

Remove and replace 290 lf of 8" pipe from MH 5744-800 to MH 5744-791

Remove 239 lf of 6" pipe and install 239 lf of 8" pipe from MH 5744-799 to MH 5744-146

Remove and replace 192 lf of 8" pipe from MH 5744-146 to MH 5744-791 (straight line - as though MH 5744-792 doesn't exist)

MH # 5744-146
Rework Manhole Bench & Invert
(to include sealing around the pipe entering the manhole from the west)
Approx depth = 6.6 ft.

MH # 5744-798 (Cleanout)
Construct Shallow Manhole where the cleanout/bend exists
Approx depth = 4.5 ft

MH # 5744-799
Replace Manhole Frame & Cover
Approx depth = 4.2 ft

MH # 5744-800
Approx depth = 10.0 ft

MH # 5744-791
Replace Manhole Frame & Cover
Approx depth = 8.1 ft

MH # 5744-792
NOT FOUND

MH # 5744-793
Replace Manhole Frame & Cover
Rework Manhole Bench & Invert
Approx depth = 6.9 ft

2970
290'
3030

192'
3100

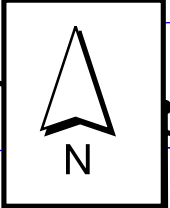
90'
110'
39'
3141

SAYLES

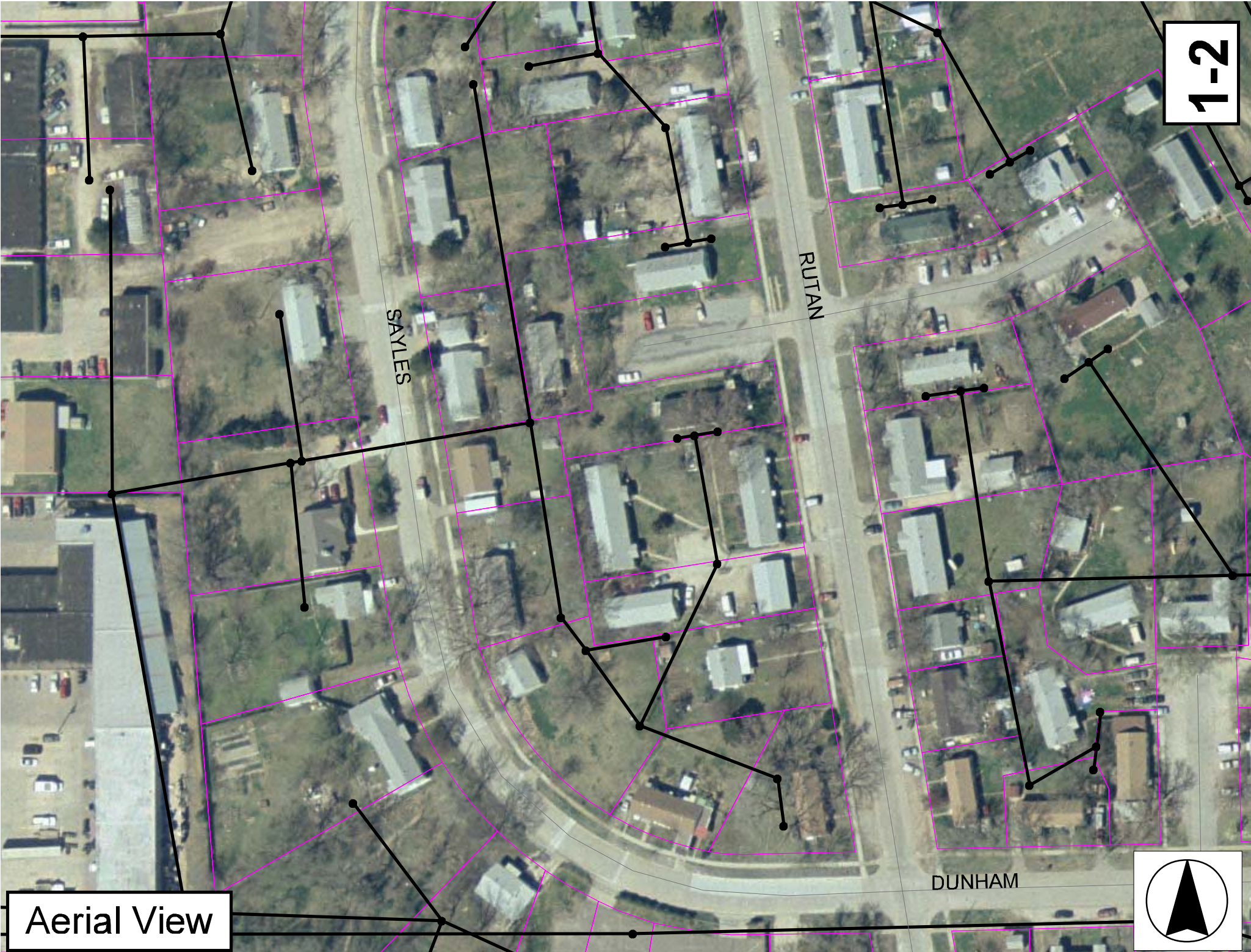
RUTAN

DUNHAM

HILLSIDE



1-2

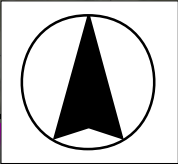


SAYLES

RUTAN

DUNHAM

Aerial View



Television Inspection Master Report

6/24/2003
12:34:53PM
C01A

US Manhole: 5744-800
DS Manhole: 5744-791

2970 S SAYLES AVE
3030 S SAYLES CT

Date Insp: 7/25/2000

Basin:

Dir Televised: Upstream To Downstream

Pipe Information

| | | | | |
|------------------|----------|----------------|--------------|----------|
| Shape: | Round | Length Status: | Project No.: | I-058 |
| Dia/Ht Width: | 8 | Material: | VCP | Index: |
| Length: | 290.0 | Slope: | 1.006 | Surface: |
| Pipe Sec Length: | Comment: | | | |

Inspection Information

| | | | | | |
|---------------|----------------|---------------|------------------|----------------|--------|
| Crew: | 694 | Percent Full: | 5 | Tape ID: | V-2471 |
| Weather: | Cloudy | Purpose: | TV Existing Line | Counter Start: | 0.00 |
| Surface Cond: | Trees & Fences | Flow: | Normal Flow | Counter Stop: | |
| Dyed Test: | No | | | | |

| Obs. # | VTR Counter Comment | Dist | Location | Description | Rating | Obsrvd (gpm) | Est. (gpm) | Ratings Struct | Clean | Remain (gpm) | |
|--------|---------------------|------|---------------------|--------------------|--------|--------------|------------|----------------|-------|--------------|--|
| 1 | | 0.0 | US Manhole 5744-800 | | | | | | | | |
