

MH 5445-348  
Approx MH depth = 4.2 ft

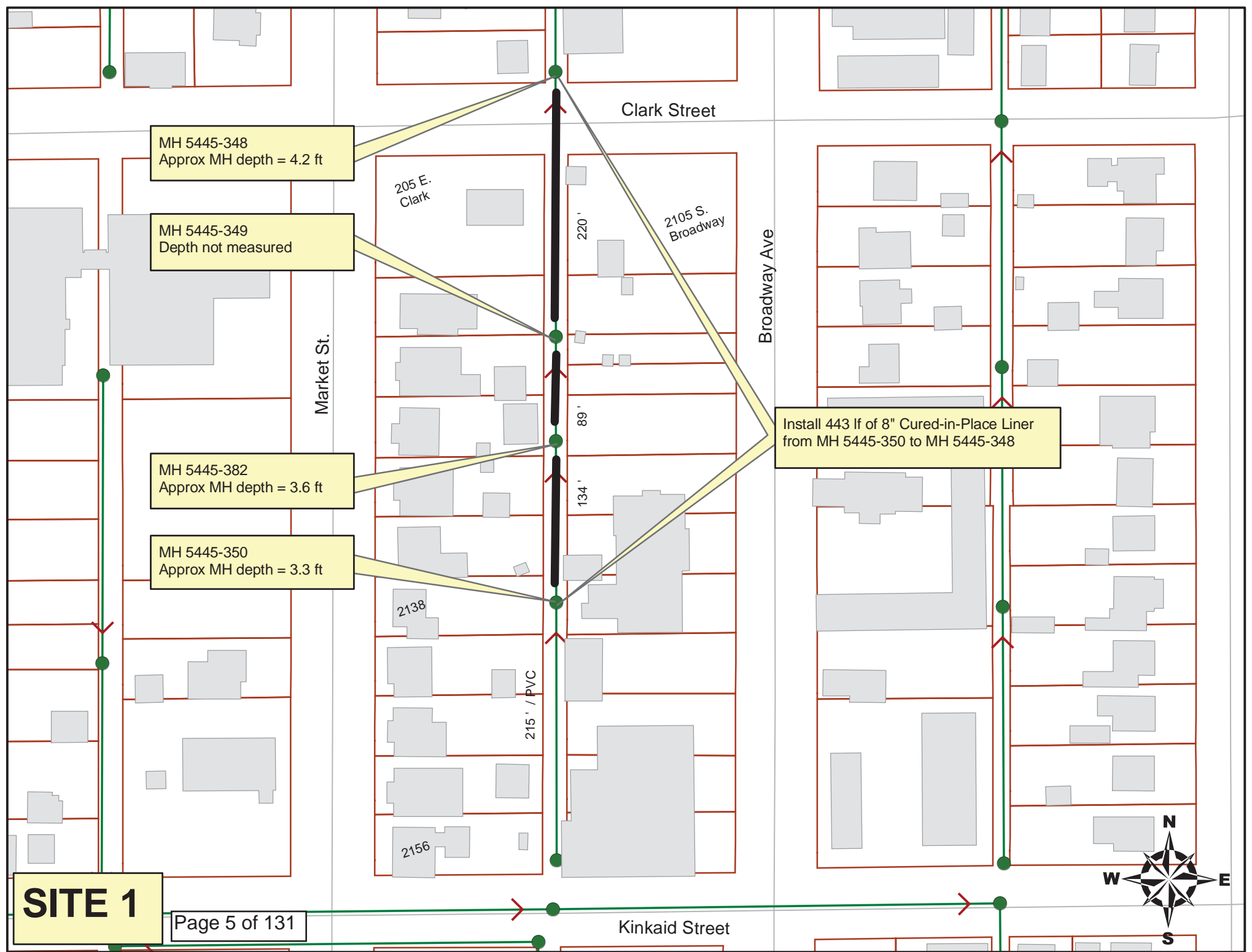
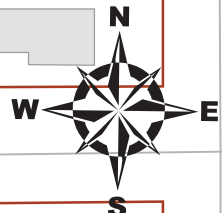
MH 5445-349  
Depth not measured

