



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

June 3, 2009

IN REPLY PLEASE
REFER TO FILE: SM-0

Mr. Michael J. Mischel, Director of Public Works
City of Palmdale
38250 Sierra Highway
Palmdale, CA 93550

Attention Mr. David Wu

Dear Mr. Mischel:

CONSOLIDATED SEWER MAINTENANCE DISTRICT CONDITION ASSESSMENT PROGRAM REPORT PROJECT Y0TV0809D

This letter is to inform you that as part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District has completed the closed-circuit television (CCTV) inspection of 263,842 feet or 13.6 percent of the City of Palmdale's sewer system.

The enclosed report outlines the structural and maintenance ratings of your system based on the Pipeline Assessment and Certification Program's rating methodology. Included in the report are the following:

- Condition Assessment Report
- Project Overview Map (Enclosure 1)
- Quick Maintenance Rating Report Priority List and Quick Maintenance Rating Map (Enclosure 2)
- Quick Structural Rating Report Priority List and Quick Structural Rating Map (Enclosure 3)
- Infrastructure Inspection Reports for Grades 4 and 5 (Enclosure 4)

Mr. Michael J. Mischel, Director of Public Works
June 3, 2009
Page 2

The Condition Assessment Report provides you with details regarding the maintenance and structural condition of your City's sewer mainlines. This information can be included in your agency's Sewer System Management Plan as a reference in Chapter 8.0 System Evaluation and Capacity Assurance Plan. The segments with critical maintenance issues have been cleaned and, in some instances, have been incorporated into our routine cleaning schedule. In addition, the segments with severe structural defects have either been repaired under our Emergency Sewer System Repair Program.

If you have any questions regarding this report or the Condition Assessment Program, please contact Mr. Robert Swartz at (626) 300-3367, Monday through Friday, 8 a.m. to 4 p.m., or at rswartz@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works



FA
DIEGO CADENA
Deputy Director

PK:ag
1698

Enc.

bc: Programs Development (YRIBE)

bc: KL, RS, FV, File (Project Y0TV0809D), SPINDLE

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

PROJECT NAME: Y0TV0809D	PROJECT MGR: Phyo Kyaw
PROJECT DATE: 01/26/2009	CONTACT NO: (626) 300-3369
SUP. DISTRICT(S): 5	MAP PAGE(S): 1886,1887,1888,1940,1941
Report By: Phyo Kyaw	Report Date: 06/01/09

INTRODUCTION

As part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District has completed the closed-circuit television (CCTV) inspection of 263,842 feet or 13.6 percent of the City of Palmdale’s sewer system.

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

PROJECT AREA AND DESCRIPTION

Project Y0TV0809D included sewer lines located in both the Unincorporated County of Los Angeles area and in the Cities of Carson, Palmdale, Palos Verde Estates and Rolling Hills Estates. Enclosed for your reference is an overview map of the project area within your City (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 detailed breakdown of the five possible defect grades is as follows:

Grade	Description	Estimate time to Failure
1:	EXCELLENT: Minor Defects.	Unlikely in the foreseeable future
2:	GOOD: Defects that have not begun to deteriorate.	20 years or more
3:	FAIR: Moderate defects that will continue to deteriorate.	10 to 20 years
4:	POOR: Severe defects that will become grade 5 defects within the foreseeable future.	5 to 10 years
5:	IMMEDIATE ATTENTION: Defects requiring immediate attention.	Has failed or will likely fail within the next 5 years

MAINTENANCE REPORT

Our inspection revealed that approximately 96.1 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 3.9 percent of the inspected pipe segments within the City of Palmdale area had a PACP maintenance grade of 4 or 5 as indicated in the Quick Maintenance Rating Table shown below. These segments have been incorporated into our routine cleaning schedule with corrective action taken as noted on the Quick Maintenance Rating Report Priority List (Enclosure 2). Also included is a color-coded map showing the quick maintenance rating for each pipe segment.

QUICK MAINTENANCE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	233,908	88.6	984
2: Good	11,003	4.2	44
3: Fair	8,646	3.3	33
4: Poor	9,242	3.5	34
5: Immediate Attention	1,043	0.4	4
TOTAL	263,842	100.0	1,099

STRUCTURAL REPORT

Our inspection revealed that approximately 98.9 percent of the inspected pipe segments within the City of Palmdale were free of severe structural defects. However, the remaining 1.1 percent of the inspected pipe segments had a PACP structural grade of 3, 4 or 5 as indicated in the Quick Structural Rating Table shown below. These segments have been placed on a priority list based on the severity and the need for action. For Items 1 through 10 in the Quick Structural Rating Report Priority List (Enclosure 3) which required a corrective action, the proposed corrective method had been completed as part of the Emergency Sewer System Repair Program. A color-coded map showing the Quick Structural Rating for each pipe segment is located in Enclosure 3. Copies of the actual inspection reports for these segments are included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	244,674	92.7	1,030
2: Good	16,248	6.2	59
3: Fair	1,109	0.4	4
4: Poor	562	0.2	2
5: Immediate Attention	1,249	0.5	4
TOTAL	263,842	100.0	1,099

CCTV INSPECTION PROJECTS

The Sewer Condition Assessment Program has performed closed-circuit television inspection in the City of Palmdale as summarized below. Scheduled projects are also listed subject to being part of the Consolidated Sewer Maintenance District.

FISCAL YEAR	PROJECT NAME	LENGTH (FT)	PERCENTAGE OF SYSTEM	STATUS
2007-2008	Y0TV0708A	18,330	1.0	COMPLETE
2007-2008	Y0TV0708D	306,486	15.8	COMPLETE
2008-2009	Y0TV0809D	263,842	13.6	COMPLETE
2010-2011*		284,725	14.7	
2013-2014*		299,768	15.5	
2014-2015*		316,163	16.3	
2015-2016*		138,900	7.2	
2015-2016*		308,217	15.9	
TOTAL		1,936,431		

*Subject to being a part of the CSMD.

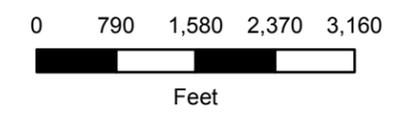
ENCLOSURE 1:

Project Overview Map

OVERVIEW MAP 2

CCTV PROJECT Y0TV0809D

Supervisorial District 2, 4 □ 5
Cities of Carson, Palmdale, Palos Verde Estates, Rolling Hills Estates
□ County Unincorporated



Legend

SMD Sanitary Sewers

- Other
- 8
- 10
- 12
- 15
- 18

SMD Manholes

- Other
- Standard
- Siphon
- Trap
- Shallow
- Drop

- SMD Pump Stations
- SMD Treatment Plants

Maintained by Others:

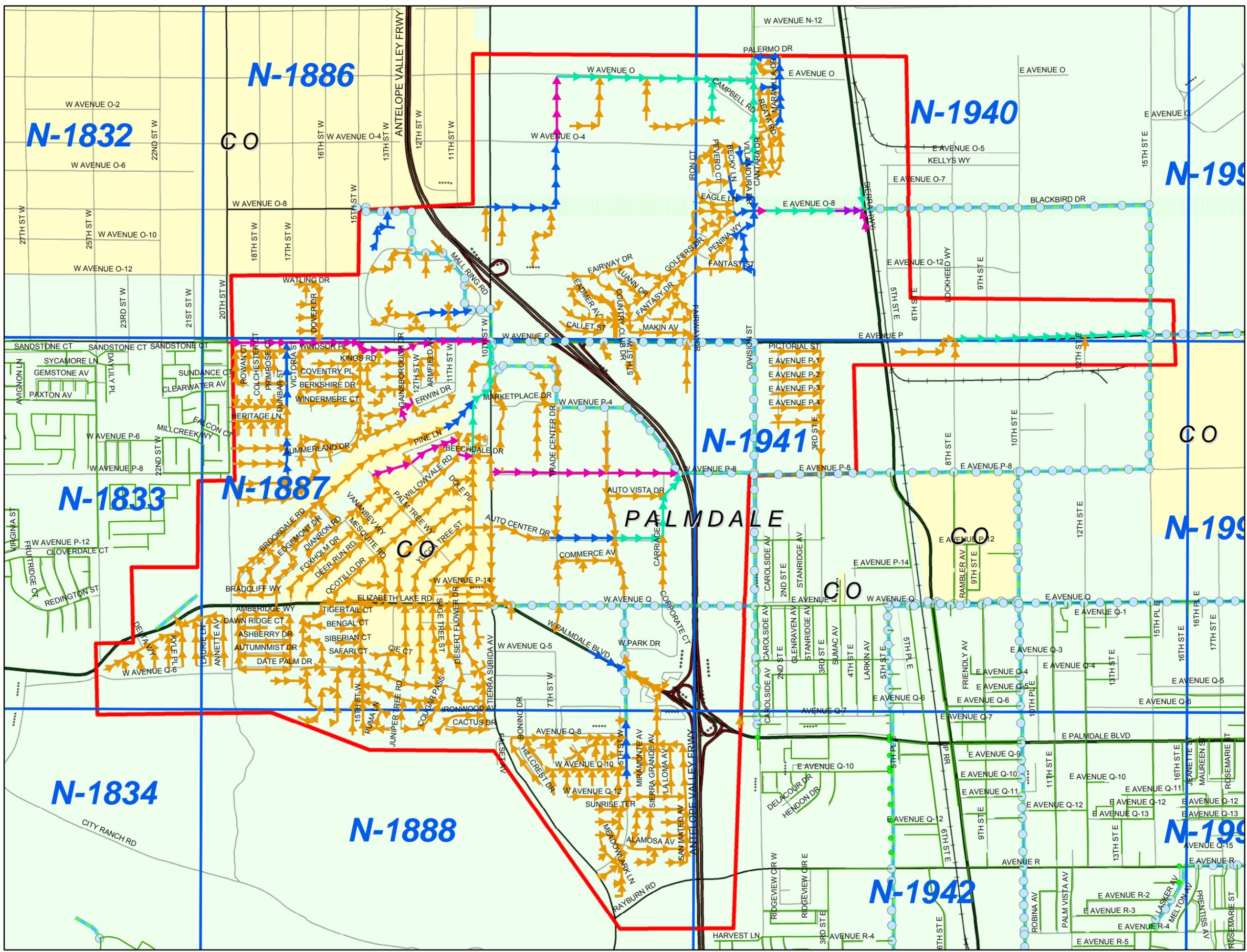
- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH

- SMD Operations Maps
- CCTV PROJECT AREA

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JANUARY 2009

Y0TV00809D Overview-PipeDia.mxd



ENCLOSURE 2:

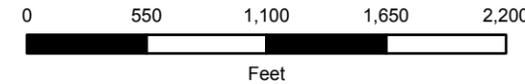
- Quick Maintenance Rating Report
Priority List
- Quick Maintenance Rating Map

ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 CITY OF PALMDALE (Y0TV0809D)
 as of 04/13/09

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	5211	1887-0416	1887-0415	DATE PALM DR	Deposits: gravel and rocks	Hydro (Completed 5/6/09)
2	5133	1888-0135	1888-0136	ELDORADO CT	Deposits: attached grease	Hydro (Completed 5/6/09)
3	5100	1887-0017	1887-0044	BERKSHIRE DR	Obstacle	Hydro (Completed 5/6/09)
4	5100	1886-0058	1886-0059	FAIRWAY DR	Deposits	Hydro (Completed 5/6/09)
5	4F00	1887-0229	1887-0230	RANCHO VISTA BV	Camera underwater	Hydro (Completed 5/6/09)
6	4C3E	1887-0042	1887-TRNK	5TH ST W	Camera underwater	Hydro (Completed 5/6/09)
7	431G	1887-0182	1887-0181	DESERT VIEW DR	Roots	Rodder (Completed 5/6/09)
8	4233	1888-0019	1888-0077	SIERRA GRANDE AV	Camera underwater; deposits: attached calcium	Hydro (Completed 5/6/09)
9	4231	1887-0183	1887-0182	DESERT VIEW DR	Roots	Rodder (Completed 5/6/09)
10	4136	1886-0057	1886-0058	FAIRWAY DR	Water level 35"; deposits	Hydro (Completed 5/6/09)
11	4135	1887-0061	1887-0059	DIANRON RD	Roots	Rodder (Completed 5/6/09)
12	4133	1887-0059	1887-0058	DIANRON RD	Roots	Rodder (Completed 5/6/09)
13	4132	1887-0032	1887-0036	ARMFIELD AV	Roots; deposits attached	Rodder (Completed 5/6/09)
14	4132	1887-0099	1887-0054	WILLOWVALE RD	Roots	Rodder (Completed 5/6/09)
15	4131	1888-0032	1888-0033	5TH PL W	Roots	Rodder (Completed 5/13/09)
16	4131	1886-0032	1886-0033	COUNTRY CLUB DR	Roots	Rodder (Completed 5/13/09)
17	4131	1886-0054	1886-0053	HANSA ST	Roots	Rodder (Completed 5/13/09)
18	4131	1886-0049	1886-0048	MAKIN AV	Roots	Rodder (Completed 5/13/09)
19	4131	1886-0043	1886-0044	MAKIN AV	Roots	Rodder (Completed 5/13/09)
20	4131	1886-0079	1886-0080	FANTASY ST	Roots	Rodder (Completed 5/6/09)
21	411A	1886-0053	1886-0052	HANSA ST	Roots	Rodder (Completed 5/6/09)
22	4114	1887-0036	1887-0037	RANCHO VISTA BV	Roots	Rodder (Completed 5/6/09)
23	4111	1887-0018	1887-0019	SOUTHCLIFF WY	Roots	Rodder (Completed 5/6/09)
24	4111	1886-0026	1886-0028	EADMER AV	Roots	Rodder (Completed 5/6/09)
25	4111	1886-0028	1886-0029	DANIA ST	Roots	Rodder (Completed 5/6/09)
26	4111	1886-0047	1886-0046	MAKIN AV	Roots	Rodder (Completed 5/6/09)
27	4111	1888-0001	1888-0002	CAMINO REAL AV	Water level 55"	Hydro (Completed 5/7/09)
28	4100	1887-0003	1887-0004	WINDSOR PL	Camera underwater	Hydro (Completed 5/6/09)
29	4100	1887-0005	1887-0033	WINDSOR PL	Camera underwater	Hydro (Completed 5/6/09)
30	4100	1887-0258	1887-0257	BROOKDALE RD	Camera underwater	Hydro (Completed 5/7/09)
31	4100	1887-0096	1887-0095	FOXHOLM DR	Concrete debris	Hydro (Completed 5/6/09)
32	4100	1886-0037	1886-0039	COUNTRY CLUB DR	Roots	Rodder (Completed 5/6/09)
33	4100	1887-0359	1887-0358	PRIMROSE CT	Deposits; roots	Rodder (Completed 5/6/09)
34	4100	1887-0234	1887-0233	TIGERTAIL CT	Roots	Rodder (Completed 5/28/09)
35	4100	1887-0471	1887-0470	EASEMENT	Roots	Rodder (Completed 5/28/09)
36	4100	1940-0029	1940-0028	DIVISION ST	Camera underwater	Hydro (Completed 5/7/09)
37	4100	1888-0140	1888-0139	RAINBOW TER	Obstacle: rock	Hydro (Completed 5/7/09)
38	4100	1888-0134	1888-0110	SUNRISE TER	Camera underwater	Hydro (Completed 5/7/09)

