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REPORT

MAY 2023

CITY OF
Rochester
New Hampshire

Year One I/I Investigations – Phase 2 –
CCTV Inspections



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June 29, 2023

Peter Nourse
Director of City Services
City of Rochester
209 Chestnut Hill Road
Rochester, NH 03867

Re: **Year 1 Phase 2 I/I Investigations CCTV Video Review**

Dear Mr. Nourse:

In Accordance with our June 6, 2022 agreement, Weston & Sampson is pleased to submit the following report for the Year 1 Phase 2 I/I Investigations CCTV Video Review. This report presents our preliminary findings and analysis of field investigations completed to date.

Project Background

The City of Rochester retained Weston & Sampson to assess approximately 26,000 linear feet (LF) of sewer pipe located in sub-areas 3, 4, 13, 14, 17, and 19. Weston & Sampson's subcontractor, BMC Corp., performed the cleaning and television work of the sanitary sewer Round 1 from October 3rd to 31st, 2022. At the City's request, Round 2 was also conducted from January 9th to 13th, 2023 on Highland Street, Eastern Avenue, Columbus Avenue, Summer Street, and Walnut Street. Weston & Sampson evaluated approximately 32,964 LF of 6-inch diameter to 24-inch diameter sanitary sewer pipe. The project area is identified in Figure 1.

Cleaning and Television Inspection Summary

Closed-circuit television inspection (CCTV) was performed by BMC to locate and document defects and maintenance issues within the sanitary sewers. The television inspection was conducted with a "pan-and-tilt" camera to observe and document the internal condition of the pipe.

Sewer

The videos provided were reviewed to locate and document defects and maintenance issues, recommend the appropriate rehabilitation, and determine the cost-effectiveness of rehabilitating the defects. Of the 37,097 LF of sewer, CCTV inspection was completed for 32,964 LF. Approximately 487 LF of sanitary sewer was unable to be inspected due to high flows, debris, roots, intruding services, offset or angular joints, changes in pipe shape, and camera malfunctions. The results of the CCTV inspections are summarized in Table 1: "Television Inspection Summary". The table includes observations and defects recorded during the inspection.

Infiltration

Infiltration is groundwater that enters the sewer system through pipe and manhole defects. Infiltration increases sewer costs because communities pay for the groundwater in the sewer system to be treated. During the spring and heavy rain events, the groundwater level increases. When the groundwater level

increases, the amount of infiltration typically increases, which can cause issues within the system if it does not have adequate capacity to carry additional flow.

A permanent United States Geological Survey (USGS) groundwater gauge located in Sanford, Maine monitors groundwater levels. Data from this groundwater gauge serves to indicate the general groundwater trends of the region. It should be noted that this USGS gauge is located approximately 20 miles away from the Rochester border and is not necessarily an accurate representation of the groundwater levels in Rochester. However, the Sanford groundwater gauge was chosen due to similar elevations to Rochester and provided an indication of groundwater trends in the area. A graph representing the groundwater readings recorded during the study period from the USGS gauge is shown in Figure 1 below.

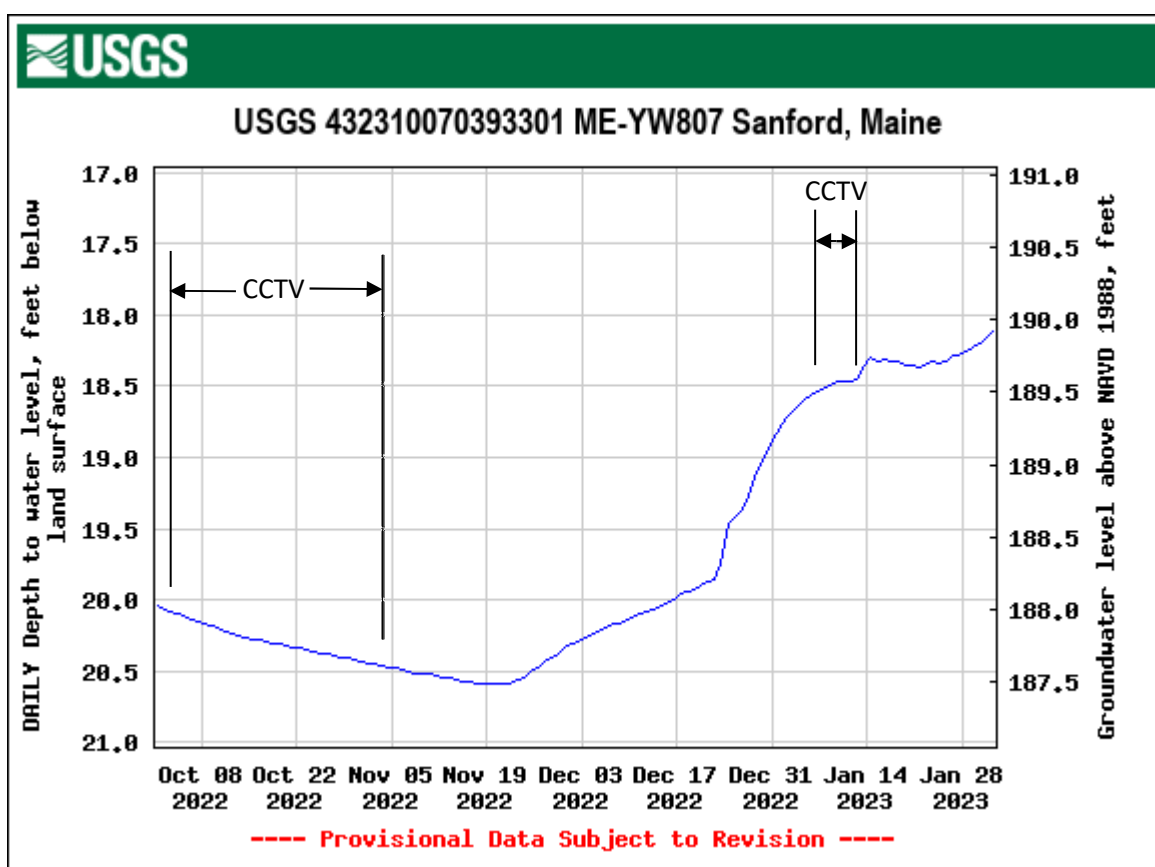


Figure 1: USGS Groundwater Gauge - Sanford, ME

Removing infiltration from the sewer system is recommended to keep sewer flow and costs down. Approximately 220,320 gallons per day (GPD) of active infiltration (such as drippers, runners, and gushers, etc.) was identified in 52 sewer segments, or approximately 35.92% of all sewer lines inspected. The Cost Effective Analysis (CEA), discussed later in this report, for sewer segments discovered to have infiltration is included in Table 2: "Cost-Effectiveness Analysis". It should be noted that when groundwater levels are higher, infiltration will more likely be observed. Evidence of infiltration (such as

infiltration stains, encrustation, etc.) was identified in 56 sewer segments, which includes 36.62% of sewer. A representation of pipes affected by infiltration is provided in Figure 2 on the right.

In addition to keeping treatment costs down, infiltration can affect the structural integrity of a pipe. Infiltration of groundwater can cause silt to wash into the pipe, which can develop voids in the soil outside the sewer pipe allowing the sewer to “spread” at the sidewalls. The loss of pipe support can result in structural defects and eventual collapse. These stages of pipe collapse are explained further in Appendix A as taken from the National Association of Sewer Service Companies’ (NASSCO) Pipeline Assessment Certification Program (PACP) Manual.

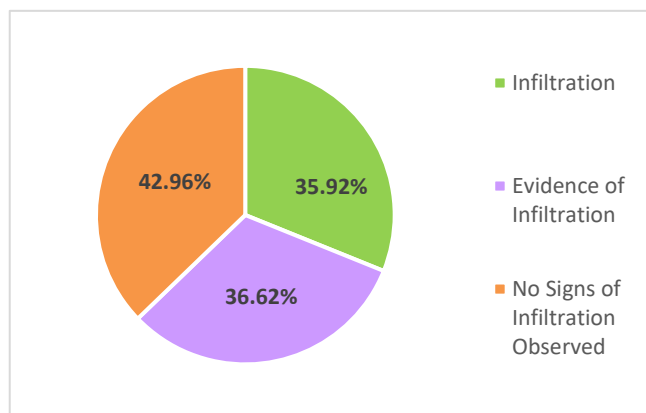


Figure 2: Percentage of pipes with infiltration

Roots

Roots enter the sewer system through cracked pipe, broken pipe, open joints, defective service connections, and manhole defects. Roots can cause blockages and restrict flow, resulting in sewer surcharging and backups. As roots get larger over time, they can slowly crack pipe walls. Root intrusion can allow infiltration to enter the sewer system through these defects as roots get larger and weaken the structural integrity of the sewer. Roots should be chemically treated and, if necessary, cut to avoid further defects and potential backups from occurring. Areas with roots and signs of structural defects should be rehabilitated or repaired. Roots were visible in 20 sewer segments, which includes 4,055 LF (12.3%) of sewer. Roots were visible in the service laterals of an additional 4 sewer segments.



Photo 1: Root Ball in Sewer Segment SP00936 on Eastern Ave at STA 1+90

Note: The roots shown in Photo 1 were removed from the sewer line after the initial inspection. BMC cut the roots on 4/5/2023.

Grease

Grease was observed in 13 sewer segments, which includes 3,348 LF (10.15%) of sewer. Accumulation of grease can cause significant hydraulic restrictions. Sewer segments with grease observed are included in Table 3. More than half of the observed grease deposits were equal to or less than 10% of the cross-sectional area within the pipe.



Photo 2: Grease in Sewer Segment SP02126 on River Street

Sediment

Sediment in sewer pipes accumulates over time typically due to insufficient flow velocity as a result of hydraulic design or system surcharging. The accumulation of sediment not only creates hydraulic restrictions in the system but can also lead to potential surcharging or a greater probability of sanitary sewer overflows (SSOs). Debris was observed in 4,738 LF (14.37%) of sewer. It should be noted that observed debris is debris left during pipe inspection and likely after light cleaning.

Hydraulic Restrictions

There are four, sewer segments that were observed to include a decrease in diameter within the pipe, which creates a potential for a hydraulic restriction. While this is not necessarily a problem, these may be “choke points” that can increase the potential for surcharging, overflows, and buildup of debris. Six pipe repairs were observed in sewer segments SP00686 and SP00692 on Portland Street, SP02225 on Wakefield Street, SP00585 on Walnut Street, and SP00925 on Highland Street. The first spot repair found on Portland Street is in the 8-inch AC sewer pipe SP00686 made with a 6-inch PVC section of pipe (Photo 3). The spot repair found on Wakefield Street is in the 10-inch VCP sewer pipe SP02225 made with an 8-inch PVC section of pipe. It is recommended these sewer segments be reviewed for a history of backups and surcharging to determine if these potential hydraulic restrictions are affecting the pipe capacity. It should be noted that the main section of pipe in the sewer pipe SP00686 is 8-inch AC and there is also 6-inch AC in the pipe.

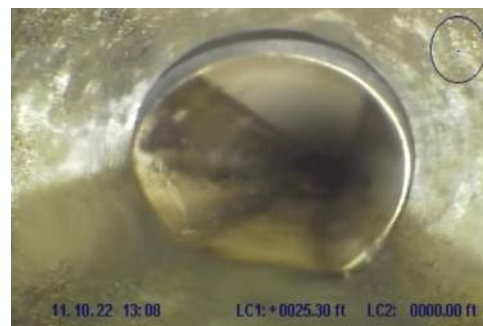


Photo 3: Pipe Repair in Sewer Segment on Portland Street SP00686

Pipe Structural Defects

Structural defects identified in the sewers include increased surface roughness or surface spalling, offset, separated or angled joints, defective point repairs, cracked or fractured pipe, broken pipe, holes, and deformed pipe. Observations for each pipe segment during television inspection are provided in Table 1. The table also includes an estimate of the amount of observed infiltration, a list of specific defects recorded during the inspection, NASSCO PACP ratings, quick structural rating (QSR), quick operation and maintenance rating (QMR), overall pipe rating (OPR), and overall pipe rating index (OPRI). An explanation for the PACP ratings is included in Appendix B. A description of the condition grades is included in the table below.

Rating	Description of NASSCO PACP Condition Grades
5	Most Significant Defect Grade
4	Significant Defect Grade
3	Moderate Defect Grade
2	Minor to Moderate Defect Grade
1	Minor Defect Grade
0	No Defects

When determining pipe segments that require rehabilitation due to structural defects, the QSR should be reviewed as the OPR and OPRI combine and average the structural and O&M defects. The QSR will show the two most significant defects and their frequency of occurrence. Of the 32,964 LF of sewer pipe reviewed, no structural defects were observed in 43 sewer segments, which includes 12,266 LF of sewer.

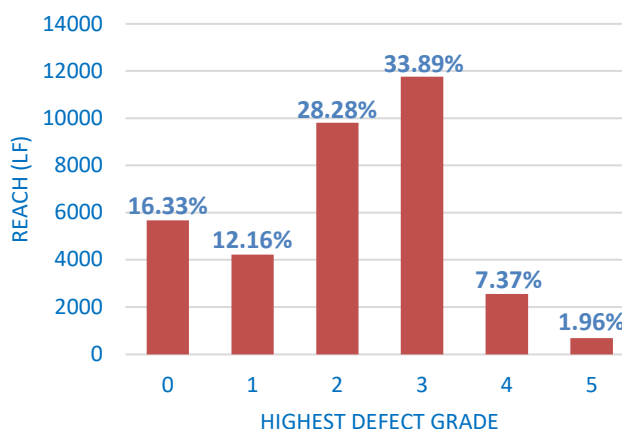


Figure 3: Distribution of pipes with their highest defect grade

Pipes with a QSR beginning with 5 and 4 typically represent the most severe

structural pipe condition. Sewer pipe with the highest condition grades of 5 and 4 were identified in 10 sewer segments, which includes 3,236 LF of sewer. The distribution of the highest structural defect grades in the reviewed sewer segments is shown in Figure 3 on the right. Percentages are out of the total CCTV'd length of 32,964 LF.

It should be noted that the PACP ratings do not replace the judgement of professional engineers.

Corrosion

There were several locations that contained the presence of pipe wall deterioration that typically indicates that the pipe is being corroded and weakened by hydrogen sulfide (H_2S). H_2S gas typically is formed under anaerobic (septic) wastewater conditions. Sewers with low velocities or stagnant flow encourage the growth of anaerobic bacteria that oxidize the H_2S and produce sulfuric acid (H_2SO_4). Over time, the corrosion and loss of concrete due to H_2S can typically lead to a collapse. The affected pipes, their locations and corresponding defect codes are indicated as shown on the following table:

Pipe Segment	Location	Material	Defect Code
SP00925	Highland Street	RCP	Surface Damage Reinforcement Visible
SP02859	Eastern Avenue	RCP	Surface Damage Aggregate Projecting
SP00949	Eastern Avenue	RCP	Surface Damage Aggregate Projecting
SP00948	Eastern Avenue	RCP	Surface Damage Aggregate Visible
SP00934	Eastern Avenue	RCP	Surface Damage Aggregate Visible
SP022855	Eastern Avenue	RCP	Surface Damage Aggregate Projecting
SP01023	Eastern Avenue	RCP	Surface Damage Aggregate Projecting
SP02537	Eastern Avenue	RCP	Surface Damage Aggregate Projecting
SP02858	Eastern Avenue	RCP	Surface Damage Aggregate Projecting
SP02856	Eastern Avenue	RCP	Surface Damage Aggregate Projecting
SP02860	Eastern Avenue	RCP	Surface Damage Aggregate Visible
SP00694	Portland Street	RCP	Surface Damage Corrosion
SP00694	Portland Street	RCP	Surface Damage Corrosion

Sewer segments on Eastern Avenue and Highland Street are both connected to multiple upstream force mains. Due to the anoxic environment within the force main, H_2S was produced traveled down the connecting sewer pipes. This has caused varying degrees of corrosion to occur in these pipes and is ultimately the most structurally damaged lines of sewer that was observed during CCTV in rounds 1 and 2 of Weston & Sampson's Year One I/I Investigations. The further away the pipe segment is to the force main determines its severity of corrosion, as those closer to it were more damaged while those further downstream were less. The pipe segments mentioned above are of most concern as they have the most severe corrosion.

The City had a previous collapse on Highland Street on sewer segment SP00925, at the pipe connection of SMH0180. A PVC repair was installed from STA 0+00 to 0+27. This collapse most likely occurred as a result of H_2S corrosion from the force main, as explained above.

Severe Defects

The following sewer pipe segments were observed to have severe defects, including fractured, broken, and deformed sections of sewer pipe. The locations and defects of these pipe segments are shown below and on the following pages:

Wakefield Street

In Asset ID SP02225 (10-inch VCP), there is a broken pipe at STA 0+03 (observed downstream of manhole SMH1392).



Photo 4: Broken pipe at STA 0+03

Portland Street

In Asset ID SP00686 (8-inch PVC), there is a deformed flexible elliptical segment of PVC pipe at STA 0+38 (observed upstream of manhole SMH0128).

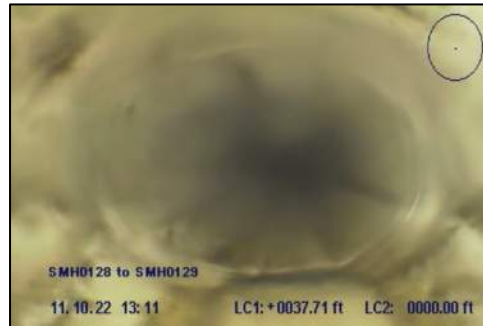


Photo 5: Deformed flexible elliptical pipe at STA 0+38

In the Asset ID SP00685 (6-inch AC), there is a piece of plastic, a hole, and fine roots in a joint at STA 0+83 (observed upstream of manhole SMH0129).



Photo 6: Plastic in joint at STA 0+83

In Asset ID SP00685 (6-inch AC), there is a missing wall in the pipe at STA 1+00 and hole at STA 1+34 (observed upstream of manhole SMH0129).

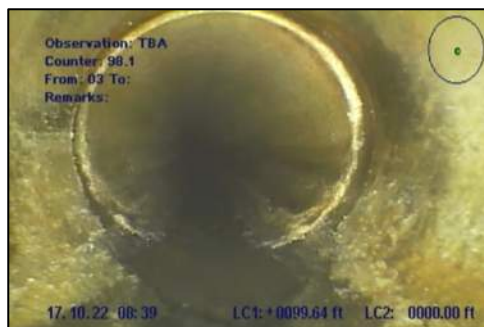


Photo 7: Surface damage missing wall at STA 1+00



Photo 8: Hole at STA 1+34

In Asset ID SP00692 (10-inch VCP), there are holes at STA 1+48 and STA 2+18 (observed downstream of manhole SMH0123). A repair patch behind the hole at STA 2+18 was also discovered, so there is other material behind the broken pipe.



Photo 9: Hole at STA 2+18



Photo 10: Hole at STA 1+48

In Asset ID SP00692 (10-inch VCP), there is a missing wall at STA 2+88 (observed downstream of manhole SMH0123).



Photo 11: Surface damage missing wall at STA 2+88

In Asset ID SP00693 (10-inch VCP), there are multiple fractures at STA 0+38 (observed upstream of manhole SMH0121).



Photo 12: Fracture multiple at STA 0+38

In Asset ID SP00693 (10-inch VCP), there is a hole at STA 0+38 (observed upstream of manhole SMH0121). A gas line exposed behind the hole.



Photo 13: Hole at STA 0+38

In Asset ID SP01114 (10-inch VCP), there are multiple fractures at STA 2+76 (observed upstream of manhole SMH0113).



Photo 14: Fracture multiple at STA 2+76

In Asset ID SP01116 (10-inch VCP), there are spiral fractures at STA 0+79 and STA 1+34 (observed downstream of manhole SMH0112).



Photo 15: Fracture spiral at STA 1+34



Photo 16: Fracture spiral at STA 0+79

In Asset ID SP00315 (10-inch VCP), there is a hole with a visible void at STA 1+97 (observed downstream of manhole SMH0115).



Photo 17: Hole void visible at STA 1+97

In Asset ID SP00317 (10-inch VCP), there is a hole at STA 0+16 (observed downstream of manhole SMH0895).



Photo 18: Hole at STA 0+16

In Asset ID SP00687 (8-inch VCP), there are spiral fractures at STA 0+01 and STA 3+77 (observed upstream of manhole SMH0128).



Photo 19: Fracture spiral at STA 0+01



Photo 20: Fracture spiral at STA 3+77

In Asset ID SP00687 (8-inch AC), there is a hole at STA 0+00 (observed upstream of manhole SMH0128).



Photo 21: Hole at STA 0+00

In Asset ID SP00688 (8-inch VCP), there is a spiral fracture at STA 1+45 (observed upstream of manhole SMH0126).



Photo 22: Fracture spiral at STA 1+45

In Asset ID SP00689 (8-inch VCP), there is a hole at STA 0+21 (observed downstream of manhole SMH0126).



Photo 23: Hole at STA 0+21

Church Street

In Asset ID SP01331 (8-inch PVC), there is a hole at STA 0+14 (observed downstream of manhole SMH0863).



Photo 24: Hole at STA 0+14

Gagne Street

In Asset ID SP00170 (8-inch PVC), there are multiple fractures in the pipe at STA 0+01 (observed upstream of manhole SMH0351).



Photo 25: Fracture multiple at STA 0+01

Charles Street

In Asset ID SP01172 (24-inch RCP), there is surface damage in the pipe at STA 2+95 (observed upstream of manhole SMH0494).



Photo 26: Surface damage at STA 2+95

Walnut Street

In Asset ID SP00585 (8-inch VCP), there are holes at STA 2+82 and at STA 3+16 (observed upstream of manhole SMH0360).



Photo 27: Hole at STA 2+82



Photo 28: Hole soil visible at STA 3+16

In Asset ID SP00585 (8-inch VCP), there are multiple fractures at STA 0+67, 1+10, STA 1+85, STA 2+57, and STA 2+90 (observed upstream of manhole SMH0360). There were also spiral fractures at STA 2+64 and STA 3+06.



Photo 29: Fracture multiple at STA 0+67

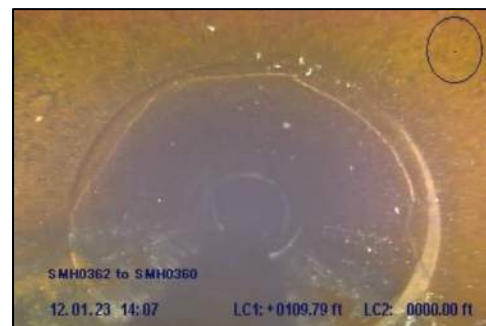


Photo 30: Fracture multiple at STA 1+10



Photo 31: Fracture multiple at STA 2+57



Photo 32: Fracture spiral at STA 2+64



Photo 33: Fracture multiple at STA 2+90



Photo 34: Fracture spiral at STA 3+06

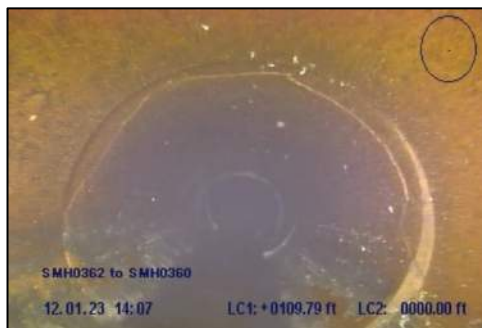


Photo 35: Fracture multiple at STA 1+10



Photo 36: Fracture multiple at STA 1+85

In Asset ID SP00585 (8-inch VCP), there are broken pipe sections at STA 1+31 and 1+92 (observed upstream of manhole SMH0360).



Photo 37: Broken pipe at STA 1+31



Photo 38: Broken pipe at STA 1+92

In Asset ID SP01910 (8-inch VCP), there are multiple fractures at STA 0+34 (observed downstream of manhole SMH0360).



Photo 39: Fracture multiple at STA 0+34

In Asset ID SP01910 (8-inch VCP), there is a hole with a void visible at STA 0+36 (observed downstream of manhole SMH0360).



Photo 40: Hole void visible at STA 0+36

Highland Street

In Asset ID SP00925 (18-inch RCP), there is an area where reinforcement is visible at STA 0+03 and a missing wall at STA 1+31 and STA 1+48 (observed upstream of manhole SMH2638).



Photo 41: Surface damage reinforcement visible at STA 0+03

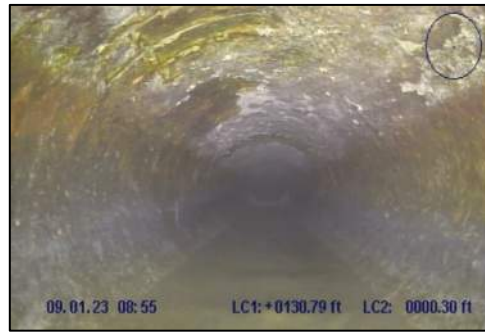


Photo 42: Surface damage missing wall at STA 1+31

In Asset ID SP00925 (18-inch RCP), there is an offset joint at STA 2+75 from what appears to be a PVC repair (observed upstream of manhole SMH2638).



Photo 43: Joint connection lining defect at STA 2+75

In Asset ID SP01947 (18-inch RCP), there is a missing wall at STA 1+35 (observed downstream of manhole SMH2638).



Photo 44: Surface damage missing wall at STA 1+35

Summer Street

In Asset ID SP01267 (12-inch VCP), there is a longitudinal fracture at STA 0+39 and multiple fractures at STA 1+15 (observed upstream of manhole SMH0051). This fracture spans most of the pipe length at 0+06, from 0+09 to 0+20, from 0+32 to 0+65, from 0+72 to 0+75, from 1+15 to 1+22, and from

2+71 to 2+78, a total of 62 LF. At STA 2+44 and STA 2+50, there is an unknown material under the broken pipe. At STA 2+53 and STA 2+94, there is a broken pipe.

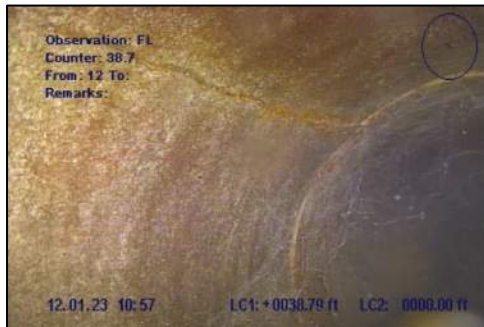


Photo 45: Fracture longitudinal at STA 0+39

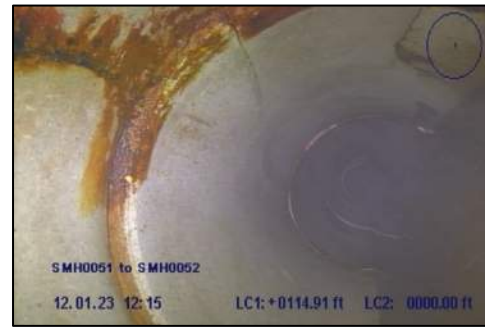


Photo 46: Fracture multiple at STA 1+15



Photo 47: Unknown material under broken pipe at STA 2+44



Photo 48: Unknown material under broken pipe at STA 2+50



Photo 49: Broken pipe at STA 2+53



Photo 50: Broken pipe at STA 2+94

In Asset ID SP01268 (12-inch VCP), there are multiple fractures at STA 0+37 (observed downstream of manhole SMH0051). At STA 1+56 there is a longitudinal fracture at the top of the pipe that spans most of the pipe, at 0+08, from 0+23 to 0+27, from 0+37 to 0+43, from 0+50 to 0+59, 0+69, 1+00, from 1+40 to 1+76, and from 2+08 to 2+15. This is a total footage of 65 LF. At STA 2+05 there is a broken pipe.



Photo 51: Fracture multiple at STA 0+37



Photo 52: Fracture multiple at STA 0+25



Photo 53: Broken pipe at STA 2+05

Eastern Avenue

In Asset ID SP02858 (18-inch RCP), there are two sections of missing walls at STA 0+17 and STA 0+19 (observed downstream of manhole SMH1178).

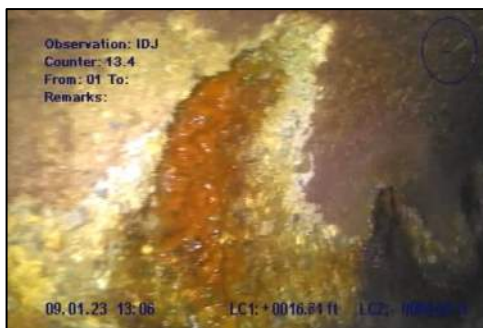


Photo 54: Surface damage missing wall at STA 0+17

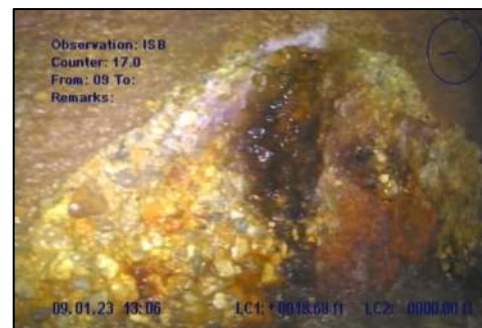


Photo 55: Surface damage missing wall at STA 0+19

In Asset ID SP02537.A (18-inch RCP), there are multiple sections of missing walls, from STA 0+55 to STA 0+62, STA 1+56 to STA 1+62, STA 3+69, from STA 4+61 to 4+65 from STA 4+44 to STA 4+57, and from STA 4+69 to STA 4+76 (upstream of manhole SMH1178). This is a total of 38 LF.



Photo 56: Surface damage missing wall at STA 4+61



Photo 57: Surface damage missing wall at STA 4+44



Photo 58: Surface damage missing wall at STA 4+69



Photo 59: Surface damage missing wall at STA 0+55



Photo 60: Surface damage missing wall at STA 1+56



Photo 61: Surface damage missing wall at STA 1+60

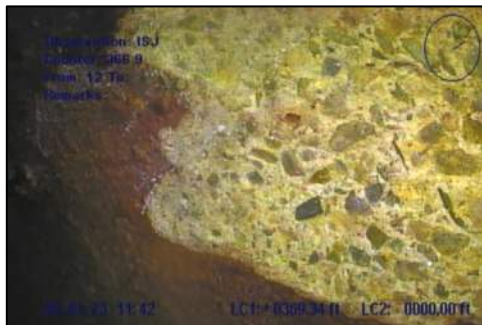


Photo 62: Surface damage missing wall at STA 3+69

Cost-Effectiveness Analysis

A cost-effectiveness analysis (CEA) was performed for inspected sewer pipe defects and infiltration sources identified to determine the merit of rehabilitating each defect. The cost-effectiveness analysis compares the estimated cost for removing I/I to the estimated savings in transport and treatment (T&T) costs resulting from the removal of I/I. T&T costs consist of capital costs to expand and upgrade the wastewater system plus annual operation and maintenance costs. Operation and maintenance costs are directly related to the quantity of flow being discharged to pump stations and treatment facilities. Increased flow volume will be reflected by increased operation and maintenance costs for electricity, cleaning, and equipment repair.

The present worth of the T&T cost for the City of Rochester was calculated using wastewater treatment plant use charges, the City's operation and maintenance, and the City's capital costs. Based on the FY22 financials, the present worth of the T&T cost over a 20-year period is \$41.88/GPD. The T&T costs have been extended throughout the life of rehabilitation methods, which have been estimated at 20 years. A memorandum explaining the calculation of T&T costs is included in Appendix C.

The computation of T&T costs for a particular I/I source draws on the effectiveness of removal. Infiltration removal is typically limited to 50 percent due to the potential for migration of the flow from one repaired defect to a nearby defect that may not have been identified. Inflow is considered 100 percent removable because the source can be permanently eliminated from the sewer.

Since the New Hampshire Department of Environmental Services (NHDES) does not have a guideline for performing I/I analyses, the Massachusetts Department of Environmental Protection's (MassDEP) Guidelines for Performing I/I Analyses and SSES was used. Based on the MassDEP Guidelines for Performing I/I Analysis & SSES, the rehabilitation cost used in the CEA is based primarily on an estimate of the as-bid construction cost for the rehabilitation. Estimated rehabilitation costs were developed using bid prices from recent projects. The rehabilitation costs used in this report do not include the cost of additional investigative work of potential backup caused by sag or pipe size changes, potential drain connections into the sewer, and potential utility penetrations.

The cost-effectiveness analyses for I/I sources are shown in Table 2. This table shows recommendations for each sewer pipeline and is rated as follows:

- **Excessive** means the cost to rehabilitate the source is **less** than the T&T cost.
- **Non-Excessive** is the opposite, where the cost to rehabilitate the source is **more than** the T&T cost.
- **Value-Effective** means the cost to rehabilitate the source is more than the T&T cost but rehabilitation is recommended because of the relative value of the repair. In this case, the T&T cost is no less than 75% of the cost to rehabilitate the defect.
- **Non-Excessive Recommended** means the cost to rehabilitate the source is more than the T&T cost, but rehabilitation is recommended for structural repairs that are a priority.

The cost-effectiveness analyses (Table 2) for sewer pipe identified:

Category	Total Pipe Length (LF)	Total I/I (GPD)	Removable I/I (GPD)	T+T Cost	Estimated Rehabilitation Cost ⁽¹⁾
Excessive Recommended (Cost-Effective)	6,447	192,816	96,408	\$4,037,567	\$430,076
Non-Excessive Recommended	21,624	19,584	9,792	\$410,089	\$1,689,752
Value Effective Recommended	1,528	7,920	3,960	\$165,845	\$192,535
Total Recommended for Rehabilitation	29,599	220,320	110,160	4,613,501	\$2,312,363

Note: ⁽¹⁾ Does not include 5% mobilization or engineering and contingency.

Sewer manholes adjacent to sewer pipes recommended for cured-in-place pipe (CIPP) rehabilitation are considered to be Non-Excessive Recommended rehabilitation. When those pipes are rehabilitated, groundwater flow can potentially migrate from the repaired sewer to a nearby manhole defect. Infiltration can be further eliminated by rehabilitating these adjacent manholes. It is recommended that these adjacent manholes be inspected prior to lining to determine whether further rehabilitation work is required.

Recommendations

Based on the findings and the observations detailed in the CEA, Weston & Sampson recommends a two-phase rehabilitation approach to address the defects observed during the investigation. Phase 1 of the recommended rehabilitations prioritizes sewer segments that are considered “critical” or have structural defects that require immediate rehabilitation based on defect ratings of 5 (highest), 4, and some 3’s. It should be noted engineering judgement was used on defects with grades of 3 to determine if they should be incorporated in phase one or two. A total of 10,502 LF of sewer pipe on Charles Street, Church Street, Columbus Avenue, Eastern Avenue, Highland Street, Portland Street, Summer Street, Wakefield Street, and Walnut Street are considered critical.

It is important to note that the City has taken a proactive approach to rehabilitating pipelines identified as critical in the Phase I recommended rehabilitations by funding a CIPP lining project scheduled for FY 2024 to rehabilitate sections of Highland Street, Eastern Avenue, Summer Street, and Walnut Street that were identified as in need of immediate repair.

Phase 2 consists of the remaining pipe segments listed in the CEA that have defect grades of 1 (lowest), 2, and 3’s that are not included as part of the Phase 1 recommendations. It is recommended the Phase 2 sewer segments are considered for rehabilitation within approximately three to five years (short-term).

A total of 18,697 LF of sewer pipe on Brock Street, Charles Street, Church Street, Columbus Avenue, Eastern Avenue, Gagne Street, Gonic Road, Old Dover Road, Portland Street, River Street, and Wakefield Street, are listed as short-term rehabilitation under Phase 2. It should be noted defects may have worsened since the time of inspection and further rehabilitation may be required once rehabilitation is initiated.

In addition, it is recommended the City review the following:

- Potential back ups caused by sags and pipe size changes
- Potential direct sewer connections into the drain
- Potential utility penetrations
- Potential direct drain connections into the sewer

The estimated cost of rehabilitation is summarized below:

Recommended Phase 1 Sewer Rehabilitation:

Sewer Segments from the CEA with structural defect severity ratings of 5, 4, and 3.

