

June 3, 2009

TO: Mr. Nicholas Agbobu
Engineering, Budget, and Office Operations

FROM: Robert Swartz
Field Operations

**CONSOLIDATED SEWER MAINTENANCE DISTRICT
CONDITION ASSESSMENT PROGRAM REPORT
PROJECT Y0TV0607C**

This memo 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 9,475 feet or approximately 0.5 percent of the sewer system within Unincorporated County maintained by the District's Central Yard

The attached 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)
- CCTV Sewer Inspection Project Schedule (Enclosure 5)

The Condition Assessment Report will provide details regarding the maintenance and structural condition of our sewer mainlines. This information can be included in our 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 for continued monitoring. 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.

PK.

W:\1 CCTV\Y0TV0607 Projects\Y0TV0607C\9-Final_Reports_by_JUR\ZLAC\Memo_0607C_ZLAC.doc

Attach

bc: RS, FV, File (Y0TV0607C)



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

PROJECT NAME:	Y0TV0607C	PROJECT MGR:	Kari Eskridge
PROJECT DATE:	02/01/07 □ 06/04/07	CONTACT NO:	(626) 300-3390
SUP. DISTRICT(s):	1	MAP PAGE(S):	1970,1971,2023,2024 □ 2076
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 9,475 feet or approximately 0.5 percent of the Unincorporated Los Angeles County sewer system maintained by the District's Central Yard.

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

PROJECT AREA AND DESCRIPTION

Project Y0TV0607C included sewer lines located in both Unincorporated County of Los Angeles area and the City of Pico Rivera. Enclosed for your reference is an overview map of the project area (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 requires 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 90.6 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 9.4 percent of the inspected pipe segments within the Unincorporated County of Los Angeles 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	333	3.5	2
2: Good	7,680	81.1	35
3: Fair	566	6.0	2
4: Poor	600	6.3	3
5: Immediate Attention	296	3.1	1
TOTAL	9,475	100.0	43

STRUCTURAL REPORT

Our inspection revealed that approximately 98.1 percent of the inspected pipe segments within the Unincorporated County of Los Angeles were free of severe structural defects. However, the remaining 1.9 percent of the inspected pipe segments had a PACP structural grade of 5 as indicated in the Quick Structural Rating Table shown below. The only segment in the Quick Structural Rating Report Priority List (Enclosure 3) had been addressed and repaired by the District's maintenance crew. A color-coded map showing the Quick Structural Rating for each pipe segment is located in Enclosure 3. A copy of the actual inspection report for this segment is included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	7,044	74.3	31
2: Good	0	0.0	0
3: Fair	2,252	23.8	11
4: Poor	0	0.0	0
5: Immediate Attention	179	1.9	1
TOTAL	9,475	100.0	43

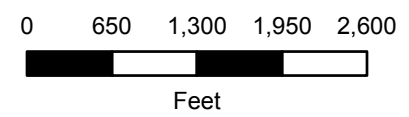
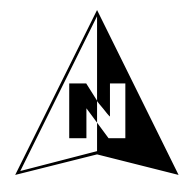
FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future closed-circuit television (CCTV) inspection of the remaining sewer lines within the Unincorporated County of Los Angeles maintained by the Central Yard. For your reference, the CCTV Sewer Inspection project schedule is listed in Enclosure 5.

ENCLOSURE 1:

Project Overview Map

Supervisorial District 1
City of Pico Rivera □
County Unincorporated



Legend

SMD Sanitary Sewers

- Other
- 8
- 10
- 12
- 18

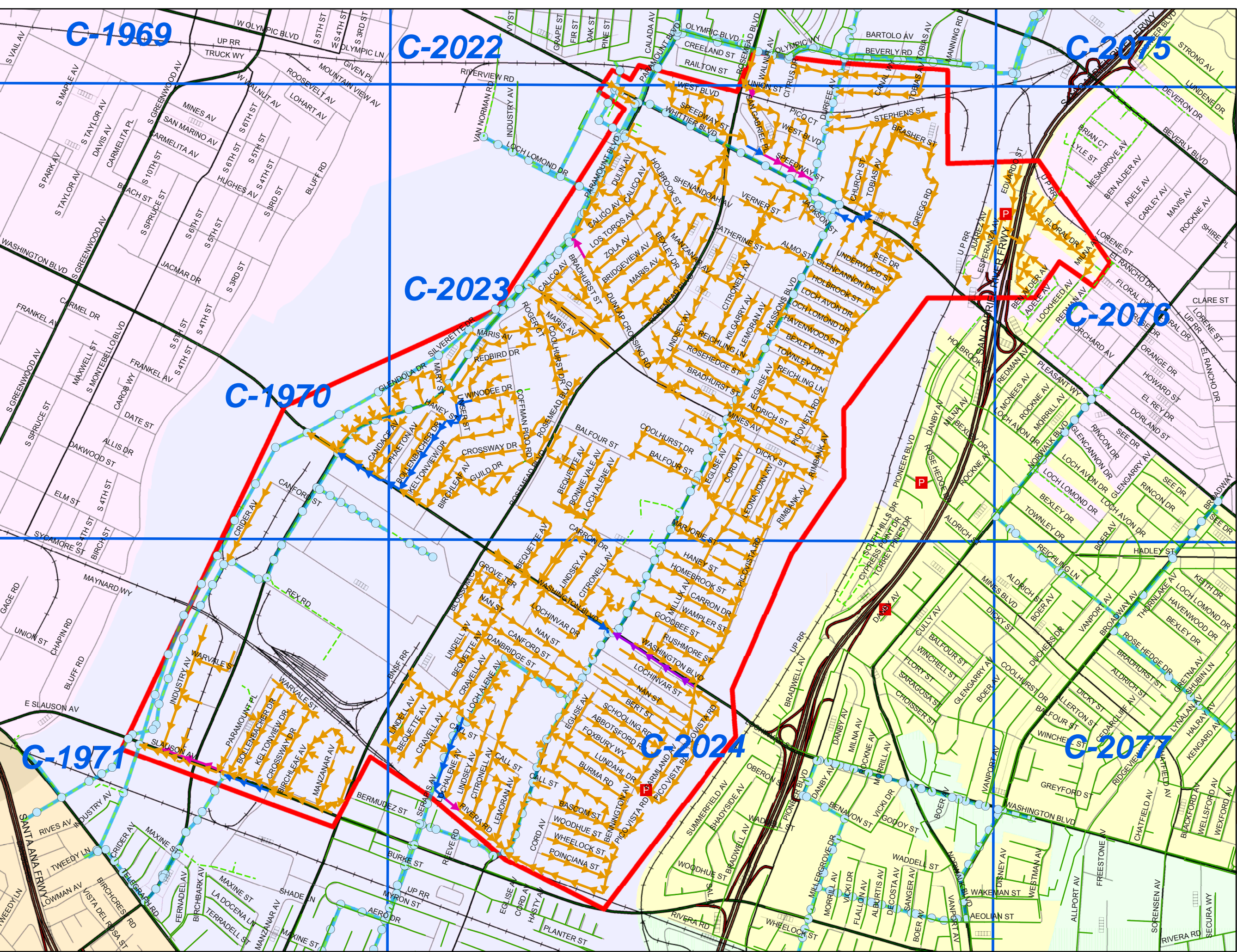
SMD Manholes

- Other
- Standard
- Siphon
- Trap
- Shallow
- Drop
- SMD Pump Satations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH
- SMD Operations Maps
- Y0TV0607C

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps. All rights reserved.