ENCLOSURE 2
CCTV PROJECT
YOTV0809D

Supervisorial District 5
PALMDALE
QUICK
MAINTENANCE
RATING
(QMR)



Legend

SMD Sanitary Sewers
QMR

- 1: EXCELLENT
- 2: GOOD
- 3: FAIR
- 4: POOR
- 5: IMMEDIATE ATTENTION

SMD Manholes

Other

Manhole Type

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

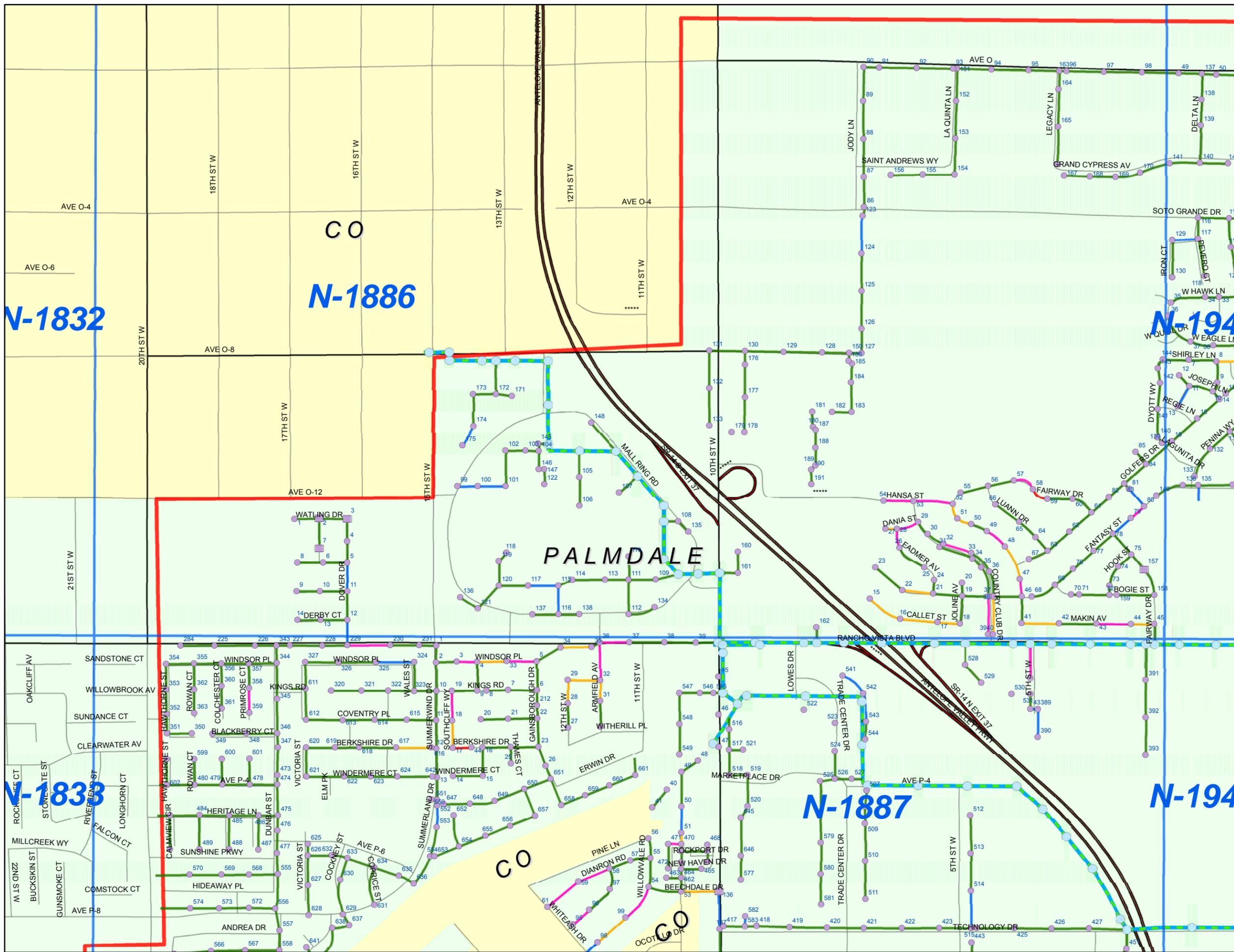
Maintained by Others:

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

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JUNE 2009

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N-1832

N-1886

N-194

N-1833

N-1887

N-194

PALMDALE

CO

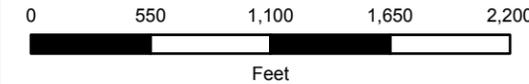
CO

CO

ENCLOSURE 2
CCTV PROJECT
YOTV0809D

Supervisory District 5
PALMDALE

QUICK
MAINTENANCE
RATING
(QMR)



Legend

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Other

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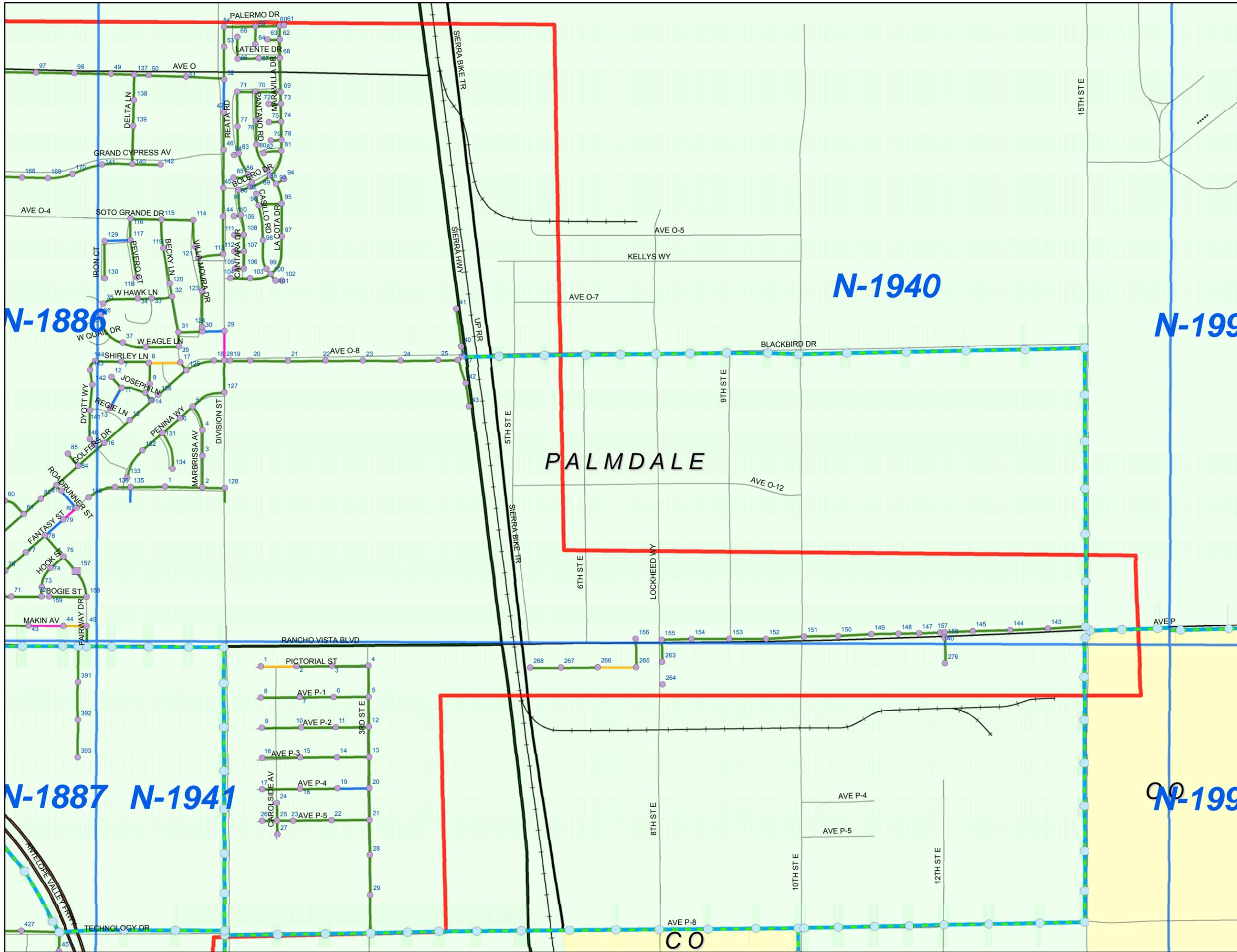
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JUNE 2009