Description	Estimated Cost			Total
	Excessive Recommended	Non-Excessive Recommended	Value- Effective Recommended	
Clean, Inspect, Test, and Seal				
• 2,211 LF of 6- to 10-inch pipe	\$2,655	\$14,447	\$3,114	\$20,216
Structural Short Liner				
• 47 LF of 6- to 10-inch pipe	\$4,950	\$11,200	\$9,350	\$25,500
Manhole to Manhole Lining				
• 8,245 LF of 6- to 24-inch pipe	\$284,580	\$860,115	\$159,660	\$1,304,355
Mainline Root Treatment				
• 2,006 LF of 6- to 24-inch pipe	\$0	\$8,945	\$0	\$8,945
Cut Protruding Service				
• 9 laterals	\$1,800	\$3,600	\$0	\$5,400
Test and Grout Service Connection				
• 1 lateral	\$800	\$0	\$0	\$800
Subtotal	\$294,785	\$896,307	\$172,124	\$1,365,216
Mobilization (not more than 5% of construction)				
• Lump sum	\$14,739	\$44,915	\$8,606	\$68,261
Subtotal – Construction	\$309,524	\$943,222	\$180,730	\$1,433,477
Engineering and Contingency				
• (Approximately 35% of construction)	\$108,333	\$330,128	\$63,256	\$501,717
Total Rehabilitation Cost	\$417,858	\$1,273,350	\$243,986	\$1,935,194

Recommended Phase 2 Sewer Rehabilitation:

Sewer segments from the CEA with structural severity ratings of 1, 2, and 3

Description	Estimated Cost			Total
	Excessive Recommended	Non-Excessive Recommended	Value- Effective Recommended	
Clean, Inspect, Test, and Seal				
• 8,310 LF of 6- to 24-inch pipe	\$24,663	\$88,984	\$441	\$114,088
Structural Short Liner				
• 266 LF of 6- to 24-inch pipe	\$17,950	\$186,450	\$2,750	\$207,150
Manhole to Manhole Lining				
• 3,963 LF of 8- to 24-inch pipe	\$81,970	\$467,820	\$17,220	\$567,010
Mainline Root Treatment				
• 4,732 LF of 6- to 24-inch pipe	\$1,908	\$22,991	\$0	\$24,899
Cut Protruding Lateral Connection				
• 10 laterals	\$2,400	\$3,600	\$0	\$6,000
Test & Grout Service Connection				
• 10 LF of 10- to 24-inch pipe	\$6,400	\$1,600	\$0	\$8,000
Lateral Liner				
• 2 laterals	\$0	\$20,000	\$0	\$20,000
• Subtotal	\$135,291	\$791,445	\$20,411	\$947,147
Mobilization (not more than 5% of construction)				
• Lump sum	\$6,765	\$39,572	\$1,021	\$47,357
• Subtotal – Construction	\$142,056	\$831,017	\$21,432	\$994,504
Engineering and Contingency (Approximately 35% of construction)	\$49,719	\$290,856	\$7,501	\$348,077
• Total Rehabilitation Cost	\$191,775	\$1,121,873	\$28,933	\$1,342,581

Summary of Recommended Rehabilitation

Recommended Rehabilitation	Total
• Phase 1: Structural defect grades of 5, 4, and 3	\$1,935,194
• Phase 2: Structural defect grades of 1, 2, and 3	\$1,342,581
Subtotal – Sewer Recommended Rehabilitation Cost	\$3,277,775

Weston & Sampson wishes to thank you and members of the Department of Public Works staff for the assistance provided to us while completing this project. We are available to meet with you at your earliest convenience to discuss this letter report. Please do not hesitate to contact me at (603) 570-6318 with any questions or comments you may have.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

John M. Sykora III
Team Leader

TABLES

TABLE 1

TELEVISION INSPECTION SUMMARY

Year 1 I/I Investigations (Phase 2) CCTV Video Review Rochester, NH

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02854	SMH0301	SMH1857	CP	18	293	293	8	1,584	1.87
Footage	Defect Code	Clock Position		Clock Position		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
		From	To							
000	ACCESS POINT MANHOLE					0	0	SMH0301		
000	MISCELLANEOUS WATER LEVEL					0	0	25%		
007	SURFACE DAMAGE AGGREGATE VISIBLE	09	04			0	0	S01		
045	TAP BREAK-IN/HAMMER	11				0	0			
048	INFILTRATION STAIN JOINT	09				0	0			
053	INFILTRATION STAIN BARREL	09				0	0			
056	INFILTRATION STAIN BARREL	03				0	0			
072	INFILTRATION STAIN JOINT	09				0	0			
087	INFILTRATION RUNNER JOINT	12				288	0			
115	INFILTRATION RUNNER LATERAL	01				288	0			
115	TAP BREAK-IN/HAMMER	01				0	0			
121	INFILTRATION STAIN JOINT	09				0	0			
128	INFILTRATION STAIN BARREL	09				0	0			
139	DEPOSITS ATTACHED ENCRUSTATION	03				0	0	5%		
145	DEPOSITS ATTACHED ENCRUSTATION	10				0	0	5%		
161	INFILTRATION DRIPPER JOINT	11				144	0			
169	INFILTRATION DRIPPER BARREL	12				144	0			
177	INFILTRATION RUNNER BARREL	09				432	0			
185	INFILTRATION STAIN BARREL	09				0	0			
187	MISCELLANEOUS WATER LEVEL					0	0	40%		
198	SURFACE DAMAGE MISSING WALL	11	03			0	0			
208	DEPOSITS ATTACHED ENCRUSTATION	09				0	0	5%		
210	INFILTRATION DRIPPER BARREL	12				0	0			

218	INFILTRATION STAIN BARREL	03		0	0	
224	INFILTRATION STAIN BARREL	03		0	0	
226	DEPOSITS ATTACHED ENCRUSTATION	09	03	0	0	5%
226	INFILTRATION DRIPPER	10		144	0	
229	INFILTRATION DRIPPER	12	02	144	0	
230	SURFACE DAMAGE AGGREGATE PROJECTING	12	03	0	0	
231	DEPOSITS ATTACHED ENCRUSTATION	12	03	0	0	5%
239	TAP BREAK-IN/HAMMER INTRUDING	11		0	0	
243	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	
251	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	
275	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	
283	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	S02
289	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	F02
291	SURFACE DAMAGE AGGREGATE VISIBLE	09	04	0	0	F01
293	ACCESS POINT MANHOLE			0	0	SMH1857

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP01021	SMH1856	SMH1857	CP	18	253	253	8	1,584	2.39

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1856
000	MISCELLANEOUS WATER LEVEL			0	0	20%
001	SURFACE DAMAGE AGGREGATE VISIBLE	02	04	0	0	S01
057	INFILTRATION RUNNER JOINT	09		0	0	
059	INFILTRATION WEEPER BARREL	03		144	0	
059	SURFACE DAMAGE MISSING WALL	01	06	0	0	
065	SURFACE DAMAGE MISSING WALL	07	11	0	0	
073	SURFACE DAMAGE MISSING WALL	07	04	0	0	
075	SURFACE DAMAGE MISSING WALL	07	09	0	0	S02
076	INFILTRATION STAIN BARREL	02	04	0	0	
076	SURFACE DAMAGE MISSING WALL	02	04	0	0	
105	INFILTRATION DRIPPER JOINT	12		144	0	
109	INFILTRATION RUNNER BARREL	09		288	0	

168	TAP BREAK-IN/HAMMER	12		0	0	
178	INFILTRATION RUNNER BARREL	03		144	0	
186	INFILTRATION RUNNER LATERAL	10		864	0	
186	INTRUDING SEALING MATERIAL SEALING RING	09	12	0	0	
186	TAP BREAK-IN/HAMMER	10		0	0	
195	INFILTRATION STAIN JOINT	03		0	0	
227	DEPOSITS ATTACHED ENCRUSTATION	03	05	0	0	5%
247	MISCELLANEOUS WATER LEVEL			0	0	50%
249	SURFACE DAMAGE MISSING WALL	07	09	0	0	F02
251	SURFACE DAMAGE AGGREGATE VISIBLE	02	04	0	0	F01
253	ACCESS POINT MANHOLE			0	0	SMH1857

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP01022	SMH0301	SMH1858	CP	18	501	501	8	1,152	2.13

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0301
000	MISCELLANEOUS WATER LEVEL			0	0	15%
001	SURFACE DAMAGE AGGREGATE VISIBLE	07	05	0	0	S01
021	INFILTRATION RUNNER JOINT	08		144	0	
069	TAP BREAK-IN/HAMMER INTRUDING	02		0	0	
090	INFILTRATION RUNNER LATERAL	11		432	0	
090	TAP BREAK-IN/HAMMER INTRUDING	11		0	0	
091	TAP BREAK-IN/HAMMER INTRUDING	02		0	0	
099	SURFACE DAMAGE MISSING WALL	10	11	0	0	
169	INFILTRATION RUNNER LATERAL	10		288	0	
169	TAP BREAK-IN/HAMMER	10		0	0	
238	TAP BREAK-IN/HAMMER	10		0	0	
319	TAP BREAK-IN/HAMMER	02		0	0	POSSIBLE BLIND TIE IN TO KNOBBY WAY
415	INFILTRATION DRIPPER LATERAL	10		144	0	
415	TAP BREAK-IN/HAMMER INTRUDING	10		0	0	
417	INFILTRATION DRIPPER LATERAL	02		144	0	
417	TAP BREAK-IN/HAMMER	02		0	0	

493	TAP BREAK-IN/HAMMER	03			0	0				
499	SURFACE DAMAGE AGGREGATE VISIBLE	07	05		0	0	F01			
501	ACCESS POINT MANHOLE				0	0	SMH1858			

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02547	SMH1185	SMH1856	CP	18	343	343	8	576	2.17

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1185
000	MISCELLANEOUS WATER LEVEL			0	0	20%
001	SURFACE DAMAGE AGGREGATE VISIBLE	07	05	0	0	S01
041	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%
048	DEPOSITS SETTLED OTHER	06		0	0	DEBRIS IN PIPE (BRICK)
082	INFILTRATION RUNNER	08		576	0	
082	TAP BREAK-IN/HAMMER	10		0	0	POSSIBLE BLIND TIE IN FROM REGENCY CT
098	ROOTS MEDIUM CONNECTION	12		0	0	10%
098	TAP BREAK-IN/HAMMER	12		0	0	
274	TAP BREAK-IN/HAMMER INTRUDING	10		0	0	
341	SURFACE DAMAGE AGGREGATE VISIBLE	07	05	0	0	F01
343	ACCESS POINT MANHOLE			0	0	SMH1856

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP00936	SMH1179	SMH1184	CP	18	263	192	8	0	1.24

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1179
000	MISCELLANEOUS WATER LEVEL			0	0	40%
007	VERMIN COCKROACH	07	05	0	0	
023	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	S01
039	VERMIN COCKROACH	10	02	0	0	
055	ROOTS FINE JOINT	10	02	0	0	
055	SURFACE DAMAGE AGGREGATE VISIBLE	05	07	0	0	S02
055	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	F01

088	ROOTS FINE JOINT	10		0	0	
104	VERMIN COCKROACH	10	02	0	0	
128	INFILTRATION STAIN JOINT	04		0	0	
139	INFILTRATION STAIN JOINT	08		0	0	
145	CRACK LONGITUDINAL	11		0	0	
145	INFILTRATION STAIN JOINT	07	12	0	0	
153	ROOTS FINE JOINT	11	02	0	0	
155	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
156	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
192	INFILTRATION STAIN JOINT	04		0	0	F02
192	MISCELLANEOUS SURVEY ABANDONED			0	0	CANNOT PASS ROOT BALL
192	ROOTS BALL BARREL	12		0	0	75%

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP00936	SMH1184	SMH1179	CP	18	263	24	8	0	1.33

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1184
000	MISCELLANEOUS WATER LEVEL			0	0	30%
003	SURFACE DAMAGE AGGREGATE VISIBLE	09	03	0	0	S01
022	TAP BREAK-IN/HAMMER INTRUDING	02		0	0	
023	MISCELLANEOUS GENERAL OBSERVATION			0	0	DEBRIS ON INTRUDING PIPE
023	SURFACE DAMAGE AGGREGATE VISIBLE	09	03	0	0	F01
024	MISCELLANEOUS SURVEY ABANDONED			0	0	CANNOT PASS INTRUDING SVC CONNECTION; 20%

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02860	SMH1861A	SMH1862	CP	18	404	404	8	4,032	1.17

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1861A (UNKNOWN SMH 301 FT DS FROM SMH1861)
000	MISCELLANEOUS WATER LEVEL			0	0	25%
000	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	S01
024	CRACK LONGITUDINAL	10		0	0	

028	INFILTRATION STAIN JOINT	09	03	0	0	
036	INFILTRATION STAIN JOINT	09	03	0	0	
044	INFILTRATION STAIN JOINT	09		0	0	
052	INFILTRATION RUNNER JOINT	12	01	2,880	0	
052	INFILTRATION STAIN JOINT	09	03	0	0	
061	INFILTRATION STAIN JOINT	09	12	0	0	
069	INFILTRATION STAIN JOINT	09	03	0	0	
077	INFILTRATION STAIN JOINT	09		0	0	
085	INFILTRATION STAIN JOINT	08	10	0	0	
104	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
104	FRACTURE LONGITUDINAL	03		0	0	
109	INFILTRATION STAIN JOINT	09	04	0	0	
122	TAP BREAK-IN/HAMMER INTRUDING	10		0	0	
125	INFILTRATION DRIPPER JOINT	12		144	0	
125	INFILTRATION STAIN JOINT	09	03	0	0	
133	INFILTRATION STAIN JOINT	09	03	0	0	
141	INFILTRATION STAIN JOINT	09	03	0	0	
153	DEPOSITS ATTACHED ENCRUSTATION	02	05	0	0	15%
154	INFILTRATION RUNNER CONNECTION	03		288	0	
154	TAP BREAK-IN/HAMMER INTRUDING	03		0	0	
182	INFILTRATION STAIN JOINT	08	12	0	0	
198	INFILTRATION STAIN JOINT	11	04	0	0	
222	INFILTRATION STAIN JOINT	02		0	0	
225	DEPOSITS ATTACHED ENCRUSTATION	02		0	0	5%
231	INFILTRATION STAIN JOINT	01	04	0	0	
239	DEPOSITS ATTACHED ENCRUSTATION	09	03	0	0	5%
239	INFILTRATION DRIPPER JOINT	12		144	0	
247	DEPOSITS ATTACHED ENCRUSTATION	12	04	0	0	5%
254	DEPOSITS ATTACHED ENCRUSTATION	09	04	0	0	5%
254	INFILTRATION DRIPPER JOINT	12		144	0	
263	INFILTRATION STAIN JOINT	03		0	0	
271	INFILTRATION STAIN JOINT	12	04	0	0	
271	INFILTRATION WEEPER JOINT	12		144	0	

279	INFILTRATION STAIN JOINT	01	03	0	0	
304	INFILTRATION STAIN JOINT	09	03	0	0	
311	INFILTRATION DRIPPER CONNECTION	02		144	0	
311	INFILTRATION STAIN CONNECTION	02	05	0	0	
311	TAP BREAK-IN/HAMMER	02		0	0	
312	INFILTRATION DRIPPER JOINT	01		144	0	
312	INFILTRATION STAIN JOINT	02	04	0	0	
344	INFILTRATION STAIN JOINT	12	04	0	0	
360	INFILTRATION STAIN JOINT	01		0	0	
393	MISCELLANEOUS WATER LEVEL			0	0	35%
401	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	F01
404	ACCESS POINT MANHOLE			0	0	SMH1862

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP00949	SMH2934	SMH0066	CP	18	121	121	8	144	1.27

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0066A (UNKNOWN SMH 364 FT DS FROM SMH0067)
000	MISCELLANEOUS WATER LEVEL			0	0	30%
000	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	S01; ALSO AT JOINTS AND PATCHES ON REST OF PIPE
002	FRACTURE SPIRAL	02	04	0	0	
002	INFILTRATION DRIPPER BARREL	02		144	0	
002	INFILTRATION STAIN JOINT	02	04	0	0	
007	INFILTRATION STAIN JOINT	08	04	0	0	
048	INFILTRATION STAIN JOINT	09	03	0	0	
056	INFILTRATION STAIN JOINT	03		0	0	
089	INFILTRATION STAIN JOINT	09	03	0	0	
096	INFILTRATION STAIN JOINT	09	03	0	0	
121	ACCESS POINT MANHOLE			0	0	SMH0066
121	INFILTRATION STAIN JOINT	09	03	0	0	
121	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	F01; ALSO AT JOINTS AND PATCHES ON REST OF PIPE

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP00948	SMH0066	SMH0277	CP	18	343	343	8	1,440	1.33
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0066		
000	MISCELLANEOUS WATER LEVEL					0	0	30%		
003	SURFACE DAMAGE AGGREGATE VISIBLE		04	08		0	0	S01		
004	SURFACE DAMAGE SURFACE SPALLING		03			0	0	S02		
016	CRACK LONGITUDINAL		02			0	0			
019	SURFACE DAMAGE SURFACE SPALLING		03				0	F02		
020	INFILTRATION STAIN CONNECTION		07	05		0	0			
020	TAP BREAK-IN/HAMMER		12			0	0			
034	TAP BREAK-IN/HAMMER ACTIVITY		12			0	0			
048	CRACK SPIRAL		12	03		0	0			
064	INFILTRATION STAIN JOINT		09	03		0	0			
095	INFILTRATION RUNNER JOINT		12			1,008	0			
095	TAP BREAK-IN/HAMMER ACTIVITY		12			0	0			
123	MISCELLANEOUS WATER LEVEL		00			0	0	20%		
129	SURFACE DAMAGE OTHER		10			0	0	SMALL CHUNK BROKEN OFF OF JOINT		
145	SURFACE DAMAGE AGGREGATE PROJECTING		07	09		0	0			
154	INFILTRATION DRIPPER JOINT		12			144	0			
154	TAP BREAK-IN/HAMMER ACTIVITY		12			0	0			
161	INFILTRATION DRIPPER JOINT		12			144	0			
161	INFILTRATION STAIN JOINT		09	03		0	0			
170	CRACK LONGITUDINAL		12			0	0			
170	CRACK SPIRAL		09			0	0			
220	INFILTRATION DRIPPER CONNECTION		12			144	0			
220	SURFACE DAMAGE AGGREGATE PROJECTING		09	03		0	0			
220	SURFACE DAMAGE AGGREGATE VISIBLE		09	03		0	0	CHANGES TO SURFACE DAMAGE AROUND THE ENTIRE		
220	TAP BREAK-IN/HAMMER		12			0	0			
235	SURFACE DAMAGE AGGREGATE VISIBLE		09	03		0	0	CHANGES BACK TO SURFACE DAMAGE ONLY AT WATE		
267	CRACK LONGITUDINAL		12			0	0			

283	CRACK LONGITUDINAL	01		0	0	
300	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	
300	TAP BREAK-IN/HAMMER	01		0	0	
332	MISCELLANEOUS WATER LEVEL			0	0	30%
340	CRACK LONGITUDINAL	09		0	0	
340	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
343	ACCESS POINT MANHOLE			0	0	SMH0277

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP00949	SMH0067	SMH2934	CP	18	364	364	8	864	1.45

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0067
000	MISCELLANEOUS WATER LEVEL			0	0	30%
005	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	S01
013	INFILTRATION STAIN JOINT	09	12	0	0	
100	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
138	MISCELLANEOUS WATER LEVEL			0	0	20%
139	INFILTRATION DRIPPER JOINT	12		432	0	
139	TAP BREAK-IN/HAMMER ACTIVITY	12		0	0	
144	CRACK LONGITUDINAL	11		0	0	
154	INFILTRATION DRIPPER	12		144	0	
154	TAP BREAK-IN/HAMMER ACTIVITY	12		0	0	
182	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
229	INFILTRATION STAIN BARREL	03		0	0	
234	INFILTRATION STAIN JOINT	12		0	0	
236	MISCELLANEOUS WATER LEVEL			0	0	30%
242	INFILTRATION STAIN JOINT	04	08	0	0	
242	MISCELLANEOUS WATER LEVEL			0	0	40%
267	FRACTURE MULTIPLE	12		0	0	
267	INFILTRATION RUNNER JOINT	11	01	288	0	
267	INFILTRATION STAIN JOINT	09	03	0	0	
273	MISCELLANEOUS WATER LEVEL			0	0	50%

279	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
288	TAP BREAK-IN/HAMMER ACTIVITY			0	0	
299	INFILTRATION STAIN JOINT	09		0	0	
332	MISCELLANEOUS WATER LEVEL			0	0	40%
340	CRACK LONGITUDINAL	11		0	0	
344	CRACK LONGITUDINAL	12		0	0	
356	INFILTRATION STAIN JOINT	09	03	0	0	
360	FRACTURE CIRCUMFERENTIAL	08	04	0	0	AT JOINT
361	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	F01
364	ACCESS POINT MANHOLE			0	0	SMH0066A (UNKNOWN SMH 364 FT DS FROM SMH0067)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP00934	SMH0277	SMH1184	CP	18	97	97	8	7,200	1.67

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0277
000	MISCELLANEOUS WATER LEVEL			0	0	30%
000	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
014	CRACK LONGITUDINAL	09		0	0	
054	SURFACE DAMAGE SURFACE SPALLING	11		0	0	
068	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
078	INFILTRATION RUNNER BARREL	09	03	7,200	0	
078	MISCELLANEOUS GENERAL OBSERVATION	09	03	0	0	WATER MAIN PROTRUDING THROUGH AND ACROSS TH
093	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
097	ACCESS POINT MANHOLE			0	0	SMH1184

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02855	SMH1178	SMH1859	RCP	18	502	502	8	2,160	1.68

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1178
000	MISCELLANEOUS WATER LEVEL			0	0	30%
000	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	S01

006	INTRUDING SEALING MATERIAL SEALING RING	10	01	0	0	
019	SURFACE DAMAGE AGGREGATE MISSING	01		0	0	
023	SURFACE DAMAGE AGGREGATE MISSING	01		0	0	
025	SURFACE DAMAGE MISSING WALL	09		0	0	
026	MISCELLANEOUS WATER LEVEL			0	0	20%
031	SURFACE DAMAGE MISSING WALL	09	03	0	0	AT JOINT
049	SURFACE DAMAGE MISSING WALL	12		0	0	
053	INFILTRATION RUNNER CONNECTION	09		432	0	
053	TAP BREAK-IN/HAMMER	09		0	0	
056	SURFACE DAMAGE MISSING WALL	08	04	0	0	
061	SURFACE DAMAGE MISSING WALL	08	04	0	0	
096	SURFACE DAMAGE MISSING WALL	08	04	0	0	AT JOINT
112	SURFACE DAMAGE MISSING WALL	08	04	0	0	AT JOINT
117	SURFACE DAMAGE MISSING WALL	03		0	0	
121	SURFACE DAMAGE MISSING WALL	04	08	0	0	
123	INFILTRATION STAIN BARREL	03		0	0	
140	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
142	SURFACE DAMAGE MISSING WALL	12		0	0	
153	CRACK LONGITUDINAL	10	04	0	0	
153	INFILTRATION RUNNER JOINT	03		432	0	
157	SURFACE DAMAGE MISSING WALL	10		0	0	
160	SURFACE DAMAGE MISSING WALL	12		0	0	
161	SURFACE DAMAGE MISSING WALL	09	03	0	0	
177	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
186	DEPOSITS ATTACHED ENCRUSTATION	08	11	0	0	5%
187	CRACK SPIRAL	03		0	0	
187	SURFACE DAMAGE MISSING WALL	02		0	0	
190	SURFACE DAMAGE MISSING WALL	02		0	0	
196	MISCELLANEOUS GENERAL OBSERVATION	03		0	0	HOLE ABOVE SVC CONNECTION
196	TAP BREAK-IN/HAMMER ACTIVITY	03		0	0	
202	CRACK CIRCUMFERENTIAL	09	10	0	0	
203	INFILTRATION DRIPPER JOINT	10		144	0	
203	TAP BREAK-IN/HAMMER ACTIVITY	10		0	0	

204	TAP BREAK-IN/HAMMER ACTIVITY	11		0	0	
210	SURFACE DAMAGE MISSING WALL	03		0	0	
218	INFILTRATION STAIN JOINT	08	12	0	0	
227	SURFACE DAMAGE MISSING WALL	12		0	0	
246	SURFACE DAMAGE SURFACE SPALLING	02		0	0	
250	INFILTRATION DRIPPER JOINT	12		144	0	
258	INFILTRATION STAIN JOINT	08	04	0	0	
266	SURFACE DAMAGE MISSING WALL	07	05	0	0	
274	SURFACE DAMAGE MISSING WALL	07	05	0	0	
276	SURFACE DAMAGE MISSING WALL	02		0	0	
278	SURFACE DAMAGE MISSING WALL	02		0	0	
283	SURFACE DAMAGE MISSING WALL	07	05	0	0	
287	SURFACE DAMAGE SURFACE SPALLING	02		0	0	
291	INFILTRATION STAIN JOINT	09	10	0	0	
299	INFILTRATION STAIN JOINT	09	03	0	0	
307	INFILTRATION STAIN JOINT	08	10	0	0	
319	INFILTRATION STAIN JOINT	09		0	0	
323	INFILTRATION STAIN JOINT	08	03	0	0	
327	INFILTRATION DRIPPER BARREL	12		144	0	
331	INFILTRATION DRIPPER JOINT	12		144	0	
331	INFILTRATION STAIN JOINT	04	08	0	0	
339	INFILTRATION STAIN JOINT	04	08	0	0	
343	MISCELLANEOUS WATER LEVEL			0	0	25%
347	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
363	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
367	INFILTRATION STAIN JOINT	08	04	0	0	
369	SURFACE DAMAGE MISSING WALL	02		0	0	
372	INFILTRATION STAIN JOINT	08	04	0	0	
387	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	10%
398	INFILTRATION DRIPPER JOINT	11		144	0	
398	INFILTRATION STAIN CONNECTION	08	11	0	0	
398	TAP BREAK-IN/HAMMER ACTIVITY	11		0	0	
399	DEPOSITS ATTACHED ENCRUSTATION	10		0	0	5%

399	INFILTRATION DRIPPER CONNECTION	11		144	0	
399	TAP BREAK-IN/HAMMER	10		0	0	
404	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
410	SURFACE DAMAGE MISSING WALL	03		0	0	
420	INFILTRATION STAIN JOINT	08	04	0	0	
422	SURFACE DAMAGE MISSING WALL	03		0	0	
428	INFILTRATION STAIN JOINT	03	04	0	0	
436	SURFACE DAMAGE MISSING WALL	02	04	0	0	
440	INFILTRATION STAIN CONNECTION	01	03	0	0	
440	TAP BREAK-IN/HAMMER ACTIVITY	01		0	0	
444	SURFACE DAMAGE MISSING WALL	12	05	0	0	S02
457	SURFACE DAMAGE MISSING WALL	12	05	0	0	F02
458	INFILTRATION DRIPPER BARREL	09		144	0	
458	SURFACE DAMAGE MISSING WALL	09		0	0	
460	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	10%
461	SURFACE DAMAGE MISSING WALL	09	03	0	0	
468	INFILTRATION STAIN JOINT	08	04	0	0	
471	SURFACE DAMAGE MISSING WALL	10	04	0	0	
476	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
479	SURFACE DAMAGE MISSING WALL	12	04	0	0	
484	INFILTRATION DRIPPER JOINT	11		144	0	
484	INFILTRATION STAIN JOINT	08	04	0	0	
486	SURFACE DAMAGE MISSING WALL	03		0	0	
489	MISCELLANEOUS WATER LEVEL			0	0	50%
492	INFILTRATION DRIPPER JOINT	12		144	0	
492	INFILTRATION STAIN JOINT	08	04	0	0	
494	SURFACE DAMAGE AGGREGATE MISSING	03		0	0	
498	INFILTRATION STAIN BARREL	03			0	
500	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	F01
502	ACCESS POINT MANHOLE			0	0	SMH1859

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP01023	SMH1178	SMH1860	CP	18	399	399	8	3,312	1.2
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH1178		
000	MISCELLANEOUS WATER LEVEL					0	0	15%		
003	INFILTRATION STAIN BARREL		08	10		0	0			
003	SURFACE DAMAGE AGGREGATE PROJECTING		07	05		0	0	S01		
005	DEPOSITS ATTACHED ENCRUSTATION		07	05		0	0	5%		
007	SURFACE DAMAGE MISSING WALL		08			0	0			
010	INFILTRATION STAIN BARREL		09			0	0			
013	DEPOSITS ATTACHED ENCRUSTATION		08	04		0	0	5%		
013	INFILTRATION DRIPPER JOINT		12			144	0			
016	INFILTRATION STAIN BARREL		09	03		0	0			
017	INFILTRATION STAIN BARREL		09			0	0			
017	SURFACE DAMAGE MISSING WALL		09			0	0			
019	INFILTRATION STAIN BARREL		09			0	0			
019	SURFACE DAMAGE MISSING WALL		09			0	0			
022	INFILTRATION DRIPPER JOINT		11			144	0			
022	INFILTRATION STAIN JOINT		08	04		0	0			
030	DEPOSITS ATTACHED ENCRUSTATION		08	04		0	0	5%		
034	INFILTRATION DRIPPER BARREL		11			144	0			
034	INFILTRATION STAIN BARREL		08	12		0	0			
038	INFILTRATION STAIN JOINT		08	04		0	0			
044	SURFACE DAMAGE MISSING WALL		03			0	0			
046	INFILTRATION STAIN JOINT		08	04		0	0			
054	INFILTRATION DRIPPER JOINT		12			144	0			
054	INFILTRATION STAIN JOINT		08	12		0	0			
057	INFILTRATION STAIN BARREL		01	05		0	0			
060	INFILTRATION STAIN BARREL		01	05		0	0			
063	INFILTRATION STAIN JOINT		04	08		0	0			
070	INFILTRATION STAIN JOINT		08	04		0	0			

074	INFILTRATION STAIN BARREL	03		0	0	
079	INFILTRATION DRIPPER JOINT	12		144	0	
079	INFILTRATION STAIN JOINT	08	04	0	0	
082	INFILTRATION STAIN JOINT	07	09	0	0	
087	INFILTRATION STAIN JOINT	07	05	0	0	
093	INFILTRATION DRIPPER BARREL	12		144	0	
095	INFILTRATION STAIN JOINT	08	04	0	0	S02
101	INFILTRATION STAIN BARREL	09		0	0	
120	INFILTRATION DRIPPER JOINT	12		144	0	
126	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
128	INFILTRATION DRIPPER JOINT	01		144	0	
131	INFILTRATION STAIN BARREL	08		0	0	
133	INFILTRATION STAIN BARREL	09		0	0	
139	INFILTRATION STAIN BARREL	08	04	0	0	
144	INFILTRATION DRIPPER JOINT	12		144	0	
146	INFILTRATION STAIN BARREL	09		0	0	
149	INFILTRATION STAIN BARREL	09		0	0	
161	INFILTRATION RUNNER JOINT	12		288	0	
168	INFILTRATION DRIPPER JOINT	11		144	0	
181	INFILTRATION STAIN BARREL	08	04	0	0	S03
184	INFILTRATION DRIPPER JOINT	12		144	0	
209	INFILTRATION DRIPPER JOINT	11	02	144	0	
237	SURFACE DAMAGE MISSING WALL	11			0	
239	INFILTRATION DRIPPER BARREL	02		144	0	
266	INFILTRATION DRIPPER JOINT	12		144	0	
310	INFILTRATION DRIPPER BARREL	10		144	0	
315	INFILTRATION DRIPPER JOINT	12		144	0	
323	INFILTRATION DRIPPER JOINT	12		144	0	
331	INFILTRATION DRIPPER JOINT	02		144	0	
339	INFILTRATION DRIPPER JOINT	12		144	0	
349	INFILTRATION DRIPPER JOINT	12		144	0	
356	INFILTRATION DRIPPER JOINT	03		144	0	
372	INFILTRATION STAIN JOINT	08	04	0	0	F02

380	INFILTRATION STAIN BARREL	08	04	0	0	F03
382	MISCELLANEOUS WATER LEVEL			0	0	40%
396	SURFACE DAMAGE AGGREGATE PROJECTING	07	05	0	0	F01
399	ACCESS POINT MANHOLE	12		0	0	SMH1860

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02537	SMH1858	SMH1859	CP	18	400	211	8	75,456	1.48

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1858
000	MISCELLANEOUS WATER LEVEL			0	0	15%
009	SURFACE DAMAGE AGGREGATE PROJECTING	07	05	0	0	
025	INFILTRATION RUNNER JOINT	02		432	0	
050	INFILTRATION RUNNER JOINT	10		1,008	0	
062	INFILTRATION RUNNER BARREL	09		576	0	
062	INFILTRATION STAIN BARREL	09		0	0	
062	SURFACE DAMAGE MISSING WALL	09		0	0	
067	INFILTRATION RUNNER JOINT	08	10	432	0	
067	INFILTRATION STAIN JOINT	08	10	0	0	
070	SURFACE DAMAGE MISSING WALL	09		0	0	
074	INFILTRATION DRIPPER JOINT	12		144	0	
082	INFILTRATION DRIPPER JOINT	12		144	0	
086	INFILTRATION STAIN BARREL	08		0	0	
086	SURFACE DAMAGE MISSING WALL	08		0	0	
091	SURFACE DAMAGE MISSING WALL	04			0	
106	CRACK SPIRAL	10		0	0	
106	SURFACE DAMAGE MISSING WALL	09		0	0	
111	INFILTRATION STAIN BARREL	09		0	0	
111	SURFACE DAMAGE MISSING WALL	09		0	0	
115	INFILTRATION GUSHER JOINT	08		72,000	0	
115	INFILTRATION STAIN JOINT	03		0	0	
115	SURFACE DAMAGE MISSING WALL	03		0	0	
119	INFILTRATION DRIPPER CONNECTION	11		144	0	

119	TAP BREAK-IN/HAMMER INTRUDING	11		0	0	
126	INFILTRATION STAIN BARREL	03		0	0	
126	SURFACE DAMAGE MISSING WALL	08		0	0	
126	SURFACE DAMAGE MISSING WALL	03		0	0	
127	INFILTRATION STAIN JOINT	12		0	0	
153	INFILTRATION STAIN BARREL	09		0	0	
153	SURFACE DAMAGE MISSING WALL	08	11	0	0	
165	INFILTRATION STAIN BARREL	09		0	0	
165	SURFACE DAMAGE MISSING WALL	09		0	0	
168	INFILTRATION STAIN BARREL	09		0	0	
168	SURFACE DAMAGE MISSING WALL	09		0	0	
171	DEPOSITS ATTACHED ENCRUSTATION	08	12	0	0	5%
183	INFILTRATION STAIN BARREL	04		0	0	
188	INFILTRATION STAIN JOINT	08	04	0	0	
192	INFILTRATION STAIN BARREL	03		0	0	
192	SURFACE DAMAGE MISSING WALL	03		0	0	
196	INFILTRATION STAIN JOINT	08	04	0	0	
198	INFILTRATION STAIN BARREL	08		0	0	
198	SURFACE DAMAGE MISSING WALL	08		0	0	S01
203	INFILTRATION STAIN JOINT	08	04	0	0	
208	INFILTRATION RUNNER BARREL	03		288	0	
208	INFILTRATION STAIN BARREL	02	05	0	0	
211	INFILTRATION DRIPPER JOINT	02		288	0	
211	INFILTRATION STAIN JOINT	08	04	0	0	
211	MISCELLANEOUS SURVEY ABANDONED			0	0	REACHED PREVIOUS SURVEY
211	SURFACE DAMAGE MISSING WALL	08		0	0	F01

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02537	SMH1859	SMH1858	CP	18	400	189	8	1,584	1.52
Footage	Defect Code	Clock Position		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments				
		From	To							
000	ACCESS POINT MANHOLE			0	0	SMH1859				
000	INFILTRATION STAIN JOINT	04	12	0	0					