| 2 | | 4.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 3 | | 7.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 4 | | 9.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 5 | | 12.0 | Invert | Sag / 10% FLOW. | | | | | | | |
| 6 | | 14.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 7 | | 17.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 8 | | 19.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 10 | | 20.0 | Invert | OUT OF SAG. | | | | | | | |
| 9 | | 22.0 | Joint | Roots | 3 | | 0.008 | 5 | 8 | 0.008 | |
| | SILT IN LINE. | | | | | | | | | | |
| 11 | | 25.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 12 | | 27.0 | Joint | Roots | 4 | | 0.010 | 10 | 25 | 0.010 | |
| 13 | | 29.0 | Invert | Sag 10% FLOW. | | | | | | | |
| 14 | | 29.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 15 | | 32.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 16 | | 34.0 | Joint | Roots | 3 | | 0.008 | 5 | 8 | 0.008 | |
| 17 | | 37.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 18 | | 40.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 19 | | 42.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 20 | | 44.0 | Invert | OUT OF SAG. | | | | | | | |
| 21 | | 45.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 22 | | 47.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 23 | | 50.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 24 | | 51.0 | Crown | Crack-Radial | 4 | | 0.008 | 10 | 0 | 0.008 | |
| 25 | | 52.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 26 | | 55.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 27 | | 58.0 | Crown | Crack-Radial | 3 | | 0.004 | 5 | 0 | 0.004 | |
| 28 | | 60.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 29 | | 62.0 | Invert | Sag / 10% FLOW. | | | | | | | |
| 30 | | 62.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 31 | | 65.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 32 | | 68.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 | |
| 33 | | 68.0 | Invert | Sag / 15% FLOW. | | | | | | | |
| 34 | | 70.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 | |
| 35 | | 71.0 | East | Wye Service | 1 | | 0.000 | 0 | 0 | 0.000 | |
| 36 | | 74.0 | Invert | Sag / UNDER WATER. | | | | | | | |
| 37 | | 78.0 | Invert | Sag / 45% FLOW. | | | | | | | |

