



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
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DONALD L. WOLFE, Director

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

October 25, 2006

IN REPLY PLEASE
REFER TO FILE: W-9

Mr Steve Forster, Director of Public Works
City of La Mirada
15515 Phoebe Avenue
La Mirada, CA 90638

Dear Mr. Forster:

CONDITION ASSESSMENT PROGRAM FISCAL YEAR 2005-06 PROJECT Y0TV0506A

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 162,807 feet or approximately 31 percent of the City of La Mirada's sewer system. This work was completed as part of Fiscal Year 2005-06 project Y0TV0506A.

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

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

Mr. Steve Forster
October 25, 2006
Page 2

If you have any questions regarding this report or the Condition Assessment Program, please contact Mr. John Adkins, Monday through Thursday, 7 a.m. to 6 p.m., at (626) 300-3367.

Very truly yours,

DONALD L. WOLFE
Director of Public Works



MANUEL DEL REAL
Assistant Deputy Director
Waterworks and Sewer Maintenance Division

JA:sb
W:\Y0TV0506A\Final-Report\Cover Letter.doc

Enc.

bc: MdR, KL, JA, File (Y0TV0506A), SPINDLE

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

PROJECT NAME:	Y0TV0506A	PROJECT MGR:	Sameer Hamad
PROJECT DATE:	09/12/05 – 12/31/05	CONTACT NO:	(626) 300-3363
SUP. DISTRICT(s):	4	MAP PAGE(S):	2080, 2129, and 2130
Report By:	Kari Eskridge	Report Date:	08/30/2006

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 162,807 feet or approximately 31 percent of the City of La Mirada’s sewer system.

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

PROJECT AREA AND DESCRIPTION

Project Y0TV0506A included sewer lines located in both the Unincorporated County of Los Angeles area and in the City of La Mirada. 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 infrastructure defects. A grade of 1 indicates that a pipe segment is in excellent condition with minor defects and failure is unlikely in the foreseeable future, while a grade of 5 indicates that a pipe segment requires immediate attention and that the pipe has either failed or will likely fail within the next 5 years. A detailed breakdown of the 5 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 98 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 2 percent of the inspected pipe segments within the City of La Mirada area had a PACP maintenance grade of 4 or 5 as indicated in the Quick Maintenance Rating Table shown below. Enclosure 2 includes a color-coded map showing the quick maintenance rating for each pipe segment and outlines the observation from the CCTV inspection and the corrective action taken by our maintenance staff. All of the action items listed in Enclosure 2 have been completed.

QUICK MAINTENANCE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	1,870	1.15	7
2: Good	148,556	91.25	601
3: Fair	9,151	5.62	38
4: Poor	2,056	1.26	9
5: Immediate Attention	1,174	0.72	5
TOTAL	162,807	100.00	660

STRUCTURAL REPORT

Our inspection revealed that approximately 98 percent of the inspected pipe segments within the City of La Mirada were free of sever structural defects. However, the remaining 2 percent of the inspected pipe segments had a PACP structural grade of 4 or 5 as indicated in the Quick Infrastructure Rating Table shown below. These segments have been placed on a priority list based on the severity and the need for action. Items 1 through 10 in Enclosure 3 will be repaired in the next 18 months utilizing District forces and contractors. A copy of the actual inspection report for these 10 segments is included in Enclosure 4. The remaining segments listed in Enclosure 3 will be repaired in the future 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.

The following Quick Infrastructure Rating Table outlines the recommended repairs and any additional action required for each pipe segment listed. (Enclosure 3)

QUICK INFRASTRUCTURE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	96,203	59.09	408
2: Good	12,705	7.80	52
3: Fair	50,174	30.82	184
4: Poor	2,021	1.24	9
5: Immediate Attention	1,704	1.05	7
TOTAL	162,807	100.00	660

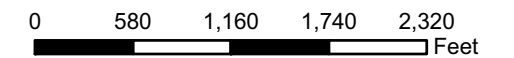
ENCLOSURE 1:

Project Maps

ENCLOSURE 1 CCTV PROJECT

Condition Assessment Projects

Y0TV0506A



Legend

SMD Sanitary Sewers

- Other
- Pipe Material:
 - Clay
 - Lined Clay
 - Cement
 - Lined Cement
 - ABS Plastic
- SMD Force Mains
- SMD Pump Stations
- SMD Treatment Plants