000	MISCELLANEOUS WATER LEVEL				0	0	20%
000	SURFACE DAMAGE AGGREGATE PROJECTING	08	04		0	0	S01
003	INFILTRATION STAIN BARREL	09			0	0	
003	SURFACE DAMAGE MISSING WALL	09			0	0	
007	DEPOSITS ATTACHED ENCRUSTATION	08	04		0	0	5%
010	SURFACE DAMAGE MISSING WALL	12	08		0	0	S02
031	INFILTRATION STAIN JOINT	08	04		0	0	S03
039	INFILTRATION RUNNER JOINT	03			288	0	
061	SURFACE DAMAGE MISSING WALL	12	08		0	0	F02
063	INFILTRATION DRIPPER JOINT	08			144	0	
102	INFILTRATION DRIPPER CONNECTION	10			144	0	
102	TAP BREAK-IN/HAMMER ACTIVITY	10			0	0	
104	SURFACE DAMAGE MISSING WALL	09	03		0	0	S04
120	SURFACE DAMAGE MISSING WALL	09	03		0	0	F04
126	SURFACE DAMAGE MISSING WALL	10	03		0	0	S05
135	SURFACE DAMAGE MISSING WALL	10	03		0	0	F05
161	INFILTRATION DRIPPER JOINT	12			144	0	
169	INFILTRATION DRIPPER JOINT	02			144	0	
174	INFILTRATION STAIN BARREL	08			0	0	
177	INFILTRATION RUNNER BARREL	09			720	0	
180	INFILTRATION STAIN BARREL	08	10		0	0	
186	INFILTRATION STAIN BARREL	08	09		0	0	
189	INFILTRATION STAIN JOINT	08	04		0	0	F03
189	MISCELLANEOUS SURVEY ABANDONED				0	0	OUT OF CABLE
189	SURFACE DAMAGE AGGREGATE PROJECTING	08	04		0	0	F01

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02858	SMH1860	SMH1861	CP	18	488	488	8	3,168	1.34

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1860
000	MISCELLANEOUS WATER LEVEL			0	0	30%
004	OBSTACLE/OBSTRUCTION ROCKS	06		0	0	5%, AT BOTTOM OF PIPE

007	INFILTRATION STAIN JOINT	09	02	0	0	
007	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	S01
015	INFILTRATION STAIN JOINT	08	04	0	0	S02
037	OBSTACLE/OBSTRUCTION ROCKS	06		0	0	10%, AT BOTTOM OF PIPE
056	INFILTRATION DRIPPER JOINT	12		144	0	
061	INFILTRATION STAIN BARREL	03		0	0	
077	INFILTRATION DRIPPER BARREL	12		144	0	
089	INFILTRATION DRIPPER BARREL	01		144	0	
089	INFILTRATION STAIN BARREL	01	04	0	0	
094	INFILTRATION STAIN BARREL	01	04	0	0	
105	INFILTRATION DRIPPER BARREL	12		144	0	
130	INFILTRATION DRIPPER JOINT	12		144	0	
146	OBSTACLE/OBSTRUCTION ROCKS	06		0	0	10%, AT BOTTOM OF PIPE
149	INFILTRATION STAIN BARREL	03	04		0	
153	INFILTRATION DRIPPER JOINT	11		144	0	
193	INFILTRATION DRIPPER JOINT	12		144	0	
231	MISCELLANEOUS WATER LEVEL			0	0	20%
255	MISCELLANEOUS WATER LEVEL			0	0	30%
280	SURFACE DAMAGE AGGREGATE MISSING	09		0	0	
291	INFILTRATION RUNNER JOINT	09		288	0	
307	INFILTRATION DRIPPER JOINT	12		144	0	
381	INFILTRATION RUNNER JOINT	03		1,008	0	
394	SURFACE DAMAGE SURFACE SPALLING	10		0	0	
408	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	
437	INFILTRATION DRIPPER JOINT	10		144	0	
446	INFILTRATION RUNNER JOINT	01		288	0	
453	MISCELLANEOUS WATER LEVEL			0	0	40%
470	INFILTRATION DRIPPER JOINT	12		144	0	
478	INFILTRATION DRIPPER JOINT	03		144	0	
478	INFILTRATION STAIN JOINT	08	04	0	0	F02
486	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	F01
488	ACCESS POINT MANHOLE			0	0	SMH1861

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02859	SMH1861	SMH1861A	CP	18	301	301	8	8,208	1.17
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH1861		
000	MISCELLANEOUS WATER LEVEL					0	0	30%		
003	SURFACE DAMAGE AGGREGATE PROJECTING		03	09		0	0	S01		
007	INFILTRATION DRIPPER JOINT		11			144	0			
007	INFILTRATION STAIN JOINT		08	04		0	0			
015	INFILTRATION DRIPPER JOINT		01			144	0			
015	INFILTRATION STAIN JOINT		08	04		0	0	S02		
023	INFILTRATION DRIPPER JOINT		12			144	0			
055	INFILTRATION DRIPPER JOINT		12			144	0			
059	INFILTRATION STAIN BARREL		08	10		0	0			
088	INFILTRATION RUNNER JOINT		09			288	0			
096	INFILTRATION RUNNER JOINT		09			576	0			
109	MISCELLANEOUS WATER LEVEL					0	0	40%		
137	INFILTRATION RUNNER JOINT		09			144	0			
140	SURFACE DAMAGE MISSING WALL		09			0	0			
145	INFILTRATION DRIPPER JOINT		09			144	0			
161	INFILTRATION DRIPPER JOINT		12			144	0			
170	INFILTRATION DRIPPER JOINT		10			144	0			
177	INFILTRATION DRIPPER BARREL		12			144	0			
177	INFILTRATION STAIN BARREL		12			0	0			
178	INFILTRATION GUSHER JOINT		12			5,760	0			
178	INFILTRATION STAIN JOINT		08	04		0	0	F02		
206	MISCELLANEOUS WATER LEVEL					0	0	30%		
218	INFILTRATION STAIN JOINT		09	03		0	0			
243	INFILTRATION STAIN JOINT		09	03		0	0			
251	INFILTRATION STAIN JOINT		08	12		0	0			
259	INFILTRATION DRIPPER JOINT		11	01		144	0			
259	INFILTRATION STAIN JOINT		09	02		0	0			

268	INFILTRATION STAIN JOINT	09	03	0	0	
276	INFILTRATION DRIPPER JOINT	11		144	0	
276	INFILTRATION STAIN JOINT	09	03	0	0	S03
292	INFILTRATION STAIN JOINT	09	03	0	0	F03
299	MISCELLANEOUS GENERAL OBSERVATION			0	0	MAJOR ROOTS IN MANHOLE SMH1861A AND INVERT
299	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	F01
301	ACCESS POINT MANHOLE			0	0	SMH1861A (UNKNOWN SMH 301 FT DS FROM SMH1861)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02861	SMH2941	SMH0067	CP	18	303	303	8	1,440	1.23

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1863A (BURIED SMH 193 FT DS FROM SMH1863)
000	MISCELLANEOUS WATER LEVEL			0	0	30%
004	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	S01
006	INFILTRATION STAIN JOINT	08	04	0	0	
022	INFILTRATION STAIN JOINT	08	12	0	0	
023	INFILTRATION DRIPPER JOINT	12		144	0	
027	SURFACE DAMAGE MISSING WALL	09		0	0	
031	INFILTRATION STAIN JOINT	12	03	0	0	
039	INFILTRATION STAIN JOINT	08	04	0	0	
047	INFILTRATION DRIPPER JOINT	01		144	0	
047	INFILTRATION STAIN JOINT	08	04	0	0	
064	INFILTRATION STAIN JOINT	09		0	0	
088	INFILTRATION STAIN JOINT	09	03	0	0	
113	INFILTRATION RUNNER JOINT	09		576	0	
121	INFILTRATION STAIN JOINT	08	12	0	0	
129	INFILTRATION STAIN JOINT	03		0	0	
137	INFILTRATION STAIN JOINT	09	03	0	0	
146	INFILTRATION STAIN JOINT	08		0	0	
153	INFILTRATION STAIN JOINT	12	04	0	0	
167	SURFACE DAMAGE SURFACE SPALLING	02		0	0	
176	MISCELLANEOUS WATER LEVEL			0	0	40%

187	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
187	INFILTRATION DRIPPER JOINT	10		144	0	
203	INFILTRATION STAIN JOINT	09		0	0	
244	MISCELLANEOUS WATER LEVEL			0	0	30%
251	INFILTRATION DRIPPER JOINT	12		144	0	
251	INFILTRATION STAIN JOINT	08	04	0	0	
273	INFILTRATION DRIPPER CONNECTION	12		288	0	
273	INFILTRATION STAIN JOINT	12	05	0	0	
273	TAP BREAK-IN/HAMMER	12		0	0	
281	MISCELLANEOUS WATER LEVEL			0	0	40%
300	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	F01
303	ACCESS POINT MANHOLE			0	0	SMH1863

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02856	SMH1863	SMH1862	CP	18	496	496	8	1,728	1.25

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1863
000	MISCELLANEOUS WATER LEVEL			0	0	30%
006	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	S01
014	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
014	INFILTRATION DRIPPER JOINT	12		144	0	
023	INFILTRATION STAIN JOINT	12	04	0	0	
031	INFILTRATION STAIN JOINT	08	04	0	0	
039	INFILTRATION STAIN JOINT	03		0	0	
039	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	F01
047	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	S02
064	INFILTRATION STAIN JOINT	10		0	0	
072	INFILTRATION STAIN JOINT	11	04	0	0	
080	INFILTRATION DRIPPER CONNECTION	01		144	0	
080	INFILTRATION STAIN CONNECTION	08	04	0	0	
080	TAP BREAK-IN/HAMMER ACTIVITY	01		0	0	
085	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	10%

085	INFILTRATION DRIPPER CONNECTION	12		144	0	
085	TAP BREAK-IN/HAMMER ACTIVITY	12		0	0	
096	INFILTRATION STAIN JOINT	12		0	0	
099	MISCELLANEOUS WATER LEVEL			0	0	40%
110	MISCELLANEOUS WATER LEVEL			0	0	50%
120	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
129	INFILTRATION STAIN JOINT	11	01	0	0	
129	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	F02
161	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	S03
177	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	F03
185	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
185	INFILTRATION DRIPPER JOINT	10		144	0	
191	MISCELLANEOUS WATER LEVEL			0	0	60%
193	DEPOSITS ATTACHED ENCRUSTATION	09	11	0	0	10%
193	DEPOSITS ATTACHED ENCRUSTATION	09	03	0	0	15%
193	INFILTRATION DRIPPER JOINT	12		144	0	
193	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
210	INFILTRATION STAIN JOINT	10	04	0	0	
210	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
218	INFILTRATION DRIPPER JOINT	02		144	0	
218	INFILTRATION STAIN JOINT	12	04	0	0	
225	INFILTRATION DRIPPER JOINT	11		144	0	
225	INFILTRATION STAIN JOINT	09	03	0	0	
250	INFILTRATION STAIN JOINT	09	11	0	0	
251	INFILTRATION DRIPPER JOINT	11		144	0	
259	INFILTRATION DRIPPER JOINT	09		144	0	
259	INFILTRATION STAIN JOINT	09	12	0	0	
263	DEPOSITS ATTACHED ENCRUSTATION	12	04	0	0	10%
263	INFILTRATION DRIPPER CONNECTION	01		144	0	
263	TAP BREAK-IN/HAMMER ACTIVITY	01		0	0	
266	TAP BREAK-IN/HAMMER ACTIVITY			0	0	
291	INFILTRATION STAIN JOINT	03		0	0	
296	MISCELLANEOUS WATER LEVEL			0	0	50%

324	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
348	INFILTRATION DRIPPER JOINT	12		144	0	
364	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
369	INFILTRATION STAIN CONNECTION	09		0	0	
369	SURFACE DAMAGE AGGREGATE PROJECTING	08	10	0	0	
369	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
397	INFILTRATION STAIN JOINT	02	04	0	0	
397	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	S04
405	INFILTRATION STAIN JOINT	10	04	0	0	
432	MISCELLANEOUS WATER LEVEL			0	0	40%
448	DEPOSITS ATTACHED ENCRUSTATION	08	11	0	0	5%
448	INFILTRATION DRIPPER CONNECTION	10		144	0	
448	TAP BREAK-IN/HAMMER			0	0	
453	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	F04
486	INFILTRATION STAIN JOINT	08	04	0	0	
486	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
487	INFILTRATION STAIN CONNECTION	02		0	0	
487	SURFACE DAMAGE AGGREGATE PROJECTING	02		0	0	
487	TAP BREAK-IN/HAMMER INTRUDING	02		0	0	
493	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	F01
496	ACCESS POINT MANHOLE			0	0	SMH1862

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
EASTERN AVENUE	SP02862	SMH1863	SMH2941	CP	18	193	193	8	720	1.45

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1863
000	MISCELLANEOUS WATER LEVEL				0	40%
003	INFILTRATION STAIN JOINT	08	04	0	0	S02
003	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
012	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
020	SURFACE DAMAGE AGGREGATE PROJECTING	04	08	0	0	
028	INFILTRATION DRIPPER JOINT	11		144	0	

036	SURFACE DAMAGE AGGREGATE PROJECTING	04	08	0	0	
044	DEPOSITS ATTACHED ENCRUSTATION		04	0	0	5%
052	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
060	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	10%
068	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
077	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
077	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
085	INFILTRATION DRIPPER JOINT	12		144	0	
085	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
102	SURFACE DAMAGE AGGREGATE PROJECTING	04	08	0	0	
109	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	10%
110	SURFACE DAMAGE AGGREGATE PROJECTING	04	08	0	0	
118	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
118	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
125	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
133	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
134	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
143	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
151	SURFACE DAMAGE AGGREGATE PROJECTING	04	08	0	0	
158	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	10%
158	INFILTRATION DRIPPER JOINT	01		144	0	
163	MISCELLANEOUS WATER LEVEL			0	0	30%
174	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
182	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	30%
182	INFILTRATION DRIPPER JOINT	09	12	288	0	
183	INFILTRATION STAIN JOINT	08	04	0	0	F02
184	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
191	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	F01
193	ACCESS POINT MANHOLE			0	0	SMH1863A (BURIED SMH 193 FT DS FROM SMH1862)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
HIGHLAND STREET	SP00925	SMH2638	SMH0180	RCP	18	302	302	8	14,976	2.44
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH2638		
000	MISCELLANEOUS WATER LEVEL					0	0	40%		
003	SURFACE DAMAGE REINFORCEMENT VISIBLE		09	03		0	0	S01		
007	INFILTRATION STAIN JOINT		09	03		0	0			
007	INTRUDING SEALING MATERIAL SEALING RING		09	02			0			
008	INFILTRATION STAIN BARREL		03	09		0	0	S02		
010	MISCELLANEOUS WATER LEVEL					0	0	20%		
015	INFILTRATION RUNNER JOINT		09			432	0			
015	INFILTRATION STAIN JOINT		10				0			
015	INTRUDING SEALING MATERIAL SEALING RING		09	03		0	0			
022	INTRUDING SEALING MATERIAL SEALING RING		09	03			0			
023	INFILTRATION RUNNER JOINT		09			288	0			
023	SURFACE DAMAGE MISSING WALL		11			0	0			
031	INFILTRATION STAIN JOINT		09	03		0	0	S03		
031	INTRUDING SEALING MATERIAL SEALING RING		09	03		0	0			
032	OBSTACLE/OBSTRUCTION OTHER OBJECTS					0	0	5%, DEBRIS		
037	FRACTURE LONGITUDINAL		08			0	0			
039	INFILTRATION RUNNER JOINT		08			288	0			
039	INTRUDING SEALING MATERIAL SEALING RING		08	03		0	0			
044	CRACK SPIRAL		04			0	0			
048	INFILTRATION RUNNER JOINT		09			864	0			
055	FRACTURE LONGITUDINAL		10			0	0			
055	INTRUDING SEALING MATERIAL SEALING RING		11			0	0			
055	OBSTACLE/OBSTRUCTION OTHER OBJECTS		09			0	0	20%, DEBRIS HANGING FROM SEALING RING		
063	FRACTURE CIRCUMFERENTIAL		10	12		0	0			
069	FRACTURE LONGITUDINAL		09			0	0			
069	SURFACE DAMAGE AGGREGATE MISSING		10			0	0			
075	SURFACE DAMAGE MISSING WALL		12			0	0			

079	SURFACE DAMAGE AGGREGATE MISSING	10	12	0	0	
081	SURFACE DAMAGE AGGREGATE MISSING	02	04	0	0	
088	SURFACE DAMAGE AGGREGATE MISSING	12		0	0	
090	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
097	SURFACE DAMAGE SURFACE SPALLING	11	12	0	0	
104	INFILTRATION RUNNER JOINT	09		432	0	
104	SURFACE DAMAGE AGGREGATE MISSING	10	02	0	0	S04
112	SURFACE DAMAGE AGGREGATE MISSING	10	02	0	0	F04
114	SURFACE DAMAGE SURFACE SPALLING	01		0	0	
118	SURFACE DAMAGE SURFACE SPALLING	11		0	0	
125	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
129	SURFACE DAMAGE AGGREGATE MISSING	10		0	0	
131	MISCELLANEOUS WATER LEVEL			0	0	15%
131	SURFACE DAMAGE MISSING WALL	11		0	0	
132	MISCELLANEOUS WATER LEVEL			0	0	30%
132	SURFACE DAMAGE MISSING WALL	11		0	0	
132	SURFACE DAMAGE SURFACE SPALLING	10		0	0	
139	SURFACE DAMAGE AGGREGATE MISSING	09	11	0	0	
147	SURFACE DAMAGE MISSING WALL	09		0	0	
150	MISCELLANEOUS WATER LEVEL			0	0	60%
158	INFILTRATION DRIPPER BARREL	09		144	0	
162	SURFACE DAMAGE MISSING WALL	04		0	0	
166	SURFACE DAMAGE MISSING WALL	04		0	0	
169	INTRUDING SEALING MATERIAL SEALING RING	01		0	0	
182	FRACTURE LONGITUDINAL	04		0	0	
182	INFILTRATION RUNNER JOINT	04		576	0	
187	MISCELLANEOUS WATER LEVEL			0	0	20%
192	SURFACE DAMAGE AGGREGATE MISSING	01	03	0	0	
202	INFILTRATION GUSHER JOINT	09	03	5,760	0	
209	INFILTRATION RUNNER JOINT	03		1,008	0	
209	INTRUDING SEALING MATERIAL SEALING RING	01	04	0	0	
209	MISCELLANEOUS GENERAL OBSERVATION	03		0	0	DEBRIS ON SEALING RING; 5%
217	INTRUDING SEALING MATERIAL SEALING RING	08	04	0	0	

217	INTRUDING SEALING MATERIAL SEALING RING	08	04	0	0	DEBRIS ON SEALING RING; 10%
221	SURFACE DAMAGE MISSING WALL	09		0	0	
234	INFILTRATION RUNNER JOINT	03		2,880	0	
242	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	
246	INFILTRATION DRIPPER BARREL	12		144	0	
248	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
250	INTRUDING SEALING MATERIAL SEALING RING	09		0	0	
258	INFILTRATION RUNNER JOINT	03		720	0	
261	SURFACE DAMAGE AGGREGATE MISSING	12		0	0	
265	SURFACE DAMAGE MISSING WALL	12		0	0	
266	INFILTRATION RUNNER JOINT	03		1,440	0	
266	INFILTRATION STAIN JOINT	09	03	0	0	F03
266	INTRUDING SEALING MATERIAL SEALING RING	04		0	0	
272	CRACK LONGITUDINAL	08		0	0	
275	INFILTRATION STAIN BARREL	03	09	0	0	F02
275	INTRUDING SEAL MATERIAL SEALING LOOSE, PO12		03	0	0	
275	MISCELLANEOUS MATERIAL CHANGE			0	0	PVC 18 INCH; SPOT REPAIR
275	SURFACE DAMAGE REINFORCEMENT VISIBLE	09	03	0	0	F01
302	ACCESS POINT MANHOLE			0	0	SMH0180

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
HIGHLAND STREET	SP01947	SMH2638	SMH0304	CP	18	378	378	8	9,216	1.84

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH2638
000	MISCELLANEOUS WATER LEVEL			0	0	20%
003	INFILTRATION STAIN BARREL	09	03	0	0	S02
003	SURFACE DAMAGE REINFORCEMENT VISIBLE	08	04	0	0	S01
009	OBSTACLE/OBSTRUCTION ROCKS	06		0	0	10%, AT BOTTOM OF PIPE
010	FRACTURE LONGITUDINAL	08		0	0	
011	INFILTRATION STAIN JOINT	09	03	0	0	S03
015	SURFACE DAMAGE MISSING WALL	09		0	0	
019	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%

022	SURFACE DAMAGE MISSING WALL	03		0	0	
023	CRACK LONGITUDINAL	01		0	0	
042	SURFACE DAMAGE MISSING WALL	11		0	0	
051	INFILTRATION RUNNER JOINT	02		288	0	
054	DEPOSITS SETTLED GRAVEL	06		0	0	
054	SURFACE DAMAGE MISSING WALL	01		0	0	
059	INFILTRATION DRIPPER JOINT	12		144	0	
067	INFILTRATION STAIN BARREL	09	03	0	0	F02
075	INFILTRATION RUNNER JOINT	11		432	0	
082	INFILTRATION DRIPPER CONNECTION	11		144	0	
082	TAP BREAK-IN/HAMMER ACTIVITY	11		0	0	
083	INFILTRATION RUNNER JOINT	01		1,440	0	
086	INFILTRATION STAIN BARREL	09		0	0	
092	INFILTRATION RUNNER JOINT	03		288	0	
116	INFILTRATION DRIPPER JOINT	12		144	0	
121	OBSTACLE/OBSTRUCTION OTHER OBJECTS	04		0	0	5%, DEBRIS ON WALL
124	INFILTRATION RUNNER JOINT	09		432	0	
136	SURFACE DAMAGE MISSING WALL	09		0	0	
137	INFILTRATION STAIN BARREL	09		0	0	
140	FRACTURE SPIRAL	10		0	0	
150	FRACTURE MULTIPLE	12		0	0	
154	INFILTRATION STAIN BARREL	03		0	0	
156	INFILTRATION RUNNER JOINT	03		288	0	
161	INFILTRATION STAIN BARREL	03		0	0	
168	INFILTRATION STAIN BARREL	03	09	0	0	S04
180	INFILTRATION STAIN BARREL	03	09	0	0	F04
181	INFILTRATION RUNNER JOINT	09		576	0	
183	INFILTRATION STAIN BARREL	03		0	0	
187	INFILTRATION STAIN BARREL	03		0	0	
194	INFILTRATION DRIPPER JOINT	11		144	0	
194	SURFACE DAMAGE SURFACE SPALLING	11		0	0	
206	INFILTRATION STAIN BARREL	03	09	0	0	
209	INFILTRATION STAIN BARREL	10		0	0	

244	INFILTRATION RUNNER JOINT	09	03	4,320	0	
247	SURFACE DAMAGE MISSING WALL	03		0	0	
250	INFILTRATION DRIPPER BARREL	11		144	0	
250	INFILTRATION STAIN BARREL	10		0	0	
266	SURFACE DAMAGE MISSING WALL	12		0	0	
283	SURFACE DAMAGE MISSING WALL	10		0	0	
289	INFILTRATION DRIPPER CONNECTION	11		144	0	
289	INFILTRATION RUNNER CONNECTION	09		288	0	
289	TAP BREAK-IN/HAMMER ACTIVITY	11		0	0	
293	INFILTRATION STAIN BARREL	09		0	0	
306	INFILTRATION STAIN BARREL	09		0	0	
327	SURFACE DAMAGE MISSING WALL	09		0	0	
331	INFILTRATION STAIN BARREL	04		0	0	
335	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
339	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
351	SURFACE DAMAGE SURFACE SPALLING	10		0	0	
369	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	
370	INFILTRATION STAIN BARREL	03		0	0	
375	SURFACE DAMAGE REINFORCEMENT VISIBLE	08	04	0	0	F01
377	INFILTRATION STAIN JOINT	09	03	0	0	F03
378	ACCESS POINT MANHOLE			0	0	SMH0304

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00690	SMH0125	SMH0124	VCP	8	285	164	3	0	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0125
000	MISCELLANEOUS WATER LEVEL			0	0	10%
001	CRACK LONGITUDINAL	09		0	0	
001	TAP BREAK-IN/HAMMER	11		0	0	
053	CRACK LONGITUDINAL	12		0	0	
056	TAP BREAK-IN/HAMMER			0	0	
100	OBSTRUCTION WEDGED IN JOINT	11		0	0	5%, MAY BE A TREE LIMB OR PIPE

123	TAP BREAK-IN/HAMMER ACTIVITY	02	0	0
140	CRACK LONGITUDINAL	03	0	0
147	FRACTURE MULTIPLE	11	0	0
151	MISCELLANEOUS WATER LEVEL		0	0 20%
158	TAP BREAK-IN/HAMMER ACTIVITY	10	0	0
161	MISCELLANEOUS WATER LEVEL		0	0 30%
163	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06	0	0 20%, CANNOT IDENTIFY OBJECT
164	MISCELLANEOUS SURVEY ABANDONED		0	0 PIPE NEEDS TO BE CLEANED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00689	SMH0126	SMH0125	VCP	8	122	122	3	0	1.38

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0126
000	MISCELLANEOUS WATER LEVEL			0	0	10%
009	CRACK LONGITUDINAL	12		0	0	
017	SURFACE DAMAGE AGGREGATE MISSING	17		0	0	
019	FRACTURE SPIRAL	10	03	0	0	
021	BROKEN	05		0	0	
055	CRACK LONGITUDINAL	12		0	0	
058	FRACTURE LONGITUDINAL	03		0	0	
060	CRACK LONGITUDINAL	09		0	0	
061	ROOTS TAP JOINT	04		0	0	5%
067	CRACK LONGITUDINAL	11		0	0	
077	CRACK LONGITUDINAL	10		0	0	
077	JOINT OFFSET SMALL (DISPLACED)	12	12	0	0	
080	CRACK LONGITUDINAL	09		0	0	
087	JOINT OFFSET SMALL (DISPLACED)	12	12	0	0	
091	CRACK LONGITUDINAL	09		0	0	
111	CRACK MULTIPLE	12	06	0	0	
113	SURFACE DAMAGE AGGREGATE MISSING	09		0	0	
122	ACCESS POINT MANHOLE			0	0	SMH0125

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00688	SMH0126	SMH0127	VCP	8	226	226	3	0	1.6
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0126		
000	MISCELLANEOUS GENERAL OBSERVATION					0	0	FIRST 3 FEET PVC 8 INCH		
000	MISCELLANEOUS WATER LEVEL					0	0	10%		
040	TAP BREAK-IN/HAMMER		02			0	0			
094	SURFACE DAMAGE AGGREGATE MISSING		03			0	0			
109	INFILTRATION STAIN JOINT		12			0	0			
134	TAP BREAK-IN/HAMMER		11			0	0			
145	FRACTURE SPIRAL		03	05		0	0			
145	FRACTURE SPIRAL		04	06		0	0			
200	TAP BREAK-IN/HAMMER ACTIVITY		02			0	0			
209	OBSTACLE/OBSTRUCTION OTHER OBJECTS		06			0	0	15%, DEBRIS IN MIDDLE OF PIPE		
210	TAP BREAK-IN/HAMMER		10			0	0			
211	MISCELLANEOUS WATER LEVEL					0	0	20%		
220	MISCELLANEOUS WATER LEVEL					0	0	10%		
226	ACCESS POINT MANHOLE					0	0	SMH0127		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00687	SMH0127	SMH0128	VCP	8	382	2	3	0	2.67
Footage	Defect Code		Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments			
	000	ACCESS POINT MANHOLE			0	0	SMH0127			
	000	HOLE VOID VISIBLE	06		0	0				
	000	MISCELLANEOUS WATER LEVEL			0	0	10%			
	001	FRACTURE MULTIPLE	07	05	0	0				
	001	TAP BREAK-IN/HAMMER CAPPED	10		0	0				
	002	MISCELLANEOUS SURVEY ABANDONED			0	0	CANNOT PASS HOLE			
	002	OBSTACLE/OBSTRUCTION OTHER OBJECTS			0	0	40%, DEBRIS IN MIDDLE OF PIPE			

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00687	SMH0128	SMH0127	AC	8	382	361	4	144	1.03
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0128		
000	MISCELLANEOUS WATER LEVEL					0	0	5%		
046	OBSTACLE/OBSTRUCTION OTHER OBJECTS		06			0	0	5%, UNKNOWN DEBRIS		
062	DEPOSITS ATTACHED ENCRUSTATION		03			144	0	5%		
062	TAP BREAK-IN/HAMMER		03			0	0			
073	TAP BREAK-IN/HAMMER ACTIVITY		09			0	0			
106	MISCELLANEOUS WATER LEVEL					0	0	20%		
147	MISCELLANEOUS WATER LEVEL					0	0	5%		
212	INFILTRATION STAIN JOINT		10			0	0			
213	DEPOSITS ATTACHED ENCRUSTATION		08	10		0	0	5%		
213	HOLE		10			0	0	HOLE IS ABOVE SERVICE		
213	MISCELLANEOUS MATERIAL CHANGE					0	0	VCP 8 INCH		
213	TAP BREAK-IN/HAMMER ACTIVITY		10			0	0			
215	DEPOSITS ATTACHED ENCRUSTATION		07	04		0	0	5%		
216	DEPOSITS ATTACHED ENCRUSTATION		07	05		0	0	5%		
218	DEPOSITS ATTACHED ENCRUSTATION		09	01		0	0	5%		
220	DEPOSITS ATTACHED ENCRUSTATION		04	08		0	0	5%		
223	CRACK LONGITUDINAL		03			0	0			
223	DEPOSITS ATTACHED ENCRUSTATION		04	08		0	0	5%		
223	TAP BREAK-IN/HAMMER		02			0	0			
225	DEPOSITS ATTACHED ENCRUSTATION		07	12		0	0	5%		
227	INFILTRATION STAIN JOINT		07	09		0	0			
229	INFILTRATION STAIN JOINT		09			0	0	S01		
245	INFILTRATION STAIN JOINT		09			0	0	F01		
246	INFILTRATION STAIN JOINT		09			0	0			
271	INFILTRATION STAIN JOINT		07	12		0	0			
273	MISCELLANEOUS WATER LEVEL					0	0	15%		
275	CRACK LONGITUDINAL		03			0	0			

276	INFILTRATION STAIN JOINT	01	03	0	0	
290	MISCELLANEOUS WATER LEVEL			0	0	25%
292	INFILTRATION STAIN JOINT	03	12	0	0	
294	INFILTRATION STAIN JOINT	04	08	0	0	
296	TAP SADDLE	09		0	0	
321	INFILTRATION STAIN JOINT	04	09	0	0	
324	INFILTRATION STAIN JOINT	03	12	0	0	
327	INFILTRATION STAIN JOINT	03		0	0	
335	MISCELLANEOUS WATER LEVEL			0	0	35%
337	INFILTRATION STAIN JOINT	04	08	0	0	
340	INFILTRATION STAIN JOINT	03	12	0	0	
342	INFILTRATION STAIN JOINT	03	09	0	0	
345	INFILTRATION STAIN BARREL	11		0	0	
350	MISCELLANEOUS WATER LEVEL			0	0	50%
351	INFILTRATION STAIN JOINT	03		0	0	
355	DEPOSITS ATTACHED ENCRUSTATION	02	12	0	0	5%
361	MISCELLANEOUS SURVEY ABANDONED			0	0	PIPE NEEDS TO BE CLEANED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00686	SMH0128	SMH0129	AC	8	583	38	4	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0128
000	MISCELLANEOUS WATER LEVEL			0	0	10%
007	INFILTRATION STAIN JOINT	03		0	0	
007	MISCELLANEOUS MATERIAL CHANGE			0	0	AC 6 INCH
026	JOINT OFFSET MEDIUM	03	09	0	0	
026	LINE RIGHT			0	0	25%
026	MISCELLANEOUS MATERIAL CHANGE			0	0	PVC 6 INCH
033	MISCELLANEOUS WATER LEVEL			0	0	25%
036	MISCELLANEOUS WATER LEVEL			0	0	5%
038	DEFORMED FLEXIBLE ELLIPTICAL	12		0	0	
038	MISCELLANEOUS SURVEY ABANDONED			0	0	CANNOT PASS DEFORMED PIPE

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP01116	SMH0112	SMH0895	VCP	10	249	249	3	144	1.25
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0112		
000	MISCELLANEOUS WATER LEVEL					0	0	25%		
006	DEPOSITS ATTACHED ENCRUSTATION		03	09		0	0	5%		
008	INFILTRATION STAIN JOINT		08			0	0			
010	DEPOSITS ATTACHED ENCRUSTATION		08			0	0	5%		
014	DEPOSITS ATTACHED ENCRUSTATION		02	04		0	0	5%		
017	DEPOSITS ATTACHED ENCRUSTATION		08			0	0	5%		
019	DEPOSITS ATTACHED ENCRUSTATION		08			0	0	5%		
022	INFILTRATION STAIN JOINT		07	12		0	0			
022	OBSTRUCTION PIPE MATERIAL IN INVERT		06			0	0	5%, LOOSE PIPE SEGMENT		
042	JOINT OFFSET SMALL (DISPLACED)		09	05		0	0			
043	FRACTURE LONGITUDINAL		09			0	0	FRACTURE CONNECTED TO TAP		
043	TAP BREAK-IN/HAMMER ACTIVITY		09			0	0			
045	JOINT OFFSET SMALL (DISPLACED)		10	05		0	0			
054	JOINT OFFSET SMALL (DISPLACED)		11	08		0	0			
079	FRACTURE SPIRAL		07	09		0	0			
134	FRACTURE SPIRAL		02	04		0	0			
134	ROOTS FINE JOINT		03	05		0	0			
137	ROOTS FINE JOINT		12			0	0			
147	ROOTS FINE JOINT		11	03		0	0			
150	TAP BREAK-IN/HAMMER ACTIVITY		10			0	0			
158	ROOTS MEDIUM JOINT		09	05		0	0	10%		
161	ROOTS MEDIUM JOINT		12	03		0	0	10%		
162	LINE DOWN		12				0			
192	DEPOSITS ATTACHED ENCRUSTATION		01	04		0	0	5%		
192	FRACTURE SPIRAL		09	08		0	0			
197	MISCELLANEOUS WATER LEVEL					0	0	15%		
203	TAP BREAK-IN/HAMMER		02			0	0			

203	TAP BREAK-IN/HAMMER	10		0	0	
207	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	
215	SURFACE DAMAGE SURFACE SPALLING	04		0	0	
217	SURFACE DAMAGE SURFACE SPALLING	04	08	0	0	
219	SURFACE DAMAGE SURFACE SPALLING	08	04	0	0	
221	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
224	SURFACE DAMAGE SURFACE SPALLING	04	08	0	0	
225	INFILTRATION DRIPPER JOINT	03		144	0	
228	SURFACE DAMAGE SURFACE SPALLING	08		0	0	
229	SURFACE DAMAGE SURFACE SPALLING	04		0	0	
231	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
234	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
236	SURFACE DAMAGE SURFACE SPALLING	04	08	0	0	
237	BROKEN	09		0	0	SMALL PIECE BROKEN OFF AT JOINT
237	SURFACE DAMAGE SURFACE SPALLING	04	08	0	0	
238	SURFACE DAMAGE SURFACE SPALLING	09	12	0	0	
239	SURFACE DAMAGE SURFACE SPALLING	08	03	0	0	
242	SURFACE DAMAGE SURFACE SPALLING	04	08	0	0	
247	SURFACE DAMAGE SURFACE SPALLING	08		0	0	
249	ACCESS POINT MANHOLE			0	0	SMH0895

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP02530	SMH0112	SMH2805	VCP	10	49	49	3	144	1.16

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0112
000	MISCELLANEOUS WATER LEVEL			0	0	20%
006	INFILTRATION STAIN JOINT	03	09	0	0	
006	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	S01
009	JOINT OFFSET SMALL (DISPLACED)	03	09	0	0	
012	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
013	INFILTRATION STAIN BARREL	04		0	0	
015	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%

017	DEPOSITS ATTACHED ENCRUSTATION	10		0	0	ON THE TAP BREAK IN; 10%
017	INFILTRATION DRIPPER CONNECTION	09		144	0	
017	TAP FACTORY	10		0	0	
022	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
025	INFILTRATION STAIN JOINT	03	09	0	0	
035	CRACK CIRCUMFERENTIAL	09		0	0	
038	DEPOSITS ATTACHED ENCRUSTATION	38		0	0	5%
041	JOINT OFFSET SMALL (DISPLACED)	09	05	0	0	
044	INFILTRATION STAIN JOINT	05	12	0	0	
045	FRACTURE LONGITUDINAL	09		0	0	
046	INFILTRATION STAIN BARREL	08		0	0	
047	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	5%
047	FRACTURE LONGITUDINAL	04		0	0	
047	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	F01
049	ACCESS POINT MANHOLE			0	0	SMH2805

