



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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ALHAMBRA, CALIFORNIA 91803-1331
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ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

February 11, 2009

IN REPLY PLEASE

REFER TO FILE: **SM-1**

Mr. Richard Wilson
City Engineer
City of Hawaiian Gardens
21815 Pioneer Boulevard
Hawaiian Gardens, CA 90716-1257

Attention Mr Steve Steinbrecher

Dear Mr Wilson

CONSOLIDATED SEWER MAINTENANCE DISTRICT CONDITION ASSESSMENT PROGRAM REPORT PROJECT Y0TV0708C

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 84,304 feet or 100 percent of the City of Hawaiian Gardens' 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)
- Fat, Oil, and Grease (FOG) Door Hanger (Enclosure 5)

Mr Richard Wilson
February 11, 2009
Page 2

The Condition Assessment Report will provide 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 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.

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



MANUEL DEL REAL
Assistant Deputy Director
Sewer Maintenance Division

ML:kk
1594

Enc.

bc MdR, KL, RS, FV, ML, **File** (Project Y0TV0708C), SPINDLE

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

PROJECT NAME:	Y0TV0708C	PROJECT MGR.	Marzena Laskowska
PROJECT DATE:	02/04/08 - 04/09/08	CONTACT NO	(626) 300-3348
SUP DISTRICT(s):	4	MAP PAGE(S):	2031, 2084
Report By:	Marzena Laskowska	Report Date.	12/01/2008

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 inspection of 84,304 feet or 100 percent of the City of Hawaiian Gardens' 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 Y0TV00708C included sewer lines located in the City of Artesia, Lakewood, and Hawaiian Gardens. 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: 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 89.7 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 10.3 percent of the inspected pipe segments within the City of Hawaiian Gardens 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.

It was noted that a few of these segments involved high concentration of fat, oil, and grease (FOG) in residential areas. It is recommended that these areas with prevalent FOG deposits be targeted with public awareness regarding preventative measures on FOG issues. We have included a copy of a door-hanger providing information on such issues for your reference (Enclosure 5). In the future, our maintenance crews will distribute this FOG brochure, targeting residential areas where FOG has been observed. We find this public awareness strategy to be the most effective means of addressing FOG problems in residential areas.

In addition, we have also highlighted several segments in commercial and industrial areas, which involved high concentration of grease deposits. Since the City of Hawaiian Gardens is a participant of the County's Industrial Waste Program, a grease accumulation report will be forwarded to the appropriate personnel of that Program for further investigation.

QUICK MAINTENANCE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	36,944	43.8	157
2: Good	30,037	35.6	127
3: Fair	8,664	10.3	33
4: Poor	8,049	9.6	34
5: Immediate Attention	610	0.7	3
TOTAL	84,304	100.0	354

STRUCTURAL REPORT

Our inspection revealed that approximately 96.9 percent of the inspected pipe segments within the City of Hawaiian Gardens were free of severe structural defects. However, the remaining 3.1 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 10 segments are included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

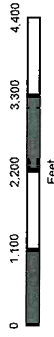
DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	45,555	54.0	206
2: Good	11,488	13.7	47
3: Fair	24,615	29.2	91
4: Poor	261	0.3	2
5: Immediate Attention	2,385	2.8	8
TOTAL	84,304	100.0	354

ENCLOSURE 1:

Project Overview Map

ENCLOSURE 1 CCTV PROJECT Y0TV0708C

Supervisory District 4
City of Artesia,
Hawaiian Gardens
& Lakewood



Legend

SMD Manholes

Other

MH Type

Standard

DROP

Shallow

Trap

Siphon

SMD Pump Stations

SMD Treatment Plants

SMD Sanitary Sewers

other

SMD Sanitary Sewers

8"

10"

12"

15"

