regulatory agencies will not have an adverse impact on the site due to the location of nearby case sites with respect to the subject site. Based on information obtained during this Phase I Environmental Site Assessment, further action toward the determination of the presence of any hazardous materials on the site is warranted based on the data outlined above."

- *Limited Phase II Investigation Report, 192 East High Street, Moorpark, California, AGI Geotechnical Inc., December 21, 2007.*

This 2007 Phase II Investigation was conducted based on the findings of the 2007 Phase I ESA summarized above. According to the report, AGI "performed a limited phase II site investigation on the eastern portion of the site in the vicinity of 220/222 East High Street (presently One More Time Thrift Shop) and the former location of 224/222 East High Street, immediately east of the thrift shop. The fieldwork was performed on November 16, 2007. Five soil borings were advanced with hand-held augering and sampling equipment with soil samples collected at discrete depths from 1 foot below ground surface (bgs) to a maximum depth of approximately 8 feet bgs. No groundwater was encountered during sampling. Laboratory analyses of select soil samples collected from the borings indicated that concentrations of total petroleum hydrocarbons as gasoline (TPH-G) were not detected, total petroleum hydrocarbons as diesel (TPH-D) were not detected and total petroleum hydrocarbons as waste oil (TPH-W.O.) were below laboratory reporting limits to 532 mg/kg. Analysis on select soil samples did not detect Volatile Organic Compounds in all samples analyzed. CAM 17 metals analytical results in select soil samples were reported below 10 X Soluble Threshold Limit

Concentrations (STLC) in all samples analyzed. Based on our field observations and laboratory analytical results as resented in this report, no chemical constituents were encountered above action levels. No additional site investigation seems to be necessary for the Property."

- *Phase I Environmental Site Assessment Report, 192 East High Street, Moorpark, California, EFI Global, January 19, 2017.*

This 2017 Phase I ESA was completed for the entire APN of which the subject property is a part. The currently adjacent properties to the west and east of the current subject property were included as part of the site in the 2017 Phase I ESA. According to the report, the historical use of the site was described as follows: "the southwest portion of the subject property was developed with a two-story train depot building in 1910 associated with the south adjoining Southern Pacific Railroad. The second floor of the depot building was reportedly utilized as a living space for the railroad agents while freight and passenger rail operations took place on the bottom floor. The remaining portions of the subject property consisted of vacant, unused land at this time. This train depot structure remained onsite until 1964 when it was demolished due to disinterest in passenger rail. In 1949, a small cafe structure was constructed to the north of the train depot along East High Street (68 East High Street) and was occupied by the Redwood Cafe and Bar-B-Que Joint. This building was demolished in 2008. Sometime between 1947 and 1954 two grain mills/grain storage structures were constructed on the southern perimeter of the subject property along with four large silos associated with Egg City (a poultry production facility elsewhere in Moorpark). By 1956, these grain storage structures were replaced with the existing storage grain structures (192 East High Street) observed onsite today. The four large silos remained onsite until 2008 when they were removed. In 1954, the existing commercial structure located near the northeast/northcentral portion of the property (220/222 East High Street) was constructed. Historical occupants have included a hardware store, electronics store, rental and sales shop, senior citizens meeting space, sheet metal shop, and thrift store. In 1958, two commercial/light industrial structures were constructed on the east side of the subject property (224/226 East High Street). These structures were originally built as a chicken hatching farm but later became used for retail, various commercial, and medical office purposes. In addition, the 226 East High Street building was utilized by Tony's Auto & Truck Repair in at least 1993. These buildings were demolished sometime between 1998 and 2003. In 1964, the existing restaurant building located near the northwest/ northcentral portion of the property (104 East High Street) was constructed. Former occupants have included Eppie's Frosti, The Donut Shop, La Playita, Maria's, and some retail occupants including a stereo shop and sporting goods shop. A gasoline service station occupied the northwest corner of the subject property from 1966 to 1978. The gas station was occupied by ARCO (Atlantic Richfield Company). By 1978, the gas station was demolished, and the existing chamber of commerce building was constructed in its place (18 East High Street) in 1979. This building was originally utilized as a bank and was occupied by Citizens Savings and Loan and First National Savings through 1986. Sometime after 1986, the building was converted for use by the Moorpark Chamber of Commerce. The last structure to be built on the subject property was the granary building (192 East High Street) which processed feed for Egg City (a poultry production facility located approximately three-quarters of a mile southwest of the subject property). The granary building was constructed to look like a train depot and was labeled "False Depot" to hide the four silos located behind the building."

EFI Global indicated the following: "This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property, with the exception of the following: The former presence of a gasoline service station on the northwest corner of the subject

property (current location of the Moorpark Chamber of Commerce building) from 1966 to 1978 is considered a REC. While the former gas station does constitute a REC, the proposed property line changes place the former gas station outside of the area that the User is planning to acquire. Therefore, the only concern associated with the former gas station in regard to the portion of the subject property the User is planning to acquire is a potential vapor intrusion concern for the proposed commercial building."

- *Pre- Demolition Asbestos & Lead Survey, 104 E High Street, Moorpark, FCG Environmental, February 8, 2017.*

FCG Environmental (FCG) performed a hazardous materials survey at Maria's Restaurant Building, which included asbestos bulk sampling and lead-based paint testing. According to the report none of the painted surfaces or coatings tested were found to contain lead at concentrations above the regulatory level of 1.0 milligrams per square centimeter (mg/cm^2). Based on these findings, no Lead-Based Paint was found at the site.

The following Asbestos Containing Materials (ACM) were identified:

- ACMs that contain greater than 1% asbestos and are regulated under current federal, state and local regulations:
  - Roofing penetration/patching mastic: Black mastic is found at roofing penetrations (pipes, vents, etc.) and in random areas for patching purposes. Roofing mastic is considered a Class I, non-friable material.
- Trace Asbestos Materials: The following materials contain a "trace" or <1% asbestos and may be managed as an Asbestos Containing Construction Material (ACCM) under Cal/OSHA requirements unless more quantitative testing is conducted to determine the actual concentration of asbestos:
  - Acoustic ceiling texture: This material is found in the small dining room located on the west side of the restaurant. This is a friable material.

- *Pre-Demolition Asbestos & Lead Paint Survey, 192 E High Street, Moorpark, FCG Environmental, February 7, 2017.*

FCG performed a hazardous materials survey at Old Granary Building and Grain Elevator Façade Building, which included asbestos bulk sampling and lead-based paint testing. According to the report, none of the interior or exterior painted surfaces showed lead concentrations at or above the 1.0 mg/cm^2 level. Therefore, none of the painted surfaces tested meet the definition of lead-based paint. A white porcelain sink located in the south granary building tested positive for lead in the glazing compound above the regulated level of 1.0 mg/cm^2. Although not covered by the EPA's RRP rule, disturbance or damage to this component may create a lead hazard which is regulated under current OSHA and state regulations.

The following Asbestos Containing Materials (ACM) were identified:

- ACMs that contain greater than 1% total asbestos and are regulated under current federal, state and local regulations:
  - North Façade Building: Black flooring mastic under vinyl floor tile: This mastic is found under off-white vinyl floor tile in the front office of the north facade building.
  - North Façade Building: Roofing layers – (tar on interior roof system): A black tar layer is found on an older roof section found inside the north façade building. This roofing system is covered by the larger structure. This roof was accessible from the

2nd level of the building and has a tar layer with 3% chrysotile asbestos under the composite roofing layer.

- South Granary Building: Roofing penetration mastics: Black mastics found at roofing penetrations on the south granary building.

Records Review

Physical Setting Sources

Topography

The current USGS topographic map (Moorpark Quadrangle, 2012) indicates that the subject property is situated at an elevation of about 520 feet above mean sea level with topography sloping down to the west. The adjacent topography consists of relatively flat terrain which gradually steepens to the north.

Geology and Hydrogeology

The subject property is located within the Transverse Ranges geologic province of California. The Transverse Ranges are characterized by east-west trending faults, folds, and mountain ranges. Mountain ranges in the Transverse Ranges are comprised of rocks that are progressively older from the west to east. Rocks within the Transverse Range include Precambrian metamorphic and igneous rocks that comprise the core of the San Gabriel and Santa Monica Mountains. These rocks are overlain by Miocene aged marine sediments of the Pico, Monterey, Repetto, and other formations. East-west trending folds and faults are predominating in this area. Valleys, faults, and downwarps separate the mountain ranges in this area. Mid to late Pleistocene faulting uplifted the area, resulting in the present-day landforms.

Mountain ranges within this province include the Santa Ynez, Santa Susana, Topatopa, San Gabriel, Sierra Pelona, and San Bernadino Mountains. Sedimentary basins include the Santa Clara River, Big Tujunga Canyon, San Gabriel River, and Los Angeles River. Geologic environments represented in the rocks found in the Transverse Ranges includes periods of non-marine deposits (Saugus, Mint Canyon, Sespe formations), marine deposits (Pico, Repetto, Monterey, San Fransisquito), volcanics (Conejo Volcanic series), and metamorphic or igneous rocks (Lowe Grandiorite, Pelona Schist, Mendenhall Gneiss). Important faults within this province include the San Andreas, San Gabriel, Red Mountain, Cucamonga, Raymond Hill, San Fernando, and Ventura faults. Many historical earthquakes have been documented along these and other faults.

Site Geology

According to the U.S. Geological Survey, (Geologic Map of the Moorpark Quadrangle Ventura County, California, 1992) the subject property is underlain by surficial sediments, which is described as unconsolidated alluvial deposits; generally, undissected silt, sand and gravel of valley and floodplain areas.

Regional Groundwater Occurrence and Quality

According to the California Department of Water Resources Groundwater Bulletin 118 (2003), the subject property is located within the Las Posas Valley groundwater basin.

During the preparation of this Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCB's) online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property:

- First Quarter 2006 Groundwater Monitoring Report, J.E. Clark II Corporation, 450 High Street, Moorpark, California prepared by CapRock Geology and Environmental and dated May 15, 2006- According to this report groundwater is encountered at approximately 50 feet below ground surface and flows to the west to north-west. This site is located about 630 feet to the east of the subject property.

Standard Environmental Record Sources

EDR was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the EDR report, which specifies the ASTM search distance for each public list, is included as Appendix B. As shown on the attached EDR report, federal, state and county lists were reviewed as part of the research effort. Please refer to Appendix B for a complete listing of sites reported by EDR and a description of the databases reviewed.

The Map Findings Summary, included in the EDR report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the EDR report.

Subject Property

The subject property was not listed on any of the regulatory databases reviewed.

Offsite Properties

Offsite properties listed by EDR fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., LUST, National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the EDR Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed UST test only)
- Reported substance released (e.g., chlorinated solvents, gasoline, metals)

- Reported regulatory agency status (e.g., case closed, "no further action")
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.

Table 2 EDR Listing Summary of Select Sites Within One-Quarter Mile of the Subject Site

Site Name	EDR Site ID	Site Address	Distance from Subject Property (feet)	Database Reference
Adjacent Properties				
Clyde S Richfield Service	3	213 High St.	Adjacent Property-North	EDR Hist Auto
A & P ARCO	A4, B7	18 E High St.	Adjacent Property-West	EDR Hist Auto
Upgradient Release Sites				
J.E. Clark II Corp	D14, D15, D16	450 E High St.	Approximately 630 feet to the East	LUST, HIST CORTESE
Nearby Sites				
Unocal #1696	B7	18 W High St.	Approximately 250 feet to the West	LUST, UST

Regulatory agency information reviewed for the listings in the table above are summarized in the Additional Environmental Record Sources section of this report.

Orphan Listings

EDR reported one orphan or unmapped site listing, which EDR is unable to plot due to insufficient address information. Based on Rincon's review of the limited address information or site descriptions for the orphan listing, the listing is not expected to impact the subject property.

Additional Environmental Record Sources

Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, upgradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., SWRCB GeoTracker database, DTSC EnviroStor database) and/or files requested from the applicable regulatory agency, as described below.

Subject Property

The subject property was not listed in any of the databases searched by EDR.

Adjacent Properties

Three adjacent properties were listed in databases searched by EDR.

- **Clyde S Richfield Service – 213 High St**: This former gasoline station property is located adjacent to the north of the subject property. According to the EDR Hist Auto database, in 1961 the site was occupied by Clyde Richfield Service as a gasoline station and in 2014 occupied by Moorpark Auto Glass as a general automobile repair shop. The City directories indicate 213 E High Street was occupied by Swinks Texaco in 1968, Tire Town from 1970 to 1971, Four Suns Bike Shop from 1975 to 1985, and The Gas Station from 1993 to 2002. The site was not listed in the GeoTracker or EnviroStor databases. However, according to documents reviewed on the Ventura County Environmental Health Division (VCEHD) website, five USTs were removed from the site in 2010. Soil samples were collected from beneath the USTs following their removal. The following summarizes the findings: "*Two soil samples were collected from beneath the 10,000-gallon UST (on the northern and southern ends) and one soil sample was collected from beneath the 1,500 gallon UST and each of the 1,000 gallon USTs. No visible soil contamination was observed during the tank removal project. The six soil samples analyzed had no detectable levels of total petroleum hydrocarbons as gasoline (TPH-G), total petroleum hydrocarbons as diesel (TPH-D) or methyl tertiary butyl ether (MTBE). Total petroleum hydrocarbons in the oil range (TPH-O) were reported in one soil sample (Tank C2-bottom) at a level of 240 milligrams per kilogram (mg/kg). No other concentrations of TPH were reported in the soil samples collected from the site. Levels of benzene, toluene, ethylbenzene, and total xylenes (BTEX) slightly above the detection limits were reported in five of the six soil samples collected. Total lead concentrations ranged from non-detectable up to 29 mg/kg.*" The detected concentration of TPH-O was well below the LA RWQCB Soil Screening Level (SSL) of 1,000 mg/kg. None of the soil samples exceeded the California Human Health Screening Levels (CHHSLs) for BTEX or lead. Based on the findings, closure was requested for the site. Based on the documents reviewed, the former USTs at this adjacent former gasoline station site are not expected to have adversely impacted soil or groundwater beneath the subject property.

- **A & P ARCO - 18 E High St:** The A & P ARCO site was formerly located adjacent to the west of the subject property where the existing Moorpark Chamber of Commerce building is located. This site is listed on the EDR Hist Auto database. According to the EDR Hist Auto database, in 1976 the site was occupied by A & P ARCO and in use as a gasoline service station. The site was not listed in the GeoTracker or EnviroStor databases. In addition, records for the site were not identified on the VCEHD website. The former Phase I ESA report, dated January 19, 1017 was provided by the City of Moorpark for the subject property. In the report, a document titled *Soils Exploration* by Testing Laboratory Inc. was referenced with information pertaining to the former gasoline service station (18 E High Street). The document states, "*The underground tanks have been removed and the locations are not within the proposed building area."* However, the document shows no indication of soil sampling for contaminants in the location of the former USTs. Based on the lack of assessment data for the former USTs, there is the potential for contaminated soil gas migration and vapor intrusion of contaminants originating from the former gasoline service station onto the subject property.

Upgradient Release Sites

One property was identified as having the potential to impact the subject property, based on information provided in the EDR database report.

- **J.E Clark/J.E. Clark II Corp - 450 High St**: This property is located approximately 630 feet to the east of the subject property and is listed on the LUST and HIST CORTESE databases. The site was as an operational commercial fuel facility, dispensing both gasoline and diesel from three islands and controlled by a card-lock system. A Case Closure Summary provided by VCEHD dated April 5, 2006 states,

  "Residual diesel impacted soil is present immediately below the former piping runs and dispensers, and the northern and western portion of the former UST excavation. Some of the impacted soil (13.42 tons) was disposed off-site. However, the remaining excavated soil was used to backfill the excavation. Soil borings indicate residual impacted soil is generally limited to shallow soils not exceeding 10 feet deep, with localized exceptions. Groundwater varies from 35 to 50 fbg. Groundwater wells generally showed only occasional hydrocarbon detections and recent sampling show no detectable hydrocarbon compounds. Generally, BTEX and MTBE are not significant compounds of concern at this site. Groundwater is not threatened and no nearby supply wells are threatened based on the absence of detectable hydrocarbons in groundwater since 2003. Residual TPHd in soil is well defined and limited vertically. A health risk based assessment indicated that residual TPHd in soil is not a human health threat for the exposure pathways modeled. The site remains an active card-lock fueling facility. Although elevated TPHd is present in soil because groundwater is not threatened and because there was no calculated excess toxic risk, remediation is not warranted nor recommended."

  According to GeoTracker, the case is listed as, "Completed- Case Closed as of 1/9/2007". Based on the documents reviewed, the case closure status and the distance from the subject property, this upgradient release site is not expected to impact the soil, or groundwater beneath the subject property.

Nearby Release Sites

- **Unocal #1696 - 18 W. High St**: This property is located approximately 230 feet to the west of the subject property and is listed on the LUST and UST databases. According to the VCEHD document titled, "County of Ventura Environmental Health Division Memorandum" dated April 6, 1994,

  "*This site has a 280-gallon waste oil tank removed under permit from VCEHD, witnessed by Robby Robinson. A service station was abandoned here in 1968. Soil samples collected after over-excavation at the time of the removal indicated no detectable contamination remained in the tank pit. The maximum petroleum hydrocarbon level detected in the spoil pile was 46 mg/l TRPH in sample SS2. Only sample SS2 was analyzed for volatiles and it was nondetectable for these constituents. Soil was hauled to a treatment facility under non-hazardous manifest."*

  According to GeoTracker, the case is listed as, "Completed- Case Closed as of 5/2/1994". Based on the documents reviewed, the anticipated groundwater flow direction to the west-northwest (away from the subject property), the case closed status, and the soil only nature of the listing, this nearby release site is not expected to impact the subject property.

Review of State of California Division of Oil and Gas Records

A review of the Department of Conservation, Division of Oil, Gas & Geothermal Resources Online Mapping System indicates that no oil wells are located on the subject property or adjacent properties, or within one-quarter mile of the subject property.

Review of National Pipeline Mapping System Records

In addition, a review of the National Pipeline Mapping System (NPMS) online Public Map Viewer[1] indicates that no gas transmission pipelines or hazardous liquid pipelines are located on the subject property or adjacent properties.

Known or Suspect Contaminated Release Sites with Potential Vapor Migration

The EDR report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E 2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If upgradient known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons and other COCs.

Petroleum Hydrocarbons

Based on our review of the EDR report, one adjacent property (former A & P ARCO-18 East High Street) has the potential to have petroleum hydrocarbon-impacted soil. Based on the proximity of this former gasoline station (adjacent to the west of the subject property), there is a potential for contaminated soil vapor to be migrating beneath the subject property.

Other COCs

Based on our review of the EDR report, not including petroleum hydrocarbon plumes described above, there are no adjacent or upgradient known or suspect contaminated soil or groundwater plumes located within 100 feet of the subject property.

[1] https://www.npms.phmsa.dot.gov/PublicViewer/

Historical Use Information on the Property and the Adjoining Properties

The historical records review completed for this Phase I ESA includes aerial photographs, topographic maps, and city directories detailed in the following sections. Copies of the historical resources reviewed are included in Appendix C. Table 3 provides a summary of the historical use information available for the subject property.

Review of Historical Aerial Photographs

Aerial photographs from EDR's aerial photograph collection were obtained and reviewed. In addition, a current aerial from Google Earth was also reviewed.

Review of Historical Topographic Maps

Historical topographic maps from EDR's map collection were obtained and reviewed.

Review of City Directory Listings

EDR was contracted to provide copies of city directory listings for the subject property.

Review of Fire Insurance Maps

EDR was contracted to provide copies of fire insurance maps for the subject property. As indicated in the attached EDR report, fire insurance maps were not available for the subject property or adjacent properties.

Review of City of Moorpark Building Permit Records

Based on the sufficient amount of information obtained from the above sources, building permit records were not reviewed.

Other Historical Sources

The 2017 Phase I ESA completed by EFI Global for the entire APN of which the subject property is a part indicated the following historical use of the property:

> "*the southwest portion of the subject property was developed with a two-story train depot building in 1910 associated with the south adjoining Southern Pacific Railroad. The second floor of the depot building was reportedly utilized as a living space for the railroad agents while freight and passenger rail operations took place on the bottom floor. The remaining portions of the subject property consisted of vacant, unused land at this time. This train depot structure remained onsite until 1964 when it was demolished due to disinterest in passenger rail. In 1949, a small cafe structure was constructed to the north of the train depot along East High Street (68 East High Street) and was occupied by the Redwood Cafe and Bar-B-Que Joint. This building was demolished in 2008. Sometime between 1947 and 1954 two grain mills/grain storage structures were constructed on the southern perimeter of the subject property along with four large silos associated with Egg City (a poultry production facility elsewhere in Moorpark). By 1956, these grain storage structures were replaced with the existing storage grain structures (192 East High Street) observed onsite today. The four large silos remained onsite until 2008 when they were removed. In 1954, the*

existing commercial structure located near the northeast/northcentral portion of the property (220/222 East High Street) was constructed. Historical occupants have included a hardware store, electronics store, rental and sales shop, senior citizens meeting space, sheet metal shop, and thrift store. In 1958, two commercial/light industrial structures were constructed on the east side of the subject property (224/226 East High Street). These structures were originally built as a chicken hatching farm but later became used for retail, various commercial, and medical office purposes. In addition, the 226 East High Street building was utilized by Tony's Auto & Truck Repair in at least 1993. These buildings were demolished sometime between 1998 and 2003. In 1964, the existing restaurant building located near the northwest/ northcentral portion of the property (104 East High Street) was constructed. Former occupants have included Eppie's Frosti, The Donut Shop, La Playita, Maria's, and some retail occupants including a stereo shop and sporting goods shop . . . The last structure to be built on the subject property was the granary building (192 East High Street) which processed feed for Egg City (a poultry production facility located approximately three-quarters of a mile southwest of the subject property). The granary building was constructed to look like a train depot and was labeled "False Depot" to hide the four silos located behind the building."

Summary of Historical Uses

Subject Property

The historical uses of the subject property are summarized above and below in Table 3 below.

Table 3 Historical Use of the Subject Property

Year	Use	Source
Subject Property		
1903	The subject property appears to be vacant, with one small square, indicating a building.	Topographic Map (TM) – Camulos Quadrangle
1921	Similar to 1903 TM.	TM- Piru Quadrangle
1938	The subject property appears to be vacant, with one building located in the southwest corner of the project site.	Aerial Photograph (AP) - EDR
1941	The subject property appears to be vacant.	TM
1944	Similar to 1941 TM.	TM
1947	Similar to 1938 AP.	AP
1951	The subject property is depicted with a warehouse/barn on the southern boundary and two buildings along the western boundary.	TM- Moorpark Quadrangle
1954	The subject property appears to have three buildings along the southern boundary of the project site.	AP
1959	Similar to 1954 AP with the addition of three buildings located in the eastern portion of the subject property, one of which appears to be 222 E High Street.	AP
1964	Eppies Frosti (104 E High Street).	City Directory (CD)

Year	Use	Source
1968	Similar to 1964 CD.	CD
1969	The southwest building no longer exists and building (104 E High Street) is located in the western portion of the subject property according to the AP. The TM depicts a total of six buildings on the subject property.	TM, AP
1970	Fairview Milling Inc. (192 E High Street).	CD
1971	Eppies Frosti (104 E High Street). Fairview Milling Inc. (192 E High Street).	CD
1974	Similar to 1969 AP.	TM
1975	Ventura County Peace Officers Association (104 E High Street).	CD
1978	Two buildings in the eastern portion of the subject property no longer exist and a new building appears to the west of the two former buildings.	AP
1980	The Donut Shop (104 E High Street). S& K Ranch Inc. Feed Mill (192 E High Street).	CD
1985	Two buildings (192 E High Street) appear north of one of the existing buildings in the center and southern boundary of the subject property. In addition, a new structure is located in the east and the building just west of the new structure no longer exists. Pats CB & Stereo, Chuck & Stellas Sport Shop (104 E High Street).	AP, CD
1986	Pats CB & Stereo, La Playita (104 E High Street). Foster Enterprises (192 E High Street).	CD
1993	Pats CB & Stereo, La Playita, Western Union Credit Card Money Transfers (104 E High Street). Similar to 1986 CD for (192 E High Street).	CD
1994	Similar to 1985 AP.	AP
1996	La Playita (104 E High Street). Paikins Color Port (222 E High Street). Similar to 1986 CD for (192 E High Street).	CD
2005	The eastern structure no longer exists. Marias Family Restaurant, Pats CB & Stereo (104 E High Street).	AP, CD
2009	Similar to 2005 AP.	AP
2012	Similar to 2009 AP. The subject property and surrounding areas of downtown Moorpark are shaded white which indicates development.	TM, AP

Year	Use	Source
2010	Similar to 2005 CD.	CD
2014	Similar to 2010 CD.	CD
2016	Similar to 2012 AP.	AP
2017	Similar to 20016 AP.	AP- Google Earth Pro

Northern Adjacent Properties

Addresses*: 61 E High Street, 71 E High Street, 105 E High Street, 137 E High Street, 139 E High Street, 165 E High Street, 169 E High Street, 197 E High Street, 213 E High Street, 233 E High Street, 255 E High Street*

Based on our review of the documents listed above, it appears that the northern adjacent properties were in use as retail businesses/commercial offices from at least 1941 through to present day.

City directories indicate the following:

- 61 E High Street was occupied by John H. Bohanon Laundromat in 1964, Moorpark Laundry in 1968, Ellis IRA Photographers in 2005 and Moorpark Family Resource Center in 2010.
- 71 E High Street was occupied by Charles Ralph from 1970 to 1975, Moorpark Chiropractic in 1980, 1985 Vince's Barber Shop from 1985 to 1986, Roberto's Barber Shop in 1993 and Jennifer's Hair & Nails from 2002 to 2014.
- 105 E High Street was occupied by Bobs Moorpark Market from 1964 to 1980, and Mayflower Market from 1985 to 2014.
- 137 E High Street was occupied by, Curly Top Beauty Salon in 1964 to 1971, H& P Tax Service Inc. in 1980, Grace Chapel in 1985, JTJ Construction & Equipment in 1986, G & A Video in 1993 and Lucass Tom Stateone insurance from 2005 to 2014.
- 139 E High Street was occupied by Dempsey Realty from 1964 to 1975, United Farm Agency in 1980 and Hartmans Radio & TV in 1986.
- 165 E High Street was occupied by business offices from 1985 to 1993.
- 169 E High Street was occupied by Ventura County Library Services Agency from 1968 to 1980 and Moorpark Printers from 1985 to 2014.
- 197 E High Street was occupied by Moorpark Committee for JR Colleges from 1970 to 1971 and Cactus Patch Restaurant from 1975 to 2014.
- 213 E High Street was occupied by Swinks Texaco in 1968, Tire Town from 1970 to 1971, Four Suns Bike Shop from 1975 to 1985, and The Gas Station from 1993 to 2002.
- 233 E High Street was occupied by businesses from 1985 to 2002.
- 255 E High Street was occupied by Castros Market from 1964 to 1971, Indice Sportswear in 1975, Little Boutique and Moorpark Video Shop from 1985 to 1986 and Continental Garden Inc. from 2005 to 2014.

Eastern Adjacent Property

Based on our review of the documents listed above, it appears that the eastern adjacent properties were vacant from 1903 to 2012 and in 2016 was in use as a parking lot. City directories were not provided by EDR for the eastern adjacent property.

Southern Adjacent Property

Based on our review of the documents listed above, it appears that the southern adjacent properties were in use as a railroad right-of-way from at least 1903 through to present day. City directories were not provided by EDR for the southern adjacent property.

Western Adjacent Property (18 E High Street)

Based on our review of the documents listed above, it appears that the western adjacent property was in use as a warehouse/barn from 1903 through 1959, a commercial business in 1969, vacant in 1978, and a commercial business from 1985 to 2016.

City directories indicate the following:

- 18 E High Street was occupied by Tytler Jas in 1975, Citizens Savings & Loan Association in 1980 and First Nationwide Savings & Loan Association in 1985 through 1986.

Gaps in Historical Sources

Several gaps of greater than five years were identified in the historical records reviewed, from 1903 to 1921, from 1921 to 1938, from 1986 to 1993, and from 1996 to 2005. These gaps are considered insignificant because the subject property use appears to be similar prior to and following the gaps.

Interviews

Rincon Consultants performed interviews regarding the subject property and surrounding areas. The purpose of the interviews was to discuss current and historical conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property.

Interview with Owner

An interview questionnaire was provided to the property owner, the City of Moorpark prior to the site reconnaissance. A copy of the questionnaire completed by Jessica Sandifer, Community Services Manager with the City of Moorpark is included in Appendix A. The following information is based on our review of the completed questionnaire and our telephone interview with the property owner.

The property owner indicated the following:

- The City of Moorpark obtained ownership of the subject property in 1989 when the Redevelopment Agency purchased the property and was transferred to the City of Moorpark.
- The former owner of the subject property was Ventura County Transportation Commission.

Jessica Sandifer also presented the following information regarding hazardous materials at the subject property.

- Previous grain silos may have used hydraulic equipment for grain operations.
- Potential for pesticide or herbicide use due to agricultural operations.

Jessica Sandifer indicated she is unaware of the presence of industrial drums, below-ground storage tanks, fill dirt, pits, ponds, lagoons, sumps, clarifiers, solvent degreasers, stained soil, vent pipes, fill pipes, or access ways, stained surfaces, transformers, capacitors, or hydraulic equipment, and records indicating the presence of PCBs.

Jessica Sandifer indicated that she is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property. In addition, she is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

Interviews with Occupants

Because the onsite buildings are currently vacant, no occupants were interviewed as part of this research effort.

Interviews with Local Government Officials

Currently the City of Moorpark owns the subject property. An interview questionnaire completed by The City of Moorpark is summarized above in the Interview with Owner section of this report.

In addition, during the site reconnaissance, Jessica Sandifer, Community Services Manager with the City of Moorpark was interviewed. The following information is based on information obtained during the site reconnaissance on June 5, 2018.

- The northernmost granary building contains a truck scale that once contained overhead piping that filled the trucks with grain. (192 E High St.)
- The former building that existed in the dirt parking lot in the east was owned by Jemco Plumbing Inc. (226 E High St.).

Jessica Sandifer, on behalf of the City of Moorpark provided the following previous Environmental Site Assessment documents for the subject property:

- *Phase I Environmental Site Assessment, A.G.I. Geotechnical, Inc., November 30, 2007.*
- *Limited Phase II Investigation Report, AGI Geotechnical Inc., December 21, 2007.*
- *Phase I Environmental Site Assessment Report, EFI Global, January 19, 2017.*
- *Pre- Demolition Asbestos & Lead Survey, City of Moorpark, February 8, 2017.*
- *Pre-Demolition Asbestos & Lead Paint Survey, City of Moorpark, February 7, 2017.*

These documents are summarized in the User Provided Information section above. Jessica Sandifer also provided the granary building plans depicting the existing building and the former and existing grain silos/ storage tanks. A copy of the plans is included in Appendix A.

Jessica Sandifer was not aware of any hazardous materials releases or other environmental liabilities associated with the property or surrounding properties.

Interviews with Others

Rincon did not attempt to interview neighboring property owners or others as part of this Phase I ESA.

Site Reconnaissance

Rincon Consultants performed a reconnaissance of the subject property on June 6, 2018. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

Methodology and Limiting Conditions

The site reconnaissance was conducted by:

1. Observing the subject property from public thoroughfares,
2. Observing the adjacent properties from public thoroughfares,
3. Observing the exterior of the onsite structures,
4. Observing the interior of the structures,
5. Backtracking to correlate exterior features with interior features, as necessary and possible, and
6. Observing the subject property from driveways, sidewalks, and unpaved areas.

Current Use of the Property and Adjacent Properties

The subject property consists of five vacant buildings which include a former restaurant, a former thrift store and several structures associated with the former onsite grain storage/milling facility. Adjacent businesses/properties include various commercial and retail properties to the north, the City of Moorpark Chamber of Commerce (18 E High St.) to the west, a dirt lot used for parking to the east and the railroad right-of-way to the south.

Past Use of the Property and Adjacent Properties

Based on our site reconnaissance, the most western building (104 E High St.) on the subject property was previously Maria's Restaurant. A two-story tall narrow yellow building (192 E High St.) with a sign that reads, "Moorpark 192 High St. Elev. 500 Ft." was formerly a grain mill depot with a floor scale for trucks to drive through the building, fill up with grain, and haul away the grain. The two southern most buildings (192 E High St.) on the subject property formerly contained storage for grain. Holding tanks and screw driven fill tanks were noted in the western most southern building during the site reconnaissance. The eastern most building (220 E High St.) on the subject property was previously "One More Time" thrift store.

Current or Past Uses in the Surrounding Areas

The subject property is surrounded by commercial, retail, and transportation land uses as detailed in the Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance. However, an adjacent property to the north (213 E High St.) appears to have the architecture of an old gasoline station.

Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

Geologic, hydrogeologic, hydrologic, and topographic information are as previously stated in the Physical Settings Section of this report.

General Description of Structures

Onsite structures are as described previously in the Site Description section of this report.

Interior and Exterior Observations

Hazardous Substances and Petroleum Products in Connection with Identified Uses

No petroleum products were identified at the subject property.

Small quantities of various hazardous substances were observed during the site reconnaissance as follows:

- The storage area at the former Maria's Restaurant contains small quantities of oil based protective enamel, contact cement, polyurethane, and paint & primer.

Rincon did not observe indications of releases from these containers.

Storage Tanks

During the site reconnaissance, we observed above-ground storage tanks formerly containing grain and located in the former grain storage buildings on the subject property.

During the site reconnaissance, no below-ground storage tanks or evidence of underground storage tanks (USTs) were observed on the subject property. In addition, the City of Moorpark representatives indicated they are unaware of any USTs on the subject property.

Odors

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors.

Drums

During the site reconnaissance, we observed one unmarked 55-gallon drum with unknown contents located adjacent to the former "One More Time" thrift shop (220 E High St.) on the subject property. No other drums were reported by the site representative or observed during the site reconnaissance. Rincon did not observe indications of releases from the drum on the subject property.

Hazardous Substances and Petroleum Products Containers Not in Connection with Identified Uses

Hazardous substances or petroleum products not in connection with identified uses were not observed at the subject property.

Unidentified Substance Containers

No unidentified substance containers or unidentified containers that might contain hazardous substances were observed during the site reconnaissance.

Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, Rincon observed a transformer box located adjacent to the north along the sidewalk of E High St. There was no indication of a release in the vicinity of the transformer.

Other Conditions of Concern

During the site reconnaissance Rincon did not note any of the following:

- Clarifiers and sumps
- Degreasers/parts washers
- Pits, ponds, and lagoons
- Stressed vegetation
- Stained soil
- Waste water
- Wells
- Septic systems/effluent disposal system

Heating/Cooling. During the site reconnaissance, air conditioning units were noted on the roof of "One More Time" thrift store and Maria's Restaurant. In addition, an air conditioning/ heating unit was located within a locked storage area along the east wall of Maria's Restaurant. All units appear to be electric.

Corrosion. During the site reconnaissance, corrosion to the buildings were apparent due to the age of the structures.

Stained Pavement. During the site reconnaissance, a 3-foot area of stained pavement was noted inside the former grain storage building along the base of a wooden office structure.

Solid Waste Debris. Solid waste was observed within the granary/milling buildings and adjacent to the One More Time thrift store.

Evaluation

Findings

Known or suspect recognized environmental conditions associated with the subject property include the following:

- Existing railroad tracks adjacent to the south of the subject property.
- The presence of a former gasoline service station located adjacent to the north of the subject property.
- The presence of a former gasoline service station located adjacent to the west of the subject property.

Opinions

A. **Existing railroad tracks adjacent to south of the subject property.** A railroad right-of-way has been present adjacent to the south of the subject property since at least 1903. Railroad ties were historically treated with creosote, and the track beds were historically treated with herbicides for weed management. Therefore, hydrocarbons, metals, herbicides, and semi volatile organic compounds (creosote, naphthalene) from the railroad activities are potentially present in the soils surrounding the railroad tracks. The presence of the adjacent railroad is a potential REC.

B. **The presence of a former gasoline service station located adjacent to the north of the subject property**. Based on the regulatory agency documents reviewed as part of this Phase I ESA, this property located adjacent to the north was occupied by Clyde Richfield Service in 1961 and in use as a gasoline station. The City directories indicate, 213 E High Street was occupied by Swinks Texaco in 1968, Tire Town from 1970 to 1971, Four Suns Bike Shop from 1975 to 1985, and a Gasoline Station from 1993 to 2002. According to documents reviewed on the VCEHD website, five USTs were removed from the site in 2010. Soil samples were collected from beneath the USTs following their removal. TPH-g and TPHd were not detected. The detected concentration of TPH-O was well below the LA RWQCB SSL. None of the soil samples exceeded the CHHSLs for BTEX or lead. Based on the findings, closure was requested for the site. Based on the documents reviewed, the former USTs at this adjacent former gasoline station site are not expected to have adversely impacted soil or groundwater beneath the subject property. The presence of the former gasoline station to the north of the subject property is considered *de minimis* with respect to the subject property.

C. **The presence of a former gasoline service station located adjacent to the west of the subject property.** The A & P ARCO site was formerly located adjacent to the west of the subject property where the existing Moorpark Chamber of Commerce building is located. According to the EDR Hist Auto database, in 1976 the site was occupied by A & P ARCO and in use as a gasoline service station. The site was not listed in the GeoTracker or EnviroStor databases. In addition, records for the site were not identified on the VCEHD website. In the 2017 Phase I ESA report, a document titled Soils Exploration by Testing Laboratory Inc. was referenced with information pertaining to the former gasoline service station (18 E High Street). The document states, "*The underground tanks have been removed and the locations are not within the proposed building area*." However, the document shows no indication of soil sampling for

contaminants in the location of the former USTs. Based on the documents reviewed and the lack of assessment data for the former USTs, there is the potential for contaminated soil gas migration and vapor intrusion of contaminants originating from the former gasoline service station onto the subject property. The presence of the adjacent former gasoline station is a potential REC.

Conclusions

Rincon has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E 1527-13 for the High Street Station Mixed Use Development in Moorpark, California. Any exceptions to, or deletions from, this practice are described in the Deviations section of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property. However, the following potential RECs associated with adjacent properties have been identified:

Potential Recognized Environmental Condition

1. Existing railroad tracks adjacent to south of the subject property.
2. The presence of a former gasoline service station located adjacent to the west of the subject property.

Recommendations

To evaluate the adjacent railroad tracks, we recommend a shallow soil sampling assessment on the southern portion of the subject property adjacent to the railroad tracks to determine if hydrocarbons, metals, herbicides, and semi volatile organic compounds from the railroad activities are present in the shallow soil near the railroad tracks. In addition, based on the historical agricultural use of the area, we also recommend that soil samples be analyzed for pesticides, as these chemicals may have been transported via railcars/railroad tracks.

To evaluate the former adjacent gasoline station to the west, we recommend that a soil vapor assessment be conducted on the subject property adjacent to the former gasoline station, to determine if there is VOC-impacted soil vapor migrating beneath the subject property from the adjacent property.

In addition, although not considered a REC pursuant to the ASTM E1527-13 standard, asbestos containing materials have been identified in onsite structures and would require abatement or special handling as part of proposed demolition activities.

Deviations

Deviations from ASTM E 1527-13 practice were not encountered during the completion of this Phase I ESA.

References

The following published reference materials were used in preparation of this Phase I ESA:

City Directory Listings
Listings provided by Environmental Data Resources (EDR).

Environmental Database
EDR report dated May 22, 2018.

Geology
USGS, "Geologic Map of the Moorpark Quadrangle, Ventura County, California" by Thomas W. Dibblee, Jr. 1992.

Groundwater
RWQCB online database GeoTracker: http://geotracker.waterboards.ca.gov/. Accessed May 23, 2018.

Historical Aerial Photographs
Photos provided by EDR and Google Earth.

Historical Topographic Maps
Maps provided by EDR.

Oil and Gas Records
State of California, Division of Oil, Gas and Geothermal Resources website: http://www.consrv.ca.gov/DOG/index.htm. Accessed May 23, 2018.

Pipelines
National Pipeline Mapping System (NMPS) Public Map Viewer, https://www.npms.phmsa.dot.gov/PublicViewer/. Accessed May 23, 2018.

Topography
USGS topographic map (Moorpark Quadrangle, 2012).

Other
Department of Toxic Substances Control online EnviroStor database: http://www.envirostor.dtsc.ca.gov/public/. Accessed May 23, 2018.

Signatures of Environmental Professionals

The qualified environmental professionals that are responsible for preparing the report include Walt Hamann, Sarah Larese and Michelle Carter. Their qualifications are summarized in the following section.

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Signature	June 12, 2018 Date
Walt Hamann, PG, CEG, CHG Name	Vice President Title
Signature	June 12, 2018 Date
Sarah A. Larese Name	Senior Environmental Scientist Title

Qualifications of Environmental Consultants

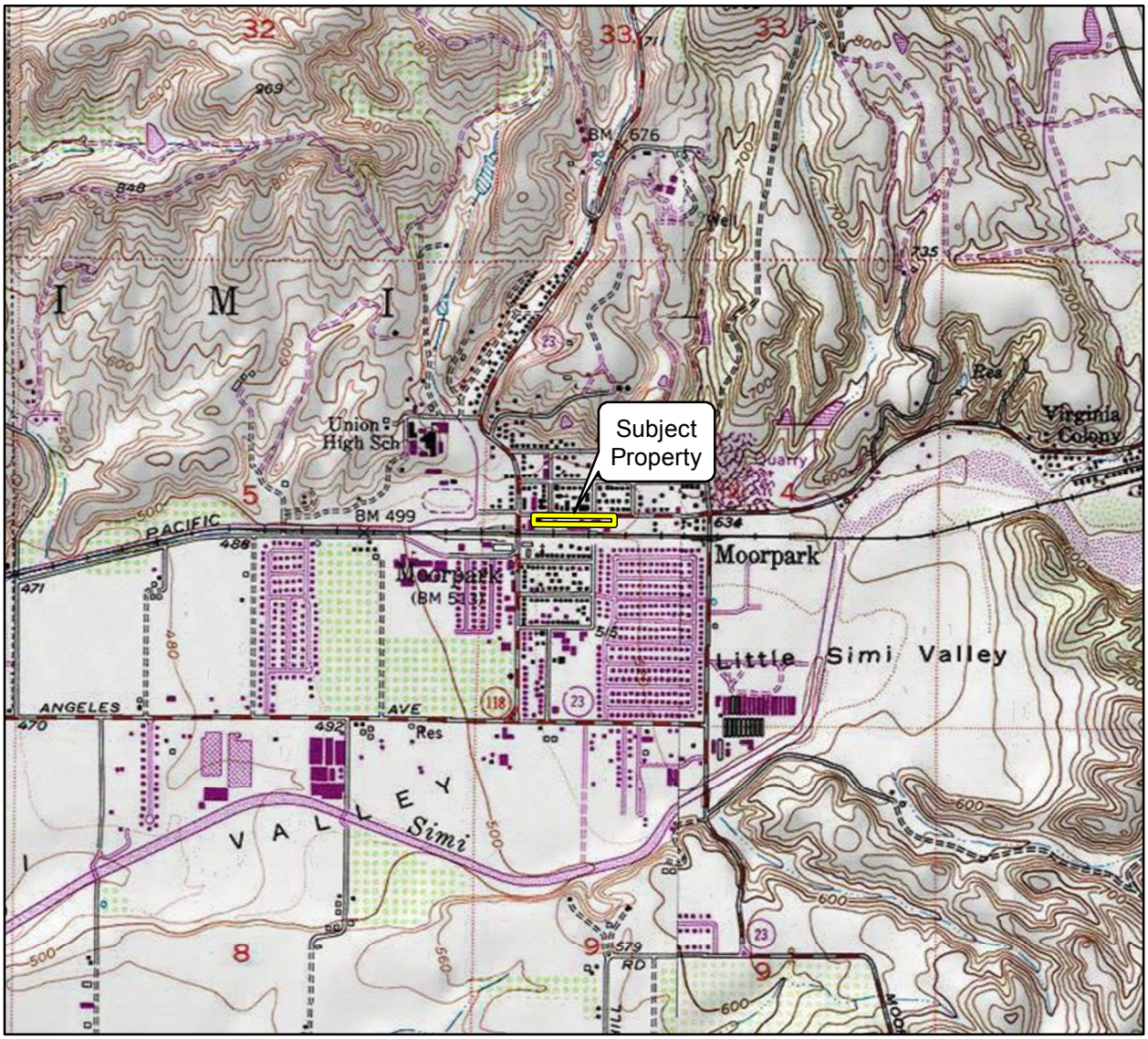
The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Walt Hamann, Sarah Larese and Michelle Carter. Their qualifications are summarized below.

Environmental Consultant Qualifications	X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience	X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries	X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience	X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience
Walt Hamann	PG, CHG, CEG		MS Geology	30 years
Sarah Larese			BA Environmental Studies	16 years
Michelle Carter			BS Earth Science	1 year

Walt Hamann, PG, CEG, CHG, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Arts degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 30 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), and Certified Hydrogeologist (#208) with the State of California.

Sarah A. Larese is a Senior Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in environmental studies from the University of California, Santa Barbara, California. Ms. Larese has experience in development, implementation and project management of environmental assessment and remediation projects, especially relating to underground storage tanks. Ms. Larese's responsibilities at Rincon include implementation of Phase I and II Environmental Site Assessments as well as conducting site remediation field activities and preparation of environmental reports. She has 16 years of experience conducting research, assessment and remediation projects.

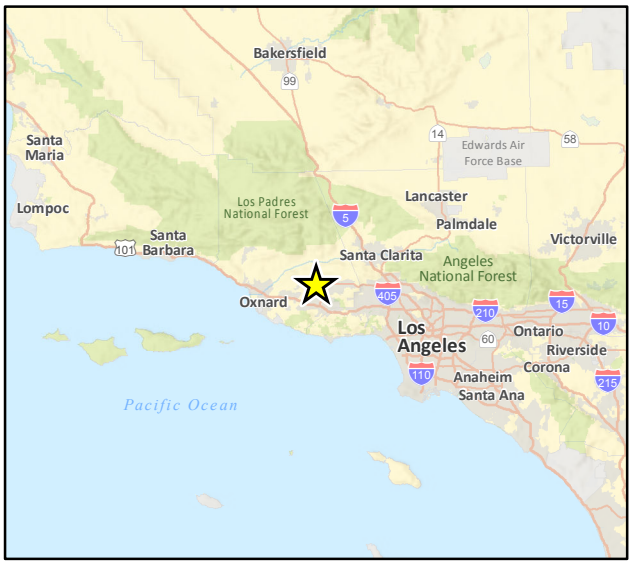
Michelle Carter is an Associate Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in Earth Science with an emphasis in Geology from the University of California, Santa Barbara. Ms. Carter's responsibilities at Rincon include implementation of Phase I Environmental Site Assessment reports for a variety of commercial, rural, and industrial properties. She also has experience conducting Phase II ESA projects including groundwater monitoring and sampling, soil vapor extraction installation/monitoring and storm water pollution prevention planning.



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Vicinity Map

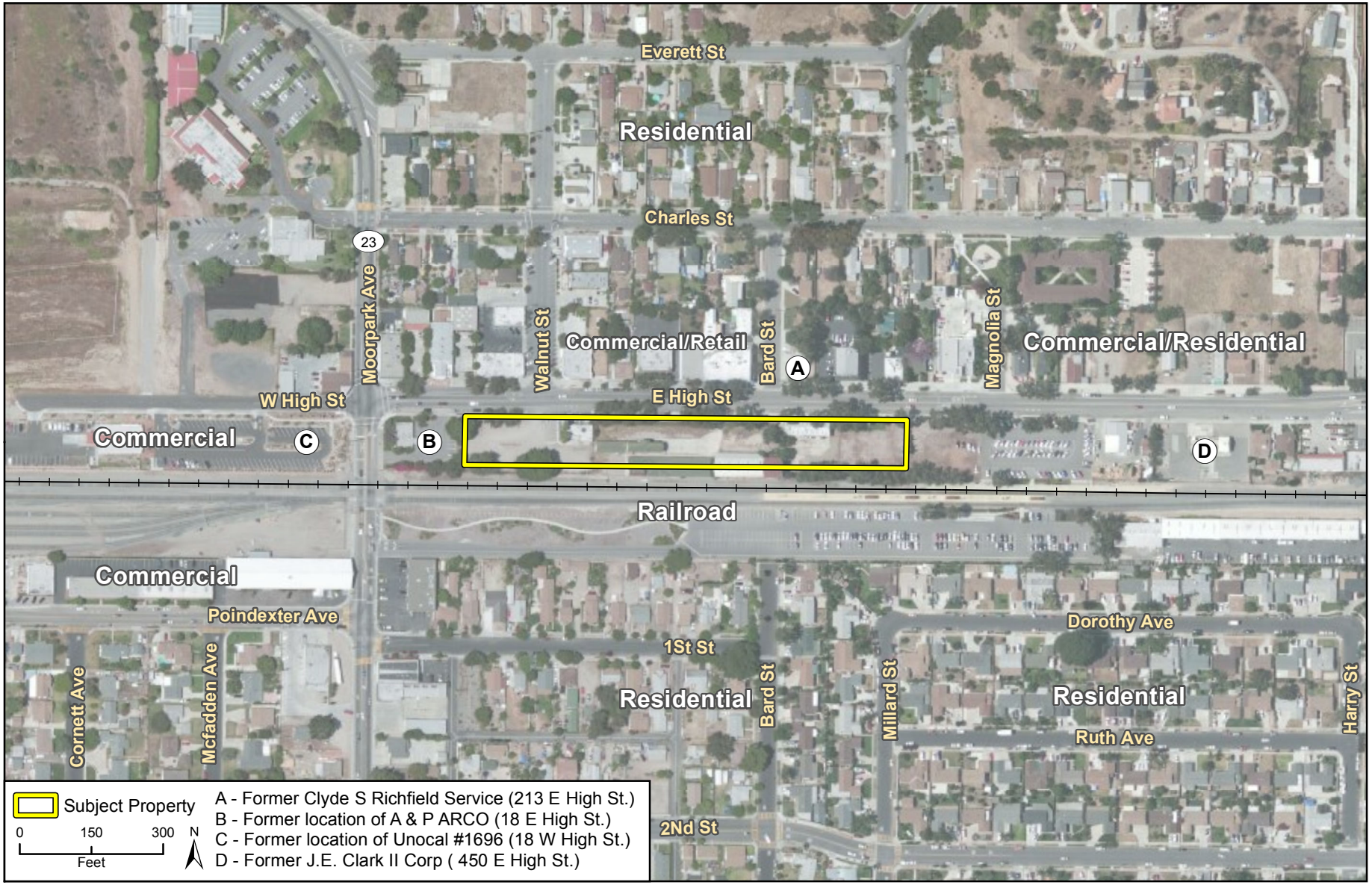
Figure 1



Imagery provided by Esri and its licensors © 2018.

Site Map

Figure 2



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Adjacent Land Use Map

Figure 3



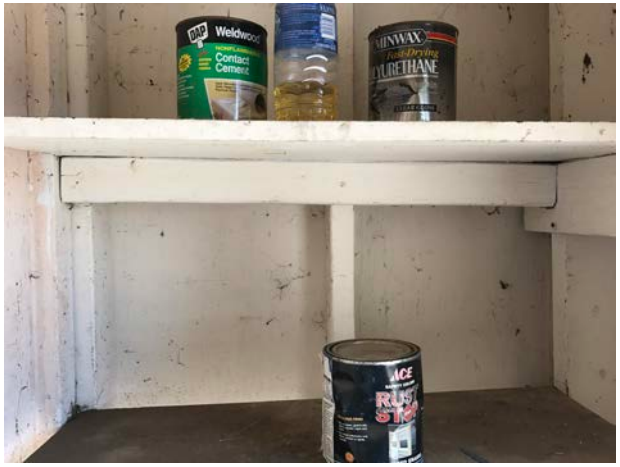
Photograph 1. View of west unpaved parking lot located on the subject property, facing east. Former location of building (68 E High St.)



Photograph 2. View of vacant Maria's Family Restaurant (104 E High St.) located in the north-west portion of the subject property, facing south.



Photograph 3. View of storage closet along the eastern wall of Maria's Family Restaurant containing buckets of paint and an air/heating unit.



Photograph 4. View of Rust Stop, polyurethane, and contact cement located in a storage cabinet along the south wall of Maria's Family Restaurant.



Photograph 5. View of the back of Maria's Family Restaurant with air/heating units located on the roof.



Photograph 6. View of two-story grain mill truck tunnel (192 E High St.) located on the central portion of the subject property, facing east.



Photograph 7. View of truck scale located in the interior of the two-story grain mill truck tunnel.



Photograph 8. View of grain mill storage building (192 E High St.) located southeast of the truck tunnel, facing southeast.



Photograph 9. View of hole in the ground in foundation of the former silos, located west of the grain storage building.



Photograph 10. View of screw driven grain fill tanks and grain storage tanks located in the interior of the Grain storage tank building (192 E High St.)



Photograph 11. View of staining on a cement floor along the edge of a wooden office structure located inside the Grain Storage building (192 H High St.)



Photograph 12. View of grain storage sheet metal building (192 E High St.) facing southeast.



Photograph 13. View of the interior of the grain storage sheet metal building with a wooden office structure, facing west.



Photograph 14. View of One More Time thrift shop (220 E High St.) the eastern most building on the subject property, facing south.



Photograph 15. View of the exterior back wall of One More Time thrift shop with air/heating units located along the roof and a paved yard.



Photograph 16. View of an unmarked 55-gallon drum located in the southwestern corner of One More Time thrift shop on the subject property.



Photograph 17. View of interior of One More Time thrift shop.



Photograph 18. View of east unpaved parking lot located on the subject property, facing west. Former location of buildings (222, 224, 226 E High St.)



Photograph 19. View of adjacent Railroad tracks, located to the south of the subject property.



Photograph 20. View of adjacent unpaved parking lot, located to the east of the subject property.



Photograph 21. View of adjacent sidewalk along E High St. located north of the subject property.



Photograph 22. View of adjacent former Clyde S Richfield gasoline service station (213 E High St.) located northeast of the subject property.



Photograph 23. View of adjacent commercial/retail buildings located to the north of the subject property.



Photograph 24. View of adjacent former A & P ARCO gas station location (18 E High St.) located to the west of the subject property.

Appendix A

Interview Documentation

Rincon Project 18-05844

Site Name and Full Address: Moorpark Railroad Depot, High Street, Moorpark, California

To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

We respectfully request that you fill out this form and e-mail it to Sarah Larese ***at*** slarese@rinconconsultants.com ***within one week from the date of this transmittal.***

1. Why is the Phase I ESA required or being performed?	Proposed on-site mixed-use development
2. What type of property transaction is planned? (i.e. sale, purchase, exchange)	purchase and sale
3. What is the entire site address?	No formal address
4. What is the Assessor's Parcel Number(s)?	512-0-090-115
5. Are any considerations beyond the requirements of Practice E1527 to be considered? (i.e. lien search, asbestos & lead based paint, radon)	No.
6. Identify all parties who will rely on the Phase I report.	Daly Group, Inc. and City of Moorpark
7. Identify the Site Manager/Contact and how the contact can be reached.	Jasch Janowicz -Daly Group jjanowicz@dalygroupinc.com Jessica Sandifer - City of Moorpark JSandifer@MoorparkCA.gov

Rincon Project 18-05844

Site Name and Full Address: Moorpark Railroad Depot, High Street, Moorpark, California

8. Identify the Site Owner and how the owner can be reached.	City of Moorpark - Jessica Sandifer JSandifer@MoorparkCA.gov
9. Do you have copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning any other knowledge or experience with the property that may be pertinent to the environmental professional (i.e. title report, previous Ph I and II ESAs, Environmental Impact Studies)?	Yes.. To be provided by City of Moorpark

1. **Did a search of *recorded land title records* (or judicial records, where appropriate) identify any environmental liens filed or recorded against the *property?***

Please checkmark the most appropriate response:

☐ I *have not* reviewed the records and ***do not know*** if there are any filed or recorded environmental liens.

☑ I *have* reviewed the records, and ***No, there aren't any*** filed or recorded environmental liens.

☐ I *have* reviewed the records, and ***Yes, there are*** environmental liens. Explain:

_____

2. **Did a search of recorded land title records (or judicial records, where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?**

Please checkmark the most appropriate response:

☐ I *have not* reviewed the records and ***do not know*** if there are any filed/recorded AULs or any AULs in place at the site.

☑ I *have* reviewed the records, and ***No, there aren't any*** filed/recorded AULs or any AULs in place at the site.

☐ I *have* reviewed the records, and ***Yes, there are*** AULs filed, recorded, and/or in place at the site. Explain:

_____

Rincon Project 18-05844

Site Name and Full Address: Moorpark Railroad Depot, High Street, Moorpark, California

3. **Does the Title Report provide any information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property?**

Please checkmark the most appropriate response:

☐ I *have not* reviewed the Title Report and ***do not know*** if it provides environmental cleanup liens or AULs information.

☑ I *have* reviewed the Title Report, and ***No, it does not*** provide environmental cleanup liens or AULs information.

☐ I *have* reviewed the Title Report, and ***Yes, it does provide*** environmental cleanup liens or AULs information. Explain:

---

4. **Do you have any specialized knowledge or experience related to the *property* 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?**

Please checkmark the most appropriate response:

☑ ***No***, I *do not* have any specialized knowledge and/or experience related to the property or nearby properties.

☐ ***Yes***, I *do* have specialized knowledge and/or experience related to the property or nearby properties. Explain:

---

5. **As the user of this ESA, based on your knowledge and experience related to the property, are you aware of any information pertaining to a reduction in value for the subject property relative to any known environmental issues?**

Please checkmark the most appropriate response:

☑ ***No***, I *do not* have any information about a reduction in property value relative to environmental issues.

☐ ***Yes***, I *do* have information about a reduction in property value relative to environmental issues. Explain:

---

6. **Does the purchase price being paid for this property reasonably reflect the fair market value of the property?**

Please checkmark the most appropriate response:

☑ ***Yes***, I *do* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Skip to question #7.

Rincon Project 18-05844

Site Name and Full Address: Moorpark Railroad Depot, High Street, Moorpark, California

☐ ***No***, I *do not* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Proceed to question #6a.

a. **If you conclude 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? (40 CFR 312.29)**

Please checkmark the most appropriate response:

☐ ***No***, I *have not* considered the idea that known or believed contamination at the site has caused the lower purchase price.

☐ ***Yes***, I *have* considered the idea that known or believed contamination at the site has caused the lower purchase price. Explain.

---

7. **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,**

a. Do you know the past uses of the property?

☐ I *do not* know.

☑ I *do* know. Explain:

Previously prepared lead and asbestos surveys and previous Phase 1

b. Do you know of specific chemicals are present or once were present at the property?

☑ I *do not* know.

☐ I *do* know. Explain:

---

c. Do you know of any spills or other chemical releases that have taken place at the property?

☑ I *do not* know.

☐ I *do* know. Explain:

---

d. Do you know of any environmental cleanups have taken place at the property?

☑ I *do not* know.

☐ I *do* know. Explain:

Rincon Project 18-05844

Site Name and Full Address: Moorpark Railroad Depot, High Street, Moorpark, California

8. **Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?**

Please checkmark the most appropriate response:

☑ ***No***, I *do not know and/or do not have any experience with any obvious indicators that point to the presence or likely presence of contamination at the property.*

☐ ***Yes***, I *do know of and/or do have experience with obvious indicators that point to the presence or likely presence of contamination at the property*. Explain:

---

9. **Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site?**

☑ ***No***, I *am not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site.*

☐ ***Yes***, I *am aware of pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site*. Explain:

---

10. **Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site?**

☑ ***No***, I *am not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.*

☐ ***Yes***, I *am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.* Explain:

---

11. **Are you aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?**

☑ ***No***, I *am not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.*

☐ ***Yes***, I *am aware of a notice, or notices, from a government entity (or multiple government entities) regarding a possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.* Explain:

User Questionnaire

Rincon Project 18-05844

Site Name and Full Address: Moorpark Railroad Depot, High Street, Moorpark, California

This questionnaire was completed by (please print):

Name	Jasch Janowicz
Title	Entitlement and Acquisitions Manager
Firm	Daly Group, Inc.
Street Address	31255 Cedar Valley Drive Suite 323
City, State, Zip Code	Westlake Village, CA 91362
Phone Number	805-309-6100
Fax Number	N/A
What is the preparer's relationship to the property (i.e., seller, buyer, occupant, property manager, employee, agent, consultant)?	buyer

The preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct, and to the best of the preparer's knowledge, no material facts have been suppressed or misstated.

Signature Jasch Janowicz Digitally signed by Jasch Janowicz Date: 2018.05.31 10:08:48 -07'00' **Date** May 31, 2018

Please email this form to Sarah Larese *at* slarese@rinconconsultants.com
This form may also be mailed or faxed to the following address:

Rincon Consultants, Inc.
Attention: Sarah Larese
180 N. Ashwood Avenue
Ventura, California 93003
Fax: (805) 644-4455

Property Owner Interview Questionnaire

Rincon Project 18-05844: Moorpark Railroad Depot, High Street, Moorpark, California
Site APN and Address:

This questionnaire should be completed by the current property owner or a designated representative of the current property owner. We respectfully request that you fill out and return this form (via fax 805-644-4455 or email _____) to us within one week from the date of this transmittal.

1)	**Was the subject property or any adjoining property ever used as:** ☑ a gasoline or other fueling station ☐ a motor vehicle repair facility ☐ a commercial printing facility ☐ a dry cleaners ☐ a photo developing laboratory ☐ a metal plating facility ☐ a farm ☑ a junkyard or landfill ☐ a waste treatment, storage, disposal, processing or recycling facility ☐ a machine shop ☐ a manufacturing facility ☐ an oil production facility (including oil wells) ☐ any other industrial use (*please check all that apply and describe*) Rincon Consultants

2)	**Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.**	
2a	**Current Use of Subject Property** (*please check all that apply*) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☑ Other- Please Describe	(*please include a brief description of current operation*) There is a storage use.
2b	**Current Use of Northern Adjoining Properties** (*please check all that apply*) ☑ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other- Please Describe	(*please include a brief description of current operation*) various commercial retail uses
2c	**Current Use of Southern Adjoining Properties** (*please check all that apply*) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☑ Other- Please Describe	(*please include a brief description of current operation*) railroad tracks and associated parking lot
2d	**Current Use of Western Adjoining Properties** (*please check all that apply*) ☑ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other- Please Describe	(*please include a brief description of current operation*) chamber of commerce office space

2e	**Current Use of Eastern Adjoining Properties** (*please check all that apply*) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☑ Other- Please Describe	(*please include a brief description of current operation*) railroad operations parking lot

3)	**Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known.**	
3a	**Previous Use of Subject Property** (*please check all that apply*) ☑ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☑ Industrial (manufacturing, warehousing, processing) ☐ Other- Please Describe	(*please include a brief description of previous operations, former property owners, and dates of operation*) chicken feed operation/storage until about 1992, Restaurant use until 2016
3b	**Previous Use of Northern Adjoining Properties** (*please check all that apply*) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☑ Other- Please Describe	(*please include a brief description of previous operations*) same, railroad use
3c	**Previous Use of Southern Adjoining Properties** (*please check all that apply*) ☑ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other- Please Describe	(*please include a brief description of previous operations*) same, various commercial retail uses
3d	**Previous Use of Western Adjoining Properties** (*please check all that apply*) ☑ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other- Please Describe	(*please include a brief description of previous operations*) prior to chamber of commerce use, it was the city's building and safety office, and a bank prior to that
3e	**Previous Use of Eastern Adjoining Properties** (*please check all that apply*) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☑ Other- Please Describe	(*please include a brief description of previous operations*) same, parking lot for rail operations

4)	**Who is the current owner of the property?**	City of Moorpark

5)	**When did current ownership begin?**	1989 (when Redevelopment Agency purchased it. Later transferred to the City.)

Rincon Project 18-05844: Moorpark Railroad Depot, High Street, Moorpark, California
Site APN and Address:

6)	**What is the age of the on-site facility?**	unknown

7)	**Who is the previous owner of the property?**	ventura county transportation commission

8)	**Please indicate the property's current**
	electrical service provider - none, no power on site. Previously SCE
	water service provider - Ventura County Waterworks District
	natural gas service provider - Southern California Gas
	sewer service provider - Ventura County Waterworks District
	solid waste hauler - Waste Management

9)	**To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate?** (*if Yes or Unknown, include how many, type, and size*)	
	☐ Damaged or discarded automotive or industrial batteries	No
	☐ Paints	No
	☐ Oils or solvents	No
	☐ Motor vehicle fuel	No
	☐ Pesticides or herbicides	unknown
	☐ Other chemicals or hazardous substances	unknown

10)	**Please indicate any wastes generated at the facility.**		
	Hazardous waste:	**Quantity:**	**Disposal Method:**
	none		

Rincon Project Site APN and Address: 18-05844: Moorpark Railroad Depot, High Street, Moorpark, California

11)	**Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility?**	
	☐ Yes ☐ No ☑ Unknown	*If Yes or Unknown, please describe* Don't know what has been done previous to City ownership, but none since.

12)	**Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin?**	
	☐ Yes ☐ No ☑ Unknown	*If Yes or Unknown, please describe* That history is unknown by the current owner.

13)	**Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

14)	**Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

15)	**Are there currently or to the best of your knowledge have there been previously, any stained soil on the property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

16)	**Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property?**	
	☑ Yes ☐ No ☐ Unknown	*If Yes or Unknown, please describe* Grain silos

17)	**Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

18)	**If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

19)	**Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

20)	**To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

21)	**Have any of the following ever been dumped above grade, buried and/or burned on the property?** (*please check all that apply and describe if possible*)	
	☐ Hazardous substances	
	☐ Petroleum products	
	☐ Unidentified waste materials	
	☐ Tires	
	☐ Automotive or industrial batteries	
	☐ Other waste materials (please describe)	

22)	**Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property?**	
	☑ Yes ☐ No ☐ Unknown	*If Yes or Unknown, please describe* Some of the grain operations may have used hydraulics

23)	**Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

24)	**Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides?**	
	☐ Yes ☐ No ☑ Unknown	*If Yes or Unknown, please describe* potential for pesticide of herbicide use due to agricultural operations

25)	**Do you have any knowledge of environmental liens that may have been recorded against the property or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

26)	**Do you have any knowledge of activity and use limitations (AULs) such as engineering controls, deed restrictions, land use restrictions, or institutional controls that may have been recorded against the property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

27)	**Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

Rincon Project Site APN and Address: 18-05844: Moorpark Railroad Depot, High Street, Moorpark, California

28)	**Do you have any knowledge of any environmental site assessments of the property or facility?**	
	☑ Yes ☐ No ☐ Unknown	*If Yes or Unknown, please describe* Phase I completed in 2016 Previous Phase I and Phase II in 2006(?)

29)	**Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

30)	**Are there any site-specific geotechnical or geologic reports available for the subject property?**	
	☑ Yes ☐ No ☐ Unknown	*If Yes or Unknown, please describe* provided to Daly Group previously

31)	**Is there a Title Report available for the subject property?**	
	☐ Yes ☑ No ☐ Unknown	*If Yes or Unknown, please describe*

This questionnaire was completed by (*please print*)	
Name	
Title	Community Services Manager
Firm	City of Moorpark
Street Address	799 Moorpark Avenue
City, State, Zip Code	Moorpark, CA 93021
Phone Number	805-517-6225
Fax Number	805-532-2550
What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, etc.)?	property manager

Rincon Project Site APN and Address: 18-05844: Moorpark Railroad Depot, High Street, Moorpark, California

Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:

Rincon Consultants, Inc.
180 N. Ashwood Avenue
Ventura, CA 93003
Attention: Environmental Site Assessment Division
Fax: (805) 644-4455
Email: slarese@rinconconsultants.com

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.

