



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

April 9, 2009

IN REPLY PLEASE

REFER TO FILE: **SM-1**

Mr Krishna Patel, Director of Public Works
City of San Dimas
245 East Bonita Avenue
San Dimas, CA 91773-3002

Attention Ms. Shari Garwick

Dear Mr. Patel:

CONSOLIDATED SEWER MAINTENANCE DISTRICT CONDITION ASSESSMENT PROGRAM REPORT PROJECT Y0TV0506D

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 inspection of 55,122 feet or 10.7 percent of the City of San Dimas' 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)

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 or will be scheduled for repair as part of the ongoing Accumulative Capital Outlay Project.

Mr Krishna Patel
April 9, 2009
Page 2

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



for DIEGO CADENA
Deputy Director

PK.kk
1664

Enc.

bc: Programs Development (Ariki)

bc: KL, RS, FV, File (Project Y0TV0506D), SPINDLE

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

PROJECT NAME:	Y0TV0506D	PROJECT MGR	Kari Eskridge
PROJECT DATE:	4/17/06-8/14/06	CONTACT NO:	(626) 300-3390
SUP DISTRICT(s):	5	MAP PAGE(S):	2427, 2428
Report By:	Phyo Kyaw	Report Date	03/25/09

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 55,122 feet or 10.7 percent of the City of San Dimas' 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 Y0TV0506D included sewer lines located in both the Unincorporated County of Los Angeles area and in the Cities of Glendora, Bradbury, Duarte, La Canada Flintridge, and San Dimas. 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: Sever 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 95.0 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 5.0 percent of the inspected pipe segments within the City of San Dimas 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	2,797	5.1	11
2: Good	46,095	83.6	199
3: Fair	3,496	6.3	14
4: Poor	2,292	4.2	10
5: Immediate Attention	442	0.8	2
TOTAL	55,122	100.0	236

STRUCTURAL REPORT

Our inspection revealed that approximately 95.8 percent of the inspected pipe segments within the City of San Dimas were free of severe structural defects. However, the remaining 4.2 percent of the inspected pipe segments had a PACP structural grade of 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 require a corrective action, the proposed corrective method 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. Copies of the actual inspection reports for these ten segments are included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	47,762	86.6	206
2: Good	796	1.4	3
3: Fair	4,289	7.8	17
4: Poor	968	1.8	4
5: Immediate Attention	1,307	2.4	6
TOTAL	55,122	100.0	236

FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future closed-circuit television (CCTV) inspection of the remaining sewer lines within the City of San Dimas according to the following schedule.

FISCAL YEAR	PROJECT NAME	LENGTH (FT)	PERCENTAGE OF SYSTEM
2005-2006	Y0TV0506D	55,122	10.7
2008-2009	Y0TV0809C	13,272	2.6
2011-2012		174,712	34.1
2015-2016		269,574	52.6
TOTAL		512,680	100.0

ENCLOSURE 1:

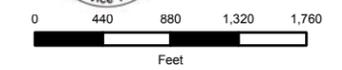
Project Overview Map

ENCLOSURE 1
CCTV PROJECT

Y0TV0506D

Supervisorial District 5
San Dimas

PROJECT OVERVIEW



Legend

SMD Manholes

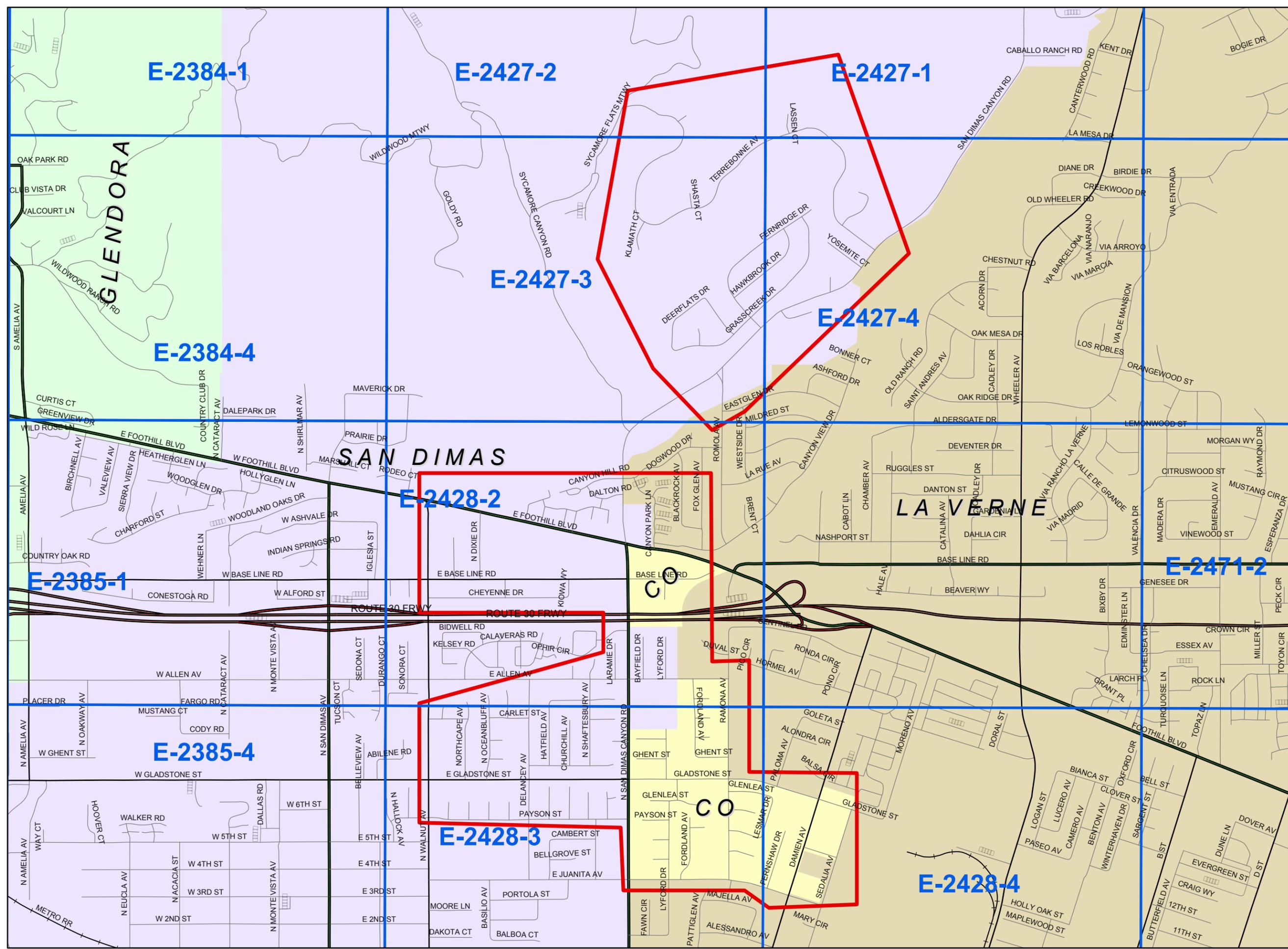
- Other
- Standard
- ▲ DROP
- Shallow
- ◇ Trap
- ⊗ Siphon
- SMD Pump Stations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- - - Non SMD Sanitary Sewers
- Trunk Mh
- DPW SMD.nosmd mh
- Parcel Boundary
- SMD Operations Maps
- CCTV PROJECT AREA