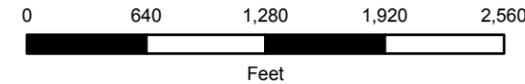
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CO

ENCLOSURE 2 CCTV PROJECT Y0TV0809D

Supervisory District 5
PALMDALE
QUICK
MAINTENANCE
RATING
(QMR)



Legend

- SMD Sanitary Sewers**
- QMR**
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 - 2: GOOD
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 - 5: IMMEDIATE ATTENTION

SMD Manholes

- Other
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- DROP
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- SMD Treatment Plants

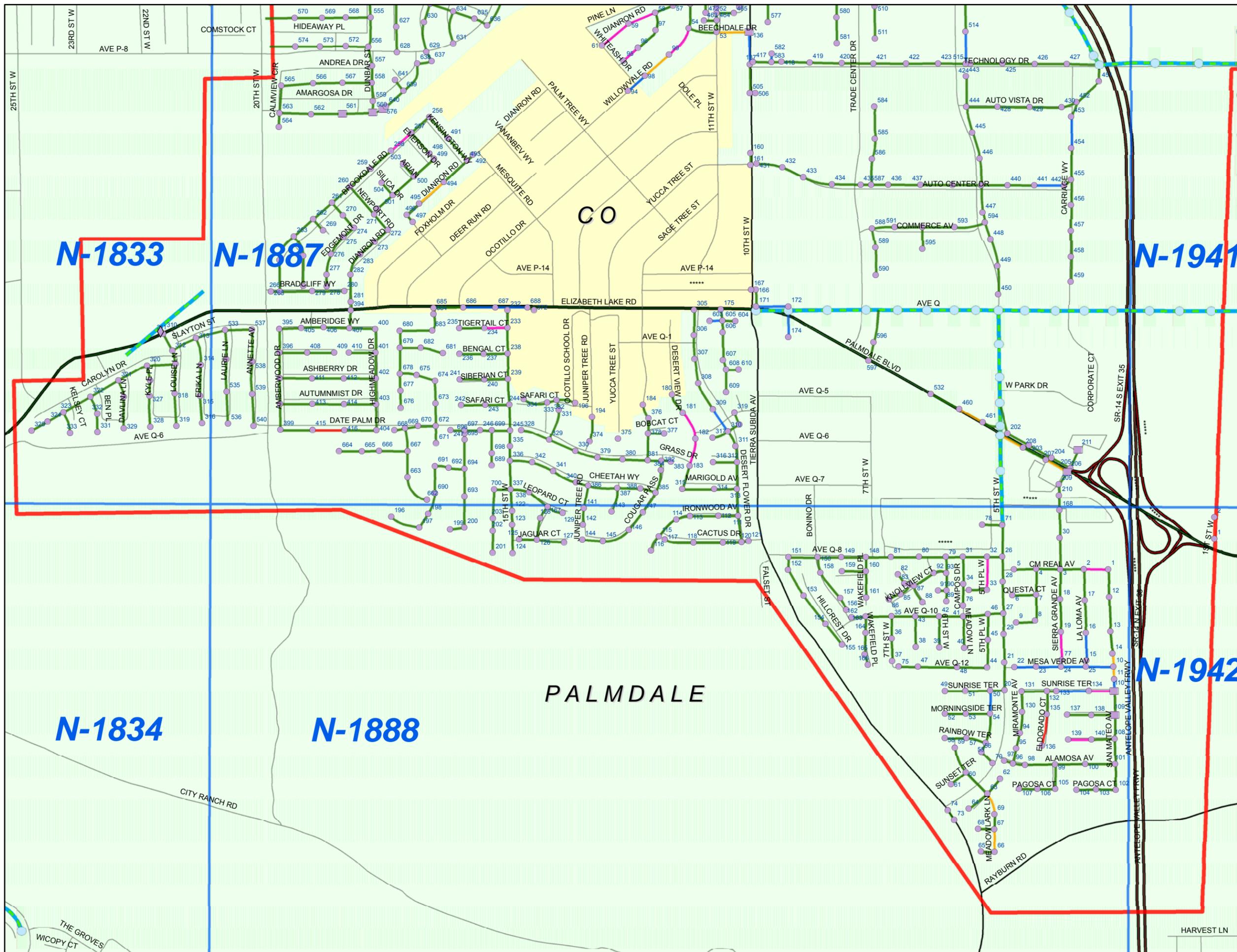
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JUNE 2009

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ENCLOSURE 3:

- Quick Structural Rating Report
Priority List
- Quick Structural Rating Map

ENCLOSURE 3
 QUICK STRUCTURAL RATING REPORT PRIORITY LIST
 CITY OF PALMDALE (Y0TV0809D)
 as of 04/13/09

Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
1	5122	1940-0047	1940-0052	DIVISION ST	Broken with fracture: 312'	Emergency Repair (Lining MH to MH): completed May 2009	353
2	5100	1887-0337	1887-0336	15TH ST W	Broken with soil visible: 310'	Emergency Repair (Lining MH to MH): completed May 2009	314
3	5100	1887-0427	1887-TRNK	TECHNOLOGY DR	Broken with 'concrete patch' visible: 45'	Structural integrity intact. No action needed.	-
4	5100	1888-0051	1888-0050	SUNRISE TER	Broken with soil visible: 247'	Emergency Repair (Lining MH to MH): completed May 2009	249
5	4100	1887-0623	1887-0624	WINDMERE CT	Multiple fractures: 246'	Structural integrity intact. No action needed.	-
6	4100	1887-0330	1887-0329	DATE PALM DR	Multiple fractures: 312'	Structural integrity intact. No action needed.	-
7	3122	1886-0054	1886-0053	HANSA ST	Fracture and crack: 40'	Emergency Repair (Lining MH to MH): completed May 2009	233
8	3121	1887-0245	1887-0244	15TH ST W	Joint offset: 86'; Fracture: 142', 148'	Emergency Repair (Lining MH to MH): completed May 2009	282
9	3100	1833-0312	1833-0311	LOUISE LN	Fracture: 6'	Structural integrity intact. No action needed.	-
10	3100	1940-0020	1940-0021	EASEMENT	Fracture: 273'	Structural integrity intact. No action needed.	-

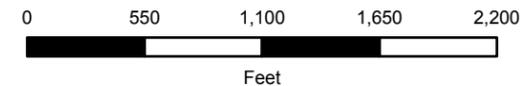
ENCLOSURE 3

CCTV PROJECT

YOTV0809D

Supervisory District 5 PALMDALE

QUICK STRUCTURAL RATING (QSR)