Signature Jessica Sandifer Digitally signed by Jessica Sandifer DN: cn=Jessica Sandifer, o, ou, email=jsandifer@moorparkca.gov, c=US Date: 2018.05.31 09:15:58 -07'00' **Date** 053118

Appendix B

Regulatory Records Documentation

Moorpark RR Depot
E High Street
Moorpark, CA 93021

Inquiry Number: 05306248.2r
May 22, 2018

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

E HIGH STREET
MOORPARK, CA 93021

COORDINATES

Latitude (North):	34.2851600 - 34° 17' 6.57''
Longitude (West):	118.8801180 - 118° 52' 48.42''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	326942.1
UTM Y (Meters):	3795179.2
Elevation:	517 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5630753 MOORPARK, CA
Version Date:	2012
Northeast Map:	5630771 SIMI VALLEY WEST, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140531
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
E HIGH STREET
MOORPARK, CA 93021

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MOORPARK GARAGE	661 WALNUT ST	EDR Hist Auto	Lower	68, 0.013, WNW
A2	CITY OF MOORPARK	661 WALNUT ST	UST	Lower	68, 0.013, WNW
3	CLYDE S RICHFIELD SE	213 HIGH ST	EDR Hist Auto	Higher	106, 0.020, ENE
A4	A & P ARCO	18 E HIGH ST	EDR Hist Auto	Lower	118, 0.022, West
B5	TOWRY S SHIRLEY CHEV	499 MOORPARK AVE	EDR Hist Auto	Lower	207, 0.039, West
6	RICHFIELD SERVICE ST	301 HIGH ST	EDR Hist Auto	Higher	244, 0.046, East
B7	UNOCAL #1696	18 HIGH ST	LUST, UST	Lower	254, 0.048, West
B8	PATTON S UNION STATI	589 MOORPARK AVE	EDR Hist Auto	Higher	291, 0.055, WNW
B9	AA MOORPARK TRANSMIS	21 W HIGH ST	EDR Hist Auto	Lower	296, 0.056, West
10	DICK S GARAGE	690 WALNUT ST	EDR Hist Auto	Higher	368, 0.070, NNW
B11	MOORPARK CLEANERS	675 MOORPARK AVE	EDR Hist Cleaner	Higher	398, 0.075, WNW
12	PRIMO CORP	31 POINDEXTER ST	RCRA-SQG, FINDS, ECHO	Lower	434, 0.082, WSW
C13	CITY OF MOORPARK	CHARLES ST (X WALNUT	UST	Higher	466, 0.088, NW
D14	J.E. CLARK	450 HIGH ST	LUST, HIST CORTESE	Higher	628, 0.119, East
D15	J. E. CLARK II CORP	450 HIGH ST	LUST	Higher	628, 0.119, East
D16	J. E. CLARK	450 HIGH ST	LUST	Higher	628, 0.119, East
D17	JE CLARK FACILITY	412 E HIGH ST	UST	Higher	649, 0.123, East
D18	CITY OF MOORPARK	412 E HIGH ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	649, 0.123, East
D19	J. E. CLARK	412 HIGH	SWEEPS UST, VENTURA CO. BWT, HIST CORTESE	Higher	649, 0.123, East
D20	J. E. CLARK CORPORAT	412 HIGH STREET	UST	Higher	649, 0.123, East
D21	J.E. CLARK II CORP P	412 HIGH ST	CA FID UST	Higher	649, 0.123, East
C22	FIRE STATION #42	782 MOORPARK AVE.	UST	Higher	685, 0.130, NW
C23	MOORPARK FIRE STATIO	782 MOORPARK AVENUE	HIST UST	Higher	685, 0.130, NW
D24	PLANT 2	415 HIGH ST	HIST UST	Higher	708, 0.134, East
25	RANCHO CLEANERS	419 MOORPARK AVE	RCRA NonGen / NLR, FINDS, ECHO, HAZNET	Lower	713, 0.135, SW
26	PETES AUTOBODY	555 SPRING RD	RCRA-SQG, FINDS, ECHO, HAZNET	Higher	1017, 0.193, East
E27	MOORPARK TEXACO AND	347 MOORPARK AVE	HIST UST	Lower	1070, 0.203, SSW
E28	TEXACO STATION	347 MOORPARK AVE	LUST	Lower	1070, 0.203, SSW
E29	TEXACO	347 MOORPARK AVE.	UST	Lower	1070, 0.203, SSW
E30	TEXACO STATION	347 MOORPARK	LUST, VENTURA CO. BWT, HIST CORTESE	Lower	1070, 0.203, SSW
F31	CONOCOPHILLIPS STN 2	13800 PRINCETON AVEN	LUST	Higher	1183, 0.224, East
F32	MOORPARK SERVICE INC	13800 E PRINCETON AV	UST	Higher	1183, 0.224, East
33	CALTRANS- MOORPARK M	626 FITCH AVE.	SWF/LF	Higher	1710, 0.324, ESE
G34	AT&T CALIFORNIA - KD	400 MINOR ST	RCRA-SQG, LUST, SWEEPS UST, HIST UST, CA FID UST,...	Higher	1795, 0.340, ESE
G35	PACIFIC BELL TELEPHO	400 MINOR ST	LUST	Higher	1795, 0.340, ESE
H36	RIDDLE EQUIPMENT REN	13840 LOS ANGELES AV	LUST, UST	Higher	1906, 0.361, East
H37	RIDDLE EQUIPMENT REN	13840 LOS ANGELES	HIST CORTESE	Higher	1906, 0.361, East
H38	RIDDLE EQUIPMENT REN	13840 LOS ANGELES AV	LUST	Higher	1906, 0.361, East
H39	RIDDLE EQUIPMENT REN	13840 LOS ANGELES AV	LUST	Higher	1906, 0.361, East

MAPPED SITES SUMMARY

Target Property Address:
E HIGH STREET
MOORPARK, CA 93021

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	REPLANET LLC	101 W LOS ANGELES AV	SWRCY, VENTURA CO. BWT	Lower	2018, 0.382, SSW
41	MOORPARK UNIF. SCHOO	30 FLORY AVE	LUST, UST, SWEEPS UST, HIST UST, CA FID UST,...	Lower	2115, 0.401, South
42	SUMMIT GAS STATION -	50 LOS ANGELES AVE.	LUST, VENTURA CO. BWT	Lower	2393, 0.453, SSW
43	SHELL SS - NEW LA AV	301 NEW LOS ANGELES	LUST, VENTURA CO. BWT	Lower	2510, 0.475, SW
I44	CHEVRON #9-0688	502 LOS ANGELES AVE	LUST	Higher	2541, 0.481, SE
I45	CHEVRON SS #0688	502 LOS ANGELES	VENTURA CO. BWT, HIST CORTESE	Higher	2541, 0.481, SE
I46	TOSCO - 76 SS #4945	506 LOS ANGELES AVE	LUST	Higher	2575, 0.488, SE
47	VIKING ELECTRONICS I	5455 ENDEAVOUR CT	ENVIROSTOR, WDS	Lower	4005, 0.759, West
48	WALNUT CANYON TRACT	WALNUT CANYON RD-N O	ENVIROSTOR	Higher	4754, 0.900, North

EXECUTIVE SUMMARY

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
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

EXECUTIVE SUMMARY

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
CPS-SLIC ---------- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
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
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---------- Historical Calsites Database
SCH ---------- School Property Evaluation Program
CDL ---------- Clandestine Drug Labs
Toxic Pits ---------- Toxic Pits Cleanup Act Sites
US CDL ---------- National Clandestine Laboratory Register

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

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
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
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
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
VENTURA CO. BWT	Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities

EXECUTIVE SUMMARY

EMI ---------- Emissions Inventory Data
ENF ---------- Enforcement Action Listing
Financial Assurance ---------- Financial Assurance Information Listing
HAZNET ---------- Facility and Manifest Data
ICE ---------- ICE
HWP ---------- EnviroStor Permitted Facilities Listing
HWT ---------- Registered Hazardous Waste Transporter Database
MED WASTE VENTURA ---------- Medical Waste Program List
MINES ---------- Mines Site Location Listing
MWMP ---------- Medical Waste Management Program Listing
NPDES ---------- NPDES Permits Listing
PEST LIC ---------- Pesticide Regulation Licenses Listing
PROC ---------- Certified Processors Database
Notify 65 ---------- Proposition 65 Records
UIC ---------- UIC Listing
WASTEWATER PITS ---------- Oil Wastewater Pits Listing
WDS ---------- Waste Discharge System
WIP ---------- Well Investigation Program Case List
OTHER OIL GAS ---------- OTHER OIL & GAS (GEOTRACKER)
NON-CASE INFO ---------- NON-CASE INFO (GEOTRACKER)
MILITARY PRIV SITES ---------- MILITARY PRIV SITES (GEOTRACKER)
CIWQS ---------- California Integrated Water Quality System
UIC GEO ---------- UIC GEO (GEOTRACKER)
WELL STIM PROJ ---------- Well Stimulation Project (GEOTRACKER)
SAMPLING POINT ---------- SAMPLING POINT (GEOTRACKER)
PROJECT ---------- PROJECT (GEOTRACKER)
PROD WATER PONDS ---------- PROD WATER PONDS (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
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.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

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 12/11/2017 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PETES AUTOBODY	***555 SPRING RD***	***E 1/8 - 1/4 (0.193 mi.)***	***26***	***30***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
PRIMO CORP	***31 POINDEXTER ST***	***WSW 0 - 1/8 (0.082 mi.)***	***12***	***12***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2018 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALNUT CANYON TRACT Facility Id: 56490100 Status: No Further Action	WALNUT CANYON RD-N O	N 1/2 - 1 (0.900 mi.)	48	73
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
VIKING ELECTRONICS I Facility Id: 71003350 Status: Refer: Other Agency	***5455 ENDEAVOUR CT***	***W 1/2 - 1 (0.759 mi.)***	***47***	***71***

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALTRANS- MOORPARK M	626 FITCH AVE.	ESE 1/4 - 1/2 (0.324 mi.)	33	38
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018 Facility ID: 56-AA-0163 Operational Status: Active Regulation Status: Notification				

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 17 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
J.E. CLARK	***450 HIGH ST***	***E 0 - 1/8 (0.119 mi.)***	***D14***	***14***
Database: LUST, Date of Government Version: 03/12/2018 Status: Completed - Case Closed Global Id: T0611100842 Global Id: T0611101184				
J. E. CLARK II CORP	450 HIGH ST	E 0 - 1/8 (0.119 mi.)	D15	18
Database: LUST REG 4, Date of Government Version: 09/07/2004 Facility Id: C-98026 Status: Preliminary site assessment workplan submitted Global ID: T0611101184				
J. E. CLARK	450 HIGH ST	E 0 - 1/8 (0.119 mi.)	D16	19
Database: LUST REG 4, Date of Government Version: 09/07/2004 Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008 Facility Id: C-93014 Status: Case Closed Facility Id: 98026 Facility Id: 93014 Status: Case Closed Global ID: T0611100842				
CONOCOPHILLIPS STN 2	13800 PRINCETON AVEN	E 1/8 - 1/4 (0.224 mi.)	F31	37
Database: LUST, Date of Government Version: 03/12/2018 Status: Completed - Case Closed Global Id: T10000003241				
AT&T CALIFORNIA - KD	***400 MINOR ST***	***ESE 1/4 - 1/2 (0.340 mi.)***	***G34***	***39***
Database: LUST, Date of Government Version: 03/12/2018				

Status: Completed - Case Closed
Global Id: T0611100890

PACIFIC BELL TELEPHO 400 MINOR ST ESE 1/4 - 1/2 (0.340 mi.) G35 45
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Facility Id: C-94034
Status: Case Closed
Facility Id: 94034
Status: Case Closed
Global ID: T0611100890

RIDDLE EQUIPMENT REN 13840 LOS ANGELES AV E 1/4 - 1/2 (0.361 mi.) H36 47
Database: LUST REG 4, Date of Government Version: 09/07/2004
Facility Id: C95179
Status: Case Closed
Global ID: T0611101065

RIDDLE EQUIPMENT REN 13840 LOS ANGELES AV E 1/4 - 1/2 (0.361 mi.) H38 48
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Global Id: T0611101065

RIDDLE EQUIPMENT REN 13840 LOS ANGELES AV E 1/4 - 1/2 (0.361 mi.) H39 50
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Facility Id: 95179
Status: Case Closed

CHEVRON #9-0688 502 LOS ANGELES AVE SE 1/4 - 1/2 (0.481 mi.) I44 66
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: C88067
Status: Case Closed
Facility Id: 88067
Status: Case Closed
Global Id: T0611100314
Global ID: T0611100314

TOSCO - 76 SS #4945 506 LOS ANGELES AVE SE 1/4 - 1/2 (0.488 mi.) I46 69
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Global Id: T0611101179
Global Id: T0611100511

Lower Elevation	Address	Direction / Distance	Map ID	Page

UNOCAL #1696 18 HIGH ST W 0 - 1/8 (0.048 mi.) B7 9
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Facility Id: C-93041
Status: Case Closed
Facility Id: 93041
Status: Case Closed
Global ID: T0611100863

TEXACO STATION 347 MOORPARK AVE SSW 1/8 - 1/4 (0.203 mi.) E28 34
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008

Facility Id: C-88066
Status: Case Closed
Facility Id: 88066
Status: Case Closed
Global ID: T0611100313

TEXACO STATION ***347 MOORPARK*** ***SSW 1/8 - 1/4 (0.203 mi.)*** ***E30*** ***36***
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Global Id: T0611100313

MOORPARK UNIF. SCHOO ***30 FLORY AVE*** ***S 1/4 - 1/2 (0.401 mi.)*** ***41*** ***51***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: C-97012
Status: Case Closed
Facility Id: 97012
Status: Case Closed
Global Id: T0611101132
Global ID: T0611101132

SUMMIT GAS STATION - ***50 LOS ANGELES AVE.*** ***SSW 1/4 - 1/2 (0.453 mi.)*** ***42*** ***55***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: C-01011
Status: Preliminary site assessment underway
Facility Id: 01011
Status: Remedial action (cleanup) Underway
Global Id: T0611101370
Global ID: T0611101370

SHELL SS - NEW LA AV ***301 NEW LOS ANGELES*** ***SW 1/4 - 1/2 (0.475 mi.)*** ***43*** ***62***
Database: VENTURA CO. LUST, Date of Government Version: 05/29/2008
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: 04030
Status: Post remedial action monitoring
Global Id: T0611123476

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 8 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF MOORPARK	CHARLES ST (X WALNUT	NW 0 - 1/8 (0.088 mi.)	C13	13
Database: VENTURA CO. UST, Date of Government Version: 02/28/2018				

Facility Id: D 1004
Facility Status: inactive

JE CLARK FACILITY	412 E HIGH ST	E 0 - 1/8 (0.123 mi.)	D17	20
Database: UST, Date of Government Version: 03/12/2018				
J. E. CLARK CORPORAT	412 HIGH STREET	E 0 - 1/8 (0.123 mi.)	D20	24
Database: UST, Date of Government Version: 03/12/2018 Facility Id: 5144				
FIRE STATION #42	782 MOORPARK AVE.	NW 1/8 - 1/4 (0.130 mi.)	C22	25
Database: VENTURA CO. UST, Date of Government Version: 02/28/2018 Facility Id: D 1068 Facility Status: inactive				
MOORPARK SERVICE INC	13800 E PRINCETON AV	E 1/8 - 1/4 (0.224 mi.)	F32	38
Database: UST, Date of Government Version: 03/12/2018 Facility Id: 503				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CITY OF MOORPARK	661 WALNUT ST	WNW 0 - 1/8 (0.013 mi.)	A2	8
Database: VENTURA CO. UST, Date of Government Version: 02/28/2018 Facility Id: D 1203 Facility Status: inactive				
UNOCAL #1696	***18 HIGH ST***	***W 0 - 1/8 (0.048 mi.)***	***B7***	***9***
Database: VENTURA CO. UST, Date of Government Version: 02/28/2018 Facility Id: D 1086 Facility Status: inactive				
TEXACO	347 MOORPARK AVE.	SSW 1/8 - 1/4 (0.203 mi.)	E29	35
Database: VENTURA CO. UST, Date of Government Version: 02/28/2018 Facility Id: D 380 Facility Status: inactive				

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 03/12/2018 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
REPLANET LLC	***101 W LOS ANGELES AV***	***SSW 1/4 - 1/2 (0.382 mi.)***	***40***	***50***
Cert Id: RC155784.001				

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.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
J. E. CLARK Status: A Tank Status: A Comp Number: 758	***412 HIGH***	***E 0 - 1/8 (0.123 mi.)***	***D19***	***22***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOORPARK FIRE STATIO Facility Id: 00000021257	782 MOORPARK AVENUE	NW 1/8 - 1/4 (0.130 mi.)	C23	25
PLANT 2 Facility Id: 00000005653	415 HIGH ST	E 1/8 - 1/4 (0.134 mi.)	D24	26

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOORPARK TEXACO AND Facility Id: 00000018623	347 MOORPARK AVE	SSW 1/8 - 1/4 (0.203 mi.)	E27	33

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.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
J.E. CLARK II CORP P Facility Id: 56004862 Status: A	412 HIGH ST	E 0 - 1/8 (0.123 mi.)	D21	24

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/11/2017 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF MOORPARK	***412 E HIGH ST***	***E 0 - 1/8 (0.123 mi.)***	***D18***	***20***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
RANCHO CLEANERS	***419 MOORPARK AVE***	***SW 1/8 - 1/4 (0.135 mi.)***	***25***	***27***

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 7 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
J.E. CLARK Reg Id: C-98026	***450 HIGH ST***	***E 0 - 1/8 (0.119 mi.)***	***D14***	***14***
J. E. CLARK Reg Id: C-93014	***412 HIGH***	***E 0 - 1/8 (0.123 mi.)***	***D19***	***22***
AT&T CALIFORNIA - KD Reg Id: C-94034	***400 MINOR ST***	***ESE 1/4 - 1/2 (0.340 mi.)***	***G34***	***39***
RIDDLE EQUIPMENT REN Reg Id: C-95179	13840 LOS ANGELES	E 1/4 - 1/2 (0.361 mi.)	H37	48
CHEVRON SS #0688 Reg Id: C-88067	***502 LOS ANGELES***	***SE 1/4 - 1/2 (0.481 mi.)***	***I45***	***68***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TEXACO STATION Reg Id: C-88066	***347 MOORPARK***	***SSW 1/8 - 1/4 (0.203 mi.)***	***E30***	***36***
MOORPARK UNIF. SCHOO Reg Id: C-97012	***30 FLORY AVE***	***S 1/4 - 1/2 (0.401 mi.)***	***41***	***51***

EXECUTIVE SUMMARY

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 8 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CLYDE S RICHFIELD SE	213 HIGH ST	ENE 0 - 1/8 (0.020 mi.)	3	8
RICHFIELD SERVICE ST	301 HIGH ST	E 0 - 1/8 (0.046 mi.)	6	9
PATTON S UNION STATI	589 MOORPARK AVE	WNW 0 - 1/8 (0.055 mi.)	B8	10
DICK S GARAGE	690 WALNUT ST	NNW 0 - 1/8 (0.070 mi.)	10	11

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOORPARK GARAGE	661 WALNUT ST	WNW 0 - 1/8 (0.013 mi.)	A1	8
A & P ARCO	18 E HIGH ST	W 0 - 1/8 (0.022 mi.)	A4	8
TOWRY S SHIRLEY CHEV	499 MOORPARK AVE	W 0 - 1/8 (0.039 mi.)	B5	8
AA MOORPARK TRANSMIS	21 W HIGH ST	W 0 - 1/8 (0.056 mi.)	B9	10

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 is 1 EDR Hist Cleaner site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOORPARK CLEANERS	675 MOORPARK AVE	WNW 0 - 1/8 (0.075 mi.)	B11	11

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
UNION OIL CO SIMI OIL FLD	SEMS-ARCHIVE

OVERVIEW MAP - 05306248.2R



0 1/4 1/2 1 Miles

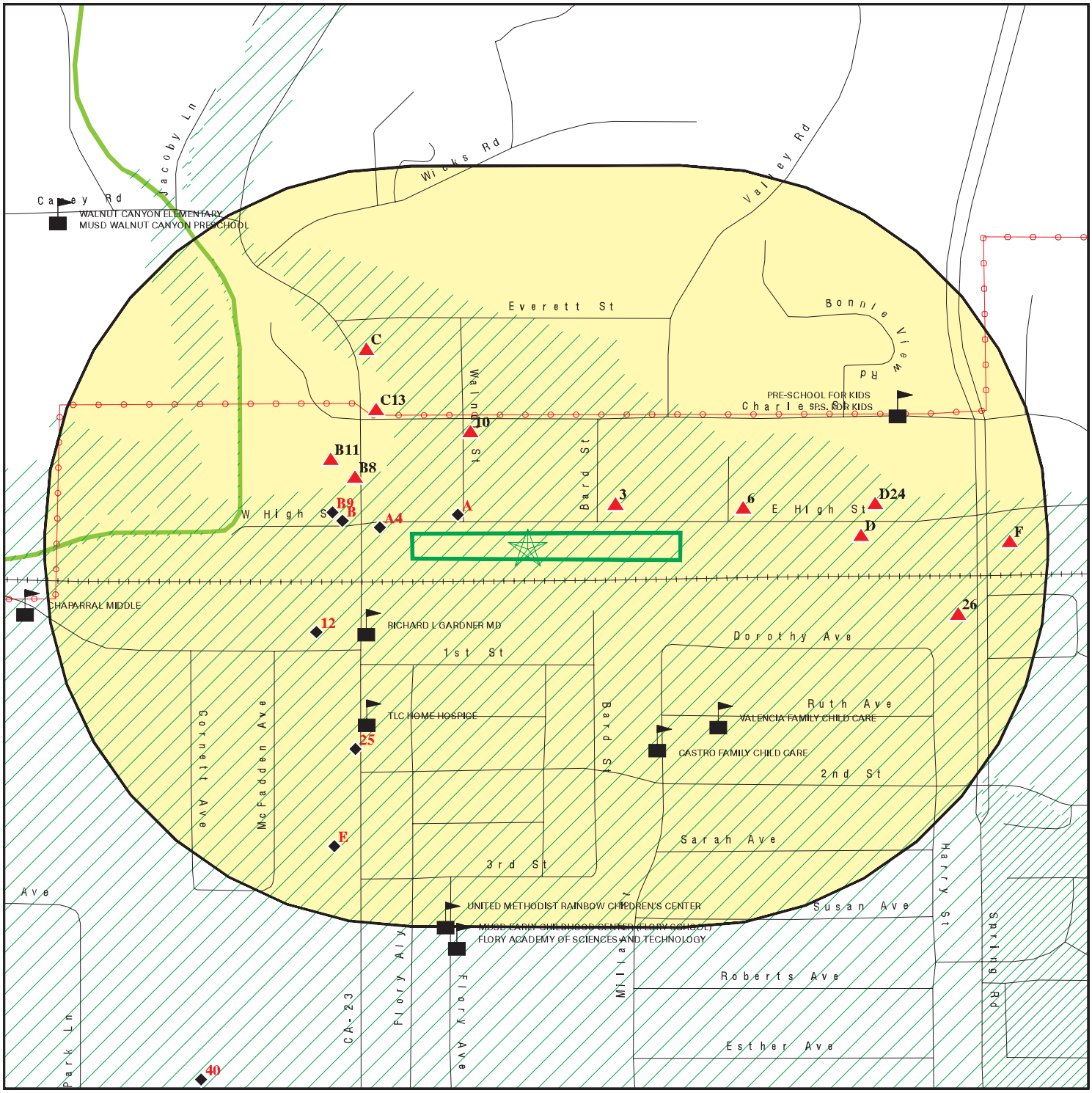
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Moorpark RR Depot	CLIENT: Rincon
ADDRESS: E High Street Moorpark CA 93021	CONTACT: Sarah Larese INQUIRY #: 05306248.2r
LAT/LONG: 34.28516 / 118.880118	DATE: May 22, 2018 4:17 pm

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DETAIL MAP - 05306248.2R



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Moorpark RR Depot	CLIENT:	Rincon
ADDRESS:	E High Street Moorpark CA 93021	CONTACT:	Sarah Larese
		INQUIRY #:	05306248.2r
LAT/LONG:	34.28516 / 118.880118	DATE:	May 22, 2018 4:21 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	1	NR	NR	1
State and tribal leaking storage tank lists								
LUST	0.500		4	3	10	NR	NR	17

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		5	3	NR	NR	NR	8
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	1	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		0	3	NR	NR	NR	3
CA FID UST	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total 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 Records								
RCRA NonGen / NLR	0.250		1	1	NR	NR	NR	2
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	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	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		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
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
FUSRAP	1.000		0	0	0	0	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
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
VENTURA CO. BWT	0.001		0	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		2	1	4	NR	NR	7
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MED WASTE VENTURA	0.001		0	NR	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
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
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
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		8	NR	NR	NR	NR	8
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	24	12	16	2	0	54

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **MOORPARK GARAGE** **EDR Hist Auto** **1009022872**
WNW **661 WALNUT ST** **N/A**
< 1/8 **MOORPARK, CA**
0.013 mi.
68 ft. **Site 1 of 3 in cluster A**

Relative: EDR Hist Auto
Lower

Actual:
516 ft.

Year:	Name:	Type:
1957	MOORPARK GARAGE	AUTOMOBILE REPAIRING
1961	ACME AUTO REPAIR	AUTOMOBILE REPAIRING

A2 **CITY OF MOORPARK** **UST** **U003042638**
WNW **661 WALNUT ST** **N/A**
< 1/8 **MOORPARK, CA**
0.013 mi.
68 ft. **Site 2 of 3 in cluster A**

Relative: VENTURA CO. UST:
Lower
Facility ID: D 1203
Facility Status: inactive

Actual:
516 ft.

---

3 **CLYDE S RICHFIELD SERVICE** **EDR Hist Auto** **1009025836**
ENE **213 HIGH ST** **N/A**
< 1/8 **MOORPARK, CA**
0.020 mi.
106 ft.

Relative: EDR Hist Auto
Higher

Actual:
519 ft.

Year:	Name:	Type:
1961	CLYDE S RICHFIELD SERVICE	GASOLINE STATIONS
2014	MOORPARK AUTO GLASS	General Automotive Repair Shops

A4 **A & P ARCO** **EDR Hist Auto** **1020331398**
West **18 E HIGH ST** **N/A**
< 1/8 **MOORPARK, CA 93021**
0.022 mi.
118 ft. **Site 3 of 3 in cluster A**

Relative: EDR Hist Auto
Lower

Actual:
515 ft.

Year:	Name:	Type:
1976	A & P ARCO	Gasoline Service Stations

B5 **TOWRY S SHIRLEY CHEVRON SERVICE** **EDR Hist Auto** **1009026729**
West **499 MOORPARK AVE** **N/A**
< 1/8 **MOORPARK, CA**
0.039 mi.
207 ft. **Site 1 of 5 in cluster B**

Relative: EDR Hist Auto
Lower

Actual:
515 ft.

Year:	Name:	Type:
1957	TOWRY S SHIRLEY CHEVRON SERVICE	GASOLINE STATIONS

TOWRY S SHIRLEY CHEVRON SERVICE (Continued) **1009026729**

1961	TOWRY S SHIRLEY CHEVRON SERVICE	GASOLINE STATIONS
1970	COLLINS BROS CHEVRON SERVICE	Gasoline Service Stations
1971	COLLINS BROS CHEVRON SERVICE	Gasoline Service Stations

---

6 **RICHFIELD SERVICE STATION** **EDR Hist Auto** **1009024461**
East **301 HIGH ST** **N/A**
< 1/8 **MOORPARK, CA**
0.046 mi.
244 ft.

Relative: EDR Hist Auto
Higher

Actual: **523 ft.**

Year:	Name:	Type:
1930	WILLIAMS E H	GASOLINE AND OIL SERVICE STATIONS

B7 **UNOCAL #1696** **LUST** **U002169192**
West **18 HIGH ST** **UST** **N/A**
< 1/8 **MOORPARK, CA**
0.048 mi.
254 ft. **Site 2 of 5 in cluster B**

Relative: LUST REG 4:
Lower

Actual: **515 ft.**

Region:	4	
Regional Board:	04	
County:	Ventura	
Facility Id:	C-93041	
Status:	Case Closed	
Substance:	Waste Oil	
Substance Quantity:	Not reported	
Local Case No:	93041	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0611100863	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	Not reported	
Enforcement Type:	EF	
Date Leak Discovered:	11/11/1993	
Date Leak First Reported:		11/11/1993
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	11/11/1993	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		5/2/1994
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		5317.886808980555971973806 1044
Source of Cleanup Funding:		F
Preliminary Site Assessment Workplan Submitted:		11/18/1993
Preliminary Site Assessment Began:		Not reported

UNOCAL #1696 (Continued) **U002169192**

Pollution Characterization Began:	Not reported
Remediation Plan Submitted:	Not reported
Remedial Action Underway:	Not reported
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	11/18/1993
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	UNOCAL CERT
RP Address:	Not reported
Program:	LUST
Lat/Long:	34.2854424 / -1
Local Agency Staff:	EHD
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported

VENTURA CO. LUST:

Region:	VENTURA
Facility ID:	93041
Status:	Case Closed

VENTURA CO. UST:

Facility ID:	D 1086
Facility Status:	inactive

B8 **PATTON S UNION STATION** **EDR Hist Auto** **1009027864**
WNW **589 MOORPARK AVE** **N/A**
< 1/8 **MOORPARK, CA**
0.055 mi.
291 ft. **Site 3 of 5 in cluster B**

Relative: EDR Hist Auto
Higher

Actual: **517 ft.**

Year:	Name:	Type:
1961	PATTON S UNION STATION	GASOLINE STATIONS

B9 **AA MOORPARK TRANSMISSION** **EDR Hist Auto** **1022099546**
West **21 W HIGH ST** **N/A**
< 1/8 **MOORPARK, CA 93021**
0.056 mi.
296 ft. **Site 4 of 5 in cluster B**

Relative: EDR Hist Auto
Lower

Actual: **515 ft.**

Year:	Name:	Type:
1971	WOOD FRANK P	General Automotive Repair Shops

AA MOORPARK TRANSMISSION (Continued) **1022099546**

1989	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1991	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1992	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1993	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1994	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1995	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1996	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1997	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1998	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
1999	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
2000	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
2000	CHRYSLER CONNECTION	General Automotive Repair Shops
2001	AA MOORPARK TRANSMISSION	Automotive Transmission Repair Shops
2001	CHRYSLER CONNECTION	General Automotive Repair Shops
2002	CHRYSLER CONNECTION	General Automotive Repair Shops

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10 **DICK S GARAGE** **EDR Hist Auto** **1009026879**
NNW **690 WALNUT ST** **N/A**
< 1/8 **MOORPARK, CA**
0.070 mi.
368 ft.

Relative: EDR Hist Auto
Higher

Actual:
519 ft.

Year:	Name:	Type:
1961	DICK S GARAGE	AUTOMOBILE REPAIRING
1994	BERARD MICHAEL GARAGE	General Automotive Repair Shops
1995	BERARD MICHAEL GARAGE	General Automotive Repair Shops

B11 **MOORPARK CLEANERS** **EDR Hist Cleaner** **1009145343**
WNW **675 MOORPARK AVE** **N/A**
< 1/8 **MOORPARK, CA**
0.075 mi.
398 ft. **Site 5 of 5 in cluster B**

Relative: EDR Hist Cleaner
Higher

Actual:
518 ft.

Year:	Name:	Type:
1957	MOORPARK CLEANERS	CLEANERS AND DYERS
1961	MOORPARK CLEANERS	CLEANERS AND DYERS
1969	TRICKEY JAMES A	Drycleaning Plants, Except Rugs
1970	TRICKEY JAMES A	Drycleaning Plants, Except Rugs
1971	TRICKEY JAMES A	Drycleaning Plants, Except Rugs
1972	TRICKEY JAMES A	Drycleaning Plants, Except Rugs

12
WSW
< 1/8
0.082 mi.
434 ft.

PRIMO CORP
31 POINDEXTER ST
MOORPARK, CA 93021

RCRA-SQG
FINDS
ECHO

1000300967
CAD080071434

Relative:
Lower

Actual:
511 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	PRIMO CORP
Facility address:	31 POINDEXTER ST MOORPARK, CA 93021
EPA ID:	CAD080071434
Mailing address:	POINDEXTER ST MOORPARK, CA 93021
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	LORENZ CURTIS
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

PRIMO CORP (Continued) **1000300967**

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

FINDS:

Registry ID: 110002660004

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.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000300967
Registry ID:	110002660004
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002660004

C13 **CITY OF MOORPARK** **UST** **U003187589**
NW **CHARLES ST (X WALNUT S** **N/A**
< 1/8 **MOORPARK, CA**
0.088 mi.
466 ft. **Site 1 of 3 in cluster C**

Relative:
Higher

Actual:
522 ft.

VENTURA CO. UST:

Facility ID:	D 1004
Facility Status:	inactive

D14 **J.E. CLARK** **LUST** **S103971832**
East **450 HIGH ST** **HIST CORTESE** **N/A**
< 1/8 **MOORPARK, CA 93021**
0.119 mi.
628 ft. **Site 1 of 9 in cluster D**

Relative:
Higher

Actual:
532 ft.

LUST:

Lead Agency:	VENTURA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611100842
Global Id:	T0611100842
Latitude:	34.285161
Longitude:	-118.876227
Status:	Completed - Case Closed
Status Date:	04/03/1995
Case Worker:	Not reported
RB Case Number:	C-93014
Local Agency:	Not reported
File Location:	Not reported
Local Case Number:	93014
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0611100842
Contact Type:	Regional Board Caseworker
Contact Name:	DANIEL PIROTTON
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	dpirotton@waterboards.ca.gov
Phone Number:	2135766714

LUST:

Global Id:	T0611100842
Action Type:	Other
Date:	04/18/1993
Action:	Leak Reported

Global Id:	T0611100842
Action Type:	Other
Date:	04/18/1993
Action:	Leak Discovery

LUST:

Global Id:	T0611100842
Status:	Open - Case Begin Date
Status Date:	04/18/1993

Global Id:	T0611100842
Status:	Open - Site Assessment
Status Date:	04/18/1993

Global Id:	T0611100842
Status:	Open - Site Assessment
Status Date:	07/31/1994

Global Id:	T0611100842

J.E. CLARK (Continued) **S103971832**

Status: Open - Remediation
Status Date: 08/03/1994

Global Id: T0611100842
Status: Open - Remediation
Status Date: 11/16/1994

Global Id: T0611100842
Status: Open - Verification Monitoring
Status Date: 03/21/1995

Global Id: T0611100842
Status: Completed - Case Closed
Status Date: 04/03/1995

Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101184
Global Id: T0611101184
Latitude: 34.2852254
Longitude: -118.875702
Status: Completed - Case Closed
Status Date: 01/09/2007
Case Worker: DBW
RB Case Number: C98026
Local Agency: VENTURA COUNTY
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: 98026
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0611101184
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Global Id: T0611101184
Contact Type: Local Agency Caseworker
Contact Name: DIANE B. WAHL
Organization Name: VENTURA COUNTY
Address: 800 S. VICTORIA AVE.
City: VENTURA
Email: diane.wahl@ventura.org
Phone Number: 8056545040

LUST:
Global Id: T0611101184
Action Type: Other
Date: 08/17/1998
Action: Leak Reported

J.E. CLARK (Continued) **S103971832**

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 05/15/2005
Action: * No Action - #3

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 06/07/2005
Action: * Historical Enforcement - #4

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 04/11/2006
Action: Technical Correspondence / Assistance / Other - #6

Global Id: T0611101184
Action Type: RESPONSE
Date: 04/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0611101184
Action Type: RESPONSE
Date: 03/14/2003
Action: Other Workplan

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 10/04/2005
Action: * Historical Enforcement - #5

Global Id: T0611101184
Action Type: Other
Date: 08/17/1998
Action: Leak Discovery

Global Id: T0611101184
Action Type: RESPONSE
Date: 12/07/2006
Action: Unknown

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 10/30/2006
Action: Technical Correspondence / Assistance / Other - #9

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 08/03/2006
Action: Technical Correspondence / Assistance / Other - #8

Global Id: T0611101184
Action Type: RESPONSE
Date: 10/31/2003
Action: Monitoring Report - Quarterly

Global Id: T0611101184
Action Type: RESPONSE

J.E. CLARK (Continued) **S103971832**

Date: 10/24/2003
Action: Other Workplan

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 02/11/2003
Action: * Historical Enforcement - #1

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 05/30/2006
Action: LOP Case Closure Summary to RB - #7

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 11/14/2006
Action: Technical Correspondence / Assistance / Other - #10

Global Id: T0611101184
Action Type: ENFORCEMENT
Date: 09/30/2003
Action: Notice of Violation - #2

LUST:
Global Id: T0611101184
Status: Open - Case Begin Date
Status Date: 08/17/1998

Global Id: T0611101184
Status: Open - Site Assessment
Status Date: 08/17/1998

Global Id: T0611101184
Status: Open - Site Assessment
Status Date: 11/15/2000

Global Id: T0611101184
Status: Open - Site Assessment
Status Date: 06/15/2002

Global Id: T0611101184
Status: Open - Verification Monitoring
Status Date: 06/15/2003

Global Id: T0611101184
Status: Completed - Case Closed
Status Date: 01/09/2007

HIST CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-98026

D15 **J. E. CLARK II CORP** **LUST** **S106163753**
East **450 HIGH ST** **N/A**
< 1/8 **MOORPARK, CA 93021**
0.119 mi.
628 ft. **Site 2 of 9 in cluster D**

Relative: **Higher**

Actual: **532 ft.**

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Ventura	
Facility Id:	C-98026	
Status:	Preliminary site assessment workplan submitted	
Substance:	Diesel	
Substance Quantity:	Not reported	
Local Case No:	98026	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0611101184	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	Not reported	
Enforcement Type:	NOV	
Date Leak Discovered:	8/17/1998	
Date Leak First Reported:		8/17/1998
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		Not reported
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		5854.756730659538721803626863 4
Source of Cleanup Funding:		F
Preliminary Site Assessment Workplan Submitted:		8/17/1998
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		7/5/2002
Hist Max MTBE Conc in Groundwater:		9.4
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	=	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	J. E. CLARK II CORP	
RP Address:	Not reported	
Program:	LUST	
Lat/Long:	34.2852254 / -1	
Local Agency Staff:	KEA	

J. E. CLARK II CORP (Continued) **S106163753**

Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

D16 **J. E. CLARK** **LUST** **S103317827**
East **450 HIGH ST** **N/A**
< 1/8 **MOORPARK, CA 93021**
0.119 mi.
628 ft. **Site 3 of 9 in cluster D**

Relative: LUST REG 4:
Higher

Actual: Region: 4
532 ft. Regional Board: 04
County: Ventura
Facility Id: C-93014
Status: Case Closed
Substance: Diesel
Substance Quantity: Not reported
Local Case No: 93014
Case Type: Soil
Abatement Method Used at the Site: EDET
Global ID: T0611100842
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: Informal Enforcement Actions,including Notices of Violations and Staff Enforcement Letters
Date Leak Discovered: 4/18/1993
Date Leak First Reported: 4/18/1993
Date Leak Record Entered: Not reported
Date Confirmation Began: 4/18/1993
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: 4/3/1995
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 5724.27163859643968922437014 32
Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 4/18/1993
Preliminary Site Assessment Began: 7/31/1994
Pollution Characterization Began: 7/31/1994
Remediation Plan Submitted: 8/3/1994
Remedial Action Underway: 11/16/1994
Post Remedial Action Monitoring Began: 3/21/1995
Enforcement Action Date: 1/1/1965
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported

J. E. CLARK (Continued) **S103317827**

Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	JAMES CLARK
RP Address:	Not reported
Program:	LUST
Lat/Long:	34.2854244 / -1
Local Agency Staff:	EHD
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported

VENTURA CO. LUST:

Region:	VENTURA
Facility ID:	98026
Status:	Case Closed

Region:	VENTURA
Facility ID:	93014
Status:	Case Closed

D17 **JE CLARK FACILITY** **UST** **U004265000**
East **412 E HIGH ST** **N/A**
< 1/8 **MOORPARK, CA 93021**
0.123 mi.
649 ft. **Site 4 of 9 in cluster D**

Relative: **Higher**

Actual: **532 ft.**

UST:

Facility ID:	Not reported
Permitting Agency:	Ventura County Environmental Health
Latitude:	34.28536
Longitude:	-118.87668

D18 **CITY OF MOORPARK** **RCRA NonGen / NLR** **1017785576**
East **412 E HIGH ST** **FINDS** **CAC002732105**
< 1/8 **MOORPARK, CA 93021** **ECHO**
0.123 mi.
649 ft. **Site 5 of 9 in cluster D**

Relative: **Higher**

Actual: **532 ft.**

RCRA NonGen / NLR:

Date form received by agency:	03/01/2014
Facility name:	CITY OF MOORPARK
Facility address:	412 E HIGH ST MOORPARK, CA 93021
EPA ID:	CAC002732105
Mailing address:	MOORPARK MOORPARK, CA 93021
Contact:	JEREMY LAURENTOWSKI
Contact address:	MOORPARK MOORPARK, CA 93021
Contact country:	Not reported
Contact telephone:	805-517-6385
Contact email:	JLAURENTOWSKI@MOORPARKCA.GOV

CITY OF MOORPARK (Continued) **1017785576**

EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: CITY OF MOORPARK
Owner/operator address: MOORPARK
MOORPARK, CA 93021
Owner/operator country: Not reported
Owner/operator telephone: 805-217-6200
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 11/19/2010
Owner/Op end date: Not reported

Owner/operator name: CITY OF MOORPARK
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 11/19/2010
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

Violation Status: No violations found

FINDS:

Registry ID: 110063995930

CITY OF MOORPARK (Continued) **1017785576**

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.

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1017785576
Registry ID: 110063995930
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110063995930

D19 East < 1/8 0.123 mi. 649 ft. **J. E. CLARK** **SWEEPS UST** **S102859875**
412 HIGH **VENTURA CO. BWT** **N/A**
MOORPARK, CA **HIST CORTESE**

Site 6 of 9 in cluster D

Relative: Higher

Actual: 532 ft.

SWEEPS UST:
Status: Active
Comp Number: 758
Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000758-000001
Tank Status: A
Capacity: 8000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: 5

Status: Active
Comp Number: 758
Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000758-000002
Tank Status: A
Capacity: 8000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P

J. E. CLARK (Continued) **S102859875**

Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 758
Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000758-000003
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 758
Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000758-000004
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 758
Number: 9
Board Of Equalization: 44-030702
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000758-000005
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

VENTURA CO. BWT:
Facility ID: HM 3699
Program: Not reported

J. E. CLARK (Continued) **S102859875**

Facility ID: HM 3893
Program: Not reported

Facility ID: HM 2830
Program: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-93014

D20
East
< 1/8
0.123 mi.
649 ft.

J. E. CLARK CORPORATION **UST** **U004118088**
412 HIGH STREET **N/A**
MOORPARK, CA 93021

Site 7 of 9 in cluster D

Relative:
Higher

Actual:
532 ft.

UST:
Facility ID: 5144
Permitting Agency: VENTURA COUNTY
Latitude: 34.1459840343758
Longitude: -119.114839915344

D21
East
< 1/8
0.123 mi.
649 ft.

J.E. CLARK II CORP PLANT 2 **CA FID UST** **S101596392**
412 HIGH ST **N/A**
MOORPARK, CA

Site 8 of 9 in cluster D

Relative:
Higher

Actual:
532 ft.

CA FID UST:
Facility ID: 56004862
Regulated By: UTNKA
Regulated ID: 5653
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 412 HIGH ST
Mailing Address 2: Not reported
Mailing City,St,Zip: MOORPARK
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

C22 **FIRE STATION #42** **UST** **U002244101**
NW **782 MOORPARK AVE.** **N/A**
1/8-1/4 **MOORPARK, CA**
0.130 mi.
685 ft. **Site 2 of 3 in cluster C**

Relative: VENTURA CO. UST:
Higher Facility ID: D 1068
Facility Status: inactive
Actual:
528 ft.

C23 **MOORPARK FIRE STATION** **HIST UST** **U001567276**
NW **782 MOORPARK AVENUE** **N/A**
1/8-1/4 **MOORPARK, CA 91320**
0.130 mi.
685 ft. **Site 3 of 3 in cluster C**

Relative: HIST UST:
Higher
Actual:
528 ft.

File Number:	0002D0D1
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002D0D1.pdf
Region:	STATE
Facility ID:	00000021257
Facility Type:	Other
Other Type:	FIRE STATION
Contact Name:	OFFICER IN CHARGE
Telephone:	8054843601
Owner Name:	VENTURA COUNTY FIRE PROTECTION
Owner Address:	275 EAST PLEASANT VALLEY ROAD
Owner City,St,Zip:	CAMARILLO, CA 93010
Total Tanks:	0002
Tank Num:	001
Container Num:	2.
Year Installed:	1982
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	30
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

D24 **PLANT 2** **HIST UST** **U001579596**
East **415 HIGH ST** **N/A**
1/8-1/4 **MOORPARK, CA 93021**
0.134 mi.
708 ft. **Site 9 of 9 in cluster D**

Relative:
Higher

Actual:
530 ft.

HIST UST:

File Number:	0002C8E6
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C8E6.pdf
Region:	STATE
Facility ID:	00000005653
Facility Type:	Other
Other Type:	FUEL JOBBER
Contact Name:	EDDI GIBSON
Telephone:	8055291486
Owner Name:	J. E. CLARK II CORP.
Owner Address:	18115 E. TELEGRAPH RD.
Owner City,St,Zip:	SANTA PAULA, CA 93060
Total Tanks:	0007
Tank Num:	001
Container Num:	7
Year Installed:	1950
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	3/8
Leak Detection:	Visual, Stock Inventor
Tank Num:	002
Container Num:	6
Year Installed:	1950
Tank Capacity:	00001500
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	3/8
Leak Detection:	Visual, Stock Inventor
Tank Num:	003
Container Num:	5
Year Installed:	1955
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	3/8
Leak Detection:	Visual, Stock Inventor
Tank Num:	004
Container Num:	4
Year Installed:	1955
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	3/8
Leak Detection:	Visual, Stock Inventor
Tank Num:	005
Container Num:	3
Year Installed:	1975

PLANT 2 (Continued) **U001579596**

Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	1/4
Leak Detection:	Visual, Stock Inventor

Tank Num:	006
Container Num:	2
Year Installed:	1975
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	1/4
Leak Detection:	Visual, Stock Inventor

Tank Num:	007
Container Num:	1
Year Installed:	1975
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	1/4
Leak Detection:	Visual, Stock Inventor

Click here for Geo Tracker PDF:

25
SW
1/8-1/4
0.135 mi.
713 ft.

RANCHO CLEANERS
419 MOORPARK AVE
MOORPARK, CA 93021

RCRA NonGen / NLR **1000171039**
FINDS **CAD981968241**
ECHO
HAZNET

Relative:
Lower

Actual:
511 ft.

RCRA NonGen / NLR:

Date form received by agency:	03/19/1987
Facility name:	RANCHO CLEANERS
Facility address:	419 MOORPARK AVE MOORPARK, CA 93021
EPA ID:	CAD981968241
Mailing address:	MOORPARK AVE MOORPARK, CA 93021
Contact:	ENVIRONMENTAL MANAGER
Contact address:	419 MOORPARK AVE MOORPARK, CA 93021
Contact country:	US
Contact telephone:	805-529-1768
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	WONSOON IM
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported

RANCHO CLEANERS (Continued) **1000171039**

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: 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

FINDS:

Registry ID: 110002759140

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.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000171039

RANCHO CLEANERS (Continued) **1000171039**

Registry ID: 110002759140
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002759140

HAZNET:

envid:	1000171039
Year:	2005
GEPAID:	CAD981968241
Contact:	UNDELIVERABLE SURVEY 2-1-95 HJ
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	419 MOORPARK AVE
Mailing City,St,Zip:	MOORPARK, CA 930210000
Gen County:	Not reported
TSD EPA ID:	NVR000076158
TSD County:	Not reported
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Not reported
Tons:	Not reported
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Ventura

envid:	1000171039
Year:	2005
GEPAID:	CAD981968241
Contact:	UNDELIVERABLE SURVEY 2-1-95 HJ
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	419 MOORPARK AVE
Mailing City,St,Zip:	MOORPARK, CA 930210000
Gen County:	Not reported
TSD EPA ID:	NVR000076158
TSD County:	Not reported
Waste Category:	Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method:	Not reported
Tons:	0.1
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Ventura

envid:	1000171039
Year:	2005
GEPAID:	CAD981968241
Contact:	UNDELIVERABLE SURVEY 2-1-95 HJ
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	419 MOORPARK AVE
Mailing City,St,Zip:	MOORPARK, CA 930210000
Gen County:	Not reported
TSD EPA ID:	NVR000076158
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Not reported
Tons:	Not reported
Cat Decode:	Not reported
Method Decode:	Not reported

RANCHO CLEANERS (Continued) **1000171039**

Facility County:	Ventura
envid:	1000171039
Year:	2004
GEPAID:	CAD981968241
Contact:	UNDELIVERABLE SURVEY 2-1-95 HJ
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	419 MOORPARK AVE
Mailing City,St,Zip:	MOORPARK, CA 930210000
Gen County:	Not reported
TSD EPA ID:	NVR000076158
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Not reported
Tons:	Not reported
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Ventura

envid:	1000171039
Year:	2004
GEPAID:	CAD981968241
Contact:	UNDELIVERABLE SURVEY 2-1-95 HJ
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	419 MOORPARK AVE
Mailing City,St,Zip:	MOORPARK, CA 930210000
Gen County:	Not reported
TSD EPA ID:	NVR000076158
TSD County:	Not reported
Waste Category:	Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method:	Not reported
Tons:	0.11
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Ventura

Click this hyperlink while viewing on your computer to access
24 additional CA_HAZNET: record(s) in the EDR Site Report.

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26 **PETES AUTOBODY** **RCRA-SQG 1000857475**
East **555 SPRING RD** **FINDS CAD983669128**
1/8-1/4 **MOORPARK, CA 93021** **ECHO**
0.193 mi. **HAZNET**
1017 ft.

Relative: **Higher**

Actual: **535 ft.**

RCRA-SQG:

Date form received by agency:	06/03/1993
Facility name:	PETES AUTOBODY
Facility address:	555 SPRING RD UNIT C4 MOORPARK, CA 93021
EPA ID:	CAD983669128
Mailing address:	SPRING RD UNIT C4 MOORPARK, CA 93021

PETES AUTOBODY (Continued) **1000857475**

Contact: PETE DELICATA
Contact address: 555 SPRING RD UNIT C4
MOORPARK, CA 93021
Contact country: US
Contact telephone: 805-529-0733
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: JESTA PEDERSEN
Owner/operator address: 2659 TOWNSGATE RD STE 210
WESTLAKE VILLAGE, CA 91361
Owner/operator country: Not reported
Owner/operator telephone: 805-379-3222
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
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

Violation Status: No violations found

FINDS:

Registry ID: 110002899793

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

PETES AUTOBODY (Continued) **1000857475**

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000857475
Registry ID:	110002899793
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002899793

HAZNET:

envid:	1000857475
Year:	2016
GEPAID:	CAL000409873
Contact:	VINCENT DEFALCO
Telephone:	8055322068
Mailing Name:	Not reported
Mailing Address:	555 SPRING RD UNIT B
Mailing City,St,Zip:	MOORPARK, CA 930212009
Gen County:	Ventura
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Waste oil and mixed oil
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.608
Cat Decode:	Waste oil and mixed oil
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Ventura

envid:	1000857475
Year:	2015
GEPAID:	CAL000283050
Contact:	MICHAEL BAUGHN
Telephone:	8055239011
Mailing Name:	Not reported
Mailing Address:	555 SPRING RD UNIT C-5
Mailing City,St,Zip:	MOORPARK, CA 930210000
Gen County:	Ventura
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Unspecified aqueous solution
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.063
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Ventura

envid:	1000857475
Year:	2015
GEPAID:	CAL000409873
Contact:	VINCENT DEFALCO
Telephone:	8055322068

PETES AUTOBODY (Continued) **1000857475**

Mailing Name:	Not reported
Mailing Address:	555 SPRING RD UNIT B
Mailing City,St,Zip:	MOORPARK, CA 930212009
Gen County:	Ventura
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Waste oil and mixed oil
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.494
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Ventura
envid:	1000857475
Year:	1993
GEPAID:	CAD983669128
Contact:	JESTA PEDERSEN
Telephone:	8055290733
Mailing Name:	Not reported
Mailing Address:	555 SPRING RD
Mailing City,St,Zip:	MOORPARK, CA 930212058
Gen County:	Not reported
TSD EPA ID:	CAT000613893
TSD County:	Not reported
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Transfer Station
Tons:	0.0135
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Ventura

E27 **MOORPARK TEXACO AND TIRE** **HIST UST** **U001579592**
SSW **347 MOORPARK AVE** **N/A**
1/8-1/4 **MOORPARK, CA 93021**
0.203 mi.
1070 ft. **Site 1 of 4 in cluster E**

Relative: HIST UST:
Lower

File Number:	0002CB54
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CB54.pdf
Region:	STATE
Facility ID:	00000018623
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	BOB VANAUSDELL
Telephone:	8055291276
Owner Name:	MOORPARK TEXACO
Owner Address:	347 MOORPARK AVE.
Owner City,St,Zip:	MOORPARK, CA 93021
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR

Actual:
510 ft.

MOORPARK TEXACO AND TIRE (Continued) **U001579592**

Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00000500
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 004
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

E28 **TEXACO STATION** **LUST** **S102438808**
SSW **347 MOORPARK AVE** **N/A**
1/8-1/4 **MOORPARK, CA 93021**
0.203 mi.
1070 ft. **Site 2 of 4 in cluster E**

Relative: LUST REG 4:
Lower
Actual: Region: 4
510 ft. Regional Board: 04
County: Ventura
Facility Id: C-88066
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: 88066
Case Type: Groundwater
Abatement Method Used at the Site: ETED
Global ID: T0611100313
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: EF
Date Leak Discovered: 6/2/1988
Date Leak First Reported: 6/2/1988
Date Leak Record Entered: Not reported

TEXACO STATION (Continued) **S102438808**

Date Confirmation Began: 7/1/1988
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: 3/8/1996
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 6451.441429623674095715482895
Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 6/20/1988
Preliminary Site Assessment Began: 8/31/1990
Pollution Characterization Began: 8/31/1990
Remediation Plan Submitted: 10/19/1990
Remedial Action Underway: 6/9/1992
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: 6/2/1988
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: TEXACO STATION
RP Address: Not reported
Program: LUST
Lat/Long: 34.2823196 / -1
Local Agency Staff: EHD
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:
Region: VENTURA
Facility ID: 88066
Status: Case Closed

E29
SSW
1/8-1/4
0.203 mi.
1070 ft.

TEXACO **UST** **U004065353**
347 MOORPARK AVE. **N/A**
MOORPARK, CA

Site 3 of 4 in cluster E

Relative:
Lower

Actual:
510 ft.

VENTURA CO. UST:
Facility ID: D 380
Facility Status: inactive

E30 **TEXACO STATION** **LUST** **S104994457**
SSW **347 MOORPARK** **VENTURA CO. BWT** **N/A**
1/8-1/4 **MOORPARK, CA 93021** **HIST CORTESE**
0.203 mi.
1070 ft. **Site 4 of 4 in cluster E**

Relative:
Lower

Actual:
510 ft.

LUST:

Lead Agency:	VENTURA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611100313
Global Id:	T0611100313
Latitude:	34.282202
Longitude:	-118.88242
Status:	Completed - Case Closed
Status Date:	03/08/1996
Case Worker:	Not reported
RB Case Number:	C-88066
Local Agency:	Not reported
File Location:	Not reported
Local Case Number:	88066
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0611100313
Contact Type:	Regional Board Caseworker
Contact Name:	DANIEL PIROTTON
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	dpirotton@waterboards.ca.gov
Phone Number:	2135766714

LUST:

Global Id:	T0611100313
Action Type:	ENFORCEMENT
Date:	06/02/1988
Action:	* Historical Enforcement

Global Id:	T0611100313
Action Type:	Other
Date:	06/02/1988
Action:	Leak Discovery

Global Id:	T0611100313
Action Type:	Other
Date:	06/02/1988
Action:	Leak Reported

LUST:

Global Id:	T0611100313
Status:	Open - Case Begin Date
Status Date:	06/02/1988

Global Id:	T0611100313
Status:	Open - Site Assessment
Status Date:	06/20/1988

TEXACO STATION (Continued) **S104994457**

Global Id: T0611100313
Status: Open - Site Assessment
Status Date: 07/01/1988

Global Id: T0611100313
Status: Open - Site Assessment
Status Date: 08/31/1990

Global Id: T0611100313
Status: Open - Remediation
Status Date: 10/19/1990

Global Id: T0611100313
Status: Open - Remediation
Status Date: 06/09/1992

Global Id: T0611100313
Status: Completed - Case Closed
Status Date: 03/08/1996

VENTURA CO. BWT:
Facility ID: BP 546
Program: Not reported

Facility ID: HM 914
Program: Not reported

Facility ID: HM 915
Program: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-88066

F31 **CONOCOPHILLIPS STN 254945** **LUST** **S111083121**
East **13800 PRINCETON AVENUE** **N/A**
1/8-1/4 **MOORPARK, CA 93020**
0.224 mi.
1183 ft. **Site 1 of 2 in cluster F**

Relative:
Higher

Actual:
538 ft.

LUST:
Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000003241
Global Id: T10000003241
Latitude: 34.2853705
Longitude: -118.8743297
Status: Completed - Case Closed
Status Date: 01/01/2008
Case Worker: Not reported
RB Case Number: Not reported
Local Agency: Not reported
File Location: Not reported
Local Case Number: SR0000000

CONOCOPHILLIPS STN 254945 (Continued) **S111083121**

Potential Media Affect: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

LUST:
Global Id: T10000003241
Action Type: RESPONSE
Date: 10/25/2007
Action: Other Report / Document

LUST:
Global Id: T10000003241
Status: Open - Case Begin Date
Status Date: 10/25/2007

Global Id: T10000003241
Status: Completed - Case Closed
Status Date: 01/01/2008

F32 **MOORPARK SERVICE INC** **UST** **U004118041**
East **13800 E PRINCETON AVE** **N/A**
1/8-1/4 **MOORPARK, CA 93021**
0.224 mi.
1183 ft. **Site 2 of 2 in cluster F**

Relative:
Higher

Actual:
538 ft.

UST:
Facility ID: 503
Permitting Agency: VENTURA COUNTY
Latitude: 34.2865524
Longitude: -118.8729835

Facility ID: Not reported
Permitting Agency: Ventura County Environmental Health
Latitude: 34.28523
Longitude: -118.87414

---

33 **CALTRANS- MOORPARK MAINTENANCE STATION** **SWF/LF** **S104583899**
ESE **626 FITCH AVE.** **N/A**
1/4-1/2 **MOORPARK, CA**
0.324 mi.
1710 ft.

Relative:
Higher

Actual:
535 ft.

SWF/LF (SWIS):
Region: STATE
Facility ID: 56-AA-0163
Lat/Long: 34.28424 / -118.87284
Owner Name: State Of California
Owner Telephone: 2138970951
Owner Address: Not reported
Owner Address2: 110 S. Main St.
Owner City,St,Zip: Los Angeles, CA 90012
Operational Status: Active
Operator: Caltrans- Moorpark Maintenance Station
Operator Phone: 8055291409
Operator Address: Randy Kerr

CALTRANS- MOORPARK MAINTENANCE STATION (Continued) **S104583899**

Operator Address2:	626 Fitch Ave.
Operator City,St,Zip:	Moorpark, CA 93021
Permit Date:	03/07/2011
Permit Status:	Notification
Permitted Acreage:	$3.20
Activity:	Limited Volume Transfer Operation
Regulation Status:	Notification
Landuse Name:	Residential
GIS Source:	Map
Category:	Transfer/Processing
Unit Number:	01
Inspection Frequency:	Annual
Accepted Waste:	Inert,Metals,Mixed municipal
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	Not reported
SWIS Num:	56-AA-0163
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	60
Actual Throughput with Units:	Cu Yards/day
Permitted Capacity with Units:	15000
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Cu Yards/year
Lat/Long:	34.28424 / -118.87284

G34 **AT&T CALIFORNIA - KD263** **RCRA-SQG** **1000250622**
ESE **400 MINOR ST** **LUST** **CAD980818660**
1/4-1/2 **MOORPARK, CA 93021** **SWEEPS UST**
0.340 mi. **HIST UST**
1795 ft. **Site 1 of 2 in cluster G** **CA FID UST**
FINDS
Relative: Higher **ECHO**
VENTURA CO. BWT
Actual: 531 ft. **HAZNET**
HIST CORTESE

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	PACIFIC BELL
Facility address:	400 MINOR MOORPARK, CA 93021
EPA ID:	CAD980818660
Mailing address:	170 N FAIR OAKS AVE RM 103 PASADENA, CA 91103
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

AT&T CALIFORNIA - KD263 (Continued) **1000250622**

Owner/Operator Summary:
Owner/operator name: PACIFIC TELE & TELE CO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: 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

Historical Generators:
Date form received by agency: 09/22/1983
Site name: PACIFIC BELL
Classification: Large Quantity Generator

Violation Status: No violations found

LUST:
Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611100890
Global Id: T0611100890

AT&T CALIFORNIA - KD263 (Continued) **1000250622**

Latitude:	34.2832565
Longitude:	-118.8732439
Status:	Completed - Case Closed
Status Date:	10/17/1996
Case Worker:	Not reported
RB Case Number:	C-94034
Local Agency:	Not reported
File Location:	Not reported
Local Case Number:	94034
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0611100890
Contact Type:	Regional Board Caseworker
Contact Name:	DANIEL PIROTTON
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	dpirotton@waterboards.ca.gov
Phone Number:	2135766714

LUST:

Global Id:	T0611100890
Action Type:	ENFORCEMENT
Date:	07/17/1994
Action:	* Historical Enforcement
Global Id:	T0611100890
Action Type:	Other
Date:	07/06/1994
Action:	Leak Reported
Global Id:	T0611100890
Action Type:	Other
Date:	07/06/1994
Action:	Leak Discovery

LUST:

Global Id:	T0611100890
Status:	Open - Case Begin Date
Status Date:	07/06/1994
Global Id:	T0611100890
Status:	Open - Site Assessment
Status Date:	07/06/1994
Global Id:	T0611100890
Status:	Open - Remediation
Status Date:	08/08/1994
Global Id:	T0611100890
Status:	Open - Remediation
Status Date:	10/15/1996
Global Id:	T0611100890

AT&T CALIFORNIA - KD263 (Continued) **1000250622**

Status: Open - Site Assessment
Status Date: 10/15/1996

Global Id: T0611100890
Status: Completed - Case Closed
Status Date: 10/17/1996

SWEEPS UST:
Status: Active
Comp Number: 1503
Number: 9
Board Of Equalization: 44-030830
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-001503-000001
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: 1

HIST UST:
File Number: 0002CC30
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CC30.pdf
Region: STATE
Facility ID: 00000057605
Facility Type: Other
Other Type: SIC 4800
Contact Name: E.J. KOEHLER
Telephone: 4155426758
Owner Name: PACIFIC BELL
Owner Address: 370 THIRD STREET
Owner City,St,Zip: SAN FRANCISCO, CA 94107
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1971
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 56001910
Regulated By: UTNKA
Regulated ID: CAD980818
Cortese Code: Not reported

AT&T CALIFORNIA - KD263 (Continued) **1000250622**

SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 400 MINOR ST
Mailing Address 2: Not reported
Mailing City,St,Zip: MOORPARK 93021
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

FINDS:

Registry ID: 110055885813

Environmental Interest/Information System
STATE MASTER

Registry ID: 110002672616

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.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000250622
Registry ID: 110002672616
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002672616

VENTURA CO. BWT:
Facility ID: HM 3743
Program: Not reported

Facility ID: FA0005032
Program: BUSINESS PLAN/CUPA UNDERGROUND TANKS

HAZNET:

AT&T CALIFORNIA - KD263 (Continued) **1000250622**

envid: 1000250622
Year: 2016
GEPAID: CAD980818660
Contact: SEAN MCFARLANE
Telephone: 9252776725
Mailing Name: Not reported
Mailing Address: 1 AT&T WAY ROOM 1A111C
Mailing City,St,Zip: BEDMINSTER, NJ 079212693
Gen County: Ventura
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.0966
Cat Decode: Aqueous solution with total organic residues less than 10 percent
Method Decode: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: Ventura

envid: 1000250622
Year: 2015
GEPAID: CAD980818660
Contact: SEAN MCFARLANE
Telephone: 9252776725
Mailing Name: Not reported
Mailing Address: P.O. BOX 5095, 4W200I
Mailing City,St,Zip: SAN RAMON, CA 945830000
Gen County: Ventura
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.063
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Ventura

envid: 1000250622
Year: 2014
GEPAID: CAD980818660
Contact: SEAN MCFARLANE
Telephone: 9258230280
Mailing Name: Not reported
Mailing Address: 2525 WATNEY
Mailing City,St,Zip: FAIRFIELD, CA 945330000
Gen County: Ventura
TSD EPA ID: CAD008302903
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.2
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Ventura

AT&T CALIFORNIA - KD263 (Continued) **1000250622**

envid: 1000250622
Year: 2014
GEPAID: CAD980818660
Contact: SEAN MCFARLANE
Telephone: 9258230280
Mailing Name: Not reported
Mailing Address: 2525 WATNEY
Mailing City,St,Zip: FAIRFIELD, CA 945330000
Gen County: Ventura
TSD EPA ID: CAD008302903
TSD County: Los Angeles
Waste Category: Aqueous solution with total organic residues 10 percent or more
Disposal Method: Solvents Recovery
Tons: 0.3
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Ventura

envid: 1000250622
Year: 2010
GEPAID: CAD980818660
Contact: JAMES CRANMER
Telephone: 3033917206
Mailing Name: Not reported
Mailing Address: 1 AT&T WAY RM 2C140
Mailing City,St,Zip: BEDMINSTER, NJ 079210000
Gen County: Not reported
TSD EPA ID: UTD991301748
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 0.025
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Ventura

Click this hyperlink while viewing on your computer to access
15 additional CA_HAZNET: record(s) in the EDR Site Report.

HIST CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-94034

G35 **PACIFIC BELL TELEPHONE** **LUST** **U002168898**
ESE **400 MINOR ST** **N/A**
1/4-1/2 **MOORPARK, CA 93021**
0.340 mi.
1795 ft. **Site 2 of 2 in cluster G**

Relative:
Higher

Actual:
531 ft.

LUST REG 4:
Region: 4
Regional Board: 04
County: Ventura
Facility Id: C-94034

PACIFIC BELL TELEPHONE (Continued) **U002168898**

Status:	Case Closed	
Substance:	Diesel	
Substance Quantity:	Not reported	
Local Case No:	94034	
Case Type:	Soil	
Abatement Method Used at the Site:		Excavate and Dispose
Global ID:	T0611100890	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	Not reported	
Enforcement Type:	EF	
Date Leak Discovered:	7/6/1994	
Date Leak First Reported:		7/6/1994
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	7/6/1994	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		10/17/1996
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		6817.006690111083707765827 8409
Source of Cleanup Funding:		F
Preliminary Site Assessment Workplan Submitted:		7/6/1994
Preliminary Site Assessment Began:		10/15/1996
Pollution Characterization Began:		7/6/1994
Remediation Plan Submitted:		10/15/1996
Remedial Action Underway:		8/8/1994
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		7/17/1994
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	PACIFIC BELL TELEPHONE	
RP Address:	Not reported	
Program:	LUST	
Lat/Long:	34.2832565 / -1	
Local Agency Staff:	EHD	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	Not reported	

VENTURA CO. LUST:
Region: VENTURA

PACIFIC BELL TELEPHONE (Continued) **U002168898**

Facility ID: 94034
Status: Case Closed

H36 **RIDDLE EQUIPMENT RENTALS** **LUST U002290902**
East **13840 LOS ANGELES AVE** **UST N/A**
1/4-1/2 **MOORPARK, CA**
0.361 mi.
1906 ft. **Site 1 of 4 in cluster H**

Relative: **Higher**

Actual: **542 ft.**

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Ventura	
Facility Id:	C95179	
Status:	Case Closed	
Substance:	Diesel	
Substance Quantity:	Not reported	
Local Case No:	95179	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0611101065	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	Not reported	
Enforcement Type:	CLOS	
Date Leak Discovered:	10/25/1995	
Date Leak First Reported:		10/25/1995
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	8/12/1995	
Date Leak Stopped:	1/1/1965	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		3/1/2000
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Tank	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		6057.764146727679620032651636 5
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		8/12/1995
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	RIDDLE EQUIP RENTALS INC	

RIDDLE EQUIPMENT RENTALS (Continued) **U002290902**

RP Address: 17304 GRACE COURT, GRASS VALLEY, CA 95949-7252
Program: LUST
Lat/Long: 34.2854134 / -1
Local Agency Staff: EKO
Beneficial Use: AGR, GWR, MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. UST:
Facility ID: D 1191
Facility Status: inactive

H37 **RIDDLE EQUIPMENT RENTALS** **HIST CORTESE** **S104164811**
East **13840 LOS ANGELES** **N/A**
1/4-1/2 **MOORPARK, CA 93021**
0.361 mi.
1906 ft. **Site 2 of 4 in cluster H**

Relative: **Higher**
Actual: **542 ft.**

HIST CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-95179

H38 **RIDDLE EQUIPMENT RENTALS** **LUST** **S103952913**
East **13840 LOS ANGELES AVE** **N/A**
1/4-1/2 **MOORPARK, CA 93021**
0.361 mi.
1906 ft. **Site 3 of 4 in cluster H**

Relative: **Higher**
Actual: **542 ft.**

LUST:
Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101065
Global Id: T0611101065
Latitude: 34.2922169
Longitude: -118.8362021
Status: Completed - Case Closed
Status Date: 03/01/2000
Case Worker: EKO
RB Case Number: C95179
Local Agency: VENTURA COUNTY
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: 95179
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0611101065
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)

RIDDLE EQUIPMENT RENTALS (Continued) **S103952913**

Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Global Id: T0611101065
Contact Type: Local Agency Caseworker
Contact Name: ERIN K. O'CONNELL
Organization Name: VENTURA COUNTY
Address: 800 S. VICTORIA AVE
City: VENTURA
Email: erin.oconnell@ventura.org
Phone Number: Not reported

LUST:
Global Id: T0611101065
Action Type: Other
Date: 10/25/1995
Action: Leak Reported

Global Id: T0611101065
Action Type: Other
Date: 10/25/1995
Action: Leak Discovery

Global Id: T0611101065
Action Type: ENFORCEMENT
Date: 03/01/0200
Action: Closure/No Further Action Letter

LUST:
Global Id: T0611101065
Status: Open - Case Begin Date
Status Date: 08/10/1995

Global Id: T0611101065
Status: Open - Reopen Case
Status Date: 08/10/1995

Global Id: T0611101065
Status: Open - Reopen Case
Status Date: 08/11/1995

Global Id: T0611101065
Status: Open - Site Assessment
Status Date: 08/12/1995

Global Id: T0611101065
Status: Completed - Case Closed
Status Date: 03/01/2000

H39 **RIDDLE EQUIPMENT RENTALS** **LUST** **S106098372**
East **13840 LOS ANGELES AVE** **N/A**
1/4-1/2 **MOORPARK, CA**
0.361 mi.
1906 ft. **Site 4 of 4 in cluster H**

Relative: **Higher**
Actual: **542 ft.**

VENTURA CO. LUST:
Region: VENTURA
Facility ID: 95179
Status: Case Closed

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40 **REPLANET LLC** **SWRCY** **S107138148**
SSW **101 W LOS ANGELES AVE** **VENTURA CO. BWT** **N/A**
1/4-1/2 **MOORPARK, CA 93021**
0.382 mi.
2018 ft.

Relative: **Lower**
Actual: **504 ft.**

SWRCY:

Reg Id:	155784
Cert Id:	RC155784.001
Mailing Address:	800 N Haven Ave Suite 120
Mailing City:	Ontario
Mailing State:	CA
Mailing Zip Code:	91764
Website:	http://www.replanet.com
Email:	Not reported
Phone Number:	(951) 520-1700
Grand Father:	N
Rural:	N
Operation Begin Date:	05/01/2012
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	CLOSED
Tuesday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Wednesday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Thursday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Friday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Saturday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Sunday Hours Of Operation:	CLOSED
Organization ID:	151891
Organization Name:	rePlanet LLC

VENTURA CO. BWT:
Facility ID: FA0022564
Program: BUSINESS PLAN/HAZARDOUS WASTE GENERATOR

41
South
1/4-1/2
0.401 mi.
2115 ft.

Relative:
Lower

Actual:
513 ft.

MOORPARK UNIF. SCHOOL DIST.
30 FLORY AVE
MOORPARK, CA

LUST **1000368487**
UST **N/A**
SWEEPS UST
HIST UST
CA FID UST
VENTURA CO. BWT
HIST CORTESE

LUST:

Lead Agency:	VENTURA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101132
Global Id:	T0611101132
Latitude:	34.279263
Longitude:	-118.880981
Status:	Completed - Case Closed
Status Date:	04/02/1997
Case Worker:	Not reported
RB Case Number:	C-97012
Local Agency:	Not reported
File Location:	Not reported
Local Case Number:	97012
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0611101132
Contact Type:	Regional Board Caseworker
Contact Name:	DANIEL PIROTTON
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	dpirotton@waterboards.ca.gov
Phone Number:	2135766714

LUST:

Global Id:	T0611101132
Action Type:	Other
Date:	01/12/1997
Action:	Leak Reported

Global Id:	T0611101132
Action Type:	Other
Date:	01/12/1997
Action:	Leak Discovery

LUST:

Global Id:	T0611101132
Status:	Open - Case Begin Date
Status Date:	01/06/1996

Global Id:	T0611101132
Status:	Open - Site Assessment
Status Date:	01/06/1996

Global Id:	T0611101132
Status:	Open - Remediation
Status Date:	03/17/1996

MOORPARK UNIF. SCHOOL DIST. (Continued) **1000368487**

Global Id: T0611101132
Status: Open - Site Assessment
Status Date: 12/16/1996

Global Id: T0611101132
Status: Open - Site Assessment
Status Date: 01/12/1997

Global Id: T0611101132
Status: Completed - Case Closed
Status Date: 04/02/1997

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Ventura	
Facility Id:	C-97012	
Status:	Case Closed	
Substance:	Diesel	
Substance Quantity:	Not reported	
Local Case No:	97012	
Case Type:	Soil	
Abatement Method Used at the Site:		Excavate and Dispose
Global ID:	T0611101132	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	1/12/1997	
Date Leak First Reported:		1/12/1997
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	1/12/1997	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		4/2/1997
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		7613.1515842730846554779268592
Source of Cleanup Funding:		F
Preliminary Site Assessment Workplan Submitted:		12/16/1996
Preliminary Site Assessment Began:		1/6/1996
Pollution Characterization Began:		12/16/1996
Remediation Plan Submitted:		3/17/1996
Remedial Action Underway:		3/17/1996
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported

MOORPARK UNIF. SCHOOL DIST. (Continued) **1000368487**

GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: MOORPARK UNIFIED SCHOOL DISTRI
RP Address: Not reported
Program: LUST
Lat/Long: 34.2792117 / -1
Local Agency Staff: KCK
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:
Region: VENTURA
Facility ID: 97012
Status: Case Closed

VENTURA CO. UST:
Facility ID: D 1266
Facility Status: inactive

SWEEPS UST:
Status: Active
Comp Number: 644
Number: 9
Board Of Equalization: 44-030671
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000644-000001
Tank Status: A
Capacity: 2000
Active Date: Not reported
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: 2

Status: Active
Comp Number: 644
Number: 9
Board Of Equalization: 44-030671
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 56-000-000644-000002
Tank Status: A
Capacity: 1000
Active Date: Not reported
Tank Use: UNKNOWN

MOORPARK UNIF. SCHOOL DIST. (Continued) **1000368487**

STG: P
Content: Not reported
Number Of Tanks: Not reported

HIST UST:
File Number: 0002CB57
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CB57.pdf
Region: STATE
Facility ID: 00000044551
Facility Type: Other
Other Type: PUBLIC SCHOOL
Contact Name: Not reported
Telephone: 8055291149
Owner Name: MOORPARK UNIFIED SCHOOL DISTRI
Owner Address: 30 FLORY AVE.
Owner City,St,Zip: MOORPARK, CA 93021
Total Tanks: 0002

Tank Num: 001
Container Num: 02
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 01
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 56002593
Regulated By: UTNKA
Regulated ID: 44551
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 30 FLORY AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: MOORPARK 93021
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

MOORPARK UNIF. SCHOOL DIST. (Continued) **1000368487**

VENTURA CO. BWT:
Facility ID: HM 436
Program: Not reported

Facility ID: BP 1867
Program: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-97012

42
SSW
1/4-1/2
0.453 mi.
2393 ft.

SUMMIT GAS STATION - LA AVE **LUST U003778477**
50 LOS ANGELES AVE. **VENTURA CO. BWT N/A**
MOORPARK, CA 93021

Relative:
Lower

Actual:
508 ft.