ENCLOSURE 2:

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

ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 UNINCORPORATED LOS ANGELES COUNTY (Y0TV0607C)
 as of 06/04/07

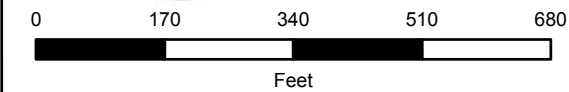
Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	5321	2076-0054	2076-0066	PIONEER BV	Sag	Hydrojet (Completed 3/25/09)
2	4131	2076-0059	2076-0058	ALLEY by OBREGON and 605 FWY	Deposits; roots	Hydrojet (Completed 4/2/09)
3	4121	2076-0038	2076-0037	OBREGON ST	Broken and multiple fractures with soil visible and roots ball	Emergency Project (Point Repair) by SMD Central Yard: Completed November 2008
4	4121	2076-0058	2076-0056	ALLEY by OBREGON and 605 FWY	Roots	Rodder (Completed 3/31/09)

ENCLOSURE 2

CCTV PROJECT Y0TV0607C

Supervisorial District 1
County Unincorporated

QUICK MAINTENANCE RATING (QMR)



Legend

- SMD Sanitary Sewers**
QMR
- 1: EXCELLENT
 - 2: GOOD
 - 3: FAIR
 - 4: POOR
 - 5: IMMEDIATE ATTENTION

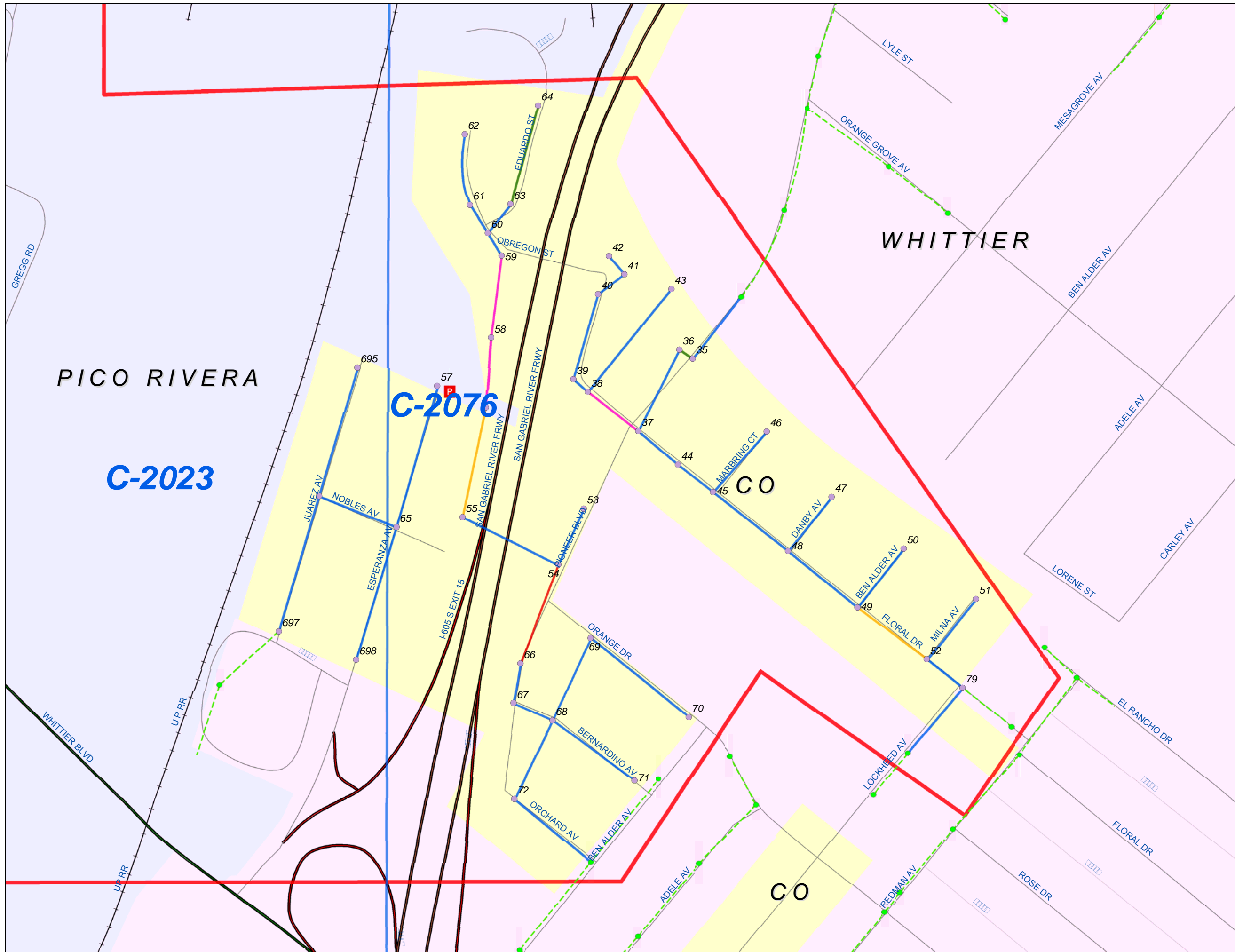
- SMD Manholes**
- Other
 - Standard
 - DROP
 - Shallow
 - Trap
 - Siphon
 - SMD Pump Stations
 - SMD Treatment Plants