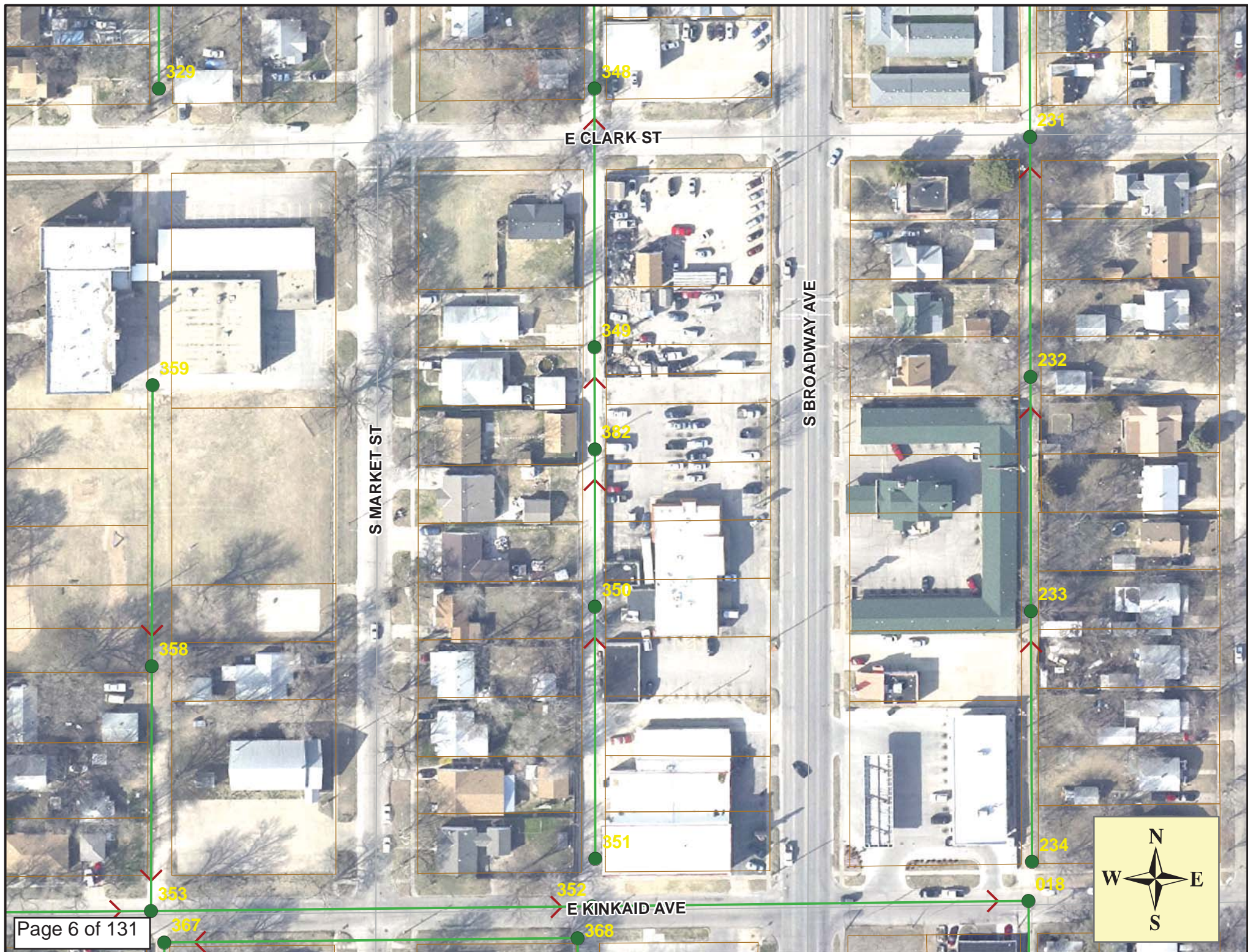
MH 5445-382  
Approx MH depth = 3.6 ft

MH 5445-350  
Approx MH depth = 3.3 ft

Install 443 lf of 8" Cured-in-Place Liner  
from MH 5445-350 to MH 5445-348

**SITE 1**





329

348

231

E CLARK ST

359

349

232

S MARKET ST

382

S BROADWAY AVE

350

233

358

351

234

353

E KINKAID AVE

018

367

368





# Video Inspection Master Report

4/16/2013

8:06 AM

US Structure: 5445-350                      2122 S MARKET AVE ST                      Date Insp: 9/21/2010                      Basin: C05D  
 DS Structure: 5445-382                      2122 S MARKET ST                      Dir Televised: Upstream To Downstream

**Pipe Information**

Project No. : D-150                      Dia/Ht: 8                      Material: VCP                      Length: 133.5