LUST:
Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101370
Global Id: T0611101370
Latitude: 34.278667005
Longitude: -118.882413205
Status: Completed - Case Closed
Status Date: 06/01/2010
Case Worker: DBW
RB Case Number: C01011
Local Agency: VENTURA COUNTY
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: 01011
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0611101370
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Global Id: T0611101370
Contact Type: Local Agency Caseworker
Contact Name: DIANE B. WAHL
Organization Name: VENTURA COUNTY
Address: 800 S. VICTORIA AVE.
City: VENTURA
Email: diane.wahl@ventura.org
Phone Number: 8056545040

SUMMIT GAS STATION - LA AVE (Continued) **U003778477**

LUST:

Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	12/11/2006
Action:	Technical Correspondence / Assistance / Other - #24
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	01/01/2008
Action:	File Review - Closure
Global Id:	T0611101370
Action Type:	Other
Date:	06/28/2001
Action:	Leak Reported
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	08/26/2009
Action:	Staff Letter
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	08/03/2006
Action:	Technical Correspondence / Assistance / Other - #23
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	06/05/2008
Action:	Technical Correspondence / Assistance / Other - #26
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	06/12/2003
Action:	* Historical Enforcement
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	01/13/2004
Action:	* Historical Enforcement
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	06/08/2009
Action:	LOP Case Closure Summary to RB
Global Id:	T0611101370
Action Type:	ENFORCEMENT
Date:	05/11/2005
Action:	* Historical Enforcement - #20
Global Id:	T0611101370
Action Type:	RESPONSE
Date:	07/30/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0611101370

SUMMIT GAS STATION - LA AVE (Continued) **U003778477**

Action Type: ENFORCEMENT
Date: 06/01/2010
Action: Closure/No Further Action Letter

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 05/12/2006
Action: Technical Correspondence / Assistance / Other - #21

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/31/2007
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 08/10/2007
Action: Unknown

Global Id: T0611101370
Action Type: Other
Date: 06/21/2001
Action: Leak Stopped

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 12/24/2009
Action: Staff Letter

Global Id: T0611101370
Action Type: RESPONSE
Date: 01/31/2005
Action: Remedial Progress Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/20/2006
Action: Other Report / Document

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 07/05/2006
Action: Technical Correspondence / Assistance / Other - #22

Global Id: T0611101370
Action Type: RESPONSE
Date: 01/31/2004
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/11/2003
Action: Interim Remedial Action Plan

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/31/2003

SUMMIT GAS STATION - LA AVE (Continued) **U003778477**

Action: Interim Remedial Action Plan

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/31/2006
Action: Remedial Progress Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 11/21/2003
Action: Interim Remedial Action Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 09/26/2003
Action: Sensitive Receptor Survey Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 02/27/2004
Action: Soil and Water Investigation Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 11/30/2003
Action: Soil and Water Investigation Report

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Technical Correspondence / Assistance / Other - #25

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/24/2003
Action: Other Report / Document

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/30/2003
Action: Other Report / Document

Global Id: T0611101370
Action Type: RESPONSE
Date: 04/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 09/17/2003
Action: * Historical Enforcement

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 05/21/2003
Action: * Historical Enforcement

SUMMIT GAS STATION - LA AVE (Continued) **U003778477**

Global Id: T0611101370
Action Type: Other
Date: 06/21/2001
Action: Leak Discovery

Global Id: T0611101370
Action Type: RESPONSE
Date: 08/15/2005
Action: Well Installation Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/29/2005
Action: Monitoring Report - Quarterly

Global Id: T0611101370
Action Type: RESPONSE
Date: 07/29/2005
Action: Remedial Progress Report

Global Id: T0611101370
Action Type: RESPONSE
Date: 06/09/2006
Action: Other Report / Document

Global Id: T0611101370
Action Type: RESPONSE
Date: 06/09/2006
Action: Soil and Water Investigation Workplan

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/30/2009
Action: Well Destruction Report

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 07/07/2003
Action: * Historical Enforcement

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/13/2003
Action: Unknown

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/10/2003
Action: Unknown

Global Id: T0611101370
Action Type: RESPONSE
Date: 06/18/2004
Action: Other Report / Document

Global Id: T0611101370
Action Type: ENFORCEMENT

SUMMIT GAS STATION - LA AVE (Continued) **U003778477**

Date: 10/10/2003
Action: Meeting

Global Id: T0611101370
Action Type: RESPONSE
Date: 01/02/2010
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0611101370
Action Type: REMEDIATION
Date: 09/22/2004
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 04/20/2009
Action: File review

Global Id: T0611101370
Action Type: RESPONSE
Date: 10/30/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0611101370
Action Type: ENFORCEMENT
Date: 07/27/2009
Action: Staff Letter - #27

LUST:
Global Id: T0611101370
Status: Open - Case Begin Date
Status Date: 06/21/2001

Global Id: T0611101370
Status: Open - Site Assessment
Status Date: 12/08/2003

Global Id: T0611101370
Status: Open - Site Assessment
Status Date: 02/27/2004

Global Id: T0611101370
Status: Open - Remediation
Status Date: 01/01/2005

Global Id: T0611101370
Status: Open - Remediation
Status Date: 01/31/2005

Global Id: T0611101370
Status: Open - Remediation
Status Date: 07/29/2005

Global Id: T0611101370
Status: Open - Site Assessment
Status Date: 06/09/2006

SUMMIT GAS STATION - LA AVE (Continued) **U003778477**

Global Id: T0611101370
Status: Open - Remediation
Status Date: 07/31/2006

Global Id: T0611101370
Status: Open - Verification Monitoring
Status Date: 04/30/2008

Global Id: T0611101370
Status: Completed - Case Closed
Status Date: 06/01/2010

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Ventura	
Facility Id:	C-01011	
Status:	Preliminary site assessment underway	
Substance:	Hydrocarbons	
Substance Quantity:	Not reported	
Local Case No:	01011	
Case Type:	Undefined	
Abatement Method Used at the Site:		Not reported
Global ID:	T0611101370	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	MOORPARK AVE.	
Enforcement Type:	LFOR	
Date Leak Discovered:	6/21/2001	
Date Leak First Reported:		6/28/2001
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	6/21/2001	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		Not reported
How Leak Discovered:	Subsurface Monitoring	
How Leak Stopped:	Other Means	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		7642.641373977398903808194 4832
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		12/8/2003
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		2/18/2004
Hist Max MTBE Conc in Groundwater:		57000
Hist Max MTBE Conc in Soil:		28700
Significant Interim Remedial Action Taken:		Not reported

SUMMIT GAS STATION - LA AVE (Continued) **U003778477**

GW Qualifier: =
Soil Qualifier: =
Organization: Not reported
Owner Contact: Not reported
Responsible Party: SAM ATASSI
RP Address: 1842 ROSCOMARE RD.
Program: LUST
Lat/Long: 34.279037 / -1
Local Agency Staff: KEA
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:
Region: VENTURA
Facility ID: 01011
Status: Remedial action (cleanup) Underway

VENTURA CO. BWT:
Facility ID: HM 2955
Program: Not reported

Facility ID: HM 3720
Program: Not reported

Facility ID: HM 738
Program: Not reported

43
SW
1/4-1/2
0.475 mi.
2510 ft.

SHELL SS - NEW LA AVE **LUST S106568385**
301 NEW LOS ANGELES AVE **VENTURA CO. BWT N/A**
MOORPARK, CA 93021

Relative:
Lower

Actual:
500 ft.

LUST:
Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611123476
Global Id: T0611123476
Latitude: 34.2792059
Longitude: -118.8861292
Status: Completed - Case Closed
Status Date: 09/16/2008
Case Worker: GLT
RB Case Number: C04030
Local Agency: VENTURA COUNTY
File Location: Local Agency
Local Case Number: 04030
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0611123476

SHELL SS - NEW LA AVE (Continued) **S106568385**

Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Global Id: T0611123476
Contact Type: Local Agency Caseworker
Contact Name: GINA TERESA
Organization Name: VENTURA COUNTY
Address: 800 S. VICTORIA AVENUE
City: VENTURA
Email: gina.teresa@ventura.org
Phone Number: Not reported

LUST:
Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 11/06/2006
Action: Technical Correspondence / Assistance / Other - #15

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 04/09/2008
Action: LOP Case Closure Summary to RB - #16

Global Id: T0611123476
Action Type: Other
Date: 06/28/2004
Action: Leak Reported

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 07/17/2006
Action: Technical Correspondence / Assistance / Other - #14

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 12/30/2005
Action: * Historical Enforcement - #13

Global Id: T0611123476
Action Type: REMEDIATION
Date: 06/18/2004
Action: Excavation

Global Id: T0611123476
Action Type: Other
Date: 06/19/2004
Action: Leak Stopped

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 01/26/2007
Action: File review - #-

SHELL SS - NEW LA AVE (Continued) **S106568385**

Global Id: T0611123476
Action Type: RESPONSE
Date: 09/15/2005
Action: Soil and Water Investigation Workplan

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 01/01/2008
Action: File review

Global Id: T0611123476
Action Type: RESPONSE
Date: 09/12/2008
Action: Well Destruction Report

Global Id: T0611123476
Action Type: RESPONSE
Date: 09/15/2005
Action: Electronic Reporting Submittal Due

Global Id: T0611123476
Action Type: RESPONSE
Date: 02/15/2005
Action: Soil and Water Investigation Report

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 09/16/2008
Action: Closure/No Further Action Letter

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 12/14/2004
Action: * Historical Enforcement - #10

Global Id: T0611123476
Action Type: Other
Date: 06/18/2004
Action: Leak Discovery

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 07/12/2005
Action: * Historical Enforcement - #11

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 04/23/2008
Action: Technical Correspondence / Assistance / Other - #17

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 07/02/2008
Action: Staff Letter - #18

Global Id: T0611123476
Action Type: RESPONSE

SHELL SS - NEW LA AVE (Continued) **S106568385**

Date: 12/02/2005
Action: Soil and Water Investigation Report

Global Id: T0611123476
Action Type: RESPONSE
Date: 01/31/2006
Action: Monitoring Report - Quarterly

Global Id: T0611123476
Action Type: RESPONSE
Date: 10/31/2006
Action: Monitoring Report - Quarterly

Global Id: T0611123476
Action Type: RESPONSE
Date: 04/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0611123476
Action Type: RESPONSE
Date: 10/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0611123476
Action Type: ENFORCEMENT
Date: 09/14/2005
Action: * Historical Enforcement - #12

LUST:
Global Id: T0611123476
Status: Open - Case Begin Date
Status Date: 06/18/2004

Global Id: T0611123476
Status: Open - Remediation
Status Date: 07/01/2004

Global Id: T0611123476
Status: Open - Site Assessment
Status Date: 09/01/2004

Global Id: T0611123476
Status: Open - Site Assessment
Status Date: 12/14/2004

Global Id: T0611123476
Status: Open - Site Assessment
Status Date: 09/09/2005

Global Id: T0611123476
Status: Open - Verification Monitoring
Status Date: 09/29/2006

Global Id: T0611123476
Status: Completed - Case Closed
Status Date: 09/16/2008

SHELL SS - NEW LA AVE (Continued) **S106568385**

VENTURA CO. LUST:
Region: VENTURA
Facility ID: 04030
Status: Post remedial action monitoring

VENTURA CO. BWT:
Facility ID: HM 3755
Program: Not reported

I44 **CHEVRON #9-0688** **LUST** **S105974848**
SE **502 LOS ANGELES AVE E** **N/A**
1/4-1/2 **MOORPARK, CA 93021**
0.481 mi.
2541 ft. **Site 1 of 3 in cluster I**

Relative:
Higher

Actual:
525 ft.

LUST:
Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611100314
Global Id: T0611100314
Latitude: 34.278786973
Longitude: -118.874476663
Status: Completed - Case Closed
Status Date: 04/21/2003
Case Worker: EKO
RB Case Number: C88067
Local Agency: VENTURA COUNTY
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: 88067
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0611100314
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Global Id: T0611100314
Contact Type: Local Agency Caseworker
Contact Name: ERIN K. O'CONNELL
Organization Name: VENTURA COUNTY
Address: 800 S. VICTORIA AVE
City: VENTURA
Email: erin.oconnell@ventura.org
Phone Number: Not reported

LUST:
Global Id: T0611100314
Action Type: ENFORCEMENT
Date: 04/11/2003
Action: Closure/No Further Action Letter

CHEVRON #9-0688 (Continued) **S105974848**

Global Id: T0611100314
Action Type: Other
Date: 08/15/1988
Action: Leak Discovery

Global Id: T0611100314
Action Type: Other
Date: 08/15/1988
Action: Leak Reported

LUST:
Global Id: T0611100314
Status: Open - Case Begin Date
Status Date: 08/15/1988

Global Id: T0611100314
Status: Open - Site Assessment
Status Date: 08/15/1988

Global Id: T0611100314
Status: Open - Site Assessment
Status Date: 10/13/1988

Global Id: T0611100314
Status: Completed - Case Closed
Status Date: 04/21/2003

LUST REG 4:
Region: 4
Regional Board: 04
County: Ventura
Facility Id: C88067
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: 88067
Case Type: Groundwater
Abatement Method Used at the Site: Vent Soil
Global ID: T0611100314
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: CLOS
Date Leak Discovered: 8/15/1988
Date Leak First Reported: 8/15/1988
Date Leak Record Entered: Not reported
Date Confirmation Began: 8/15/1988
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: 4/21/2003
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported

CHEVRON #9-0688 (Continued) **S105974848**

Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		8213.123802835543880658501448
Source of Cleanup Funding:		F
Preliminary Site Assessment Workplan Submitted:		8/15/1988
Preliminary Site Assessment Began:		10/13/1988
Pollution Characterization Began:		10/13/1988
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		8/15/1988
Historical Max MTBE Date:		12/17/1997
Hist Max MTBE Conc in Groundwater:		20
Hist Max MTBE Conc in Soil:		.092
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	<	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	CHEVRON USA PRODUCTS COMPANY	
RP Address:	145 S. STATE COLLEGE BLVD., RM #4084, BREA 92822-2292	
Program:	LUST	
Lat/Long:	34.27864499 / -1	
Local Agency Staff:	EKO	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	7/13/00 2ND QTR GW MON RPT 2000; 10/18/00 3RD QTR GW MON RPT 2000	

VENTURA CO. LUST:

Region:	VENTURA
Facility ID:	88067
Status:	Case Closed

I45 **CHEVRON SS #0688** **VENTURA CO. BWT** **S103684163**
SE **502 LOS ANGELES** **HIST CORTESE** **N/A**
1/4-1/2 **MOORPARK, CA 93021**
0.481 mi.
2541 ft. **Site 2 of 3 in cluster I**

Relative:
Higher

Actual:
525 ft.

VENTURA CO. BWT:

Facility ID:	FA0004873
Program:	HAZARDOUS WASTE GENERATOR/CUPA UNDERGROUND TANKS/BUSINESS PLAN

HIST CORTESE:

Region:	CORTESE
Facility County Code:	56
Reg By:	LTNKA
Reg Id:	C-88067

I46 **TOSCO - 76 SS #4945** **LUST** **S103952686**
SE **506 LOS ANGELES AVE** **N/A**
1/4-1/2 **MOORPARK, CA 93021**
0.488 mi.
2575 ft. **Site 3 of 3 in cluster I**

Relative:
Higher

Actual:
525 ft.

LUST:

Lead Agency:	VENTURA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611101179
Global Id:	T0611101179
Latitude:	34.278911
Longitude:	-118.8740221
Status:	Completed - Case Closed
Status Date:	10/01/2004
Case Worker:	Not reported
RB Case Number:	C98021
Local Agency:	Not reported
File Location:	Local Agency Warehouse
Local Case Number:	98021
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0611101179
Contact Type:	Regional Board Caseworker
Contact Name:	DANIEL PIROTTON
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	dpirotton@waterboards.ca.gov
Phone Number:	2135766714

LUST:

Global Id:	T0611101179
Action Type:	Other
Date:	08/03/1998
Action:	Leak Reported

Global Id:	T0611101179
Action Type:	Other
Date:	08/03/1998
Action:	Leak Discovery

Global Id:	T0611101179
Action Type:	RESPONSE
Date:	02/25/2009
Action:	Correspondence

Global Id:	T0611101179
Action Type:	ENFORCEMENT
Date:	08/11/2003
Action:	* No Action

Global Id:	T0611101179
Action Type:	ENFORCEMENT
Date:	02/19/2004
Action:	* Historical Enforcement - #L01

TOSCO - 76 SS #4945 (Continued) **S103952686**

Global Id: T0611101179
Action Type: ENFORCEMENT
Date: 10/01/2004
Action: Technical Correspondence / Assistance / Other

Global Id: T0611101179
Action Type: ENFORCEMENT
Date: 04/27/2009
Action: Staff Letter - #DueDil

Global Id: T0611101179
Action Type: ENFORCEMENT
Date: 10/07/2004
Action: Closure/No Further Action Letter

LUST:
Global Id: T0611101179
Status: Open - Case Begin Date
Status Date: 06/02/1998

Global Id: T0611101179
Status: Open - Site Assessment
Status Date: 06/02/1998

Global Id: T0611101179
Status: Open - Site Assessment
Status Date: 08/03/1998

Global Id: T0611101179
Status: Completed - Case Closed
Status Date: 10/01/2004

Lead Agency: VENTURA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611100511
Global Id: T0611100511
Latitude: 34.278911
Longitude: -118.8740221
Status: Completed - Case Closed
Status Date: 07/15/1993
Case Worker: Not reported
RB Case Number: C-89102
Local Agency: Not reported
File Location: Not reported
Local Case Number: 89102
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0611100511
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN

TOSCO - 76 SS #4945 (Continued) **S103952686**

Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

LUST:
Global Id: T0611100511
Action Type: Other
Date: 07/26/1989
Action: Leak Discovery

Global Id: T0611100511
Action Type: ENFORCEMENT
Date: 08/04/1989
Action: * Historical Enforcement

Global Id: T0611100511
Action Type: Other
Date: 07/26/1989
Action: Leak Reported

LUST:
Global Id: T0611100511
Status: Open - Case Begin Date
Status Date: 07/26/1989

Global Id: T0611100511
Status: Open - Site Assessment
Status Date: 07/26/1989

Global Id: T0611100511
Status: Open - Site Assessment
Status Date: 10/15/1992

Global Id: T0611100511
Status: Open - Remediation
Status Date: 06/15/1993

Global Id: T0611100511
Status: Completed - Case Closed
Status Date: 07/15/1993

47
West
1/2-1
0.759 mi.
4005 ft.

VIKING ELECTRONICS INC **ENVIROSTOR** **S104579043**
5455 ENDEAVOUR CT **WDS** **N/A**
MOORPARK, CA 93021

Relative:
Lower

Actual:
484 ft.

ENVIROSTOR:
Facility ID: 71003350
Status: Refer: Other Agency
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED

VIKING ELECTRONICS INC (Continued) **S104579043**

Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Chatsworth
Assembly: 44
Senate: 27
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.28387
Longitude: -118.8948
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAL000140644
Alias Type: EPA Identification Number
Alias Name: 71003350
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

WDS:
Facility ID: 4 56I014978
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 4
Facility Telephone: 8055539655
Facility Contact: JUSTIN KILLGORE
Agency Name: VIKING ELECTRONICS INC
Agency Address: 5455 Endeavour Ct
Agency City,St,Zip: Moorpark 930211712

VIKING ELECTRONICS INC (Continued) **S104579043**

Agency Contact:	JUSTIN KILLGORE
Agency Telephone:	8055539655
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

48
North
1/2-1
0.900 mi.
4754 ft.

WALNUT CANYON TRACT **ENVIROSTOR** **S100204264**
WALNUT CANYON RD-N OF MOORPARK 32&33 **N/A**
MOORPARK, CA 93021

Relative:
Higher

Actual:
710 ft.

ENVIROSTOR:

Facility ID:	56490100
Status:	No Further Action
Status Date:	06/30/1991
Site Code:	300266
Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	350
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	* Mmonroy
Division Branch:	Cleanup Chatsworth
Assembly:	37
Senate:	27
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	34.31505
Longitude:	-118.8807
APN:	NONE SPECIFIED

WALNUT CANYON TRACT (Continued) **S100204264**

Past Use: ILLEGAL DUMPING
Potential COC: Arsenic Asbestos Containing Materials (ACM Total Chromium (1:6 ratio Cr VI:Cr III Lead TPH-gas Aluminum Beryllium and compounds Cadmium and compounds
Confirmed COC: 30001-NO 30005-NO 30013-NO 30025-NO 30047-NO 30080-NO 30108-NO 40001-NO
Potential Description: SOIL
Alias Name: WALNUT CANYON ASSOCIATION
Alias Type: Alternate Name
Alias Name: 300266
Alias Type: Project Code (Site Code)
Alias Name: 56490100
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/27/1994
Comments: CalSites Validation Program confirms NFA for DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/30/1991
Comments: Based on the information provided in the PEA and the addendum reports, the contamination at the site may not constitute a threat to human health and environment. Therefore, the Dept concurs with the PEA recommendation that no further action is needed at the site at this time.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/20/1990
Comments: Did not address the surface water and groundwater targets, did not put in any monitoring wells. Residential house in proximity. Few groundwater wells within one mile radius. Did not address metal contamination and did not take any deep soil samples to confirm petroleum hydrocarbon migration Medium priority PEA recommended.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SIMI	1003878606	UNION OIL CO SIMI OIL FLD	BET MOORPARK COMM COLL & SIMI	93021	SEMS-ARCHIVE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
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: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list 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). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS 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 the 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. The 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 potential NPL site.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/30/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

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: 02/16/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 78

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
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: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
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: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
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: 01/16/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 63

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/12/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 48

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
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 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 REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

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: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/06/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
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: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 15

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
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: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
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).

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 01/13/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
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: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

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: 01/19/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/02/2018
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: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/08/2018
Date Data Arrived at EDR: 02/09/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 39

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
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: 01/30/2018
Next Scheduled EDR Contact: 05/14/2018
Data Release Frequency: Varies

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: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: No Update Planned

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

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/04/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
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: 06/30/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 07/23/2018
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: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
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: 02/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 27

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/22/2018
Next Scheduled EDR Contact: 06/11/2018
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

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 04/19/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

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: 01/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 46

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
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: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

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: 02/08/2018
Date Data Arrived at EDR: 02/08/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 0

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
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: 01/19/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 63

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

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: 02/15/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

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: 02/21/2018
Next Scheduled EDR Contact: 06/04/2018
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: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
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: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
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: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2018
Next Scheduled EDR Contact: 08/27/2018
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: 01/11/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
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: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
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: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
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: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
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: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/23/2018
Next Scheduled EDR Contact: 06/04/2018
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: 04/09/2018
Next Scheduled EDR Contact: 08/06/2018
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: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 06/18/2018
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: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/20/2018
Next Scheduled EDR Contact: 08/06/2018
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: 04/27/2018
Next Scheduled EDR Contact: 08/20/2018
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: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
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: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
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: 03/09/2018
Next Scheduled EDR Contact: 06/18/2018
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: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
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: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
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: 01/03/2018
Date Data Arrived at EDR: 01/04/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/16/2018
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: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
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: 12/31/2017
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 79

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/02/2018
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: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/23/2018
Next Scheduled EDR Contact: 06/04/2018
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: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

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: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
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: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
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: 01/25/2018
Date Data Arrived at EDR: 02/28/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 72

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/11/2018
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: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
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: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/20/2017
Date Data Arrived at EDR: 12/21/2017
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 92

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 28

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/23/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/13/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 30

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/21/2018
Next Scheduled EDR Contact: 06/04/2018
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: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA LIVERMORE-PLEASANTON
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA SAN FRANCISCO CO
Cupa facilities

Date of Government Version: 04/20/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

DRYCLEAN AVAQMD: DRYCLEAN AVAQMD
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52
Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

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: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 36
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: DRYCLEAN SOUTH COAST
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/16/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45
Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
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: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 54

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 02/14/2018
Date Data Arrived at EDR: 02/16/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 46

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
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: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/21/2018
Next Scheduled EDR Contact: 06/04/2018
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. 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: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/21/2018
Next Scheduled EDR Contact: 06/04/2018
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: 01/08/2018
Date Data Arrived at EDR: 01/09/2018
Date Made Active in Reports: 02/06/2018
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

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: 02/27/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
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: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/19/2018
Number of Days to Update: 45

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/05/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
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: 03/23/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
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: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
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: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
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: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

OTHER OIL GAS: OTHER OIL & GAS (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

PROD WATER PONDS: PROD WATER PONDS (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

PROJECT: PROJECT (GEOTRACKER)
Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

NON-CASE INFO: NON-CASE INFO (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

SAMPLING POINT: SAMPLING POINT (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

WELL STIM PROJ: WELL SAMP PROJ (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

CIWQS: The California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 60

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

UIC GEO: UIC GEO (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
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.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. 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 Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. 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: 01/09/2018
Date Data Arrived at EDR: 01/11/2018
Date Made Active in Reports: 02/22/2018
Number of Days to Update: 42

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa Facility List

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 10

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/25/2018
Date Data Arrived at EDR: 01/26/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 47

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/26/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/26/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 14

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 48

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/05/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 40

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 39

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
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: 03/01/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 9

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/30/2018
Number of Days to Update: 53

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/26/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 47

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/02/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 54

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
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: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 28

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/06/2018
Date Data Arrived at EDR: 02/09/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

LASSEN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 56

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/16/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 29

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 05/14/2018
Number of Days to Update: 13

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 01/17/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 28

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/05/2018
Date Made Active in Reports: 01/18/2018
Number of Days to Update: 13

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
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: 02/21/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 40

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 28

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 01/11/2018
Date Data Arrived at EDR: 01/12/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 27

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MONO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 15

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/22/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 18

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
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: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/22/2018
Next Scheduled EDR Contact: 06/11/2018
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: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 30

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/22/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 01/31/2018
Date Data Arrived at EDR: 02/01/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 41

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 35

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 02/07/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/19/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 46

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/15/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 50

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
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: 11/02/2017
Date Data Arrived at EDR: 01/03/2018
Date Made Active in Reports: 02/05/2018
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
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: 11/02/2017
Date Data Arrived at EDR: 01/03/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 42

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/17/2017
Number of Days to Update: 14

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

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: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 46

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 08/20/2018
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: 03/05/2018
Date Data Arrived at EDR: 03/07/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 40

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/18/2018
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: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Local Oversight Program Listing

A listing all LOP release sites that are or were under the County of San Diegoa??s jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/23/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 11

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
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: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
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: 03/20/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 43

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
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: 03/14/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
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: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SANTA CLARA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Cupa Facility List
Cupa facility list

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
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: 02/22/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/04/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 42

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
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: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 16

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 20

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
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: 04/03/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/09/2018
Number of Days to Update: 33

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/06/2018
Date Data Arrived at EDR: 02/07/2018
Date Made Active in Reports: 03/16/2018
Number of Days to Update: 37

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 01/08/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 29

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 01/26/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 47

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 04/17/2018
Number of Days to Update: 26

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/16/2018
Number of Days to Update: 50

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 48

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
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: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
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: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
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: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 54

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
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: 02/28/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 16

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 31

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 02/01/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 47

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
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: 01/03/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 03/22/2018
Number of Days to Update: 36

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 07/23/2018
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: 12/31/2017
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/09/2018
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/08/2018
Next Scheduled EDR Contact: 06/25/2018
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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

MOORPARK RR DEPOT
E HIGH STREET
MOORPARK, CA 93021

TARGET PROPERTY COORDINATES

Latitude (North):	34.28516 - 34° 17' 6.58''
Longitude (West):	118.880118 - 118° 52' 48.42''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	326942.1
UTM Y (Meters):	3795179.2
Elevation:	517 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5630753 MOORPARK, CA
Version Date:	2012
Northeast Map:	5630771 SIMI VALLEY WEST, 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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

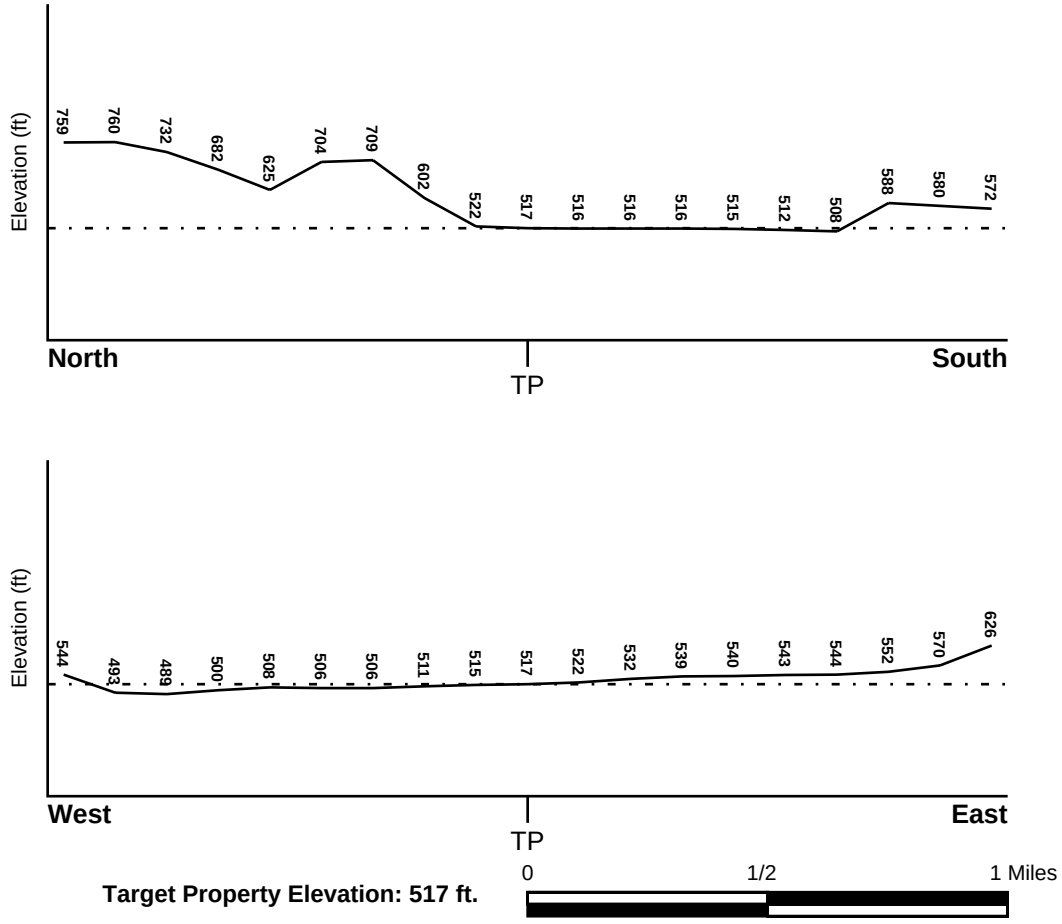
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06111C0817E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06111C0836E	FEMA FIRM Flood data
06111C0819E	FEMA FIRM Flood data
06111C0838E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
MOORPARK	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

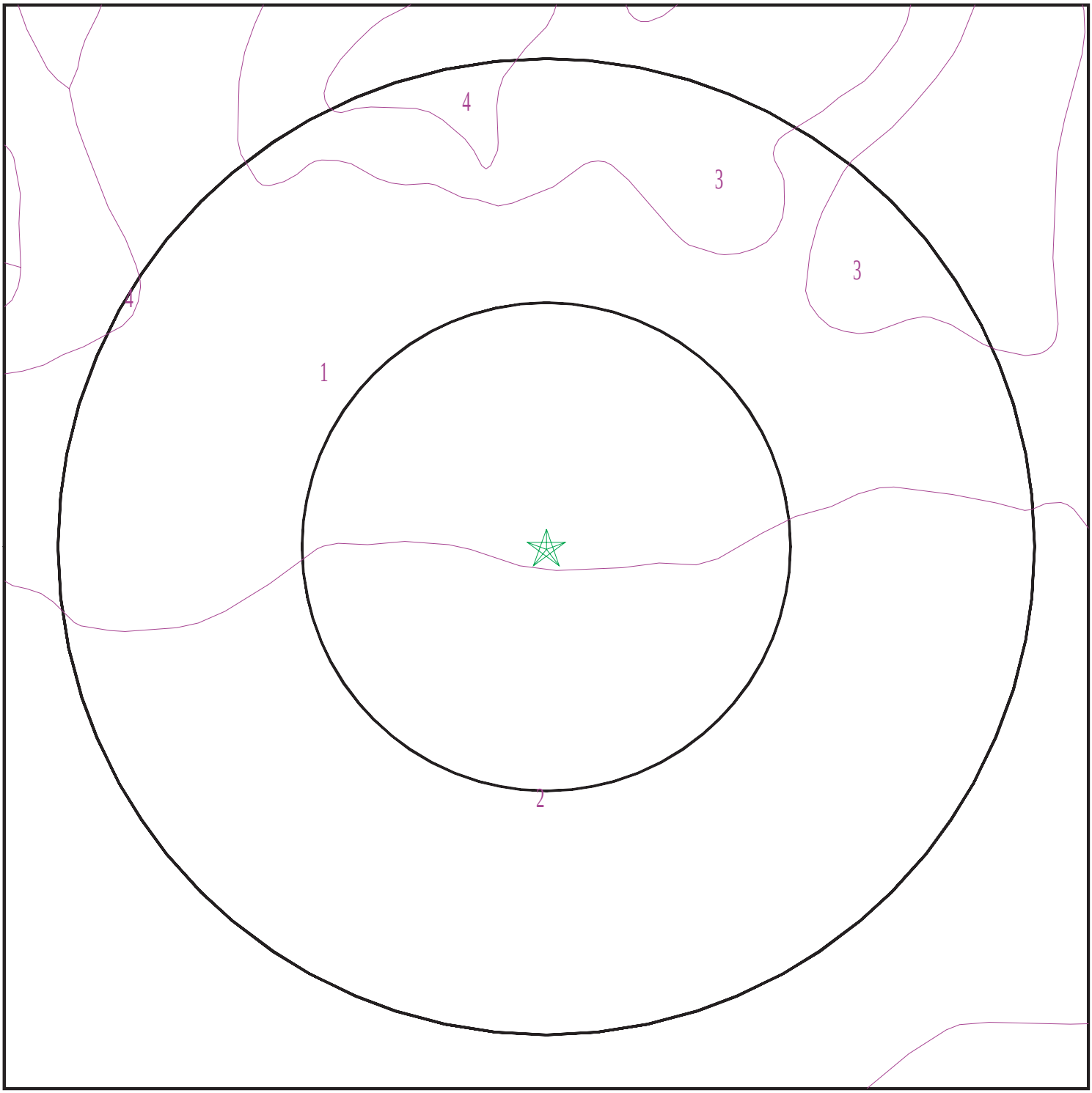
Era:	Cenozoic
System:	Tertiary
Series:	Pliocene
Code:	Tp *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 05306248.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Moorpark RR Depot	CLIENT:	Rincon
ADDRESS:	E High Street Moorpark CA 93021	CONTACT:	Sarah Larese
LAT/LONG:	34.28516 / 118.880118	INQUIRY #:	05306248.2r
		DATE:	May 22, 2018 4:22 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: GARRETSON

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	22 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.8 Min: 6.1

Soil Map ID: 2

Soil Component Name: MOCHO

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

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 conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	16 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: SOPER

Soil Surface Texture: gravelly 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: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	11 inches	40 inches	very gravelly clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
3	40 inches	44 inches	weathered bedrock	Not reported	Not reported	Max: 0 Min: 0	Max: Min:

Soil Map ID: 4

Soil Component Name: CHESTERTON

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.6
2	9 inches	25 inches	sandy clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.5
3	25 inches	35 inches	indurated	Not reported	Not reported	Max: Min:	Max: Min:
4	35 inches	59 inches	sandy loam	Not reported	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.8 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	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

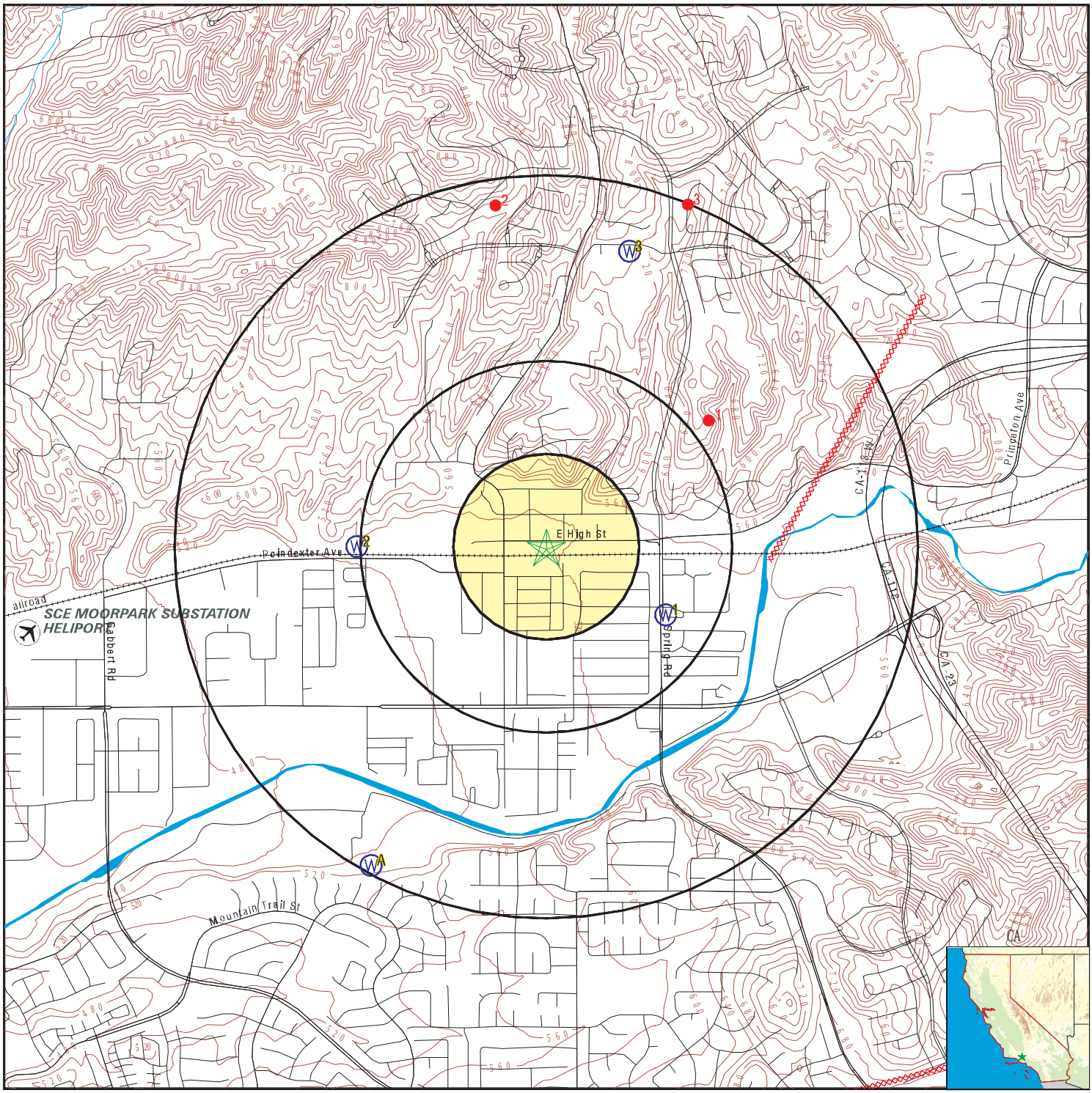
MAP ID	WELL ID	LOCATION FROM TP
1	CADW60000016853	1/4 - 1/2 Mile ESE
2	CADW60000016854	1/2 - 1 Mile West
3	CADW60000019847	1/2 - 1 Mile NNE
A4	CADW60000016860	1/2 - 1 Mile SSW
A5	CADW60000033255	1/2 - 1 Mile SSW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG11000290596	1/2 - 1 Mile NE
2	CAOG11000284968	1/2 - 1 Mile North
3	CAOG11000284965	1/2 - 1 Mile NNE

PHYSICAL SETTING SOURCE MAP - 05306248.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Moorpark RR Depot	CLIENT:	Rincon
ADDRESS:	E High Street Moorpark CA 93021	CONTACT:	Sarah Larese
		INQUIRY #:	05306248.2r
LAT/LONG:	34.28516 / 118.880118	DATE:	May 22, 2018 4:22 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
ESE
1/4 - 1/2 Mile
Higher

CA WELLS **CADW60000016853**

Objectid:	16853
Latitude:	34.2825
Longitude:	-118.8745
Site code:	342825N1188745W001
State well numbe:	02N19W04K001S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	56
County name:	Ventura
Basin code:	'4-8'
Basin desc:	Las Posas Valley
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000016853

2
West
1/2 - 1 Mile
Lower

CA WELLS **CADW60000016854**

Objectid:	16854
Latitude:	34.28517
Longitude:	-118.88902
Site code:	342853N1188895W001
State well numbe:	02N19W05K001S
Local well name:	'02N19W05K01S'
Well use id:	3
Well use descrip:	Irrigation
County id:	56
County name:	Ventura
Basin code:	'4-8'
Basin desc:	Las Posas Valley
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000016854

3
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000019847**

Objectid:	19847
Latitude:	34.2967
Longitude:	-118.8762
Site code:	342967N1188762W001
State well numbe:	03N19W33P003S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	56
County name:	Ventura

Basin code:	'4-8'
Basin desc:	Las Posas Valley
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000019847

A4
SSW **CA WELLS** **CADW60000016860**
1/2 - 1 Mile
Lower

Objectid:	16860
Latitude:	34.27263
Longitude:	-118.887696
Site code:	342722N1188870W001
State well numbe:	02N19W08H002S
Local well name:	'02N19W08H02S'
Well use id:	3
Well use descrip:	Irrigation
County id:	56
County name:	Ventura
Basin code:	'4-8'
Basin desc:	Las Posas Valley
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000016860

A5
SSW **CA WELLS** **CADW60000033255**
1/2 - 1 Mile
Lower

Objectid:	33255
Latitude:	34.2728
Longitude:	-118.889
Site code:	342728N1188890W001
State well numbe:	02N19W08G003S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	56
County name:	Ventura
Basin code:	'4-8'
Basin desc:	Las Posas Valley
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000033255

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
NE
1/2 - 1 Mile

OIL_GAS **CAOG11000290596**

District nun:	2	Api number:	11105681
Blm well:	N	Redrill can:	No
Dryhole:	Y	Well status:	P
Operator name:	ExxonMobil Corporation		
County name:	Ventura	Fieldname:	Any Field
Area name:	Any Area	Section:	4
Township:	02N	Range:	19W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Edd H. Williams et ux	Wellnumber:	B-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	19-AUG-55
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Not Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000290596		

2
North
1/2 - 1 Mile

OIL_GAS **CAOG11000284968**

District nun:	2	Api number:	11100864
Blm well:	N	Redrill can:	No
Dryhole:	Y	Well status:	P
Operator name:	Petan Co.		
County name:	Ventura	Fieldname:	Moorpark (ABD)
Area name:	Any Area	Section:	33
Township:	03N	Range:	19W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	gps		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	31-MAY-60
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Not Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000284968		

3
NNE
1/2 - 1 Mile

OIL_GAS **CAOG11000284965**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

District nun:	2	Api number:	11100861
Blm well:	N	Redrill can:	No
Dryhole:	Y	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Ventura	Fieldname:	Moorpark (ABD)
Area name:	Any Area	Section:	33
Township:	03N	Range:	19W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Williams	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:	CAOG11000284965		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93021	255	11

Federal EPA Radon Zone for VENTURA County: 1

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: 93021

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.625 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

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^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation 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 C

Historical Research Documentation

Moorpark RR Depot

E High Street

Moorpark, CA 93021

Inquiry Number: 5306248.4

May 22, 2018

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

05/22/18

Site Name:

Moorpark RR Depot
E High Street
Moorpark, CA 93021
EDR Inquiry # 5306248.4

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Sarah Larese

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Rincon 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:

P.O.# 18-05844
Project: 18-05844

Coordinates:

Latitude:	34.28516 34° 17' 7" North
Longitude:	-118.880118 -118° 52' 48" West
UTM Zone:	Zone 11 North
UTM X Meters:	326946.06
UTM Y Meters:	3795374.45
Elevation:	517.00' above sea level

Maps Provided:

2012
1974
1969
1951
1944
1941
1921
1903

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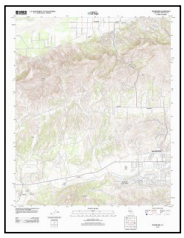
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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Moorpark
2012
7.5-minute, 24000



Simi Valley West
2012
7.5-minute, 24000

1974 Source Sheets



Moorpark
1974
7.5-minute, 24000
Aerial Photo Revised 1969

1969 Source Sheets



Simi
1969
7.5-minute, 24000
Aerial Photo Revised 1947



Moorpark
1969
7.5-minute, 24000
Aerial Photo Revised 1969



Simi Valley West
1969
7.5-minute, 24000
Aerial Photo Revised 1969

1951 Source Sheets



Simi
1951
7.5-minute, 24000
Aerial Photo Revised 1947

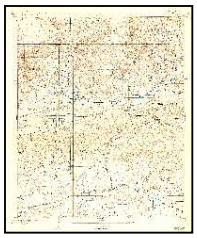


Moorpark
1951
7.5-minute, 24000
Aerial Photo Revised 1947

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1944 Source Sheets



PIRU
1944
15-minute, 62500

1941 Source Sheets



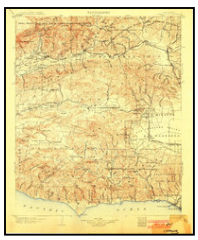
Piru
1941
15-minute, 62500

1921 Source Sheets



Piru
1921
15-minute, 62500

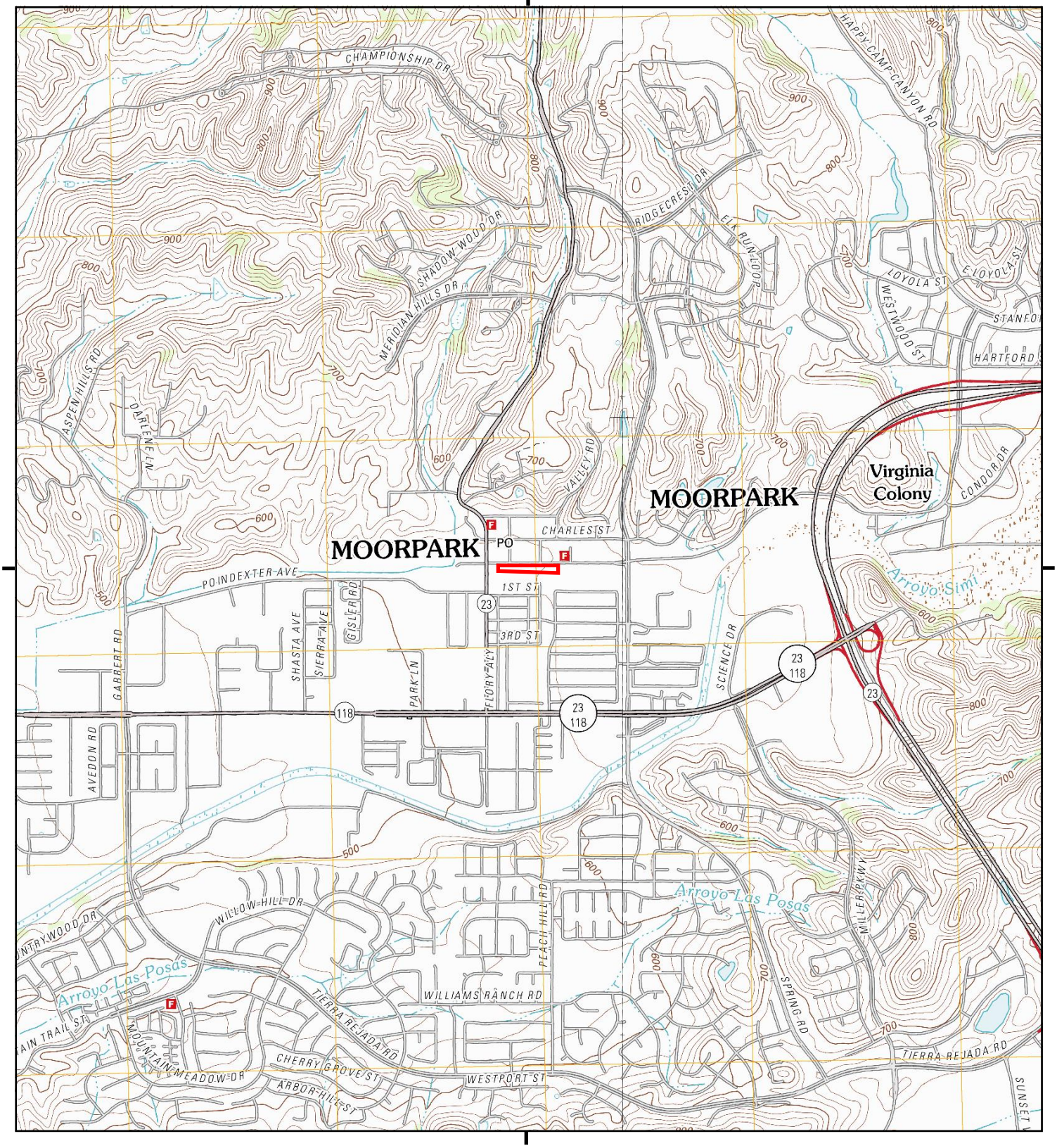
1903 Source Sheets



Camulos
1903
30-minute, 125000

Historical Topo Map

2012



This report includes information from the following map sheet(s).

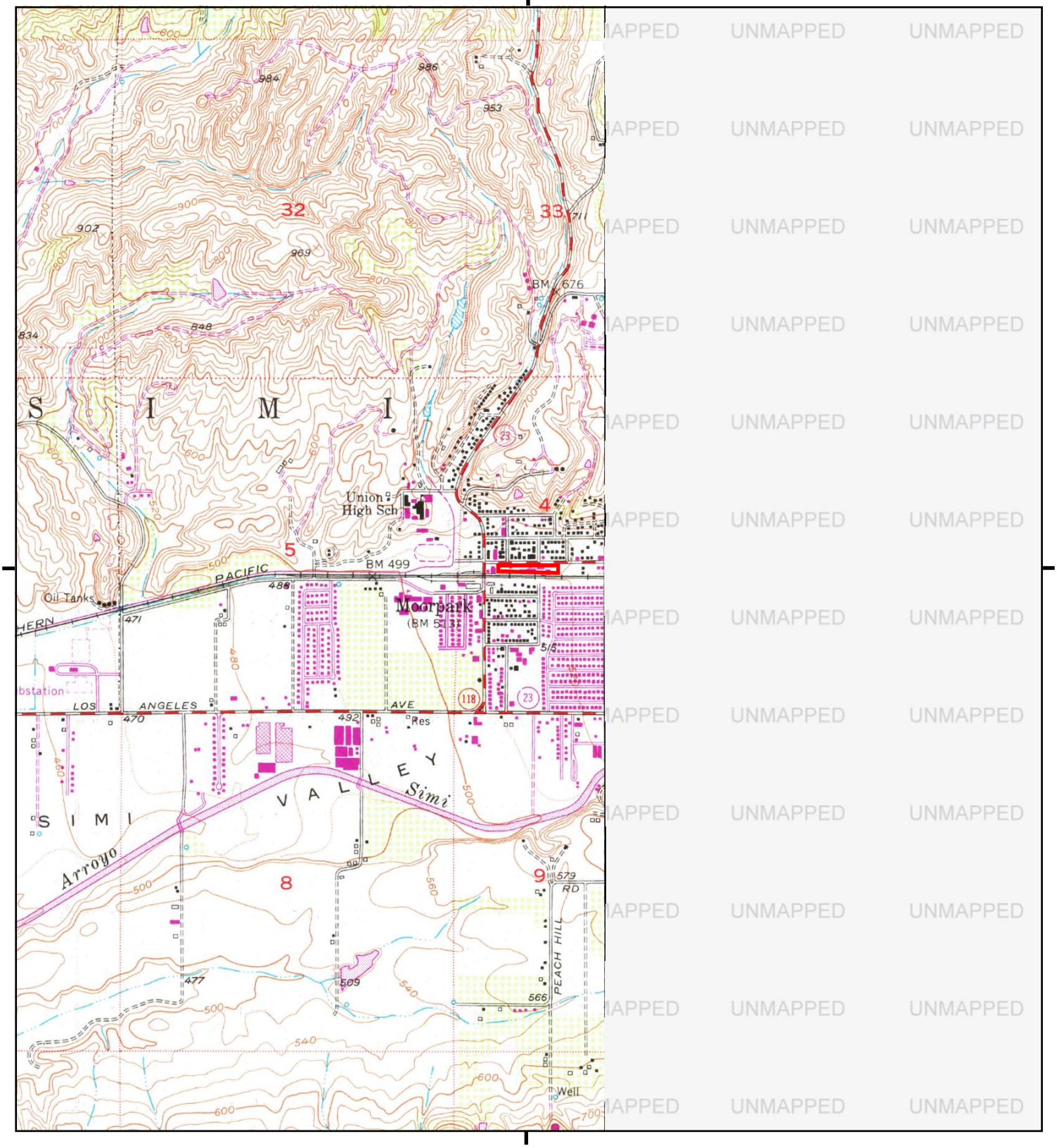
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Moorpark, 2012, 7.5-minute
NE, Simi Valley West, 2012, 7.5-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N



This report includes information from the following map sheet(s).

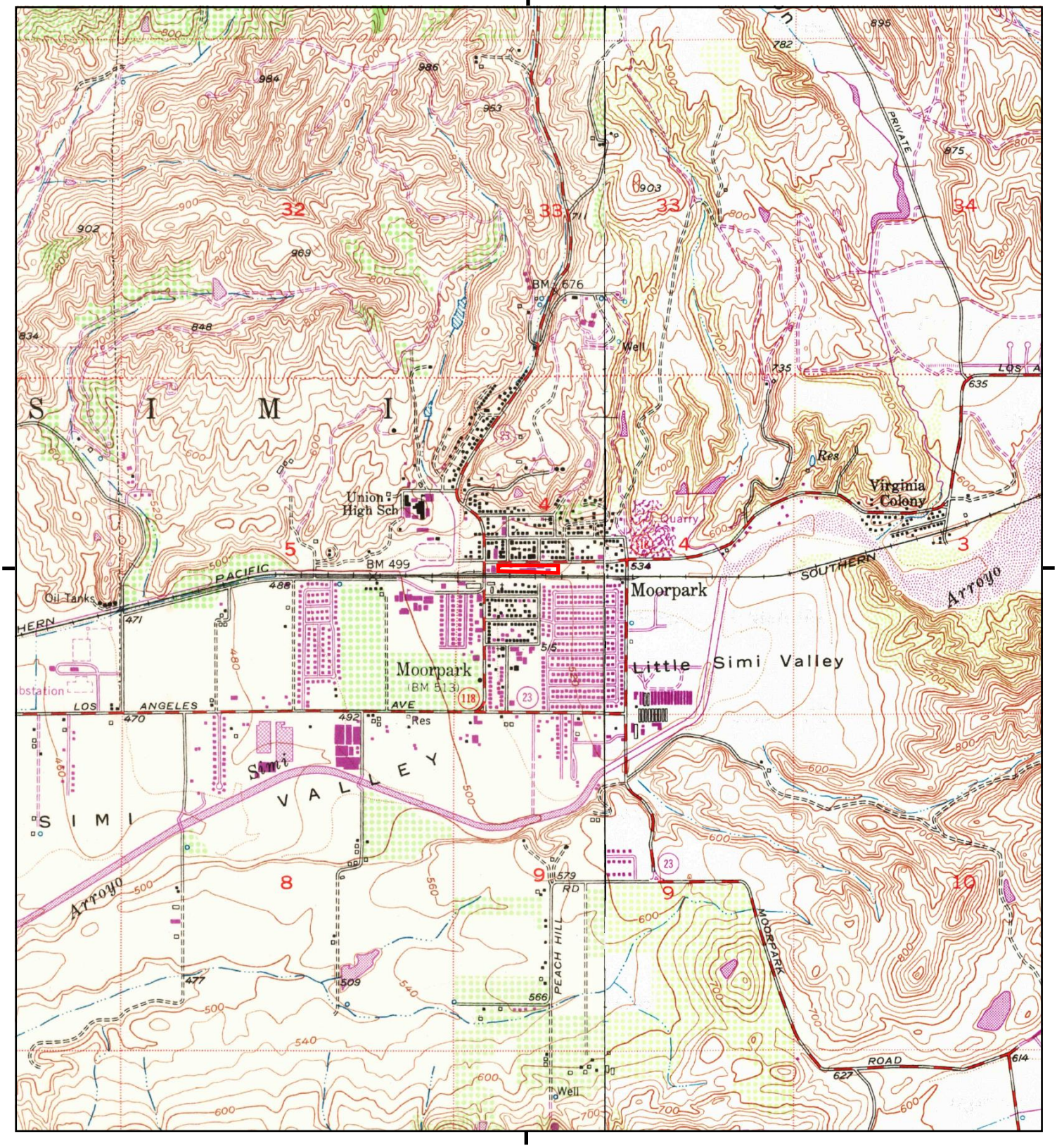
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Moorpark, 1974, 7.5-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N



This report includes information from the following map sheet(s).

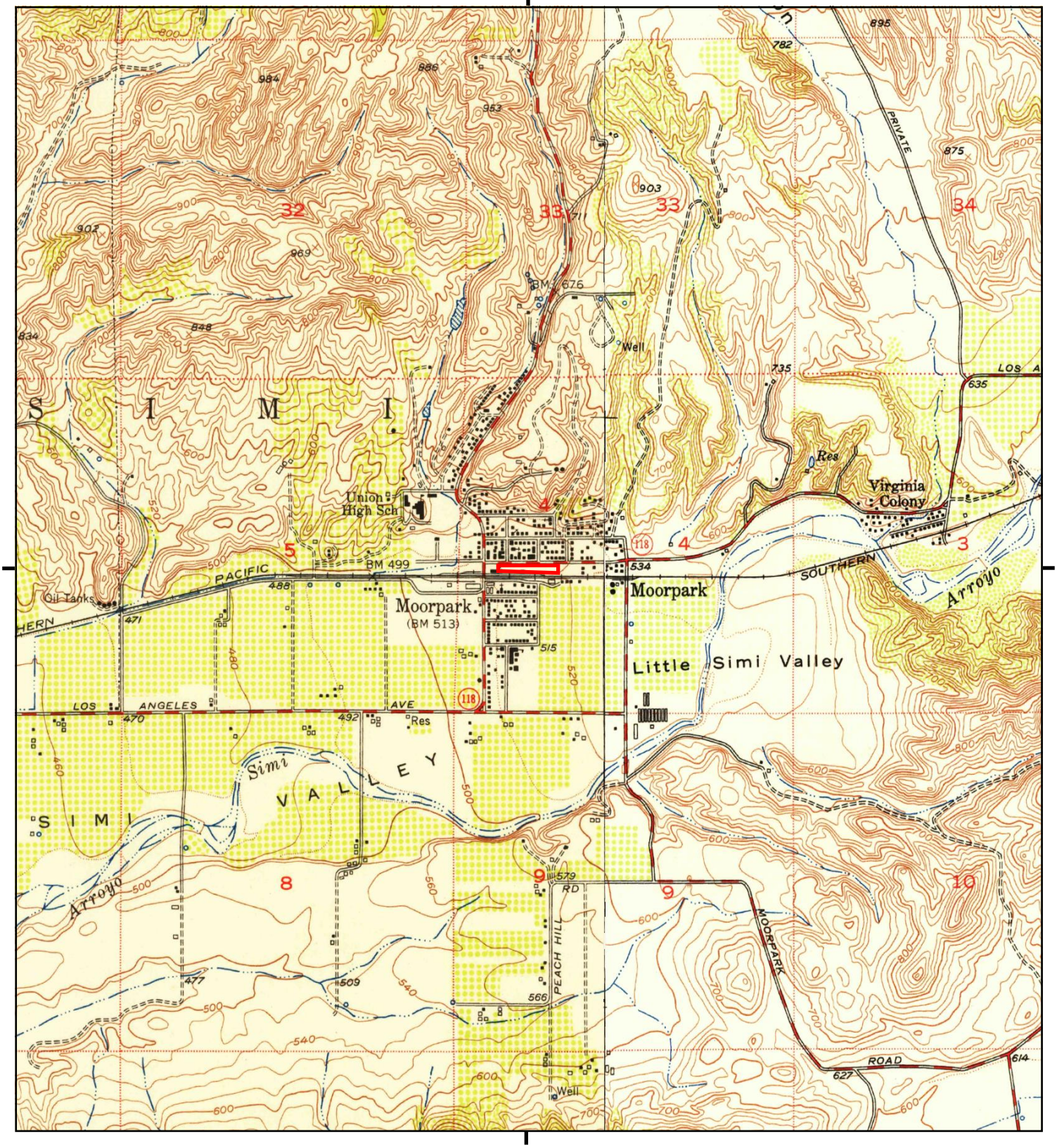
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Moorpark, 1969, 7.5-minute
NE, Simi, 1969, 7.5-minute
NE, Simi Valley West, 1969, 7.5-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N



This report includes information from the following map sheet(s).

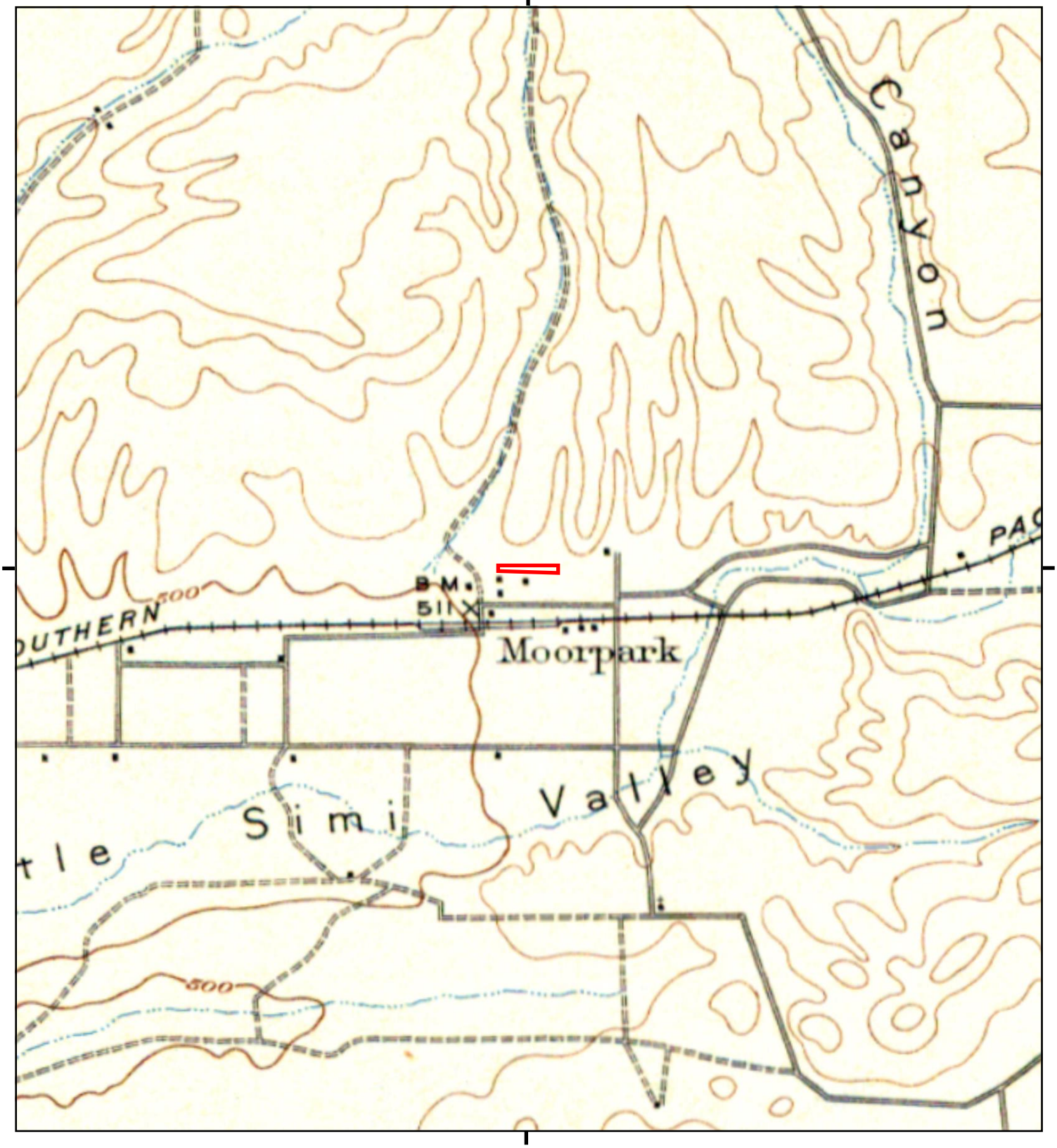
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Moorpark, 1951, 7.5-minute
NE, Simi, 1951, 7.5-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N



This report includes information from the following map sheet(s).

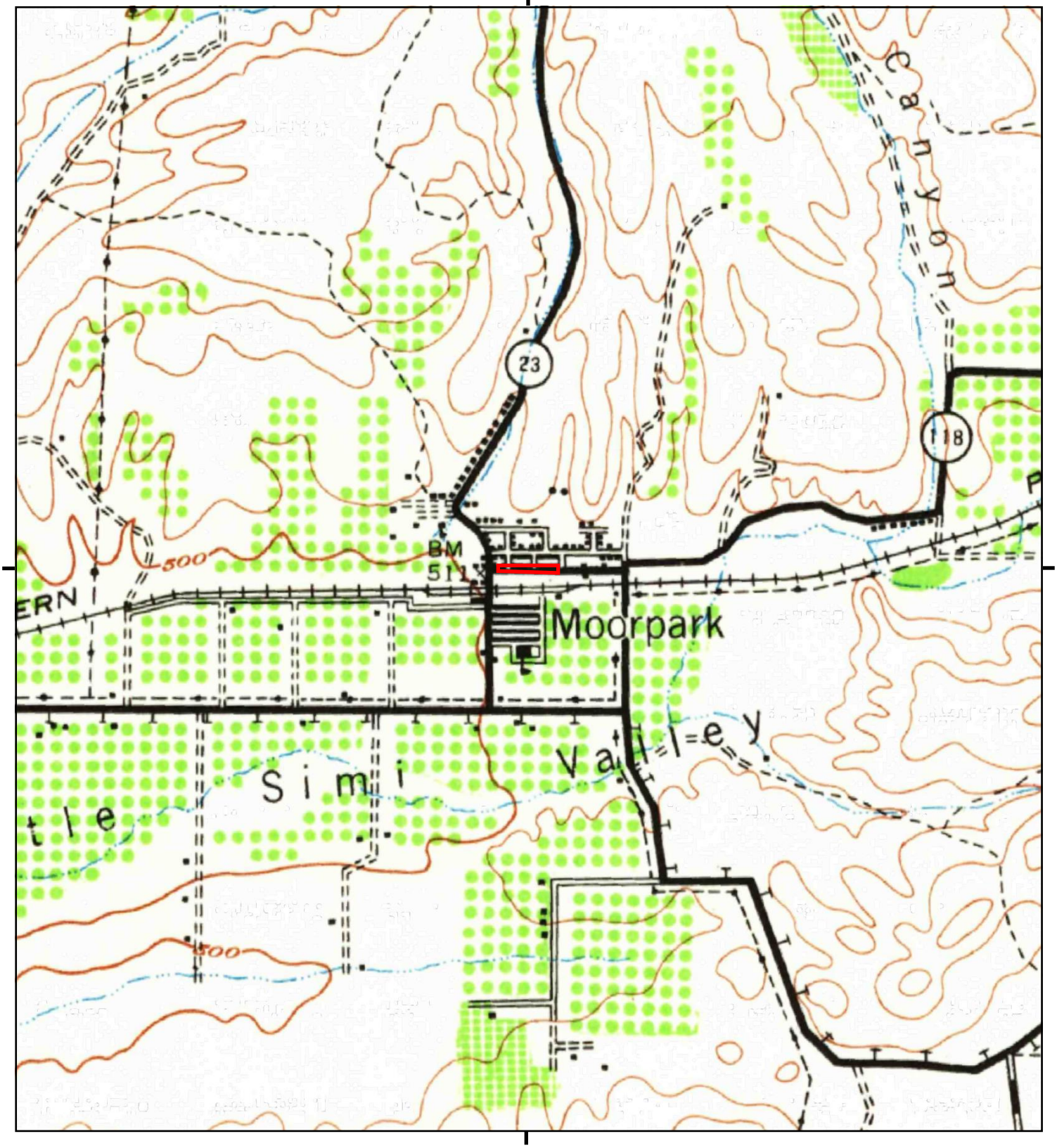
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, PIRU, 1944, 15-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N



This report includes information from the following map sheet(s).

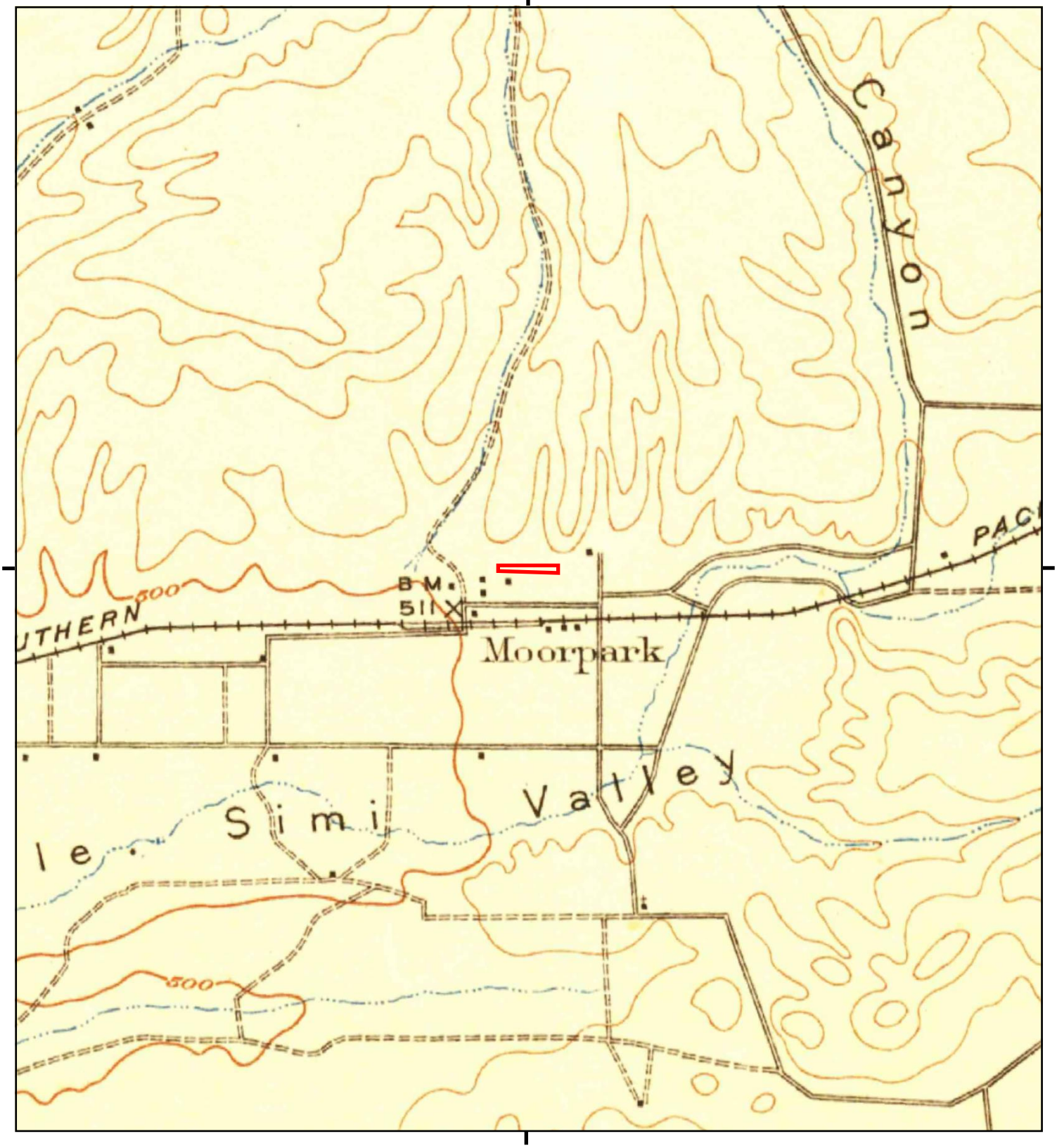
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Piru, 1941, 15-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Piru, 1921, 15-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Camulos, 1903, 30-minute

SITE NAME: Moorpark RR Depot
ADDRESS: E High Street
Moorpark, CA 93021
CLIENT: Rincon

N

Moorpark RR Depot

E High Street

Moorpark, CA 93021

Inquiry Number: 5306248.8

May 22, 2018

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

05/22/18

Site Name:

Moorpark RR Depot
E High Street
Moorpark, CA 93021
EDR Inquiry # 5306248.8

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Sarah Larese

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.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1985	1"=500'	Flight Date: September 12, 1985	USDA
1978	1"=500'	Flight Date: September 21, 1978	USDA
1969	1"=500'	Flight Date: July 25, 1969	USGS
1959	1"=500'	Flight Date: August 21, 1959	USDA
1954	1"=500'	Flight Date: January 14, 1954	USGS
1947	1"=500'	Flight Date: August 20, 1947	USGS
1938	1"=500'	Flight Date: May 09, 1938	USDA

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INQUIRY #: 5306248.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 5306248.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 5306248.8
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 5306248.8
YEAR: 2005
= 500'
N
EDR



INQUIRY #: 5306248.8

YEAR: 1994

= 500'

N

EDR



INQUIRY #: 5306248.8

YEAR: 1985

= 500'

N

EDR


INQUIRY #: 5306248.8
YEAR: 1978
= 500'
N
EDR



INQUIRY #: 5306248.8

YEAR: 1969

= 500'

N

EDR



INQUIRY #: 5306248.8

YEAR: 1959

= 500'

N

EDR



INQUIRY #: 5306248.8

YEAR: 1954

= 500'

N

EDR



INQUIRY #: 5306248.8

YEAR: 1947

= 500'

N

EDR


INQUIRY #: 5306248.8
YEAR: 1938
= 500'
N
EDR

Moorpark RR Depot
E High Street
Moorpark, CA 93021

Inquiry Number: 5306248.5
May 22, 2018

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1926 through 2014. 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.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by infoUSA®

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2014	EDR Digital Archive	-	X	X	-
2010	EDR Digital Archive	-	X	X	-
2005	EDR Digital Archive	-	X	X	-
2002	Haines & Company, Inc.	-	X	X	-
2000	Pacific Bell Telephone Co	-	-	-	-
1996	Pacific Bell	-	X	X	-
1993	GTE	-	X	X	-
1986	Pacific Bell	-	X	X	-
1985	Pacific Telephone Co	-	X	X	-
1980	Polk	-	X	X	-
1976	R. L. Polk & Co.	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1975	General Telephone Company of California	-	X	X	-
	Pacific Telephone Co	-	X	X	-
1971	B&G Publications	-	X	X	-
1970	General Telephone Company of California	-	X	X	-
1968	B&G Publications	-	X	X	-
1965	R. L. Polk & Co.	-	X	X	-
1964	Pacific Telephone Co	-	X	X	-
1961	R. L. Polk & Co.	-	X	X	-
1957	R. L. Polk Co. of California	-	X	X	-
1953	R. L. Polk & Co. of California	-	X	X	-
1949	Los Angeles Directory Co.	-	X	X	-
1940	Southern California	-	X	X	-
1930	Los Angeles Directory Co.	-	X	X	-
1926	Los Angeles Directory Co.	-	X	X	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

E High Street
Moorpark, CA 93021

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

1 SOUTH C ST

43 1 SOUTH C ST

Year	Uses	Source
1975	Asbury Stanley DO	Pacific Telephone Co

1 SOUTH F ST

40 1 SOUTH F ST

Year	Uses	Source
1975	Tolliver Wm T	Pacific Telephone Co

1ST

40 1ST

Year	Uses	Source
1971	MEDRANO SOLEDAD	B&G Publications

49 1ST

Year	Uses	Source
1985	Haswell D Equipment Co Inc	Pacific Telephone Co
1971	MC FADDEN R	B&G Publications
1964	Dencker Herman	Pacific Telephone Co

65 1ST

Year	Uses	Source
1986	Bauer Lynda Sue	Pacific Bell
1971	YOUNG CORA S MRS	B&G Publications
1964	Young Cora S Mrs	Pacific Telephone Co

77 1ST

Year	Uses	Source
1993	Moorpark	GTE
	Catholic Charities Oasis	GTE
	Catholic Charities	GTE
	Moorpark	GTE
	Catholic Charities Oasis	GTE

FINDINGS

80 1ST

Year	Uses	Source
1971	CLEMENTS I L	B&G Publications

96 1ST

Year	Uses	Source
1986	Moorpark Food Pantry Inc	Pacific Bell
1971	RODRIGUEZ N	B&G Publications

97 1ST

Year	Uses	Source
1986	Alcala Raodel	Pacific Bell
1985	Alcala Raodel	Pacific Telephone Co
1971	GOODMAN J M	B&G Publications
1964	Goodman Jewel M	Pacific Telephone Co

102 1ST

Year	Uses	Source
1971	NO RETURN	B&G Publications

112 1ST

Year	Uses	Source
1993	Barren Pedro Jr	GTE
	Barren Pedro Jr	GTE
1971	WELLS JAMES J	B&G Publications

113 1ST

Year	Uses	Source
1971	FRIESS BILLIE	B&G Publications

124 1ST

Year	Uses	Source
1971	CRABILL FRED	B&G Publications

125 1ST

Year	Uses	Source
1971	AMESCUA CAYLOS	B&G Publications

136 1ST

Year	Uses	Source
1985	Valerio Benito S Sr	Pacific Telephone Co
1971	VALERIO BEN	B&G Publications

FINDINGS

143 1ST

Year	Uses	Source
1971	NO RETURN	B&G Publications

146 1ST

Year	Uses	Source
1986	Valerio Jesse	Pacific Bell
1985	Valerio Jesse	Pacific Telephone Co
1964	Barker Wni H	Pacific Telephone Co

147 1ST

Year	Uses	Source
1971	RHOADS JOSEPH	B&G Publications
1964	White Jess	Pacific Telephone Co

149 1ST

Year	Uses	Source
1986	Salgado Miguel S	Pacific Bell
1971	TRi CKEY BELLE MRS	B&G Publications

160 1ST

Year	Uses	Source
1971	GARCIA PAUL	B&G Publications

164 1ST

Year	Uses	Source
1986	Fernandez Consuelo	Pacific Bell
1985	Femandez Consuelo	Pacific Telephone Co
1971	VASQUEZ JOE	B&G Publications

167 1ST

Year	Uses	Source
1986	Herbert F J	Pacific Bell
	Herbert Edna	Pacific Bell
1971	HERBERT EDN	B&G Publications
1964	Herbert Edna	Pacific Telephone Co

172 1ST

Year	Uses	Source
1971	HEDRICK ELMER	B&G Publications
1964	Hedrick Elmer S	Pacific Telephone Co

FINDINGS

173 1ST

Year	Uses	Source
1964	Carter Mable	Pacific Telephone Co

187 1ST

Year	Uses	Source
1993	Baraas Joseph @Oxnard	GTE
	Baraas Jose	GTE
	Baraas Jose	GTE
	Baralas Jose& Brenda @Oxnard	GTE
1971	CARDOZA A	B&G Publications

191 1ST

Year	Uses	Source
1986	Herrera Jose D	Pacific Bell
	Herrera Jose L	Pacific Bell
1971	PAIGE LINDALEE	B&G Publications
	CASTEEL RUBYLEE	B&G Publications
	SMITH GARY	B&G Publications
	STEPHENS ETHEL	B&G Publications

194 1ST

Year	Uses	Source
1971	BROWN LAUR	B&G Publications

1ST ST

1 1ST ST

Year	Uses	Source
2002	STPOINTMECH	Haines & Company, Inc.
	DSGNPFAb 80 N	Haines & Company, Inc.