- Maintained by Others:**
- Trunk Sewerlines
 - Non SMD Sanitary Sewers
 - Trunk Mh
 - Non SMD Maintained MH
 - Parcel Boundary
 - SMD Operations Maps
 - CCTV PROJECT AREA

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps. All rights reserved.

MAY 2009

Y0TV0607C_ZLAC_QMR.mdx



ENCLOSURE 3:

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

ENCLOSURE 3
QUICK STRUCTURAL RATING REPORT PRIORITY LIST
UNINCORPORATED LOS ANGELES COUNTY (Y0TV0607C)
as of 06/04/07

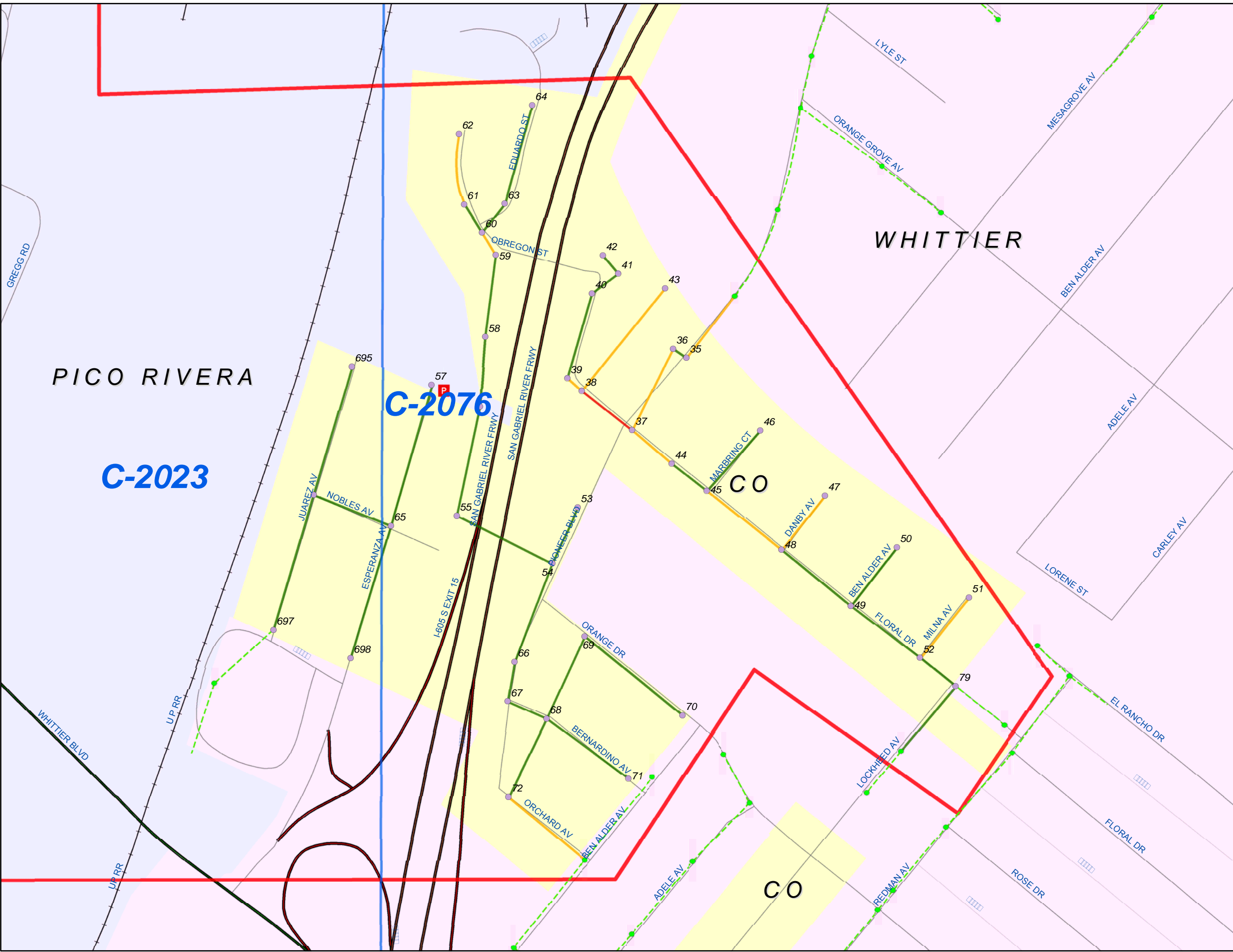
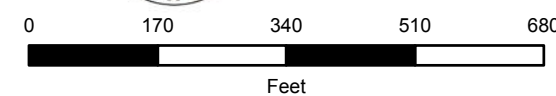
Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
1	5300	2076-0037	2076-0038	OBERGON ST	Broken and multiple fractures with soil visible: 11'	Emergency Project (Point Repair) by SMD Central Yard: Completed November 2008	

