

January 28, 2009

TO. Nick Agbobu
Engineering, Budget, and Office Operations

FROM. Robert Swartz
Field Operations



**CONSOLIDATED SEWER MAINTENANCE DISTRICT
CONDITION ASSESSMENT PROGRAM REPORT
PROJECT Y0TV0506F**

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 inspection of 24,123 feet or 100 percent of the unincorporated County/Malibu area'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)

The Condition Assessment Report will provide you with 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:kk
1621

Attach.

bc. RS, FV, File (YOTV0506F), SPINDLE

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

PROJECT NAME:	Y0TV0506F	PROJECT MGR:	Fernando Villaluna
PROJECT DATE:	06/27/06 – 08/04/06	CONTACT NO:	(626) 300-3380
SUP. DISTRICT(s):	3	MAP PAGE(S):	1016, 1029, 1123 & 1158
Report By:	Phyo Kyaw	Report Date:	01/06/09

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 24,123 feet or 100 percent of the Unincorporated County/ Malibu Area’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 Y0TV0506F included sewer lines located in Unincorporated County of Los Angeles area and the Cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, Rancho Palos Verdes and Westlake Village. 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 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 77.5 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 22.5 percent of the inspected pipe segments within the Unincorporated County/ Malibu 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	6,629	27.5	35
2: Good	9,456	39.2	46
3: Fair	2,607	10.8	12
4: Poor	4,542	18.8	24
5: Immediate Attention	889	3.7	5
TOTAL	24,123	100.0	122

STRUCTURAL REPORT

Our inspection revealed that approximately 99.1 percent of the inspected pipe segments within the Unincorporated County/ Malibu Area were free of severe structural defects. However, the remaining 0.9 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. Item 2 in the Quick Structural Rating Report Priority List (Enclosure 3) will be repaired by County forces. 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 2 segments are included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	20,534	85.1	106
2: Good	1,115	4.6	5
3: Fair	2,271	9.4	9
4: Poor	203	0.9	2
5: Immediate Attention	0	0.0	0
TOTAL	24,123	100.0	122

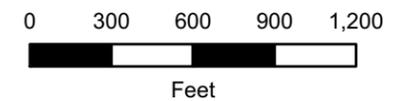
ENCLOSURE 1:

Project Overview Map

PROJECT OVERVIEW MAP

**CCTV PROJECT
Y0TV0506F**

Supervisorial District 3 4
City of Agoura Hills, Calabasas,
Hidden Hills, Malibu, Rancho Palos
Verdes, Westlake Village
County Unincorporated