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FEBRUARY 2008



ENCLOSURE 2:

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

ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 CITY OF SAN DIMAS (Y0TV0506D)
 as of 08/14/06

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	5321	2428-0099	2428-0101	PAYSON ST	Roots	Rodder (completed 3/23/09)
2	5122	2427-0013	2427-0089	SAN DIMAS CYN RD	High water level	Hydrojet (completed 3/20/09)
3	4229	2427-0070	2427-0069	KLAMATH CT	Sag in pipe	Hydrojet (completed 7/28/08)
4	4221	2428-0285	2428-0284	FOOTHILL BV	High water level	Hydrojet (completed 7/28/08)
5	4221	2428-0054	2428-0055	DELANCEY AV	Roots	Rodder (completed 7/23/08)
6	4221	2427-0049	2427-0050	SANDIMAS CYN R/W	Sag in pipe	Hydrojet (completed 3/20/09)
7	4134	2427-0062	2427-0063	TERREBONE AVE	Sag in pipe	Hydrojet (90-day periodic, last completed 11/21/08)
8	4131	2427-0048	2427-0049	SAN DIMAS CYN RD	Roots	Rodder (completed 7/29/08)
9	4131	2427-0051	2427-CITY	ROMOLA AV	Roots	Rodder (completed 3/23/09)
10	4122	2428-0097	2428-0095	PAYSON ST	Roots	Rodder (completed 7/22/08)
11	4121	2428-0010	2428-TRNK	WALNUT AV	High water level	Hydrojet (completed 3/23/09)
12	4100	2428-0009	2428-0010	WALNUT AV	High water level	Hydrojet (completed 3/23/09)

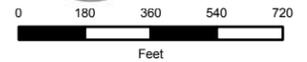
ENCLOSURE 2

CCTV PROJECT

Y0TV0506D

Supervisorial District 5
San Dimas

QUICK
MAINTENANCE
RATING
(QMR)