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	5445-350	US Manhole	1					
2		0.0	Joint / gapped	Offset	3		0.010	20	0	0.010
3		7.0	Joint	Offset	0		0.000	0	0	0.000
4		12.6	2131 S BROADWAY	Wye Service	1		0.000	0	0	0.000
5		16.6		Wye Service	1		0.000	0	0	0.000
6		19.8	Joint	Offset	3		0.010	20	0	0.010
7		34.7	2131 S BROADWAY	Break-In Conn	2		0.002	0	0	0.002
8		35.4	Joint	Offset	3		0.010	20	0	0.010
9		37.3	Joint	Offset	3		0.010	20	0	0.010
10		42.3		Broken Pipe	4		0.030	78	0	0.030
11		42.3		Crack-Radial	3		0.004	5	0	0.004
12		42.3	Joint	Offset	3		0.010	20	0	0.010
13		46.8	2131 S BROADWAY	Wye Service	1		0.000	0	0	0.000
14		50.0	Joint	Offset	3		0.010	20	0	0.010
15		52.6	Joint	Offset	2		0.000	0	0	0.000
16		55.1	Joint	Offset	3		0.010	20	0	0.010
17		57.8	Joint	Offset	3		0.010	20	0	0.010
18		58.8	2132 S MARKET	Wye Service	1		0.000	0	0	0.000
19		65.2	Joint	Offset	3		0.010	20	0	0.010
20		67.7	Joint	Offset	2		0.000	0	0	0.000
21		81.0		Broken Pipe	3		0.010	60	0	0.010
22		82.1		Wye Service	4		0.000	60	0	0.000
23		82.2		Crack-Horizontal	4		0.008	10	0	0.008
24		84.0	2130 S MARKET	Wye Service	1		0.000	0	0	0.000
25		85.4	Joint	Offset	3		0.010	20	0	0.010
26		85.7		Crack-Radial	2		0.002	2	0	0.002
27		90.5	Joint	Offset	4		0.030	60	0	0.030
28		91.1		Broken Pipe	5		0.060	100	0	0.060
29		93.2	Joint	Offset	2		0.000	0	0	0.000
30		98.2	Joint	Offset	3		0.010	20	0	0.010
31		107.5		Wye Service	1		0.000	0	0	0.000
32		110.2		Wye Service	1		0.000	0	0	0.000
33		113.3	Joint	Offset	2		0.000	0	0	0.000
34		116.1	Joint	Offset	3		0.010	20	0	0.010
35		120.9	Joint	Offset	4		0.030	60	0	0.030
36		126.0	Joint	Offset	3		0.010	20	0	0.010
37		128.6	PVC begins	Other	1		0.000	0	0	0.000
38		132.1	2122 S MARKET / Manhole tap	Break-In Conn	1		0.001	0	0	0.001
39		133.7	5445-382	DS Manhole	2		0.000	0	0	0.000

## Video Inspection Master Report

4/16/2013

8:07 AM

US Structure: 5445-382                      2122 S MARKET ST                      Date Insp: 9/22/2010                      Basin: C05D  
 DS Structure: 5445-349                      2131 S BROADWAY AVE                      Dir Televised: Upstream To Downstream

**Pipe Information**

Shape: Round                      Length Status:                      Project No. : D-150  
 Dia/Ht: 8                      Material: VCP                      Index:  
 Length: 88.5                      Slope: 0.400                      Surface:

**Comments:** LOTS OF OFF SET JOINTS.78 FEET CONNECTION NEEDS REPAIR.

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			
							Est. (gpm)	Struct	Clean	Remain (gpm)
1		0.0	5445-382	US Manhole	1		0.000	0	0	0.000
2		8.8	Joint	Offset	3		0.010	20	0	0.010
3		16.5	Joint	Offset	3		0.010	20	0	0.010
4		19.2		Crack-Radial	3		0.004	5	0	0.004
5		21.4	Joint	Offset	3		0.010	20	0	0.010
6		25.8		Wye Service	5		Could be abandoned? Not sealed at main. -LML			
7		26.5	Joint	Offset	3		0.010	20	0	0.010
8		28.3		Wye Service	1		0.000	0	0	0.000
9		31.9		Crack-Radial	3		0.004	5	0	0.004
10		34.1	Joint	Offset	3		0.010	20	0	0.010
11		41.7	Joint	Offset	3		0.010	20	0	0.010
12		44.2	Joint	Offset	2		0.000	0	0	0.000
13		49.3	Joint	Offset	3		0.010	20	0	0.010
14		51.2		Wye Service	1		0.000	0	0	0.000
15		51.8	Joint	Offset	3		0.010	20	0	0.010
16		53.7		Wye Service	1		0.000	0	0	0.000
17		54.4	Joint	Offset	3		0.010	20	0	0.010
18		59.5	Joint	Offset	3		0.010	20	0	0.010
19		61.8		Sag	4		Sag was removed by Sewer Maintenance -LML			
20		64.6		Sag	1		0.000	1	0	0.000
21		64.6	Joint	Offset	3		0.010	20	0	0.010
22		66.9	Joint	Offset	3		0.010	20	0	0.010
23		69.6	Joint	Offset	3		0.010	20	0	0.010
24		72.0	Joint	Offset	3		0.010	20	0	0.010
25		74.6	Joint	Offset	3		0.010	20	0	0.010
26		76.4		Wye Service	1		0.000	0	0	0.000
27		77.1		Break-In Conn	3		Could be abandoned? Not sealed at main. -LML			
28		78.2	2120 S MARKET	Break-In Conn	3		0.004	2	0	0.004
29		82.2	Joint	Offset	3		0.010	20	0	0.010
30		84.5	Joint	Offset	2		0.000	0	0	0.000
31		89.6	5445-349	DS Manhole	3		0.000	0	0	0.000

## Video Inspection Master Report

4/16/2013

8:07 AM

US Structure: 5445-349                      2131 S BROADWAY AVE                      Date Insp: 9/22/2010                      Basin: C05D  
 Dir Televised: Upstream To Downstream