1-3

Television Inspection Master Report

6/24/2003
12:34:53PM
C01A

US Manhole: 5744-800
DS Manhole: 5744-791

2970 S SAYLES AVE
3030 S SAYLES CT

Date Insp: 7/25/2000

Basin:

| | | | | | | | | |
|----|-------|-------------|-------------------|---|-------|----|----|-------|
| 38 | 78.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 39 | 80.0 | Invert | Sag / 15% FLOW. | | | | | |
| 40 | 80.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 41 | 81.0 | Invert | Sag / 10% FLOW. | | | | | |
| 42 | 82.0 | Invert | Sag / OUT OF SAG. | | | | | |
| 43 | 82.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 44 | 85.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 45 | 88.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 46 | 90.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 47 | 93.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 48 | 98.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 49 | 100.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 50 | 101.0 | East | Wye Service | 1 | 0.000 | 0 | 0 | 0.000 |
| 51 | 101.0 | Wye Service | Roots | 4 | 0.010 | 10 | 25 | 0.010 |
| 52 | 105.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 53 | 113.0 | West | Wye Service | 1 | 0.000 | 0 | 0 | 0.000 |
| 54 | 113.0 | Wye Service | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 55 | 115.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 56 | 117.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 57 | 120.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 58 | 122.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 59 | 124.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 60 | 127.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 61 | 128.0 | East | Wye Service | 1 | 0.000 | 0 | 0 | 0.000 |
| 62 | 128.0 | Wye Service | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 63 | 129.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 64 | 131.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 65 | 134.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 66 | 137.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 67 | 139.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 68 | 142.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 69 | 144.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 70 | 147.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 71 | 149.0 | Joint | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 72 | 152.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 73 | 154.0 | Joint | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 74 | 157.0 | Joint | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 75 | 159.0 | Joint | Roots | 4 | 0.010 | 10 | 25 | 0.010 |
| 76 | 161.0 | Joint | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 77 | 164.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 78 | 166.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 79 | 169.0 | Joint | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 80 | 171.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 81 | 172.0 | Invert | Sag / 10% FLOW. | | | | | |
| 82 | 174.0 | Joint | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 83 | 176.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 84 | 177.0 | Joint | Roots | 4 | 0.010 | 10 | 25 | 0.010 |
| 85 | 178.0 | Joint | Roots | 3 | 0.008 | 5 | 8 | 0.008 |
| 86 | 180.0 | Joint | Roots | 1 | 0.002 | 1 | 1 | 0.002 |
| 87 | 190.0 | West | Wye Service | 1 | 0.000 | 0 | 0 | 0.000 |
| 88 | 203.0 | Joint | Roots | 2 | 0.004 | 2 | 4 | 0.004 |
| 89 | 203.0 | Invert | Sag / 10% FLOW. | | | | | |