Legend

SMD Sanitary Sewers

QMR

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

SMD Manholes

- Other

MH Type

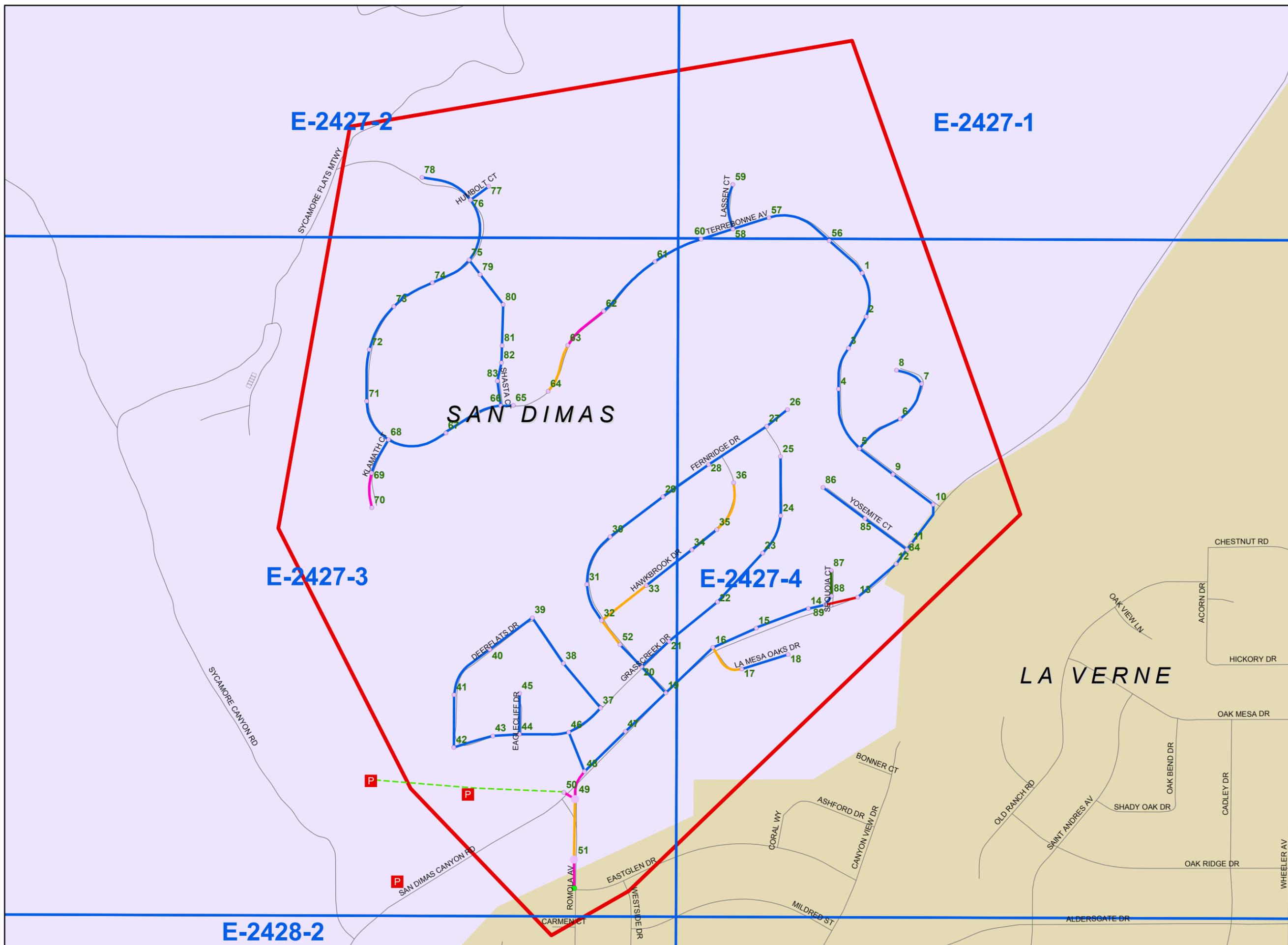
- Standard
- DROP
- Shallow
- Trap
- Siphon
- SMD Pump Satations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- DPW-SMD.nosmd.mh
- Parcel Boundary
- SMD Operations Maps
- CCTV PROJECT AREA

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FEBRUARY 2009



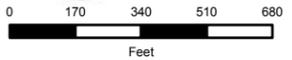
ENCLOSURE 2

CCTV PROJECT

Y0TV0506D

Supervisorial District 5
San Dimas

QUICK
MAINTENANCE
RATING
(QMR)



Legend

SMD Sanitary Sewers

QMR

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

SMD Manholes

- Other
- Standard
- DROP
- Shallow
- Trap
- Siphon

SMD Pump Satations

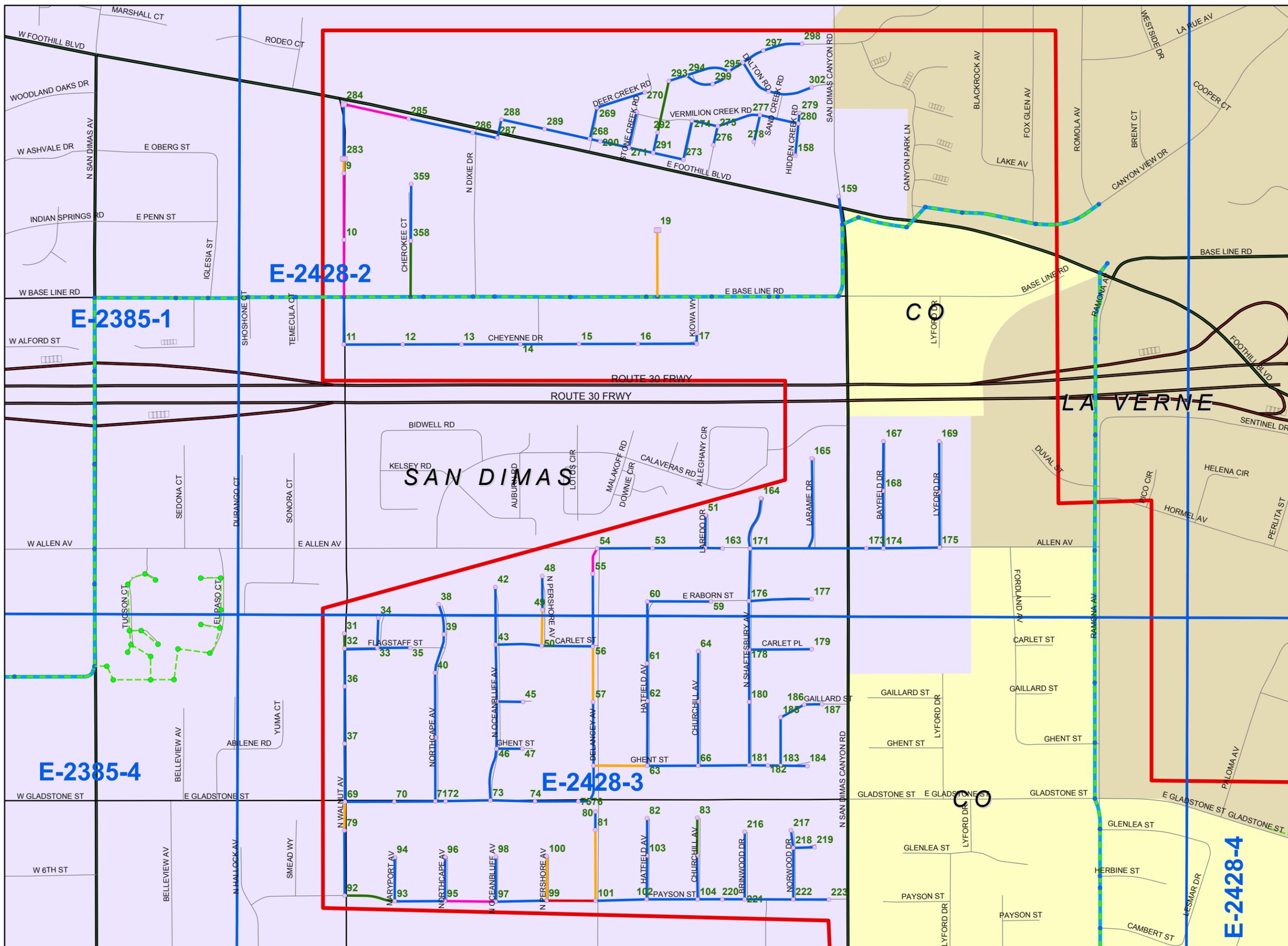
SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- DPW SMD.nosmd.mh
- Parcel Boundary
- SMD Operations Maps
- CCTV PROJECT AREA