6 1ST ST

Year	Uses	Source
1993	Frar kent	GTE
	Frar kent	GTE
1986	Or	Pacific Bell

7 1ST ST

Year	Uses	Source
2002	MONARCH	Haines & Company, Inc.

FINDINGS

Year	Uses	Source
2002	SELECTADVISORS	Haines & Company, Inc.
	CONSTRRSC	Haines & Company, Inc.
	RICHTER SPECIALTY	Haines & Company, Inc.
	RAINBOW BUILDERS	Haines & Company, Inc.
	RM DESIGNS	Haines & Company, Inc.
	PROINKJETCOM	Haines & Company, Inc.
	ASSOCIATES	Haines & Company, Inc.
	OBRIENKATE	Haines & Company, Inc.
	NTERGRATION	Haines & Company, Inc.
	NETWORK SYSTEMS	Haines & Company, Inc.
	TECHNOLOGY	Haines & Company, Inc.
	NAC IMAGE	Haines & Company, Inc.
	SILKSCREEN PRINTING	Haines & Company, Inc.

8 1ST ST

Year	Uses	Source
2002	KER 9 Joseph	Haines & Company, Inc.

9 1ST ST

Year	Uses	Source
2002	BB BEATY FORD	Haines & Company, Inc.

21 1ST ST

Year	Uses	Source
2002	MONARCH	Haines & Company, Inc.
	STCENTURY	Haines & Company, Inc.
	UNIFORMS	Haines & Company, Inc.
	STCENTURY	Haines & Company, Inc.

27 1ST ST

Year	Uses	Source
2002	DOMINGUEZ Pula	Haines & Company, Inc.

29 1ST ST

Year	Uses	Source
1926	Burns Perry S Linnie mgr Sparr Fruit Co	Los Angeles Directory Co.
	Burroughs Gilbert driller	Los Angeles Directory Co.

FINDINGS

38 1ST ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1980	Helms Roofing	Polk
1968	KEENEY FRED	B&G Publications

39 1ST ST

Year	Uses	Source
1926	Merry Chas E Sadie R formn	Los Angeles Directory Co.
	Methodist Episcopal Church Rev R K Swenerton pastor Sespe cor Fillmore	Los Angeles Directory Co.

40 1ST ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1980	Barajas Simon	Polk
1968	MEDRANO S	B&G Publications

49 1ST ST

Year	Uses	Source
2002	CEJAAracelr	Haines & Company, Inc.
1996	Amezcua Juan	Pacific Bell
1975	Mc Fadden Roy A	Pacific Telephone Co
	Mc Fadden Roy A	General Telephone Company of California
1968	DENCKER H	B&G Publications

65 1ST ST

Year	Uses	Source
2002	TAMAYOJose A	Haines & Company, Inc.
	TAMAYOG	Haines & Company, Inc.
	ROBERTOTamayo	Haines & Company, Inc.
1996	Tamayo Jose A	Pacific Bell
1980	Goodman Jewel M	Polk
1975	Goodman Jewel M	General Telephone Company of California
	Goodman Jewel M	Pacific Telephone Co
1968	YOUNG C MRS	B&G Publications

77 1ST ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1996	CATHOLIC CHARITIES OASIS	Pacific Bell

FINDINGS

Year	Uses	Source
1996	CATHOLIC CHARITIES	Pacific Bell
1980	Moorpark Ofc	Polk
	Catholic Social Service	Polk
1975	Moorpark Ofc	General Telephone Company of California
	Moorpark Ofc	Pacific Telephone Co
	Catholic Social Service	Pacific Telephone Co

79 1ST ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1980	Holy Cross C C D	Polk
1975	Holy Cross C C D	General Telephone Company of California

80 1ST ST

Year	Uses	Source
1975	Clements I L	Pacific Telephone Co
	Clements I L	General Telephone Company of California
1968	CLEMENTS I	B&G Publications

90 1ST ST

Year	Uses	Source
2002	ISARRARASBeniamrn	Haines & Company, Inc.
	GARCIA Michael	Haines & Company, Inc.

96 1ST ST

Year	Uses	Source
2002	MIRESAlvhn	Haines & Company, Inc.
1975	Mires Mike	Pacific Telephone Co

97 1ST ST

Year	Uses	Source
2002	MORALES Ramon	Haines & Company, Inc.
1968	GOODMAN J	B&G Publications

101 1ST ST

Year	Uses	Source
2002	Maurrlia	Haines & Company, Inc.
	SARAMBULAAn Alonin	Haines & Company, Inc.
	PEREZ Casanova	Haines & Company, Inc.
1980	Mendez M	Polk

FINDINGS

Year	Uses	Source
1968	KOHLER F MRS	B&G Publications

102 1ST ST

Year	Uses	Source
2002	OAGUILARAnionro	Haines & Company, Inc.
1980	Ramirez Alfonzo	Polk
1968	COOK JUNIOR	B&G Publications

112 1ST ST

Year	Uses	Source
2002	BARRON Pedro Jr	Haines & Company, Inc.
	BARRONPedro C	Haines & Company, Inc.
	BA 8 RONPedro Jr	Haines & Company, Inc.
	VILLASANA Enedira	Haines & Company, Inc.
1996	B Barren Rene	Pacific Bell
	A Barren Pedro Jr	Pacific Bell
	A Barren Cornelia	Pacific Bell
1980	Barron Pedro C	Polk
1975	Barron Pedro C	Pacific Telephone Co
	Barron Pedro C	General Telephone Company of California
1968	DANIEL JAMES	B&G Publications

113 1ST ST

Year	Uses	Source
2002	SMAGDALENOMrguel	Haines & Company, Inc.
1980	Tamayo Ricardo	Polk
1968	RODRIGUEZ JOE	B&G Publications
1964	Rodriguez Joe D	Pacific Telephone Co

124 1ST ST

Year	Uses	Source
2002	SMAGOALENOMiguel	Haines & Company, Inc.
1968	CRABILL FRED	B&G Publications
1964	Crabill Fred	Pacific Telephone Co

125 1ST ST

Year	Uses	Source
2002	J ARAIZAJesus	Haines & Company, Inc.
	LOVERAManuel	Haines & Company, Inc.
1968	SHROPSHIRE K	B&G Publications

FINDINGS

1st St

136 1st St

Year	Uses	Source
2005	SUPREME ELECTRIC & ELECTRONICS	EDR Digital Archive

1ST ST

136 1ST ST

Year	Uses	Source
2002	ELECTRIC&ELECTRON	Haines & Company, Inc.
	SUPREME	Haines & Company, Inc.
	SCASSESE Edward JJr	Haines & Company, Inc.
1980	Valerio Rosalinda	Polk
1968	SAN MIGUEL Y	B&G Publications

137 1ST ST

Year	Uses	Source
2002	MAGDALENOMrguel PALMAOb	Haines & Company, Inc.
	ESPINOZA Elizabelh	Haines & Company, Inc.
1968	PARKER NORMAN	B&G Publications

143 1ST ST

Year	Uses	Source
1968	VACANT	B&G Publications

145 1ST ST

Year	Uses	Source
2002	MAGDALENOMrguel	Haines & Company, Inc.
1996	Flores Juan	Pacific Bell
1980	Franklin D	Polk
1975	Withington Jan	General Telephone Company of California
	Withington Jan	Pacific Telephone Co
1968	NO RETURN	B&G Publications

146 1ST ST

Year	Uses	Source
2002	VALERIOJesse	Haines & Company, Inc.
1996	Valerlo Jesse	Pacific Bell
	Valerio Jesse	Pacific Bell
1980	Valerio Jesse	Polk

FINDINGS

Year	Uses	Source
1980	Fuentes Josefina	Polk
1968	BARKER BIRDIE	B&G Publications
1964	Rojas Vic S	Pacific Telephone Co

147 1ST ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
	1ST 93021 CONT	Haines & Company, Inc.
1980	Moniot Curtis	Polk
1968	WILLIAMS BETTYE	B&G Publications
1940	Bond Eugene Mrs r	Southern California

149 1ST ST

Year	Uses	Source
2002	PONCE Rogelo	Haines & Company, Inc.
1980	Salgado Miguel S	Polk
1968	SHAW F E	B&G Publications

160 1ST ST

Year	Uses	Source
2002	MAGOALENOM 0nuel	Haines & Company, Inc.
	GOMEZSrlvia	Haines & Company, Inc.
1996	Ramlrez M	Pacific Bell
	Ayala Raymundo	Pacific Bell
1975	Gamboa Alicia	General Telephone Company of California
	Gamboa Alicia	Pacific Telephone Co
1968	MADDOX JOS	B&G Publications
1964	Maddox Jos W	Pacific Telephone Co

162 1ST ST

Year	Uses	Source
2002	VILLANUEVAJe	Haines & Company, Inc.

164 1ST ST

Year	Uses	Source
2002	PEREZFelipe	Haines & Company, Inc.
1975	Munoz Leonor	General Telephone Company of California
1968	HENDERSON MARIAN	B&G Publications

FINDINGS

167 1ST ST

Year	Uses	Source
2002	MAGDALENOMaguei	Haines & Company, Inc.
	Imelda	Haines & Company, Inc.
	HERNANDEZNAVA	Haines & Company, Inc.
1980	Herbert Edna	Polk
1975	Herbert Edna	General Telephone Company of California
1968	HERBERT EDN	B&G Publications

172 1ST ST

Year	Uses	Source
2002	MAGDALENOMUguel	Haines & Company, Inc.
1975	Bondurant Larry	General Telephone Company of California
	Bondurant Larry	Pacific Telephone Co
1968	HEDRICK E	B&G Publications

173 1ST ST

Year	Uses	Source
2002	GONZALEZJesus	Haines & Company, Inc.
	MAGDALENOMrguel	Haines & Company, Inc.
1980	Holguin Pedro	Polk
1975	Magdaleno Miguel	Pacific Telephone Co
	Magdaleno Miguel	General Telephone Company of California
1968	MOHRMARGO	B&G Publications

175 1ST ST

Year	Uses	Source
2002	AYALA Samuel	Haines & Company, Inc.
1996	Ayala Samuel	Pacific Bell

177 1ST ST

Year	Uses	Source
2002	NAVARRETE Martha	Haines & Company, Inc.
1996	Covarrubias Fernando	Pacific Bell
	194 Gonzalez Martha	Pacific Bell

187 1ST ST

Year	Uses	Source
2002	MAGDALENOMiguel	Haines & Company, Inc.
1975	Goettert J	Pacific Telephone Co
	Goettert J	General Telephone Company of California

FINDINGS

Year	Uses	Source
1968	NO RETURN	B&G Publications

189 1ST ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

191 1ST ST

Year	Uses	Source
2002	HERRERAJOse	Haines & Company, Inc.
1980	Herrera Jose D	Polk
1975	Stephens Ethel L	General Telephone Company of California
	Stephens Ethel L	Pacific Telephone Co
1968	STEPHENS E	B&G Publications

194 1ST ST

Year	Uses	Source
2002	SMEZABennio	Haines & Company, Inc.
1975	Brusven Jas	Pacific Telephone Co
	Brusven Jas	General Telephone Company of California
1968	BROWN LAUR	B&G Publications
1964	Brown Laura E	Pacific Telephone Co

BARD

420 BARD

Year	Uses	Source
1971	GLASSBURN R	B&G Publications

445 BARD

Year	Uses	Source
1975	Delgado Edgar A	Pacific Telephone Co
1971	JENKINS LINDA	B&G Publications

452 BARD

Year	Uses	Source
1975	Hopkins Dorothy	Pacific Telephone Co
1971	JORDAN RICHD	B&G Publications

453 BARD

Year	Uses	Source
1971	HILTON ROY	B&G Publications

FINDINGS

468 BARD

Year	Uses	Source
1975	Donnelly Stephen	Pacific Telephone Co
1971	DONNELLY S	B&G Publications

484 BARD

Year	Uses	Source
1971	DURON ELIS	B&G Publications

496 BARD

Year	Uses	Source
1975	Dominguez John	Pacific Telephone Co
	Dominguez Benjamin	Pacific Telephone Co
1971	DOMINGUEZ J	B&G Publications

501 BARD

Year	Uses	Source
1971	LEONARD N	B&G Publications
1968	LEONARD N	B&G Publications

508 BARD

Year	Uses	Source
1968	PRESSLEY K	B&G Publications

520 BARD

Year	Uses	Source
1971	DEAL CLARENCE	B&G Publications

530 BARD

Year	Uses	Source
1964	Freytag Marion Mrs	Pacific Telephone Co
1949	Williamson Maldon C h	Los Angeles Directory Co.
	Freytag Marion wid C F h	Los Angeles Directory Co.

540 BARD

Year	Uses	Source
1964	Morris Earl R	Pacific Telephone Co
1949	Morse Earl R Annis bxmkr h	Los Angeles Directory Co.

655 BARD

Year	Uses	Source
1968	BARRERAA	B&G Publications

FINDINGS

BARD ST

436 BARD ST

Year	Uses	Source
2002	BROR 13 JEZFesnardo	Haines & Company, Inc.
	ROORBGUEZCo Ste Bo	Haines & Company, Inc.
1996	Rodriguez Salvador	Pacific Bell
1980	Bovee Alvin	Polk
1964	Bankson Robt E	Pacific Telephone Co

445 BARD ST

Year	Uses	Source
2002	WHITAEn RJamw	Haines & Company, Inc.
1980	Moormeister Don E	Polk
1975	Delgado Edgar A	General Telephone Company of California
1964	Orr Keith V	Pacific Telephone Co

447 BARD ST

Year	Uses	Source
1985	Miller P	Pacific Telephone Co
1980	Putnam Clifton	Polk
1964	Klukken Lowell	Pacific Telephone Co

452 BARD ST

Year	Uses	Source
2002	ALVARAOOEOEaanbo	Haines & Company, Inc.
	Lagw Mi	Haines & Company, Inc.
1996	Reynaga Yolanda	Pacific Bell
1993	Lepine G & M	GTE
	Lepine G & M	GTE
1985	Lepine G & M	Pacific Telephone Co
1975	Hopkins Dorothy	General Telephone Company of California
1970	Jordan Richard E	General Telephone Company of California
	Jordan Robert E Krotona Hi @Ojai	General Telephone Company of California
1964	Webster Frances M	Pacific Telephone Co

453 BARD ST

Year	Uses	Source
2002	HILTON Roy	Haines & Company, Inc.
1996	Hilton Roy	Pacific Bell
1993	Hilton Roy	GTE

FINDINGS

Year	Uses	Source
1993	Hilton V M	GTE
	Hilton Roy	GTE
1986	Hilton Roy	Pacific Bell
	Hilton Security Service	Pacific Bell
	Hilton V M	Pacific Bell
1985	Hilton Roy	Pacific Telephone Co
1980	Hilton Roy	Polk
1970	Hilton Roy	General Telephone Company of California

468 BARD ST

Year	Uses	Source
2002	PERRY Samrl B	Haines & Company, Inc.
1996	Perry Sam	Pacific Bell
1993	Perry Sam	GTE
	Perry Sam	GTE
1986	Olsen G & D	Pacific Bell
1985	Olsen G & D	Pacific Telephone Co
1975	Donnelly Stephen	General Telephone Company of California
1970	Donnelly Stephen	General Telephone Company of California
1964	Donnelly Stephen	Pacific Telephone Co

484 BARD ST

Year	Uses	Source
1985	Duron Steve	Pacific Telephone Co
1970	Duron Elisa	General Telephone Company of California

496 BARD ST

Year	Uses	Source
1996	Salgado Ramon	Pacific Bell
1993	Dominguez John	GTE
	Dominguez John	GTE
1986	Dominguez John	Pacific Bell
1985	Dominguez John	Pacific Telephone Co
1980	Dominguez John	Polk
1975	Dominguez Benjamin	General Telephone Company of California
1970	Dominguez John	General Telephone Company of California
1964	Dominguez John	Pacific Telephone Co

FINDINGS

501 BARD ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1986	Herrera Jose Maria Jr	Pacific Bell
1985	Herrera Jose Maria Jr	Pacific Telephone Co
1980	Diaz Maria	Polk

508 BARD ST

Year	Uses	Source
2002	R 80 A 0 Aurora	Haines & Company, Inc.
1964	Pressley K C	Pacific Telephone Co

520 BARD ST

Year	Uses	Source
2002	7 TA 8 Y 06 Oclai	Haines & Company, Inc.
1980	Mize Bill & Sarah	Polk
1970	Deal Clarence	General Telephone Company of California
1964	Cisneros Emily	Pacific Telephone Co

544 BARD ST

Year	Uses	Source
1930	Enright Albt J elk Safeway Stores	Los Angeles Directory Co.

Bard St

621 Bard St

Year	Uses	Source
2014	TIMBERCRETE INC	EDR Digital Archive

BARD ST

639 BARD ST

Year	Uses	Source
2002	0 XXX	Haines & Company, Inc.
1996	Cruz Rosa Ella	Pacific Bell
1986	Howton Adair	Pacific Bell
1985	Howton Adair	Pacific Telephone Co

640 BARD ST

Year	Uses	Source
2002	UUMMr GSMe 8at	Haines & Company, Inc.

Year	Uses	Source
1986	Cummings C	Pacific Bell
1985	Cummings C	Pacific Telephone Co

650 BARD ST

Year	Uses	Source
1996	Cummings Curran	Pacific Bell
1993	Cummings D K @Newbury Park	GTE
	Cummings Curran	GTE
	Cummings Curran	GTE

Bard St

655 Bard St

Year	Uses	Source
2010	ANTONIO SOLANO	EDR Digital Archive
2005	ANTONIO SOLANO	EDR Digital Archive

BARD ST

655 BARD ST

Year	Uses	Source
2002	WHITAKER W 19an	Haines & Company, Inc.
1986	Colahan James & Shirley	Pacific Bell
1985	Colahan James & Shirley	Pacific Telephone Co
1980	Loughran N	Polk
1964	Duran Femando	Pacific Telephone Co

CHARLES

16 CHARLES

Year	Uses	Source
1971	BONTA ROBERT	B&G Publications
1968	BONTA ROBT	B&G Publications

34 CHARLES

Year	Uses	Source
1971	SLADE KATE P	B&G Publications
1968	SLADE KATE	B&G Publications

FINDINGS

35 CHARLES

Year	*Uses*	*Source*
1971	COVEY MATT	B&G Publications
1968	COVEY MATT	B&G Publications

49 CHARLES

Year	*Uses*	*Source*
1971	KELLEY ANN	B&G Publications
1968	KELLEY ANN	B&G Publications

64 CHARLES

Year	*Uses*	*Source*
1971	GUTIERREZ RUDOLPH P	B&G Publications
1968	GUTIERREZ R	B&G Publications

71 CHARLES

Year	*Uses*	*Source*
1971	BEZANSON L	B&G Publications
1968	RHINES DICK	B&G Publications

73 CHARLES

Year	*Uses*	*Source*
1971	NO RETURN	B&G Publications
1968	NO RETURN	B&G Publications

81 CHARLES

Year	*Uses*	*Source*
1971	BREWER FLOYD	B&G Publications
1968	BREWER FLOYD	B&G Publications

136 CHARLES

Year	*Uses*	*Source*
1971	FRAKE JOHN	B&G Publications
1968	FRAKE JOHN	B&G Publications

137 CHARLES

Year	*Uses*	*Source*
1971	RODRIQUEZ JOSE	B&G Publications

148 CHARLES

Year	*Uses*	*Source*
1968	BRUBAKERC J	B&G Publications

FINDINGS

155 CHARLES

Year	Uses	Source
1986	Ramlrez Florentino	Pacific Bell

156 CHARLES

Year	Uses	Source
1971	RASEY BERNICE	B&G Publications
1968	RASEY BERNICE	B&G Publications

161 CHARLES

Year	Uses	Source
1971	REYNA LEO	B&G Publications
1968	REYNA LEO	B&G Publications

168 CHARLES

Year	Uses	Source
1971	LOPEZ ROBERT	B&G Publications

172 CHARLES

Year	Uses	Source
1971	VALDIVIA JOE	B&G Publications

195 CHARLES

Year	Uses	Source
1971	VALDIVIA GEO	B&G Publications
1968	VALDIVIA GEO	B&G Publications

211 CHARLES

Year	Uses	Source
1968	RIVERAC	B&G Publications

212 CHARLES

Year	Uses	Source
1971	JAMES CLIFFORD R	B&G Publications
1968	HOUSE FRANK	B&G Publications

224 CHARLES

Year	Uses	Source
1968	NO RETURN	B&G Publications

229 CHARLES

Year	Uses	Source
1968	VASQUEZ FRANK	B&G Publications

248 CHARLES

Year	Uses	Source
1971	GARZA ANGEL	B&G Publications
1968	GARZA ANGEL	B&G Publications

259 CHARLES

Year	Uses	Source
1971	RODRIGUEZ M	B&G Publications
1968	RODRIGUEZ M	B&G Publications

260 CHARLES

Year	Uses	Source
1996	B Solis Maria Del Carmen	Pacific Bell
1971	VARGAS VICKI	B&G Publications
1968	VARGAS VICKI	B&G Publications

272 CHARLES

Year	Uses	Source
1971	CARAWAY AARON	B&G Publications
1968	RODRIGUEZ V	B&G Publications

301 CHARLES

Year	Uses	Source
1971	CASTRO H	B&G Publications
1968	CASTRO H	B&G Publications

CHARLES ST

14 CHARLES ST

Year	Uses	Source
2002	V 4 JAh R	Haines & Company, Inc.

16 CHARLES ST

Year	Uses	Source
1986	Mitchell J	Pacific Bell
1985	Bonta Robt S	Pacific Telephone Co
1980	Bonta Robt S	Polk
1975	Bonta Robt S	General Telephone Company of California

Year	Uses	Source
1975	Bonta Robt S	Pacific Telephone Co
1970	Bonta Robt S	General Telephone Company of California
1964	Bonta Robt S	Pacific Telephone Co

17 CHARLES ST

Year	Uses	Source
2002	AMAYAEIFIlto	Haines & Company, Inc.
	t ALVAREZMaro A 845 23 75536 B	Haines & Company, Inc.

19 CHARLES ST

Year	Uses	Source
2002	VALLEMaureln	Haines & Company, Inc.

34 CHARLES ST

Year	Uses	Source
2002	REVESArnoeo	Haines & Company, Inc.
	SOUSMia Del Cannen	Haines & Company, Inc.
1996	Berg Guy Alan	Pacific Bell
	Berg Guy Alan	Pacific Bell
1986	Haney Wm B & Mary Ann	Pacific Bell
1985	Haney Wm B & Mary Ann	Pacific Telephone Co
1980	Vondera Mary Ann	Polk
	Vondera Michelle	Polk
1975	Holden Clyde	General Telephone Company of California
	Holden Clyde	Pacific Telephone Co
1964	Slade Kate P	Pacific Telephone Co

35 CHARLES ST

Year	Uses	Source
1980	Holy Cross Church	Polk
1975	Covey Matt	Pacific Telephone Co
	Covey Steven D	General Telephone Company of California
	Covey Matt	General Telephone Company of California
1970	Covey Matt	General Telephone Company of California

36 CHARLES ST

Year	Uses	Source
2002	XX 0 X	Haines & Company, Inc.

FINDINGS

48 CHARLES ST

Year	Uses	Source
2002	VERAJu Onta	Haines & Company, Inc.

49 CHARLES ST

Year	Uses	Source
2002	E 0 BADICharl Jote	Haines & Company, Inc.
1985	Ekback Hugo G	Pacific Telephone Co
1980	Ekback Hugo G	Polk
1975	Ekback Hugo G	Pacific Telephone Co
	Ekback Hugo G	General Telephone Company of California
1970	Kelley Anna L	General Telephone Company of California
1964	Kelley H W	Pacific Telephone Co

54 CHARLES ST

Year	Uses	Source
2002	B TBAEBETTene	Haines & Company, Inc.

Charles St

64 Charles St

Year	Uses	Source
2014	R&D CONSTRUCTION	EDR Digital Archive
2010	R&D CONSTRUCTION	EDR Digital Archive
2005	R&D CONSTRUCTION	EDR Digital Archive

CHARLES ST

64 CHARLES ST

Year	Uses	Source
2002	Ja SSALEAGE	Haines & Company, Inc.
	LEPfl OHOND a 0&5 552 f	Haines & Company, Inc.
	LEPROHOAe M S	Haines & Company, Inc.
	t JSPR OHR B& 552 1a 6 B	Haines & Company, Inc.
	POHJEROYJenry K 53 9060 t	Haines & Company, Inc.
1986	Hanich Steven M	Pacific Bell

71 CHARLES ST

Year	Uses	Source
2002	XXXXc	Haines & Company, Inc.
1975	Ekback Elizabeth	Pacific Telephone Co

Year	Uses	Source
1975	Ekback Elizabeth	General Telephone Company of California
1970	Bezanson Lewis	General Telephone Company of California
1964	Best Hazel W	Pacific Telephone Co

Charles St

73 Charles St

Year	Uses	Source
2005	FOOD SAFETY TRAINING SPE	EDR Digital Archive

CHARLES ST

73 CHARLES ST

Year	Uses	Source
2002	Xw XX	Haines & Company, Inc.
1964	Trickey Martha Bell	Pacific Telephone Co

81 CHARLES ST

Year	Uses	Source
2002	BODRCUEZJose	Haines & Company, Inc.
1985	Brewer Floyd O	Pacific Telephone Co
1980	Brewer Floyd O	Polk
1975	Brewer Floyd O	Pacific Telephone Co
1964	Brewer Floyd O	Pacific Telephone Co

Charles St

97 Charles St

Year	Uses	Source
2014	FIGUEROA GRADING	EDR Digital Archive
	FIGUEROA TOOL	EDR Digital Archive
2010	FIGUEROA TOOL	EDR Digital Archive
	FIGUEROA GRADING	EDR Digital Archive

CHARLES ST

97 CHARLES ST

Year	Uses	Source
2002	FIGEBOAAS M 15 49514 WS	Haines & Company, Inc.
	GRADING	Haines & Company, Inc.
1996	Figueroa Angel S Jr	Pacific Bell

Year	Uses	Source
1996	FIGUEROA A S GRADING	Pacific Bell
1993	Figueroa Carlos	GTE
	Figueroa C	GTE
	Figueroa Anthony @Camarillo @ State Hospital Grnds Camrio	GTE
	Figueroa Angel S Jr	GTE
	Figueroa A S Grading	GTE
	Figueroa Angel S Jr	GTE
	Figueroa A S Grading	GTE
1986	Figueroa A S Grading	Pacific Bell
	Figueroa C	Pacific Bell
	Figueroa Angel S Jr	Pacific Bell
	Figueroa Anthony	Pacific Bell
1985	Figueroa A S Grading	Pacific Telephone Co
	Figueroa Angel S Jr	Pacific Telephone Co
1980	Figueroa Angel S Jr	Polk
	Figueroa A S Grading	Polk

136 CHARLES ST

Year	Uses	Source
1993	Valdivia Joe & Angie	GTE
	Valdivia Joe & Angie	GTE
1980	Basquez Phillip E Sr	Polk
1970	Frake John A	General Telephone Company of California
1964	Frake John A	Pacific Telephone Co

137 CHARLES ST

Year	Uses	Source
2002	RODR 4 UEZJose E	Haines & Company, Inc.
1996	Rodriguez Jose E	Pacific Bell
1993	Rodriguez Jose E	GTE
	Rodriguez Jose E	GTE
1986	Rodriguez Jose E drftsmn	Pacific Bell
	Rodriquez Jose E	Pacific Bell
	Rodriquez Jose E drftsmn	Pacific Bell
1985	Rodriquez Jose E	Pacific Telephone Co
1980	Rodriquez Jose E	Polk
1975	Rodriquez Jose E	General Telephone Company of California
	Rodriquez Jose E	Pacific Telephone Co

FINDINGS

Year	Uses	Source
1970	Rodriquez Jose E	General Telephone Company of California

143 CHARLES ST

Year	Uses	Source
2002	RODRIGUEZJose	Haines & Company, Inc.
1993	Rodriguez Concrete	GTE
	Rodriguez Concrete	GTE

148 CHARLES ST

Year	Uses	Source
2002	ARAMBULARanmon	Haines & Company, Inc.
1986	Meza Ramos Benito	Pacific Bell
1980	Rosales Maria	Polk

155 CHARLES ST

Year	Uses	Source
2002	ACEVESJosa	Haines & Company, Inc.
1975	Gutierrez Epifanio S	General Telephone Company of California
1964	Taylor Donald	Pacific Telephone Co
	Taylor La Donna	Pacific Telephone Co

156 CHARLES ST

Year	Uses	Source
1996	Rasey Bernice G	Pacific Bell
1993	Rasey Bernice G	GTE
	Rasey Bernice G	GTE
1986	Rasey Bernice G	Pacific Bell
1985	Rasey Bernice G	Pacific Telephone Co
1980	Rasey Bernice G	Polk
1975	Rasey Bernice G	General Telephone Company of California
	Rasey Bernice G	Pacific Telephone Co
1970	Rasey Bernice G	General Telephone Company of California

158 CHARLES ST

Year	Uses	Source
2002	KIRULGERPatca	Haines & Company, Inc.
	RASEYBamtoe G	Haines & Company, Inc.

FINDINGS

Charles St

161 Charles St

Year	Uses	Source
2010	9300 TELEPHONE ROAD LLC	EDR Digital Archive

CHARLES ST

161 CHARLES ST

Year	Uses	Source
2002	BIEYALBO	Haines & Company, Inc.
1975	Reyna Leo	Pacific Telephone Co
	Reyna Leo	General Telephone Company of California
1970	Reyna Leo	General Telephone Company of California
1964	Reyna Leo	Pacific Telephone Co

164 CHARLES ST

Year	Uses	Source
1957	Teague Robt C	R. L. Polk Co. of California
	Teague Court AHU	R. L. Polk Co. of California

168 CHARLES ST

Year	Uses	Source
2002	XX 0 X	Haines & Company, Inc.

170 CHARLES ST

Year	Uses	Source
1964	Barnard Ida	Pacific Telephone Co
1957	Barnard Ida Mrs	R. L. Polk Co. of California

171 CHARLES ST

Year	Uses	Source
1996	Espinoza Alicia Ana	Pacific Bell
1993	Espinoza Emilio	GTE
	Espinoza Angel	GTE
	Espinoza Angel	GTE
	Espinoza Emilio	GTE

172 CHARLES ST

Year	Uses	Source
2002	VALDIVIAJee VAt IDWAJ	Haines & Company, Inc.

FINDINGS

Year	Uses	Source
1996	Valdivia Joe & Juanita	Pacific Bell
1993	I Valdivia Joe & Juanita	GTE
	I Valdivia Joe & Juanita	GTE
	Valdivia Joe & Angie	GTE
1986	Valdivia Joe & Angle	Pacific Bell
	Valdivia Jose	Pacific Bell
1985	Valdivia Jose	Pacific Telephone Co
1980	Valdivia Joe	Polk
1975	Valdivia Joe	General Telephone Company of California
	Valdivia Joe	Pacific Telephone Co
1970	Valdiva Joe	General Telephone Company of California
1965	STRAKA ROBT C	R. L. Polk & Co.
1964	Casteel Erma I	Pacific Telephone Co
1957	Campanelli Mary Mrs	R. L. Polk Co. of California

174 CHARLES ST

Year	Uses	Source
1964	Stewart Florence	Pacific Telephone Co
1957	Stead Joseph	R. L. Polk Co. of California

181 CHARLES ST

Year	Uses	Source
2002	VASP 00 EZF 0oraitno	Haines & Company, Inc.
	RAMIREZCauda RA 41 REZJuan M	Haines & Company, Inc.
1993	Ramirez Florentino	GTE
	Ramirez Florentino	GTE

184 CHARLES ST

Year	Uses	Source
2002	MARTINEZJnse	Haines & Company, Inc.
	GAR 4 CA Enae Id	Haines & Company, Inc.

195 CHARLES ST

Year	Uses	Source
2002	DOBBINSTndd	Haines & Company, Inc.
1986	Valdivia Geo	Pacific Bell
1985	Valdivia Geo	Pacific Telephone Co
1980	Valdivia Geo	Polk
1975	Valdivia Geo	General Telephone Company of California
	Valdivia Geo	Pacific Telephone Co

FINDINGS

Year	Uses	Source
1970	Valdivia Geo	General Telephone Company of California
1964	Valdivia Geo	Pacific Telephone Co

200 CHARLES ST

Year	Uses	Source
1975	Watkins Paul S	General Telephone Company of California

211 CHARLES ST

Year	Uses	Source
2002	DOE 6 ZALE 2 Pedro	Haines & Company, Inc.
1996	Gonzalez Pedro	Pacific Bell
1993	Gonzalez Pedro	GTE
	Gonzalez Pedro	GTE
1986	Gonzalez Pedro	Pacific Bell
1964	Rivera Connie	Pacific Telephone Co

229 CHARLES ST

Year	Uses	Source
2002	Mt 61 ERDennis	Haines & Company, Inc.
1996	Miller Dennis	Pacific Bell
1993	Miller Dennis	GTE
	Miller Dennis	GTE

230 CHARLES ST

Year	Uses	Source
1975	Aira Anthony S	General Telephone Company of California
	Bates Larry S	Pacific Telephone Co
1970	Armstrong Beverly S	General Telephone Company of California

239 CHARLES ST

Year	Uses	Source
2002	OMEZAJoge	Haines & Company, Inc.
1986	Castro George Meza	Pacific Bell
1985	Castro George Meza	Pacific Telephone Co
1980	Nestor Brian	Polk

248 CHARLES ST

Year	Uses	Source
2002	AGREDANOJne	Haines & Company, Inc.
	VERARo Sert	Haines & Company, Inc.

Year	Uses	Source
1996	Agredano Jose	Pacific Bell
1993	Agredano Jose	GTE
	Agredano Adrian	GTE
	Agredano Jose	GTE
	Agredano Jose & Yvonne	GTE
	Agredano Adrian	GTE
1986	Agri Fresh @Santa Paula	Pacific Bell
	Agredano Jose	Pacific Bell
1985	Agredano Jose	Pacific Telephone Co
1980	Garza Angel	Polk
	Agredano Jose	Polk
1975	Garza Angel	Pacific Telephone Co
	Garza Angel	General Telephone Company of California
1970	Garza Angel	General Telephone Company of California

250 CHARLES ST

Year	Uses	Source
1957	Sangster John M	R. L. Polk Co. of California

252 CHARLES ST

Year	Uses	Source
1957	Reugtin Harry	R. L. Polk Co. of California

256 CHARLES ST

Year	Uses	Source
1957	Hill Harold M	R. L. Polk Co. of California

259 CHARLES ST

Year	Uses	Source
2002	CRUt 2isa	Haines & Company, Inc.
1975	Rodriguez Martin	General Telephone Company of California
1970	Rodriguez Martin	General Telephone Company of California
1964	Rodriguez Martin	Pacific Telephone Co

260 CHARLES ST

Year	Uses	Source
2002	MAGIDALE 40 Mana	Haines & Company, Inc.
1996	h	Pacific Bell
	Magdeenro Maria	Pacific Bell
1993	Magdeleno Maria	GTE

Year	Uses	Source
1993	Magdeleno Maria	GTE
	Magdic Jamie @Thousand Oaks	GTE
	Magdich B @Camarillo	GTE
	Maged Jerome @Camarillo	GTE
	Maged Jerome	GTE
	Magee Joe & Pat	GTE

272 CHARLES ST

Year	Uses	Source
2002	LERMAI	Haines & Company, Inc.
1985	Munoz Libby	Pacific Telephone Co
1975	Mendoza Manuel C	General Telephone Company of California
1970	Caraway Aaron C	General Telephone Company of California
1964	Rodriguez Kathy	Pacific Telephone Co

301 CHARLES ST

Year	Uses	Source
2002	CBARRERAASear	Haines & Company, Inc.
1980	Barrera Alvaro Jr	Polk
1964	Castro Hortense	Pacific Telephone Co

DOROTHY

241 DOROTHY

Year	Uses	Source
1970	Padilla Joe A	General Telephone Company of California
1964	Padilla Joe A	Pacific Telephone Co

DOROTHY AVE

208 DOROTHY AVE

Year	Uses	Source
1975	Stephens T B Bert	Pacific Telephone Co

233 DOROTHY AVE

Year	Uses	Source
2002	SA GSOOjea a	Haines & Company, Inc.

241 DOROTHY AVE

Year	Uses	Source
2002	MORALES Jenus	Haines & Company, Inc.

Year	Uses	Source
2002	TAMUAYORBcario	Haines & Company, Inc.
1986	Lopez Eddie @Oxnard	Pacific Bell
	Lopez E Lucy	Pacific Bell
1971	PADILLA JOE	B&G Publications
1968	PADILLA JOE	B&G Publications

255 DOROTHY AVE

Year	Uses	Source
1968	AMAVISCA A	B&G Publications

E 1ST ST

18 E 1ST ST

Year	Uses	Source
1970	Ofc l	General Telephone Company of California

52 E 1ST ST

Year	Uses	Source
1953	Fire Dept No	R. L. Polk & Co. of California

131 E 1ST ST

Year	Uses	Source
1940	Young Cora S Mrs r	Southern California

134 E 1ST ST

Year	Uses	Source
1940	So Calif Edison Co Ltd	Southern California

143 E 1ST ST

Year	Uses	Source
1964	Shaw F E	Pacific Telephone Co

156 E 1ST ST

Year	Uses	Source
1940	Graham E C r	Southern California

191 E 1ST ST

Year	Uses	Source
1964	Stephens W H	Pacific Telephone Co

FINDINGS

E HIGH

15 E HIGH

Year	Uses	Source
1975	Kern Jos P D atty	Pacific Telephone Co
	Scoles John F atty	Pacific Telephone Co

17 E HIGH

Year	Uses	Source
1975	MOORPARK RENDEZVOUS	Pacific Telephone Co
	Moorpark Rendezvous Card Room	Pacific Telephone Co

18 E HIGH

Year	Uses	Source
1975	Tytler Jas	Pacific Telephone Co

43 E HIGH

Year	Uses	Source
1975	ENTERPRISE..Sti J & NEWS	Pacific Telephone Co

45 E HIGH

Year	Uses	Source
1975	Moorpark Theatre	Pacific Telephone Co

49 E HIGH

Year	Uses	Source
1975	Schlosser Mark DOS	Pacific Telephone Co

87 E HIGH

Year	Uses	Source
1975	MOORPARK PHARMACY	Pacific Telephone Co

95 E HIGH

Year	Uses	Source
1975	BANK OF A LEVY	Pacific Telephone Co
	vloorpark Ofc	Pacific Telephone Co

104 E HIGH

Year	Uses	Source
1975	Ventura County Peace Officers Association	Pacific Telephone Co

FINDINGS

105 E HIGH

Year	Uses	Source
1975	Bobs Moorpark Mkt	Pacific Telephone Co

135 E HIGH

Year	Uses	Source
1940	Houser Bros Mkt	Southern California

139 E HIGH

Year	Uses	Source
1975	DEMPSEY REALTY	Pacific Telephone Co

169 E HIGH

Year	Uses	Source
1975	Morpark	Pacific Telephone Co
	VENTURA COUNTY OF Contd LIBRARY SERVICES AGENCY Contd	Pacific Telephone Co

179 E HIGH

Year	Uses	Source
1975	Whitakers Hardware	Pacific Telephone Co

189 E HIGH

Year	Uses	Source
1975	USS Norton Sound AVM	Pacific Telephone Co
	Moorpark	Pacific Telephone Co

197 E HIGH

Year	Uses	Source
1975	Cactus Patch Restaurant I	Pacific Telephone Co

220 E HIGH

Year	Uses	Source
1975	Moorpark Electronics	Pacific Telephone Co

235 E HIGH

Year	Uses	Source
1940	Moorpark Enterprise	Southern California

247 E HIGH

Year	Uses	Source
1940	Richards Letha C r Walnut Canyon	Southern California
	Red & White Grocery	Southern California

FINDINGS

249 E HIGH

Year	Uses	Source
1940	Holland Drug Co	Southern California

255 E HIGH

Year	Uses	Source
1986	Moorpark Video Shoppe	Pacific Bell
	Little Bow Tique	Pacific Bell
	Litle K TOks	Pacific Bell
	Litle Boutique	Pacific Bell
1985	Moorpark Video Shoppe	Pacific Telephone Co
	Little Bow Tique	Pacific Telephone Co
1975	INDICE SPORTS WEAR	Pacific Telephone Co

273 E HIGH

Year	Uses	Source
1975	Meyer Roger T	Pacific Telephone Co

E HIGH ST

1 E HIGH ST

Year	Uses	Source
2002	RAMIREZ Herman IB	Haines & Company, Inc.

E High St

11 E High St

Year	Uses	Source
2010	TREES OF INSPIRATION 1 OF 1 BY	EDR Digital Archive
2005	MOORPARK BICYCLES INC	EDR Digital Archive

E HIGH ST

11 E HIGH ST

Year	Uses	Source
2002	MOORPKBICYCLES	Haines & Company, Inc.
1993	Petals N Pine	GTE
	Petals N Pine	GTE
1971	HALLS VARIETY STORE	B&G Publications

FINDINGS

15 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1986	Robertos Barber Shop	Pacific Bell
1980	State Farm Insurance Companies Agencies	Polk
	Moorpark	Polk
1975	Kern Jos P D atty	General Telephone Company of California
1971	FITZSIMMONS J	B&G Publications
1970	Fitzsimons J David atty	General Telephone Company of California
	Fitzsimons Raymond G Sr	General Telephone Company of California

E High St

17 E High St

Year	Uses	Source
2014	AMADOR WHITTLE ARCHITECTS INC	EDR Digital Archive
2010	AMADOR WHITTLE ARCHITECTS INC	EDR Digital Archive
2005	AMADOR WHITTLE ARCHITECTS INC	EDR Digital Archive
	BESTSTUFF MEDIA PROMOTIONS	EDR Digital Archive
	DOO-DAH DEPOT	EDR Digital Archive

E HIGH ST

17 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1993	Monikas General Store	GTE
	Monikas General Store	GTE
1986	Double L Saloon	Pacific Bell
	Double R	Pacific Bell
	DOUBLE R TOW IN G	Pacific Bell
1985	Moorpark Rendezvous Card Room	Pacific Telephone Co
1980	Moorpark Rendezvous Bar	Polk
	MOORPARK RENDEZVOUS CARD ROOM	Polk
	Rendezvous Bar	Polk
1975	Moorpark Rendezvous Card Room	General Telephone Company of California

FINDINGS

E High St

18 E High St

Year	Uses	Source
2014	LAW OFFCES OF DOUGLAS H RIDLEY	EDR Digital Archive

E HIGH ST

18 E HIGH ST

Year	Uses	Source
1986	Moorpark Office	Pacific Bell
1985	First Nationwide Savings Moorpark Office	Pacific Telephone Co
1980	Citizens Savings & Loan Association	Polk
	Moorpark Office	Polk

E High St

33 E High St

Year	Uses	Source
2014	MOORPARK FOUNDATION FOR THE AR	EDR Digital Archive
	R C S INSURANCE SERVICES INC	EDR Digital Archive
	ACME INSURANCE & FINANCIAL SVC	EDR Digital Archive
	GREEN SCOTT LAW OFFICES OF	EDR Digital Archive
2010	GREEN SCOTT LAW OFFICES OF	EDR Digital Archive
	SCOTT GREEN & ASSOC A LAW CORP	EDR Digital Archive
	PEARL CANYON DEVELOPMENT LLC	EDR Digital Archive
	ACME FINANCIAL AND INSUR SVCS	EDR Digital Archive
	ACME INSURANCE & FINANCIAL SVC	EDR Digital Archive
2005	RAGTIME AEROLITE INC	EDR Digital Archive
	ALL AMERICAN WATER HEATERS & P	EDR Digital Archive
	CARI CO LLC	EDR Digital Archive
	SOUTH EQUIPMENT INC	EDR Digital Archive
	MASINO PLASTERING INC	EDR Digital Archive
	SHAMROCK STUCCO LLC	EDR Digital Archive
	GREEN SCOTT LAW OFFICES OF	EDR Digital Archive
	SCOTT GREEN & ASSOC A LAW CORP	EDR Digital Archive
	TIERRA PACIFIC DEVELOPMENT LLC	EDR Digital Archive
	DELFINO DEVELOPMENT INC	EDR Digital Archive
	GOLDEN PACIFIC HOLDINGS LLC	EDR Digital Archive
	310 PROPERTY DEVELOPMENT LLC	EDR Digital Archive

Year	Uses	Source
2005	EASY LAW INC	EDR Digital Archive

E HIGH ST

33 E HIGH ST

Year	Uses	Source
2002	OFCOF	Haines & Company, Inc.
	GREENSCOTTLAW	Haines & Company, Inc.
	EASYLAWINC	Haines & Company, Inc.
1993	Plant Fruitvale Av @Moorpark	GTE
	ator Taxes & Insurance Services	GTE
	Valovich Paul J	GTE
	Office	GTE
	Independent Pools Inc	GTE
	Independent Builders Inc	GTE
	Gladys Valbuena	GTE
	Community Christian Church Of Moorpark	GTE
	ator Taxes & Insurance Services	GTE
	QUALITY S E CRE TARIAL S E RVICE @Camarillo	GTE
	Office	GTE
	Independent Pools Inc	GTE
	Independent Building Inspections	GTE
	Independent Builders Inc	GTE
	Community Christian Church Of Moorpark	GTE
	Gladys Valbuena	GTE
	Glagovich Don	GTE
	Glaister A E	GTE
1986	Thousand Oaks	Pacific Bell
	Camarillo	Pacific Bell
	QUALITY ROOFIN G CO	Pacific Bell
	Office	Pacific Bell
1985	Moorpark	Pacific Telephone Co
	SNEED DARREL INS AGENT	Pacific Telephone Co
	Office	Pacific Telephone Co
	Coughlon Robert E atty	Pacific Telephone Co
	After Hours Limousine Service	Pacific Telephone Co

FINDINGS

41 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

43 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1985	Village Haircutters	Pacific Telephone Co
1980	Village Haircutters	Polk
1971	ENTERPRISE SUN & NEWS	B&G Publications

45 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1993	Moorpark Melodrama	GTE
	Magnificent Moorpark Melodrama & Vaudeville Co The	GTE
	Bredemann Linda	GTE
	Moorpark Melodrama	GTE
	Magno Jerry & Kim	GTE
	Magnificent Moorpark Melodrama & Vaudeville Co The	GTE
	Bredemann Linda	GTE
1986	Moorpark Melodrama	Pacific Bell
	Magnificent Moorpark Melodrama & Vaudeville Co The	Pacific Bell
1985	Moorpark Melodrama	Pacific Telephone Co
	Magnificent Moorpark Melodrama & Vaudeville Co The	Pacific Telephone Co
1980	Horizon Players The communty theatre	Polk
1975	Moorpark Union Elementary School Dist	General Telephone Company of California
	Moorpark Theatre	General Telephone Company of California
1971	VALLEY THEATRE	B&G Publications
1964	Cain PW	Pacific Telephone Co

49 E HIGH ST

Year	Uses	Source
1980	H & R Block Co	Polk
	BLOCK H & R CO	Polk
	Albright J A rl est brkr	Polk
1975	Schlosser Mark DDS	General Telephone Company of California
1971	PANIK J J DDS	B&G Publications

Year	Uses	Source
1970	Panik Jerome J DDS	General Telephone Company of California

E High St

61 E High St

Year	Uses	Source
2010	MOORPARK SIMI VALLEY NEIGHBR	EDR Digital Archive
	MOOPARK FAMILY RESOURCE CENTER	EDR Digital Archive
2005	ELLIS IRA PHOTOGRAPHERS	EDR Digital Archive

E HIGH ST

61 E HIGH ST

Year	Uses	Source
2002	COR 8 ERSTONE 889 S	Haines & Company, Inc.
	PHOTOGRAPHIC	Haines & Company, Inc.
	AIKENKHri	Haines & Company, Inc.
1964	BOHANON JOHN H Moorpark Laundromat	Pacific Telephone Co

E High St

68 E High St

Year	Uses	Source
2005	BAR BQ JOINT	EDR Digital Archive

E HIGH ST

68 E HIGH ST

Year	Uses	Source
2002	BARBUEJOINTTHE	Haines & Company, Inc.
1993	BAR B QUE JOIN T THE	GTE
	BAR B QUE JOIN T THE	GTE
1986	Redwood Cafe	Pacific Bell
1985	Redwood Cafe	Pacific Telephone Co

FINDINGS

E High St

71 E High St

Year	Uses	Source
2014	JENNIFERS HAIR & NAIL	EDR Digital Archive
2010	JENNIFERS HAIR & NAIL	EDR Digital Archive
2005	JENNIFERS HAIR & NAIL	EDR Digital Archive

E HIGH ST

71 E HIGH ST

Year	Uses	Source
2002	JENNIFEIESHAIR 9 NAIL	Haines & Company, Inc.
1993	Robertos Barber Shop	GTE
	Robertos Barber Shop	GTE
1986	Vinces Barber Shop	Pacific Bell
1985	Vinces Barber Shop	Pacific Telephone Co
1975	CHARLE S OF MOORPARK	General Telephone Company of California
	Charles Ralph	General Telephone Company of California
1971	CHARLES OF MPK	B&G Publications
1970	Charles Ralph	General Telephone Company of California
	CHARLE S OF MOORPARK	General Telephone Company of California

73 E HIGH ST

Year	Uses	Source
2002	XXX 0 X	Haines & Company, Inc.
1985	MOORPARK CHIROPRATIC	Pacific Telephone Co
1980	Moyers R A DC	Polk

75 E HIGH ST

Year	Uses	Source
1971	LAWLEY LEE	B&G Publications
1970	Lawley Lee	General Telephone Company of California

E High St

79 E High St

Year	Uses	Source
2014	OLD TOWN BREAKFAST & BAKE	EDR Digital Archive
2010	OLD TOWN BREAKFAST & BAKE	EDR Digital Archive
2005	OLD TOWN BREAKFAST & BAKE	EDR Digital Archive

FINDINGS

E HIGH ST

79 E HIGH ST

Year	Uses	Source
1980	Country Properties Ltd	Polk
	Moorpark Investment Co	Polk

81 E HIGH ST

Year	Uses	Source
2002	MEXTECTS	Haines & Company, Inc.
	ARCHITECTS	Haines & Company, Inc.
	REDMONDJCKW	Haines & Company, Inc.
	DOSAPROCRP	Haines & Company, Inc.
	Wb ASSOCSATES	Haines & Company, Inc.
	NEWTONJOHN	Haines & Company, Inc.
	fe MEWC 08 JRTF 1 NANCIAL	Haines & Company, Inc.
	ADVANTAGE REALTY	Haines & Company, Inc.
	e MOORPARK 808 378 M	Haines & Company, Inc.
	ARCH APROCORP	Haines & Company, Inc.
	TTE 800 T 8053 M PUBLSHING B 090 UEZRICKD 0 S	Haines & Company, Inc.
	BUTO TIMTODOS	Haines & Company, Inc.
	LAB 9 Hf 9 BRSLEY M 8 S	Haines & Company, Inc.
	r BOROUEZRICK 00 S	Haines & Company, Inc.

87 E HIGH ST

Year	Uses	Source
1985	Wood John W OD	Pacific Telephone Co
1975	MOORPARK PHARMACY	General Telephone Company of California
1971	GUNTER PHARM	B&G Publications
1970	GUN TE R PHARMACY	General Telephone Company of California
1964	Moorpark Pharmacy	Pacific Telephone Co

E High St

95 E High St

Year	Uses	Source
2014	CELERITIVE TECHNOLOGIES INC	EDR Digital Archive
2010	IVY TECH CHARTER SCHOOL	EDR Digital Archive
2005	R&R MUSIC	EDR Digital Archive

FINDINGS

E HIGH ST

95 E HIGH ST

Year	Uses	Source
2002	INDUSTRYMU 8 SICAL	Haines & Company, Inc.
1985	Moorpark Moorpark Ofc	Pacific Telephone Co
1980	BANK OF A LEVY	Polk
	Moorpark Ofc	Polk
1975	Moorpark Ofc	General Telephone Company of California
1971	BANK OF A LEVY	B&G Publications
1970	From @Agoura@ telephones call	General Telephone Company of California
	Moorpark Ofc	General Telephone Company of California
	Olsen&Moorprk Rds @Thousand Oaks@	General Telephone Company of California
1964	FIRST WESTRN BANK & TRUST CO	Pacific Telephone Co

004 E HIGH ST

Year	Uses	Source
1970	Eppies Frosti l	General Telephone Company of California

E High St

104 E High St

Year	Uses	Source
2014	MARIAS FAMILY RESTUARANT	EDR Digital Archive
2010	MARIAS FAMILY RESTUARANT	EDR Digital Archive
2005	MARIAS FAMILY RESTUARANT	EDR Digital Archive
	PATS CB & STEREO	EDR Digital Archive

E HIGH ST

104 E HIGH ST

Year	Uses	Source
1993	W E S TE RN UN ION Contd Credit Card Money Transfers	GTE
	Pats CB & Stereo	GTE
	Pats CB & Stereo	GTE
	La Playita	GTE
	Pats CB & Stereo	GTE
	Pats CB & Stereo	GTE
	La Playita	GTE
1986	Pats CB & Stereo	Pacific Bell

Year	Uses	Source
1986	La Playlta	Pacific Bell
1985	Pats CB & Stereo	Pacific Telephone Co
	Chuck & Stellas Sport Shop	Pacific Telephone Co
1980	Donut Shop The	Polk
1971	EPPIES FROSTI	B&G Publications
1964	Eppies Frosti	Pacific Telephone Co

E High St

105 E High St

Year	Uses	Source
2014	MAYFLOWER MARKET	EDR Digital Archive
2010	MAYFLOWER MARKET	EDR Digital Archive
2005	MAYFLOWER MARKET	EDR Digital Archive

E HIGH ST

105 E HIGH ST

Year	Uses	Source
2002	Hi JAZMiusafa r MAYF	Haines & Company, Inc.
	MARKET&LIOUORIHE	Haines & Company, Inc.
1993	Mayflower Market The	GTE
	Mayflower Transit Agency	GTE
	Mayflower Market The	GTE
1986	Mayflower Market The	Pacific Bell
1985	The Mayflower Market	Pacific Telephone Co
1980	Bobs Moorpark Mkt	Polk
1975	Bobs Moorpark Mkt	General Telephone Company of California
1971	BOBS MPK MKT	B&G Publications
1970	BOBS MOORPARK MKT	General Telephone Company of California
	BOBS MOTORCYCLE S ALE S & S E RVICE @Thousand Oaks	General Telephone Company of California
1964	Bobs Moorpark Mkt	Pacific Telephone Co

135 E HIGH ST

Year	Uses	Source
2002	CARENRaymard	Haines & Company, Inc.
1971	ZEPEDA ARISTEO	B&G Publications
1970	Zepeda Aristeo	General Telephone Company of California

FINDINGS

136 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

E High St

137 E High St

Year	Uses	Source
2014	LUCAS TOM STATEONE INSURANCE	EDR Digital Archive
2010	LUCAS TOM STATEONE INSURANCE	EDR Digital Archive
2005	LUCAS TOM STATEONE INSURANCE	EDR Digital Archive

E HIGH ST

137 E HIGH ST

Year	Uses	Source
1993	G&A Video	GTE
	G&A Video	GTE
1986	J TS GE N E RAL S TORE No Charge To Calling Party	Pacific Bell
	J T F Enterprises	Pacific Bell
	JTJ Construction & Equipment	Pacific Bell
1985	GRACE CHAPEL FOURSQUARE CHURCH	Pacific Telephone Co
1980	H & P Tax Service Inc	Polk
1971	CURLY TOP BTY SALON	B&G Publications
1964	CURLY TOP BEAUTY SALON	Pacific Telephone Co

139 E HIGH ST

Year	Uses	Source
1986	Hartmans Radio & TV	Pacific Bell
	From Saticoy Telephones Call	Pacific Bell
	Ace Appliance Service	Pacific Bell
1980	UNITED FARM AGENCY	Polk
1975	I DE MPS E Y RE ALTY	General Telephone Company of California
	Dempsey Road Mutual Water Co	General Telephone Company of California
1971	DEMPSEY S	B&G Publications
1964	Dempsey S A Jack rl est	Pacific Telephone Co

141 E HIGH ST

Year	Uses	Source
1940	Amer Commercial & Savings Bank	Southern California

FINDINGS

161 E HIGH ST

Year	Uses	Source
1980	Russell Jan	Polk
1971	NO RETURN	B&G Publications

E High St

165 E High St

Year	Uses	Source
2014	ALLUVIUM CORPORATION	EDR Digital Archive
	NEWTON JOHN W & ASSOCIATES	EDR Digital Archive
	CANALE DAVID	EDR Digital Archive
	LARRY BRISLEY ARCHITECT INC	EDR Digital Archive
2010	LARRY BRISLEY ARCHITECT INC	EDR Digital Archive
	RCS INSURANCE SERVICES INC	EDR Digital Archive
	MEYER SASADA DIANNE MFT	EDR Digital Archive
	JILL GRANNIS DMD	EDR Digital Archive
	STUDIO X ARCHITECTS INC	EDR Digital Archive
	NEWTON JOHN W & ASSOCIATES	EDR Digital Archive
	ALLUVIUM CORPORATION	EDR Digital Archive
2005	ADVANTAGE REALTY	EDR Digital Archive
	NEWTON JOHN W & ASSOCIATES	EDR Digital Archive
	BRISLEY LRRY ARCHT A PRFSSSNAL	EDR Digital Archive
	STUDIO X ARCHITECTS INC	EDR Digital Archive
	WILLIAM CHARLES GROUP	EDR Digital Archive
	DIVINE FAMILY CHIROPRACTI	EDR Digital Archive
	RCS INSURANCE SERVICES INC	EDR Digital Archive
	BILL PERKINS	EDR Digital Archive

E HIGH ST

165 E HIGH ST

Year	Uses	Source
1993	ACMS	GTE
	Borquez Rick DDS	GTE
	Coughlon Robert E atty	GTE
	Redmond Jack W II A Professional Corp d DS	GTE
	Ricatto Paul	GTE
	State Farm Insurance Companies Regional Ofc	GTE

FINDINGS

Year	Uses	Source
1993	Moorpark	GTE
	I AC RLeasing	GTE
	A C R A Credit Reporting Agency	GTE
	Borquez Rick DDS	GTE
	Borquez S J	GTE
	Coughlon Robert E atty	GTE
	Redmond Jack W II A Professional Corp d DS	GTE
	Ricatto Paul	GTE
	Moorpark	GTE
	I AC RLeasing	GTE
1986	Borquez Rick DDS	Pacific Bell
	Buto Tim T DDS	Pacific Bell
	Coughlon Robert E atty	Pacific Bell
	Newton John W Consulting	Pacific Bell
	Redmond Jack W II A Professional Corp d DS	Pacific Bell
1985	Borquez Rick DDS	Pacific Telephone Co
	Buto Tim T DDS	Pacific Telephone Co
	Kovacs Civil Engineering	Pacific Telephone Co
	Newton John W Consulting	Pacific Telephone Co
	Redmond Jack W II A Professional Corp d DS	Pacific Telephone Co

E High St

169 E High St

Year	Uses	Source
2014	MOORPARK PRINTERS	EDR Digital Archive
2010	MOORPARK PRINTERS	EDR Digital Archive
2005	MOORPARK PRINTERS	EDR Digital Archive

E HIGH ST

169 E HIGH ST

Year	Uses	Source
1993	Moorpark Printers	GTE
	Moorpark Printers	GTE
	Moorpark Rubbish Disposal	GTE
1986	Moorpark Printers	Pacific Bell

Year	Uses	Source
1985	Moorpark Printers	Pacific Telephone Co
1980	Moorpark	Polk
	Volunteer Services Branch Libraries	Polk
1975	Moorpark	General Telephone Company of California
1971	VENTURA CNTY LIBRARY DEPT	B&G Publications
1970	Moorpark Br	General Telephone Company of California

E High St

173 E High St

Year	Uses	Source
2014	ACF VET CLINIC MOORPARK	EDR Digital Archive
2010	ACF VET CLINIC MOORPARK	EDR Digital Archive
2005	ACF VET CLINIC MOORPARK	EDR Digital Archive

E HIGH ST

173 E HIGH ST

Year	Uses	Source
2002	r PHIIUPJEANNEMDM	Haines & Company, Inc.
	ACSVETER 18 ARY	Haines & Company, Inc.
	CLINIC	Haines & Company, Inc.
1993	Philp Jeanne MDVM	GTE
	Phatp Scott&	GTE
	Philp Jeanne MDVM	GTE
1986	ACS Veterinary Clinic	Pacific Bell
	Philip Jeanne M DVM	Pacific Bell
1985	ACS Veterinary Clinic	Pacific Telephone Co
	Philip Jeanne M DVM	Pacific Telephone Co
1980	Vendor Accounts Payable	Polk
	Moorpark	Polk
1964	ROSES DEPT STORE	Pacific Telephone Co

177 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

178 E HIGH ST

Year	Uses	Source
2002	H 000 RPARK	Haines & Company, Inc.

Year	Uses	Source
2002	r WH 1 TAKER HARDWARE	Haines & Company, Inc.
	HARDWARE	Haines & Company, Inc.

E High St

179 E High St

Year	Uses	Source
2014	WHITAKER HARDWARE INC	EDR Digital Archive
	MOORPARK HARDWARE	EDR Digital Archive
2010	WHITAKER HARDWARE INC	EDR Digital Archive
	MOORPARK HARDWARE	EDR Digital Archive
2005	WHITAKER HARDWARE INC	EDR Digital Archive
	MOORPARK HARDWARE	EDR Digital Archive

E HIGH ST

179 E HIGH ST

Year	Uses	Source
1993	Whitakers Hardware	GTE
	Whitakers Hardware	GTE
1986	Whitakers Hardware	Pacific Bell
	Whitby L	Pacific Bell
1985	Whitakers Hardware	Pacific Telephone Co
1980	Whitakers Hardware	Polk
1975	Whitakers Hardware	General Telephone Company of California
1971	WHITAKERS HARDWARE	B&G Publications
1970	Whitakers Hdwe	General Telephone Company of California
1964	Whitakers Hdwe	Pacific Telephone Co

181 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

184 E HIGH ST

Year	Uses	Source
2002	LAPLAYITA	Haines & Company, Inc.

185 E HIGH ST

Year	Uses	Source
2002	ADVA 8 TAOE REALTY	Haines & Company, Inc.

FINDINGS

E High St

189 E High St

Year	Uses	Source
2014	LUTHERS ATTIC	EDR Digital Archive
2010	LUTHERS ATTIC	EDR Digital Archive
2005	LUTHERS ATTIC	EDR Digital Archive

E HIGH ST

189 E HIGH ST

Year	Uses	Source
2002	re MOORPARK PR 41 NERS 868 S	Haines & Company, Inc.
	ri OORPKPRINTEJS	Haines & Company, Inc.
	WOKALDona	Haines & Company, Inc.
1993	Luthers Attic	GTE
	Luthria Anita	GTE
	Luthers Attic	GTE
1986	Lutners Attic	Pacific Bell
1980	Moorpark	Polk
	USS Quapaw ATF 110	Polk
1975	Moorpark	General Telephone Company of California
1971	POST OFFICE	B&G Publications

192 E HIGH ST

Year	Uses	Source
1993	Foster Enterprises	GTE
	Foster Enterprises	GTE
1986	FOS TE R E N TE RPRIS E S	Pacific Bell
1980	S & K RANCH INC FEED MILL	Polk
1971	FAIRVIEW MILLING	B&G Publications
1970	Fairview Milling Inc	General Telephone Company of California

E High St

197 E High St

Year	Uses	Source
2014	CACTUS PATCH THE	EDR Digital Archive
2010	CACTUS PATCH THE	EDR Digital Archive
2005	CACTUS PATCH THE	EDR Digital Archive

FINDINGS

E HIGH ST

197 E HIGH ST

Year	Uses	Source
2002	RESTAURANT	Haines & Company, Inc.
	WHITAKERJames	Haines & Company, Inc.
	CACTUS PATCH	Haines & Company, Inc.
1993	Cactus Patch Restaurant	GTE
	Cactus Patch Restaurant	GTE
1986	Cactus Patch Restaurant	Pacific Bell
1985	Cactus Patch Restaurant	Pacific Telephone Co
1980	Cactus Patch Restaurant	Polk
1975	Cactus Patch Restaurant	General Telephone Company of California
1971	MPK COMMITTEE FOR JR COLLEGES	B&G Publications
1970	Moorpark Committee for Junior Colleges	General Telephone Company of California

201 E HIGH ST

Year	Uses	Source
1940	Adairs Grocery	Southern California

209 E HIGH ST

Year	Uses	Source
1940	So Pac Co depot Moorpark	Southern California
	So Calif Telephone Co	Southern California

E High St

213 E High St

Year	Uses	Source
2014	HEARTS OF JADE LLC	EDR Digital Archive
	MOORPARK AUTO GLASS	EDR Digital Archive
2005	CUMMINGS JOY	EDR Digital Archive

E HIGH ST

213 E HIGH ST

Year	Uses	Source
2002	GASSTATIONTHE	Haines & Company, Inc.
	CUMMINGSCurnan	Haines & Company, Inc.
1993	o Childrens Learning Center @Oxnard@	GTE
	Gas Station The	GTE

FINDINGS

Year	Uses	Source
1993	Gas Station The	GTE
	Childrens Hour The	GTE
	Childrens Hour The	GTE
1985	Four Suns Bike Shop	Pacific Telephone Co
1980	FOUR SUNS BIKE SHOP	Polk
1975	Four Suns Bike Shop	General Telephone Company of California
1971	TIRE TOWN	B&G Publications
1970	Tire Town	General Telephone Company of California

217 E HIGH ST

Year	Uses	Source
1940	Bradley A Jean r	Southern California

218 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

E High St

220 E High St

Year	Uses	Source
2014	MOORPARK ACTIVE SENIORS INC	EDR Digital Archive
2010	MOORPARK ACTIVE SENIORS INC	EDR Digital Archive
2005	MOORPARK ACTIVE SENIORS INC	EDR Digital Archive

E HIGH ST

220 E HIGH ST

Year	Uses	Source
1993	Anchor Sheet Metal	GTE
	One More Time Senior Thrift Shop	GTE
	One More Time Senior Thrift Shop	GTE
	Anchor Sheet Metal	GTE
1986	RE P Manufacturing	Pacific Bell
	RE P Manufacturing	Pacific Bell
	Moorpark Senior Citizens	Pacific Bell
	Moorpark Rubbish Disposal	Pacific Bell
	Moorpark Rentals & Sales	Pacific Bell
1985	REP Manufacturing	Pacific Telephone Co
	REP Manufacturing	Pacific Telephone Co

FINDINGS

Year	Uses	Source
1985	Paikins Color Port	Pacific Telephone Co
	MOORPARK RENTALS & SALES	Pacific Telephone Co
1980	MOORPARK RENTALS & SALES	Polk
1975	Moorpark Electronics	General Telephone Company of California
1971	MENASHES OF MPK	B&G Publications
1970	ME N AS HES OF MOORPARK	General Telephone Company of California

222 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

226 E HIGH ST

Year	Uses	Source
2002	JECO PLUMBING INC	Haines & Company, Inc.
1993	Tonys Auto & Truck Repair	GTE
	Tonys Auto & Truck Repair	GTE
1986	MWorpark Mental Health Center	Pacific Bell
1985	Moorpark Mental Health Center	Pacific Telephone Co
	Liberty Inspection Co	Pacific Telephone Co
1980	Moorpark Medical Group	Polk
	Leir Roger K	Polk
1975	Moorpark	General Telephone Company of California
	Moorpark Center	General Telephone Company of California
	Moorpark Health Service & Referral Center	General Telephone Company of California
	Flurys Backhoe Service	General Telephone Company of California
	From Saticoy Telephones Call	General Telephone Company of California
1971	HARRIS VERLE	B&G Publications
	OLSEN CHARLES	B&G Publications
	VENTURA CNTY SOC WELFARE DEPT	B&G Publications
1970	Moorpark	General Telephone Company of California
	Olsen Chas E chirprctr	General Telephone Company of California
	Harris Verle Civil Engineering	General Telephone Company of California
1964	PAIGE MARVIN R CO INC Business Ofc	Pacific Telephone Co

227 E HIGH ST

Year	Uses	Source
1940	Simi Valley Cash Feed Store	Southern California

FINDINGS

228 E HIGH ST

Year	Uses	Source
2002	ONE MORETIME	Haines & Company, Inc.
	XXXX	Haines & Company, Inc.
	SENIOR THRIFTSH	Haines & Company, Inc.

