

Install 609 lf of 8" Cured-in-Place Liner from MH 5846-278 to MH 5846-275

MH 5846-278
Record depth = 9.0 ft

MH 5846-277
1120 Christine
Record depth = 10.0 ft

MH 5846-276
1144 Christine
Approx depth = 9.2 ft

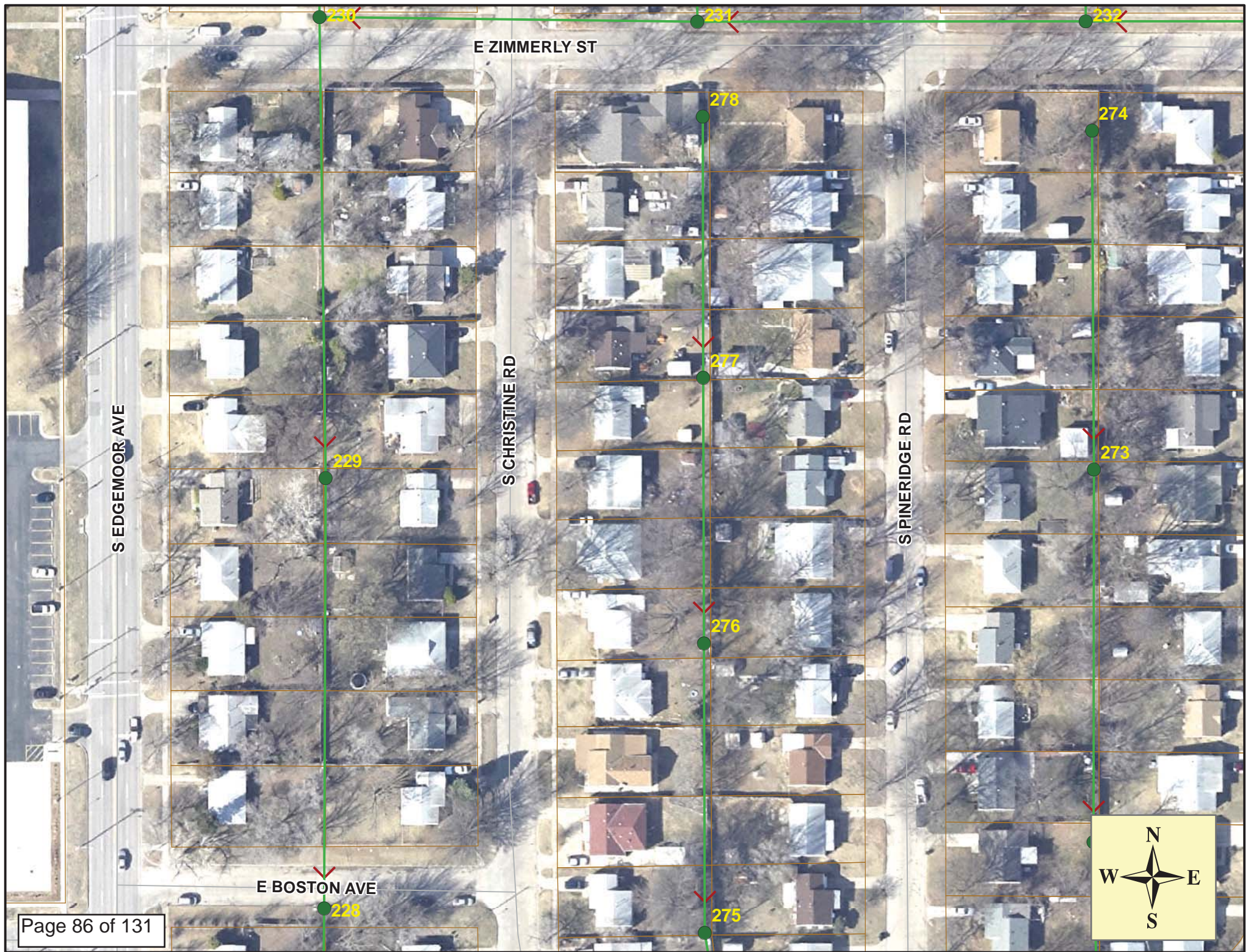
MH 5846-275
1202 Christine
Approx pipe depth = 8.0 ft
Approx MH depth = 14.0 ft