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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 SAN DIMAS (Y0TV0506D)
 as of 8/14/06

Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
1	5141	2428-0012	2428-0011	CHEYENNE DR	Hole with void visible and fractures: 281'	Lining: MH to MH	310
2	5131	2427-0022	2427-0021	GRASSCREEK DR	Hole with concrete visible: 63'	Structural integrity in tact. No action needed.	-
3	5131	2427-0050	2427-0049	SAN DIMAS CYN RD	Hole with soil visible: 16'	Point Repair	5
4	5112	2427-0026	2427-0027	FERNRIDGE DR	Broken at joint: 91'	Structural integrity in tact. No action needed.	-
5	5112	2427-0046	2427-0048	GRASSCREEK DR	Hole with void visible: 20'; multiple cracks	Structural integrity in tact. No action needed.	-
6	5100	2427-0020	2427-0019	FERNRIDGE DR	Hole with soil visible: 133'	Structural integrity in tact. No action needed.	-
7	4231	2427-0051	2427-CITY	ROMOLA AV	Fractures: 163'	Structural integrity in tact. No action needed.	-
8	4133	2427-0007	2427-0006	WHITEBLUFF DR	Hole: 166'; multiple fractures	Structural integrity in tact. No action needed.	-
9	4131	2428-0293	2428-0292	EASEMENT	Surface damage: 97'	Structural integrity in tact. No action needed.	-
10	4123	2428-0284	2428-0283	WALNUT AV	Broken: 81'	Structural integrity in tact. No action needed.	-

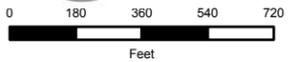
ENCLOSURE 3

CCTV PROJECT

Y0TV0506D

Supervisorial District 5
San Dimas

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 (Purple circle)

MH Type

- Standard (Purple circle)
- DROP (Purple triangle)
- Shallow (Purple square)
- Trap (Purple diamond)
- Siphon (Purple circle with cross)

- SMD Pump Satations (Red square with P)

- SMD Treatment Plants (Black rectangle with WTP)

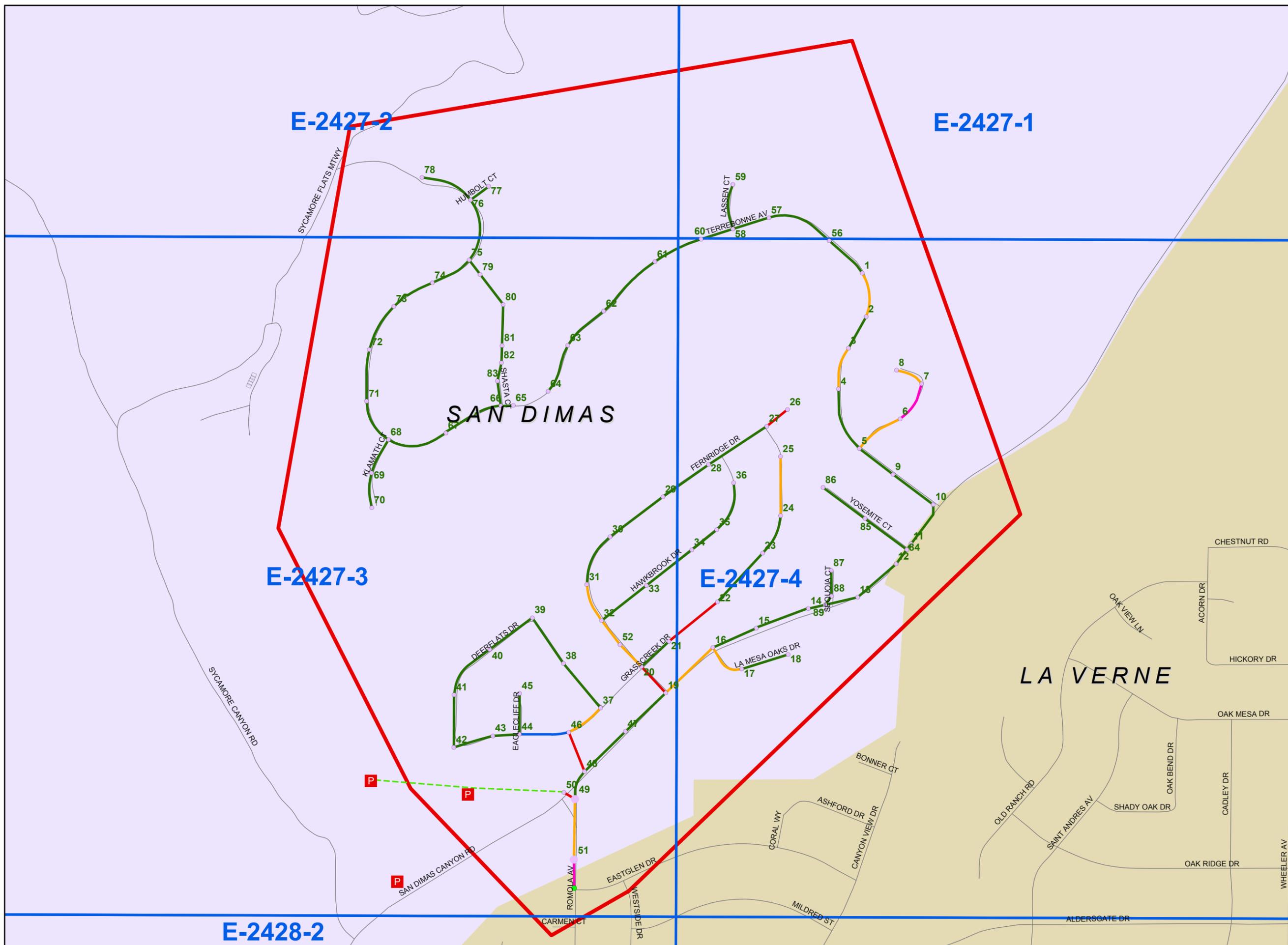
Maintained by Others:

- Trunk Sewerlines (Thick green line)
- Non SMD Sanitary Sewers (Dashed green line)
- Trunk Mh (Blue circle)
- DPW-SMD.nosmd.mh (Green circle)

- Parcel Boundary (Thin grey line)
- SMD Operations Maps (Blue outline)
- CCTV PROJECT AREA (Red outline)

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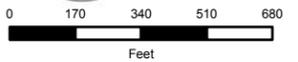
ENCLOSURE 3

CCTV PROJECT

Y0TV0506D

Supervisorial District 5
San Dimas

QUICK
STRUCTURAL
RATING
(QSR)



Legend

SMD Sanitary Sewers

QSR

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

SMD Manholes

- Other

MH Type

- Standard
- DROP
- Shallow
- Trap
- Siphon

- SMD Pump Satations

- SMD Treatment Plants

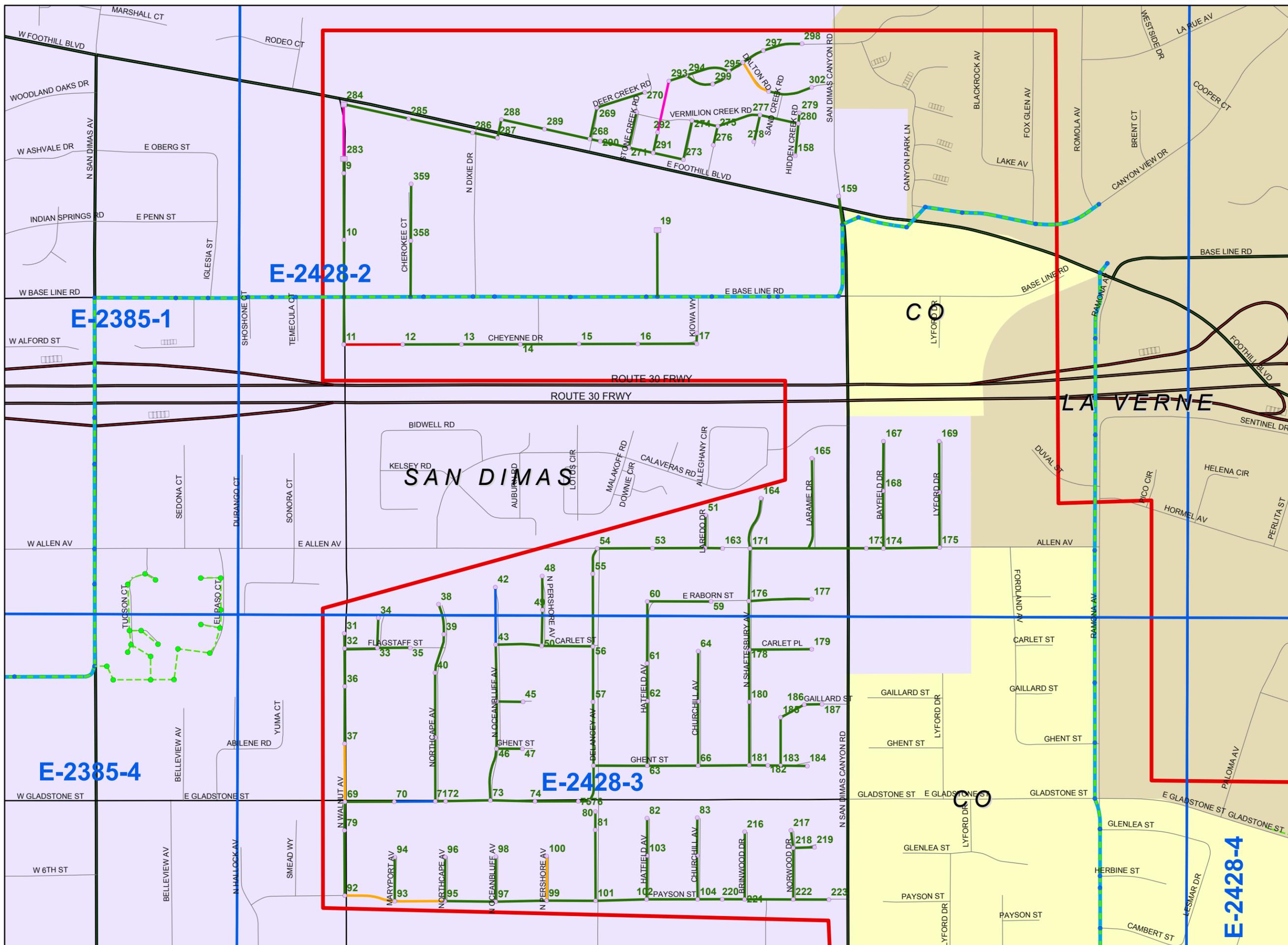
Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- DPW SMD.nosmd.mh