Maintained by Others

Trunk Sewerlines

Non SMD Sanitary Sewers

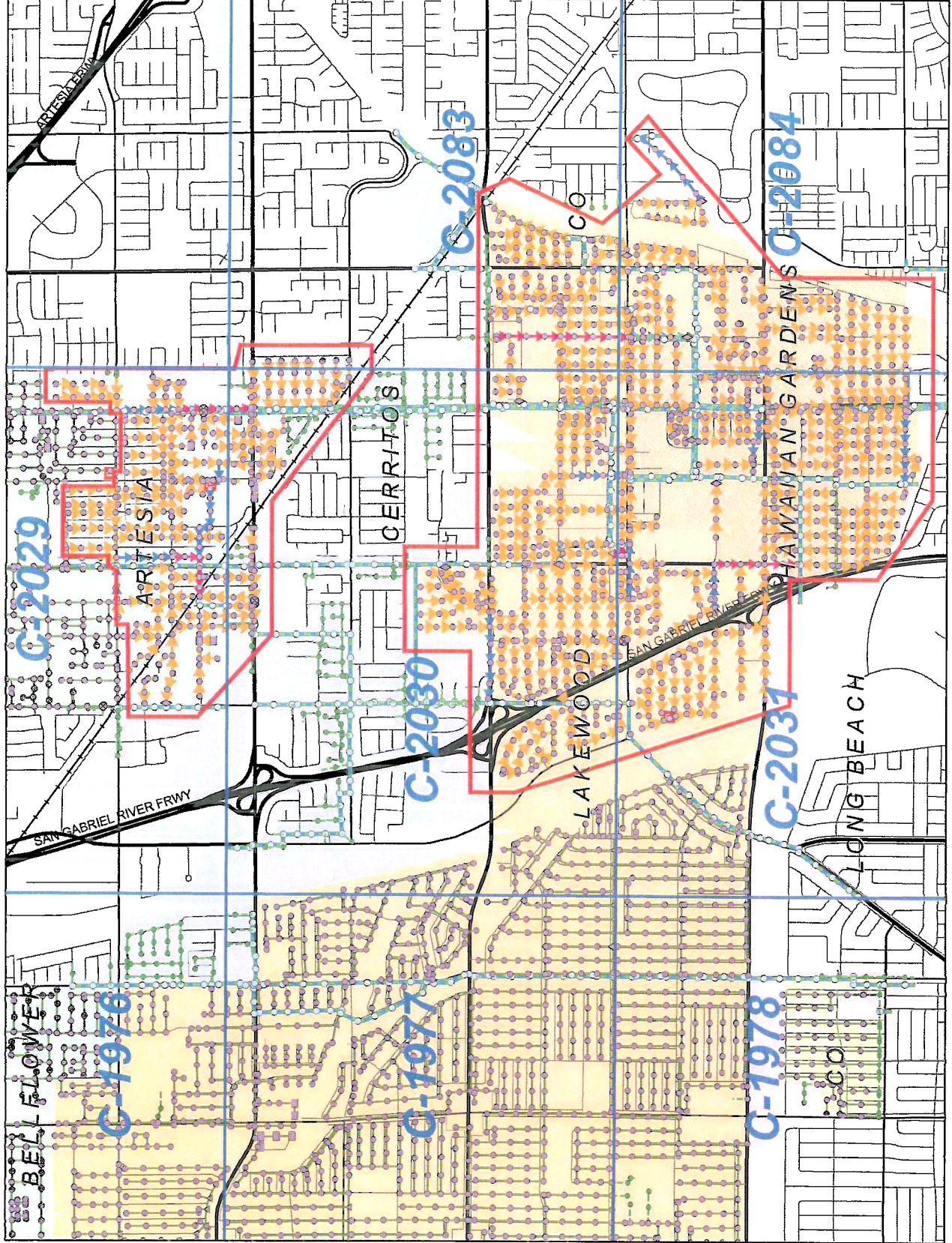
Trunk Sewer

Non SMD Manholes

Parcel Boundary

SMD Operations Maps

CCTV Project Area



This map is intended only for internal operations of the City of Artesia, Hawaiian Gardens, and Lakewood. 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. Mapsee digital map data. All rights reserved by Thomas Bros. Maps®

NOVEMBER 2007

Y0TV0708C_Overview.mdx

ENCLOSURE 2:

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

ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 CITY OF HAWAIIAN GARDENS (Y0TV0708C)
 as of 04/09/08

Item No.	QMR	Start MH	End MH	Street	Observation: Location	Corrective Action Taken
1	5231	2084-0074	2084-0074A	HAWAIIAN AV	Grease in lateral	Laterals are homeowner's responsibility
2	5141	2084-0095	2084-0096	221ST ST	Grease	Hydrojet (Cleaned 7/8/08)
3	5100	2031-0353	2031-0355	214TH ST	Deposits	Hydrojet (Cleaned 10/30/08)
4	4A3B	2031-0443	2031-0392	221ST ST	Grease	Hydrojet 90 day periodic (Last cleaned 05/01/08)
5	492D	2031-0340	2084-0056	BELSHIRE AV	Camera underwater	Hydrojet (Cleaned 7/9/08)
6	4734	2031-0472	2031-0457	ELAINE AV	Camera underwater	Hydrojet (Cleaned 7/9/08)
7	472D	2031-0260	2031-TRNK	VIOLETA AV	Camera underwater	Rodder 90 day periodic (Last cleaned 06/24/08)
8	4729	2031-0377	2031-0376	CARSON ST	Camera underwater	Rodder 150 day periodic (Last cleaned 05/01/08)
	4100	2031-0376	2031-0377			
9	463A	2031-0372	2031-0373	CARSON ST	Grease	Hydrojet 60 day periodic (Last cleaned 05/02/08)
10	463A	2031-0473	2031-0459	JUAN AV	Camera underwater	Hydrojet (Cleaned 7/9/08)
11	4600	2031-0284	2031-TRNK	CENTRALIA AV	Camera underwater	Hydrojet (Cleaned 7/25/08)
12	4523	2031-0373	2031-TRNK	CARSON ST	Grease	Hydrojet 60 day periodic (Last cleaned 05/02/08)
13	443D	2031-0402	2031-TRNK	DEVLIN AV	Grease	Hydrojet (Cleaned 7/25/08)
14	4333	2031-0380	2031-0401	DEVLIN AV	Grease	Hydrojet (Cleaned 7/30/08)
15	432B	2031-0254	2031-TRNK	CLARKDALE AV	Camera underwater	Hydrojet (Cleaned 7/25/08)
16	413A	2031-0235	2031-0236	223RD ST	Infiltration runner (clear)	No action required
17	4137	2031-0236	2031-0396	223RD ST	Infiltration runner (clear)	No action required
18	4137	2031-0453	2031-0394	BELSHIRE AV	Grease	Hydrojet 60 day periodic (Last cleaned 06/27/08)
19	4136	2084-0104	2031-0378	CARSON ST	Grease	Rodder 150 day periodic (Last cleaned 05/09/08)
20	4132	2031-0457	2031-0458	226TH ST	Camera underwater	Hydrojet (Cleaned 7/25/08)
21	4132	2031-0241	2031-TRNK	PIONEER AV	Grease; camera underwater	Hydrojet (Cleaned 7/28/08)
22	4131	2031-0401	2031-TRNK	DEVLIN AV	Grease; camera underwater	Hydrojet 90 day periodic (Last cleaned 05/28/08)
23	4131	2084-0094	2084-0095	CLARETTA AV	Grease; camera underwater	Hydrojet 60 day periodic (Last cleaned 05/02/08)
24	4131	2031-0457	2031-TRNK	226TH ST	Grease	Hydrojet (Cleaned 7/25/08)
25	412O	2031-0375	2031-0374	CARSON ST	Infiltration runner (clear)	No action required
26	412N	2031-0239	2031-0240	PIONEER AV	Camera underwater	Hydrojet 60 day periodic (Last cleaned 06/27/08)
27	412L	2084-0089	2084-0088	VERNE AV	Camera underwater	Hydrojet (Cleaned 7/8/08)
28	412B	2031-0292	2031-0329	212TH ST	Infiltration runner (clear)	No action required
29	4125	2084-0104	2084-0105	BELSHIRE AV	Infiltration runner (clear)	No action required
30	4124	2031-0259	2031-TRNK	VIOLETA AV	Grease; camera underwater	Hydrojet 90 day periodic (Last cleaned 05/08/08)

ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 CITY OF HAWAIIAN GARDENS (Y0TV0708C)
 as of 04/09/08

Item No.	QMR	Start MH	End MH	Street	Observation: Location	Corrective Action Taken
31	4123	2031-0342	2031-0343	BELSHIRE AV	Infiltration runner at MH base	CSMD will repair MH base.
32	4122	2031-0388	2031-0387	221ST ST	High water mark	No action required
33	4114	2031-0262	2031-0263	VIOLETA AV	Roots	Rodder (Last cleaned 10/29/08)
34	4112	2031-0479	2031-0466	ALLEY	High water mark	Hydrojet 90 day periodic (Last cleaned 04/10/08)
35	4112	2084-0097	2084-0098	BELSHIRE AV	Infiltration runner (clear)	No action required
36	4100	2031-0231	2031-0379	ALLEY	Infiltration runner (clear)	No action required
37	4100	2031-0446	2031-0447	ALLEY	Camera underwater	Emergency Point Repair (completed 8/27/08)

ENCLOSURE 2
CCTV PROJECT

Y0TV0708C
Supervisory District 4
Hawaiian Gardens

QUICK
MAINTENANCE
RATING
(QMR)



