Appendix B
CCTV SUMMARY AND REPAIR RECOMMENDATIONS

Introduction to Appendix B

Purpose

The purpose of this introduction is to provide the codes and examples of the Pipeline Assessment Certification Program (PACP) Code used within the first and second spreadsheet. This code is used to denote the different connections, details, and defects shown in the pipe's CCTV video.

Inflow and Infiltration

The sewer pipe makes up a minority of the inflow and infiltration (I&I) in the system, with most being found in the sewer structures. Within this report, the defect was denoted based on the volume of groundwater entering the system. The coding used in creating the pipe logs uses acronyms determined by NASSCO's Pipeline Assessment Certification Program (PACP). All infiltration defect codes begin with the letter 'I'. They are followed by the denotation of what volume of groundwater is entering the pipe. The notation system can be seen below in Table 2. The defect was then documented for where it occurred in the pipe's segment. The coding system can be seen below in Table 3.

Infiltration Type	Code	Detailed Description
Stain	S	Mineralized section, where there is evidence of infiltration, but no present moisture
Weeper	W	Mineralized section where there is moisture evident, though there is no observable flow
Dripper	D	A steady drip of water is entering from outside of the asset, can be somewhat intermittent
Runner	R	A steady stream of water is entering from outside the asset, no lapse in flow
Gusher	G	A pressurized stream of water is entering from outside the asset, no lapse in flow

Table 2 – Infiltration Notation

Infiltration Location	Code	Detailed Description
Barrel	B	A section of pipe that is continuous and undisturbed from any taps
Connection	C	A location where the sewer main connects with another pipe or structure that differs from itself. Most often, this was the 4" lateral service connections
Joint	J	A section where two pipes of the same size interlock, creating a continuous run of pipe.
Lateral	L	A service connection, often at the 10:00 or 2:00 position, where infiltration can be observed happening upstream of the connection.

Table 3 – Pipe Location Notation

Example I&I Codes:
IDB – Infiltration Dripper in Barrel
IRC – Infiltration Runner at Connection

ISJ – Infiltration Stain at Joint

Lateral Service Connections

The lateral services found in almost all pipes in the system were denoted as taps or 'T'. This refers to them tapping into the sewer main to deposit residential or commercial waste. If the tap appeared to be factory constructed it was documented as 'TF' for tap factory, indicating that the connection was factory made. The third letter in the code referred to the state that the tap was observed to be in. The notation system can be seen below in Table 4.

State of Tap	Code	Detailed Description
Standard	-	Tap does not have any waste actively flowing, but appears to be in working condition
Activity	A	Tap is actively flowing and appears to be in working condition
Capped	C	Tap has a cap visible from within the sewer main. No waste is flowing from tap.
Defective	D	Tap is not in working condition and has active infiltration
Abandoned	B	Tap is not in working condition, has heavy mineralization or DAGS (see below) build-up, but does not have any active infiltration

Table 4 – Lateral Connection Notation

Example Lateral Service Codes:
TF – Standard Tap Factory Service Connection
TFC – Tap Factory Connection has been capped
TFA - Standard Tap Factory Service Connection is actively running at time of CCTV video recording.

Miscellaneous Codes in Pipe Logs

The remaining notation was used to document defects within a pipe that did not involve infiltration. Only PACP codes that appeared in Talkeetna's Sewer System appear in Table 5 below.

Defect	Code	Detailed Description
Surface Aggregate Missing	SAM	Any noticeable defect in the pipe's surface that created a three-dimensional indentation.
Medium Joint Separation	JSM	A separation of the pipe's main body where 0.5 to 1 inch of the joint was exposed
Large Joint Separation	JSL	A separation of the pipe's main body where greater than 1 inch of the joint was exposed
Medium Joint Offset	JOM	A misalignment in two pipe sections that results in unequal distances between the sections within a connecting joint
Large Joint Offset	JOL	A misalignment in two pipe sections that results in the lack of a successful connection
Deposits – Oil and Grease	DAGS	Deposits on any side of the pipe are a result of fats, oils, or grease entering the system.

Deposits – Fines	DSF	Deposits along the invert that appear to be silty or sandy in nature and are non-adhesive
Deposits – Hard	DSC	Deposits that are gravity settled along the invert and appear to be solid in place
Rocks – Obstruction	OBR	Large rocks within the invert
Hole – Soil Visible	HSV	A section of the pipe where the pipe is completely absent, and the soil can be seen
Longitudinal Crack	CL	A crack in the pipe that runs parallel with the pipe's direction
Circumferential Crack	CC	A crack in the pipe that runs along the circumference of the wall, orthogonal to the pipe's direction
Longitudinal Fracture	FL	A fracture in the pipe (larger than a crack) that runs parallel with the pipe's direction
Manhole – Access	AMH	Indicates that the survey has ended at a manhole
Cleanout – Access	ACO	Indicates that the survey has ended at a cleanout
Lift Station – Access	AWW	Indicates that the survey has ended at a lift station
Junction Box - Access	AJB	Indicates that the survey has ended at closed connection
Water level	MWL	Used to denote significant changes in water level within a short distance
Survey abandoned	MSA	Used when obstacles block too much area for the camera to pass through, survey often continued from opposite direction

Table 5 – Miscellaneous Codes

Talkeetna Sewer System Pipe Summary Table				General Condition Grade Score Values: *1=No or Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect*									
Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
CO19-001	MH19-0025	S I St	8	DIP	Yes	6/5/2024	193	Upstream	<1	1	1	-21.3 LF, JSM throuhghout entire circumfrence, highly mineralized - 45.9 LF, SAM at 7:00 position -72.7 LF, 4" TFA at 10:00 position, highly mineralized - 142.6 LF, 4" TFA at 10:00 position, FOG build-up along invert of TF - 190.6 LF, 4" TF at 10:00 position - 191.7 LF, 4" TFD at 2:00 position, small offset along bottom of connection - 193.2 LF, ACO 19-001	Reinspect pipe every 10 years
CO19-002	MH19-0022	S H St	8	DIP	Yes	6/6/2024	153	Upstream	1	1	1	- 6.0 LF, SAM along 6:00 position, 1" DSF also present - 24.2 LF, 4" TF at 10:00 position, highly mineralized - 31.2 LF, 4" TFA at 2:00 position - 32.6 LF, SAM at 9:00 position - 39.3 LF, 4" TF at 10:00 position, highly mineralized - 46.7 LF. SAM at 4:00 position - 47.0 LF to 57.0 LF, DSC dispersed from 5:00 to 7:00 - 153.6 LF, ACO 19-002	Reinspect pipe every 10 years
CO19-003	MH19-005	E Gliska St	8	DIP	Yes	6/7/2024	188	Upstream	1	1	1	- 6.9 to 8.6 LF, SAM sustained at 7:00 position - 46.3 LF, SAM at 12:00 position -58.5 LF SAM at 6:00 position - 149.6 to 171.2 LF, 1-2" DSGV / DSC in invert - 157.5, 4" TFA at 2:00 position, build-up in invert - 160.1, 4" TF at 10:00 position -186.3 LF, 4" TF at 3:00 position - 186.8 LF, SAM at connection from 5:00 to 7:00 and 10:00 to 2:00 - 188.4 LF, ACO 19-003	Reinspect pipe every 10 years
CO19-004	MH19-005	E Gliska St	8	DIP	Yes	6/7/2024	142	Upstream	<1	2	1	- 24.0 LF, SAM at 5:00 position - 55.5 LF, SAM at 7:00 position -58.5 to 72.9 LF, intemittent SAM from 4:00 to 8:00 position - 76.3 LF, SAM at 6:00 position - 96. to 106.5 2 LF, SAM at 8:00 position - 106.6 LF, 4" TF at 2:00 position, highly mineralized, SAM near connection - 132.7 LF, SAM at 5:00 position - 140.0 LF, 4" TF at 10:00 position -142.0 LF, ACO 19-004	Reinspect pipe every 10 years
CO24-001	MH24-003	S C St	8	DIP	Yes	5/29/2024	202	Downstream	<1	1	1	- 2.0 to 5.5 LF, 1-2" DSF at 6:00 position - 10 LF to 200 LF, LFDC from 3:00 to 9:00 position - 201.9 LF, 48" AMH	Reinspect pipe every 10 years
CO24-002	MH24-008	Talkleetna Spur	8	DIP	Yes	5/29/2024	207	Upstream	<1	1	2	- 25.0 LF, 4" TFA at 10:00 position - 33.1 LF, 4"TFD at 2:00 position, gap on bottom of connection - 52.1 LF, SAM at 9:00 position - 54.6 LF, CC from 7:00 at 5:00 position - 62.1 LF, SAM at 9:00 position - 80.9 LF, 4" TF at 10:00 position - 95.0 LF, 4" TFA at 10:00 position - 105.3 LF, 4" TFC at 2:00 position - 128.1 LF, SAM at 6:00 position -139.4 LF, 4" TFA at 2:00 position - 157.7 LF, 4" TF at 10:00 position - 165.0 LF, SAM at 7:00 position - 204.7 LF, 4" TB at 10:00 position - 207,1 LF ACO 24-002	Reinspect pipe every 10 years
CO24-003	MH24-0015	E First St	8	DIP	No	5/30/2024	119	Upstream	1	2	1	- 136 LF, high water and grease deposits, survey abandoned - 40.6 LF, TFA at 10:00 position - 49.6 LF. 4" TF at 10:00 position, OBC within TF blocking 25% area from 4:00 to 8:00 position -58.5 LF, 4" TF at 2:00 position, OBC within TF blocking 30% area from 4:00 to 8:00 position - 91.3 LF to , DAGS from 2:00 to 4:00 position and 8:00 to 10::00 possition, 5% reduction in area -114.5 LF DAGS from 5:00 to 7:00 position, thick obstacle, 20% reduction in area - 116.8 LF, TF at 2:00 position - Unclear whether it ends at cleanout or major obstruction	Reinspect pipe every 10 years
CO25-005	MH25-0025	E Second St	8	DIP	Yes	5/30/2024	17	Upstream	2	1	1	15.9 LF, 6" TFA at 10:00 position - 17.0 LF DAGS from 5:00 to 7:00 position, obstacle at bottom of CO, 30% reduction in area - 17.0 LF, ACO 25-001A	Reinspect pipe every 10 years
CO25-002	MH25-002	E Third St	8	DIP	Yes	5/31/2024	214	Upstream	<1	1	1	- 18.2 LF, 4" TF at 10:00 position - 68.4 LF, 4" TF at 10:00 position - 98.4 LF, SAM at 3:00 position - 149.5 LF, 4" TF at 2:00 position, highly mineralized - 212.9 LF, 4" TF at 10:00 position - 214.0 LF, ACO 25-002	Reinspect pipe every 10 years
CO25-003	MH25-0019	West of Talkeetna Elem	8	DIP	Yes	6/2/2024	201	Upstream	<1	1	1	- 191.9 LF, JSM at 6:00 position - 192.7 LF, 8" TFA at 9:00 position - 194.0 LF, DSC (Concrete chunk) at 5:00 position, 10% reduction in area - 201.1 LF, ACO 25-003	Reinspect pipe every 10 years
MH19-0010	MH19-0011	S Easy St	8	DIP	Yes	6/4/2024	296	Downstream	1	2	1	- 8.9 LF, 4" TF at 10:00 position, mineralized - 32.4 LF, SAM at 6:00 in invert - 36.0 LF, 4" TFA at 2:00 position, mineralized - 50.4 LF, SAM at 5:00 position - 51.6 to 52.3 LF, SAM at 6:00 in invert - 66.5 LF, SAM from 5:00 to 6:00 position - 109.5 LF, TF at 10:00 position, 3" SAM above connection - 208.3 LF, SAM at 5:00 to 7:00 position - 211.0 to 217.0 LF, SAM at 7:00 position - 226.8 LF, SAM from 5:00 to 7:00 position - 228.4 LF, SAM at 12:00 position - 245.3 LF, SAM from 3:00 to 9:00, adjacent to joint - 263.9 LF, SAM from 8:00 to 10:00 - 274.0 LF, 4" TFA at 2:00 position, sludge build-up along invert - 274.9 LF, SAM at 1:00 position - 286.4 LF, TF at 9:00 position - 296.3 LF, AMH 19-0011	Reinspect pipe every 10 years
MH19-0011	MH19-0015	S Easy St	8	DIP	Yes	6/4/2024	282	Downstream	1	1	1	- 5.6 LF, JSS and SAM around circumfrence of joint - 23.8 LF, SAM at 7:00 position - 60.9 LF, SAM from 2:00 to 4:00 - 129.9 LF, 4" TFA at 2:00 position - 132.6 LF, 4" TF at 10:00 position, LFD around connection - 233.0 LF, 4" TFA at 2:00 position, mineralized - 137.3 LF, 4" TFA at 10:00 position, mineralized - 281.5 LF, SAM at 10:00 position - 282.2 LF, AMH 19-0015	Reinspect pipe every 10 years
MH19-0012	MH19-0034	S I St	8	DIP	Yes	6/4/2024	290	Downstream	<1	1	1	- 27.8 LF, SAM at 6:00 position - 33.9 to 36.7 LF, SAM at 6:00 position - 46.2 LF, SAM at 6:00 position - 54.8 LF, 4" TF at 2:00 position, mineralized - 108.7 LF, SAM at 6:00 position - 117.6 LF, 4" TF at 2:00 position, mineralized - 138.6 LF, SAM from 5:00 to 7:00 - 153.4 LF, TF at 10:00 position - 160.6 LF, SAM from 5:00 to 7:00 - 261.1 LF, 4" TF at 2:00 position, mineralized, possible IDC - 290.4 LF, AMH 19-0034	Reinspect pipe every 10 years
MH19-0013	MH19-0018	S H St	8	DIP	Yes	6/6/2024	418	Downstream	<1	2	1	- 4.0 LF, 4" TF at 1:00 position, mineralized - 32.5 LF, SAM at 7:00 position - 40.3 LF, 4" TF at 10:00 position, slight offset, mineralized, possible IWC - 75.6 LF, 4" TF at 11:00 position, mineralized, SAM around connection - 116.9 LF, 4" TF at 2:00 position, SAM around connection - 142.8 LF, SAM at 7:00 position - 229.8 LF, 4" TF at 2:00 position, mineralized - 250.7 to 252.1 LF, SAM at 6:00 position in invert - 254.7 LF, 4" TF at 10:00 position, mineralized, slight offset - 289.1 LF, SAM at 5:00 position - 331.5 LF, 4" TF at 10:00 position, slight offset, standing water in connection - 339.4 LF, RPPD at 12:00 position, 6" patch appears to still have IDB coming through - 380.8 LF, SAM from 6:00 to 9:00 along joint edge - 399.1 LF, SAM from 5:00 to 8:00 along joint edge - 417.9 LF, AMH drop connect to 19-0018	 CIPP Point Repair 78.5 LF from MH19-0018