SMD Manholes

- Other
- MH Type
 - Standard
 - DROP
 - Shallow
 - Trap
 - Siphon

Maintained by Others

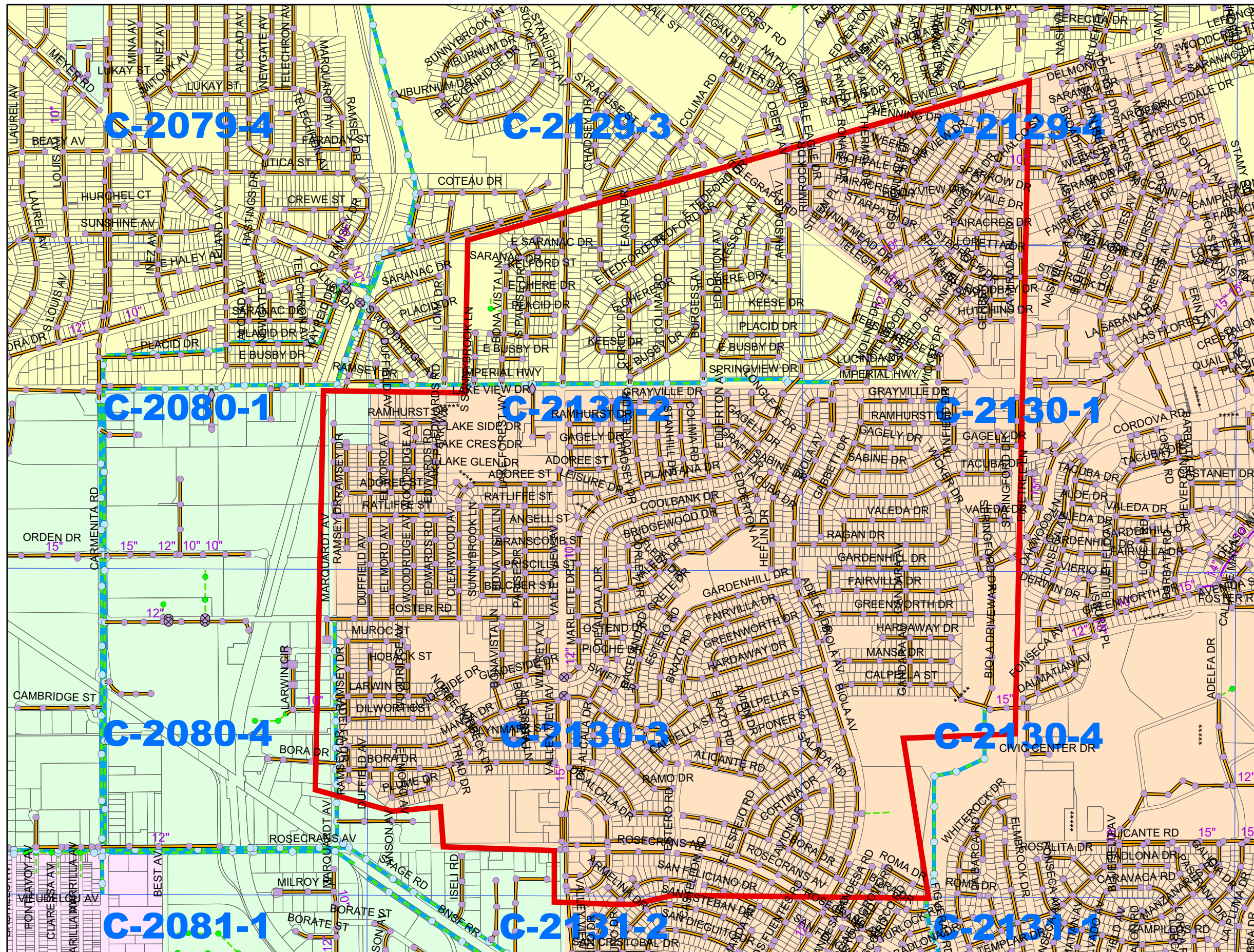
- Sewers by Type:
 - Trunk Main Lines
 - Trunk Force Mains
 - Non SMD Sanitary Sewers
- Trunk Sewer MHs
- Private or City Sanitary Sewer MHs
- Project Area

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September 2005

CCTV PROJECT OVERVIEW MAP

Y0TV0506A overview.mdx



ENCLOSURE 2:

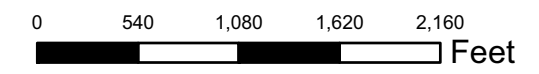
QMR Report
Priority List of Identified Deficiencies
Quick Maintenance Rating Map

ENCLOSURE 2

QMR REPORT and PRIORITY LIST FOR IDENTIFIED DEFICIENCIES - CITY OF LA MIRADA (YOTV0506A)

Item No.	Jurisdiction	MMS	QMR	Observation	Corrective Action Taken
2	LAM	114113	5123	ROOTS	Rod M/L and re-televis
3	LAM	113910	5122	ROOTS	Rod M/L and re-televis
4	LAM	113968	5122	ROOTS	Rod M/L and put on 90-day periodic
5	LAM	114095	5122	DEBRIS	Hydro clean M/L and re-televis
6	LAM	114443	5122	OBSTACLES IN JOINT	Rod M/L and re-televis
7	LAM	114136	4224	WATER LEVEL (CAMERA UNDERWATER)	On former 18-month periodic, reativate rodder 90-day periodic until refoamed.
8	LAM	115086	4134	INFILTRATION RUNNER	Mill saw M/L and re-televis
10	LAM	114188	4131	ENCRUSTATION	Mill saw M/L and re-televis
11	LAM	114326	4131	ROCKS	Hydro clean M/L and re-televis
12	LAM	114135	4123	WATER LEVEL (CAMERA UNDERWATER)	On former 18-month periodic, reativate rodder 90-day periodic until refoamed.
13	LAM	113840	4122	WATER LEVEL (CAMERA UNDERWATER)	Hydro clean M/L and re-televis
16	LAM	114013	4122	WATER LEVEL (CAMERA UNDERWATER)	Rod M/L and re-televis
17	LAM	114088	4122	ROOTS	Rod M/L and re-televis
18	LAM	113816	4121	WATER MARK @ 60%	M/L always has heavy flow
19	LAM	113960	4121	ROOTS	Rod M/L and re-televis