Legend

SMD Sanitary Sewers

QMR

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

SMD Manholes

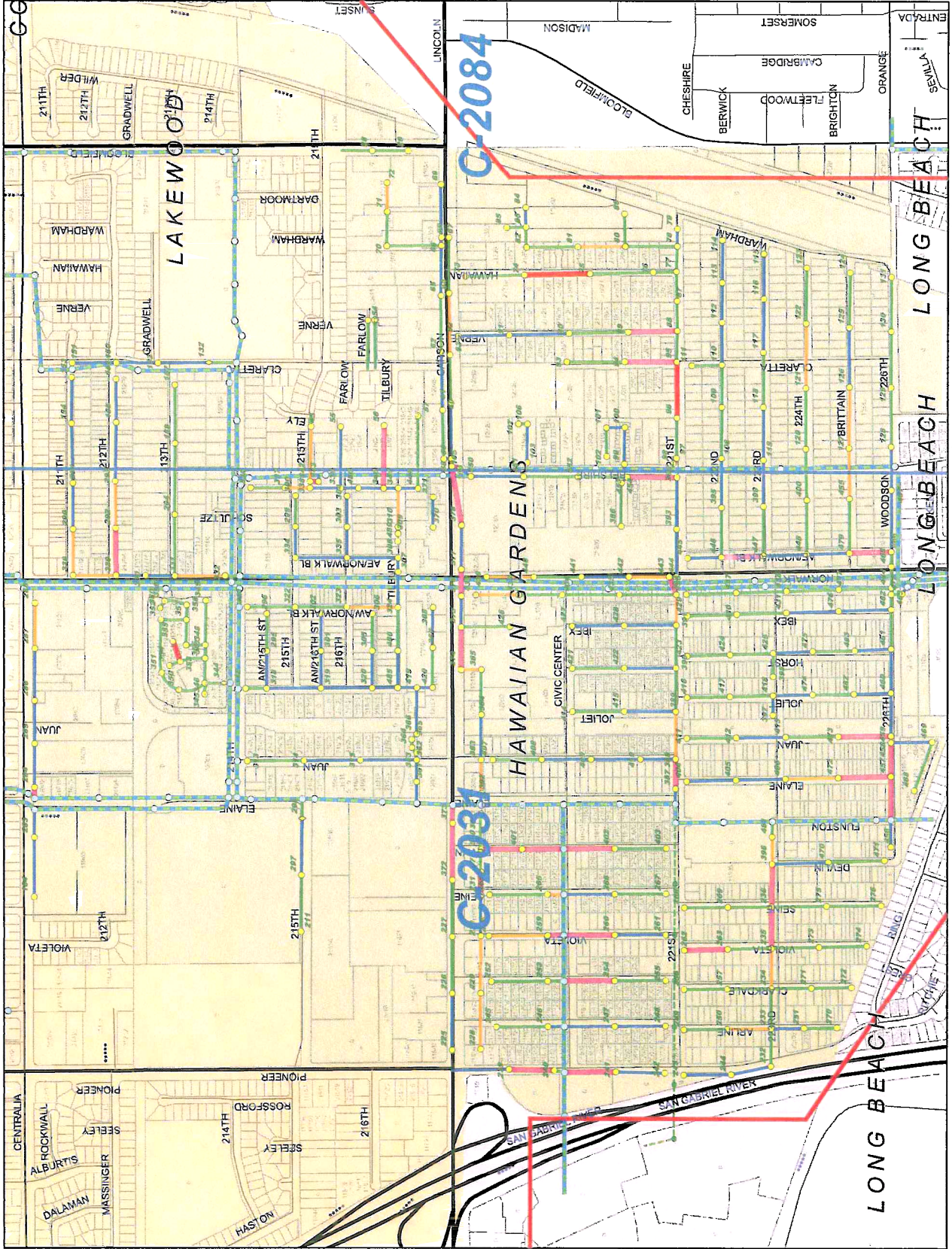
HGD

- Standard
- Trap
- SMD Pump Stations
- SMD Treatment Plants
- Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Sewer
- Non SMD Manholes
- Parcel Boundary
- SMD Operations Maps
- CCTV Project Area

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JUNE 2008



ENCLOSURE 3:

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

ENCLOSURE 3
 QUICK STRUCTURAL RATING REPORT PRIORITY LIST
 CITY OF HAWAIIAN GARDENS (Y0TV0708C)
 as of 04/09/08

Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
1	5122	2084-0126	2084-0127	BRITTAIN ST	Hole (capped with VCP pipe): 228'	Structural integrity in tact. No action needed.	-
	5300	2084-0127	2084-0126		Hole (capped with VCP pipe): 48', 61'		
2	5141	2084-0104	2031-0378	CARSON ST	Fracture 23'	Structural integrity in tact. No action needed.	-
3	5131	2031-0437	2031-0436	NORWALK BV	Broken with soil visible: 240'	Lining: MH to MH	335
4	513B	2031-0446	2031-0447	ALLEY NEAR NORWALK BV	Broken with soil visible: 73'; alignment down 45%, pipe 100% full	Emergency Point Repair (completed 08/27/08)	
	4122	2031-0447	2031-0446		Fracture: 14'; alignment down 20% 130'		
5	5132	2031-0412	2031-0413	JUAN AV	Broken with void visible at the base of the Start MH	CSMD will repair MH base.	
6	5122	2084-0048	2084-0053	FARLOW ST	Hole with void visible 5'	Lining: MH to MH	315
7	5100	2031-0295	2031-0318	HORST AV	Broken at joint: 3'	Structural integrity in tact. No action needed.	-
8	5100	2031-0424	2031-0425	HORST AV	Broken with void visible at the trough of End MH	CSMD will repair MH base.	-
9	413B	2031-0385-A	2031-0384	EASEMENT NEAR CARSON ST	Broken with void visible at joint 8'	Structural integrity in tact. No action needed.	-
10	4134	2031-0337	2031-0338	BELSHIRE AVE	Fractures. 143'	Structural integrity in tact. No action needed.	-

ENCLOSURE 3

CCTV PROJECT

Y0TV0708C

Supervisory District 4
Hawaiian Gardens

QUICK STRUCTURAL RATING (QSR)