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Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
MH19-0015	MH19-0016	S Easy St	8	DIP	Yes	6/3/2024	402	Upstream	1	1	1	- 145.1 LF, 4" TFA at 2:00 position - 146.6 LF, 4" TF at 10:00 position, mineralized - 262.5 LF, 4" TF at 2:00 position - 263.8 LF, 4" TF at 10:00 position, mineralized - 402.3 LF, AMH 19-0015	Reinspect pipe every 10 years
MH19-0016	MH19-0017	E Front St	8	DIP	Yes	6/4/2024	330	Downstream	1	1	2	- 15.0 LF, SAM at 7:00 position - 155.0 LF, SAM at 1:00 position - 324.9 LF, JOM, mineralization - 329.7 LF, CC from 9:00 to 1:00 along joint - 330.3 LF, AJB in MH19-0017	Reinspect pipe every 10 years
MH19-0017	MH19-0018	E Front St	8	DIP	No	6/4/2024	Unknown	Downstream	2	2	2	- 6.7 LF, JSM, significant mineralization, IWJ likely - 38.0 to 291.4 LF, sustained DAGS build up at 5:00 and 7:00, 5-15% reduction in area - 205.7 to 208.1 LF, SAM at 4:00 to 5:00 position - 251.3 LF, JSS, moderate mineralization and DAGS - 291.4 to 305.4 LF, 2" DSC/DAGS along invert of pipe, 20% reduction in area - 305.5 LF, OBR obstructing camera and damming invert - 305.5 LF, MSA due to OBR	 CIPP Point Repair 6.7 LF from MH19-0017
MH19-0018	MH19-0019	E Front St	8	DIP	Yes	6/8/2024	370	Upstream	2	1	2	- Inspection of invert is difficult with high flows present - 25.9 LF, JSM, significant mineralization - 202.1 LF, JSS, moderate mineralization - 249.8 LF, 4" TF at 2:00 position - 283.3 LF, SAM at 6:00 position - 358.1 LF, SAM at 8:00 and 4:00 - 5:00 - 369.6 LF, AJB in MH19-0018, highly mineralized inside with 2 IDC cases along top of sealed junction box	Reinspect pipe every 10 years
MH19-0019	MH19-0036	S G St	12	DIP	Yes	6/8/2024	400	Downstream	3	1	2	- Pulses of high flow do not allow proper camera inpsection for intervals throuhgout video - 60.1 LF, ISJ from 8:00 to 4:00 - 102.8 LF, 4" TFC, mineralized - 133.2 LF, ISJ from 8:00 to 4:00 - 188.3 LF, ISJ from 8:00 to 4:00, SAM at 3:00 - 206.7 LF, ISJ from 8:00 to 4:00 - 267.7 LF, 4" TFB at 12:00, DAE covering almost entire pipe, extremely mineralized, 80% reduction in area - 298.2 LF, ISJ from 10:00 to 2:00 - 388.8 LF, SAM at 9:00 position, mineralized - 399.9 LF, AMH 19-0019A	Reinspect pipe every 10 years
MH19-0036	MH19-0037	S G St	12	DIP	Yes	6/8/2024	413	Downstream	3	2	2	- Invert difficult to inspect due to high flow rates - 3.4 LF, ISJ from 8:00 to 4:00, extremely mineralized - 21.6 LF, ISJ from 8:00 to 4:00, extremely mineralized - 40.1 LF, ISJ from 8:00 to 4:00, extremely mineralized - 41.6 LF, 4" TFC at 12:00, IDC from service pipe - 94.6 LF, JSS with ISJ from 8:00 to 4:00 - 110.4 LF, SAM at 9:00 - 149.5 LF, ISJ from 8:00 to 4:00, extremely mineralized - 170.9 LF, 4" TF at 1:00, mineralized, SAM around connection, possible IWC - 195.5 LF, 4" TFB at 12:00, DAE present in service, 50% reduction in area, extremely mineralized, IWCs likely - 215.9 LF, SAM and ISB from 11:00 to 1:00 - 217.8 LF, SAM and ISB from 10:00 to 11:00 - 219.8 LF, SAM and ISB from 10:00 to 12:00 - 353.0 LF, 4" TF at 12:00 position, mineralized - 412.9 LF, AMH 19-0019B, DAGS build-up along transition from pipe to shelf in MH	 CIPP Pipe from 0 to 225 LF to Seal from Infiltration/Barrel Stains
MH19-0037	MH19-0038	S G St	12	DIP	Yes	6/8/2024	168	Downstream	3	1	2	- 4.0 LF, ISJ from 8:00 to 4:00 - 40.7 LF, ISJ from 8:00 to 4:00 - 82.6 LF, 4" TFB, entirely filled with DAE at conection, highly mineralized, >80% reduction of area - 132.3 to 153.2 LF, DAGS build-up at 4:00 and 8:00 position, 5% reduction in aea - 168.5 LF, AMH 19-0035	Reinspect pipe every 10 years
MH19-0021	MH19-0019	S G St	12	DIP	Yes	6/8/2024	391	Upstream	3	1	2	- 4.0 LF, SAM at 9:00 position - 14.0 LF, 4" TF at 2:00 position, mineralized - 170.7 LF, 4" TFC at 12:00 position - 194.5 LF, SAM at 7:00 position - 273.5 LF, 4" TFA at 10:00 position, SAM around bottom of connection - 335.7 LF, 4" TFC at 12:00 position - 390.9 LF, AMH 19-0021, highly mineralized	Reinspect pipe every 10 years
MH19-0022	MH19-0018	S H St	8	DIP	Yes	6/6/2024	352	Downstream	<1	2	1	- 128.6 LF, TFA at 1:00 position, mineralization, SAM surrounding connection - 130.8 LF, SAM at 6:00 to 7:00 - 149.3 LF, SAM at 6:00 position - 150.4 to 151.9 LF, SAM at 5:00 position - 167.7 LF, SAM at 5:00 position - 183.6 LF, 4" TF at 1:00 position, heavily mineralized, SAM around position - 185.9 LF, SAM at 2:00 to 4:00 position - 222.8 LF, JSM, moderate mineralization - 232.2 LF, SAM at 9:00 position - 240.3 to 240.9 LF, SAM at 7:00 position - 259.4 LF, JSS, mineralization - 271.4 LF, SAM at 8:00 position - 287.8 LF, SAM at 3:00 position - 292.4 LF, SAM at 9:00 position - 292.8 LF, 4" TFA at 11:00 position, mineralization, DAGS build-up in invert - 310.8 to 331.9 LF, interspersed SAM from 6:00 to 7:00 - 351.0 LF, JSS, with RSS from 8:00 to 2:00, mineralization, and SAM at 4:00 - 352.1 LF, AJB in MH19-0018, highly mineralized	Reinspect pipe every 10 years
MH19-0023	MH19-0017	S I St	8	DIP	Yes	6/5/2024	401	Downstream	1	2	1	- 3.9 LF, SAM at 8:00 position - 8.5 LF, JSS, highly mineralized - 26.0 LF, SAM at 11:00 - 43.8 to 81.0 LF, 2" OBR in invert, 5-10% reduction in area - 82.5 LF, JSM, highly mineralized, likely IWJ - 90.4 LF, 4" TF at 3:00, mineralized, connection visible - 151.4 LF, 4" TF at 9:00 position, slightly offset, connection visible - 146.4 to 187.5 LF, 2-3" DSF and DSC along invert from 5:00 to 7:00 - 180.9 LF, 4" TF at 3:00 position, 0.5" offset in connection, standing water in bottom, likely IWC - 189.2 LF, 4" TF at 10:00 position, mineralized - 252.7 LF, 4" TFA at 2:00 position, connection visible - 274.8 LF, 4" TF at 10:00 position, mineralized - 285.9 to 304.2 LF, 1-2" DSF/OBR in pipe's invert - 304.2 LF, MSA on first video due to rocks - 327.2 LF, SAM at 10:00 position - 327.8 LF, 4" TF at 10:00 position - 345.2 to 349.5 LF, SAM interspersed from 11:00 to 2:00 - 352.8 LF, 4" TF at 2:00 position, mineralized - 400.8 LF, AJB at MH19-0017	Reinspect pipe every 10 years
MH19-0024	MH19-0016	S Easy St	8	DIP	Yes	6/3/2024	431	Downstream	1	2	1	- 6.8 to 22.9 LF, SAM in invert at 6:00 position - 32.9 to 40.8 LF, SAM in invert at 6:00 position - 40.4 LF, 4" TF at 10:00 position, mineralized - 64.3 LF, 4" TF at 2:00 position - 64.8 to 78.2 LF, SAM in invert from 5:00 to 7:00 - 102.5 to 147.3 LF, SAM in invert from 5:00 to 7:00 - 169.0 LF, 4" TF at 2:00 position - 177.0 to 187.3 LF, SAM in invert from 5:00 to 7:00 - 199.0 LF, 4" TFA at 2:00 position, high flow - 283.9 to 298.3 LF, SAM in invert from 5:00 to 7:00 - 306.0 LF, 4" TFA at 2:00 position - 374.2 LF, 4" TF at 10:00 position - 431.1 LF, AMH 19-0016	Reinspect pipe every 10 years