E High St

233 E High St

Year	Uses	Source
2014	WARDLOW DICK INSURANCE BROKERS	EDR Digital Archive
2010	WARDLOW DICK INSURANCE BROKERS	EDR Digital Archive
2005	WARDLOW DICK INSURANCE BROKERS	EDR Digital Archive

E HIGH ST

233 E HIGH ST

Year	Uses	Source
2002	WARDLOW Rchard	Haines & Company, Inc.
	INSURANCE	Haines & Company, Inc.
	DICKWA	Haines & Company, Inc.
1993	California Clowns	GTE
	eamery The	GTE
	Toy Attic	GTE
	Toy G W @Camarillo	GTE
	eamery The	GTE
	Toy Attic	GTE
1986	Top Notch The	Pacific Bell
	Gardens	Pacific Bell
	From @Canoga Park @ Telephones Call	Pacific Bell
	W ALTE RS RE AL	Pacific Bell
	Better Homes And Gardens Walters Real Estate	Pacific Bell
	Christines Interiors	Pacific Bell
	Christines Interiors & Giftware	Pacific Bell
	Moorpark General Store	Pacific Bell
1985	Better Homes And Gardens Walters Real Estate	Pacific Telephone Co
	Cristines Interiors	Pacific Telephone Co

Year	Uses	Source
1985	Christines Interiors & Giftware	Pacific Telephone Co
	Moorpark General Store	Pacific Telephone Co
	Soda Fountain The	Pacific Telephone Co
	Top Notch The	Pacific Telephone Co
	Walters Real Estate Better Homes And Gardens	Pacific Telephone Co

243 E HIGH ST

Year	Uses	Source
1940	Whitaker Hardware Co	Southern California

E High St

255 E High St

Year	Uses	Source
2014	CONTINENTAL GARDEN INC	EDR Digital Archive
2010	CONTINENTAL GARDEN INC	EDR Digital Archive
2005	CONTINENTAL GARDEN INC	EDR Digital Archive

E HIGH ST

255 E HIGH ST

Year	Uses	Source
2002	SECRETG	Haines & Company, Inc.
1986	Moorpark Flower Emporium	Pacific Bell
1985	Moorpark Flower Emporium	Pacific Telephone Co
1975	IN DICE S PORTS W E AR	General Telephone Company of California
1971	CASTROS MARKET	B&G Publications
1970	Castros Market	General Telephone Company of California
1964	Castros Market	Pacific Telephone Co

273 E HIGH ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
	XXXX	Haines & Company, Inc.
	MARTINEZTnnidad	Haines & Company, Inc.
	MA 1 T 1 NEZ 7 S 2va Juan	Haines & Company, Inc.
	GONSLEZUMaria E	Haines & Company, Inc.
	AVINAMana R	Haines & Company, Inc.
	APARTMENTS	Haines & Company, Inc.

Year	Uses	Source
2002	QOGDINZTrenidad	Haines & Company, Inc.

285 E HIGH ST

Year	Uses	Source
1986	Meza Enrique	Pacific Bell

HIGH

123 HIGH

Year	Uses	Source
1975	Deleon Carmen I	Pacific Telephone Co

156 HIGH

Year	Uses	Source
1970	Ramirez Pat Jr	General Telephone Company of California

HIGH E

11 HIGH E

Year	Uses	Source
1996	MOORPARK MELODRAMA COSTUME ANNEX	Pacific Bell
1968	HALLS STORE	B&G Publications

15 HIGH E

Year	Uses	Source
1968	COMM ACTION COUNCIL OF MP	B&G Publications

17 HIGH E

Year	Uses	Source
1996	RITZY RAGS	Pacific Bell

20 HIGH E

Year	Uses	Source
1968	UNION OIL	B&G Publications

33 HIGH E

Year	Uses	Source
1996	F WAYNE J SAND & GRAVEL INC	Pacific Bell
	E VALTOR TAXES & INSURANCE SERVICES	Pacific Bell
	CHURCH OF MOORPARK	Pacific Bell

Year	Uses	Source
1996	A COMMUNITY CHRISTIAN	Pacific Bell
	D F 0 R DENTAL LABORATORY	Pacific Bell

43 HIGH E

Year	Uses	Source
1968	ARABIAN	B&G Publications

45 HIGH E

Year	Uses	Source
1996	MOORPARK	Pacific Bell
	MELODRAMA & VAUDEVILLE	Pacific Bell
	REAR Bredemann Linda	Pacific Bell
	MAGNIFICENT	Pacific Bell
1968	VALLEY THEATRE	B&G Publications

47 HIGH E

Year	Uses	Source
1968	ONEAL LEE	B&G Publications
	SHROPSHIRE	B&G Publications

49 HIGH E

Year	Uses	Source
1968	MOORPARK REALTY	B&G Publications

61 HIGH E

Year	Uses	Source
1968	MOORPARK LNDRY	B&G Publications
	CHANEY ENTERPR	B&G Publications

68 HIGH E

Year	Uses	Source
1996	BAR B QUE JOINT THE	Pacific Bell

71 HIGH E

Year	Uses	Source
1968	WATCH SHOP	B&G Publications

75 HIGH E

Year	Uses	Source
1968	LAWLEY LEE	B&G Publications

FINDINGS

79 HIGH E

Year	Uses	Source
1968	VACANT	B&G Publications

83 HIGH E

Year	Uses	Source
1968	MPK TRAILER PRK	B&G Publications
	RENOE RICHD	B&G Publications
	CLARK TED	B&G Publications
	GANTS GLEN	B&G Publications
	WILLIS T MRS	B&G Publications
	STUART MARY	B&G Publications
	DAVIS LOY	B&G Publications
	ERICKSON R	B&G Publications
	BERGE CARL	B&G Publications
	NICKEL IMRS	B&G Publications
	KRAVA ANN	B&G Publications
	PETERSON N	B&G Publications

87 HIGH E

Year	Uses	Source
1968	GUNTER PHARM	B&G Publications

95 HIGH E

Year	Uses	Source
1968	1ST WESTERN BANK	B&G Publications

100 HIGH E

Year	Uses	Source
1968	RAY C MRS	B&G Publications

104 HIGH E

Year	Uses	Source
1996	LA PLAYITA	Pacific Bell
1968	EPPIES FROSTI	B&G Publications

105 HIGH E

Year	Uses	Source
1996	THE MAYFLOWER MARKET & LIQUOR	Pacific Bell
1968	BOBS MKT	B&G Publications

FINDINGS

115 HIGH E

Year	Uses	Source
1968	NO RETURN	B&G Publications

137 HIGH E

Year	Uses	Source
1996	G & A VIDEO	Pacific Bell
1968	JOCELYNS HAIR FASHIONS	B&G Publications

139 HIGH E

Year	Uses	Source
1968	DEMPSEY S	B&G Publications

161 HIGH E

Year	Uses	Source
1968	URIBE JUAN	B&G Publications

165 HIGH E

Year	Uses	Source
1996	101 BORQUEZ RICK DOS	Pacific Bell
	101 BUTO TIM T DDS	Pacific Bell
	101 REDMOND JACK W II	Pacific Bell
	205 WARD ROBERT C	Pacific Bell
	106 EDWARD JONES	Pacific Bell
	ADVANTAGE REALTY	Pacific Bell
	103 MOORPARK	Pacific Bell
	A PROFESSIONAL CORP	Pacific Bell

169 HIGH E

Year	Uses	Source
1996	MOORPARK PRINTERS	Pacific Bell
1968	CNTY LIBRARY	B&G Publications

173 HIGH E

Year	Uses	Source
1996	ACS VETERINARY CLINIC	Pacific Bell
1968	VACANT	B&G Publications

179 HIGH E

Year	Uses	Source
1996	189 LUTHERS ATTIC	Pacific Bell
	WHITAKER HARDWARE	Pacific Bell

FINDINGS

Year	Uses	Source
1968	WHITAKERS HRDWRE	B&G Publications

189 HIGH E

Year	Uses	Source
1968	POST OFFICE	B&G Publications

192 HIGH E

Year	Uses	Source
1996	FOSTER ENTERPRISES	Pacific Bell

197 HIGH E

Year	Uses	Source
1996	CACTUS PATCH RESTAURANT	Pacific Bell

213 HIGH E

Year	Uses	Source
1996	GAS STATION THE	Pacific Bell
1968	SWINKS TEXACO	B&G Publications

220 HIGH E

Year	Uses	Source
1996	ONE MORE TIME SENIOR THRIFT SHOP	Pacific Bell
1968	MOORPARK HDWRE	B&G Publications

222 HIGH E

Year	Uses	Source
1996	PAIKINS COLOR PORT	Pacific Bell

226 HIGH E

Year	Uses	Source
1996	JEMCO PLUMBING INC	Pacific Bell
	255 MARCELINES	Pacific Bell
1968	BERGER I DDS	B&G Publications
	BERGER J DDS	B&G Publications
	ROBINSON V	B&G Publications
	ADMARK	B&G Publications

230 HIGH E

Year	Uses	Source
1968	FARRELL JIM	B&G Publications

FINDINGS

255 HIGH E

Year	Uses	Source
1968	CASTROS MKT	B&G Publications

273 HIGH E

Year	Uses	Source
1996	Martinez Trinidad	Pacific Bell
1968	SALINAS EFRAIN	B&G Publications

285 HIGH E

Year	Uses	Source
1968	MEDELLIN J	B&G Publications

HIGH W

18 HIGH W

Year	Uses	Source
1996	CHARLES ABBOTT ASSOCIATES INC	Pacific Bell

21 HIGH W

Year	Uses	Source
1996	AA MOORPARK	Pacific Bell
	TRANSMISSIONS SPECIALIST	Pacific Bell

HIGH ST

123 HIGH ST

Year	Uses	Source
1975	Deleon Carmen I	General Telephone Company of California

125 HIGH ST

Year	Uses	Source
1970	Herrera Nellie I	General Telephone Company of California
1940	Moorpark Cafe	Southern California

129 HIGH ST

Year	Uses	Source
1975	Espinoza Esther I	General Telephone Company of California

137 HIGH ST

Year	Uses	Source
1970	Curly Top Beauty Salon	General Telephone Company of California

FINDINGS

139 HIGH ST

Year	Uses	Source
1964	Moorpark	Pacific Telephone Co

156 HIGH ST

Year	Uses	Source
1975	Ramirez Pat Jr I	General Telephone Company of California

161 HIGH ST

Year	Uses	Source
1964	Edge David R	Pacific Telephone Co

189 HIGH ST

Year	Uses	Source
1970	For Zip Code Information call	General Telephone Company of California
	Moorpark	General Telephone Company of California

I First Investigative Consultants

180 I First Investigative Consultants

Year	Uses	Source
1993	Financial Services 6	GTE

MAGNOLIA AVE

712 MAGNOLIA AVE

Year	Uses	Source
2002	G 9 RCIAAI	Haines & Company, Inc.

740 MAGNOLIA AVE

Year	Uses	Source
1993	Uribe Juan A	GTE
	Uribe Juan A	GTE
	Uribe Lucy	GTE
1986	Uribe Juan A	Pacific Bell
1985	Uribe Juan A	Pacific Telephone Co
1980	Uribe Juan A	Polk

FINDINGS

MAGNOLIA ST

712 MAGNOLIA ST

Year	Uses	Source
1971	GARCIA HIPOLITO	B&G Publications
1968	GARCIA H	B&G Publications

740 MAGNOLIA ST

Year	Uses	Source
1975	Uribe Juan A	Pacific Telephone Co
	Uribe Juan A	General Telephone Company of California
1971	URIBE JUAN	B&G Publications

MILLARD

487 MILLARD

Year	Uses	Source
1971	BURD FORREST	B&G Publications
1968	BURD FORREST	B&G Publications
1964	Burd Forrest	Pacific Telephone Co

507 MILLARD

Year	Uses	Source
1971	ONEY HENRY	B&G Publications
1968	ONEY HENRY	B&G Publications

MILLARD ST

487 MILLARD ST

Year	Uses	Source
2002	GONSALEZ Victor M	Haines & Company, Inc.
	AMEZCORJorga	Haines & Company, Inc.
	ALFAROJonge Eneque	Haines & Company, Inc.
1986	Woolard Dan	Pacific Bell
	Teenager Telephone	Pacific Bell
1985	Woolard Dan	Pacific Telephone Co
1980	Woolard Dan	Polk
1975	Woolard Dan	General Telephone Company of California
1970	Burd Forrest	General Telephone Company of California

FINDINGS

507 MILLARD ST

Year	Uses	Source
1996	Velazquez Ana Bertha	Pacific Bell
1993	Mendiola Gustavo & Sandra	GTE
	Velazquez Ana Bertha	GTE
	Mendiondo M B	GTE
	Mendiola Gustavo & Sandra	GTE
	Velazquez Ana Bertha	GTE
1986	Barrera Agustin S	Pacific Bell
1985	Barrera Armando	Pacific Telephone Co
	Barrera Agustin S	Pacific Telephone Co
1980	Barrera Agustin S	Polk
1975	Oney Henry	General Telephone Company of California
1970	Oney Henry	General Telephone Company of California
1964	Oney Henry	Pacific Telephone Co

MOORPARK

499 MOORPARK

Year	Uses	Source
1964	AITKEN FRED CHEVRON SERV STN	Pacific Telephone Co

601 MOORPARK

Year	Uses	Source
1964	MORARK AUTO PARTS	Pacific Telephone Co

624 MOORPARK

Year	Uses	Source
1964	Streets Key & Saw Shop	Pacific Telephone Co

Moorpark

625 Moorpark

Year	Uses	Source
1993	Wefls R G And Co	GTE

MOORPARK

679 MOORPARK

Year	Uses	Source
1964	Mc Cown Lee	Pacific Telephone Co

FINDINGS

MOORPARK AVE

475 MOORPARK AVE

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1980	Flugum Jon K	Polk

496 MOORPARK AVE

Year	Uses	Source
2002	PLUS MINUS MRKT	Haines & Company, Inc.
	09 HEEMA Paramji MOORPK 99 CENT	Haines & Company, Inc.
1993	La Cabanita	GTE
	La Cabanita	GTE
1985	Pizza Stop Etc	Pacific Telephone Co
1980	Brothers Antiques & General Store	Polk
1975	Marz Harold G	General Telephone Company of California
	Cuddy Mary Louise	General Telephone Company of California
	Marys This & That	Pacific Telephone Co
	Cuddy Mary Louise	Pacific Telephone Co
	Marys This & That	General Telephone Company of California
1970	Taylor Les Second Hand Furniture Dealer	General Telephone Company of California

499 MOORPARK AVE

Year	Uses	Source
1970	MOOW ARK CHE VRON S E RVICE	General Telephone Company of California

526 MOORPARK AVE

Year	Uses	Source
1980	Nishikawa Wallace Y MD	Polk
1975	Nishikawa Wallace Y MD	Pacific Telephone Co
	Nishilkawa Wallace Y MD	General Telephone Company of California

528 MOORPARK AVE

Year	Uses	Source
1980	Braun Bail Bonds	Polk
	Camarillo III Ward Bishops Ofc	Polk
	Moorpark Branch	Polk
	KING ORSON REALTY	Polk
	MAY TRANSFER & STORAGE CO	Polk
	MAYFLOWER MOVING & STORAGE	Polk
	ORSON KING REALTY	Polk

Year	Uses	Source
1975	King Orson Realty	General Telephone Company of California
	ORS ON KIN G RE ALTY	General Telephone Company of California
	ORSON KING REALTY	Pacific Telephone Co
1970	Otten Leonard M geni contr	General Telephone Company of California

Moorpark Ave

530 Moorpark Ave

Year	Uses	Source
2014	OASIS HAIR & NAILS	EDR Digital Archive
	GREER PH CO INC	EDR Digital Archive
	COASTER COMPANY	EDR Digital Archive
	SAASSOFT LLC	EDR Digital Archive
	JILL GRANNIS DMD	EDR Digital Archive
	J W MILLS MANAGEMENT LLC	EDR Digital Archive
	CLICKWARE INC	EDR Digital Archive
	A A N INSURANCE SERVICES	EDR Digital Archive
2010	A A N INSURANCE SERVICES	EDR Digital Archive
	INSURANCE BROKER	EDR Digital Archive
	SIMPLEFY INC	EDR Digital Archive
	MD MEDICAL & HM HEALTHCARE SUP	EDR Digital Archive
	MOORFIELD ENTERPRISES LLC	EDR Digital Archive
	DANA HEALTHCARE CORP	EDR Digital Archive
	COASTER COMPANY	EDR Digital Archive
	GREER PH CO INC	EDR Digital Archive
	OASIS HAIR & NAILS	EDR Digital Archive
	AURELIO INSURANCE AGENCY	EDR Digital Archive
	JONES GREGORY S MAI & COMPANY	EDR Digital Archive
2005	JONES GREGORY S MAI & COMPANY	EDR Digital Archive
	GARDNER RICHARD L MD	EDR Digital Archive
	M AND R LANDSCAPE CONSTRUCTION	EDR Digital Archive
	HAIR MAKEUP BY MARCIA ORELLANA	EDR Digital Archive
	AURELIO INSURANCE AGENCY	EDR Digital Archive
	DANA HEALTHCARE CORP	EDR Digital Archive
	SERVOY INC	EDR Digital Archive
	IRELAND PACKS & BUSINESS SVCS	EDR Digital Archive
	SHARP JMCO	EDR Digital Archive
	DARANCARE CORP	EDR Digital Archive
	OASIS HAIR & NAILS	EDR Digital Archive

FINDINGS

Year	Uses	Source
2005	CLICKWARE INC	EDR Digital Archive
	COHN RONALD M CPA PC	EDR Digital Archive
	NOBLE RONALD A FARMERS INSUR	EDR Digital Archive
	MITCHELL DONNA	EDR Digital Archive

MOORPARK AVE

530 MOORPARK AVE

Year	Uses	Source
2002	BUILDING	Haines & Company, Inc.
	AUL 8 EUOTONY	Haines & Company, Inc.
	FARMERS INS AGENT	Haines & Company, Inc.
	COHNRONALDM	Haines & Company, Inc.
	DARANCAREINC	Haines & Company, Inc.
	G 0 RDNER RICHARDL MD HAIR&MAKE	Haines & Company, Inc.
	ORELLANA IR	Haines & Company, Inc.
	TAX&BUSINESS	Haines & Company, Inc.
	SERVICES	Haines & Company, Inc.
	IRELAND WALTER EA JONESGREGORYS 0 M	Haines & Company, Inc.
	MAI&COMPANY KATHYSNAILS	Haines & Company, Inc.
	MOORPARK	Haines & Company, Inc.
	EDUCATORS ASSOCIATION 0 N 0 BLE	Haines & Company, Inc.
	AFARMERSINS 5 SHARP 4 JMCO	Haines & Company, Inc.
	TMETRICSINC 80538 009 W TANIAS A	Haines & Company, Inc.
	TANIASAGENCY	Haines & Company, Inc.
1993	Accounting Software & Products	GTE
	Avenues In Travel	GTE
	Blue Shield Agent Tony Aurelio	GTE
	Canejo Pediatric Assoc	GTE
	COHN RON ALD M	GTE
	Aurelio Tony	GTE
	Fillmore	GTE
	Gardner Richard LMD	GTE
	Ireland Tax & Business Services	GTE
	Mitchell Chas W	GTE
	I Mitchell Chizma Donna Ins Agcy	GTE
	Moorpark Chamber Of Commerce	GTE
	Moorpark Educators Association	GTE

FINDINGS

Year	Uses	Source
1993	Moorpark Medical Group	GTE
	MOORPARK N E W S MIRROR	GTE
	My Bookie Bookkeeping Service	GTE
	T Metrics Inc	GTE
	Accounting Software & Products	GTE
	Accounting Solutions	GTE
	Avenues In Travel	GTE
	Blue Shield Agent Tony Aurelio	GTE
	Blue Shield Authorized Agent No Charge To Calling Party	GTE
	Blue Shield Group Sales	GTE
	Blue Shield Medicare Supplements	GTE
	Blue Shield New Enrollment	GTE
	Blue Shield Of California	GTE
	Canejo Pediatric Assoc	GTE
	COHN RON ALD M	GTE
	Aurelio Tony	GTE
	Gardner Richard LMD	GTE
	Gardner Robert & Janet	GTE
	Ireland Tax & Business Services	GTE
	Iren Senem	GTE
	I Mitchell Chizma Donna Ins Agcy	GTE
	Moorpark Chamber Of Commerce	GTE
	Moorpark Educators Association	GTE
	Moorpark Electro Optics	GTE
	Moorpark Medical Group	GTE
	MOORPARK N E W S MIRROR	GTE
	My Bookie Bookkeeping Service	GTE
	T Metrics Inc	GTE
	Wasser Harris MD	GTE
	Wasserman D	GTE
	Wasser Harris MD	GTE
1986	A Printing	Pacific Bell
	Avenues In Travel	Pacific Bell
	COHN RON ALD M	Pacific Bell
	Diet Center Of Moorpark	Pacific Bell
	Aurelio Tony	Pacific Bell
	HUFFMAN CHIROPRACTIC	Pacific Bell
	May Transfer & Storage Co	Pacific Bell

FINDINGS

Year	Uses	Source
1986	Mayflower Moving & Storage	Pacific Bell
	Mission Construction	Pacific Bell
	Moorpark Medical Group	Pacific Bell
	Moorpark Microsystems	Pacific Bell
	Tabs Secretarial Services	Pacific Bell
	Tabullo Silbino V @Oxnard	Pacific Bell
	Tate Richard J elctrncs engnr	Pacific Bell
	Wasser Harris MD	Pacific Bell
1985	Avenues In Travel	Pacific Telephone Co
	COHN RONALD M	Pacific Telephone Co
	HUFFMAN CHIROPRACTIC	Pacific Telephone Co
	KAZA ADI L MRS MD	Pacific Telephone Co
	Kaza Adi MD	Pacific Telephone Co
	MAY TRANSFER & STORAGE CO	Pacific Telephone Co
	MAYFLOWER MOVING & STORAGE	Pacific Telephone Co
	Medical Clinic Of Moorpark	Pacific Telephone Co
	Mission Construction	Pacific Telephone Co
	Moorpark Microsystems	Pacific Telephone Co
	PS For Kids tutoring	Pacific Telephone Co
	Puri Surinder MD	Pacific Telephone Co
	Rodriguez Jose E drftsmn	Pacific Telephone Co
	Rodriquez Jose E drftsmn	Pacific Telephone Co
	Tate Richard J elctrncs engnr	Pacific Telephone Co
	Diet Center Of Moorpark	Pacific Telephone Co
1980	Borquez Richard G DDS	Polk
1975	Schools	General Telephone Company of California
	Moorpark Union Elementary School Dist	Pacific Telephone Co

532 MOORPARK AVE

Year	Uses	Source
1970	Luv Bug Coiffures	General Telephone Company of California

534 MOORPARK AVE

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

536 MOORPARK AVE

Year	Uses	Source
1975	If No Answer Call	General Telephone Company of California

Year	Uses	Source
1975	Moorpark Ofc	General Telephone Company of California

538 MOORPARK AVE

Year	Uses	Source
1980	BRAUN REALTY	Polk
1975	OZZIES	Pacific Telephone Co
	Pacific Coast Clinical Laboratory	Pacific Telephone Co
	Pacific Coast Clinical Laboratory	General Telephone Company of California

539 MOORPARK AVE

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1980	ROGERS WAYNE L TRUCKING	Polk
1975	ROGE RS W AYN E L TRUCKIN G	General Telephone Company of California

540 MOORPARK AVE

Year	Uses	Source
2002	AR OYOCindy	Haines & Company, Inc.

542 MOORPARK AVE

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1980	HANSON QUENTON E CPA	Polk
1975	Moody Arthur A M CPA	Pacific Telephone Co
	Moody Arthur A M CPA	General Telephone Company of California

544 MOORPARK AVE

Year	Uses	Source
1970	N ATL RE TIRE D TE ACHE RS AS S N	General Telephone Company of California
	Nat l Life & Accident Ins Co	General Telephone Company of California

546 MOORPARK AVE

Year	Uses	Source
1980	ENTERPRISE SUN & NEWS	Polk
1975	Nati Life & Accident Ins Co	General Telephone Company of California
	Nati Life & Accident Ins Co	Pacific Telephone Co

601 MOORPARK AVE

Year	Uses	Source
2002	F 100 RIGUE 2 A	Haines & Company, Inc.
	SARABIAPa U	Haines & Company, Inc.

Year	Uses	Source
2002	THAKRARMukesh M	Haines & Company, Inc.
	CAESAR CARPETS	Haines & Company, Inc.
1985	Fines Welding & Supply	Pacific Telephone Co
	Fines Auto Repair & Trailer Service	Pacific Telephone Co
	Fines Auto Repair & Trailor Service	Pacific Telephone Co
1980	MOORPARK AUTO PARTS INC	Polk
	Moorpark Machine Shop	Polk
1975	MOORPARK AUTO PARTS IN C	General Telephone Company of California
	MOORPARK AUTO PARTS INC	Pacific Telephone Co

Moorpark Ave

624 Moorpark Ave

Year	Uses	Source
2010	A PLUS NUTRITION	EDR Digital Archive
2005	A PLUS NUTRITION	EDR Digital Archive

MOORPARK AVE

624 MOORPARK AVE

Year	Uses	Source
2002	A Plus INtr 4tion	Haines & Company, Inc.
1993	Thorn Books Antiquarian	GTE
	Thorn Books Antiquarian	GTE
1986	Moorpark Chamber Of Commerce	Pacific Bell

631 MOORPARK AVE

Year	Uses	Source
2002	HAIR SALON	Haines & Company, Inc.
	ENRIQUE 1 SPLACE	Haines & Company, Inc.
1993	Moorpark Sew & Vac	GTE
	Moorpark Sew & Vac	GTE
1986	Moorpark	Pacific Bell
	Lawson Karl	Pacific Bell
	United Financial Resources	Pacific Bell
1970	ORDYS CAS A DE BE AUTY	General Telephone Company of California

643 MOORPARK AVE

Year	Uses	Source
2002	XPERTAX	Haines & Company, Inc.

FINDINGS

Year	Uses	Source
1993	Ramirez Lucia	GTE
	Sofias Little Shop	GTE
	Ramirez Lucia	GTE
	Sofias Little Shop	GTE
1980	Oasis	Polk
1970	Wig Box The	General Telephone Company of California

661 MOORPARK AVE

Year	Uses	Source
2002	DAL 14 DOT 9odoro	Haines & Company, Inc.
1986	Kannard K Bll	Pacific Bell
1985	Yeyna Gregg	Pacific Telephone Co
1980	Yeyna Gregg	Polk
1975	Tanner I G	General Telephone Company of California
	Tanner I G	Pacific Telephone Co

675 MOORPARK AVE

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1993	Jemco Plumbing Inc	GTE
	Jemco Plumbing Inc	GTE
1986	Jemco Plumbing Inc	Pacific Bell
	Jenci N TOks	Pacific Bell
1985	Jemco Plumbing Inc	Pacific Telephone Co
1980	Moorpark Printers	Polk
1975	Moorpark Printers	General Telephone Company of California
	MOORPARK RE N DE ZVOUS 9513	General Telephone Company of California

MOORPARK RD

364 MOORPARK RD

Year	Uses	Source
1971	PACE JOHN W	B&G Publications

375 MOORPARK RD

Year	Uses	Source
1971	SPENCERS MKT	B&G Publications

FINDINGS

380 MOORPARK RD

Year	Uses	Source
1971	BARRY M J	B&G Publications

S MOORPARK AVE

560 S MOORPARK AVE

Year	Uses	Source
1940	Holland M L r	Southern California

W 1ST ST

2 W 1ST ST

Year	Uses	Source
1993	Castaneda Stanle IKt Astoria POwr 485	GTE
	Castaneda Stanle IKt Astoria POwr$485	GTE

3 W 1ST ST

Year	Uses	Source
1976	Waddell R	R. L. Polk & Co.

4 W 1ST ST

Year	Uses	Source
1976	Guerro Jose C	R. L. Polk & Co.

5 W 1ST ST

Year	Uses	Source
1957	47 N o return	R. L. Polk Co. of California

6 W 1ST ST

Year	Uses	Source
2002	B 3 WENNERHOLMAlce I	Haines & Company, Inc.
	WENNERHOLMBruce	Haines & Company, Inc.
1976	Perez Richd	R. L. Polk & Co.

7 W 1ST ST

Year	Uses	Source
1976	Luna Jose	R. L. Polk & Co.

8 W 1ST ST

Year	Uses	Source
1976	Vacant	R. L. Polk & Co.

FINDINGS

23 W 1ST ST

Year	Uses	Source
1957	5 Johnson Clifford	R. L. Polk Co. of California

29 W 1ST ST

Year	Uses	Source
1961	Vacant	R. L. Polk & Co.
	Z 35 Sieland Louise A Mrs AHU	R. L. Polk & Co.

52 W 1ST ST

Year	Uses	Source
1961	Ib Shitterly Grover	R. L. Polk & Co.
1957	Id Vacant	R. L. Polk Co. of California

53 W 1ST ST

Year	Uses	Source
1961	7b Lindburg Geo	R. L. Polk & Co.
	7c Chaffee Lucille Mrs hu	R. L. Polk & Co.

W HIGH

3 W HIGH

Year	Uses	Source
1975	Bingham H J S	Pacific Telephone Co

21 W HIGH

Year	Uses	Source
1975	Ocker Louis Auto Clinic	Pacific Telephone Co
	Auto Clinic Ocker Louis	Pacific Telephone Co

W High St

18 W High St

Year	Uses	Source
2010	MOORPARK CITY OF	EDR Digital Archive
2005	MOORPARK CITY OF	EDR Digital Archive
	ABBOTT CHARLES ASSOCIATES INC	EDR Digital Archive

FINDINGS

W HIGH ST

18 W HIGH ST

Year	Uses	Source
2002	CHARLESABBOTT	Haines & Company, Inc.
	ASSOCIATES INC	Haines & Company, Inc.
	BLDNOISFTY	Haines & Company, Inc.
	MOORPKCl Y	Haines & Company, Inc.
1971	CLINE RICHFIELD SERVICE	B&G Publications

20 W HIGH ST

Year	Uses	Source
1964	Moorpark Whsle Distrs	Pacific Telephone Co

21 W HIGH ST

Year	Uses	Source
2002	AA MOORPARK	Haines & Company, Inc.
	TRNSMSSNSSPCLST	Haines & Company, Inc.
1993	AA Moorpark Transmissions Specialist	GTE
	AA Moorpark Transmissions Specialist	GTE
	A & A Professional Cleaning Service	GTE
1986	Hager Automotive	Pacific Bell
1985	Hager Automotive	Pacific Telephone Co
1980	OCKER LOUIS AUTO CLINIC	Polk
	AUTO CLINIC OCKER LOUIS	Polk
1975	Ocker Louis Auto Clinic	General Telephone Company of California
	Auto Clinic Ocker Louis	General Telephone Company of California
1971	MPK GARAGE	B&G Publications
1970	Moorpark Garage	General Telephone Company of California

100 W HIGH ST

Year	Uses	Source
1964	Herron John O	Pacific Telephone Co

101 W HIGH ST

Year	Uses	Source
1980	Moorpark Co Op Nursery	Polk

161 W HIGH ST

Year	Uses	Source
1975	Hernandez Frank L	General Telephone Company of California

FINDINGS

WALNUT

661 WALNUT

Year	Uses	Source
1971	CHANEY ENTERPRISES	B&G Publications

680 WALNUT

Year	Uses	Source
1971	FOURSQUARE CH	B&G Publications
	SCOTT FRED	B&G Publications
1968	FOURSQUARE CH	B&G Publications
1964	Scott Fred Rev	Pacific Telephone Co

681 WALNUT

Year	Uses	Source
1971	TAKAHASHI K	B&G Publications
1968	WOOFF EDW	B&G Publications
1964	Wooff Edw A	Pacific Telephone Co

686 WALNUT

Year	Uses	Source
1968	NORCO ENGRG	B&G Publications

690 WALNUT

Year	Uses	Source
1968	MRPK AUTO BODY SERVICE	B&G Publications

702 WALNUT

Year	Uses	Source
1971	FIRST BAPT CH	B&G Publications
1968	FIRST BAPTIST CH	B&G Publications
1964	First Baptist Church	Pacific Telephone Co

760 WALNUT

Year	Uses	Source
1971	HILL H W	B&G Publications
1968	HILL H W	B&G Publications

FINDINGS

WALNUT AVE

700 WALNUT AVE

Year	Uses	Source
1926	Brand Merle	Los Angeles Directory Co.

750 WALNUT AVE

Year	Uses	Source
1926	Garner W B	Los Angeles Directory Co.

756 WALNUT AVE

Year	Uses	Source
1926	Johnson Bert	Los Angeles Directory Co.

760 WALNUT AVE

Year	Uses	Source
1926	Larramendy P A	Los Angeles Directory Co.

WALNUT ST

651 WALNUT ST

Year	Uses	Source
1965	SARGENT RAY E	R. L. Polk & Co.

Walnut St

661 Walnut St

Year	Uses	Source
2014	MOORPARK PRODUCE	EDR Digital Archive
2010	MOORPARK PRODUCE	EDR Digital Archive
2005	MOORPARK PRODUCE	EDR Digital Archive

WALNUT ST

661 WALNUT ST

Year	Uses	Source
2002	MOORPARK PRODUCE	Haines & Company, Inc.
1996	MOORPARK PRODUCE	Pacific Bell
1985	Janelles Dance Etc	Pacific Telephone Co
1980	Bilingual Education Program	Polk
	MOORPARK COLLEGE	Polk
1975	MOORPARK DROP IN CE N TE R	General Telephone Company of California

Year	Uses	Source
1975	MOORPARK DROP IN CENTER	Pacific Telephone Co
1970	Arts West Valley Refrigeration	General Telephone Company of California
	Chaney Enterprises Appliance Sales & Service	General Telephone Company of California
	Chaney Fred F I OOBlackbrn Pl @Ventura	General Telephone Company of California
	West Valley Refrigeration	General Telephone Company of California

Walnut St

680 Walnut St

Year	Uses	Source
2014	SEASONAL ADVENTURES	EDR Digital Archive
2010	SEASONAL ADVENTURES	EDR Digital Archive
	SEPICH ASSOCIATES	EDR Digital Archive
2005	A ONE PRINTING	EDR Digital Archive
	VILLAGE DEVELOPMENT	EDR Digital Archive

WALNUT ST

680 WALNUT ST

Year	Uses	Source
2002	SEPICHJ	Haines & Company, Inc.
	SEPICH ASSOCIATES	Haines & Company, Inc.
1993	Life Centers Pregnancy Counseling Center	GTE
	Life Safe Safety Services PO Box 1407 @Ojai	GTE
	Life Management	GTE
	Life Centers Of Ventura County	GTE
	Life Centers	GTE
	Life Centers	GTE
	Life Centers Of Ventura County	GTE
	Life Centers Pregnancy Counseling Center	GTE
1980	GRACE CHAPEL FOURSQUARE CHURCH	Polk
1975	Foursquare Church	Pacific Telephone Co
	Foursquare Church	General Telephone Company of California
1970	Foursquare Church	General Telephone Company of California
	Scott Fred Rev	General Telephone Company of California
1964	Foursquare Church	Pacific Telephone Co

FINDINGS

681 WALNUT ST

Year	Uses	Source
2002	GARCIA Fon da	Haines & Company, Inc.
	LIVO Theresa	Haines & Company, Inc.
1993	Lazo Maldonado Tomas	GTE
	Lazo Maldonado Tomas	GTE
1980	Oviedo Ramon Sr	Polk
1975	Franklin Geo A	Pacific Telephone Co
	Franklin Geo A	General Telephone Company of California
1970	Takahashi Koki	General Telephone Company of California

Walnut St

686 Walnut St

Year	Uses	Source
2005	WAGGIN TAILS	EDR Digital Archive

WALNUT ST

686 WALNUT ST

Year	Uses	Source
2002	WAG 61 N TAILS	Haines & Company, Inc.
	BRONSONOCai Ses	Haines & Company, Inc.
1996	WAGGIN TAILS	Pacific Bell
1993	Waggin Tails	GTE
	Waggin Tails	GTE
1986	Waggin Tails	Pacific Bell
1985	Waggin Tails	Pacific Telephone Co

Walnut St

690 Walnut St

Year	Uses	Source
2010	690 MARTIAL ARTS & FITNESS	EDR Digital Archive
	J & H VENTURES LLC	EDR Digital Archive
2005	BOULEVARD MOTORCAR COMPANY	EDR Digital Archive
	BRONSON INVESTMENTS	EDR Digital Archive

FINDINGS

WALNUT ST

690 WALNUT ST

Year	Uses	Source
2002	B 60 NSON 10nestenats	Haines & Company, Inc.
1993	Berard Michael Garage	GTE
	Berard Michael Garage	GTE
1986	Faircloth Classic Restoration	Pacific Bell

691 WALNUT ST

Year	Uses	Source
2002	Oo YOTheresa	Haines & Company, Inc.
1986	Nunez Jimmy & Mimi	Pacific Bell
1975	Cretsinger Robt D	General Telephone Company of California
	CretsInger Robt D	Pacific Telephone Co

Walnut St

702 Walnut St

Year	Uses	Source
2014	FIRST BAPTIST CHURCH MOORPA	EDR Digital Archive
2010	FIRST BAPTIST CHURCH MOORPA	EDR Digital Archive
2005	FIRST BAPTIST CHURCH MOORPA	EDR Digital Archive

WALNUT ST

702 WALNUT ST

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1993	Moorpark Community Church S BC	GTE
	Moorpark Community Church S BC	GTE
1986	First Baptist Church So Of Moorpark	Pacific Bell
1985	First Baptist Church So Of Moorpark	Pacific Telephone Co
1980	First Baptist Church So Of Moorpark	Polk
1975	First Baptist Church So Of Moorpark	General Telephone Company of California
1970	First Baptist Church	General Telephone Company of California
	If no answer call @Simi@	General Telephone Company of California

760 WALNUT ST

Year	Uses	Source
2002	KALESEri	Haines & Company, Inc.

Year	Uses	Source
1996	Hill HW	Pacific Bell
1993	Hill H W	GTE
	Hill H Wayne & Penny @Thousand Oaks	GTE
	Hill H W	GTE
1986	Hill H W	Pacific Bell
1985	Hill H W	Pacific Telephone Co
1980	Hill H W	Polk
1975	Hill H W	General Telephone Company of California
1970	Hill H W	General Telephone Company of California
1964	Hill H W	Pacific Telephone Co

YOU2167 1ST

4 YOU2167 1ST

Year	Uses	Source
1980	Space	Polk
	Space	Polk

FINDINGS

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
E High Street	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

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
004 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
1 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
1 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
100 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
100 W HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
101 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
101 W HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
102 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
102 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
104 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
104 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
104 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
104 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
105 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
105 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1976, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
105 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
105 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
11 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
11 E High St	2014, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
11 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
112 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
112 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
113 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
113 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
115 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
123 HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
123 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
124 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
124 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
125 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
125 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
125 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
129 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
131 E 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
134 E 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
135 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
135 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
136 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
136 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
136 1st St	2014, 2010, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
136 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
136 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1986, 1985, 1976, 1975, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
136 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
137 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
137 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
137 CHARLES ST	2014, 2010, 2005, 2000, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
137 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
137 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
137 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
137 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
139 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
139 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1976, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
139 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
139 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
14 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
141 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
143 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
143 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
143 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
143 E 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
145 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
146 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
146 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
147 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
147 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
148 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
148 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1985, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
149 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
149 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
15 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
15 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1985, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
15 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
155 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
155 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
156 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
156 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
156 E 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
156 HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
156 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
158 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
16 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
16 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
160 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
160 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
161 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
161 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
161 Charles St	2014, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
161 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
161 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
161 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
161 W HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
162 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
164 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
164 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
164 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1953, 1949, 1940, 1930, 1926
165 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
165 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
165 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
167 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
167 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
168 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
168 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
169 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
169 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
169 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
169 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
17 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
17 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
17 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
17 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
17 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
170 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
171 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
172 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
172 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
172 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
172 CHARLES ST	2014, 2010, 2005, 2000, 1976, 1971, 1968, 1961, 1953, 1949, 1940, 1930, 1926
173 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
173 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
173 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
173 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
173 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
174 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1953, 1949, 1940, 1930, 1926
175 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
177 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
177 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
178 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
179 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
179 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1976, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
179 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
179 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
18 E 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
18 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
18 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
18 E High St	2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
18 HIGH W	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
18 W HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
18 W High St	2014, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
180 I First Investigative Consultants	2014, 2010, 2005, 2002, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
181 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
181 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
184 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
184 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
185 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
187 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
187 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
189 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
189 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
189 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1985, 1976, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
189 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
189 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
189 HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
19 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
191 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
191 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
191 E 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
192 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1985, 1976, 1975, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
192 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
194 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
194 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
195 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
195 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
197 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
197 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
197 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
197 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
20 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
20 W HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
200 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
201 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
208 DOROTHY AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
209 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
21 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
21 HIGH W	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
21 W HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
21 W HIGH ST	2014, 2010, 2005, 2000, 1996, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
211 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
211 CHARLES ST	2014, 2010, 2005, 2000, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
212 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
213 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1986, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
213 E High St	2010, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
213 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
217 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
218 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
220 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
220 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
220 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
220 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
222 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
222 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
224 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
226 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1976, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
226 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
227 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
228 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
229 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
229 CHARLES ST	2014, 2010, 2005, 2000, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
23 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1953, 1949, 1940, 1930, 1926
230 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
230 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
233 DOROTHY AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
233 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
233 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
235 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
239 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
241 DOROTHY	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
241 DOROTHY AVE	2014, 2010, 2005, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
243 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
247 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
248 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
248 CHARLES ST	2014, 2010, 2005, 2000, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
249 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
250 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1953, 1949, 1940, 1930, 1926
252 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1953, 1949, 1940, 1930, 1926
255 DOROTHY AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
255 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
255 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1980, 1976, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
255 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
255 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
256 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1953, 1949, 1940, 1930, 1926
259 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
259 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
260 CHARLES	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
260 CHARLES ST	2014, 2010, 2005, 2000, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
27 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
272 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
272 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1980, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
273 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
273 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
273 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
285 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

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Address Researched	Address Not Identified in Research Source
285 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
29 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930
29 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1957, 1953, 1949, 1940, 1930, 1926
3 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
3 W HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
301 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
301 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
33 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
33 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
33 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
34 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
34 CHARLES ST	2014, 2010, 2005, 2000, 1993, 1976, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
35 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
35 CHARLES ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
36 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
364 MOORPARK RD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
375 MOORPARK RD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
38 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
380 MOORPARK RD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
39 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930
4 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4 YOU2167 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
40 1 SOUTH F ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
40 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
40 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
41 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
420 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
43 1 SOUTH C ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
43 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
43 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
43 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
436 BARD ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
445 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
445 BARD ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
447 BARD ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
45 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
45 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1976, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
45 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
452 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
452 BARD ST	2014, 2010, 2005, 2000, 1986, 1980, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
453 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
453 BARD ST	2014, 2010, 2005, 2000, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
468 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
468 BARD ST	2014, 2010, 2005, 2000, 1980, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
47 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
475 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
48 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
484 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
484 BARD ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
487 MILLARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
487 MILLARD ST	2014, 2010, 2005, 2000, 1996, 1993, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
49 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1980, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
49 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
49 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
49 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
49 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
49 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
49 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
496 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
496 BARD ST	2014, 2010, 2005, 2002, 2000, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
496 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1986, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
499 MOORPARK	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
499 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
5 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1953, 1949, 1940, 1930, 1926
501 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
501 BARD ST	2014, 2010, 2005, 2000, 1996, 1993, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
507 MILLARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
507 MILLARD ST	2014, 2010, 2005, 2002, 2000, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
508 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
508 BARD ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
52 E 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1949, 1940, 1930, 1926
52 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
520 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
520 BARD ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
526 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
528 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
53 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1957, 1953, 1949, 1940, 1930, 1926
530 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1940, 1930, 1926
530 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
530 Moorpark Ave	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
532 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
534 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
536 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
538 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
539 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
54 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
540 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1940, 1930, 1926
540 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
542 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
544 BARD ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1926
544 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
546 MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
560 S MOORPARK AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1930, 1926
6 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
6 W 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
601 MOORPARK	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
601 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
61 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
61 E High St	2014, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
61 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
621 Bard St	2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
624 MOORPARK	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
624 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
624 Moorpark Ave	2014, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
625 Moorpark	2014, 2010, 2005, 2002, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
631 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
639 BARD ST	2014, 2010, 2005, 2000, 1993, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
64 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
64 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
64 Charles St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
640 BARD ST	2014, 2010, 2005, 2000, 1996, 1993, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
643 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1986, 1985, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
65 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
65 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
650 BARD ST	2014, 2010, 2005, 2002, 2000, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
651 WALNUT ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
655 BARD	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
655 BARD ST	2014, 2010, 2005, 2000, 1996, 1993, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
655 Bard St	2014, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
661 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1993, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
661 WALNUT	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
661 WALNUT ST	2014, 2010, 2005, 2000, 1993, 1986, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
661 Walnut St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
675 MOORPARK AVE	2014, 2010, 2005, 2000, 1996, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
679 MOORPARK	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
68 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
68 E High St	2014, 2010, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
68 HIGH E	2014, 2010, 2005, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
680 WALNUT	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
680 WALNUT ST	2014, 2010, 2005, 2000, 1996, 1986, 1985, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
680 Walnut St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
681 WALNUT	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
681 WALNUT ST	2014, 2010, 2005, 2000, 1996, 1986, 1985, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
686 WALNUT	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
686 WALNUT ST	2014, 2010, 2005, 2000, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
686 Walnut St	2014, 2010, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
690 WALNUT	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
690 WALNUT ST	2014, 2010, 2005, 2000, 1996, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
690 Walnut St	2014, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
691 WALNUT ST	2014, 2010, 2005, 2000, 1996, 1993, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
7 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
7 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
700 WALNUT AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930
702 WALNUT	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
702 WALNUT ST	2014, 2010, 2005, 2000, 1996, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
702 Walnut St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
71 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
71 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
71 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1980, 1976, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
71 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
71 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
712 MAGNOLIA AVE	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
712 MAGNOLIA ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
73 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
73 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
73 Charles St	2014, 2010, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
73 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
740 MAGNOLIA AVE	2014, 2010, 2005, 2002, 2000, 1996, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
740 MAGNOLIA ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
75 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
75 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
750 WALNUT AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930
756 WALNUT AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930
760 WALNUT	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
760 WALNUT AVE	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930
760 WALNUT ST	2014, 2010, 2005, 2000, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
77 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
77 1ST ST	2014, 2010, 2005, 2000, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
79 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
79 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
79 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
79 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
8 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
8 W 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
80 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
80 1ST ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
81 CHARLES	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
81 CHARLES ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1976, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
81 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
83 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
87 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
87 E HIGH ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1980, 1976, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
87 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
9 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
90 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
95 E HIGH	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
95 E HIGH ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1976, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
95 E High St	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
95 HIGH E	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
96 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
96 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
97 1ST	2014, 2010, 2005, 2002, 2000, 1996, 1993, 1980, 1976, 1975, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
97 1ST ST	2014, 2010, 2005, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
97 CHARLES ST	2014, 2010, 2005, 2000, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
97 Charles St	2005, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

Moorpark RR Depot

E High Street

Moorpark, CA 93021

Inquiry Number: 5306248.3

May 22, 2018

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

05/22/18

Site Name:

Moorpark RR Depot
E High Street
Moorpark, CA 93021
EDR Inquiry # 5306248.3

Client Name:

Rincon
180 North Ashwood Avenue
Ventura, CA 93003-0000
Contact: Sarah Larese

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PO # 18-05844

Project 18-05844

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Sanborn® Library search results

Certification #: 31AA-424B-BB95

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Appendix I

Noise Data and Modeling Worksheets

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers
www.rinconconsultants.com

Ambient Noise Survey Data Sheet

Instructions: Document noise measurement locations with a photo of the site, including the noise meter. Additionally, take notes on general and secondary noise sources, including the instantaneous noise level if possible. As a reminder, A/C weighting should be set to "A" and generally response time should be set to "fast." For additional information, please review the *Noise Measurement Protocol* in the pelican case.

Project Name: Moorpark Depot **Job Number:** 18-05844
Date: 06-12-2018 **Operator Name:** Jamie Power

Measurement #1

Location: 2 (project site, High st) **Begin time:** 7:41 am **Finish time:** 7:56 am
Measurement No.: 1 **Wind (mph):** _____ **Direction:** _____
Cloud Cover Class: Overcast (>80%) ○ Light (20-80%) ○ Sunny (<20%) ⊗
Calibration (dB): Start: _____ End: _____
Primary Noise Sources: Traffic along High st **Distance:** ~60 ft from centerline
Secondary Noise Sources: birds, pedestrians
Notes: _____

Traffic Count: Passenger Cars: N/A
Medium to Heavy Duty Trucks (3 axles): _____ Heavy Duty Trucks (4+ axles): _____
Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____

Leq: 65.4 **SEL:** _____ **Lmax:** 78.7 **Lmin:** 44.6 **PK:** 98.6
L(05): _____ **L(10):** _____ **L(50):** _____ **L(90):** _____ **L(95):** _____
Response: Slow ○ Fast ○ Peak ○ Impulse ○

Measurement #2

Location: 1 (along High st) **Begin time:** 7:57 am **Finish time:** 8:12 am
Measurement No.: 2 **Wind (mph):** _____ **Direction:** _____
Cloud Cover Class: Overcast (>80%) ○ Light (20-80%) ○ Sunny (<20%) ⊗
Calibration (dB): Start: _____ End: _____
Primary Noise Sources: Traffic High st. **Distance:** ~30 ft centerline
Secondary Noise Sources: pedestrians, train x-ing bells, train (100 ft away)
Notes: siren-ambulance, traffic Moorpark

Traffic Count: Passenger Cars: (76)
Medium to Heavy Duty Trucks (3 axles): _____ Heavy Duty Trucks (4+ axles): _____
Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____

Leq: 69.0 **SEL:** _____ **Lmax:** 88.8 **Lmin:** 51.3 **PK:** 114.8
L(05): _____ **L(10):** _____ **L(50):** _____ **L(90):** _____ **L(95):** _____
Response: Slow ○ Fast ○ Peak ○ Impulse ○

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers
www.rinconconsultants.com

Ambient Noise Survey Data Sheet

Instructions: Document noise measurement locations with a photo of the site, including the noise meter. Additionally, take notes on general and secondary noise sources, including the instantaneous noise level if possible. As a reminder, A/C weighting should be set to "A" and generally response time should be set to "fast." For additional information, please review the *Noise Measurement Protocol* in the pelican case.

Project Name: Moorpark Depot **Job Number:** 18-05 844

Date: 06-12-2018 **Operator Name:** Jamie Power

Measurement #1

Walnut St ←

Location: 3 (nearest residence) **Begin time:** 8:16 am **Finish time:** 8:31 am

Measurement No.: 3 **Wind (mph):** _____ **Direction:** _____

Cloud Cover Class: Overcast (>80%) ○ Light (20-80%) ○ Sunny (<20%) ⊗

Calibration (dB): Start: _____ End: _____

Primary Noise Sources: Traffic high st **Distance:** ~30 ft

Secondary Noise Sources: Traffic Walnut, pedestrians

Notes: _____

Traffic Count: Passenger Cars: N/A

Medium to Heavy Duty Trucks (3 axles): _____ Heavy Duty Trucks (4+ axles): _____

Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____

Leq: 55.0 **SEL:** _____ **Lmax:** 73.4 **Lmin:** 45.2 **PK:** 98.5

L(05): _____ **L(10):** _____ **L(50):** _____ **L(90):** _____ **L(95):** _____

Response: Slow ○ Fast ○ Peak ○ Impulse ○

Measurement #2

Location: _____ **Begin time:** _____ **Finish time:** _____

Measurement No.: _____ **Wind (mph):** _____ **Direction:** _____

Cloud Cover Class: Overcast (>80%) ○ Light (20-80%) ○ Sunny (<20%) ○

Calibration (dB): Start: _____ End: _____

Primary Noise Sources: _____ **Distance:** _____

Secondary Noise Sources: _____

Notes: _____

Traffic Count: Passenger Cars: _____

Medium to Heavy Duty Trucks (3 axles): _____ Heavy Duty Trucks (4+ axles): _____

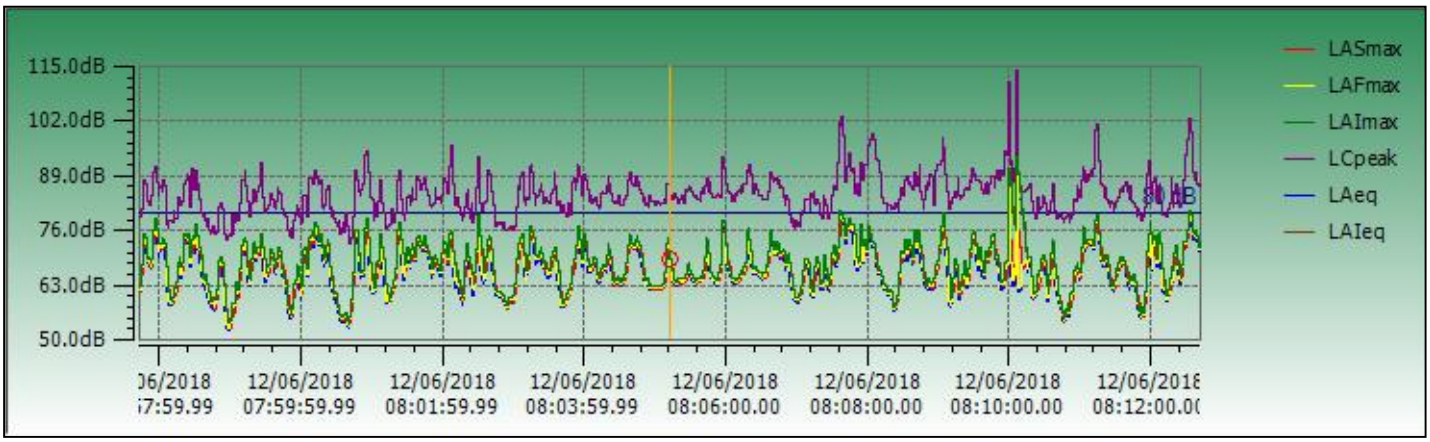
Instantaneous Noise Sources/Levels (e.g., airplane, bus airbrake, etc.): _____

Leq: _____ **SEL:** _____ **Lmax:** _____ **Lmin:** _____ **PK:** _____

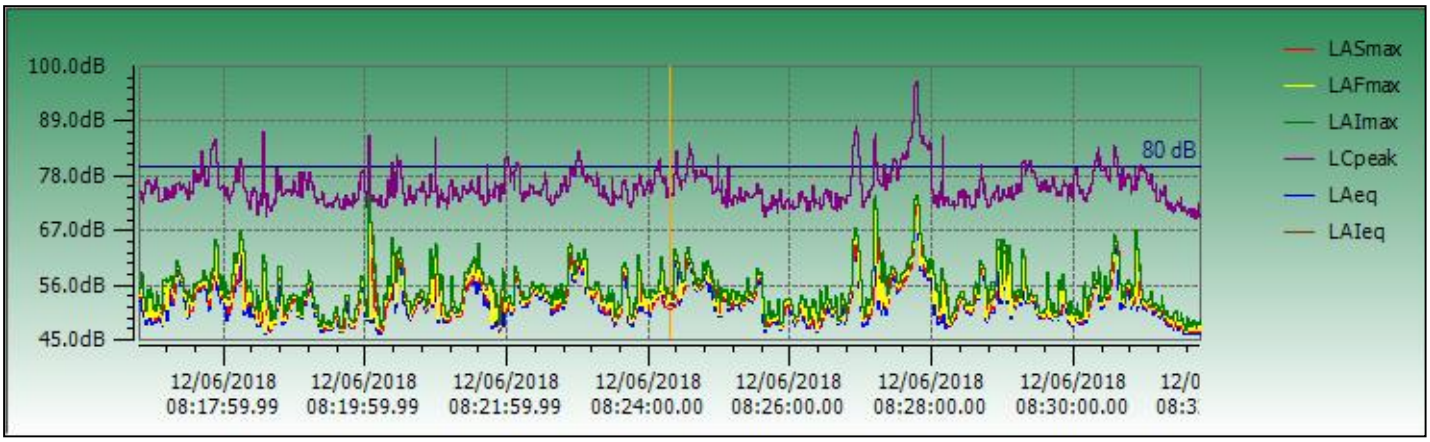
L(05): _____ **L(10):** _____ **L(50):** _____ **L(90):** _____ **L(95):** _____

Response: Slow ○ Fast ○ Peak ○ Impulse ○

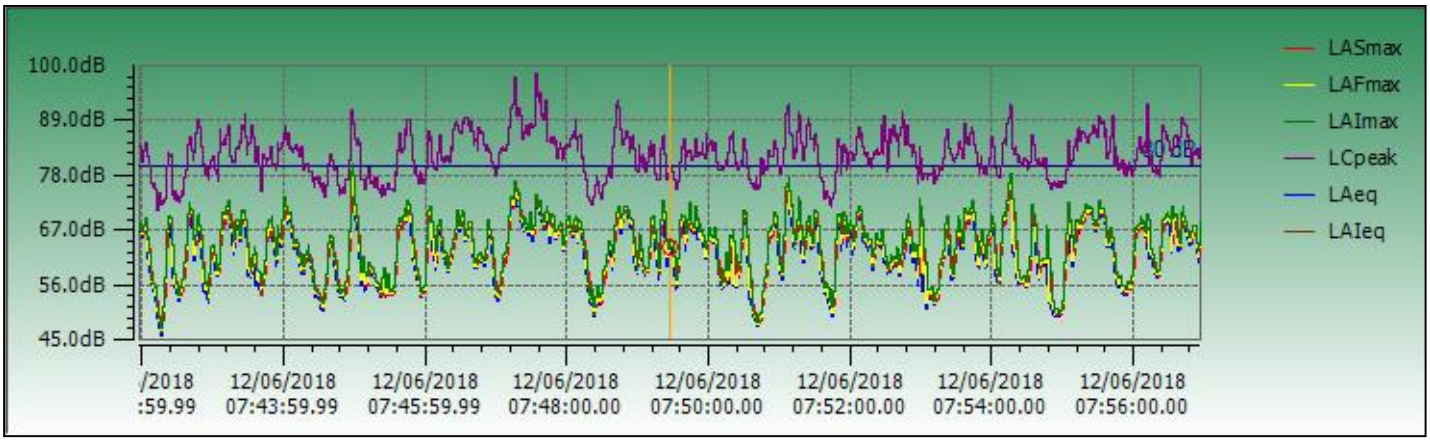
Instrument Model	CEL-633C		
Battery Low	No	Site	Unallocated
End Date & Time	6/12/2018 8:12:43 AM	Location	Unallocated
Overload	No	Person	Unallocated
Duration	00:15:00 HH:MM:SS	Process	Unallocated
Pause Duration	00:00:00 HH:MM:SS	Start Date & Time	6/12/2018 7:57:43 AM
Response	Random	Result	Cumulative
Run Number	3		
Serial Number	1739839		
Notes			



Instrument Model	CEL-633C		
Battery Low	No	Site	Unallocated
End Date & Time	6/12/2018 8:31:48 AM	Location	Unallocated
Overload	No	Person	Unallocated
Duration	00:15:00 HH:MM:SS	Process	Unallocated
Pause Duration	00:00:00 HH:MM:SS	Start Date & Time	6/12/2018 8:16:48 AM
Response	Random	Result	Cumulative
Run Number	4		
Serial Number	1739839		
Notes			



Instrument Model	**CEL-633C**		
Battery Low	No	Site	Unallocated
End Date & Time	6/12/2018 7:56:57 AM	Location	Unallocated
Overload	No	Person	Unallocated
Duration	00:15:00 HH:MM:SS	Process	Unallocated
Pause Duration	00:00:00 HH:MM:SS	Start Date & Time	6/12/2018 7:41:57 AM
Response	Random	Result	Cumulative
Run Number	2		
Serial Number	1739839		
Notes			



24-Hour Noise Measurement Avg Leq, CNEL, and Ldn Calculation Spreadsheet

Instructions

1. Open meter data in Excel.
2. Copy and paste values for into highlighted cells in spreadsheet.

Results	
24-hour average Leq	64.7
CNEL	69.2
Ldn	65.0

Duration (seconds) 240

No.s	Date Time	Date	Time	dB
1	10/2/2019 8:43	10/2/2019	8:43:58 AM	52.9
2	10/2/2019 8:47	10/2/2019	8:47:58 AM	50.5
3	10/2/2019 8:51	10/2/2019	8:51:58 AM	58.1
4	10/2/2019 8:55	10/2/2019	8:55:58 AM	51.6
5	10/2/2019 8:59	10/2/2019	8:59:58 AM	55.6
6	10/2/2019 9:03	10/2/2019	9:03:58 AM	51.5
7	10/2/2019 9:07	10/2/2019	9:07:58 AM	55.8
8	10/2/2019 9:11	10/2/2019	9:11:58 AM	51.9
9	10/2/2019 9:15	10/2/2019	9:15:58 AM	50.3
10	10/2/2019 9:19	10/2/2019	9:19:58 AM	49.9
11	10/2/2019 9:23	10/2/2019	9:23:58 AM	51.1
12	10/2/2019 9:27	10/2/2019	9:27:58 AM	49.5
13	10/2/2019 9:31	10/2/2019	9:31:58 AM	51.5
14	10/2/2019 9:35	10/2/2019	9:35:58 AM	50.6
15	10/2/2019 9:39	10/2/2019	9:39:58 AM	50.4
16	10/2/2019 9:43	10/2/2019	9:43:58 AM	52.3
17	10/2/2019 9:47	10/2/2019	9:47:58 AM	48.6
18	10/2/2019 9:51	10/2/2019	9:51:58 AM	51.9
19	10/2/2019 9:55	10/2/2019	9:55:58 AM	54.7
20	10/2/2019 9:59	10/2/2019	9:59:58 AM	48.8
21	10/2/2019 10:03	10/2/2019	10:03:58 AM	47.5
22	10/2/2019 10:07	10/2/2019	10:07:58 AM	52.7
23	10/2/2019 10:11	10/2/2019	10:11:58 AM	52
24	10/2/2019 10:15	10/2/2019	10:15:58 AM	49
25	10/2/2019 10:19	10/2/2019	10:19:58 AM	52
26	10/2/2019 10:23	10/2/2019	10:23:58 AM	47
27	10/2/2019 10:27	10/2/2019	10:27:58 AM	45.6
28	10/2/2019 10:31	10/2/2019	10:31:58 AM	50.1
29	10/2/2019 10:35	10/2/2019	10:35:58 AM	50.1
30	10/2/2019 10:39	10/2/2019	10:39:58 AM	49.5
31	10/2/2019 10:43	10/2/2019	10:43:58 AM	50.5

32	10/2/2019 10:47	10/2/2019	10:47:58 AM	51.8
33	10/2/2019 10:51	10/2/2019	10:51:58 AM	49.9
34	10/2/2019 10:55	10/2/2019	10:55:58 AM	47.7
35	10/2/2019 10:59	10/2/2019	10:59:58 AM	49
36	10/2/2019 11:03	10/2/2019	11:03:58 AM	48.1
37	10/2/2019 11:07	10/2/2019	11:07:58 AM	50.5
38	10/2/2019 11:11	10/2/2019	11:11:58 AM	52.2
39	10/2/2019 11:15	10/2/2019	11:15:58 AM	46.9
40	10/2/2019 11:19	10/2/2019	11:19:58 AM	57.9
41	10/2/2019 11:23	10/2/2019	11:23:58 AM	50
42	10/2/2019 11:27	10/2/2019	11:27:58 AM	50.6
43	10/2/2019 11:31	10/2/2019	11:31:58 AM	52.6
44	10/2/2019 11:35	10/2/2019	11:35:58 AM	50.6
45	10/2/2019 11:39	10/2/2019	11:39:58 AM	50.9
46	10/2/2019 11:43	10/2/2019	11:43:58 AM	54.2
47	10/2/2019 11:47	10/2/2019	11:47:58 AM	49.7
48	10/2/2019 11:51	10/2/2019	11:51:58 AM	52.6
49	10/2/2019 11:55	10/2/2019	11:55:58 AM	56.8
50	10/2/2019 11:59	10/2/2019	11:59:58 AM	51.1
51	10/2/2019 12:03	10/2/2019	12:03:58 PM	45.6
52	10/2/2019 12:07	10/2/2019	12:07:58 PM	52
53	10/2/2019 12:11	10/2/2019	12:11:58 PM	48.8
54	10/2/2019 12:15	10/2/2019	12:15:58 PM	55
55	10/2/2019 12:19	10/2/2019	12:19:58 PM	52.5
56	10/2/2019 12:23	10/2/2019	12:23:58 PM	49.1
57	10/2/2019 12:27	10/2/2019	12:27:58 PM	50.2
58	10/2/2019 12:31	10/2/2019	12:31:58 PM	56.7
59	10/2/2019 12:35	10/2/2019	12:35:58 PM	54.5
60	10/2/2019 12:39	10/2/2019	12:39:58 PM	51.2
61	10/2/2019 12:43	10/2/2019	12:43:58 PM	49.1
62	10/2/2019 12:47	10/2/2019	12:47:58 PM	49.4
63	10/2/2019 12:51	10/2/2019	12:51:58 PM	50.2
64	10/2/2019 12:55	10/2/2019	12:55:58 PM	54
65	10/2/2019 12:59	10/2/2019	12:59:58 PM	53.2
66	10/2/2019 13:03	10/2/2019	1:03:58 PM	51.3
67	10/2/2019 13:07	10/2/2019	1:07:58 PM	47.2
68	10/2/2019 13:11	10/2/2019	1:11:58 PM	49.5
69	10/2/2019 13:15	10/2/2019	1:15:58 PM	52.8
70	10/2/2019 13:19	10/2/2019	1:19:58 PM	55.9
71	10/2/2019 13:23	10/2/2019	1:23:58 PM	55.3
72	10/2/2019 13:27	10/2/2019	1:27:58 PM	53.2
73	10/2/2019 13:31	10/2/2019	1:31:58 PM	58.8
74	10/2/2019 13:35	10/2/2019	1:35:58 PM	53.2
75	10/2/2019 13:39	10/2/2019	1:39:58 PM	51.3
76	10/2/2019 13:43	10/2/2019	1:43:58 PM	54.4
77	10/2/2019 13:47	10/2/2019	1:47:58 PM	50.9
78	10/2/2019 13:51	10/2/2019	1:51:58 PM	56.3

79	10/2/2019 13:55	10/2/2019	1:55:58 PM	53.2
80	10/2/2019 13:59	10/2/2019	1:59:58 PM	53.8
81	10/2/2019 14:03	10/2/2019	2:03:58 PM	52.4
82	10/2/2019 14:07	10/2/2019	2:07:58 PM	55
83	10/2/2019 14:11	10/2/2019	2:11:58 PM	52.6
84	10/2/2019 14:15	10/2/2019	2:15:58 PM	74.4
85	10/2/2019 14:19	10/2/2019	2:19:58 PM	50.8
86	10/2/2019 14:23	10/2/2019	2:23:58 PM	51.9
87	10/2/2019 14:27	10/2/2019	2:27:58 PM	53.9
88	10/2/2019 14:31	10/2/2019	2:31:58 PM	52.7
89	10/2/2019 14:35	10/2/2019	2:35:58 PM	51.8
90	10/2/2019 14:39	10/2/2019	2:39:58 PM	52.5
91	10/2/2019 14:43	10/2/2019	2:43:58 PM	54.4
92	10/2/2019 14:47	10/2/2019	2:47:58 PM	57.4
93	10/2/2019 14:51	10/2/2019	2:51:58 PM	54.6
94	10/2/2019 14:55	10/2/2019	2:55:58 PM	51.2
95	10/2/2019 14:59	10/2/2019	2:59:58 PM	51.1
96	10/2/2019 15:03	10/2/2019	3:03:58 PM	52.9
97	10/2/2019 15:07	10/2/2019	3:07:58 PM	53.1
98	10/2/2019 15:11	10/2/2019	3:11:58 PM	50.1
99	10/2/2019 15:15	10/2/2019	3:15:58 PM	52.5
100	10/2/2019 15:19	10/2/2019	3:19:58 PM	50.2
101	10/2/2019 15:23	10/2/2019	3:23:58 PM	49.6
102	10/2/2019 15:27	10/2/2019	3:27:58 PM	53.9
103	10/2/2019 15:31	10/2/2019	3:31:58 PM	53.3
104	10/2/2019 15:35	10/2/2019	3:35:58 PM	52.9
105	10/2/2019 15:39	10/2/2019	3:39:58 PM	54.1
106	10/2/2019 15:43	10/2/2019	3:43:58 PM	51.5
107	10/2/2019 15:47	10/2/2019	3:47:58 PM	53.3
108	10/2/2019 15:51	10/2/2019	3:51:58 PM	52
109	10/2/2019 15:55	10/2/2019	3:55:58 PM	52.6
110	10/2/2019 15:59	10/2/2019	3:59:58 PM	50.3
111	10/2/2019 16:03	10/2/2019	4:03:58 PM	55.1
112	10/2/2019 16:07	10/2/2019	4:07:58 PM	52.4
113	10/2/2019 16:11	10/2/2019	4:11:58 PM	51
114	10/2/2019 16:15	10/2/2019	4:15:58 PM	47.2
115	10/2/2019 16:19	10/2/2019	4:19:58 PM	51.8
116	10/2/2019 16:23	10/2/2019	4:23:58 PM	55.2
117	10/2/2019 16:27	10/2/2019	4:27:58 PM	52.7
118	10/2/2019 16:31	10/2/2019	4:31:58 PM	51.5
119	10/2/2019 16:35	10/2/2019	4:35:58 PM	51.7
120	10/2/2019 16:39	10/2/2019	4:39:58 PM	51
121	10/2/2019 16:43	10/2/2019	4:43:58 PM	54.4
122	10/2/2019 16:47	10/2/2019	4:47:58 PM	52.1
123	10/2/2019 16:51	10/2/2019	4:51:58 PM	52.6
124	10/2/2019 16:55	10/2/2019	4:55:58 PM	51.2
125	10/2/2019 16:59	10/2/2019	4:59:58 PM	79.6

126	10/2/2019 17:03	10/2/2019	5:03:58 PM	54.1
127	10/2/2019 17:07	10/2/2019	5:07:58 PM	51.4
128	10/2/2019 17:11	10/2/2019	5:11:58 PM	50.7
129	10/2/2019 17:15	10/2/2019	5:15:58 PM	54
130	10/2/2019 17:19	10/2/2019	5:19:58 PM	46.5
131	10/2/2019 17:23	10/2/2019	5:23:58 PM	51.9
132	10/2/2019 17:27	10/2/2019	5:27:58 PM	48
133	10/2/2019 17:31	10/2/2019	5:31:58 PM	49.8
134	10/2/2019 17:35	10/2/2019	5:35:58 PM	47.5
135	10/2/2019 17:39	10/2/2019	5:39:58 PM	52.3
136	10/2/2019 17:43	10/2/2019	5:43:58 PM	49.2
137	10/2/2019 17:47	10/2/2019	5:47:58 PM	53.9
138	10/2/2019 17:51	10/2/2019	5:51:58 PM	50.8
139	10/2/2019 17:55	10/2/2019	5:55:58 PM	56.4
140	10/2/2019 17:59	10/2/2019	5:59:58 PM	50.1
141	10/2/2019 18:03	10/2/2019	6:03:58 PM	53.2
142	10/2/2019 18:07	10/2/2019	6:07:58 PM	49.5
143	10/2/2019 18:11	10/2/2019	6:11:58 PM	50
144	10/2/2019 18:15	10/2/2019	6:15:58 PM	52.9
145	10/2/2019 18:19	10/2/2019	6:19:58 PM	72.8
146	10/2/2019 18:23	10/2/2019	6:23:58 PM	51.3
147	10/2/2019 18:27	10/2/2019	6:27:58 PM	46.5
148	10/2/2019 18:31	10/2/2019	6:31:58 PM	50.9
149	10/2/2019 18:35	10/2/2019	6:35:58 PM	52.8
150	10/2/2019 18:39	10/2/2019	6:39:58 PM	51.9
151	10/2/2019 18:43	10/2/2019	6:43:58 PM	52.2
152	10/2/2019 18:47	10/2/2019	6:47:58 PM	49.8
153	10/2/2019 18:51	10/2/2019	6:51:58 PM	50.5
154	10/2/2019 18:55	10/2/2019	6:55:58 PM	50.3
155	10/2/2019 18:59	10/2/2019	6:59:58 PM	51.4
156	10/2/2019 19:03	10/2/2019	7:03:58 PM	55.5
157	10/2/2019 19:07	10/2/2019	7:07:58 PM	51
158	10/2/2019 19:11	10/2/2019	7:11:58 PM	48.6
159	10/2/2019 19:15	10/2/2019	7:15:58 PM	48.7
160	10/2/2019 19:19	10/2/2019	7:19:58 PM	51.7
161	10/2/2019 19:23	10/2/2019	7:23:58 PM	48.1
162	10/2/2019 19:27	10/2/2019	7:27:58 PM	89.3
163	10/2/2019 19:31	10/2/2019	7:31:58 PM	52.7
164	10/2/2019 19:35	10/2/2019	7:35:58 PM	48.6
165	10/2/2019 19:39	10/2/2019	7:39:58 PM	51.5
166	10/2/2019 19:43	10/2/2019	7:43:58 PM	55.9
167	10/2/2019 19:47	10/2/2019	7:47:58 PM	49.1
168	10/2/2019 19:51	10/2/2019	7:51:58 PM	50
169	10/2/2019 19:55	10/2/2019	7:55:58 PM	51.4
170	10/2/2019 19:59	10/2/2019	7:59:58 PM	52.7
171	10/2/2019 20:03	10/2/2019	8:03:58 PM	46.4
172	10/2/2019 20:07	10/2/2019	8:07:58 PM	48.4

