

3-1

POINT REPAIR:
Remove and replace 25 lf of 8" pipe from 125' west of MH 5547-041 to 150' west of MH 5547-041. Contractor shall use C-900 pipe for the repair. Pipe goes through a Storm Water Sewer Manhole in Topeka. Repairs necessary to the Storm Water Sewer shall be incidental to the point repair. Asphalt pavement removal and replacement shall be incidental to the point repair.

MH # 5547-044
Approx depth = 3.5 ft

MH # 5547-042
Reconstruct Special Shallow Manhole
Approx depth = 2.5 ft

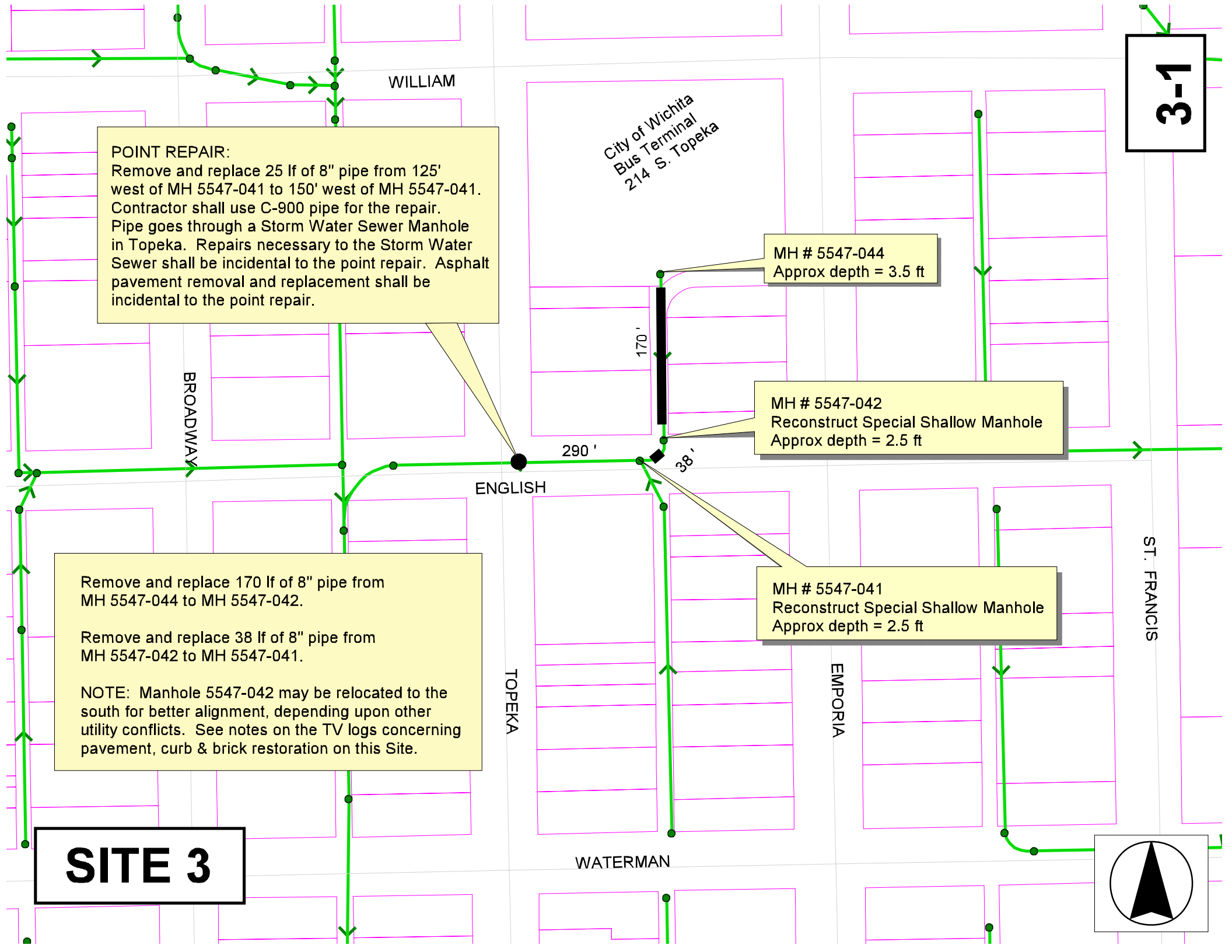
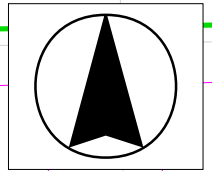
MH # 5547-041
Reconstruct Special Shallow Manhole
Approx depth = 2.5 ft

Remove and replace 170 lf of 8" pipe from MH 5547-044 to MH 5547-042.

