

RedZone
ROBOTICS

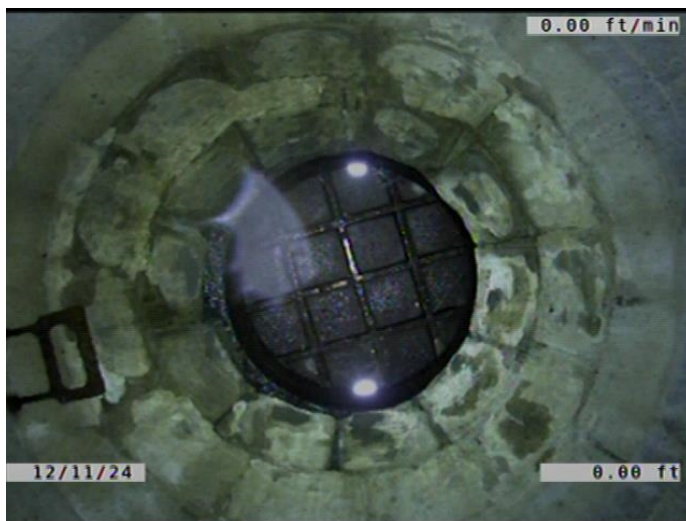
Street:	South Dekalb Street		Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Easement/Right of Way		Tape/Media #:		
Purpose:	Sewer System Evaluation Survey (SS		Dia/Height:	10"	
Use:	Sanitary Sewage Pipe		Material:	VCP	
Drain Area:			Lining:	None	
Category:	NA				
Comment:					
Location Details:			Direction of Survey:	Upstream	
US MH:	M-507-085	DS MH:	M-507-027	Total Length Surveyed (ft):	170.6

O&M Index:	1.57	O&M Quick:	322E	O&M Rating:	102.00
Structural Index:	2.14	Structural Quick:	4132	Structural Rating:	62.00
Overall Index:	1.74	Overall Quick:	4134	Overall Rating:	164.00

Position	Code	Observation	Video (sec)	Grade
M-507-027				
.0	AMH	Manhole	0	NA
.0	MWL	Miscellaneous Water Level	114	NA
.0	MWLS(S01)	Miscellaneous Water Level Sag	121	S 2
3.3	MWLS(F01)	Miscellaneous Water Level Sag	152	S 2
6.7	MWLS(S02)	Miscellaneous Water Level Sag	179	S 2
7.7	DAE	Deposits Attached Encrustation	232	M 2
15.2	MWLS(F02)	Miscellaneous Water Level Sag	293	S 2
16.9	DAE(S03)	Deposits Attached Encrustation	349	M 2
19.9	RFJ(S04)	Roots Fine Joint	416	M 1
24.3	MWLS(S05)	Miscellaneous Water Level Sag	449	S 2
32.0	MWLS(F05)	Miscellaneous Water Level Sag	487	S 2
34.2	MWLS(S06)	Miscellaneous Water Level Sag	505	S 2
44.1	MWLS(F06)	Miscellaneous Water Level Sag	550	S 2
47.1	MWLS(S07)	Miscellaneous Water Level Sag	572	S 2
53.4	SSS	Surface Damage Surface Spalling	611	S 2
61.7	MWLS(F07)	Miscellaneous Water Level Sag	662	S 2
69.1	B	Broken	724	S 4
69.6	TBD	Tap Break-in/Hammer Defective	743	M 3
72.0	MWLS(S08)	Miscellaneous Water Level Sag	773	S 2