Legend

SMD Sanitary Sewers

- Other
- 4
- 8
- 10
- 12
- 15
- 18

SMD Manholes

- Other

MH Type

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

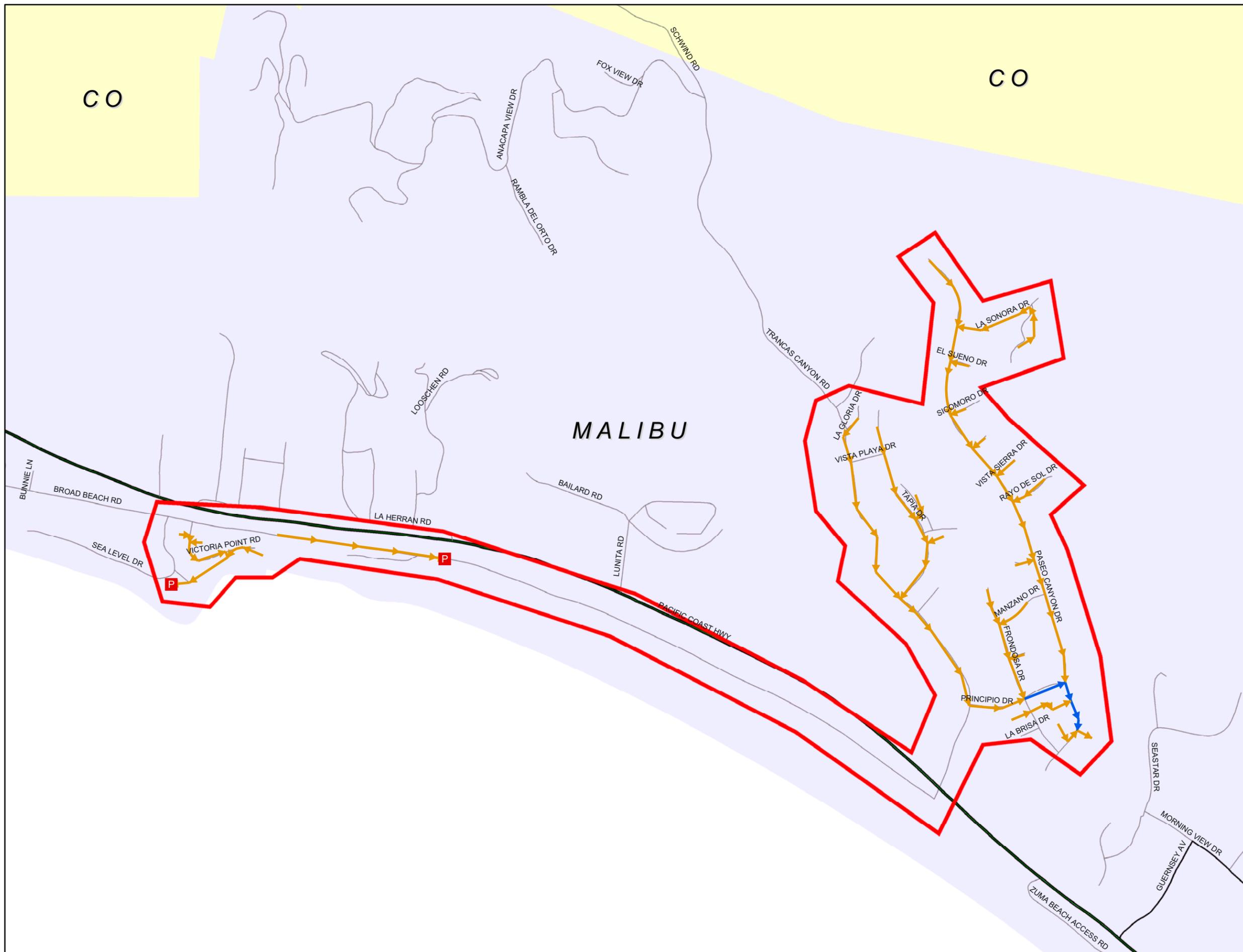
Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH
- SMD Operations Maps
- Y0TV0506F

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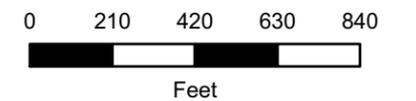
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MALIBU

PROJECT OVERVIEW MAP

CCTV PROJECT Y0TV0506F

Supervisorial District 3 4
City of Agoura Hills, Calabasas,
Hidden Hills, Malibu, Rancho Palos
Verdes, Westlake Village
County Unincorporated



Legend

SMD Sanitary Sewers

- Other
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Maintained by Others:

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

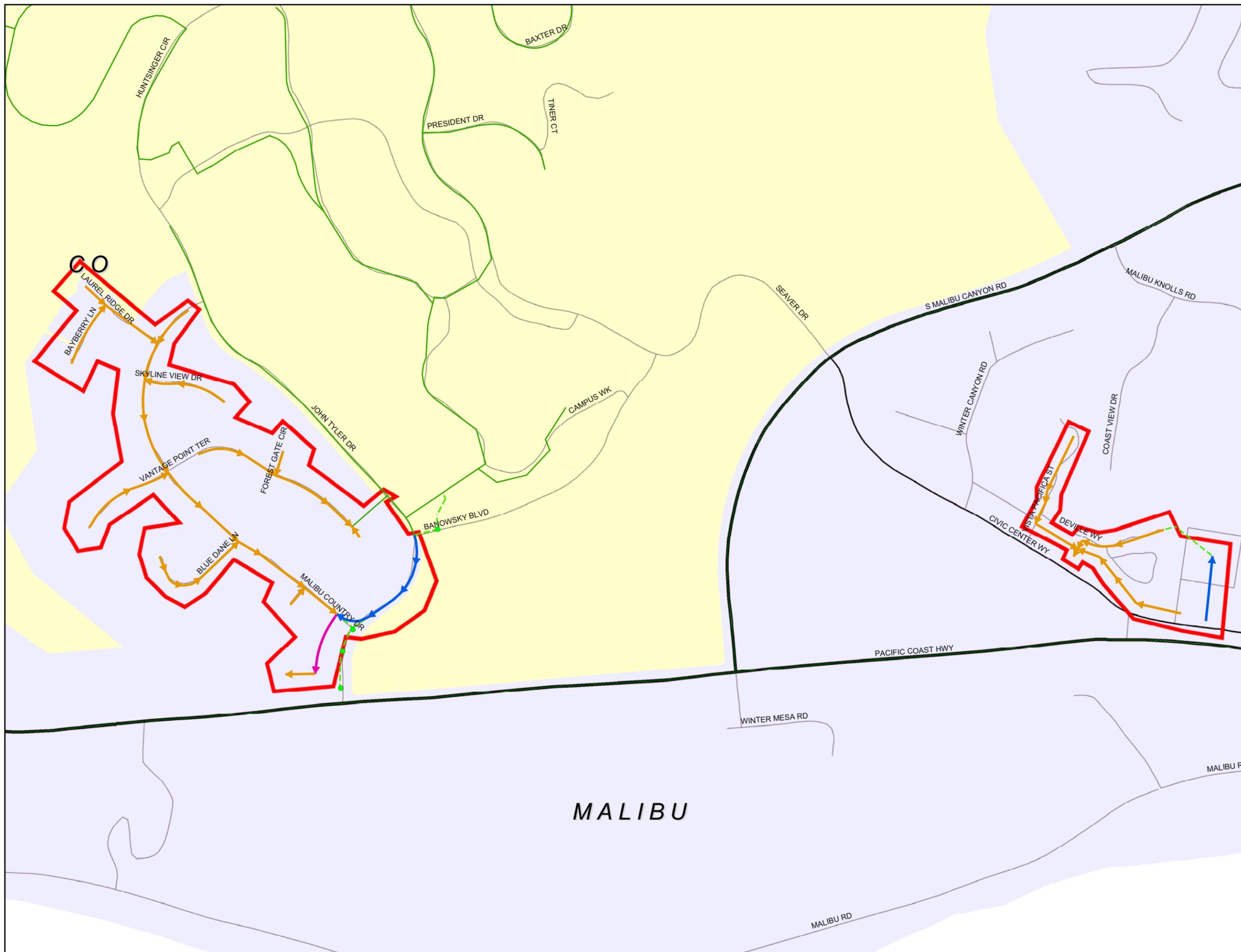
- SMD Operations Maps

- Y0TV0506F

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MALIBU

ENCLOSURE 2:

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

ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 CITY OF MALIBU (Y0TV0506F)
 as of 08/04/06

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	512C	1029-0031	1029-0030	PASEO CANYON DR	Camera underwater	Hydrojet (Completed 11/13/08)
2	5123	1029-0073	1029-0074	BROAD BEACH RD	Obstacle: 247'	Remove obstacle (Completed 11/10/08)
3	5121	1123-0003	1123-0002	EASEMENT between CIVIC CENTER and DE VILLE	Roots	Rodder (Completed 11/10/08))
4	5121	1123-0043	1123-0044	JOHN TYLER DR	Deposit	Hydrojet (Completed 10/21/08)
5	5121	1029-0027	1029-0032	EASEMENT by PRINCIPIO and PASEO CANYON	Roots	Rodder (Completed 01/09/08)
6	4531	1029-0025	1029-0024	EASEMENT by LA BRISA and FRONDOSA	Roots	Hydrojet (Completed 11/13/08)
7	4332	1029-0008	1029-0009	TRANCAS CYN DR	Roots	Hydrojet (Completed 10/21/08)
8	4331	1029-0061	1029-0062	TAPIA RD	Roots	Hydrojet (Completed 10/21/08)
9	4325	1029-0033	1029-0032	PASEO CANYON DR	Water Sag	Hydrojet (Completed 01/09/08)
10	4132	1029-0006	1029-0005	LA GLORIA DR	Roots	Hydrojet (Completed 10/21/08)
11	4122	1029-0003	1016-0006	VICTORIA POINT RD	Grease; Roots	Rodder (Completed 11/28/07)
12	4122	1016-0005	1029-0004	VISTA POINT RD	Roots	Rodder (Completed 11/10/08)
13	4122	1029-0004	1029-0003	VISTA POINT RD	Pipe alignment change	No action needed.
14	4121	1123-0025	1123-0026	SKYLINE VIEW DR	Camera underwater	Hydrojet (Completed 10/21/08)
15	4121	1029-0029	1029-0028	EASEMENT by FRONDOSA and PASEO CANYON	Roots	Rodder (Completed 08/21/07)
16	4121	1029-0057	1029-0056	EASEMENT by LA SONORA	Roots	Rodder (Completed 11/12/08)
17	411D	1123-0001	1158-0002	EASEMENT by DE VILLE	Roots	Rodder (Completed 10/23/08)
18	411D	1123-0001	1123-0002	EASEMENT by DE VILLE	Roots	Hydrojet (Completed 11/13/08)
19	4112	1029-0067	1029-0062	EASEMENT by MARINA VISTA and TAPIA	Roots	Hydrojet (Completed 11/13/08)
20	4100	1123-0009	1123-0106	VISTA PACIFICA ST	Camera underwater	Hydrojet (Completed 10/21/08)
21	4100	1123-0007	1123-0006	EASEMENT by VISTA PACIFICA and CIVIC CENTER	Pipe alignment change	No action needed.
22	4100	1029-0017	1029-0033	PRINCIPIO DR	Camera underwater	Hydrojet (Completed 3/11/08)
23	4100	1029-0032	1029-0031	PASEO CANYON DR	High water mark	No action needed.

