

November 18, 2016

TO: Nicholas Agbobu
Engineering, Budget, and Office Operations

FROM: Robert Swartz
Field Operations



**CONSOLIDATED SEWER MAINTENANCE DISTRICT
CONDITION ASSESSMENT PROGRAM REPORT
UNINCORPORATED COUNTY**

This memo is to inform you that the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District (District) has completed a Sewer Condition Assessment Program of a portion of the unincorporated County's sewer system maintained by the District's East Yard.

The enclosed Condition Assessment Report provides details regarding the maintenance and structural condition of your City's sewer mainlines. This information should be included in the District's Sewer System Management Plan as a reference in Chapter 8, System Evaluation and Capacity Assurance Plan. The segments with critical maintenance issues have been cleaned and, where appropriate, incorporated into our enhanced maintenance cleaning schedule for continued monitoring. In addition, the segments with severe structural defects have either been repaired or will be scheduled for repair or replacement as part of the ongoing Accumulative Capital Outlay Project.

EL:

Attach.

bc: RS, FV, File (Y0TV0809C)

**CONDITION ASSESSMENT REPORT
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
CONSOLIDATED SEWER MAINTENANCE DISTRICT**

| | | | |
|-------------------|------------|--------------|------------------------|
| PROJECT NAME: | Y0TV0809C | PROJECT MGR: | Kari Eskridge |
| PROJECT DATE: | 12/07/2009 | CONTACT NO: | (626) 300-3369 |
| SUP. DISTRICT(s): | 5 | MAP PAGE(S): | 1906, 1907, 1960, 1961 |
| Report By: | Eric Liu | Report Date: | 11/18/16 |

INTRODUCTION

As part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District (District) has completed the condition assessment of 301,513 feet or 8.3 percent of the unincorporated County's sewer system maintained by the District's East Yard.

The enclosed Condition Assessment Report outlines the structural and maintenance ratings of our system based on the Pipeline Assessment and Certification Program's (PACP Version 6.0.1) rating methodology. Included in the report are the following:

- Project Overview Map (Enclosure 1)
- Quick Maintenance Rating Map, High Water Levels List and Map, and Sample Lateral Notice Letter (Enclosure 2)
- Quick Structural Rating Report Priority List, Quick Structural Rating Map, and Lining and Point Repair Projects Map (Enclosure 3)

The District has now completed the condition assessment of 921,100 feet of the unincorporated County's sewer system maintained by the District's East Yard. Previous Condition Assessment Reports dated January 5, 2009, April 6, 2009, May 28, 2009, October 8, 2009, and May 20, 2011 have been provided to you. A copy of the reports can also be found in the District's website at <http://dpw.lacounty.gov/smd/cctv/city/>.

The Sewer Condition Assessment Program utilizes the PACP Quick Rating methodology to rank the structural and maintenance condition of your system based on industry standards.

PROJECT AREA AND DESCRIPTION

Project No. Y0TV0809C included sewer lines located in the unincorporated County and the Cities of Glendora, Palos Verdes Estates, Rancho Palos Verdes, and San Dimas. Enclosed for your reference is an overview map of the project area within the unincorporated County. (Enclosure 1).

DEFECT GRADE DESCRIPTION

The Quick Rating indicates the number of occurrences for the highest severity grade for each pipe segment for either maintenance or structural defects. A grade of 1 indicates that a pipe segment is in excellent condition with minor defects while a grade of 5 indicates that a pipe segment may require immediate attention. A legend of the five possible defect grades is as follows:

| Grade | Defect Grade Description |
|-----------|--------------------------|
| 1: | MINOR |
| 2: | MINOR TO MODERATE |
| 3: | MODERATE |
| 4: | SIGNIFICANT |
| 5: | MOST SIGNIFICANT |

MAINTENANCE REPORT

Our inspection revealed that approximately 78.2 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 21.8 percent of the pipe segments within the unincorporated County had a PACP maintenance grade of 3, 4, or 5 as indicated in the Quick Maintenance Rating Table shown below. These segments have been incorporated into our routine cleaning schedule.

A color-coded map showing the quick maintenance rating for each pipe segment is provided in Enclosure 2.

