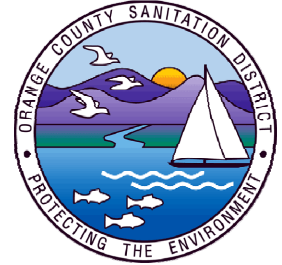


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# Initial Study

## Rehabilitation of Western Regional Sewers, Project No. 3-64

Prepared for



Orange County Sanitation District

Prepared by  
**JACOBS**<sup>®</sup>

November 2015

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## Acronyms and Abbreviations

AELUP	Airport Environs Land use Plan
APE	Area of Potential Effects
AQMP	Air Quality Management Plan
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	congestion management program
CNDDDB	California Natural Diversity Database
CO	carbon monoxide
CRHR	California Register of Historical Resources
DAMP	County of Orange Drainage Area Management Plan
EIR	Environmental Impact Report
GHG	greenhouse gas
IS	Initial Study
lb/day	pounds per day
NAAQS	National Ambient Air Quality Standards
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OCFCD	Orange County Flood Control District
OCTA	Orange County Transportation Authority
OCWD	Orange County Water District
PM <sub>10</sub>	particulate matter less than 10 microns
PM <sub>2.5</sub>	particulate matter less than 2.5 microns
Project	Rehabilitation of Western Regional Sewers
RWQCB	Regional Water Quality Control Board

OCSD	Orange County Sanitation District
ROC	reactive organic compounds
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SO <sub>x</sub>	sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers

# **1.0 Project Information**

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## **1.1 Introduction**

This Initial Study (IS) has been prepared in accordance with the California Environmental Quality Act (CEQA) guidelines and regulations. The Initial Study examines the potential for direct, indirect, growth-inducing, irreversible, short- and long-term, and cumulative environmental effects associated with the Rehabilitation of Western Regional Sewers Project (proposed Project).

## **1.2 Purpose of the Initial Study**

In accordance with Section 15367 of the California Code of Regulations, the Orange County Sanitation District (OCSD) is identified as the Lead Agency for the proposed Project. Pursuant to Section 15063(a) of the CEQA Guidelines, OCSD is required to undertake the preparation of an Initial Study to determine if the proposed action will have a significant effect on the environment. The purposes of this Initial Study are to: (1) identify potential environmental impacts, (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), (3) enable the Lead Agency to modify the proposed Project (through mitigation of adverse impacts), (4) facilitate assessment of potential environmental impacts early in the design of the proposed Project, and (5) provide documentation for the potential finding that the proposed Project will not have a significant effect on the environment or can be mitigated to a level of insignificance. This Initial Study is an informational document providing an environmental basis for subsequent discretionary actions that could be required from OCSD or other Responsible Agencies.

## **1.3 Statutory Requirements and Authority**

In the State of California CEQA Guidelines, Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include: (1) a description of the proposed Project, including the location of the proposed Project site; (2) an identification of the environmental setting; (3) an identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that some evidence exists to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the proposed Project is compatible with existing zoning, plans, and other applicable land-use controls; and (6) the name(s) of the person or persons who prepared or participated in the preparation of the Initial Study.

## 1.4 Permits and Approvals

Public agencies could use this Initial Study as the basis for their decisions to issue approvals and/or permits that could be applicable to the proposed Project. Table 1-1 provides a list of those entitlements and permits that could be required for the proposed Project.

**Table 1-1: Project Permits and Approvals**

Agency Name	Permit or Approval	Need for Permit
Caltrans District 12	Encroachment Permit/Approval of Traffic Control Plan	Work on Seal Beach Interceptor within Interstate 405 (I-405) right-of-way.
State Water Board	Construction General Permit ORDER NO. 2012-0006-DWQ NPDES NO. CAS000002	The project will result in soil disturbance of more than one acre.
Regional Water Quality Control Board	Clean Water Act Section 402 Permit	If work requires a Waste Discharge Report.
South Coast Air Quality Management District	Permit to Construct	Required if the air scrubber is selected for the Westside Pump Station
Orange County Flood Control District	Encroachment Permit	Encroachment within Orange County Flood Control District (OCFCD) right-of-way beneath channels.
Orange County Transportation Authority	Encroachment Permit	Encroachment within in Old Pacific Electric Rail right-of-way
Orange County Public Works	Building Permit/Encroachment Permit/Approval of Traffic Control Plan	Proposed improvements at West Side Pump Station located within unincorporated Rossmoor.
City of La Palma	Encroachment Permit/Approval of Traffic Control Plan	Encroachment within city streets.
City of Cypress	Encroachment Permit/Approval of Traffic Control Plan	Encroachment within city streets.
City of Buena Park	Encroachment Permit/Approval of Traffic Control Plan	Encroachment within city streets.
City of Anaheim	Encroachment Permit/Approval of Traffic Control Plan	Encroachment within city streets.
City of Los Alamitos	Encroachment Permit/Approval of Traffic Control Plan	Encroachment within city streets.
City of Seal Beach	Encroachment Permit/Approval of Traffic Control Plan	Encroachment within city streets.

## 1.5 Agency Consultation and Coordination

The agencies listed in Table 1-1 could require OCSD to obtain approvals for the proposed Project. Coordination with other agencies may be required to determine the specific nature of any future permits or approvals. Agencies will be notified pursuant to CEQA guidelines; any subsequent comments will be considered accordingly. In addition, this document is intended to provide agencies and the general

public with an environmental basis pursuant to CEQA to facilitate the dissemination of information deemed necessary to the discretionary approvals process and the approval, or conditional approval, of any aspect of the proposed Project within the jurisdiction of the agency.



## 2.0 Project Description

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### 2.1 Project Background and Location

OCSD is proposing to rehabilitate and/or replace the entire length of the Orange Western Sub-trunk, Los Alamitos Sub-trunk, the Westside Relief Interceptor, and the Seal Beach Boulevard Interceptor. These sewer lines are located in the westernmost portion of the OCSD service area and are referred to collectively as the Western Regional Sewers throughout this document (proposed Project; See Figure 2-1). Collectively, the Los Alamitos Sub-trunk, the Westside Relief Interceptor, and the Seal Beach Boulevard Interceptor convey sewage flows from the City of Seal Beach, the unincorporated portion of Orange County known as Rossmoor, the City of Los Alamitos, the City of Cypress, the City of La Palma, and other areas in the vicinity to the Westside Pump Station. The Orange Western Sub-trunk conveys flows from the cities of Cypress, Buena Park, and Anaheim to the Miller Holder Trunk and the Knott Interceptor. The Orange Western Sub-trunk is not tributary to the Westside Pump Station.

The proposed Project also proposes complete replacement of the Westside Pump Station wet well, replacement or rehabilitation of the existing force main and installation of either an air jumper or an air scrubber to improve odor control. The size and location of each pipeline is discussed further below. The proposed Project Study Area (streets and easements containing existing pipelines) and location of the existing pipelines are presented in Appendix A.

Orange Western Sub-trunk: The Orange Western Sub-trunk (Figure 2-1), constructed in 1959, is 13,940 feet long and has 38 manholes. The pipe is 21 inches in diameter. The Orange Western Sub-trunk consists of two segments. The first segment begins just north of the intersection of Crescent Avenue and Western Avenue in the City of Buena Park. The pipeline continues south on Western Avenue and turns west on West Orange Avenue before connecting to the Knott Interceptor. The second segment continues west on West Orange Avenue from the Knott Avenue intersection to the Miller Holder Trunk Sewer at the Valley View Street intersection.

Los Alamitos Sub-trunk: Los Alamitos Sub-trunk (Figure 2-1), constructed in 1959, is 34,620 feet long and has 90 manholes. The pipe diameter ranges in size from 18 to 30 inches. Approximately 15,540 feet is believed to be under capacity and will require increasing the size of the pipe (Figure 2-2). The Los Alamitos Sub-trunk is within the following cities: La Palma (La Palma Avenue and Denni Street), Cypress (Denni Street, Guardian Drive, Orange Avenue, Bloomfield Avenue, and Bloomfield Street), Los Alamitos (Bloomfield Street, W. Cerritos Avenue, Chestnut Street, Sausalito Street Oak Street, Katella Avenue, and Los Alamitos Boulevard) Seal Beach (Seal Beach Boulevard and Old Ranch Parkway) and Rossmoor (3112 Yellowtail Drive).

Westside Relief Interceptor: The Westside Relief Interceptor (Figure 2-1) was constructed under two contracts in 1959 and 1976. This line is approximately 32,100 feet long with 81 manholes. Pipe size ranges from 15 to 39 inches in diameter. Approximately 16,010 feet is believed to be under capacity and will require increasing the size of the pipe (Figure 2-2). The Westside Relief Interceptor is within the

following cities: La Palma (Crescent Avenue, Moody Street), Cypress (Moody Street, Orange Avenue, Denni Street), Los Alamitos (Denni Street, Katella Avenue, and Los Alamitos Boulevard), and Seal Beach (Seal Beach Boulevard and Old Ranch Parkway). The Los Alamitos Sub-trunk and Westside Relief Interceptor are physically connected at the intersection of Orange Avenue and Denni Street by Diversion No. 65.

Seal Beach Interceptor: Seal Beach Interceptor (Figure 2-1), constructed in 1969, is 5,530 feet long and has 8 manholes. The pipe is 51 inches in diameter. The Seal Beach Interceptor begins just south of the Westside Pump Station at the end of Old Ranch Parkway in the city of Seal Beach. The pipeline continues south across the Interstate 405 (I-405) freeway right-of-way and in Beverly Manor Road south of the I-405 freeway until merging with Seal Beach Boulevard. The pipeline then continues south in Seal Beach Boulevard until it reaches the Seal Beach Pump Station located at the intersection of Seal Beach Boulevard and Westminster Boulevard. The Seal Beach Naval Weapons Station extends to the centerline of Seal Beach Boulevard. Approximately 3,500 feet of Seal Beach Interceptor is on easement on Navy land.

Westside Pump Station: The pump station underwent a major reconstruction in 2008 that involved the replacement of the building and pumps, rehabilitation of the wet well, installation of new equipment, and the addition of an underground access structure. During this project, extensive degradation of the wet well was discovered. Repairs were made to put the wet well back in service and intended to extend the life of the wet well by another 10 to 15 years. The pump station receives sewage flows from the Los Alamitos Sub-trunk, Leisure World, and the Rossmoor/Los Alamitos area. The flow from the West Side Relief Interceptor currently bypasses the Westside Pump Station and flows directly into the Seal Beach Interceptor. The pump station discharges into the Seal Beach Interceptor via a 150-foot-long, 20-inch-diameter force main that was installed in 1995. The Seal Beach Interceptor conveys all the flow from the Westside Pump Station to the Seal Beach Pump Station.

## **2.2 Project Need**

The Western Regional Sewer pipelines have exceeded their functional life and have developed deficiencies that allow intrusion of groundwater and, in some cases, have developed hard calcium deposits which make the pipe hard to clean and impede the wastewater flow. Also, portions of both the Los Alamitos Sub-trunk (15,540 linear feet) and Westside Relief Interceptor (16,010 linear feet) are considered capacity deficient, are unable to handle projected 2040 wet weather flows, and need to be upsized to alleviate existing surcharging (Figure 2-2).

The Westside Pump Station wet well was repaired in 2008 to extend its serviceable life. The repairs to the wet well are nearing the end of their expected life, and the wet well needs to be replaced in order to be fully improved.

## 2.3 Project Purpose

The purpose of the proposed Project is to increase the life of a portion of the assets within the Western Region of OCSD's service area by another 50 years and ensure that the 2040 wet weather peak flows will be adequately contained through means that minimize impacts to the environment and maintain OCSD's policy of being a good neighbor. The proposed Project would eliminate existing surcharging and groundwater intrusion and extend the service life of the Orange Western Sub-Trunk, Los Alamitos Sub-trunk, Westside Relief Interceptor, and the Seal Beach Interceptor lines (Western Regional Sewers) by either rehabilitation of the existing lines or replacement of the lines on a new alignment within the same streets.

Without the Rehabilitation of the Western Regional Sewers and Westside Pumps Station improvements, groundwater intrusion and surcharging would continue and the wet well would continue to degrade. Additionally, OCSD would not meet requirements to accommodate 2040 wet weather flows, potentially resulting in unplanned sanitary sewer releases to the environment.

## 2.4 Project Description

The proposed Project would rehabilitate and/or replace the Orange Western Sub-Trunk, the Los Alamitos Sub-trunk, the Westside Relief Interceptor, and the Seal Beach Boulevard Interceptor pipelines (Figure 2-2); reconstruct the Westside Pump Station wet well; and add either an air scrubber or air jumper line at the Westside Pump Station. Improvements would generally be completed within the same public rights-of-way or easements as the existing pipelines and on existing OCSD property. Additionally, the Western Regional Sewers cross perpendicular to four concrete-lined OCFCD drainage channels: Bixby Channel, Federal Storm Channel, Carbon Creek, and Moody Creek. Where replacement is required, a new pipeline would typically be installed on a new alignment within the same roadway utilizing open-cut construction. Temporary sewage bypass would also be required when connecting the new pipe to the system. Trenchless methods such as pipe bursting, micro tunneling or directional drilling could also be utilized. Trenchless technologies are considered to have fewer impacts than open-cut, resulting primarily in shorter construction duration and fewer pieces of construction equipment, which in turn result in fewer impacts. Trenchless construction methods would be utilized at the following locations: between the Westside Pump Station and Seal Beach Boulevard, at all Orange County Flood Control facilities or other drainage channels, and near Willow Street/Denni Street as well as beneath Denni Street Park. Where rehabilitation is required, the existing pipeline would generally be rehabilitated in place utilizing the cured-in-place pipe (CIPP) method. The CIPP method is a trenchless process utilized to reline the existing pipelines. Rehabilitation would also include temporary sewage bypass to keep the system operational.

Subsequent to installation of the new pipe or rehabilitation of existing pipe, local and permitted connections to the mainline would be reconnected. In locations where there are non-permitted connections or locations where private laterals are connected directly to OCSD, a new local connection/system would be constructed and reconnected in accordance with OCSD policy, which requires private laterals/connections to be connected to a city- or county-owned manhole prior to being

connected to an OCSD manhole or pipeline. Subsequent to construction of the new pipe, the existing pipe and manholes will be abandoned in place and filled with concrete slurry. At this time, all areas identified for replacement that are not specifically identified for trenchless construction are evaluated in this IS as open-cut replacement. This represents a worst case scenario for environmental impacts for the proposed Project and for disclosure and consideration of impacts by the public and interested parties. Areas anticipated for both replacement and rehabilitation are shown on Figure 2-2.

In addition to pipeline and manhole rehabilitation and/or replacement, the proposed Project also includes rehabilitation/replacement of the Westside Pump Station force main, reconstruction of the Westside Pump Station wet well, and construction of either a two-stage biological/chemical air scrubber that would be located in an addition to the existing equipment building or an air jumper from the wet well to the downstream manhole. The air jumper line would be underground.

Figure 2-1: Project Area Map

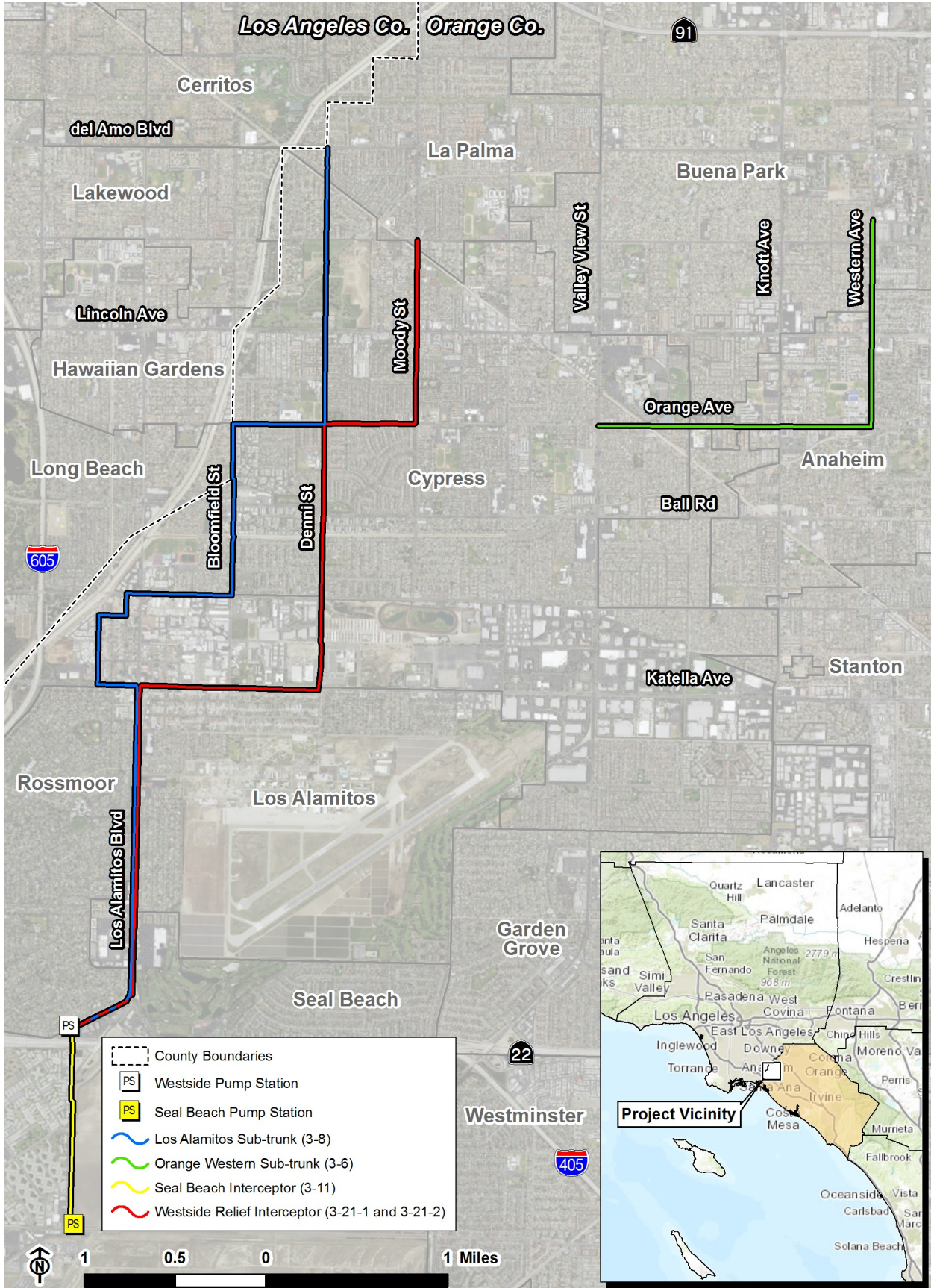
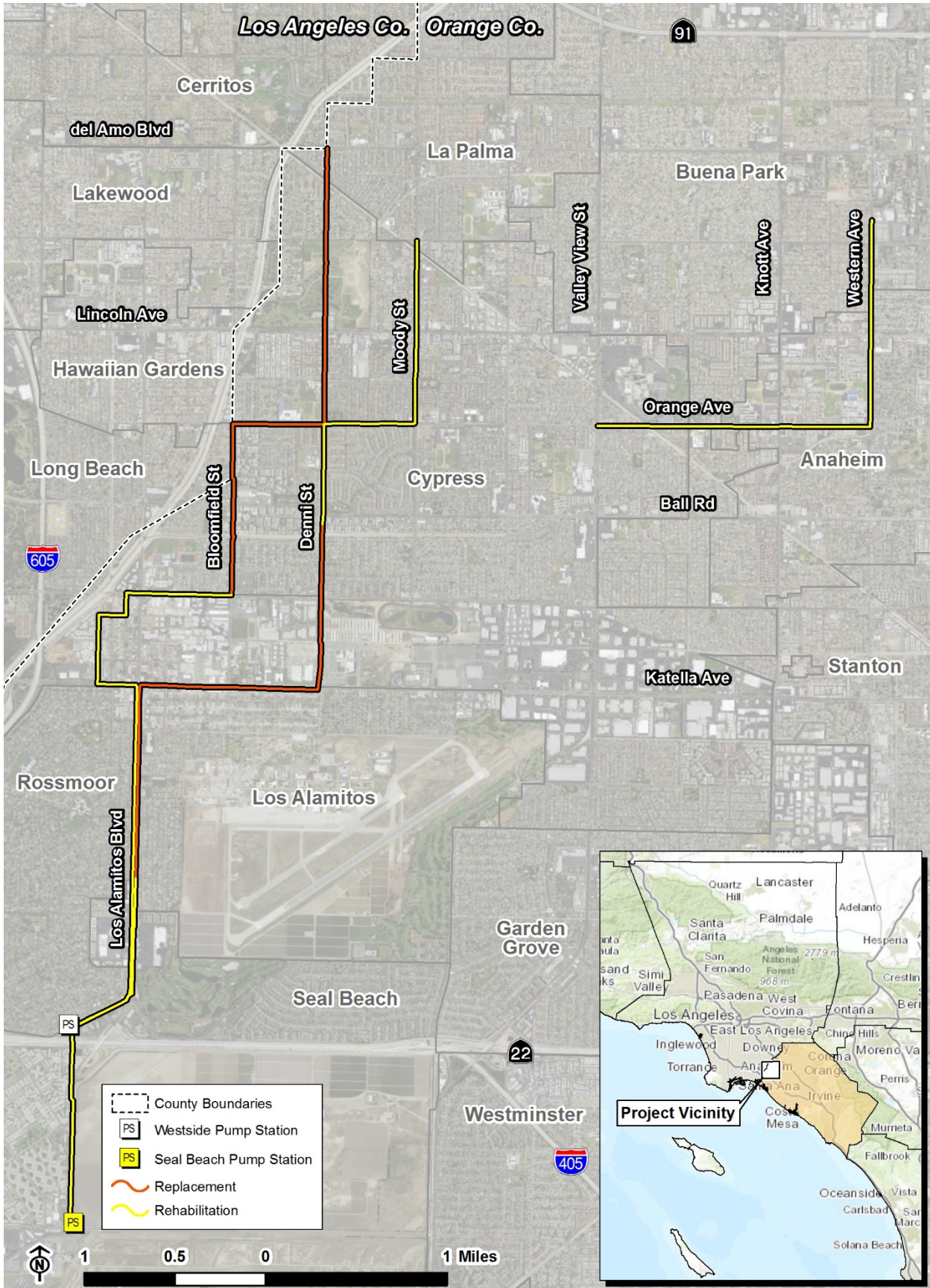


Figure 2-2: Proposed Replacement and Rehabilitation Locations



## 3.0 Environmental Checklist Form

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### 3.1 Project Description and Background

**1. Project Title**

Rehabilitation of Western Regional Sewers, Project No. 3-64

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

Orange County Sanitation District, 10844 Ellis Avenue, Fountain Valley, CA 92708

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

Daisy Covarrubias, (714) 593-7119

**4. Project Location (see Figure 2-1):**

The project is located primarily within public rights-of-way (e.g., streets and easements) in the cities of La Palma (Denni Street and Moody Street), Buena Park (Western Avenue and Orange Avenue), Cypress (Denni Street, Guardian Drive, Moody Street, Orange Avenue, Bloomfield Street, West Cerritos Avenue, Chestnut Street, Sausalito Street, Oak Street, and Katella Avenue), Anaheim (Western Avenue and Orange Avenue), Los Alamitos (Katella Avenue and Los Alamitos/Seal Beach Boulevard), Seal Beach (Seal Beach Boulevard and Beverly Manor Road), and Rossmoor (unincorporated County of Orange). The Westside Pump Station is located at 3112 Yellowtail Drive.