73.7	SSS	Surface Damage Surface Spalling	809	S 2
74.1	TBD	Tap Break-in/Hammer Defective	821	M 3
85.9	MWLS(F08)	Miscellaneous Water Level Sag	889	S 2
89.4	MWLS(S09)	Miscellaneous Water Level Sag	910	S 2
93.2	JOMD	Joint Offset Medium Defective	977	S 3
94.8	MWLS(F09)	Miscellaneous Water Level Sag	997	S 2
98.1	MWLS(S10)	Miscellaneous Water Level Sag	1016	S 2
104.7	MWLS(F10)	Miscellaneous Water Level Sag	1046	S 2
116.7	MWLS(S11)	Miscellaneous Water Level Sag	1096	S 2
125.8	MWLS(F11)	Miscellaneous Water Level Sag	1147	S 2
127.7	MWLS(S12)	Miscellaneous Water Level Sag	1165	S 2
134.0	MWLS(F12)	Miscellaneous Water Level Sag	1202	S 2
135.2	OBZ	Obstruction Other	1217	M 2
137.2	SSS	Surface Damage Surface Spalling	1242	S 2
141.9	MWLS(S13)	Miscellaneous Water Level Sag	1276	S 2
142.4	SSS	Surface Damage Surface Spalling	1294	S 2
158.6	MWLS(F13)	Miscellaneous Water Level Sag	1404	S 2
159.8	OBZ	Obstruction Other	1418	M 2
161.5	MWLS(S14)	Miscellaneous Water Level Sag	1440	S 2
166.0	JOMD	Joint Offset Medium Defective	1508	S 3
166.0	MWLS(F14)	Miscellaneous Water Level Sag	1524	S 2
168.9	DAE(F03)	Deposits Attached Encrustation	1544	M 2
168.9	RFJ(F04)	Roots Fine Joint	1552	M 1
170.6	AMH	Manhole	1692	NA

M-507-085



Code: **AMH**
Description: **Manhole**

Distance (ft): **.0**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **NO**
Remarks: **M-507-027**



Code: **MWL**
Description: **Miscellaneous Water Level**

Distance (ft): **.0**
Structural Grade: **0**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index:
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **.0**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **S01**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **3.3**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **F01**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **6.7**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **S02**
Within 8" of Joint: **NO**
Remarks:



Code: **DAE**
Description: **Deposits Attached Encrustation**

Distance (ft): **7.7**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **8**
Clock To: **4**
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index:
Within 8" of Joint: **YES**
Remarks:



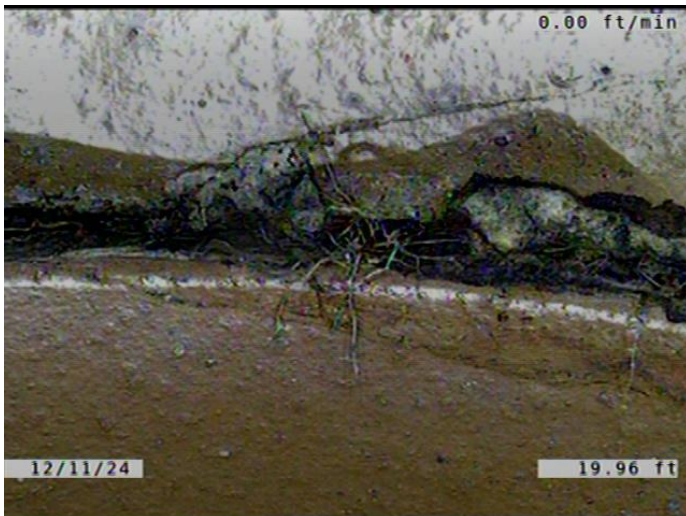
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **15.2**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **F02**
Within 8" of Joint: **NO**
Remarks:



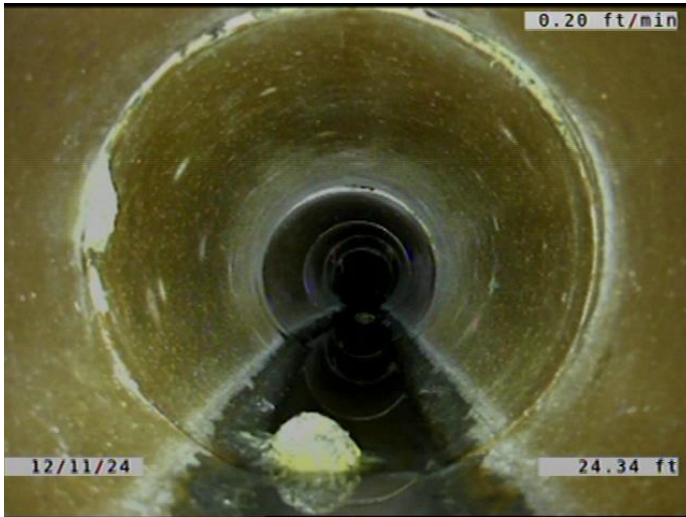
Code: **DAE**
Description: **Deposits Attached Encrustation**

Distance (ft): **16.9**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **7**
Clock To: **5**
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **S03**
Within 8" of Joint: **YES**
Remarks:



Code: **RFJ**
Description: **Roots Fine Joint**

Distance (ft): **19.9**
Structural Grade: **0**
O&M Grade: **1**
Clock Start/From: **10**
Clock To: **2**
1st Value:
2nd Value:
Value Percent:
Continuous Index: **S04**
Within 8" of Joint: **YES**
Remarks:



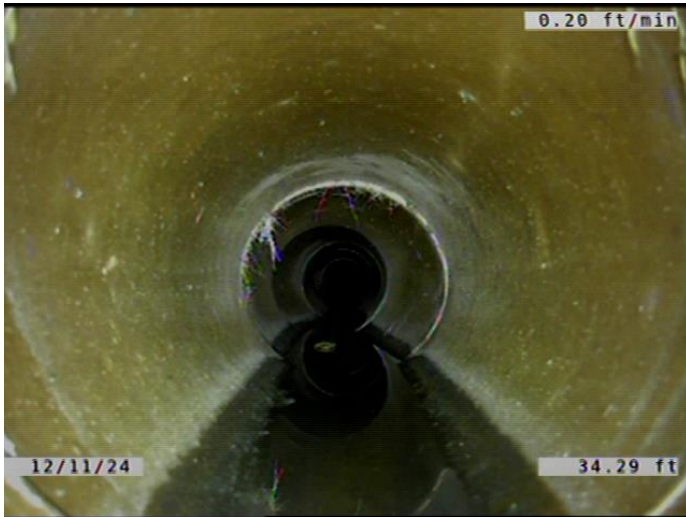
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **24.3**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **S05**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **32.0**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **F05**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **34.2**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **S06**
Within 8" of Joint: **NO**
Remarks:



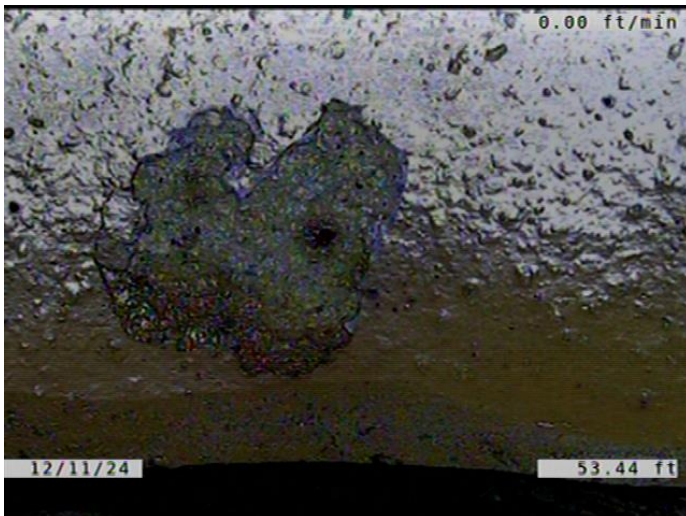
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **44.1**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **F06**
Within 8" of Joint: **NO**
Remarks:



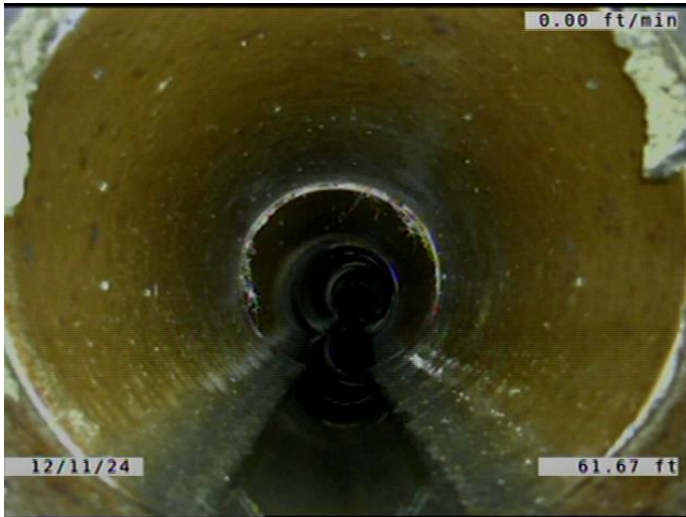
Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **47.1**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **10.000**
 Continuous Index: **S07**
 Within 8" of Joint: **NO**
 Remarks:



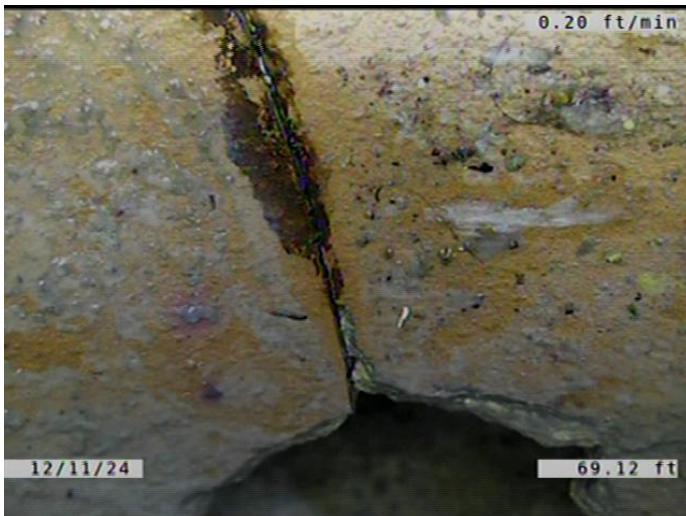
Code: **SSS**
 Description: **Surface Damage Surface Spalling**

Distance (ft): **53.4**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From: **12**
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **61.7**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **F07**
Within 8" of Joint: **NO**
Remarks:



Code: **B**
Description: **Broken**

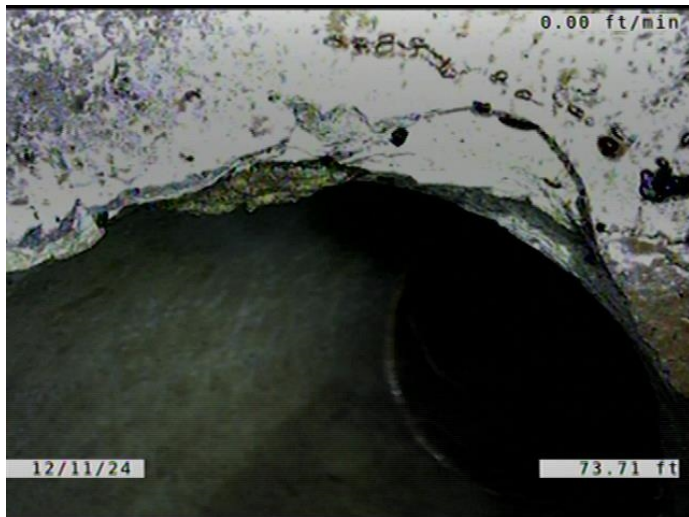
Distance (ft): **69.1**
Structural Grade: **4**
O&M Grade: **0**
Clock Start/From: **11**
Clock To: **1**
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:



Code:	TBD
Description:	Tap Break-in/Hammer Defective
Distance (ft):	69.6
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	12
Clock To:	
1st Value:	6.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	SERVICE COMES FROM THE LEFT (NORTH). ACTIVITY. CONSTANTLY R

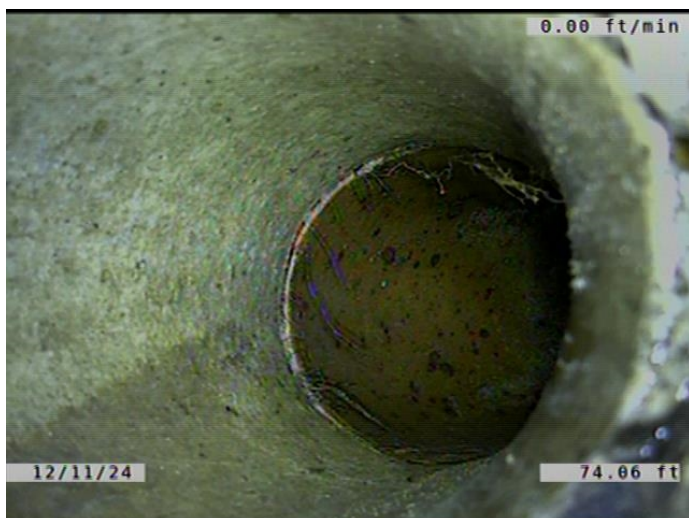


Code:	MWLS
Description:	Miscellaneous Water Level Sag
Distance (ft):	72.0
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	15.000
Continuous Index:	S08
Within 8" of Joint:	NO
Remarks:	



Code: **SSS**
 Description: **Surface Damage Surface Spalling**

Distance (ft): **73.7**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From: **11**
 Clock To: **1**
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks:



Code: **TBD**
 Description: **Tap Break-in/Hammer Defective**

Distance (ft): **74.1**
 Structural Grade: **0**
 O&M Grade: **3**
 Clock Start/From: **12**
 Clock To:
 1st Value: **6.000**
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **YES**
 Remarks: **SERVICE COMES FROM THE RIGHT (SOUTH). ROOTS GROWING IN THE J**



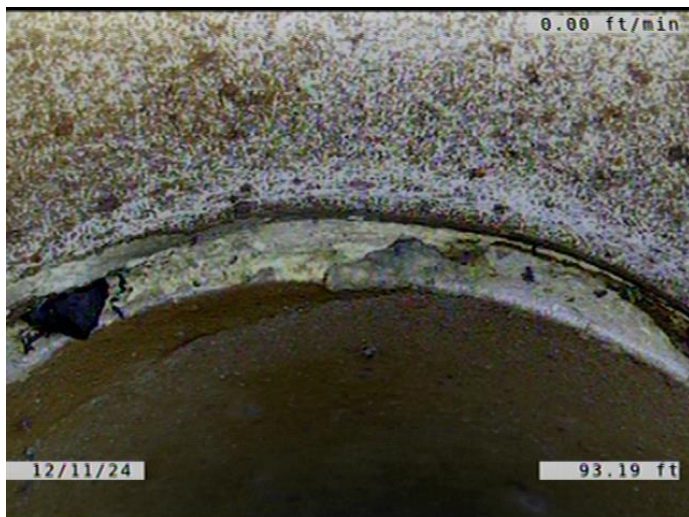
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **85.9**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **15.000**
Continuous Index: **F08**
Within 8" of Joint: **NO**
Remarks:



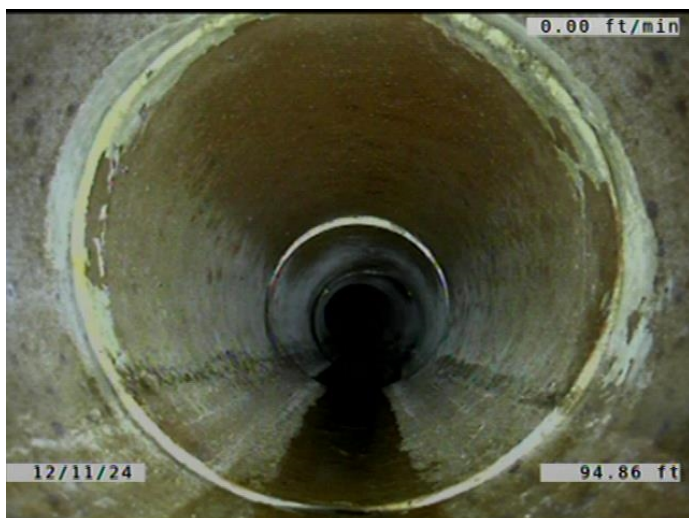
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **89.4**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **S09**
Within 8" of Joint: **NO**
Remarks:



Code: **JOMD**
 Description: **Joint Offset Medium Defective**

Distance (ft): **93.2**
 Structural Grade: **3**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks:



Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **94.8**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **10.000**
 Continuous Index: **F09**
 Within 8" of Joint: **NO**
 Remarks:



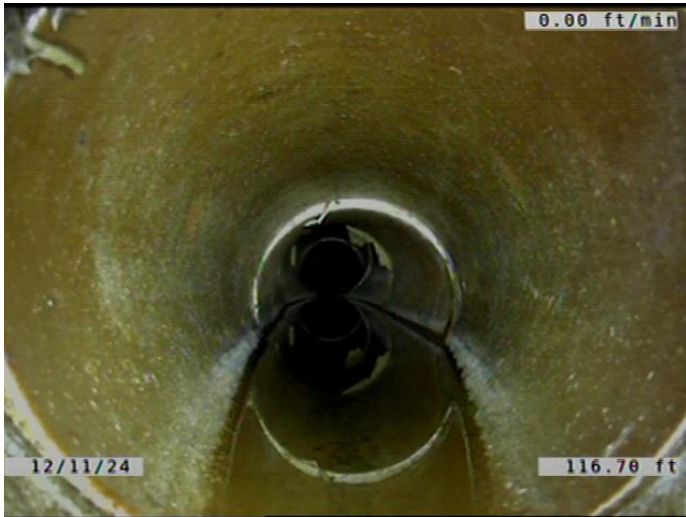
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **98.1**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **S10**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **104.7**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **F10**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **116.7**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **20.000**
Continuous Index: **S11**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **125.8**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **20.000**
Continuous Index: **F11**
Within 8" of Joint: **NO**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **127.7**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **S12**
Within 8" of Joint: **NO**
Remarks:



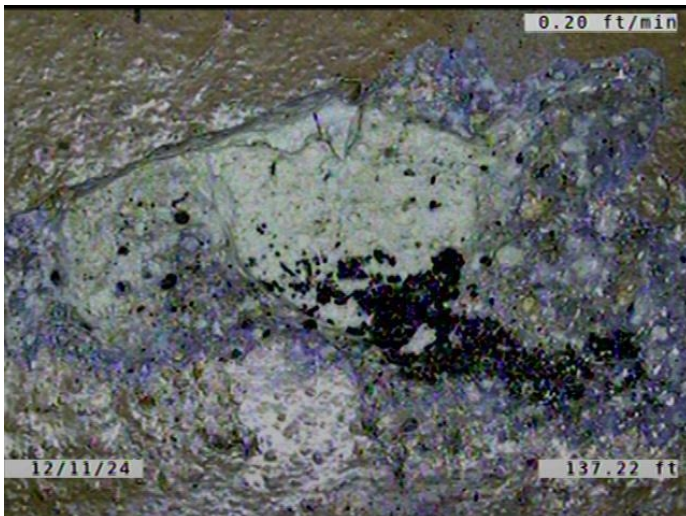
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **134.0**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **F12**
Within 8" of Joint: **NO**
Remarks:



Code: **OBZ**
Description: **Obstruction Other**

Distance (ft): **135.2**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **6**
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index:
Within 8" of Joint: **YES**
Remarks: **ROOTS THAT HAVE BEEN CUT FROM THE PIPE.**



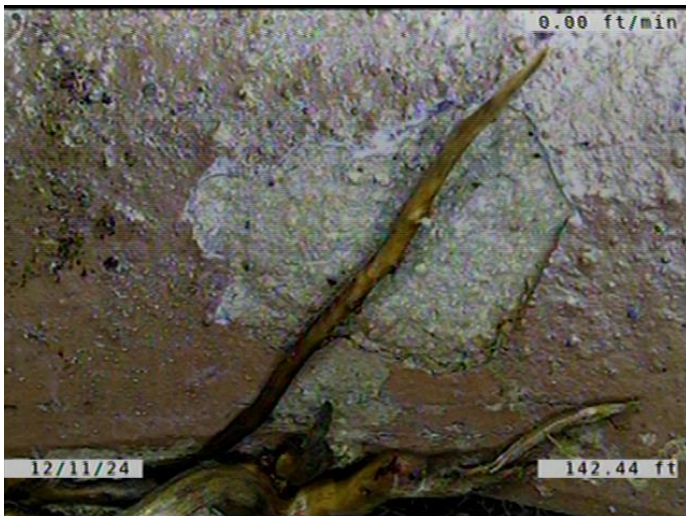
Code: **SSS**
Description: **Surface Damage Surface Spalling**

Distance (ft): **137.2**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From: **7**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **141.9**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **15.000**
Continuous Index: **S13**
Within 8" of Joint: **NO**
Remarks:



Code: **SSS**
Description: **Surface Damage Surface Spalling**

Distance (ft): **142.4**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From: **2**
Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint: **YES**
Remarks:



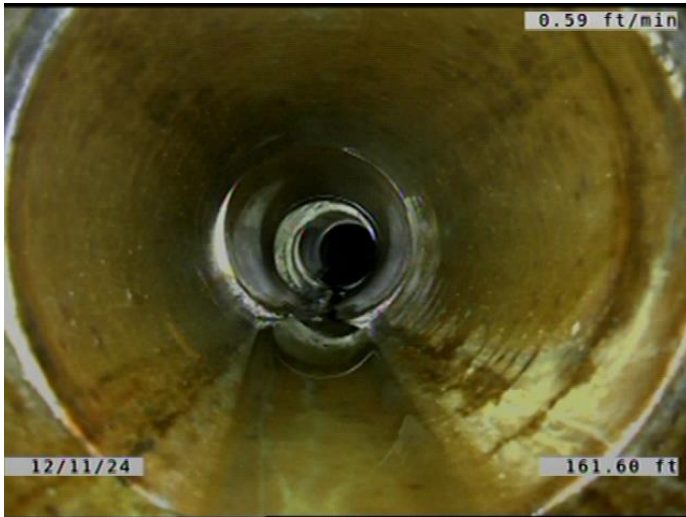
Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **158.6**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **15.000**
Continuous Index: **F13**
Within 8" of Joint: **NO**
Remarks:



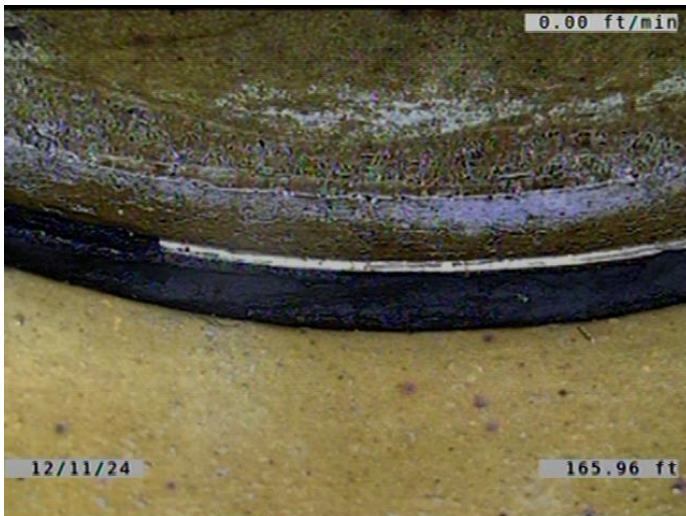
Code: **OBZ**
Description: **Obstruction Other**

Distance (ft): **159.8**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **6**
Clock To:
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index:
Within 8" of Joint: **YES**
Remarks: **ROOTS THAT HAVE BEEN CUT FROM THE PIPE.**



Code: **MWLS**
 Description: **Miscellaneous Water Level Sag**

Distance (ft): **161.5**
 Structural Grade: **2**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent: **10.000**
 Continuous Index: **S14**
 Within 8" of Joint: **NO**
 Remarks:



Code: **JOMD**
 Description: **Joint Offset Medium Defective**

Distance (ft): **166.0**
 Structural Grade: **3**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks:



Code: **MWLS**
Description: **Miscellaneous Water Level Sag**

Distance (ft): **166.0**
Structural Grade: **2**
O&M Grade: **0**
Clock Start/From:
Clock To:
1st Value:
2nd Value:
Value Percent: **10.000**
Continuous Index: **F14**
Within 8" of Joint: **NO**
Remarks:



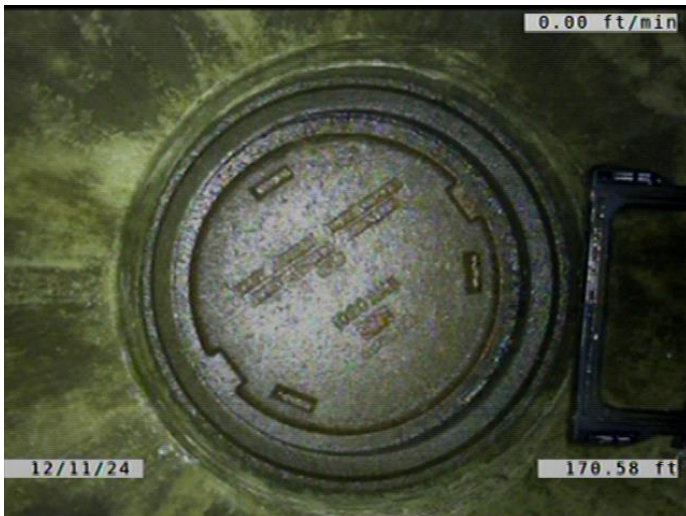
Code: **DAE**
Description: **Deposits Attached Encrustation**

Distance (ft): **168.9**
Structural Grade: **0**
O&M Grade: **2**
Clock Start/From: **7**
Clock To: **5**
1st Value:
2nd Value:
Value Percent: **5.000**
Continuous Index: **F03**
Within 8" of Joint: **YES**
Remarks:



Code: **RFJ**
 Description: **Roots Fine Joint**

Distance (ft): **168.9**
 Structural Grade: **0**
 O&M Grade: **1**
 Clock Start/From: **10**
 Clock To: **2**
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index: **F04**
 Within 8" of Joint: **YES**
 Remarks:



Code: **AMH**
 Description: **Manhole**

Distance (ft): **170.6**
 Structural Grade: **0**
 O&M Grade: **0**
 Clock Start/From:
 Clock To:
 1st Value:
 2nd Value:
 Value Percent:
 Continuous Index:
 Within 8" of Joint: **NO**
 Remarks: **M-507-085**