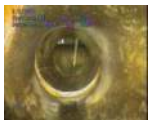
Talkeetna Sewer System Pipe Summary Table				General Condition Grade Score Values: *1=No or Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect*									
Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
MH19-0025	MH19-0023	S I St	8	DIP	Yes	6/5/2024	302	Upstream	1	2	1	- 18.1 LF, ISJ from 8:00 to 4:00 - 36.5 LF, ISJ from 8:00 to 4:00 - 79.8 to 88.3 LF, SAM from 5:00 to 7:00 - 92.0 LF, ISJ from 8:00 to 4:00 - 110.2 LF, JSM, highly mineralized - 128.8 LF, JSM, highly mineralized - 131.1 LF, SAM at 4:00 position - 147.2 LF, JSM, mineralized - 184.2 LF, JSM - 190.9 LF, 4" TF at 10:00 position - 202.6 LF, JOM, mineralized - 221.2 LF, JSM - 229.7 LF, 4" TF at 10:00 position, standing water present - 239.7 LF, ISJ from 8:00 to 4:00 - 258.1 LF, JSM, highly mineralized - 279.2 LF, 4" TBC at 10:00 position, grouted shut, mineralized - 294.0 LF, 4" TF at 4:00 position, slightly offset - 302.1 LF, AMH 19-0025	Reinspect pipe every 10 years
MH19-0026	MH19-0024	S Easy St	8	DIP	Yes	6/3/2024	432	Upstream	<1	1	1	- 38.3 to 43.1 LF, SAM from 5:00 to 6:00 - 57.4 to 76.0 LF, SAM from 6:00 to 7:00 - 87.6 LF, 4" TFA at 2:00 position, mineralized, possible IRC, SAM around connection - 132.7 LF, 4" TFA at 2:00 position, mineralized, connection visible, likely an IRC - 160.2 LF, 4" TF at 10:00 position, mineralized - 202.6 LF, JSM - 288.9 LF, 4" TF at 2:00 position, mineralized - 325.3 LF, 4" TFA at 10:00 position, mineralized - 362.4 LF, 4" TF at 10:00 position, offset visible within service - 404.4 LF, 4" TF at 2:00 position, mineralized - 428.7 LF, 4" TF at 10:00 position, SAM around connection, mineralized - 429.7 LF, 4" TF at 2:00 position, mineralized - 432.1 LF, AMH 19-0026	Reinspect pipe every 10 years
MH19-0027	MH19-0035	S G St	12	DIP	Yes	6/7/2024	310	Downstream	3	1	2	- 51.3 LF, SAM at 9:00 position - 53.8 LF, SAM from 8:00 to 10:00 - 65.5 to 90.5 LF, SAM interspersed from 8:00 to 11:00 - 129.5 to 135.4 LF, interspersed SAM at 9:00 position - 146.0 LF, SAM at 3:00 position - 150.4 LF, 4" TFA, highly mineralized, 40% reduction in area, possible IWC - 309.6 LF, AMH 19-0027A	Reinspect pipe every 10 years
MH19-0035	MH19-0021	S G St	12	DIP	Yes	6/8/2024	231	Upstream	3	1	2	- 63.0 LF, 4" TF at 11:00 positioin, mineralized, SAM around connection - 72.3 LF, ISJ from 8:00 to 4:00 - 78.0 LF, 4" TFC at 12:00 position - 108.9 LF, ISJ from 8:00 to 4:00 - 127.2 LF, ISJ from 8:00 to 4:00 - 163.8 LF, ISJ from 8:00 to 4:00 - 176.9 LF, 4" TFC at 12:00 position - 218.9 LF, ISJ from 8:00 to 4:00 - 230.7 LF, AMH 19-0027A	Reinspect pipe every 10 years
MH19-0028	MH19-0030	S I St	8	DIP	Yes	6/5/2024	179	Downstream	<1	2	1	- 2.1 LF, ISJ from 7:00 to 5:00 - 19.9 LF, ISJ from 8:00 to 4:00 - 28.2 LF, 4" TFA at 2:00 position, mineralized, SAM around connection - 38.2 LF, JSM, mineralized - 56.9 LF, JOM, mineralized - 94.4 LF, JSM, moderate mineralization - 112.5 LF, JSM, moderate mineralization - 116.3 LF, SAM at 7:00 position - 131.3 LF, JSL, mineralized - 149.7 LF, JSM, moderate mineralization - 178.3 LF,JSL, multiple rings visible, mineralized, likely IWC, gasket visible - 179.2 LF, AMH 19-0030, high I&I in manhole	 - Excavate and Rejoin Joint 1 LF from MH19-0030
MH19-0029	MH19-0028	S I St	8	DIP	Yes	6/5/2024	430	Upstream	<1	2	1	- 8.5 LF, JSM, mineralized - 27.1 LF, JSM, mineralized - 45.7 LF, JSM, mineralized - 82.1 LF, JSM - 100.7 LF, JSM, moderate mineralization - 102.7 LF, SAM from 5:00 to 6:00 - 104.7 LF, SAM from 5:00 to 6:00 - 106.0 LF, 4" TF at 10:00 position, mineralized - 137.8 LF, JSM, mineralized, ISJ - 156.2 LF, JSM, mineralized - 174.7 LF, JSM, highly mineralized, ISJ - 193.2 LF, ISJ - 205.2 LF, SAM at 4:00 position - 211.5 LF, JSM, highly mineralized, ISJ - 224.5 LF, 4" TFA at 10:00 position, mineralized - 230.0 LF, ISJ - 248.6 LF, JSM - 285.5 LF, JSM - 303.9 LF, JSM - 322.4 LF, JSM, mineralized - 349.1 LF, 4" TF at 10:00 position, mineralized, SAM around connection - 367.5 LF, 4" TF at 10:00 position, oval-shaped connection - 377.8 LF, JSM - 396.4 LF, JSM, mineralized - 414.7 LF, JSM - 428.4 LF, 4" TF at 2:00 position, mineralized - 430.4 LF, AMH 19-0029, insulating blanket in MH at time of video	Pipe is not in a high-risk location, but listed joint separations could develop infiltration. Downstream manholes should be monitored for I&I when the water table is high. Reinspect every 10 years.
MH19-0030	MH19-0031	E Second St	8	DIP	Yes	6/6/2024	254	Downstream	1	2	1	- 12.8 LF, JSM - 14.3 LF, 4" TFA at 9:00 position - 49.9 LF, JSM, mineralized - 102.4 LF, 2" DSZ in invert, backing water/debris up - 115.7 LF, 4" TF at 3:00, 1" DSF in service invert - 123.3 LF, JSM - 141.7 LF, ISJ from 8:00 to 4:00 - 160.2 LF, ISJ from 8:00 to 4:00 - 178.6 LF, JSM, mineralized - 197.2 LF, JSM - 215.7 LF, JSM - 225.3 LF, 4" TF at 2:00 position, mineralized - 234.2 LF, JSM, high mineralized, ISJ - 252.6 LF, JSM, mineralized - 253.9 LF, AMH 19-0031	Reinspect pipe every 10 years
MH19-0031	MH19-0032	E Second St	8	DIP	Yes	6/6/2024	280	Downstream	1	1	1	- 21.3 LF, ISJ from 8:00 to 4:00 - 30.5 LF, 4" TFA at 10:00 position, mineralized - 35.3 to 56.8 LF, MWL rises to 3" - 49.3 LF, 4" TF at 2:00 position - 58.0 LF, JSM - 78.3 LF, SAM at 7:00 position - 92.8 LF, 4" TF at 2:00 position, mineralized - 113.5 LF, SAM at 5:00 position - 187.2 LF, ISJ from 8:00 to 4:00 - 208.9 LF, 4" TF at 2:00 position, mineralized - 236.2 LF, SAM at 5:00 position - 238.1 to 239.0 LF, SAM at 6:00 position - 261.1 LF, ISJ from 8:00 to 4:00 - 266.7 LF, SAM at 7:00 position - 270.2 LF, SAM at 7:00 position - 280.2 LF, AMH 19-0032	Reinspect pipe every 10 years

Talkeetna Sewer System Pipe Summary Table				General Condition Grade Score Values: *1=No or Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect*									
Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
MH19-0033	MH19-0027	S G St	12	DIP	Yes	6/7/2024	401	Downstream	3	2	2	- 16.7 LF, ISJ from 8:00 to 4:00 - 53.5 LF, ISJ from 8:00 to 4:00, SAM at 9:00 position - 71.9 LF, ISJ from 8:00 to 4:00 - 95.7 LF, 4" TFB at 12:00 position, heavily mineralized - 145.4 LF, ISJ from 8:00 to 4:00 - 163.7 LF, ISJ from 8:00 to 4:00 - 182.1 LF, ISJ from 8:00 to 4:00 - 200.5 LF, ISJ from 8:00 to 4:00 - 218.9 LF, ISJ from 8:00 to 4:00 - 237.2 LF, ISJ from 8:00 to 4:00 - 255.4 LF, ISJ from 8:00 to 4:00 - 273.7 LF, ISJ from 8:00 to 4:00 - 292.3 LF, ISJ from 8:00 to 4:00 - 310.5 LF, ISJ from 8:00 to 4:00 - 316.0 LF, 4" TFC, highly mineralized, actively flowing IRC from connection - 328.8 LF, ISJ from 8:00 to 4:00 - 347.1 LF, ISJ from 8:00 to 4:00 - 365.5 LF, ISJ from 8:00 to 4:00 - 383.8 LF, ISJ from 8:00 to 4:00 - 401.3 LF, AMH 19-0027	 CIPP Liner for Entire Length, not cutting out Service Connection that is 85 LF from MH19-0027
MH19-0034	MH19-0017	S I St	8	DIP	Yes	6/4/2024	263	Downstream	1	2	1	- 19.0 LF, DSZ 10% reduction in area - 22.7 LF, 4" TFA at 2:00 position - 25.1 LF, 4" TFA at 10:00 position, mineralized, connection gasket visible - 75.3 LF, 4" TF at 2:00 position, mineralized - 150.0 LF, 4" TF at 2:00 position, mineralized - 148.1 to 151.3 LF, DAGS build-up along walls and top - 164.8 LF, 4" TF at 10:00 position, mineralized - 185.0 LF, SAM from 7:00 to 10:00 - 242.7 to 252.3 LF, DAE build-up at 5:00 and 7:00, 5% reduction in area - 258.9 LF, DAGS and Mineralization along joint from 8:00 to 4:00, 10% reduction in area - 259.0 to 262.8 LF, 1-2" DSF in pipe's invert, 10% reduction in area - 262.5 LF, Closed pipe lid at 12:00 position - 263.0 LF, AJB at MH19-0017, junction has 2" of debris in center, 20% reduction in area	Reinspect pipe every 10 years
MH19-005	MH19-006	E Gliska St	8	DIP	Yes	6/7/2024	258	Downstream	1	2	1	- 7.0 to 8.5 LF, SAM from 6:00 to 7:00 position - 16.2 LF, SAM at 4:00 position - 58.8 LF, 4" TF at 11:00 position, small offset at connection, highly mineralized - 117.0 LF, SAM at 3:00 position - 130.4 LF, SAM at 3:00 position - 134.1 LF, SAM at 9:00 position - 210.3 LF, 4" TF at 2:00 posiition -218.8 LF, SAM at 4:00 position - 223.4 LF, SAM at 8:00 position - 240.5, 4" TF at 10:00 position - 257.9 LF, AMH 19-006	Reinspect pipe every 10 years
MH19-006	MH19-0038	E Gliska St	8	DIP	Yes	6/7/2024	426	Downstream	1	2	1	- 9.6 LF, TF at 2:00 position, mineralized - 13.8 LF, approx. 3" HSV/SAP section at 12:00 position - 13.8 LF, IWB from hole at 12:00 position - 18.9 LF, SAM at 4:00 position - 26.5 LF, JSM along circumfrence - 27.4 to 31.4 LF, SAM from 5:00 to 7:00 position - 38.1 LF, SAM at 9:00 position - 57.6 LF, SAM at 4:00 position - 177.7 LF, 4" TF at 10:00 position, large DAGS build-up in pipe and around connection - 188.5 LF, 4" TFA at 2:00 position - 218.4 LF, 4" TF at 2:00 position - 266.4 LF, 4" TF at 10:00 position - 298.8 LF, SAM at 3:00 position - 300.7 LF, SAM at 9:00 position - 374.6 LF, 4" TFA at 2:00 position, mineralized - 413.0 LF, SAM at 10:00 position - 421.9 to 426.7 LF, SAM from 5:00 to 7:00 - 426.7 LF, AMH drop connect to 19-0035	 CIPP Point Repair at 13.8 LF from MH19-006
MH19-008	MH19-0013	S H St	8	DIP	Yes	6/6/2024	416	Upstream	1	2	1	- 17.6 LF, CC from 7:00 to 11:00 near/across joint - 54.1 LF, SAM at 9:00 position along joint - 62.1 LF, 4 "TFD at 10:00, 0.5" offset along bottom of connection, SAM at connection, mineralized, possible IDC - 11.5 LF, SAM at 6:00 in pipe invert -113.8 LF, SAM at 4:00 position -125.0 LF, 4" TF at 2:00 position, highly mineralized - 126.9 LF, 4" TFD at 9:00, 0.5" offset along bottom of connection, standing water accumulated - 166.1 LF, SAM at 5:00 position - 208.8 LF, 4" TFA at 1:00, highly mineralized - 214.1 LF, 4" TFA at 10:00, mineralized, slightly offset, possible IDC - 218.8 LF, CC from 12:00 to 5:00 adjacent to pipe joint - 224.0 to 233.2 LF, SAM at 7:00 position - 283.9 LF, 4" TF at 3:00 position, slight separation at connection - 288.3 LF, 4" TFA at 11:00 position - 302.4 LF, SAM at 7:00 position - 367.1 LF, 4" TF at 12:00 position, highly mineralized - 381.0 LF, 4" TFA at 3:00 position - 409.1 LF, 4" TF at 2:00, SAM directly below connection - 412.0 LF, TFA at 10:00 position, mineralized -416.1 LF, AMH 19-008, AEP	Reinspect pipe every 10 years
MH19-009	MH19-0012	S I St	8	DIP	Yes	6/4/2024	286	Upstream	1	1	1	- 8.3 LF, 4" TF at 2:00 position, mineralized - 94.8 LF, 4" TF at 10:00 position, mineralized - 94.0 to 97.0 LF, SAM at 6:00 in pipe invert - 98.1 LF, 4" TF at 2:00 position, highly mineralized - 112.7 to 115.5 LF, SAM at 6:00 in pipe invert - 171.4 LF, 4" TFA at 2:00 position, highly mineralized, SAM around the connection - 193.7 LF, SAM at 9:00 position - 196.8 LF, 4" TFA at 10:00 position, highly mineralized - 220.7 LF, SAM from 5:00 to 6:00 position - 276.2 to 277.0 LF, SAM at 5:00 position - 286.5 LF, AMH 19-0012	Reinspect pipe every 10 years
MH24-001	MH24-0017	E Main St	8	DIP	Yes	6/7/2024	343	Downstream	1	1	1	- 7.5 LF, JOM, mineralized - 25.9 LF, JSM - 80.9 LF, JSM, mineralized - 84.0 to 95.7 LF, SAM at 7:00 position - 165.6 LF, 4" TFA at 10:00 position, mineralized - 202.7 LF, 4" TFA at 2:00 position, mineralized - 228.9 LF, ISJ from 8:00 to 4:00 - 235.2 LF, SAM at 2:00 position - 247.1 LF, ISJ from 8:00 to 4:00 - 267.9 to 269.3 LF, ISB from 11:00 to 1:00, minerlized and SAM present - 279.9 LF, SAM at 7:00 position - 287.4 LF, SAM from 2:00 to 4:00 - 302.7 to 303.4 LF, SAM from 5:00 to 6:00 - 326.8 to 340.5 LF,SAM from 5:00 to 7:00 -343.3 LF, AMH 24-0017	Reinspect pipe every 10 years
MH24-0016	MH19-0033	E Second St	12	DIP	Yes	6/3/2024	400	Downstream	3	1	3	- Flow in pipe is in pulses - Mineralization on top and sides of most joint connections - 53.3 LF , SAM at 6:00 position - 125.8 LF, 4" TFA at 3:00 position - 255.4 LF, short CLs attached to joint, highly mineralized - 328.6 LF, SAM from 4:00 to 10:00 along joint - 400.6 LF, AMH 19-0033	Reinspect pipe every 10 years
MH24-0017	MH19-0021	E Main St	8	DIP	Yes	6/7/2024	340	Downstream	1	1	1	- 55.3 LF, SAM from 8:00 to 12:00 slong joint - 91.8 LF, DSZ build-up causing small build-up, 20% reduction of area - 109.4 LF, 4" TF at 10:00 position, slight offset, mineralized, possible IWC - 186.4 LF, 4" TFA at 10:00 position, mineralized - 223.9 LF, 4" TFA at 2:00 position, mineralized, SAM around connection - 227.0 LF, 2-3" DSZ in invert, backing up water - 267.8 LF, SAM in invert at 6:00 position - 290.5 LF, 4" TF at 10:00 position, mineralized - 339.9 LF, AMH 24-0017, highly mineralized	Reinspect pipe every 10 years