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

Orange County Sanitation District, 10844 Ellis Avenue, Fountain Valley, CA 92708

**6. General Plan Designation:**

- Anaheim: Transportation
- Buena Park: Transportation
- Cypress: Transportation, Medium-Density Residential, Cemetery
- La Palma: Transportation, Open Space/Recreation
- Los Alamitos: Transportation, Single-Family Residential
- Seal Beach: Transportation
- Orange County: Single-Family Residential

**7. Zoning:** The proposed Project area is within urban, developed areas within existing public rights-of-way, OCSD easements, or OCSD property. Zoning within the proposed Project area for each potentially affected jurisdiction is provided below. The proposed Project would be consistent with existing zoning and/or other land use controls (e.g., Los Alamitos Army Air Field Airport Environs Land Use Plan).

- Anaheim: Transportation
- Buena Park: Transportation
- Cypress: Transportation, Residential Single-Family Zone, Public and Semi-Public Zone
- La Palma: Transportation, Open Space/Recreation
- Los Alamitos: Transportation, Unknown
- Seal Beach: Transportation, General Commercial
- Orange County: Suburban Residential

## **8. Description of Project:**

OCSD is proposing to rehabilitate and/or replace entire lengths of the Orange Western Sub-Trunk, Los Alamitos Sub-trunk, Westside Relief Interceptor, and the Seal Beach Interceptor (see Figure 2-1). In addition to pipeline and manhole replacement and/or rehabilitation, the proposed Project also includes rehabilitation/replacement of the Westside Pump Station force main, reconstruction of the Westside Pump Station wet well, and construction of either a two-stage biological/chemical air scrubber that would be located within an addition to the existing equipment building or an air jumper between the wet well and the downstream manhole.

## **9. Surrounding Land Uses and Setting:**

The proposed Project is nearly exclusively located within and underneath arterial streets. The proposed Project crosses between private properties within an easement along the Los Alamitos sub-trunk near the intersection of Willow Drive and Denni Street. It also crosses beneath Denni Street Park, beneath Orange County Flood Control District (OCFCD) channels (Bixby Channel, Federal Storm Channel, Carbon Creek, and Moody Creek) and through Forest Lawn Memorial Park Cemetery (Forest Lawn Cemetery) along Guardian Drive. Surrounding land uses include single- and multiple-family residences; schools; parks; and neighborhood-scale commercial, public and quasi-public, and industrial uses (see Appendix A).

## **10. Other Public Agencies Whose Approval is Required:**

OCSD could be required to obtain approval from the California Department of Transportation (Caltrans); Regional Water Quality Control Board (RWQCB); South Coast Air Quality Management District; Orange County Flood Control District (OCFCD); Orange County Transportation Authority (OCTA); County of Orange; and the cities of Buena Park, Anaheim, Cypress, La Palma, Los Alamitos, and Seal Beach.

## **11. Environmental Factors Potentially Affected:**

The environmental factors checked below potentially would be affected by the proposed Project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklist on the following pages. Please see the Environmental Checklist for additional information.



<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input checked="" type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input checked="" type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input checked="" type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input checked="" type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input checked="" type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Service Systems	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

### 3.2 Determination

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required

Signature: Carla Dillon

Date: 11-30-15

Printed name: Carla Dillon

For: OCSD

OCSD will host a public scoping meeting on December 16, 2015, at 10 a.m. at the Cypress Community Center (5700 Orange Avenue, Cypress CA, 90630) to solicit comments on the proposed Project. You may provide comments during the scoping meeting or in writing. Written comments will be considered during the preparation of the Project EIR. **All comments must be received by**

**December 29, 2015.**

Submit comments via postal mail or email to:

Daisy Covarrubias, Senior Staff Analyst  
Orange County Sanitation District, Planning Division  
10844 Ellis Ave, Fountain Valley, CA 92708-7018  
Email: CEQA@ocsd.com

### 3.3 Evaluation of Environmental Impacts

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant with Mitigation Incorporation” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c) (3) (D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where this is available for review.

- b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Incorporation,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

### 3.4 CEQA Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I.	<b>AESTHETICS:</b> Would the project:				
a)	Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
II.	<b>AGRICULTURE AND FOREST RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
III.	<b>AIR QUALITY:</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e)	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>IV.</b>	<b>BIOLOGICAL RESOURCES:</b> Would the project:				
<b>a)</b>	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c)</b>	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>d)</b>	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>e)</b>	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>f)</b>	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>V.</b>	<b>CULTURAL RESOURCES:</b> Would the project:				
<b>a)</b>	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Cause a substantial adverse change in the significance of an archaeological	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	resource pursuant to §15064.5?				
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>VI.</b>	<b>GEOLOGY AND SOILS:</b> Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii)	Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii)	Seismic-related ground failure, including liquefaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv)	Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Be located on expansive soil (Table 18-1-B of the Uniform Building Code), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VII.</b>	<b>GREENHOUSE GAS EMISSIONS:</b> Would the project:				
<b>a)</b>	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>VIII.</b>	<b>HAZARDS AND HAZARDOUS MATERIALS:</b> Would the project:				
<b>a)</b>	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>c)</b>	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>d)</b>	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>e)</b>	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>f)</b>	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>g)</b>	Impair implementation of or physically interfere with an adopted emergency	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	response plan or emergency evacuation plan?				
<b>h)</b>	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>IX.</b>	<b>HYDROLOGY AND WATER QUALITY:</b> Would the project:				
<b>a)</b>	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>c)</b>	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>d)</b>	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>e)</b>	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>f)</b>	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>g)</b>	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>h)</b>	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>i)</b>	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>j)</b>	Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>X.</b>	<b>LAND USE AND PLANNING:</b> Would the project:				
<b>a)</b>	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>c)</b>	Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>XI.</b>	<b>MINERAL RESOURCES:</b> Would the project:				
<b>a)</b>	Result in the loss of availability of a known mineral resource of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b)</b>	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XII.</b>	<b>NOISE:</b> Would the project result in:				
<b>a)</b>	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>c)</b>	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>d)</b>	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>e)</b>	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>f)</b>	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XIII.</b>	<b>POPULATION AND HOUSING:</b> Would the project:				
<b>a)</b>	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b)</b>	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c)</b>	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XIV.</b>	<b>PUBLIC SERVICES:</b>				
<b>a)</b>	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Parks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Other public facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>XV.</b>	<b>RECREATION:</b>				
<b>a)</b>	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>b)</b>	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XVI.</b>	<b>TRANSPORTATION/TRAFFIC:</b> Would the project:				
<b>a)</b>	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance a circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f)	Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>XVII.</b>	<b>UTILITIES AND SERVICE SYSTEMS:</b> Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>XVIII.</b>	<b>MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 4.0 Environmental Evaluation

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The following evaluation provides responses to the questions in the Environmental Checklist. A brief explanation for each question in the Environmental Checklist is provided to adequately support each impact determination. All responses consider the whole of the action involved including construction and operational impacts as well as direct and indirect impacts. Environmental factors potentially affected by the proposed Project are presented below and organized according to the format of the Checklist.

### 4.1 Aesthetics

Would the project:

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

**No Impact** – No scenic vistas are located within the vicinity of the proposed Project. All construction activities will be temporary and occur within urban, developed areas within existing public rights-of-way or OCSD easements. Operation will not be an impact because improvements will be subterranean or part of the existing pump station. This issue will not be addressed in the EIR.

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

**Less Than Significant** – The nearest State scenic highway is Pacific Coast Highway, a State scenic highway designated by the California Department of Transportation (Caltrans 2015). Pacific Coast Highway is located approximately 0.75 miles southwest of the Seal Beach Pump Station. The proposed Project would not affect Pacific Coast Highway. To accommodate construction within Forest Lawn Cemetery, trimming and/or removal of trees and shrubs would be required. In addition several areas (e.g., Moody Street, Katella Avenue, Los Alamitos Boulevard, and Seal Beach Boulevard) include some median landscaping. The contractor will be required to provide replacement landscaping where affected. No other designated scenic resources are within the proposed Project area. No impacts to scenic resources will occur as a result of the proposed project. This issue will not be addressed in the EIR.

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

**Less than Significant Impact with Mitigation** – Rehabilitation and/or replacement of the Orange Western Sub-Trunk, Los Alamitos Sub-trunk, Westside Relief Interceptor, Seal Beach Interceptor and construction of Westside Pump Station improvements would occur primarily within developed areas within public rights-of-way or OCSD easements and would primarily be located below the ground surface. The proposed Project will result in temporary visual impacts due to the presence of heavy machinery and construction activities. Construction activities for the Western Regional Sewers would continuously move and would not remain in any one location for extended periods of

time. During construction at the Westside Pump Station, site access would require removal of a portion of the existing property fence; and the equipment building would be enlarged to house the air scrubber. The construction work will be done within the pump station site and behind the existing fence. Subsequent to completion of the improvements at the pump station, the fence will be reconstructed to match the existing fence. Temporary visual impacts associated with construction of the Western Regional Sewers activities and equipment would not substantially degrade the existing visual character or quality of the site and its surroundings but may be considered significant. Visual impacts during construction will be evaluated in the EIR and mitigation measures will be recommended, as required. If the air scrubber is implemented for the Westside Pump Station, an extension of the existing equipment building would be constructed to house the air scrubber resulting in a permanent visual change in the appearance of the OCSD property. If the air jumper is selected for installation, it would be located below grade; and the site and its surroundings would experience no appreciable change. Although the Westside Pump Station would appear very similar to existing conditions, the permanent change may be considered significant. Permanent visual changes associated with operation of the Western Regional Sewers and Westside Pump Station will be evaluated in the EIR and mitigation measures will be recommended as, required.

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

**Less than Significant with Mitigation** – The proposed Project includes the construction and operation of the Western Regional Sewers and the Westside Pump Station improvements. Construction of the Westside Pump Station would be limited to normal daytime hours. Construction activities associated with the Western Regional Sewers would occur during the day when feasible; however, it is likely that nighttime construction activities within and adjacent to residential areas may be necessary to minimize potential daytime traffic impacts. Where nighttime construction is necessary, and/or where otherwise required by local municipal code (e.g., Los Alamitos Municipal Code 17.14.040 [Light and Glare]), the contractor will be required to focus construction lighting on construction areas and direct it away from residential or other sensitive areas. All construction would be within developed areas within existing public rights-of-way or OCSD easements. Construction is temporary and would not create a new substantial source of light or glare; however, construction lighting impacts may be considered significant when near residential or other sensitive receptors. Proposed improvements do not include new permanent operational lighting and would primarily be located below ground surface. Operation of the Western Regional Sewers and Westside Pump Station will not create any new permanent source of substantial light or glare that would adversely affect nighttime views in the area. Light and glare associated with construction activities will be addressed in the EIR and mitigation measures will be recommended as required.



## 4.2 Agricultural Resources

Based on the data available from the California Department of Conservation Farmland Mapping and Monitoring Program, the proposed Project area is on lands designated “Urban and Built Up Land” (DOC 2015).

- a-e) **No Impact** – Based on the California Department of Conservation Farmland Mapping and Monitoring Program data, designated Prime Farmland is located east of Seal Beach Boulevard/Los Alamitos Boulevard on the Seal Beach Naval Weapons Station, as well as at the Joint Forces Training Base, Los Alamitos. The proposed Project area, however, is classified as urban and does not contain any farmlands, parcels encumbered under the Williamson Act, forest land, or timberland production zones. No impacts to agricultural resources will occur as a result of this Project. This issue will not be addressed in the EIR.

## 4.3 Air Quality

Criteria for determining the significance of air quality impacts are based on federal, state, and local air pollution standards and regulations. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make significance determinations. The proposed Project is located within the South Coast Air Basin (SCAB). Construction and operational activities associated with the proposed Project must be consistent with the Air Quality Management Plan (AQMP) that is managed by the South Coast Air Quality Management District (SCAQMD). The SCAQMD also has developed thresholds of significance for both construction and operational emissions.

### Thresholds of Significance for Construction Emissions:

- 75 pounds per day of reactive organic compounds (ROC)
- 100 pounds per day of nitrogen oxides (NO<sub>x</sub>)
- 550 pounds per day of carbon monoxide (CO)
- 150 pounds per day of particulate matter 10 microns in diameter or less (PM<sub>10</sub>)
- 150 pounds per day of sulfur oxides (SO<sub>x</sub>)

### Thresholds of Significance for Operational Emissions:

- 55 pounds per day of ROC
- 55 pounds per day of NO<sub>x</sub>
- 550 pounds per day of CO
- 150 pounds per day of PM<sub>10</sub>

- 150 pounds per day of SO<sub>x</sub>

Would the project:

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

**Potentially Significant Impact** – The proposed Project is located in the SCAB, which is in nonattainment for the California Ambient Air Quality Standards (CAAQS) for ozone (O<sub>3</sub>), particulate matter 2.5 microns in diameter or less (PM<sub>2.5</sub>), and PM<sub>10</sub> and in attainment for all other criteria pollutants. The proposed Project area is also in nonattainment for the National Ambient Air Quality Standards (NAAQS) for O<sub>3</sub> and PM<sub>2.5</sub>; in maintenance for CO, PM<sub>10</sub>, and NO<sub>x</sub>; and in attainment for all other criteria pollutants. Potential air quality impacts associated with the proposed Project could result from temporary construction activities including demolition, excavation, and equipment and construction vehicle usage and operations including scheduled maintenance of the system. Typical construction equipment would likely include but is not limited to the following: pavement saw, jack hammer, air compressor, excavator, front loader, dump truck, pick-up trucks, concrete truck, backhoe, crane, delivery truck, asphalt truck, compactor, and paving machine. Operational emissions would be associated with vehicle trips to complete routine maintenance; clean sewer lines and manholes; perform visual inspection utilizing closed-circuit television and camera inspection; conduct flow-monitoring, as-needed repairs, chemical dosing for odor and corrosion control, and operation the air scrubber if it is selected for the project. The proposed Project would not result in a substantial change in required maintenance activities, so operational emissions would be very similar to the existing operational emissions. The EIR will evaluate the potential for the project to generate construction emissions that could exceed federal and state air quality standards and local significance thresholds and will recommend mitigation measures as necessary to ensure compliance with the SCAQMD Air Quality Management Plan (AQMP).

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

**Potentially Significant Impact** – The proposed Project is located in the SCAB, which is in nonattainment for the CAAQS for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> and in attainment for all other criteria pollutants. The proposed Project area is also in nonattainment for the NAAQS for O<sub>3</sub> and PM<sub>2.5</sub>; in maintenance for CO, PM<sub>10</sub>, and NO<sub>x</sub>; and in attainment for all other criteria pollutants. Potential air quality impacts associated with emissions from the construction equipment and vehicle trips associated with maintenance and operation activities listed in 4.3 a). The EIR will evaluate potential for the proposed Project to generate construction emissions that could exceed federal and state air quality standards and local significance thresholds. The SCAQMD air quality model, CalEEMod Version 2013.2.2 will be used to assess potential emissions. In addition, emission factors will be obtained from SCAQMD for years 2007 through 2026. The EIR will evaluate potential air quality impacts and recommend mitigation measures as necessary to ensure compliance with the SCAQMD management plans.

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

**Potentially Significant Impact** – Potential air quality impacts would be associated with emissions from the anticipated construction equipment and vehicle trips associated with maintenance and operation activities listed in 4.3 a). Emissions associated with construction and operations could exceed SCAQMD thresholds of significance and could result in cumulatively considerable net increases in criteria pollutants. The EIR will evaluate potential cumulative emission impacts and recommend mitigation measures, as necessary.

- d) Expose sensitive receptors to substantial pollutant concentrations?

**Less than Significant with Mitigation** – Sensitive receptors are defined as populations that are more susceptible to the effects of pollution than the population at large. Sensitive receptor locations include residential areas, hospitals, schools, playgrounds, daycare facilities, elderly housing, and convalescent facilities. The proposed Project would include construction within the vicinity of sensitive receptors. Considering the temporary construction activities, it is not likely that the proposed Project would result in potentially significant impacts to sensitive receptors; however, in order to analyze impacts of the proposed Project on potential sensitive receptors, air quality analyses will be conducted (as discussed in response 4.3 b) to determine if sensitive receptors would be exposed to construction or operational emissions in excess of SCAQMD construction or operational significance thresholds. Potential air quality impacts would be associated with emissions from the anticipated construction equipment and vehicle trips associated with maintenance and operation activities listed in 4.3 a). The proposed Project would be very similar to the existing operational emissions. The EIR will evaluate potential impacts to sensitive receptors from construction equipment emissions and recommend mitigation measures, as necessary.

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

**Less Than Significant with Mitigation** – Construction equipment, as well as, construction activities from the proposed Project would emit exhaust fumes (e.g. diesel emission, fumes from asphalt paving activities, fumes from excavation soils off-gassing, etc.). Odors from these sources would be localized and generally confined to the proposed Project site. Construction activities would be completed in accordance with SCAQMD rules. Objectionable odors associated with construction activities are not anticipated to affect a substantial number of people. Operation of Western Regional Sewers and Westside Pump Station is not expected to generate objectionable odors and should reduce odors if either the air jumper line or air scrubber is installed at the Westside Pump Station. The EIR will evaluate potential impacts with regard to the creation of objectionable odors during construction and recommend mitigation measures, as necessary.

## 4.4 Biological Resources

Would the project:

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

**Less than Significant Impact** – A California Natural Diversity Database (CNDDDB) search was conducted on May 27, 2015, and updated on September 30, 2015. The search revealed occurrence records for five sensitive species within 0.25 mile of the proposed Project area: ferruginous hawk (*Buteo regalis*), western tidal-flat tiger beetle (*Cicindela gabbii*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), coast horned lizard (*Phrynosoma blainvillii*), and western pond turtle (*Emys marmorata*); and one State/federally listed endangered species, salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*). The proposed Project area is located within paved public rights-of-way within city streets or OCSD easements. No habitat for any of the species occurs within the proposed Project area. Construction and operation of the proposed Project would not have any effect either directly or through habitat modification on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. This issue will not be addressed in the EIR.

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

**No Impact** – The proposed Project is located within paved public rights-of-way within city streets or OCSD easements. The proposed Project area does not support any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. This issue will not be addressed in the EIR.