A point repair will be performed "by others" prior to liner installation and will also include the construction of an outside drop. Contractor shall check with the Public Works Engineer or Inspector for status of that work prior to scheduling this line for CIPP installation. (refer to 2013 Sanitary Sewer Recon Phase 7)

SITE 13

Page 85 of 131





E ZIMMERLY ST

S EDGEMOOR AVE

S CHRISTINE RD

S PINERIDGE RD

E BOSTON AVE

230

231

232

278

274

229

277

273

276

228

275



Video Inspection Master Report

7/1/2013

10:05 AM

US Structure: 5846-278 **1102 S CHRISTINE ST** **Date Insp: 8/26/2008** **Basin: E04A**
DS Structure: 5846-277 **1120 S CHRISTINE ST** **Dir Televised:Up->Down**

Pipe Information

Shape:	Round	Project No. :	F-176
Dia/Ht:	8	Material:	VCP
Length:	195.0	Slope:	0.103
Overall Cond: Poor			

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	US Manhole	5846-278	1					
2		8.2	West	Wye Service	1		0.000	0	0	0.000
	1102 S CHRISTINE			4" Clay Wye Connection						
3		12.4	East	Wye Service	1		0.000	0	0	0.000
	1103 S PINERIDGE			4" Clay Wye Connection						
4		22.9	Joint	Roots	1		0.002	1	1	0.002
5		38.1	Joint	Roots	1		0.002	1	1	0.002
6		44.3	Joint	Roots	1		0.002	1	1	0.002
7		56.6	Joint	Roots	1		0.002	1	1	0.002
8		59.5	Joint	Roots	1		0.002	1	1	0.002
9		60.5	West	Wye Service	1		0.000	0	0	0.000
	1108 SS CHRISTINE			4" Clay Wye Connection		Comment: ROOTS 2				
10		62.8	Joint	Roots	1		0.002	1	1	0.002
11		63.7	East	Wye Service	1		0.000	0	0	0.000
	1109 S PINERIDGE			4" Clay Wye Connection						
12		65.6	Joint	Roots	1		0.002	1	1	0.002
13		68.8	Joint	Roots	1		0.002	1	1	0.002
14		71.9	Joint	Roots	1		0.002	1	1	0.002
15		74.8	Joint	Roots	1		0.002	1	1	0.002
16		78.0	Joint	Roots	1		0.002	1	1	0.002
17		81.0	Joint	Roots	1		0.002	1	1	0.002
18		84.0	Joint	Roots	1		0.002	1	1	0.002
19		87.2	Joint	Roots	1		0.002	1	1	0.002
20		96.5	Joint	Roots	1		0.002	1	1	0.002
21		99.5	Joint	Roots	1		0.002	1	1	0.002
22		105.8	Upper Right	Broken Pipe	3		0.010	60	0	0.010
23		112.5	West	Break-In Conn	1		0.001	0	0	0.001
	1114 S CHRISTINE			4" Predco Saddle						
24		115.5	East	Wye Service	1		0.000	0	0	0.000
	1115 S PINERIDGE			4" Clay Wye Connection						
25		164.3	West	Wye Service	1		0.000	0	0	0.000
	1120 S CHRISTINE			4" Clay Wye Connection						
26		167.2	East	Wye Service	1		0.000	0	0	0.000
	1121 S PINERIDGE			4" Clay Wye Connection						
27		195.1	DS Manhole	5846-277	1		ROOTS 3. BROKEN PIPE 1. NEEDS REHAB			

Video Inspection Master Report

7/1/2013

10:05 AM

US Structure: 5846-277 1120 S CHRISTINE ST Date Insp: 8/26/2008 Basin: E04A
 DS Structure: 5846-276 1144 CHRISTINE ST Dir Televised: Up->Down