ENCLOSURE 2 CCTV PROJECT Y0TV0506A



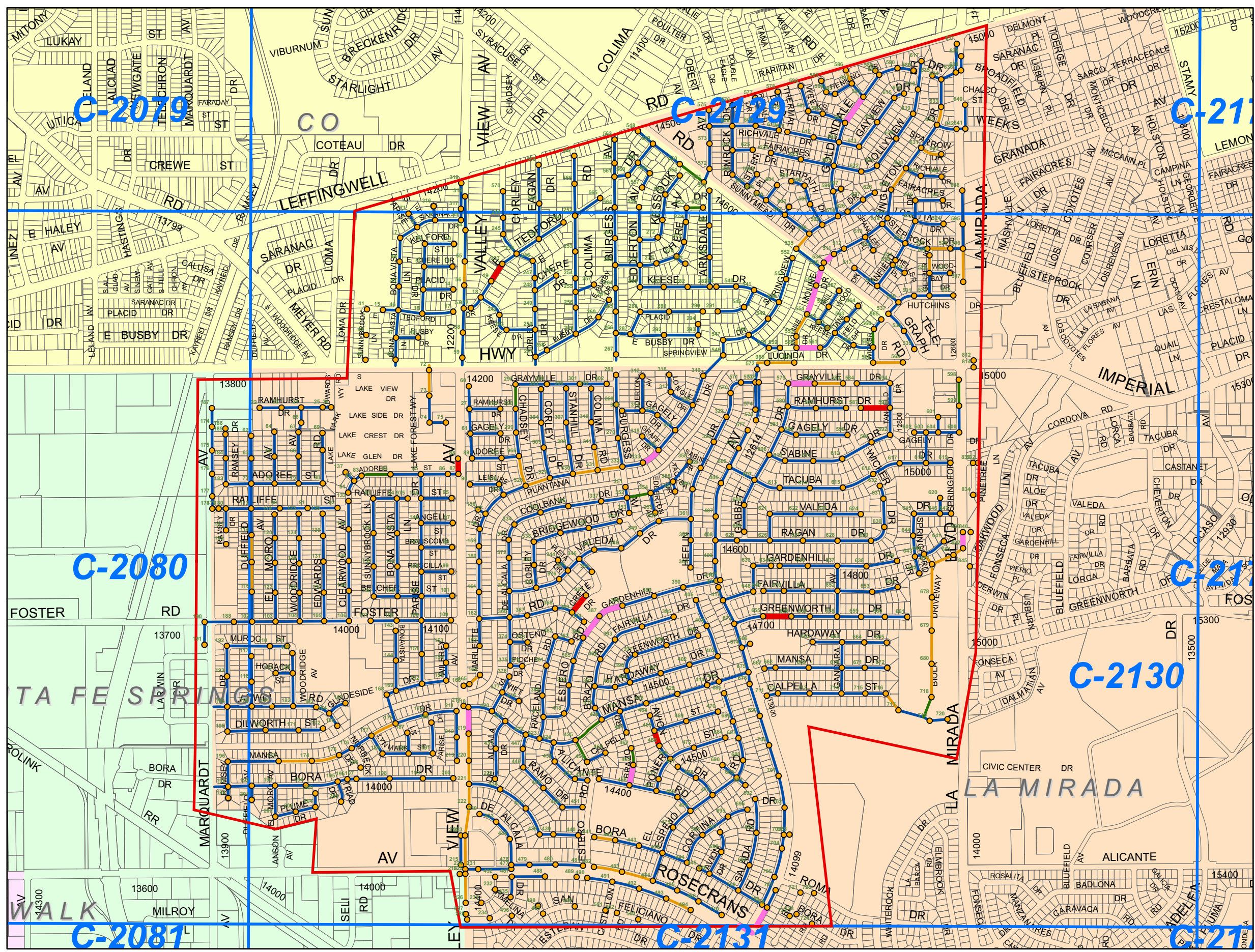
- Legend**
- Manhole
 - Quick Maintenance Rating**
 - 1: EXCELLENT
 - 2: GOOD
 - 3: FAIR
 - 4: POOR
 - 5: IMMEDIATE ATTENTION
 - SMD Operations Maps
 - CCTV Project Area

Quick Maintenance Rating (QMR) As of 06/15/06

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June 2006

CCTV PROJECT



ENCLOSURE 3:

QSR Report
Priority List of Identified Deficiencies
Quick Structural Rating Map

ENCLOSURE 3

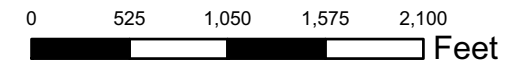
QSR REPORT and PRIORITY LIST FOR IDENTIFIED DEFICIENCIES - CITY OF LA MIRADA (Y0TV0506A)
04-03-06