QUICK MAINTENANCE RATING TABLE

| DEFECT GRADE | PIPE LENGTH (FT) | PERCENT TOTAL INSPECTED PIPE LENGTH | NO. SEGMENTS |
|----------------------|------------------|-------------------------------------|--------------|
| 1: Minor | 942 | 0.3 | 6 |
| 2: Minor to Moderate | 234,785 | 77.9 | 1,002 |
| 3: Moderate | 18,367 | 6.1 | 87 |
| 4: Significant | 44,431 | 14.7 | 174 |
| 5: Most Significant | 2,988 | 1.0 | 12 |
| TOTAL | 301,513 | 100.0 | 1,281 |

Lateral Notices

Also included in the maintenance inspection reports are private lateral deficiencies discovered during the assessment of the mainline. The District does not maintain lateral lines. It is the responsibility of the property owner to maintain their respective lateral lines to facilitate the flow of wastewater from their property to the mainline. Letters will be sent to property owners notifying them of the maintenance issues detected in their laterals. A sample lateral notice letter is provided in Enclosure 2 for your reference.

High Water Levels

Our inspection revealed that approximately 99.5 percent of the system televised has adequate capacity. Approximately 0.5 percent of the segments inspected exhibited visual signs associated with high water levels. The capacity of the sewer pipe can be determined by analyzing several PACP codes, including Water Level, Water Mark, and miscellaneous remarks, which indicate the camera was underwater or there were sags in the line. A sewer pipe is considered at capacity when 50 percent of the diameter of sewer pipe is full of water. However, there are conditions in which the Water Level or Water Mark has reached 50 percent or greater due to heavy flows in adjoining pipes, a temporary stoppage caused by debris in the sewer lines, or a sag in the line. Therefore, additional review of these pipe segments was conducted to determine if any capacity issues exist.

All sewer pipes where the Water Level, Water Mark, and miscellaneous remarks of camera underwater or sags in the line are at or above 50 percent capacity have been listed and analyzed on the High Water Level table in Enclosure 2. The nature of these high water level conditions is also summarized on this table.

A map showing the sewer lines with high water levels is provided in Enclosure 2.

Infiltration

Our inspection revealed that infiltration was not detected in any pipe segments in the unincorporated County's system.

STRUCTURAL REPORT

Our inspection revealed that approximately 88 percent of the inspected pipe segments within unincorporated County were free of severe structural defects. However, the remaining 12 percent of the inspected pipe segments had a PACP structural grade of 4 or 5 as indicated in the Quick Structural Rating Table shown on page 4. These segments have been placed on a priority list based on the severity and the need for action. For items 1 through 139 in the Quick Structural Rating Report Priority List (Enclosure 3) which require a corrective action, the proposed repair or replacement will be scheduled in the next 24 months as part of the ongoing Accumulative Capital Outlay Project. A color-coded map showing the Quick Structural Rating for each pipe segment is located in Enclosure 3. A map showing the sewer lines, which need lining and point repairs, is also provided in Enclosure 3.

QUICK STRUCTURAL RATING TABLE

| DEFECT GRADE | PIPE LENGTH (FT) | PERCENT TOTAL INSPECTED PIPE LENGTH | NO. SEGMENTS |
|----------------------|------------------|-------------------------------------|--------------|
| 1: Minor | 187,207 | 62.1 | 827 |
| 2: Minor to Moderate | 24,599 | 8.2 | 98 |
| 3: Moderate | 53,328 | 17.7 | 217 |
| 4: Significant | 32,884 | 10.9 | 125 |
| 5: Most Significant | 3,495 | 1.1 | 14 |
| TOTAL | 301,513 | 100.0 | 1,281 |

CONDITION ASSESSMENT PROJECTS

The Sewer Condition Assessment Program performed the condition assessment of the sewer lines within unincorporated County maintained by the East Yard according to the following schedule:

| FISCAL YEAR | PROJECT NAME | LENGTH (FT) | PERCENTAGE OF SYSTEM | STATUS |
|--------------|--------------|-------------|----------------------|----------------|
| 2005-2006 | Y0TV0506D | 49,010 | 1.4 | COMPLETED |
| 2005-2006 | Y0TV0506E | 159,581 | 4.4 | COMPLETED |
| 2007-2008 | Y0TV0708F | 195,437 | 5.4 | COMPLETED |
| 2008-2009 | Y0TV0809A | 213,884 | 5.9 | COMPLETED |
| 2008-2009 | Y0TV0809C | 301,513 | 8.3 | COMPLETED |
| 2009-2010 | Y0TV0910B | 1,675 | 0.1 | COMPLETED |
| 2009-2010 | Y0TV0910C | 224,433 | 6.2 | REPORT PENDING |
| 2010-2011 | Y0TV1011A | 502,737 | 13.9 | REPORT PENDING |
| 2011-2012 | Y0TV1112B | 767,924 | 21.2 | REPORT PENDING |
| 2013-2014 | Y0TV1314B1 | 292,285 | 8.1 | REPORT PENDING |
| 2013-2014 | Y0TV1314B2 | 324,762 | 9.0 | REPORT PENDING |
| 2014-2015 | Y0TV1415B | 580,774 | 16.1 | REPORT PENDING |
| TOTAL | | 3,614,015 | 100.0 | |