Pipe Information

Shape: Round Length Status: Project No. : F-176
 Dia/Ht: 8 Material: VCP Index:
 Length: 198.0 Slope: 0.101 DVD #0437
 Overall Cond: Very Poor Comments: BROKEN PIPE THROUGH OUT LINE NEEDS REHAB

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	US Manhole	5846-277	1					
2		21.4	West	Wye Service	3	0.000	2	0	0.000	
1126 S CHRISTINE				4" Clay Wye Connection	Comment:	ROOTS 3				
3		24.4	East	Wye Service	2	0.000	0	0	0.000	
1127 S PINERIDGE				4" Clay Wye Connection	Comment:	ROOTS				
4		39.3	Joint	Roots	1	0.002	1	1	0.002	
5		42.6	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
6		55.4	Upper Left	Crack-Horizontal	1	0.001	1	0	0.001	
7		67.0	Crown / roots	Crack-Horizontal	2	0.002	2	0	0.002	
8		70.5	Upper Left	Crack-Horizontal	1	0.001	1	0	0.001	
9		73.2	Joint	Roots	4	0.010	10	25	0.010	
10		75.1	West	Break-In Conn	4	0.008	60	0	0.008	
1132 S CHRISTINE				4" PVC Saddle "T" Conn	Comment:	ROOTS 4				
11		76.9	East	Wye Service	4	0.000	60	0	0.000	
1133 S PINERIDGE				4" Clay Wye Connection	Comment:	ROOTS 4				
12		82.5	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
13		86.0	Crown	Broken Pipe	3	0.010	60	0	0.010	
14		88.8	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
15		98.1	Crown	Broken Pipe	3	0.010	60	0	0.010	
16		104.3	Crown	Broken Pipe	2	0.008	44	0	0.008	
17		107.5	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
18		113.5	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
19		116.7	Crown	Broken Pipe	2	0.008	44	0	0.008	
20		126.3	West	Wye Service	2	0.000	0	0	0.000	
1138 S CHRISTINE				4" Clay Wye Connection	Comment:	ROOTS 2				
21		129.4	East	Wye Service	3	0.000	2	0	0.000	
1139 S PINERIDGE				4" Clay Wye Connection	Comment:	ROOTS 3				
22		147.6	Crown	Crack-Horizontal	2	0.002	2	0	0.002	
23		160.0	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
24		175.9	West	Wye Service	1	0.000	0	0	0.000	
1144 S CHRISTINE				4" Clay Wye Connection						
25		178.9	East	Wye Service	1	0.000	0	0	0.000	
1145 S PINERIDGE				4" Clay Wye Connection						
26		193.2	Cracked & loose tile in crown	Broken Pipe	4	0.030	78	0	0.030	
27		193.5	Offset Joint	Line over the offset	4	0.030	60	0	0.030	
28		198.0	DS Manhole	5846-276	Comment:	BROKEN PIPE THROUGH OUT LINE NEEDS REHAB				

Video Inspection Master Report

7/1/2013

10:05 AM

US Structure: 5846-276 1144 CHRISTINE ST Date Insp: 8/27/2008 Basin: E04A
 DS Structure: 5846-275 1202 CHRISTINE ST Dir Televised: Up->Down

Pipe Information

Shape: Round Length Status: Project No. : F-176
 Dia/Ht: 8 Material: VCP Index:
 Length: 215.5 Slope: 0.102 DVD #0437
 Overall Cond: Very Poor