Legend

SMD Sanitary Sewers

QSR

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

SMD Manholes

HGD

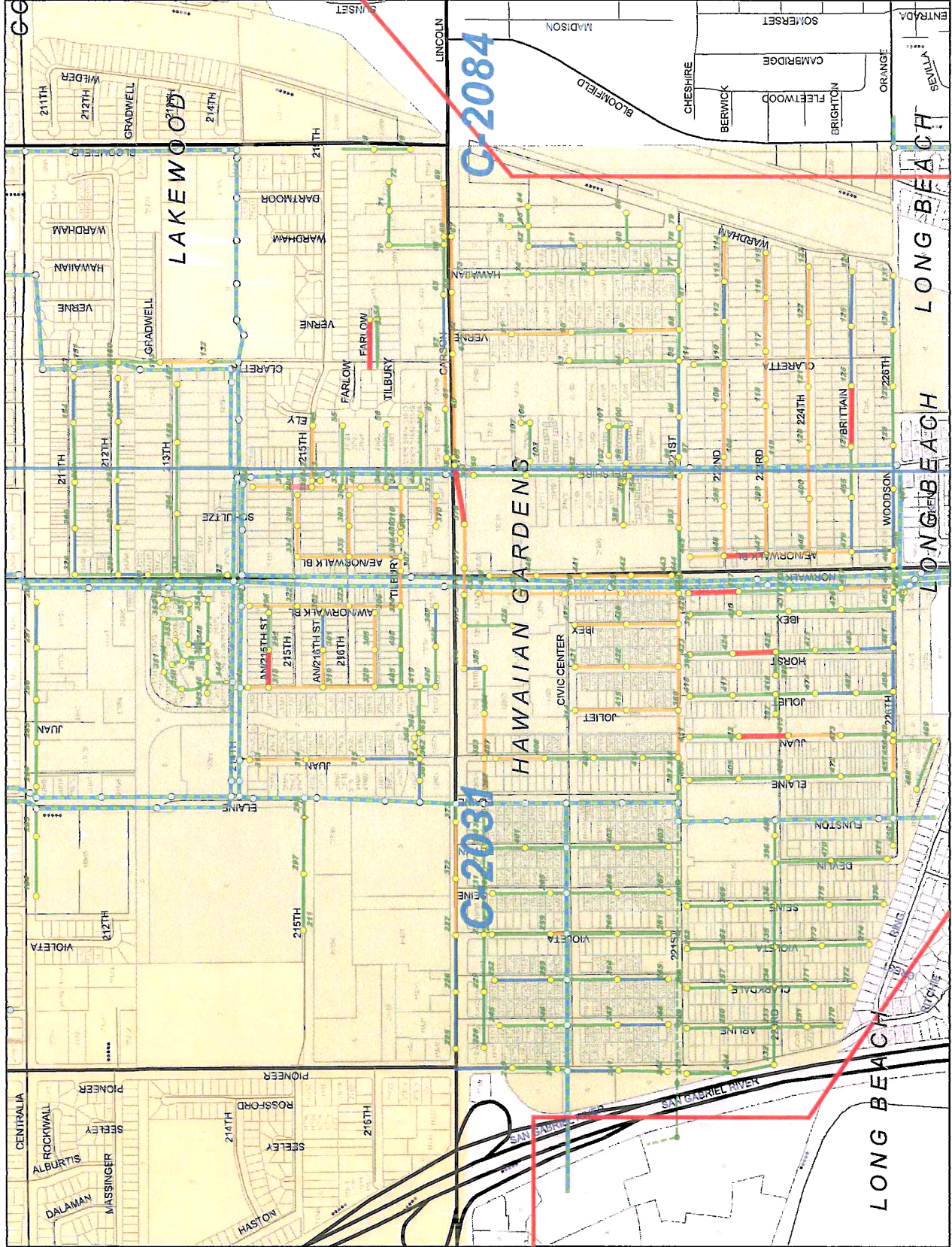
- Standard
- Trap
- SMD Pump Stations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Sewer
- Non SMD Manholes
- Parcel Boundary
- SMD Operations Maps
- CCTV Project Area

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JUNE 2008



ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



Inspection report

Date: 03/27/2008	P.O. #: Y0TV0708C	Weather: Dry	Surveyed By: Martin Garcia	section number: 1353	PSR: 117403
Total Pipe Length: 371.00	Survey Customer: LACDPW	System Owner: HAWAIIAN GARDENS	Clean Date: 03/18/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: BRITAIN ST	Flow Control: Not Controlled	Start MH: 2084-0126
City: HGD	Year Renewed:	End MH: 2084-0127
Location Code: Light Highway	Tape/Media # M313-035	Total length surveyed: 251.3 ft

Purpose: Maintenance Related	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0126/2084-0127/2084	Lining:
	Category:

Comment:
 Location details:

1:496	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2084-0126	00:00:34	10442	
	0.00	VC	Vermin Cockroach, within 8 inch: NO	00:00:49	10443	M 1
	5.00	MWL	Water Level, 15 #, within 8 inch: NO	00:01:17	10444	M 2
	5.80	CC	Crack Circumferential, from 7 to 5 o'clock, within 8 inch: YES	00:01:43	10445, b	S 1
	12.60	CC	Crack Circumferential, from 9 to 5 o'clock, within 8 inch: YES	00:03:00	10447, b	S 1
	12.60	RFJ	Roots Fine Joint, from 9 to 4 o'clock, within 8 inch: YES	00:03:33	10449, b	
	20.30	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:04:27	10451	
	32.20	CC	Crack Circumferential, from 8 to 4 o'clock, within 8 inch: YES	00:05:37	10452, b	S 1
	42.30	CC	Crack Circumferential, from 8 to 12 o'clock, within 8 inch: YES	00:06:59	10454, b	S 1
	67.00	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:08:18	10456	
	69.80	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:08:45	10457	
	79.40	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:09:28	10458	
	87.60	CC	Crack Circumferential, from 12 to 4 o'clock, within 8 inch: YES	00:10:27	10459, b	S 1
	118.80	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:12:03	10461	
	120.50	CC	Crack Circumferential, from 9 to 5 o'clock, within 8 inch: YES	00:12:55	10462, b	S 1
	128.20	TF	Tap Factory, at 9 o'clock, 6", within 8 inch: NO	00:13:51	10464	
	157.10	RFJ	Roots Fine Joint, from 7 to 2 o'clock, within 8 inch: YES	00:15:52	10465, b	
	157.10	CC	Crack Circumferential, from 8 to 2 o'clock, within 8 inch: YES	00:16:13	10467, b	S 1
	163.70	RFJ	Roots Fine Joint, from 10 to 2 o'clock, within 8 inch: YES	00:17:00	10469, b	
	171.80	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:17:47	10471	
	180.60	CC	Crack Circumferential, from 8 to 1 o'clock, within 8 inch: YES	00:18:28	10472, b	S 1
	181.40	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:19:02	10474	
	183.10	CC	Crack Circumferential, from 7 to 2 o'clock, within 8 inch: YES	00:19:25	10475, b	S 1
	193.00	CL	Crack Longitudinal, at 1 o'clock, within 8 inch: YES	00:20:17	10477, b	S 2
	201.30	MWL	Water Level, 10 #, within 8 inch: NO	00:20:57	10479	M 2