ENCLOSURE 1:

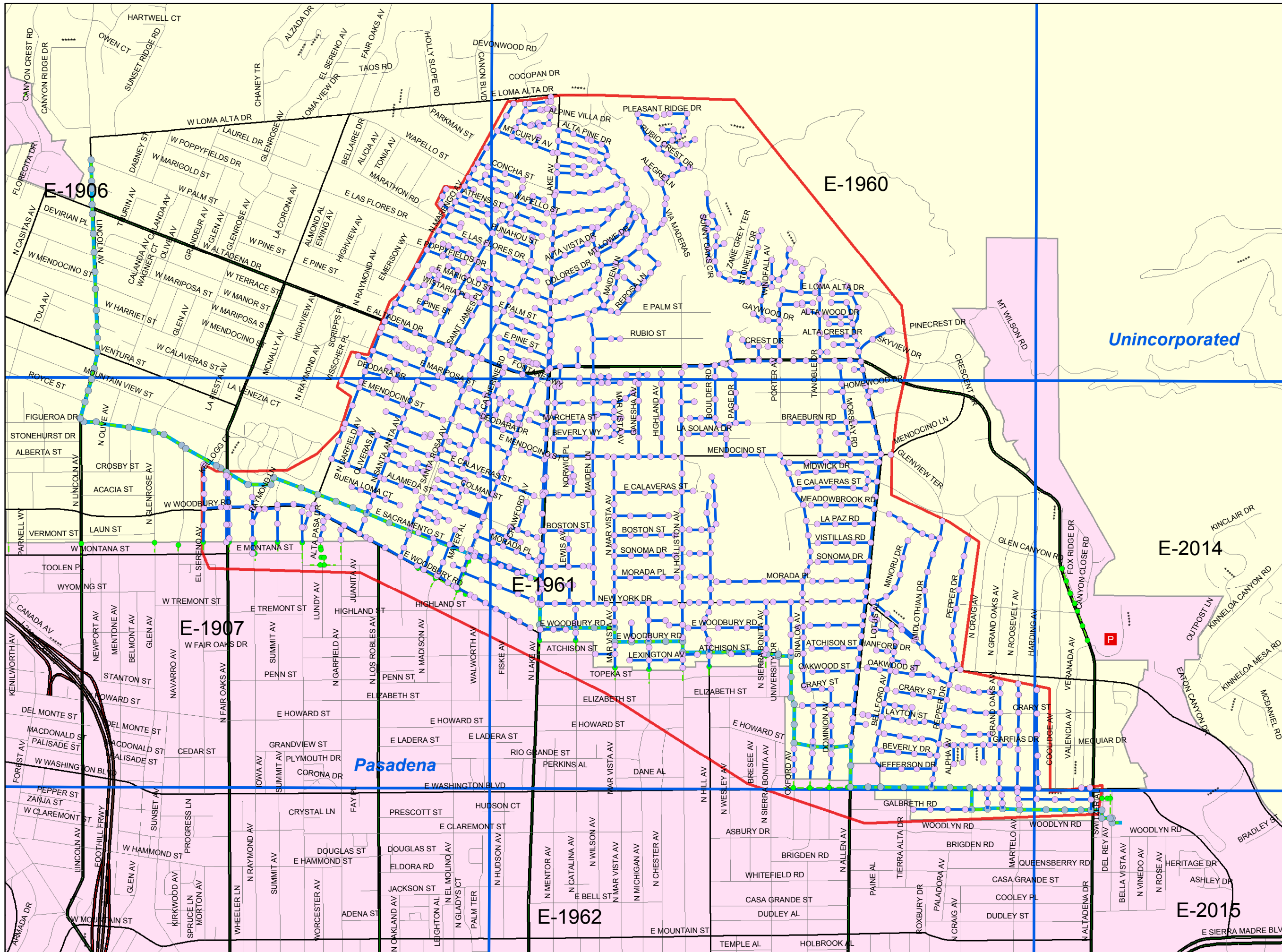
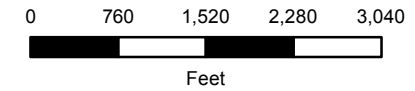
Project Overview Map