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	US Manhole	5846-276	1					
2		2.2	Crown	Broken Pipe	2	0.008	44	0	0.008	
3		6.0	Invert	Crack-Radial	3	0.004	5	0	0.004	
4		15.0	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
5		21.6	Upper Right	Broken Pipe	2	0.008	44	0	0.008	
6		32.3	West	Wye Service	1	0.000	0	0	0.000	
1150 S CHRISTINE				4" Clay Wye Connection	Comment:	ROOTS 2				
7		34.5	East	Wye Service	2	0.000	0	0	0.000	
1151 S PINERIDGE				4" Clay Wye Connection	Comment:	ROOTS 2				
8		49.8	Crown	Broken Pipe	3	0.010	60	0	0.010	
9		75.0	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
10		77.9	Upper Right	Broken Pipe	3	0.010	60	0	0.010	
11		81.1	Crown	Broken Pipe	3	0.010	60	0	0.010	
12		84.4	Upper Right	Crack-Horizontal	1	0.001	1	0	0.001	
13		87.6	West	Wye Service	1	0.000	0	0	0.000	
1156 S CHIRSTINE				4" Clay Wye Connection						
14		90.9	East	Wye Service	2	0.000	0	0	0.000	
1157 S PINERIDGE				4" Clay Wye Connection	Comment:	CRACKS 2				
15		103.3	Upper Right	Broken Pipe	1	0.004	30	0	0.004	
16		146.8	West	Wye Service	1	0.000	0	0	0.000	
1162 S CHRISTINE				4" Clay Wye Connection						
17		149.6	East	Wye Service	1	0.000	0	0	0.000	
1163 S PINERIDGE				4" Clay Wye Connection						
18		163.1	Upper Left	Crack-Horizontal	1	0.001	1	0	0.001	
19		164.9	Crown	Broken Pipe	3	0.010	60	0	0.010	
20		168.8	Upper Left	Crack-Horizontal	3	0.004	5	0	0.004	
21		171.7	Upper Left	Crack-Horizontal	1	0.001	1	0	0.001	
22		174.8	Upper Right	Broken Pipe	3	0.010	60	0	0.010	

Video Inspection Master Report

7/1/2013

10:05 AM

US Structure: 5846-276 1144 CHRISTINE ST Date Insp: 8/27/2008 Basin: E04A
 DS Structure: 5846-275 1202 CHRISTINE ST Dir Televised: Up->Down