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

**Less than Significant Impact** – Although the proposed Project site is located within a developed urban area, both the existing alignments of the Los Alamitos Sub-trunk and the Westside Relief Interceptor cross beneath Bixby Channel, Carbon Creek, and/or Moody Creek; and the Seal Beach Interceptor crosses below the Federal Storm Channel. All of these channels

are included in the U.S. Fish and Wildlife Service National Wetlands Inventory database (USFWS 2015) as riverine wetlands (Cowardin Classification: Riverine, streambed, seasonally flooded, excavated; Cowardin et al. 1979). It is likely that these channels are Other Waters of the United States and would be under United States Army Corps of Engineers (USACE) jurisdiction. It is possible that that they may also contain jurisdictional wetlands pursuant to the Clean Water Act. However, based on OCSD as-built drawings, existing pipes at these locations are approximately 15 to 22 feet beneath the channels. The proposed Project would either rehabilitate the existing lines which run beneath the channels or construct a new line beneath the channels at approximately the same elevation utilizing trenchless technology that would not affect the channels above (e.g., pipe bursting, jack and bore, etc.). Although not anticipated, if groundwater is encountered during the project, the contractor will need to obtain a dewatering permit from the Santa Ana Regional Water Quality Control Board to discharge the groundwater or the groundwater will be containerized and disposed of in accordance with federal and state law. Based on the current proposed construction requirements, no work within the channels is anticipated; and rehabilitation/replacement of the pipeline would not disturb the channel. No federally protected wetlands would be affected. This issue will be addressed in the EIR only if there is change in the proposed Project that will disturb these channels.

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

**No Impact** – The proposed Project is located within paved public rights-of-way within city streets or OCSD easements. It does not support native habitat or any migratory fish or wildlife species. Furthermore, the proposed Project site is not located within a migratory wildlife corridor or native wildlife nursery site. No impacts to these resources are anticipated as a result of the proposed Project. This issue will not be addressed in the EIR.

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

**Less Than Significant with Mitigation** – Several cities within the proposed Project area have tree protection ordinances or policies regarding tree protection. Within Forest Lawn Cemetery, the Los Alamitos Sub-trunk is capacity deficient and will require replacement on a new parallel alignment within the existing road (Guardian Avenue). The current alignment passes beneath a small group of mature trees. Trimming or removal would be required to accommodate the new alignment. At this time, only the areas within or adjacent to the Forest Lawn Cemetery would require removal of mature trees. Removal and avoidance will be considered further during development of the EIR. OCSD or the contractor will coordinate with Forest Lawn Cemetery to determine replacement trees/vegetation. This issue will be evaluated in more detail within the EIR.

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

**Less Than Significant Impact** – The proposed Project is located within the Planning Area of the Proposed Orange County Transportation Authority Habitat Conservation Plan/Natural Community Conservation Plan, but it is not located within the Permit Area. Additionally, the proposed Project is located within paved public rights-of-way within city streets or OCSD easements and will have no impacts on native habitats or sensitive species. The proposed Project will not conflict with the provisions of the proposed Orange County Transportation Authority Habitat Conservation Plan/Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. This issue will not be addressed in the EIR.

## 4.5 Cultural Resources

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

**Less Than Significant Impact** – The proposed Project is primarily located within paved public rights-of-way within city streets or OCSD easements. Based on a review of the records at California Historical Resources Information System Information Center, no previously documented historical resources are identified within the boundaries of the proposed Project area; however, a cultural resources survey of the proposed Project alignment indicates that a portion of the alignment crosses the Forest Lawn Cemetery in the City of Cypress. Based on the survey, Forest Lawn Cemetery was found to be eligible for inclusion in both the National Register of Historic Places (NHRP) and the California Register of Historical Resources (CRHR) as a historic district with four primary contributing elements. These elements include the Ascension Mausoleum, Church of Our Fathers, mortuary building, and its associated facilities maintenance building, all of which are original to the construction of Forest Lawn Cemetery. While a segment of the proposed Project will be undertaken within the boundaries of Forest Lawn Cemetery, alignments will avoid all identified elements; therefore activities are not expected to affect any of the individual elements that contribute to Forest Lawn Cemetery’s significance and eligibility. The proposed Project will have less than significant impact on historic resources as defined in Section 15064.5.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

**Less Than Significant Impact with Mitigation** – The proposed Project is primarily located within paved public rights-of-way within city streets or OCSD easements. As such, the proposed improvements are expected to affect only areas that have already been disturbed. A records search within a 1/8-mile radius of the proposed Project indicated that the proposed alignment

falls within, or adjacent to, two previously recorded and disturbed archaeological sites, both of which may retain subsurface artifacts. One of these sites, P-30-001352, was described as a secondary marine shell deposit encompassing 10,000 square meters. The southern half of the site was destroyed by the construction of I-405, and the northern half has since been built over with a parking lot and corporate buildings. Given the high degree of disturbance, this site has little to no integrity and would not be eligible for inclusion in either the NRHP or CRHR. The second site, P-30-001502, was first documented in 1999 as a scatter of artifacts, including shell, faunal and human bone, and stone tools. The westernmost boundary of the site is within the proposed Project's alignment along Seal Beach Boulevard. The last investigation of this site (URS 2010) reported the presence of prehistoric archaeological materials.

While the proposed Project is not expected to disturb the two previously documented archaeological sites; excavation in these areas could displace previously undisturbed soils containing archaeological materials. The EIR will evaluate potential impacts to unknown archaeological resources and will recommend mitigation measures, as necessary.

Pursuant to SB 18 and AB 52, correspondence with Native American representatives to address potential impacts to tribal resources, if any, is currently underway. The EIR will recommend mitigation measures for any identified tribal resources through discussion with the affected tribes when tribal representatives have had the opportunity to comment.

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

**Less than Significant Impact with Mitigation** – The proposed Project is located primarily within paved public rights-of-way within city streets or OCSD easements. As such, the proposed improvements would primarily impact areas that have already been disturbed; however, construction could involve excavation into native soils and impact unique paleontological resources. The EIR will evaluate potential impacts to paleontological resources and recommend mitigation measures, as necessary.

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

**Less than Significant Impact with Mitigation** – The proposed Project is located primarily within paved public rights-of-way within city streets or OCSD easements. As such, the proposed improvements are expected to affect only areas that have already been disturbed; however, a portion of the proposed Project is located in Forest Lawn Cemetery. Significant impacts to known burials at the cemetery are not anticipated, as subsurface Project-related activities are expected to be within the limits of the pavement or within existing easements within the cemetery; however, given the close proximity of the project to existing interments, close coordination with Forest Lawn Cemetery will be required. OCSD will coordinate proposed improvements within Forest Lawn Cemetery to identify locations of interments and develop mitigation measures, including the new alignment within Guardian Drive. In addition, the

construction could involve excavation into native soils, potentially resulting in inadvertent discovery of unknown remains. The EIR will evaluate potential for impacts to human remains and recommend mitigation measures, as required.

## 4.6 Geology and Soils

Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

**Less than Significant Impact** – The proposed Project area falls within earthquake fault zones, as delineated on the Alquist-Priolo Earthquake Fault Zoning Map; however, the proposed Project is not located within a special study zone and would be constructed within existing streets and OCSD easements. The proposed Project would rehabilitate or replace an existing system and would be designed and constructed in conformance with the current Uniform Building Code and California Building Code seismic engineering standards. Construction and operation of the proposed Project will not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death, from the rupture of a known earthquake fault as a result of the proposed improvements. This issue will not be addressed in the EIR.

- ii. Strong seismic ground shaking?

**Less Than Significant Impact** – The proposed Project site is located in a seismically active portion of southern California, and the potential exists for strong seismic ground-shaking. The Newport-Inglewood Fault is located approximately 1 mile south of the Westside Pump Station. The proposed Project would be designed and constructed in conformance with the current Uniform Building Code and California Building Code seismic engineering standards. Construction and operation of the proposed Project will not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death, from strong seismic ground-shaking as a result of the proposed improvements. This issue will not be addressed in the EIR.

- iii. Seismic-related ground failure, including liquefaction?

**Potentially Significant Impact** – The potential for seismic-related ground failure is associated with the probability of severe ground-shaking as a result of an earthquake or a nearby active fault. Liquefaction is the phenomenon that occurs when saturated granular



soils develop high pore water pressures during seismic shaking and behave like a heavy fluid. This phenomenon generally occurs in areas of high seismicity where groundwater is shallow and loose granular soils or hydraulic fill soils subject to liquefaction are present. For liquefaction to develop, loose granular sediments below the groundwater table must be present; and shaking of sufficient magnitude and duration must occur.

The proposed Project is located in an area mapped as a liquefaction hazard zone (DOC 2015). Appropriate design considerations would be made to ensure the proposed improvements do not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death, from seismic-related ground failure, including liquefaction. Exposure of people or structures to potential substantial adverse effects, including risk of loss, injury, or death, from seismic-related ground failure, including liquefaction, as a result of the proposed improvements could occur. The EIR will evaluate potential impacts associated with strong seismic-related ground failure, including liquefaction, and will recommend mitigation measures, as required.

iv. Landslides?

**Less than Significant Impact** – The proposed Project area is generally flat and has a low susceptibility for landslides (DOC 2015). The Proposed sewer line improvements are subgrade and have no exposure to landslides. Implementation of the proposed Project will not expose people or structures to adverse effects associated with landslides. Exposure of people or structures to potential substantial adverse effects, including risk of loss, injury, or death, associated with landslides as a result of the proposed improvements is considered to be a less than significant impact. This issue will not be addressed in the EIR.

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

**Less than Significant Impact** – The proposed Project is located within paved public rights-of-way within city streets or OCSD easements. As such, the proposed improvements would primarily impact areas that have already been disturbed and covered by fill during roadway construction. Any potential for wind erosion would be limited to the area under construction. The proposed improvements will require excavation of material and, where suitable, on-site soils will be reused as fill. Excavation stockpiles would be watered and/or covered and stored appropriately to limit loss due to erosion. The proposed improvements will not result in substantial soil erosion or loss of topsoil. Impact associated with substantial soil erosion or loss of topsoil is less than significant and will not be addressed in the EIR.

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

**Less than Significant Impact** – Evaluation of liquefaction and landslides is provided in responses a) iii and iv, respectively. The proposed improvements would be designed and constructed in conformance with the recommendations of a project specific geotechnical report, in accordance with the current Uniform Building Code and California Building Code seismic engineering standards and other applicable building codes. Backfill would be placed to meet standard engineering design requirements and local grading practices. Potential impacts due to an unstable geologic unit or soil, resulting in lateral spreading, subsidence, or collapse will be avoided. Impacts on the project associated with on- or off-site lateral spreading, subsidence, or collapse would be less than significant. This issue will not be addressed in the EIR.

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

**Less than Significant Impact** – Section 1803 of the California Building Code (2013) pertains to soils and foundations and design, testing and reporting requirement for structures/foundations resting on soils with an expansion index greater than 20, determined in accordance with ASTM D 4289. Although expansive soils may exist within the proposed Project area, the proposed improvements will be made to an existing system and will be designed in compliance with requirements of governing jurisdictions and applicable building codes. The proposed Project does not involve construction of foundations and would not result in a significant adverse impact from expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risk to life or property. This issue will not be addressed in the EIR.

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

**No Impact** – No septic tanks or alternative wastewater disposal systems will serve the proposed Project. The proposed Project will not result in impacts related to septic tanks or alternative wastewater disposal systems. This issue will not be addressed in the EIR.

## 4.7 Greenhouse Gas Emissions

Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Less than Significant Impact** – The proposed Project will take multiple years to construct, requiring concurrent construction operations by multiple contractors. Typical construction equipment could include but is not limited to the following: pavement saw, jack hammer, air compressor, excavator, front loader, dump truck, pick-up trucks, concrete truck, backhoe, crane, delivery truck, asphalt truck, compactor, and paving machine. Operational emissions would be associated with vehicle trips to complete routine maintenance; clean sewer lines and manholes;

perform visual inspections of lines; and conduct flow-monitoring, as-needed repairs, and chemical dosing for odor and corrosion control. Also, there is potential for operational emissions and indirect emission associated with energy usage if an air scrubber is constructed at the Westside Pump Station.

The SCAQMD has adopted interim greenhouse gas (GHG) significance thresholds of 10,000 metric tons per year for carbon dioxide (CO<sub>2</sub>) equivalent (CO<sub>2</sub>e). It is unlikely CO<sub>2</sub>e emissions from construction of this project would approach these levels, which are more typical of operational emissions from industrial facilities and impacts would be less than significant. The EIR will analyze potential GHG emissions during both construction and operation and evaluate them in relation to the significance thresholds established by the SCAQMD.

- b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**Less than Significant Impact** – OCSD has not adopted any specific plans, policies, or regulations for reducing GHGs. The SCAQMD has several programs available for reducing GHG emissions, including the Climate Change Policy approved in 2008 and the Green Policy approved in 2009. The Climate Change Policy was enacted for the purpose of assisting businesses and local government agencies with reducing carbon emissions, while the Green Policy guides SCAQMD decisions relative to reducing its own carbon emissions. The SCAQMD has adopted an interim GHG significance threshold of 10,000 metric tons per year for CO<sub>2</sub>e. Construction GHG emissions will be quantified and reported in the EIR. Refer to section 4.7 a) for a list of typical construction equipment and operational activities. Operational emissions would primarily be associated with vehicle trips associated with maintenance of the Western Regional Sewers, and if installed, the future energy use for the air scrubber. Operational emissions will be evaluated in the EIR, but are anticipated to be far below the significance threshold. Operational emissions are not anticipated to conflict with any polices or plans.

## 4.8 Hazards and Hazardous Materials

Would the project:

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

**Less than Significant Impact** – The proposed improvements may require transport of hazardous materials (e.g., petroleum, solvents, lubricants, etc.) to the proposed Project site during construction. Operations could require transport of other chemicals (magnesium hydroxide, hydrogen peroxide, sodium hydroxide, ferrous chloride, etc.) to control odor and corrosion that may be added directly to the sewers. The project will be required to comply with laws and regulations regarding transport use and disposal of hazardous materials. With compliance with applicable laws and regulations, the proposed Project will not result in a significant hazard to the

public or environment; and impacts will be less than significant. This issue will not be addressed within the EIR.

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

**Less than Significant Impact** – The proposed improvements may require transport of hazardous materials (e.g., petroleum, solvents, lubricants, etc.) to the proposed Project site during construction. Operations could require transport of other chemicals (magnesium hydroxide, hydrogen peroxide, sodium hydroxide, ferrous chloride, etc.) to control odor and corrosion that may be added directly to the sewers. However, neither the construction nor operation of the project will result in reasonably foreseeable upset or accident conditions. Potential for the proposed Project to result in a release of hazardous materials that would create a significant hazard to the public or the environment will be less than significant. This issue will not be addressed within the EIR.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

**Less than Significant Impact with Mitigation** – Twenty-three schools located within 0.25 mile of the proposed Project and are listed in the table 4.1 below. Construction of the proposed improvements may require use of hazardous materials (e.g., petroleum, solvents, lubricants, etc.). Additionally, construction equipment would emit diesel particulates; and excavation of contaminated soils could emit volatile organic compounds. At this time it is not anticipated that the proposed Project would involve handling or use of acutely hazardous materials. The EIR will evaluate potential use and/or emissions of hazardous materials near schools and will recommend mitigation measures, as required.

<b>Table 4-1: Schools within 0.25 Mile of the Proposed Project Area</b>		
<b>School Name</b>	<b>Address</b>	<b>City</b>
Christ the King Elem School	3591 Orangewood Avenue	Los Alamitos
Montessori School-Eureka	4161 Green Avenue	Los Alamitos
St John's-Epis	641 South Western Avenue	Anaheim
Elk Grove Montessori Elementary	8271 Gay Street	Cypress
Adventist Union School	4321 Cerritos Avenue	Cypress
Center For Early Education	4460 Lincoln Avenue	Cypress
Rosecrans Elementary	4351 Orange Avenue	Cypress
Walton Middle	3715 W. Orange Avenue	Anaheim
Tubman (Harriet) Continuation High School	501 S. Western Avenue	Anaheim
Foxborough Elementary	320 Danbrook Street	Anaheim
Wood Canyon Elementary	195 N. Western Avenue	Anaheim
Valencia Elementary	9281 Denni Street	Cypress
Workman Avenue Elementary	4545 Myra Avenue	Cypress
Cox Bar Elementary	8710 Moody Street	Cypress
Cuddeback Elementary	4631 La Palma Avenue	La Palma
El Rincon Elementary	9739 Denni Street	Cypress

<b>Table 4-1: Schools within 0.25 Mile of the Proposed Project Area</b>		
<b>School Name</b>	<b>Address</b>	<b>City</b>
Avalon (K-12)	10821 Oak Street	Los Alamitos
Two Harbors Elementary	10862 Bloomfield Street	Los Alamitos
International Elementary	3591 Cerritos	Los Alamitos
California Academy of Mathematics & Science	4112 Cerritos Avenue	Los Alamitos
Educational Partnership High (Ind. Study)	10291 Bloomfield Street	Los Alamitos
Holder Elementary	720 S. Western Avenue	Anaheim
Sawyers Bar Elementary	9500 Holder Street	Buena Park

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

**Less than Significant with Mitigation** – Excavation will be required for rehabilitation and/or replacement of the Western Regional Sewers and for the proposed improvement of the Westside Pump Station. Based on a review of the State Water Resource Control Board’s Geotracker, multiple sites that are on the list compiled pursuant to Government Code 65962.5 are adjacent to the proposed Project site but not located on the site; however, excavated soils may have been affected by contamination from adjacent facilities. The EIR will evaluate potential impacts on the proposed Project from adjacent contaminated sites and will recommend mitigation measures, as required.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

**Less than Significant Impact** – Portions of the proposed Project are located within the Los Alamitos Army Air Field Airport Environs Land use Plan (AELUP). Neither construction nor the operation of the proposed Project will result in any safety hazard impacts for people associated with activities within the AELUP. This issue will not be addressed in the EIR.

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

**No Impact** – The proposed Project is not located within the vicinity of a private airport. The proposed Project will not result in a safety hazard related to a private airstrip for people residing or working in the proposed Project area. This issue will not be addressed in the EIR.

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

**Less than Significant Impact with Mitigation** – Rehabilitation and/or replacement of the pipelines throughout the proposed Project area would require construction activities to occupy up to one and, in some cases, more than one lane of the existing roadway. This would result in temporary lane and or street closures for replacement locations (see Figure 2-2). The contractor will be required to provide local/emergency access at all times; however, temporary closures could hinder evacuation during an emergency. The EIR will evaluate potential impacts on emergency response/evacuation plans and will recommend mitigation measures, as required.

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

**No Impact** – The proposed Project is not adjacent to or near wildland areas or areas where wildlands are adjacent to urbanized areas. The proposed Project will have no impacts on people or structures due to a significant risk of loss, injury, or death involving wildland fires. This issue will not be addressed in the EIR.

## 4.9 Hydrology and Water Quality

Would the project:

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

**Less than Significant Impact** – The proposed Project will disturb more than one acre and will be required to comply with the requirements of the State Water Board Construction General Permit (ORDER NO. 2012-0006-DWQ National Pollutant Discharge Elimination System (NPDES) Permit NO. CAS000002) and will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP addresses the implementation of best management practices (BMPs) to address stormwater discharges from the construction site that otherwise could contribute to potential violations of water quality standards or waste discharge requirements. Additionally, construction activities will comply with the requirements of the applicable County of Orange Drainage Area Management Plan (DAMP) for public works construction projects, which includes details for management of stormwater throughout Orange County and compliance with city and county individual NPDES permits, as applicable. All public works construction contracts in Orange County are governed by “Standard Specifications for Public Works Construction.” Section 7 of these standard specifications imposes specific construction practices, which are included within DAMP Appendix H as structural and nonstructural BMPs for public works construction. In general, the standard specifications require the contractor to keep informed of, observe, and comply with state and federal laws and county and municipal ordinances and regulations.

Excavation will occur within the proposed Project site. The majority of the excavation areas are paved. Groundwater in the proposed Project area occurs approximately 50 to 70 feet below mean

sea level (OCWD 2014) and is not anticipated to be encountered during construction of the proposed Project. In the event that perched groundwater zones are encountered, a dewatering permit would be obtained from the Santa Ana Region Water Quality Control Board prior to any dewatering. Depending on the environmental analysis of the water, water meeting discharge requirements would be discharged to the storm drains. Water not meeting discharge requirements would need to be treated prior to discharge or hauled to a treatment facility.

Construction staging would occur on the proposed Project site, with the exception of temporary parking of vehicles on the adjacent roads. Equipment will be inspected to prevent leaks and will be maintained as part of customary construction practices. Therefore, any residual oil, grease, and other fuel products from equipment would be negligible and would not result in significant impacts on surface or groundwater.

Subsequent to the completion of the construction activities, surface areas would be repaved or otherwise restored to preconstruction conditions. Operation of the proposed Project would not affect surface or groundwater.

The proposed Project would not result in a significant impact to on- or off-site water quality or water quality of receiving waterbodies if discharges are necessary. This topic will not be discussed in the EIR.

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

**Less than Significant Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and improvements at the Westside Pump Station will not result in a depletion of groundwater supplies. The construction and operation of the proposed Project would not interfere with groundwater recharge. Proposed Project impacts on groundwater supplies or recharge will be less than significant. This topic will not be discussed in the EIR.