OVERVIEW MAP

CCTV PROJECT

YOTV0809C

COUNTY UNINCORPORATED



Legend

- SMD Sanitary Sewers
- SMD Manholes**
 - Other
 - Standard
 - DROP
 - Shallow
 - Trap
 - Siphon
 - SMD Pump Stations
 - SMD Treatment Plants
- Maintained by Others:**
 - Trunk Sewerlines
 - Non SMD Sanitary Sewers
 - Non SMD Maintained MH
 - SMD Operations Maps
 - CCTV PROJECT AREA

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FEBRUARY 2015

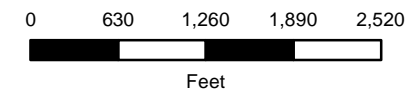
ENCLOSURE 2:

- Quick Maintenance Rating Map
- High Water Levels List and Map
- Sample Lateral Notice Letter

ENCLOSURE 2 CCTV PROJECT YOTV0809C

COUNTY
UNINCORPORATED

QUICK
MAINTENANCE
RATING
(QMR)



Legend

SMD Sanitary Sewers

- QMR
- 1: MINOR
 - 2: MINOR TO MODERATE
 - 3: MODERATE
 - 4: SIGNIFICANT
 - 5: MOST SIGNIFICANT

SMD Manholes

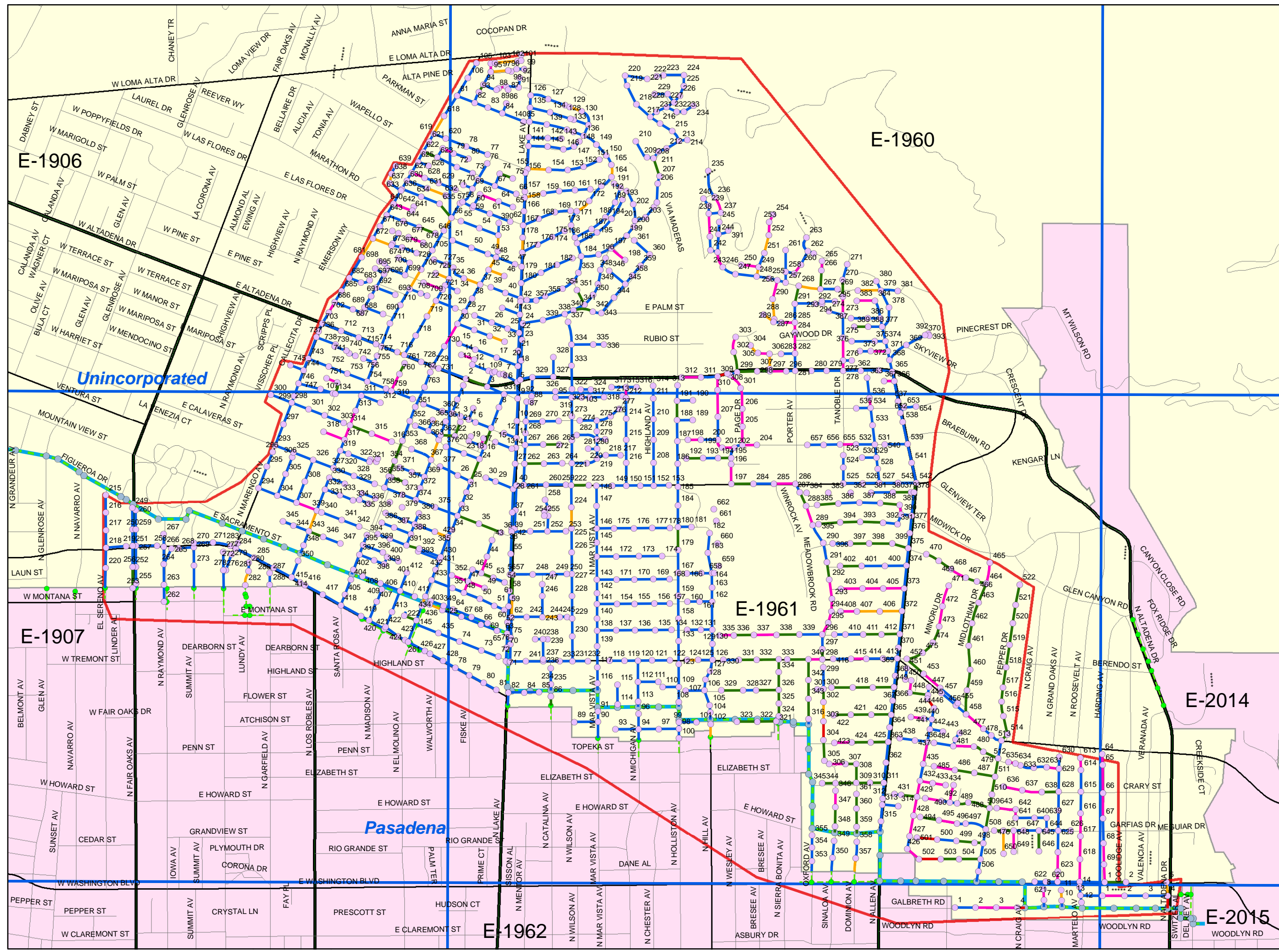
- Other
- Standard
- DROP
- Shallow
- Trap
- Siphon
- SMD Pump Stations
- SMD Treatment Plants