The following line segments received a Quick Maintenance Rating of above 4000 due to the observation of Root Ball or Deposit inside the lateral connection. CSMD does not maintain lateral lines: it is the responsibility of the parcel owner to maintain their respective lateral lines to facilitate the flow of wastewater from their property to the mainline. Therefore, these lines were not included on the Priority List above identified with maintenance deficiencies in need of immediate attention by CSMD.

Item No.	QMR	Start MH	End MH	Street	Observation
1	4311	1029-0061	1029-0068	EASEMENT by MARINA VISTA and TAPIA	Roots in lateral
2	4231	1029-0012	1029-0013	TRANCAS CYN DR	Roots in lateral
3	4231	1029-0013	1029-0014	TRANCAS CYN DR	Roots in lateral
4	4222	1029-0019	1029-0018	FRONDOSA DR	Roots in lateral
5	4122	1123-0106	1123-0107	VISTA PACIFICA ST	Roots in lateral
6	4121	1029-0007	1029-0008	TRANCAS CYN DR	Roots in lateral

CO

CO

ENCLOSURE 2

CCTV PROJECT Y0TV0506F

Supervisory District 3
MALIBU

QUICK MAINTENANCE RATING (QMR)



0 310 620 930 1,240



Legend Feet

SMD Sanitary Sewers

QMR

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

SMD Manholes

- Other

MH Type

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

Maintained by Others:

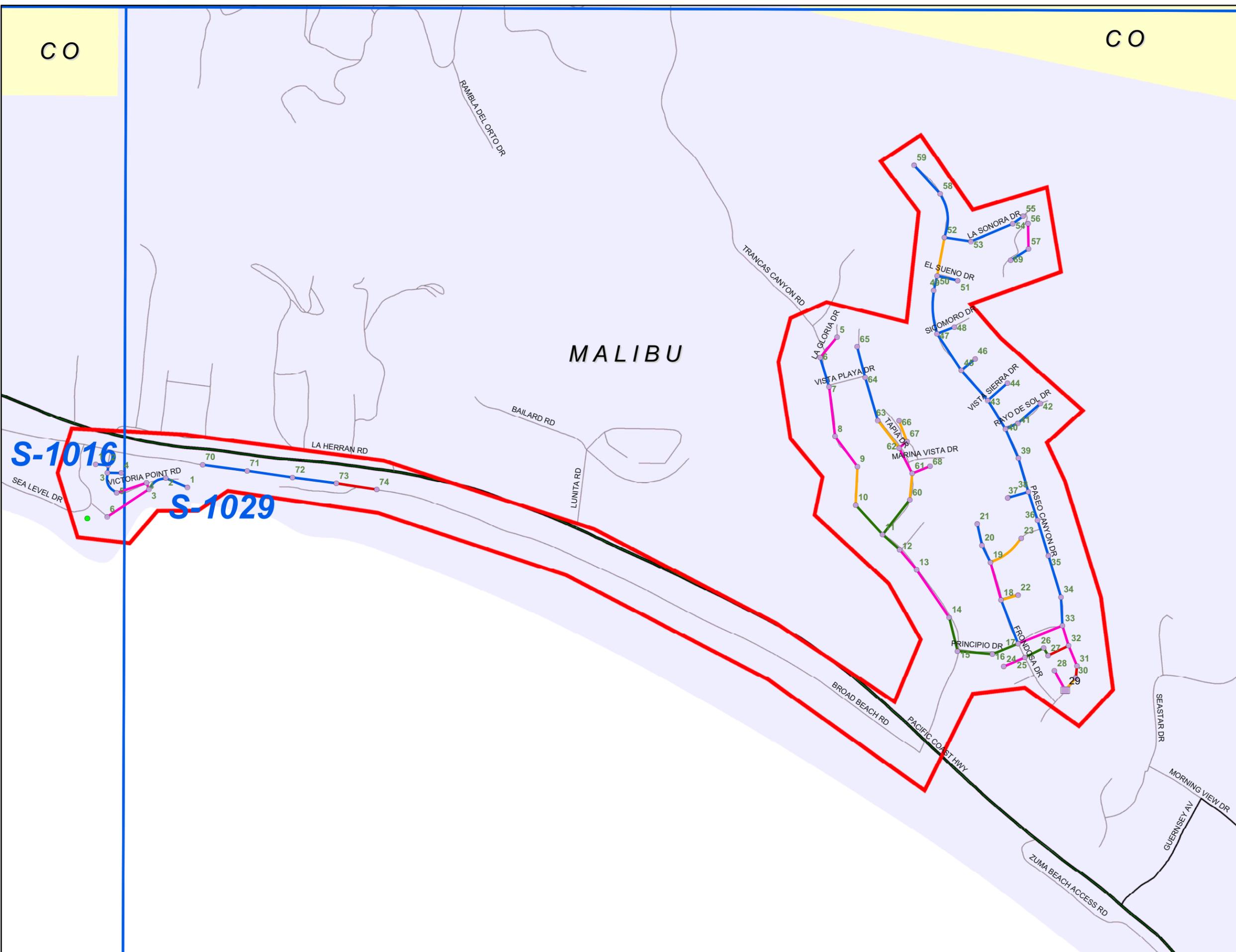
- Trunk Sewerlines
- - - Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH

- SMD Operations Maps
- CCTV Project Area

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ENCLOSURE 2

CCTV PROJECT Y0TV0506F

Supervisory District 3
MALIBU

QUICK MAINTENANCE RATING (QMR)