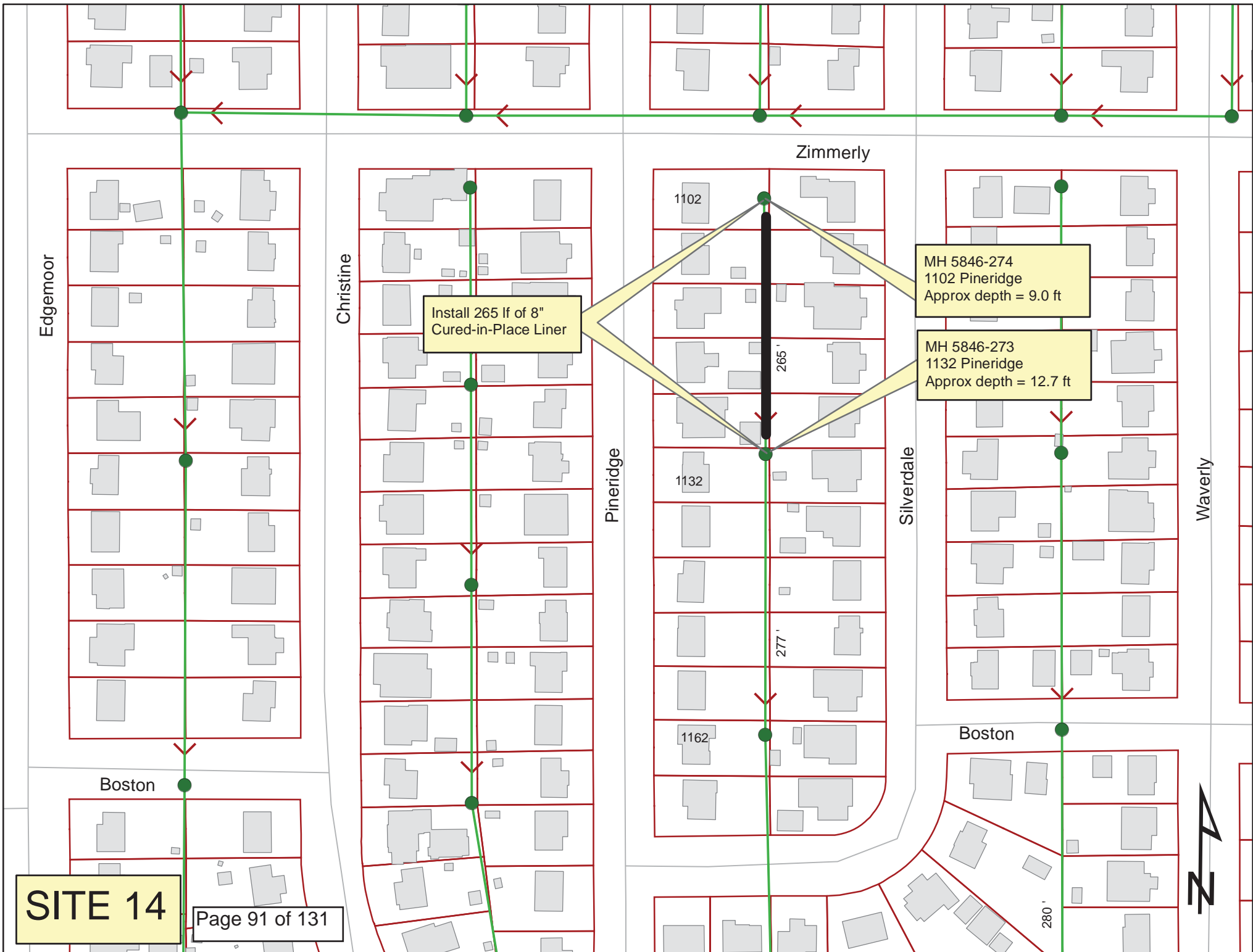
23	183.9	West	Break-In Conn	4	0.008	60	0	0.008
1202 S CHRISTINE			4" Break In Connection	Comment: ROOTS				
24	186.7	East	Wye Service	4	0.000	60	0	0.000
1169 S PINERIDGE			4" Clay Wye Connection	Comment: ROOTS 4				
25	189.7	Lower Right	Broken Pipe	3	0.010	60	0	0.010
26	192.1	Crown	Broken Pipe	3	0.010	60	0	0.010
27	198.8	Joint	Roots	3	0.008	5	8	0.008
28	202.0	Joint	Roots	2	0.004	2	4	0.004
29	202.5	Upper Right	Broken Pipe	3	0.010	60	0	0.010
30	205.8	Crown	Roots / Broken Pipe	3	0.010	60	0	0.010
31	207.0	Start	Sag	3	0.000	5	0	0.000
32	210.1	Camera Lens Emerged	Sag	4	0.000	10	0	0.000
33	214.3	Camera Lens Submerged	Sag	1	0.000	1	0	0.000
34	214.3	DS Manhole 5846-275		3	0.000	0	0	0.000

Comment: BROKEN PIPE THROUGH OUT LINE NEEDS REHAB.

Line needs an outside drop constructed. - LML

The downstream 33 lf of pipe will be replaced "by others" prior to liner installation.
 (including taps at 183' and 186') -LML