Maintained by Others:

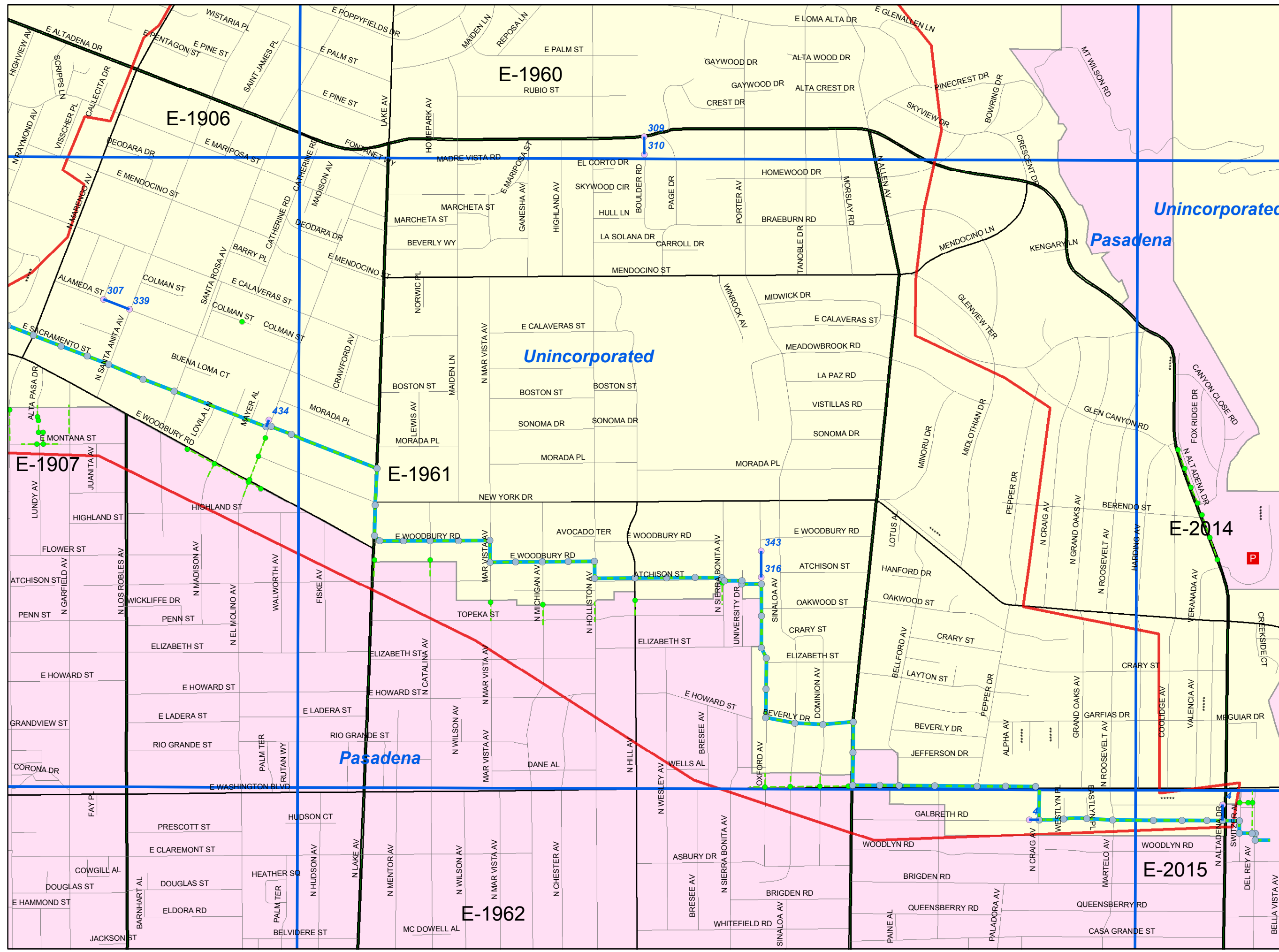
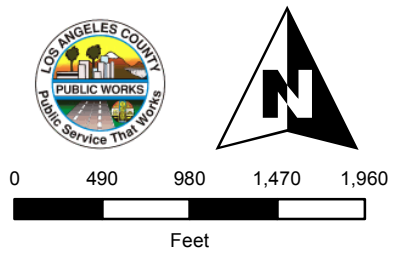
- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Non SMD Maintained MH
- SMD Operations Maps
- CCTV PROJECT AREA

