

F

Appendix F CCTV Assessment

Project Information

Client: CIMA
 Project: Pre-Rehabilitation Survey
 Date: 12/18/2020
 File: 14257

Video #	Start MH	End MH	Use	Size	Material	Length	Comment
1	MH 1	MH 2	SAN	200	PVC	87.6	Deformations & oval sections
2	MH 2	MH 4	SAN	200	PVC	80	Deformations & oval sections
3	MH 4	MH 3	SAN	200	PVC	179.2	50% Sag
4	MH 4	MH 5	SAN	200	PVC	108.2	Multiple 50% Sags
5	MH 5	MH 10	SAN	200	PVC	91.4	50% Sag
6	MH 9	MH 10	SAN	200	PVC	14.8	Offset joint, Multiple fractures
7	MH 7	MH 8	SAN	200	PVC	113.1	No issues
8	MH 8	MH 9	SAN	200	PVC	113.9	No issues
9	MH 9	MH 11	SAN	200	PVC	82.6	No issues
10	MH 12	MH 11	SAN	200	PVC	79	No issues
11	MH 13	MH 12	SAN	200	PVC	66.2	No issues
12	MH 13	END RUN	SAN	100	PVC	57.4	Grease Build up
13	MH 27	MH 25	SAN	200	PVC	84.8	10% Sag
14	MH 26	MH 25	SAN	200	PVC	62.4	Deformations & oval sections
15	MH 25	STUB	SAN	200	PVC	12.8	No issues
16	MH 25	MH 24	SAN	200	PVC	55.5	20% Sag
17	MH 24	MH 22	SAN	200	PVC	64	20% Sag / Ovalling
18	MH 23	MH 22	SAN	200	PVC	63	10% Sag
19	MH 22	MH 20	SAN	200	PVC	118	15% Sag

Video #	Start MH	End MH	Use	Size	Material	Length	Comment
20	MH 21	MH 20	SAN	200	PVC	66	25% Sag
21	MH 20	MH 16A	SAN	200	PVC	118.6	No issues
22	MH 16	MH 19	SAN	150	PVC	24.2	No issues
23	MH 16	MH 16A	SAN	150	PVC	23.7	No issues
24	DUMP LINE	MH 16A	SAN	100	PVC	45.1	Hole (Patch repair)
25	MH 16A	MH 15	SAN	200	CT	121.4	Multiple Sags
26	MH 11	MH 15	SAN	200	PVC	77.4	No issues
27	MH 15	MH 28	SAN	200	PVC	88.7	Sag 35%
28	MH 28	MH 29	SAN	200	CT	69	Broken Section / Fractures
29	MH 29	MH 30	SAN	200	CT	19.2	Large offset joint / Severe Roots
29R	MH 30	MH 29	SAN	200	CT	1.6	Full of gravel
30	MH 42	MH 43	SAN	200	PVC	121	No issues
31	MH 44	MH 43	SAN	200	PVC	57	15% Sag
32	MH 44	STUB NE	SAN	200	PVC	56.3	Deformations
33	MH 44	MH 45	SAN	200	PVC	83.5	Broken Section / Sags
34	MH 45	MH 46	SAN	200	PVC	66.7	Broken Pipe
34R	MH 45	MH 46	SAN	200	PVC	13.9	Broken Pipe
35	MH 46	MH47	SAN	200	PVC	111.3	30% Sag / Owalling
36	MH 47	MH 48	SAN	200	CT	41.2	25% WL/Sag
37	MH 49	MH 48	SAN	200	CT	109.6	Multiple Breaks/Fractures
38	MH 48	MH 50	SAN	200	CT	97.6	Multiple Breaks/Fractures
39	MH 56	MH 55	SAN	200	PVC	47.1	No issues
40	MH 55A	MH 55	SAN	200	PVC	61.3	No issues
41	MH 55	MH 53	SAN	200	PVC	95	Broken Section / Fractures
42	MH 53	MH 54	SAN	200	PVC	62.3	need report
43	MH 52	MH 53	SAN	200	PVC	45.5	Defective Pipe Change
44	MH 52	MH 51	SAN	200	CT	106.7	Offset Joint / Owalling
45	MH 51	MH 50	SAN	200	PVC	57.6	Deformation