Item No.	Jurisdiction	PSR (MMS)	QSR	Observation	Comments	Proposed Corrective Method	Length of Repair (FT)	Estimated Repair Cost
1	LAM	114077	5100	BVV: Broken Void Visible, 10-2 o'clock, within 8	Soil erosion occurring	Point repair at 148' from U/S manhole		\$5,000
2	LAM	113811	5100	B: Broken, 7-12 o'clock, within 8 inches: yes	Broken pipe in flow line	Point repair at 2' from U/S manhole		\$5,000
3	LAM	114082	5141	HSV: Hole Soil Visible, 9 o'clock, within 8 inches: yes	Broken area just above water level, multiple fractures along bottom half of pipe	Point repair at 155' from U/S manhole		\$5,000
				FM: Fracture Multiple, from 3-10 o'clock, within 8 inches: yes		line entire line	322	\$19,320
4	LAM	114058	4232	FM: Fracture Multiple, 12-12 o'clock, within 8 inches: yes FM: Fracture Multiple, 3-9 o'clock, within 8 inches: yes	Segment should be broken to broken soil visible, many broken and fractured areas in this pipe segment	line entire line	214	\$12,840
5	LAM	113861	4236	FM: Fracture Multiple, 7-2 o'clock, within 8 inches: yes B: Broken, 7-1 o'clock, within 8 inches: yes	Broken pipe in flow line, multiple fractures exist just after broken pipe	line entire line	242	\$14,520
6	LAM	114052	5141	BSV: Broken Soil visible, 9-11 o'clock, within 8 inches: yes FM: Fracture Multiple, from 8-4 o'clock, within 8 inches: yes	Broken area just above water line, and multiple fractures cover remaining segment of pipe	Point repair at 50' from U/S manhole		\$6,000
7	LAM	113838	5132	BSV: Broken Soil visible, 4 o'clock, within 8 inch	Broken just above flow line. Small broken area	Point repair at 262' from U/S manhole		\$5,000
8	LAM	114261	5132	HSV: Hole Soil Visible, 3-4 o'clock, within 8 inch	Hole in flow line, also multiple cracks in same pipe segment	Point repair at 32' from U/S manhole		\$5,000
9	LAM	113953	4100	B: Broken, 8-10 o'clock, within 8 inches: yes	Broken at joint	Point repair at 26' from U/S manhole		\$5,000
10	LAM	113952	5100	BSV: Broken Soil visible, 2 o'clock, within 8 inch	Broken pipe above flow line, roots growing through hole	Point repair at 128' from U/S manhole		\$5,000
The segments below, 11-17, will be repaired in the future as part of the ongoing Accumulative Capital Outlay Project (ACOP).								
11	LAM	114299	4212	FM: Fracture Multiple, 5-11 o'clock, within 8 inches: no FM: Fracture Multiple, 1-3 o'clock, within 8 inches: yes	fracture from 5-11 o'clock looks more like broken pipe, just above flow line	lining entire line		
12	LAM	114142	4132	FM: Fracture Multiple, 11-1 o'clock, within 8 inches: yes	This pipe segment is broken, not fractured	lining entire line		
13	LAM	114069	4134	FM: Fracture Multiple, 3-8 o'clock, within 8 inches: yes	Fracture in flow line	lining entire line		
14	ZLAC	114257	4136	FM: Fracture Multiple, 7-9 o'clock, within 8 inches: yes	fracture near flow line	lining entire line		
15	LAM	114084	4134	FM: Fracture Multiple, 4-8 o'clock, within 8 inches: yes	fractures in flow line	lining entire line		
16	LAM	113966	4133	FM: Fracture Multiple, 12-12 o'clock, within 8 inches: yes	More fractures near bottom of pipe/ within area of flow	lining entire line		
17	LAM	114136	413B	FM: Fracture Multiple, 10-4 o'clock, within 8 inches: yes	fracture near top of pipe, above flow	lining entire line		