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OCTOBER 2014



ENCLOSURE 2
CCTV PROJECT
YOTV0809C
COUNTY
UNINCORPORATED
HIGH WATER LEVEL



- Legend**
- HIGH WATER LEVEL
 - SMD Manholes**
 - Other
 - Manhole Type**
 - Standard
 - ▲ DROP
 - ◻ Shallow
 - ◆ Trap
 - ⊗ Siphon
 - P** SMD Pump Stations
 - WTP** SMD Treatment Plants
 - Maintained by Others:**
 - Trunk Sewerlines
 - - - Non SMD Sanitary Sewers
 - Non SMD Maintained MH
 - SMD Operations Maps
 - CCTV PROJECT AREA

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FEBRUARY 2015



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

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

(DATE)

IN REPLY PLEASE

REFER TO FILE:

SM-1

Mr./Ms. (NAME)
(ADDRESS)

Dear Ms. (LAST NAME):

SEWER LATERAL ROOT INTRUSION

The County of Los Angeles Consolidated Sewer Maintenance District is responsible for the maintenance of the sanitary sewer system in your area. We recently televised the sewer mainline and discovered roots in your sewer lateral connection. The intrusion of the roots from your lateral may block the flow of sewage in the mainline sewer causing an overflow upstream of your property. You are hereby requested to perform maintenance on the private sewer lateral serving the property located at 4474 El Prieto Road, Altadena, California 91001.

In accordance with **County Code 20.24.080 Maintenance of Sewer Laterals.** ***"All house laterals, industrial connection sewers, septic tank outlet connections to STEP system, and appurtenances thereto existing as of January 23, 1953, or thereafter constructed, shall be maintained by the owner of the property served in a safe and sanitary condition, and all devices or safeguards which are required by this Division 2 for the operation thereof shall be maintained in good working order."***

As the property owner, you are responsible for the entire length of the sewer lateral, which includes the portion that extends beyond the property line into the public right of way. We request that you contact a licensed plumber to service your sewer lateral within 90 days to remove roots and any other obstructions that may cause a sewage backup.

Your licensed plumber is required to protect the District's sewer mainlines from dislodged roots and other debris by utilizing catcher baskets at the manhole downstream from your lateral connection. Prior to your plumber cleaning your lateral, please notify the District's sewer maintenance yard in your area at (626) 446-5227 to arrange for authorization to access the downstream manhole.

We have enclosed photos of your lateral connection showing the root blockage. In addition, we have included literature on ways to minimize sewer overflows and damage to your home. Please consider establishing a routine cleaning schedule for your sewer lateral to minimize potential plumbing problems caused by root intrusion that are likely to reoccur.

If your sewer lateral has been cleaned after the date on the enclosed photos, no further action is necessary. After your lateral has been serviced, please notify Mr. Fernando Villaluna, Sewer Maintenance Division, at (626) 300-3380 or fvillaluna@dpw.lacounty.gov.

Thank you for helping keep the sewer lines clean and in good working order.

Very truly yours,

GAIL FARBER
Director of Public Works

WILLIAM J. WINTER
Assistant Deputy Director
Sewer Maintenance Division

XXXXXX

Enc.