Legend Feet

SMD Sanitary Sewers

QMR

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

SMD Manholes

- Other

MH Type

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Maintained by Others:

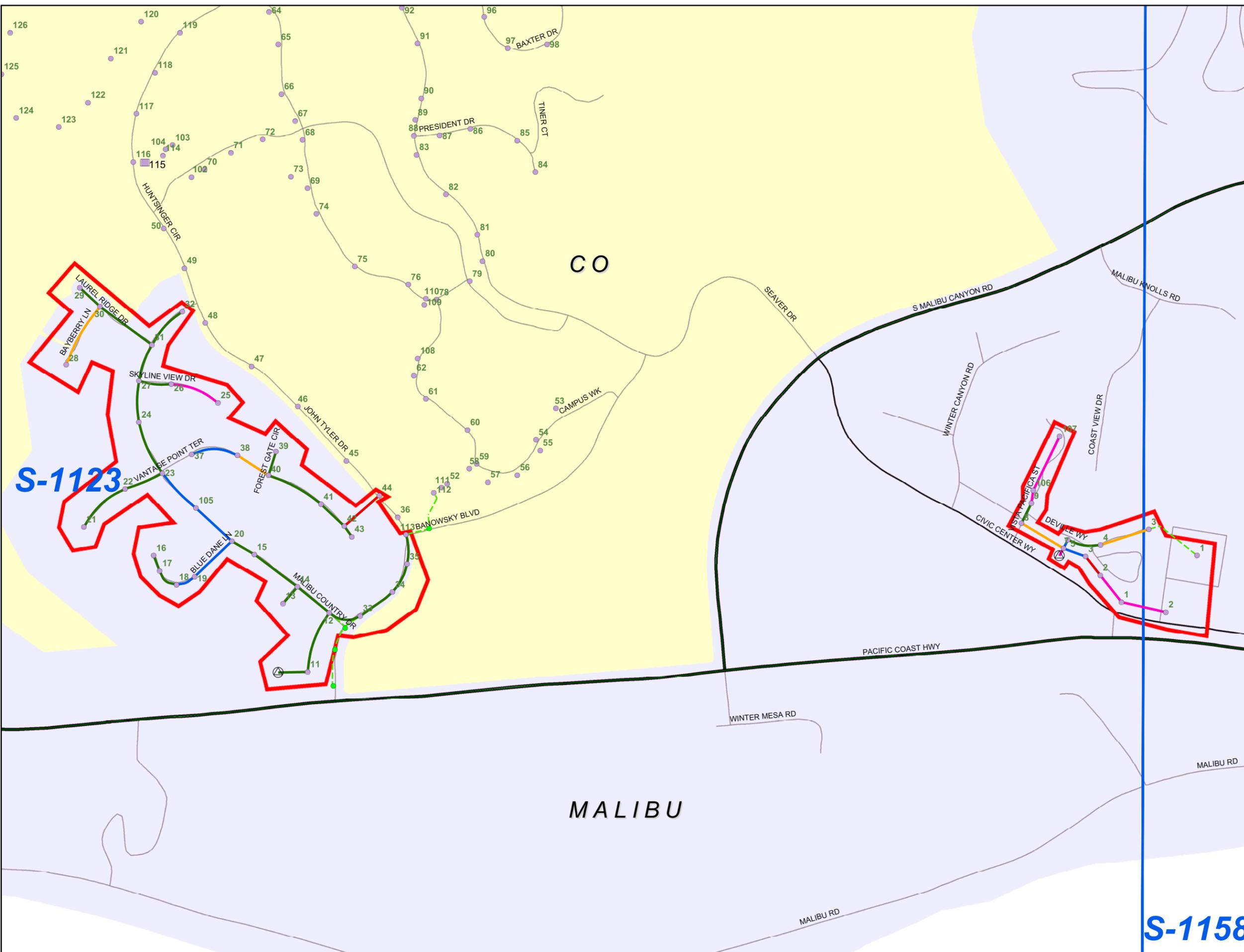
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ENCLOSURE 3:

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

ENCLOSURE 3
QUICK STRUCTURAL RATING REPORT PRIORITY LIST
CITY OF MALIBU (Y0TV0506F)
as of 08/04/06

Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
1	4100	1123-0012	1123-0033	JOHN TYLER DR	Fracture: 93'	Structural integrity intact. No action needed.	-
2	4100	1123-0005	1123-0007	DEVILLE WAY	Hole: End MH	CSMD will repair MH base.	-

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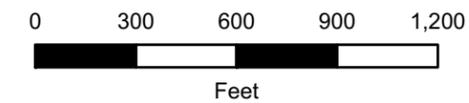
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ENCLOSURE 3

CCTV PROJECT Y0TV0506F

Supervisorial District 3
MALIBU

QUICK STRUCTURAL RATING (QSR)



Legend

SMD Sanitary Sewers

QSR

- 1: EXCELLENT
- 2: GOOD
- 3: FAIR
- 4: POOR

SMD Manholes

- Other

MH Type

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

Maintained by Others:

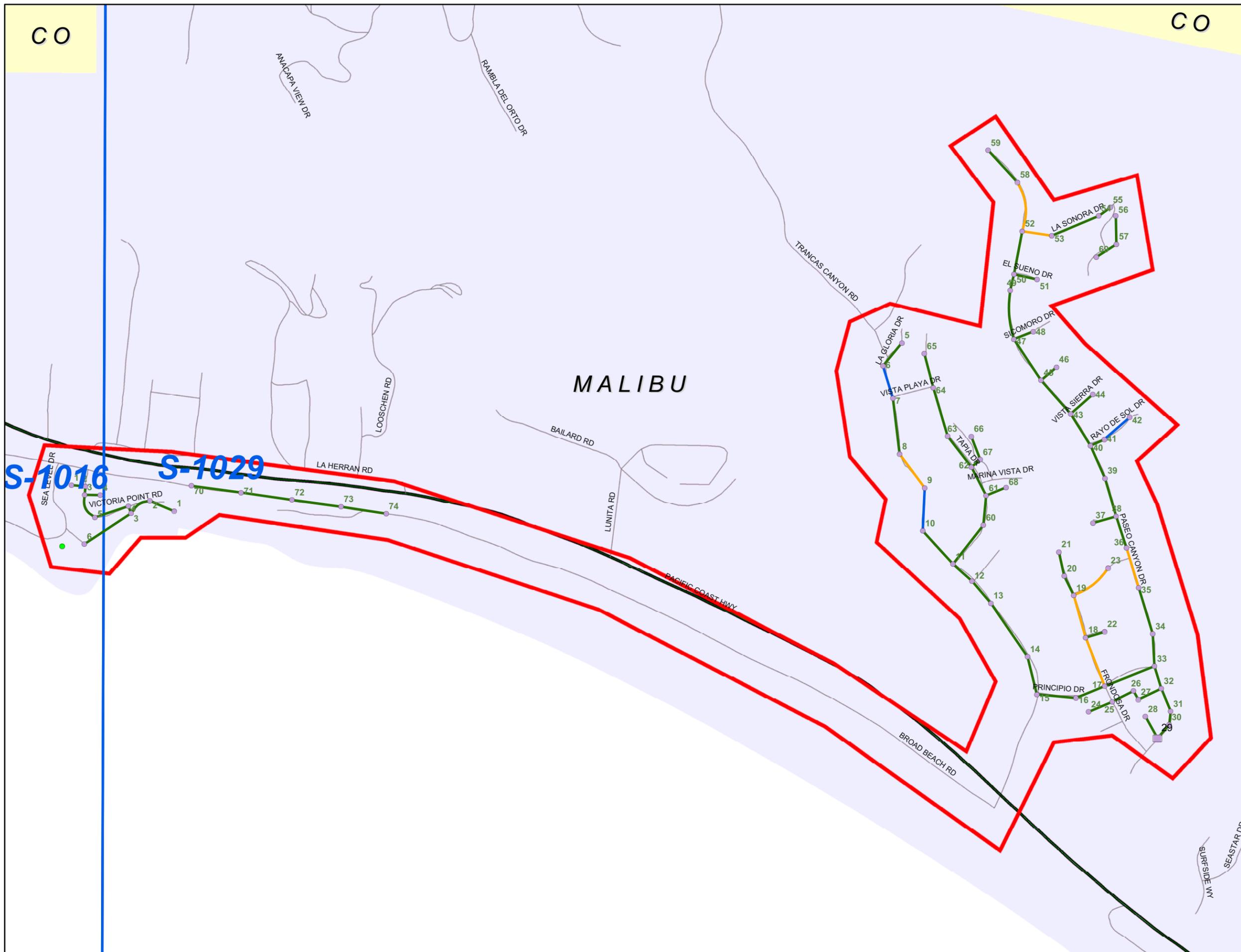
- Trunk Sewerlines
- - - Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH

- SMD Operations Maps
- CCTV Project Area

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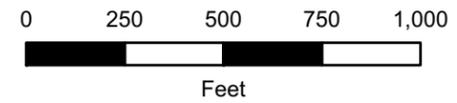


ENCLOSURE 3

CCTV PROJECT YOTV0506F

Supervisory District 3
MALIBU

QUICK STRUCTURAL RATING (QSR)



Legend

SMD Sanitary Sewers

QSR

- 1: EXCELLENT
- 2: GOOD
- 3: FAIR
- 4: POOR

SMD Manholes

- Other

MH Type

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

Maintained by Others:

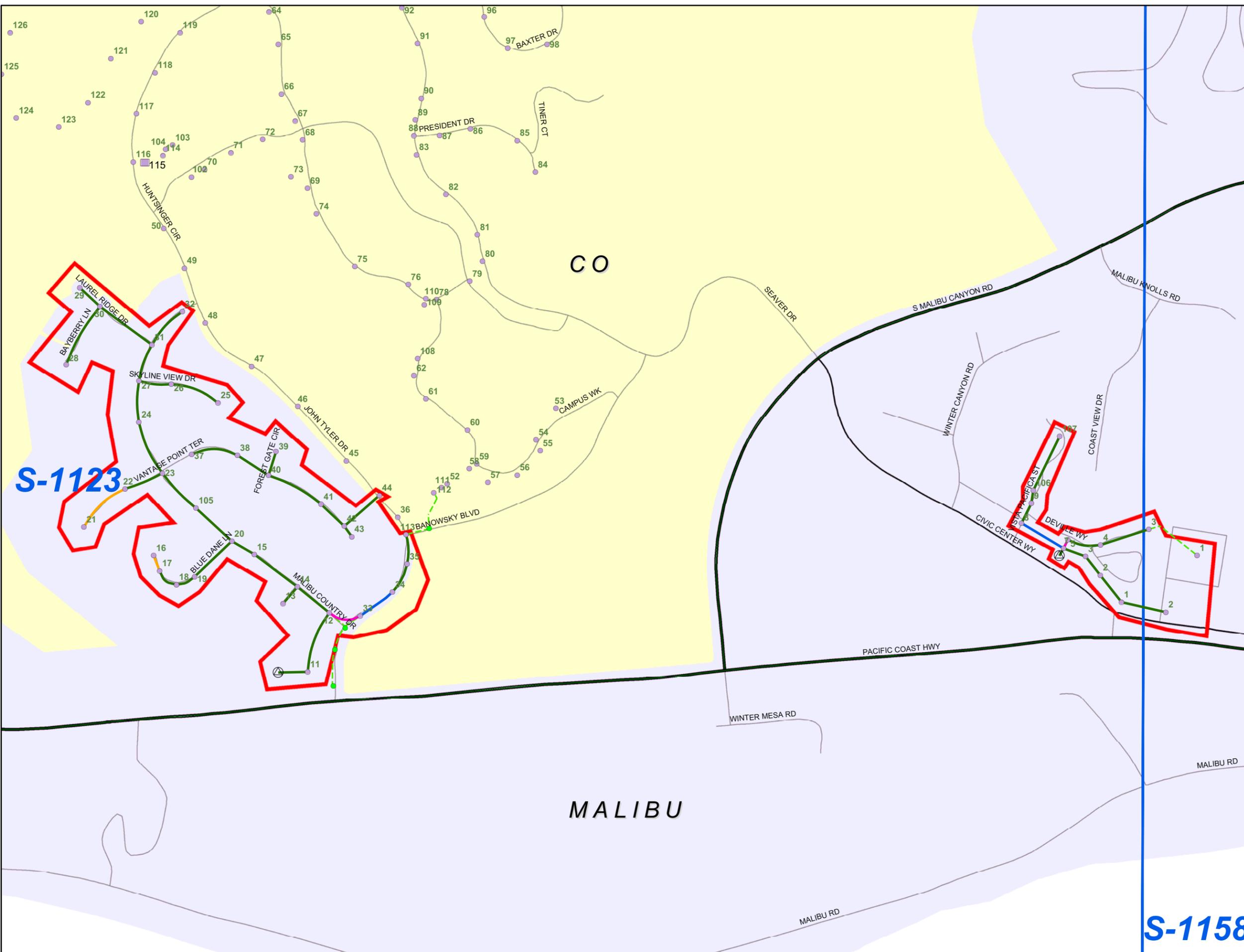
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ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



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

Inspection report

Date: 20060726	P.O.#: YOTV0506F	Weather: 1 Dry	Surveyed By: NPS-D. Beck	section number: 502	PSR: 32251
Total Pipe Length: 134.93	Survey Customer: LACDPW	System Owner: MAL	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1123

Street: JOHN TYLER DR	Flow Control: N Not Controlled	Start MH: 1123-0012
City: MAL	Year Renewed:	End MH: 1123-0033
Location Code: C Light Highway	Tape/Media #: 003	Total length surveyed: 134.93 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 10/10
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 1123	Lining:
	Category:

Comment:
 Location details:

1:350	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:31		
	93.32	Fracture Multiple, from 10 to 02 o'clock, within 8 inch: YES	00:02:56	191a, b	
	134.93	Manhole	00:04:26		

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



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

Inspection report

Date: 20060726	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS-D. Beck	section number: 508	PSR: 32243
Total Pipe Length: 47.81	Survey Customer: LACDPW	System Owner: MAL	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1123

Street: DEVILLE WAY	Flow Control: N Not Controlled	Start MH: 1123-0005
City: MAL	Year Renewed:	End MH: 1123-0007
Location Code: C Light Highway	Tape/Media #: 003	Total length surveyed: 47.81 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 1123	Lining:
	Category:

Comment:
 Location details:

1 125	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:24		
	5.69	Roots Fine Joint, from 03 to 04 o'clock, within 8 inch: YES	00:00:52	226a	
	23.25	Obstacles In Joint, 5 % of cross sectional area, from 11 to 01 o'clock, Remark: gasket	00:02:14	227a	
	27.45	Roots Fine Joint, from 03 to 04 o'clock, within 8 inch: YES	00:02:47	228a	
	45.31	Hole, from 06 to 07 o'clock, within 8 inch: YES	00:03:31	229a	S 4
	47.81	Manhole	00:04:32		

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