DS Structure: 5445-348                      2055 S BROADWAY AVE

**Pipe Information**

Shape: Round	Length Status:	Project No. : D-150
Dia/Ht: 8	Material: VCP	Index:
Length: 220.5	Slope: 0.100	Surface:

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	5445-349	US Manhole	1	0.000	0	0	0.000	
2		1.7		Crack-Radial	3	0.004	5	0	0.004	
3		2.7	Joint	Offset	2	0.000	0	0	0.000	
4		2.9		Crack-Radial	2	0.002	2	0	0.002	
5		5.3		Crack-Radial	2	0.002	2	0	0.002	
6		10.1	Joint	Offset	3	0.010	20	0	0.010	
7		11.9		Wye Service	1	0.000	0	0	0.000	
8		13.7	2114 S MARKET	Break-In Conn	4	Fixed by Sewer Maintenance -LML				
9		15.2	Joint	Offset	3	0.010	20	0	0.010	
10		20.0	Joint	Offset	3	0.010	20	0	0.010	
11		25.7		Crack-Radial	3	0.004	5	0	0.004	
12		28.0	Joint	Offset	3	0.010	20	0	0.010	
13		30.3	Joint	Offset	3	0.010	20	0	0.010	
14		33.1	Joint	Offset	3	0.010	20	0	0.010	
15		35.5	Joint	Offset	3	0.010	20	0	0.010	
16		37.4		Wye Service	1	0.000	0	0	0.000	
17		38.2	Joint	Offset	4	0.030	60	0	0.030	
18		38.2		Crack-Radial	3	0.004	5	0	0.004	
19		39.9		Wye Service	1	0.000	0	0	0.000	
20		43.1	Joint	Offset	3	0.010	20	0	0.010	
21		48.1		PVC begins	1	0.000	0	0	0.000	
22		59.2	2105 S BROADWAY	PVC Break-In Conn	1	0.001	0	0	0.001	
23		65.5		PVC ends	1	0.000	0	0	0.000	
24		66.8	205 E CLARK	PVC Break-In Conn	1	0.001	0	0	0.001	
25		69.9	Joint	Offset	3	0.010	20	0	0.010	
26		79.9	Joint	Offset	3	0.010	20	0	0.010	
27		82.4	Joint	Offset	3	0.010	20	0	0.010	
28		84.8	Joint	Offset	2	0.000	0	0	0.000	
29		86.5	2105 S BROADWAY	Wye Service	2	Looks possibly inactive?		-LML		
30		87.5	Joint	Offset	4	0.030	60	0	0.030	
31		89.2		Wye Service	2	0.000	0	0	0.000	
32		95.0	Joint	Offset	2	0.000	0	0	0.000	