Talkeetna Sewer System Pipe Summary Table				General Condition Grade Score Values: *1=No or Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect*									
Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
MH24-0018	MH24-001	S F St	8	DIP	Yes	6/3/2024	288	Downstream	<1	1	1	- 12.0 LF, JSM - 13.1 LF, 4" TF at 10:00 position, mineralized - 38.2 LF, 4" TFA at 2:00 position, mineralized - 104.1 LF, JSM - 122.4 LF, JSM, mineralized - 133.2 LF, 4" TF at 2:00 position, mineralized, SAM around connection - 148.2 to 153.3 LF, SAM at 6:00 position - 158.9 LF, JSM - 265.7 to 267.3 LF, SAM at 5:00 position - 288.1 LF, AMH 24-001	Reinspect pipe every 10 years
MH24-002	MH24-003	North Alley	8	DIP	Yes	5/29/2024	401	Upstream	3	1	2	- 9.5 to 34.9 LF, LFDC mineralized from 9:00 to 3:00 position - 45.5 LF, 4" TFA at 2:00 position, significant DAGS - 62.7 LF, 4" TFA at 10:00 position - 98.5 LF, 4" TFA at 2:00 position - 99.5 LF, 4" TFA at 10:00 position - 152.5 LF, 4" TFA at 2:00 position - 175.0 LF, 4" TF at 10:00 position - 286.2 LF, 4" TFA at 10:00 position - 312.8 LF, 4" TF at 2:00 position -332.2 LF, 4" TFA at 10:00 position - 340.5 to 327.0 LF, 2" DSF along invert from 5:00 to 7:00 - 347.3 LF, 4" TFA at 2:00 position - 377.7 to 378.5 LF, SAM at 3:00 position - 395.3 LF, 4" TF at 9:00 position, significanr DAE in TF along invert, 40% reduction in area - 400.8 LF, AMH 19-005	Reinspect pipe every 10 years
MH24-003	MH24-006	S C St	8	DIP	Yes	5/29/2024	164	Downstream	1	1	2	- 18.0 to 25.9 LF, DAGS build-up at 5:00 and 7:00 position, 5-10% reduction of area - 38.7 to 40.6 LF, DAGS build-up at 5:00 and 7:00 position, 5-10% reduction of area - 70.1 to 73.2 LF, DAGS build-up at 7:00 position, 5% reduction of area - 107.9 to 163.6 LF, DAGS build-up at 5:00 and 7:00 position, 5-10% reduction of area - 164.0 LF, AMH 19-006	Reinspect pipe every 10 years
MH24-004	MH24-003	North Alley	8	DIP	Yes	5/29/2024	306	Upstream	1	1	1	- 5.2 to 9.7 LF, DAE at 9:00 and 3:00 position, 5% reduction in area - 18.1 LF, CC from 2:00 to 4:00 near joint - 27.3 LF, 4" TFA at 10:00 position - 35.0 LF, 4" TF at 1:00 position, mineralized - 65.6 LF, 4"TF at 10:00 position, mineralized - 83.8 LF, 4" TFA at 2:00 position - 88.1 LF, 4" TFA at 9:00 position, slight offset, significant DAGS build-up in bottom, 40% reduction of area - 119.1 LF, 4" TFA at 2:00 position - 157.7 LF, 4" TF at 10:00 position, mineralized - 167.9 LF, 4" TF at 10:00 position - 220.2 LF, 4" TF at 10:00 position, mineralized - 236.4 LF, SAM at 12:00 position - 271.9 LF, 4" TF at 10:00 position - 293.4 LF, 2" TF at 3:00 position - 300.8 to 306.0 LF, OBR in invert, 20% reduction in area - 306.0 LF, AMH 24-004, invert filled with rocks/gravel	Reinspect pipe every 10 years
MH24-005	MH24-006	E Main St	8	DIP	Yes	5/29/2024	396	Upstream	1	1	2	- 77.3 LF, 4" TFA at 10:00 position - 131.9 LF, 4" TFC at 2:00 position, SAM around connection - 137.1 LF, 4" TFA at 10:00 position - 196.4 LF, 4" TF at 10:00 position - 226.7 LF, 4" TF at 10:00 position - 285.5 LF, 4" TF at 10:00 position, mineralized - 293.8 to 316.0 LF, 2" DSF/OBR along invert from 5:00 to 7:00 - 325.0 LF, 4" TF at 10:00 position, mineralized - 396.0 AMH 24-005	Reinspect pipe every 10 years
MH24-006	MH24-0013	S C St	8	DIP	Yes	5/29/2024	360	Downstream	2	1	2	- Mineralization present throuhgout pipe from 4:00 to 8:00 - High, fast flows do not allow invert examination - 72.6 LF, 4" TF at 2:00 postiion, SAM around connection - 96.9 LF, 4" TF at 10:00 position, mineralized - 318.1 LF, 4" TF at 12:00 position, highly mineralized - 342.0 to 360.0 LF, MWL rises to 50% capacity - 360.0 LF, AMH 24-013	Reinspect pipe every 10 years
MH24-007	MH24-006	E Main St	8	DIP	Yes	5/292024	Unknown	Downstream/ Upstream	1	1	2	Downstream CCTV Video: - 12.5 LF, SAM at 6:00 position - 55.4 LF, 4" TF at 10:00 position - 114.3 LF, 4" TF at 10:00 position - 132.7 to 136.5 LF, CL from 2:00 to 4:00, mineralized - 149.7 LF, ISJ from 8:00 to 4:00 - 163.0 to 205.5 LF, DAGS intermittent from 9:00 to 3:00, 5% reduction in area - 171.2 LF, 4" TFA at 2:00 position, mineralized - 178.9 LF, 2" DSZ along invert from 5:00 to 7:00 - 182.1 LF, 4" TF at 10:00 position - 205.5 LF, MSA due to camera malfunction Upstream CCTV Video: - 18.0 LF, ISJ from 8:00 to 4:00 - 59.5 to 121.0 LF, LFDC at 4:00 to 8:00, black grime along bottom, mineralized - 109.4 LF, 4" TFA at 2:00 position, mineralized - 122.7 LF, 4" TF at 2:00 position, heavily mineralized, DAGS build-up reducing area by 20% - 143.0 to 163.8 LF, intermittent DAGS build-up at 3:00 and 9:00 position - 158.3 LF, 4" TF at 2:00 position, DAGS build-up along invert reducing area by 30%, mineralization - MSA due to overlap with downstream video	Reinspect pipe every 10 years
MH24-008	MH24-007	E Main St	8	DIP	Yes	5/29/2024	212	Downstream	1	2	2	- 33.3 to 36.9 LF, FL at 10:00 position, attached to TF connection - 36.7 LF, 4" TFA at 10:00 position, SAM aroud connection, possible IRC - 92.3 LF, 4" TFA at 10:00 position - 98.6 LF, 4" TF at 2:00 position, mineralized - 102.1 LF, SAM from 4:00 to 8:00 along joint - 119.4 LF, 4" TF at 10:00 position - 165.4 LF, 4" TFA at 10:00 position - 175.5 LF, SAM from 5:00 to 7:00 - 197.8 LF, SAM from 3:00 to 5:00, possible IWB - 211.5 LF, AMH 24-007	 CIPP T-Liner tophat over service connection at 36.7 LF from MH24-008, w/ at least 3 ft mainline sleeve to cover fracture
MH24-009	MH24-001	S F St	8	DIP	Yes	6/3/2024	383	Downstream	1	1	1	- 10.5 to 15.1 LF, interspersed DAE from 2:00 to 5:00, 5% reduction in area - 53.4 to 61.0 LF, 1" DSF along invert at 6:00 - 94.8 LF, SAM from 2:00 to 5:00 along joint - 124.2 LF, 4" TF at 11:00 position - 216.8 LF, 4" TF at 2:00 position - 260.8 LF, JSM - 279.5 LF, JSM - 316.5 LF, JSM - 347.9 LF, 4" TF at 2:00 position, SAM around connection - 353.7 LF, JSM - 383.0 LF, AMH 24-009	Reinspect pipe every 10 years
MH24-0010	MH24-0012	S B St	8	DIP	Yes	5/29/2024	294	Upstream	<1	1	1	- 9.6 to 29.8 LF, 1" black grime DSF along invert at 6:00 - 17.7 LF, ISJ from 8:00 to 4:00 - 62.5 LF, 4" TF at 10:00 position, mineralized - 105.0 LF, 4" TF at 10:00 position - 153.9 LF, 4" TF at 10:00 position - 204.1 LF, SAM at 10:00 position - 214.7 LF, 4" TF at 10:00 position - 252.9 LF, 4" TF at 10:00 position, slight offset, possible IWC - 288.5 LF, 4" TF at 10:00 position, DAGS in invert - 293.7 LF, AMH 24-010	Reinspect pipe every 10 years
MH24-0011	MH24-0012	E First St	8	DIP	Yes	5/29/2024	219	Upstream	<1	1	1	- 95.7 LF, 4" TF at 2:00 positiion, highly mineralized with DAE, 20% reduction in area - 98.3 LF, 4" TFA at 2:00 position, mineralized and DAGS - 98.3 LF, DAGS build-up from 6:00 to 8:00, 20% reduction in area, likely related to TFA adjacent - 165.8 LF, ISJ from 12:00 to 12:00 - 212.4 LF, 2" TF at 3:00 position, highly mineralized and DAGS, 40% reduction in area, likely IWC - 218.7 LF, AMH 24-011, sediment in invert	Reinspect pipe every 10 years