- Parcel Boundary
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ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



Inspection report

Date: 20060818	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: NPS R RUIZ	section number: 266	PSR: 86340
Total Pipe Length: 310	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2428

Street: CHEYENNE DR 310'	Flow Control: N Not Controlled	Start MH: 2428-0012
City: SND	Year Renewed:	End MH: 2428-0011
Location Code: C Light Highway	Tape/Media #: 055	pipe length: 308.36 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length:
Drain. Area:	Lining Method:
	Category:

Remark

1:775	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:35		
	0.88	Water Level, 10 % of cross sectional area	00:00:39		M 2
	0.88	Water Mark, 20 % of cross sectional area	00:00:41		M 2
	71.66	Tap Factory Made, at 02 o'clock, 6", within 8 inch: YES	00:03:23		
	74.50	Tap Factory Made, at 10 o'clock, 6", within 8 inch: YES	00:03:39		
	158.48	Tap Factory Made, at 02 o'clock, 6" within 8 inch: YES	00:06:26		
	161.03	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:45		
	240.02	Tap Factory Made, at 02 o'clock, 6", within 8 inch: YES	00:09:18		
	248.04	Tap Factory Made, at 10 o'clock, 6", within 8 inch: YES	00:09:41		
	282.75	Fracture Multiple, from 06 to 01 o'clock, within 8 inch: YES	00:11:48	342a	S 4
	282.75	Hole Soil Visible, from 10 to 11 o'clock, within 8 inch: YES	00:11:56	343a, b	S 5
	308.36	General Observation, Remark: End of segment/ pipe material-VCP	00:14:04		
	308.36	Manhole	00:14:21		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5141	2200	9	4	13	4.5	2	3.25



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060815	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: D.solano	section number: 298	PSR: 86385
Total Pipe Length: 349.51	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2427

Street: GRASSCREEK DR	Flow Control: N Not Controlled	Start MH: 2427-0022
City: SND	Year Renewed:	End MH: 2427-0021
Location Code: C Light Highway	Tape/Media #: 103	pipe length: 349.51 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length: 5.0
Drain. Area:	Lining Method:
	Category:

Remark **NONE**

1:875	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:30		
	1.70	Water Level, 10 % of cross sectional area	00:00:49		M 2
	1.70	Water Mark, 15 % of cross sectional area	00:00:56		M 2
	60.98	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:02:49		
	62.38	Crack Multiple, from 10 to 04 o'clock, within 8 inch: YES	00:03:34	238a	S 3
	63.38	Hole Void Visible, at 12 o'clock, within 8 inch: NO	00:04:01	239a, b	S 5
	65.67	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:04:45		
	128.75	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:06:56		
	136.43	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:07:29		
	199.31	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:09:45		
	207.09	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:10:18		
	270.07	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:12:19		
	282.74	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:12:55		
	340.93	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:14:49		
	349.51	Manhole	00:15:32		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5131	2200	8	4	12	4	2	3



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060905	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 328	PSR: 86413
Total Pipe Length: 71	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: H Heavy Cleaning	Map Grid #: 2427

Street: SAN DIMAS CYN RD	Flow Control: N Not Controlled	Start MH: 2427-0050
City: SND	Year Renewed	End MH: 2427-0049
Location Code: D Easement/Right of Way	Tape/Media #: 023	pipe length: 16.97 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 6/6
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length: 6.0
Drain. Area:	Lining Method:
	Category:

Remark.. **pipe broken camera blocked**

1:50	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:00		
	2.00	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES, Remark: from manhole	00:01:38		
	8.18	Crack Multiple, from 07 to 08 o'clock, within 8 inch: YES	00:04:10	2463a	S 3
	16.27	Roots Medium Joint, from 08 to 04 o'clock, 65 %, within 8 inch: YES	00:05:09	2464a	
	16.27	Broken Soil Visible, from 03 to 09 o'clock, within 8 inch: YES	00:05:33	2465a	S 5
	16.97	Survey Abandoned, Remark: roots, hole, camera blocked	00:07:52	2466a	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5131	0000	8	0	8	4	0	4



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060905	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 329	PSR: 86413
Total Pipe Length: 0	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: H Heavy Cleaning	Map Grid #: 2427

Street: SANDIMAS CYN R/W	Flow Control: N Not Controlled	Start MH: 2427-0049
City: SND	Year Renewed:	End MH: 2427-0050
Location Code: D Easement/Right of Way	Tape/Media #: 023	pipe length: 73.36 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 6/6
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length: 3.0
Drain. Area:	Lining Method:
	Category:

Remark **Camera blocked Roots**

1:200	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:01:13		
	0.00	Water Level, 1 % of cross sectional area	00:01:20		M 2
	0.00	Water Mark, 20 % of cross sectional area	00:01:23		M 2
	53.29	Roots Fine Joint, from 02 to 04 o'clock, within 8 inch: YES	00:03:58		
	62.78	Joint Offset Medium	00:04:36	2471a	S 1
	66.57	Joint Offset Medium	00:05:00	2472a	S 1
	71.16 S1	Roots Medium Barrell, from 03 to 06 o'clock, 25 %, within 8 inch: YES, start	00:05:34	2473a	M 4
	73.26	Survey Abandoned, Remark: Camera Blocked on reverse set	00:07:44		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
1200	4222	2	12	14	1	3	2.33



Inspection report

Date: 20060814	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: D.sloano	section number: 303	PSR: 86389
Total Pipe Length: 161.09	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2427