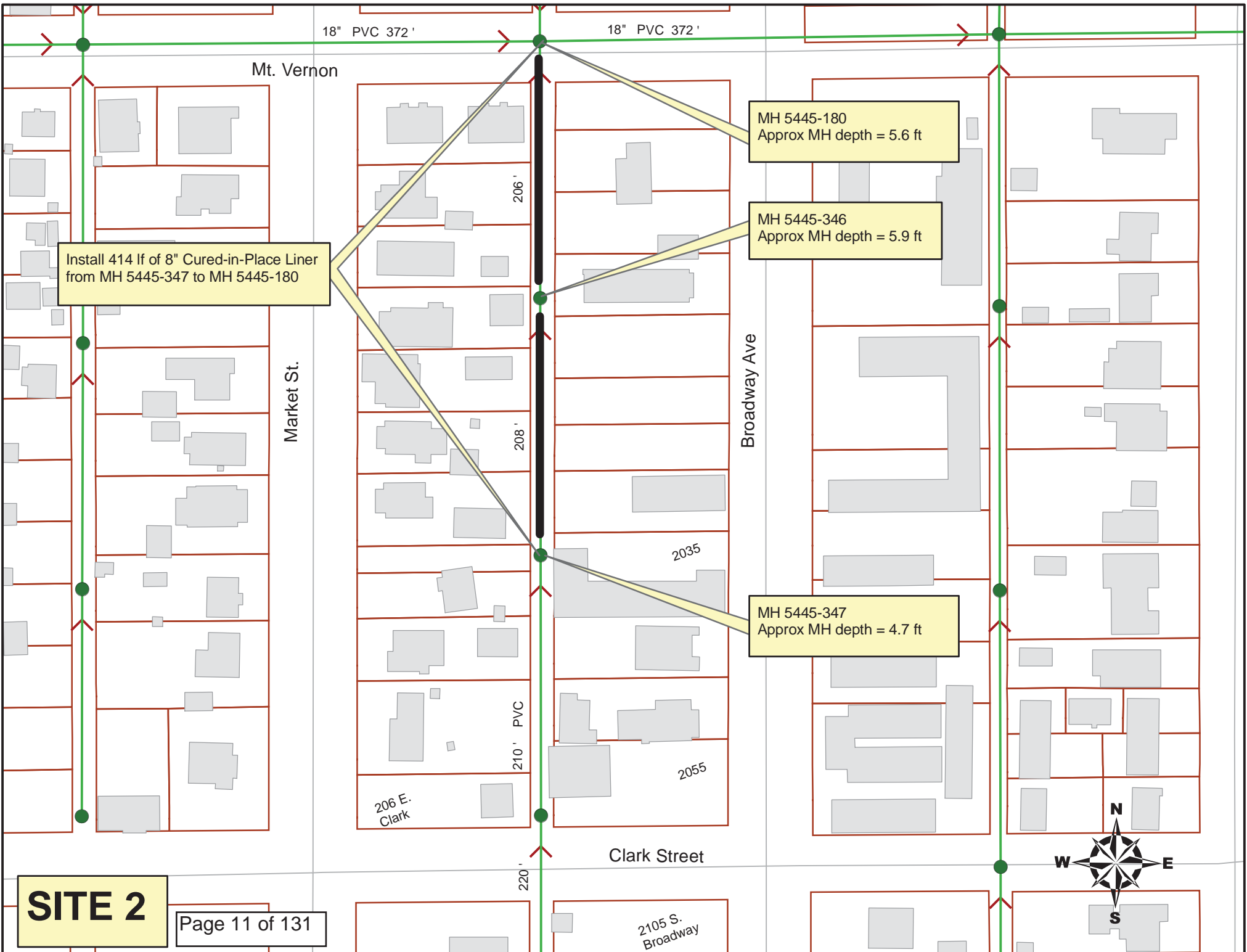
## Video Inspection Master Report

4/16/2013

8:07 AM

US Structure: 5445-349                      2131 S BROADWAY AVE                      Date Insp: 9/22/2010                      Basin: C05D  
 Dir Televised: Upstream To Downstream  
 DS Structure: 5445-348                      2055 S BROADWAY AVE

33	97.4	Joint	Offset	3	0.010	20	0	0.010
34	100.1	Joint	Offset	4	0.030	60	0	0.030
35	102.5	Joint	Offset	2	0.000	0	0	0.000
36	105.0	Joint	Offset	3	0.010	20	0	0.010
37	107.7		Crack-Radial	3	0.004	5	0	0.004
38	111.1	2105 S BROADWAY	Break-In Conn	3	0.004	2	0	0.004
39	114.3		Wye Service	2	0.000	0	0	0.000
40	115.1	Joint	Offset	3	0.010	20	0	0.010
41	117.9		Broken Pipe	5	0.060	100	0	0.060
42	118.8	2105 S BROADWAY	Wye Service	3	0.000	2	0	0.000
43	120.2	Joint	Offset	3	0.010	20	0	0.010
44	122.7	Joint	Offset	3	0.010	20	0	0.010
45	137.1		Wye Service	1	0.000	0	0	0.000
46	139.8		Wye Service	1	0.000	0	0	0.000
47	195.2	Joint	Offset	3	0.010	20	0	0.010
48	202.8	Joint	Offset	3	0.010	20	0	0.010
49	215.3	Joint	Offset	3	0.010	20	0	0.010
50	215.6		Crack-Radial	3	0.004	5	0	0.004
51	220.2	5445-348	DS Manhole	3	0.000	0	0	0.000



18" PVC 372'

18" PVC 372'

Mt. Vernon

Market St.

Broadway Ave

Clark Street

206'

208'

2035

2055

206 E. Clark

210' PVC

220'