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

**Less than Significant Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station would primarily be below the paved road surface and will have a less than significant effect on the existing drainage pattern of the site or area. The Western Regional Sewers cross perpendicular to four concrete-lined OCFCD drainage channels (Bixby Channel, Federal Storm Channel, Carbon Creek, and Moody Creek); however, proposed improvements will go beneath the channel, using underground trenchless technology. The proposed Project will not require work within the channels, will not

alter the existing channels within the site, and will not result in any substantial erosion or siltation on- or off-site. Potential project impacts on drainages patterns will be less than significant. This topic will not be discussed in the EIR.

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

**Less than Significant Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station would primarily be below the paved road surface and beneath Bixby Channel, Federal Storm Channel, Carbon Creek, and Moody Creek and will not have any substantial effect on the existing drainage pattern of the site or area or the course of a river or stream. The proposed Project would not result in new impervious surface. Subsequent to construction, the street would be repaved to preconstruction conditions. The West Side Pump Station improvements also would not result in new impervious surfaces and therefore would not substantially increase the rate or amount of surface runoff that would result in flooding on or off site. The proposed Project will not have a significant effect on the existing drainage pattern or result in flooding. This topic will not be discussed in the EIR.

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

**No Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station are intended to accommodate 2040 wet weather flows and eliminate surcharging. The proposed Project is primarily below grade, and the road surface will be returned to its original or better condition subsequent to construction. During construction, BMPs would be implemented to control erosion and sedimentation from excavated soil in stormwater runoff. This would minimize erosion and sedimentation associated with stormwater from affecting surface waters. Subsequent to construction, the proposed Project would not result in any new impervious surfaces. The proposed Project would not create or contribute runoff and would have no impact to stormwater drainage systems or provide any source of polluted runoff. The proposed Project would have no impact on existing or planned drainage systems or provide additional sources of polluted runoff. This topic will not be discussed in the EIR.

- f) Otherwise substantially degrade water quality?

**Less Than Significant Impact** – Refer to Response a) above, which addresses impacts to water quality. The proposed Project is not anticipated to substantially degrade water quality. This topic will not be discussed in the EIR.

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



**No Impact** – Construction of housing is not associated with the proposed Project. This topic will not be discussed in the EIR.

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

**No Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station would be below grade. The proposed Project will not include structures that would impede or redirect flood flows. Therefore, no impacts would be associated with the placement of structures that would impede or redirect flood flows within a 100-year flood hazard area. This topic will not be discussed in the EIR.

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

**No Impact** – No levee or dam is located within the proposed Project area. The proposed Project is primarily located below ground and will not expose people or structures to any significant risk of loss or injury or contribute to flooding as a result of the failure of a levee or dam. This topic will not be discussed in the EIR.

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

**No Impact** – Based on the location of the proposed Project site, the site is not likely to be inundated by a seiche, tsunami, or mudflow. This topic will not be discussed in the EIR.

## 4.10 Land Use and Planning

Would the project:

- a) Physically divide an established community?

**Less than Significant Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station would be constructed within existing streets and OCSD easements. Access to homes and businesses would be maintained during construction. Subsequent to construction, access would be the same as prior to construction. Construction and operation of the proposed Project will not divide an established community. This topic will not be discussed in the EIR.

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

**Potentially Significant Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station would not change existing land uses; however, due to the potential need for nighttime construction and anticipated construction noise, the proposed Project may conflict with existing plans or regulations pertaining to nighttime construction, nighttime construction lighting, and noise where there are sensitive land uses affected. The EIR will evaluate conflicts with existing general plan designations or zoning ordinances and then will evaluate what the associated impact with the inconsistency would be and will recommend mitigation measures, as required.

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

**Less Than Significant** – The proposed Project is located within the Planning Area of the Proposed Orange County Transportation Authority Habitat Conservation Plan/Natural Community Conservation Plan, but it is not located within the Permit Area. Additionally, the proposed Project is located within paved public rights-of-way within city streets or OCSD easements and would have no impacts on native habitats or sensitive species. It would not conflict with the provisions of the proposed Orange County Transportation Authority Habitat Conservation Plan/Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. This issue will not be addressed in the EIR.

## 4.11 Mineral Resources

Would the project:

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

**No Impact** – The proposed Project will not use mineral resources and will not affect the availability of any known mineral resources. The proposed Project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. This topic will not be discussed in the EIR.

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

**No Impact** – The proposed Project site is not located in a delineated mineral resource area. The proposed Project will not result in the loss of availability of a locally important mineral resource recovery site. This topic will not be discussed in the EIR.

## 4.12 Noise

Would the project result in:

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

**Potentially Significant Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station have the potential to create temporary noise increases through construction equipment usage and vehicle trips generated by construction workers and supply/haul trucks traveling to and from the proposed Project site. Construction equipment usage is anticipated to generate the loudest noise levels during construction that could exceed local ordinance standards within the following areas: City of La Palma, City of Buena Park, City of Anaheim, City of Cypress, City of Los Alamitos, City of Seal Beach, and unincorporated areas of Orange County (Rossmoor). Typical construction equipment would likely include but is not limited to the following: pavement saw, jack hammer, air compressor, excavator, front loader, dump truck, pick-up trucks, concrete truck, backhoe, crane, delivery truck, asphalt truck, compactor, and paving machine. Operational noise would be associated with vehicle trips to complete routine maintenance; clean sewer lines and manholes; perform visual inspection utilizing closed-circuit television and camera inspection; conduct flow-monitoring, as-needed repairs, and chemical dosing for odor and corrosion control; and operation of the air scrubber, if included in the project. All scrubber equipment would be installed within an extension of the existing building. Completion of the proposed Project would result in no significant change of operational noise from the baseline conditions.

Table 4-1 below summarizes the noise restrictions specified in applicable ordinances. Additionally, night construction may be required; and nighttime construction noise levels may also exceed/conflict with general plan/local ordinance standards. The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) will be used to assess potential short-term construction impacts throughout the proposed Project area. The EIR will evaluate potential noise impacts, including exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies and will recommend mitigation measures, as required.

**Table 4-2: Noise Level Restrictions per Local Ordinances**

City or County	Applicable Noise Ordinance	Noise Level Threshold	Noise Restrictions
City of La Palma	Article III, Division 1, Section 44-267 Noise	n/a	Construction activities are prohibited on Monday – Friday from 5:00 p.m. to 7:00 a.m., Saturday from 5:00 p.m. to 7:00 a.m., and Sundays and holidays. Modification of construction hours may be granted for temporary uses per <a href="#">section 44-1007(7)</a> .
City of Buena Park	Title 8, Chapter 8.28 Noise	n/a	Construction is prohibited on Sundays and any other day between the hours of 8:00 p.m. and 7:00 a.m.
City of Anaheim	Title 6, Chapter 6.73 Noise	n/a	Unreasonable noise is prohibited between the hours of 10:00 p.m. and 7:00 a.m.
City of Cypress	Article VII, Chapter 13, Section 13-70 Noise	n/a	Construction activities are prohibited between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, 8:00 p.m. and 9:00 a.m. on Saturdays, and any time on Sunday and federal holidays. A variance will be required if construction activities occur outside the specified days and times.
City of Los Alamitos	Title 17, Division 3, Chapter 17.24 Noise	n/a	Construction activities are prohibited between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or any time on Sunday and federal holidays. A variance will be required if construction activities occur outside the specified days and times.
City of Seal Beach	Title 7, Chapter 7.15 Noise	n/a	Construction activities are prohibited between 8:00 p.m. and 7:00 a.m. on weekdays, 8:00 p.m. and 8:00 a.m. on Saturdays, or any time on Sundays and holidays.
Unincorporated Orange County	Division 6, Article 1, Section 4-6	n/a	Construction activities are prohibited between 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or any time on Sunday or federal holidays.

n/a = not applicable

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

**Less than Significant Impact with Mitigation** – Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station will be located near various sensitive receptor locations and could expose of persons to or generation of excessive groundborne vibration or noise during construction. Groundborne vibration and groundborne noise levels are generally caused by impact devices such as pile driving. Although use of these devices is not anticipated during construction, groundborne vibration from heavy equipment operations could occur. The Federal Transit Administration (FTA) *Transit Noise and*

*Vibration Impact Assessment Manual* provides vibration impact criteria and recommended methodologies and guidance for assessing potential vibration impacts. The EIR will evaluate potential groundborne vibration and noise impacts associated with the anticipated construction equipment. Typical equipment could include but is not limited to the following: pavement saw, jack hammer, air compressor, excavator, front loader, dump truck, pick-up trucks, concrete truck, backhoe, crane, delivery truck, asphalt truck, compactor, and paving machine.

Following construction, only the potential operation of the air scrubber at Westside Pump Station could result in groundborne noise or vibration. The air scrubber would be constructed within an extension to an existing equipment building which would attenuate the overall noise in most cases. The EIR will evaluate potential noise impacts, including exposure of persons to excess noise and vibration. Additional mitigation measures would be developed to further reduce noise and vibration from the Westside Pump Station.

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

**Less than Significant Impact with Mitigation** – Only the potential operation of the air scrubber at Westside Pump Station could result in a permanent increase in ambient noise levels in the project vicinity. The air scrubber would be constructed within an extension to an existing equipment building, which would attenuate the overall noise in most cases. The EIR will evaluate potential noise impacts, including operational noise from the air scrubber and associated increases in ambient noise conditions. If necessary, additional mitigation measures will be developed to further reduce potential permanent increases in ambient noise conditions.

- d) A substantial temporary or periodic increase in ambient noise levels in the project the ambient noise conditions?

**Potentially Significant Impact** – Refer to Response 4.12 a) above for discussion of potential construction noise. In addition weekend and/or nighttime construction may be required to minimize project effects on traffic and/or other sensitive day time land uses (schools, Los Alamitos Race Course, etc.). The EIR will evaluate noise associated with construction and will recommend mitigation measures, as required.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**Less than Significant Impact** – Portions of the proposed Project are located within the Los Alamitos Army Air Field AELUP. Aircraft noise within the portions of the proposed Project area within the AELUP is required to conform to noise restrictions established in the AELUP. Rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station will have no effect on noise or noise contours associated with Los

Alamitos Joint Forces Training Base and would not expose people residing or working in the proposed Project area to excessive noise levels. This topic will not be discussed in the EIR.

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

**No Impact** – The proposed rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station is not located within the vicinity of a private airstrip. This topic will not be discussed in the EIR.

## 4.13 Population and Housing

Would the project:

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

**No Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and improvements of the Westside Pump Station would not directly or indirectly induce substantial population growth in the area because the proposed Project involves rehabilitation and/or replacement of the Western Regional Sewers and new construction to replace a wet well at an existing pump station; these components have exceeded their functional life. Capacity deficient segments would be increased to accommodate 2040 wet weather flows; however, the proposed rehabilitation and/or replacement would not increase the capacity of the system and would not directly or indirectly induce substantial growth. Therefore, the proposed Project will not induce population growth. This topic will not be discussed in the EIR.

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

**No Impact** – Neither construction nor operation of the proposed Project includes or requires acquisition of any property. The proposed Project would be constructed within public rights-of-way and will not displace any housing or necessitate construction of any replacement housing. The proposed Project will not displace existing housing or necessitating the construction of replacement housing. This topic will not be discussed in the EIR.

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

**No Impact** – Neither construction nor operation of the proposed Project includes or requires acquisition of any property and will not displace any people. The proposed Project would be

constructed within public rights-of-way and will not displace any people or housing. This topic will not be discussed in the EIR.

## 4.14 Public Services

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

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?

**Less Than Significant Impact with Mitigation** – The proposed rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station could result in additional temporary areas of traffic congestion associated with staging and constructing of the proposed Project within public street rights-of-way. Construction of the proposed Project also could potentially result in disruption or delay of fire and police protection, potential delays for school buses or other vehicles transporting students to and from schools, and temporary relocation/closure of bus stops; however, the proposed Project would not result in substantial adverse impacts that will require new or altered government facilities. Additionally a portion of the Los Alamitos sub-trunk passes beneath the Denni Street Park and would be replaced utilizing trenchless technology. Construction would not result in closure or any substantial adverse physical impacts on the Denni Street Park; however, parking and/or street access may be limited during construction. Operation of the proposed Project would be the same as for the existing system and would not result in any substantial adverse physical impacts on public services. The EIR will evaluate potential public service impacts and will recommend mitigation measures, as required.

## 4.15 Recreation

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

**Less than Significant Impact with Mitigation** – The proposed Project will not increase the use of parks or other recreational facilities such that substantial physical deterioration of the facility

will occur or will be accelerated; however, the portion of the Los Alamitos sub trunk beneath the Denni Street Park has been identified as being capacity deficient and will have to be replaced. As previously discussed, trenchless technology would be utilized at this location and although direct disturbance or closure during construction is not anticipated, parking and/or street access may be limited during construction. The EIR will evaluate potential impacts on the Denni Street Park and its users and will recommend mitigation measures, as required.

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

**No Impact** – The proposed Project does not include recreational facilities and would not require the construction or expansion of recreational facilities. The proposed rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station will not have an adverse physical effect on the environment related to construction or expansion of recreational facilities. This topic will not be discussed in the EIR.

## 4.16 Transportation/Traffic

Would the project:

- a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

**Less than Significant Impact with Mitigation** – Rehabilitation and/or replacement of the pipelines would encroach into traffic lanes and may require temporary lane and/or street closures; parking restrictions; and, potentially, nighttime construction to minimize traffic impacts during the day. This encroachment may result in conflicts with applicable plans, ordinances, or policies regarding performance of the circulation system. Additionally, where replacement is necessary, or where existing pipes are close to the roadway shoulders, construction could temporarily reduce access for bike and buses. Operational impacts would be associated with vehicle trips to complete routine maintenance; clean sewer lines and manholes; and perform visual inspections, closed-circuit television and camera inspection, flow-monitoring, as-needed repairs, and chemical dosing for odor and corrosion control. The proposed Project would not result in any substantial increase in the frequency of maintenance activities, so operational traffic impacts would be very similar to existing conditions. The operation of the proposed Project would not have a significant impact on traffic circulation. The EIR will evaluate potential construction-related traffic impacts and will recommend mitigation measures, as required.



- b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?

**Potentially Significant Impact** – The Orange County Transportation Authority is responsible for the applicable congestion management program (CMP). Katella Avenue and Valley View Boulevard are the only CMP roadways within the proposed Project area. Currently no impacts to Valley View Boulevard are anticipated; however, replacement and rehabilitation associated with the Westside Relief Interceptor and Los Alamitos Sub-trunk are anticipated on Katella Avenue (see Figure 2-2). Replacement and/or rehabilitation of the pipelines and proposed improvements would encroach into traffic lanes and require temporary lane and or street closures; parking restrictions; and, potentially, nighttime construction that could result in a significant impact to level of service on Katella Avenue. The EIR will evaluate potential construction impacts on traffic and will recommend mitigation measures, as required. Potential operational impacts are discussed in 4.16 a). The proposed Project would not result in any substantial increase in the frequency of maintenance activities, so operational traffic impacts would be very similar to existing conditions. The operation of the proposed Project would have a less than significant impact on any CMP roadway.

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

**No Impact** – The proposed Project would have no impact on air traffic patterns. This topic will not be discussed in the EIR.

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

**No Impact** – Subsequent to completion of the Western Regional Sewers Project, the proposed Project area will look the same as it did prior to the rehabilitation and/or replacement of the pipelines. Construction of the wet well at the pump station would be behind the property fence. The proposed Project will not increase hazards due to design features or incompatible uses. This topic will not be discussed in the EIR.

- e) Result in inadequate emergency access?

**Potentially Significant Impact** – The proposed rehabilitation and/or replacement of the Western Regional Sewers would encroach into traffic lanes and require temporary lane and/or street closures and, potentially, nighttime construction that could result in some delay to emergency access on a short-term basis. The contractor would be required to provide local and emergency access at all times. Construction impacts on emergency access will be evaluated in the EIR; and mitigation measures will be recommended, as required. Potential operational impacts are discussed in 4.16 a). The proposed Project would not result in any substantial increase in the

frequency of maintenance activities, so operational traffic impacts would be very similar to existing conditions. Operation of the proposed Project will not have a significant impact on any emergency access.

- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

**Less than Significant Impact** – Subsequent to construction, all proposed Project areas affecting plans or programs regarding public transit, bicycle, or pedestrian facilities will be returned to the existing condition. The proposed Project would be primarily below grade and will not result in a significant impact on the performance or safety of such facilities. The proposed rehabilitation and/or replacement of the Western Regional Sewers and proposed improvements at the Westside Pump Station will not result in a significant impact on any adopted policies, plans, or programs supporting alternative transportation. This issue will not be addressed in the EIR.

## 4.17 Utilities and Service Systems

Would the project:

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

**No Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and improvements at the Westside Pump Station would not influence quantities of wastewater generated. The proposed Project would rehabilitate and or replace an existing system to accommodate 2040 wet weather flows and would eliminate groundwater intrusion, which could result in a reduction in the amount of wastewater in the system. The proposed Project will not exceed the existing wastewater treatment requirements of the Regional Water Quality Control Board. This topic will not be discussed in the EIR.

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

**Less Than Significant Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and improvements at the Westside Pump Station would increase the size of the pipes, where required, to meet 2040 wet weather flows and eliminate surcharging. The areas that need to be increased are located in the middle portions, where smaller pipe results in surcharging and restricts flow (see Figure 2-2). Pipes proposed to be upsized would be upsized only to match pipes upstream and downstream. Increasing the pipe size, where required, to meet 2040 wet weather flows would not require construction of new or expansion of existing treatment facilities. This topic will not be discussed in the EIR.

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

**No Impact** – No new stormwater drainage facilities or expansion of existing facilities would be required as part of the proposed Project. The proposed Project would rehabilitate the existing Western Regional Sewers and return the proposed Project area to preconstruction conditions. This topic will not be discussed in the EIR.

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

**No Impact** – The proposed Project will not require the provision of new water supplies. Water entitlements and resources will not be impacted by the proposed Project. This topic will not be discussed in the EIR.

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

**No Impact** – Rehabilitation and/or replacement of the Western Regional Sewers and improvements at the Westside Pump Station would increase the size of the pipes, where required, to meet 2040 wet weather flows and eliminate surcharging. The proposed Project would rehabilitate and or replace an existing system and eliminate groundwater intrusion, which could result in a reduction in the amount of wastewater in the system. The proposed Project accommodates the forecasted 2040 wet weather flows and will have no impact on demand. This topic will not be discussed in the EIR.

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

**Less than Significant Impact** – Debris or solid waste generated during rehabilitation and/or replacement of the Western Regional Sewers and improvements at the Westside Pump Station would be transported to an approved solid waste disposal facility. The proposed Project is not expected to substantially affect the capacity of existing landfills. The proposed Project would not generate solid waste following completion of the proposed Project. This topic will not be discussed in the EIR.

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

**Less than Significant Impact** – Solid waste produced by the proposed Project will be disposed of at a properly permitted facility in accordance with federal and state laws. This topic will not be discussed in the EIR.

## 4.18 Mandatory Findings of Significance

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

**Less Than Significant Impact With Mitigation** – As described in Section 4.4, the proposed Project area is located within paved public rights-of-way within city streets or OCSD easements and will have no impacts on native habitats or sensitive species or restrict their range. As described in Section 4.5, based on the cultural resources records search, site, P-30-001502, westernmost boundary is within the proposed Project's alignment along Seal Beach Boulevard. The proposed Project would not substantially degrade the quality of the environment or eliminate important examples of major periods of California history or prehistory; however, if excavation of native soils is required this would have a potential to impact unknown buried historic resources. This will be addressed within the cultural resources section of the EIR, and mitigation measures would be developed as appropriate.

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

**Less Than Significant Impact** – Primarily, noise, traffic, and air quality impacts associated with construction of the rehabilitation and/or replacement of the Western Regional Sewers and improvements at the Westside Pump Station have potential to be cumulatively considerable. Potential long-term impacts from operation would be substantively the same as the existing system and would not result in cumulatively considerable operational impacts. Potential cumulative impacts will be addressed in the EIR.

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

**Potentially Significant Impact** – Construction impacts associated with the proposed Project may result in temporary unavoidable significant impacts that could result in temporary adverse effects on human beings during construction. Subsequent to construction, the proposed Project impacts would be limited to maintenance and inspections for the life of the facility, which would not result in any long-term direct or indirect adverse effects on human beings.