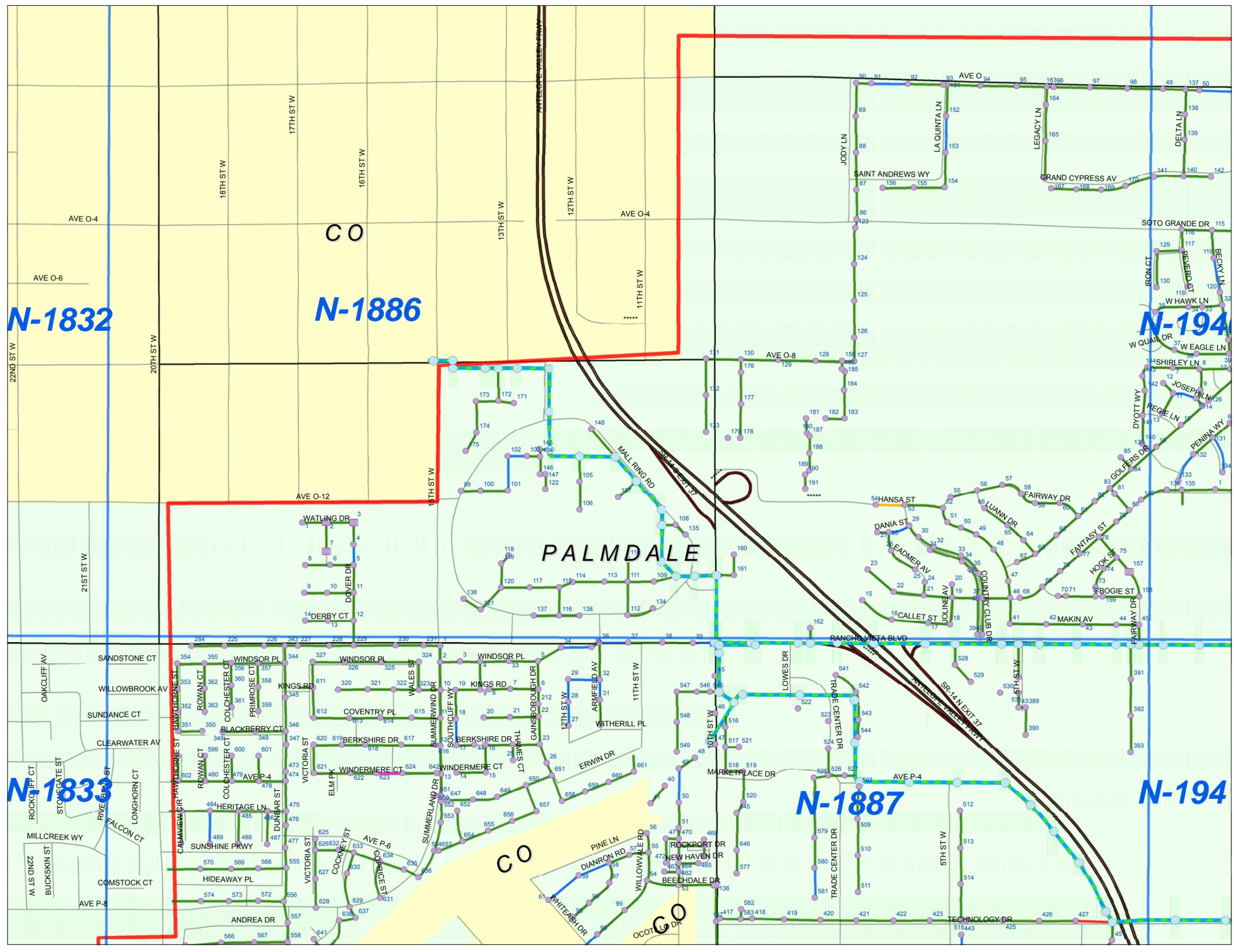


- ### Legend
- #### SMD Sanitary Sewers
- ##### QSR
- 1: EXCELLENT (Green line)
 - 2: GOOD (Blue line)
 - 3: FAIR (Yellow line)
 - 4: POOR (Pink line)
 - 5: IMMEDIATE ATTENTION (Red line)

- #### SMD Manholes
- Other (Circle with dot)
- #### Manhole Type
- Standard (Purple circle)
 - DROP (Purple triangle)
 - Shallow (Purple square)
 - Trap (Purple diamond)
 - Siphon (Purple circle with cross)
 - SMD Pump Stations (Red square with 'P')
 - SMD Treatment Plants (Black square with 'WTP')

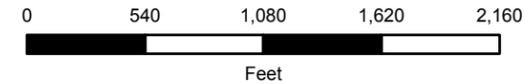
- #### Maintained by Others:
- Trunk Sewerlines (Green dashed line)
 - Non SMD Sanitary Sewers (Blue dashed line)
 - Trunk MH (Blue circle)
 - Non SMD Maintained MH (Green circle)
 - SMD Operations Maps (Blue outline)
 - CCTV PROJECT AREA (Red outline)

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ENCLOSURE 3
CCTV PROJECT
Y0TV0809D

Supervisory District 5
PALMDALE
QUICK
STRUCTURAL
RATING
(QSR)



Legend

- SMD Sanitary Sewers**
QSR
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 - 2: GOOD
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 - 5: IMMEDIATE ATTENTION

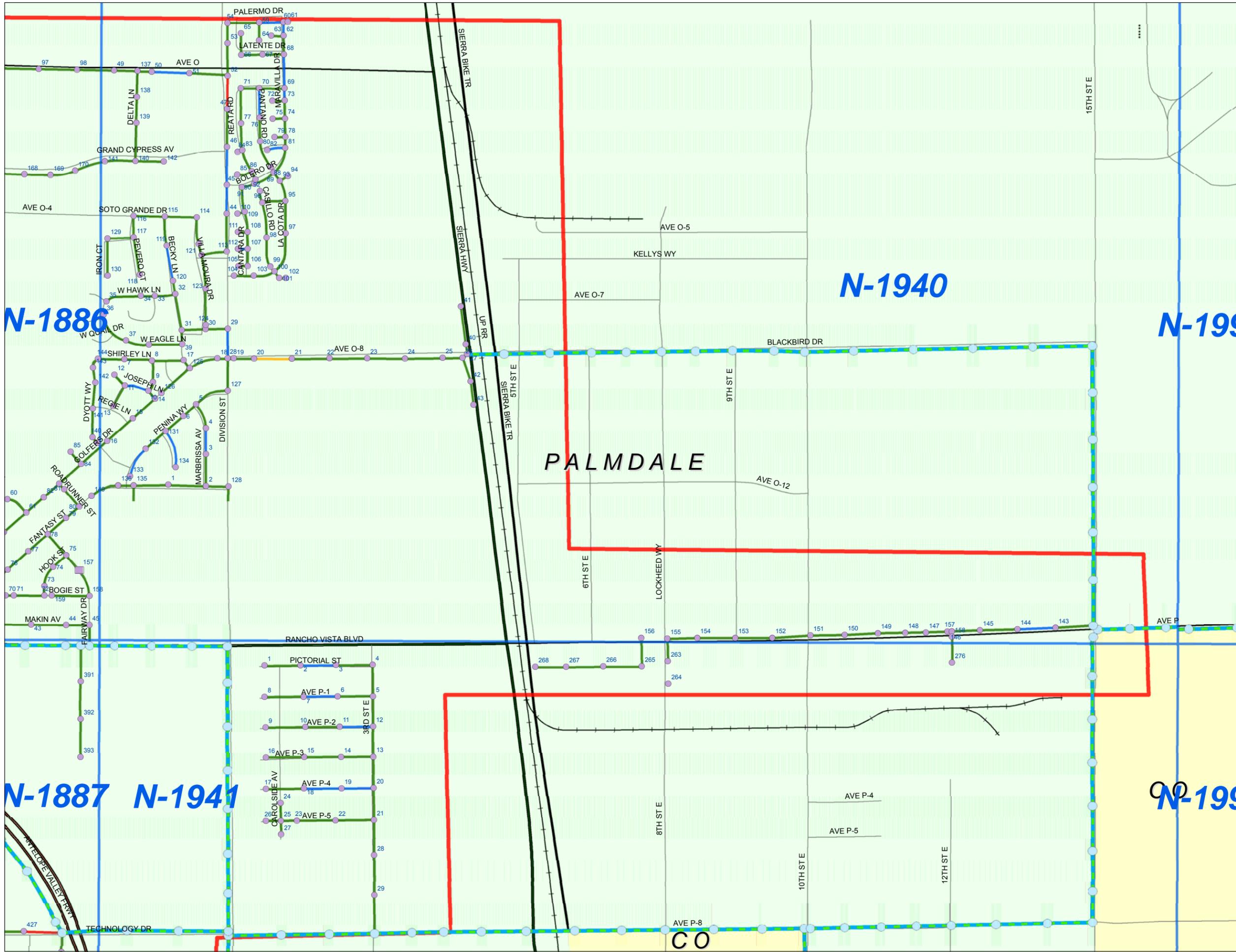
SMD Manholes

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

Maintained by Others:

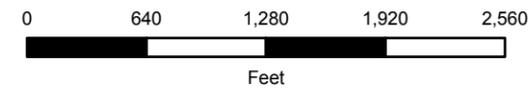
- Trunk Sewerlines
- Non SMD Sanitary Sewers
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ENCLOSURE 3
CCTV PROJECT
Y0TV0809D

Supervisory District 5
PALMDALE
QUICK
STRUCTURAL
RATING
(QSR)



Legend

SMD Sanitary Sewers

- QSR**
- 1: EXCELLENT (Green line)
 - 2: GOOD (Blue line)
 - 3: FAIR (Yellow line)
 - 4: POOR (Pink line)
 - 5: IMMEDIATE ATTENTION (Red line)

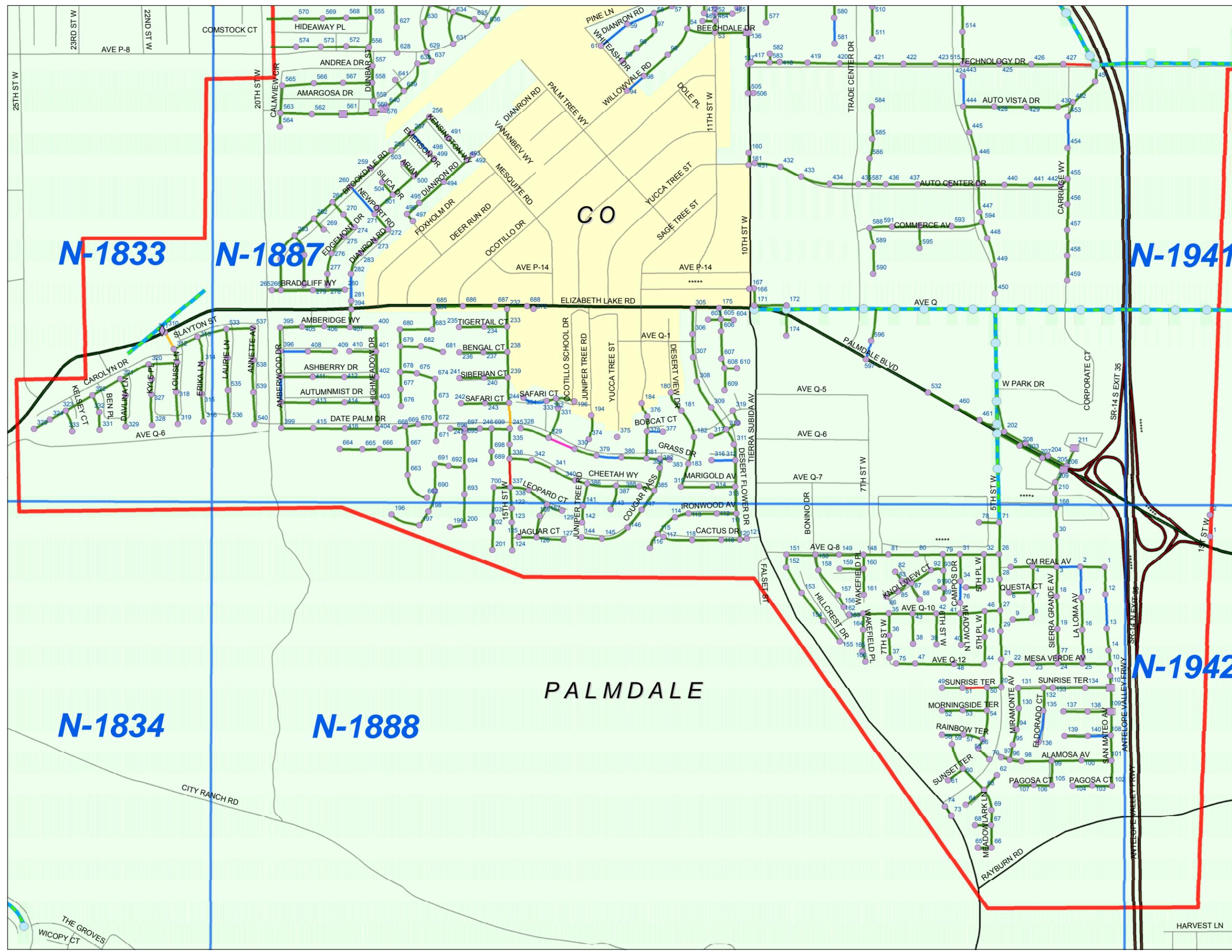
SMD Manholes

- Other (Circle with dot)
- Manhole Type**
 - Standard (Purple circle)
 - DROP (Purple triangle)
 - Shallow (Purple square)
 - Trap (Purple diamond)
 - Siphon (Purple circle with cross)
 - SMD Pump Stations (Red square with P)
 - SMD Treatment Plants (WTP icon)

Maintained by Others:

- Trunk Sewerlines (Thick blue line)
- Non SMD Sanitary Sewers (Dashed green line)
- Trunk MH (Blue circle)
- Non SMD Maintained MH (Green circle)
- SMD Operations Maps (Blue outline)
- CCTV PROJECT AREA (Red outline)

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ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



Inspection report

Date: 20090204	P.O.☐ Y0TV0809D	Weather: Dry	Surveyed By: Martin Garcia	section number: 1402	PSR: 40424
Total Pipe Length: 350.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date: 02.02 2009	Pre-Cleaned: Jetting	Map Grid ☐

Street: DIVISION ST	Flow Control: Not Controlled	Start MH: 1940-0047
City: PLM	Year Renewed	End MH: 1940-0052
Location Code: Light Highway	Tape/Media ☐ M313-007	pipe length: 352.8 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 15"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0047 1940-0052 1940	Lining Method:
	Category:

Remark::

1:875	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1940-0047	00:00:35	1171	
	6.00	Water Level, 5 ☐, within 8 inch: NO	00:01:22	1172	
	271.50	Vermin Rat, 1", within 8 inch: NO	00:08:08	1173	M 2
	310.70	Fracture Circumferential, from 10 to 5 o'clock, within 8 inch: YES	00:09:38	1174, b	S 2
	312.10	Broken, from 12 to 5 o'clock, within 8 inch: NO	00:10:09	1176, b	S 5
	312.60	Fracture Circumferential, from 7 to 5 o'clock, within 8 inch: NO	00:10:34	1179, b	S 2
	352.80	Manhole, within 8 inch: NO, Remarks: 1940-0052	00:12:20	1181	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5122	2100	9	2	11	3	2	2.75



Inspection report

Date: 20090303	P.O. □	Weather: Dry	Surveyed By: Rigo Alvarez	section number: 1077	PSR: 49024
Total Pipe Length: 312.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date:	Pre-Cleaned: Jetting	Map Grid □