173	10/2/2019 20:11	10/2/2019	8:11:58 PM	46.7
174	10/2/2019 20:15	10/2/2019	8:15:58 PM	47
175	10/2/2019 20:19	10/2/2019	8:19:58 PM	70.8
176	10/2/2019 20:23	10/2/2019	8:23:58 PM	46.6
177	10/2/2019 20:27	10/2/2019	8:27:58 PM	46.4
178	10/2/2019 20:31	10/2/2019	8:31:58 PM	54.7
179	10/2/2019 20:35	10/2/2019	8:35:58 PM	47.5
180	10/2/2019 20:39	10/2/2019	8:39:58 PM	49.4
181	10/2/2019 20:43	10/2/2019	8:43:58 PM	46.2
182	10/2/2019 20:47	10/2/2019	8:47:58 PM	48.9
183	10/2/2019 20:51	10/2/2019	8:51:58 PM	51.9
184	10/2/2019 20:55	10/2/2019	8:55:58 PM	50.9
185	10/2/2019 20:59	10/2/2019	8:59:58 PM	48.7
186	10/2/2019 21:03	10/2/2019	9:03:58 PM	46.4
187	10/2/2019 21:07	10/2/2019	9:07:58 PM	48.8
188	10/2/2019 21:11	10/2/2019	9:11:58 PM	52.3
189	10/2/2019 21:15	10/2/2019	9:15:58 PM	45.8
190	10/2/2019 21:19	10/2/2019	9:19:58 PM	48
191	10/2/2019 21:23	10/2/2019	9:23:58 PM	44.1
192	10/2/2019 21:27	10/2/2019	9:27:58 PM	47.3
193	10/2/2019 21:31	10/2/2019	9:31:58 PM	44
194	10/2/2019 21:35	10/2/2019	9:35:58 PM	49.2
195	10/2/2019 21:39	10/2/2019	9:39:58 PM	49.5
196	10/2/2019 21:43	10/2/2019	9:43:58 PM	47.6
197	10/2/2019 21:47	10/2/2019	9:47:58 PM	46.5
198	10/2/2019 21:51	10/2/2019	9:51:58 PM	49.1
199	10/2/2019 21:55	10/2/2019	9:55:58 PM	50.5
200	10/2/2019 21:59	10/2/2019	9:59:58 PM	42.9
201	10/2/2019 22:03	10/2/2019	10:03:58 PM	48.7
202	10/2/2019 22:07	10/2/2019	10:07:58 PM	46
203	10/2/2019 22:11	10/2/2019	10:11:58 PM	43.1
204	10/2/2019 22:15	10/2/2019	10:15:58 PM	49.9
205	10/2/2019 22:19	10/2/2019	10:19:58 PM	43.7
206	10/2/2019 22:23	10/2/2019	10:23:58 PM	47.6
207	10/2/2019 22:27	10/2/2019	10:27:58 PM	48.9
208	10/2/2019 22:31	10/2/2019	10:31:58 PM	49.3
209	10/2/2019 22:35	10/2/2019	10:35:58 PM	47
210	10/2/2019 22:39	10/2/2019	10:39:58 PM	47.3
211	10/2/2019 22:43	10/2/2019	10:43:58 PM	43.5
212	10/2/2019 22:47	10/2/2019	10:47:58 PM	43.6
213	10/2/2019 22:51	10/2/2019	10:51:58 PM	42.1
214	10/2/2019 22:55	10/2/2019	10:55:58 PM	47.6
215	10/2/2019 22:59	10/2/2019	10:59:58 PM	40.8
216	10/2/2019 23:03	10/2/2019	11:03:58 PM	45.4
217	10/2/2019 23:07	10/2/2019	11:07:58 PM	46.3
218	10/2/2019 23:11	10/2/2019	11:11:58 PM	41.1
219	10/2/2019 23:15	10/2/2019	11:15:58 PM	41

220	10/2/2019 23:19	10/2/2019	11:19:58 PM	43.1
221	10/2/2019 23:23	10/2/2019	11:23:58 PM	41.2
222	10/2/2019 23:27	10/2/2019	11:27:58 PM	39.7
223	10/2/2019 23:31	10/2/2019	11:31:58 PM	46.2
224	10/2/2019 23:35	10/2/2019	11:35:58 PM	45
225	10/2/2019 23:39	10/2/2019	11:39:58 PM	45.6
226	10/2/2019 23:43	10/2/2019	11:43:58 PM	48.2
227	10/2/2019 23:47	10/2/2019	11:47:58 PM	39.6
228	10/2/2019 23:51	10/2/2019	11:51:58 PM	39.8
229	10/2/2019 23:55	10/2/2019	11:55:58 PM	39.5
230	10/2/2019 23:59	10/2/2019	11:59:58 PM	39.6
231	10/3/2019 0:03	10/3/2019	12:03:58 AM	41.5
232	10/3/2019 0:07	10/3/2019	12:07:58 AM	47.6
233	10/3/2019 0:11	10/3/2019	12:11:58 AM	39.8
234	10/3/2019 0:15	10/3/2019	12:15:58 AM	41.3
235	10/3/2019 0:19	10/3/2019	12:19:58 AM	49.4
236	10/3/2019 0:23	10/3/2019	12:23:58 AM	40.3
237	10/3/2019 0:27	10/3/2019	12:27:58 AM	39.6
238	10/3/2019 0:31	10/3/2019	12:31:58 AM	40.1
239	10/3/2019 0:35	10/3/2019	12:35:58 AM	42.2
240	10/3/2019 0:39	10/3/2019	12:39:58 AM	40.4
241	10/3/2019 0:43	10/3/2019	12:43:58 AM	39.1
242	10/3/2019 0:47	10/3/2019	12:47:58 AM	44.6
243	10/3/2019 0:51	10/3/2019	12:51:58 AM	42.4
244	10/3/2019 0:55	10/3/2019	12:55:58 AM	42.1
245	10/3/2019 0:59	10/3/2019	12:59:58 AM	49.9
246	10/3/2019 1:03	10/3/2019	1:03:58 AM	41.9
247	10/3/2019 1:07	10/3/2019	1:07:58 AM	45.6
248	10/3/2019 1:11	10/3/2019	1:11:58 AM	42
249	10/3/2019 1:15	10/3/2019	1:15:58 AM	43.5
250	10/3/2019 1:19	10/3/2019	1:19:58 AM	42.9
251	10/3/2019 1:23	10/3/2019	1:23:58 AM	40.2
252	10/3/2019 1:27	10/3/2019	1:27:58 AM	39.3
253	10/3/2019 1:31	10/3/2019	1:31:58 AM	48.2
254	10/3/2019 1:35	10/3/2019	1:35:58 AM	37.9
255	10/3/2019 1:39	10/3/2019	1:39:58 AM	39.1
256	10/3/2019 1:43	10/3/2019	1:43:58 AM	43.8
257	10/3/2019 1:47	10/3/2019	1:47:58 AM	39.6
258	10/3/2019 1:51	10/3/2019	1:51:58 AM	42
259	10/3/2019 1:55	10/3/2019	1:55:58 AM	44.1
260	10/3/2019 1:59	10/3/2019	1:59:58 AM	41
261	10/3/2019 2:03	10/3/2019	2:03:58 AM	39
262	10/3/2019 2:07	10/3/2019	2:07:58 AM	43.2
263	10/3/2019 2:11	10/3/2019	2:11:58 AM	38.8
264	10/3/2019 2:15	10/3/2019	2:15:58 AM	40.1
265	10/3/2019 2:19	10/3/2019	2:19:58 AM	39.9
266	10/3/2019 2:23	10/3/2019	2:23:58 AM	41.2

267	10/3/2019 2:27	10/3/2019	2:27:58 AM	40.5
268	10/3/2019 2:31	10/3/2019	2:31:58 AM	39
269	10/3/2019 2:35	10/3/2019	2:35:58 AM	41.2
270	10/3/2019 2:39	10/3/2019	2:39:58 AM	40.9
271	10/3/2019 2:43	10/3/2019	2:43:58 AM	41
272	10/3/2019 2:47	10/3/2019	2:47:58 AM	41.2
273	10/3/2019 2:51	10/3/2019	2:51:58 AM	42.3
274	10/3/2019 2:55	10/3/2019	2:55:58 AM	38.9
275	10/3/2019 2:59	10/3/2019	2:59:58 AM	41.5
276	10/3/2019 3:03	10/3/2019	3:03:58 AM	40.3
277	10/3/2019 3:07	10/3/2019	3:07:58 AM	41.6
278	10/3/2019 3:11	10/3/2019	3:11:58 AM	42
279	10/3/2019 3:15	10/3/2019	3:15:58 AM	43.3
280	10/3/2019 3:19	10/3/2019	3:19:58 AM	47.8
281	10/3/2019 3:23	10/3/2019	3:23:58 AM	39.9
282	10/3/2019 3:27	10/3/2019	3:27:58 AM	42.2
283	10/3/2019 3:31	10/3/2019	3:31:58 AM	42.6
284	10/3/2019 3:35	10/3/2019	3:35:58 AM	43.7
285	10/3/2019 3:39	10/3/2019	3:39:58 AM	48.3
286	10/3/2019 3:43	10/3/2019	3:43:58 AM	43.2
287	10/3/2019 3:47	10/3/2019	3:47:58 AM	47
288	10/3/2019 3:51	10/3/2019	3:51:58 AM	39.9
289	10/3/2019 3:55	10/3/2019	3:55:58 AM	48.2
290	10/3/2019 3:59	10/3/2019	3:59:58 AM	45.2
291	10/3/2019 4:03	10/3/2019	4:03:58 AM	45.1
292	10/3/2019 4:07	10/3/2019	4:07:58 AM	41.3
293	10/3/2019 4:11	10/3/2019	4:11:58 AM	42.9
294	10/3/2019 4:15	10/3/2019	4:15:58 AM	47.5
295	10/3/2019 4:19	10/3/2019	4:19:58 AM	43.7
296	10/3/2019 4:23	10/3/2019	4:23:58 AM	43.1
297	10/3/2019 4:27	10/3/2019	4:27:58 AM	43.7
298	10/3/2019 4:31	10/3/2019	4:31:58 AM	43.5
299	10/3/2019 4:35	10/3/2019	4:35:58 AM	44.3
300	10/3/2019 4:39	10/3/2019	4:39:58 AM	45.3
301	10/3/2019 4:43	10/3/2019	4:43:58 AM	48.4
302	10/3/2019 4:47	10/3/2019	4:47:58 AM	54.2
303	10/3/2019 4:51	10/3/2019	4:51:58 AM	53.8
304	10/3/2019 4:55	10/3/2019	4:55:58 AM	51.9
305	10/3/2019 4:59	10/3/2019	4:59:58 AM	51.6
306	10/3/2019 5:03	10/3/2019	5:03:58 AM	46.4
307	10/3/2019 5:07	10/3/2019	5:07:58 AM	48.2
308	10/3/2019 5:11	10/3/2019	5:11:58 AM	46.5
309	10/3/2019 5:15	10/3/2019	5:15:58 AM	50.9
310	10/3/2019 5:19	10/3/2019	5:19:58 AM	46.6
311	10/3/2019 5:23	10/3/2019	5:23:58 AM	47.3
312	10/3/2019 5:27	10/3/2019	5:27:58 AM	47.3
313	10/3/2019 5:31	10/3/2019	5:31:58 AM	50.3

314	10/3/2019 5:35	10/3/2019	5:35:58 AM	49.9
315	10/3/2019 5:39	10/3/2019	5:39:58 AM	51
316	10/3/2019 5:43	10/3/2019	5:43:58 AM	50.7
317	10/3/2019 5:47	10/3/2019	5:47:58 AM	49.8
318	10/3/2019 5:51	10/3/2019	5:51:58 AM	51.9
319	10/3/2019 5:55	10/3/2019	5:55:58 AM	52.3
320	10/3/2019 5:59	10/3/2019	5:59:58 AM	50.3
321	10/3/2019 6:03	10/3/2019	6:03:58 AM	49.8
322	10/3/2019 6:07	10/3/2019	6:07:58 AM	52.5
323	10/3/2019 6:11	10/3/2019	6:11:58 AM	53.3
324	10/3/2019 6:15	10/3/2019	6:15:58 AM	51
325	10/3/2019 6:19	10/3/2019	6:19:58 AM	50.6
326	10/3/2019 6:23	10/3/2019	6:23:58 AM	51.7
327	10/3/2019 6:27	10/3/2019	6:27:58 AM	53.7
328	10/3/2019 6:31	10/3/2019	6:31:58 AM	56.7
329	10/3/2019 6:35	10/3/2019	6:35:58 AM	57.2
330	10/3/2019 6:39	10/3/2019	6:39:58 AM	54.7
331	10/3/2019 6:43	10/3/2019	6:43:58 AM	55.5
332	10/3/2019 6:47	10/3/2019	6:47:58 AM	56.4
333	10/3/2019 6:51	10/3/2019	6:51:58 AM	56.3
334	10/3/2019 6:55	10/3/2019	6:55:58 AM	60.3
335	10/3/2019 6:59	10/3/2019	6:59:58 AM	54.4
336	10/3/2019 7:03	10/3/2019	7:03:58 AM	57.9
337	10/3/2019 7:07	10/3/2019	7:07:58 AM	54.1
338	10/3/2019 7:11	10/3/2019	7:11:58 AM	53
339	10/3/2019 7:15	10/3/2019	7:15:58 AM	54.4
340	10/3/2019 7:19	10/3/2019	7:19:58 AM	54.2
341	10/3/2019 7:23	10/3/2019	7:23:58 AM	53.8
342	10/3/2019 7:27	10/3/2019	7:27:58 AM	53.4
343	10/3/2019 7:31	10/3/2019	7:31:58 AM	54.9
344	10/3/2019 7:35	10/3/2019	7:35:58 AM	58.5
345	10/3/2019 7:39	10/3/2019	7:39:58 AM	52.5
346	10/3/2019 7:43	10/3/2019	7:43:58 AM	55.8
347	10/3/2019 7:47	10/3/2019	7:47:58 AM	54.9
348	10/3/2019 7:51	10/3/2019	7:51:58 AM	53.7
349	10/3/2019 7:55	10/3/2019	7:55:58 AM	59.1
350	10/3/2019 7:59	10/3/2019	7:59:58 AM	68.4
351	10/3/2019 8:03	10/3/2019	8:03:58 AM	58.2
352	10/3/2019 8:07	10/3/2019	8:07:58 AM	54.9
353	10/3/2019 8:11	10/3/2019	8:11:58 AM	57.3
354	10/3/2019 8:15	10/3/2019	8:15:58 AM	56.3
355	10/3/2019 8:19	10/3/2019	8:19:58 AM	55.5
356	10/3/2019 8:23	10/3/2019	8:23:58 AM	58.1
357	10/3/2019 8:27	10/3/2019	8:27:58 AM	51.7
358	10/3/2019 8:31	10/3/2019	8:31:58 AM	51.8
359	10/3/2019 8:35	10/3/2019	8:35:58 AM	51.4
360	10/3/2019 8:39	10/3/2019	8:39:58 AM	54.6

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/11/2019
Case Description: Moorpark Railroad Depot - Demolition

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	105.0	0.0
Dozer	No	40		81.7	105.0	0.0
Backhoe	No	40		77.6	105.0	0.0
Backhoe	No	40		77.6	105.0	0.0
Backhoe	No	40		77.6	105.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Exceedance Day Lmax	Exceedance Day Leq	Exceedance Evening Lmax	Exceedance Evening Leq	Exceedance Night Lmax	Exceedance Night Leq
Concrete Saw	83.1	76.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	75.2	71.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.1	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Concrete Saw	No	20	89.6	75.0		0.0
Dozer	No	40	81.7	75.0		0.0
Backhoe	No	40	77.6	75.0		0.0
Backhoe	No	40	77.6	75.0		0.0
Backhoe	No	40	77.6	75.0		0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Concrete Saw	86.1	79.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	78.1	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	86.1	81.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/11/2019
Case Description: Moorpark Railroad Depot - Site Preparation

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		105.0	0.0
Scraper	No	40		83.6	105.0	0.0
Backhoe	No	40		77.6	105.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	78.6	74.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	77.1	73.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	78.6	77.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Grader	No	40	85.0	75.0	0.0
Scraper	No	40	83.6	75.0	0.0
Backhoe	No	40	77.6	75.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	81.5	77.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	80.1	76.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.5	80.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/11/2019
Case Description: Moorpark Railroad Depot - Grading

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		105.0	0.0
Dozer	No	40		81.7	105.0	0.0
Backhoe	No	40		77.6	105.0	0.0
Backhoe	No	40		77.6	105.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	78.6	74.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	75.2	71.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	78.6	77.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Spec	Actual	Receptor	Estimated

Description	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Grader	No	40	85.0		75.0	0.0
Dozer	No	40		81.7	75.0	0.0
Backhoe	No	40		77.6	75.0	0.0
Backhoe	No	40		77.6	75.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	81.5	77.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	78.1	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.5	80.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/11/2019
Case Description: Moorpark Railroad Depot - Building Construction

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	105.0	0.0
Man Lift	No	20		74.7	105.0	0.0
Man Lift	No	20		74.7	105.0	0.0
Generator	No	50		80.6	105.0	0.0
Backhoe	No	40		77.6	105.0	0.0
Welder / Torch	No	40		74.0	105.0	0.0
Welder / Torch	No	40		74.0	105.0	0.0
Welder / Torch	No	40		74.0	105.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	74.1	66.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	68.3	61.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	68.3	61.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	74.2	71.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	67.6	63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	67.6	63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	67.6	63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	74.2	75.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Crane	No	16	80.6	75.0		0.0
Man Lift	No	20	74.7	75.0		0.0
Man Lift	No	20	74.7	75.0		0.0
Generator	No	50	80.6	75.0		0.0
Backhoe	No	40	77.6	75.0		0.0
Welder / Torch	No	40	74.0	75.0		0.0
Welder / Torch	No	40	74.0	75.0		0.0
Welder / Torch	No	40	74.0	75.0		0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Crane	77.0	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	71.2	64.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	71.2	64.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	77.1	74.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.1	78.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/11/2019
Case Description: Moorpark Railroad Depot - Paving

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Paver	No	50	77.2	105.0		0.0
Pavement Scarafier	No	20	89.5	105.0		0.0
Roller	No	20	80.0	105.0		0.0
Roller	No	20	80.0	105.0		0.0
Backhoe	No	40	77.6	105.0		0.0
Concrete Mixer Truck	No	40	78.8	105.0		0.0

Results

	Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	70.8	67.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	83.1	76.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	73.6	66.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	73.6	66.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	71.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	72.4	68.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.1	78.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night

Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Paver	No	50	77.2	75.0	0.0	
Pavement Scarafier	No	20	89.5	75.0	0.0	
Roller	No	20	80.0	75.0	0.0	
Roller	No	20	80.0	75.0	0.0	
Backhoe	No	40	77.6	75.0	0.0	
Concrete Mixer Truck	No	40	78.8	75.0	0.0	

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	73.7	70.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	86.0	79.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	76.5	69.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	76.5	69.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	74.0	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	75.3	71.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	86.0	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/11/2019
Case Description: Moorpark Railroad Depot - Architectural Coating

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	105.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Exceedance Day Lmax	Exceedance Day Leq	Exceedance Evening Lmax	Exceedance Evening Leq	Exceedance Night Lmax	Exceedance Night Leq
Compressor (air)	71.2	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.2	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	75.0	0.0

Results

Noise Limits (dBA) | Noise Limit Exceedance (dBA)

Calculated (dBA)	Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	74.1	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	74.1	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/09/2019
Case Description: Moorpark Railroad Depot - Demolition (Mitigated)

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	175.0	10.0
Dozer	No	40		81.7	175.0	15.0
Backhoe	No	40		77.6	175.0	15.0
Backhoe	No	40		77.6	175.0	15.0
Backhoe	No	40		77.6	175.0	15.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	68.7	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	55.8	51.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68.7	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Concrete Saw	No	20	89.6	75.0		15.0
Dozer	No	40	81.7	75.0		15.0
Backhoe	No	40	77.6	75.0		15.0
Backhoe	No	40	77.6	75.0		15.0
Backhoe	No	40	77.6	75.0		15.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Concrete Saw	71.1	64.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.1	59.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.1	66.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/09/2019
Case Description: Moorpark Railroad Depot - Site Preparation (Mitigated)

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		175.0	15.0
Scraper	No	40		83.6	175.0	15.0
Backhoe	No	40		77.6	175.0	15.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	59.1	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	57.7	53.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.1	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Grader	No	40	85.0		75.0	15.0
Scraper	No	40		83.6	75.0	15.0
Backhoe	No	40		77.6	75.0	15.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	66.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	65.1	61.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.5	65.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/09/2019
Case Description: Moorpark Railroad Depot - Grading (Mitigated)

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Grader	No	40	85.0	175.0		15.0
Dozer	No	40	81.7	175.0		15.0
Backhoe	No	40	77.6	175.0		15.0
Backhoe	No	40	77.6	175.0		15.0

Results

	Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	59.1	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	55.8	51.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.1	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Spec	Actual	Receptor	Estimated

Description	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Grader	No	40	85.0		75.0	15.0
Dozer	No	40		81.7	75.0	15.0
Backhoe	No	40		77.6	75.0	15.0
Backhoe	No	40		77.6	75.0	15.0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	66.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.1	59.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.5	65.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/09/2019
Case Description: Moorpark Railroad Depot - Building Construction (Mitigated)

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	175.0	15.0
Man Lift	No	20		74.7	175.0	10.0
Man Lift	No	20		74.7	175.0	10.0
Generator	No	50		80.6	175.0	10.0
Backhoe	No	40		77.6	175.0	15.0
Welder / Torch	No	40		74.0	175.0	10.0
Welder / Torch	No	40		74.0	175.0	10.0
Welder / Torch	No	40		74.0	175.0	10.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Crane	54.7	46.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	53.8	46.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	53.8	46.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	59.7	56.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	53.1	49.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	53.1	49.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	53.1	49.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.7	59.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Crane	No	16	80.6	75.0	15.0	
Man Lift	No	20	74.7	75.0	10.0	
Man Lift	No	20	74.7	75.0	10.0	
Generator	No	50	80.6	75.0	10.0	
Backhoe	No	40	77.6	75.0	15.0	
Welder / Torch	No	40	74.0	75.0	10.0	
Welder / Torch	No	40	74.0	75.0	10.0	
Welder / Torch	No	40	74.0	75.0	10.0	

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Crane	62.0	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	61.2	54.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	61.2	54.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	67.1	64.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	60.5	56.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	60.5	56.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	60.5	56.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	67.1	67.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/09/2019
Case Description: Moorpark Railroad Depot - Paving (Mitigated)

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Paver	No	50	77.2	175.0	15.0	
Pavement Scarafier	No	20	89.5	175.0	10.0	
Roller	No	20	80.0	175.0	15.0	
Roller	No	20	80.0	175.0	15.0	
Backhoe	No	40	77.6	175.0	15.0	
Concrete Mixer Truck	No	40	78.8	175.0	0.0	

Results

	Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	51.3	48.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	68.6	61.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	54.1	47.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	54.1	47.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	51.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	67.9	63.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68.6	66.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night

Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Paver	No	50	77.2	75.0	15.0	
Pavement Scarafier	No	20	89.5	75.0	15.0	
Roller	No	20	80.0	75.0	15.0	
Roller	No	20	80.0	75.0	15.0	
Backhoe	No	40	77.6	75.0	15.0	
Concrete Mixer Truck	No	40	78.8	75.0	10.0	

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Paver	58.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	71.0	64.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.0	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	65.3	61.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.0	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/09/2019
Case Description: Moorpark Railroad Depot - Architectural Coating

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residences	Residential	55.0	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	175.0	10.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Exceedance Day Lmax	Exceedance Day Leq	Exceedance Evening Lmax	Exceedance Evening Leq	Exceedance Night Lmax	Exceedance Night Leq
Compressor (air)	56.8	52.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	56.8	52.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Businesses	Commercial	65.4	45.0	45.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	75.0	10.0

Results

Noise Limits (dBA) | Noise Limit Exceedance (dBA)

Calculated (dBA)	Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	64.1	60.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	64.1	60.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Moorpark Railroad Depot Project

Leq

HVAC Equipment Noise Level at Nearest Commercial Property

	dB Value	Conversion Value		
HVAC Equipment 1	54.4	2.75E+05	Sum =	62.2
HVAC Equipment 2	54.4	2.75E+05		
HVAC Equipment 3	54.4	2.75E+05		
HVAC Equipment 4	54.4	2.75E+05		
HVAC Equipment 5	54.4	2.75E+05		
HVAC Equipment 6	54.4	2.75E+05		

Moorpark Railroad Depot Project

Leq

HVAC Equipment Noise Level at Nearest Commercial Property with Setbacks

	dB Value	Conversion Value		
HVAC Equipment 1	51.9	1.55E+05	Sum =	59.7
HVAC Equipment 2	51.9	1.55E+05		
HVAC Equipment 3	51.9	1.55E+05		
HVAC Equipment 4	51.9	1.55E+05		
HVAC Equipment 5	51.9	1.55E+05		
HVAC Equipment 6	51.9	1.55E+05		

Moorpark Railroad Depot Project

Leq

HVAC Equipment Noise Level at Nearest Commercial Property with Shielding

	dB Value	Conversion Value		
HVAC Equipment 1	51.4	1.38E+05	Sum =	59.2
HVAC Equipment 2	51.4	1.38E+05		
HVAC Equipment 3	51.4	1.38E+05		
HVAC Equipment 4	51.4	1.38E+05		
HVAC Equipment 5	51.4	1.38E+05		
HVAC Equipment 6	51.4	1.38E+05		

Moorpark Railroad Depot Project

Leq

HVAC Equipment Noise Level at Nearest Residence

	dB Value	Conversion Value		
HVAC Equipment 1	47.9	6.17E+04	Sum =	55.7
HVAC Equipment 2	47.9	6.17E+04		
HVAC Equipment 3	47.9	6.17E+04		
HVAC Equipment 4	47.9	6.17E+04		
HVAC Equipment 5	47.9	6.17E+04		
HVAC Equipment 6	47.9	6.17E+04		

Moorpark Railroad Depot Project

Leq

HVAC Equipment Noise Level at Nearest Residence with Setbacks

	dB Value	Conversion Value		
HVAC Equipment 1	46.7	4.68E+04	Sum =	54.5
HVAC Equipment 2	46.7	4.68E+04		
HVAC Equipment 3	46.7	4.68E+04		
HVAC Equipment 4	46.7	4.68E+04		
HVAC Equipment 5	46.7	4.68E+04		
HVAC Equipment 6	46.7	4.68E+04		

Moorpark Railroad Depot Project

Leq

HVAC Equipment Noise Level at Nearest Residence with Shielding

	dB Value	Conversion Value		
HVAC Equipment 1	44.9	3.09E+04	Sum =	52.7
HVAC Equipment 2	44.9	3.09E+04		
HVAC Equipment 3	44.9	3.09E+04		
HVAC Equipment 4	44.9	3.09E+04		
HVAC Equipment 5	44.9	3.09E+04		
HVAC Equipment 6	44.9	3.09E+04		

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**East High St (Moorpark Ave to Spring Rd) - Existing**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	75	75	75
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	9031	186	93
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	59.8845	53.0223	61.7838
Calculate Road #1 DNL	64.2551	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		275
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		68.9631
Calculate Rail #1 DNL	68.9631	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		275
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		63.7811
Calculate Rail #2 DNL	63.7811	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**71.1524**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name: **East High St (Moorpark Ave to Spring Rd) - Existing plus Project**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	75	75	75
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	9564	197	99
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	60.1336	53.2718	62.0553
Calculate Road #1 DNL	64.5177	Reset	

Railroad #1 Track Identifier: **Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		275
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		68.9631
Calculate Rail #1 DNL	68.9631	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		275
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		63.7811
Calculate Rail #2 DNL	63.7811	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**71.2049**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**East High St (Moorpark Ave to Spring Rd) - Cumulative**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	75	75	75
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	10796	223	111
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	60.6598	53.8102	62.5522
Calculate Road #1 DNL	65.0273	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		275
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		68.9631
Calculate Rail #1 DNL	68.9631	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		275
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		63.7811
Calculate Rail #2 DNL	63.7811	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**71.3068**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**East High St (Moorpark Ave to Spring Rd) - Cumulative plus Projec**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	75	75	75
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	11330	234	117
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	60.8695	54.0193	62.7808
Calculate Road #1 DNL	65.2483	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		275
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		68.9631
Calculate Rail #1 DNL	68.9631	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		275
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		63.7811
Calculate Rail #2 DNL	63.7811	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**71.3632**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**Moorpark Ave (Poindexter Ave to Los Angeles Ave) - Existing**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	25	25	25
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	7585	156	78
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	66.2836	59.4152	68.1767
Calculate Road #1 DNL	70.65	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		575
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		575
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**75.4534**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**Moorpark Ave (Poindexter Ave to Los Angeles Ave) - Existing plus**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	25	25	25
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	7799	161	80
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	66.4044	59.5523	68.2867
Calculate Road #1 DNL	70.7656	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		575
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		575
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**75.4881**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**Moorpark Ave (Poindexter Ave to Los Angeles Ave) - Cumulative**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	25	25	25
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	9913	204	102
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	67.4461	60.5803	69.3418
Calculate Road #1 DNL	71.8143	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		575
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		575
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**75.8186**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name: **Moorpark Ave (Poindexter Ave to Los Angeles Ave) - Cumulative p**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	25	25	25
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	10127	209	104
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	67.5388	60.6855	69.4261
Calculate Road #1 DNL	71.9029	Reset	

Railroad #1 Track Identifier: **Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		575
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		575
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**75.8541**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**Spring Road (East High Street to Los Angeles Ave) - Existing**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	45	45	45
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	17770	366	183
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	68.6506	61.7885	68.0512
Calculate Road #1 DNL	71.8074	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		160
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		160
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**75.8159**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**Spring Road (East High Street to Los Angeles Ave) - Existing plus P**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	45	45	45
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	18081	373	186
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	68.7259	61.8708	68.1218
Calculate Road #1 DNL	71.8816	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		160
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		160
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**75.8456**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**Spring Road (East High Street to Los Angeles Ave) - Cumulative**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	45	45	45
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	21427	442	221
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	69.4633	62.6079	68.8706
Calculate Road #1 DNL	72.6236	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		160
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		160
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**76.1424**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

Site ID	High Street Station - Moorpark
Record Date	12/12/2019
User's Name	Rincon Consultants, Inc.

Road # 1 Name:	**Spring Road (East High Street to Los Angeles Ave) - Cumulative plu**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	45	45	45
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	21738	448	224
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	69.5259	62.6665	68.9292
Calculate Road #1 DNL	72.6841	Reset	

Railroad #1 Track Identifier:	**Metrolink/Amtrak Passenger Rail**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑

Effective Distance		160
Average Train Speed		30
Engines per Train		1
Railway cars per Train		5
Average Train Operations (ATO)		27
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		72.4913
Calculate Rail #1 DNL	72.4913	Reset

Railroad #2 Track Identifier:	**Union Pacific Freight Rail**

Rail # 2

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		160
Average Train Speed		30
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		4
Night Fraction of ATO		15
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐

Bolted Trucks:	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL		67.3092
Calculate Rail #2 DNL	67.3092	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**76.1695**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses

(/resource/313/hud-noise-guidebook/)

- Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Vibration Analysis

PPV (in/sec) = PPV {ref} * (25/D)^1.5

Where PPV = Peak Particle Velocity
{ref} = PPV at the reference distance of 25 feet
D = distance to the receptor

Equipment = Large Bulldozer

PPV{ref} =	0.089	in/sec
D =	105	feet
PPV at receptor =	***0.010***	***in/sec***

PPV is 1.7x to 6x larger than RMS velocity
Assume typical conversion factor of 4 PPV:RMS

Therefore estimated RMS velocity =	***0.003***	***in/sec***
Lv =	***68***	***VdB***

Source: Chapter 12 Noise and Vibration During Construction in
Transit Noise and Vibration Assessment, April 1995
Harris Miller Miller & Hanson, Inc.
Prepared For: USDOT Federal Transit Administration

Vibration Source Levels For Construction Equipment

Equipment		PPV at 25 ft (in/sec)	Approximate Lv at 25 feet *
Impact Pile Driver	upper range	1.518	112
	typical	0.644	104
Sonic Pile Driver	upper range	0.734	105
	typical	0.17	93
Clam shovel drop (slurry wall construction)		0.202	94
Hydromill (slurry wall construction)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.21	94
Hoe Ram		0.089	87
	large	0.089	87
Bulldozer	small	0.003	58
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79

* RMS Velocity in decibels VdB with Vref of 1E-6 in/sec and PPV:RMS of ~

Criterion

US Bureau of Mines, 1971	
PPV, in/sec	Degree of Damage
<2	Safe
2 - 4	Plaster Cracking
4 - 7	Minor Damage
>7	Major Damage

Canmet, Bauer, and Calder, 1977		
Equipment	PPV Threshold, in/sec	Type of Damage
Rigid Mercury Switches	0.5	Trip Out
House	2	Cracked Plaster
Concrete Block	8	Crack in Block
Cased Drill Holes	15	Horizontol Offset
Pumps, Compressors	40	Shaft Misalignment

Human Response Criteria

Level, Lv in VdB	Equivalent Noise Level, dBA		Human Response
	Low freq (30Hz)	Hi Freq (60 Hz)	
65	25	40	Approximate threshold of perception, low-freq inaudible, but mid-freq excessive for sleeping
75	35	50	Approx. dividing line between barely perceptible and clearly perceptible. Annoying vibration for most people. Low-freq acceptable for sleeping areas.
85	45	60	Vibration acceptable only if no more than 2 events/day for residential uses. Low-freq annoying in sleeping areas; mid-freq unacceptable for sensitive uses, including schools and churches.
90	50	65	Difficulty with tasks such as reading computer screens. Generally annoying for commercial uses.

Impact Criteria

Land Use	Lv in VdB		
	Frequent Events (70+/day)	Occasional Events (30-70)	Infrequent (<30 events/day)
Category 1: Vibration	65	65	65
Concert Halls	65	65	65
TV Studios	65	65	65
Recording Studios	65	65	65
Category 2: Residences, hotels, sleeping areas	72	75	80
Auditoriums	72	80	80
Theaters	72	80	80
Category 3: Institutional with primarily daytime use only	75	78	83

Vibration Analysis

PPV (in/sec) = PPV {ref} * (25/D)^1.5

Where PPV = Peak Particle Velocity
{ref} = PPV at the reference distance of 25 feet
D = distance to the receptor

Equipment = Loaded Truck

PPV{ref} =	0.076	in/sec
D =	105	feet
PPV at receptor =	***0.009***	***in/sec***

PPV is 1.7x to 6x larger than RMS velocity
Assume typical conversion factor of 4 PPV:RMS

Therefore estimated RMS velocity =	***0.002***	***in/sec***
Lv =	***67***	***VdB***

Source: Chapter 12 Noise and Vibration During Construction in
Transit Noise and Vibration Assessment, April 1995
Harris Miller Miller & Hanson, Inc.
Prepared For: USDOT Federal Transit Administration

Vibration Source Levels For Construction Equipment

Equipment		PPV at 25 ft (in/sec)	Approximate Lv at 25 feet *
Impact Pile Driver	upper range	1.518	112
	typical	0.644	104
Sonic Pile Driver	upper range	0.734	105
	typical	0.17	93
Clam shovel drop (slurry wall construction)		0.202	94
Hydromill (slurry wall construction)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.21	94
Hoe Ram		0.089	87
	large	0.089	87
Bulldozer	small	0.003	58
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79

* RMS Velocity in decibels VdB with Vref of 1E-6 in/sec and PPV:RMS of ~

Criterion

US Bureau of Mines, 1971	
PPV, in/sec	Degree of Damage
<2	Safe
2 - 4	Plaster Cracking
4 - 7	Minor Damage
>7	Major Damage

Canmet, Bauer, and Calder, 1977		
Equipment	PPV Threshold, in/sec	Type of Damage
Rigid Mercury Switches	0.5	Trip Out
House	2	Cracked Plaster
Concrete Block	8	Crack in Block
Cased Drill Holes	15	Horizontol Offset
Pumps, Compressors	40	Shaft Misalignment

Human Response Criteria

Level, Lv in VdB	Equivalent Noise Level, dBA		Human Response
	Low freq (30Hz)	Hi Freq (60 Hz)	
65	25	40	Approximate threshold of perception, low-freq inaudible, but mid-freq excessive for sleeping
75	35	50	Approx. dividing line between barely perceptible and clearly perceptible. Annoying vibration for most people. Low-freq acceptable for sleeping areas.
85	45	60	Vibration acceptable only if no more than 2 events/day for residential uses. Low-freq annoying in sleeping areas; mid-freq unacceptable for sensitive uses, including schools and churches.
90	50	65	Difficulty with tasks such as reading computer screens. Generally annoying for commercial uses.

Impact Criteria

Land Use	Lv in VdB		
	Frequent Events (70+/day)	Occasional Events (30-70)	Infrequent (<30 events/day)
Category 1: Vibration	65	65	65
Concert Halls	65	65	65
TV Studios	65	65	65
Recording Studios	65	65	65
Category 2: Residences, hotels, sleeping areas	72	75	80
Auditoriums	72	80	80
Theaters	72	80	80
Category 3: Institutional with primarily daytime use only	75	78	83

Vibration Analysis

PPV (in/sec) = PPV {ref} * (25/D)^1.5

Where PPV = Peak Particle Velocity
{ref} = PPV at the reference distance of 25 feet
D = distance to the receptor

Equipment = Roller

PPV{ref} =	0.21	in/sec
D =	105	feet
PPV at receptor =	***0.024***	***in/sec***

PPV is 1.7x to 6x larger than RMS velocity
Assume typical conversion factor of 4 PPV:RMS

Therefore estimated RMS velocity =	***0.006***	***in/sec***
Lv =	***76***	***VdB***

Source: Chapter 12 Noise and Vibration During Construction in
Transit Noise and Vibration Assessment, April 1995
Harris Miller Miller & Hanson, Inc.
Prepared For: USDOT Federal Transit Administration

Vibration Source Levels For Construction Equipment

Equipment		PPV at 25 ft (in/sec)	Approximate Lv at 25 feet *
Impact Pile Driver	upper range	1.518	112
	typical	0.644	104
Sonic Pile Driver	upper range	0.734	105
	typical	0.17	93
Clam shovel drop (slurry wall construction)		0.202	94
Hydromill (slurry wall construction)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.21	94
Hoe Ram		0.089	87
	large	0.089	87
Bulldozer	small	0.003	58
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79

* RMS Velocity in decibels VdB with Vref of 1E-6 in/sec and PPV:RMS of ~

Criterion

US Bureau of Mines, 1971	
PPV, in/sec	Degree of Damage
<2	Safe
2 - 4	Plaster Cracking
4 - 7	Minor Damage
>7	Major Damage

Canmet, Bauer, and Calder, 1977		
Equipment	PPV Threshold, in/sec	Type of Damage
Rigid Mercury Switches	0.5	Trip Out
House	2	Cracked Plaster
Concrete Block	8	Crack in Block
Cased Drill Holes	15	Horizontol Offset
Pumps, Compressors	40	Shaft Misalignment

Human Response Criteria

Level, Lv in VdB	Equivalent Noise Level, dBA		Human Response
	Low freq (30Hz)	Hi Freq (60 Hz)	
65	25	40	Approximate threshold of perception, low-freq inaudible, but mid-freq excessive for sleeping
75	35	50	Approx. dividing line between barely perceptible and clearly perceptible. Annoying vibration for most people. Low-freq acceptable for sleeping areas.
85	45	60	Vibration acceptable only if no more than 2 events/day for residential uses. Low-freq annoying in sleeping areas; mid-freq unacceptable for sensitive uses, including schools and churches.
90	50	65	Difficulty with tasks such as reading computer screens. Generally annoying for commercial uses.

Impact Criteria

Land Use	Lv in VdB		
	Frequent Events (70+/day)	Occasional Events (30-70)	Infrequent (<30 events/day)
Category 1: Vibration	65	65	65
Concert Halls	65	65	65
TV Studios	65	65	65
Recording Studios	65	65	65
Category 2: Residences, hotels, sleeping areas	72	75	80
Auditoriums	72	80	80
Theaters	72	80	80
Category 3: Institutional with primarily daytime use only	75	78	83

Appendix J

Will-Serve Letters

county of ventura

PUBLIC WORKS
VENTURA COUNTY

Jeff Pratt
Agency Director

Central Services
Joan Araujo, Director

Engineering Services
Christopher Cooper, Director

Transportation
David Fleisch, Director

Water & Sanitation
Michaela Brown, Director

Watershed Protection
Glenn Shephard, Director

April 15th, 2019

County of Ventura
Resource Management Agency
Building & Safety
3855-F Alamo Street, Room 2019-A
Simi Valley, CA 93063

Subject: High Street Depot
APN: 512-0-090-110
Sewer Availability Letter

The subject property is within the boundaries of Ventura County Waterworks District No. 1 (District) for sewer service. Applicant is proposing to construct 91 multi-family dwelling and approximately 14,000 square feet of commercial retail for which sanitary sewer treatment will be available from the District.

Applicant shall be required to comply with the District's Rules and Regulations. Applicant shall pay applicable fees and construct the needed improvements prior to receiving water service. Any requirements by Ventura County Fire Protection District greater than the District's existing facilities are the responsibility of the applicant.

This is not to be construed as a "will serve" letter.

Respectfully,

Susan Pan

Susan Pan, P.E.
Deputy Director
Water and Sanitation Department

county of ventura

PUBLIC WORKS
VENTURA COUNTY

Jeff Pratt
Agency Director

Central Services
Joan Araujo, Director

Engineering Services
Christopher Cooper, Director

Transportation
David Fleisch, Director

Water & Sanitation
Michaela Brown, Director

Watershed Protection
Glenn Shephard, Director

April 15th, 2019

County of Ventura
Resource Management Agency
Building & Safety
3855-F Alamo Street, Room 2019-A
Simi Valley, CA 93063

Subject: High Street Depot
APN: 512-0-090-110
Water Availability Letter

The subject property is within the boundaries of Ventura County Waterworks District No. 1 (District) for water service. Applicant is proposing to construct 91 multi-family dwelling and approximately 14,000 square feet of commercial retail for which water will be available from the District.

Applicant shall be required to comply with the District's Rules and Regulations. Applicant shall pay applicable fees and construct the needed improvements prior to receiving water service. Any requirements by Ventura County Fire Protection District greater than the District's existing facilities are the responsibility of the applicant.

This is not to be construed as a "will serve" letter.

Respectfully,

Susan Pan

Susan Pan, P.E.
Deputy Director
Water and Sanitation Department

Appendix K

Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

Introduction

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the High Street Station Mixed Use Development Project (proposed project), located along the south site of High Street in Moorpark, California. Public Resources Code Section 21081.6(a) requires that a Lead Agency adopt an MMRP before approving a project in order to mitigate or avoid significant impacts that have been identified in an Initial Study – Mitigated Negative Declaration (IS-MND). The purpose of the MMRP is to ensure that the required mitigation measures identified in the IS-MND are implemented as part of overall project implementation. In addition to ensuring implementation of mitigation measures, the MMRP provides feedback to agency staff and decision-makers during project implementation, and identifies the need for enforcement action before irreversible environmental damage occurs.

The following table summarizes the mitigation measures for each issue area identified in the IS-MND for the proposed project. The table identifies each mitigation measure; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring frequency; and the agency or party responsible for ensuring that the monitoring is performed. In addition, the table includes columns for compliance verification. Where an impact was identified to be less than significant, no mitigation measures were required.

This MMRP will be used by the City of Moorpark Community Development Department to determine compliance with mitigation measures included in the IS-MND.

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
Biological Resources								
Have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species	**BIO-1 Habitat Modification (Nesting Birds, Non-Hillside or Urban Areas)** Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). Because construction may occur during the bird breeding season (February 1 to August 31), the project is subject to bird survey requirements. Pre-construction nesting bird surveys shall be conducted to determine the locations of nesting birds. Bird surveys shall include a minimum of three nesting bird surveys to be conducted by a qualified biologist, over a two-week period with the third survey occurring no more than three days prior to the start of vegetation clearing. The nesting bird survey area shall include a buffer around the grading limits and land clearing limits of 500 feet to accommodate potential raptors that could be affected. If an active bird nest is found prior to land clearing activities, a maximum 300-foot buffer (depending on the species and noise and site conditions) shall be established surrounding the nest(s) and shall be flagged for avoidance. If any active raptor nests are found, a buffer area of 250 to 500 feet from the nest shall be established until after the young have fledged (i.e., the birds are no longer reliant on the nest). The avoidance buffer area for nesting birds may be reduced upon the approval of the monitoring biologist as determined by the species nesting and the activity being conducted. If an active nest of a special-status bird species is found, a suitable buffer area of 200 to 500 feet from the nest (depending on the status of the species) shall be established until the nest becomes inactive.	If initial ground disturbing activities occur during the breeding bird nesting season, verify that a qualified biologist has performed nesting bird surveys	City of Moorpark	Within 2 weeks prior to construction, with the third survey occurring no more than three days and prior to the start of vegetation clearing	Three surveys prior to construction If active nests are present, during land clearing activities and/or construction activities			

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
	If no active nests are identified during pre-construction nesting bird surveys, land clearing activities may commence with no limitation. If active bird nests are found and avoidance buffers are established prior to or during construction, a biologist shall monitor the active nest(s) during land clearing activities and/or construction activities to determine whether the recommended avoidance buffers are adequate to ensure that nesting activities are not being stressed or jeopardized. Land disturbance may occur within the avoidance buffer area(s) only after the young have fledged (i.e., the birds are no longer reliant on the nest) as determined by the monitoring biologist. The methods and results of the nesting bird survey(s), any nesting bird avoidance efforts as a result of those surveys, and the success of the avoidance buffers shall be documented in a letter report (Nesting Bird Survey and Active Nest Monitoring Report) and shall be submitted to the City no later than three weeks following the completion of active nest monitoring activities.							
Cultural Resources								
Cause a substantial adverse change in the significance of an archaeological resource	**CUL-1 Cultural Resources** During ground-disturbing activities, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall monitor excavation and ground-disturbing activities within native soils that have not been previously disturbed. If cultural resources are encountered during excavation and/or ground-disturbing activities, work in the immediate area must halt, and a Native American representative who is ancestrally related to the project area must be contacted immediately to evaluate the find and consult with the City of Moorpark and the archaeologist. If the discovery proves to be significant under the National Historic Preservation Act, additional work such as data recovery excavation may be warranted.	Field verification to confirm that if archaeological resources are encountered, appropriate measures are implemented	City of Moorpark	During construction	As needed			

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
	CUL-2 Archaeological Resources The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the state of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify an MLD. The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	Field verification to confirm that if paleontological resources are encountered, appropriate measures are implemented	City of Moorpark	During construction	As needed			
Disturb any human remains, including those interred outside of formal cemeteries	**CUL-3 Human Remains** If human remains are encountered unexpectedly during construction demolition and/or grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code (PRC) Section 5097.98. In the event that human remains are discovered during excavation activities, the following procedure shall be observed: ▪ Stop immediately and contact the Ventura County Coroner/Medical Examiner. ▪ If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the Native American Heritage Commission (NAHC). ▪ The NAHC will immediately notify the person it believes to be the Most Likely Descendent (MLD) of the deceased Native American. ▪ The MLD has 48 hours to make recommendations to the project applicant, or representative, for the	Field verification to confirm that if human remains are encountered, appropriate measures are implemented	City of Moorpark	During construction	As needed			

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
	treatment or disposition, with proper dignity, of the human remains and grave goods. If the project applicant does not accept the descendant's recommendations, the project applicant or the descendent may request mediation by the NAHC.							
Geology and Soils								
Expose people or structures to seismic-related ground failure, including liquefaction Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse	**GEO-1 Ground Improvement** In accordance with recommendations made by the geohazard report, the applicant shall complete ground improvement activities to reduce the potential for liquefaction and dry seismic settlement on-site to near two inches of total settlement and one inch of differential settlement. The ground improvement options are as follows: ▪ Vibro Replacement (VR, also referred to as "stone columns") consists of advancing a vibroflot to the selected depth (approximately 50 feet for the project site) using a combination of the weight of the vibroflot assembly and vibration; or ▪ Deep Soil Mixing (DSM) utilizes a large diameter auger mounted to a large drill rig or crane to advance the auger to the target depth. Cement is mixed into the soil at a regulated rate of around 10 percent and mixed by the auger using several up and down passes of the auger. The amount of cement added to the soil is determined by laboratory testing and/or previous experience to optimize the soil strength versus amount of cement utilized. A specialty ground improvement contractor shall prepare a site-specific ground improvement plan (GIP) that indicates the method and depth of treatment, size and spacing of the ground improvement columns, quality control procedures, and post-treatment CPT testing program (assuming VR method) to document ground improvement has densified the soils to reduce settlement during a seismic event to acceptable levels.	Verification of compliance with requirements during grading plan review	City of Moorpark	Prior to issuance of grading permit	Once			

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
	The GIP shall be reviewed and approved by the City of Moorpark's geotechnical reviewer prior to issuance of grading permits.							
	GEO-2 Stormwater Infiltration In accordance with recommendations made by the geohazard report, the applicant shall locate any on-site concentrated stormwater infiltration basins at least 100 feet away from project structural elements and off-site improvements (i.e., buried utilities) that could be impacted by settlement. Alternatively, the applicant may instead use a diffuse infiltration system that does not concentrate infiltration in a specific location.	Verification of compliance with requirements during building plan review	City of Moorpark	Prior to issuance of building permit	Once			
Would the project result in substantial soil erosion or the loss of topsoil?	**GEO-3 Erosion/Grading/Short-Term Construction Impacts** ▪ The applicant shall provide staked signage at the site with a minimum of three-inch lettering containing contact information for the City Engineer (Department of Public Works) and the hauling or general contractor. ▪ Excavation and grading activities shall be scheduled during dry weather periods, if possible. If grading occurs during the rainy season (October 15 through April 1), diversion dikes shall be constructed to channel runoff around the site. Channels shall be lined with grass or roughened pavement to reduce runoff velocity. ▪ Stockpiles, excavated, and exposed soil shall be covered with secured tarps, plastic sheeting, erosion control fabrics, or treated with a bio-degradable soil stabilizer.	Verification of compliance with requirements prior to and during construction	City of Moorpark	Prior to excavation and ground disturbance Verification during construction	Once, verification as needed			
Hazards and Hazardous Materials								
Be located on a site included on a list of hazardous material sites and create a significant	**HAZ-1 Soil Sampling and Soil Vapor Assessment** Within 30 days of the project applicant acquiring the project site from the City of Moorpark and prior to issuance of a grading permit, a shallow soil sampling assessment shall be conducted on the southern portion of the site as close to the railroad tracks as	Submittal of letter report to the City of Moorpark summarizing results of soil sampling and soil vapor	City of Moorpark	Prior to issuance of grading and building permits	Once, prior to construction			

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
hazard to the public or the environment	possible, but not within the railroad right-of-way (i.e., within 30 feet of the railroad tracks), to evaluate the adjacent railroad tracks and determine if hydrocarbons, metals, herbicides, and semi volatile organic compounds from the railroad activities are present in the shallow soil near the railroad tracks. Contaminated soil identified during sampling activities shall be removed and stored in appropriate waste containers, which shall be stored in a secure location such that no person will come into contact with contaminated materials. Any contaminated soil shall be stored in a roll-off bin or similarly-covered container. The handling and transport of waste shall be conducted in accordance with applicable local, state and federal regulations, including the USEPA Resource Conversation and Recovery Act (40 CFR Part 262), Federal and State Occupational Safety and Health Administrations, Federal and State Departments of Transportation, and DTSC (CFR Title 22). Any contaminated soils determined to be hazardous or non-hazardous waste must adequately profiled (sampled) prior to acceptable re-use or disposal at an appropriate off-site facility. Complete sampling and handling and transport procedures for reuse or disposal shall be completed in accordance with applicable local, state, and federal laws and policies. In addition, a shallow vapor sampling assessment shall be conducted on the western portion of the site adjacent to the former gasoline station (now the Chamber of Commerce building) to determine if there is VOC-impacted soil vapor migrating beneath the site from the adjacent property. The soil vapor survey shall be performed according to the applicable standards of the DTSC and CalEPA. If the investigations indicate that any soil exceeds federal, state, or local regulatory action levels, then the soil shall be remediated to applicable agency standards through soil removal and disposal efforts.	assessment					

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
Noise								
Result generation of a substantial temporary or permanent increase in ambient noise levels	**N-1 Construction Noise** ▪ Operate all diesel equipment with closed engine doors and equip all diesel equipment with mufflers that reduce construction equipment noise by at least 5 dBA. ▪ For stationary equipment, designate equipment areas with appropriate acoustic shielding on building and grading plans and locate these areas to maximize the distance between the activity and the existing commercial uses. Equipment and shielding will be installed prior to construction and remain in designated location throughout construction activities. Appropriate acoustic shielding shall completely obscure the noise source from sensitive receptors along the north side of High Street. The shielding shall be non-reflective and shall composed of sound absorbing materials like vinyl, polyester, wool, woven fiberglass, or wood. ▪ Electrical power shall be used to run to run air compressors and similar power tools and to power any temporary structures, such as construction trailers. ▪ Require all contractors, as a condition of contract, to maintain and tune-up all construction equipment to minimize noise emissions and provide monthly reports documenting equipment maintenance activities. ▪ Erect temporary sound barriers along the northern boundary of the project site between active on-site construction work using heavy equipment and adjacent receivers (commercial properties). Such barriers will be of sufficient height to break the line-of-sight between noise-generating equipment and the noise-sensitive receiver, and will be continuous with no gaps or holes between panels or the ground. Temporary sound barriers may include noise curtains, sound blankets, or solid temporary barriers.	Field verification and noise surveys to determine whether the noise control measures are achieving necessary noise reductions	Project applicant/City of Moorpark	During construction activities	Periodically throughout construction			

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
	▪ The applicant shall retain a City-approved noise consultant to conduct a noise survey at the beginning of each phase of construction (i.e., demolition, site preparation, grading, building construction, paving, and architectural coating) and when the equipment mix changes significantly (e.g., heavy-duty pieces of equipment begin to be utilized during a certain phase that differ from those utilized during the start of that phase). Noise monitoring shall occur over the course of the first full day of construction activities and shall commence at the start of daily construction activities (including equipment warm-up) and end when all heavy-duty equipment has been shut down for the day. If the noise survey measures construction noise levels that are within 3 dBA of the limits specified in Moorpark Municipal Code Section 17.53.070, Tables 1, 2, and 2A, the noise consultant shall conduct continuous monitoring during construction activities over the course of three consecutive days to verify noise levels. If the noise limits specified in Moorpark Municipal Code Section 17.53.070, Tables 1, 2, and 2A are exceeded, significant noise-generating construction activities shall halt, and the applicant shall develop a noise control plan that includes additional noise reduction measures, including but not limited to installing sound barriers of greater height and scheduling construction activities such that fewer pieces of construction equipment are in operation at any given time. Upon completion of the noise control plan, construction activities shall recommence with implementation of the additional noise control measures, at which time the noise consultant shall perform an additional noise survey to evaluate the effectiveness of the additional measures. The noise consultant shall prepare a brief memorandum summarizing the results of the noise survey conducted for each							

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
	phase of construction, for any times when the equipment mix changes significantly, and for times at which implementation of a noise control plan is required. The memorandum shall be submitted to the City within five working days of the noise survey.							
	N-2 HVAC Equipment Noise A noise barrier (such as a screen or parapet) shall be installed around HVAC equipment. To be an effective noise barrier, the screen or parapet should extend at least one foot above the tallest rooftop piece of HVAC equipment and be of sufficient length to block line of sight between the HVAC units and the nearest commercial and residential properties. The screen or parapet shall achieve at least a 6 dBA reduction in HVAC equipment noise.	Verification of compliance with requirements	City of Moorpark	Prior to issuance of building permit	Once			
Transportation								
Conflict with a program plan, ordinance or policy addressing the circulation system	**TRA-1 Area of Contribution (AOC) Fees** The project would be required to pay the applicable AOC and Citywide Traffic Impact Mitigation fees based upon the level of traffic added within the Los Angeles Avenue and Moorpark Avenue corridor. The project's monetary contribution shall be based on its percent contribution to traffic at the impacted intersections, which is 1.79 percent for the Moorpark Avenue/High Street intersection, 0.35 percent for the Spring Road/High Street intersection, and 0.61 percent for the Los Angeles Avenue/Spring Road intersection. As part of the City's plan to mitigate cumulative traffic impacts, the City has identified and programmed the following additional improvements for the Los Angeles Avenue/Spring Road and Moorpark Avenue/High Street intersections that would mitigate cumulative impacts: ▪ Los Angeles Avenue/Spring Road Intersection: Add an additional through lane on the eastbound and westbound approaches. ▪ Moorpark Avenue/High Street Intersection: Add	Payment of the AOC fee	City of Moorpark	Prior to issuance of a certificate of occupancy for the first residential building	Once			

Impact	Mitigation Measure	Action	Responsible Agency or Party	When Monitoring to Occur	Monitoring Frequency	Compliance Verification		
						Initial	Date	Comments
	an additional through lane on the southbound approach and provide a left-turn lane, through lane, and right-turn lane on the northbound approach. The project applicant shall pay the AOC and Citywide Traffic Impact Mitigation fees prior to issuance of a certificate of occupancy for the first residential building.							
Tribal Cultural Resources								
Cause a substantial adverse change in the significance of a tribal cultural resource	**TCR-1 Unanticipated Discovery of Tribal Cultural Resources** During ground-disturbing activities, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall monitor excavation and ground-disturbing activities within native soils that have not been previously disturbed. If cultural resources are encountered during excavation and/or ground-disturbing activities, work in the immediate area must halt and a Native American representative who is ancestrally related to the project area must be contacted immediately to evaluate the find and consult with the City of Moorpark and the archaeologist as to the treatment of the find which may determine additional measures to avoid or reduce impacts to the resource are required. These additional measures to avoid or reduce impacts shall be determined on a case by case basis and approved by the City's Community Development Director.	Field verification to confirm that if tribal cultural resources are encountered, appropriate measures are implemented	City of Moorpark	During construction	As needed			

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Appendix L

Response to Comments on the First Public Review Draft

Responses to Comments on the First Public Review Draft IS-MND

This section includes comments received during the first circulation of the Draft IS-MND prepared for the High Street Station Mixed Use Development Project (Project).

The first Draft EIR was circulated for a 30-day public review period that began on February 20, 2019 and ended on March 12, 2019. The City of Moorpark received six comment letters on the first Draft IS-MND. The commenters and the page number on which each commenter's letter appear are listed below.

Letter No.	and Commenter	Page No.
1	Ashley Cook, Cultural Heritage Board Staff, Ventura County Cultural Heritage Board	
2	Nicole Collazo, Ventura County Air Pollution Control District	
3	Nathanial Summerville, Engineer III-Advanced Planning Section, Ventura County Watershed Protection District	
4	Anitha Balan, Engineering Manager II, County of Ventura Public Works Agency Transportation Department	
5	Rebecca Lustig, Ventura County Environmental Health Division	
6	Dean Wallraff, Attorney at Law, Advocates for the Environment	

The comment letters and responses follow. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1).

Letter 1

Ventura County Cultural Heritage Board Memorandum

County of Ventura • Resource Management Agency • Planning Division
800 S. Victoria Avenue, Ventura, CA 93009-1740 • (805) 654-5042 • https://vcrma.org/divisions/planning

DATE: March 11, 2019

TO: City of Moorpark

FROM: Ashley Cook, Cultural Heritage Board Staff
THROUGH: Denice Thomas, Planning Programs Manager

SUBJECT: **Review of Notice of Intent to Adopt a Mitigated Negative Declaration**
High Street Mixed Use Development
City of Moorpark, RMA Project Ref. No. 19-003

The Notice of Intent to Adopt a Mitigated Negative Declaration for the High Street Mixed Use Development Project has been reviewed. Specifically, the Section 5 - Cultural Resources discussion:

> *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5:*
>
> *Discussion: "Although the project site is not considered a historical resource in accordance with CEQA, the proposed project site is bound to the north by a segment of Ventura County Landmark # 72, which consists of a row of pepper trees planted by early Moorpark settlers John Nubee and John Barrett in 1904. Although the proposed project would not impact these trees, due to their proximity to the project area, City of Moorpark's Tree Preservation Guidelines (Moorpark Municipal Code 12.12.060) would be enforced to ensure they are not impacted by nearby construction. During construction, a physical barrier (flagging or safety fencing) would be installed around any adjacent pepper trees that are situated near mechanized equipment. Therefore, impacts to Ventura County Landmark # 72 would be avoided and impacts to historical resources would be less than significant"*

Cultural Heritage Board (CHB) Staff provides the following comments:

- Robust tree preservation measures should be enforced to ensure the Pepper trees (Landmark #72) are protected throughout the entire construction process. A certified arborist should be consulted to ensure that the preservation measures are adequate. 1

- Although the Historic Resource Report listed in Appendix D reports the existing buildings on the site were found to be ineligible for listing on the national, state or local level, the site itself seems to have some local significance. The site is the location of the area's first railroad and that the railroad helped to shape the region's growth according to the report as listed below: 2

"*The presence of the railroad allowed the largely agricultural community of Moorpark to transport both people and goods at rates not possible prior, enabling substantial economic and population growth. A fire destroyed Moorpark's original railroad depot in 1909 and Southern Pacific constructed a replacement in 1910. The second generation depot spanned two current-day parcels, which include the subject parcel and the one to its immediate west (currently occupied by the Chamber of Commerce). By the 1950s, popularity of the commuter trains waned and the Moorpark Depot became a flag stop. In 1958, Southern Pacific announced the depot's closure (Press Courier 1958). The Moorpark Depot was deconstructed by the Railroad in the mid-1960s."*

CHB Staff recommends the inclusion of some type of interpretive display with photos and information that highlight the history of the site and the railroad be incorporated into the project's mitigation measures.

2 (cont.)

Please contact Ashley Cook at 805-654-5042 or ashley.cook@ventura.org if you have any questions.

Letter 1

COMMENTER: Ashley Cook, Cultural Heritage Board Staff, Ventura County Cultural Heritage Board

DATE: March 11, 2019

Response 1.1

The commenter states that proposed project should implement robust tree preservation measures to ensure that the pepper tress (Ventura County Landmark #72) are protected during project construction. The commenter recommends consulting with a certified arborist to determine whether the tree preservation measures are adequate.

As discussed in Section 5, *Cultural Resources*, of the Draft IS-MND the project contractor(s) would be required to comply with the City of Moorpark's Tree Preservation Guidelines (Moorpark Municipal Code 12.12.060) during project construction. These guidelines include installing a physical barrier (flagging or safety fencing) around any adjacent pepper trees that are situated near mechanized equipment. The inclusion of additional tree preservation measures as suggested by the commenter is not needed to mitigate impacts to trees under CEQA but will be forwarded to City decision makers for their consideration.

Response 1.2

The commenter states that regardless of the determination that existing buildings on-site are ineligible for listing on the national, state, and local levels, the project site has local historical significance because it is the location of the area's first railroad, which helped to foster the region's growth. The commenter recommends adding a mitigation measure to the IS-MND that requires the project to include an interpretive display with photos and information on the site's history and the railroad.

As discussed in Section 5, *Cultural Resources,* the project would have no impact to historical resources. However, to address the commenter's concerns regarding the historical significance of the project site, the following condition of approval has been added to Section 5, *Cultural Resources*:

CR-1 Interpretive Display

The applicant shall coordinate with the Moorpark Historical Society to develop an interpretive display discussing the history of the project site, its significance, and its important details and features, which shall be installed at the site. The display shall be installed on a publicly-accessible building or in a publicly-accessible outdoor location on the project site. The display shall include images and information from collected research pertaining to the project site. The content shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History (NPS 1983). Installation of the display shall be completed within one year of the date of completion of construction of the proposed project.

Ventura County
Air Pollution
Control District

669 County Square Dr
Ventura, California 93003

tel 805/645-1400
fax 805/645-1444
www.vcapcd.org

Michael Villegas
Air Pollution Control Officer

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Joseph Fiss, City of Moorpark DATE: March 11, 2019

FROM: Nicole Collazo

SUBJECT: Request for Review of Notice of Intent to Adopt a Mitigated Negative Declaration for City of Moorpark High Street Mixed-Use Development (RMA 19-003)

Air Pollution Control District (APCD) staff has reviewed the subject Notice of Intent to Adopt a Mitigated Negative Declaration (MND), which has identified potential environmental impacts for a mixed-use project proposed in the City of Moorpark. The project includes 91 multi-family residential units with 7,038 sq. ft. of ground-floor commercial retail and office space. In addition, a stand-alone 6,618 sq. ft. commercia space in three separate buildings surrounding a village area that will be open to the public and used as a special events venue. The project will also include demolishing the existing buildings and structures on-site. The Project Location is along the south side of High Street, roughly between Walnut Street and Magnolia Street. The Lead Agency for the project is the City of Moorpark.

GENERAL COMMENTS

Air Quality Section

Item 1- Section 3, Page 17. The South Central Coast Air Basin's jurisdiction also includes San Luis Obispo County Air Pollution Control District (SLOAPCD). Please include this in the statement. 1

Item 2- Construction Emissions, Page 21. We'd like to request to edit the first bullet point under recommended construction measure 1 (equipment idling) to clarify it is a state law requirement and idling is limited to five minutes:

"All commercial on-road and off-road diesel vehicles are subject to the idling limits of Title 13, CCR §2485, §2449(d)(3), respectively. Construction equipment shall not idle for more than five (5) consecutive minutes. The idling limit does not apply to: (1) idling when queuing; (2) idling to verify that the vehicle is in safe operating condition; (3) 2

idling for testing, servicing, repairing or diagnostic purposes; (4) idling necessary to accomplish work for which the vehicle was designed (such as operating a crane); (5) idling required to bring the machine system to operating temperature, and (6) idling necessary to ensure safe operation of the vehicle."

2 (cont.)

Item 3- Construction Emissions, Table 3. Although the construction emissions calculated were less than 25 lbs./day for ROC and NOx, using cleaner diesel on-road and off-road equipment (Tier 3 and Tier 4 engines) will reduce the amount of NOx generated as a result of construction operations. Using low-VOC to zero-VOC paint (0-25 g/L ROC) will also further reduce the construction ROC emissions estimation.

3

Item 4- Operational Emissions, Page 23. Typographical error; should say "would not contribute": "Project operational emissions would not exceed VCAPCD thresholds for ROC or NOx; therefore, the project would contribute substantially to an existing or projected air quality violation."

4

Item 5- Item c, Page 24. This section references the VCAPCD *Air Quality Assessment Guidelines* (AQAG, 2003) for carbon monoxide (CO) analyses, specifically that a CO hotspot screening analysis should be conducted when the project's indirect emissions exceed the ozone precursor significance thresholds. The project's indirect emissions are below the 25 lbs./day significance thresholds and therefore a CO hotspots analysis is not needed. The AQAG defines "indirect emissions" as those emission resulting from mobile sources in a residential, commercial and/or institutional land use (AQAG, Section 5.1, Page 5-1). Please use the indirect emissions estimate from Table 4 to conclude the indirect emissions do not exceed the ozone precursor significance thresholds.

5

Item 6- Item c, Page 24. The proposed residential units would be located approximately 70 feet north of the Moorpark Metrolink Station. Although the CARB *Air Quality and Land Use Handbook* (2005) states that the highest air quality impact for locomotives is within 1,000 ft. of a rail yard, the handbook also states that "the highest concentration of diesel particulate matter (DPM) emissions is due to idling locomotives". DPM is a toxic air contaminant that encompasses 70% of the known potential cancer risk from air toxics in California (*Air Quality and Land Use Handbook*). The Moorpark Metrolink Station is used by both Metrolink and Amtrak locomotives, which emit DPM and idle when they pick-up and drop-off passengers. However, as of 2017, Metrolink began using Tier 4 locomotives that service the Moorpark Metrolink Station (article here), which are equipped with the cleanest diesel engine technology. Tier 4 locomotives have an 85% reduction in DPM and NOx emissions. In addition, in 2018, Caltrans funded the Amtrak's Pacific Surfliner trains to also be replaced with Tier 4 engines, which will reduce its locomotive emissions by 90% (article here). Because of these upgrades to the lines running near the proposed project, and due to reasons stated in the MND, exposure of pollutants to sensitive receptors will be less than significant. Although not required for this project, similar projects located near a large emission source (freeway intersections,

6

etc.) incorporated further exposure reduction measures such as locating the air intakes away from the emission source, disabling window opening capability nearest the emission source, and/or installing a vegetative barrier.

6 (cont.)

Thank you for the opportunity to review this project and MND. If you have any questions, please call me at 645-1426 or email me at nicole@vcapcd.org.

Letter 2

COMMENTER: Nicole Collazo, Ventura County Air Pollution Control District

DATE: March 11, 2019

Response 2.1

The commenter requests that Section 3, *Air Quality*, of the Draft IS-MND include the statements that the South Central Coast Air Basin also encompasses the San Luis Obispo County Air Pollution Control District.

To address this request, Section 3, *Air Quality*, has been revised as follows:

> The project site lies within the South Central Coast Air Basin (the Basin), which is under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD), ~~and~~ the Santa Barbara County Air Pollution Control District (SBCAPCD), and the San Luis Obispo Air Pollution Control District (SLOACPD).

Response 2.2

The commenter requests that Section 3, *Air Quality*, of the Draft IS-MND be revised to clarify that State law requires that idling of construction vehicles is limited to five minutes.

To address this request, Section 3, *Air Quality*, has been revised as follows:

> Although construction-related impacts would be less than significant because of their temporary nature, the VCAPCD recommends the following measures to minimize construction-related emissions. Implementation of the recommended measures below would also ensure that *Coccidioides immitis* spores are controlled to the maximum extent feasible.
>
> 1. In order to reduce impacts associated with NO_X emissions (a precursor to ozone), the following measures shall be implemented:
>   - ~~Equipment idling time should be minimized.~~
>   - All commercial on-road and off-road diesel vehicles are subject to the idling limits of California Code of Regulations Title 13, Sections 2485 and 2449(d)(3), respectively. Construction equipment shall not idle for more than five consecutive minutes. The idling limit does not apply to: 1) idling when queuing; 2) idling to verify that the vehicle is in safe operating condition; (3), idling for testing, servicing, repairing, or diagnostic purposes; 4) idling necessary to accomplish work for which the vehicle was designed (such as operating a crane); 5) idling required to bring the machine system to operating temperature, and 6) idling necessary to ensure safe operation of the vehicle.
>   - Equipment engines should be maintained in good condition and in proper tune, as per manufacturer's specifications.
>   - During the smog season (May through October), the construction period should be lengthened so as to minimize the number of vehicles and equipment operating at the same time.

- Alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, should be used if feasible.

Response 2.3

The commenter states that although project construction emissions of reactive organic compounds (ROC)[1] and nitrogen oxides (NO_X) were calculated to be less than 25 pounds per day, additional emission control measures, such as the use of Tier 3 and Tier 4 engines and low-VOC to zero-VOC paint, would further reduce NO_X and ROC emissions.

The use of Tier 3 and Tier 4 engines and low-VOC to zero-VOC paint as suggested by the commenter is not needed to address a significant environmental impact, but could be included as conditions of approval for the proposed project; therefore, this comment will be forwarded to City decision makers for their consideration.

Response 2.4

The commenter notes a typographical error in Section 3, *Air Quality*, of the Draft IS-MND.

To address this typographical error, Section 3, *Air Quality*, has been revised as follows:

> Project operational emissions would not exceed VCAPCD thresholds for ROC or NO_X; therefore, the project would <u>not</u> contribute substantially to an existing or projected air quality violation.

Response 2.5

The commenter summarizes VCAPCD guidance for evaluating whether a CO hotspot screening analysis is needed. The commenter states that the VCAPCD *Air Quality Assessment Guidelines* (2003) considers indirect emissions to be those generated by mobile sources. The commenter requests that Section 3, *Air Quality*, of the Draft IS-MND be revised to be consistent with this guidance.

To address this request, Section 3, *Air Quality*, has been revised as follows:

> According to the VCAPCD *Ventura County Air Quality Assessment Guidelines* (2003), a CO hotspot screening analysis should be performed for any project with indirect emissions greater than the ozone project significance threshold of 25 pounds per day that may significantly impact roadway intersections that are currently operating at Levels of Service (LOS) E or F. A CO hotspot is a localized concentration of CO that exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and State eight-hour standard of 9.0 ppm (CARB 2016). The proposed project would generate maximum daily <u>indirect</u> CO emissions of ~~35.9~~ <u>24.2</u> pounds per day, which would <u>not</u> exceed the ozone significance threshold <u>of 25 pounds per day</u>. ~~However, the Traffic and Parking Study determined that none of the intersections in the project area currently operate at LOS E or F and that the project would not significantly impact any intersections.~~ Therefore, a CO hotspot screening analysis is not required.