2105 S. Broadway

MH 5445-180  
Approx MH depth = 5.6 ft

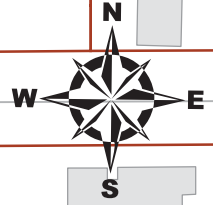
MH 5445-346  
Approx MH depth = 5.9 ft

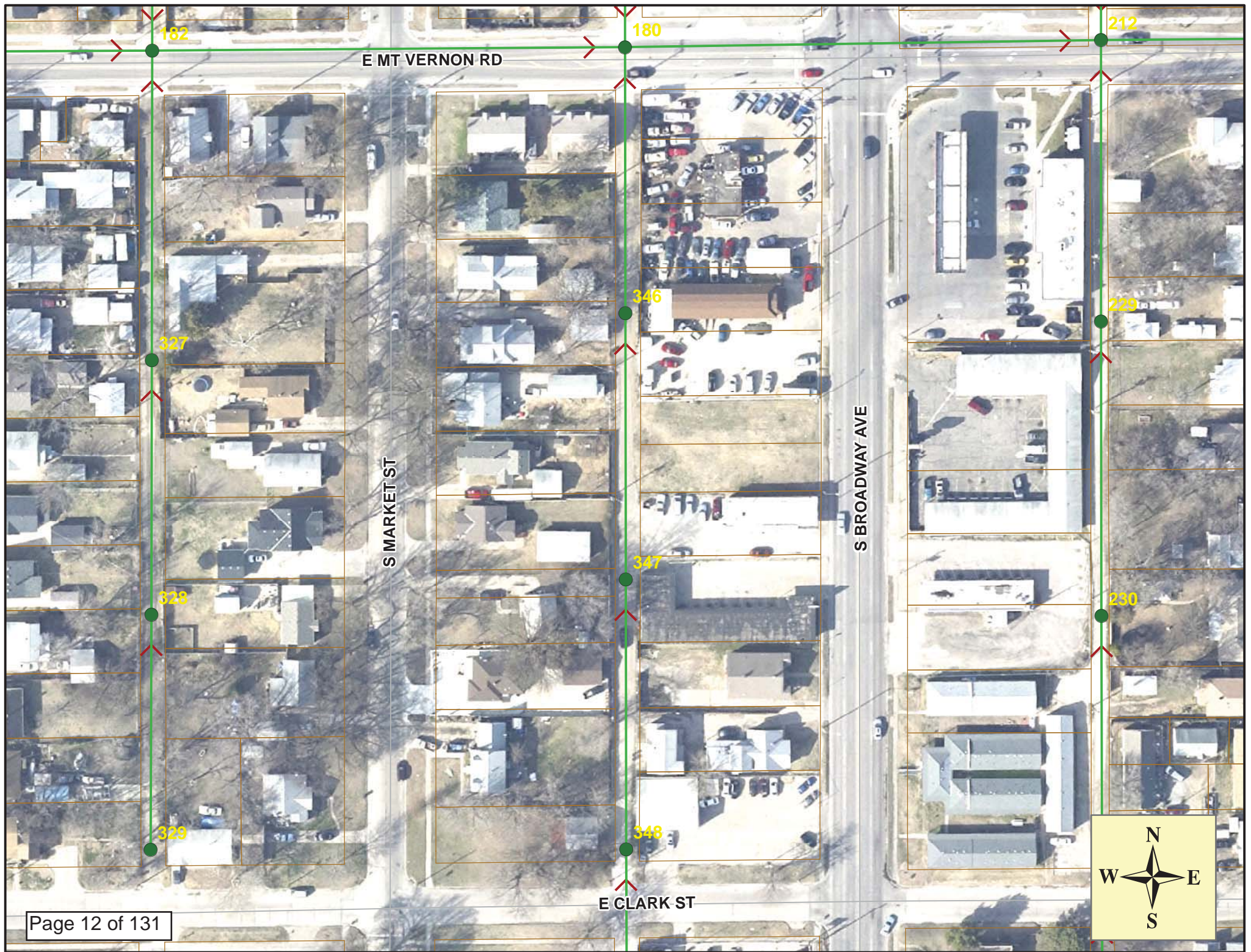
MH 5445-347  
Approx MH depth = 4.7 ft

Install 414 lf of 8" Cured-in-Place Liner from MH 5445-347 to MH 5445-180

**SITE 2**

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## Video Inspection Master Report

4/16/2013

8:08 AM

**US Structure:** 5445-347                      2035 S BROADWAY AVE                      **Date Insp:** 9/22/2010                      **Basin:** C05D  
**DS Structure:** 5445-346                      2013 S BROADWAY AVE                      **Dir Televised:** Upstream To Downstream

**Pipe Information**

**Shape:** Round                      **Length Status:**                      **Project No. :** D-149  
**Dia/Ht:** 8                      **Material:** VCP                      **Index:**  
  
**Length:** 208.0                      **Slope:** 0.101                      **Surface:**  
  
**Overall Cond:** Poor

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	5445-347	US Manhole	3	0.000	0	0	0.000	
2		15.5	2035 S BROADWAY	Wye Service / cracked	3	0.000	2	0	0.000	
3		17.9		Wye Service	1	0.000	0	0	0.000	
4		21.2	Joint	Offset	3	0.010	20	0	0.010	
5		23.8	Joint	Offset	3	0.010	20	0	0.010	
6		33.6	Joint	Offset	3	0.010	20	0	0.010	
7		33.8		Crack-Radial	3	0.004	5	0	0.004	
8		38.6	Joint	Offset	3	0.010	20	0	0.010	
9		39.1		Broken Pipe	4	0.030	78	0	0.030	
10		39.6	2033 S BROADWAY	Break-In Conn	2	0.002	0	0	0.002	
11		41.2	Joint	Offset	3	0.010	20	0	0.010	
12		42.4	2030 S MARKET	Break-In Conn	3	Fixed by Sewer Maintenance				
13		48.8	Joint	Offset	3	0.010	20	0	0.010	
14		51.6		Crack-Radial	3	0.004	5	0	0.004	
15		61.3	Joint	Offset	3	0.010	20	0	0.010	
16		65.6		Wye Service	1	0.000	0	0	0.000	
17		68.4		Wye Service	1	0.000	0	0	0.000	
18		78.8	Joint	Offset	3	0.010	20	0	0.010	
19		84.0	Joint	Offset	3	0.010	20	0	0.010	
20		86.7	Joint	Offset	3	0.010	20	0	0.010	
21		90.3		Break-In Conn	4	Is this inactive or abandoned? Not sealed. -LML				
22		92.7	2028 S MARKET	Break-In Conn	4	0.008	60	0	0.008	
23		94.2	Joint	Offset	3	0.010	20	0	0.010	
24		96.8	Joint	Offset	3	0.010	20	0	0.010	
25		99.3	Joint	Offset	3	0.010	20	0	0.010	
26		104.3	Joint	Offset	2	0.000	0	0	0.000	
27		107.1	Joint	Offset	2	0.000	0	0	0.000	
28		109.3	Joint	Offset	3	0.010	20	0	0.010	
29		110.7		Break-In Conn	4	0.008	60	0	0.008	