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## 6.0 References

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- California Department of Conservation, Division of Mines and Geology (DMG). 2007. Special Publication 42, Fault-Rupture Hazard Zones in California.  
<http://www.conservation.ca.gov/cgs/rghm/ap/Pages/Index.aspx>. Accessed October 5, 2015.
- California Department of Conservation Farmland Mapping and Monitoring Program (DOC). 2015  
<http://maps.conservation.ca.gov/ciff/ciff.html> Accessed October 5, 2015
- California Department of Fish and Wildlife. 2015. California Natural Diversity Database, Rarefind V. 3.1.0. Updated, September 2015. Accessed May 27, 2015 and September 30, 2015.
- California Department of Toxic Substances Control (DTSC). 2015. Hazardous Water and Substances List (Cortese List).  
[http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site\\_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST](http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST). Accessed September 30, 2015.
- California Department of Transportation (Caltrans). 2015. Orange County Scenic Highways Map  
[http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/scenic_highways/) Accessed October 9, 2015.
- California Office of Historic Preservation. 2015. California Historical Resources Information System. South Central Coast Information Center. Records Search File Nos.: 15078 and 15589.
- California State Water Resources Control Board (SWRCB). 2015. Geotracker.  
<http://geotracker.waterboards.ca.gov/> Accessed September 30, 2015.
- City of Anaheim, Planning Services Division. 2015. Title 18 Zoning Map.  
<http://www.anaheim.net/departmentsfolders/planning/ZoningMap.pdf>. Accessed June 10, 2015.
- \_\_\_\_\_. 2004. City of Anaheim General Plan. May 2004.
- City of Buena Park, Planning Division. 2010. Buena Park General Plan. December 2010.
- \_\_\_\_\_. 2015. City of Buena Park Zoning Map.  
<https://www.buenapark.com/modules/ShowDocument.aspx?documentid=4784>. Accessed June 10, 2015.
- City of Cypress, Community Development. 2000. City of Cypress General Plan. 2000.
- \_\_\_\_\_. 2015. City of Cypress Zoning Map.  
[http://www.ci.cypress.ca.us/community\\_develpmnt/zoning\\_map.htm](http://www.ci.cypress.ca.us/community_develpmnt/zoning_map.htm). Accessed June 10, 2015.

- \_\_\_\_\_. 2015. City of La Palma Zoning Map. <http://www.cityoflapalma.org/DocumentCenter/View/5366>. Accessed June 10, 2015.
- City of Los Alamitos, Community Development. 2015. Los Alamitos General Plan. March 2015.
- \_\_\_\_\_. 2015. City of Los Alamitos Zoning Map. [http://cityoflosalamitos.org/?wpfb\\_dl=316](http://cityoflosalamitos.org/?wpfb_dl=316). Accessed June 10, 2015.
- City of Seal Beach, Planning and Development. 2003. City of Seal Beach General Plan. December, 2003.
- \_\_\_\_\_. 2010. City of Seal Beach Zoning Map. <http://www.sealbeachca.gov/Departments/Community-Development/Planning-Development/Zoning-Maps>. Accessed September 29, 2015.
- Cowardin, L.M., V. Carter V., F.C. Golet, E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Report No. FWS/OBS/-79/31. Washington, D.C.
- Orange County Public Works, Land Use Planning, The County of Orange General Plan. July 2014.
- \_\_\_\_\_. 2014. County of Orange Zoning Map. <http://ocplanning.net/civicax/filebank/blobdload.aspx?blobid=9062>. Accessed September 29, 2015.
- \_\_\_\_\_. 2014. County of Orange Land Use Element Map. <http://ocplanning.net/civicax/filebank/blobdload.aspx?blobid=40198>. Accessed September 29, 2015.
- Orange County Sanitation District (OCSD). 2007. Collection System Improvement Plan Program Environmental Impact Report.
- Orange County Water District (OCWD). 2012. Orange County Groundwater Contour Maps. [http://www.ocwd.com/Portals/0/ProgramsProjects/Hydrogeology/GroundwaterContourMaps/June\\_WL2014L2.pdf](http://www.ocwd.com/Portals/0/ProgramsProjects/Hydrogeology/GroundwaterContourMaps/June_WL2014L2.pdf). Accessed October 1, 2015.
- South Coast Air Quality Management District (SCAQMD). 2014. CEQA Air Quality Handbook. <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>. Accessed June 8, 2015.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS). 2015. Washington, D.C. <http://www.fws.gov/wetlands/>. Accessed September 30, 2015.

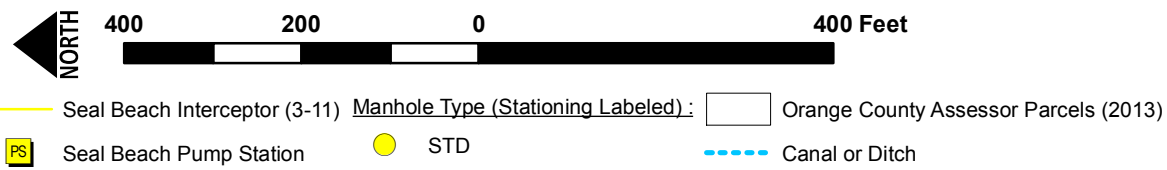
# **Appendix A**

## **Project Area**

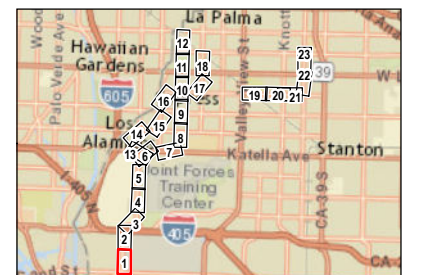




Map 1 of 23

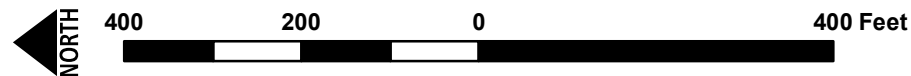


### Orange County Sanitation District Sewer Mains and Manholes



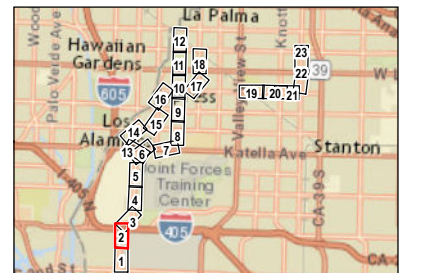


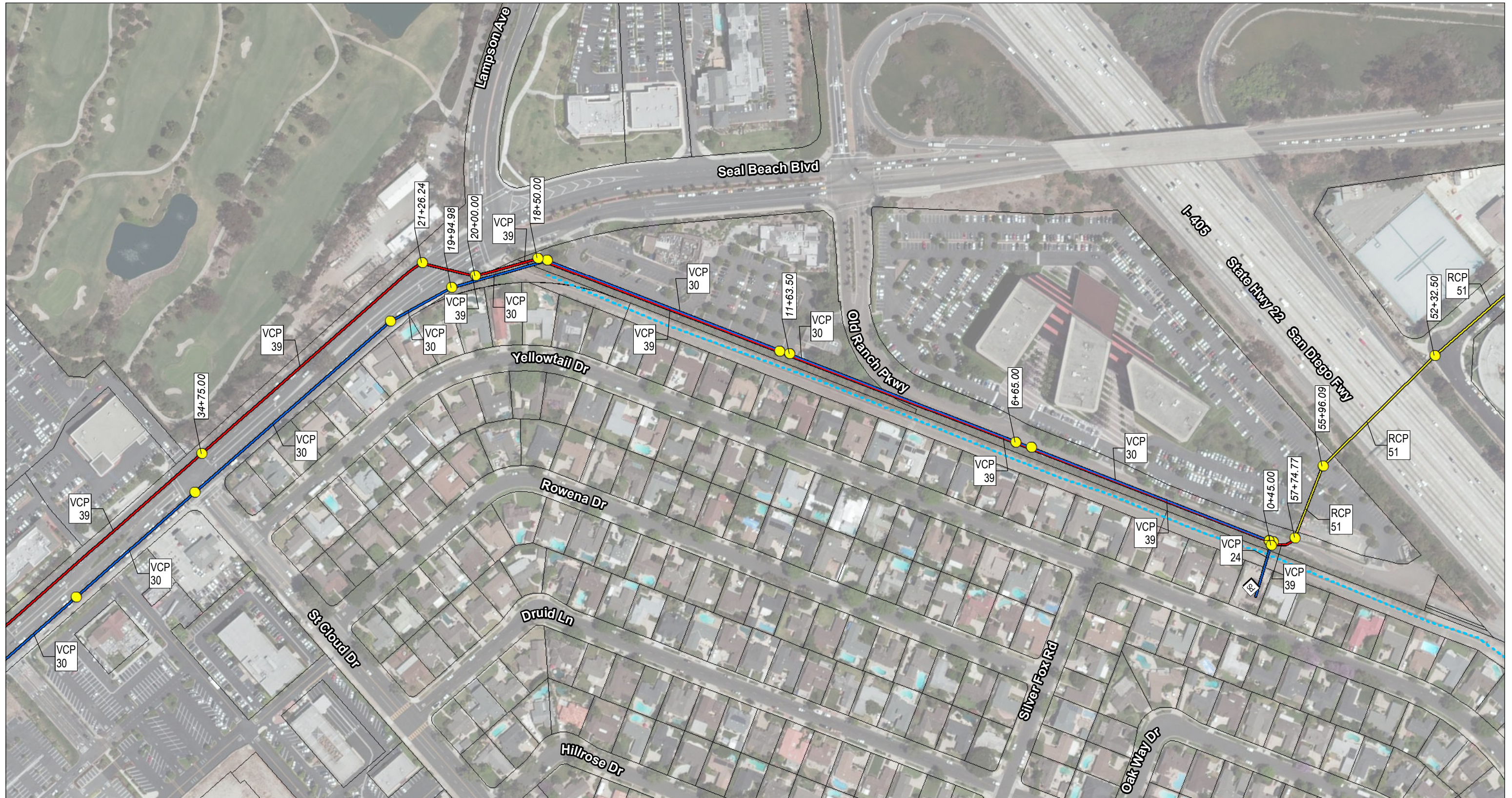
Map 2 of 23



- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li><span style="color: blue;">—</span> Los Alamitos Sub-trunk (3-8)</li> <li><span style="color: yellow;">—</span> Seal Beach Interceptor (3-11)</li> <li><span style="color: red;">—</span> Westside Relief Interceptor (3-21-1 and 3-21-2)</li> <li><span style="border: 1px solid black; padding: 2px;">PS</span> Westside Pump Station</li> </ul> | <p>Manhole Type (Stationing Labeled):</p> <ul style="list-style-type: none"> <li><span style="color: yellow;">⊗</span> DIV</li> <li><span style="color: yellow;">●</span> STD</li> </ul> | <ul style="list-style-type: none"> <li><span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Orange County Assessor Parcels (2013)</li> <li><span style="color: blue; font-style: dashed;">—</span> Canal or Ditch</li> <li><span style="color: black;">✱</span> Health Care Facility</li> </ul> |
|---|--|---|

## Orange County Sanitation District Sewer Mains and Manholes



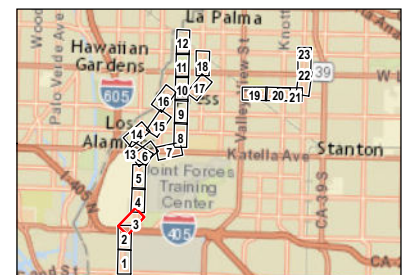


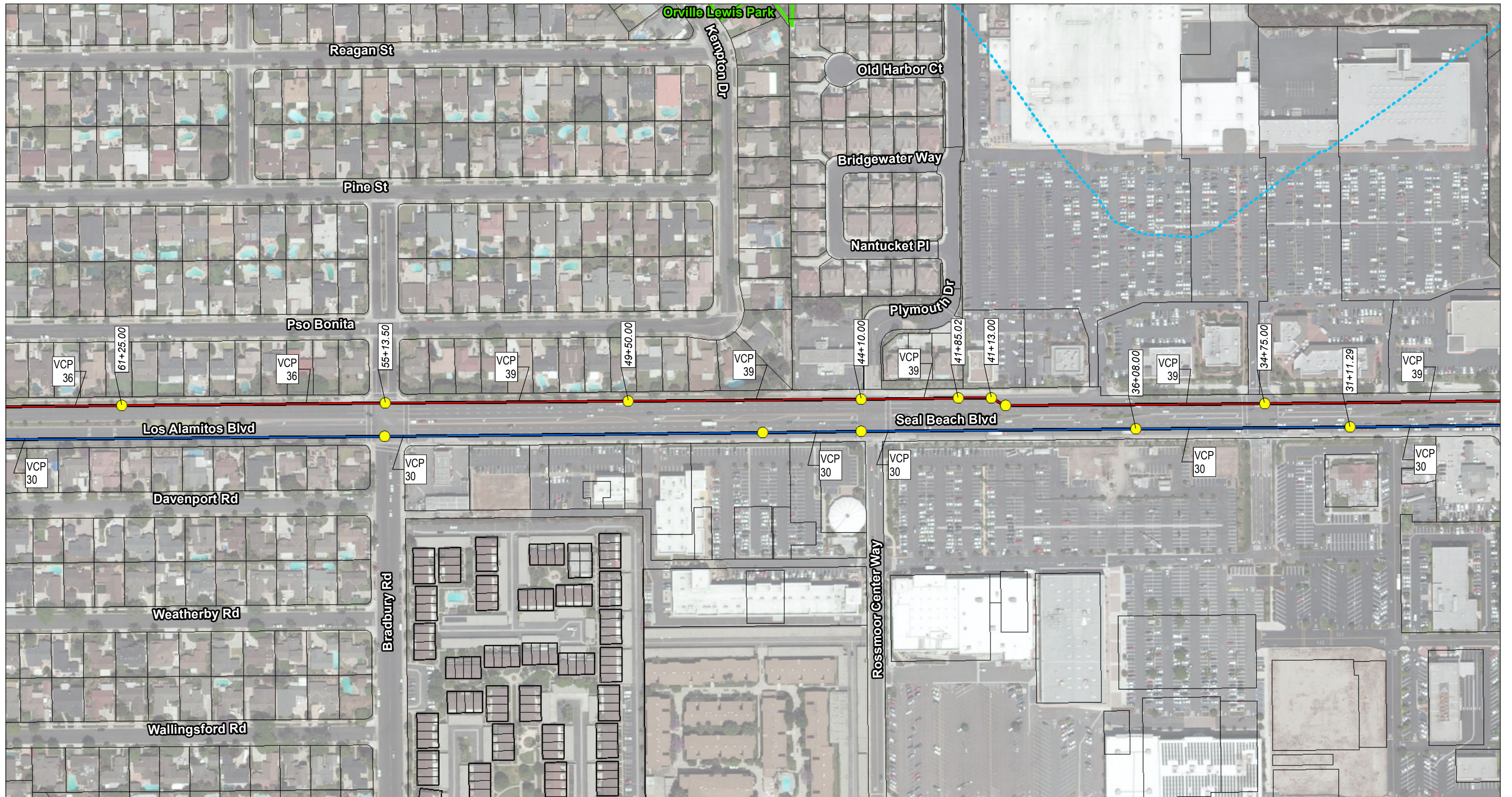
Map 3 of 23



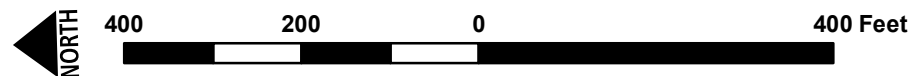
- |  |   |   |
|--|---|---|
| <span style="color: blue;">—</span> Los Alamitos Sub-trunk (3-8)                     | <b>Manhole Type (Stationing Labeled):</b> | <span style="border: 1px solid grey; display: inline-block; width: 15px; height: 10px;"></span> Orange County Assessor Parcels (2013) |
| <span style="color: yellow;">—</span> Seal Beach Interceptor (3-11)                  | <span style="color: yellow;">⊗</span> DIV | <span style="color: blue; border-bottom: 1px dashed blue; width: 20px; display: inline-block;"></span> Canal or Ditch                 |
| <span style="color: red;">—</span> Westside Relief Interceptor (3-21-1 and 3-21-2)   | <span style="color: yellow;">●</span> STD |   |
| <span style="border: 1px solid black; padding: 2px;">PS</span> Westside Pump Station |   |   |

## Orange County Sanitation District Sewer Mains and Manholes



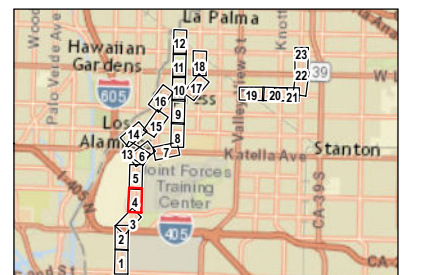


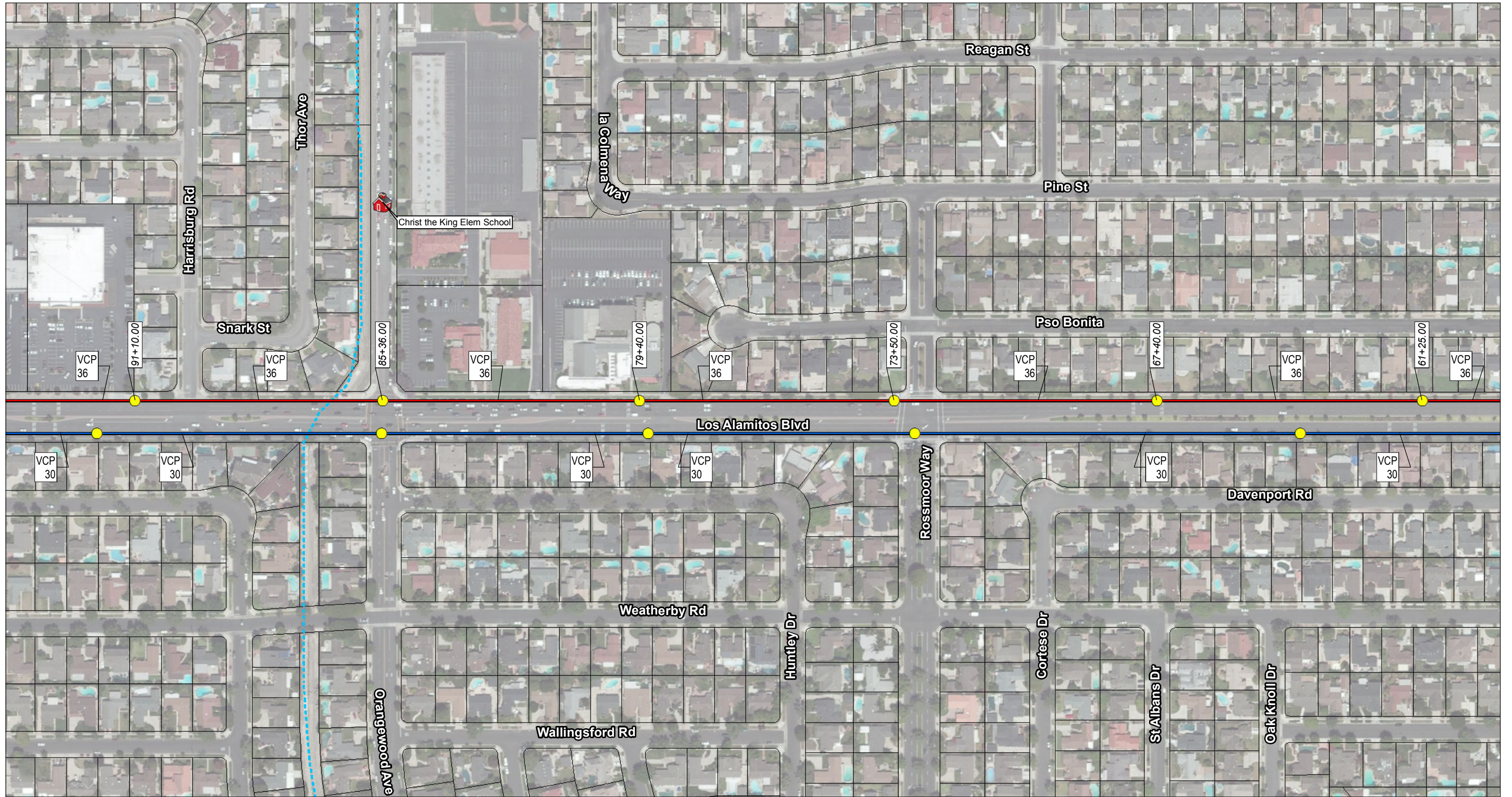
Map 4 of 23



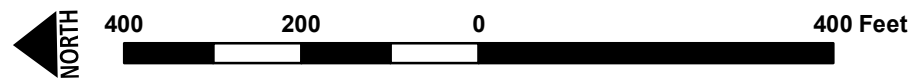
- Los Alamitos Sub-trunk (3-8)
- Westside Relief Interceptor (3-21-1 and 3-21-2)
- Manhole Type (Stationing Labeled): STD
- Orange County Assessor Parcels (2013)
- California Protected Areas Database Holdings
- Canal or Ditch