[1] ROCs are also referred to as volatile organic compounds (VOC).

Response 2.6

The commenter states that the project is proximate to the Moorpark Metrolink Station, which is a source of diesel particulate matter (DPM), which is a toxic air contaminant. The commenter states that, in addition to the analysis contained in Section 3, *Air Quality*, of the Draft IS-MND, the project would have a less than significant impact related to the exposure of sensitive receptors to substantial concentrations of pollutants because Metrolink and Amtrak's Pacific Surfliner locomotives are or will be equipped with Tier 4 engines, which reduce DPM and NO_X emissions by at least 85 percent. The commenter states that although it would not be required for the proposed project, similar projects located near large emission source have incorporated exposure reduction measures, such as locating air intakes away from the emission source, disabling window opening capability near the emission source, and/or installing a vegetative barrier.

The use of exposure reduction measures as suggested by the commenter is not needed to address a significant environmental impact under CEQA, but could be included as a condition of approval for the proposed project; therefore, this comment will be forwarded to City decision makers for their consideration.

VENTURA COUNTY WATERSHED PROTECTION DISTRICT
WATERSHED PLANNING AND PERMITS DIVISION
800 South Victoria Avenue, Ventura, California 93009
Sergio Vargas, Deputy Director – (805) 650-4077

M E M O R A N D U M

DATE: March 12, 2019

TO: Joseph Fiss, Community Development Department
City of Moorpark

FROM: Nathaniel Summerville, Engineer III-Advanced Planning Section

SUBJECT: MND High Street Station
APN(s): 5120090115
Zone 3
Watershed Protection District Project Number: WC2019-0017
INCOMPLETE

Pursuant to your request dated February 19, 2019, this office has reviewed the submitted materials and provides the following comments.

PROJECT LOCATION:

Along the south side of High Street, roughly in between Walnut Street and Magnolia Street, Moorpark, CA

PROJECT DESCRIPTION:

The project would be located on a 2.15-acre site along the south side of High Street, roughly in between Walnut Street and Magnolia Street, in the City of Moorpark in Ventura County, CA. The project involves a mixed-use development consisting of 91 multi-family residential units (including 18 studios, 26 one-bedroom units, 39 two-bedroom units and 8 three-bedroom units) and 13,656 sf of commercial development. The residential units would be constructed within four individual buildings, each with a maximum of three floors. The proposed project includes approximately 7,038 sf of ground-floor commercial retail and office space in the four residential buildings. In addition, the project includes 6,618 sf of standalone commercial space in three separate buildings surrounding an outdoor village green that would be open to the public and used as a special event venue. Project design and architectural features would be consistent with the design guidelines contained in the Moorpark Downtown Specific Plan. The project includes 139 on-site parking spaces in addition to off-site parking spaces. The proposed project would also demolish the existing non-operational commercial and industrial buildings on-site. The site currently contains 17 mature trees that include palm, cypress, ash, and pepper trees. Some of the mature trees on-site would be removed over the course of construction activities, but the project would preserve the existing pepper trees along High Street (Ventura County Landmark #72), and the existing large ash trees along the southern

portion of the property. On-site grading in the form of removal and recompaction would occur across the entire site along with geologic hazard remediation. Construction is estimated to begin in 2019 and is estimated to take approximately one year to complete.

APPLICATION COMPLETENESS:

INCOMPLETE - from our area of concern.

WATERSHED PROTECTION DISTRICT COMMENTS:

The proposed project will convert approximately 2.15 acres of light residential development into a mixed-use development of higher density. This planned development would result in a significant increase of impervious area within the subject property. The initial study indicated that MS4 regulations would be met but did not specify the specific stormwater measured that would be applied. No mitigation measures were indicated in the documents provided for review that would address the proposed increase in peak storm runoff due to increases in impervious area. This will result in impacts to Moorpark Storm Drain No.1 and Walnut Canyon, which are District jurisdictional redline channels with limited capacity. The project proponent is hereby informed that it is the District's standard that a project cannot impair, divert, impede, or alter the characteristics of the flow of water running in any District jurisdictional redline channel. 1

Please be aware Walnut Canyon has been identified as having limited flood carrying capacity and no increases in flow will be allowed. Furthermore, Walnut Canyon is aging and slowly deteriorating. Please reference the "Gabbert & Walnut Canyon Channels Flood Control Deficiency Study" prepared in 1997, updated in 2005, and adopted by the City of Moorpark, which identifies needed improvements to update the aging flood control infrastructure in the Gabbert/Walnut watershed. The deficiency study also identifies more stringent detention requirements for future development and requires post-development peak flowrates to be mitigated to at or below 90% of the pre-development flow. The Project must provide adequate mitigation measures to comply with this mitigation standard. 2

Project findings should verify compliance with the Ventura County Watershed Protection District hydrology data and the 2017 Hydrology Manual and follow the Watershed Protection District "Guide for Hydrology and Hydraulic Study Report" found at the following website:
http://onestop.vcpublicworks.org/watershed-protection-district-guidelines-standards 3

Please submit a complete Drainage Report that, at a minimum, includes the following items:

- Sign and Seal from Licensed Engineer
- Figures/Hydrology Maps
- Hydrologic and Hydraulic Calculations
- Stormwater Calculations
- Mitigation Measures

4

- Offsite Flows
- Hydrology Maps
- Stormwater Quality Treatment Devices
- FEMA Maps
- Storm Drainage Plan (showing outlets and complete storm drain network)

4 (cont.)

WATERSHED PROTECTION DISTRICT CONDITIONS:

1. Prior to approval of zone clearance for use inauguration, the applicant shall work with the City and District to determine the required contribution towards regional infrastructure consistent with regional infrastructure improvements as identified in the Gabbert/Walnut Canyon Channel Deficiency Study updated in 2005, adopted by the City of Moorpark, and District requirements.

2. The proposed development shall incorporate mitigation measures to address cumulative impacts due to the proposed increase in imperviousness. Project shall mitigate post-development peak flowrates to at or below 90% of the pre-development flow for each frequency of storm event consistent with Ventura County Watershed Protection District policy and WP-2 Ordinance or, alternatively apply the city standard whichever is most strict shall apply.

5

END OF TEXT

Letter 3

COMMENTER: Nathaniel Summerville, Engineer III-Advanced Planning Section, Ventura County Watershed Protection District

DATE: March 12, 2019

Response 3.1

The commenter states that the Draft IS-MND did not state the specific stormwater measures that the proposed project would implement to meet the requirements of the MS4 permit and did not impose mitigation measures to address the proposed increase in peak stormwater runoff that would occur due to the increase in impervious area on the project site. The commenter states that the proposed project would impact Moorpark Storm Drain No.1 and Walnut Canyon, which are jurisdictional redline channels with limited capacity. The commenter states that the Ventura County Watershed Protection District's (VCWPD) standard is that a project cannot impair, divert, impede, or alter the characteristics of the flow of water running in any VCWPD jurisdictional redline channel.

Item 9, *Description of Project*, has been revised as follows to include additional information on the specific stormwater measures proposed by the project:

Stormwater Control Measures

Storm drain inlets will be integrated into parking areas and new Low Impact Development (LID) Best Management Practices (BMPs) would be integrated into the building, landscaping, streetscape, and parking lot areas. Storm drain inlets would be collected by a new on-site storm drain system, which would discharge into the existing storm drain within High Street and ultimately drain to Moorpark Storm Drain No. 1. As described in the Preliminary Hydrologic and Hydraulic/Stormwater Quality Report (Hydrology Report), site-specific LID BMPs would be integrated into the project in compliance with the 2011 Ventura County Technical Guidance Manual (2011 TGM) (Appendix B). The design of grading and drainage plans for the proposed project were based on the following hydrologic and water quality impact reduction strategies:

- **Site Planning**: The project has been designed in a manner that would effectively disconnect impervious surfaces such that five percent Effective Impervious Area is achieved;
- **Protect and Restore Natural Areas**: Natural areas were proposed to the maximum extent feasible by the inclusion of a pervious village green and pervious paving/landscaping within the streetscape;
- **Source Control Measures**: Storm drain signage would be added to all drain inlets along with the design of outdoor trash storage areas in compliance with MMC standards;
- **Treatment Control BMPs**: Stormwater treatment would be divided into three areas, including the treatment of roof areas, treatment of parking/drive-aisle areas, and treatment of street frontage areas. The treatment of building roof runoff would be accomplished through the inclusion of flow-through planter boxes adjacent to proposed buildings. The planter boxes will be sized to treat the full stormwater quality design volume specified in the 2011 TGM. The treatment of parking/drive-aisle runoff would be accomplished through the inclusion of bio-retention areas with underdrains and pervious paving within the southern portion of the site. The treatment of street frontage areas would be accomplished by integrating a biofiltration basin into the proposed pedestrian "bulb-out" near the intersection of High Street and Bard

Street and by integrating "StormTreat" linear stormwater filtration devices into the proposed High Street streetscape landscaping plans.

- **Flood Control Detention**: The project would reduce the post-development flow rate by 0.92 cubic feet per second (cfs) by including 175 feet of oversized 48-inch drain pipe in the western drainage area and 65 feet of 36-inch pipe within the eastern drainage area.

Section 10, *Hydrology and Water Quality*, has been revised as follows to address the proposed increase in peak stormwater runoff and project impacts to Moorpark Storm Drain No. 1 and Walnut Canyon. No mitigation measures are necessary because the project would reduce post-development peak flow rates to at or below 90 percent of pre-development flow through implementation of stormwater control measures:

> A Hydrology Report was completed for the project site by CCE Design Associates, Inc. in June 2019 and is included in full as Appendix B. The purpose of the report was to validate the grading and drainage design for the proposed project. Overall, drainage patterns on the project site will remain largely unchanged. However, as described under *Project Description*, storm drain inlets will be integrated into parking areas, and new LID BMPs would be integrated into the building, landscaping, streetscape, and parking lot areas. Storm drain inlets would be collected by a new on-site storm drain system, which would discharge into the existing storm drain within High Street and ultimately drain to Moorpark Storm Drain No. 1.
>
> The project would be subject to the requirements of a Ventura County Municipal Separate Storm Sewer Systems (MS4) permit, which requires the use of site specific BMPs. As described under *Project Description*, site-specific LID BMPs would be integrated into the project in compliance with the 2011 TGM. These measures include site planning to achieve five percent Effective Impervious Area, use of pervious paving/landscaping, and installation of storm drain signage. Furthermore, treatment control BMPs such as planter boxes, bio-retention areas, biofiltration basins, and "StormTreat" linear stormwater filtration devices would be installed to treat runoff from roof areas, parking/drive-aisle areas, and street frontage areas would be installed.
>
> Per the findings within the Gabbert & Walnut Canyon Channels Flood Control Deficiency Study (County of Ventura 2005), the Ventura County Watershed Protection District has established an allowable peak discharge flow rate of 90 percent or less of the pre-development flow rate. The "pre-development" flow rate for the project site is 4.62 cfs using the 100-year peak event runoff flow rate. Therefore, an acceptable peak discharge flow rate for the project is 4.16 cfs (0.90 * 4.62 cfs). The maximum "post-development" flow rate for the developed project site would be 5.08 cfs. However, the project would reduce the post-development flow rate by 0.92 cfs by including 175 feet of oversized 48-inch drain pipe in the western drainage area and 65 feet of 36-inch pipe within the eastern drainage area (Appendix B). These drain pipes would detain and accumulate stormwater runoff, then release runoff at various metered rates that meet City and County criteria for detained flow release depending on the size of the storm event.
>
> Therefore, operation of the project would not be expected to violate any water quality standards or waste discharge requirements. The project would have less than significant impacts with respect to water quality standards and discharge requirements.

Response 3.2

The commenter states that Walnut Canyon has limited flood carrying capacity and that no increases in flow would be allowed. The commenter states that Walnut Canyon is aging and deteriorating and references the "Gabbert & Walnut Canyon Channels Flood Control Deficiency Study" (2005), which requires that post-development peak flow rates be mitigated to at or below 90 percent of pre-development flow. The commenter states that the IS-MND should include mitigation measures to comply with this requirement.

See Response 3.1. Section 10, *Hydrology and Water Quality*, has been revised to address impacts to Walnut Canyon and to demonstrate compliance with VCWPD requirements. No mitigation measures are necessary because the project would reduce post-development peak flow rates to at or below 90 percent of pre-development flow through implementation of stormwater control measures.

Response 3.3

The commenter states that the findings of the IS-MND should comply with the VCWPD hydrology data and the 2017 Hydrology Manual and follow the VCWPD "Guide for Hydrology and Hydraulic Study Report."

A Preliminary Hydrologic and Hydraulic/Stormwater Quality Report has been prepared in support of the analysis in Section 10, *Hydrology/Water Quality*, and is included in full as Appendix B.

Response 3.4

The commenter requests that the project applicant submit a complete Drainage Report.

A Preliminary Hydrologic and Hydraulic/Stormwater Quality Report has been prepared in support of the analysis in Section 10, *Hydrology/Water Quality*, and is included in full as Appendix B.

Response 3.5

The commenter states the following conditions that will be required by VCWPD for the proposed project:

1. The applicant shall work with the City of Moorpark and the VCWPD to determine that required contribution towards regional infrastructure improvements as identified in the "Gabbert/Walnut Canyon Channel Deficiency Study" (2005) and VCWPD requirements.
2. The project shall mitigation post-development peak flow rates to at or below 90 percent of the pre-development flow for each frequency of storm event.

This comment is noted. As discussed under Response 3.2, the project would reduce post-development peak flow rates to at or below 90 percent of pre-development flow through implementation of stormwater control measures.

Letter 4

County of Ventura
PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
Traffic, Advance Planning & Permits Division
MEMORANDUM

DATE: 3/11/2019

TO: RMA Planning Division
Attention: Anthony Ciuffetelli

FROM: Anitha Balan, Engineering Manager II

SUBJECT: **REVIEW OF DOCUMENT 19-003** Initial Study - MND
Project: **High Street Station Mixed Use Development**
Lead Agency: **City of Moorpark**
The High Street Station Mixed Use Development (proposed project) involves development of 91 multi-family residential units, 13,656 sf of commercial development, and associated surface parking spaces. The project site is approximately 2.15 acres.
APN# 5120090115

Pursuant to your request, the Public Works Agency - Transportation Department has reviewed the Initial Study - MND for the High Street Station Mixed Use Development.

The High Street Station Mixed Use Development (proposed project) involves development of 91 multi-family residential units,approximately 69,834 gross sf., 13,656 sf of commercial development, and associated surface parking spaces. The project site is approximately 2.15 acres and is within the Moorpark Downtown Specific Plan Area.

Commercial/retail space includes 6,618 sf would be standalone commercial space in three separate buildings, a brewery, winery or similar use to occupy the 3,824-sf; a restaurant to occupy the 1,386-sf; and a coffee or ice-cream shop to occupy 1,408-sf . In addition, the proposed project includes approximately 7,038 sf of commercial space for retail and office uses.

An outdoor village green is proposed in the central portion of the site, south of the High Street/Bard Street intersection. The village green would be open to the public and would be used daily by on-site residents and patrons of the commercial uses. The space is also programmed for use by the City as a special event venue. Streetscape landscaping is proposed along the project frontage and additional areas of landscaping are proposed in the western portion of the site near the intersection of High Street and Walnut Street, around each building, and along the southern boundary of the property.

We offer the following comment(s):

1. PWATD strongly recommends the City of Moorpark to have the Traffic Study revised with accurate land use codes, correct calculation methods, and properly evaluate the impact the project will have on the City of Moorpark's roadways and County of Ventura's Regional Road Networks.

   The methodology used in the Traffic Study (TS) produced by Associated Transportation Engineers (ATE) to calculate the Average Daily Trips (ADT) and Peak Hour Trips (PHT) are not in conformance with the Institute of Transportation Engineers (ITE) Trip Generation Manual and Handbook. The land use codes used in the TS and the method of calculating the ADT and PHT are not consistent with the process described in the ITE Manual. The TS should properly follow the ITE Trip Generation Handbook especial chapter 4 and 9, and figure 4.2 when establishing the trip generation of the project.

   Apartments:
   The ADT and PHT for apartments in accordance with the ITE manual, should be calculated using the Fitted Curve Equation. The use of fitted curve will produce different values than what is used in the TS.

   Brewery/Winery:
   TS used land use code High Turnover Restaurant (932) for the Brewery/Winery. The ITE Manual has a Winery as a land use code 970, which has different ADT and PHT. Since the Winery land use has a small sample size, and the standard deviation is greater than 55% of the average rate, the TS should collect local traffic count data to produce an accurate ADT and PHT for the proposed Winery or Brewery. The traffic counts must be collect in a way to account for the higher counts on Friday, Saturday, and Sunday for Wineries/Breweries. Per the ITE Manual (low sample size) the Saturday and Sunday average count is four times greater than a weekday count. 1

   Coffee or Ice Cream Shop:
   In Environmental Checklist chapter 3, Air Quality, Table 2 it has the Coffee or Ice Cream Shop as a "Fast Food without Drive-Thru". The TS used the land use code for High Turnover Restaurant (932). A better match of land use would be a Coffee/Donut Shop without Drive-Thru Window (936). For example, the AM PHT that in the TS is 14 PHT with Land use code 932. Using the better match of land use code 936, the AM PHT would be 142 PHT, a significantly higher number and 2 times higher than the total project's AM PHT stated in the TS. The TS should evaluate and mitigate these impacts.

   Other Restaurant (1,386-sf commercial building):
   The TS correctly used the land use code for High Turnover Restaurant (932) commercial use, however the TS used the average rate when calculating the ADT

and PHT. The standard deviation for sample size is too high for the data collected in the ITE Manual. In accordance with the ITE manual, to evaluate the ADT and PHT, the engineer should be collecting local data to accurately establish these values.

Office/Retail (Commercial Space)
The project specifies that the intended uses for these units are for retail and office. PWATD recommends the applicant define which units will be used as office and which units will be used for retail. The trip generation for retail and office space is significantly different. For example 7,038 sf of shopping center will generate 989 ADT using the fitted curve, while 7,038 sf of general office space will generate 81 ADT. The TS should be revised to accurately calculate the ADT and PHT based on office space or retail use.

1 (cont.)

Village Green:
There is no mention of trips being generated by this usage in the TS. The project description states that the space would be open to the public and as a venue for special events. The TS should be revised to include the trips generated by the Village Green including the number and size of the events.

2. The cumulative impacts of the development of this project, when considered with the cumulative impact of all other approved (or anticipated) development projects in the County, will be potentially significant. To address the cumulative adverse impacts of traffic on the County of Ventura Regional Road Network, the appropriate Traffic Impact Mitigation Fee (TIMF) should be paid to the County when the development occurs. The TIMF may be adjusted for inflation at the time of deposit in accordance with the latest version of the Engineering News Record Construction Cost Index.

Based on the information provided in the Initial Study - Mitigated Negative Declaration for the High Street Station Mixed Use Development and the reciprocal agreement between the City of Moorpark and the County of Ventura, the reciprocal fee due to the County of Ventura is: 2

1,703 ADT x $20.85/ADT = $35,507.55

The above is an estimate based on information provided in the Initial Study - Mitigated Negative Declaration for the High Street Station Mixed Use Development Project. PWATD strongly recommends the City of Moorpark have the TS revised to accurately re-calculate the trip generation and evaluate that traffic impacts as stated in the traffic study. The TIMF due will be based on the revised traffic study.

Our review is limited to the impacts this project may have on the County's Regional Road Network.

Letter 4

COMMENTER: Anitha Balan, Engineering Manager II, County of Ventura Public Works Agency Transportation Department

DATE: March 11, 2019

Response 4.1

The commenter states that the methodology used in the Traffic and Circulation Study (Appendix C of the Draft IS-MND) is not in conformance with the Institute of Transportation Engineers (ITE) Trip Generation Manual and Handbook due to the methodology and land use types selected to estimate Average Daily Trips (ADT) and Peak Hour Trips (PHT). The commenter states that the Average Daily Trips and Peak Hour Trips for the proposed apartments should be calculated using the Fitted Curve Equation. The commenter states that the Traffic and Circulation Study should collect local traffic count data to calculate ADT and PHT for the proposed brewery/winery and restaurant. The commenter states that the Traffic and Circulation Study should use the Coffee/Donut Shop without Drive-Thru Window land use for the proposed coffee/ice cream shop. The commenter states that the Traffic and Circulation Study should specify how much of the proposed commercial space would be allocated to retail and office uses. The commenter states that the Traffic and Circulation Study should include trips generated by special events held on the proposed village green.

Using the Institute of Transportation Engineers (ITE) Trip Generation Manual and Handbook to estimate trips associated with the proposed apartments, brewery/winery, and restaurant is consistent with the City of Moorpark's, "Guidelines for Preparing Traffic and Circulation Studies."

The amount of square footage that would be associated with a restaurant and a coffee or ice cream shop were combined because it has been shown that coffee/donut shop square footage trip generation rates yield widely varied results from actual count data.[2] Also, the analysis is conservative because some restaurant users are expected to walk to the coffee or ice cream shop before and/or after attending the restaurant and consequently, resulting in less generation of trips.

The amount of retail and office use that would be included in the commercial space would be determined as the spaces are rented out. Therefore, the traffic analysis calculates the amount of trips that would occur if the entire ground floor was used as retail space, which is a conservative estimate because retail uses generate a higher amount of trips compared to office uses.

The type of special events and when these events would occur on or around the village green is unknown. These events would be based on the needs/preference of the community and consequently, would change over time. Therefore, any estimates regarding events and future community needs would be speculative. Future special events would require the issuance of a Temporary Use Permit, which would regulate and minimize potential traffic impacts associated with special events.

Response 4.2

The commenter states that the project would have a cumulatively considerable contribution to the cumulative traffic impact on the County of Ventura Regional Road Network, which is consistent with

[2] https://www.cedengineering.com/userfiles/Trip%20Generation%20Study%20of%20Coffee%20Shops.pdf

the findings of Section 17, *Transportation*. The commenter states that the project applicant would be required to pay a Traffic Impact Mitigation Fee to the County of Ventura to address this impact, which would be due at the time development occurs.

As discussed in Section 17, *Transportation,* the project would be subject to paying the Citywide Traffic Mitigation Fee and would be required to pay an Area of Contribution (AOC) Fee. Therefore, the commenter is correct in stating that the project applicant would be required to pay the Traffic Impact Mitigation Fee to the County of Ventura.

Letter 5

Resource Management Agency

ENVIRONMENTAL HEALTH DIVISION

MEMORANDUM

DATE: March 11, 2019

TO: Joseph Fiss, Community Development Department, City of Moorpark

FROM: Rebecca Lustig, Ventura County Environmental Health Division

SUBJECT: **RMA Ref# 18-004; High Street Station Mixed Use Development; RPD2018-0 and ZC2018-01; APN 512-0-090-115**

Environmental Health Division (Division) staff reviewed the information submitted for this project.

Proposed project includes the construction and operation of commercial food facilities, including a restaurant, ice cream or coffee shop, and brewery or winery. Food facilities are subject to plan review and permitting by this Division. The applicant/food facility operator must submit three sets of plans to the Ventura County Environmental Health Division, Community Services Section and obtain plan approval prior to beginning any construction of the food facility. A Permit to Operate is required prior to beginning any retail food operations.

If you have any questions, please contact Rebecca Lustig at (805) 654-2830 or Rebecca.Lustig@ventura.org.

Letter 5

COMMENTER: Rebecca Lustig, Ventura County Environmental Health Division

DATE: March 11, 2019

The commenter states that the food facilities proposed by the project would be subject to plan review and permitting by the Ventura County Environmental Health Division prior to beginning construction of the food facilities. The commenter states that a Permit to Operate would be required prior to beginning retail food operations.

The commenter is correct in stating that the proposed project would be subject to these requirements of the Ventura County Environmental Health Division. This permit requirement does not relate to an environmental impact under CEQA and all required permits for food facilities would be obtained prior to issuance of a certificate of occupancy.

Letter 6

April 12, 2019

Advocates for the Environment

A non-profit public-interest law firm
and environmental advocacy organization

Daly Group Inc.
31255 Cedar Valley Drive, Suite 323
Westlake Village, CA 91362

re: Moorpark High Street Station Mixed Use Development

Dear Daly Group:

I reviewed the Mitigated Negative Declaration for the High Street Station Mixed Use Development (the **MND**) on behalf of our client, the Committee to Preserve Historic High Street. I write to point out a few ways the Project is inconsistent with the relevant legal requirements.

The MND anticipates that, in connection with its approval of the Project, the City of Moorpark will enact a change to the zoning regulations for the C-OT zoning, to allow mixed-use developments. The MND doesn't state exactly how the C-OT zoning will be changed, and doesn't analyze any potential environmental impacts of the zone change, other than the construction of the Project. The lack of information in the MND concerning the most significant and far-reaching Project entitlement makes the MND's description of the Project inadequate; it violates CEQA. And the zone change would presumably open up the C-OT zone to other mixed-use development, which may have significant impacts that should be analyzed in the MND. 1

The Downtown Specific Plan (**SP** or **Specific Plan**) requirements for Mixed Use Developments in areas designated Old Town Commercial (SP § 2.2.5 5) require the entire ground floor to be used exclusively for retail and other commercial uses. "The intent of allowing for mixed use projects in the Old Town Commercial District is to provide continuous frontage of retail shops and commercial business establishments at the street level.... No dwelling shall be permitted to be located in whole or in part on the ground floor or street level." The Project violates this SP provision by allowing 18 residential studios on the ground floor of the Project. (MND p. 4.) 2

SP 2.2.5 5.d requires all parking spaces needed for the residential use to be provided on-site and for the exclusive use of the residents. Thus, parking spaces for the residential uses cannot be "shared." Table 11 on page 19 of the Traffic and Circulation Study attached as Appendix C to the MND, shows that 201 parking spaces are 3

required by the Moorpark Municipal Code (MMC) for the Project's residential uses, and 45 spaces are required for the commercial uses. SP 2.2.5 5.d therefore requires that all 201 residential parking spaces be provided on-site (in additional to some of the spaces for the commercial uses). But the MND states that that only 139 parking spaces will be provided on-site, a violation of the Specific Plan. 3 (cont.)

The MND's Cultural Resources section does not disclose whether any of the Native American tribes who requested notice of projects proposed within the City of Moorpark requested to enter into consultation when they were informed about this project. That information should have been included in the MND. 4

Mitigation measure TCR-1 requires that consultation with Native American tribes will begin if resources of Native American origin are discovered during project construction, but that measure is inconsistent with Public Resources Code § 21080.3.1, which governs Native American consultation, and which does not provide for consultation during grading. The record also contains no substantial evidence showing that MM TCR-1 will, via the consultation process, reduce any impacts on Native American cultural resources to a level where they are not significant. 5

The MND's decision to use the latest, informal and unadopted SCAQMD GHG CEQA Guidance to set the GHG significance threshold for this Project is not supported by any analysis or evidence. The MND just assumes that it is applicable and appropriate. CEQA requires that an agency's choice of significance threshold be supported with substantial evidence in the record. 6

There is no reason that Phase II sampling for soil and soil-gas contamination cannot be done now, and the results incorporated in the MND. Mitigation Measure HAZ-1 is improperly deferred because it is feasible to do the sampling now, instead of waiting until just before the start of grading. Doing the Phase II sampling now would allow a better MND analysis of soil contamination. Railroad corridors are often contaminated with a variety of toxic chemicals. (See, e.g. https://www.railstotrails.org/build-trails/trail-building-toolbox/acquisition/environmental-contaminants/.) So there is ample reason to be concerned that Hazardous Materials impacts—stirring up contaminated dust during grading—may occur 7

There is also reason to be concerned about noise from the Project. The MND fails to analyze the impact on High Street of replacing the existing buildings, which provide a barrier between High Street and the Metro rail tracks, with the Project buildings, which may provide a lower level of noise screening. 8

The MND states that the ambient noise on High Street is now 69 dBa, 4 db above the City's exterior daytime noise standard of 65 dBa. The Project will add noise, through HVAC, 9

additional traffic, and noise generated by residents and customers of the retail establishments. For a cumulative impact where the standards are already exceeded, any increase will be cumulatively considerable, and thus significant, under CEQA. The MND should have mitigated types of operational noise other than just the HVAC noise.

9 (cont.)

Our clients object to the Project primarily because (1) it contains too many residential units for the site; (2) the ground floor is not exclusively commercial, as required under the Specific Plan; (3) it doesn't provide sufficient parking for the uses envisioned, and will therefore reduce the available parking for businesses in the area; and (4) it will result in more train noise and noise from the Project on High Street. Our clients would like to negotiate a reduction in scope for the Project with you. If you fail to appropriately modify the Project before the City issues entitlements, they may take action to challenge the entitlements in court.

10

Sincerely,

Dean Wallraff, Attorney at Law

Letter 6

COMMENTER: Dean Wallraff, Attorney at Law, Advocates for the Environment

DATE: April 12, 2019

Response 6.1

The commenter states that the Draft IS-MND does not state how the C-OT zoning regulations would be changed and does not analyze the potential environmental impacts of the zone change other than the proposed project. The commenter states that the project description is therefore inadequate. The commenter also states that the proposed zoning regulations change would allow other mixed-use development in the C-OT zone, which may have significant impacts that should be analyzed in the IS-MND.

The City of Moorpark has determined that the proposed project will include the adoption of a "Mixed-Use" (MU) overlay district to allow the proposed mixed-use development within the underlying C-OT zoning district. This overlay zone would be added on top of the existing commercial zone and would preserve the underlying intent and set of allowable uses of the C-OT zone and would add allowable residential uses as part of a mixed-use project. The MU Overlay would contain applicable mixed-use development standards that would supersede the development standards of the underlying commercial zone but would only be applicable to mixed-use projects. The proposed zoning district overlay is proposed to only be applied to the project parcels and therefore no additional impacts from development beyond those already analyzed in the IS-MND would occur.

Response 6.2

The commenter states that the proposed project violates Section 2.2.5.5 of the Downtown Specific Plan, which requires that the entire ground floor of mixed use development be used exclusively for retail and other commercial uses, because the project would allow 18 residential studios on the ground level of the project.

The project proposes to include 18 "live-work" units on the ground floor along with 13,656 square feet of commercial uses on the ground floor and in three stand-alone commercial buildings. This proposed mix of live-work and commercial uses at the ground level of the project is consistent with the Downtown Specific Plan's SP-D land use designation for the project site, which states that the purpose of this Specific Plan land use designation is to increase the attraction level of the core area and create jobs for community residents. It is also consistent with the goals and core vision of the DTSP, which included a mixed-use analysis finding that "mixed use is appropriate in the Old Town Commercial Zone along the High Street Corridor. Furthermore, DTSP Section 1.4.7 (Table 3) determined that mixed-use development would be appropriate in the Commercial Old Town zone along the High Street corridor and that "increasing residential and office activities in downtown can foster a healthy, diverse environment."

Economic realities also support the City's decision to consider residential uses within the C-OT zone via the proposed project. The City commissioned a review of the commercial market in Moorpark and according to the analysis prepared by Keyser Marston Associates dated August 26, 2016, Moorpark has excess commercial tenant space resulting in high vacancy rates. Leakage of retail spending to neighboring cities and the trending rise of on-line purchasing continue to contribute to the softening of the commercial/retail marking in Moorpark. Allowing mixed-use development

within downtown Moorpark and the C-OT zone in proximity to public transit would provide a built-in customer base to help support the existing nearby local businesses.

The proposed mixed-use project would be consistent with current state and regional initiatives to place high-density residential uses near services and transit. Transit Oriented Development (TOD), Priority Development Areas, and other similar designations are intended to focus residential development near public transportation in order to reduce traffic congestion and help achieve greenhouse gas emission targets. Allowing mixed-use development within downtown Moorpark and the C-OT zone in proximity to public transit would create compact, walkable, pedestrian-oriented development centered upon high quality public transportation.

The proposed mixed-use project would help the City of Moorpark address the critical need for housing as described in the City's 2014-2021 Housing Element. The City's regional housing needs allocation (RHNA) required the development of 1,164 housing units spread across various affordability levels. As of 2018, the City saw only 579 units built with 641 units still remaining to meet the RHNA. The City will receive its RHNA for the next cycle (2021-2029) and is expecting a significant allocation in addition to the units still to be constructed within the current cycle. Therefore, the proposed MU overlay district will allow the construction of new housing units in fulfillment of the City's requirements.

Response 6.3

The commenter states that the proposed project does not include the required number of residential parking spaces on-site per Section 2.2.5.5 of the Downtown Specific Plan.

As discussed in the Traffic and Circulation Study (Appendix C of the Draft IS-MND), Section 17.32.020 of the Moorpark Municipal Code states that parking in the High Street area (High Street from Moorpark Avenue to Spring Road) must meet 50 percent of the parking requirements. In consideration for providing fewer parking spaces than required, a percentage of the parking spaces provided must be open to and available to the general public at all times. Furthermore, in lieu of meeting the required parking, the project applicant may pay a fee to reduce the required on-site parking by an additional 10 to 40 percent of the required parking. The project is required to provide 246 parking spaces on-site. However, the project proposes to provide 56 percent of the on-site parking spaces required (139 on-site parking spaces) and will designate 75% of this on-site parking as shared parking open to the public. This is consistent with the City's High Street parking reduction program. The project has also completed a shared parking study (Nelson/Nygaard, 2019), which identified 226 additional unused parking spaces available for use within a ½ mile radius of the project site. Approximately 106 spaces are available the Metrolink Station's south lot; 89 spaces are available within 1,000 ft. walk along High Street ,Walnut Street, and Bard Street; and 31 spaces within the auxiliary Metrolink parking lot located east of the project site. These available additional parking spaces sufficiently support the anticipated overall parking demands of the project site.

Response 6.4

The commenter states that the Draft IS-MND does not disclose whether any of the Native American tribes requested consultation with the City of Moorpark regarding the proposed project.

The Barbareno/Venureno Band of Mission Indians has requested consultation with the City. The following language has been added to Section 18, *Tribal Cultural Resources:*

> The City of Moorpark received a request for consultation from one Tribe, the Barbareno/Venureno Band of Mission Indians. *During this consultant, they requested that a Native American monitor be present during excavation and grading activities. See Mitigation Measure TCR-XX.*

Response 6.5

The commenter states that Mitigation Measure TCR-1 is inconsistent with Public Resources Code (PRC) Section 21080.3.1 because PRC Section 21080.3.1 does not provide for Native American consultation during grading. The commenter states that there is not substantial evidence that Mitigation Measure TCR-1 would reduce any impacts on tribal cultural resources to a less than significant level.

PRC Section 21080.3.1 outlines the requirements for a lead agency to conduct consultation with California Native American tribes prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report, pursuant to AB 52. Therefore, Mitigation Measure TCR-1 is not intended to demonstrate compliance with PRC Section 21080.3.1 but rather to provide a course of action for mitigating impacts to tribal cultural resources that may be encountered during project construction. Nonetheless, the project will involve a tribal monitor during the grading period as required by Mitigation Measure TCR-XX.

Response 6.6

The commenter states that Section 8, *Greenhouse Gas Emissions*, of the Draft IS-MND does not provide substantial evidence as to why the City of Moorpark chose to use the South Coast Air Quality Management District (SCAAQMD) greenhouse gas (GHG) emissions significance threshold of 3,000 MT of CO_2e per year.

Because the project would be constructed post-2020, the threshold discussion in Section 8, *Greenhouse Gas Emissions*, has been revised to include a threshold consistent with the State's 2030 target of a 40 percent reduction in 1990 levels.

Response 6.7

The commenter states that Mitigation Measures HAZ-1 is deferred mitigation because it is feasible to perform soil and soil-gas contamination sampling now rather than prior to the start of grading. The commenter states that concerns that contaminated dust would be stirred up during grading of the project site.

The applicant does not currently own the project site so is unable to perform sampling at this time. As stated in Section 9 *Hazards and Hazardous Materials,* there are no Recognized Environmental Conditions (RECs) in connection with the project site. However, testing will be done by the project applicant upon obtaining title to the property and prior to excavation and grading because two potential RECs were identified on adjacent properties, including (1) existing railroad tracks adjacent to south of the site, and (2) the presence of a former gasoline service station located adjacent to the western property boundary. If the investigations indicate that soil exceeds regulatory action levels, then the soil shall be remediated to local agency standards through soil removal and disposal efforts.

Mitigation Measure HAZ-1 has been revised as follows to specify the timing requirements of this mitigation measure:

Mitigation Measure

HAZ-1 Soil Sampling and Soil Vapor Assessment

Within 30 days of the project applicant acquiring the project site from the City of Moorpark and prior to issuance of a grading permit, a shallow soil sampling assessment shall be conducted on the southern portion of the site as close to the railroad tracks as possible, but not within the railroad right-of-way (i.e., within 30 feet of the railroad tracks), to evaluate the adjacent railroad tracks and determine if hydrocarbons, metals, herbicides, and semi volatile organic compounds from the railroad activities are present in the shallow soil near the railroad tracks.

Response 6.8

The commenter states that the Draft IS-MND does not adequately analyze whether the proposed buildings would provide a lower level of screening from railroad noise than the existing buildings.

Section 13, *Noise*, of the Draft IS-MND addresses railway noise impacts related to the demolition and construction of buildings on the project site. The five existing structures on the project site provide some attenuation of railway noise because they block the line of sight between the railway and adjacent commercial development across High Street. A single row of intervening structures between a noise source and a receptor provides an approximately 5 dBA reduction in noise levels (FTA 2018). The proposed project would construct a new row of structures that would break the line of sight between the railway and the adjacent commercial properties, thereby reducing railway noise by at least 5 dBA (FTA 2018). In addition, most of the buildings constructed as part of the proposed project would be approximately three stories in height, which would be taller than existing development. The increase in building height would serve to further attenuate railway noise along High Street because increased barrier height decreases noise transmission (FTA 2018). Furthermore, the proposed project would be constructed of materials such as metal, wood, and brick, which would be of similar or greater thickness than the materials from which the existing buildings are constructed (i.e., wood and metal). Denser wall materials provide greater noise attenuation (Federal Highway Administration 1974).[3] For these reasons, the proposed project would provide a higher level of screening from railroad noise than the existing buildings.

Response 6.9

The commenter states that ambient noise on High Street is 4 dB above the City's exterior daytime noise standard of 65 dBA. The commenter states that the Draft IS-MND should include mitigation of the project's operational noise sources other than heating, ventilation, and air conditioning (HVAC) equipment (e.g., additional traffic, noise generated by future residents and patrons).

The commenter is incorrect. The City's exterior noise standard of 65 dBA applies only to residential land uses. As shown in Table 1 of the City of Moorpark General Plan Noise Element, the City considers exterior noise levels up to 70 CNEL to be "clearly compatible" with commercial land uses (including commercial retail, restaurants, banks, and movie theaters). In addition, the City considers exterior noise levels up to 80 CNEL to be "normally compatible" with commercial land uses. "Clearly

[3] Federal Highway Administration. 1974. The Audible Landscape: A Manual for Highway Noise and Land Use. November 1094. https://www.fhwa.dot.gov/ENVIRonment/noise/noise_compatible_planning/federal_approach/audible_landscape/al04.cfm (accessed April 2019).

compatible" indicates that the specified land use of satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements, and "normally compatible" indicates that new construction or development should be undertaken only after a detailed analysis of noise reduction requirements are made and needed noise insultation features are included in the design. The ambient noise on High Street is approximately 69 CNEL, which is within the "clearly compatible" range for commercial land uses. Therefore, ambient noise on High Street does not exceed the City's exterior noise standard for adjacent commercial uses.

Section 13, *Noise*, evaluates the project's on-site operational noise impacts related to outdoor recreational uses, delivery and trash hauling trucks, and parking lots as well as the project's off-site roadway noise impacts. As discussed therein, the project would have less than significant operational noise impacts related to these noise sources. Therefore, additional mitigation beyond that required for HVAC noise (Mitigation Measure N-2) is not required.

Response 6.10

The commenter states opposition to the proposed project for the following reasons:

- Quantity of residential units is too high;
- The ground floor is not exclusively commercial use;
- Sufficient parking is not provided; and
- The project would result in increased noise levels along High Street due to increased train noise and noise from the proposed project

The commenter requests a reduction in the scope of the proposed project.

Comments on the size and scope of the project are noted, but do not directly pertain to the IS-MND. City decision makers will consider the commenter's opposition and suggestion for reduced scope as they review the project. See Responses 6.8 and 6.9 for discussion on the project's noise impacts.

Appendix M

Response to Comments on the Second Public Review Draft

Responses to Comments on the Recirculation of the Public Review Draft IS-MND

This section includes comments received during the recirculation of the Draft IS-MND prepared for the High Street Station Mixed Use Development Project (Project).

The Draft IS-MND was recirculated for a 30-day public review period that began on February 7, 2020 and ended on March 9, 2020. The City of Moorpark received 11 comment letters on the recirculated Draft IS-MND. The commenters and the page number on which each commenter's letter appear are listed below.

Letter No.	and Commenter	Page No.
1	Ramesh Bassiri, Technical Services Section, Ventura County Environmental Health Division	2
2	James Maxwell, Groundwater Specialist, Ventura County Public Works Watershed Protection District	4
3	Dillan Murray, Cultural Heritage Program Planner, County of Ventura Cultural Heritage Board	9
4	Dean Wallraff, Attorney at Law, Advocates for the Environment	13
5	Karen Kwan, Principal Environmental Specialist, Southern California Gas Company	35
6	Mark Bandurraga, Engineer IV, Ventura County Public Works Watershed Protection District	39
7	Miya Edmonson, IGR/CEQA Branch Chief, District 7 – Office of Regional Planning, Department of Transportation	44
8	Nicole Collazo, Air Quality Specialist, Ventura County Air Pollution Control District	48
9	Dale Whitaker	50
10	Susan Arakawa, Administrative Assistant, The Tribal Elders' Council Governing Board, Santa Ynez Band of Chumash Indians	53
11	Todd McIntyre, Chief Strategy Officer, Southern Regional Rail Authority (SCRRA)	55

The comment letters and responses follow. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one comment is included in the letter, each comment has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1).

Letter 1

RESOURCE MANAGEMENT AGENCY
county of ventura

Environmental Health Division
Charles R. Genkel
Director

February 13, 2020

Karen Vaughn
Community Development Department
799 Moorpark Avenue
Moorpark, CA 93021

RMA Ref# 19-003-1: NOI to Adopt MND for the High Street Station Mixed Use Development

Environmental Health Division (Division) staff reviewed the information submitted for this project and provides the following comment:

Proposed project includes the construction and operation of commercial food facilities, including a winery, brewery, and restaurants. Food facilities are subject to plan review and permitting by this Division. The applicant/food facility operator must submit three sets of plans to the Ventura County Environmental Health Division, Community Services Section and obtain plan approval prior to beginning any construction of the food facility. A Permit to Operate is required prior to beginning any retail food operations.

Information on the Division's food facility permitting requirements is available on-line at:

https://vcrma.org/consumer-food-protection

If you have any questions, please contact me at (805) 654-2830.

Ramesh Bassiri, R.E.H.S.
Technical Services Section
Environmental Health Division

800 South Victoria Avenue, Ventura, CA 93009-1730 (805) 654-2813 FAX (805) 654-2480
Internet Web Site Address: www.vcrma.org/envhealth

Letter 1

COMMENTER: Ramesh Bassiri, Technical Services Section, Ventura County Environmental Health Division

DATE: February 13, 2020

Response 1

The commenter states that the food facilities proposed by the project would be subject to plan review and permitting by the Ventura County Environmental Health Division prior to beginning construction of the food facilities. The commenter states that a Permit to Operate would be required prior to beginning retail food operations.

The commenter is correct in stating that the proposed project would be subject to these requirements of the Ventura County Environmental Health Division. This permit requirement does not relate to an environmental impact under CEQA, but all required permits for food facilities would be obtained prior to issuance of a certificate of occupancy.

Letter 2

PUBLIC VENTURA COUNTY WORKS

WATERSHED PROTECTION

MEMORANDUM

DATE: February 24, 2020

TO: Anthony Ciuffetelli, RMA/Planning/EDR Coordinator

FROM: James Maxwell, Groundwater Specialist

SUBJECT: RMA 19-013-1 – City of Moorpark, High Street Station Mixed Use Development, Initial Study – Draft Mitigated Negative Declaration (MND)

The Ventura County Public Works Agency, Water Resources Division (VCWRD) reviewed the MND and supporting documents submitted by the City of Moorpark.

PROJECT DESCRIPTION

The proposed project is located on a 2.15-acre site (Assessor Parcel Number [APN] 512-0-090-115) on the south side of High Street, between Walnut Street and Magnolia Street, in the City of Moorpark. The proposed project is a mixed-use development consisting of 91 multi-family residential units and 15,018-square feet (SF) of commercial space with 6,618-SF of standalone commercial space and 139 on-site parking spaces. Existing structures will be demolished and the property graded prior to construction.

ENVIRONMENTAL IMPACT ANALYSIS

The project site overlies the Las Posas Valley Basin (Department of Water Resources [DWR] Basin No. 4-008), which is hydrologically continuous with the Oxnard Subbasin (DWR Basin No. 4-004.02), designated by DWR as critically-overdrafted.

There are no groundwater wells located within the project boundaries and no active wells within 0.5 miles of the parcel. The site is in the Ventura County Waterworks District 1 (VCWWD 1) service area and a Water Availability Letter dated April 15, 2019 has been issued by the Ventura County Water and Sanitation Department. VCWWD 1 sources 80% of its supply from imported water from Calleguas Municipal Water District (CMWD) and 20% from five groundwater wells it operates in the Las Posas Valley Basin. The Fox Canyon Groundwater Management Agency (FCGMA) manages confined and unconfined aquifers in the Las Posas Valley Basin from which VCWWD 1 draws water. Groundwater pumping allocations were reduced by FCGMA's Emergency Ordinance E, which was adopted in 2014. FCGMA adopted a new pumping allocation ordinance which becomes effective October 1, 2020. 1

It is not known how much water the proposed project is anticipated to consume at full buildout and for grading and construction purposes. Based on the development use and

design occupancy, it is estimated that approximately 1.0-acre feet per year (AFY) will be extracted from the Las Posas Valley Basin by VCWWD 1 to supply the site. 1 (Cont.)

No surface water is present on the site or is intended for use. The *Preliminary Hydrologic and Hydraulic/Stormwater Quality Report* prepared by CCE Design Associates, Inc., dated June 18, 2019 reports that 80 percent of the ground surface will be impervious after build-out. Stormwater runoff from the increased impervious surface area will be directed through oversized storm drainpipes with orifice plates to restrict outflow to the allowable rates defined in the report. Bio-retention areas with underdrains will be installed adjacent to the paved driveways. A linear stormwater biofiltration system is proposed alongside the street (High Street) frontage. It is not clear how many AFY of surface water is anticipated to be recharged to the subsurface through the planned retention and biofiltration systems or become runoff. According to the *Preliminary Geohazard Report, Various City-owned Properties, Moorpark,* California, dated January 2018 and prepared by Oakridge Geoscience, Inc., the depth to groundwater was encountered at between 20 to 38 feet below ground surface (bgs) with a historical high groundwater level in the downtown Moorpark area at 15 feet bgs. 2

The project site is within the boundaries of the VCWWD 1 sewer service area and a Sewer Availability Letter dated April 15, 2019 has been issued by the Ventura County Water and Sanitation Department. No community wastewater treatment system or onsite wastewater treatment system has been proposed. 3

The proposed project will include grading and construction activities. Heavy equipment, hazardous materials, chemicals and fuel stored onsite should be kept within containment. Equipment fueling, maintenance and liquid transfers should be conducted in dedicated areas to prevent the potential introduction of impacts to shallow subsurface groundwater. 4

The MND determined that the foreseeable impact to the water supply for the proposed project is less than significant. However, the anticipated annual volume of water consumption at full site build-out and for construction and grading is not known and could potentially result in extraction of 1.0-AFY or more of groundwater from a basin that is in hydrologic continuity with a critically-overdrafted basin. The proposed development introduces impervious surface area that could potentially prevent the percolation of surface water to the underlying basin. The annual volume of surface water anticipated to be recharged to the underlying basin or discharged offsite is not known. 5

REFERENCES

County of Ventura. 2016. *Water Rate Study. Waterworks District No. 1 (Moorpark). December.*

Letter 2

COMMENTER: James Maxwell, Groundwater Specialist, Ventura County Public Works Watershed Protection District

DATE: February 24, 2020

Response 2.1

The commenter states that it is unknown how much water the proposed project is anticipated to consume at full buildout and for grading purposes. The commenter adds that based on the development use and design occupancy, it is estimated that approximately 1.0-acre feet per year (AFY) will be extracted from the Las Posas Valley Basin, which is hydrologically continuous with a critically-overdrafted basin.

Based on information provided by the project applicant, the project would use approximately 2,000 gallons of water per day during the demolition, site preparation and grading phases. Over the 30-day period, water would be provided via water truck and the total volume of water would be approximately 0.2 acre-foot. Water would be drawn from a temporary construction meter attached to the nearest fire hydrant. In addition, as discussed in Section 19, *Utilities and Service Systems*, of the Draft IS-MND, the project is anticipated to increase water demand by approximately 34.7 acre-feet per year at full buildout. In response to this comment, the following text of Section 19, *Utilities and Service Systems*, has been revised:

> Based on information provided by the project applicant, the project would use approximately 2,000 gallons of water per day during the demolition, site preparation, and grading phases. Over this 30-day period, water would be provided via water truck and the total volume of water would be approximately 60,000 gallons, or 0.2 acre-foot. Water would be drawn from a temporary construction meter attached to the nearest fire hydrant. In addition, ~~A~~according to the CalEEMod modeling prepared for the project, the project would increase water demand by approximately 11,295,898 gallons per year or 34.7 acre-feet per year (AFY) during project operation (Appendix C).

The proposed project would not generate population growth in excess of the population forecasts underlying the Ventura County Waterworks District No. 1's 2015 Urban Water Management Plan. Existing and planned water supply sources include imported water supply from Calleguas, groundwater pumped from the East Las Posas Groundwater Basin, Title 22 recycled water produced at the Moorpark Water Reclamation Facility (MWRF), and planned local water supply projects including the VCWWD No. 1 Moorpark Desalter Project and expansions to the MWRF recycled water system. The Fox Canyon Groundwater Management Agency, which is the local groundwater sustainability agency, has allocated the VCWWD No. 1 a maximum of 1,756 acre-free per year via Ordinance E, which was enacted to eliminate overdraft from the aquifer systems for municipal and industrial uses (VCWWD 2016). Regardless of whether the project is served by groundwater or other supply sources, the VCWWD No. 1 would not be permitted to withdraw groundwater in excess of this allocation. Therefore, as concluded in Section 10, *Hydrology and Water Quality*, of the Draft IS-MND, the project would have less-than-significant impacts related to groundwater supply.

Response 2.2

The commenter states that the *Preliminary Hydrologic and Hydraulic/Stormwater Quality Report* prepared by CCE Design Associated, Inc., does not make clear how many acre-feet per year (AFY) of surface water are anticipated to be recharged to the subsurface versus becoming runoff.

Given the constraints posed by on-site soils related to the potential to exacerbate the liquefaction potential of the project site, infiltration of stormwater is not feasible (see discussion in Section 7, Geology and Soils, of the Draft IS-MND and the Preliminary Geohazard Report in Appendix G). Therefore, with implementation of the proposed project, no direct recharge of surface water to the subsurface would occur, and all surface water would be discharged as runoff and would vary depending on the amount of annual participation. The Preliminary Hydrologic and Hydraulic/Stormwater Quality Report prepared by CCE Design Associated, Inc (Appendix B) evaluated the peak discharge flowrate that would occur during a 100-year storm event. As described in the project description, the project proposes to mitigate the increase in peak runoff flowrate caused by increased impervious cover by providing 175 feet of oversized 48-inch drain pipe in the western drainage area and 65 feet of 36-inch pipe within the eastern drainage area. The project would reduce the post-development flow rate by 0.92 cubic feet per second (cfs). Therefore, as stated in Section 10 Hydrology and Water Quality, impacts to the existing drainage pattern of the area would be less than significant.

Response 2.3

The commenter states that the project does not propose a community wastewater treatment system or onsite wastewater treatment.

The commenter is correct. The project does not include a community wastewater treatment system or on-site wastewater treatment. As concluded in Section 19, *Utilities and Service Systems*, of the Draft IS-MND, the project's impacts related to wastewater would be less than significant because the project would not generate wastewater in excess of the three-million-gallon daily surplus capacity of the Moorpark Water Reclamation Facility. The Ventura County Water and Sanitation Department has issued a will-serve letter for the proposed project.

Response 2.4

The commenter states that heavy equipment, hazardous materials, chemicals, and fuel stored onsite during grading and construction activities should be kept in containment and that equipment fueling, maintenance, and liquid transfers should be directed to designated areas to prevent potential effects to shallow groundwater.

As discussed in Section 9, *Hazards and Hazardous Materials*, of the Draft IS-MND, the routine transport, use, and disposal of hazardous materials during construction would be conducted in accordance with applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22, which regulate the handling and transport of hazardous materials. These laws, in addition to United States Occupational Safety and Health Administration (OSHA) laws and regulations, provide regulations for protection against the risks to life and property from the use and transportation of hazardous materials. Specifically, Chapter 1926 Subpart H of the OSHA Safety and Health Regulations for Construction relates to handling, storage, use and disposal of hazardous materials and places restrictions and requires specific procedures

regarding the placement, staging locations, and proper procedures for waste management/disposal to hazardous materials exposure. In addition, as discussed in Section 7, *Geology and Soils*, according to the Preliminary Geohazard Report (Appendix G), groundwater was encountered at sites along High Street at depths of 33 to 38 feet in the drill holes. Historic high groundwater levels in downtown Moorpark have been within 15 to 20 feet of the ground surface and it is unlikely that groundwater would be encountered over the course of construction. Regardless, because all transport, use, and disposal of hazardous materials would be governed by applicate state and federal laws, impacts would be less than significant

Response 2.5

The commenter states that while the foreseeable impact to the water supply for the proposed project is deemed less than significant in the MND, impacts to water supply are unknown for the following reasons:

- Anticipated annual volume of water consumption at full site build-out and for construction and grading is not known and could potentially result in extraction of 1.0 AFY or more from a basin that is in hydrologic continuity with a critically-overdrafted basin;
- Introduction of impervious surface area that could potentially prevent the percolation of surface water to the underlying basin; and
- Anticipated annual volume of surface water to be recharged to the underlying basin or discharged offsite is unknown.

See Responses 2.1 and 2.2 for discussions on the project anticipated water use and groundwater recharge, respectively. Based on data provided in the *Preliminary Hydrologic and Hydraulic/Stormwater Quality Report* (Appendix B), the amount of impervious surface on the project site would increase from approximately 30 percent (0.6 acre) under existing conditions to approximately 80 percent (1.7 acre) under proposed project conditions. Therefore, the project would add approximately 1.1 acre of impervious surfaces to the project. However, this addition of impervious surfaces to the project site, which does not currently have retention or infiltration basins on-site, would not substantially interfere with groundwater recharge. Therefore, impacts to groundwater supplies would be less than significant, as concluded in Section 10, *Hydrology and Water Quality*, of the Draft IS-MND.

Letter 3

CULTURAL HERITAGE BOARD

county of ventura

February 25, 2020

Karen Vaughn
Community Development Department
799 Moorpark Avenue
Moorpark, CA 93021

Subject: **Review of Notice of Intent to Adopt a Mitigated Negative Declaration**
High Street Station Mixed Use Development
City of Moorpark, RMA 19-003

Dear Ms. Vaughn,

We are in receipt of the Notice of Intent to Adopt a Mitigated Negative Declaration for the High Street Mixed Use Development Project. Thank you for the opportunity to review and comment on the proposed project.

Ventura County Cultural Heritage Board (CHB) Staff reviewed the first draft IS-MND prepared for the proposed project and provided the following recommendations in a letter dated March 11, 2019:

- Robust tree preservation measures should be enforced to ensure the Pepper trees (Landmark #72) are protected throughout the entire construction process. A certified arborist should be consulted to ensure that the preservation measures are adequate.
- The inclusion of some type of interpretive display with photos and information that highlight the history of the site and the railroad be incorporated into the project's mitigation measures.

CHB Staff have reviewed the second draft IS-MND and have the following comments:

- CHB Staff understand an interpretive display will be installed per the specifications outlined in *CR-1: Interpretative Display* in Appendix L, page 2, and have no further comments on this recommendation. 1
- CHB Staff request being informed by the City of Moorpark as soon as possible in the event that Pepper trees associated with Landmark #72 are adversely affected during implementation of the project, including disruption or substantial removal of branches, feeder roots, etc. 2

- A historical marker denoting Landmark #72 (Pepper trees) is located immediately adjacent to the project site along the southern side of High Street, in the area across from Bard Street. It is recommended that this marker remain in place or, if removed, be replaced like-for-like in order to continue educating passersby on the significance of the historic resource. 3
- A typographical error is noted on Appendix L, page 2. It is stated "As discussed in *Section 5, Cultural Resources*, the project would have no impact to historical resources." However, impacts of the project related to historical resources in Section 5, threshold (a) of the draft IS-MND were determined to be "less than significant." 4

Thank you again for the opportunity to comment on the proposed project. If you require anything further or have questions regarding our findings, please do not hesitate to contact Dillan Murray at (805) 654-5042 or via email at Dillan.Murray@ventura.org.

Sincerely,



Dillan Murray
Cultural Heritage Program Planner

CC: Denice Thomas, Planning Programs Manager, Ventura County Planning Division
Case File

Letter 3

COMMENTER: Dillan Murray, Cultural Heritage Program Planner, County of Ventura Cultural Heritage Board

DATE: February 25, 2020

Response 3.1

The commenter states that the County of Ventura Cultural Heritage Board has no further comments on the inclusion of an interpretive display, which is now required as a condition of approval for the proposed project.

As stated in the *Project Description* on Page 7 of the IS-MND, "As part of the project design, the proposed project would incorporate an interpretive display into a portion of the proposed commercial storefront space".

Response 3.2

The commenter asks to be notified as soon as possible if pepper trees associated with Landmark #72 are adversely affected during project implementation, including disruption or substantial removal of branches, feeder roots, etc.

As stated in the *Project Description* on Page 7 of the IS-MND, the City of Moorpark Tree Preservation Guidelines (Moorpark Municipal Code 12.12.060) would be enforced to ensure the pepper trees are not impacted by nearby construction. During construction, conditions of approval would require the establishment of a physical barrier (flagging or see-through safety fencing) to be installed around any adjacent pepper trees that are situated near any mechanized equipment. Additionally, the project's grading plan would not disrupt or remove of structural feeder roots and would not fill, cut, or compact soils within the dripline. Regardless, the City acknowledges the commenters request regarding notification if pepper trees were to be adversely affected.

Response 3.3

The commenter states that the historical marker denoting Landmark #72 (pepper trees) educates passersby on the significance of the historic resource and recommends that it remain in place or, if removed, be replaced like-for-like in order to continue educating passersby.

As part of the current project plans, this marker, along with the gazebo, El Camino Real bell, and memorial bricks will all be located at the western end of the project site, in front of the Chamber of Commerce site on High Street. The historical marker denoting Landmark #72 is not planned for removal.

Response 3.4

The commenter notes a typographical error on Appendix L, page 2. It is noted "As discussed in Section 5, Cultural Resources, the project would have no impact to historical resources." The commenter explains that impacts of the project related to historical resources were determined to be "less than significant" in the draft IS-MND.

In response to this comment, the following text from Appendix L under Response 1.2 has been revised:

> As discussed in Section 5, *Cultural Resources,* of the Draft IS-MND, the project would have a less than significant impact ~~no impact~~ to historical resources. However, to address the commenter's concerns regarding the historical significance of the project site, the following condition of approval has been added to Section 5, *Cultural Resources*…

Letter 4

March 5, 2020

Advocates for the Environment

A non-profit public-interest law firm
and environmental advocacy organization



Karen Vaughn
City of Moorpark
Community Development Department
799 Moorpark Ave.
Moorpark, CA 93021

Via U.S. Mail and email to KVaughn@MoorparkCA.gov

re: Moorpark High Street Station Mixed Use Development

Dear Ms. Vaughn:

I write to comment on the Mitigated Negative Declaration (the **MND**) for the High Street Station Mixed Use Development, Project Nos. RPD2018-01, ZC2018-01, DDA2018-01 and DA2018-01 (the **Project**), proposed to be constructed on the south side of High Street, between Walnut Street and Magnolia Street in the City of Moorpark (the **Project Site**). I comment on behalf of our client, the Committee to Preserve Historic High Street.

Undefined Project

The MND anticipates that, in connection with its approval of the Project, the City of Moorpark will amend the Moorpark Municipal Code (**MMC**) to include a Mixed-Use Overlay Zone. (MND p. 74.) The ordinance that would add that designation is not included with the MND, and does not appear to be available to the public, even though it is a necessary part of the Project. Failing to provide the proposed zoning ordinance to the public precludes informed review of the Project and the MND, as the public cannot evaluate the environmental and other impacts of the proposed Mixed-Use Overlay zoning ordinance without seeing its text. 1

Similarly, the MND contains a list of Required Approvals for the project, including a Zoning Map Amendment, Residential Planned Development Permit for conditions of approval, a Disposition and Planned Development Permit, and a Development Agreement. (MND p. 9.) None of these documents have been made available to the public, although, under the California Environmental Quality Act (**CEQA**, Public Resources Code §§ 21000-21189.3), the MND must evaluate the environmental impacts of these proposed enactments because they are part of the Project. Under CEQA Guidelines § 15378, a "Project" means "the whole of an action" that results in potential changes to the environment. Circulating the MND for 2

comment when important underlying documents are not available violates CEQA because the public and the decisionmakers cannot understand the nature and scope of the Project being evaluated in the MND. 2 (cont.)

A notice currently posted on the City of Moorpark Web site says that the Project was changed in several ways, e.g. from 91 to 79 units, with the elimination of 3-bedroom apartments and the increase of commercial space from 13,656 to 14,471 square feet. The MND analyzes the former, 91-unit project, which might have very different environmental impacts than does the new project. The MND should have been updated to analyze the current version of the Project. This failure to analyze the current project violates CEQA, which requires an accurate, stable, and finite project description. 3

The Notice of Intent to Adopt a Mitigated Negative Declaration issued by the City violates CEQA because it does not provide notice concerning the actual Project to be built. Its project description describes the former, 91-unit version of the Project, not the actual proposed Project. 4

Spot Zoning

The MND states that the proposed Mixed-Use Overlay Zone would apply only to the Project site. (MND p. 74.) This is spot zoning, which occurs when "a small parcel of land is subject to more or less restrictive zoning than surrounding properties." (*Foothill Communities Coalition v. County of Orange* (2014) 222 Cal.App.4th 1302, 1312.) This spot zoning violates the law because there is no substantial public need for it. (*Id.* at p. 1314.) 5

Inconsistencies with the Specific Plan

The Land Use Element of the Moorpark General Plan designates the area containing the Project Site with a "Downtown Specific Plan (SP-D)" land-use designation. The Downtown Specific Plan (**SP** or **Specific Plan**) in turn provides an "Old Town Commercial (C-OT)" land-use designation for the Project Site. (SP p. 2-24.) The Project does not include an amendment to either the General Plan or the Specific Plan. Land-use approvals issued by a California City, including zoning, must be consistent with the applicable general and specific plans, so the Project must comply with the Specific Plan even if the applicable zoning ordinance is amended. 6

Specific Plan requirements for Mixed Use Developments in areas designated Old Town Commercial (SP § 2.2.5 5) call for the entire ground floor to be used exclusively for retail and other commercial uses. "The intent of allowing for mixed use projects in the Old Town Commercial District is to provide continuous frontage of 7

retail shops and commercial business establishments at the street level.… No dwelling shall be permitted to be located in whole or in part on the ground floor or street level." (SP § 2.2.5 5) The Project violates this SP provision by allowing 18 residential studios on the ground floor of the Project. (MND p. 4.)

7 (Cont.)

Parking

SP 2.2.5 5.d requires all parking spaces needed for the residential use to be provided on-site and for the exclusive use of the residents. Thus, parking spaces for the residential uses cannot be "shared." Table 11 on page 20 of the Traffic and Circulation Study attached as Appendix D to the MND, shows that 190 parking spaces are required by the MMC for the Project's residential uses, and 50 spaces are required for the restaurant, commercial, and brewery uses. SP 2.2.5 5.d therefore requires that all 190 residential parking spaces be provided on-site (in additional to some of the spaces for the commercial uses). But the MND states that that only 139 parking spaces will be provided on-site, a violation of the Specific Plan.

8

The parking study by Walker Consultants, dated December 30, 2019, is flawed and should not have been used as the basis for a conclusion that the Project will not have a significant adverse impact on parking along High Street. The parking study improperly included in its count of downtown parking spaces the lots owned by the Ventura County Transportation Commission (**VCTC**) located adjacent to the Metrolink station, which, according to the signs posted in those lots, are to be used only by Metrolink passengers. The parking study also pointed out that the loss of Lot 5b, near the High Street Arts Center, would have an adverse impact on that facility.

9

Trees

MMC 12.12.050 requires the City to prepare a tree report for any "urban development proposal" where there are associated historic trees or nature trees. There is no evidence in the MND that the City complied with this requirement, which would have provided more information on the trees, relevant to both the Aesthetics and Biological Resources sections of the MND. Approval of the Project without producing such a report violates the MMC.

10

CEQA: EIR

As discussed below, there are several areas in which the Project may have significant adverse environmental impacts, even with the proposed mitigation measures. CEQA therefore requires that an EIR be prepared.

11

CEQA: Cultural Resources

There are two resources in close proximity to the Project Site that qualify as historical resources under CEQA Guidelines § 15064.5: (1) the row of pepper trees adjacent to High Street on the northern side of the Project, Ventura County Landmark #72; and (2) Tanner Corner, at the intersection of High Street and Highway 23, which is listed on the California Register of Historic Resources. 12

The Project may have significant adverse impacts on these historic resources, and these potential impacts are not analyzed or mitigated in the MND.

In addition, the Ventura County Cultural Heritage Board stated, in Letter 1 in MND Appendix L, that the railroad depot, formerly on the site, has historic significance, and the Project's impacts should therefore be mitigated with at least an interpretive display highlighting the history of the site and the railroad. Response 1.2 states that a mitigation measure addressing this issue, CR-1, was added to the MND's cultural-resources section, but that measure is not included in that section of the MND. 13

CEQA: Greenhouse Gases

The MND's analysis of the Project's greenhouse-gas (**GHG**) emissions relies heavily on the CARB 2017 Climate Change Scoping Plan, but it is inconsistent with it in a number of ways.

The 2017 Scoping Plan points out that it is possible for housing projects to achieve net-zero GHG emissions, as Newhall Ranch did. (pp. 101-102.) This project should do that. At the very least, it should include the maximum feasible amount of solar rooftop power. 14

The MND calculates GHG emissions for the Project at 2.7 $MTCO_2e$. (p. 55.) For some reason, it focuses on the year 2030 requirements and goals, but a project like this will last much longer, at least until 2050, so the Project should be consistent with the state's 2050 GHG-reduction goals as well. The 2017 Scoping Plan sets an overall goal of 2 $MTCO_2e$ per capita per year in 2050. (p. 99.) Since the Project's emissions will exceed this threshold, they will be significant under CEQA, requiring all feasible mitigation measures be adopted. 15

One feasible mitigation measure that the City should require is to prohibit the use of natural gas for the project. It is feasible to use electricity for space heating and cooking, and to use solar water heaters for heating water. Since California plans to 16

obtain all its electricity from renewable sources by 2045, using electricity instead of natural gas would eliminate an important part of the Project's GHG emissions. The applicant would save money by not installing any natural gas infrastructure. 16 (Cont.)

The MND sets out a methodology for a "locally-appropriate, project-specific efficiency threshold." (pp. 52-53.) This methodology is flawed in several important ways. First, it uses 2030 as the date for analyzing emissions, when 2050 would be more appropriate, as discussed above. 17

The MND methodology takes statewide GHG targets for various sectors (residential, agricultural, etc.), adds them up, subtracts out the sectors that are locally inapplicable, and then prorates them down to the population of the Moorpark planning area to derive the target of 2.7 $MTCO_2e$/capita/year. The calculation uses, in some cases, the low end of the ranges in the 2017 Scoping Plan when it should use the midpoint of those ranges. (Compare Scoping Plan p. 31 with MND p. 54.) More significantly, the methodology suffers from the same defect the California Supreme Court pointed out in the Newhall Ranch case: the state will not achieve its GHG reduction goals if only new projects reduce GHG by the amount required to meet those goals because most GHG emissions from housing come from existing projects that will not reduce their GHG emissions until they are rebuilt. (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 241–242.) A new project like this one must reduce its GHG emissions below the target state-wide average for the state to meet its 2030 or 2050 GHG reduction goals. 18 19

The estimates of the Project's likely GHG emissions appear to be based on a CalEEMod run using specifications of the old, 91-residential unit project instead of the currently proposed 79-unit project. In some ways the new project is smaller than the old project, but there are also some increases, for example, in the commercial square footage, so it is not obvious that the new project's GHG emissions will be less than those from the original project. Basing the MND's conclusion that the Project will not have significant GHG impacts on a CalEEMod run for the old project violates CEQA because the CalEEMod data for the wrong project is not substantial evidence. 20

The MND provides substantial evidence that the Project may have significant cumulative GHG impacts; therefor an EIR is required. 21

CEQA: Hazardous Materials

The MND concludes that, but for mitigation, the Project might have a significant hazardous-material impact because it is located on a site that is potentially contaminated with hazardous materials. (p. 61.) It proposes a mitigation measure, HAZ-1, to reduce this potential significant impact to a less-than-significant level. (pp.

63-64.) HAZ-1 requires Phase II soil testing within 30 days after the applicant acquires the Project Site from the City.

There is no reason that Phase II sampling for soil and soil-gas contamination cannot be done now, and the results incorporated in the MND. Mitigation Measure HAZ-1 violates CEQA because it is improperly deferred; it is feasible to do the sampling now, instead of waiting until just before the start of grading. Doing the Phase II sampling now would allow a better MND analysis of soil contamination. Railroad corridors are often contaminated with a variety of toxic chemicals. (See, e.g. https://www.railstotrails.org/build-trails/trail-building-toolbox/acquisition/environmental-contaminants/.) In addition, there is a reasonable possibility of soil and soil-gas contamination from the sites listed on pages 15–17 of the Phase I Environmental Site Assessment attached to the MND as Appendix H. 22

The City's response to a previous comment on this issue (Appendix L, Letter 6, Response 6.7) states that soil testing cannot be performed now because the applicant does not currently own the project site. It is owned by the City. The City could, however, enter into an agreement with the applicant allowing it to conduct soil testing on the site prior to the transfer of ownership.

So there is ample reason to be concerned that Hazardous Materials impacts—stirring up contaminated dust during grading—may occur.

CEQA: Air Quality

The MND relies on thresholds of significance established by the Ventura County Air Pollution Control District. (MND p. 21) It states "the VCAPCD also considers a project to have cumulative adverse air quality impact if project emissions exceed two pounds per day of ROC or NOx." (*Ibid.*) But the table on page 23 shows the Project is expected to emit 9.4 pounds/day of ROC and 22.4 pounds/day of NOx, resulting in a significant cumulative air-quality impact. The existence of a significant air-quality impact means that an EIR is required. 23

CEQA: Noise

There is also reason to be concerned about noise from the Project. The MND fails to analyze the impact on High Street of replacing the existing buildings, which provide a barrier between High Street and the Metro rail tracks, with the Project buildings, which may provide a lower level of noise screening. The MND (p. 82) states that the ambient noise on High Street is now 69 dBa, 4 db above the City's exterior daytime residential noise standard of 65 dBa. The Project will add noise, through 24 25

HVAC, additional traffic, and noise generated by residents and customers of the retail establishments. Even though noise standards for commercial buildings may be higher than 65 dBa, the City should apply the residential standards to a project like this that consists of mostly residential development. For a cumulative impact where the standards are already exceeded, any increase will be cumulatively considerable, and thus significant, under CEQA. The MND should have required mitigation of operational noise other than just the HVAC noise.

25 (Cont.)

26

CEQA: Water Supply

The MND claims that there will be sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. (p. 117.) The analysis supporting this conclusion relies heavily on the 2015 Urban Water Management Plan (**UWMP**) from Ventura County Waterworks District No. 1 (**VCWWD**). (p. 119.)

The UWMP gives short shrift to climate change. Its approach can be characterized as follows: "Metropolitan Water District has a lot of climate-change efforts going on, and we'll trust them to take care of the problem." (UWMP pp. 4-10.)

It is well established that climate change will increase drought in Southern California. The 2014 Synthesis Report from the Intergovernmental Panel on Climate Change (IPCC), available online at https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf (IPCC 2014 Synthesis Report) shows that we've already experienced a global average temperature increase of 1° C and that we may well see a rise of an additional 4° C if we continue on the same business-as-usual trajectory. (p. 59.) The 1° C increase we've already seen has caused intensified droughts, hurricanes, and heatwaves, so a further substantial increase will have catastrophic impacts.