1-4

Television Inspection Master Report

6/24/2003
12:34:53PM

| US Manhole: | 5744-800 | 2970 S SAYLES AVE | Date Insp: | 7/25/2000 | Basin: | C01A |
|------------------------------|----------|---------------------|-------------------|-----------|--------|-------------|
| DS Manhole: | 5744-791 | 3030 S SAYLES CT | | | | |
| 90 | 205.0 | Joint | Roots | 2 | 0.004 | 2 4 0.004 |
| 91 | 213.0 | Invert | Sag / OUT OF SAG. | | | |
| 92 | 222.0 | Crown | Crack-Horizontal | 3 | 0.004 | 5 0 0.004 |
| 93 | 223.0 | East | Break-In Conn | 1 | 0.001 | 0 0 0.001 |
| TOP OF LINE / Protruding Tap | | | | | | |
| 94 | 223.0 | Crown | Roots | 2 | 0.004 | 2 4 0.004 |
| ROOTS AT E. TAP | | | | | | |
| 95 | 227.0 | Joint | Roots | 3 | 0.008 | 5 8 0.008 |
| 96 | 235.0 | West | Wye Service | 1 | 0.000 | 0 0 0.000 |
| 97 | 249.0 | Joint | Roots | 2 | 0.004 | 2 4 0.004 |
| 98 | 251.0 | Quad 3 / L-Lt | Crack-Radial | 2 | 0.002 | 2 0 0.002 |
| 99 | 259.0 | Quad 3 / L-Lt | Crack-Horizontal | 3 | 0.004 | 5 0 0.004 |
| 100 | 260.0 | East | Break-In Conn | 1 | 0.001 | 0 0 0.001 |
| 101 | 260.0 | Break-In-Connection | Roots | 4 | 0.010 | 10 25 0.010 |
| 102 | 265.0 | West | Wye Service | 1 | 0.000 | 0 0 0.000 |
| 103 | 265.0 | Wye Service | Roots | 4 | 0.010 | 10 25 0.010 |
| 104 | 271.0 | Invert | Sag / 10% FLOW. | | | |
| 105 | 279.0 | Invert | Sag / OUT OF SAG. | | | |
| 106 | 282.0 | Joint | Roots | 1 | 0.002 | 1 1 0.002 |
| 107 | 284.0 | Joint | Roots | 2 | 0.004 | 2 4 0.004 |
| 108 | 287.0 | Joint | Roots | 3 | 0.008 | 5 8 0.008 |
| 109 | 290.0 | DS Manhole | | | | |

Television Inspection Master Report

6/24/2003
12:34:53PM

US Manhole: 5744-793
DS Manhole: 5744-146

3100 S SAYLES CT

Date Insp: 7/26/2000

Basin: C01A

Dir Televised: Upstream To Downstream

Pipe Information

| | | |
|------------------|----------------|--------------------|
| Shape: Round | Length Status: | Project No.: I-058 |
| Dia/Ht Width: 6 | Material: VCP | Index: |
| Length: 90.0 | Slope: 0.778 | Surface: |
| Pipe Sec Length: | Comment: | |

Inspection Information

| | | |
|-------------------|---------------------------|---------------------|
| Crew: 694 | Percent Full: 5 | Tape ID: V-2470 |
| Weather: Sunny | Purpose: TV Existing Line | Counter Start: 0.00 |
| Surface Cond: N/A | Flow: Normal Flow | Counter Stop: |
| Dyed Test: No | | |