Inspection report

Date: 03/27/2008	P.O. #: Y0TV0708C	Weather: Dry	Surveyed By: Martin Garcia	section number: 1353	PSR: 117403
Total Pipe Length: 371.00	Survey Customer: LACDPW	System Owner: HAWAIIAN GARDENS	Clean Date: 03/18/2008	Pre-Cleaned: Jetting	Map Grid #:

1:496	position	code	observation	MPEG	photo	grade
	<u>221.20</u>	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:21:46	10480	
	<u>228.00</u>	HVV	Hole Void Visible, from 10 to 2 o'clock, within 8 inch: NO	00:22:38	10481, b	S 5
	<u>230.70</u>	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:23:18	10483	
	<u>242.60</u>	FC	Fracture Circumferential, from 12 to 5 o'clock, within 8 inch: YES	00:23:59	10484, b	S 2
	<u>245.90</u>	RFJ	Roots Fine Joint, from 7 to 1 o'clock, within 8 inch: YES	00:24:35	10486, b	
	<u>245.90</u>	CC	Crack Circumferential, from 7 to 12 o'clock, within 8 inch: YES	00:24:59	10488, b	S 1
	<u>251.30</u>	DAE	Deposits Attached Encrustation, from 5 to 7 o'clock, 10 #, within 8 inch: YES	00:26:41	10490, b	M 2
	<u>251.30</u>	MSA	Abandoned Survey, within 8 inch: NO, Remarks: UNABLE TO PASS CALCIUM	00:30:34	10492	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5122	2311	19	7	26	1.46	1.75	1.53



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

Inspection report

Date: 03/27/2008	P.O. #: Y0TV0708C	Weather: Dry	Surveyed By: Martin Garcia	section number: 1354	PSR: 117403
Total Pipe Length: 371.00	Survey Customer: LACDPW	System Owner: HAWAIIAN GARDENS	Clean Date: 03/18/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: BRITAIN ST	Flow Control: Not Controlled	Start MH: 2084-0127
City: HGD	Year Renewed:	End MH: 2084-0126
Location Code: Light Highway	Tape/Media # M313-035	Total length surveyed: 77.7 ft

Purpose: Maintenance Related	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0126/2084-0127/2084	Lining:
	Category:

Comment:
 Location details:

1:200	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2084-0127	00:00:28	10493	
	5.00	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:01:00	10494	
	7.40	MWL	Water Level, 15", within 8 inch: NO	00:01:23	10495	M 2
	11.10	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:01:43	10496	
	48.40	HVV	Hole Void Visible, from 10 to 2 o'clock, within 8 inch: NO	00:03:21	10497, b	S 5
	51.00	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:03:55	10499	
	61.30	HVV	Hole Void Visible, from 10 to 2 o'clock, within 8 inch: NO	00:04:35	10500, b	S 5
	63.00	HVV	Hole Void Visible, from 10 to 2 o'clock, within 8 inch: NO	00:05:17	10502, b	S 5
	77.70	DAE	Deposits Attached Encrustation, from 5 to 7 o'clock, 15", within 8 inch: YES	00:06:32	10504, b	M 3
	77.70	MSA	Abandoned Survey, within 8 inch: NO, Remarks: UNABLE TO PASS CALCIUM- R	00:07:28	10506	

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



Inspection report

Date: 04/02/2008	P.O. #: YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 341	PSR: 672815
Total Pipe Length: 363.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 04/01/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: CARSON ST	Flow Control: Not Controlled	Start MH: 2084-0104
City: HGD	Year Renewed:	End MH: 2031-0378
Location Code: Main Highway - Suburban/Rural	Tape/Media # G312-039	Total length surveyed: 259.7 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0104/2084-0378/2031	Lining:
	Category:

Comment:
 Location details:

1:650	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2084-0104	00:01:14	888	
	4.70	S1 MWLS	Water Level Sag, 35 #, within 8 inch: NO, Start	00:02:18	889, b	M 3
	9.50	MCU	Camera Underwater, within 8 inch: NO	00:03:37	891, b	M 4
	10.30	DAGS	Deposits Attached Grease, from 3 to 9 o'clock, 10 #, within 8 inch: NO	00:05:35	893, b	M 2
	10.30	FM	Fracture Multiple, from 3 to 9 o'clock, within 8 inch: YES	00:06:49	895, b	S 4
	12.60	CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES	00:08:36	898, b	S 3
	12.60	DAGS	Deposits Attached Grease, from 7 to 5 o'clock, 15 #, within 8 inch: NO	00:08:57	900, b	M 3
	23.40	B	Broken, from 3 to 9 o'clock, within 8 inch: YES	00:11:07	902, b	S 5
	26.60	F1 MWLS	Water Level Sag, 35 #, within 8 inch: NO, End	00:12:01	904	M 3
	26.60	MWL	Water Level, 10 #, within 8 inch: NO	00:12:25	905	M 2
	26.60	CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES	00:12:57	906, b	S 3
	51.50	TFC	Tap Factory Capped, at 9 o'clock, 6", within 8 inch: NO	00:14:06	908	
	68.10	TBA	Tap Break-in Active, at 9 o'clock, 4", within 8 inch: NO	00:14:59	909	
	94.30	S2 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, Start	00:16:19	910, b	S 3
	140.00	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:17:48	912	
	197.20	TFC	Tap Factory Capped, at 9 o'clock, 6", within 8 inch: NO	00:19:19	913	
	220.30	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:20:34	914	
	257.20	F2 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, End	00:22:34	915	S 3
	259.70	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0378	00:25:21	916	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5141	4133	21	17	38	3.5	2.83	3.17



Inspection report

Date: 04.02.2008	P.O.☐ YOTV0708C	Weather: Dry	Surveyed By: Rigo Alvarez	section number: 275	PSR: 123813
Total Pipe Length: 308.00	Survey Customer: LACDPW	System Owner: Hawallan - Gardens	Clean Date: 04.01.2008	Pre-Cleaned: Jetting	Map Grid ☐

Street: NORWALK BV	Flow Control: Not Controlled	Start MH: 2031-0437
City: HGD	Year Renewed	End MH: 2031-0436
Location Code: Light Highway	Tape/Media ☐ R311-022	Total length surveyed: 334.4 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0436.2031-0437.2031	Lining:
	Category:

Comment:
 Location details:

1:825	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0437	00:00:33	5315	
	<u>10.30</u>	MWL	Water Level, 5 ☐, within 8 inch: NO	00:01:15	5316	M 2
	<u>15.20</u>	MGO	General Observation, within 8 inch: NO, Remarks: Pipe joint Length 5'	00:01:38	5317	
	<u>69.20</u>	TFA	Tap Factory Active, at 10 o'clock, 6", within 8 inch: NO	00:02:59	5318	
	<u>87.10</u>	TFC	Tap Factory Capped, at 10 o'clock, 6", within 8 inch: NO	00:03:41	5319	
	<u>115.50</u>	TFC	Tap Factory Capped, at 10 o'clock, 6", within 8 inch: NO	00:04:40	5320	
	<u>138.40</u>	TFC	Tap Factory Capped, at 10 o'clock, 6", within 8 inch: NO	00:05:30	5321	
	<u>160.00</u>	FL	Fracture Longitudinal, at 12 o'clock, within 8 inch: YES	00:06:40	5322, b	S 3
	<u>160.00</u>	CC	Crack Circumferential, from 12 to 5 o'clock, within 8 inch: YES	00:07:03	5324, b	S 1
	<u>160.00</u>	CL	Crack Longitudinal, at 3 o'clock, within 8 inch: YES	00:07:26	5326, b	S 2
	<u>166.80</u>	TFC	Tap Factory Capped, at 10 o'clock, 6", within 8 inch: NO	00:08:26	5328	
	<u>220.80</u>	TFA	Tap Factory Active, at 10 o'clock, 6", within 8 inch: NO	00:10:03	5329	
	<u>233.60</u>	TFB	Tap Factory Abandoned, at 10 o'clock, 6", within 8 inch: NO	00:10:39	5330	
	<u>240.00</u>	BSV	Broken Soil Visible, from 12 to 5 o'clock, within 8 inch: YES	00:11:39	5331, b	S 5
	<u>282.30</u>	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:13:19	5333	
	<u>310.50</u>	TFC	Tap Factory Capped, at 10 o'clock, 6", within 8 inch: NO	00:14:13	5334	
	<u>328.50</u>	TFC	Tap Factory Capped, at 10 o'clock, 6", within 8 inch: NO	00:14:52	5335	
	<u>334.40</u>	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0436	00:15:37	5336	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5131	2100	11	2	13	2.75	2	2.6



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Inspection report

Date: 03/25/2008	P.O. #: YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 848	PSR: 123822
Total Pipe Length: 256.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 03/25/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: ALLEY	Flow Control: Not Controlled	Start MH: 2031-0446
City: HGD	Year Renewed:	End MH: 2031-0447
Location Code: Alley	Tape/Media # G312-033	Total length surveyed: 74 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0446/2031-0447/2031	Lining:
	Category:

Comment:
 Location details:

1:200	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0446	00:00:37	7987	
	0.80	MWL	Water Level, 15", within 8 inch: NO	00:00:52	7988	M 2
	11.10	S1 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, Start	00:01:47	7989, b	S 3
	43.00	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:03:13	7991	
	72.80	F1 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, End	00:04:46	7992	S 3
	72.80	BVV	Broken Void Visible, from 7 to 5 o'clock, within 8 inch: YES	00:05:28	7993, b	S 5
	74.00	LD	Alignment Down, 45", within 8 inch: NO	00:06:08	7995, b	M 4
	74.00	MSA	Abandoned Survey, within 8 inch: NO, Remarks: Camera blocked by siphon	00:06:36	7997	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5132	4121	11	6	17	3.67	3	3.4



Inspection report

Date: 03/25/2008	P.O. #: YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 849	PSR: 123822
Total Pipe Length: 256.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 03/25/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: ALLEY	Flow Control: Not Controlled	Start MH: 2031-0447
City: HGD	Year Renewed:	End MH: 2031-0446
Location Code: Alley	Tape/Media # G312-033	Total length surveyed: 131.8 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0446/2031-0447/2031	Lining:
	Category:

Comment:
 Location details:

1:325	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0447	00:00:38	7998	
	5.00	S1 MWLS	Water Level Sag, 25 #, within 8 inch: NO, Start	00:01:23	7999	M 2
	14.00	FM	Fracture Multiple, from 12 to 2 o'clock, within 8 inch: YES	00:02:25	8000, b	S 4
	36.50	TFC	Tap Factory Capped, at 9 o'clock, 6", within 8 inch: NO	00:03:28	8002	
	43.00	CC	Crack Circumferential, from 7 to 6 o'clock, within 8 inch: NO	00:04:16	8003, b	S 1
	73.50	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:05:30	8005	
	76.10	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:05:53	8006	
	85.50	F1 MWLS	Water Level Sag, 25 #, within 8 inch: NO, End	00:06:21	8007	M 2
	85.50	MWL	Water Level, 15 #, within 8 inch: NO	00:06:40	8008	M 2
	92.50	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:07:10	8009	
	117.70	FC	Fracture Circumferential, from 7 to 6 o'clock, within 8 inch: YES	00:08:19	8010, b	S 2
	122.90	TFC	Tap Factory Capped, at 9 o'clock, 6", within 8 inch: NO	00:09:03	8012	
	130.70	JOL	Joint Offset Large, within 8 inch: YES	00:09:55	8013, b	S 2
	130.70	LD	Alignment Down, 20 #, within 8 inch: NO	00:10:20	8015, b	M 2
	130.70	MGO	General Observation, within 8 inch: NO, Remarks: Siphon	00:10:53	8017	
	131.80	MSA	Abandoned Survey, within 8 inch: NO, Remarks: Camera blocked by siphon	00:11:33	8018	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4122	2400	9	8	17	2.25	2	2.13



Inspection report

Date: 03/27/2008	P.O.☐ YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 872	PSR: 123794
Total Pipe Length: 304.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 03/26/2008	Pre-Cleaned: Jetting	Map Grid ☐

Street: D2C	Flow Control: Not Controlled	Start MH: 2031-0412
City: HGD	Year Renewed	End MH: 2031-0413
Location Code: Light Highway	Tape/Media ☐ G312-035	Total length surveyed: 324 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0412 2031-0413 2031	Lining:
	Category:

Comment:
 Location details:

1:800	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0412	00:00:58	8577	
	0.00	BVV	Broken Void Visible, from 4 to 8 o'clock, within 8 inch: NO, Remarks: Channel of MH is broken	00:01:39	8578, b	S 5
	0.00	MWL	Water Level, 10 ☐, within 8 inch: NO	00:02:30	8580	M 2
	11.30	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:03:00	8581	
	29.30	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:03:57	8582	
	66.10	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:05:18	8583	
	104.20	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:06:37	8584	
	153.80	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:08:13	8585	
	255.20	TFC	Tap Factory Capped, at 3 o'clock, 6", within 8 inch: NO	00:11:34	8586	
	262.10	IW	Infil Weeper, at 10 o'clock, within 8 inch: NO	00:12:34	8587	M 2
	262.10	S1 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, Start	00:12:56	8588, b	S 3
	268.70	F1 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, End	00:14:05	8590	S 3
	289.00	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:15:35	8591	
	312.10	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:16:45	8592	
	324.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0413	00:17:50	8593	