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP01114	SMH0113	SMH1368	VCP	10	298	298	3	288	1.04

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0113
000	MISCELLANEOUS WATER LEVEL			0	0	15%
004	SURFACE DAMAGE SURFACE SPALLING	05	07	0	0	S01
005	INFILTRATION STAIN JOINT	03		0	0	
008	INFILTRATION STAIN JOINT	04	08	0	0	
009	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%
009	HOLE	09		0	0	
011	INFILTRATION STAIN JOINT	04	08	0	0	
017	INFILTRATION STAIN JOINT	04	08	0	0	
020	DEPOSITS ATTACHED ENCRUSTATION	08	12	0	0	5%
023	INFILTRATION DRIPPER JOINT	12		144	0	
023	INFILTRATION STAIN JOINT	08	04	0	0	
023	SURFACE DAMAGE SURFACE SPALLING	05	07	0	0	F01

025	SURFACE DAMAGE SURFACE SPALLING	05	07	0	0	S02
026	DEPOSITS ATTACHED ENCRUSTATION	03	10	0	0	5%
026	INFILTRATION DRIPPER JOINT	02		144	0	
029	SURFACE DAMAGE SURFACE SPALLING	05	07	0	0	F02
031	SURFACE DAMAGE SURFACE SPALLING	05		0	0	
032	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
034	SURFACE DAMAGE SURFACE SPALLING	08		0	0	
035	INFILTRATION STAIN JOINT	07	05	0	0	
037	SURFACE DAMAGE SURFACE SPALLING	07	05	0	0	S03
039	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
041	INFILTRATION STAIN JOINT	08	04	0	0	
044	SURFACE DAMAGE SURFACE SPALLING	07	05	0	0	F03
045	DEPOSITS ATTACHED ENCRUSTATION	12		0	0	5%
046	SURFACE DAMAGE SURFACE SPALLING	04		0	0	
051	INFILTRATION STAIN JOINT	05	12	0	0	
057	DEPOSITS ATTACHED ENCRUSTATION	07	12	0	0	10%
057	SURFACE DAMAGE SURFACE SPALLING	11		0	0	
058	SURFACE DAMAGE SURFACE SPALLING	10		0	0	
060	INFILTRATION STAIN JOINT	09	03	0	0	
060	SURFACE DAMAGE SURFACE SPALLING	11	04	0	0	
063	SURFACE DAMAGE SURFACE SPALLING	11	03	0	0	
066	INFILTRATION STAIN JOINT	10	02	0	0	
068	SURFACE DAMAGE SURFACE SPALLING	11		0	0	
069	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
072	INFILTRATION STAIN JOINT	04	08	0	0	
073	SURFACE DAMAGE SURFACE SPALLING	11	03	0	0	
075	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	5%
076	SURFACE DAMAGE SURFACE SPALLING	10	02	0	0	S04
084	SURFACE DAMAGE SURFACE SPALLING	10	02	0	0	F04
087	INFILTRATION STAIN JOINT	03	09	0	0	
088	SURFACE DAMAGE SURFACE SPALLING	08		0	0	
090	INFILTRATION STAIN JOINT	03	09	0	0	
090	SURFACE DAMAGE SURFACE SPALLING	11		0	0	

091	SURFACE DAMAGE SURFACE SPALLING	08	04	0	0	S05
100	INFILTRATION STAIN JOINT	03	09	0	0	
100	SURFACE DAMAGE ROUGHNESS INCREASED	08	04	0	0	F05
105	SURFACE DAMAGE SURFACE SPALLING	08		0	0	
106	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
106	TAP BREAK-IN/HAMMER DEFECTIVE	09		0	0	SERVICE DOES NOT CONNECT TO MAIN, VOID ABOVE S
108	SURFACE DAMAGE SURFACE SPALLING	09	01	0	0	S06
117	SURFACE DAMAGE AGGREGATE VISIBLE	08		0	0	
124	SURFACE DAMAGE AGGREGATE VISIBLE	08		0	0	
127	SURFACE DAMAGE AGGREGATE VISIBLE	04		0	0	
132	SURFACE DAMAGE SURFACE SPALLING	09	01	0	0	F06
134	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
136	SURFACE DAMAGE AGGREGATE VISIBLE	08		0	0	
136	SURFACE DAMAGE SURFACE SPALLING	08		0	0	
139	SURFACE DAMAGE SURFACE SPALLING	01	04	0	0	
142	INFILTRATION STAIN JOINT	05	08	0	0	
144	SURFACE DAMAGE SURFACE SPALLING	04		0	0	
145	INFILTRATION STAIN JOINT	05	08	0	0	
151	INFILTRATION STAIN JOINT	05	07	0	0	
154	INFILTRATION STAIN JOINT	05	12	0	0	
154	SURFACE DAMAGE SURFACE SPALLING	12	04	0	0	
157	INFILTRATION STAIN JOINT	05	07	0	0	
173	INFILTRATION STAIN JOINT	08		0	0	
176	INFILTRATION STAIN JOINT	05	07	0	0	
176	SURFACE DAMAGE SURFACE SPALLING	12	04	0	0	
185	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
185	LINE UP	06		0	0	
191	INFILTRATION STAIN JOINT	07	05	0	0	
192	SURFACE DAMAGE SURFACE SPALLING	04		0	0	
195	INFILTRATION STAIN JOINT	07		0	0	
197	INFILTRATION STAIN JOINT	07		0	0	
200	INFILTRATION STAIN JOINT	07		0	0	
200	SURFACE DAMAGE SURFACE SPALLING	12	04	0	0	

219	SURFACE DAMAGE SURFACE SPALLING	04		0	0
225	INFILTRATION STAIN JOINT	07		0	0
239	SURFACE DAMAGE SURFACE SPALLING	04		0	0
258	INFILTRATION STAIN JOINT	07		0	0
258	JOINT OFFSET SMALL (DISPLACED)	11	04	0	0
260	LINE UP	12		0	0
262	SURFACE DAMAGE SURFACE SPALLING	12		0	0
264	JOINT OFFSET SMALL (DISPLACED)	09	05	0	0
266	TAP FACTORY	09		0	0
272	JOINT OFFSET SMALL (DISPLACED)	12		0	0
276	FRACTURE MULTIPLE	03		0	0
279	SURFACE DAMAGE SURFACE SPALLING	09		0	0
291	SURFACE DAMAGE SURFACE SPALLING	09		0	0
292	TAP FACTORY CAPPED	03		0	0
293	SURFACE DAMAGE SURFACE SPALLING	05	07	0	0
295	SURFACE DAMAGE SURFACE SPALLING	04		0	0
298	ACCESS POINT MANHOLE			0	0 SMH1368

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP01115	SMH0113	SMH2805	VCP	10	246	246	3	720	1.16

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0113
000	MISCELLANEOUS WATER LEVEL			0	0	15%
006	SURFACE DAMAGE SURFACE SPALLING	05	07	0	0	S01
009	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
012	DEPOSITS ATTACHED ENCRUSTATION	07	11	0	0	5%
012	INFILTRATION DRIPPER JOINT	09		144	0	
018	DEPOSITS ATTACHED ENCRUSTATION	01	05	0	0	5%
018	INFILTRATION DRIPPER JOINT	03		144	0	
021	DEPOSITS ATTACHED ENCRUSTATION	05	12	0	0	5%
024	INFILTRATION STAIN JOINT	08		0	0	
028	INFILTRATION STAIN JOINT	08	04	0	0	

031	INFILTRATION STAIN JOINT	08	04	0	0	
033	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
037	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
041	FRACTURE MULTIPLE	11		0	0	
042	DEPOSITS ATTACHED ENCRUSTATION	11	07	0	0	5%
043	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
046	INFILTRATION STAIN JOINT	05	02	0	0	
048	DEPOSITS ATTACHED ENCRUSTATION	07	10	0	0	5%
057	INFILTRATION STAIN JOINT	07	05	0	0	
060	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
063	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
066	DEPOSITS ATTACHED ENCRUSTATION	05	12	0	0	5%
069	DEPOSITS ATTACHED ENCRUSTATION	07	09	0	0	5%
073	DEPOSITS ATTACHED ENCRUSTATION	07	09	0	0	5%
075	DEPOSITS ATTACHED ENCRUSTATION	07	09	0	0	5%
078	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
081	INFILTRATION STAIN JOINT	08	04	0	0	
084	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
093	DEPOSITS ATTACHED ENCRUSTATION	05	03	0	0	5%
096	INFILTRATION STAIN JOINT	08	10	0	0	
099	DEPOSITS ATTACHED ENCRUSTATION	05	03	0	0	5%
102	INFILTRATION STAIN JOINT	05		0	0	
108	DEPOSITS ATTACHED ENCRUSTATION	08	11	0	0	5%
108	INFILTRATION STAIN JOINT	07	12	0	0	
112	DEPOSITS ATTACHED ENCRUSTATION	07	09	0	0	5%
115	INFILTRATION STAIN JOINT	07	05	0	0	
118	INFILTRATION DRIPPER JOINT	12		144	0	
118	INFILTRATION STAIN JOINT	09	12	0	0	
121	INFILTRATION STAIN JOINT	09	12	0	0	
127	INFILTRATION STAIN JOINT	08	04	0	0	
133	INFILTRATION STAIN JOINT	04		0	0	
142	DEPOSITS ATTACHED ENCRUSTATION	04	12	0	0	5%
145	INFILTRATION STAIN JOINT	04	08	0	0	

148	INFILTRATION STAIN JOINT	04	01	0	0	
156	INFILTRATION STAIN JOINT	04		0	0	
156	MISCELLANEOUS MATERIAL CHANGE			0	0	CAST 10 INCH
156	SURFACE DAMAGE CORROSION	07	05	0	0	S02
156	SURFACE DAMAGE SURFACE SPALLING	05	07	0	0	F01
172	MISCELLANEOUS MATERIAL CHANGE			0	0	VCP 10 INCH
172	SURFACE DAMAGE CORROSION	07	05	0	0	F02
172	SURFACE DAMAGE SURFACE SPALLING	08	04	0	0	S03
175	INFILTRATION DRIPPER JOINT	01		144	0	
175	INFILTRATION STAIN JOINT	04	08	0	0	
177	INFILTRATION STAIN JOINT	04	08	0	0	
180	INFILTRATION STAIN JOINT	04	08	0	0	
189	DEPOSITS ATTACHED ENCRUSTATION	04	12	0	0	5%
192	DEPOSITS ATTACHED ENCRUSTATION	10	07	0	0	10%
192	INFILTRATION DRIPPER JOINT	10		144	0	
196	INFILTRATION STAIN JOINT	10		0	0	
199	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
201	FRACTURE MULTIPLE	09		0	0	
202	DEPOSITS ATTACHED ENCRUSTATION	07	12	0	0	5%
208	INFILTRATION STAIN JOINT	07	12	0	0	
213	FRACTURE MULTIPLE	12		0	0	
217	FRACTURE MULTIPLE	01		0	0	
223	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
225	JOINT OFFSET SMALL (DISPLACED)	02	04	0	0	
235	INFILTRATION STAIN JOINT	07	12	0	0	
238	INFILTRATION STAIN JOINT	07	09	0	0	
241	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
244	INFILTRATION STAIN JOINT	04	08	0	0	
244	SURFACE DAMAGE SURFACE SPALLING	08	04	0	0	F03
246	ACCESS POINT MANHOLE			0	0	SMH2805

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP01113	SMH0114	SMH1368	VCP	10	298	298	3	5,760	1.61
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0114		
000	MISCELLANEOUS WATER LEVEL					0	0	15%		
028	SURFACE DAMAGE SURFACE SPALLING		07			0	0			
042	ROOTS FINE JOINT		04	08		0	0			
048	ROOTS FINE JOINT		04	08		0	0			
052	ROOTS FINE JOINT		04	08		0	0			
055	SURFACE DAMAGE SURFACE SPALLING		03			0	0			
057	ROOTS MEDIUM CONNECTION		02			0	0	20%		
057	TAP BREAK-IN/HAMMER					0	0			
058	ROOTS MEDIUM JOINT		09	03		0	0	20%		
061	ROOTS MEDIUM JOINT		09	03		0	0	50%		
062	ROOTS MEDIUM BARREL		03			0	0	20%		
063	ROOTS FINE JOINT		03	09		0	0			
065	ROOTS MEDIUM JOINT		07	12		0	0	10%		
067	ROOTS MEDIUM JOINT		07	05		0	0	10%		
080	TAP BREAK-IN/HAMMER ACTIVITY		10			0	0			
094	INFILTRATION STAIN JOINT		05			0	0			
110	SURFACE DAMAGE SURFACE SPALLING					0	0			
139	TAP BREAK-IN/HAMMER ACTIVITY		03			0	0			
142	SURFACE DAMAGE SURFACE SPALLING		09			0	0			
194	INFILTRATION STAIN JOINT		08			0	0			
206	SURFACE DAMAGE SURFACE SPALLING		09			0	0			
207	TAP BREAK-IN/HAMMER		03			0	0			
246	TAP FACTORY CAPPED		02			0	0			
262	JOINT OFFSET SMALL (DISPLACED)		03	09		0	0			
275	INFILTRATION RUNNER JOINT		03			4,320	0			
278	INFILTRATION RUNNER JOINT		03			432	0			
281	TAP BREAK-IN/HAMMER		01			0	0			

287	INFILTRATION RUNNER JOINT	08		288	0
290	INFILTRATION DRIPPER JOINT	08		144	0
293	INFILTRATION RUNNER JOINT	08	04	576	0
298	ACCESS POINT MANHOLE			0	0 SMH1368

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00315	SMH0115	SMH0114	VCP	10	312	312	3	288	1.24

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0115
000	MISCELLANEOUS WATER LEVEL			0	0	10%
008	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
011	HOLE	04		0	0	
013	DEPOSITS ATTACHED ENCRUSTATION	07	05	0	0	5%
013	INFILTRATION STAIN BARREL	10	02	0	0	
015	SURFACE DAMAGE SURFACE SPALLING	04		0	0	
033	CRACK MULTIPLE	09		0	0	COULD NOT SEE INSIDE, CCTV WENT PASSED IT
034	TAP FACTORY	03		0	0	
060	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
074	CRACK LONGITUDINAL	09		0	0	
085	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
135	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
145	INFILTRATION RUNNER JOINT	09		288	0	
147	CRACK LONGITUDINAL	03		0	0	
154	INFILTRATION STAIN JOINT	09		0	0	
160	INFILTRATION STAIN JOINT	08	04	0	0	
163	HOLE VOID VISIBLE	09		0	0	HOLE UNDER SERVICE CONNECTION
163	TAP BREAK-IN/HAMMER INTRUDING	09		0	0	
164	INFILTRATION STAIN JOINT	04		0	0	
168	INFILTRATION STAIN JOINT	04	08	0	0	
170	INFILTRATION STAIN JOINT	08		0	0	
173	TAP FACTORY CAPPED	09		0	0	
182	INFILTRATION STAIN JOINT	09		0	0	

184	INFILTRATION STAIN JOINT	04	08	0	0
185	TAP BREAK-IN/HAMMER			0	0
196	ROOTS FINE JOINT	12		0	0
198	ROOTS FINE JOINT	10	01	0	0
201	ROOTS FINE JOINT	09	12	0	0
203	SURFACE DAMAGE SURFACE SPALLING	09		0	0
204	ROOTS FINE JOINT	10	02	0	0
207	ROOTS FINE JOINT	12		0	0
211	ROOTS FINE JOINT	12		0	0
227	ROOTS FINE JOINT	12		0	0
231	ROOTS FINE JOINT	09	02	0	0
244	SURFACE DAMAGE SURFACE SPALLING	12		0	0
250	FRACTURE MULTIPLE	10		0	0
250	INFILTRATION STAIN BARREL	02		0	0
261	SURFACE DAMAGE SURFACE SPALLING	12		0	0
267	FRACTURE LONGITUDINAL	02		0	0
281	SURFACE DAMAGE SURFACE SPALLING	02		0	0
292	ROOTS FINE JOINT	12	02	0	0
301	TAP FACTORY ACTIVITY	03		0	0
312	ACCESS POINT MANHOLE			0	0

SMH0114

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00699	SMH0116	SMH0115	VCP	10	286	286	3	1,440	1.1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0116
000	MISCELLANEOUS WATER LEVEL			0	0	15%
002	INFILTRATION STAIN JOINT	04	08	0	0	S01
009	INFILTRATION RUNNER JOINT	08		1,008	0	
012	DEPOSITS SETTLED GRAVEL	06		0	0	15%
025	INFILTRATION STAIN BARREL	12		0	0	
035	INFILTRATION STAIN BARREL	12		0	0	
062	TAP BREAK-IN/HAMMER ACTIVITY	03		0	0	

064	INFILTRATION STAIN JOINT	08	04	0	0	F01
072	INFILTRATION STAIN JOINT	03		0	0	
074	INFILTRATION STAIN JOINT	04	08	0	0	
079	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	5%
082	INFILTRATION STAIN JOINT	03	09	0	0	
092	INFILTRATION STAIN JOINT	07		0	0	
102	DEPOSITS ATTACHED ENCRUSTATION	07	12	0	0	5%
133	CRACK MULTIPLE	09		0	0	
156	INFILTRATION RUNNER CONNECTION	03		288	0	
156	TAP BREAK-IN/HAMMER ACTIVITY	03		0	0	
162	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
175	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	5%
190	INFILTRATION DRIPPER CONNECTION	09		144	0	
190	TAP FACTORY	09		0	0	
205	CRACK MULTIPLE	04		0	0	
210	INFILTRATION STAIN JOINT	04	08	0	0	
232	JOINT OFFSET SMALL (DISPLACED)	10	03	0	0	
235	SURFACE DAMAGE SURFACE SPALLING	09		0	0	
250	INFILTRATION STAIN JOINT	09	12	0	0	
267	INFILTRATION STAIN JOINT	09	12	0	0	
270	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
272	INFILTRATION STAIN JOINT	04	08	0	0	
275	CRACK LONGITUDINAL	12	06	0	0	
275	INFILTRATION STAIN JOINT	07	12	0	0	
277	TAP BREAK-IN/HAMMER	02		0	0	
279	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
281	FRACTURE LONGITUDINAL	10		0	0	
286	ACCESS POINT MANHOLE			0	0	SMH0115

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00698	SMH0116	SMH0117	VCP	10	301	71	3	2,160	1.28
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0116		
000	MISCELLANEOUS WATER LEVEL					0	0	10%		
001	LINE UP					0	0			
002	INFILTRATION STAIN JOINT		08			0	0			
002	JOINT OFFSET SMALL (DISPLACED)		03	09		0	0	S01		
011	INFILTRATION STAIN JOINT		03	09		0	0			
011	JOINT OFFSET SMALL (DISPLACED)		03	09		0	0	F01		
015	INFILTRATION STAIN JOINT		03	09		0	0			
017	INFILTRATION STAIN JOINT		04	08		0	0	S02		
023	JOINT OFFSET SMALL (DISPLACED)		12			0	0			
038	INFILTRATION RUNNER JOINT		03			720	0			
042	INFILTRATION RUNNER JOINT		03			432	0			
044	INFILTRATION RUNNER JOINT		03			432	0			
050	INFILTRATION RUNNER JOINT		03			288	0			
054	JOINT OFFSET SMALL (DISPLACED)		12			0	0			
056	JOINT OFFSET SMALL (DISPLACED)		08	12		0	0			
060	JOINT OFFSET SMALL (DISPLACED)		12			0	0			
065	JOINT OFFSET SMALL (DISPLACED)		12			0	0			
067	JOINT OFFSET SMALL (DISPLACED)		12			0	0			
070	INFILTRATION RUNNER CONNECTION		03			288	0			
070	TAP BREAK-IN/HAMMER INTRUDING		03			0	0			
071	INFILTRATION STAIN JOINT		04	08		0	0	F02		
071	MISCELLANEOUS SURVEY ABANDONED					0	0	CANNOT PASS INTRUDING SERVICE		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00698	SMH0117	SMH0116	VCP	10	301	156	3	0	1.11
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0117		
000	MISCELLANEOUS WATER LEVEL					0	0	10%		
033	JOINT OFFSET SMALL (DISPLACED)		03	12		0	0			
036	DEPOSITS ATTACHED ENCRUSTATION		04			0	0	5%		
038	TAP BREAK-IN/HAMMER ACTIVITY		02			0	0			
053	DEPOSITS ATTACHED ENCRUSTATION		04	08		0	0	5%		
056	INFILTRATION STAIN BARREL		09			0	0			
057	INFILTRATION STAIN JOINT		03	09		0	0			
067	ROOTS FINE CONNECTION		02			0	0			
067	TAP BREAK-IN/HAMMER		02			0	0			
068	CRACK MULTIPLE		03			0	0			
070	ROOTS FINE CONNECTION		09			0	0			
070	TAP BREAK-IN/HAMMER ACTIVITY		09			0	0			
080	DEPOSITS ATTACHED ENCRUSTATION		03			0	0	5%		
084	DEPOSITS ATTACHED ENCRUSTATION		03			0	0	5%		
086	INFILTRATION STAIN JOINT		08			0	0			
093	CRACK MULTIPLE		08			0	0			
101	INFILTRATION STAIN JOINT		08			0	0			
104	DEPOSITS ATTACHED ENCRUSTATION		08			0	0	5%		
110	DEPOSITS ATTACHED ENCRUSTATION		08			0	0	5%		
123	MISCELLANEOUS WATER LEVEL					0	0	20%		
129	DEPOSITS ATTACHED ENCRUSTATION		08			0	0	5%		
134	INFILTRATION STAIN JOINT		07			0	0			
146	INFILTRATION STAIN JOINT		03	09		0	0			
153	SURFACE DAMAGE SURFACE SPALLING		09			0	0			
155	TAP BREAK-IN/HAMMER INTRUDING		09			0	0			
156	MISCELLANEOUS SURVEY ABANDONED					0	0	CANNOT PASS INTRUDING SERVICE		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00697	SMH0118	SMH0117	VCP	10	120	120	3	864	1.14

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0118
000	MISCELLANEOUS WATER LEVEL			0	0	15%
001	INFILTRATION DRIPPER JOINT	12		144	0	
002	INFILTRATION STAIN JOINT	04	08	0	0	S01
008	INFILTRATION DRIPPER JOINT	12		144	0	
016	INFILTRATION DRIPPER JOINT	12		144	0	
017	TAP BREAK-IN/HAMMER ACTIVITY	01		0	0	
022	INFILTRATION DRIPPER CONNECTION	10		144	0	
022	TAP BREAK-IN/HAMMER ACTIVITY	10		0	0	
026	INFILTRATION DRIPPER JOINT	09		144	0	
027	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%
027	DEPOSITS ATTACHED ENCRUSTATION	02		0	0	DEPOSITS BLOCKING SERVICE CONNECTION; 5%
027	TAP BREAK-IN/HAMMER	02		0	0	
037	INFILTRATION DRIPPER JOINT	03		144	0	
040	MISCELLANEOUS WATER LEVEL			0	0	25%
047	INFILTRATION STAIN JOINT	04	08	0	0	F01
066	INFILTRATION STAIN JOINT	08	12	0	0	
071	INFILTRATION STAIN JOINT	08	12	0	0	
083	INFILTRATION STAIN JOINT	04	08	0	0	
093	INFILTRATION STAIN JOINT	04	08	0	0	
120	ACCESS POINT MANHOLE			0	0	SMH0117

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00696	SMH0119	SMH0118	VCP	10	176	176	3	1,008	1.04

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0119
000	MISCELLANEOUS WATER LEVEL			0	0	15%

018	TAP BREAK-IN/HAMMER	03		0	0	
033	SURFACE DAMAGE SURFACE SPALLING	09		0	0	
034	INFILTRATION RUNNER JOINT	03		288	0	
036	INFILTRATION STAIN JOINT	04	08	0	0	
064	INFILTRATION STAIN JOINT	08		0	0	
064	MISCELLANEOUS WATER LEVEL			0	0	25%
077	SURFACE DAMAGE SURFACE SPALLING	09		0	0	
081	INFILTRATION STAIN JOINT	09		0	0	
091	INFILTRATION DRIPPER JOINT	01		144	0	
093	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
094	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
100	CRACK LONGITUDINAL	08		0	0	
107	JOINT OFFSET SMALL (DISPLACED)	09		0	0	
117	INFILTRATION STAIN JOINT	04		0	0	
120	CRACK LONGITUDINAL	08		0	0	
120	INFILTRATION DRIPPER JOINT	09		144	0	
122	INFILTRATION STAIN JOINT	04	12	0	0	
125	INFILTRATION STAIN BARREL	11		0	0	
132	MISCELLANEOUS WATER LEVEL			0	0	15%
140	INFILTRATION STAIN JOINT	04	12	0	0	
142	INFILTRATION STAIN JOINT	08	12	0	0	
149	INFILTRATION STAIN JOINT	08	04	0	0	S01
164	CRACK LONGITUDINAL	12		0	0	
166	INFILTRATION DRIPPER JOINT	12		144	0	
171	INFILTRATION DRIPPER JOINT	12		144	0	
173	INFILTRATION DRIPPER BARREL	01		144	0	
173	INFILTRATION STAIN JOINT	08	04	0	0	F01
176	ACCESS POINT MANHOLE			0	0	SMH0118

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00695	SMH0120	SMH0119	VCP	10	168	168	3	576	1.1
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0120		
000	MISCELLANEOUS WATER LEVEL					0	0	15%		
001	INFILTRATION STAIN JOINT		04	08		0	0	S01		
004	INFILTRATION STAIN BARREL		09			0	0			
006	INFILTRATION STAIN BARREL		09			0	0			
008	INFILTRATION DRIPPER JOINT		11			144	0			
008	MISCELLANEOUS GENERAL OBSERVATION		10	01		0	0	REPAIR PATCH; UNKNOWN MATRERIAL		
029	BROKEN		09			0	0			
047	INFILTRATION STAIN JOINT		04	08		0	0	F01		
059	INFILTRATION STAIN JOINT		04	08		0	0			
063	INFILTRATION STAIN JOINT		08	12		0	0	S02		
066	FRACTURE LONGITUDINAL		09			0	0			
090	INFILTRATION STAIN JOINT		08	12		0	0	F02		
092	DEPOSITS ATTACHED ENCRUSTATION		03			0	0	5%		
095	CRACK LONGITUDINAL		02			0	0			
095	TAP BREAK-IN/HAMMER ACTIVITY		02			0	0			
101	TAP BREAK-IN/HAMMER ACTIVITY		10			0	0			
117	SURFACE DAMAGE SURFACE SPALLING		08			0	0			
126	DEPOSITS ATTACHED ENCRUSTATION		03	09		0	0	5%		
134	INFILTRATION WEEPER JOINT		09			144	0			
136	INFILTRATION STAIN JOINT		09			0	0			
137	TAP SADDLE ACTIVITY		10			0	0			
144	SURFACE DAMAGE SURFACE SPALLING		09			0	0			
159	CRACK SPIRAL		04	03		0	0			
161	INFILTRATION RUNNER JOINT		08	09		288	0			
164	TAP BREAK-IN/HAMMER ACTIVITY		10			0	0			
168	ACCESS POINT MANHOLE					0	0	SMH0119		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00694	SMH0121	SMH0120	VCP	10	140	140	3	864	1.15

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0121
000	MISCELLANEOUS WATER LEVEL			0	0	10%
003	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	5%
006	MISCELLANEOUS MATERIAL CHANGE			0	0	CAS 10 INCH
006	SURFACE DAMAGE CORROSION	12	12	0	0	S01
017	MISCELLANEOUS WATER LEVEL			0	0	20%
022	INFILTRATION DRIPPER JOINT	12		144	0	
022	MISCELLANEOUS MATERIAL CHANGE			0	0	VCP 10 INCH
022	SURFACE DAMAGE CORROSION	12	12	0	0	F01
023	INFILTRATION STAIN JOINT	04	08	0	0	
030	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	S01; 5%
084	INFILTRATION DRIPPER JOINT	12		144	0	
086	INFILTRATION DRIPPER JOINT	12		144	0	
088	INFILTRATION DRIPPER JOINT	10		144	0	
091	INFILTRATION DRIPPER JOINT	12		144	0	
093	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06		0	0	5%, DEPOSITS ENCRUSTATION AT BOTTOM OF PIPE
096	INFILTRATION DRIPPER BARREL	09		144	0	
106	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
136	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	F01; 5%
140	ACCESS POINT MANHOLE			0	0	SMH0120

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00693	SMH0121	SMH0122	VCP	10	287	287	3	144	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0121
000	MISCELLANEOUS WATER LEVEL			0	0	10%
003	FRACTURE LONGITUDINAL	12		0	0	

004	FRACTURE LONGITUDINAL	12		0	0	
007	FRACTURE MULTIPLE	12		0	0	
011	FRACTURE SPIRAL	04	12	0	0	
013	CRACK MULTIPLE	03		0	0	
021	FRACTURE MULTIPLE	12	09	0	0	
024	TAP BREAK-IN/HAMMER	03		0	0	
026	CRACK MULTIPLE	09	03	0	0	
029	CRACK MULTIPLE	09	03	0	0	
033	CRACK MULTIPLE	09	03	0	0	
033	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
035	CRACK MULTIPLE	09	03	0	0	
037	FRACTURE MULTIPLE	04	09	0	0	
038	MISCELLANEOUS GENERAL OBSERVATION	12		0	0	HOLE WITH GAS LINE EXPOSED
039	HOLE	01		0	0	
039	TAP BREAK-IN/HAMMER	10		0	0	
041	FRACTURE MULTIPLE	11		0	0	
042	CRACK MULTIPLE	03	09	0	0	
049	CRACK MULTIPLE	02		0	0	
056	FRACTURE HINGE 4	05	07	0	0	
120	CRACK LONGITUDINAL	03		0	0	
122	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	S01; 5%
126	BROKEN	09		0	0	
135	CRACK LONGITUDINAL	04		0	0	
139	TAP BREAK-IN/HAMMER	10		0	0	
164	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	F01; 5%
167	TAP BREAK-IN/HAMMER	03		0	0	
172	FRACTURE CIRCUMFERENTIAL	03	12	0	0	
173	JOINT OFFSET SMALL (DISPLACED)	04	08	0	0	S01
182	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	5%
192	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
192	JOINT OFFSET SMALL (DISPLACED)	04	08	0	0	F01
202	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
207	DEPOSITS ATTACHED ENCRUSTATION	08	10	0	0	5%

210	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
214	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
218	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	S01; 5%
226	JOINT OFFSET SMALL (DISPLACED)	09	03	0	0	
248	INFILTRATION DRIPPER JOINT	03		144	0	
266	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
274	TAP BREAK-IN/HAMMER	02		0	0	
278	OBSTRUCTION BRICK OR MASONRY	06		0	0	20%, BRICK MATERIAL AND DEPOSITS AT BOTTOM OF P
280	CRACK SPIRAL	03		0	0	
282	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	F01; 5%
282	MISCELLANEOUS WATER LEVEL			0	0	30%
287	ACCESS POINT MANHOLE			0	0	SMH0122

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00692	SMH0123	SMH0122	VCP	10	298	298	3	432	1.11

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0123
000	MISCELLANEOUS WATER LEVEL			0	0	10%
002	DEPOSITS ATTACHED ENCRUSTATION	05	07	0	0	5%
004	DEPOSITS ATTACHED ENCRUSTATION	05	07	0	0	10%
008	INFILTRATION STAIN JOINT	05	03	0	0	
012	INFILTRATION STAIN JOINT	09	03	0	0	S01
025	INFILTRATION DRIPPER JOINT	08		144	0	
025	INFILTRATION STAIN JOINT	09	03	0	0	F01
027	DEPOSITS ATTACHED ENCRUSTATION	05	07	0	0	5%
029	DEPOSITS ATTACHED ENCRUSTATION	05	12	0	0	10%
029	INFILTRATION DRIPPER JOINT	09		144	0	
031	DEPOSITS ATTACHED ENCRUSTATION	05	07	0	0	5%
033	INFILTRATION STAIN JOINT	05	07	0	0	
035	DEPOSITS ATTACHED ENCRUSTATION	05	07	0	0	10%
037	DEPOSITS ATTACHED ENCRUSTATION	05	12	0	0	5%
041	INFILTRATION STAIN JOINT	05	12	0	0	

043	INFILTRATION STAIN JOINT	05	12	0	0	
044	TAP BREAK-IN/HAMMER ACTIVITY	10		0	0	
045	DEPOSITS ATTACHED ENCRUSTATION	05	07	0	0	5%
047	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
049	INFILTRATION STAIN JOINT	04		0	0	
065	INFILTRATION STAIN JOINT	08		0	0	
069	INFILTRATION STAIN JOINT	05	07	0	0	
071	INFILTRATION STAIN JOINT	04	08	0	0	S01
089	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	5%
093	INFILTRATION STAIN JOINT	04	08	0	0	F01
099	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
128	MISCELLANEOUS MATERIAL CHANGE	12		0	0	PVC 12 INCH
131	MISCELLANEOUS WATER LEVEL			0	0	25%
133	MISCELLANEOUS MATERIAL CHANGE			0	0	VCP 10 INCH
148	HOLE	11		0	0	
151	CRACK MULTIPLE	09		0	0	
151	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
182	CRACK LONGITUDINAL	03		0	0	
194	SURFACE DAMAGE SPALLING OF COATING	04		0	0	
218	MISCELLANEOUS GENERAL OBSERVATION	03	01	0	0	REPAIR PATCH; UNKNOWN MATERIAL
219	FRACTURE LONGITUDINAL	10		0	0	
219	TAP BREAK-IN/HAMMER ACTIVITY	10		0	0	
228	TAP BREAK-IN/HAMMER	01		0	0	
263	MISCELLANEOUS MATERIAL CHANGE			0	0	PVC 10 INCH
270	MISCELLANEOUS MATERIAL CHANGE			0	0	VCP 10 INCH
273	INFILTRATION STAIN JOINT	08	04	0	0	S01
287	CRACK LONGITUDINAL	12		0	0	
288	SURFACE DAMAGE MISSING WALL	12		0	0	
293	DEPOSITS ATTACHED ENCRUSTATION	05	03	0	0	5%
293	INFILTRATION DRIPPER JOINT	03		144	0	
293	INFILTRATION STAIN JOINT	08	04	0	0	F01
298	ACCESS POINT MANHOLE			0	0	SMH0122

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00691	SMH0124	SMH0123	VCP	10	299	299	3	0	1
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH0124	
000	MISCELLANEOUS WATER LEVEL						0	0	10%	
010	TAP BREAK-IN/HAMMER				10		0	0		
051	TAP BREAK-IN/HAMMER				02		0	0		
066	INFILTRATION STAIN JOINT				04		0	0		
082	JOINT OFFSET SMALL (DISPLACED)				12		0	0		
084	JOINT OFFSET SMALL (DISPLACED)				09		0	0		
090	INFILTRATION STAIN JOINT				04		0	0		
117	JOINT OFFSET SMALL (DISPLACED)				09		0	0		
124	TAP BREAK-IN/HAMMER				10		0	0		
147	INFILTRATION STAIN JOINT				04		0	0		
151	INFILTRATION STAIN JOINT				04		0	0		
164	INFILTRATION STAIN JOINT				04		0	0		
190	TAP BREAK-IN/HAMMER ACTIVITY				01		0	0		
268	INFILTRATION STAIN JOINT				05	07	0	0	S01	
294	INFILTRATION STAIN JOINT				05	07	0	0	F01	
299	ACCESS POINT MANHOLE						0	0	SMH0123	

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00690	SMH0124	SMH0125	VCP	10	285	121	3	0	1.09
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH0124	
000	MISCELLANEOUS WATER LEVEL						0	0	15%	
002	MISCELLANEOUS MATERIAL CHANGE						0	0	VCP 8 INCH	
008	LINE UP						0	0	S01; 5%	
010	HOLE VOID VISIBLE				08		0	0		
010	JOINT OFFSET SMALL (DISPLACED)				03		0	0		