File (Lateral)

XXXXX

Roots at Lateral Connection



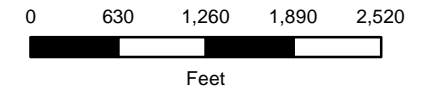
ENCLOSURE 3:

- Quick Structural Rating Report
Priority List
- Quick Structural Rating Map
- Lining and Point Repair
Projects Map

ENCLOSURE 3 CCTV PROJECT YOTV0809C

COUNTY
UNINCORPORATED

QUICK
STRUCTURAL
RATING
(QSR)



Legend

SMD Sanitary Sewers QSR

- 1: MINOR
- 2: MINOR TO MODERATE
- 3: MODERATE
- 4: SIGNIFICANT
- 5: MOST SIGNIFICANT

SMD Manholes

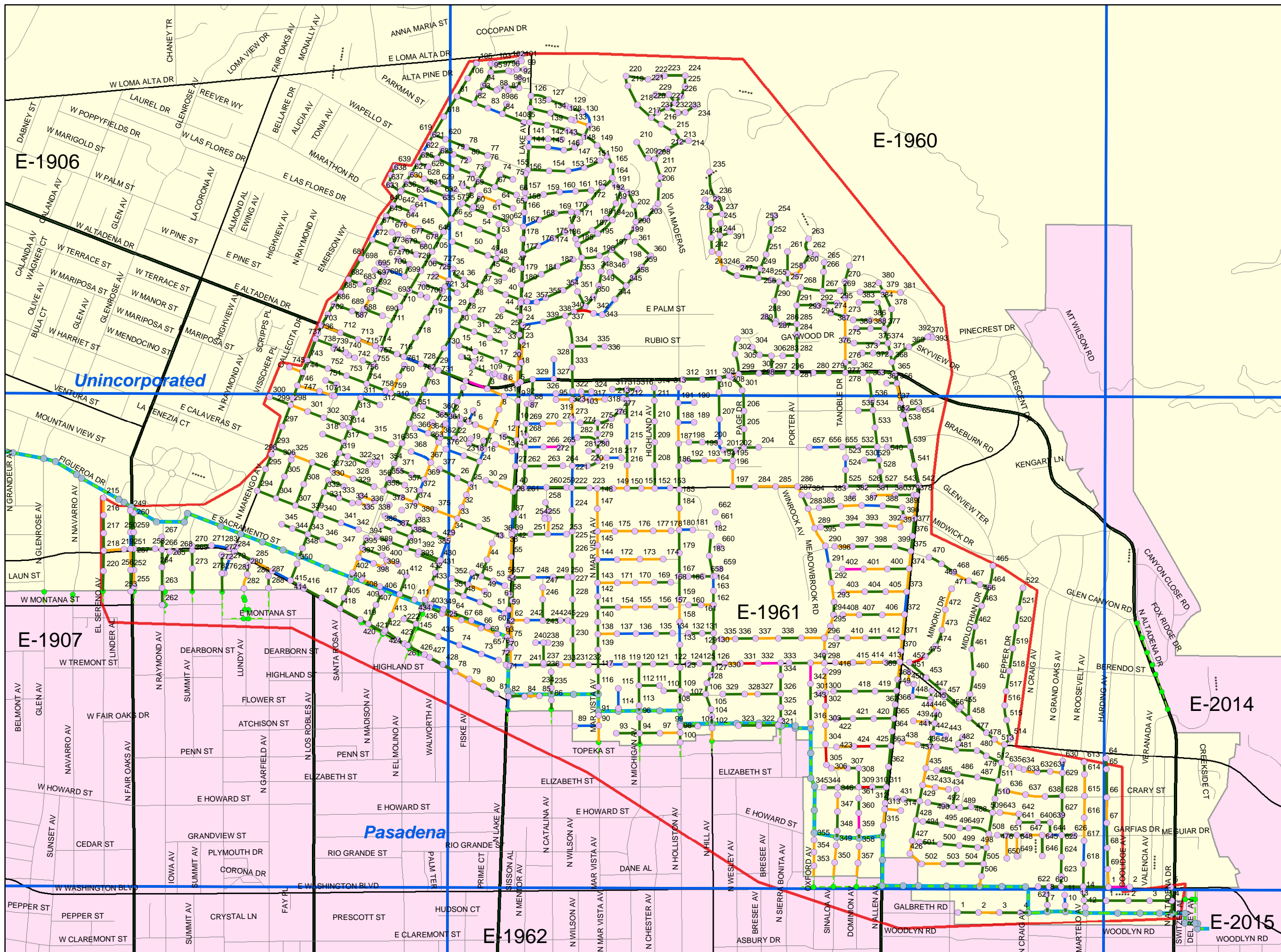
- Other
- Standard
- DROP
- Shallow
- Trap
- Siphon
- SMD Pump Stations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Non SMD Maintained MH
- SMD Operations Maps
- CCTV PROJECT AREA