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



Inspection report

Date: 03/17/2008	P.O.☐ Y0TV0708C	Weather: Dry	Surveyed By: Martin Garcia	section number: 1274	PSR: 117513
Total Pipe Length: 292.00	Survey Customer: LACDPW	System Owner: HAWAIIAN GARDENS	Clean Date: 03/12/2008	Pre-Cleaned: Jetting	Map Grid ☐

Street: FARLOW ST	Flow Control: Not Controlled	Start MH: 2084-0048
City: HGD	Year Renewed	End MH: 2084-0053
Location Code: Light Highway	Tape/Media ☐ M313-028	Total length surveyed: 316.8 ft

Purpose: Maintenance Related	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0048 2084-0053 2084	Lining:
	Category:

Comment:
 Location details:

1:775	position	code	observation	MPEG	photo	grade
			2084-0048			
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2084-0048	00:00:24	8638	
	5.00	JOL	Joint Offset Large, within 8 inch: YES	00:01:21	8639, b	S 2
	5.00	HVV	Hole Void Visible, from 3 to 6 o'clock, within 8 inch: YES	00:02:18	8641, b	S 5
	6.80	MWL	Water Level, 25 ☐, within 8 inch: NO	00:03:01	8643	M 2
	23.90	MWL	Water Level, 10 ☐, within 8 inch: NO	00:03:40	8644	M 2
	63.10	JOM	Joint Offset Medium, within 8 inch: YES	00:05:06	8645, b	S 1
	72.20	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:05:49	8647	
	82.20	MWL	Water Level, 5 ☐, within 8 inch: NO	00:06:16	8648	M 2
	140.20	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:08:03	8649	
	167.00	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:09:00	8650	
	237.10	MWL	Water Level, 15 ☐, within 8 inch: NO	00:11:11	8651	M 2
	242.30	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:11:33	8652	
	247.00	FC	Fracture Circumferential, from 5 to 1 o'clock, within 8 inch: YES	00:12:46	8653, b	S 2
	250.40	MWL	Water Level, 30 ☐, within 8 inch: NO	00:13:20	8655	M 2
	261.80	MWL	Water Level, 5 ☐, within 8 inch: NO	00:15:12	8656	M 2
	269.20	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:15:36	8657	
	306.30	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:16:55	8658	
	316.80	AMH	Manhole, within 8 inch: NO, Remarks: 2084-0053	00:17:38	8659	
			2084-0053			

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5122	2600	10	12	22	2.5	2	2.2



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Inspection report

Date: 03:19 2008	P.O. #: YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 807	PSR: 123902
Total Pipe Length: 227.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 03:19 2008	Pre-Cleaned: Jetting	Map Grid #:

Street: ALLEY	Flow Control: Not Controlled	Start MH: 2031-0295
City: HGD	Year Renewed:	End MH: 2031-0318
Location Code: Alley	Tape/Media # G312-030	Total length surveyed: 36.1 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0295 2031-0318 2031	Lining:
	Category:

Comment:
 Location details:

1:100	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0295	00:00:36	7078	
	3.50	B	Broken, from 5 to 9 o'clock, within 8 inch: YES	00:01:27	7079, b	S 5
	5.00	MWL	Water Level, 10 #, within 8 inch: NO	00:02:02	7081	M 2
	8.20	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:02:22	7082	
	27.90	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:3:10	7083	
	35.70	MSA	Abandoned Survey, within 8 inch: NO, Remarks: Camera blocked by obstacl	00:05:50	7084	

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



Inspection report

Date: 03/19/2008	P.O. #: YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 808	PSR: 123902
Total Pipe Length: 227.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 03/19/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: ALLEY	Flow Control: Not Controlled	Start MH: 2031-0318
City: HGD	Year Renewed:	End MH: 2031-0295
Location Code: Alley	Tape/Media # G312-030	Total length surveyed: 215 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0295/2031-0318/2031	Lining:
	Category:

Comment:
 Location details:

1:525	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0318	00:00:45	7087	
	5.00	MWL	Water Level, 10", within 8 inch: NO	00:01:44	7088	M 2
	66.40	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:03:26	7089	
	75.60	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:03:55	7090	
	102.20	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:04:51	7091	
	121.70	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:05:34	7092	
	141.40	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:06:19	7093	
	144.20	TBA	Tap Break-in Active, at 9 o'clock, 4", within 8 inch: NO	00:06:41	7094	
	181.20	TFA	Tap Factory Active, at 3 o'clock, 4", within 8 inch: NO	00:07:50	7095	
	183.70	TFA	Tap Factory Active, at 9 o'clock, 4", within 8 inch: NO	00:08:20	7096	
	215.00	MSA	Abandoned Survey, within 8 inch: NO, Remarks: Completes inspection of e	00:09:37	7097	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	2100	0	2	2	0	2	2



Inspection report

Date: 03/31/2008	P.O. #: Y0TV0708C	Weather: Dry	Surveyed By: Martin Garcia	section number: 1380	PSR: 123804
Total Pipe Length: 264.00	Survey Customer: LACDPW	System Owner: HAWAIIAN GARDENS	Clean Date: 03/27/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: HORST AV	Flow Control: Not Controlled	Start MH: 2031-0424
City: HGD	Year Renewed:	End MH: 2031-0425
Location Code: Light Highway	Tape/Media # M313-037	Total length surveyed: 280.7 ft

Purpose: Maintenance Related	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0424/2031-0425/2031	Lining:
	Category:

Comment:
 Location details:

1:700	position	code	observation	MPEG	photo	grade
			2031-0424			
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0424	00:00:41	11027	
	0.00	VC	Vermin Cockroach, within 8 inch: NO	00:00:55	11028	M 1
	5.00	MWL	Water Level, 10 #, within 8 inch: NO	00:01:56	11029	M 2
	5.80	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:02:16	11030	
	28.80	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:03:12	11031	
	56.90	TFC	Tap Factory Capped, at 3 o'clock, 6", within 8 inch: NO	00:04:31	11032	
	59.60	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:05:03	11033	
	59.80	TBA	Tap Break-in Active, at 3 o'clock, 6", within 8 inch: NO	00:05:24	11034	
	82.40	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:06:25	11035	
	90.00	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:06:57	11036	
	108.20	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:07:48	11037	
	131.40	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:08:50	11038	
	159.80	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:10:00	11039	
	162.60	TFC	Tap Factory Capped, at 3 o'clock, 6", within 8 inch: NO	00:10:27	11040	
	185.50	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:11:28	11041	
	198.70	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:12:09	11042	
	206.50	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:12:41	11043	
	214.20	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:13:17	11044	
	232.30	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:14:11	11045	
	280.70	HSV	Hole Soil Visible, from 4 to 8 o'clock, within 8 inch: NO, Remarks: IN CHANNEL	00:16:16	11046, b	S 5
	280.70	VC	Vermin Cockroach, within 8 inch: NO	00:16:44	11048	M 1
	280.70	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0425	00:17:07	11049	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5100	2112	5	4	9	5	1.33	2.25