014	BROKEN	05		0	0	
018	CRACK SPIRAL	09		0	0	
018	TAP BREAK-IN/HAMMER ACTIVITY	10		0	0	
019	MISCELLANEOUS WATER LEVEL			0	0	25%
024	INFILTRATION STAIN JOINT	09		0	0	
027	MISCELLANEOUS WATER LEVEL			0	0	10%
028	INFILTRATION STAIN JOINT	05	07	0	0	S02
034	CRACK LONGITUDINAL	03		0	0	
040	INFILTRATION STAIN JOINT	05	07	0	0	F02
042	JOINT OFFSET SMALL (DISPLACED)	03		0	0	
047	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
052	MISCELLANEOUS WATER LEVEL			0	0	10%
057	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
061	JOINT OFFSET SMALL (DISPLACED)	07		0	0	
076	SURFACE DAMAGE SURFACE SPALLING	06	03	0	0	
077	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
079	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
081	JOINT OFFSET MEDIUM	12		0	0	
081	MISCELLANEOUS WATER LEVEL			0	0	
085	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
086	TAP BREAK-IN/HAMMER ACTIVITY	03		0	0	
089	JOINT OFFSET SMALL (DISPLACED)	05		0	0	
097	CRACK LONGITUDINAL	09		0	0	
097	FRACTURE MULTIPLE	01	03	0	0	
099	CRACK LONGITUDINAL	01		0	0	
099	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
112	JOINT OFFSET SMALL (DISPLACED)	03		0	0	
116	JOINT OFFSET MEDIUM	12		0	0	GAP BETWEEN JOINTS
119	LINE UP			0	0	F01; 5%
120	TAP BREAK-IN/HAMMER	09		0	0	
121	MISCELLANEOUS SURVEY ABANDONED			0	0	REACHED SURVEY #70

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00687	SMH0128	SMH0127	AC	8	382	382	4	0	1.43
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0128		
000	MISCELLANEOUS WATER LEVEL					0	0	15%		
361	MISCELLANEOUS GENERAL OBSERVATION					0	0	REACHED PREVIOUS SURVEY, SURVEY BEGAN		
363	JOINT OFFSET SMALL (DISPLACED)		03	09		0	0			
363	SURFACE DAMAGE SURFACE SPALLING		04	08		0	0	MINOR SPALLING		
366	INFILTRATION STAIN JOINT		03	09		0	0			
372	JOINT OFFSET SMALL (DISPLACED)		09			0	0			
375	INFILTRATION STAIN JOINT		03	09		0	0			
377	FRACTURE MULTIPLE		04	08		0	0			
378	TAP BREAK-IN/HAMMER CAPPED		03			0	0			
379	HOLE		06			0	0			
382	ACCESS POINT MANHOLE					0	0	SMH0127		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00685	SMH0129	SMH1367	AC	6	237	135	10	0	1.5
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0129		
000	MISCELLANEOUS WATER LEVEL					0	0	5%		
003	SURFACE DAMAGE MISSING WALL		06			0	0			
013	HOLE		06			0	0			
013	INFILTRATION STAIN JOINT		03	09		0	0			
018	MISCELLANEOUS WATER LEVEL					0	0	15%		
023	BROKEN		10			0	0			
023	JOINT OFFSET SMALL (DISPLACED)		12			0	0	S01		
027	MISCELLANEOUS WATER LEVEL					0	0	5%		
052	MISCELLANEOUS WATER LEVEL					0	0	30%		
053	JOINT OFFSET SMALL (DISPLACED)		12			0	0	F01		

063	INFILTRATION STAIN JOINT	05	07	0	0	
073	INFILTRATION STAIN JOINT	05	07	0	0	
073	MISCELLANEOUS WATER LEVEL			0	0	20%
075	TAP BREAK-IN/HAMMER INTRUDING	09		0	0	
080	TAP SADDLE ACTIVITY	12		0	0	
082	MISCELLANEOUS WATER LEVEL			0	0	10%
083	HOLE VOID VISIBLE	04		0	0	
083	MISCELLANEOUS GENERAL OBSERVATION	05	07	0	0	PIECE OF PLASTIC THAT IS BETWEEN THE TWO SIDES
083	ROOTS FINE JOINT	08	04	0	0	
093	SURFACE DAMAGE MISSING WALL	05	07	0	0	
093	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	
103	INFILTRATION STAIN JOINT	08	04	0	0	
113	INFILTRATION STAIN JOINT	08	04	0	0	
113	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
124	BROKEN	05	07	0	0	LARGE BROKEN HOLE AT BOTTOM OF PIPE
124	INFILTRATION STAIN JOINT	04	08	0	0	
124	TAP SADDLE	02		0	0	
134	HOLE	06		0	0	
134	INFILTRATION STAIN JOINT	04	08	0	0	
135	MISCELLANEOUS SURVEY ABANDONED			0	0	COULD NOT PASS HOLE

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00317	SMH0895	SMH0111	VCP	10	48	48	3	144	1.33

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0895
000	MISCELLANEOUS WATER LEVEL			0	0	15%
001	SURFACE DAMAGE SURFACE SPALLING	04	08	0	0	S01; INTENSIFIES AT 25 LF
003	INFILTRATION DRIPPER JOINT	09		144	0	
012	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
015	INFILTRATION STAIN JOINT	03		0	0	
016	HOLE	12		0	0	
025	CRACK CIRCUMFERENTIAL	07	11	0	0	

032	CRACK CIRCUMFERENTIAL	08	09	0	0	
035	SURFACE DAMAGE SURFACE SPALLING	08		0	0	
037	TAP BREAK-IN/HAMMER ACTIVITY	11		0	0	
040	INFILTRATION STAIN JOINT	09		0	0	
040	SURFACE DAMAGE SURFACE SPALLING	04	08	0	0	F01
041	SURFACE DAMAGE OTHER	12		0	0	SMALL GASH IN PIPE
043	INFILTRATION STAIN JOINT	03		0	0	
048	ACCESS POINT MANHOLE			0	0	SMH0111

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00685	SMH1367	SMH0129	AC	6	237	102	10	0	1.94

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1367
000	MISCELLANEOUS WATER LEVEL			0	0	5%
007	HOLE	05	07	0	0	
007	SURFACE DAMAGE MISSING WALL	06		0	0	
017	INFILTRATION STAIN JOINT	05	12	0	0	
017	ROOTS MEDIUM JOINT	03	07	0	0	25%
023	MISCELLANEOUS WATER LEVEL			0	0	20%
037	BROKEN	07		0	0	
037	MISCELLANEOUS WATER LEVEL			0	0	30%
039	MISCELLANEOUS WATER LEVEL			0	0	40%
047	INFILTRATION STAIN JOINT	03	12	0	0	
047	ROOTS TAP JOINT	07	03	0	0	25%
047	SURFACE DAMAGE MISSING WALL	06		0	0	
049	MISCELLANEOUS WATER LEVEL			0	0	5%
057	BROKEN	06		0	0	
057	ROOTS FINE JOINT	08	04	0	0	
067	BROKEN	04		0	0	
067	ROOTS FINE JOINT			0	0	
077	BROKEN	07		0	0	
077	ROOTS FINE JOINT	07		0	0	

087	BROKEN	03	0	0
097	SURFACE DAMAGE MISSING WALL	06	0	0
098	TAP BREAK-IN/HAMMER ACTIVITY	03	0	0
100	SURFACE DAMAGE MISSING WALL	07	06	0
102	MISCELLANEOUS SURVEY ABANDONED		0	0

CANNOT PASS MISSING WALL HOLE IN JOINT

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00686	SMH2935	SMH0128	AC	6	338	44	10	288	1.2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0129.A (BURIED 539 FT DS FROM SMH0129)
000	MISCELLANEOUS WATER LEVEL			0	0	5%
001	ROOTS MEDIUM BARREL	03	09	0	0	15%
012	INFILTRATION STAIN CONNECTION	05	07	0	0	
012	MISCELLANEOUS GENERAL OBSERVATION	12		0	0	BARE SURFACE SLAB ABOVE CONNECTION, DIFFEREN
012	TAP BREAK-IN/HAMMER	02		0	0	
032	SURFACE DAMAGE SURFACE SPALLING	10		0	0	
033	TAP BREAK-IN/HAMMER	09		0	0	
037	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	30%
037	INFILTRATION DRIPPER JOINT	04		144	0	
037	INFILTRATION DRIPPER JOINT	12		144	0	
043	HOLE	05		0	0	
043	INFILTRATION STAIN JOINT	05	01	0	0	
043	JOINT OFFSET MEDIUM	03		0	0	
044	MISCELLANEOUS SURVEY ABANDONED			0	0	CANNOT PASS OFFSET JOINT

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00686	SMH0128	SMH2935	AC	8	338	9	10	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0128
000	MISCELLANEOUS WATER LEVEL			0	0	10%
008	MISCELLANEOUS MATERIAL CHANGE			0	0	AC 6 INCH

009	DEPOSITS SETTLED FINE	03	08	0	0	F01
009	MISCELLANEOUS SURVEY ABANDONED			0	0	CANNOT PASS TRANSITION

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
PORTLAND STREET	SP00686	SMH0129	SMH2935	AC	6	245	245	10	0	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0129
000	MISCELLANEOUS WATER LEVEL			0	0	5%
002	DEPOSITS SETTLED FINE	04	08	0	0	
002	TAP SADDLE	03		0	0	
025	TAP SADDLE	09		0	0	
059	MISCELLANEOUS WATER LEVEL			0	0	15%
091	SURFACE DAMAGE MISSING WALL	12		0	0	
141	INFILTRATION STAIN BARREL	03	05	0	0	
142	TAP BREAK-IN/HAMMER ACTIVITY	03		0	0	
149	MISCELLANEOUS WATER LEVEL			0	0	5%
179	TAP SADDLE	09		0	0	
243	ROOTS MEDIUM BARREL	04	08	0	0	10%
245	ACCESS POINT MANHOLE			0	0	SMH0129.B (BURIED SMH 245 FT DS FROM SMH0129)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP02223	SMH0014	SMH1391	VCP	10	295	290	3	19,296	1.25

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0014
000	MISCELLANEOUS WATER LEVEL			0	0	5%
002	CRACK LONGITUDINAL	10		0	0	
009	FRACTURE LONGITUDINAL	05		0	0	
009	INFILTRATION STAIN BARREL	08		0	0	
019	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	5%
020	FRACTURE SPIRAL	02	10	0	0	
021	INFILTRATION STAIN BARREL	09		0	0	

023	INFILTRATION WEEPER JOINT	09		144	0	
025	INFILTRATION STAIN JOINT	09		0	0	
027	INFILTRATION STAIN JOINT	09		0	0	
029	INFILTRATION STAIN JOINT	03	09	0	0	
030	INFILTRATION STAIN BARREL	03		0	0	
041	CRACK LONGITUDINAL	08		0	0	
041	INFILTRATION STAIN BARREL	08		0	0	
043	INFILTRATION WEEPER JOINT	05	10	144	0	
046	INFILTRATION STAIN JOINT	07	10	0	0	
062	INFILTRATION STAIN JOINT	07		0	0	
066	BROKEN	07		0	0	
072	CRACK LONGITUDINAL	09		0	0	
072	DEPOSITS ATTACHED ENCRUSTATION	07	09	0	0	5%
074	FRACTURE MULTIPLE	12	05		0	
074	INFILTRATION DRIPPER BARREL	12		144	0	
075	INFILTRATION STAIN BARREL	03		0	0	
075	TAP BREAK-IN/HAMMER	02		0	0	
078	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%
089	CRACK LONGITUDINAL	08		0	0	
089	INFILTRATION STAIN JOINT	08		0	0	
097	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
101	INFILTRATION STAIN JOINT	09		0	0	
105	BROKEN	12	01	0	0	
115	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%
120	INFILTRATION STAIN JOINT	07		0	0	
122	CRACK MULTIPLE	12	03	0	0	
130	INFILTRATION STAIN JOINT	05	10	0	0	
132	DEPOSITS ATTACHED ENCRUSTATION	05	11	0	0	5%
132	FRACTURE SPIRAL	12	04	0	0	
134	DEPOSITS ATTACHED ENCRUSTATION	05	11	0	0	5%
136	DEPOSITS ATTACHED ENCRUSTATION	01	05	0	0	5%
136	INFILTRATION DRIPPER	07		144	0	
138	DEPOSITS ATTACHED ENCRUSTATION	07	05	0	0	5%

139	CRACK LONGITUDINAL	02		0	0	
139	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
140	INFILTRATION RUNNER CONNECTION	02		720	0	
142	DEPOSITS ATTACHED ENCRUSTATION	07	05	0	0	5%
144	DEPOSITS ATTACHED ENCRUSTATION	07	10	0	0	5%
144	INFILTRATION DRIPPER	07		144	0	
145	MISCELLANEOUS WATER LEVEL			0	0	10%
146	INFILTRATION STAIN JOINT	07		0	0	
147	DEPOSITS SETTLED FINE	06		0	0	15%
148	INFILTRATION STAIN JOINT	04	07	0	0	
150	INFILTRATION DRIPPER JOINT	02		144	0	
152	DEPOSITS ATTACHED ENCRUSTATION	05	07	0	0	5%
154	DEPOSITS ATTACHED ENCRUSTATION	05		0	0	5%
155	MISCELLANEOUS WATER LEVEL			0	0	20%
158	DEPOSITS SETTLED FINE	06		0	0	25%
158	INFILTRATION STAIN JOINT	04		0	0	
171	INFILTRATION RUNNER JOINT	09		432	0	
172	MISCELLANEOUS WATER LEVEL			0	0	30%
173	INFILTRATION STAIN JOINT	04		0	0	
175	CRACK MULTIPLE	05	11	0	0	
175	INFILTRATION GUSHER JOINT			5,760	0	
176	MISCELLANEOUS WATER LEVEL			0	0	20%
187	DEPOSITS SETTLED FINE	06		0	0	
190	INFILTRATION RUNNER JOINT	03		432	0	
195	MISCELLANEOUS WATER LEVEL			0	0	10%
200	INFILTRATION RUNNER JOINT	05		432	0	
208	INFILTRATION DRIPPER JOINT	03		144	0	
214	INFILTRATION RUNNER CONNECTION	02		288	0	
214	TAP BREAK-IN/HAMMER	02		0	0	
216	FRACTURE LONGITUDINAL	09		0	0	
220	INFILTRATION STAIN JOINT	03		0	0	
233	INFILTRATION RUNNER JOINT	07		432	0	
237	INFILTRATION DRIPPER JOINT	03		144	0	

251	INFILTRATION RUNNER JOINT	04		288	0
261	FRACTURE LONGITUDINAL	03		0	0
263	INFILTRATION RUNNER JOINT	04		288	0
278	INFILTRATION RUNNER JOINT	04		288	0
280	INFILTRATION STAIN JOINT	03	09	0	0
283	INFILTRATION GUSHER CONNECTION	02		7,200	0
283	TAP BREAK-IN/HAMMER	02		0	0
284	INFILTRATION RUNNER JOINT	08		432	0
286	INFILTRATION DRIPPER JOINT	09		144	0
288	DEPOSITS SETTLED FINE	06		0	0
288	INFILTRATION GUSHER JOINT	07		1,008	0
290	MISCELLANEOUS SURVEY ABANDONED			0	0

LINE INTENTIONALLY ABANDONED BY CITY

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP02224	SMH0014	SMH1392	VCP	10	397	397	3	8,496	1.3

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0014
000	MISCELLANEOUS WATER LEVEL			0	0	10%
005	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
008	INFILTRATION RUNNER JOINT	08		288	0	
009	TAP BREAK-IN/HAMMER	09		0	0	
010	INFILTRATION RUNNER JOINT	04	08	144	0	
013	INFILTRATION STAIN JOINT	02	05	0	0	
016	DEPOSITS ATTACHED ENCRUSTATION	05		0	0	5%
018	INFILTRATION STAIN JOINT	05		0	0	
020	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
024	INFILTRATION RUNNER JOINT	09		144	0	
026	INFILTRATION STAIN JOINT	03		0	0	
028	INFILTRATION STAIN JOINT	03		0	0	
030	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
032	INFILTRATION STAIN JOINT	03		0	0	
034	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%

036	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
038	INFILTRATION STAIN JOINT	03		0	0	
042	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
044	FRACTURE SPIRAL	08		0	0	
046	JOINT OFFSET SMALL (DISPLACED)	07		0	0	
048	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
050	JOINT OFFSET SMALL (DISPLACED)	04		0	0	
052	INFILTRATION STAIN JOINT	09		0	0	
058	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
060	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
063	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
064	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06		0	0	5%, RAGGING
068	DEPOSITS ATTACHED ENCRUSTATION	08	05	0	0	5%
071	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
071	JOINT OFFSET SMALL (DISPLACED)	03	11	0	0	
073	INFILTRATION RUNNER JOINT	09		288	0	
075	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
075	JOINT OFFSET SMALL (DISPLACED)	03	09	0	0	
079	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
086	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
089	JOINT OFFSET SMALL (DISPLACED)	11	03	0	0	
104	JOINT OFFSET SMALL (DISPLACED)	11	03	0	0	
106	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%
108	DEPOSITS ATTACHED ENCRUSTATION	08	04	0	0	5%
114	INFILTRATION RUNNER	09		432	0	
116	INFILTRATION DRIPPER JOINT	09		144	0	
118	INFILTRATION DRIPPER JOINT	09		144	0	
120	CRACK LONGITUDINAL	03		0	0	
120	INFILTRATION DRIPPER JOINT	03		144	0	
129	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
137	DEPOSITS ATTACHED ENCRUSTATION	09		0	0	5%
137	INFILTRATION DRIPPER JOINT	09		144	0	
139	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	10%

139	INFILTRATION DRIPPER JOINT	09		144	0	
140	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	5%
142	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	10%
143	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
145	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	5%
147	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	5%
149	INFILTRATION DRIPPER JOINT	10		144	0	
149	INFILTRATION STAIN JOINT	10		0	0	
151	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	5%
154	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06		0	0	5%, RAGGING
155	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	10%
157	INFILTRATION STAIN JOINT	04	12	0	0	
159	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
161	CRACK LONGITUDINAL	09		0	0	
161	INFILTRATION STAIN JOINT	09		0	0	
169	DEPOSITS ATTACHED ENCRUSTATION	04		0	0	5%
171	CRACK LONGITUDINAL	03		0	0	
171	INFILTRATION RUNNER JOINT	09		720	0	
173	CRACK LONGITUDINAL	03		0	0	
173	DEPOSITS ATTACHED ENCRUSTATION	03	09	0	0	5%
173	INFILTRATION RUNNER JOINT	03		288	0	
178	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	10%
178	INFILTRATION RUNNER JOINT	04		432	0	
180	INFILTRATION DRIPPER JOINT	09		144	0	
182	CRACK LONGITUDINAL	10		0	0	
182	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
184	DEPOSITS ATTACHED ENCRUSTATION	04	09	0	0	5%
186	INFILTRATION STAIN JOINT	03	09	0	0	
188	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
190	DEPOSITS ATTACHED ENCRUSTATION	04	09	0	0	5%
192	CRACK LONGITUDINAL	03		0	0	
192	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
194	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%

196	DEPOSITS ATTACHED ENCRUSTATION	04	09	0	0	10%
196	FRACTURE LONGITUDINAL	10		0	0	
197	HOLE VOID VISIBLE	09		0	0	
197	TAP BREAK-IN/HAMMER	09		0	0	
199	INFILTRATION STAIN JOINT	09		0	0	
200	INFILTRATION STAIN JOINT	09	03	0	0	
202	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
204	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	10%
206	INFILTRATION STAIN JOINT	04	03	0	0	
209	INFILTRATION RUNNER JOINT	03		288	0	
211	INFILTRATION STAIN JOINT	03	09	0	0	
213	INFILTRATION RUNNER JOINT	09		144	0	
215	DEPOSITS ATTACHED ENCRUSTATION	04	12	0	0	5%
217	DEPOSITS ATTACHED ENCRUSTATION	08	12	0	0	10%
219	DEPOSITS ATTACHED ENCRUSTATION	04	12	0	0	5%
219	INFILTRATION DRIPPER JOINT	04		144	0	
223	INFILTRATION STAIN JOINT	03		0	0	
225	DEPOSITS ATTACHED ENCRUSTATION	03	04	0	0	5%
229	INFILTRATION RUNNER JOINT	09		144	0	
229	INFILTRATION STAIN JOINT	03	09	0	0	
231	DEPOSITS ATTACHED ENCRUSTATION	04	12	0	0	5%
236	OBSTACLE/OBSTRUCTION OTHER OBJECTS	12		0	0	5%, RAGGING
237	CRACK LONGITUDINAL	03		0	0	
258	INFILTRATION STAIN JOINT	03	09	0	0	
260	DEPOSITS ATTACHED ENCRUSTATION	04	12	0	0	5%
262	OBSTRUCTION BRICK OR MASONRY	06		0	0	5%, RAGGING AND BRICKS
264	INFILTRATION STAIN JOINT	07	09	0	0	
268	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
270	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
278	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
281	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06		0	0	5%, RAGGING
288	JOINT OFFSET SMALL (DISPLACED)	12	08	0	0	
290	INFILTRATION STAIN JOINT	03	09	0	0	

291	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
293	INFILTRATION STAIN JOINT	04	08	0	0	
294	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
294	INFILTRATION DRIPPER JOINT	12		144	0	
297	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
299	INFILTRATION STAIN JOINT	05	03	0	0	
301	INFILTRATION RUNNER JOINT	09		432	0	
302	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06		0	0	5%, UNKNOWN OBSTRUCTION IN PIPE
303	INFILTRATION RUNNER JOINT	03		288	0	
305	INFILTRATION RUNNER JOINT	09		288	0	
305	INFILTRATION STAIN JOINT	09		0	0	
307	INFILTRATION RUNNER JOINT	09		144	0	
309	INFILTRATION RUNNER JOINT	09		144	0	
311	INFILTRATION RUNNER JOINT	09		720	0	
313	INFILTRATION RUNNER JOINT	03		288	0	
313	OBSTRUCTION WEDGED IN JOINT	08		0	0	5%, UNKNOWN PIPE MATERIAL IN JOINT
315	INFILTRATION RUNNER JOINT	03		144	0	
317	INFILTRATION RUNNER JOINT	03		144	0	
321	INFILTRATION RUNNER JOINT	03		288	0	
321	INFILTRATION STAIN JOINT	03		0	0	
323	INFILTRATION STAIN JOINT	08		0	0	
325	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
327	DEPOSITS ATTACHED ENCRUSTATION	04	02	0	0	5%
330	INFILTRATION RUNNER JOINT	08		144	0	
332	DEPOSITS ATTACHED ENCRUSTATION	04	03	0	0	5%
332	INFILTRATION DRIPPER	10		144	0	
334	DEPOSITS ATTACHED ENCRUSTATION	08		0	0	5%
336	DEFORMED RIGID	07	04	0	0	
338	BROKEN	07		0	0	MEDIUM PIECE AT BOTTOM OF JOINT BROKEN OFF
340	JOINT OFFSET SMALL (DISPLACED)	02	05	0	0	
342	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
344	INFILTRATION STAIN JOINT	07	12	0	0	
346	DEPOSITS ATTACHED ENCRUSTATION	05	02	0	0	5%

350	INFILTRATION STAIN JOINT	05		0	0	
356	DEPOSITS ATTACHED ENCRUSTATION	07	05	0	0	5%
358	DEPOSITS ATTACHED ENCRUSTATION	07	03	0	0	5%
358	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
360	INFILTRATION RUNNER JOINT	08		432	0	
360	INFILTRATION STAIN JOINT	07	09	0	0	
362	DEPOSITS ATTACHED ENCRUSTATION	07	05	0	0	5%
364	DEPOSITS ATTACHED ENCRUSTATION	05	03	0	0	5%
365	INFILTRATION RUNNER CONNECTION	10		288	0	
365	TAP BREAK-IN/HAMMER	10		0	0	
366	DEPOSITS ATTACHED ENCRUSTATION	07	05	0	0	5%
368	DEPOSITS ATTACHED ENCRUSTATION	07	09	0	0	10%
380	INFILTRATION STAIN JOINT	05	12	0	0	
383	INFILTRATION STAIN JOINT	05	12	0	0	
385	DEPOSITS ATTACHED ENCRUSTATION	04	01	0	0	5%
387	DEPOSITS ATTACHED ENCRUSTATION	04	01	0	0	5%
389	DEPOSITS ATTACHED ENCRUSTATION	05	03	0	0	5%
391	DEPOSITS ATTACHED ENCRUSTATION	05	09	0	0	10%
393	DEPOSITS ATTACHED ENCRUSTATION	05	03	0	0	5%
393	DEPOSITS SETTLED FINE	06		0	0	
397	ACCESS POINT MANHOLE			0	0	SMH1392

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP01605	SMH0048	SMH0050	RCP	18	333	333	8	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0048
000	MISCELLANEOUS WATER LEVEL			0	0	40%
000	VERMIN COCKROACH	12		0	0	S01
165	MISCELLANEOUS WATER LEVEL			0	0	30%
332	VERMIN COCKROACH	12		0	0	F01
333	ACCESS POINT MANHOLE			0	0	SMH0050

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP00952	SMH0053.A	SMH0050	CAS	18		81	8	0	3

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0055.A (UNKNOWN SMH 215 FT US FROM SMH0055)
000	MISCELLANEOUS WATER LEVEL			0	0	20%
004	SURFACE DAMAGE CORROSION	12	12	0	0	S01
018	MISCELLANEOUS WATER LEVEL			0	0	30%
080	SURFACE DAMAGE CORROSION	12	12	0	0	F01
081	MISCELLANEOUS SURVEY ABANDONED			0	0	WRONG PIPE

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP00952	SMH0053	SMH0050	RCP	18	173	173	8	0	1.4

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0053
000	MISCELLANEOUS WATER LEVEL			0	0	30%
000	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	S01
000	VERMIN COCKROACH	03	09	0	0	S02
090	SURFACE DAMAGE AGGREGATE PROJECTING	09		0	0	
171	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	F01
171	VERMIN COCKROACH	03	09	0	0	F02
173	ACCESS POINT MANHOLE			0	0	SMH0050

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP01270	SMH0253	SMH0048	RCP	18	273	273	8	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0253
000	MISCELLANEOUS WATER LEVEL			0	0	40%
004	VERMIN COCKROACH	12		0	0	S01

039	SURFACE DAMAGE AGGREGATE VISIBLE	09	03	0	0	
044	SURFACE DAMAGE ROUGHNESS INCREASED	03	09	0	0	S02
071	MISCELLANEOUS WATER LEVEL			0	0	50%
270	SURFACE DAMAGE ROUGHNESS INCREASED	03	09	0	0	F02
270	VERMIN COCKROACH	12		0	0	F01
273	ACCESS POINT MANHOLE			0	0	SMH0048

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP02225	SMH1392	SMH1393	VCP	10	23	23	3	0	1.08

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1392
000	MISCELLANEOUS WATER LEVEL			0	0	15%
001	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	10%
002	DEPOSITS SETTLED FINE	06		0	0	10%
003	BROKEN	09		0	0	
003	DEPOSITS ATTACHED ENCRUSTATION	05	02	0	0	5%
005	INFILTRATION STAIN JOINT	07		0	0	
005	JOINT OFFSET SMALL (DISPLACED)	10		0	0	
007	DEPOSITS ATTACHED ENCRUSTATION	05	02	0	0	5%
011	JOINT OFFSET SMALL (DISPLACED)	01		0	0	
011	SURFACE DAMAGE SURFACE SPALLING	04		0	0	
015	INFILTRATION STAIN JOINT	05	02	0	0	
015	JOINT OFFSET SMALL (DISPLACED)	01		0	0	
017	JOINT OFFSET SMALL (DISPLACED)	08		0	0	
017	JOINT OFFSET SMALL (DISPLACED)	12		0	0	LARGER GAP BETWEEN JOINTS
017	MISCELLANEOUS MATERIAL CHANGE			0	0	PVC 8 INCH
023	ACCESS POINT MANHOLE			0	0	SMH1393

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP01962	SMH2933	SMH0049	RCP	18	238	237	8	0	1.67

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0252.A (UNKNOWN SMH 295 FT US OF SMH0252)
000	MISCELLANEOUS WATER LEVEL			0	0	30%
013	MISCELLANEOUS WATER LEVEL			0	0	40%
013	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	S01
204	VERMIN COCKROACH	10	02	0	0	
214	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	F01
222	MISCELLANEOUS WATER LEVEL			0	0	50%
238	ACCESS POINT MANHOLE			0	0	SMH0049

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01489	SMH0010	SMH1749	PVC	18	151	151	12	0	3

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0010
000	MISCELLANEOUS WATER LEVEL			0	0	25%
003	DEPOSITS ATTACHED GREASE	02	09	0	0	S01; 10%
037	TAP BREAK-IN/HAMMER ACTIVITY	10		0	0	
041	TAP BREAK-IN/HAMMER	02		0	0	
148	DEPOSITS ATTACHED GREASE	02	09	0	0	F01; 10%
151	ACCESS POINT MANHOLE			0	0	SMH1749

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP02546	SMH0011	SMH0013	PVC	18	315	315	12	0	3

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0011
000	DEPOSITS ATTACHED GREASE	02	10	0	0	S01; 5%

000	MISCELLANEOUS WATER LEVEL				0	0	30%
053	TAP BREAK-IN/HAMMER ACTIVITY	10			0	0	
132	MISCELLANEOUS WATER LEVEL				0	0	40%
313	DEPOSITS ATTACHED GREASE	02	10		0	0	F01; 5%
315	ACCESS POINT MANHOLE				0	0	SMH0013

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01491	SMH0013	SMH0015	PVC	18	96	96	12	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0013
000	DEPOSITS ATTACHED GREASE	03	09	0	0	S01; 5%
000	MISCELLANEOUS WATER LEVEL			0	0	40%
094	DEPOSITS ATTACHED GREASE	03	09	0	0	F01; 5%
096	ACCESS POINT MANHOLE			0	0	SMH0015

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01492	SMH0015	SMH1393	PVC	18	355	355	12	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0015
000	DEPOSITS ATTACHED GREASE	03	09	0	0	S01; 5%
000	MISCELLANEOUS WATER LEVEL			0	0	30%
045	MISCELLANEOUS WATER LEVEL			0	0	50%
182	MISCELLANEOUS WATER LEVEL			0	0	40%
353	DEPOSITS ATTACHED GREASE	03	09	0	0	F01; 5%
355	ACCESS POINT MANHOLE			0	0	SMH1393

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01494	SMH0016	SMH0017	PVC	18	295	295	12	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0016
000	DEPOSITS ATTACHED GREASE	03	09	0	0	S01; 5%
000	MISCELLANEOUS WATER LEVEL			0	0	20%
039	MISCELLANEOUS WATER LEVEL			0	0	30%
115	MISCELLANEOUS WATER LEVEL			0	0	40%
175	MISCELLANEOUS WATER LEVEL			0	0	30%
279	MISCELLANEOUS WATER LEVEL			0	0	40%
292	DEPOSITS ATTACHED GREASE	03	09	0	0	F01; 5%
295	ACCESS POINT MANHOLE			0	0	SMH0017

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01495	SMH0017	SMH0018	PVC	18	308	308	12	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0017
000	MISCELLANEOUS WATER LEVEL			0	0	30%
003	DEPOSITS ATTACHED GREASE	03	09	0	0	S01; 5%
081	MISCELLANEOUS WATER LEVEL			0	0	40%
159	MISCELLANEOUS WATER LEVEL			0	0	50%
230	MISCELLANEOUS WATER LEVEL			0	0	40%
306	DEPOSITS ATTACHED GREASE	03	09	0	0	F01; 5%
307	MISCELLANEOUS GENERAL OBSERVATION			0	0	SMH1390 DNE
308	ACCESS POINT MANHOLE			0	0	SMH0018

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01566	SMH0018	SMH1463	PVC	18	49	49	12	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0018
000	DEPOSITS ATTACHED GREASE	03	09	0	0	S01; 5%
000	MISCELLANEOUS WATER LEVEL			0	0	30%
031	MISCELLANEOUS WATER LEVEL			0	0	40%
047	DEPOSITS ATTACHED GREASE	03	09	0	0	F01; 5%
049	ACCESS POINT MANHOLE			0	0	SMH1463

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01564	SMH0020	SMH1399	PVC	18	7	7	12	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0020
000	MISCELLANEOUS WATER LEVEL			0	0	20%
007	ACCESS POINT MANHOLE			0	0	SMH1399

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01493	SMH1393	SMH0016	PVC	18	171	171	12	144	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1393
000	MISCELLANEOUS WATER LEVEL			0	0	30%
001	DEPOSITS ATTACHED GREASE	03	09	0	0	S01; 5%
089	INFILTRATION DRIPPER CONNECTION	11		144	0	
089	TAP BREAK-IN/HAMMER ACTIVITY	11		0	0	
093	MISCELLANEOUS WATER LEVEL			0	0	20%
108	MISCELLANEOUS WATER LEVEL			0	0	30%
159	MISCELLANEOUS WATER LEVEL			0	0	20%

169	DEPOSITS ATTACHED GREASE	03	09	0	0	F01; 5%
171	ACCESS POINT MANHOLE			0	0	SMH0016

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01958	SMH1399	SMH0021	RCP	18	43	43	12	0	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1399
000	MISCELLANEOUS WATER LEVEL			0	0	25%
001	SURFACE DAMAGE ROUGHNESS INCREASED	03	09	0	0	S01
012	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
030	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
040	SURFACE DAMAGE ROUGHNESS INCREASED	03	09	0	0	F01
043	ACCESS POINT MANHOLE			0	0	SMH0021

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01563	SMH1401	SMH0020	PVC	18	215	215	12	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1401
000	MISCELLANEOUS WATER LEVEL			0	0	25%
047	TAP FACTORY ACTIVITY	09		0	0	
098	TAP FACTORY	09		0	0	
215	ACCESS POINT MANHOLE			0	0	SMH0020

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP01560	SMH1463	SMH1401	PVC	18	275	275	12	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1463
000	MISCELLANEOUS WATER LEVEL			0	0	25%
005	DEPOSITS ATTACHED GREASE	03	09	0	0	S01; 5%

035	MISCELLANEOUS WATER LEVEL			0	0	40%
052	TAP FACTORY	03		0	0	
106	TAP FACTORY	02		0	0	
147	TAP FACTORY	04		0	0	
175	TAP FACTORY ACTIVITY	03		0	0	
239	TAP FACTORY	03		0	0	
271	DEPOSITS ATTACHED GREASE	03	09	0	0	F01; 5%
275	ACCESS POINT MANHOLE			0	0	SMH1401

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP00175	SMH1467	SMH1469	VCP	10	253	253	3	144	1.22

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1467
000	MISCELLANEOUS WATER LEVEL			0	0	20%
004	DEPOSITS SETTLED FINE	06		0	0	
007	CRACK LONGITUDINAL	04		0	0	
007	CRACK SPIRAL	03	05	0	0	
009	CRACK SPIRAL	08	09	0	0	
015	MISCELLANEOUS WATER LEVEL			0	0	30%
017	INFILTRATION STAIN JOINT	02		0	0	
028	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
028	MISCELLANEOUS WATER LEVEL			0	0	20%
030	JOINT OFFSET SMALL (DISPLACED)	09		0	0	
030	MISCELLANEOUS WATER LEVEL			0	0	10%
035	TAP FACTORY ACTIVITY	09		0	0	
046	JOINT OFFSET SMALL (DISPLACED)	03		0	0	
052	DEPOSITS SETTLED FINE	06		0	0	S01
062	MISCELLANEOUS WATER LEVEL			0	0	20%
068	JOINT OFFSET SMALL (DISPLACED)	03		0	0	
070	TAP FACTORY	10		0	0	
073	CRACK LONGITUDINAL	09		0	0	
082	INFILTRATION STAIN JOINT	09		0	0	