CONTRACTOR SHALL NOT INSTALL CIPP PRIOR TO THE DOWNSTREAM 33 LF REPAIR. - LML

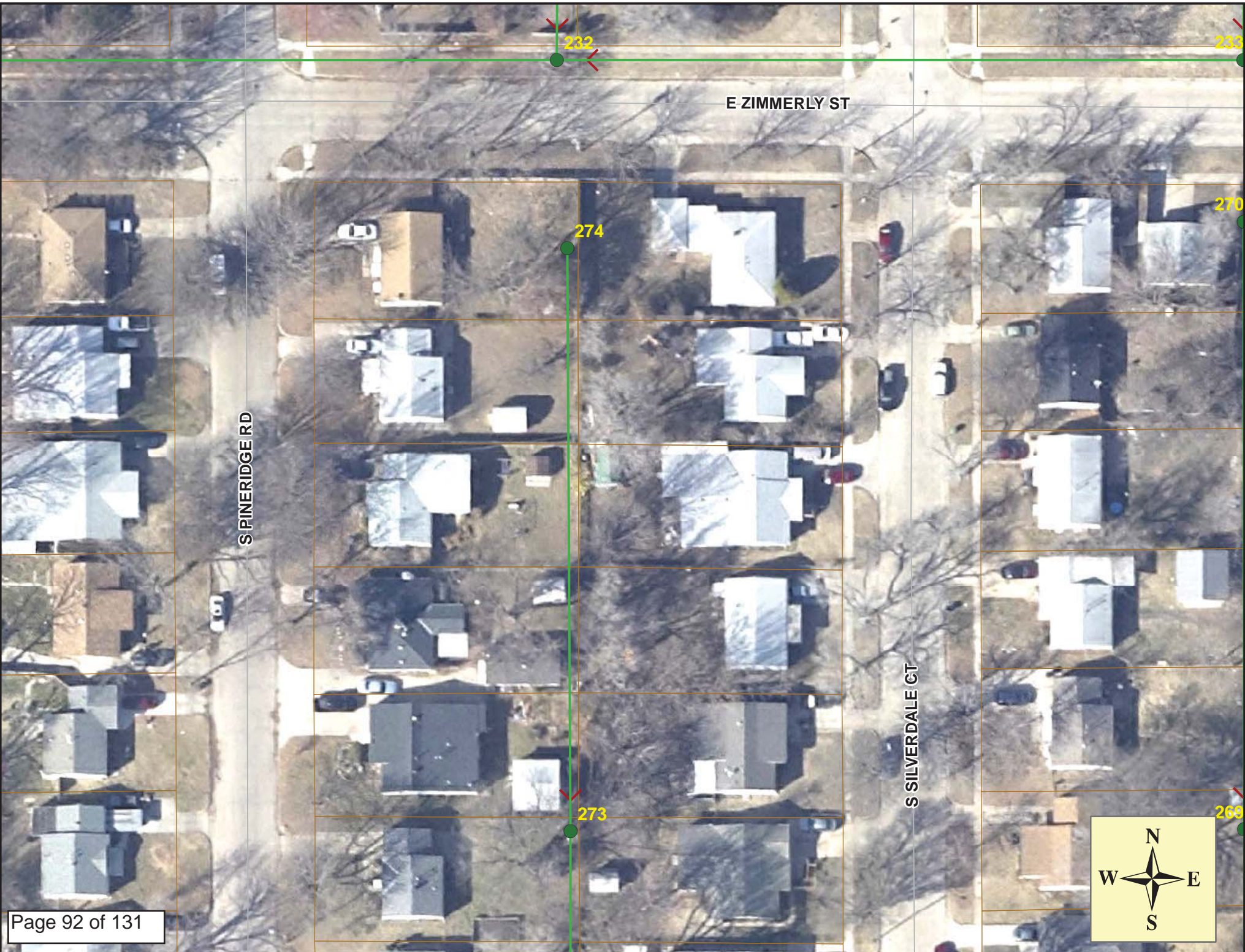


Install 265 lf of 8" Cured-in-Place Liner

MH 5846-274
1102 Pineridge
Approx depth = 9.0 ft

MH 5846-273
1132 Pineridge
Approx depth = 12.7 ft

SITE 14



Video Inspection Master Report

7/1/2013

10:05 AM

US Structure: 5846-274 1102 PINERIDGE ST Date Insp: 8/22/2008 Basin: E04A
 DS Structure: 5846-273 1132 PINERIDGE ST Dir Televised: Upstream To Downstream

Pipe Information

Shape: Round Length Status: Project No. : F-176
 Dia/Ht: 8 Material: VCP Index:
 Length: 265.0 Slope: 0.102 Overall Cond: Poor