Video #	Start MH	End MH	Use	Size	Material	Length	Comment
46	MH 50	MH 61	SAN	200	PVC	125.7	Holding Water
47	MH 61	MH 62	SAN	200	PVC	124.8	20% Sag
48	MH 53	MH 57	SAN	200	CT	53	Offset Joint / Fracture
49	MH 57	MH 58	SAN	200	CT	96.2	Multiple Breaks & Fractures
50	MH 58	MH 68	SAN	200	PVC	55.2	No issues
51	MH 58	MH 59	SAN	200	PVC	99.4	No issues
52	MH 59A	MH 66	SAN	200	CT	42.6	Crack & Fracture
52R	MH 66	MH 59A	SAN	200	CT	21	Fracture
53	MH 59A	MH 59	SAN	200	PVC	4.3	No Issues
54	MH 59	MH 60	SAN	200	PVC	60.4	No Issues
55	MH 60	END RUN	SAN	100	PVC	22	No Issues
56	MH 60	MH 64	SAN	200	CT	6.6	Defective Pipe Change
56R	MH 60	MH 64	SAN	200	CT	95.1	Defective Pipe Change
57	MH 69A	MH 69	SAN	200	PVC	130.2	Deformations
58	MH 69	MH 69B	SAN	200	PVC	61.8	Deformations & oval sections
59	MH 69	END RUN N	SAN	150	PVC	62.2	20% Sag
60	MH 69B	MH 70	SAN	200	PVC	44.1	Multiple Sags
61	MH 69B	MH 67	SAN	200	PVC	105.8	20% Sag
62	MH 72	MH 73	SAN	200	PVC	51.4	No Issues
63	MH 72	MH 67	SAN	200	PVC	59.9	20% Sag / Owalling
64	MH 67	MH 65	SAN	200	CT	99.9	Multiple Sags
65	MH 76	MH 97	SAN	200	CT	54.3	Fractures / Cracks/ Roots
66	MH 97	MH 65	SAN	200	CT	119.1	Fracture/Defective Joints
67	MH 64	MH 65	SAN	200	CT	60	40% Sag
68	MH 64	MH 62	SAN	200	CT	49.6	Deposits/Cracks/Fractures
69	MH 74A	MH 74	SAN	200	CT	66.7	Broken Pipe/Roots/Offset Joint
70	MH 62A	MH 62	SAN	300	PVC	64.6	40% Sag
71	MH 62A	MH 62B	SAN	200	CT	63.1	Roots/Sags up to 30%

Video #	Start MH	End MH	Use	Size	Material	Length	Comment
72	MH 74	MH 62B	SAN	200	CT	5.4	Roots/Crack
73	MH 77	END RUN SE	SAN	100	CT	33.7	Roots
74	MH 77	MH 81	SAN	200	CT	77	Roots/Cracks/Fractures/Broken Joint
75	MH 81	MH 82	SAN	200	CT	92.7	Roots/Crack
76	MH 82	MH 83	SAN	200	CT	30.3	Defective Service/Offset/Roots
77	MH 83	SCHOOL MH	SAN	200	CT	32.6	Roots
78	MH 83	MH 84	SAN	200	CT	81.9	Broken pipe at MH 84
79	MH 1	MH 2	ST	450	RCP	100.1	Cracks
80	MH 2	MH 2A	ST	450	RCP	99.9	Cracks/Debris
81	MH 2A	MH 3	ST	450	RCP	78.1	No Issues - Debris in MH 3
82	MH 3	MH 4	ST	450	RCP	76.5	No Issues
83	MH 5	MH 4A	ST	450	PVC	39.2	No Issues
84	MH 5	MH 6	ST	525	PVC	44.4	10% Sag, downstream MH
85	MH 6	MH 7	ST	600	PVC	21.3	Offset Joint before manhole
86	MH 7	MH 8	ST	600	PVC	36.7	Intuding service
87	MH 8	OUTLET	ST	600	CMP	5.1	Ice
88	MH 87	MH 86	SAN	150	CT	38.2	Broken Pipe
88R	MH 86	MH 87	SAN	150	CT	88.2	Fracture/Roots
89	MH 86	MH 85	SAN	200	CT	94.5	Severe Break - Unable to pass
89R	MH 85	MH 86	SAN	200	CT	8.8	Severe Break - Unable to pass
90	MH 85	MH 84	SAN	200	CT	31.7	Roots/Fracture at MH 84
91	MH 84	MH 80	SAN	200	CT	87.4	Roots
92	MH 80	MH 80A	SAN	200	CT	128.7	Roots/Fracture
93	MH 80	MH 33	SAN	200	CT	87.9	Multiple Breaks
94	MH 4A	MH 4B	ST	450	PVC	18.6	No Issues
95	MH 4	MH 4A	ST	450	RCP	24	Fracture at Joint
96	END RUN S	MH 13	ST	375	PVC	1.7	Full of Concrete/Abandoned?
97	MH 13	MH 22	ST	450	PVC	22.8	MH 22 Buried