086	INFILTRATION STAIN JOINT	08	04	0	0	
086	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
088	INFILTRATION STAIN JOINT	09	03	0	0	
090	TAP FACTORY CAPPED	09		0	0	
095	BROKEN	12		0	0	PIECE BROKEN OFF OF JOINT
097	INFILTRATION STAIN JOINT	09		0	0	
101	JOINT OFFSET MEDIUM	03		0	0	
103	INFILTRATION STAIN JOINT	01	03	0	0	
107	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
116	INFILTRATION DRIPPER BARREL	11		144	0	
116	ROOTS MEDIUM BARREL	11		0	0	40%
116	TAP FACTORY CAPPED	02		0	0	
117	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
127	TAP FACTORY CAPPED	03		0	0	
137	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
142	ROOTS FINE BARREL	06		0	0	
161	JOINT OFFSET SMALL (DISPLACED)	03		0	0	
164	TAP FACTORY CAPPED	02		0	0	
165	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
170	TAP FACTORY CAPPED	02		0	0	
173	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
177	MISCELLANEOUS WATER LEVEL			0	0	30%
190	DEPOSITS SETTLED FINE	06		0	0	F01
190	MISCELLANEOUS WATER LEVEL			0	0	10%
190	OBSTRUCTION PIPE MATERIAL IN INVERT	06		0	0	15%, PIECE OF BROKEN PIPE FROM UPSTREAM
191	CRACK LONGITUDINAL	11		0	0	
195	TAP FACTORY CAPPED	10		0	0	
200	JOINT OFFSET SMALL (DISPLACED)	11		0	0	
215	BROKEN	09		0	0	PIECE BROKEN OFF OF JOINT
219	BROKEN	02		0	0	PIECE BROKEN OFF OF JOINT
221	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
242	TAP FACTORY	02		0	0	
247	FRACTURE LONGITUDINAL	12		0	0	

251	MISCELLANEOUS WATER LEVEL				0	0	20%
253	ACCESS POINT MANHOLE	12			0	0	SMH1469

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP00174	SMH1469	SMH0029	VCP	15	227	227	2	0	1.73

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1469
000	MISCELLANEOUS WATER LEVEL			0	0	20%
005	CRACK MULTIPLE	09	03	0	0	
005	SURFACE DAMAGE SPALLING OF COATING	10		0	0	
007	BROKEN	04		0	0	PIECE BROKEN OFF OF JOINT
010	CRACK MULTIPLE	09	12	0	0	S01
016	DEPOSITS SETTLED FINE	06		0	0	S02
027	SURFACE DAMAGE SPALLING OF COATING	11	00	0	0	
039	SURFACE DAMAGE SURFACE SPALLING	01		0	0	
043	FRACTURE LONGITUDINAL	07		0	0	
043	SURFACE DAMAGE SURFACE SPALLING	10		0	0	
044	CRACK MULTIPLE	09	03	0	0	F01
045	CRACK LONGITUDINAL	12		0	0	S03
045	TAP FACTORY ACTIVITY	01		0	0	
048	SURFACE DAMAGE SURFACE SPALLING	12	12	0	0	
049	CRACK MULTIPLE	11	01	0	0	
049	TAP FACTORY CAPPED	11		0	0	
056	FRACTURE LONGITUDINAL	07			0	
058	SURFACE DAMAGE SURFACE SPALLING	07		0	0	
059	CRACK LONGITUDINAL	08		0	0	
059	INFILTRATION STAIN BARREL	07		0	0	
067	CRACK LONGITUDINAL	07		0	0	
069	CRACK LONGITUDINAL	08		0	0	
069	FRACTURE LONGITUDINAL	12		0	0	
080	CRACK MULTIPLE	10	12	0	0	
080	SURFACE DAMAGE SPALLING OF COATING	05	07	0	0	

091	CRACK LONGITUDINAL	09		0	0	
093	CRACK LONGITUDINAL	08		0	0	
097	ROOTS FINE JOINT	09		0	0	
100	ROOTS FINE CONNECTION	01		0	0	
100	TAP FACTORY	01		0	0	
101	ROOTS FINE JOINT	08		0	0	
103	CRACK LONGITUDINAL	11		0	0	
104	TAP FACTORY CAPPED	10		0	0	
105	ROOTS FINE JOINT	03		0	0	
106	CRACK LONGITUDINAL	08		0	0	
111	CRACK LONGITUDINAL	08		0	0	
113	CRACK LONGITUDINAL	08		0	0	
115	CRACK LONGITUDINAL	04		0	0	
117	CRACK LONGITUDINAL	03		0	0	
121	FRACTURE LONGITUDINAL	04		0	0	
125	CRACK LONGITUDINAL	04		0	0	
127	TAP BREAK-IN/HAMMER	12		0	0	
128	CRACK LONGITUDINAL	08		0	0	
130	CRACK LONGITUDINAL	04		0	0	
132	CRACK LONGITUDINAL	08		0	0	
137	CRACK LONGITUDINAL	04		0	0	
137	INFILTRATION STAIN BARREL	03		0	0	
143	CRACK LONGITUDINAL	08		0	0	
155	CRACK LONGITUDINAL	03		0	0	
162	FRACTURE MULTIPLE	01	04	0	0	
162	TAP FACTORY	01		0	0	
165	CRACK LONGITUDINAL	04		0	0	
170	DEPOSITS SETTLED GRAVEL	03	06	0	0	20%, RAGGING
174	TAP FACTORY CAPPED	10		0	0	
175	CRACK MULTIPLE	03	10	0	0	
175	DEPOSITS SETTLED FINE	06		0	0	F02
175	INFILTRATION STAIN JOINT	07	09	0	0	
177	CRACK LONGITUDINAL	09		0	0	

183	CRACK LONGITUDINAL	08		0	0	
185	CRACK MULTIPLE	09	04	0	0	
190	CRACK LONGITUDINAL	09		0	0	
192	FRACTURE MULTIPLE	08	11	0	0	
192	TAP FACTORY ACTIVITY	10		0	0	
194	MISCELLANEOUS WATER LEVEL			0	0	30%
195	BROKEN	12		0	0	PIECE BROKEN OFF OF JOINT
195	FRACTURE MULTIPLE	12	02	0	0	
199	CRACK MULTIPLE	04	09	0	0	
199	INFILTRATION STAIN BARREL	08	04	0	0	S04
199	INFILTRATION STAIN JOINT	08	12	0	0	
206	CRACK LONGITUDINAL	12		0	0	F03
207	FRACTURE MULTIPLE	09	04	0	0	S05
214	INFILTRATION STAIN BARREL	08	04	0	0	F04
214	TAP FACTORY	02		0	0	
221	TAP FACTORY CAPPED	10		0	0	
222	BROKEN	08		0	0	
226	FRACTURE MULTIPLE	09	04	0	0	F05
227	ACCESS POINT MANHOLE			0	0	

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WAKEFIELD STREET	SP02229	SMH1749	SMH0011	PVC	18	202	202	12	0	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1749
000	MISCELLANEOUS WATER LEVEL			0	0	30%
001	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S01
006	DEPOSITS ATTACHED GREASE	03	09	0	0	S02; 10%
043	MISCELLANEOUS WATER LEVEL			0	0	40%
200	DEPOSITS ATTACHED GREASE	03	09	0	0	F02; 10%
200	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F01
202	ACCESS POINT MANHOLE			0	0	SMH0011;

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
SUMMER STREET	SP01267	SMH0051	SMH0052	VCP	12	302	302	3	432	1.42
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0051		
000	MISCELLANEOUS WATER LEVEL					0	0	25%		
003	TAP FACTORY CAPPED		02			0	0			
006	FRACTURE LONGITUDINAL		12			0	0			
011	DEPOSITS SETTLED FINE		06			0	0			
012	JOINT OFFSET SMALL (DISPLACED)		12			0	0	S01		
013	FRACTURE LONGITUDINAL		01			0	0	S02		
014	INFILTRATION STAIN JOINT		05	07		0	0			
020	FRACTURE LONGITUDINAL		12			0	0	F02		
022	JOINT OFFSET SMALL (DISPLACED)		12			0	0	F01		
024	CRACK LONGITUDINAL		04			0	0			
025	ROOTS FINE JOINT		02			0	0			
025	TAP FACTORY CAPPED		02			0	0			
026	ROOTS MEDIUM CONNECTION		01	03		0	0	20%		
026	TAP BREAK-IN/HAMMER		02			0	0			
028	JOINT OFFSET SMALL (DISPLACED)		12			0	0			
028	TAP BREAK-IN/HAMMER		10			0	0			
030	JOINT OFFSET SMALL (DISPLACED)		12			0	0			
031	MISCELLANEOUS WATER LEVEL					0	0	40%		
032	FRACTURE LONGITUDINAL		12			0	0			
034	FRACTURE LONGITUDINAL		12			0	0			
036	FRACTURE LONGITUDINAL		12			0	0			
039	FRACTURE LONGITUDINAL		11			0	0			
039	INFILTRATION STAIN BARREL		12			0	0			
041	FRACTURE LONGITUDINAL		11			0	0			
043	FRACTURE LONGITUDINAL		10			0	0			
043	INFILTRATION STAIN BARREL		10			0	0			
043	JOINT OFFSET SMALL (DISPLACED)		02			0	0			

048	FRACTURE LONGITUDINAL	11		0	0
048	INFILTRATION STAIN BARREL	12		0	0
050	FRACTURE MULTIPLE	11	01	0	0
050	JOINT OFFSET SMALL (DISPLACED)	12		0	0
051	TAP FACTORY CAPPED	09		0	0
052	FRACTURE LONGITUDINAL	12		0	0
052	INFILTRATION STAIN BARREL	12		0	0
054	INFILTRATION STAIN JOINT	03		0	0
056	FRACTURE MULTIPLE	10	12	0	0
056	JOINT OFFSET SMALL (DISPLACED)	12		0	0
058	TAP BREAK-IN/HAMMER	10		0	0
059	FRACTURE LONGITUDINAL	12		0	0
061	FRACTURE LONGITUDINAL	12		0	0
063	FRACTURE LONGITUDINAL	08		0	0
064	JOINT OFFSET SMALL (DISPLACED)	01		0	0
065	FRACTURE LONGITUDINAL	12		0	0
065	INFILTRATION STAIN JOINT	03	05	0	0
066	FRACTURE MULTIPLE	07	05	0	0
066	INFILTRATION STAIN BARREL	05	07	0	0
067	INFILTRATION STAIN BARREL	09		0	0
068	INFILTRATION STAIN JOINT	03		0	0
072	FRACTURE MULTIPLE	08	03	0	0
072	INFILTRATION STAIN BARREL	08	03	0	0
073	FRACTURE LONGITUDINAL	12		0	0
073	INFILTRATION STAIN JOINT	03	09	0	0
075	FRACTURE LONGITUDINAL	12		0	0
075	INFILTRATION STAIN BARREL	12		0	0
075	INFILTRATION STAIN JOINT	03	09	0	0
078	TAP BREAK-IN/HAMMER	10		0	0
078	TAP BREAK-IN/HAMMER	02		0	0
081	INFILTRATION STAIN JOINT	05	07	0	0
082	TAP FACTORY	10		0	0
083	INFILTRATION STAIN JOINT	05	07	0	0

085	INFILTRATION STAIN JOINT	07	10	0	0	
085	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
091	JOINT OFFSET SMALL (DISPLACED)	02		0	0	
092	CRACK LONGITUDINAL	12		0	0	
097	INFILTRATION STAIN JOINT	03		0	0	
097	MISCELLANEOUS WATER LEVEL			0	0	25%
101	TAP FACTORY	02		0	0	
105	INFILTRATION STAIN JOINT	08	10	0	0	
107	INFILTRATION STAIN JOINT	08	04	0	0	
109	TAP FACTORY CAPPED	02		0	0	
112	CRACK LONGITUDINAL	04		0	0	
112	INFILTRATION STAIN BARREL	04		0	0	
112	INFILTRATION STAIN JOINT	04	08	0	0	S03
113	CRACK LONGITUDINAL	01		0	0	
113	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
115	FRACTURE LONGITUDINAL	12		0	0	
115	INFILTRATION STAIN BARREL	12		0	0	
116	FRACTURE MULTIPLE	12	03	0	0	
116	INFILTRATION STAIN BARREL	03		0	0	
118	FRACTURE LONGITUDINAL	12		0	0	
118	INFILTRATION STAIN JOINT	09	12	0	0	
120	FRACTURE LONGITUDINAL	12		0	0	
120	INFILTRATION STAIN BARREL	12		0	0	
122	FRACTURE LONGITUDINAL	12		0	0	
122	INFILTRATION STAIN BARREL	12		0	0	
124	INFILTRATION STAIN JOINT	04	08	0	0	F03
126	JOINT OFFSET SMALL (DISPLACED)	04		0	0	
131	CRACK LONGITUDINAL	12		0	0	
131	INFILTRATION STAIN BARREL	12		0	0	
134	CRACK LONGITUDINAL	09		0	0	
134	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
135	INFILTRATION RUNNER CONNECTION	09		432	0	
135	TAP BREAK-IN/HAMMER	09		0	0	

137	CRACK LONGITUDINAL	12		0	0	
137	INFILTRATION STAIN CONNECTION	07	03	0	0	
137	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
138	DEPOSITS ATTACHED ENCRUSTATION	12	04	0	0	5%
140	INFILTRATION STAIN JOINT	04	08	0	0	S04
143	CRACK LONGITUDINAL	12		0	0	
143	INFILTRATION STAIN BARREL	12		0	0	
145	CRACK LONGITUDINAL	12		0	0	
155	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
156	TAP FACTORY CAPPED	02		0	0	
169	CRACK LONGITUDINAL	12		0	0	
171	CRACK LONGITUDINAL	12		0	0	
173	CRACK LONGITUDINAL	12		0	0	
180	TAP BREAK-IN/HAMMER	02		0	0	
183	INFILTRATION STAIN JOINT	04	08	0	0	F04
183	TAP FACTORY CAPPED	02		0	0	
191	INFILTRATION STAIN JOINT	04	08	0	0	
193	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
195	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
198	INFILTRATION STAIN JOINT	08	01	0	0	
204	INFILTRATION STAIN JOINT	04	08	0	0	S05
230	JOINT OFFSET SMALL (DISPLACED)	02		0	0	
230	MISCELLANEOUS WATER LEVEL			0	0	40%
242	INFILTRATION STAIN JOINT	04	08	0	0	F05
242	MISCELLANEOUS WATER LEVEL			0	0	20%
244	MISCELLANEOUS MATERIAL CHANGE			0	0	12 INCH AC
244	SURFACE DAMAGE OTHER	04	08	0	0	UNKNOWN MATERIAL UNDER BROKEN PIPE BETWEEN
248	FRACTURE LONGITUDINAL	09		0	0	
248	SURFACE DAMAGE SURFACE SPALLING	09		0	0	
250	BROKEN	08		0	0	
250	MISCELLANEOUS MATERIAL CHANGE			0	0	12 INCH VCP
250	SURFACE DAMAGE OTHER	08	04	0	0	UNKNOWN MATERIAL UNDER BROKEN PIPE BETWEEN
251	CRACK LONGITUDINAL	12		0	0	

251	MISCELLANEOUS WATER LEVEL			0	0	30%
253	BROKEN	12		0	0	
253	INFILTRATION STAIN JOINT	03		0	0	
257	CRACK LONGITUDINAL	12		0	0	
258	CRACK MULTIPLE	09	03	0	0	
261	CRACK LONGITUDINAL	11		0	0	
263	INFILTRATION STAIN JOINT	03	09	0	0	
271	DEPOSITS ATTACHED ENCRUSTATION	04	08	0	0	5%
271	FRACTURE LONGITUDINAL	12		0	0	
271	INFILTRATION STAIN BARREL	12		0	0	
273	FRACTURE LONGITUDINAL	12		0	0	
273	INFILTRATION STAIN JOINT	09	12	0	0	
275	FRACTURE MULTIPLE	03	12	0	0	
275	INFILTRATION STAIN BARREL	09	12	0	0	
278	FRACTURE LONGITUDINAL	10		0	0	
279	SURFACE DAMAGE SPALLING OF COATING	09		0	0	
287	CRACK LONGITUDINAL	12		0	0	
290	SURFACE DAMAGE SURFACE SPALLING	03		0	0	
294	BROKEN	03		0	0	
294	FRACTURE SPIRAL	03	12	0	0	
295	INFILTRATION STAIN JOINT	09	12	0	0	
296	DEPOSITS SETTLED FINE	06		0	0	
296	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	
298	INFILTRATION STAIN JOINT	08	02	0	0	
302	ACCESS POINT MANHOLE			0	0	SMH0052

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
SUMMER STREET	SP01268	SMH0051	SMH1469	VCP	12	237	237	3	0	1.32

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0051
000	MISCELLANEOUS WATER LEVEL			0	0	25%
004	CRACK LONGITUDINAL	12		0	0	

006	DEPOSITS SETTLED FINE	06		0	0	
006	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S01
006	TAP FACTORY	02		0	0	
007	CRACK LONGITUDINAL	12		0	0	
008	FRACTURE LONGITUDINAL	12		0	0	
011	CRACK LONGITUDINAL	12		0	0	
011	INFILTRATION STAIN JOINT	09	12	0	0	
023	FRACTURE LONGITUDINAL	12		0	0	
023	INFILTRATION STAIN JOINT	08	04	0	0	
025	FRACTURE LONGITUDINAL	12		0	0	
027	FRACTURE SPIRAL	08	12	0	0	
027	INFILTRATION STAIN JOINT	04	08	0	0	
028	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F01
031	INFILTRATION STAIN JOINT	12	04	0	0	
035	INFILTRATION STAIN JOINT	12	04	0	0	
037	FRACTURE MULTIPLE	10	02	0	0	
037	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
039	INFILTRATION STAIN JOINT	03		0	0	
040	FRACTURE LONGITUDINAL	12		0	0	
041	INFILTRATION STAIN JOINT	08		0	0	
042	CRACK LONGITUDINAL	03		0	0	
043	FRACTURE LONGITUDINAL	08		0	0	
043	FRACTURE SPIRAL	09	12	0	0	
045	INFILTRATION STAIN JOINT	09	03	0	0	
048	TAP FACTORY	03		0	0	
050	FRACTURE LONGITUDINAL	12		0	0	
053	INFILTRATION STAIN JOINT	04	08	0	0	
055	FRACTURE LONGITUDINAL	11		0	0	
055	INFILTRATION STAIN JOINT	04	08	0	0	
056	CRACK MULTIPLE	03	09	0	0	
057	INFILTRATION STAIN JOINT	09	03	0	0	
058	FRACTURE MULTIPLE	11	12	0	0	
059	FRACTURE LONGITUDINAL	12		0	0	

059	INFILTRATION STAIN JOINT	03	09	0	0	
063	INFILTRATION STAIN JOINT	09	05	0	0	
063	TAP FACTORY	03		0	0	
067	TAP BREAK-IN/HAMMER ACTIVITY	01		0	0	
069	FRACTURE LONGITUDINAL	12		0	0	
071	CRACK LONGITUDINAL	09		0	0	
071	INFILTRATION STAIN JOINT	09		0	0	
074	CRACK LONGITUDINAL	12		0	0	
081	TAP FACTORY CAPPED	02		0	0	
083	CRACK LONGITUDINAL	04		0	0	
086	CRACK MULTIPLE	11	01	0	0	
091	TAP FACTORY	10		0	0	
092	INFILTRATION STAIN JOINT	09	03	0	0	
098	INFILTRATION STAIN JOINT	09		0	0	
100	FRACTURE LONGITUDINAL	12		0	0	
100	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
104	INFILTRATION STAIN JOINT	08	04	0	0	S02
105	CRACK MULTIPLE	11	01	0	0	S03
117	TAP FACTORY CAPPED	02		0	0	
140	FRACTURE LONGITUDINAL	12		0	0	S04
141	INFILTRATION STAIN JOINT	08	04	0	0	F02
151	CRACK MULTIPLE	11	01	0	0	F03
151	FRACTURE LONGITUDINAL	11		0	0	F04
151	INFILTRATION STAIN JOINT	09	12	0	0	
152	TAP BREAK-IN/HAMMER ACTIVITY	11		0	0	
154	FRACTURE MULTIPLE	12	02	0	0	
156	FRACTURE LONGITUDINAL	12		0	0	S05
156	INFILTRATION STAIN BARREL	08	12	0	0	
158	INFILTRATION STAIN BARREL	08	12	0	0	
160	INFILTRATION STAIN BARREL	03		0	0	
160	INFILTRATION STAIN JOINT	08		0	0	
166	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
167	CRACK LONGITUDINAL	09		0	0	

167	TAP FACTORY CAPPED	10		0	0	
168	INFILTRATION STAIN JOINT	02		0	0	
176	FRACTURE LONGITUDINAL	12		0	0	F05
178	JOINT OFFSET SMALL (DISPLACED)	03		0	0	
179	TAP FACTORY	02		0	0	
186	SURFACE DAMAGE SPALLING OF COATING	03		0	0	
190	CRACK MULTIPLE	09	03	0	0	
192	BROKEN	12		0	0	
193	CRACK LONGITUDINAL	12		0	0	
198	TAP FACTORY	10		0	0	
203	CRACK MULTIPLE	09	03	0	0	
205	BROKEN	07	10	0	0	
205	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
208	FRACTURE LONGITUDINAL	12		0	0	S06
209	SURFACE DAMAGE SPALLING OF COATING	10		0	0	
212	CRACK LONGITUDINAL	09		0	0	
215	FRACTURE LONGITUDINAL	12		0	0	F06
217	CRACK LONGITUDINAL	12		0	0	
219	SURFACE DAMAGE SPALLING OF COATING	09		0	0	
221	CRACK LONGITUDINAL	02		0	0	
223	CRACK LONGITUDINAL	12		0	0	
230	CRACK MULTIPLE	02	10	0	0	
232	CRACK LONGITUDINAL	03	09	0	0	
234	JOINT OFFSET SMALL (DISPLACED)	03		0	0	
237	ACCESS POINT MANHOLE	12		0	0	SMH1469

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP01962	SMH0252	SMH0049	DIP	18	530	530	20	0	2.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0252
000	MISCELLANEOUS WATER LEVEL			0	0	25%
002	DEPOSITS ATTACHED GREASE	07	05	0	0	S01; 5%

002	SURFACE DAMAGE CORROSION	07	05	0	0	S02
355	MISCELLANEOUS WATER LEVEL			0	0	30%
508	MISCELLANEOUS WATER LEVEL			0	0	25%
524	MISCELLANEOUS CAMERA UNDERWATER			0	0	15%
530	ACCESS POINT MANHOLE			0	0	SMH0049
530	DEPOSITS ATTACHED GREASE	07	05	0	0	F01; 5%
530	SURFACE DAMAGE CORROSION	07	05	0	0	F02

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP01962	SMH0252	SMH0049	DIP	18	527	527	20	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0252
000	MISCELLANEOUS WATER LEVEL			0	0	10%
307	OBSTACLE/OBSTRUCTION OTHER OBJECTS			0	0	5%, SMALL PVC PIPE SECTION ON PIPE BOTTOM
411	MISCELLANEOUS GENERAL OBSERVATION	06		0	0	S01; POSSIBLE DIP IN PIPE, LOWER VISIBILITY TO BOTT
501	MISCELLANEOUS GENERAL OBSERVATION	06		0	0	F01; POSSIBLE DIP IN PIPE, LOWER VISIBILITY TO BOTT
527	ACCESS POINT MANHOLE			0	0	SMH0049

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP01961	SMH1398	SMH0252	DIP	18	466	466	20	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1398
000	MISCELLANEOUS WATER LEVEL			0	0	25%
003	DEPOSITS ATTACHED GREASE	04	08	0	0	S02; AT WATER LINE; 5%
003	SURFACE DAMAGE CORROSION	07	05	0	0	S01
440	LINE LEFT			0	0	
463	DEPOSITS ATTACHED GREASE	04	08	0	0	F02; AT WATER LINE; 5%
463	SURFACE DAMAGE CORROSION	07	05	0	0	F01
466	ACCESS POINT MANHOLE			0	0	SMH0252

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
COLUMBUS AVE	SP01961	SMH1398	SMH0252	DIP	18	466	81	20	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1398
000	MISCELLANEOUS WATER LEVEL			0	0	10%
081	MISCELLANEOUS SURVEY ABANDONED			0	0	POOR VISIBILITY, WATER LEVEL HIGH AND DEBRIS

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GAGNE STREET	SP00170	SMH0351	SMH0350	PVC	8	91	91	13	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0351
000	MISCELLANEOUS WATER LEVEL			0	0	5%
001	FRACTURE MULTIPLE	03	09	0	0	
040	TAP FACTORY	02		0	0	
063	TAP FACTORY	02		0	0	
083	TAP FACTORY ACTIVITY	02		0	0	
085	MISCELLANEOUS WATER LEVEL			0	0	15%
091	ACCESS POINT MANHOLE			0	0	SMH0350

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GAGNE STREET	SP00171	SMH0351	SMH0352	PVC	8	83	83	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0351
000	MISCELLANEOUS WATER LEVEL			0	0	5%
030	TAP FACTORY			0	0	
051	TAP FACTORY			0	0	
083	ACCESS POINT MANHOLE			0	0	DROP CONNECTION IN SMH0352

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GAGNE STREET	SP00172	SMH0352	SMH1636	PVC	8	83	83	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0352
000	MISCELLANEOUS WATER LEVEL			0	0	5%
044	TAP FACTORY ACTIVITY			0	0	
063	TAP FACTORY			0	0	
083	ACCESS POINT MANHOLE			0	0	SMH1636

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GAGNE STREET	SP00173	SMH0353	SMH1636	PVC	8	7	7	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0353
000	MISCELLANEOUS WATER LEVEL			0	0	5%
007	ACCESS POINT MANHOLE			0	0	SMH1636

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GAGNE STREET	SP00169	SMH0353	SMH2785	RCP	15	315	315	8	0	1.67

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0353
000	MISCELLANEOUS WATER LEVEL			0	0	20%
015	SURFACE DAMAGE AGGREGATE MISSING	09		0	0	
079	SURFACE DAMAGE AGGREGATE MISSING	03		0	0	
147	TAP FACTORY ACTIVITY	12		0	0	
278	TAP FACTORY	12		0	0	
314	OBSTRUCTION BRICK OR MASONRY	06		0	0	5%, BRICK AND RAGGING
315	ACCESS POINT MANHOLE			0	0	SMH2785

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GAGNE STREET	SP00168	SMH0354	SMH0353	PVC	8	187	187	13	0	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0354
000	MISCELLANEOUS WATER LEVEL			0	0	5%
007	DEPOSITS ATTACHED ENCRUSTATION	03		0	0	5%
007	TAP SADDLE	03		0	0	
057	TAP FACTORY ACTIVITY	03		0	0	
066	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06		0	0	5%, RAGGING
084	TAP FACTORY ACTIVITY	09		0	0	
116	TAP FACTORY ACTIVITY	09		0	0	
118	MISCELLANEOUS GENERAL OBSERVATION	12		0	0	DIP IN PIPE
120	TAP FACTORY ACTIVITY	02		0	0	
123	MISCELLANEOUS WATER LEVEL			0	0	15%
127	LINE UP	12		0	0	5%
133	MISCELLANEOUS WATER LEVEL			0	0	0%
137	TAP FACTORY ACTIVITY	02		0	0	
161	DEPOSITS ATTACHED RAGGING	09		0	0	BUILD UP IN SVC
161	TAP FACTORY	09		0	0	
187	ACCESS POINT MANHOLE	06		0	0	DROP CONNECTION; SMH0353

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
RIVER STREET	SP02126	SMH2785	SMH2783	RCP	15	109	109	8	0	2

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH2785
000	MISCELLANEOUS WATER LEVEL			0	0	15%
088	DEPOSITS ATTACHED GREASE	10	02	0	0	5%; S01
096	DEPOSITS ATTACHED GREASE	10	02	0	0	5%; F02
109	ACCESS POINT MANHOLE			0	0	SMH2783

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
RIVER STREET	SP02145	SMH2783	SMH2940	RCP	15	17	17	8	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH2783
000	MISCELLANEOUS WATER LEVEL			0	0	15%
017	ACCESS POINT MANHOLE			0	0	SMH2783.A (BURIED SMH 17 FT DS OF 2783)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP01158	SMH0494	SMH0273	RCP	24	357	357	8	576	1.6

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0494
000	MISCELLANEOUS WATER LEVEL			0	0	10%
000	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	
021	INFILTRATION RUNNER JOINT	03		576	0	
021	TAP BREAK-IN/HAMMER ACTIVITY	03		0	0	
068	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
206	SURFACE DAMAGE REINFORCEMENT VISIBLE	02		0	0	AROUND SERVICE
206	TAP BREAK-IN/HAMMER	02		0	0	
306	DEPOSITS SETTLED GRAVEL	06		0	0	
339	TAP BREAK-IN/HAMMER	01		0	0	
354	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	
357	ACCESS POINT MANHOLE			0	0	SMH0273

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP01172	SMH0494	SMH1351	RCP	24	411	411	8	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0494
000	MISCELLANEOUS WATER LEVEL			0	0	20%

001	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
007	SURFACE DAMAGE REINFORCEMENT VISIBLE	08		0	0	AROUND SERVICE
008	ROOTS FINE CONNECTION	10		0	0	
008	TAP BREAK-IN/HAMMER	10		0	0	
069	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	
096	SURFACE DAMAGE REINFORCEMENT VISIBLE	10		0	0	AROUND SERVICE
096	TAP BREAK-IN/HAMMER ACTIVITY	10		0	0	
146	SURFACE DAMAGE AGGREGATE PROJECTING	10		0	0	
146	TAP BREAK-IN/HAMMER	11		0	0	
224	TAP BREAK-IN/HAMMER	11		0	0	
295	SURFACE DAMAGE REINFORCEMENT VISIBLE	01		0	0	AROUND SERVICE
295	TAP BREAK-IN/HAMMER	01		0	0	
305	TAP BREAK-IN/HAMMER	10		0	0	
307	TAP BREAK-IN/HAMMER CAPPED	10		0	0	
408	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
411	ACCESS POINT MANHOLE			0	0	SMH1351

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP01173	SMH0496	SMH1351	RCP	24	307	307	8	0	1.67

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0496
000	MISCELLANEOUS WATER LEVEL			0	0	10%
001	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01; ALSO AGGREGATE VISIBLE AT 12
038	DEPOSITS ATTACHED RAGGING	06		0	0	15%
064	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	S02
135	SURFACE DAMAGE SURFACE SPALLING	03	09	0	0	F02
244	SURFACE DAMAGE REINFORCEMENT VISIBLE	01		0	0	AROUND SERVICE
244	TAP BREAK-IN/HAMMER ACTIVITY	01		0	0	
301	TAP BREAK-IN/HAMMER ACTIVITY	01		0	0	
305	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
307	ACCESS POINT MANHOLE			0	0	SMH1351; ALSO AGGREGATE VISIBLE AT 12

CHARLES STREET											
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index	
CHARLES STREET	SP00434	SMH0501	SMH1349	RCP	24	311	287	8	0	1.25	
Footage	Defect Code		Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments				
	000	ACCESS POINT MANHOLE			0	0	SMH0501				
	000	MISCELLANEOUS WATER LEVEL			0	0	10%				
	000	SURFACE DAMAGE AGGREGATE VISIBLE		03	08	0	0	S01			
	002	SURFACE DAMAGE SURFACE SPALLING		09	03	0	0	S02			
	058	ROOTS FINE JOINT		09	12	0	0				
	093	SURFACE DAMAGE SURFACE SPALLING		09	03	0	0	F02			
	106	INTRUDING SEALING MATERIAL SEALING RING		01		0	0				
	119	SURFACE DAMAGE AGGREGATE PROJECTING		01	03	0	0				
	119	TAP BREAK-IN/HAMMER		01		0	0				
	202	TAP BREAK-IN/HAMMER		01		0	0				
	245	TAP BREAK-IN/HAMMER CAPPED		01		0	0				
	251	TAP BREAK-IN/HAMMER		01		0	0				
	270	SURFACE DAMAGE SURFACE SPALLING		09	03	0	0				
	287	MISCELLANEOUS SURVEY ABANDONED				0	0	OUT OF CABLE			
	287	SURFACE DAMAGE AGGREGATE VISIBLE		03	08	0	0	F01			
CHARLES STREET											
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index	
CHARLES STREET	SP00445	SMH0507	SMH0505	RCP	24	389	389	8	1,728	1.67	
Footage	Defect Code		Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments				
	000	ACCESS POINT MANHOLE			0	0	SMH0507				
	000	MISCELLANEOUS WATER LEVEL			0	0	20%				
	000	SURFACE DAMAGE AGGREGATE VISIBLE		04	08	0	0	S01			
	000	SURFACE DAMAGE SURFACE SPALLING		09	03	0	0	S02			
	096	SURFACE DAMAGE SURFACE SPALLING		09	03	0	0	F02			
	114	INFILTRATION STAIN JOINT		03		0	0				
	121	SURFACE DAMAGE SURFACE SPALLING		08	04	0	0	S03			
	208	INFILTRATION DRIPPER CONNECTION		01		144	0				

208	TAP BREAK-IN/HAMMER INTRUDING	01		0	0	
214	SURFACE DAMAGE AGGREGATE PROJECTING	12		0	0	
214	TAP BREAK-IN/HAMMER	12		0	0	
259	INFILTRATION RUNNER JOINT	04		576	0	
259	INFILTRATION RUNNER JOINT	08		576	0	
265	INFILTRATION DRIPPER CONNECTION	12		144	0	
265	TAP BREAK-IN/HAMMER	12		0	0	
275	BROKEN	08		0	0	SMALL PIECE BROKEN OFF OF JOINT
282	SURFACE DAMAGE AGGREGATE PROJECTING	12		0	0	
282	TAP BREAK-IN/HAMMER	12		0	0	
287	INFILTRATION DRIPPER JOINT			288	0	
287	TAP BREAK-IN/HAMMER INTRUDING	12		0	0	
330	SURFACE DAMAGE SURFACE SPALLING	08	04	0	0	F03
386	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
389	ACCESS POINT MANHOLE			0	0	SMH0505

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP00449	SMH0507	SMH0509	RCP	24	440	440	8	2,304	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0507
000	MISCELLANEOUS WATER LEVEL			0	0	15%
000	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	S01
032	INFILTRATION RUNNER JOINT	08		432	0	
088	SURFACE DAMAGE AGGREGATE PROJECTING	12		0	0	
088	TAP BREAK-IN/HAMMER	12		0	0	
131	TAP BREAK-IN/HAMMER	10		0	0	
169	INFILTRATION DRIPPER CONNECTION	12		144	0	
169	TAP BREAK-IN/HAMMER	12		0	0	
235	SURFACE DAMAGE AGGREGATE PROJECTING	11	09	0	0	
235	TAP BREAK-IN/HAMMER	11		0	0	
237	MISCELLANEOUS WATER LEVEL			0	0	5%
320	INFILTRATION DRIPPER CONNECTION	11		144	0	

320	ROOTS FINE CONNECTION	11		0	0	
320	TAP BREAK-IN/HAMMER	11		0	0	
347	INFILTRATION RUNNER JOINT	08		432	0	
360	INFILTRATION DRIPPER JOINT	12		720	0	
360	TAP BREAK-IN/HAMMER	12		0	0	
366	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	S02
378	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	F02
383	SURFACE DAMAGE SURFACE SPALLING	09		0	0	
398	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	S03
418	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	F03
428	INFILTRATION RUNNER JOINT	04		432	0	
437	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	F01
440	ACCESS POINT MANHOLE			0	0	SMH0509

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP00440	SMH1348	SMH0501	RCP	24	401	401	8	144	1.38

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1348
000	MISCELLANEOUS WATER LEVEL			0	0	10%
004	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	S01
013	SURFACE DAMAGE AGGREGATE PROJECTING	12		0	0	
013	TAP BREAK-IN/HAMMER ACTIVITY	12		0	0	
027	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S02
053	CRACK LONGITUDINAL	04		0	0	
058	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F02
065	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S03
073	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
128	ROOTS FINE JOINT	08	12	0	0	
147	ROOTS FINE BARREL	12		0	0	
169	ROOTS FINE JOINT	10	03	0	0	
231	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F03
235	SURFACE DAMAGE AGGREGATE PROJECTING	05	12	0	0	

235	TAP BREAK-IN/HAMMER	12		0	0	
250	INFILTRATION DRIPPER CONNECTION	12		144	0	
250	SURFACE DAMAGE AGGREGATE PROJECTING	04	08	0	0	
250	TAP BREAK-IN/HAMMER ACTIVITY	12		0	0	
277	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S04
295	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F04
323	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S05
333	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F05
342	ROOTS FINE JOINT	12		0	0	
381	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S06
386	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F06
399	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	F01
401	ACCESS POINT MANHOLE			0	0	SMH0501

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP00442	SMH1348	SMH0505	RCP	24	366	366	8	0	1.6