Street: 15TH ST W	Flow Control: Not Controlled	Start MH: 1887-0337
City: PLM	Year Renewed	End MH: 1887-0336
Location Code: Light Highway	Tape/Media □ R001-026	pipe length: 313.7 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 8"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0336 1887-0337 1887	Lining Method:
	Category:

Remark::

1:775	position	observation	MPEG	photo	grade
	0.10	Manhole, within 8 inch: NO, Remarks: 1887-0337	00:00:26	5810	
	9.30	Tap Factory, at 9 o'clock, 4", within 8 inch: NO	00:01:15	5811	
	10.20	Water Level, 5 □, within 8 inch: NO	00:01:25	5812	
	16.30	General Observation, within 8 inch: NO, Remarks: Pipe joint Length 6'	00:01:52	5813	
	79.00	Tap Factory, at 9 o'clock, 4", within 8 inch: NO	00:03:42	5814	
	154.60	Tap Factory, at 9 o'clock, 4", within 8 inch: NO	00:05:56	5815	
	230.40	Tap Factory, at 9 o'clock, 4", within 8 inch: NO	00:08:13	5816	
	310.80	Broken Soil Visible, from 4 to 7 o'clock, within 8 inch: YES	00:11:01	5817, b	S 5
	313.70	Manhole, within 8 inch: NO, Remarks: 1887-0336	00:12:04	5819	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5100	0000	5	0	5	5	0	5



Inspection report

Date: 20090218	P.O.☐ Y0TV0809D	Weather: Dry	Surveyed By: Martin Garcia	section number: 1541	PSR: 48991
Total Pipe Length: 350.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date: 02:16 2009	Pre-Cleaned: Jetting	Map Grid ☐

Street: TECHNOLOGY DR	Flow Control: Not Controlled	Start MH: 1887-0427
City: PLM	Year Renewed	End MH: 1887-TRNK
Location Code: Light Highway	Tape/Media ☐ M313-017	pipe length: 353.6 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 12"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0427:1887-TRNK:1887	Lining Method:
	Category:

Remark::

1:875	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1887-0427	00:00:31	2282	
	6.00	Water Level, 5 ☐, within 8 inch: NO	00:01:16	2283	
	46.40	Hole Void Visible, from 10 to 4 o'clock, within 8 inch: YES	00:03:04	2284, b	S 5
	46.40	General Observation, within 8 inch: NO, Remarks: APPEARS TO BE PLASTIC	00:03:30	2287	
	338.20	Alignment Left, within 8 inch: NO	00:11:46	2288	M 1
	353.60	Manhole, within 8 inch: NO, Remarks: 1887-TRNK	00:12:29	2289	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5100	1100	5	1	6	5	1	3



Inspection report

Date: 20090312	P.O. □	Weather: Dry	Surveyed By: Rigo Alvarez	section number: 1213	PSR: 48791
Total Pipe Length: 237.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date:	Pre-Cleaned: Jetting	Map Grid □

Street: SUNRISE TER	Flow Control: Not Controlled	Start MH: 1888-0051
City: PLM	Year Renewed	End MH: 1888-0050
Location Code: Light Highway	Tape/Media □ R001-033	pipe length: 248.4 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 8"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0050 1888-0051 1888	Lining Method:
	Category:

Remark::

1:625	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1888-0051	00:00:33	7704	
	7.90	Water Level, 5 □, within 8 inch: NO	00:00:59	7705	
	13.60	General Observation, within 8 inch: NO, Remarks: Pipe joint Length 6'	00:01:28	7706	
	54.30	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:02:23	7707	
	56.90	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:02:46	7708	
	131.90	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:04:31	7709	
	134.20	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:04:50	7710	
	192.70	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:06:39	7711	
	200.80	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:07:06	7712	
	246.90	Broken Soil Visible, from 4 to 8 o'clock, within 8 inch: YES	00:09:37	7713, b	S 5
	248.40	Manhole, within 8 inch: NO, Remarks: 1888-0050	00:10:43	7715	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5100	0000	5	0	5	5	0	5



Inspection report

Date: 20090216	P.O. □	Weather: Light Rain	Surveyed By: Rigo Alvarez	section number: 848	PSR: 766593
Total Pipe Length: 250.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date:	Pre-Cleaned: Jetting	Map Grid □

Street: WINDMERE CT	Flow Control: Not Controlled	Start MH: 1887-0623
City: PLM	Year Renewed	End MH: 1887-0624
Location Code: Light Highway	Tape/Media □ R001-015	pipe length: 249.3 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 8"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0623 1887-0624 1887	Lining Method:
	Category:

Remark::

1:625	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1887-0623	00:00:29	2446	
	5.00	Water Level, 5 □, within 8 inch: NO	00:01:03	2447	
	11.20	General Observation, within 8 inch: NO, Remarks: Pipe joint Length 6'	00:01:30	2448	
	55.70	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:02:42	2449	
	76.60	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:03:41	2450	
	115.90	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:04:52	2451	
	130.70	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:05:31	2452	
	206.60	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:07:46	2453	
	239.50	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:08:49	2454	
	246.80	Fracture Multiple, from 9 to 4 o'clock, within 8 inch: YES	00:09:37	2455, b	S 4
249.30	Manhole, within 8 inch: NO, Remarks: 1887-0624	00:10:48	2457		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4100	0000	4	0	4	4	0	4



Inspection report

Date: 20090305	P.O. □	Weather: Dry	Surveyed By: Rigo Alvarez	section number: 1117	PSR: 49138
Total Pipe Length: 312.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date:	Pre-Cleaned: Jetting	Map Grid □

Street: DATE PALM DR	Flow Control: Not Controlled	Start MH: 1887-0330
City: PLM	Year Renewed	End MH: 1887-0329
Location Code: Light Highway	Tape/Media □ R001-028	pipe length: 313.7 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 8"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0329 1887-0330 1887	Lining Method:
	Category:

Remark::

1:775	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1887-0330	00:00:29	6210	
	6.40	Tap Factory Capped, at 3 o'clock, 4", within 8 inch: NO	00:01:15	6211	
	13.50	General Observation, within 8 inch: NO, Remarks: Pipe joint Length 6'	00:01:58	6212	
	21.40	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:02:19	6213	
	42.30	Tap Factory Capped, at 3 o'clock, 4", within 8 inch: NO	00:03:03	6214	
	51.90	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:03:31	6215	
	79.10	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:04:21	6216	
	99.80	Tap Factory Capped, at 3 o'clock, 4", within 8 inch: NO	00:05:05	6217	
	108.60	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:05:32	6218	
	147.70	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:06:50	6219	
	156.50	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:07:17	6220	
	244.40	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:09:34	6221	
	253.20	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:10:01	6222	
	304.50	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:11:41	6223	
	311.90	Fracture Multiple, from 9 to 3 o'clock, within 8 inch: YES	00:12:30	6224, b	S 4
	313.70	Manhole, within 8 inch: NO, Remarks: 1887-0329	00:13:21	6226	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4100	0000	4	0	4	4	0	4



Inspection report

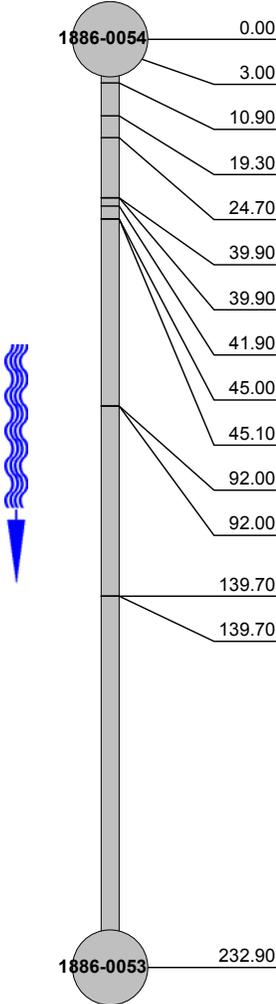
Date: 20090130	P.O. □	Weather: Dry	Surveyed By: Rigo Alvarez	section number: 634	PSR: 49568
Total Pipe Length: 279.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date:	Pre-Cleaned: Jetting	Map Grid □