Inspection report

Date: 04/03/2008	P.O.☐: YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 353	PSR: 123877-A
Total Pipe Length: 274.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 04/02/2008	Pre-Cleaned: Jetting	Map Grid ☐:

Street: ALLEY	Flow Control: Not Controlled	Start MH: 2031-0385-A
City: HGD	Year Renewed:	End MH: 2031-0384
Location Code: Alley	Tape/Media ☐: G312-040	Total length surveyed: 108.7 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0384/2031-0385/2031	Lining:
	Category:

Comment:
 Location details:

1:275	position	code	observation	MPEG	photo	grade
			2031-0385-A			
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: Undocumented, 2031-0385-A	00:00:59	1087	
	6.00	MWL	Water Level, 10 ☐, within 8 inch: NO	00:01:49	1088	M 2
	6.90	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:02:17	1089	
	8.80	B	Broken, from 3 to 5 o'clock, within 8 inch: YES	00:02:54	1090, b	S 4
	16.80	TFC	Tap Factory Capped, at 9 o'clock, 6", within 8 inch: NO	00:03:50	1092	
	31.50	S1 DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 10 ☐, within 8 inch: YES, Start	00:05:04	1093, b	M 2
	31.50	S2 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, Start	00:05:30	1095, b	S 3
	31.50	IW	Infil Weeper, from 7 to 9 o'clock, within 8 inch: YES	00:05:52	1097, b	M 2
	39.10	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:06:50	1099	
	44.30	S3 DAGS	Deposits Attached Grease, from 8 to 10 o'clock, 10 ☐, within 8 inch: YES, Start	00:07:42	1100, b	M 2
	47.10	F1 DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 10 ☐, within 8 inch: YES, End	00:08:32	1102	M 2
	57.70	S4 DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 10 ☐, within 8 inch: YES, Start	00:09:43	1103, b	M 2
	57.70	IW	Infil Weeper, from 7 to 5 o'clock, within 8 inch: YES	00:10:09	1105, b	M 2
	65.40	TFC	Tap Factory Capped, at 3 o'clock, 6", within 8 inch: NO	00:11:10	1107	
	104.60	F2 CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES, End	00:13:24	1108	S 3
	104.60	F3 DAGS	Deposits Attached Grease, from 8 to 10 o'clock, 10 ☐, within 8 inch: YES, End	00:13:45	1109	M 2
	104.60	F4 DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 10 ☐, within 8 inch: YES, End	00:14:10	1110	M 2
	108.70	AMH	Manhole, within 8 inch: NO, Remarks: Buried, 2031-0384	00:15:17	1111	
			2031-0384			

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4132	2900	10	18	28	3.33	2	2.33



Inspection report

Date: 03/21/2008	P.O. #: YOTV0708C	Weather: Dry	Surveyed By: Gilbert Contreras	section number: 814	PSR: 123942
Total Pipe Length: 153.00	Survey Customer: LACDPW	System Owner: Hawaiian Gardens	Clean Date: 03/20/2008	Pre-Cleaned: Jetting	Map Grid #:

Street: BELSHIRE AV	Flow Control: Not Controlled	Start MH: 2031-0337
City: HGD	Year Renewed:	End MH: 2031-0338
Location Code: Light Highway	Tape/Media # G312-031	Total length surveyed: 204 ft

Purpose: Routine Assessment	Dia/Height: Circular 8"
Use: Sanitary	Material: Vitrified Clay Pipe Pipe Joint length:
Drain. Area: 0337 2031-0338 2031	Lining:
	Category:

Comment:
 Location details:

1:500	position	code	observation	MPEG	photo	grade
	0.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0337	00:00:38	7162	
	0.50	CC	Crack Circumferential, from 2 to 10 o'clock, within 8 inch: NO	00:01:29	7163, b	S 1
	0.50	DAE	Deposits Attached Encrustation, from 3 to 9 o'clock, 5 #, within 8 inch: NO	00:01:52	7165, b	M 2
	5.00	MWL	Water Level, 10 #, within 8 inch: NO	00:02:35	7167	M 2
	7.80	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:02:54	7168	
	20.80	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:03:36	7169	
	32.60	CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES	00:04:36	7170, b	S 3
	32.60	DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 5 #, within 8 inch: YES	00:04:57	7172, b	M 2
	33.80	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:05:39	7174	
	66.00	MWL	Water Level, 15 #, within 8 inch: NO	00:06:35	7175	M 2
	71.80	MWL	Water Level, 20 #, within 8 inch: NO	00:07:03	7176	M 2
	77.50	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:07:50	7177	
	85.80	CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES	00:09:01	7178, b	S 3
	85.80	DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 5 #, within 8 inch: YES	00:09:22	7180, b	M 2
	120.00	CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES	00:11:22	7182, b	S 3
	120.00	DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 10 #, within 8 inch: NO	00:11:50	7184, b	M 2
	128.10	TFA	Tap Factory Active, at 9 o'clock, 6", within 8 inch: NO	00:12:49	7186	
	142.50	S2 DSC	Deposits Settled Compacted, from 5 to 7 o'clock, 15 #, within 8 inch: NO, Remarks: asphalt, Start	00:16:53	7187, b	M 3
	143.00	FM	Fracture Multiple, from 7 to 5 o'clock, within 8 inch: YES	00:14:14	7190, b	S 4
	143.00	DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 5 #, within 8 inch: YES	00:14:36	7192, b	M 2
	144.00	TFA	Tap Factory Active, at 3 o'clock, 6", within 8 inch: NO	00:15:16	7194	
	172.70	F2 DSC	Deposits Settled Compacted, from 5 to 7 o'clock, 15 #, within 8 inch: NO, Remarks: asphalt, End	00:18:28	7195	M 3
	186.90	DAE	Deposits Attached Encrustation, from 7 to 5 o'clock, 5 #, within 8 inch: YES	00:19:35	7196, b	M 2
	186.90	CM	Crack Multiple, from 7 to 5 o'clock, within 8 inch: YES	00:19:58	7198, b	S 3
	204.00	AMH	Manhole, within 8 inch: NO, Remarks: 2031-0338	00:21:29	7200	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4134	3229	17	24	41	2.83	2.18	2.41

ENCLOSURE 5:

- FAT, OIL, GREASE (FOG)
Door Hanger