## Orange County Sanitation District Sewer Mains and Manholes



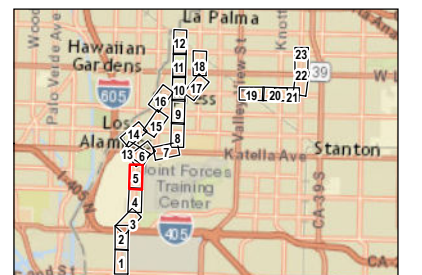


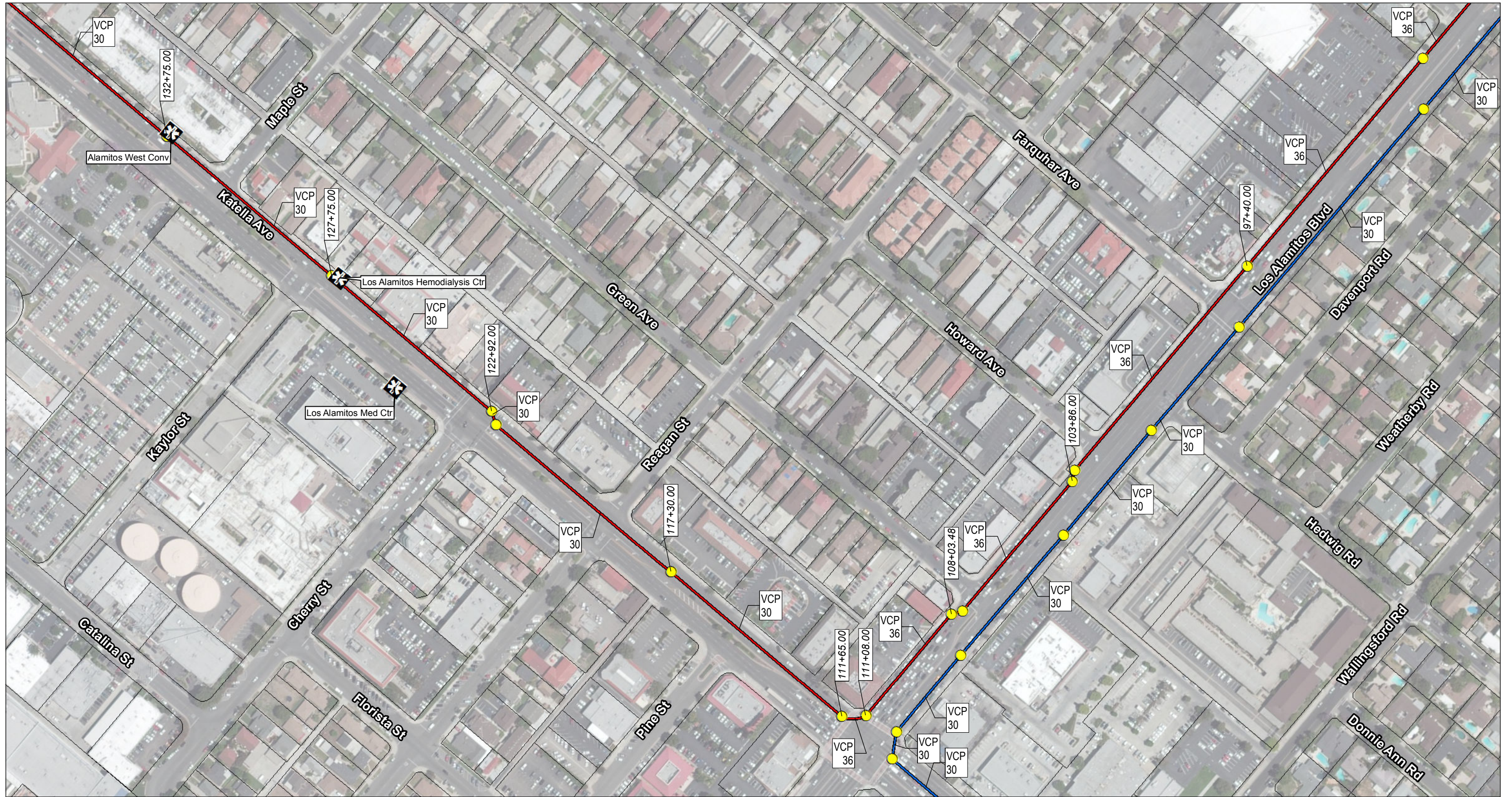
Map 5 of 23



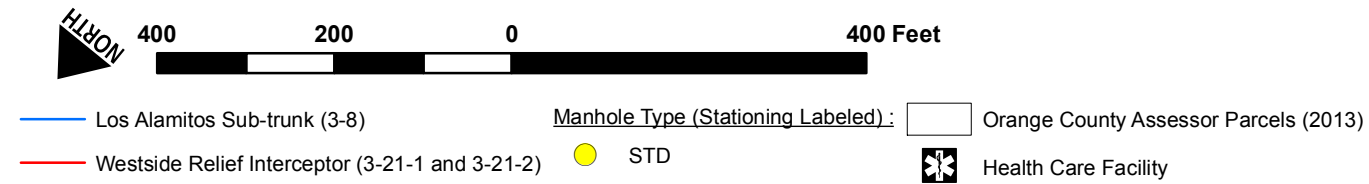
- Los Alamitos Sub-trunk (3-8)
- Westside Relief Interceptor (3-21-1 and 3-21-2)
- Manhole Type (Stationing Labeled): ● STD
- Orange County Assessor Parcels (2013)
- - - Canal or Ditch
- 🏠 School

## Orange County Sanitation District Sewer Mains and Manholes

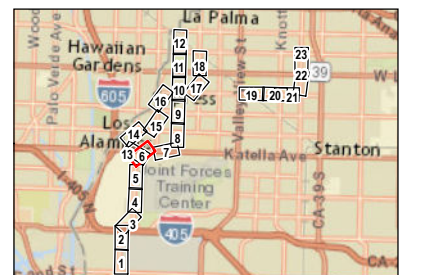




Map 6 of 23

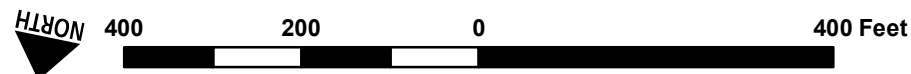


### Orange County Sanitation District Sewer Mains and Manholes



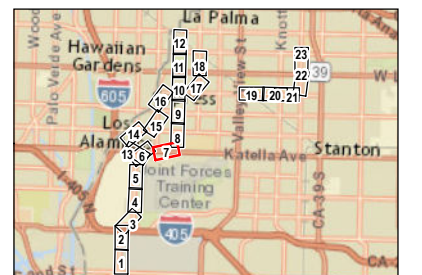


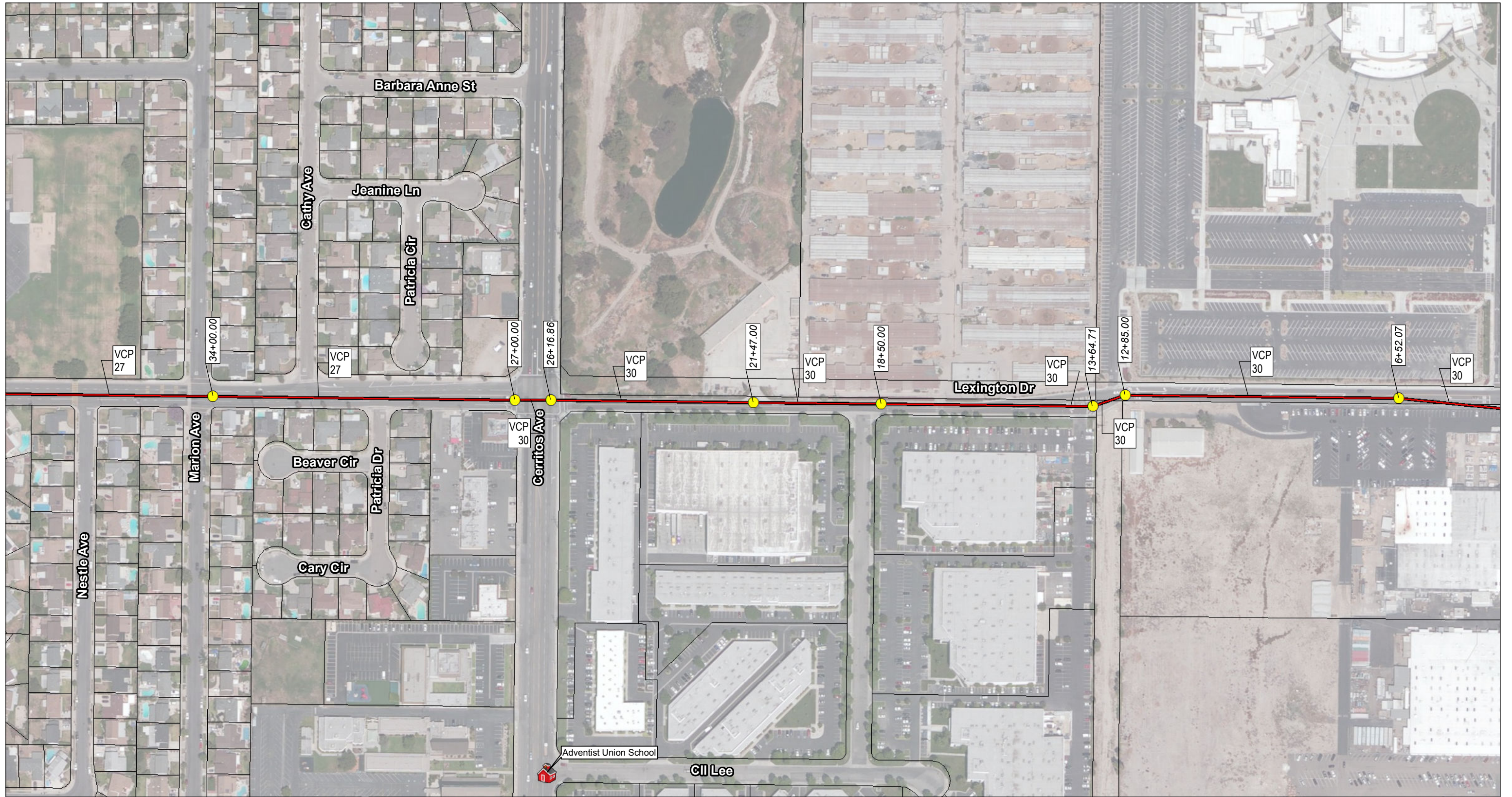
Map 7 of 23



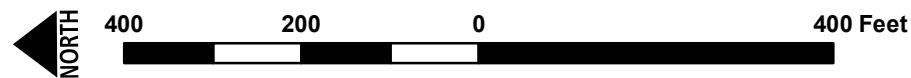
- Westside Relief Interceptor (3-21-1 and 3-21-2)
- Manhole Type (Stationing Labeled): STD
- Orange County Assessor Parcels (2013)
- ▭ California Protected Areas Database Holdings
- 🏫 School
- 🏥 Health Care Facility

## Orange County Sanitation District Sewer Mains and Manholes



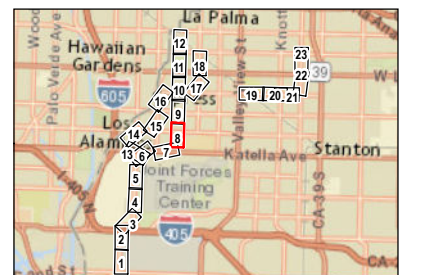


Map 8 of 23



- Westside Relief Interceptor (3-21-1 and 3-21-2)
- STD
- Manhole Type (Stationing Labeled):
- Orange County Assessor Parcels (2013)
- 🏫 School

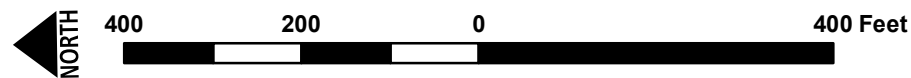
## Orange County Sanitation District Sewer Mains and Manholes





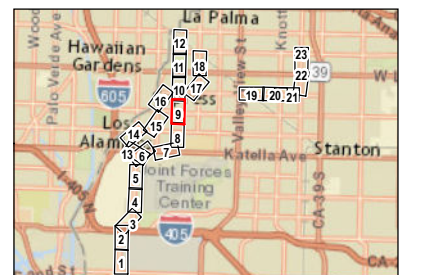


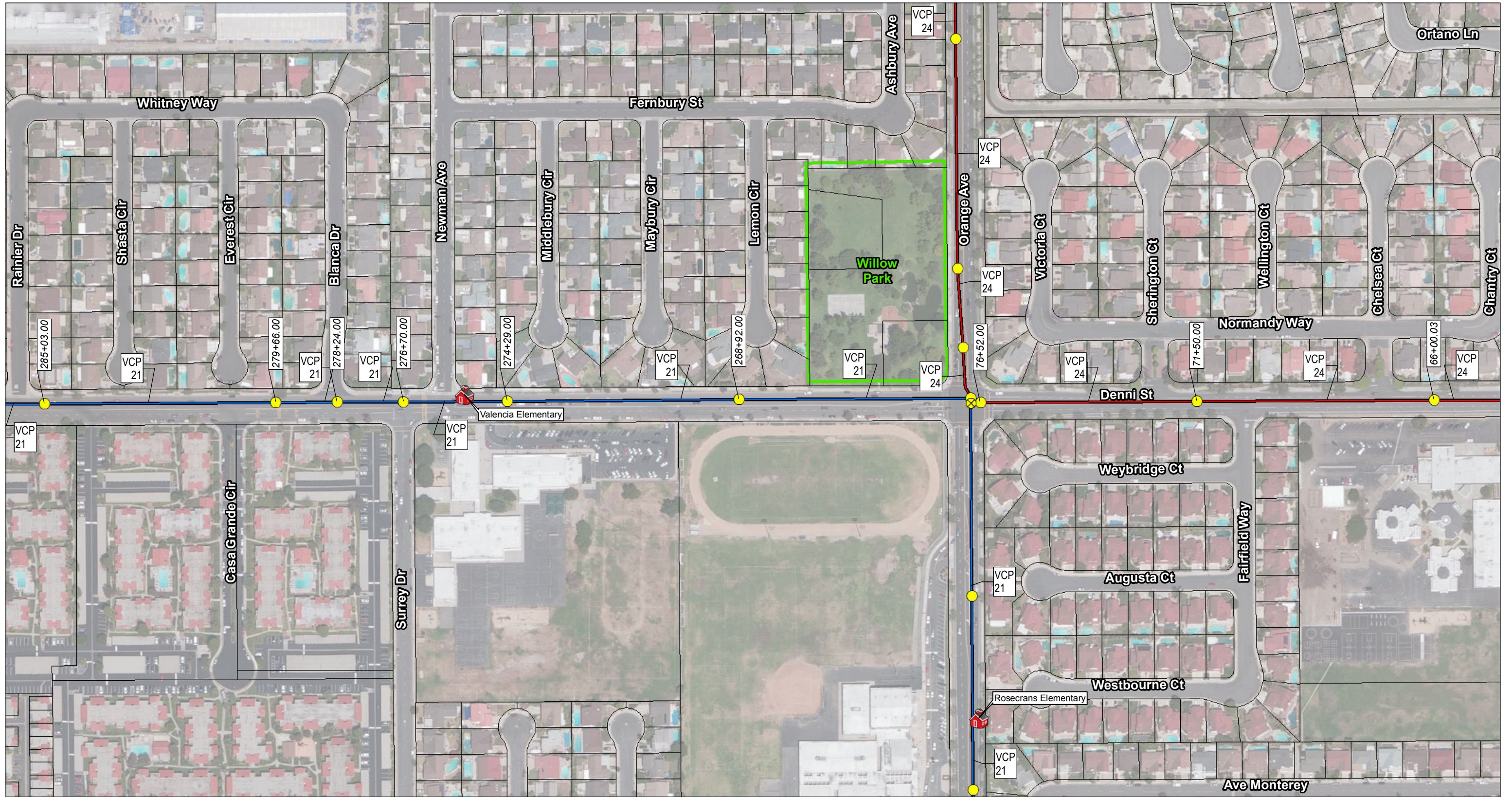
Map 9 of 23



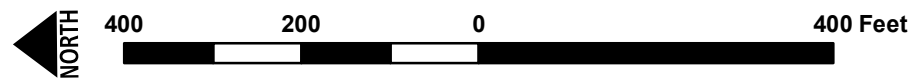
- Westside Relief Interceptor (3-21-1 and 3-21-2) Manhole Type (Stationing Labeled):
- Westside Relief Interceptor (3-21-1 and 3-21-2)
  - ⊗ DIV
  - STD
  - Orange County Assessor Parcels (2013)
  - California Protected Areas Database Holdings
  - Stream or River
  - School

## Orange County Sanitation District Sewer Mains and Manholes



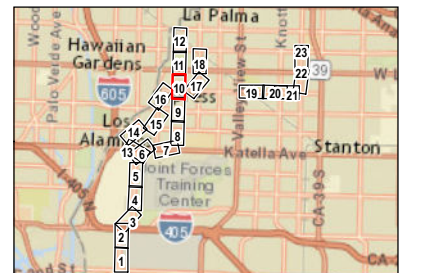


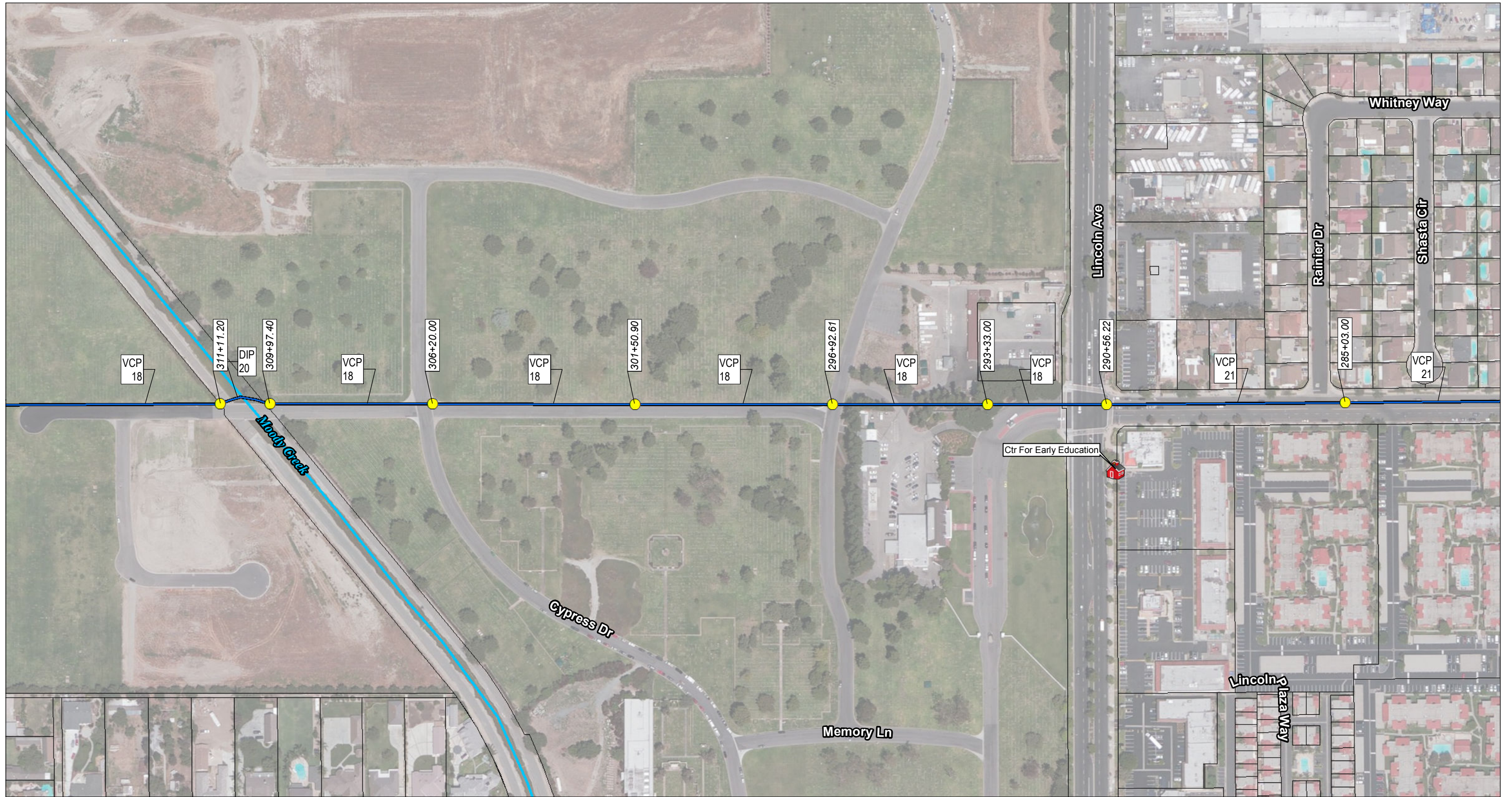
Map 10 of 23



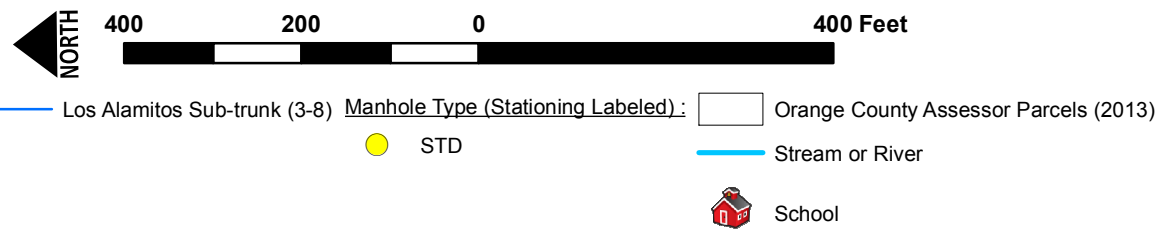
- Los Alamitos Sub-trunk (3-8)
- Westside Relief Interceptor (3-21-1 and 3-21-2)
- Manhole Type (Stationing Labeled):
  - ⊗ DIV
  - STD
- Orange County Assessor Parcels (2013)
- California Protected Areas Database Holdings
- School