## Video Inspection Master Report

4/16/2013

8:08 AM

US Structure: 5445-347      2035 S BROADWAY AVE      Date Insp: 9/22/2010      Basin: C05D  
 Dir Televised: Upstream To Downstream  
 DS Structure: 5445-346      2013 S BROADWAY AVE

30	111.9	Joint	Offset	3	0.010	20	0	0.010
31	112.1		Crack-Radial	3	0.004	5	0	0.004
32	116.3		Wye Service	1	0.000	0	0	0.000
33	116.9	Joint	Offset	3	0.010	20	0	0.010
34	118.8		Wye Service	1	0.000	0	0	0.000
35	127.0	Joint	Offset	3	0.010	20	0	0.010
36	129.8		Crack-Radial	3	0.004	5	0	0.004
37	134.5	Joint	Offset	3	0.010	20	0	0.010
38	136.9	Joint	Offset	3	0.010	20	0	0.010
39	141.3		Wye Service	1	0.000	0	0	0.000
40	142.1	Joint	Offset	3	0.010	20	0	0.010
41	143.3	2024 S MARKET	Wye Service	1	0.000	0	0	0.000
42	144.6	Joint	Offset	3	0.010	20	0	0.010
43	154.7	Joint	Offset	3	0.010	20	0	0.010
44	159.8	Joint	Offset	3	0.010	20	0	0.010
45	162.3	Joint	Offset	3	0.010	20	0	0.010
46	166.6		Wye Service	3	0.000	2	0	0.000
47	167.3	Joint	Offset	3	0.010	20	0	0.010
48	169.2		Wye Service	1	0.000	0	0	0.000
49	174.9	Joint	Offset	3	0.010	20	0	0.010
50	174.9		Crack-Radial	3	0.004	5	0	0.004
51	180.0		Crack-Radial	2	0.002	2	0	0.002
52	182.3	Joint	Offset	3	0.010	20	0	0.010
53	184.8	Joint	Offset	3	0.010	20	0	0.010
54	191.8		Wye Service	1	0.000	0	0	0.000
55	194.2	2020 S MARKET	Wye Service	1	0.000	0	0	0.000
56	194.8	Joint	Offset	3	0.010	20	0	0.010
57	197.5	Joint	Offset	2	0.000	0	0	0.000
58	197.8		Crack-Radial	2	0.002	2	0	0.002
59	199.6	Joint	Offset	3	0.010	20	0	0.010
60	202.1	Joint	Offset	3	0.010	20	0	0.010
61	205.8		Broken Pipe	4	0.030	78	0	0.030
62	208.3	5445-346	DS Manhole	3	0.000	0	0	0.000

## Video Inspection Master Report

4/16/2013

8:09 AM

**US Structure:** 5445-346      **2013 S BROADWAY AVE**      **Date Insp:** 9/22/2010      **Basin:** C05D  
**DS Structure:** 5445-180      **207 E MT VERNON RD**      **Dir Televised:** Upstream To Downstream

**Pipe Information**

<b>Shape:</b> Round	<b>Length Status:</b>	<b>Project No. :</b> D-149
<b>Dia/Ht:</b> 8	<b>Material:</b> VCP	<b>Index:</b>
<b>Length:</b> 207.5	<b>Slope:</b> 0.101	<b>Surface:</b>