Talkeetna Sewer System Pipe Summary Table				General Condition Grade Score Values: *1=No or Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect*									
Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
MH24-0012	MH24-0013	E First St	8	DIP	Yes	5/30/2024	396	Upstream	1	1	1	- Nearly all joints in this pipe have moderate mineralization around joint - 32.5 LF, 4" TF at 10:00 position, mineralized - 41.2 LF, SAM at 4:00 position - 83.5 LF, 4" TF at 2:00 position, mineralized - 132.2 LF, 4" TFA at 10:00 position, mineralized - 169.0 LF, 4" TF at 2:00 position, mineralized - 251.0 LF, 5-6" RPP at 2:00 position, effective - 281.9 LF, 8" LR split at approximately 45 degrees from main line, connection in good condition - 282.9 LF, JSM, mineralized from 8:00 to 4:00 - 290.6 LF, 4" TFA at 10:00, mineralized - 319.9 LF, 4" TF at 9:00 position, mineralized, connection visible - 342.2 LF, SAM from 2:00 to 4:00 - 396.3 LF, AMH 24-012, offset between pipe connection and MH invert, fractured concrete in MH invert	Reinspect pipe every 10 years
MH24-0013	MH25-004	S C St	8	DIP	Yes	5/30/2024	347	Downstream	2	1	2	- 2.6 to 347.0 LF, LFDC, mineralization from 4:00 to 8:00 -130.2 LF, 4" TFA at 3:00 position, connection visible - 259.9 LF, 4" TF at 2:00 position - 347.0 LF, AMH 25-004	Reinspect pipe every 10 years
MH24-0014	MH25-003	S D St	8	DIP	Yes	5/30/2024	350	Downstream	1	1	2	- 7.0 LF, 4" TF at 2:00 position - 8.8 LF, 4" TF at 2:00 position, slight offset - 58.9 LF, SAM at 3:00 position - 78.9 LF, SAM at 4:00 position - 114.1 LF, SAM from 3:00 to 4:00 - 127.7 LF, SAM from 7:00 to 8:00 - 146.6 LF, SAM at 7:00 position - 350.1 LF, AMH 25-003	Reinspect pipe every 10 years
MH24-0015	MH24-0014	E First St	8	DIP	Yes	5/30/2024	402	Upstream	<1	1	1	- 102.8 LF, 6" TFA at 9:00 position, water pooling in connection - 148.8 LF, 4" TF at 2:00 position, mineralized - 156.6 LF, SAM at 4:00 position - 198.9 LF, 4" TF at 10:00 position, SAM around connection - 257.5 LF, 4" TF at 2:00 position - 319.0 LF, 4" TF at 2:00 position, SAM around connection - 401.9 LF, AMH 24-015	Reinspect pipe every 10 years
MH25 -010	MH25-009	E Third St	8	DIP	Yes	5/31/2024	270	Downstream	1	1	1	- 14.6 to 25.8 LF, interspersed SAM from 4:00 to 8:00 - 65.9 LF, 4" TFA at 2:00 position - 115.3 LF, SAM from 5:00 to 6:00 - 141.7 LF, 4" TFA at 10:00 position - 146.5 LF, 4" TFA at 2:00, DSF in service invert - 270.3 LF, AMH 25-009	Reinspect pipe every 10 years
MH25-001	MH25-002	E Second St	8	DIP	Yes	5/30/2024	268	Upstream	1	1	1	- 7.6 to 11.0 LF, 1-2" DSF along pipe invert, 6:00 position - 10.5 LF, SAM at 2:00 position - 99.9 LF, 4" TF at 10:00 position - 118.7 LF, 4" TFA at 2:00 position - 162.4 LF, 4" TF at 2:00 position, SAM around connection - 159.8 to 173.2 LF, 1-2" DSF in pipe invert, 6:00 position - 171.1 LF, SAM from 3:00 to 4:00 - 234.8 LF, 4" TF at 10:00 position, mineralized, SAM around connection - 260.0 to 267.9 LF, 2" DSF in pipe invert, 6:00 position - 263.8 LF, 4" TF at 10:00 position, mineralized - 268.0 LF, AMH 25-001	Reinspect pipe every 10 years
MH25-0012	MH30-001	Talkeetna Airport	8	DIP	Yes	6/2/2024	147	Downstream	1	2	3	- 16.0 LF, JSM, mineralization - 34.4 LF, JSM, mineralization - 71.6 LF, JSM, little/no mineralization - 90.1 LF, JSM, mineralization - 112.0 to 112.8 LF, SAM at 5:00 position - 127.0 LF, JSM, mineralization - 147.1 LF, AMH, 30-001	Pipe is high-risk, but there are no signs of failure. The joint separation should be monitored and reinspected every 5 years
MH25-0013	MH25-0012	Talkeetna Airport	8	DIP	Yes	6/2/2024	159	Downstream	1	2	2	- 2.0 to 10.3 LF, LFDC from 5:00 to 7:00 - 47.0 LF, JSM, mineralization - 91.3 LF, 4" TF at 9:00 posiiton - 102.3 LF, JSM - 121.7 to 147.5 LF, 2-3" DSF in invert, 6:00 position - 139.1 LF, JSM, mineralization - 158.7 LF, AMH 30-012	Reinspect pipe every 10 years
MH25-0017	MH25-0024	E Veterans Way	8	DIP	Yes	6/1/2024	218	Downstream	<1	2	3	- 5.6 LF, IRJ at 11:00 to 1:00, mineralized - 8.4 LF, 4" TF at 2:00 position - 100.8 to 105.1 LF, ISB from 3:00 to 9:00 position - 105.2 LF, ISJ from 8:00 to 4:00 - 154.8 to 156.9 LF, SAM interspersed from 5:00 to 7:00 - 215.9 LF, JSM with ISJ from 8:00 to 4:00 - 217.7 LF, AMH 24-0024	 - CIPP point repair 5.6 ft from MH25-0017
MH25-0018	MH25-0017	S Talkeetna Spur	8	DIP	Yes	6/1/2024	249	Upstream	<1	1	1	- 36.6 LF, ISJ from 8:00 to 4:00 - 37.8 LF, 4" TF at 10:00 position, mineralized - 92.1 LF, ISJ from 8:00 to 4:00 - 239.2 LF, 4" TFA at 10:00 position - 240.0 LF, JSM with ISJ from 8:00 to 4:00 - 249.0 LF, AMH 25-0018	Reinspect pipe every 10 years
MH25-0019	MH25-0015	Easement off Veterans Way	8	DIP	Yes	6/2/2024	311	Upstream	<1	1	1	- 8.7 to 16.9 LF, SAM from 4:00 to 5:00 - 54.6 LF, ISJ from 9:00 to 3:00 - 128.4 LF, ISJ from 9:00 to 3:00 - 311.0 LF, AMH 25-0019	Reinspect pipe every 10 years
MH25-002	MH25-003	E Second St	8	DIP	Yes	5/30/2024	402	Downstream	<1	1	1	- 20.2 LF, SAM at 3:00 position - 52.4 LF, 4" TF at 10:00 position, 0.5" offset at connection - 78.8 LF, 4" TF at 2:00 position mineralized - 146.6 LF, 4" TF at 10:00 position, mineralized - 153.5 LF, SAM at 3:00 position - 160.4 LF, SAM at 3:00 position - 168.7 LF, 4" TF at 2:00 position, mineralized - 170.6 LF, 4" TF at 10:00 position, mineralized - 194.6 LF, SAM at 4:00 position - 283.5 LF, 4" TF at 10:00 position - 376.4 LF, SAM at 3:00 position - 402.4 LF, AMH 25-003, sloped entry to MH	Reinspect pipe every 10 years
MH25-0021	LS-01	S Talkeetna Spur	8	DIP	Yes	6/1/2024	354	Downstream	<1	1	1	- 115.6 LF, JSM - 118.3 LF, JSM - 121.7 LF, 4" TFA at 2:00 position - 133.5 LF, JSM - 170.7 LF, JSM - 290.6 LF, SAM at 9:00 position - 325.5 LF, SAM at 8:00 position - 331.2 LF, 4" TF at 2:00 position - 354.2 LF, AWW, drop connection to LS-01	Reinspect pipe every 10 years
MH25-0022	MH25-0021	S Talkeetna Spur	8	DIP	Yes	6/1/2024	375	Downstream	<1	1	1	- 74.5 LF, SAM at 4:00 position - 81.5 LF, 4" TF at 2:00 position, mineralized - 93.0 to 95.2 LF, SAM at 5:00 position - 131.4 to 139.3 LF, SAM at 8:00 position - 209.7 to 215.9 LF, SAM at 9:00 position - 223.4 LF, SAM at 4:00 position - 313.1 LF, 4" TF at 2:00 position, mineralized, SAM around connection - 375.0 LF, AMH 25-0021	Reinspect pipe every 10 years
MH25-0023	MH25-0022	S Talkeetna Spur	8	DIP	Yes	6/1/2024	383	Downstream	<1	1	1	- 9.2 LF, 4" TF at 2:00 position, mineralized - 16.2 LF, JSM, mineralized - 160.1 LF, TF at 2:00 position, mineralized - 298.9 to 300.0 LF, SAM at 4:00 position - 349.4 LF, SAM at 9:00 position - 382.8 LF, AMH 25-0022	Reinspect pipe every 10 years
MH25-0024	MH25-0016	E Veterans Way	8	DIP	Yes	6/1/2024	405	Downstream	<1	2	1	- 3.9 LF, JOM - 8.6 LF, SAM at 3:00 position - 98.6 LF, SAM at 3:00 position - 148.0 to 161.9 LF, SAM at 3:00 position - 165.5 LF, ISJ from 9:00 to 3:00 - 203.6 LF, 4" TFA at 12:00 position, possible infiltration - 207.5 LF, 4" TFA at 12:00 position, leaking at connection, IRC - 257.9 LF, ISJ from 9:00 to 3:00 - 257.9 to 403.7 LF, SAM interspersed from 3:00 to 7:00 - 276.2 LF, IDJ at 11:00 position, mineralized - 344.6 LF, SAM at 9:00 position - 372.2 LF, SAM at 3:00 position - 277.8 LF, SAM at 5:00 position - 385.3 LF, SAM at 2:00 position, mineralized, possible infiltration - 404.9 LF, AMH 25-016	 CIPP T-Liner Tophat at service connection 207.5 LF Downstream

Talkeetna Sewer System Pipe Summary Table				General Condition Grade Score Values: *1=No or Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect*									
Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
MH25-0025	MH25-004	E Second St	8	DIP	Yes	5/30/2024	395	Downstream	1	2	1	- Most joints are mineralized in some regard, ISJs are reported for high mineralization/separation - 12.7 LF, JSM, no mineralization - 60.9 LF, SAM at 2:00 position - 94.5 to 104.7 LF, 2-3" DSF in pipe invert, 6:00 position - 105.4 LF, JSM, mineralizd - 119.7 LF, 4" TF at 2:00 position, mineralized - 120.9 to 141.5 LF, 2-3" DSF in pipe invert, 6:00 position - 179.4 LF, JOM from 10:00 to 7:00 - 180.8 LF, 4" TFC at 10:00 position, mineralized - 193.5 LF, 4" TF at 2:00 position, highly mineralized - 223.0 LF, 4" TF at 10:00 position, connection visible, new - 229.4 LF, ISJ from 8:00 to 4:00 - 270.6 LF, 4" TF at 10:00 position, mineralized, slight offset in connection - 273.2 LF, 4" TFA at 2:00 position, DAGS in invert, 20% reduction of area -284.4 LF, ISJ from 8:00 to 4:00, SAM present - 302.6 LF, ISJ from 8:00 to 4:00, highly mineralized - 321.0 LF, ISJ from 8:00 to 4:00 - 348.2 LF, 4" TFA at 2:00 position, slight ofset in connection, mineralized - 394.7 LF, AMH 25-004	Reinspect pipe every 10 years
MH25-0026	MH25-0014	E Veterans Way	8	DIP	Yes	6/2/2024	401	Downstream	2	2	1	- 5.6 LF, 4" TF at 10:00 position, mineralized - 33.2 to 35.0 LF, DAGS build-up at 4:00 and 8:00 positions - 73.7 LF, 4" TF at 10:00 position - 108.1 to 382.0 LF, SAM at 7:00 position - 121.3 LF, 4" TF at 10:00 position - 167.7 LF, 4" TFA at 2:00 position, mineralized - 168.8 LF, 4" TF at 10:00 position, slight offset - 224.8 to 226.7 LF, ISB and SAM from 10:00 to 2:00 - 308.7 LF, ISJ from 9:00 to 3:00 - 327.1 LF, ISJ from 9:00 to 3:00 - 345.4 LF, ISJ from 9:00 to 3:00 - 363.8 LF, ISJ from 9:00 to 3:00 - 382.1 to 400.7 LF, SAM at 10:00 and 2:00 positions - 400.7 LF, AMH 25-014	Reinspect pipe every 10 years
MH25-003	MH25-004	E Second St	8	DIP	Yes	5/31/2024	403	Upstream	1	2	2	- 35.8 LF, 2" DSF/DSZ along invert at 6:00 position - 46.4 LF, SAM from 9:00 to 10:00 - 50.2 to 51.8 LF, SAM at 9:00 position - 63.4 LF, SAM at 9:00 to 10:00 position - 82.7 LF, SAM at 11:00 position - 97.2 LF, 4" TF at 2:00 position, new connection visible - 98.5 LF, SAM at 9:00 position - 111.2 LF, SAM at 4:00 position - 123.5 LF, SAM at 3:00 position - 135.9 LF, SAM at 3:00 position - 155.1 LF, SAM at 9:00 position - 169.4 LF, SAM at 9:00 position - 182.1 LF, 4" TFA at 2:00 position, slightly offset - 232.7 LF, 4" TF at 2:00 position, mineralized - 253.6 LF, SAM at 9:00 position - 283.7 LF, SAM at 9:00 position - 344.4 LF, SAM from 8:00 to 9:00 - 376.9 to 378.7 LF, SAM at 7:00 position - 403.1 AMH 25-003	Reinspect pipe every 10 years
MH25-004	MH25-007	S C St	8	DIP	Yes	5/31/2024	347	Downstream	2	2	2	- 8.3 LF, SAM at 9:00 position - 45.0 to 46.6 LF, SAM at 9:00 position - 80.4 to 82.4 LF, SAM at 9:00 position - 123.2 to 128.6 LF, SAM at 9:00 and 3:00 position - 164.2 LF, SAM at 8:00 and 3:00 position - 175.4 LF, SAM at 9:00 position - 182.7 LF, SAM at 8:00 position - 191.4 LF, LFDC from 2:00 to 10:00, mineralized - 204.8 LF, SAM at 9:00 position - 206.8 to 209.6 LF, SAM at 9:00 and 6:00 position - 214.3 LF, SAM at 8:00 and 3:00 to 4:00 position - 278.5 LF, 4" TF at 2:00 position, mineralized - 307.2 LF, SAM at 9:00 position - 311.4 LF, SAM at 3:00 position - 313.6 to 336.1 LF, interspersed DAGS from 10:00 to 4:00, 5% reduction in area - 334.4 LF, MWL rises to 50% pipe area until AMH - 347.0 LF, IGC as pipe enters MH - 347.0 LF, AMH 25-007	Pipe should be inspected following repairs on MH25-007 to ensure infiltration gusher has ceased in the connection. Reinspct every 10 years
MH25-006	MH25-007	E Third St	8	DIP	Yes	6/1/2024	307	Downstream	<1	1	1	- 25.0 LF, 4" TFA at 10:00 position, mineralized - 146.2 LF, 4" TF at 2:00 position, mineralized - 182.5 LF, 4" TF at 10:00 position, connection visible - 273.5 LF, 4" TFA at 2:00 position, 0.5" offset at connection, possible IRC - 290.1 LF, 1" DSZ build-up in invert, 6:00 position - 307.5 LF, AJB, drop connect to MH25-007	Reinspect pipe every 10 years
MH25-007	LS-02	E Third St	8	DIP	Yes	5/31/2024	410	Downstream	2	2	2	- 2.0 to 409.7 LF, LFDC sustained mineralization from 2:00 to 5:00 and 7:00 to 10:00 - 138.2 LF, 4" TFC at 12:00 position - 141.5 LF, SAM from 2:00 to 5:00 position - 190.5 LF, 4" TFC at 12:00 position, highly mineralized - 232.0 LF, 4" TFC at 12:00 position - 234.6 LF, SAM at 3:00 postiion - 238.4 LF, SAM at 5:00 position - 248.5 to 253.7 LF, SAM at 5:00 positon - 273.9 LF, SAM at 3:00 position - 288.0 LF, SAM at 5:00 position - 319.2 to 320.0 LF, SAM at 12:00 position, mineralized - 335.9 to 345.5 LF, SAM interspersed from 2:00 to 9:00 - 372.8 to 383.4 LF, SAM interspersed from 2:00 to 8:00 - 402.0 LF, SAM from 2:00 to 4:00 - 409.7 LF, AOC drop connect to LS-02	Reinspect pipe every 10 years
MH25-009	LS-02	E Third St	8	DIP	Yes	5/31/2024	397	Downstream	1	1	1	- 9.3 to LF, DAGS along invert from 5:00 to 7:00, 5-10% reduction in area - 90.4 LF, SAM at 7:00 position - 140.0 LF, ISJ - 199.5 LF, 4" TF at 2:00 position, mineralized - 248.6 LF, 4" TF at 2:00 position, mineralized, connection visible - 254.6 LF, 4" TF at 2:00 position, 2" SAM above connection, mineralized - 281.4 LF, SAM at 4:00 position - 289.6 LF, SAM from 4:00 to 5:00 - 312.9 LF, SAM at 5:00 position - 336.8 to 341.5 LF, DSC at 6:00 atop DAGS in invert, 15% reduction in area - 359.2 LF, SAM at 9:00 position - 396.7 LF, AOC, drop connection to LS-02	Reinspect pipe every 10 years
MH25-0010	MH25-0011	E Third St	8	DIP	Yes	5/31/2024	127	Upstream	<1	1	1	- 54.7 LF, ISJ from 8:00 to 4:00 -110.2 LF, ISJ from 8:00 to 4:00 - 127.2 LF, AMH 25-0011	Reinspect pipe every 10 years
MH25-0014	LS-02	S D St	8	DIP	Yes	6/2/2024	456	Downstream	1	1	2	- 102.1 LF, SAM at 9:00 position - 150.7 LF, SAM at 5:00 position - 422.4 to 432.5 LF, SAM at 5:00 and 7:00 positions - 456.4 LF, AWW LS-02	Reinspect pipe every 10 years
MH25-0015	MH25-0026	E Veterans Way	8	DIP	Yes	6/2/2024	279	Downstream	1	1	1	- 4.1 LF, SAM at 5:00 position - 5.9 to 20.3 LF, sustained SAM at 5:00 and 7:00 positions - 19.4 LF, SAM at 9:00 positioin - 26.8 to 52.1 LF, SAM from 4:00 to 8:00 - 58.7 LF, SAM from 3:00 to 8:00 along joint - 77.0 LF, SAM from 5:00 to 7:00 - 109.8 LF, 4" TFC, cap protruding to main - 121.5 LF, 4" TF at 10:00 position, mineralized - 142.1 LF, 4" TFA at 10:00 position - 151.8 to 249.5 LF, SAM at 5:00 position - 248.7 LF, 4" TFA at 10:00 position - 279.1 LF, AMH 25-0026	Reinspect pipe every 10 years
MH25-0016	MH25-0015	E Veterans Way	8	DIP	Yes	6/1/2024	122	Downstream	2	1	1	- 0.1 to 0.8 LF, SAM at 3:00 positiion - 3.4 to 13.4 LF, SAM at 4:00 and 8:00 positions - 92.0 LF, ISJ from 9:00 to 3:00 - 110.6 LF, MWL at 50% - 121.7 LF, AMH 25-015, Water dripping in video, unable to locate source	Reinspect pipe every 10 years