Street: FERNRIDGE DR	Flow Control: N Not Controlled	Start MH: 2427-0026
City: SND	Year Renewed:	End MH: 2427-0027
Location Code: C Light Highway	Tape/Media #: 101	pipe length: 161.78 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length:
Drain. Area:	Lining Method:
	Category:

Remark: **NONE**

1:400	position	observation	MPEG	photo	grade
	0.00	Manhole	00:01:18		
	6.29	Water Level, 5 % of cross sectional area	00:02:09		M 2
	6.29	Water Mark, 10 % of cross sectional area	00:02:16		M 2
	9.58	Tap Factory Made Active, at 02 o'clock, 6" within 8 inch: YES	00:02:43		
	17.27	Tap Factory Made Active, at 02 o'clock, 6" within 8 inch: YES	00:03:48		
	18.56	Crack Circumferential, from 09 to 11 o'clock, within 8 inch: YES	00:04:21	6a, b	S 1
	24.85	Tap Factory Made Active, at 10 o'clock, 6" within 8 inch: YES	00:05:09		
	62.88	Tap Factory Made Active, at 02 o'clock, 6" within 8 inch: YES	00:07:03		
	78.94	Crack Circumferential, from 08 to 10 o'clock, within 8 inch: YES	00:08:08	9a, b	S 1
	91.32	Broken Void Visible, from 07 to 08 o'clock, within 8 inch: YES	00:09:53	10a, b	S 5
	120.56	Tap Factory Made Active, at 10 o'clock, 6" within 8 inch: YES	00:11:43		
	133.34	Tap Factory Made Active, at 02 o'clock, 6" within 8 inch: YES	00:12:41		
	161.78	Manhole	00:14:43		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5112	2200	7	4	11	2.33	2	2.2



Inspection report

Date: 20060816	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: D.solano	section number: 324	PSR: 86410
Total Pipe Length: 216.03	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2427

Street: GRASSCREEK DR	Flow Control: N Not Controlled	Start MH: 2427-0046
City: SND	Year Renewed:	End MH: 2427-0048
Location Code: C Light Highway	Tape/Media #: 105	pipe length: 216.27 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length:
Drain. Area:	Lining Method:
	Category:

Remark: **hole in pipie soil visible**

1:550	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:51		
	0.90	Water Level, 10 % of cross sectional area	00:01:57		M 2
	0.90	Water Mark, 20 of cross sectional area	00:02:02		M 2
	20.06	Hole Soil Visible, at 12 o'clock, within 8 inch: NO	00:03:34	377a, b	S 5
	27.75	Crack Circumferential, from 07 to 09 o'clock, within 8 inch YES	00:04:35	378a, b	S 1
	32.04	Roots Fine Joint, from 02 to 05 o'clock, within 8 inch: YES	00:05:03	379a	
	69.26	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: NO	00:06:21		
	70.86	Crack Circumferential, from 06 to 02 o'clock, within 8 inch: YES	00:07:29	381a	S 1
	102.20	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:08:50		
	124.95	Tap Factory Made Capped, at 02 o'clock, 6", within 8 inch: YES	00:09:51		
	170.66	Roots Fine Joint, from 09 to 02 o'clock, within 8 inch: YES	00:11:21	384a	
	201.20	Water Level, 20 % of cross sectional area	00:12:16	385a	M 2
	216.27	Manhole	00:13:12		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5112	2300	7	6	13	2.33	2	2.17



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Inspection report

Date: 20060815	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: D.solano	section number: 294	PSR: 86381
Total Pipe Length: 162.18	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2427

Street: FERNRIDGE DR	Flow Control: N Not Controlled	Start MH: 2427-0020
City: SND	Year Renewed:	End MH: 2427-0019
Location Code: C Light Highway	Tape/Media #: 103	pipe length: 162.18 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length: 5.0
Drain. Area:	Lining Method:
	Category:

Remark.: **NONE**

1:400	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:29		
	0.00	Water Level, 5 % of cross sectional area	00:00:42		M 2
	0.00	Water Mark, 15 % of cross sectional area	00:00:45		M 2
	7.98	General Photo	00:01:05	176a	
	133.04	Broken Soil Visible, at 12 o'clock, within 8 inch: NO	00:09:33	178a, b	S 5
	162.18	Manhole	00:11:32		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5100	2200	5	4	9	5	2	3



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Inspection report

Date: 20060901	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 331	PSR: 86415
Total Pipe Length: 157	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2427

Street: ROMOLA AV	Flow Control: N Not Controlled	Start MH: 2427-0051
City: SND	Year Renewed:	End MH: 2427-CITY
Location Code: C Light Highway	Tape/Media #: 023	pipe length: 186.83 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 12/12
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length: 6.0
Drain. Area:	Lining Method:
	Category:

Remark: **Roots**

1:475	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:56		
	4.99	Water Level, 25 % of cross sectional area	00:01:39		M 2
	4.99	Water Mark, 45 % of cross sectional area	00:01:46		M 3
	6.69	Roots Fine Joint, from 08 to 10 o'clock, within 8 inch: YES	00:02:08		
	8.78	+	00:02:19		
	34.73	Roots Fine Joint, from 02 to 04 o'clock, within 8 inch: YES	00:03:06		
	44.91	Fracture Spiral, from 01 to 05 o'clock, within 8 inch: YES	00:03:37	2420a, b	S 3
	79.54	Roots Fine Joint, at 01 o'clock, within 8 inch: YES	00:05:15		
	89.52	Roots Fine Joint, from 08 to 10 o'clock, within 8 inch: YES	00:05:42		
	99.70	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:06:03	2423a	
	114.37	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:06:34		
	159.59	Fracture Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:07:52	2425a, b	S 4
	159.59	Tap Break-In Active, at 12 o'clock, 6", within 8 inch: YES, Remark: Broken joint	00:08:19	2426a	
	160.58	Fracture Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:09:11	2427a, b	S 4
	167.27	Water Level, Sag in pipe, 55 % of cross sectional area	00:09:56		M 4
	186.83	Manhole, Remark: End of Segment Pipe found VCP	00:11:22		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4231	4131	11	9	20	3.67	3	3.33