ENCLOSURE 3

CCTV PROJECT

Y0TV0506A



Legend

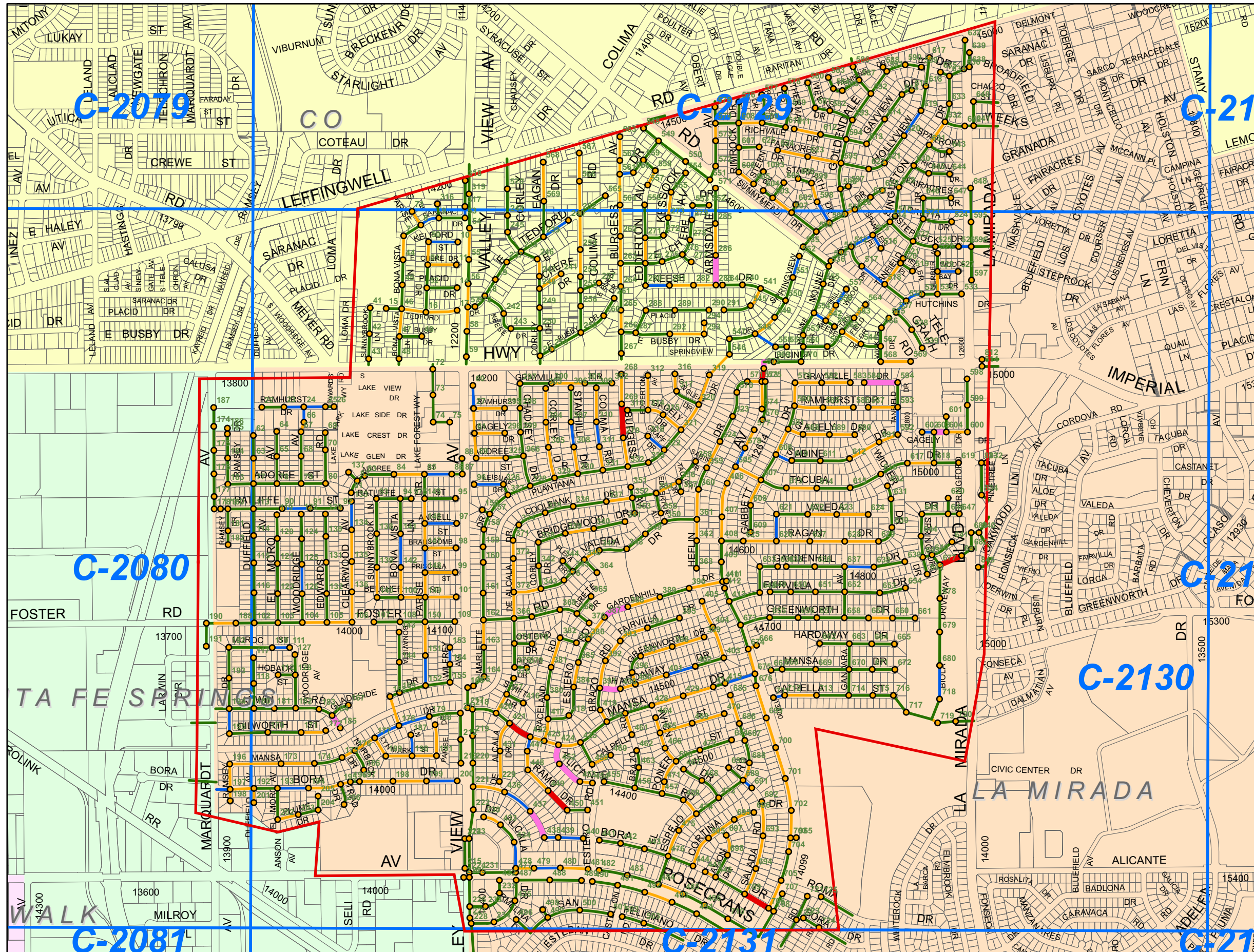
- Manhole
- Quick InfraStructure Rating**
- 1: Excellent
- 2: Good
- 3: Fair
- 4: Poor
- 5: Immediate Attention
- SMD Operations Maps
- CCTV Project Area

**Quick
InfraStructure
Rating
(QSR)
As of 06/15/06**

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June 2006

CCTV PROJECT



ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



MACKONE DEVELOPMENT, INC.
 2244 BEVERLY BOULEVARD
 LOS ANGELES, CA 90057
 Tel: (213) 252-9506, Fax: (213) 252-9527

Inspection report

Date: 11/22/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 634	PSR: 114082
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: RAMO DR	Flow Control:	Start MH: 2130-0450
City: LAM	Year Renewed:	End MH: 2130-0449
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 23	pipe length: 321.9 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP, 285 ft. Pipe Length: 285
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:528	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:36		
	0.00	MWL	Water Level, 5 % of cross sectional area, from 05 to 07 o'clock	00:00:46		M 2
	0.00	MWM	Water Mark, 5 % of cross sectional area, from 05 to 07 o'clock	00:00:54		M 2
	7.50	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO, Remark: ROOTS	00:01:42	241a	
	46.00	CL	Crack Longitudinal, at 12 o'clock, within 8 inch: YES	00:02:58	242a	S 2
	46.90	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:03:22	243a	
	47.10	CC	Crack Circumferential, from 09 to 10 o'clock, within 8 inch: YES	00:03:42	244a	S 1
	55.30	CM	Crack Multiple, from 09 to 02 o'clock, within 8 inch: YES	00:04:39	245a	S 3
	55.30	RTJ	Roots Tap Joint, at 10 o'clock, 5 %, within 8 inch: YES	00:04:52	246a	
	59.40	CL	Crack Longitudinal, at 03 o'clock, within 8 inch: YES	00:05:27	247a	S 2
	59.40	CL	Crack Longitudinal, at 09 o'clock, within 8 inch: YES	00:05:50	248a	S 2
	60.70	CM	Crack Multiple, from 02 to 05 o'clock, within 8 inch: YES	00:06:23	249a	S 3
	60.90	CM	Crack Multiple, from 08 to 10 o'clock, within 8 inch: YES	00:06:52	250a	S 3
	63.80	CC	Crack Circumferential, from 01 to 04 o'clock, within 8 inch: YES	00:07:23	251a	S 1
	77.70	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:07:57	252a	
	88.10	CL	Crack Longitudinal, at 07 o'clock, within 8 inch: YES	00:08:31	253a	S 2
	107.80	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO, Remark: ROOTS	00:09:06	254a	
	140.90	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:09:59	255a	
	152.00	CM	Crack Multiple, from 07 to 05 o'clock, within 8 inch: YES	00:10:51	256a	S 3
	155.20	HSV	Hole Soil Visible, at 09 o'clock, within 8 inch: YES	00:11:18	257a	S 5
	155.20	FM	Fracture Multiple, from 03 to 10 o'clock, within 8 inch: YES	00:11:58	258a	S 4
	168.40	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:12:24	259a	
	170.50	CL	Crack Longitudinal, at 07 o'clock, within 8 inch: YES	00:12:51	260a	S 2
	202.00	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:13:32	261a	