Talkeetna Sewer System Pipe Summary Table				General Condition Grade Score Values: *1=No or Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect*									
Upstream Structure No.	**Downstream Structure No.**	**Location**	**Pipe Dia. (in.)**	**Material**	**CCTV Complete**	**Inspection Date**	**Inspection Length (ft)**	**Inspection Direction**	**Flow Depth (in.)**	**Likelihood of Failure (LOF)**	**Consequence of Failure (COF)**	**General Comments (See Pipe Logs for Highlighted Pipe's Summaries)**	**Photos of Damage to be Repaired**
MH30-001	MH19-0032	Talkeetna Airport	8	DIP	Yes	6/3/2024	290	Upstream	<1	1	2	- 7.0 LF, SAM at 4:00 position - 15.5 LF, SAM at 8:00 position - 58.5 LF, SAM at 5:00 position - 151.8 LF, 4" TF at 10:00 position, mineralized - 167.9 to 172.2 LF, SAM in invert at 6:00 position - 240.2 LF, JSM, mineralized - 271.6 LF, SAM at 6:00 position - 277.3 LF, JSM - 290.3 LF, AMH 30-001	Reinspect pipe every 10 years
MH30-002	MH25-0013	Talkeetna Airport	8	DIP	Yes	6/2/2024	316	Upstream	<1	2	1	- 37.7 LF, SAM at 8:00 position, along joint -56.4 LF, JSM, little/no mineralization - 93.6 LF, JSS, mineralization - 112.1 LF, JSM, little/no mineralization - 116.7 LF, 4" TFA at 10:00 position, mineralized - 149.1 LF, JSM, mineralization - 162.4 LF, 4" TF at 12:00 position - 167.6 LF, JSS - 174.3 LF, SAM at 5:00 position - 222.9 LF, JSL, little/no mineralization - 241.5 LF, JSM, mineralization - 246.8 LF, 4" TF at 10:00, mineralized, SAM around connection - 278.5 LF, JSM - 296.9 LF, JSM - 313.8 LF, 4" TF at 10:00 position - 314.3 LF, JOL, mineralization visible at offset - 316.3 LF, AMH 30-002	 Excavate and realign pipe connection 2 LF from MH30-002

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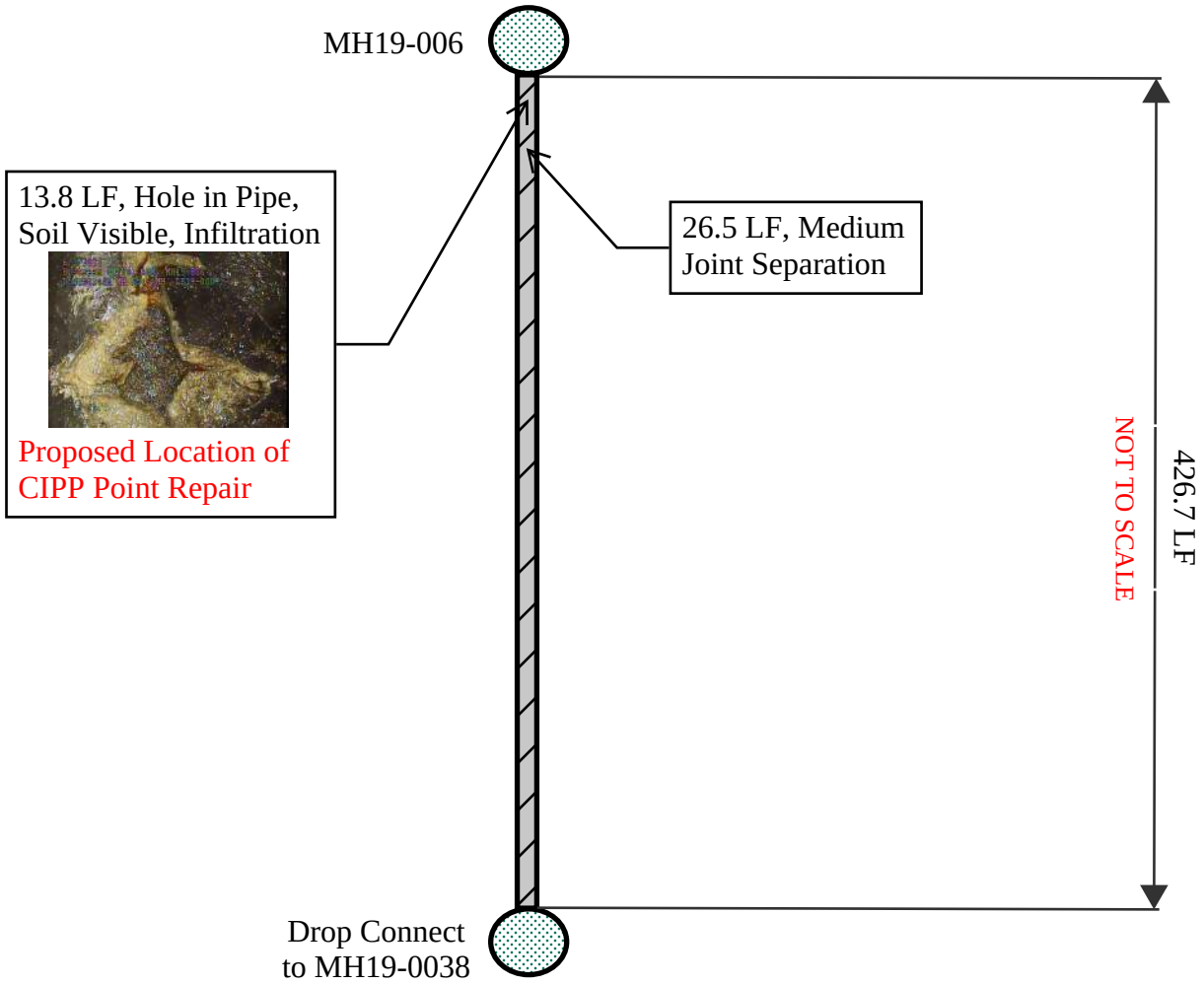
Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	E Gliska Street

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH19-006	MH19-0038	Downstream	426 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	8 inches	6/7/2024	Frawner Corp.	



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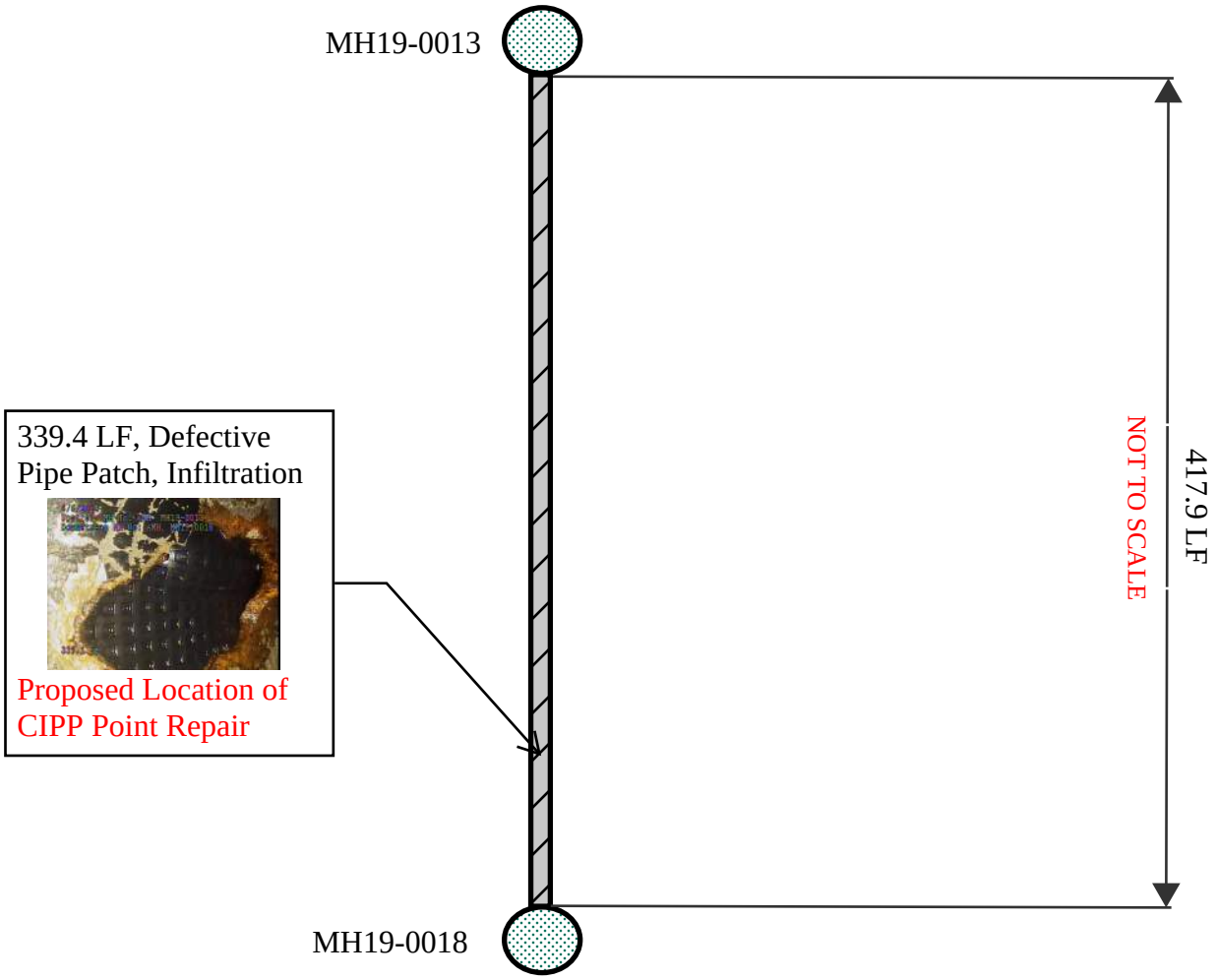
Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	South H Street

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH19-0013	MH19-0018	Downstream	418 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	8 inches	6/6/2024	Frawner Corp.	