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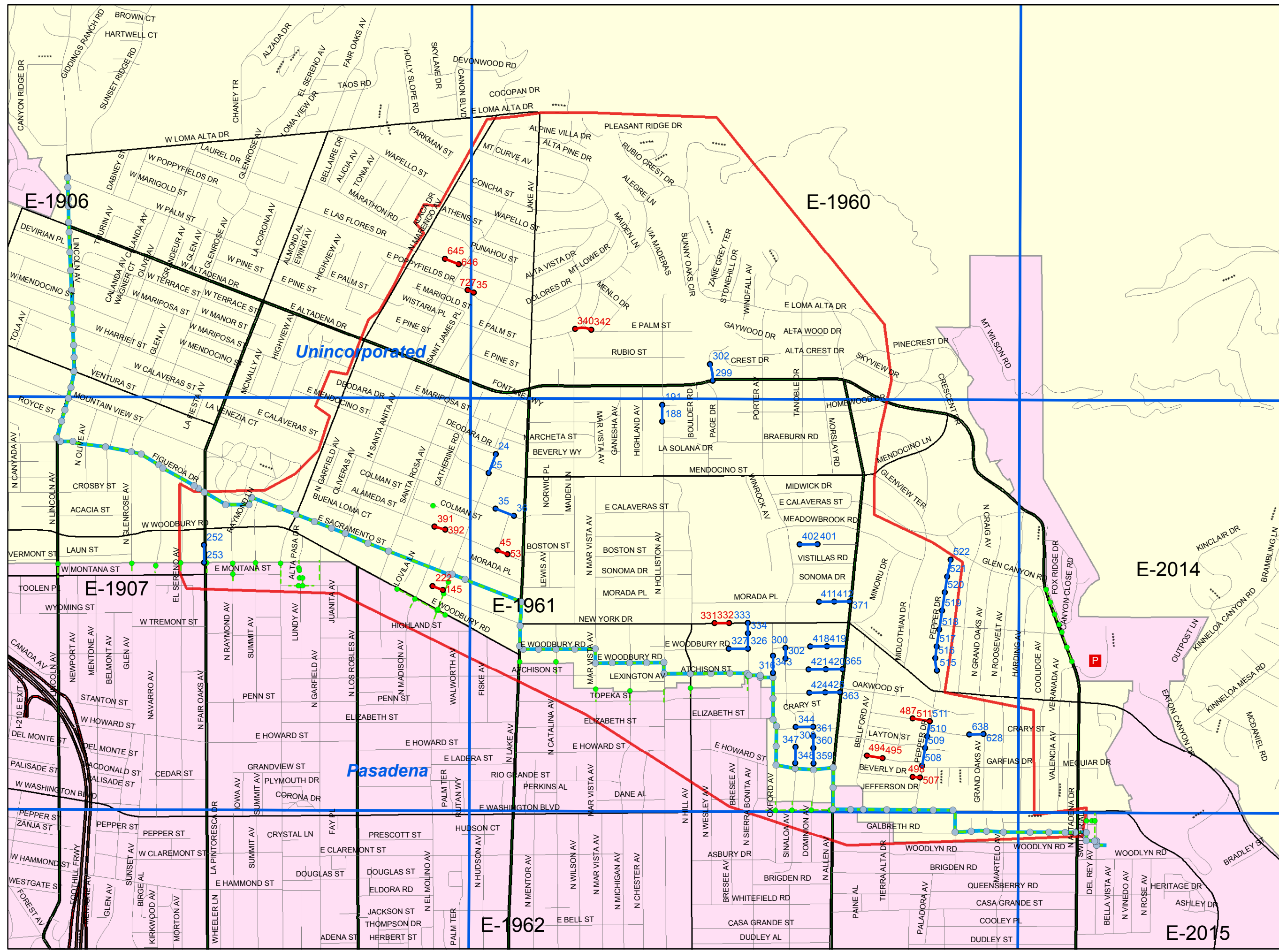
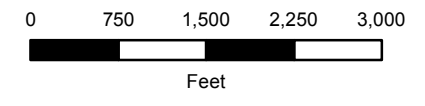
ENCLOSURE 3

CCTV PROJECT

YOTV0809C

COUNTY UNINCORPORATED

LINING & POINT REPAIR



Legend

— POINT REPAIR

— LINING

SMD Manholes

⊙ Other

Manhole Type

● Standard

▲ DROP

■ Shallow

◇ Trap

⊗ Siphon

P SMD Pump Stations

WTP SMD Treatment Plants

Maintained by Others:

— Trunk Sewerlines

--- Non SMD Sanitary Sewers

● Non SMD Maintained MH

□ SMD Operations Maps

▭ CCTV PROJECT AREA

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