ENCLOSURE 3

CCTV PROJECT Y0TV0607C

Supervisorial District 1
County Unincorporated

QUICK STRUCTURAL RATING (QSR)



Legend

SMD Sanitary Sewers QSR

- 1: EXCELLENT
- 3: FAIR
- 5: IMMEDIATE ATTENTION

SMD Manholes

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

SMD Pump Satations

- SMD Pump Satations

SMD Treatment Plants

- SMD Treatment Plants

Maintained by Others:

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

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps. All rights reserved.

MAY 2009

Y0TV0607C_ZLAC_QSR.mdx

ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



Inspection report

Date: 20070603	P.O. #: Y0TV0607C	Weather: 1 Dry	Surveyed By: T GLOCK	section number: 1370	PSR: 119833
Total Pipe Length: 179	Survey Customer: LACDPW	System Owner: ZLAC	Clean Date: 06/03/2007	Pre-Cleaned: J Jetting	Map Grid #: 2076

Street: OBREGON ST	Flow Control: N Not Controlled	Start MH: 2076-0038
City: ZLAC	Year Renewed:	End MH: 2076-0037
Location Code: C Light Highway	Tape/Media # 0399	pipe length: 128.5 ft

Reason for inspection: F Routine Assessment	Dia/Height: C 8/8
Use of Sewer: SS Sanitary	Material: VCP Pipe Length: 3ft
Drain. Area: 0037/2076-0038/2076	Lining Method:
	Category:

Remark: **Broken pipe**

1:325	position	observation	MPEG	photo	grade
	0.00	Upstream Manhole, Survey Begins	00:01:26		
	0.00	Water Level, 2 % of cross sectional area	00:01:42	346	M 2
	4.90	Crack Multiple, from 07 to 05 o'clock, within 8 inch: YES	00:02:18	347	S 3
	12.90	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:02:28	348	S 3
	22.10	Crack Multiple, from 08 to 12 o'clock, within 8 inch: YES	00:03:09	350	S 3
	23.40	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:22	349	
	24.70	Crack Multiple, from 02 to 05 o'clock, within 8 inch: YES	00:03:44	351	S 3
	27.80 S1	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES, start	00:04:00	352	S 3
	70.80	Water Level, Sag in pipe, 20 % of cross sectional area	00:07:38	355	M 2
	70.80	Water Level, 10 % of cross sectional area	00:07:48	356	M 2
	77.90	Tap Factory Made Active, at 03 o'clock, 6", within 8 inch: YES	00:05:42	353	
	85.20	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:06:14	354	
	103.20	Water Level, 20 % of cross sectional area	00:09:27	357	M 2
	121.30	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:10:17	358	
	125.50 S2	Fracture Multiple, from 08 to 12 o'clock, within 8 inch: YES, start	00:10:44	359	S 4
	128.00 S3	Hole Soil Visible, from 07 to 11 o'clock, within 8 inch: YES, start	00:11:30	360	S 5
	128.00	Roots Medium Barrell, from 09 to 11 o'clock, 5 %, within 8 inch: YES	00:11:43	361	M 4
	128.40 F1	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES, end	00:12:27		S 3
	128.40 F2	Fracture Multiple, from 08 to 12 o'clock, within 8 inch: YES, end	00:12:31		S 4
	128.40 F3	Hole Soil Visible, from 08 to 11 o'clock, within 8 inch: YES, end	00:12:34		S 5
	128.50	Survey Abandoned, Remark: camera blocked broken pipe	00:13:03	362	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5242	4124	90	12	102	3.21	2.4	3.09



WinCan America, Inc.
 1730 Montano Road NE, Suite E
 Albuquerque, NM 87107
 Tel: (505) 341.0109, Fax: (505) 341.0133

Inspection report

Date: 20070530	P.O. #: Y0TV0607-C	Weather: 1 Dry	Surveyed By: T. Glock	section number: 1397	PSR: 119833
Total Pipe Length: 179	Survey Customer: LACOPW	System Owner: PRV	Clean Date: 05/30/2007	Pre-Cleaned: H Heavy Cleaning	Map Grid #: 2076

Street: OBERGON ST	Flow Control: N Not Controlled	Start MH: 2076-0037
City: ZLAC	Year Renewed:	End MH: 2076-0038
Location Code: C Light Highway	Tape/Media #: 0399	pipe length: 11.1 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8"/8"
Use of Sewer: SS Sanitary	Material: VCP Pipe Length: PSR#119833
Drain. Area: 0038/2076-0037/2076	Lining Method:
	Category:

Remark: **Cckede broken pipe**

1:50	position	observation	MPEG	photo	grade
		Downstream Manhole, Survey Begins	00:01:12		
		Water Level, 25 of cross sectional area	00:01:39	637	M 2
		Hole Soil Visible, from 01 to 05 o'clock, within 8 inch: YES, Remark: Roots	00:02:31	638	S 5
		Broken Soil Visible, from 08 to 05 o'clock, within 8 inch: YES, start	00:02:51	639	S 5
		Roots Tap Barrell, from 03 to 05 o'clock, 15 #, within 8 inch: YES, Remark: large tap root	00:03:25	640	M 3
		Broken Soil Visible, from 08 to 04 o'clock, within 8 inch: YES, end			S 5

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5300	3121	15	5	20	5	2.5	4

ENCLOSURE 5:

CCTV Sewer Inspection Project Schedule

Unincorporated Central Yard

CCTV PROJECT SCHEDULE

FISCAL YEAR	PROJECT NAME	LENGTH (FT)	PERCENTAGE OF SYSTEM	REPORT STATUS
2005-2006	Y0TV0506A	34,270	2.0	IN PROGRESS
2006-2007	Y0TV0607C	9,475	0.5	COMPLETE
2007-2008	Y0TV0708B	253,485	14.7	COMPLETE
2008-2009	Y0TV0809B	5,167	0.3	IN PROGRESS
2009-2010	Y0TV0910B	227,947	13.2	
2010-2011		288,236	16.7	
2011-2012		304,024	17.6	
2011-2012		149,936	8.7	
2012-2013		190,537	11.1	
2012-2013		16,239	1.0	
2014-2015		61,341	3.6	
2014-2015		183,459	10.6	
TOTAL		1,724,116	100.0	