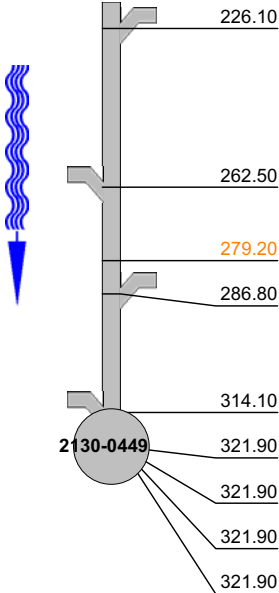


MACKONE DEVELOPMENT, INC.
 2244 BEVERLY BOULEVARD
 LOS ANGELES, CA 90057
 Tel: (213) 252-9506, Fax: (213) 252-9527

Inspection report

Date: 11/22/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 634	PSR: 114082
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

1:528	position	code	observation	MPEG	photo	grade
	226.10	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:14:08	262a	
	262.50	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO, Remark: ROOTS	00:14:57	263a	
	279.20	CM	Crack Multiple, from 11 to 04 o'clock, within 8 inch: YES	00:15:42	264a	S 3
	286.80	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:16:08	265a	
	314.10	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:16:49	266a	
	321.90		SLIGHT CIRCULAR CRACKS THROUGHOUT 15% OF REACH	00:17:42		
	321.90		SLIGHT LONGITUDE CRACKS THROUGHOUT 10% OF REACH	00:18:13		
	321.90		END OF SEGMENT	00:18:26		
	321.90		MATERIALS FOUND-VCP	00:18:43		





MACKONE DEVELOPMENT, INC.
 2244 BEVERLY BOULEVARD
 LOS ANGELES, CA 90057
 Tel: (213) 252-9506, Fax: (213) 252-9527

Inspection report

Date: 11/29/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 481	PSR: 114077
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: BORA DR	Flow Control:	Start MH: 2130-0445
City: LAM	Year Renewed:	End MH: 2130-0446
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 28	pipe length: 156.02 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP, 122 FT. Pipe Length: 122
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:400	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:35		
	0.00	MWL	Water Level, 0 % of cross sectional area	00:00:37		M 2
	0.00	MWM	Water Mark, 0 % of cross sectional area	00:00:50		M 2
	6.10	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:01:07	470a	
	46.48	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:01:49	471a	
	74.14	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:02:24	472a	
	108.01	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:03:04	473a	
	148.90	BVV	Broken Void Visible, from 10 to 02 o'clock, within 8 inch: YES	00:04:14	474a, b	S 5
	156.02	EOS	End of Segment	00:04:50		
	156.02	MF	Materials Found-VCP	00:05:00		

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



MACKONE DEVELOPMENT, INC.
 2244 BEVERLY BOULEVARD
 LOS ANGELES, CA 90057
 Tel: (213) 252-9506, Fax: (213) 252-9527

Inspection report

Date: 11/22/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 625	PSR: 114058
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: ALICANTE RD	Flow Control:	Start MH: 2130-0452
City: LAM	Year Renewed:	End MH: 2130-0424
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 23	pipe length: 176.2 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP, 214 FT. Pipe Length: 214
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:450	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:40		
	0.00	MWL	Water Level, 5 % of cross sectional area, from 05 to 07 o'clock	00:00:52		M 2
	0.00	MWM	Water Mark, 5 % of cross sectional area, from 05 to 07 o'clock	00:01:03		M 2
	22.10	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:01:53	228a	
	63.10	CM	Crack Multiple, from 02 to 04 o'clock, within 8 inch: YES	00:03:11	229a	S 3
	70.70	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO, Remark: ROOTS	00:03:38	230a	
	75.70	CS	Crack Spiral, from 09 to 02 o'clock, within 8 inch: YES	00:04:13	231a	S 2
	79.80	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO, Remark: CRACKED	00:04:53	232a, b	
	87.80	CM	Crack Multiple, from 09 to 02 o'clock, within 8 inch: YES	00:06:14	233a	S 3
	93.50	FM	Fracture Multiple, from 12 to 12 o'clock, within 8 inch: YES	00:07:11	234a	S 4
	96.70	FM	Fracture Multiple, from 03 to 09 o'clock, within 8 inch: YES	00:07:49	235a	S 4
	176.20		END OF SEGMENT	00:12:00		
	176.20		MATERIALS FOUND-VCP	00:12:28		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4232	2200	16	4	20	3.2	2	2.86



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 Tel: (213) 252-9506, Fax: (213) 252-9527

Inspection report

Date: 11/23/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 440	PSR: 114052
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: MANSA DR	Flow Control:	Start MH: 2130-0422
City: LAM	Year Renewed:	End MH: 2130-0421
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 24	pipe length: 301.46 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP, 268 FT. Pipe Length: 268
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:750	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:34		
	0.00	MWL	Water Level, 20 % of cross sectional area, from 04 to 08 o'clock	00:00:50		M 2
	0.00	MWM	Water Mark, 25 % of cross sectional area, from 03 to 09 o'clock	00:01:04		M 2
	41.70	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:01:55	20a	
	50.14	BSV	Broken Soil Visible, from 09 to 11 o'clock, within 8 inch: YES	00:02:54	21a	S 5
	50.14	FM	Fracture Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:03:11	22a	S 4
	51.56	FL	Fracture Longitudinal, at 04 o'clock, within 8 inch: YES	00:04:14	23a	S 3
	52.48	CM	Crack Multiple, from 11 to 04 o'clock, within 8 inch: YES	00:04:46	24a	S 3
	72.41	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:05:21	25a	
	94.18	TBA	Tap Break-In Active, at 02 o'clock, 6", within 8 inch: NO	00:05:58	26a	
	143.41	TFC	Tap Factory Made Capped, at 02 o'clock, 6", within 8 inch: NO	00:07:09	27a	
	152.46	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:08:01	28a	
	195.58	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:09:22	29a	
	244.91	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:10:34	30a	
	293.73	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:11:51	31a	
	301.46	SLTR	Slight Longitudinal Cracks Throughout Reach 10%	00:12:21		
	301.46	EOS	End of Segment	00:12:27		
	301.46	MF	Materials Found-VCP	00:12:39		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5141	2200	15	4	19	3.75	2	3.17