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1348
000	MISCELLANEOUS WATER LEVEL			0	0	15%
003	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	S01
036	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	S02
040	SURFACE DAMAGE SPALLING OF COATING	09		0	0	F02
055	SURFACE DAMAGE SPALLING OF COATING	09		0	0	
058	SURFACE DAMAGE SPALLING OF COATING	11	01	0	0	S03
107	SURFACE DAMAGE SPALLING OF COATING	11	01	0	0	F03
117	TAP BREAK-IN/HAMMER	10		0	0	
125	SURFACE DAMAGE SPALLING OF COATING	03		0	0	
131	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	S04
138	SURFACE DAMAGE SPALLING OF COATING	09	03	0	0	F04
148	MISCELLANEOUS WATER LEVEL			0	0	5%
164	SURFACE DAMAGE SPALLING OF COATING	03		0	0	
196	MISCELLANEOUS WATER LEVEL			0	0	15%

201	SURFACE DAMAGE AGGREGATE PROJECTING	12	05	0	0	
201	TAP BREAK-IN/HAMMER	12		0	0	
238	SURFACE DAMAGE AGGREGATE PROJECTING	07	05	0	0	
238	TAP BREAK-IN/HAMMER	12		0	0	
280	SURFACE DAMAGE SPALLING OF COATING	03	09	0	0	
310	SURFACE DAMAGE AGGREGATE PROJECTING	07	05	0	0	
310	TAP BREAK-IN/HAMMER	12		0	0	
317	MISCELLANEOUS WATER LEVEL			0	0	5%
328	SURFACE DAMAGE SPALLING OF COATING	09		0	0	S05
350	SURFACE DAMAGE SPALLING OF COATING	09		0	0	F05
364	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	F01
366	ACCESS POINT MANHOLE			0	0	SMH0505

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP00434	SMH1349	SMH0501	RCP	24	311	34	8	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1349
000	MISCELLANEOUS WATER LEVEL			0	0	20%
001	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
033	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
034	MISCELLANEOUS SURVEY ABANDONED			0	0	REACHED PAST PREVIOUS SURVEY
034	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP00436	SMH1349	SMH1350	RCP	24	260	260	8	0	1.71

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1349
000	MISCELLANEOUS WATER LEVEL			0	0	15%
003	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	S01
031	SURFACE DAMAGE SURFACE SPALLING	09	03	0	0	S02
075	SURFACE DAMAGE AGGREGATE PROJECTING	12	05	0	0	

075	TAP BREAK-IN/HAMMER	01			0	0				
128	SURFACE DAMAGE AGGREGATE PROJECTING	12	05		0	0				
128	SURFACE DAMAGE SPALLING OF COATING	09	03		0	0	F02			
128	TAP BREAK-IN/HAMMER	02			0	0				
206	SURFACE DAMAGE AGGREGATE PROJECTING	02	05		0	0				
206	TAP BREAK-IN/HAMMER INTRUDING	02			0	0				
257	SURFACE DAMAGE AGGREGATE VISIBLE	03	09		0	0	F01			
260	ACCESS POINT MANHOLE				0	0	SMH1350			

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP00437	SMH1350	SMH0496	RCP	24	28	28	8	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1350
000	MISCELLANEOUS WATER LEVEL			0	0	15%
001	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
026	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
028	ACCESS POINT MANHOLE			0	0	SMH0496

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP00453	SMH1679	SMH0509	RCP	24	328	328	8	864	2.36

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1679
000	MISCELLANEOUS WATER LEVEL			0	0	15%
000	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	S01
113	INFILTRATION DRIPPER CONNECTION	01		144	0	
113	TAP BREAK-IN/HAMMER	01		0	0	
164	SURFACE DAMAGE AGGREGATE PROJECTING	01	03	0	0	
164	TAP BREAK-IN/HAMMER	01		0	0	
179	INFILTRATION RUNNER JOINT	03		288	0	
225	INFILTRATION DRIPPER CONNECTION	12		144	0	
225	SURFACE DAMAGE AGGREGATE PROJECTING	09	03	0	0	

225	TAP BREAK-IN/HAMMER	12		0	0	
236	CRACK LONGITUDINAL	08		0	0	
252	ROOTS FINE JOINT	08		0	0	
260	INFILTRATION RUNNER JOINT	08		144	0	
260	ROOTS FINE JOINT	08	04	0	0	
268	ROOTS FINE JOINT	03		0	0	
289	INFILTRATION DRIPPER CONNECTION	12		144	0	
289	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
289	TAP BREAK-IN/HAMMER	12		0	0	
325	SURFACE DAMAGE AGGREGATE VISIBLE	03	09	0	0	F01
328	ACCESS POINT MANHOLE			0	0	SMH0509

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHARLES STREET	SP02553	SMH2762	SMH0273	RCP	24	563	563	8	0	1.17

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH2762
000	MISCELLANEOUS WATER LEVEL			0	0	15%
000	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
080	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	
313	DEPOSITS ATTACHED RAGGING	06		0	0	10%
318	MISCELLANEOUS WATER LEVEL			0	0	25%
465	CRACK MULTIPLE	11		0	0	
472	TAP BREAK-IN/HAMMER INTRUDING	09		0	0	
484	TAP BREAK-IN/HAMMER ACTIVITY	09		0	0	
557	SURFACE DAMAGE AGGREGATE VISIBLE	08	04	0	0	
559	MISCELLANEOUS WATER LEVEL			0	0	35%
561	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
563	ACCESS POINT MANHOLE			0	0	SMH0273

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
OLD DOVER ROAD	SP01161	SMH2939	SMH0541	RCP	24	265	265	8	0	1.25
Footage	Defect Code		Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments			
	000	ACCESS POINT MANHOLE			0	0	SMH1331.A (UNKNOWN SMH 215 FT DS FROM SMH1331)			
	000	MISCELLANEOUS WATER LEVEL			0	0	15%			
	000	SURFACE DAMAGE AGGREGATE VISIBLE		04	08	0	0	S01		
	052	ROOTS FINE BARREL		11	0	0				
	146	SURFACE DAMAGE AGGREGATE PROJECTING		09	03	0	0			
	146	TAP BREAK-IN/HAMMER ACTIVITY		11	0	0				
	262	SURFACE DAMAGE AGGREGATE VISIBLE		04	08	0	0	F01		
	265	ACCESS POINT MANHOLE			0	0	SMH0541			

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
OLD DOVER ROAD	SP01162	SMH1331	SMH2938	RCP	24	364	364	8	0	1
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
	000	ACCESS POINT MANHOLE				0	0	SMH1331		
	000	MISCELLANEOUS WATER LEVEL				0	0	15%		
	000	SURFACE DAMAGE AGGREGATE VISIBLE	03	09		0	0	S01		
	079	INFILTRATION STAIN JOINT	08			0	0			
	092	SURFACE DAMAGE SURFACE SPALLING	09			0	0			
	131	TAP BREAK-IN/HAMMER ACTIVITY	10			0	0			
	177	SURFACE DAMAGE SURFACE SPALLING	03			0	0			
	216	CRACK SPIRAL	03			0	0			
	280	CRACK SPIRAL	09			0	0			
	302	SURFACE DAMAGE SURFACE SPALLING	12			0	0			
	311	MISCELLANEOUS WATER LEVEL				0	0	25%		
	359	MISCELLANEOUS WATER LEVEL				0	0	15%		
	362	SURFACE DAMAGE AGGREGATE VISIBLE	03	09		0	0	F01		
	364	ACCESS POINT MANHOLE				0	0	BURIED SMH (BURIED SMH 554 FT DS FROM SMH2762)		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
OLD DOVER ROAD	SP01161	SMH1331	SMH2939	RCP	24	215	215	8	288	1.3

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1331
000	MISCELLANEOUS WATER LEVEL			0	0	15%
000	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
011	SURFACE DAMAGE SURFACE SPALLING	12		0	0	S02
025	SURFACE DAMAGE SURFACE SPALLING	12		0	0	F02
081	INFILTRATION RUNNER CONNECTION	03		288	0	
081	TAP BREAK-IN/HAMMER INTRUDING	03		0	0	
096	ROOTS MEDIUM CONNECTION	02		0	0	10%
096	SURFACE DAMAGE AGGREGATE PROJECTING	08	04	0	0	
096	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
099	ROOTS MEDIUM JOINT	08	04	0	0	15%
180	INFILTRATION STAIN JOINT	08	12	0	0	
197	INFILTRATION STAIN JOINT	08		0	0	
212	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
215	ACCESS POINT MANHOLE			0	0	SMH1331.A (UNKNOWN SMH 215 FT DS FROM SMH1331)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
OLD DOVER ROAD	SP01162	SMH2762	SMH2938	RCP	24	554	554	8	0	1.25

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH2762
000	MISCELLANEOUS WATER LEVEL			0	0	15%
000	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	S01
011	SURFACE DAMAGE AGGREGATE PROJECTING	12	05	0	0	
011	TAP BREAK-IN/HAMMER ACTIVITY	02		0	0	
052	SURFACE DAMAGE AGGREGATE PROJECTING	03		0	0	KEEP
552	SURFACE DAMAGE AGGREGATE VISIBLE	04	08	0	0	F01
554	ACCESS POINT MANHOLE			0	0	SMH2762.A (BURIED SMH 554 FT DS FROM SMH2762)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01324	SMH0724	SMH1568	PVC	12	463	463	13	29,088	1.29
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0724		
000	MISCELLANEOUS WATER LEVEL					0	0	20%		
064	INFILTRATION STAIN JOINT		09			0	0			
146	MISCELLANEOUS WATER LEVEL					0	0	30%		
149	INFILTRATION RUNNER CONNECTION		12			28,800	0			
149	TAP BREAK-IN/HAMMER ACTIVITY		12			0	0			
167	INFILTRATION STAIN JOINT		03	12		0	0			
240	INFILTRATION RUNNER CONNECTION		10			288	0			
240	TAP BREAK-IN/HAMMER INTRUDING		10			0	0			
353	INFILTRATION STAIN JOINT		12	12		0	0			
357	TAP BREAK-IN/HAMMER		09			0	0			
362	INFILTRATION STAIN JOINT		06	09		0	0			
364	MISCELLANEOUS WATER LEVEL					0	0	20%		
401	MISCELLANEOUS WATER LEVEL					0	0	30%		
414	INFILTRATION STAIN JOINT		09	11		0	0			
457	MISCELLANEOUS WATER LEVEL					0	0	20%		
463	ACCESS POINT MANHOLE					0	0	SMH1568		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01325	SMH0724	SMH1569	PVC	12	486	486	13	288	1.5
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0724		
000	MISCELLANEOUS WATER LEVEL					0	0	50%		
081	TAP SADDLE ACTIVITY		12			0	0			
267	MISCELLANEOUS WATER LEVEL					0	0	60%		
292	MISCELLANEOUS WATER LEVEL					0	0	50%		
318	MISCELLANEOUS WATER LEVEL					0	0	15%		

339	MISCELLANEOUS WATER MARK					0	0	60%
372	INFILTRATION RUNNER CONNECTION	10				288	0	
372	TAP BREAK-IN/HAMMER ACTIVITY	10				0	0	
396	INFILTRATION STAIN JOINT	03				0	0	
486	ACCESS POINT MANHOLE					0	0	SMH1569

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01326	SMH0725	SMH1569	PVC	12	382	382	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0725
000	MISCELLANEOUS WATER LEVEL			0	0	20%
171	MISCELLANEOUS WATER MARK			0	0	60%
382	ACCESS POINT MANHOLE			0	0	SMH1569

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01327	SMH0725	SMH1570	PVC	12	391	391	13	0	1.14

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0725
000	MISCELLANEOUS WATER LEVEL			0	0	15%
007	INFILTRATION STAIN JOINT	03	12	0	0	
098	INFILTRATION STAIN JOINT	03	09	0	0	S01
223	CRACK LONGITUDINAL	03		0	0	
304	FRACTURE LONGITUDINAL	03		0	0	
315	INFILTRATION STAIN BARREL	12		0	0	
352	INFILTRATION STAIN JOINT	03	09	0	0	F01
382	DEPOSITS SETTLED FINE	06		0	0	15%
391	ACCESS POINT MANHOLE			0	0	SMH1570

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHURCH STREET	SP01333	SMH0860	SMH0861	PVC	8	110	110	13	0	1
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0860		
000	MISCELLANEOUS WATER LEVEL					0	0	15%		
015	MISCELLANEOUS WATER LEVEL					0	0	5%		
064	TAP FACTORY		03			0	0			
110	ACCESS POINT MANHOLE					0	0	SMH0861		
110	OBSTRUCTION BRICK OR MASONRY		06			0	0	5%, BRICK IN MANHOLE INVERT		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHURCH STREET	SP01334	SMH0860	SMH1258	PVC	8	69	69	13	0	0
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0860		
000	MISCELLANEOUS WATER LEVEL					0	0	15%		
003	TAP FACTORY ACTIVITY					0	0			
034	MISCELLANEOUS WATER LEVEL					0	0	5%		
062	MISCELLANEOUS WATER LEVEL					0	0	15%		
069	ACCESS POINT MANHOLE					0	0	SMH1258		

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHURCH STREET	SP01332	SMH0862	SMH0861	PVC	8	293	293	13	0	2
Footage	Defect Code		Clock Position From	Clock Position To		Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments		
000	ACCESS POINT MANHOLE					0	0	SMH0862		
000	MISCELLANEOUS WATER LEVEL					0	0	5%		
059	TAP FACTORY		09			0	0			
087	TAP FACTORY		09			0	0			
217	TAP FACTORY ACTIVITY		09			0	0			

289	MISCELLANEOUS WATER LEVEL				0	0	15%
291	OBSTRUCTION BRICK OR MASONRY	06			0	0	5%, BRICK IN MANHOLE INVERT
293	ACCESS POINT MANHOLE				0	0	SMH0861

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHURCH STREET	SP01331	SMH0863	SMH0862	PVC	8	301	301	13	0	1.5

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0863
000	MISCELLANEOUS WATER LEVEL			0	0	5%
014	BROKEN	06		0	0	SMALL PIECE BROKEN OFF PIPE AT JOINT
032	BROKEN	06		0	0	
196	TAP FACTORY	09		0	0	
301	ACCESS POINT MANHOLE			0	0	SMH0862

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHURCH STREET	SP01330	SMH0863	SMH0864	PVC	8	302	302	13	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0863
000	MISCELLANEOUS WATER LEVEL			0	0	5%
002	TAP FACTORY	09		0	0	
009	TAP FACTORY	03		0	0	
084	TAP FACTORY	03		0	0	
103	TAP FACTORY	10		0	0	
133	DEPOSITS ATTACHED OTHER	03	09	0	0	5%, DEPOSITS ON WALLS
136	TAP FACTORY	10		0	0	
182	TAP FACTORY	02		0	0	
218	TAP FACTORY	02		0	0	
296	TAP FACTORY	10		0	0	
302	ACCESS POINT MANHOLE			0	0	SMH0864

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHURCH STREET	SP01884	SMH0864	SMH0865	PVC	8	317	317	13	0	1.8
Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments				
000	ACCESS POINT MANHOLE			0	0	SMH0864				
000	MISCELLANEOUS WATER LEVEL			0	0	10%				
006	MISCELLANEOUS WATER LEVEL			0	0	5%				
058	TAP FACTORY	02		0	0					
114	TAP FACTORY	03		0	0					
125	DEPOSITS ATTACHED OTHER	03	09	0	0	5%, DEPOSITS ATTACHED TO WALL				
127	TAP FACTORY ACTIVITY	10		0	0					
184	TAP FACTORY	10		0	0					
207	TAP FACTORY	10		0	0					
229	DEPOSITS ATTACHED OTHER	03	09	0	0	5%, DEPOSITS ATTACHED TO WALL				
232	TAP FACTORY	02		0	0					
278	OBSTACLE/OBSTRUCTION OTHER OBJECTS	06		0	0	5%, SMALL UNKNOWN MATERIAL ON BOTTOM OF PIPE				
291	TAP SADDLE	03		0	0					
313	DEPOSITS SETTLED FINE	06		0	0					
313	TAP FACTORY	09		0	0					
315	OBSTRUCTION CONSTRUCTION DEBRIS	06		0	0	50%; LARGE PILE OF CONSTRUCTION DEBRIS AT END O				
317	ACCESS POINT MANHOLE			0	0	SMH0865				

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
CHURCH STREET	SP01335	SMH1258	SMH1576	PVC	8	381	381	13	0	1
Footage	Defect Code		Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments			
	000	ACCESS POINT MANHOLE			0	0	SMH1258			
	000	MISCELLANEOUS WATER LEVEL			0	0	5%			
	016	DEPOSITS SETTLED FINE		07	0	0				
	381	ACCESS POINT MANHOLE			0	0	SMH1576			

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01322	SMH1567	SMH1566	PVC	12	308	308	13	288	1
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1567	
000	MISCELLANEOUS WATER LEVEL						0	0	25%	
012	VERMIN COCKROACH				12		0	0	S01	
029	MISCELLANEOUS WATER LEVEL						0	0	35%	
052	INFILTRATION RUNNER CONNECTION						288	0		
052	TAP BREAK-IN/HAMMER				09		0	0		
052	VERMIN COCKROACH				12		0	0	F01	
053	TAP SADDLE				03		0	0		
055	MISCELLANEOUS WATER LEVEL						0	0	20%	
062	MISCELLANEOUS WATER MARK						0	0	80%	
122	MISCELLANEOUS WATER LEVEL						0	0	30%	
177	MISCELLANEOUS WATER LEVEL						0	0	50%	
231	MISCELLANEOUS WATER LEVEL						0	0	40%	
253	MISCELLANEOUS WATER LEVEL						0	0	30%	
258	MISCELLANEOUS WATER MARK						0	0	75%	
276	MISCELLANEOUS WATER LEVEL						0	0	40%	
301	MISCELLANEOUS WATER LEVEL						0	0	30%	
308	ACCESS POINT MANHOLE						0	0	SMH1566	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01323	SMH1567	SMH1568	PVC	12	405	405	13	0	1
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1567	
000	MISCELLANEOUS WATER LEVEL						0	0	15%	
004	VERMIN COCKROACH				12		0	0	S01	
130	CRACK LONGITUDINAL				11		0	0		
232	TAP SADDLE				02		0	0		

284	VERMIN COCKROACH				0	0	F01
340	TAP SADDLE	09			0	0	
405	ACCESS POINT MANHOLE				0	0	SMH1568

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP10329	SMH1571	SMH1573	PVC	12	491	491	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1571
000	MISCELLANEOUS WATER LEVEL			0	0	25%
131	MISCELLANEOUS WATER LEVEL			0	0	35%
178	MISCELLANEOUS WATER LEVEL			0	0	45%
242	MISCELLANEOUS WATER LEVEL			0	0	35%
351	MISCELLANEOUS WATER LEVEL			0	0	45%
481	MISCELLANEOUS WATER LEVEL			0	0	35%
491	ACCESS POINT MANHOLE			0	0	SMH1573

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01883	SMH1572	SMH1574	PVC	12	458	458	13	0	1

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1572
000	MISCELLANEOUS WATER LEVEL			0	0	40%
029	ROOTS TAP JOINT	11		0	0	5%
040	MISCELLANEOUS WATER LEVEL			0	0	50%
079	MISCELLANEOUS WATER LEVEL			0	0	60%
131	MISCELLANEOUS WATER LEVEL			0	0	70%
198	MISCELLANEOUS WATER LEVEL			0	0	60%
251	ROOTS FINE JOINT	10		0	0	
300	MISCELLANEOUS WATER LEVEL			0	0	70%
306	ROOTS TAP BARREL	12		0	0	5%
376	MISCELLANEOUS WATER LEVEL			0	0	60%
395	MISCELLANEOUS WATER LEVEL			0	0	50%

442	MISCELLANEOUS WATER LEVEL	0	0	40%
458	ACCESS POINT MANHOLE	0	0	SMH1574

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01882	SMH1573	SMH1572	PVC	12	75	75	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1573
000	MISCELLANEOUS WATER LEVEL			0	0	40%
063	MISCELLANEOUS WATER LEVEL			0	0	50%
075	ACCESS POINT MANHOLE			0	0	SMH1572

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01329	SMH1571	SMH2936	PVC	12	422	422	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH1571
000	MISCELLANEOUS WATER LEVEL			0	0	25%
301	MISCELLANEOUS WATER LEVEL			0	0	15%
364	MISCELLANEOUS WATER LEVEL			0	0	40%
391	MISCELLANEOUS WATER LEVEL			0	0	50%
397	MISCELLANEOUS WATER LEVEL			0	0	30%
422	ACCESS POINT MANHOLE			0	0	SMH1571.A (BURIED SMH 422 FT US OF 1571)

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
GONIC ROAD	SP01327	SMH2937	SMH1570	PVC	12	129	129	13	0	0

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0725.A (BURIED SMH 271 FT US FROM SMH0725)
000	MISCELLANEOUS WATER LEVEL			0	0	25%
087	MISCELLANEOUS WATER LEVEL			0	0	50%
129	ACCESS POINT MANHOLE			0	0	SMH1570

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00197	SMH1654	SMH1655	PVC	12	161	161	13	0	0
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1654	
000	MISCELLANEOUS WATER LEVEL						0	0	20%	
011	TAP FACTORY				02		0	0		
051	TAP FACTORY				02		0	0		
061	MISCELLANEOUS WATER LEVEL						0	0	10%	
080	TAP FACTORY				03		0	0		
087	TAP FACTORY				09		0	0		
161	ACCESS POINT MANHOLE						0	0	SMH1655	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00198	SMH1655	SMH1656	PVC	12	174	174	13	0	0
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1655	
000	MISCELLANEOUS WATER LEVEL						0	0	15%	
002	TAP FACTORY				09		0	0		
062	TAP FACTORY				02		0	0		
135	TAP FACTORY				03		0	0		
174	ACCESS POINT MANHOLE						0	0	SMH1656	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00199	SMH1656	SMH1657	PVC	12	159	159	13	0	0
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1656	
000	MISCELLANEOUS WATER LEVEL						0	0	15%	
044	TAP FACTORY				09		0	0		

121	TAP FACTORY		03			0	0			
159	ACCESS POINT MANHOLE					0	0	SMH1657		
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00200	SMH1657	SMH1658	PVC	12	222	222	13	0	0
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1657	
000	MISCELLANEOUS WATER LEVEL						0	0	15%	
142	TAP FACTORY						0	0		
222	ACCESS POINT MANHOLE						0	0	SMH1658	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00201	SMH1658	SMH1659	PVC	12	116	116	13	0	0
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1658	
000	MISCELLANEOUS WATER LEVEL						0	0	10%	
011	TAP FACTORY						0	0		
116	ACCESS POINT MANHOLE						0	0	SMH1659	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00202	SMH1659	SMH1660	PVC	12	182	182	13	0	1
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1659	
000	MISCELLANEOUS WATER LEVEL						0	0	10%	
013	ROOTS TAP JOINT		09				0	0	5%	
129	TAP FACTORY		09				0	0		
182	ACCESS POINT MANHOLE						0	0	SMH1660	

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00263	SMH1660	SMH1584	PVC	12	76	76	13	0	0
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1660	
000	MISCELLANEOUS WATER LEVEL						0	0	15%	
076	ACCESS POINT MANHOLE						0	0	SMH1584	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
BROCK STREET	SP00196	SMH1653	SMH1654	PVC	12	174	174	13	0	0
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH1653	
000	MISCELLANEOUS WATER LEVEL						0	0	15%	
039	TAP FACTORY						0	0		
075	TAP FACTORY						0	0		
174	ACCESS POINT MANHOLE						0	0	SMH1654	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WALNUT ST	SP00585	SMH0360	SMH0362	VCP	8	346	27	3	0	2
Footage	Defect Code				Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments	
000	ACCESS POINT MANHOLE						0	0	SMH0360	
000	MISCELLANEOUS WATER LEVEL						0	0	20%	
003	FRACTURE LONGITUDINAL		02				0	0		
021	JOINT OFFSET SMALL (DISPLACED)		12				0	0		
027	HOLE SOIL VISIBLE		04				0	0		
027	MISCELLANEOUS SURVEY ABANDONED						0	0	REACHED PREVIOUS SURVEY	

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WALNUT ST	SP01910	SMH0360	SMH1850	VCP	8	49	49	3	0	1.79

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0360
000	MISCELLANEOUS WATER LEVEL			0	0	20%
003	CRACK LONGITUDINAL	09		0	0	
010	FRACTURE SPIRAL	08	03	0	0	
016	CRACK LONGITUDINAL	09		0	0	
022	FRACTURE SPIRAL	08	12	0	0	
030	CRACK LONGITUDINAL	09		0	0	
032	FRACTURE SPIRAL	09	12	0	0	
034	FRACTURE MULTIPLE	09	03	0	0	
036	HOLE VOID VISIBLE	09		0	0	
037	MISCELLANEOUS WATER LEVEL			0	0	30%
038	FRACTURE SPIRAL	06	09	0	0	
040	FRACTURE MULTIPLE	07	05	0	0	
040	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
043	FRACTURE SPIRAL	08	11	0	0	
044	MISCELLANEOUS WATER LEVEL			0	0	20%
044	OBSTACLE/OBSTRUCTION OTHER OBJECTS			0	0	5%, RAGGING BUILD UP
045	FRACTURE MULTIPLE	08	12	0	0	
049	ACCESS POINT MANHOLE			0	0	SMH1850

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia. (in)	Pipe Length (ft)	TV Pipe Length (ft)	Joint Spacing (ft)	Total Infiltration (gpd)	PACP Overall Pipe Rating Index
WALNUT ST	SP00585	SMH0362	SMH0360	VCP	8	346	319	3	288	1.7

Footage	Defect Code	Clock Position From	Clock Position To	Infil. Rate (gpd)	Uniden. SVC Flow (gpd)	Defect Comments
000	ACCESS POINT MANHOLE			0	0	SMH0362
000	MISCELLANEOUS WATER LEVEL			0	0	20%
003	CRACK MULTIPLE	09	03	0	0	
005	CRACK MULTIPLE	09	03	0	0	

006	FRACTURE LONGITUDINAL	02		0	0	
007	TAP FACTORY	12		0	0	
010	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
014	FRACTURE LONGITUDINAL	03		0	0	
016	CRACK LONGITUDINAL	01		0	0	
018	CRACK LONGITUDINAL	10		0	0	
020	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
022	CRACK LONGITUDINAL	01		0	0	
026	FRACTURE SPIRAL	02	05	0	0	
029	CRACK MULTIPLE	10	02	0	0	
038	MISCELLANEOUS GENERAL OBSERVATION	06		0	0	5%, DEBRIS IN PIPE
040	CRACK LONGITUDINAL	10		0	0	
040	FRACTURE SPIRAL	09	12	0	0	
043	CRACK LONGITUDINAL	10		0	0	
045	CRACK LONGITUDINAL	12		0	0	
047	CRACK MULTIPLE	12		0	0	
047	FRACTURE LONGITUDINAL	02		0	0	
049	FRACTURE MULTIPLE	09	03	0	0	
050	INFILTRATION DRIPPER CONNECTION	12		288	0	FROM GAP BETWEEN SVC AND PIPE
050	TAP FACTORY	12		0	0	
051	CRACK SPIRAL	01		0	0	
051	MISCELLANEOUS WATER LEVEL			0	0	10%
052	SURFACE DAMAGE SURFACE SPALLING	12		0	0	
053	CRACK LONGITUDINAL	03		0	0	
055	CRACK MULTIPLE	02		0	0	
059	CRACK SPIRAL	03		0	0	
059	FRACTURE SPIRAL	02	05	0	0	
061	FRACTURE SPIRAL	01	03	0	0	
064	CRACK MULTIPLE	03	09	0	0	
065	CRACK LONGITUDINAL	08		0	0	
067	FRACTURE LONGITUDINAL	03		0	0	
067	FRACTURE MULTIPLE	07	09	0	0	
069	FRACTURE SPIRAL	02	05	0	0	

071	CRACK MULTIPLE	09	03	0	0	
076	FRACTURE LONGITUDINAL	11		0	0	
080	FRACTURE LONGITUDINAL	10		0	0	
080	FRACTURE SPIRAL	03	05	0	0	
082	FRACTURE SPIRAL	10		0	0	
084	FRACTURE LONGITUDINAL	10		0	0	
090	FRACTURE MULTIPLE	11		0	0	
092	CRACK LONGITUDINAL	09		0	0	
094	FRACTURE SPIRAL	02	05	0	0	
098	FRACTURE SPIRAL	07	11	0	0	
102	FRACTURE SPIRAL	03	05	0	0	
106	CRACK LONGITUDINAL	03		0	0	
109	FRACTURE SPIRAL	07	09	0	0	
110	FRACTURE MULTIPLE	08	04	0	0	
112	CRACK SPIRAL	10	03	0	0	
114	TAP FACTORY	12		0	0	
117	CRACK SPIRAL	03	05	0	0	
119	FRACTURE SPIRAL	07	10	0	0	
123	FRACTURE SPIRAL	09	12	0	0	
125	CRACK MULTIPLE	09	03	0	0	
129	FRACTURE SPIRAL	12	06	0	0	
131	BROKEN	08		0	0	
131	FRACTURE MULTIPLE	07	11	0	0	
133	FRACTURE MULTIPLE	08	12	0	0	
135	CRACK MULTIPLE	12		0	0	
138	MISCELLANEOUS MATERIAL CHANGE			0	0	8 INCH PVC
139	TAP FACTORY	12		0	0	
140	MISCELLANEOUS MATERIAL CHANGE			0	0	8 INCH VCP
140	SURFACE DAMAGE SURFACE SPALLING	07	05	0	0	
145	FRACTURE MULTIPLE	08	04	0	0	
148	CRACK MULTIPLE	09	03	0	0	
156	CRACK LONGITUDINAL	09		0	0	
157	CRACK LONGITUDINAL	10		0	0	

157	FRACTURE SPIRAL	01	05	0	0
160	FRACTURE LONGITUDINAL	04		0	0
162	FRACTURE MULTIPLE	09	03	0	0
164	CRACK MULTIPLE	09		0	0
165	CRACK LONGITUDINAL	01		0	0
166	FRACTURE LONGITUDINAL	09		0	0
166	FRACTURE LONGITUDINAL	03		0	0
167	TAP FACTORY ACTIVITY	01		0	0
168	FRACTURE SPIRAL	09	04	0	0
171	CRACK MULTIPLE	11	01	0	0
174	FRACTURE CIRCUMFERENTIAL	09	03	0	0
178	CRACK MULTIPLE	11	01	0	0
180	FRACTURE SPIRAL	10	03	0	0
182	FRACTURE MULTIPLE	08	10	0	0
182	JOINT OFFSET SMALL (DISPLACED)	12		0	0
184	FRACTURE MULTIPLE	10	04	0	0
186	FRACTURE SPIRAL	09	03	0	0
188	CRACK LONGITUDINAL	09		0	0
190	CRACK LONGITUDINAL	09		0	0
192	BROKEN	03		0	0
192	FRACTURE LONGITUDINAL	10		0	0
194	CRACK LONGITUDINAL	09		0	0
206	FRACTURE SPIRAL	01	05	0	0
208	FRACTURE MULTIPLE	09	05	0	0
212	FRACTURE SPIRAL	09	10	0	0
214	FRACTURE MULTIPLE	09	03	0	0
216	CRACK MULTIPLE	09	03	0	0
218	FRACTURE LONGITUDINAL	09		0	0
218	FRACTURE SPIRAL	02	03	0	0
220	FRACTURE SPIRAL	02	03	0	0
222	BROKEN	02		0	0
222	FRACTURE SPIRAL	04	09	0	0
225	FRACTURE SPIRAL	01	04	0	0

227	JOINT OFFSET SMALL (DISPLACED)	10		0	0	
229	FRACTURE LONGITUDINAL	09		0	0	
229	FRACTURE MULTIPLE	02	05	0	0	
233	FRACTURE MULTIPLE	09	11	0	0	
235	CRACK SPIRAL	08	03	0	0	
241	CRACK MULTIPLE	03	09	0	0	
243	FRACTURE SPIRAL	09	03	0	0	
247	FRACTURE MULTIPLE	10	04	0	0	
249	CRACK LONGITUDINAL	07		0	0	
251	CRACK MULTIPLE	03	05	0	0	
251	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
255	FRACTURE LONGITUDINAL	10		0	0	
257	FRACTURE MULTIPLE	06	09	0	0	
257	FRACTURE MULTIPLE	12	06	0	0	
265	FRACTURE SPIRAL	03	09	0	0	
272	CRACK LONGITUDINAL	11		0	0	
276	FRACTURE SPIRAL	09	04	0	0	
280	FRACTURE SPIRAL	07	11	0	0	
282	CRACK SPIRAL	12	04	0	0	
282	HOLE	04		0	0	
283	MISCELLANEOUS WATER LEVEL			0	0	25%
288	FRACTURE SPIRAL	05	02	0	0	
290	FRACTURE MULTIPLE	07	11	0	0	
291	OBSTACLE/OBSTRUCTION OTHER OBJECTS			0	0	5%, RAGGING IN PIPE
294	FRACTURE SPIRAL	08	04	0	0	
298	FRACTURE MULTIPLE	08	03	0	0	
300	FRACTURE SPIRAL	03	09	0	0	
302	CRACK SPIRAL	02	03	0	0	
304	CRACK MULTIPLE	01	03	0	0	
306	FRACTURE SPIRAL	09	04	0	0	
308	JOINT OFFSET SMALL (DISPLACED)	12		0	0	
310	CRACK MULTIPLE	10	01	0	0	
314	FRACTURE SPIRAL	03	04	0	0	

316	FRACTURE LONGITUDINAL	04		0	0	
316	HOLE SOIL VISIBLE	07	09	0	0	
319	CRACK SPIRAL	09	05	0	0	
319	MISCELLANEOUS SURVEY ABANDONED			0	0	CANNOT PASS HOLE
TOTAL			220,320	0	Total Pipe Length 37,097	Total TV Pipe Length 32,964

Year 1 I/I Investigations (Phase 2) CCTV Video Review Rochester, NH

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP01022	SMH0301	SMH1858	CP	18	501	1,152	576	\$24,123			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Cut Protruding Service	\$600	
										Cut Protruding Service	\$600	
										Cut Protruding Service	\$600	
										Manhole to Manhole Structural Lining	\$90,180	
Total Rehabilitation Cost										\$92,580	NON-EXCESSIVE RECOMMENDED	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP02547	SMH1185	SMH1856	CP	18	343	576	288	\$12,061			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Manhole to Manhole Structural Lining	\$61,740	
										Root Treatment	\$1,372	
Total Rehabilitation Cost										\$63,712	NON-EXCESSIVE RECOMMENDED	
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP00936	SMH1179	SMH1184	CP	18	263	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$47,340	
										Root Treatment	\$1,052	
Total Rehabilitation Cost										\$48,392	NON-EXCESSIVE RECOMMENDED	