Remove and replace 38 lf of 8" pipe from MH 5547-042 to MH 5547-041.

NOTE: Manhole 5547-042 may be relocated to the south for better alignment, depending upon other utility conflicts. See notes on the TV logs concerning pavement, curb & brick restoration on this Site.

SITE 3



3-2

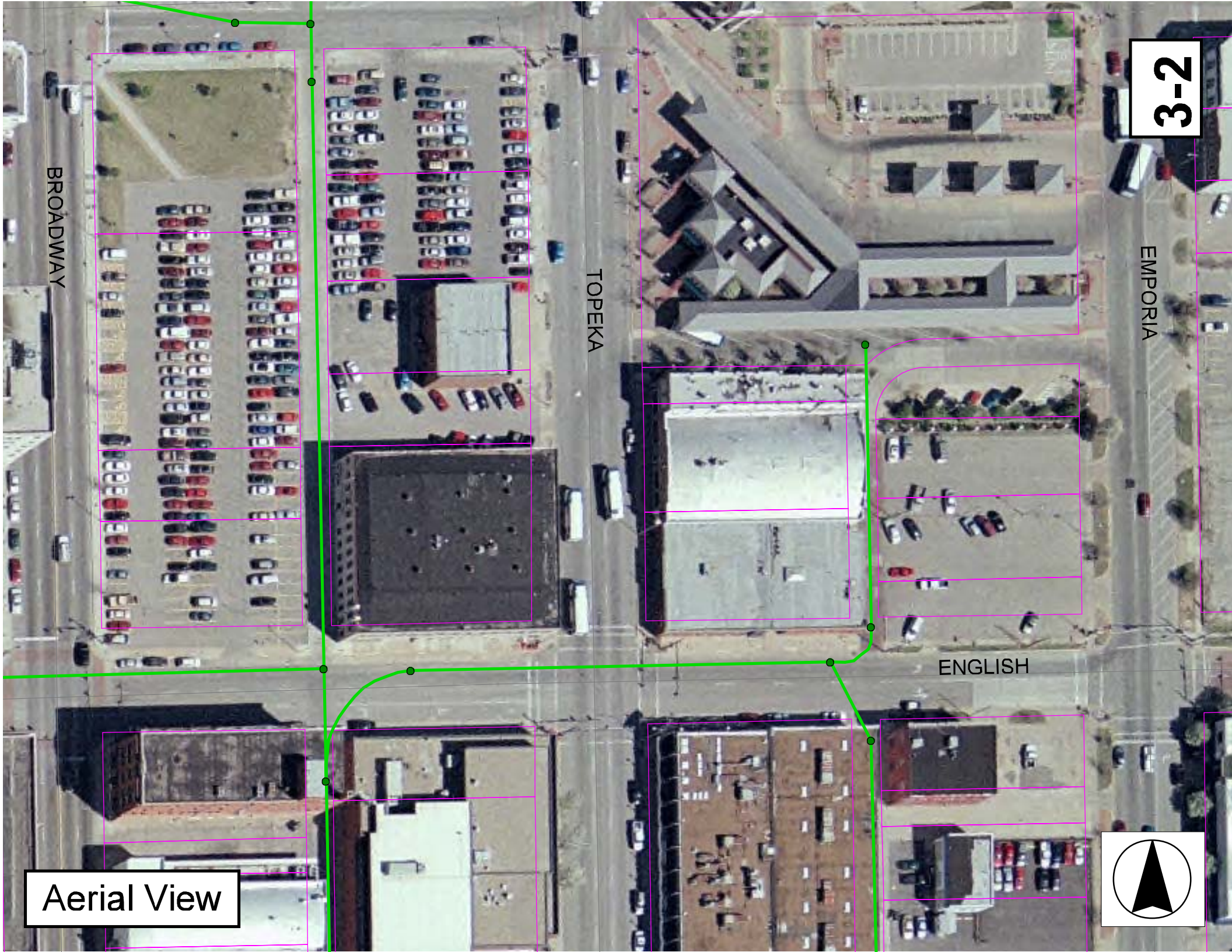
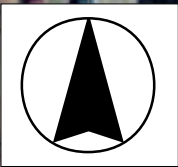
BROADWAY