Street: HANSA ST	Flow Control: Not Controlled	Start MH: 1886-0054
City: PLM	Year Renewed	End MH: 1886-0053
Location Code: Light Highway	Tape/Media □ R001-004	pipe length: 232.9 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 8"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0053 1886-0054 1886	Lining Method:
	Category:

Remark::

1:575	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1886-0054	00:00:21	491	
	3.00	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:01:02	492	
	10.90	Tap Break-in Active, at 10 o'clock, 4", within 8 inch: NO	00:01:58	493	
	19.30	Water Level, 5 □, within 8 inch: NO	00:02:24	494	
	24.70	General Observation, within 8 inch: NO, Remarks: Pipe joint Length 5'	00:02:51	495	
	39.90	Roots Fine Joint, from 3 to 7 o'clock, within 8 inch: YES	00:03:39	496, b	M 1
	39.90	Crack Longitudinal, at 9 o'clock, within 8 inch: NO	00:03:51	498, b	S 2
	41.90	Crack Multiple, from 9 to 3 o'clock, within 8 inch: NO	00:05:03	500, b	S 3
	45.00	Roots Fine Joint, at 9 o'clock, within 8 inch: YES	00:05:35	502, b	M 1
	45.10	Crack Longitudinal, at 3 o'clock, within 8 inch: YES	00:06:17	504, b	S 2
	92.00	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:08:21	506	
	92.00	Roots Medium Connection, at 3 o'clock, 25 □, within 8 inch: NO	00:08:46	507, b	M 3
	139.70	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:10:51	509	
	139.70	Roots Ball Connection, at 3 o'clock, 65 □, within 8 inch: NO	00:11:06	510, b	M 4
	232.90	Manhole, within 8 inch: NO, Remarks: 1886-0053	00:15:00	512	



QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3122	4131	7	9	16	2.33	2.25	2.29



Inspection report

Date: 20090304	P.O. □	Weather: Dry	Surveyed By: Rigo Alvarez	section number: 1083	PSR: 49177
Total Pipe Length: 280.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date:	Pre-Cleaned: Jetting	Map Grid □

Street: 15TH ST W	Flow Control: Not Controlled	Start MH: 1887-0245
City: PLM	Year Renewed	End MH: 1887-0244
Location Code: Light Highway	Tape/Media □ R001-027	pipe length: 281.2 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 8"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0244 1887-0245 1887	Lining Method:
	Category:

Remark::

1:700	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1887-0245	00:00:29	5857	
	6.00	Water Level, 5 □, within 8 inch: NO	00:01:15	5858	
	12.50	General Observation, within 8 inch: NO, Remarks: Pipe Joint Length 6'	00:01:51	5859	
	26.50	Tap Factory Capped, at 3 o'clock, 4", within 8 inch: NO	00:02:32	5860	
	80.30	Tap Factory Capped, at 3 o'clock, 4", within 8 inch: NO	00:04:17	5861	
	86.40	Joint Offset Medium, within 8 inch: YES	00:04:53	5862, b	S 1
	87.50	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:05:30	5864	
	142.60	Fracture Circumferential, from 5 to 7 o'clock, within 8 inch: YES	00:07:43	5865, b	S 2
	148.60	Crack Multiple, from 12 to 5 o'clock, within 8 inch: YES	00:08:52	5867, b	S 3
	156.20	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:09:36	5869	
	225.40	Tap Factory Capped, at 3 o'clock, 4", within 8 inch: NO	00:11:43	5870	
	281.20	Manhole, within 8 inch: NO, Remarks: 1887-0244	00:13:49	5871	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3121	0000	6	0	6	2	0	2



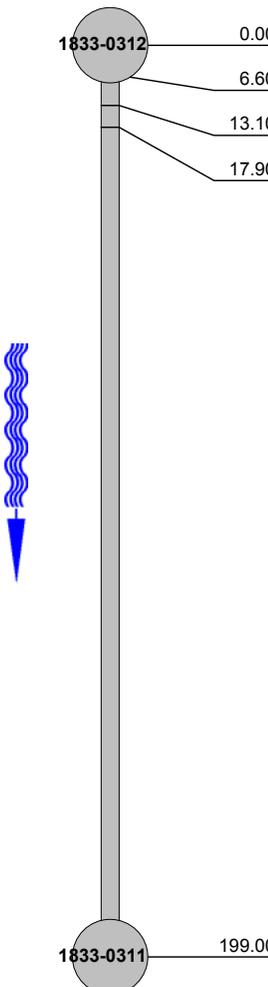
Inspection report

Date: 20090218	P.O. □	Weather: Dry	Surveyed By: Rigo Alvarez	section number: 899	PSR: 56122
Total Pipe Length: 200.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date:	Pre-Cleaned: Jetting	Map Grid □

Street: LOUISE LN	Flow Control: Not Controlled	Start MH: 1833-0312
City: PLM	Year Renewed	End MH: 1833-0311
Location Code: Light Highway	Tape/Media □ R001-017	pipe length: 199 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 8"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0311 1833-0312 1833	Lining Method:
	Category:

Remark::

1:500	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1833-0312	00:00:35	2895	
	6.60	Crack Multiple, from 10 to 3 o'clock, within 8 inch: YES	00:01:21	2896, b	S 3
	13.10	Water Level, 5 □, within 8 inch: NO	00:01:48	2898	
	17.90	General Observation, within 8 inch: NO, Remarks: Pipe joint Length 5'	00:02:33	2899	
	199.00	Manhole, within 8 inch: NO, Remarks: 1833-0311	00:07:05	2900	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3100	0000	3	0	3	3	0	3



Inspection report

Date: 20090205	P.O.☐ Y0TV0809D	Weather: Dry	Surveyed By: Martin Garcia	section number: 1410	PSR: 40397
Total Pipe Length: 350.00	Survey Customer: LACDPW	System Owner: PLM	Clean Date: 02.02 2009	Pre-Cleaned: Jetting	Map Grid ☐

Street: EASEMENT	Flow Control: Not Controlled	Start MH: 1940-0020
City: PLM	Year Renewed	End MH: 1940-0021
Location Code: Light Highway	Tape/Media ☐ M313-008	pipe length: 355.2 ft

Reason for inspection: Routine Assessment	Dia/Height: Circular 15"
Use of Sewer: Sanitary	Material: Vitrified Clay Pipe Pipe Length:
Drain. Area: 0020 1940-0021 1940	Lining Method:
	Category:

Remark::

1:875	position	observation	MPEG	photo	grade
	0.00	Manhole, within 8 inch: NO, Remarks: 1940-0020	00:00:26	1279	
	6.00	Water Level, 5 ☐, within 8 inch: NO	00:01:51	1280	
	84.50	Tap Factory Capped, at 12 o'clock, 4", within 8 inch: NO	00:03:57	1281	
	188.00	Tap Factory Capped, at 12 o'clock, 4", within 8 inch: NO	00:06:44	1282	
	272.90	Fracture Longitudinal, at 12 o'clock, within 8 inch: YES	00:09:19	1283, b	S 3
	291.50	Tap Factory Capped, at 12 o'clock, 4", within 8 inch: NO	00:10:15	1285	
	334.00	Water Level, 10 ☐, within 8 inch: NO	00:11:31	1286	
	355.20	Manhole, within 8 inch: NO, Remarks: 1940-0021	00:12:17	1287	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3100	0000	3	0	3	3	0	3