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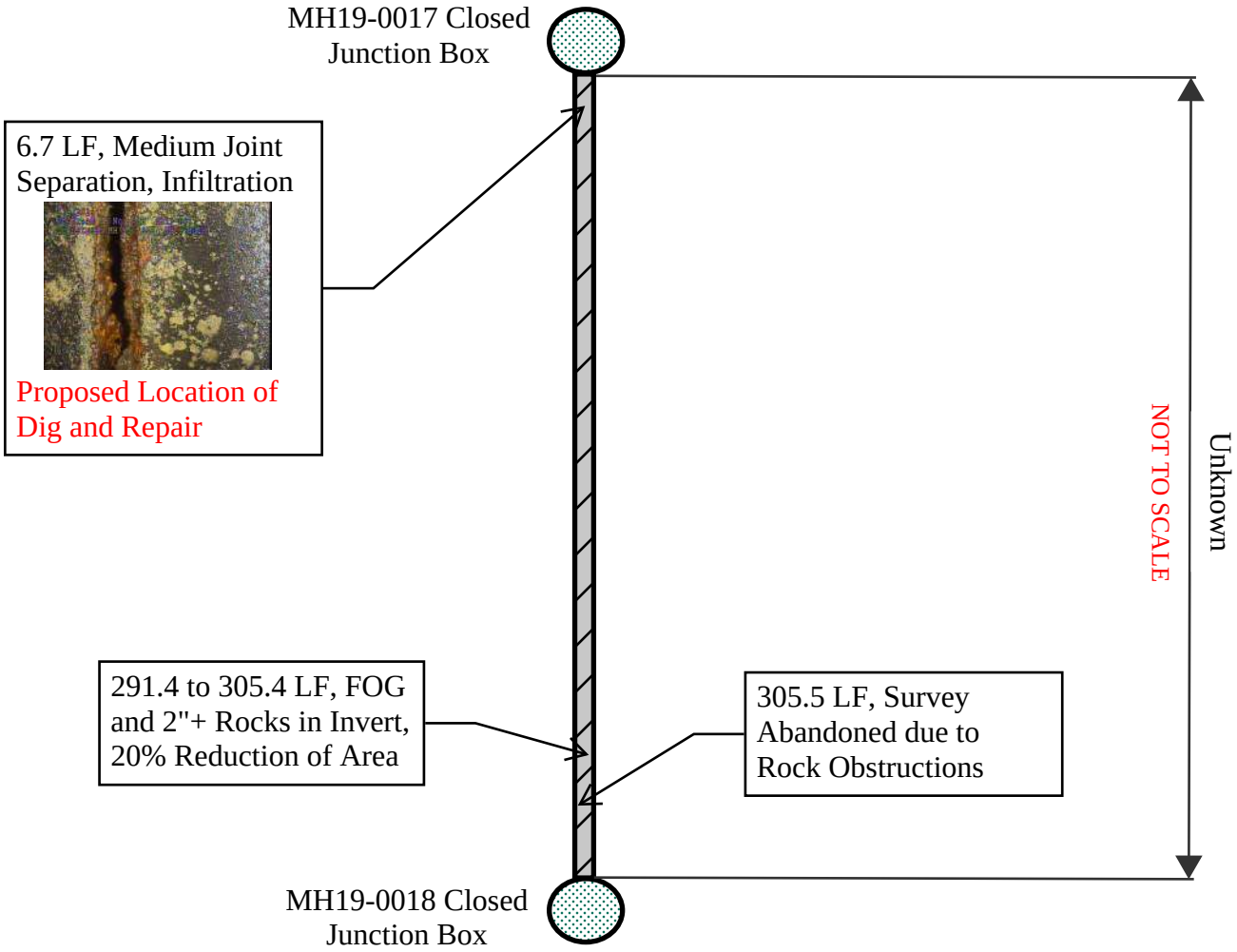
Sewer Main Inspection with Pipe-Run Graph

Project Name: Talkeetna Sewer Inspection	City: Talkeetna	Street: E Front Street	
Upstream Structure: MH19-0017	Downstream Structure: MH19-0018	Direction of Survey: Downstream	Length Surveyed: 305 LF
Pipe Material: Ductile Iron	Pipe Diameter: 8 inches	Date of Survey: 6/4/2024	Surveyed by: Frawner Corp.	Additional Info: Survey Incomplete



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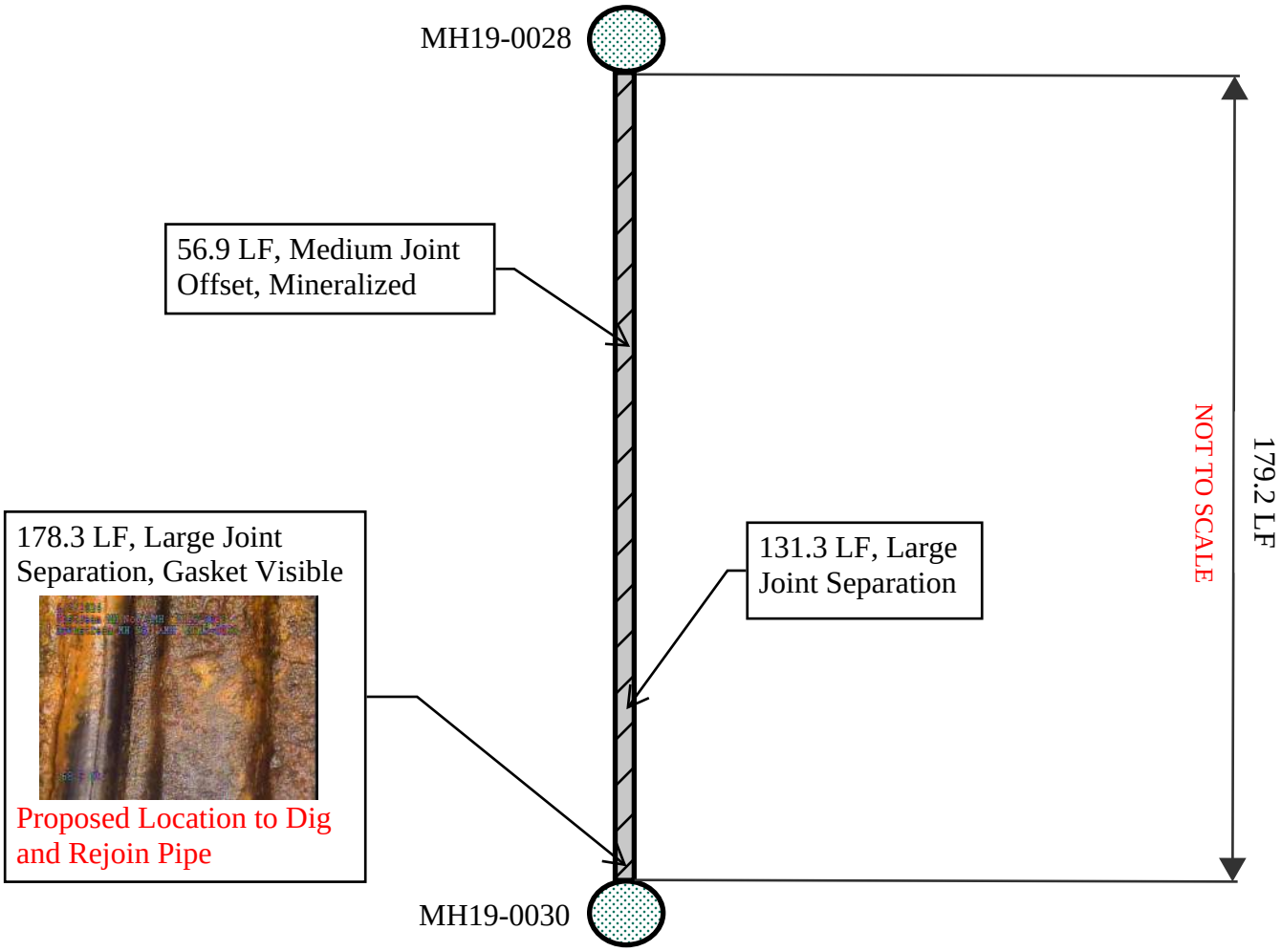
Sewer Main Inspection with Pipe-Run Graph

Project Name: Talkeetna Sewer Inspection	City: Talkeetna	Street: South I Street	
Upstream Structure: MH19-0028	Downstream Structure: MH19-0030	Direction of Survey: Downstream	Length Surveyed: 179 LF
Pipe Material: Ductile Iron	Pipe Diameter: 8 inches	Date of Survey: 6/5/2024	Surveyed by: Frawner Corp.	Additional Info:



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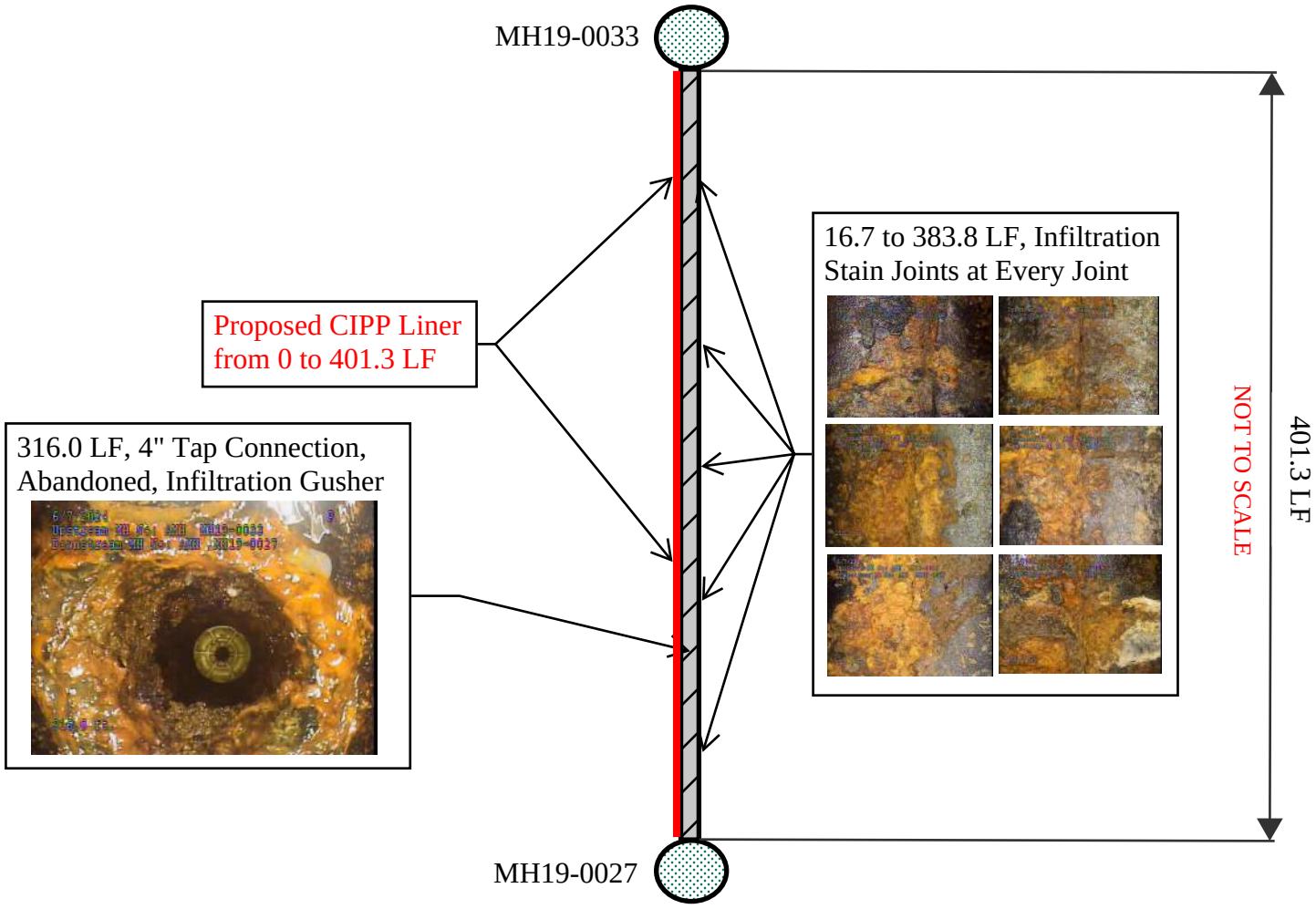
Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	South G Street

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH19-0033	MH19-0027	Downstream	401 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	12 inches	6/7/2024	Frawner Corp.	



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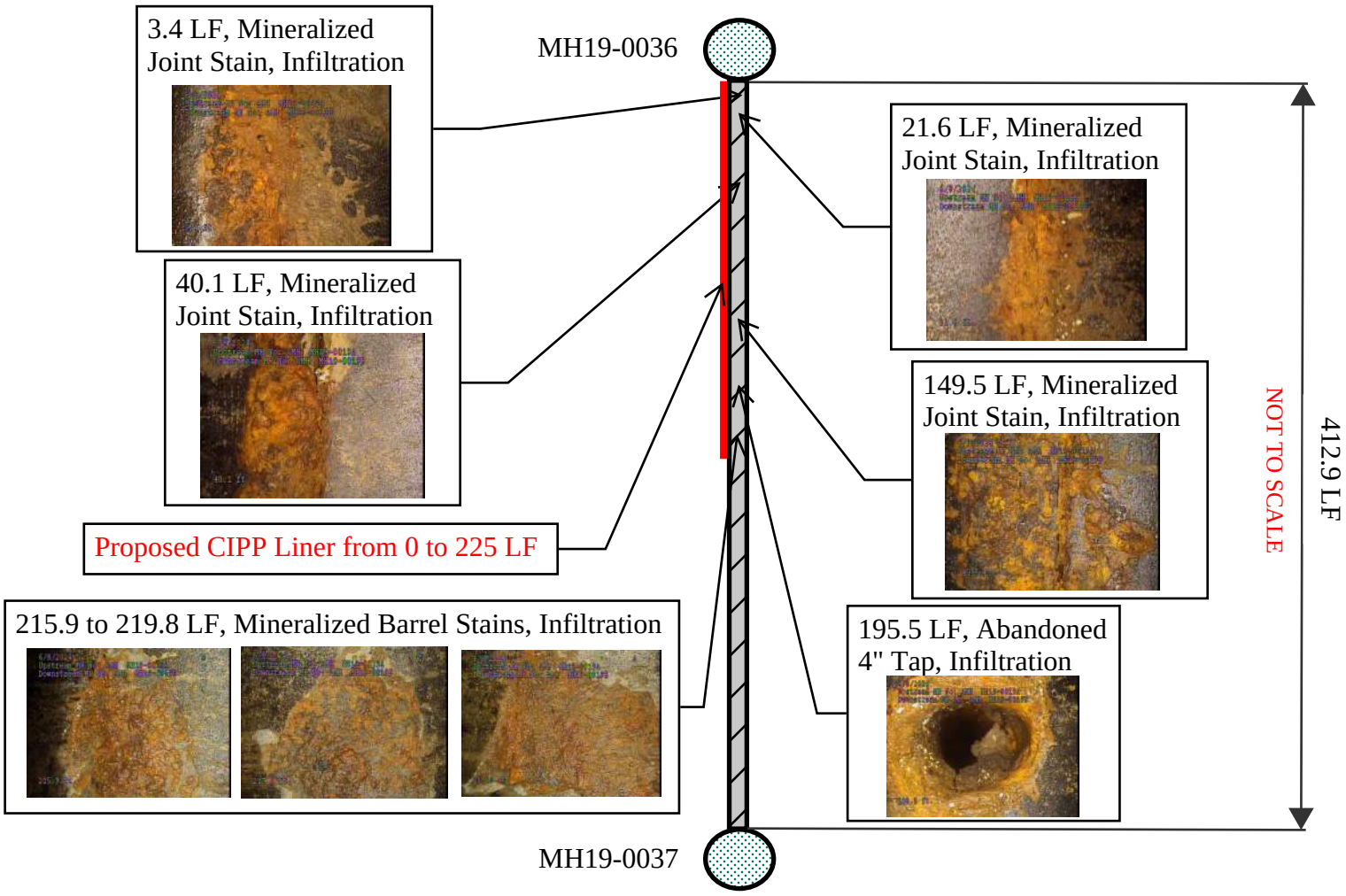
Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	South G Street

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH19-0036	MH19-0037	Downstream	413 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	12 inches	6/8/2024	Frawner Corp.	