TOPEKA

EMPORIA

ENGLISH

Aerial View



Television Inspection Master Report

5/20/2004
4:13:24PM

US Manhole: 5547-044
DS Manhole: 5547-042

230 S TOPEKA ST
420 E ENGLISH

Date Insp: 2/11/2004

Basin: C05A

Dir Televised: Upstream To Downstream

Pipe Information

Shape: Round	Length Status:	Project No.: A-137
Dia/Ht Width: 8	Material: VCP	Index:
Length: 170.0	Slope: 0.247	Surface:
Pipe Sec Length:	Comment:	

Inspection Information

Crew: RAC	Percent Full:	Tape ID: V-4369
Weather: Cloudy	Purpose: TV Existing Line	Counter Start: 0
Surface Cond: N/A	Flow: Normal Flow	Counter Stop:

Obs. #	VTR Counter	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1	0	0.0	US Manhole	5547-044	1					
2	1;28	9.0	Crown	Broken Pipe	4		0.030	78	0	0.030
NEEDS REPAIR / Pipe pushes downward for one joint / need to replace at least the upstream 11 lf										
3	3;42	18.0	West	Wye Service	1		0.000	0	0	0.000
WYE IS FOR 222 S, TOPEKA										
4	5;23	20.0	East	Wye Service	2		0.000	0	0	0.000
WYE MAY BE SEALED OFF, PARKING LOT (not sealed at the main)										
5	5;53	22.0	Crown	Broken Pipe	3		0.010	60	0	0.010
6	6;23	25.0	Crown	Crack-Horizontal	2		0.002	2	0	0.002
7	7;15	37.0	Crown	Broken Pipe	3		0.010	60	0	0.010
8	8;30	41.0	Crown	Broken Pipe	4		0.030	78	0	0.030
9	9;07	42.0	West	Wye Service	1		0.000	0	0	0.000
WYE FOR 230 S. TOPEKA										
10	9;34	44.0	East	Wye Service / Sealed	1		0.000	0	0	0.000
11	10;02	47.0	Crown	Broken Pipe	3		0.010	60	0	0.010
12	10;58	64.0	Crown	Broken Pipe	5		0.060	100	0	0.060
NEEDS REPAIR										
13	11;43	66.0	West	Wye Service	2		0.000	0	0	0.000
POSSIBLY SEALED OFF / wye full of goop										
14	12;36	68.0	East	Wye Service / Sealed	2		0.000	0	0	0.000
15	13;34	70.0	Crown	Observation Hole	2		0.000	0	0	0.000
16	13;34	70.0	Crown	Crack-Radial	4		0.008	10	0	0.008
MULTIPLE CRACKS										
17	14;06	74.0	East	Break-In Conn	2		0.002	0	0	0.002
Protruding / sealed off										
18	14;36	79.0	Crown	Broken Pipe	3		0.010	60	0	0.010
19	15;17	83.0	Quad 3 / L-Lt	Broken Pipe	5		0.060	100	0	0.060
NEEDS REPAIR / hole in side of pipe with cavity										
20	16;05	91.0	West	Wye Service / Sealed	1		0.000	0	0	0.000
21	16;48	93.0	East	Wye Service / Sealed	1		0.000	0	0	0.000
22	17;11	94.0	Crown	Broken Pipe	3		0.010	60	0	0.010
23	21;24	106.0	Camera Lens	Submerge Sag	3		0.000	5	0	0.000
(SAG CONTINUES TO DOWN STREAM M.H.)										
24	22;49	115.0	West	Wye Service / Sealed	1		0.000	0	0	0.000
25	23;29	117.0	East	Wye Service / Sealed	2		0.000	0	0	0.000
26	25;11	120.0	West	Wye Service	2		0.000	0	0	0.000
CONNECTION FOR 234 S. TOPEKA										
27	25;26	120.0	Crown	Crack-Radial	2		0.002	2	0	0.002

3-3

Television Inspection Master Report

5/20/2004
4:13:24PM

US Manhole: 5547-044 230 S TOPEKA ST Date Insp: 2/11/2004 Basin: C05A
DS Manhole: 5547-042 420 E ENGLISH