## Orange County Sanitation District Sewer Mains and Manholes

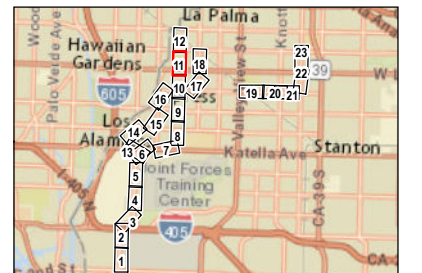


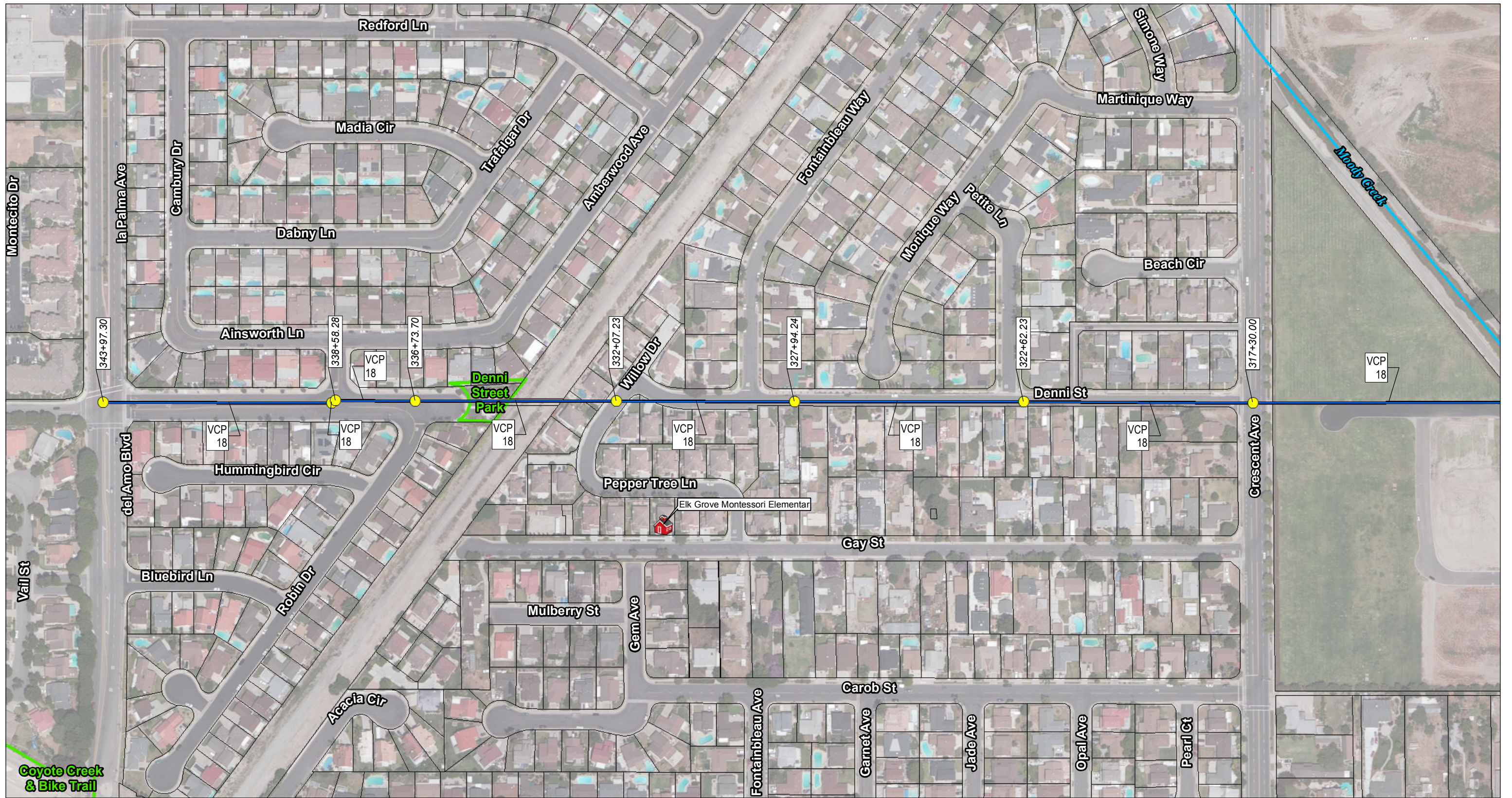


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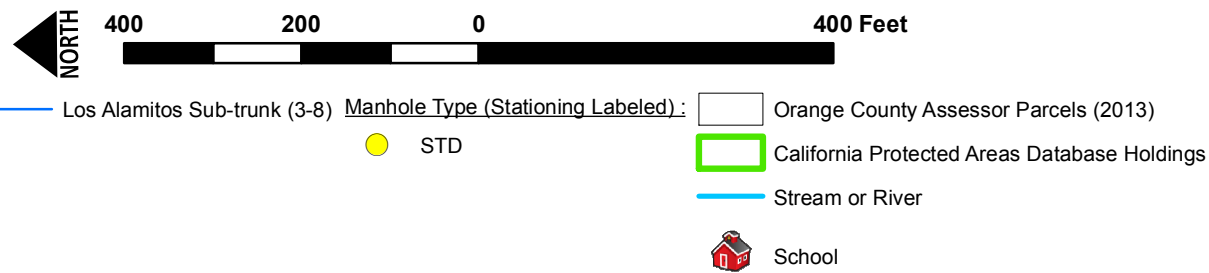


### Orange County Sanitation District Sewer Mains and Manholes

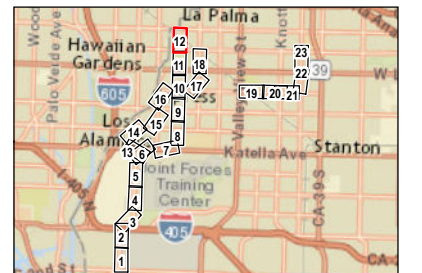




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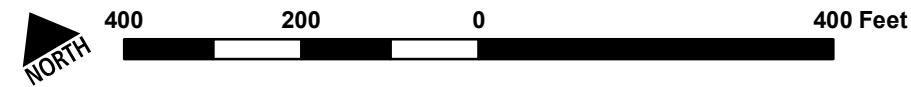


## Orange County Sanitation District Sewer Mains and Manholes



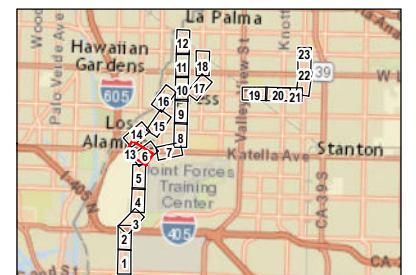


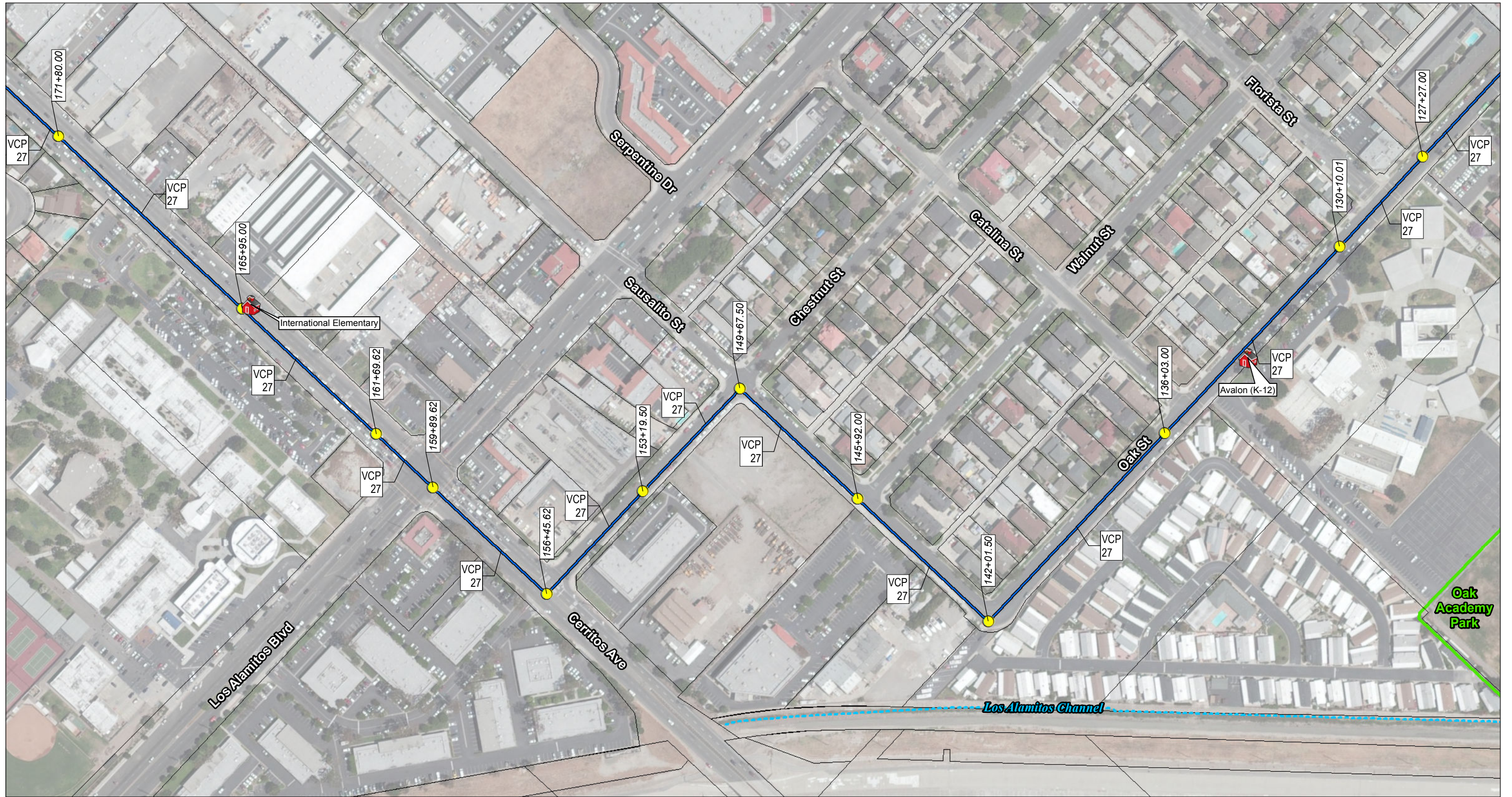
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- Los Alamitos Sub-trunk (3-8)
- Westside Relief Interceptor (3-21-1 and 3-21-2)
- Manhole Type (Stationing Labeled): STD
- Orange County Assessor Parcels (2013)
- Canal or Ditch

## Orange County Sanitation District Sewer Mains and Manholes



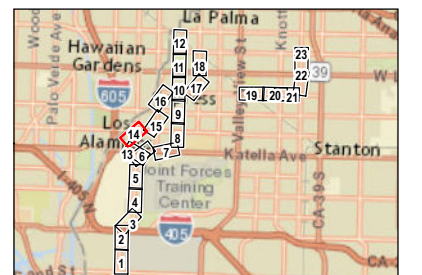


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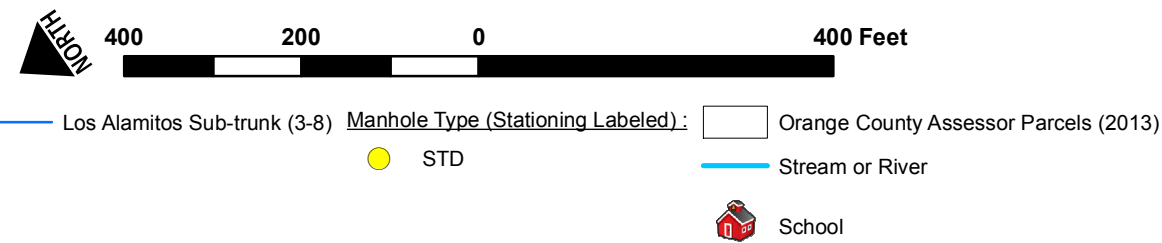
- Los Alamitos Sub-trunk (3-8)
- Manhole Type (Stationing Labeled): STD
- Orange County Assessor Parcels (2013)
- ▭ California Protected Areas Database Holdings
- - - Canal or Ditch
- 🏫 School

## Orange County Sanitation District Sewer Mains and Manholes

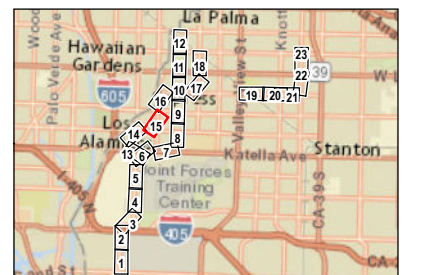




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## Orange County Sanitation District Sewer Mains and Manholes



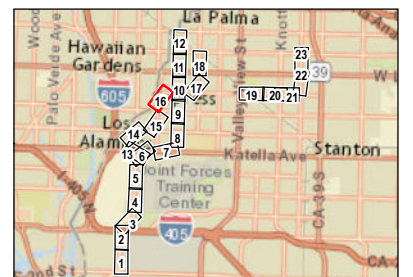


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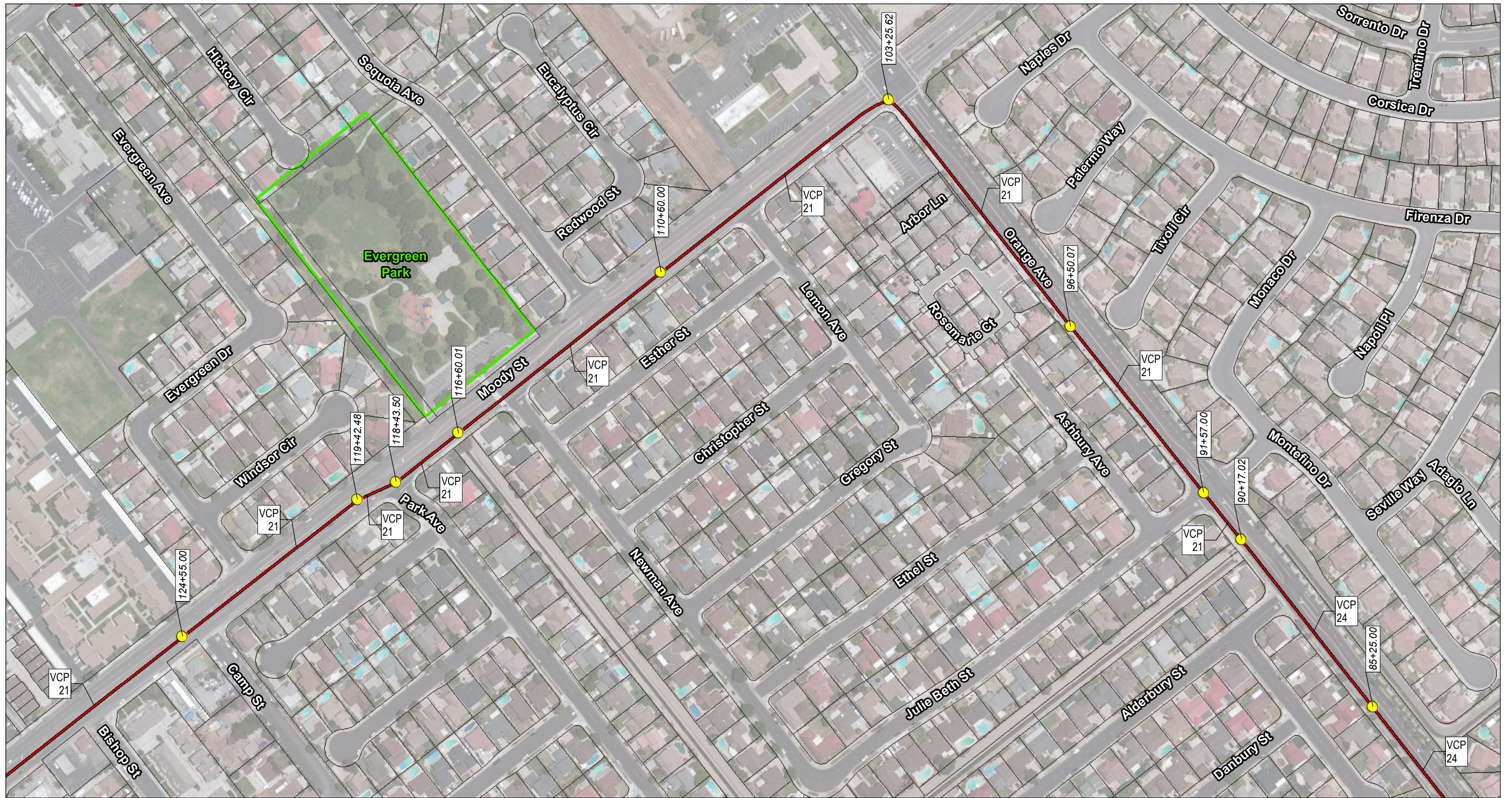


- Los Alamitos Sub-trunk (3-8)
- Manhole Type (Stationing Labeled): STD
- Orange County Assessor Parcels (2013)
- School

## Orange County Sanitation District Sewer Mains and Manholes





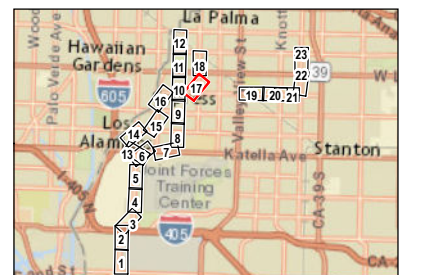


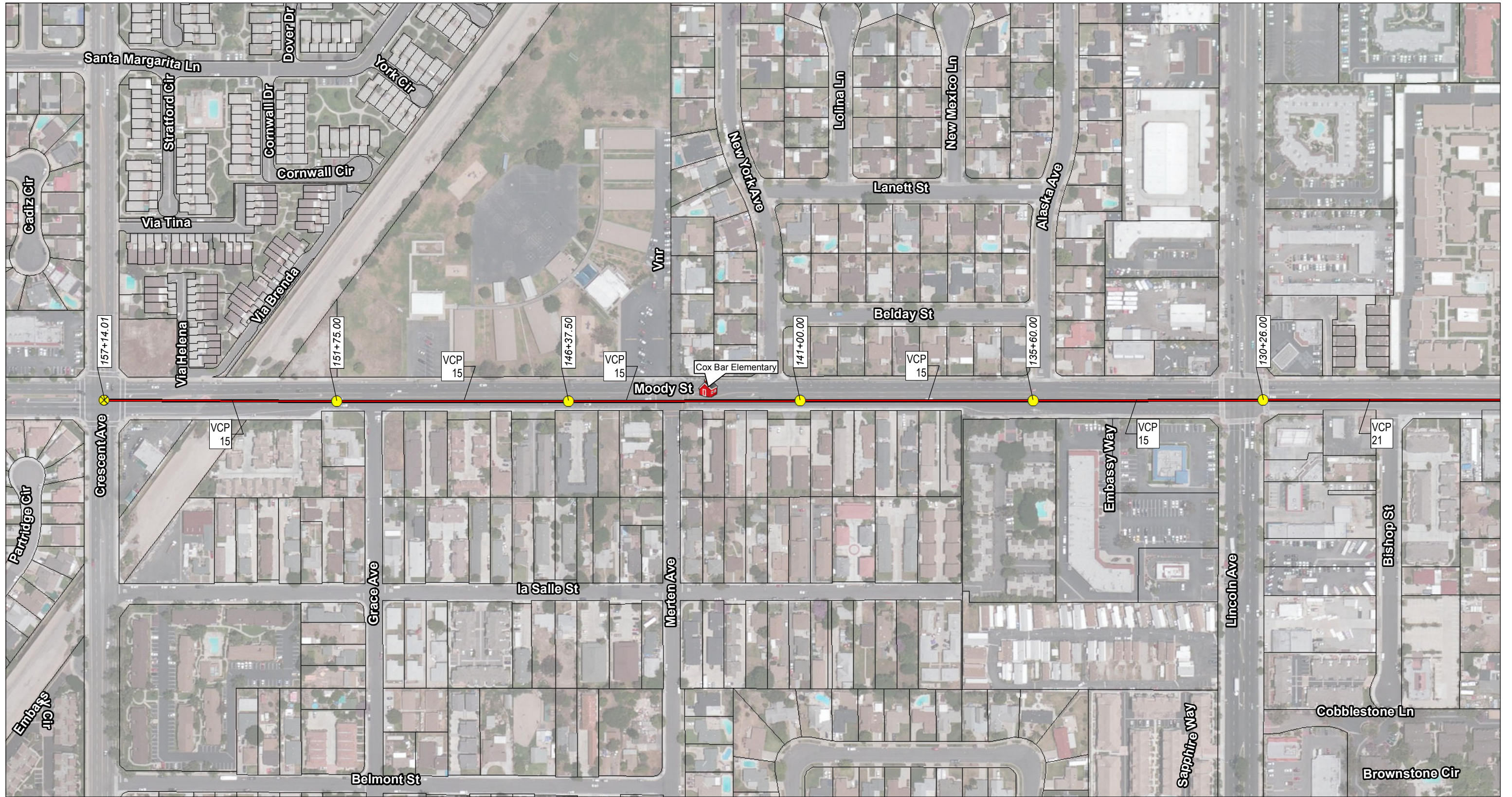
Map 17 of 23



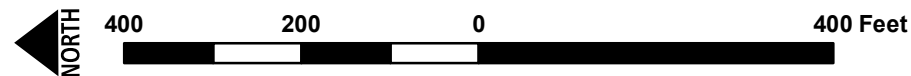
- Westside Relief Interceptor (3-21-1 and 3-21-2)
- Manhole Type (Stationing Labeled): STD
- Orange County Assessor Parcels (2013)
- ▭ California Protected Areas Database Holdings
- 🏫 School