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 2244 BEVERLY BOULEVARD
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Inspection report

Date: 12/30/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 268	PSR: 113953
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: IMPERIAL HWY	Flow Control:	Start MH: 2130-0572
City: LAM	Year Renewed:	End MH: 2130-TRNK
Location Code: A Main Highway - Urban	Tape/Media #: 61	pipe length: 46.58 ft
Reason for inspection: F	Dia/Height: C 8/8	
Use of Sewer: SS	Material: 8" VCP,68 FT. Pipe Length: 68	
Drain. Area: 2130	Lining Method:	
	Category:	

Remark::

1:125	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:21		
	0.00	MWL	Water Level, 5 % of cross sectional area, from 05 to 07 o'clock	00:00:33		M 2
	0.00	MWM	Water Mark, 15 % of cross sectional area, from 05 to 07 o'clock	00:00:43		M 2
	29.49	B	Broken, from 08 to 10 o'clock, within 8 inch: YES	00:01:53	457a	S 4
	30.92	DAGS	Deposits Attached Grease, 5 % of cross sectional area, from 10 to 02 o'clock, within 8 inch: YES	00:02:09	458a	M 2
	46.58	EOS	End of Segment	00:02:37		
	46.58	MF	Materials Found-VCP	00:02:45		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4100	2300	4	6	10	4	2	2.5



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Inspection report

Date: 12/30/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 267	PSR: 113952
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: BIOLA AV	Flow Control:	Start MH: 2130-0573
City: LAM	Year Renewed:	End MH: 2130-0572
Location Code: A Main Highway - Urban	Tape/Media #: 61	pipe length: 176.87 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP, 139 FT. Pipe Length: 139
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:450	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:38		
	0.00	MWL	Water Level, 5 % of cross sectional area, from 05 to 07 o'clock	00:00:50		M 2
	0.00	MWM	Water Mark, 15 % of cross sectional area, from 05 to 07 o'clock	00:00:59		M 2
	68.55	RMJ	Roots Medium Joint, from 09 to 04 o'clock, 5 %, within 8 inch: YES	00:02:06	445a	
	119.50	RMJ	Roots Medium Joint, from 01 to 04 o'clock, 5 %, within 8 inch: YES	00:03:01	446a	
	128.25	BSV	Broken Soil Visible, at 02 o'clock, within 8 inch: NO	00:03:56	447a	S 5
	128.25	RMJ	Roots Medium Joint, at 02 o'clock, 10 %, within 8 inch: NO	00:04:09	448a	
	130.08	TBA	Tap Break-In Active, at 02 o'clock, 6", within 8 inch: NO	00:04:40	449a	
	130.08	RMJ	Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inch: YES	00:05:01	450a	
	176.87	FRTR	Fine Roots Throughout Reach 20%	00:05:49		
	176.87	EOS	End of Segment	00:05:54		
	176.87	MF	Materials Found-VCP	00:06:08		

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



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Inspection report

Date: 12/22/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 196	PSR: 113861
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: GAGELY DR	Flow Control:	Start MH: 2130-0604
City: LAM	Year Renewed:	End MH: 2130-0603
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 53	pipe length: 242.87 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP, 129 FT. Pipe Length: 129
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:600	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:25		
	0.00	MWL	Water Level, 15 % of cross sectional area, from 04 to 08 o'clock	00:00:37		M 2
	0.00	MWM	Water Mark, 15 % of cross sectional area, from 04 to 08 o'clock	00:00:46		M 2
	13.43	CM	Crack Multiple, from 04 to 09 o'clock, within 8 inch: YES	00:01:41	501a	S 3
	14.04	FL	Fracture Longitudinal, at 04 o'clock, within 8 inch: YES	00:02:10	502a	S 3
	14.04	FL	Fracture Longitudinal, at 09 o'clock, within 8 inch: YES	00:02:27	503a	S 3
	14.04	CM	Crack Multiple, from 09 to 04 o'clock, within 8 inch: YES	00:02:45	504a	S 3
	15.05	TFD	Tap Factory Made Defective, at 10 o'clock, 6", within 8 inch: NO, Remark: CRACKED	00:03:08	505a	M 2
	16.17	CL	Crack Longitudinal, at 08 o'clock, within 8 inch: YES	00:03:32	506a	S 2
	16.17	CL	Crack Longitudinal, at 04 o'clock, within 8 inch: YES	00:03:44	507a	S 2
	38.44	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:04:25	508a	
	49.53	FM	Fracture Multiple, from 07 to 02 o'clock, within 8 inch: YES	00:04:39	509a	S 4
	50.55	B	Broken, from 11 to 01 o'clock, within 8 inch: YES	00:05:48	510a	S 4
	52.99	CM	Crack Multiple, from 12 to 04 o'clock, within 8 inch: YES	00:07:00	511a	S 3
	89.40	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:08:03	512a	
	100.79	CM	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:09:03	513a	S 3
	102.11	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:09:21	514a	
	152.86	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:10:48	515a	
	158.76	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:11:16	516a	
	216.53	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:13:00	517a	
	242.87	EOS	End of Segment	00:13:53		
	242.87	MF	Materials Found-VCP	00:14:03		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4236	2300	30	6	36	3	2	2.77