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP00936	SMH1184	SMH1179	CP	18	263	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Cut Protruding Service	\$600	
										Total Rehabilitation Cost	\$1,200	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP02860	SMH1861A	SMH1862	CP	18	404	4,032	2,016	\$84,430		Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Cut Protruding Service	\$600	
										Manhole to Manhole Structural Lining	\$72,720	
										Total Rehabilitation Cost	\$73,920	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP00949	SMH2934	SMH0066	CP	18	121	144	72	\$3,015		Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$21,780	
										Total Rehabilitation Cost	\$21,780	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP00948	SMH0066	SMH0277	CP	18	343	1,440	720	\$30,154		Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$61,740	
										Total Rehabilitation Cost	\$61,740	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost				
EASTERN AVENUE	SP00949	SMH0067	SMH2934	CP	18	364	864	432	\$18,092		Rehabilitation Cost	Cost-Effectiveness	
											Manhole to Manhole Structural Lining	\$65,520	
											Total Rehabilitation Cost	\$65,520	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost				
EASTERN AVENUE	SP00934	SMH0277	SMH1184	CP	18	97	7,200	3,600	\$150,768		Rehabilitation Cost	Cost-Effectiveness	
											Cut Protruding Service	\$600	
											Manhole to Manhole Structural Lining	\$17,460	
											Total Rehabilitation Cost	\$18,060	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost				
EASTERN AVENUE	SP02855	SMH1178	SMH1859	RCP	18	502	2,160	1,080	\$45,230		Rehabilitation Cost	Cost-Effectiveness	
											Manhole to Manhole Structural Lining	\$90,360	
											Total Rehabilitation Cost	\$90,360	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost				
EASTERN AVENUE	SP01023	SMH1178	SMH1860	CP	18	399	3,312	1,656	\$69,353		Rehabilitation Cost	Cost-Effectiveness	
											Manhole to Manhole Structural Lining	\$71,820	
											Total Rehabilitation Cost	\$71,820	VALUE EFFECTIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP02861	SMH2941	SMH0067	CP	18	303	1,440	720	\$30,154			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$54,540	
										Total Rehabilitation Cost	\$54,540	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP02856	SMH1863	SMH1862	CP	18	496	1,728	864	\$36,184			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Manhole to Manhole Structural Lining	\$89,280	
Total Rehabilitation Cost	\$89,880	NON-EXCESSIVE RECOMMENDED										
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
EASTERN AVENUE	SP02862	SMH1863	SMH2941	CP	18	193	720	360	\$15,077			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$34,740	
										Total Rehabilitation Cost	\$34,740	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
HIGHLAND STREET	SP00925	SMH2638	SMH0180	RCP	18	302	14,976	7,488	\$313,597			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$54,360	
										Total Rehabilitation Cost	\$54,360	EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
HIGHLAND STREET	SP01947	SMH2638	SMH0304	CP	18	378	9,216	4,608	\$192,983			
											Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$68,040	
										Total Rehabilitation Cost	\$68,040	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00690	SMH0125	SMH0124	VCP	8	285	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,280	
										Structural Short Liner	\$2,000	
										Total Rehabilitation Cost	\$4,280	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00689	SMH0126	SMH0125	VCP	8	122	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$366	
										Structural Short Liner	\$2,500	
										Structural Short Liner	\$1,500	
										Total Rehabilitation Cost	\$4,366	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00688	SMH0126	SMH0127	VCP	8	226	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$1,808	
										Structural Short Liner	\$1,500	
										Total Rehabilitation Cost	\$3,308	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00687	SMH0127	SMH0128	VCP	8	382	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$3,056	
										Structural Short Liner	\$2,000	
										Total Rehabilitation Cost	\$5,056	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00687	SMH0128	SMH0127	AC	8	382	144	72	\$3,015			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$3,056	
										Lateral Liner	\$5,000	
										Total Rehabilitation Cost	\$8,056	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00686	SMH0128	SMH0129	AC	8	583	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Structural Short Liner	\$1,500	
										Total Rehabilitation Cost	\$1,500	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP01116	SMH0112	SMH0895	VCP	10	249	144	72	\$3,015			
											Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$17,430	
										Root Treatment	\$747	
										Total Rehabilitation Cost	\$18,177	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP02530	SMH0112	SMH2805	VCP	10	49	144	72	\$3,015			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$441	
										Structural Short Liner	\$2,750	
										Total Rehabilitation Cost	\$3,191	VALUE EFFECTIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP01114	SMH0113	SMH1368	VCP	10	298	288	144	\$6,031			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,682	
										Structural Short Liner	\$2,750	
										Structural Short Liner	\$3,300	
										Structural Short Liner	\$1,650	
										Total Rehabilitation Cost	\$10,382	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00699	SMH0116	SMH0115	VCP	10	286	1,440	720	\$30,154			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,574	
										Structural Short Liner	\$2,200	
										Test and Grout Service	\$800	
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$6,374	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00698	SMH0116	SMH0117	VCP	10	301	2,160	1,080	\$45,230			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,709	
										Cut Protruding Service	\$600	
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$4,109	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00698	SMH0117	SMH0116	VCP	10	301	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$903	
										Total Rehabilitation Cost	\$903	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00694	SMH0121	SMH0120	VCP	10	140	864	432	\$18,092			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$1,260	
										Structural Short Liner	\$9,900	
										Total Rehabilitation Cost	\$11,160	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00693	SMH0121	SMH0122	VCP	10	287	144	72	\$3,015		Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$20,090	
										Total Rehabilitation Cost	\$20,090	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00692	SMH0123	SMH0122	VCP	10	298	432	216	\$9,046		Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,682	
										Structural Short Liner	\$2,200	
										Structural Short Liner	\$2,200	
										Structural Short Liner	\$2,200	
										Total Rehabilitation Cost	\$9,282	VALUE EFFECTIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00690	SMH0124	SMH0125	VCP	10	285	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Structural Short Liner	\$1,100	
										Structural Short Liner	\$2,750	
										Total Rehabilitation Cost	\$3,850	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00687	SMH0128	SMH0127	AC	8	382	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Structural Short Liner	\$1,500	
										Total Rehabilitation Cost	\$1,500	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00685	SMH0129	SMH1367	AC	6	237	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$7,425	
										Root Treatment	\$711	
										Total Rehabilitation Cost	\$8,136	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00317	SMH0895	SMH0111	VCP	10	48	144	72	\$3,015			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$432	
										Structural Short Liner	\$2,750	
										Total Rehabilitation Cost	\$3,182	VALUE EFFECTIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00685	SMH1367	SMH0129	AC	6	237	0	0	\$0	Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$711	
										Total Rehabilitation Cost	\$711	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00686	SMH2935	SMH0128	AC	6	338	288	144	\$6,031	Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,704	
										Root Treatment	\$1,014	
										Structural Short Liner	\$900	
										Total Rehabilitation Cost	\$4,618	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
PORTLAND STREET	SP00686	SMH0129	SMH2935	AC	6	245	0	0	\$0	Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$735	
										Structural Short Liner	\$6,300	
										Total Rehabilitation Cost	\$7,035	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
COLUMBUS AVE	SP01962	SMH0252	SMH0049	DIP	18	530	0	0	\$0	Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$95,400	
										Total Rehabilitation Cost	\$95,400	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
COLUMBUS AVE	SP01961	SMH1398	SMH0252	DIP	18	466	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$83,880	
										Total Rehabilitation Cost	\$83,880	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
SUMMER STREET	SP01267	SMH0051	SMH0052	VCP	12	302	432	216	\$9,046			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$33,220	
										Root Treatment	\$1,208	
										Total Rehabilitation Cost	\$34,428	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
SUMMER STREET	SP01268	SMH0051	SMH1469	VCP	12	237	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$26,070	
										Total Rehabilitation Cost	\$26,070	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP02223	SMH0014	SMH1391	VCP	10	295	19,296	9,648	\$404,058			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,655	
										Structural Short Liner	\$2,200	
										Structural Short Liner	\$2,750	
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$8,405	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP02224	SMH0014	SMH1392	VCP	10	397	8,496	4,248	\$177,906		Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$27,790	
										Total Rehabilitation Cost	\$27,790	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP02225	SMH1392	SMH1393	VCP	10	23	0	0	\$0		Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$207	
										Total Rehabilitation Cost	\$207	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01489	SMH0010	SMH1749	PVC	18	151	0	0	\$0		Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,718	
										Total Rehabilitation Cost	\$2,718	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP02546	SMH0011	SMH0013	PVC	18	315	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$5,670	
										Total Rehabilitation Cost	\$5,670	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01491	SMH0013	SMH0015	PVC	18	96	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$1,728	
										Total Rehabilitation Cost	\$1,728	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01492	SMH0015	SMH1393	PVC	18	355	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$6,390	
										Total Rehabilitation Cost	\$6,390	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01494	SMH0016	SMH0017	PVC	18	295	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$5,310	
										Total Rehabilitation Cost	\$5,310	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01495	SMH0017	SMH0018	PVC	18	308	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$5,544	
										Total Rehabilitation Cost	\$5,544	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01566	SMH0018	SMH1463	PVC	18	49	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$882	
										Total Rehabilitation Cost	\$882	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01493	SMH1393	SMH0016	PVC	18	171	144	72	\$3,015			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$3,078	
										Structural Short Liner	\$9,100	
										Total Rehabilitation Cost	\$12,178	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP01560	SMH1463	SMH1401	PVC	18	275	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$4,950	
										Total Rehabilitation Cost	\$4,950	NON-EXCESSIVE

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP00175	SMH1467	SMH1469	VCP	10	253	144	72	\$3,015			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,277	
										Root Treatment	\$759	
										Structural Short Liner	\$2,200	
										Total Rehabilitation Cost	\$5,236	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP00174	SMH1469	SMH0029	VCP	15	227	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$3,405	
										Manhole to Manhole Structural Lining	\$23,760	
										Root Treatment	\$908	
										Total Rehabilitation Cost	\$28,073	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WAKEFIELD STREET	SP02229	SMH1749	SMH0011	PVC	18	202	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$3,636	
										Total Rehabilitation Cost	\$3,636	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP01158	SMH0494	SMH0273	RCP	24	357	576	288	\$12,061			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$7,854	
										Structural Short Liner	\$9,000	
										Structural Short Liner	\$10,000	
										Total Rehabilitation Cost	\$26,854	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP01172	SMH0494	SMH1351	RCP	24	411	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$90,420	
										Root Treatment	\$3,288	
										Total Rehabilitation Cost	\$93,708	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP01173	SMH0496	SMH1351	RCP	24	307	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$6,754	
										Structural Short Liner	\$10,000	
										Total Rehabilitation Cost	\$16,754	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP00434	SMH0501	SMH1349	RCP	24	311	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$2,488	
										Structural Short Liner	\$10,000	
										Total Rehabilitation Cost	\$12,488	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP00445	SMH0507	SMH0505	RCP	24	389	1,728	864	\$36,184			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$8,558	
										Cut Protruding Service	\$600	
										Cut Protruding Service	\$600	
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$10,558	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP00449	SMH0507	SMH0509	RCP	24	440	2,304	1,152	\$48,246			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$96,800	
										Root Treatment	\$3,520	
										Total Rehabilitation Cost	\$100,320	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP00440	SMH1348	SMH0501	RCP	24	401	144	72	\$3,015			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$3,208	
										Structural Short Liner	\$2,000	
										Structural Short Liner	\$10,000	
										Structural Short Liner	\$10,000	
										Test and Grout Service	\$800	
Total Rehabilitation Cost	\$26,008	NON-EXCESSIVE RECOMMENDED										
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP00442	SMH1348	SMH0505	RCP	24	366	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Structural Short Liner	\$10,000	
										Structural Short Liner	\$10,000	
										Structural Short Liner	\$10,000	
										Total Rehabilitation Cost	\$30,000	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP00436	SMH1349	SMH1350	RCP	24	260	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Structural Short Liner	\$10,000	
										Structural Short Liner	\$10,000	
Total Rehabilitation Cost	\$20,600	NON-EXCESSIVE RECOMMENDED										

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP00453	SMH1679	SMH0509	RCP	24	328	864	432	\$18,092			
											Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$72,160	
										Root Treatment	\$2,624	
										Total Rehabilitation Cost	\$74,784	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHARLES STREET	SP02553	SMH2762	SMH0273	RCP	24	563	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$12,386	
										Cut Protruding Service	\$600	
										Total Rehabilitation Cost	\$12,986	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GAGNE STREET	SP00170	SMH0351	SMH0350	PVC	8	91	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Structural Short Liner	\$6,500	
										Total Rehabilitation Cost	\$6,500	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GAGNE STREET	SP00169	SMH0353	SMH2785	RCP	15	315	0	0	\$0			
											Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$4,725	
										Total Rehabilitation Cost	\$4,725	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GAGNE STREET	SP00168	SMH0354	SMH0353	PVC	8	187	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$1,496	
										Total Rehabilitation Cost	\$1,496	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
OLD DOVER ROAD	SP01161	SMH2939	SMH0541	RCP	24	265	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$2,120	
										Structural Short Liner	\$10,000	
										Total Rehabilitation Cost	\$12,120	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
OLD DOVER ROAD	SP01162	SMH1331	SMH2938	RCP	24	364	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Lateral Liner	\$15,000	
										Total Rehabilitation Cost	\$15,000	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
OLD DOVER ROAD	SP01161	SMH1331	SMH2939	RCP	24	215	288	144	\$6,031			
											Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Root Treatment	\$1,720	
										Structural Short Liner	\$10,000	
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$13,120	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
OLD DOVER ROAD	SP01162	SMH2762	SMH2938	RCP	24	554	0	0	\$0		Rehabilitation Cost	Cost-Effectiveness
										Structural Short Liner	\$10,000	
										Total Rehabilitation Cost	\$10,000	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
RIVER STREET	SP02126	SMH2785	SMH2783	RCP	15	109	0	0	\$0		Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$1,635	
										Total Rehabilitation Cost	\$1,635	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHURCH STREET	SP01333	SMH0860	SMH0861	PVC	8	110	0	0	\$0		Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$880	
										Total Rehabilitation Cost	\$880	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHURCH STREET	SP01332	SMH0862	SMH0861	PVC	8	293	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,344	
										Total Rehabilitation Cost	\$2,344	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHURCH STREET	SP01331	SMH0863	SMH0862	PVC	8	301	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Structural Short Liner	\$1,500	
										Structural Short Liner	\$7,000	
										Total Rehabilitation Cost	\$8,500	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHURCH STREET	SP01330	SMH0863	SMH0864	PVC	8	302	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,416	
										Total Rehabilitation Cost	\$2,416	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
CHURCH STREET	SP01884	SMH0864	SMH0865	PVC	8	317	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,536	
										Total Rehabilitation Cost	\$2,536	NON-EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GONIC ROAD	SP01324	SMH0724	SMH1568	PVC	12	463	29,088	14,544	\$609,103			
											Rehabilitation Cost	Cost-Effectiveness
										Cut Protruding Service	\$600	
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$1,400	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GONIC ROAD	SP01325	SMH0724	SMH1569	PVC	12	486	288	144	\$6,031		Rehabilitation Cost	Cost-Effectiveness
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$800	EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GONIC ROAD	SP01327	SMH0725	SMH1570	PVC	12	391	0	0	\$0		Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$3,910	
										Total Rehabilitation Cost	\$3,910	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GONIC ROAD	SP01322	SMH1567	SMH1566	PVC	12	308	288	144	\$6,031		Rehabilitation Cost	Cost-Effectiveness
										Test and Grout Service	\$800	
										Total Rehabilitation Cost	\$800	EXCESSIVE RECOMMENDED

Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
GONIC ROAD	SP01883	SMH1572	SMH1574	PVC	12	458	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$1,832	
										Total Rehabilitation Cost	\$1,832	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
BROCK STREET	SP00202	SMH1659	SMH1660	PVC	12	182	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Root Treatment	\$728	
										Total Rehabilitation Cost	\$728	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WALNUT ST	SP01910	SMH0360	SMH1850	VCP	8	49	0	0	\$0			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Manhole to Manhole Structural Lining	\$2,940	
										Total Rehabilitation Cost	\$2,940	NON-EXCESSIVE RECOMMENDED
Street	Pipe ID	Start Manhole	End Manhole	Pipe Material	Pipe Dia (in)	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost			
WALNUT ST	SP00585	SMH0362	SMH0360	VCP	8	346	288	144	\$6,031			
										Rehabilitation	Rehabilitation Cost	Cost-Effectiveness
										Clean, Inspect, Test & Seal	\$2,768	
										Manhole to Manhole Structural Lining	\$21,000	
										Total Rehabilitation Cost	\$23,768	NON-EXCESSIVE RECOMMENDED

	Pipe Length (ft)	Total Infil. (gpd)	Removable Infil. (gpd)	T+T Cost	Rehabilitation Cost
TOTAL NON-EXCESSIVE	275	0	0	\$0	\$4,950
TOTAL EXCESSIVE RECOMMENDED	6,447	192,816	96,408	\$4,037,567	\$430,076
TOTAL VALUE EFFECTIVE RECOMMENDED	1,528	7,920	3,960	\$165,845	\$192,535
TOTAL NON-EXCESSIVE RECOMMENDED	21,624	19,584	9,792	\$410,089	\$1,689,752
TOTAL	29,874	220,320	110,160	\$4,613,501	\$2,317,313
TOTAL RECOMMENDED	29,599	220,320	110,160	\$4,613,501	\$2,312,363

TABLE 3
SEWER SEGMENTS WITH GREASE

Year One I/I Investigations (Phase 2) CCTV Video Review - Rochester, NH

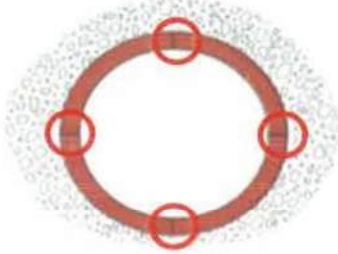
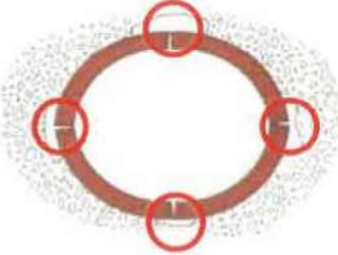
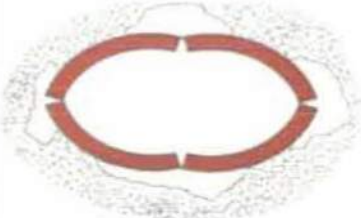
Asset ID	Start Manhole	End Manhole	Street	Pipe Material	Pipe Diameter (in)	Pipe Length (LF)	Percentage of X-sectional Area
SP02126	SMH2785	SMH2783	RIVER STREET	RCP	15	113	5.00%
SP01489	SMH0010	SMH1749	WAKEFIELD STREET	PVC	18	152	10.00%
SP02546	SMH0011	SMH0013	WAKEFIELD STREET	PVC	18	319	5.00%
SP01491	SMH0013	SMH0015	WAKEFIELD STREET	PVC	18	98	5.00%
SP01492	SMH0015	SMH1393	WAKEFIELD STREET	PVC	18	357	5.00%
SP01494	SMH0016	SMH0017	WAKEFIELD STREET	PVC	18	297	5.00%
SP01495	SMH0017	SMH0018	WAKEFIELD STREET	PVC	18	309	5.00%
SP01566	SMH0018	SMH1463	WAKEFIELD STREET	PVC	18	51	5.00%
SP01493	SMH1393	SMH0016	WAKEFIELD STREET	PVC	18	173	5.00%
SP01560	SMH1463	SMH1401	WAKEFIELD STREET	PVC	18	274	5.00%
SP02229	SMH1749	SMH0011	WAKEFIELD STREET	PVC	18	204	10.00%
SP01962	SMH0252	SMH0049	COLUMBUS AVE	DIP	18	535	5.00%
SP01961	SMH1398	SMH0252	COLUMBUS AVE	DIP	18	466	5.00%
Percentage of Cross-sectional Area				Number of Pipes	Length (LF)		
≤ 10%				13	3,348		
>10% to ≤ 20%				0	0		
>20% to ≤ 50%				0	0		
>50%				0	0		
Total Sewer Segments with Grease				13			
Total Length of Sewer with Grease (LF)				3,348			

APPENDIX A

STAGES OF COLLAPSE

Stages of Pipe Collapse

The progression to a pipe collapse can be represented in three sequential stages.

Stage	Illustration
<p>Stage 1 - An initial, often minor, defect enables the deterioration process to begin. In this stage the pipe has defects but remains supported by the surrounding soil. Such defects may include:</p> <ul style="list-style-type: none"> • <i>Cracks or deformation caused by excessive load or poor bedding.</i> • Poor construction practices such as improper backfill and compaction. • Leaking joints. • Damage caused when making connections. • Damage caused by third parties. 	
<p>Stage 2 - The deterioration process continues in and/or behind the pipe wall. Open break lines, called <i>fractures</i>, and other structural defects occur, and <i>soil particles are washed away</i> due to the infiltration/exfiltration process.</p>	
<p>Stage 3 - The <i>loss of support from the surrounding soil allows the crown to drop</i>. This deformation leads to pipe collapse, which occurs due to the weakened wall.</p>	



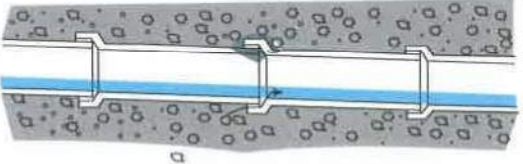
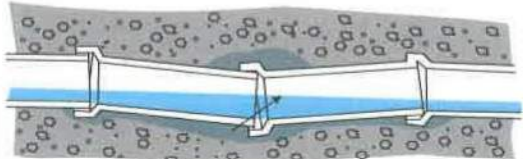
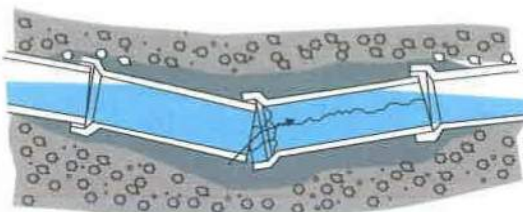
Hinge Defects

Examples of pipe deterioration likely created during construction

Loss of Pipe Support - Pipe Subsidence

Pipe deterioration often involves the surrounding soil. Studies have shown conclusively that minor pipe defects, such as leaking joints, can lead to major structural problems in certain soil conditions when the pipe is subjected to regular surcharge. If an exfiltration/infiltration cycle occurs, it is possible to cause migration of fine soil particles into the pipe, and subsequent voids or loss in soil density around the outside of the pipe. This is particularly important because soil loss can lead to reduced support around the pipe. Soil migration leading to soil loss can also occur when groundwater flows through the bedding material.

Subsidence occurs in three stages:

Stage	Illustration
<p>Stage 1 - There is a gap in the pipe at a joint or at a poor lateral connection. Some visible defects are: offset joints, improper connections, infiltration, missing joint seals or <i>defects in joint seals</i>.</p>	
<p>Stage 2 – Groundwater infiltration, or infiltration/exfiltration caused by surcharging of the pipe, may cause voids around joints. Loss of soil support around the pipe allows the pipe to move, joints to open, and soil ingress to increase. Some visible defects are: <i>open and displaced joints, loss of line and level and infiltration</i>.</p> <p>Care must be exercised when viewing video recordings, as displaced joints can be overcompensated by the camera's lighting system.</p>	
<p>Stage 3 - Uneven loading of pipes due to joint displacement and lack of support from the surrounding soil causes pipes to crack or fracture. As the process accelerates, cracked or fractured pipes may also break and deform. Some visible defects are: <i>open and displaced joints, cracked and fractured pipes, loss of line and sag</i>. The camera may be submerged due to water level increase caused by the reverse grade.</p>	

APPENDIX B

PACP CONDITION GRADING SYSTEM



PACP® Condition Grading System

Using the PACP Code Matrix, each PACP code is assigned a condition grade ranging from 1 to 5. Grades are assigned based on the significance of the defect, extent of damage, percentage of restriction to flow capacity or the amount of wall loss due to deterioration.

Note

*The PACP Condition Grading System alone is inadequate for determining if a pipe segment should be rehabilitated or replaced. Many other factors in addition to the internal condition of the segment should be considered. The fact that a segment has significant grade 4 or grade 5 defects does not necessarily mean the pipe segment should be immediately rehabilitated, thus **PACP does not replace the judgment of professional engineers**. Recent experience by PACP users has shown that pipe segments with serious defects, such as hinge failures, may remain largely unchanged for many decades if no deterioration factors such as surcharging, roots or groundwater are present.*

Condition Grades

Condition Grades are assigned for two defect categories, structural and operation and maintenance (O&M). Grades and definitions are listed below:

- 5 – Most significant defect grade
- 4 – Significant defect grade
- 3 – Moderate defect grade
- 2 – Minor to moderate defect grade
- 1 – Minor defect grade

The PACP Condition Grading System results are entirely dependent on the quality of the PACP defect coding. Errors in the coding will directly result in errors in the grading. Coding should be accomplished based on proper PACP guidelines and not based on condition grades. All utilities, engineers and contractors should make sure the data they are using was coded by experienced technicians, who have successfully demonstrated their competence using PACP through a formal or informal apprenticeship program. PACP data from inexperienced technicians should be checked and corrected as needed. Errors found in coding should be corrected and brought to the attention of the technician.

Pipe Rating System

The PACP Condition Grading System provides a framework within which to calculate several pipe rating numbers which is useful for ranking line segments based on severity



Appendix C - PACP Condition Grading System



of observed defects and conditions. The pipe ratings are based upon the number of occurrences for each condition grade within individual line segments and are separately calculated for structural defects and Operation and Maintenance (O&M) defects. PACP's Pipe Grading System provides three ways to express pipe segment conditions – Quick Rating, Overall Pipe Rating and Pipe Rating Index.

Grading Continuous Pipe Defects

The PACP Continuous Defect feature enables special coding when long or repeated portions of a pipe are affected by the same defect. Since a long or "repeated" defect is obviously more severe than a "point" defect, a mechanism is provided to translate these continuous defects into an equivalent number of point defects.

The equivalent number of point defects contained in a continuous defect is calculated by dividing the length of the continuous defect by 5 for the Imperial System and by 1.5 for the International Metric System of units (SI). The quotient is then rounded to the nearest whole number. For example, a 19.7 foot (6 m) continuous defect, grade 3, should be equivalent to four Grade 3 defects. See proper calculations for both systems below:

$$\text{Equivalent Point Defects} = \frac{\text{Length (ft)}}{5} = \frac{\text{Length (m)}}{1.5}$$

Examples:

$$\frac{19.7 \text{ ft}}{5 \text{ ft/Defect}} = 3.94 \approx 4 \text{ Defects}$$

$$\frac{6 \text{ m}}{1.5 \text{ m/Defect}} = 4 \text{ Defects}$$

Note

Fractions of the quotient are rounded to the nearest whole number (i.e. ≤ 0.49 is rounded down, and ≥ 0.5 is rounded up).



Appendix C - PACP Condition Grading System



PACP Quick Rating

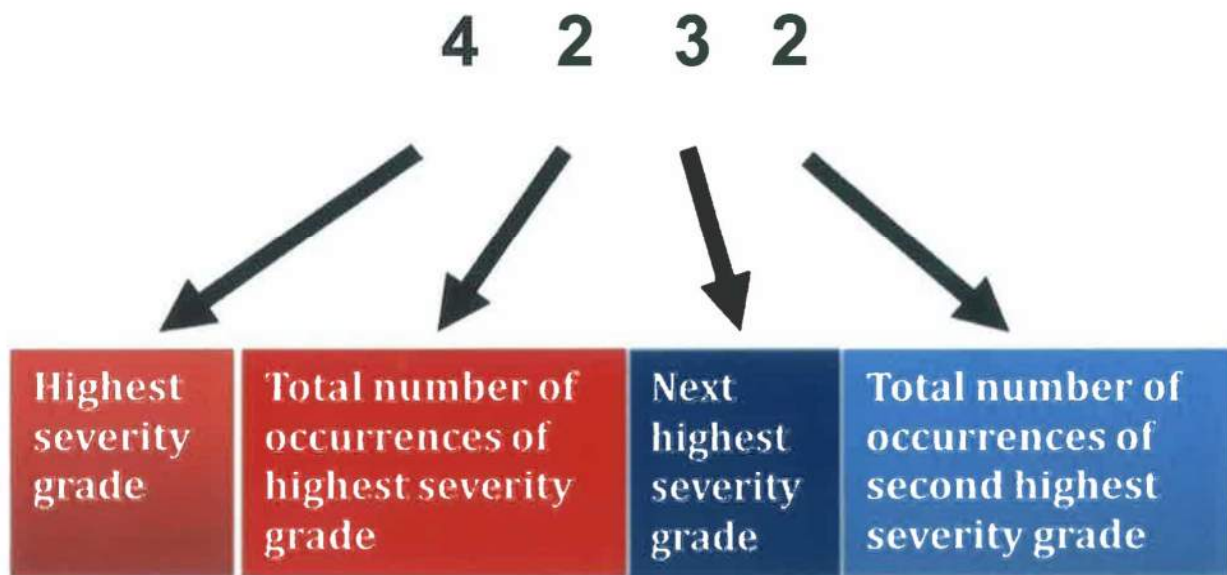
The PACP Quick Rating is a shorthand way of expressing the number of occurrences for the two highest severity grades. The quick rating is a four character score compiled as follows:

First Character: Highest severity grade occurring along the pipe length.

Second Character: Total number of occurrences of that highest severity grade. If the total number exceeds 9, then alphabetic characters are used as follows:
10 to 14 = A, 15 to 19 = B and 20 to 24 = C, etc.

Third Character: Second highest severity grade occurring along the pipe length.

Fourth Character: Total number of the second highest severity grade occurrences. If the total number exceeds 9, then alphabetic characters are used as follows:
10 to 14 = A, 15 to 19 = B and 20 to 24 = C, etc.



For example: 4B27

This immediately shows no grade 5 defects or grade 3 defects were observed. However, fifteen to nineteen grade 4 defects and seven grade 2 defects were found.

Another example: 3224

Two grade 3 defects and four grade 2 defects were observed in the pipe, however, no grade 5 or grade 4 defects were found.



Appendix C - PACP Condition Grading System

If a pipe segment only has defects of one grade, the first two characters are the grade and the quantity of defects, and the last two characters are 00 (denoting no other defect grades). For example, a segment with two grade 4 defects and no other defects would have a rating of 4200. A pipe segment with no defects would have a rating of 0000 (all zeros). This does not imply that grade 0 exists.

The PACP Quick Rating provides a means to summarize the number and severity of the most significant defects found within a pipe segment. As with the other pipe ratings, the quick rating is separately calculated for Structural (QSR) and O&M (QMR) coded defects, and may be combined into an Overall Quick Rating (QOR).

Segment Grade Scores (SG):

Each pipe segment will have a separate Segment Grade Score for each of the five condition grades. These scores are calculated by multiplying each condition grade number by its number of occurrences in the individual pipe segment.

$$SG_N = \text{number of grade } N \text{ defects} \times \text{condition grade } N$$

For example, a pipe has the following defects and condition grades:

Structural

6 defects, grade 5
2 defects, grade 3
4 defects, grade 2

O&M

2 defects, grade 3
4 defects, grade 2

The segment grade scores for the structural and O&M ratings are:

Cond. Grade	Defects		Segment Grade	
	Structural	O&M	Structural	O&M
5	6	0	$SG_5 = (6 \times 5) = 30$	$SG_5 = (0 \times 5) = 0$
4	0	0	$SG_4 = 0$	$SG_4 = 0$
3	2	2	$SG_3 = 6$	$SG_3 = 6$
2	4	4	$SG_2 = 8$	$SG_2 = 8$
1	0	0	$SG_1 = 0$	$SG_1 = 0$

Note

If a pipe segment had no defects of a particular grade, then the Segment Grade Score for that grade would be zero (0).



Appendix C - PACP Condition Grading System

Overall Pipe Rating (OR):

The five individual Segment Grade Scores are added together to calculate the Overall Pipe Rating. Structural pipe ratings are calculated using only structural defect grades, while O&M pipe ratings are calculated using only O&M defect grades. This total score should be viewed with caution, since a high Overall Pipe Rating score may indicate a high number of low severity defects, a low number of high severity defects or a balance of high and low defect grades.

$$OR = SG_1 + SG_2 + SG_3 + SG_4 + SG_5$$

For example, from the previous example the following ratings are calculated:

Condition Grade	Defects		Segment Grade	
	Structural	O&M	Structural	O&M
5	6	0	30	0
4	0	0	0	0
3	2	2	6	6
2	4	4	8	8
1	0	0	0	0
Total Defects =	12	6		
Overall Rating =			44	14

Pipe Rating Index (RI)

The Pipe Rating Index is an indicator of overall defect severity within the line segment. This index is calculated by dividing the overall pipe rating by the total number of defects. Pipe Rating Indexes are separately calculated for Structural and O&M. Note: since this calculated index score simply represents an average of the segment grade scores, it does not indicate whether there are many or few defects with high or low condition grade numbers. A pipe segment with zero condition grade defects would have a Pipe Rating Index of zero (0).

$$RI = \left(\frac{\text{Overall Rating}}{\text{Total number of defects}} \right)$$



Appendix C - PACP Condition Grading System

For example, from the previous example the following ratings are calculated:

$$RI_{\text{Structural}} = \frac{44}{12} = 3.7, \text{ and, } RI_{\text{O\&M}} = \frac{14}{6} = 2.3$$

Condition Grade	Defects		Segment Grade	
	Structural	O&M	Structural	O&M
5	6	0	30	0
4	0	0	0	0
3	2	2	6	6
2	4	4	8	8
1	0	0	0	0
Total Defects =	12	6		
Overall Rating =			44	14
Rating Index =			3.7	2.3

While all of these rating methods have benefits and each could be adapted, the Overall Quick Rating (QOR) provides the highest condition grade within the ratings. The highest condition grade is not always apparent in the RI or OR. Therefore, the Overall Quick Rating (QOR) is used in determining the likelihood of failure component of risk discussed in subsequent sections of this Appendix.



Appendix C - PACP Condition Grading System

Following is a sample sheet with pipe rating examples, calculations and explanations.

	A	B	C	D	E	F	G
1			Condition	Number of Defects		Segment Grade	
2			Grades	Structural	O&M	Structural	O&M
						$(C) \times (D)$	$(C) \times (E)$
3	Point Defects		5	3	5	15	25
4			4	5	0	20	0
5			3	2	4	6	12
6			2	3	5	6	10
7			1	1	3	1	3
8	Continuous Defects	Length (ft)					
				$(B)/5$	$(B)/5$	$(C) \times (D)$	$(C) \times (E)$
9	S01-F01 (Struc.)	29	3	6	-	18	-
10	S02-F02 (Struc.)	21	2	4	-	8	-
11	S03-F03 (Struc.)	16	5	3	-	15	-
12	S04-F04 (O&M)	15	3	-	3	-	9
13	S05-F05 (O&M)	16	1	-	3	-	3
				$\Sigma(D)$	$\Sigma(E)$		
14	Total Defects =			27	23		
						$\Sigma(F)$	$\Sigma(G)$
15	Overall Rating =					89	62
						$(F15)/(D14)$	$(G15)/(E14)$
16	Rating Index =					3.3	2.7
	Quick Rating =			5645	5537		
	Overall Quick Rating =			5A45			

APPENDIX C

T&T COST MEMORANDUM

**T&T Cost Calculation
Rochester, New Hampshire
May 2023**

Fiscal year 2022 Transportation and Treatment (T&T) costs for sewage in the City of Rochester can be calculated using the City's O&M and Capital costs. Table A shows Rochester's FY22 O&M and Capital costs.

TABLE A – CITY OF ROCHESTER SEWERAGE COSTS FY22

ITEM	FLOW (gallons/year)	FLOW (gallons/day)	ROCHESTER COST	COST (\$/GPD)
Administration + O&M	1,110,549,000	3,042,600	\$2,991,153	\$0.9831
Capital Improvement Expenditures (WWTF, PS, & Collections Maintenance and Upgrades)	1,110,549,000	3,042,600	\$2,381,000	\$0.7826
Debt Services (Capital Costs)	1,110,549,000	3,042,600	\$2,610,003	\$0.8578
TOTAL			\$7,982,156	\$2.6235

Therefore, the total FY22 T&T cost for the City of Rochester's costs is \$2.6235/GPD

According to the Department of Environmental Protection's (DEP) Guidelines for Performing I/I Analyses and SSES this cost of \$2.6235/GPD needs to be extended throughout the life of a rehabilitative measure. The life cycle for a rehabilitative measure can be set by good engineering judgment as well as backup documentation, depending on the type of rehabilitation. For this study, Weston & Sampson will use a life cycle of 20 years.

To find the present worth of a rehabilitative measure over a twenty-year period, a discount rate, or annual percentage rate, is required. According to the DEP, the discount rate for FY22 is 2.25%. To calculate the T&T cost in order to account for this twenty-year period, a present worth analysis must be done. The following formula will calculate the present worth of the T&T cost for the next twenty years.

PRESENT WORTH ANALYSIS:

Discount Rate = 2.25% (DEP FY22 Information)

Present Worth Factor:

$$\frac{(1+i)^n - 1}{i(1+i)^n} \quad \text{where:} \quad \begin{array}{l} i = \text{discount rate, or interest rate} \\ n = \text{number of years} \end{array}$$

$$\frac{(1 + 0.0225)^{20} - 1}{0.0225(1 + 0.0225)^{20}} = 15.96$$

Present Worth T&T Cost (Using DEP FY22 Discount Rate):

$$(\text{Present Worth Factor}) \times (\text{FY22 T\&T cost})$$

$$15.96 \times \$2.6235/\text{GPD} = \$41.88/\text{GPD}$$

Therefore, the T&T cost for the City of Rochester, using a present worth of the rehabilitation over a twenty-year period and a discount rate of 2.25% is \$41.88/GPD.