## Orange County Sanitation District Sewer Mains and Manholes



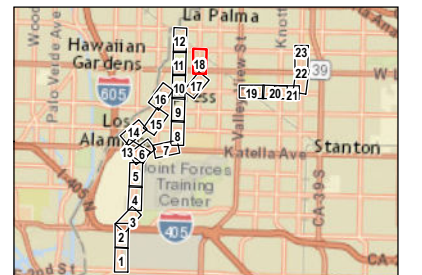


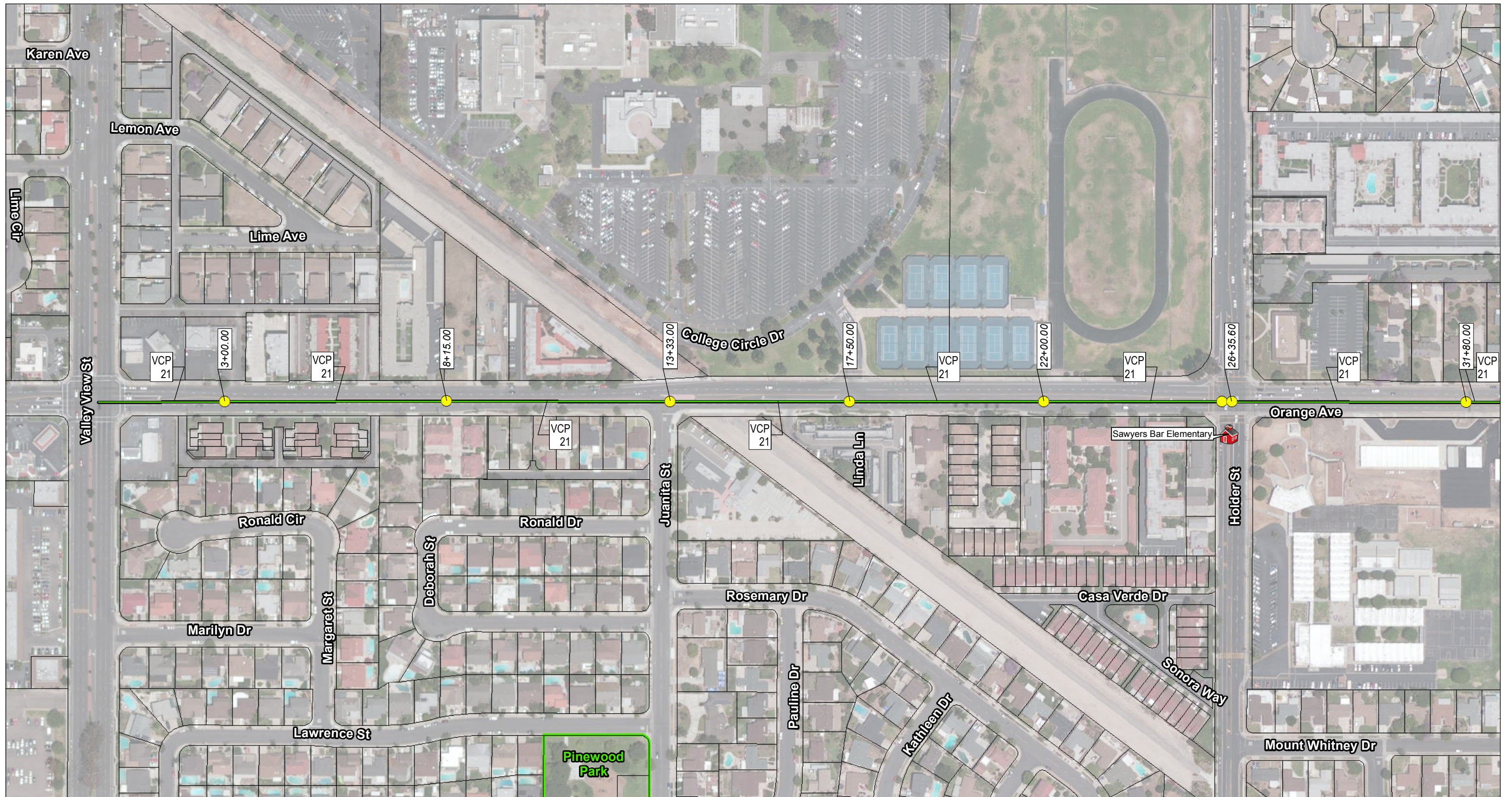
Map 18 of 23



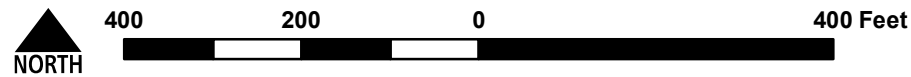
- Westside Relief Interceptor (3-21-1 and 3-21-2)
- Manhole Type (Stationing Labeled):
  - ⊗ DIV
  - STD
- Orange County Assessor Parcels (2013)
- School

## Orange County Sanitation District Sewer Mains and Manholes



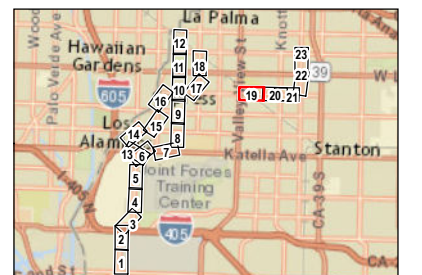


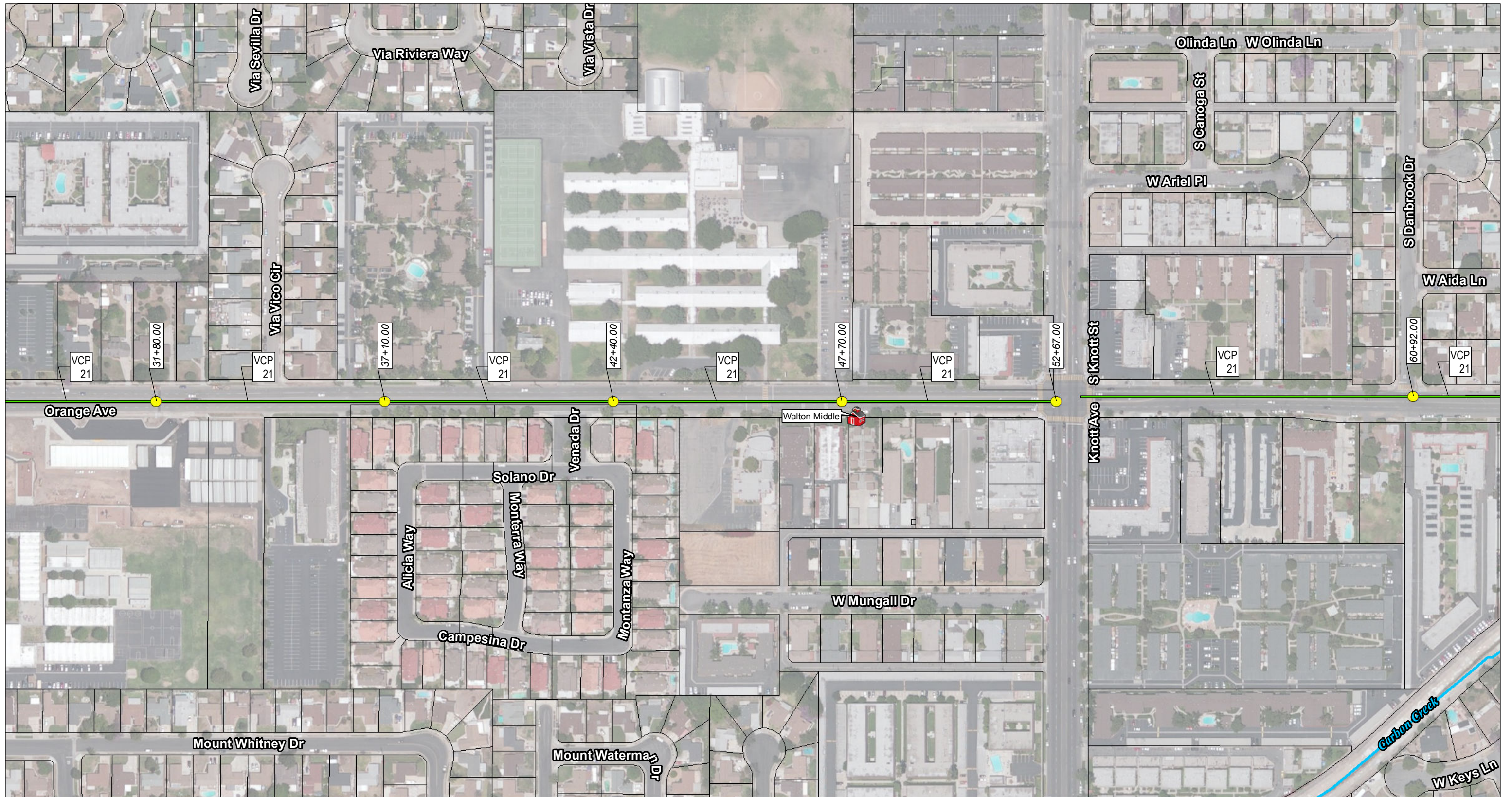
Map 19 of 23



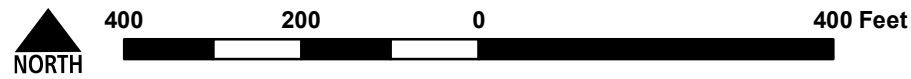
- Orange Western Sub-trunk (3-6) Manhole Type (Stationing Labeled):
- Orange County Assessor Parcels (2013)
- California Protected Areas Database Holdings
- School
- STD

## Orange County Sanitation District Sewer Mains and Manholes



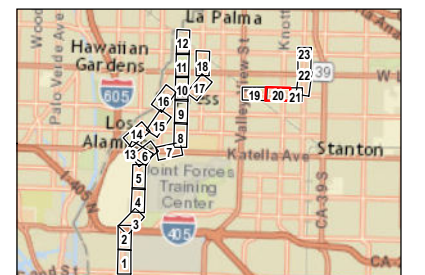


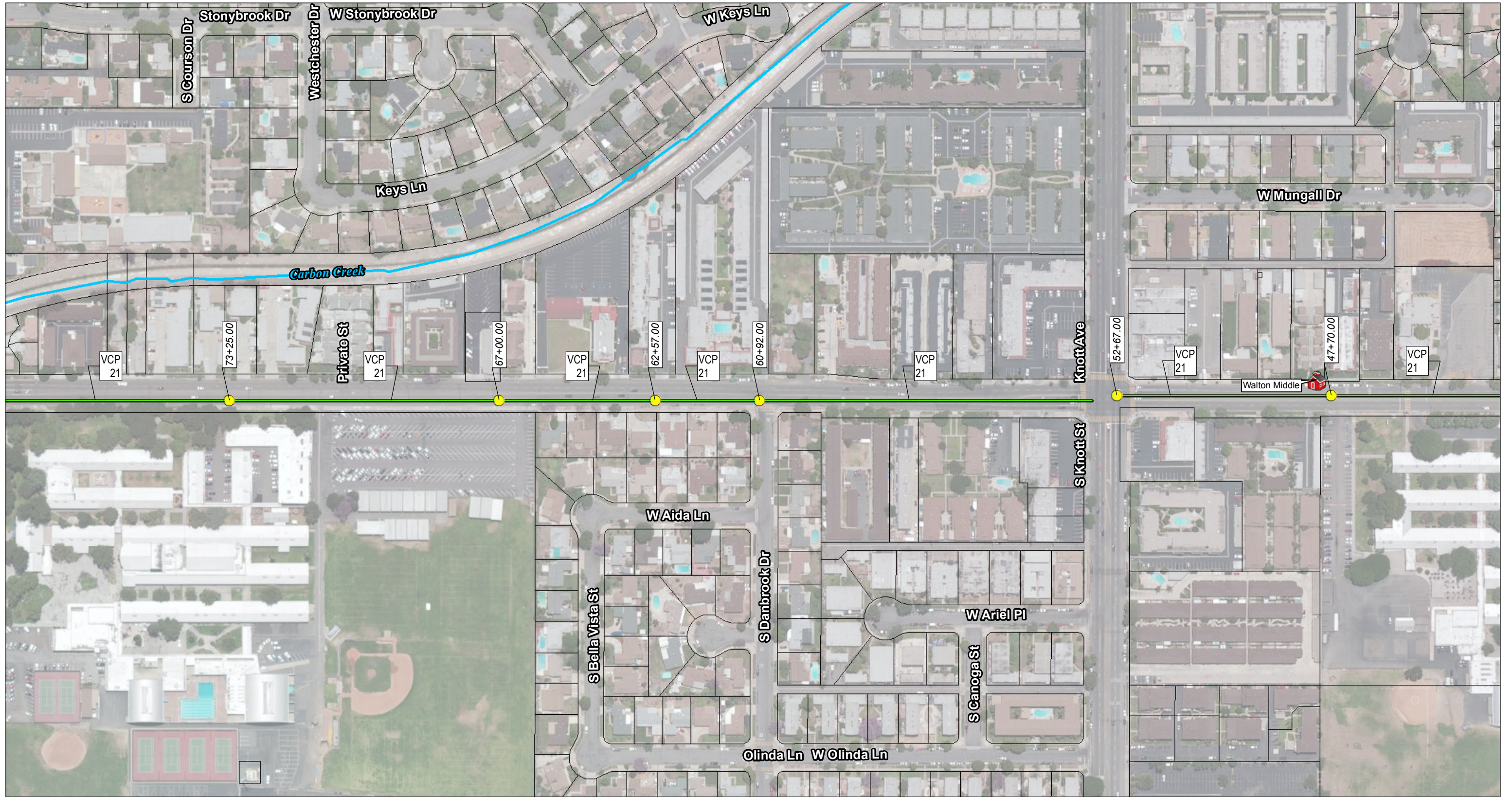
Map 20 of 23



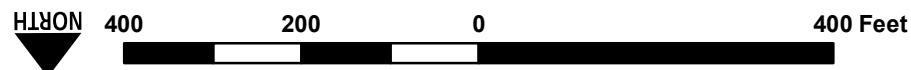
- Orange Western Sub-trunk (3-6) Manhole Type (Stationing Labeled):
- Orange County Assessor Parcels (2013)
- STD
- Stream or River
- School

## Orange County Sanitation District Sewer Mains and Manholes



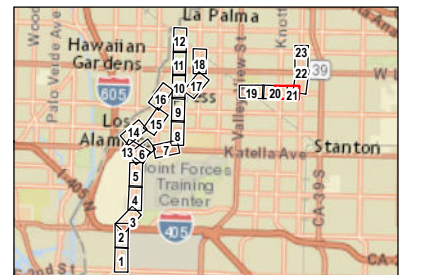


Map 21 of 23



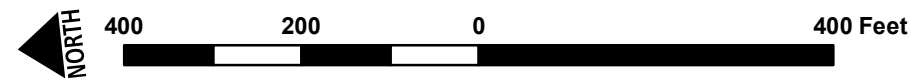
- Orange Western Sub-trunk (3-6)
- Manhole Type (Stationing Labeled):
- STD
- Orange County Assessor Parcels (2013)
- Stream or River
- School

## Orange County Sanitation District Sewer Mains and Manholes



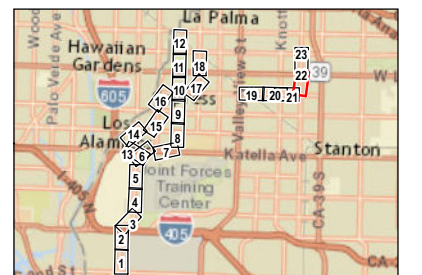


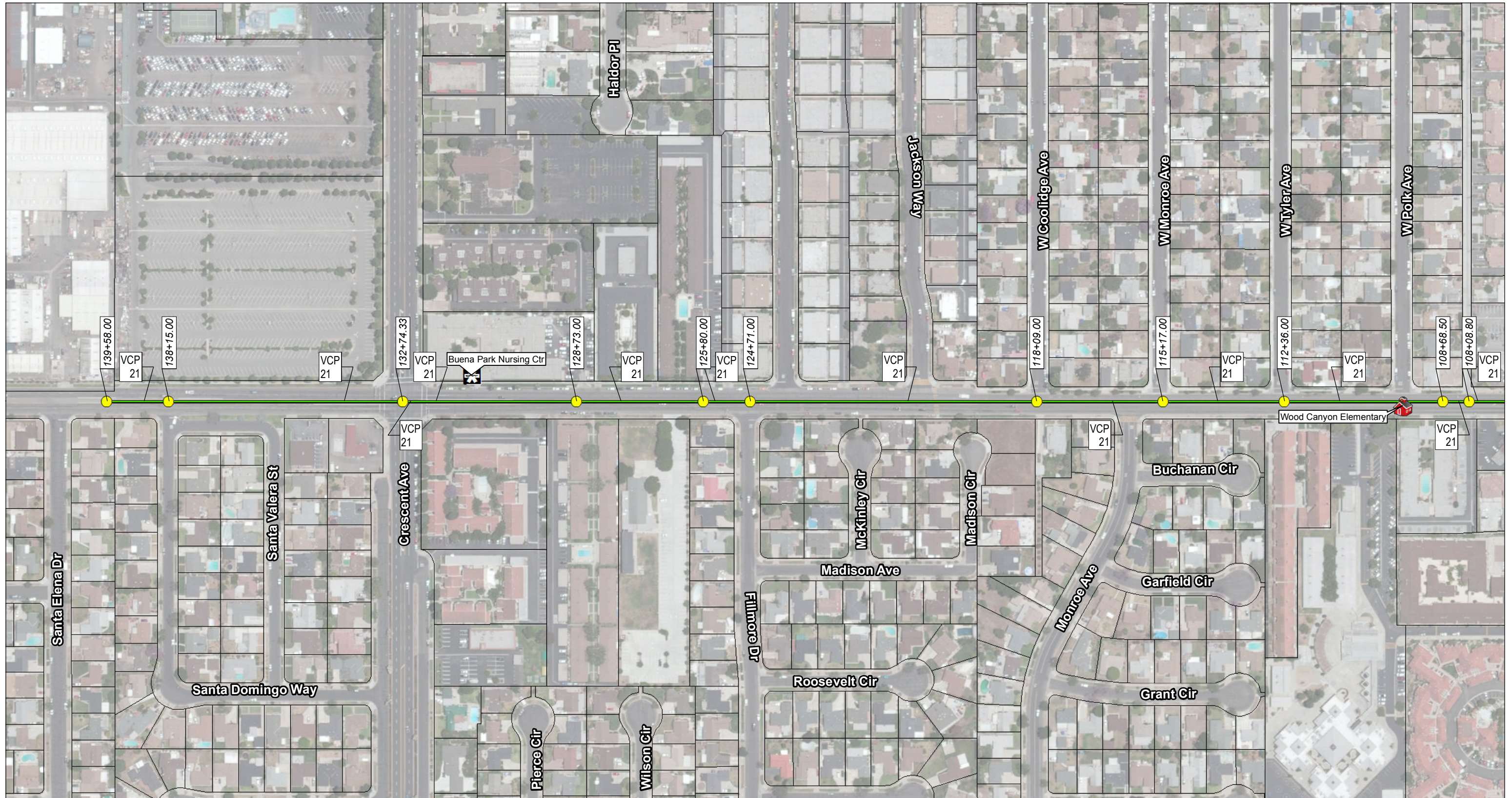
Map 22 of 23



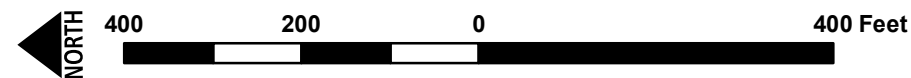
- Orange Western Sub-trunk (3-6)
- STD
- Manhole Type (Stationing Labeled):
- VCP 21
- Orange County Assessor Parcels (2013)
- Stream or River
- School

## Orange County Sanitation District Sewer Mains and Manholes





Map 23 of 23



- Orange Western Sub-trunk (3-6) Manhole Type (Stationing Labeled):
- Orange County Assessor Parcels (2013)
- STD
- School
- Health Care Facility

## Orange County Sanitation District Sewer Mains and Manholes