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	5445-346	US Manhole	3	0.000	0	0	0.000	
2		3.9	Joint	Offset	3	0.010	20	0	0.010	
3		8.3		Wye Service	1	0.000	0	0	0.000	
4		9.1	Joint	Offset	3	0.010	20	0	0.010	
5		9.5		Broken Pipe	4	0.030	78	0	0.030	
6		10.9		Wye Service	1	0.000	0	0	0.000	
7		11.5	Joint	Offset	3	0.010	20	0	0.010	
8		16.5	Joint	Offset	3	0.010	20	0	0.010	
9		19.1	Joint	Offset	3	0.010	20	0	0.010	
10		19.5		Crack-Horizontal	2	0.002	2	0	0.002	
11		19.8		Broken Pipe	4	0.030	78	0	0.030	
12		28.3	2013 S BROADWAY	Wye Service	5	Fixed by Sewer Maintenance -LML				
13		29.7		Broken Pipe	4	0.030	78	0	0.030	
14		31.6	Joint	Offset	3	0.010	20	0	0.010	
15		34.7		Broken Pipe	3	0.010	60	0	0.010	
16		34.9		Crack-Radial	3	0.004	5	0	0.004	
17		35.9	2013 S BROADWAY	Wye Service	1	0.000	0	0	0.000	
18		36.8	Joint	Offset	3	0.010	20	0	0.010	
19		38.1	2016 S MARKET	Wye Service	1	0.000	0	0	0.000	
20		39.4	Joint	Offset	3	0.010	20	0	0.010	
21		41.9	Joint	Offset	3	0.010	20	0	0.010	
22		44.7		Crack-Radial	3	0.004	5	0	0.004	
23		47.0	Joint	Offset	3	0.010	20	0	0.010	
24		49.6		Broken Pipe	5	0.060	100	0	0.060	
25		54.6	Joint	Offset	3	0.010	20	0	0.010	
26		57.1	Joint	Offset	3	0.010	20	0	0.010	
27		61.5	2005 S BROADWAY	Wye Service	3	Fixed by Sewer Maintenance -LML				
28		62.3	Joint	Offset	2	0.000	0	0	0.000	
29		64.2		Wye Service	1	0.000	0	0	0.000	
30		69.8	Joint	Offset	3	0.010	20	0	0.010	
31		72.3	Joint	Offset	3	0.010	20	0	0.010	
32		74.7	Joint	Offset	3	0.010	20	0	0.010	

## Video Inspection Master Report

4/16/2013

8:09 AM

**US Structure: 5445-346**                      **2013 S BROADWAY AVE**                      **Date Insp: 9/22/2010**                      **Basin: C05D**  
**DS Structure: 5445-180**                      **207 E MT VERNON RD**                      **Dir Televised: Upstream To Downstream**

33	80.1		Broken Pipe	5	0.060	100	0	0.060
34	85.0		Broken Pipe	5	0.060	100	0	0.060
35	86.6		Wye Service	1	0.000	0	0	0.000
36	87.4	Joint	Offset	3	0.010	20	0	0.010
37	88.4	2010 S MARKET	Break-In Conn	4	Fixed by Sewer Maintenance -LML			
38	94.8	Joint	Offset	3	0.010	20	0	0.010
39	97.4	Joint	Offset	4	0.030	60	0	0.030
40	100.0		Crack-Radial	3	0.004	5	0	0.004
41	102.4	Joint	Offset	3	0.010	20	0	0.010
42	107.6		Broken Pipe	5	0.060	100	0	0.060
43	109.8	Joint	Offset	3	0.010	20	0	0.010
44	111.6		Wye Service	1	0.000	0	0	0.000
45	112.6		Crack-Radial	2	0.002	2	0	0.002
46	114.1		Wye Service	1	0.000	0	0	0.000
47	114.1	2001 S BROADWAY	Break-In Conn	4	0.008	60	0	0.008
48	114.8	Joint	Offset	3	0.010	20	0	0.010
49	117.5	Joint	Offset	3	0.010	20	0	0.010
50	117.9		Crack-Radial	2	0.002	2	0	0.002
51	120.3		Crack-Radial	2	0.002	2	0	0.002
52	122.3	Joint	Offset	3	0.010	20	0	0.010
53	125.1	Joint	Offset	3	0.010	20	0	0.010
54	127.6	Joint	Offset	3	0.010	20	0	0.010
55	130.3		Broken Pipe	5	0.060	100	0	0.060
56	132.3	Joint	Offset	4	0.030	60	0	0.030
57	136.8		Wye Service	1	0.000	0	0	0.000
58	139.3		Wye Service	1	0.000	0	0	0.000
59	139.9	Joint	Offset	2	0.000	0	0	0.000
60	145.0	Joint	Offset	3	0.010	20	0	0.010
61	147.7	Joint	Offset	3	0.010	20	0	0.010
62	150.2	Joint	Offset	3	0.010	20	0	0.010
63	152.7	Joint	Offset	3	0.010	20	0	0.010
64	155.1	Joint	Offset	3	0.010	20	0	0.010
65	159.4	2001 S BROADWAY	Wye Service	1	0.000	0	0	0.000
66	160.1	Joint	Offset	3	0.010	20	0	0.010
67	160.1		Crack-Horizontal	3	0.004	5	0	0.004
68	160.1		Crack-Radial	3	0.004	5	0	0.004
69	162.0		Wye Service	1	0.000	0	0	0.000
70	162.0	201 E MT VERNON	Break-In Conn	3	0.004	2	0	0.004
71	170.3	Joint	Offset	3	0.010	20	0	0.010
72	172.9		Broken Pipe	4	0.030	78	0	0.030
73	177.6	Joint	Offset	2	0.000	0	0	0.000
74	182.8		Broken Pipe	3	0.010	60	0	0.010
75	188.1		Crack-Radial	3	0.004	5	0	0.004
76	190.2		PVC begins	1	0.000	0	0	0.000
77	204.5	5445-180	DS Manhole	3	0.000	0	0	0.000