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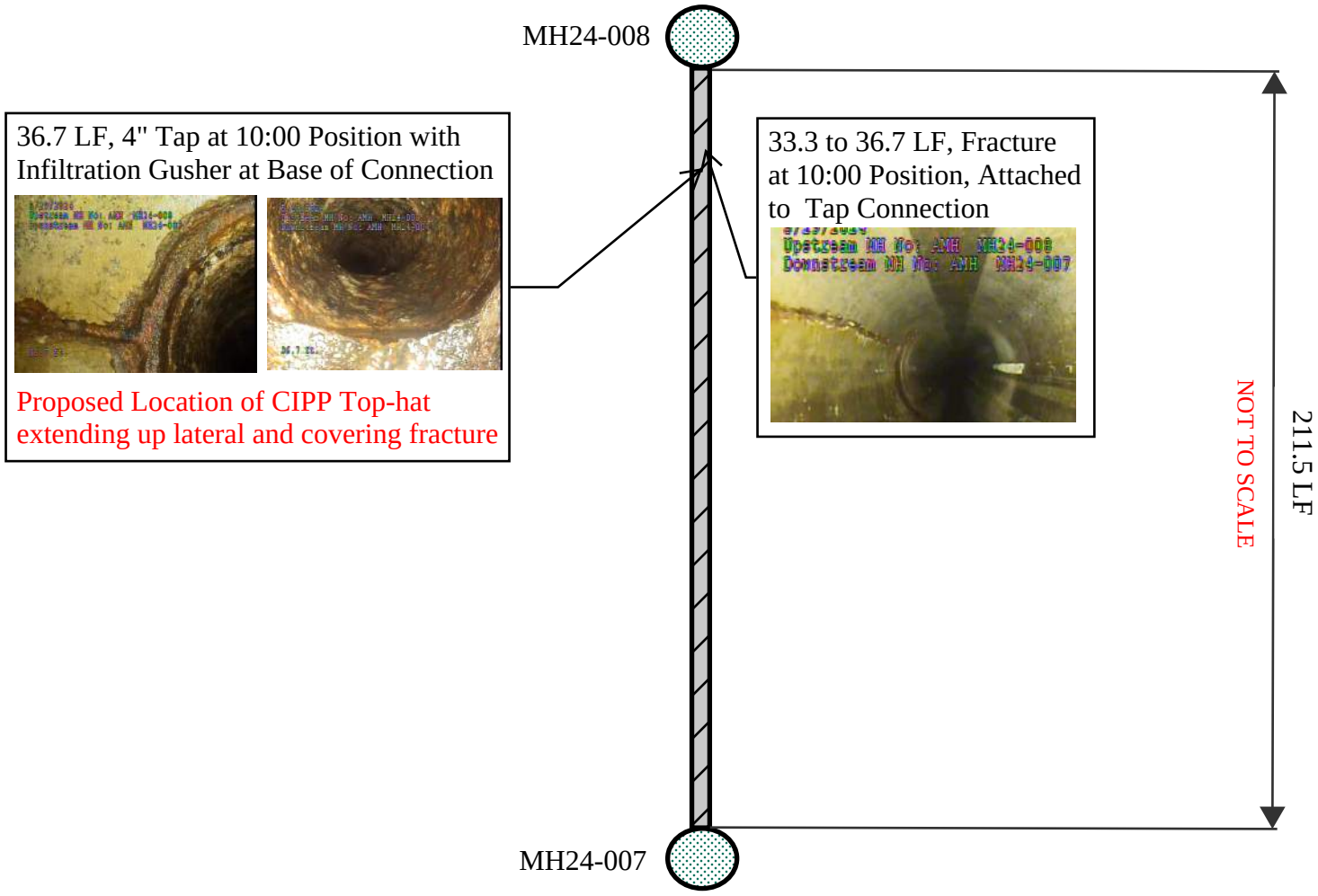
Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	E Main Street

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH24-008	MH24-007	Downstream	212 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	8 inches	5/29/2024	Frawner Corp.	



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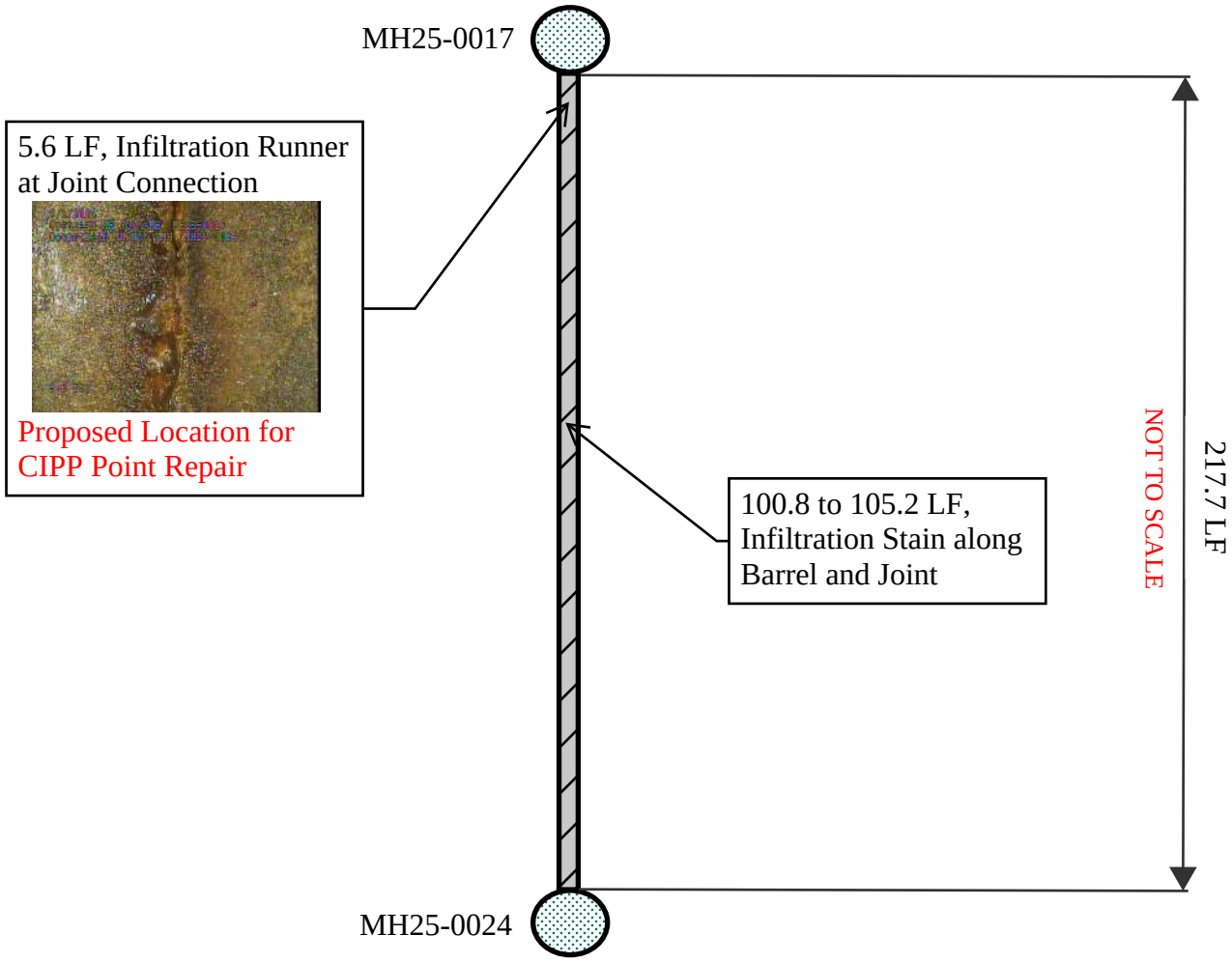
Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	E Veterans Way

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH25-0017	MH25-0024	Downstream	218 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	8 inches	6/1/2024	Frawner Corp.	



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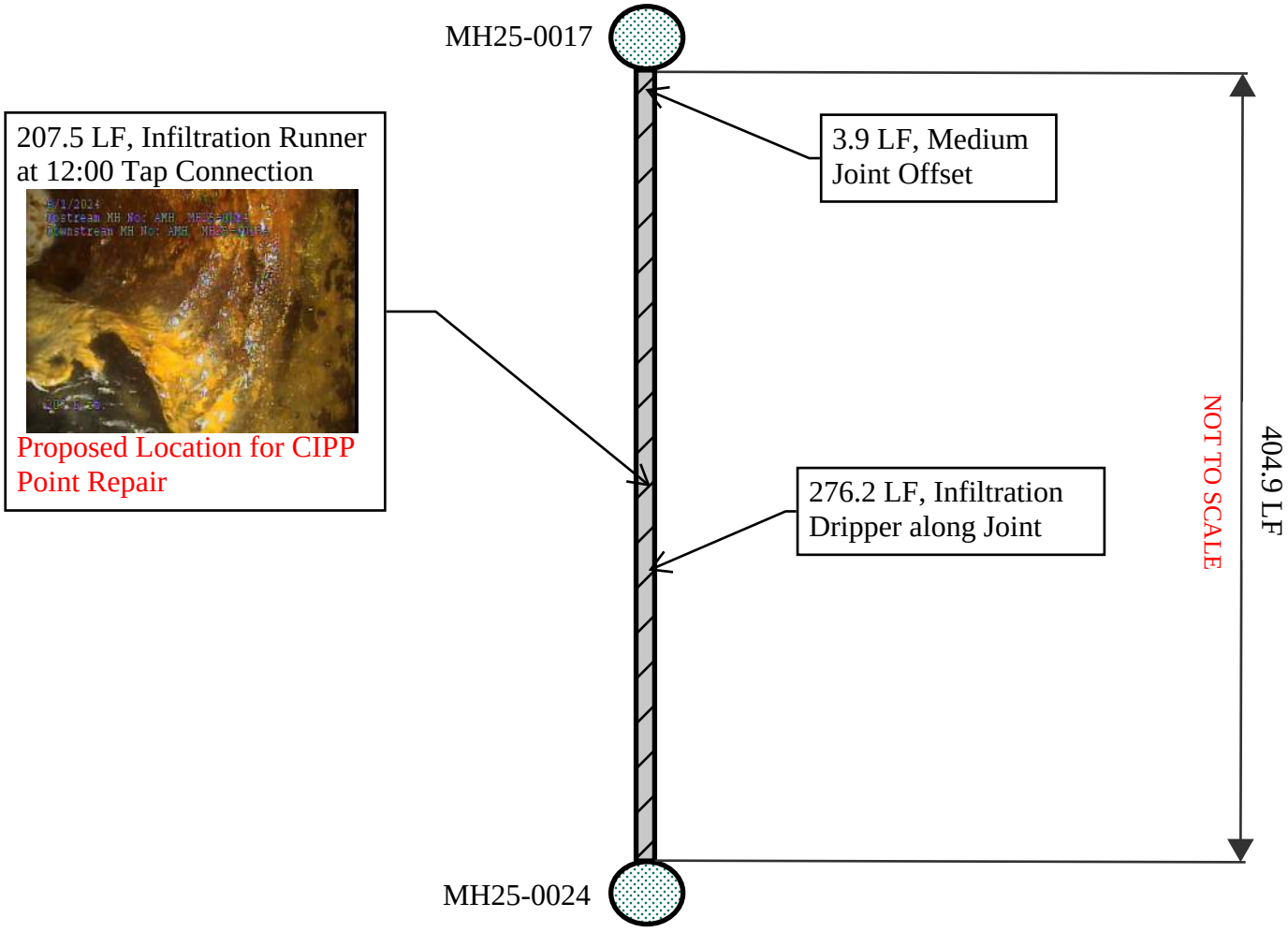
Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	E Veterans Way

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH25-0024	MH25-0016	Downstream	405 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	8 inches	6/1/2024	Frawner Corp.	



3900 Arctic Blvd Suite 204
Anchorage, AK 99501
(907) 562-1468

Sewer Main Inspection with Pipe-Run Graph

Project Name:	City:	Street:
Talkeetna Sewer Inspection	Talkeetna	Talkeetna Airport

Upstream Structure:	Downstream Structure:	Direction of Survey:	Length Surveyed:
MH30-002	MH25-0013	Upstream	316 LF

Pipe Material:	Pipe Diameter:	Date of Survey:	Surveyed by:	Additional Info:
Ductile Iron	8 inches	6/2/2024	Frawner Corp.