28	26;05	126.0	Crown	Crack-Radial	2	0.002	2	0	0.002
29	27;22	140.0	West	Wye Service	1	0.000	0	0	0.000
			WYE FOR 236 S. TOPEKA						
30	28;26	142.0	East	Wye Service	2	0.000	0	0	0.000
			WYE SHOULD BE SEALED OFF / but not sealed at the main						
31		161.0	West	Break-In Conn 3					
			TAP IN POOR CONDITION, LOOKS SEALED OFF						
32	32;36	164.0	East	Wye Service	2	0.000	0	0	0.000
			SEALED OFF? / not sealed at the main						
33	33;24	170.0	DS Manhole	5547-042	0				0.000
			LINE IN POOR CONDITION						

NOTES:

The bricked pavement shall be restored. If the Contractor will be replacing a significant portion of an old concrete patch, then the Contractor shall be required to remove the entire patch and restore it all with brick. Street Maintenance will provide bricks from their stock at the West Substation. It will be the Contractor's responsibility to locate the bricks and remove them from the pile. Contractor may contact Dick Dickerson at 941-0601 to arrange access to the Substation and the bricks.

Manhole 5547-042 may be relocated further to the south, if possible. The line between MH 5547-042 and MH 5547-041 is currently a "curved" line. Contractor will lay the pipe in a straight line between new MH 5547-042 and MH 5547-041.

CONTRACTORS NEED TO REVIEW THE SITE. All concrete pavement, curb, sidewalk, asphalt pavement and bricked pavement shall be incidental to the pipe replacement. Any repairs to the storm water sewer system, signs, etc. in the new alignment shall be incidental.

Pictures attached.

3-4

Television Inspection Master Report

5/20/2004
4:13:24PM

US Manhole: 5547-042 420 E ENGLISH Date Insp: 2/11/2004 Basin: C05A
DS Manhole: 5547-041 420 E ENGLISH

Dir Televised: Upstream To Downstream

Pipe Information

Shape: Round Length Status: Project No.: A-137
Dia/Ht Width: 8 0 Material: VCP Index:
Length: 38.0 Slope: 0.263 Surface:
Pipe Sec Length: Comment:

Inspection Information

Crew: RAC Percent Full: Tape ID: V-4369
Weather: Sunny Purpose: TV Existing Line Counter Start: 33;24
Surface Cond: N/A Flow: Normal Flow Counter Stop:

Obs. #	VTR Counter Comment	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings		
								Struct	Clean	Remain (gpm)
1	33;24	0.0	US Manhole	5547-042 (pipe is laid in a "curve")						
2	34;02	8.0	North	Wye Service	1		0.000	0	0	0.000
				POSSIBLY SEALED OFF / very hard to see if it is sealed or not						
3	34;59	14.0	Camera Blocked	Other	5		0.000	0	0	0.000

PIPE STICKING THROUGH SEWER LINE

REVERSE SETUP:

0 Downstream Manhole 5547-041 (tv against the flow)
0 PVC pipe begins
13 PVC pipe ends
21 Same place as above where a pipe is sticking through the sewer line

See notes on Page 3-4 for replacement of this line.

3-5

Television Inspection Master Report

5/20/2004
4:13:24PM

US Manhole: 5547-041
DS Manhole: 5547-038

420 E ENGLISH
235 S TOPEKA

Date Insp: 2/11/2004

Basin: C05A

Dir Televised: Upstream To Downstream

Pipe Information

Shape: Round	Length Status:	Project No.: A-137
Dia/Ht Width: 8 0	Material: VCP	Index:
Length: 290.5	Slope: 0.252	Surface:
Pipe Sec Length: Comment:		

Inspection Information

Crew: RAC	Percent Full:	Tape ID: V-4369
Weather: Sunny	Purpose: TV Existing Line	Counter Start: 37;33
Surface Cond: N/A	Flow: Normal Flow	Counter Stop:

Obs. #	VTR Counter Comment	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1	37;33	0.0	US Manhole	5547-041	0					
2	38;12	6.0	Crown	Broken Pipe	3		0.010	60	0	0.010
CRACKS RUN LENGTH OF PIPE SECTION										
3	38;45	12.0	Quad 4 / U-Lt	Crack-Horizontal	3		0.004	5	0	0.004
4	39;09	17.0	Crown	Broken Pipe	3		0.010	60	0	0.010
5	39;41	29.0	Crown	Crack-Radial	2		0.002	2	0	0.002
6	40;10	35.0	Quad 4 / U-Lt	Broken Pipe	4		0.030	78	0	0.030
NEEDS REPAIR										
7	40;50	41.0	Joint	Offset	3		0.010	20	0	0.010
OFFSET NEEDS REPAIR										
8	40;50	54.0	Quad 1 / U-Rt	Crack-Radial	3		0.004	5	0	0.004
9	41;09	60.0	Crown	Broken Pipe	3		0.010	60	0	0.010
10	41;28	64.0	Crown	Other	1		0.000	0	0	0.000
O;H										
11	41;49	69.0	Crown	Broken Pipe	2		0.008	44	0	0.008
70.0 Sag begins										
73.0 Camera under water for a joint										
12	42;26	80.0	Crown	Broken Pipe	4		0.030	78	0	0.030
NEEDS REPAIR										
1	42:42	81.0	Quad 1 / U-Rt	Broken Pipe	3		0.010	60	0	0.010
2	44:02	86.0	Quad 3 / L-Lt	Broken Pipe	5		0.060	100	0	0.060
NEEDS REPAIR / cavity along the side of the pipe / ok to line through this										
3	44:14	87.0	Quad 2 / L-Rt	Broken Pipe	4		0.030	78	0	0.030
4	44:29	90.0	Quad 1 / U-Rt	Offset	3		0.010	20	0	0.010
5	45:28	104.0	Quad 4 / U-Lt	Broken Pipe	2		0.008	44	0	0.008
6	45:50	108.0	Quad 1 / U-Rt	Broken Pipe	3		0.010	60	0	0.010
7	46:11	112.0	Quad 4 / U-Lt	Broken Pipe	3		0.010	60	0	0.010
8	46:45	117.0	Quad 2 / L-Rt	Broken Pipe	3		0.010	60	0	0.010
9	47:04	120.0	Quad 1 / U-Rt	Broken Pipe	3		0.010	60	0	0.010
10	47:28	127.0	Quad 4 / U-Lt	Broken Pipe	3		0.010	60	0	0.010

Television Inspection Master Report

5/20/2004
4:13:24PM

US Manhole: 5547-041 420 E ENGLISH Date Insp: 2/11/2004 Basin: C05A
DS Manhole: 5547-038 235 S TOPEKA

11	47:49	130.0	Quad 1 / U-Rt	Broken Pipe / hole	4	0.030	78	0	0.030
12	47:57	131.0	Joint	CAST IRON PIPE BEGINS					
13	48:17	136.0	Joint	CAST IRON ENDS					
(cast iron section seems to be a "high point" / pipe dips downward just west of cast iron pipe)									
14	48:42	142.0	Quad 4 / U-Lt	Broken Pipe / Offset Joint					
15	48:59	146.0	Quad 1 / U-Rt	Broken Pipe	3	0.010	60	0	0.010

POINT REPAIR FROM 125' TO 150' WEST OF MH 5547-041

16	49:23	155.0	Quad 4 / U-Lt	Broken Pipe	2	0.008	44	0	0.008
17	49:55	165.0	Quad 1 / U-Rt	Broken Pipe	3	0.010	60	0	0.010
18	50:12	169.0	Quad 3 / L-Lt	Broken Pipe	3	0.010	60	0	0.010
19	50:24	171.0	Quad 1 / U-Rt	Offset	5	0.060	100	0	0.060
20	50:59	180.0	Quad 4 / U-Lt	Broken Pipe	3	0.010	60	0	0.010
21	51:25	187.0	Quad 4 / U-Lt	Broken Pipe	3	0.010	60	0	0.010
22	51:39	189.0	Quad 1 / U-Rt	Other	0				0.000
O/H.									
23	51:47	190.0	Quad 3 / L-Lt	Broken Pipe	2	0.008	44	0	0.008
24	52:01	192.0	Quad 4 / U-Lt	Broken Pipe	2	0.008	44	0	0.008
25	52:50	210.0	Quad 4 / U-Lt	Broken Pipe	3	0.010	60	0	0.010
26	53:08	214.0	Quad 1 / U-Rt	Broken Pipe	3	0.010	60	0	0.010
27	55:48	254.0	North	Break-In Conn	4	0.008	60	0	0.008
NEEDS REPAIR / Lots of pipe missing around the tap / 235 S. Topeka?									
28	55:58	255.0	Quad 4 / U-Lt	Crack-Radial	3	0.004	5	0	0.004
29	56:29	263.0	Quad 4 / U-Lt	Broken Pipe	3	0.010	60	0	0.010
30	57:14	276.0	Quad 1 / U-Rt	Broken Pipe	2	0.008	44	0	0.008
31	57:34	281.0	Quad 1 / U-Rt	Broken Pipe	4	0.030	78	0	0.030
32	58:30	290.0	DS Manhole	5547-038	0				0.000

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