| Obs. # | VTR Counter Comment | Dist | Location | Description | Rating | Obsrvd (gpm) | Est. (gpm) | Ratings | | |
|--------|---------------------|------|---------------------|--------------|--------|--------------|------------|---------|-------|--------------|
| | | | | | | | | Struct | Clean | Remain (gpm) |
| 1 | | 0.0 | US Manhole 5744-793 | | | | | | | |
| 2 | | 4.0 | Quad 3 / L-Lt | Crack-Radial | 3 | | 0.004 | 5 | 0 | 0.004 |
| 3 | | 11.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 4 | | 16.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 5 | | 26.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 6 | | 27.0 | West | Wye Service | 1 | | 0.000 | 0 | 0 | 0.000 |
| 7 | | 31.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 8 | | 35.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 9 | | 38.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 10 | | 48.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 11 | | 51.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 12 | | 54.0 | West | Wye Service | 1 | | 0.000 | 0 | 0 | 0.000 |
| 13 | | 58.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 14 | | 61.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 15 | | 63.0 | Quad 4 / U-Lt | Crack-Radial | 4 | | 0.008 | 10 | 0 | 0.008 |
| 16 | | 63.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 17 | | 65.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 18 | | 68.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 19 | | 70.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 20 | | 75.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 21 | | 78.0 | Joint | Roots | 1 | | 0.002 | 1 | 1 | 0.002 |
| 22 | | 78.0 | East | Wye Service | 1 | | 0.000 | 0 | 0 | 0.000 |
| 23 | | 80.0 | Joint | Roots | 3 | | 0.008 | 5 | 8 | 0.008 |
| 24 | | 82.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 25 | | 82.0 | Joint | Offset | 3 | | 0.010 | 20 | 0 | 0.010 |
| 26 | | 84.0 | Joint | Roots | 4 | | 0.010 | 10 | 25 | 0.010 |
| 27 | | 87.0 | Joint | Roots | 3 | | 0.008 | 5 | 8 | 0.008 |
| 28 | | 90.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 29 | | 92.0 | DS Manhole 5744-146 | | | | | | | |

Line is 6" diameter per work order

Service line coming into MH 5744-146 from the west needs sealed as an incidental item to reworking the manhole bench & invert. There are large roots growing into the manhole around the pipe.

1-6

Television Inspection Master Report

6/24/2003
12:34:53PM

US Manhole: 5744-146
DS Manhole: 5744-792 3100 S SAYLES CT

Date Insp: 7/27/2000 **Basin:** C01A

Dir Televised: Upstream To Downstream

Pipe Information

| | | | | |
|------------------|----------|----------------|--------------|----------|
| Shape: | Round | Length Status: | Project No.: | I-058 |
| Dia/Ht Width: | 8 | Material: | VCP | Index: |
| Length: | 30.0 | Slope: | 1.000 | Surface: |
| Pipe Sec Length: | Comment: | | | |

Inspection Information

| | | | | | |
|---------------|----------------|---------------|------------------|----------------|--------|
| Crew: | 694 | Percent Full: | 5 | Tape ID: | V-2470 |
| Weather: | Cloudy | Purpose: | TV Existing Line | Counter Start: | 14.41 |
| Surface Cond: | Trees & Fences | Flow: | Normal Flow | Counter Stop: | |
| Dyed Test: | No | | | | |

| Obs. # | VTR Counter Comment | Dist | Location | Description | Rating | Obsrvd (gpm) | Est. (gpm) | Ratings | | |
|--------|---------------------|------|---------------------|--------------|--------|--------------|------------|---------|-------|--------------|
| | | | | | | | | Struct | Clean | Remain (gpm) |
| 1 | | 0.0 | US Manhole 5744-146 | | | | | | | |
| 2 | | 3.0 | Quad 4 / U-Lt | Crack-Radial | 2 | | 0.002 | 2 | 0 | 0.002 |
| 3 | | 10.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 4 | | 12.0 | Joint | Roots | 2 | | 0.004 | 2 | 4 | 0.004 |
| 5 | | 15.0 | Joint | Roots | 3 | | 0.008 | 5 | 8 | 0.008 |

Looks like the line bends here. Too many roots to see beyond the joint at 15'.
Camera is blocked. Grease on the pipe. No reverse setup done by the televisor.

Contractor to run the pipe in a straight line from MH 5744-146 to MH 5744-791.
Footage measured to be 192 lf between those two manholes.

NOTE: No tv logs available for the line from 5744-799 to 5744-798CO
and from 5744-798CO to 5744-793.