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	US Manhole	5846-274	1	0.000	0	0	0.000	
2		3.0	OFFSET		2	0.004	2	4	0.004	
3		6.2	Joint		1	0.002	1	1	0.002	
4		9.2	Offset Joint	Heavy Roots	3	0.008	5	8	0.008	
5		10.5	West	Wye Service	2	0.000	0	0	0.000	
			1102 S PINERIDGE	4" Clay Wye Connection	Comment: ROOTS					
6		11.1	Crown	Broken Pipe	3	0.010	60	0	0.010	
7		12.4	Joint	Roots	2	0.004	2	4	0.004	
8		13.3	East	Wye Service	1	0.000	0	0	0.000	
			1103 S SILVERDALE	4" Clay Wye Connection						
9		15.4	Joint	Heavy Roots	4	0.010	10	25	0.010	
10		21.3	Joint	Heavy Roots	3	0.008	5	8	0.008	
11		27.5	Joint	Heavy Roots	4	0.002	1	1	0.002	
12		30.8	Joint	Roots	1	0.002	1	1	0.002	
13		33.9	Joint	Roots	1	0.002	1	1	0.002	
14		36.9	Joint	Roots	1	0.002	1	1	0.002	
15		56.1	West	Wye Service	1	0.000	0	0	0.000	
			1108 S PINERIDGE	4" Clay Wye Connection						
16		59.1	East	Wye Service	3	0.000	2	0	0.000	
			1109 S SILVERDALE	4" Clay Wye Connection	Comment: ROOTS 3					
17		67.4	Joint	Roots	1	0.002	1	1	0.002	
18		84.6	Upper Left	Crack-Horizontal	1	0.001	1	0	0.001	
19		89.2	Crown	Broken Pipe	3	0.010	60	0	0.010	
20		105.5	West	Wye Service	3	0.000	2	0	0.000	
			1114 S PINERIDGE	4" Clay Wye Connection	Comment: ROOTS 3					
21		108.6	East	Wye Service	1	0.000	0	0	0.000	
			1115S PINERIDGE	4" Clay Wye Connection						
22		138.5	Joint	Roots	2	0.004	2	4	0.004	
23		144.8	East	Wye Service	1	0.000	0	0	0.000	
				4" Clay Wye Connection						
24		148.7	Upper Left	Crack-Horizontal	1	0.001	1	0	0.001	

Video Inspection Master Report

7/1/2013

10:05 AM

US Structure: 5846-274 1102 PINERIDGE ST Date Insp: 8/22/2008 Basin: E04A
 DS Structure: 5846-273 1132 PINERIDGE ST Dir Televised: Upstream To Downstream

25	151.0	Upper Right	Broken Pipe	3	0.010	60	0	0.010
26	154.5	West	Wye Service	3	0.000	2	0	0.000
1120 S PINERIDGE			4" Clay Wye Connection	Comment: ROOTS 3				
27	157.1	Joint	Roots	1	0.002	1	1	0.002
28	157.7	Upper Left	Crack-Horizontal	1	0.001	1	0	0.001
29	157.7	East	Wye Service	2	0.000	0	0	0.000
1121 S SILVERDALE			4" Clay Wye Connection	Comment: CRACKS & ROOTS				
30	172.3	Joint	Roots	1	0.002	1	1	0.002
31	181.6	Joint	Roots	1	0.002	1	1	0.002
32	193.8	Joint	Roots	1	0.002	1	1	0.002
33	206.8	Joint	Roots	3	0.008	5	8	0.008
1126 S PINERIDGE				Comment: ROOTS 3				
34	210.0	East	Wye Service	3	0.000	2	0	0.000
1127 S SILVERDALE			4" Clay Wye Connection					
35	262.0	Crown	Broken Pipe	5	0.060	100	0	0.060
			Top of pipe is gone and there is a cavity, right at the manhole wall. Loose bundles of roots were pushed up in front of the camera and it was not clear whether or not the invert of the pipe was still good. -LML					
36	265.0	DS Manhole 5846-273						

7-23-13: Sewer Maintenance will do a point repair on the north side of MH 5846-273. Pipe should be OK for liner installation after that. -LML

8-8-13: Sewer Maintenance has completed the repair. The next segment south of MH 5846-273 is scheduled for open cut replacement. - LML