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Inspection report

Date: 20060817	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: D.solano	section number: 353	PSR: 86486
Total Pipe Length: 262.58	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2427

Street: WHITEBLUFF DR	Flow Control: N Not Controlled	Start MH: 2427-0007
City: SND	Year Renewed:	End MH: 2427-0006
Location Code: C Light Highway	Tape/Media #: 106	pipe length: 262.58 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length: 5.0
Drain. Area:	Lining Method:
	Category:

Remark. **NONE**

1-650	position	observation	MPEG	photo	grade
	0.00	Manhole			
	0.00	Water Level, 5 % of cross sectional area			M 2
	0.00	Water Mark, 15 of cross sectional area			M 2
	9.48	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:02:25		
	35.63	Crack Multiple, from 02 to 05 o'clock, within 8 inch: YES	00:03:34	484a, b	S 3
	87.23	Tap Factory Made Active, at 02 o'clock, 6" within 8 inch: NO	00:05:21		
	90.12	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:05:39		
	91.22	Crack Multiple, from 09 to 04 o'clock, within 8 inch: YES	00:06:20	487a	S 3
	141.82	Crack Circumferential, from 03 to 05 o'clock within 8 inch: YES	00:07:57	488a, b	S 1
	158.09	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:09:03		
	164.18	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:09:42	490a	S 3
	166.87	Hole, at 01 o'clock, within 8 inch: NO	00:10:13	491a, b	S 4
	225.95	Tap Factory Made Active, at 10 o'clock, 6". within 8 inch: NO	00:11:57		
	230.05	Alignment Right, 10 °	00:12:13		M 1
	262.58	Manhole	00:13:11		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4133	2211	14	5	19	2.8	1.67	2.38



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Inspection report

Date: 20061215	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: NPS D.Solano	section number: 975	PSR: 86008
Total Pipe Length: 284	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2428

Street: EASEMENT	Flow Control: N Not Controlled	Start MH: 2428-0293
City: SND	Year Renewed:	End MH: 2428-0292
Location Code: G Parking Lot	Tape/Media #: 001	pipe length: 121.04 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length:
Drain. Area:	Lining Method:
	Category:

Remark **camera blkd/reversal completed**

1:300	position	observation	MPEG	photo	grade
	0.00	Upstream Manhole, Survey Begins	00:00:00		
	0.00	Reversal Inspection	00:00:00		
	0.00	Water Level, 5 % of cross sectional area	00:01:50		M 2
	0.00	Water Mark, 15 % of cross sectional area	00:01:51		M 2
	66.53	Water Level, 20 % of cross sectional area	00:04:25	78a	M 2
	87.11	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: NO	00:05:46		
	92.49	Crack Multiple, from 11 to 04 o'clock, within 8 inch: YES	00:06:49	80a, b	S 3
	96.89	Hole, from 12 to 01 o'clock, within 8 inch: NO	00:07:47	81a, b	S 4
	121.04	General Observation, Remark: End of reversal inspection	00:09:51	82a	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4131	2300	7	6	13	3.5	2	2.6



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Inspection report

Date: 20060824	P.O.#: Y0TV0506D	Weather: 1 Dry	Surveyed By: NPS R RUIZ	section number: 122	PSR: 86124
Total Pipe Length: 288	Survey Customer: LACDPW	System Owner: SND	Clean Date:	Pre-Cleaned: H Heavy Cleaning	Map Grid #: 2428

Street: WALNUT AV	Flow Control: N Not Controlled	Start MH: 2428-0284
City: SND	Year Renewed:	End MH: 2428-0283
Location Code: C Light Highway	Tape/Media #: 059	pipe length: 282.75 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8/8
Use of Sewer: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Length:
Drain. Area:	Lining Method:
	Category:

Remark

1:700	position	observation	MPEG	photo	grade
	2428-0284	Manhole	00:00:38		
	0.00	Water Level, 1 0 % of cross sectional area	00:00:56		M 2
	0.00	Water Mark, 20 % of cross sectional area	00:00:59		M 2
	75.87	Tap Factory Made, at 02 o'clock, 6", within 8 inch: YES	00:03:24		
	78.80	Crack Circumferential, from 12 to 05 o'clock, within 8 inch: NO	00:04:10	746a, b	S 1
	79.88	Crack Longitudinal, at 10 o'clock, within 8 inch: NO	00:05:02	747a	S 2
	79.88	Surface Spalling Other, at 10 o'clock, within 8 inch: NO	00:06:18	749a, b	S 2
	80.37	Tap Break-In, at 10 o'clock, 6", within 8 inch: NO	00:07:00		
	81.44	Hole, from 08 to 10 o'clock, within 8 inch: NO	00:07:35	751a, b	S 4
	81.44	Crack Circumferential, from 06 to 09 o'clock, within 8 inch: YES	00:08:10	752a	S 1
	82.61	Crack Spiral, from 01 to 05 o'clock, within 8 inch: NO	00:08:23	753a	S 2
	196.03	Crack Circumferential, from 07 to 05 o'clock, within 8 inch: NO	00:11:23	754a	S 1
	282.75	General Observation, Remark: End of segment/ pipe material-VCP	00:16:34		
	282.75	Manhole	00:16:49		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4123	2200	13	4	17	1.86	2	1.89