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Inspection report

Date: 11/30/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 452	PSR: 113838
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: BORA DR	Flow Control:	Start MH: 2130-0709
City: LAM	Year Renewed:	End MH: 2130-0706
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 29	pipe length: 289.35 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP, 291 FT. Pipe Length: 291
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:725	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:34		
	0.00	MWL	Water Level, 10 % of cross sectional area, from 05 to 07 o'clock	00:00:52		M 2
	0.00	MWM	Water Mark, 10 % of cross sectional area, from 05 to 07 o'clock	00:01:01		M 2
	52.68	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:02:02	495a	
	101.91	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:03:04	496a	
	117.57	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:03:32	497a	
	179.00	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:04:31	498a	
	241.04	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:05:32	499a	
	273.49	BSV	Broken Soil Visible, at 04 o'clock, within 8 inch: YES	00:06:42	500a	S 5
	273.49	FL	Fracture Longitudinal, at 04 o'clock, within 8 inch: YES	00:06:58	501a	S 3
	273.79	CM	Crack Multiple, from 08 to 11 o'clock, within 8 inch: YES	00:07:30	502a	S 3
	289.35	EOS	End of Segment	00:08:03		
	289.35	MF	Materials Found-VCP	00:08:15		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5132	2200	11	4	15	3.67	2	3



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Inspection report

Date: 05/04/2006	P.O.#:	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 689	PSR:
Total Pipe Length:	Survey Customer:	System Owner:	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1537

Street: 0	Flow Control:	Start MH: 2130-0681
City: LA MIRADA	Year Renewed:	End MH: 2130-0677
Location Code: D Easement/Right of Way	Tape/Media #: 1A	pipe length: 194.26 ft

Reason for inspection:	Dia/Height: C 15/15
Use of Sewer: SS Sanitary	Material: 15" VCP Pipe Length:
Drain. Area:	Lining Method:
	Category:

Remark::

1:475	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:40		
	0.00	MWL	Water Level, 15 % of cross sectional area, from 04 to 08 o'clock	00:00:57		M 2
	0.00	MWM	Water Mark, 25 % of cross sectional area, from 04 to 08 o'clock	00:01:09		M 2
	1.00	HSV	Hole Soil Visible, from 07 to 12 o'clock, within 8 inch: YES	00:02:03	4a, b	S 5
	194.26	MF	Materials Found-VCP	00:07:20		
	194.26	EOS	End of Segment	00:07:35		

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



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Inspection report

Date: 10/31/2005	P.O.#: Y0TV0506A	Weather: 1 Dry	Surveyed By: J.ALEJOS	section number: 526	PSR: 114261
Total Pipe Length:	Survey Customer: 26-007.00	System Owner: LAM	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 2130

Street: BURGESS AV	Flow Control:	Start MH: 2130-0269
City: LAM	Year Renewed:	End MH: 2130-0270
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 12	pipe length: 245.52 ft

Reason for inspection: F	Dia/Height: C 8/8
Use of Sewer: SS	Material: 8" VCP,354 FT. Pipe Length: 354
Drain. Area: 2130	Lining Method:
	Category:

Remark::

1:600	position	code	observation	MPEG	photo	grade
	0.00	AMH	Upstream Manhole, Survey Begins	00:00:42		
	0.00	MWL	Water Level, 5 % of cross sectional area, at 07 o'clock	00:00:56		M 2
	0.00	MWM	Water Mark, 10 of cross sectional area, from 05 to 07 o'clock	00:01:09		M 2
	32.44	HSV	Hole Soil Visible, from 03 to 04 o'clock, within 8 inch: YES	00:02:12	221a	S 5
	32.44	CM	Crack Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:02:42	222a	S 3
	43.63	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:03:05	223a	
	100.69	RFJ	Roots Fine Joint, from 10 to 02 o'clock, within 8 inch: YES	00:04:11	224a	
	101.91	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:04:28	225a	
	106.89	RTJ	Roots Tap Joint, from 01 to 02 o'clock, 10 %, within 8 inch: YES	00:05:06	226a	
	107.91	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO, Remark: ROOTS	00:05:26	227a	
	179.00	CM	Crack Multiple, from 01 to 03 o'clock, within 8 inch: YES	00:06:52	228a	S 3
	179.92	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:07:10	229a	
	182.46	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:07:33	230a	
	240.84	TFA	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: NO	00:08:42	231a	
	242.16	RTJ	Roots Tap Joint, from 10 to 03 o'clock, 50 %, within 8 inch: YES	00:09:22	232a	
	243.28	TFA	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: NO	00:11:23	233a	
	245.52	INC	Inspection incomplete due to TAP ROOTS	00:15:10	234a	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5132	2200	11	4	15	3.67	2	3