"It is very likely that heat waves will occur more often and last longer." (IPCC 2015 Synthesis Report, p. 10.) "Impacts from recent climate-related extremes, such as heat waves, droughts, floods, cyclones and wildfires, reveal significant vulnerability and exposure of some ecosystems and many human systems to current climate variability (very high confidence). Impacts of such climate-related extremes include alteration of ecosystems, disruption of food production and water supply…." (*Id.* at p. 53 [emphasis added].) The report lists "multi-decade droughts" as a possible hazard resulting from climate change. (*Id.* at p. 36.) "Increases in the frequency or intensity of ecosystem disturbances such as droughts, wind-storms, fires and pest outbreaks have been detected in many parts of the world and in some cases are attributed to climate change." (*Id.* at p. 51 [emphasis added].) "In many mid-latitude and subtropical dry

regions, mean precipitation will likely decrease." (*Id.* at p. 11.) "Climate change over the 21st century is projected to reduce renewable surface water and groundwater resources in most dry subtropical regions (robust evidence, high agreement), intensifying competition for water among sectors (limited evidence, medium agreement). In presently dry regions, the frequency of droughts will likely increase by the end of the 21st century under RCP8.5 (medium confidence)." (*Id.* at p. 69.) Table 2.3 lists "key risks" from climate change, including "urban risks associated with water supply systems (high confidence)." (*Id.* at p. 71.)

Recent science from the IPCC establishes that climate change poses a substantial risk to water supply in Southern California over the next few decades, and the UWMP does not factor in the risks to water supply of a world that is several degrees hotter than today's world. Because it is based on the UWMP, the MND's water-supply analysis is heavily flawed, and inadequate to support the conclusion that there will be water available for the project and other foreseeable projects over the next 30 years. 27

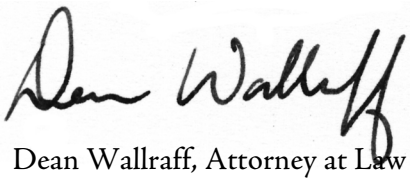
Incorporation of Previous Comments

This letter incorporates by reference all comment letters included in Appendix L of the MND as they apply to the current version of the Project.

Conclusion

The MND provides evidence that the Project may have significant environmental impacts in several areas and therefore an EIR is required.

Sincerely,



Dean Wallraff, Attorney at Law

10211 Sunland Blvd., Shadow, CA 91040 (818) 353-4268 dw@aenv.org

Letter 4

COMMENTER: Dean Wallraff, Attorney at Law, Advocates for the Environment

DATE: March 5, 2020

Response 4.1

The commenter requests the text of the proposed zoning ordinance amendment in order to allow public review of the project's environmental impacts.

Text amendments to the Downtown Specific Plan are described in the Staff Report for the July 15, 2020 Regular City Council Meeting. The Staff Report was listed on the Agenda under item 8.C. and contains subject "Consider a Resolution for Amendment No. 3 to SP 1995-01 (Downtown Specific Plan) for Text Amendments pertaining to Mixed-Use Regulations within the Specific Plan – Downtown Overlay Zone." Direct text changes are noted on page 152- 154 and Exhibit A (pages 160-162) of the Staff Report.

Response 4.2

The commenter requests that all documents listed as required approvals for the project be made available to the public to allow public review of the project's environmental impact.

The documents listed as Required Approvals for the project are generally described in Initial Study – Section 11, *Required Approvals*, and Section 11, *Land Use and Planning*, in the Draft IS-MND and will be available before the Planning Commission and City Council hearings where decision makers will evaluate the project and the requested entitlements. Information for all Planning Commission and City Council agenda items are available to the public and are included in the applicable Staff Reports. The environmental impacts associated with the proposed project and its proposed entitlements have been fully disclosed and evaluated throughout the Draft IS-MND, which has been provided for public review in accordance with CEQA requirements.

Response 4.3

The commenter states that the Draft IS-MND should have been updated to analyze the current version of the project as described on the City of Moorpark website to have 79 residential units, no three-bedroom apartments, and 14,471 square feet of commercial space.

The Draft IS-MND analyzes a conservative total of proposed residential dwellings on the project site, including up to 91 residential units with studio, one-bedroom, two-bedroom, and three-bedroom units as well as up to 15,018 square feet of commercial space. The smaller project would result in incrementally lesser environmental impacts for some issue areas, such as fewer operational air pollutant emissions, less energy consumption, less HVAC noise, less demand for public services and utilities, and fewer vehicle trips, and similar environmental impacts for all other issue areas (see Response 4.20 for a specific discussion of GHG emissions impacts). However, a minor reduction in the project size would not create any new significant environmental impacts beyond those already identified in the Draft IS-MND. Therefore, the Draft IS-MND provides a conservative analysis of project impacts based on the original project description, which would be lesser if a smaller project is approved and implemented and meets CEQA's requirements to fully disclose the project's significant environmental impacts.

Response 4.4

The commenter opines that the Notice of Intent to Adopt a Mitigated Negative Declaration issued by the City violates CEQA because it does not describe the updated changes to the proposed project (described under Response 4.3).

See Response 4.3. As discussed therein, the Draft IS-MND provides a conservative analysis of the environmental impacts associated with the original described project. A project that has a reduced scope of development would logically create less impacts than those associated with the original project. The purpose of CEQA is to fully disclose the project's significant environmental impacts, which has been done through the project IS-MND.

Response 4.5

The commenter states that because the proposed Mixed-Use Overlay Zone would apply only to the project site, it is spot zoning and violates the law since there is no substantial public need for it.

In 1998, the City Council adopted Ordinance No. 247 establishing the Specific Plan - Downtown (SP-D) Overlay Zone (Zoning Code Chapter 17.72) and Resolution No. 1998-1515 establishing the Downtown Specific Plan (DTSP). The DTSP sets forth a vision for the downtown area which identifies certain commercial corridors, residential areas, and mixed-uses along High Street. Section 2.2.5 Old Town Commercial (C-OT) of the DTSP includes uses and development standards relating to mixed-use development within this district. Consequently, the DTSP already allows for Mixed-Use and amendments to the DTSP contain specific development regulations to allow for design flexibility of Mixed-Use development. See Staff Report, Agenda item 8.C., subject "Consider a Resolution for Amendment No. 3 to SP 1995-01 (Downtown Specific Plan) for Text Amendments pertaining to Mixed-Use Regulations within the Specific Plan – Downtown Overlay Zone" for more details.

Response 4.6

The commenter states that the project is inconsistent with the Moorpark Downtown Specific Plan (DTSP) because the DTSP provides an "Old Town Commercial (C-OT)" land use designation for the project site. The commenter adds that without an amendment to the General Plan or DTSP, the project must comply with the DTSP even if the zoning ordinance is amended.

See Response 4.1 and 4.5. The DTSP Specific Plan Amendments were adopted by the City on July 15, 2020. Amendments to the DTSP contain specific development regulations to allow for design flexibility of Mixed-Use development. See Staff Report, Agenda item 8.C., subject "Consider a Resolution for Amendment No. 3 to SP 1995-01 (Downtown Specific Plan) for Text Amendments pertaining to Mixed-Use Regulations within the Specific Plan – Downtown Overlay Zone" for more details.

Response 4.7

The commenter states that the DTSP requirements for Mixed Use Developments in areas designated Old Town Commercial require the ground floor to be used exclusively for commercial purposes (SP 2.2.5 5) and concludes that the project violates this provision by allowing residential units on the ground floor.

See Responses 4.1, 4.5, and 4.6. Amendments to the DTSP contain specific development regulations to allow for design flexibility of Mixed-Use development and allow residential units on the ground

floor behind commercial building spaces. These amendments were adopted on July 15, 2020; therefore, the project is now consistent with the DTSP.

Response 4.8

The commenter states that the project provides insufficient parking spaces and is in violation of the DTSP, which requires all parking spaces for residential use to be exclusive to residents and on-site (DTSP Section 2.2.5 5.d). The commenter also points to inconsistencies in parking spaces required as analyzed in the Traffic and Circulation Study and the Draft IS-MND.

The proposed number of parking spaces is consistent with Section 2.2.5.5.d of the DTSP, which states that all parking spaces required by the residential use of a mixed-use development shall be provided on-site and shall be specifically designated and reserved for the exclusive use of the residents. Per DTSP Section 3.8, the project will also provide an additional 21 on-site shared parking spaces . Guest parking will be accommodated with nearby public parking, per the DTSP amendments that were approved by the City on July 15, 2020.

The City commissioned a shared parking study (Walker Consultants 2019), which identified 226 additional unused parking spaces available for use within a ½ mile radius of the project site. Approximately 106 spaces are available the Metrolink Station's south lot; 89 spaces are available within 1,000-foot walk along High Street, Walnut Street, and Bard Street; and 31 spaces are available within the auxiliary Metrolink parking lot located east of the project site.

The project will meet the project requirements described in the DTSP and there are additional parking spaces available in the area surrounding the project site. Therefore, there is ample parking to support the anticipated parking demands of the project site.

Response 4.9

The commenter opines that the parking study conducted by Walker Consultants is flawed due to the inclusion of parking spaces associated with the Ventura County Transportation Commission. In addition, the commenter states that the parking study points out that the loss of Lot 5b, near the High Street Arts Center, would have an adverse impact on the Center.

The parking study conducted by Walker Consultants (2019) acknowledges that the parking spaces in the Ventura County Transportation Commission lots are meant to be used primarily for commuter purposes, but that they are also available for public parking. In addition, as stated in the parking study, Lot 5B was identified as a temporary parking solution for the High Street Arts Center in the DTSP. The parking study also determined that peak parking demand, which occurring on a weekday at 11:00 a.m., resulted in approximately 40 percent occupancy of parking spaces. Additionally, as described in Response 4.9, the parking study also identified 226 additional unused parking spaces available for use within a ½ mile radius of the project site. Therefore, because the project will meet the project requirements described in the DTSP and the additional parking spaces available in the area surrounding the project site, the project would not cause any parking issues for the High Street Arts Center.

Response 4.10

The commenter requests that the City provide a tree report as required under MMC 12.12.050.

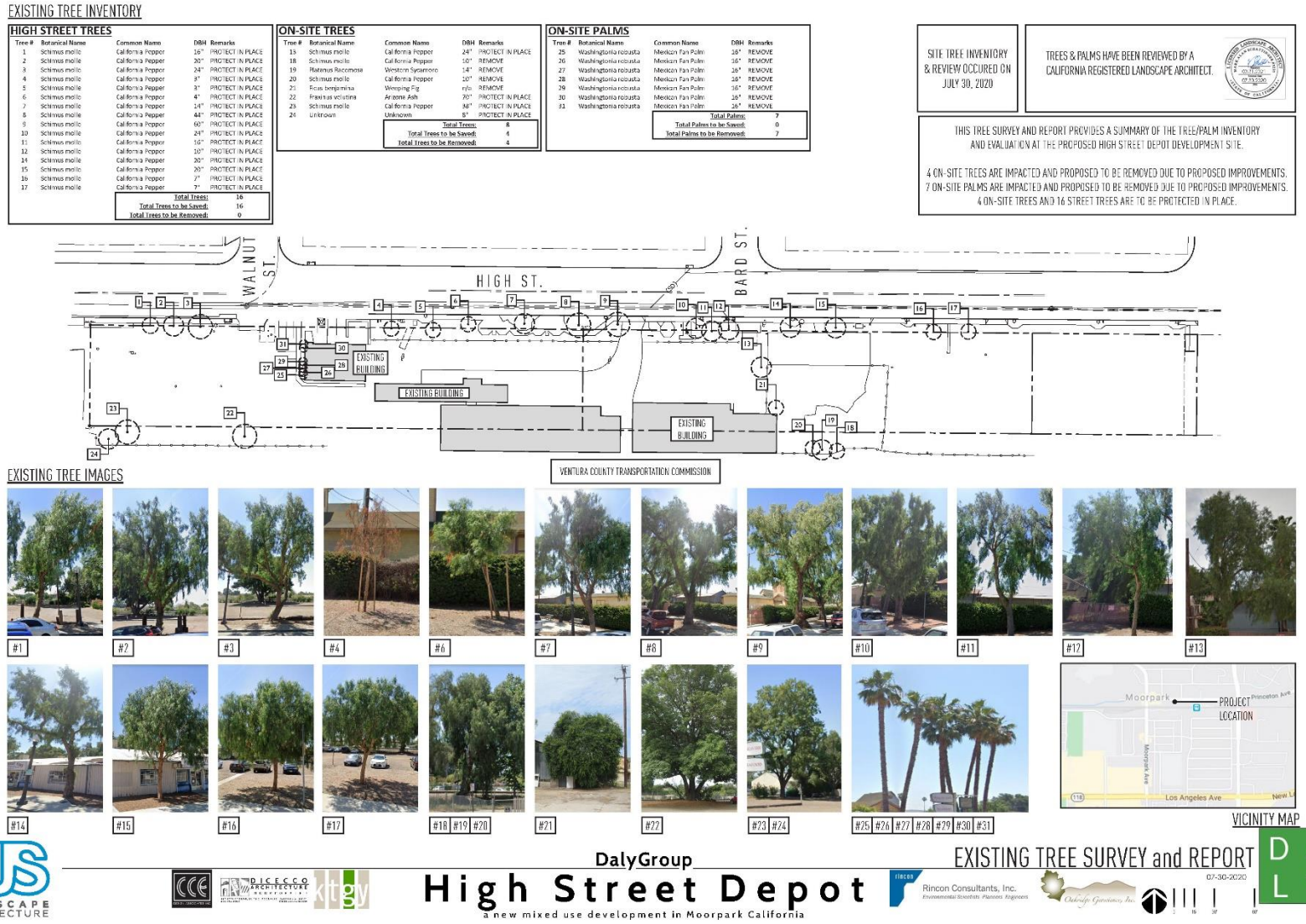
See the existing tree survey and report on the next page for details on which trees would be removed and where they are located. A total of 11 trees on-site would be removed. No trees along High Street would be removed. The trees that would be removed on-site include: The 11 removals include: two California Pepper trees, one Western Sycamore tree, one Weeping Fig, and seven Mexican Fan Palms. The diameter breast height of the pepper, sycamore, and palm trees range from 10 inches to 16 inches.

Per MMC 12.12.050(d), *The director of community development, or his or her designated representative, may waive the requirement for a tree report or may waive the requirement for survey of one (1) or more trees based upon the director's judgment that the tree(s) would have little or no value in that location.* (Ord. 101 § 1, 1988). The information in this landscaping plan provides the community development director with the tree type (by common name and genus and species), tree location, and diameter breast height of each tree. This existing tree survey and report allows for the community development director to make the judgement that a more extensive tree report is not required.

Response 4.11

The commenter states that an EIR is required because of various areas (discussed in Responses 4.12 through 4.27) in which the Project may have significant adverse environmental impacts, even with proposed mitigation measures.

As discussed in the Draft IS-MND, all potentially significant project impacts would be reduced to a less-than-significant level with implementation of the identified mitigation measures. An EIR is required when a project has the potential to result in significant environmental impacts that cannot be mitigated to a less than significant level. In accordance with Section 15070 of the State CEQA Guidelines, a lead agency shall prepare a negative declaration (ND) or mitigated negative declaration (MND) if an initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. As discussed in responses 4.12 through 4.27 there is not substantial evidence suggesting the potential for a significant environmental effect; therefore, preparation of an MND is appropriate and preparation of an EIR is not warranted.


EXISTING TREE INVENTORY
HIGH STREET TREES
ON-SITE TREES
ON-SITE PALMS
SITE TREE INVENTORY & REVIEW OCCURED ON JULY 30, 2020
TREES & PALMS HAVE BEEN REVIEWED BY A CALIFORNIA REGISTERED LANDSCAPE ARCHITECT.
THIS TREE SURVEY AND REPORT PROVIDES A SUMMARY OF THE TREE/PALM INVENTORY AND EVALUATION AT THE PROPOSED HIGH STREET DEPOT DEVELOPMENT SITE.
4 ON-SITE TREES ARE IMPACTED AND PROPOSED TO BE REMOVED DUE TO PROPOSED IMPROVEMENTS.
7 ON-SITE PALMS ARE IMPACTED AND PROPOSED TO BE REMOVED DUE TO PROPOSED IMPROVEMENTS.
4 ON-SITE TREES AND 16 STREET TREES ARE TO BE PROTECTED IN PLACE.
WALNUT ST.
HIGH ST.
BARD ST.
EXISTING BUILDING
VENTURA COUNTY TRANSPORTATION COMMISSION
EXISTING TREE IMAGES
VICINITY MAP
PROJECT LOCATION
Moorpark
Los Angeles Ave
DalyGroup
High Street Depot
a new mixed use development in Moorpark California
EXISTING TREE SURVEY and REPORT
07-30-2020
Rincon Consultants, Inc.

Response 4.12

The commenter states that the project may have significant adverse impacts on two historical resources near the project site, which are not analyzed or mitigated in the Draft IS-MND - the row of pepper trees adjacent to High Street on the northern edge of the project site (Ventura County Landmark #72) and Tanner's Corner located at the intersection of High Street and Moorpark Avenue (listed on the California Register of Historical Resources).

As discussed in Section 1, *Aesthetics*, and Section 5, *Cultural Resources*, of the Draft IS-MND, the project would leave the row of pepper trees (Ventura County Landmark #72) in place and the City of Moorpark's Tree Preservation Guidelines (MMC 12.12.060) would be enforced as a condition of approval to ensure they are not impacted by nearby construction. During construction, a physical barrier (flagging or see-through safety fencing) would be installed around any adjacent pepper trees that are situated near mechanized equipment. Additionally, the project's grading plan would not disrupt or remove structural feeder roots and would not fill, cut, or compact soils within the dripline. If necessary, the project contractor would work with a consulting arborist during grading and construction. This would avoid impacts to Ventura County Landmark # 72. Furthermore, continued pepper tree maintenance would be completed in accordance with the City's California Pepper Trees Maintenance Plan (2006b). Therefore, with adherence to existing municipal code requirements and the City's adopted Pepper Tree Maintenance Plan, impacts would be avoided and no mitigation measures are required.

Based on the results of the records search performed for the project at the South Central Coast Information Center in 2018 as part of the *High Street Station Mixed Use Development Cultural Resources Assessment Report* (Appendix E of the Draft IS-MND), Tanner's Corner is listed in the California Register of Historical Resources. As concluded in the cultural resources assessment report, the project would have no direct impact to this historical resource because it is not located on the project site. Mitigation Measure TRA-1 requires payment of Citywide Traffic Impact Mitigation fees to contribute toward implementation of improvements for the High Street/Moorpark Avenue intersection (adjacent to Tanner's Corner), which would consist of adding an additional through lane on the southbound approach and providing a left-turn lane, through lane, and right-turn lane on the northbound approach. Tanner's Corner is located on the northeast corner of the High Street/Moorpark Avenue intersection; therefore, improvements south of this intersection would have no impact to this property. Furthermore, as described in the City's Operating and Capital Improvement Projects Budget for Fiscal Year 2019-2020, the widening of Moorpark Avenue north of this intersection would include adding a southbound lane along the west side of Moorpark Avenue from Casey Road to Third Street, which would not impact Tanner's Corner given that it is located on the east side of Moorpark Avenue.[1] The project would have no impact on the ability for Tanner's Corner to maintain it's listing on the California Register of Historic Resources and there would be no indirect impact.

Response 4.13

The commenter states that Mitigation Measure CR-1 described in the response to Letter 1 from the Ventura County Cultural Heritage Board, which suggested adding an interpretive display highlighting

[1] Moorpark, City of. 2019. Operating and Capital Improvement Projects Budget for Fiscal Year 2019-2020. https://www.moorparkca.gov/DocumentCenter/View/9589/F-201920-Budget?bidId= (accessed March 2020).

the history of the site and historically significant railroad depot, was not added to Section 5, *Cultural Resources*, of the Draft IS-MND.

The project applicant has incorporated Ventura County Cultural Heritage Board's recommendation for an interpretive display as a project design feature, which is described in Section 9, *Description of Project*, of the Initial Study of the Draft IS-MND. This project design feature would be required as a condition of approval.

Response 4.14

The commenter states that the project is inconsistent with the CARB 2017 Climate Change Scoping Plan. The commenter states that the 2017 Scoping Plan deems net-zero GHG emissions possible for housing projects (pp. 101-102) and that the project should achieve net-zero GHG emissions or at the very least should include the maximum feasible amount of solar rooftop power.

As discussed in Section 8, Greenhouse Gas Emissions, in the Draft IS-MND, the project is consistent with the 2017 Scoping Plan since it would not generate emissions exceeding the per service population thresholds established for reducing greenhouse gas emissions and thus be consistent with the state's goals for GHG reductions. Regarding net-zero emissions, the 2017 Scoping Plan states, "Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development (ARB p. 101)[2]. In addition, Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA" (p. 102).

In accordance with Section 150.1(b)14 of the 2019 Building Energy Efficiency Standards, all new residential uses under three stories must install photovoltaic (PV) solar panels that generate an amount of electricity equal to expected electricity usage. The project would be required to comply with this building code standard.

Since the project does not conflict with the CARB 2017 Scoping Plan, impacts would be less than significant. Net-zero emission reductions are not required and substantial evidence suggesting that a significant impact would occur has not been provided.

Response 4.15

The commenter states that since a project like this one would last much longer than 2030, it should be consistent with the state's 2050 GHG emissions reduction goals as well as the 2030 goals. The commenter notes that since the 2017 Scoping Plan sets an overall goal of 2 MT of CO_2e per capita per year in 2050, the project's calculated emissions (2.7 MT of CO_2e) would exceed this threshold and would therefore be significant under CEQA, requiring adoption of all feasible mitigation measures.

As discussed in Section 8, *Greenhouse Gas Emissions*, of the Draft IS-MND, the Association of Environmental Professionals Climate Change Committee recommends that CEQA GHG analyses evaluate project emissions in light of the trajectory of state climate change legislation and assess their "substantial progress" toward achieving long-term reduction targets identified in available

[2] California Air Resources Board. 2017. California's 2017 Climate Change Scoping Plan. Accessible at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed July 2020.

plans, legislation, or EOs. Consistent with AEP Climate Change Committee recommendations, GHG impacts are analyzed in terms of whether the proposed project would impede "substantial progress" toward meeting the reduction goal identified in Senate Bill 32 and Executive Order B-55-18, which sets a long-term goal of carbon neutrality that is more stringent that the State's 2050 goal under Executive Order S-3-05. As SB 32 is considered an interim target toward meeting the 2045 State goal, consistency with SB 32 is considered contributing substantial progress toward meeting the State's long-term 2045 goals. Therefore, because the project's GHG emissions of 2.7 MT of CO_2e per service person would be less-than-significant in light of SB 32 targets, the project would not impede substantial progress toward meeting the State's 2045 and 2050 goals and impacts would be less than significant. In addition, the proposed project would participate in applicable future requirements adopted to meet the State's long-term 2045 and 2050 goals. For example, electricity provided to the proposed project would be increasingly sourced by renewable energy per the requirements of Senate Bill 100, residents living in the project would have the opportunity to utilize the immediately adjacent Metrolink commuter rail service, and vehicles used by residents, employees, guests, and patrons would emit fewer GHG emissions over time due to increasingly stringent federal and state fuel efficiency standards.

Response 4.16

The commenter states that the City should prohibit the use of natural gas for the project as a feasible GHG mitigation measure.

As discussed in Section 8, *Greenhouse Gas Emissions*, the proposed project would have less than significant impacts related to GHG emissions. Because impacts related to emissions of greenhouse gases are less than significant, additional mitigation such as eliminating natural gas service for the project is not required.

Response 4.17

The commenter again states that the methodology used for a "locally-appropriate, project-specific efficiency threshold" is flawed because it analyzes emission for 2030 when 2050 would be more appropriate.

See Response 4.15. As discussed therein, use of a significance threshold based on 2030 is appropriate for the proposed project, which has a buildout year prior to 2030.

Response 4.18

The commenter states that the MND GHG emission calculations in some cases use the low end of ranges in the 2017 Scoping Plan when they should use the midpoint of those ranges.

Regardless of whether the analysis uses the low end or midpoint of the ranges of forecast GHG emissions from various sectors in the 2017 Scoping Plan, the total GHG emissions forecast for 2030 remains the same at 260 million metric tons of carbon dioxide equivalent (CO_2e). Furthermore, the low end of the ranges for the Residential and Commercial, Recycling and Waste, Transportation, Industrial, and Agriculture are used because, as stated in footnote 66 on page 31 of the 2017 Scoping Plan, the low end of these ranges represents estimated emissions from the Scoping Plan Scenario, which is the scenario on which the assumptions and forecasts of the 2017 Scoping Plan are based, whereas the high end represents sector underperformance. The high end of the range is used for the High GWP and Electric Power sectors because, as stated in footnotes 67 and 68 on page

31 of the 2017 Scoping Plan, the high end of the range represents the Scoping Plan Scenario, and the low end of the range represents sector overperformance (CARB 2017). Therefore, the emissions estimates used for each of these sectors in Table 8 in Section 8, *Greenhouse Gas Emissions*, represents the Scoping Plan Scenario, which is based on best available data.

Response 4.19

The commenter states that a new project must reduce its GHG emissions below the statewide target for the state to meet its 2030 and 2050 GHG reduction goals to account for the fact that emissions coming from existing projects will not reduce their GHG emissions until they are rebuilt.

Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, as long as any threshold chosen is supported by substantial evidence (CEQA Guidelines Section 15064.7[c]). To supplement this, the 2017 Scoping Plan states, "lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change science" (CARB 2017). As stated in Section 8, *Greenhouse Gas Emissions*, the City has chosen to use a locally-appropriate, project-specific threshold consistent with the assumptions of the 2017 Scoping Plan and the SB 32 target to evaluate the significance of the project's GHG emissions and presents substantial evidence as to why use of this threshold is appropriate for the proposed project. Furthermore, the proposed project would incorporate GHG emission reduction features that are specific to new development, including installation of rooftop solar as required by Section 150.1(c)14 of the 2019 California Building Energy Efficiency Standards, exclusion of wood-burning and natural gas fireplaces, siting near transit and downtown Moorpark to facilitate use of alternative transportation, and installation of streetscape improvements to High Street to facilitate pedestrian access in the project site vicinity.

Response 4.20

The commenter states that because the project's likely GHG emissions seem to be based on a CalEEMod run using the old project specifications, the conclusion that the project would not have significant GHG impacts violates CEQA. The commenter adds that it is not obvious that the GHG emissions would be less than those of the original project because the commercial square footage is increased.

The Draft IS-MND analyzes the proposed project as 91 residential units with studio, one-bedroom, two-bedroom, and three-bedroom units as well as 15,018 square feet of commercial space. The reduced project consists of 79 residential units and 13,628 square feet of commercial space; therefore, contrary to the commenter's assertion, the commercial square footage has decreased in comparison to the project analyzed in the Draft IS-MND. Table 1 summarizes the estimated construction-related GHG emissions from the reduced project, which were amortized over 30 years (the assumed life of the project per South Coast Air Quality Management District guidance), and Table 2 summarizes the estimated combined construction-related GHG emissions and operational GHG emissions from the reduced project. As shown therein, combined construction and operational GHG emissions would decrease by approximately 50 MT of CO_2e per year to 985 MT of CO_2e per year, and per service person emissions would increase by approximately 0.3 MT of CO_2e per year to 3.0 MT of CO_2e per year. The increase in per service person emissions is primarily due to a

proportionally greater reduction in the service population of the reduced project as compared to the decrease in total GHG emissions. Despite the increase in per service person emissions, GHG emissions from the reduced project remain below the threshold of 3.2 MT of CO_2e per year. Therefore, similar to the project analyzed in the Draft IS-MND, the reduced project would also have less-than-significant impacts related to GHG emissions. The GHG emissions estimates for the proposed project in the Draft IS-MND and for the reduced project below are conservative because they assume that all mobile source emissions are new to the proposed project when, in reality, a substantial portion of vehicle trips are being redirected and/or relocated from other areas in the region. Furthermore, it is likely that actual mobile source emissions associated with the project would be lower than those estimated herein due to the project's proximity to downtown Moorpark and the Metrolink station.

Table 1 Estimated Construction Emissions of Greenhouse Gases – Reduced Project Size

Construction Year	Annual Emissions (MT of CO_2e)		
	Draft IS-MND	Reduced Project Size	Net Change
2020	129.8	127.4	(2.4)
2021	289.1	281.9	(7.2)
Total	**418.9**	**409.3**	**(9.6)**
Amortized over 30 years	14.0	13.6	(0.4)

Notes: Modeling results for the reduced project are appended to this section. Numbers may not add up due to rounding. Amortized construction emissions are added to annual operational emissions in Table 2 and compared to the per-service-person threshold; therefore, a threshold is not included in this table.

Table 2 Combined Annual Emissions of Greenhouse Gases – Reduced Project Size

Emission Source	Annual Emissions (MT of CO_2e) Draft IS-MND	Reduced Project Size	Net Change
Construction[1]	14.0	13.6	(0.4)
Operational			
Area	1.1	1.0	(0.1)
Energy	220.6	209.8	(10.8)
Solid Waste	65.1	62.0	(3.1)
Water	31.6	28.4	(3.2)
Mobile			
CO_2 and CH_4	686.6	654.7	(31.9)
N_2O	16.5	15.9	(0.6)
Total Project Emissions	1,035.5	985.4	(50.1)
Service Population (Residents + Employees)	390[1]	329[2, 3, 4]	(61)
Emissions per SP	2.7	3.0	0.3
Locally-Applicable, Project-Specific Threshold	3.2	3.2	n/a
Threshold Exceeded?	No	No	n/a

N/A = not applicable; SP = service population
Notes: Modeling results for the reduced project are appended to this section. Some numbers may not add up due to rounding.
[1] See Table 1.
[2] 302 residents + 88 employees
[3] As stated in Section 3, *Air Quality*, the average household size for the city of Moorpark of 3.32 persons per household; therefore, the reduced project would accommodate approximately 242 residents (3.32 persons per household x 79 units) (CDOF 2019).
[4] The decrease in ground floor commercial space under the reduced project size from 8,400 square feet to 7,853 square feet would reduce the number of employees associated with the ground floor commercial space by one employee to 13 employees (7,853 square feet divided by 1 employee per 588 square feet [see Section 3, *Air Quality*]) and the total employees accommodated by the project to 87 (88 – 1).
[5] 242 residents + 87 employees

Response 4.21

The commenter states that an EIR is required because the Draft IS-MND offers substantial evidence that the project may have significant cumulative GHG impacts.

The vast majority of individual projects do not generate sufficient GHG emissions to create significant project-specific environmental effects. However, the environmental effects of a project's GHG emissions can contribute incrementally to cumulative environmental effects that are significant, contributing to climate change, even if an individual project's environmental effects are limited (CEQA Guidelines Section 15064[h][1]). The issue of a project's environmental effects and contribution towards climate change typically involves an analysis of whether or not a project's contribution towards climate change is cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

The threshold of significance used in Section 8, *Greenhouse Gas Emissions*, is the level above which project impacts would be cumulatively considerable. As discussed therein, the project's GHG

emissions would not exceed the threshold of significance; therefore, the project would not have a cumulatively considerable contribution to a cumulative impact related to climate change and GHG emissions. As a result, there is no evidence suggesting contribution to a significant cumulative impact, and preparation of an EIR is not warranted.

Response 4.22

The commenter states that Phase II sampling for soil and soil-gas contamination required under Mitigation Measure HAZ-1 should be conducted now instead of waiting until right before grading and that the City could enter into an agreement with the applicant allowing it to conduct soil testing on-site prior to the transfer of ownership from the City.

As stated in Section 9 *Hazards and Hazardous Materials,* the two Phase I Environmental Site Assessments conducted by Rincon Consultants and EFI Global determined there are no Recognized Environmental Conditions (RECs) in connection with the project site. Nevertheless, out of an abundance of caution, supplemental testing will be completed by the project applicant upon obtaining title to the property and prior to excavation and grading because two potential RECs were identified on adjacent properties, including (1) existing railroad tracks adjacent to south of the site, and (2) the presence of a former gasoline service station located adjacent to the western property boundary. If the investigations indicate that soil exceeds regulatory action levels, then the soil shall be remediated to local agency standards through soil removal and disposal efforts. As outlined in Mitigation Measure HAZ-1, the shallow soil and vapor sampling assessments shall be performed within 30 days of the project applicant acquiring the project site from the City of Moorpark and shall meet the specific standards outlined in the measure. Mitigation Measure HAZ-1 also requires removal and disposal of any contaminated soil in accordance with applicable local, state, and federal regulations.

Response 4.23

The commenter states that an EIR is necessary because the project would result in significant cumulative air quality impacts since the project would emit 9.4 pounds per day of reactive organic compounds (ROC) and 22.4 pounds per day of nitrogen oxides (NO_x).

As discussed in Section 3, *Air Quality*, the VCAPCD considers a project to have a significant cumulative adverse air quality impact if project emissions exceed two pounds per day of ROC or NO_X *and* if the project is inconsistent with the population forecasts contained in the Air Quality Management Plan. As discussed in Section 3, *Air Quality*, of the Draft IS-MND, the project would be consistent with the population forecasts contained in the Air Quality Management Plan. Because the project would not result in a cumulative adverse air quality impact, mitigation is not required and preparation of an EIR is not warranted. In addition, per the comment letter provided by VCAPCD (Letter 8), VCAPCD concurs with the significance determinations presented in the Draft IS-MND.

Response 4.24

The commenter states that the MND should analyze the impact on High Street of replacing the existing buildings with the project buildings, which may provide a lower level of noise screening between High Street and the Metro rail tracks.

As discussed in Section 13, *Noise*, of the Draft IS-MND, the proposed project would provide greater noise screening compared to the existing buildings through increased building height (with the

exception of the existing granary building tower) and greater density of buildings, thereby breaking the line of sight between the railway and the adjacent commercial properties and providing more effective sound attenuation at commercial properties located north of the project site. Moreover, the existing buildings are non-habitable and were constructed using wood, steel, and metal siding which have reduced sound attenuating properties when compared to the proposed project building materials consisting of metal, wood, steel and brick, and the interior walls would be lined with sound-attenuating insulation. The resulting increase in wall density would provide greater sound attenuation when compared to existing conditions (Federal Highway Administration 1974).

Response 4.25

The commenter states that since the project would be mostly residential, it should follow residential noise standards. The commenter states that according to the Draft IS-MND, the ambient noise level on High Street is currently 4 dBA above the City's exterior daytime residential noise standard of 65 dBA.

The ruling for *California Building Industry Association v. Bay Area Air Quality Management District* (*CBIA v. BAAQMD*) determined that under CEQA, except for a few specified and limited instances, noise impacts on residents of a proposed project are not required to be analyzed. Nevertheless, an analysis of the project site's noise/land use compatibility is included in Section 13, *Noise*, for informational purposes. As discussed therein, the ambient noise level at the project site is approximately 69 CNEL, which exceeds the City's "clearly compatible" exterior noise standard of 65 CNEL for multiple-family residential land uses and falls within the "normally compatible" range of 65 to 70 CNEL for multiple family residential land uses. Therefore, in order to comply with the City's noise standards, the project would be required to incorporate design features such as noise barriers, Sound Transmission Class-rated windows and doors, orientation of windows away from the railroad, upgraded exterior wall and/or roof construction, insulation batts, and/or forced air ventilation that reduce exterior and interior noise levels to below the City's standards.

Response 4.26

The commenter states that the MND should require mitigation of operational noise other than the HVAC noise because any increase in noise would be cumulatively considerable where the standards are already exceeded.

As discussed in Section 13, *Noise*, operational noise associated with outdoor recreational uses would not generate an audible increase in the ambient noise environment because on-site conversations between residents and patrons would not typically generate an audible noise level increase in excess of the existing noise environment. In addition, such noise would be intermittent and would be similar to what is generated at existing nearby downtown commercial development. Therefore, noise associated with outdoor recreational uses would be less-than-significant and mitigation is not required.

Operational noise levels associated with delivery and trash hauling services and parking lot activities were compared to the City's exterior noise standards set forth in the MMC, which are set at levels intended to address cumulative impacts related to operational noise in the city. As discussed in Section 13, *Noise*, noise levels generated by delivery and trash hauling services and parking lot activities would not exceed the City's exterior noise standards and would therefore be less than significant. As such, mitigation is not required.

Response 4.27

The commenter states that because the Draft IS-MND's water supply analysis relies on the Urban Water Management Plan (UWMP), which does not consider the climate risk to water supply, it is flawed and cannot support the conclusion that there will be enough water available for the project over the next 30 years.

The water supply analysis contained in the Draft IS-MND relies on water supply and demand data from the most recent iteration of VCWWD No. 1's UWMP, which was published in June 2016 (VCWWD 2016). As the water supplier for the proposed project, the VCWWD No. 1 is considered to be the source of the best available information on water availability for the project. Therefore, in relying on data and assumptions from the VCWWD No. 1's UWMP, the analysis utilizes the best available information and data on water supply and demand forecasts for the project region. Furthermore, the UWMP considers the effects of climate on water supply in Section 4.6, *Climate Change*, and Section 6.10, *Climate Change Impacts to Supply*, and includes water supply projections for various climatic conditions, including single dry year and multiple dry year scenarios through 2040, in accordance with the requirements of California Water Code Section 10635(a). The water supply analysis in Section 19, *Utilities and Service Systems*, compares the project's estimated water demand to the multiple dry year water supply and demand forecasts, which considers the status of supply sources in multiple consecutive drought years, as projected by the VCWWD No. 1's UWMP. Therefore, because the water supply analysis in the Draft IS-MND is based on the VCWWD No. 1 UWMP, which considers climate risk to water supply, the water supply analysis adequately considers the climate risk to water supply. Under extreme water shortage/drought conditions (Level 1 through 3), water reduction methods that may be implemented to reduce water consumption include, but are not limited to: restricting hours of irrigation, disallow non-essential irrigation, limiting vehicle washing, altered rate structures, etc. As such, the conclusions of the Draft IS-MND related to water supply remain unchanged.

Letter 5

SoCalGas
A Sempra Energy utility

Karen Kwan
Principal Environmental Specialist

Southern California Gas Company
Sempra Energy utilities
MGT02A
555 Fifth Street
Los Angeles, Ca. 90013
Tel: 213.248.73355817

RECEIVED
MAR - 9 2020
CITY OF MOORPARK
COMMUNITY DEVELOPMENT

March 5, 2020

Ms. Karen Vaughn
City of Monrovia, Community Development Department
799 Moorpark Ave.
Moorpark, CA 93021

RE: Notice of Intent to Adopt a Mitigated Negative Declaration for the High Street Station Mixed Use Development (Project)

Dear Ms. Vaughn:

Southern California Gas Company (SoCalGas) appreciates the opportunity to review and respond to the Project's Notice of Availability of a Mitigated Negative Declaration. We respectfully request that the following comments be incorporated into the document.

- SoCalGas has several medium pressure distribution service lines that intersect the parcel identified as part of the High Street Station Mixed Use Development footprint. 1

- SoCalGas recommends, as required by California law, that the project proponent call Underground Service Alert at 811 or (800) 422-4133 at least two business days prior to performing any excavation work for the proposed project. Underground Service Alert will coordinate with SoCalGas and other Utility owners in the area to mark the locations of buried utility-owned lines. 2

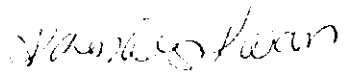
- While *Section 19 Utilities and Service Systems* discusses the demand for services of natural gas as having "a less than signification impact" on SoCalGas, there is no specific discussion on whether to project will require or result in the relocation or construction of natural gas lines. 3

- Should it be determined that the proposed project may require SoCalGas to abandon and/or relocate or otherwise modify any portion of its existing natural gas lines, SoCalGas respectfully requests that the City and/or the project proponent coordinate with SoCalGas by emailing: NorthwestDistributionUtilityRequest@semprautilities.com. 4

- Should it be determined that the proposed project may require SoCalGas to extend new natural gas service, SoCalGas respectfully requests that project proponent coordinate with us by calling (800) 427-2000 to follow-up on this matter or submit a "Non-Residential Request for New Gas Services" application. 5

Once again, we appreciate the opportunity to comment on the Project's Recirculated Draft EIR. If you have any questions, please feel free to contact SoCalGas Environmental Review at Envreview@semprautilities.com.

Sincerely,



Karen Kwan
Principal Environmental Specialist
Southern California Gas Company

Letter 5

COMMENTER: Karen Kwan, Principal Environmental Specialist, Southern California Gas Company (SoCalGas)

DATE: March 5, 2020

Response 5.1

The commenter states that SoCalGas has several medium pressure distribution service lines that intersect the project site.

The project applicant would comply with all protocols outlined in the comment letter from SoCalGas, including calling the Underground Service Alert prior to any excavation or site demolition to identify all on-site and immediately-adjacent gas lines. The project applicant would also contact SoCalGas representatives to confirm the accuracy of the Underground Service Alert results prior to any excavation or site demolition. At this time, the project applicant does not anticipate the need to relocate any on-site medium pressure gas lines as part of site development. However, if SoCalGas determines that relocation is necessary, the project applicant would coordinate with SoCalGas Northwest Distribution Utility Division to relocate the lines in accordance with the SoCal Gas Natural Gas Service Guidelines (January 2020).[3]

Response 5.2

The commenter recommends the City call Underground Service Alert at 811 or (800) 422-4133 at least two business days prior to performing any excavation work for the proposed project to ensure that the locations of buried utility-owned lines are marked, as required by California law.

The project applicant and City would be required comply with all applicable laws and regulations.

Response 5.3

The commenter requests specific discussion on whether the project would require or result in the relocating or construction of natural gas lines.

See Response 5.1. As discussed therein, at this time, the project applicant does not anticipate the need to relocate any on-site medium pressure gas lines as part of site development. Furthermore, as discussed in Section 9, *Description of Project*, of the Initial Study of the Draft IS-MND, the project includes installation of dry utilities as part of site improvements as well as off-site connections to existing dry utilities on or adjacent to the project. The project applicant would coordinate construction of new natural gas connections to on-site development by the filing of a standard Non-Residential Request for New Gas Services application and subsequently constructing plans approved as part of building and safety plan check.

In response to this comment, the following text has been added to Section 19, *Utilities and Service Systems*, of the Draft IS-MND:

> SCE's Big Creek/Ventura local capacity area includes the project site, and has an excess annual capacity of 2,459 MW (8,290 MMBtu), which is more than enough to accommodate

[3] SoCalGas. 2020. Natural Gas Service Guidebook. January 2020. https://www.socalgas.com/documents/construction/GasServiceGuidebook.pdf (accessed March 2020).

the electricity requirements of the project (SCE 2018b). For 2019, the estimated surplus of natural gas capacity is 794 MMcf/day (823,378 MMBtu/day), which is more than enough to accommodate the natural gas requirements of the project (SoCalGas 2018). According to SoCalGas, several medium pressure distribution service lines intersect the project site; however, at this time the project applicant does not anticipate the need to relocate any on-site medium pressure gas lines as part of site development. If SoCalGas determines that relocation is necessary during their review of the project's natural gas service request, the project applicant would coordinate with SoCalGas Northwest Distribution Utility Division to relocate the lines in accordance with the SoCalGas Natural Gas Service Guidelines (2020). As discussed under *Description of Project*, the project includes installation of dry utilities as part of site improvements as well as off-site connections to existing dry utilities on or adjacent to the project. Improvements to existing facilities or the provision of new electricity and natural gas facilities is not anticipated. The project would have a less than significant impact on local electricity, natural gas, and telecommunications providers.

Response 5.4

The commenter requests that should the proposed project require SoCalGas to abandon and/or relocate or otherwise modify any portion of its existing natural gas lines, the City contact SoCalGas by emailing: NorthwestDistributionUtilityRequest@semprautilities.com.

As discussed under Response 5.1, if SoCalGas determines that relocation of existing natural lines is necessary during review of the project's natural gas service request, the project applicant would coordinate with SoCalGas Northwest Distribution Utility Division to relocate the lines in accordance with the SoCal Gas Natural Gas Service Guidelines (January 2020).[4]

Response 5.5

The commenter requests that the City coordinate with SoCalGas by calling (800) 427-2000 or by submitting a "Non-Residential Request for Gas Services" application should the proposed project require SoCalGas to extend new natural gas service.

As discussed under Response 5.3, the project applicant would coordinate construction of new natural gas connections to on-site development by the filing of a standard Non-Residential Request for New Gas Services application and subsequently constructing plans approved as part of building and safety plan check.

[4] SoCalGas. 2020. Natural Gas Service Guidebook. January 2020. https://www.socalgas.com/documents/construction/GasServiceGuidebook.pdf (accessed March 2020).

Letter 6

PUBLIC VENTURA COUNTY WORKS

WATERSHED PROTECTION

WATERSHED PLANNING AND PERMITS DIVISION
800 South Victoria Avenue, Ventura, California 93009
Sergio Vargas, Deputy Director – (805) 650-4077

M E M O R A N D U M

DATE: March 5, 2020

TO: Karen Vaughn, Community Development Director
City of Moorpark

FROM: Mark Bandurraga, Engineer IV, Hydrology Section

SUBJECT: MND High Street Station
APN(s): 5120090115
Zone 3
Watershed Protection District Project Number: WC2019-0017
COMPLETE

Pursuant to your request dated December 16, 2020 this office has reviewed the submitted materials and provides the following comments.

PROJECT LOCATION:

Along the south side of High Street, roughly in between Walnut Street and Magnolia Street, Moorpark, CA

PROJECT DESCRIPTION:

The project would be located on a 2.15-acre site along the south side of High Street, roughly in between Walnut Street and Magnolia Street, in the City of Moorpark in Ventura County, CA. The project involves a mixed-use development consisting of 91 multi-family residential units (including 18 studios, 26 one-bedroom units, 39 two-bedroom units and 8 three-bedroom units) and 13,656 sf of commercial development. The residential units would be constructed within four individual buildings, each with a maximum of three floors. The proposed project includes approximately 7,038 sf of ground-floor commercial retail and office space in the four residential buildings. In addition, the project includes 6,618 sf of standalone commercial space in three separate buildings surrounding an outdoor village green that would be open to the public and used as a special event venue. Project design and architectural features would be consistent with the design guidelines contained in the Moorpark Downtown Specific Plan. The project includes 139 on-site parking spaces in addition to off-site parking spaces. The proposed project would also demolish the existing non-operational commercial and industrial buildings on-site. The site currently contains 17 mature trees that include palm, cypress, ash, and pepper trees. Some of the mature trees on-site would be removed over the course of construction

activities, but the project would preserve the existing pepper trees along High Street (Ventura County Landmark #72), and the existing large ash trees along the southern portion of the property. On-site grading in the form of removal and recompaction would occur across the entire site along with geologic hazard remediation. Adjacent to the property on the South side of High Street is a city storm drain that connects to the District's redline channel Moorpark Storm Drain No. 1 at the downstream end of the project.

APPLICATION COMPLETENESS:

COMPLETE - from our area of concern.

WATERSHED PROTECTION DISTRICT COMMENTS:
None.

WATERSHED PROTECTION DISTRICT CONDITIONS:

1. **Mitigation:** The proposed development shall incorporate mitigation measures to address cumulative impacts due to the proposed increase in imperviousness. Project shall reduce the developed condition peaks to 90% of the existing condition peaks for the 10-, 25-, 50-, and 100-yr storms per the recommendations in the City-Adopted 2005 PACE Report "Gabbert & Walnut Canyon Channels Flood Control Deficiency Study – Addendum" Rev. August 2005. 1

2. **Encroachment Permit:** If the final design for the Project has a direct connection to the District's Moorpark Storm Drain No. 1 channel, the proponent shall obtain an Encroachment Permit from the Ventura County Watershed Protection District to perform any work within and or utilize the District's Right of Way. Project findings will be required to comply with the Ventura County Watershed Protection District hydrology data and the 2017 Hydrology Manual and follow the Watershed Protection District "Guide for Hydrology and Hydraulic Study Report" found at following website: http://pwaportal.ventura.org/WPD/onestop/guidelines/Guide%20for%20Hydra.pdf 2

3. **Downstream Facilities:** The proposed development would be served by Gabbert Channel and Walnut Canyon Channel main drainage system, which has aging concrete flood protection facilities in need of rehabilitation. The MND should consider potential impacts to existing infrastructure and evaluate funding mechanisms to determine and collect the pro-rated share of the needed capital improvements that would benefit the proposed development. 3

4. **Stormwater Responsibility**: The City of Moorpark is responsible for administering the NPDES MS4 Stormwater Program for this development, which includes the connection(s) to the District's channel. The development's responsibility for NPDES compliance and the City's administration of the program will be identified in the District Encroachment Permit for any proposed connection to Moorpark Storm Drain No. 1. 4

If you have any questions, please feel free to contact me by email at Mark.Bandurraga@ventura.org or by phone at (805) 654-2015.

END OF TEXT

Letter 6

COMMENTER: Mark Bandurraga, Engineer IV, Hydrology Section, Ventura County Watershed Protection District

DATE: March 5, 2020

Response 6.1

The commenter provides recommended measures to address cumulative impacts related to the increase in impervious surfaces.

As discussed in Section 10, *Hydrology and Water Quality*, of the Draft IS-MND, the proposed project would have a less-than-significant impact on hydrology and water quality related to the introduction of impervious surfaces. The project is designed to include site specific Best Management Practices and other features to comply with the requirements of a Ventura County Municipal Separate Storm Sewer Systems (MS4) permit and the allowable peak discharge flow rate established by the Ventura County Watershed Protection District per the findings of the Gabbert & Walnut Canyon Channels Flood Control Deficiency Study (County of Ventura 2005). These requirements are intended to address the impacts of a cumulative increase in impervious surfaces as part of urban development in the watershed; therefore, the project's compliance with these requirements would ensure that project impacts are not cumulatively considerable. The Preliminary Hydrologic and Hydraulic/Stormwater Quality Report included as Appendix B of the Final IS-MND concludes that post development flow rates have been reduced from 4.62 cfs to 4.13 cfs (or 89% of the existing condition peak flow rate) with the inclusion of the proposed on-site detention measures. The project also includes Low Impact Development stormwater treatment elements, including flow through bio-filtration planter boxes to capture and treat roof runoff and pervious pavement to capture and treat parking lot runoff. This is consistent with the recommendations in the adopted 2005 PACE Report "Gabbert and Walnut Canyon Channels Flood Control Deficiency Study – Addendum Rev. August 2005.

Response 6.2

The commenter states that the City shall obtain an Encroachment Permit from the Ventura County Watershed Protection District and comply with the appropriate reports if the final design of the project has a direct connection to the District's Moorpark Storm Drain No. 1 channel.

The proposed project would comply with all applicable requirements from the Ventura County Watershed Protection District related to Encroachment Permits and connections to the Moorpark Storm Drain No. 1.

Response 6.3

The commenter requests that the IS-MND consider potential impacts to existing Gabbert Channel and Walnut Canyon Channel flood protection infrastructure and assess funding mechanisms needed to collect the pro-rated share of needed capital improvements.

As discussed in Section 10, *Hydrology and Water Quality*, and Section 19, *Utilities and Service Systems*, of the Draft IS-MND and above in Response 6.1, the proposed project is designed to comply with the allowable peak discharge flow rate established by the Ventura County Watershed

Protection District per the findings within the Gabbert & Walnut Canyon Channels Flood Control Deficiency Study (County of Ventura 2005). As a result, as concluded in Section 19, *Utilities and Service Systems*, of the Draft IS-MND, impacts to stormwater drainage facilities would be less than significant and would not be cumulatively considerable. No mitigation measures are required.

Response 6.4

The commenter states that the City is responsible for administering the NPDES MS4 Stormwater Program for the project, including any connections to the Ventura County Watershed Protection District's channel.

The City will administer the NPDES NS4 Stormwater Program for the project in accordance with federal, state, and local requirements.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7- OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 897-0067
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Letter 7

Making Conservation a California Way of Life.

Governor's Office of Planning & Research

MAR 05 2020

STATE CLEARINGHOUSE

March 5, 2020

Karen Vaughn
Community Development Department
799 Moorpark Avenue
Moorpark, CA 93021

RE: High Street Station Mixed Use Development – Mitigated Negative Declaration (MND)
SCH# 2020029021
GTS# 07-VEN-2020-00387
Vic. VEN-23 PM R13.365
Vic. VEN-118 PM R17.896

Dear Karen Vaughn,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The project involves a mixed-use development consisting of 91 multi-family residential units and 15,018 square feet (sf) of commercial development within four individual buildings. In addition, the project includes 6,618 sf of standalone commercial space in three separate buildings surrounding an outdoor village green that would be open to the public and used as a special event venue. The project includes 139 on-site parking spaces and 26 on-street parking spaces as well as additional shared parking spaces in existing downtown public parking areas.

The nearest State facilities to the proposed project are SR-23 and SR-118. After reviewing the MND, Caltrans has the following comments:

As shown in Table 29 under Environmental Checklist #17 (Transportation) of the Initial Study/Mitigated Negative Declaration (MND), potential impacts at the Los Angeles Avenue/Spring Road intersection and Moorpark Avenue/High Street intersection could occur. The currently proposed mitigation measure, identified as TRA-1 in the MND, would require the project applicant to pay an Area of Contribution (AOC) Fee and a Citywide Traffic Mitigation Fee to mitigate cumulative impacts. The AOC and Citywide Traffic Mitigation fees would be applied towards the following programmed improvements that the City has identified: 1

- Los Angeles Avenue/Spring Road Intersection: Add an additional through lane on the eastbound and westbound approaches.

- Moorpark Avenue/High Street Intersection: Add an additional through lane on the southbound approach and provide a left-turn lane, through lane, and right-turn lane on the northbound approach.

Caltrans does not concur that these mitigations are the most effective or appropriate for a sustainable transportation system. Caltrans encourages projects that create high quality transportation alternatives for local and inter-regional trips. State-level policy goals related to sustainable transportation seek to reduce the number of trips made by driving, reduce Greenhouse Gas (GHG), and encourage alternative modes of travel. Caltrans' Strategic Management Plan has set targets of tripling trips made by bicycle and doubling trips made by walking and public transit by 2020. The Strategic Plan also seeks to achieve a 15% reduction in statewide, per capita, vehicle miles traveled (VMT) by 2020. Similar goals are embedded in California Transportation Plan 2040, and Southern California Association of Governments' (SCAG) Regional Transportation Plan. Statewide legislation such as AB 32 and SB 375, as well as Executive Order S-3-05 and N-19-19, echo the need to pursue more sustainable development. Mitigation measure TRA-1 is incompatible with these State-level goals, as the widening of Los Angeles and Moorpark Avenues would create greater crossing distances, increase vehicle speeds, and induce demand for additional vehicle trips, all of which negatively impact safety and discourage alternative transportation modes. By avoiding unnecessary street widening, a transit-oriented mixed-use project like the one proposed can more effectively function as intended. Caltrans recommends the AOC and Citywide Traffic Mitigation fees be applied to more appropriate infrastructure projects that will reduce VMT and GHG emissions, such as: 1 Cont.

- Enhancing pedestrian/bicycle connections to the Metrolink station with robust signage, wayfinding, safety improvements, and streetscape amenities.
- Incorporating bicycle infrastructure along Moorpark Ave and Spring Street to improve safety and provide connections from the project site to destinations along Los Angeles Ave.
- Including canopy trees, bioswales, bicycle parking facilities, and street furniture to provide a comfortable and sustainable environment to encourage active transportation modes and improve community health.
- Providing high quality bus shelters and bus bulb-outs on major streets.
- Using high-visibility continental crosswalks, curb extensions, count-down signal heads, pedestrian refuge islands, and pedestrian scrambles at all crossings.
- Implementing leading pedestrian intervals that give pedestrians a 5- to 7-second head start in crosswalks, which provides additional crossing time and makes pedestrians more visible to drivers.
- Reducing the amount of parking whenever possible, as research on parking suggests that abundant car parking enables and encourages driving. Research looking at the relationship between land-use, parking, and transportation indicates that the amount of

car parking supplied can undermine a project's ability to encourage public transit and active modes of transportation. For any project to better promote public transit and reduce vehicle miles traveled, we recommend the implementation of Transportation Demand Management (TDM) strategies as an alternative to building an unnecessary amount of parking.

- Encouraging residents and visitors of the proposed project to utilize public transit. TDM strategies such as public transportation incentives, carpool, rideshare, telecommuting, walking, biking, bike-share, and educational programs should be considered.
- Evaluating the feasibility for shared micro-mobility vendors such as bike sharing and considering the need for designated curb space for Mobility-as-a-Service (MaaS) drop-off and pick-up activity near the Metrolink station.

1 Cont.

Additionally, there may be encroachment permits required for any project work proposed on or near Caltrans Right of Way. The transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will also need a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods.

2

If you have any questions, please contact project coordinator Anthony Higgins, at anthony.higgins@dot.ca.gov and refer to GTS# 07-VEN-2020-00387.

Sincerely,

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

Letter 7

COMMENTER: Miya Edmonson, IGR/CEQA Branch Chief, District 7 – Office of Regional Planning, California Department of Transportation (Caltrans)

DATE: March 5, 2020

Response 7.1

The commenter does not agree that Mitigation Measure TRA-1, outlined in Section 17, *Transportation*, of the Draft IS-MND, is the most effective or appropriate for a sustainable transportation system. The commenter recommends a variety of infrastructure projects that would reduce VMT and GHG emissions, for which the Area of Contribution (AOC) and Citywide Traffic Mitigation fees could be applied instead.

The circulation improvements identified in Mitigation Measure TRA-1 are improvements that the City has already programmed for the Los Angeles Avenue/Spring Road and Moorpark Avenue/High Street intersections to mitigate traffic cumulative impacts as part of the City's Operating and Capital Improvement Projects Budget for Fiscal Year 2019-2020 (City of Moorpark 2019). The environmental document for the Los Angeles Avenue/Spring Road intersection improvements has already been approved by Caltrans and the Federal Highway Administration and accepted by the Moorpark City Council.

The proposed project includes several of the infrastructure projects recommended by Caltrans. For example, the project would implement streetscape improvements along the existing High Street right-of-way, including landscaping, addition of sidewalk bulb-outs, and enhancements to sidewalk and crosswalk paving, street furniture, and the existing Gazebo, Camino Real Bell, and Memorial Bricks, which would enhance pedestrian and bicycle connections to the Metrolink station and generally improve pedestrian and bicycle access in downtown Moorpark. There is an existing bus shelter on High Street, directly adjacent to the project site, which would be retained as part of the project. On April 29, 2020, the Moorpark City Council voted to allocate $1.5M of remaining bond funds toward High Street Streetscape work, including wayfinding signage, sidewalk or frontage improvements, street furniture, crosswalk and pedestrian improvements, etc. The project would also leave the existing canopy trees along the High Street frontage in place and install bicycle parking spaces as required by Title 24. In addition, the project site's close proximity (i.e., 200 feet) to the Metrolink train station and the Moorpark bus stop for the Moorpark City Transit Routes 1 and 2 and VCTC's East County and East-West Connector bus lines would facilitate pedestrian and bicycle access to transit.

Response 7.2

The commenter notes that the City may be required to obtain an encroachment permit and a Caltrans transportation permit to perform work on or near Caltrans Right of Way.

The project applicant and City would comply with applicable requirements related to Caltrans facilities.

Letter 8

Ventura County
Air Pollution
Control District

669 County Square Dr
Ventura, California 93003

tel 805/645-1400
fax 805/645-1444
www.vcapcd.org

Dr. Laki Tisopulos, P.E.
Air Pollution Control Officer

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Karen Vaughn, Community Development Dept., City of Moorpark

DATE: March 6, 2020

FROM: Nicole Collazo, Air Quality Specialist

SUBJECT: Comments on Draft Mitigated Negative Declaration (DMND) for the High Street Station Mixed Use Project (RMA 19-003-1)

Air Pollution Control District (APCD) staff has reviewed the DMND for the proposed High Street Station mixed use project. The project would be located on 2.15 acres, consisting of 91 multi-family residential units and 15,018 sq. ft. of commercial development, including a public outdoor event venue. Some of the existing buildings would be demolished as part of the proposed project. The project location is along the south side of High Street, between Walnut Street and Magnolia Street, within the City of Moorpark. The Lead Agency for the project is the City of Moorpark.

GENERAL COMMENTS

As a recommending agency for the CEQA review of the subject project, APCD concurs with the Air Quality and Greenhouse Gas Emissions significance impact determinations. APCD has the following comments regarding the DMND:

Air Quality Section

Item 1- Page 22. The last sentence pertaining to the Asbestos- Demolition and Renovation rule is 62.7, not 74.2 (Architectural Coatings). 1

Thank you for the opportunity to review this project's DMND. If you have any questions, you may call me at (805) 645-1426 or email nicole@vcapcd.org.

Letter 8

COMMENTER: Nicole Collazo, Air Quality Specialist, Ventura County Air Pollution Control District

DATE: March 6, 2020

Response 8.1

The commenter notes a typographical error in the last sentence regarding the Asbestos - Demolition and Renovation rule, which should refer to Rule 62.7 (Asbestos - Demolition and Renovation) rather than Rule 74.2 (Architectural Coatings.)

In response to this comment, the following text from Section 3, *Air Quality*, of the Draft IS-MND has been revised:

> In addition, it was assumed the project would comply with all applicable regulatory standards, including VCAPCD Rule 55 (Fugitive Dust), Rule ~~74.2~~ 62.7 (Asbestos – Demolition and Renovation), and Rule 74.2 (Architectural Coatings).

Letter 9

Karen Vaughn

Community Development Department

799 Moorpark Ave.

Moorpark CA. 93021

Re. Moorpark High Street station Mixed Use Development

Dear Ms. Vaughn

I want to get on the record as to my opposition to the Mitigated Negative Declaration on the High Street Project. This project if flawed in many ways, A defective and inaccurate Parking study , noncompliance with existing zoning , impact on circulation that is not addressed in a dated circulation element , on street parking impacts to local business , lack of good planning by placing so much high density housing projects in the old part of town. And finally, this project has many CEQA issues and that will require a full EIR on the project. 1

Thank You Dale Whitaker

Letter 9

COMMENTER: Dale Whitaker

DATE: No date

Response 9.1

The commenter states opposition to the proposed project for the following reasons:

- A defective and inaccurate parking study;
- Noncompliance with existing zoning;
- Impact on circulation that is not addressed in a dated circulation element;
- On-street parking impacts to local business;
- Housing density too high in the old part of town; and
- Many CEQA issues that will require a full EIR.

The commenter's opposition to the proposed project is noted.

The commenter's opinions regarding the inadequacy of the City's parking study and the density of housing proposed in the City's downtown area are not environmental issues addressed by CEQA. The CEQA environmental review process involves evaluation of the project's physical environmental impacts based on impact areas and thresholds as described in CEQA Appendix G. A local government may consider factors outside of environmental concerns, such as the adequacy of parking studies and housing density, in their overall assessment of a proposed project. However, discussions of the adequacy of parking and the merits of housing density in a given area are outside of the environmental review process and thus are not included in this IS-MND. The commenter's opinions regarding parking and housing density do not affect the conclusions in the Draft IS-MND.

As discussed in Section 9, *Description of Project*, of the Initial Study and Section 11, *Land Use and Planning*, of the Draft IS-MND, project entitlements include a Residential Planned Development (RPD), a Disposition Agreement and Development Agreement. With approval of project entitlements, the project would be consistent with the City's zoning ordinance.

Please refer to Section 17, *Transportation*, of the Draft IS-MND, for discussion of project impacts on the existing circulation system, which would be reduced to a less than significant level with implementation of Mitigation Measure TRA-1. As discussed, a traffic report was completed for the project by Associated Transportation Engineers (ATE) on December 10, 2019 (Appendix D). The report describes existing conditions, project trip generation rates, and the impact of the project on existing conditions. It also includes an analysis of the proposed and developing projects in the vicinity of the project's related impacts to traffic and circulation in a future setting. In addition, please refer to the Final IS-MND Cover Memo, which discusses project impacts related to vehicle miles traveled (VMT). The project would be consistent with VMT reduction goals since the project site is adjacent to the Moorpark Metrolink station and the proposed mixed-use development is within ½-mile from the station's platforms. As discussed in the Draft IS-MND and the Final IS-MND Supplemental Information Memorandum, the project would not degrade existing intersections or roadways to unacceptable levels of the service and the project would not conflict with measures for reducing VMT.

The commenter does not provide specifics on which environmental issues require analysis in an EIR or substantial evidence that any project impacts would be significant and unavoidable. As discussed

in the Draft IS-MND, all potentially significant project impacts would be reduced to a less-than-significant level with implementation of the identified mitigation measures. Therefore, as discussed in Response 4.11, preparation of an EIR is not warranted.

Letter 10

Santa Ynez Band of Chumash Indians
Tribal Elders' Council
P.O. Box 365 ◆ Santa Ynez ◆ CA ◆ 93460
Phone: (805)688-7997 ◆ Fax: (805)688-9578 ◆ Email: elders@santaynezchuhmash.org

March 13, 2020

City of Moorpark
Community Development Department
799 Moorpark Avenue
Moorpark, CA 93021

Att.: Karen Vaughn, Community Development Director

Re: Moorpark – High Street Station Mixed-use Development – NOI to Adopt MND

Dear Ms. Vaughn:

Thank you for contacting the Tribal Elders' Council for the Santa Ynez Band of Chumash Indians in regards to the above mentioned project. We apologize for the delay in our response.

At this time, the Elders Council requests no further consultation on this project; however, if supplementary literature reveals additional information, or if the scope of the work changes, we kindly ask to be notified. 1

If you decide to have the presence of a Native American monitor in place during ground disturbance to assure that any cultural items unearthed be identified as quickly as possible, please contact our office or Chumash of the project area. 2

Thank you for remembering that at one time our ancestors walked this sacred land.

Sincerely Yours,

Susan Arakawa
Administrative Assistant for/
The Tribal Elders' Council Governing Board
Tribal Hall
100 Via Juana Road
P.O. 517
Santa Ynez, CA 93460
(805) 688-7997 ext. 4119
sarakawa@santaynezchumash.org

Letter 10

COMMENTER: Susan Arakawa, Administrative Assistant, The Tribal Elders' Council Governing Board, Santa Ynez Band of Chumash Indians

DATE: March 13, 2020

Response 10.1

The commenter requests notification if there are additions or changes to the supplementary literature or scope of work for the project.

This request is noted.

Response 10.2

The commenter requests that their offices or Chumash of the project area be contacted should the City decide to have a Native American monitor present during ground disturbance.

As required by Mitigation Measure CUL-1 of the IS-MND, if cultural resources are encountered during excavation and/or ground-disturbing activities (which will be observed by an archeological monitor), work in the immediate area must halt, and a Native American representative who is ancestrally related to the project area must be contacted immediately to evaluate the find and consult with the City of Moorpark and the archaeologist. Therefore, if cultural resources are identified, the Chumash will be notified and a Native American representative who is ancestrally related to the project area will be identified to monitor further ground disturbance.

Letter 11

METROLINK.
SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
900 Wilshire Blvd. Suite 1500 Los Angeles, CA 90017
metrolinktrains.com

March 27, 2020

Ms. Karen Vaughn
Community Development Director
City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021

RE: Notice of Intent to Adopt a Mitigated Negative Declaration for the High Street Station Mixed-Use Development Project

Dear Ms. Vaughn:

The Southern California Regional Rail Authority (SCRRA) has received the Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) for the High Street Station Mixed-Use Development Project. We are encouraged to see transit-oriented development that provides increased opportunity for rail ridership in Moorpark. Thank you for the opportunity to comment on key issues related to SCRRA and operations of the railroad adjacent to the project site.

As background information, SCRRA is a five-county Joint Powers Authority (JPA) that operates the regional commuter rail system known as Metrolink. Additionally, SCRRA provides rail engineering, construction, operations and maintenance services to its five JPA member agencies. The JPA consists of the Los Angeles County Metropolitan Transportation Authority (Metro), San Bernardino County Transportation Authority (SBCTA), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC) and Ventura County Transportation Commission (VCTC).

Below is a list of general comments that apply to the Mitigated Negative Declaration in relation to the railroad. Comments are as follows:

1. The proposed project is primarily on a property adjacent to a railroad right of way (ROW) that is operated and maintained by SCRRA and owned by VCTC. However, the proposed project also includes parking that encroaches 20 feet into the ROW. All construction within the SCRRA operating corridor and ROW, or work activities that affect the current operation, future operation, or safety of trains must be reviewed and approved by SCRRA. The project applicant must obtain prior written authorization from SCRRA for any access to the railroad ROW. 1

It is important that the licensee understand that VCTC property may be developed for public projects and programs. Improvements to safety (such as platform widening to standard widths or installation of a pedestrian underpass) and operational improvements (such as lengthening of siding tracks or installation of turnback tracks) may be warranted by future operations. Further information that may be of use can be found here https://metrolinktrains.com/about/agency/engineering--construction/. 1 cont.

2. No project drainage is permitted to drain onto railroad ROW, during or after construction. 2

3. The project is being built along an active rail line. Not all trains stop at the adjacent station, and many trains run through the area at high speeds. To maximize safety, the project should include adequate fencing, walls and protections to preclude trespassing into the rail corridor. 3

4. Page 91 of the MND states that, “At the Moorpark station, Metrolink trains make 16 daily stops... and Amtrak trains make 11 daily stops.” There are currently 14 Metrolink and 12 Amtrak trains operate daily through this corridor Monday through Friday and reduced number of trains on the weekends. Two of the Amtrak trains operate as “shared service trains.” These trains are shown in the Metrolink timetable and accept Metrolink tickets. Most other Amtrak trains do not stop at the Moorpark station. Union Pacific Railroad (UPRR) also operates freight trains along this corridor. Rail traffic along this corridor may increase to meet demand. 4

5. Any landscaping along the railroad ROW should be set back so that it does not encroach on any part of the railroad ROW with roots or branches and shall not block the view of railroad signals and sight distances. Landscape placement should also allow for maintenance without the need to access the railroad ROW. 5

6. To assess requirements for construction (including demolition or alteration of structures) adjacent to the railroad, plans for construction should be sent to the SCRRA Engineering Department at the following address:

   SCRRA Engineering Department
   Attn: Joseph McNeely, PE, Principal Engineer
   2558 Supply Street
   Pomona, CA 91767

   Plans may be sent to Joseph and questions addressed via email at mcneelyj@scrra.net

   Please consult SCRRA Engineering and Construction guidelines as necessary, including more information regarding ROW Encroachment, at the following web address: 6

Letter 11

COMMENTER: Todd McIntyre, Chief Strategy Officer, Southern Regional Rail Authority (SCRRA)

DATE: March 27, 2020

Response 11.1

The commenter states that all construction within the railroad ROW and work activities that affect operation must be reviewed and approved by SCCRA.

The project applicant and City will obtain authorization from SCCRA for access to the railroad ROW and any activities that may affect railway operation.

Response 11.2

The commenter states that no project drainage is permitted to drain onto railroad ROW, during or after construction.

The project is designed such that no permanent structures are located in the railroad ROW. Within the 20-foot railroad ROW, the project would include vehicle parking spaces using pervious pavement to increase stormwater retention. In addition, the project would include on-site detention facilities and storm drain inlets integrated into parking areas, and low impact development best management practices would be integrated into the building, landscaping, streetscape, and parking lot areas. These features would ensure that stormwater runoff is directed away from the ROW.

Response 11.3

The commenter requests that project include adequate fencing, walls, and protections between the project and the railway to preclude trespassing and maximize safety.

The project will include adequate barriers between the project site and the railway ROW to maximize safety at the site and for the railway. Barriers may include but are not limited to building walls where buildings are present and along the southern edge of the proposed parking spaces, a 6'-4" metal welded wire fence.

Response 11.4

The commenter clarifies the current number of trains that operate daily (14 Metrolink and 12 Amtrak trains Monday through Friday with a reduced number of trains on the weekends) and states that rail traffic along this corridor may increase to meet demand.

The IS-MND conservatively assumes average passenger train operations of 27 trains per day (16 Metrolink and 11 Amtrak). While the commenter's corrections have been added as a footnote in the Final IS-MND, the change does not affect the analysis of the project's impacts on the environment contained in the IS-MND.

In response to this comment, the following text has been added to Section 13, *Noise*, of the Final IS-MND:

Based on a comment letter dated March 27, 2020 from the Southern Regional Rail Authority (SCRRA), approximately 14 Metrolink and 12 Amtrak train operations occur per day. The discussion in the IS-MND remains unchanged as the analysis conservatively analyzes a total of 27 train trips per day compared to the 26 identified by SCRRA.

Response 11.5

The commenter states that landscaping along the ROW should: 1) be set back so it does not encroach the railroad ROW with roots or branches or block the view of railway signals and 2) allow maintenance of landscaping without accessing the railroad ROW.

This project will set back landscaping at an appropriate distance and regular maintenance will not require access to the ROW. Along the southern edge of the parking spaces, the project proposes a 6'-4" metal welded wire fence with vines (Red trumpet vine and Japanese Honeysuckle) in compliance with Metrolink landscaping design guidelines.

Response 11.6

The commenter provides the location for the online SCRRA Engineering and Construction guidelines and states that construction plans should be sent to the SCRRA Engineering Department.

The applicant and the City will refer to the guidelines provide, and project construction plans will be sent to the SCRRA Engineering Department contact provided.

Response 11.7

The commenter provides recommendations regarding the improvements to the Moorpark Ave./High St. intersection required by Mitigation Measure TRA-1. Recommendations include: 1) appropriate safety treatments should be included such that the crossing will meet FRA Quiet Zone standards after improvements are completed, 2) road widening must not encroach on the rail yard west of Moorpark Ave (because there is a rail switch immediately adjacent to the road); 3) consideration should be given to potential grade separation of the crossing; and 4) improvements should not preclude future grade separation as roadway and rail traffic volumes may increase over time. The commenter states that the intersection improvements should be coordinated with the SCRRA.

The recommendations will be implemented in the project and SSCRA will be included to the list of authorities with which traffic improvements will be coordinated.