Video #	Start MH	End MH	Use	Size	Material	Length	Comment
98	MH 22	MH 19	ST	525	PVC	85.4	MH 22 Buried
99	MH 13	MH 13A	ST	375	PVC	8.7	Ice
100	MH 19	MH 18	ST	750	RCP	68.4	No Issues
101	MH 19	MH 19A	ST	600	PE	18.6	No Issues
102	MH 19A	MH 19B	ST	600	PVC	85.7	Gravel
103	MH 18	MH 17	ST	750	RCP	42.4	No Issues - Debris in MH 18
104	MH 17	MH 16	ST	750	PVC	19.2	Pipe through Sewer
105	MH 15	MH 16	ST	525	PVC	19.2	Ice
106	MH 14	MH 15	ST	525	PVC	11.3	No Issues
107	MH 14	OUTFALL	ST	525	PVC	43.8	Debris
108	MH 87	MH 88	SAN	200	PVC	79.9	Defective Connection/Offset Joint
109	MH 88	MH 90	SAN	200	PVC	62.7	No Issues
110	MH 90	MH 92A	SAN	200	PVC	33.5	No Issues
111	MH 88	MH 89	SAN	200	PVC	15	No Issues
112	MH 92A	MH 93	SAN	250	PVC	82.4	No Issues
113	MH 93	MH 93A	SAN	250	PVC	82.2	No Issues
114	MH 92A	MH 92	SAN	250	PVC	5.1	No Issues
115	MH 92	MH 95	SAN	250	PVC	30.9	No Issues
116	MH 95	MH 96	SAN	250	PVC	77.4	No Issues
117	MH 93A	END RUN	SAN	250	PVC	9	Pipe Ends in Gravel
118	CB 23A	MH 23B	ST	300	PVC	47.2	No Issues
119	CB 23B	MH 23	ST	300	PVC	68.4	No Issues
120	MH 80A	END RUN	SAN	200	CT	70.3	Roots/Fracture
121	MH 85	MH 98	SAN	150	PVC	42.3	Roots
122	MH 62B	MH 31	SAN	200	CT	78.2	Multiple Breaks / Roots
123	MH 22	OUTFALL	ST	300	PVC	67.8	No Issues
124	MH 22	END RUN	ST	300	PVC	66	No Issues
125	MH 21	CB 21	ST	300	RCP	50.7	Cracks

Upstream MH 10	Downstream MH 9	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:52	Length Surveyed 89.2
Additional Information					Media Label 128

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 10
0.0		MWL	Water Level		0			
9.9	S01	DSGV	Deposits Settled: Gravel	5 to 7	10			
15.3	F01	DSGV	Deposits Settled: Gravel	5 to 7	10			
24.5		DSGV	Deposits Settled: Gravel	5 to 7	10			
33.3	S02	DSGV	Deposits Settled: Gravel	6 to 7	5			
41.1	F02	DSGV	Deposits Settled: Gravel	5 to 7	10			
54.2	S03	DSGV	Deposits Settled: Gravel	5 to 7	10			
59.9	F03	DSGV	Deposits Settled: Gravel	5 to 7	10			
66.1	S04	DSGV	Deposits Settled: Gravel	5 to 8	10			
73.0	F04	DSGV	Deposits Settled: Gravel	5 to 7	10			
89.2		AMH	Access Point - Manhole					ST MH 9

Upstream MH 10	Downstream MH 9	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:52	Length Surveyed 89.2
Additional Information					Media Label 128



AMH - Access Point - Manhole @ 0.0 m.
ST MH 10



MWL - Water Level @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 9.9 m.



DSGV - Deposits Settled: Gravel @ 15.3 m.

Upstream MH 10	Downstream MH 9	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:52	Length Surveyed 89.2
Additional Information					Media Label 128



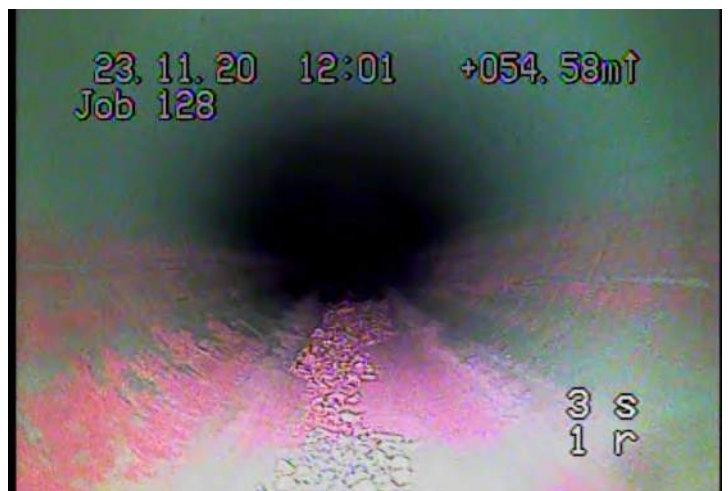
DSGV - Deposits Settled: Gravel @ 24.5 m.



DSGV - Deposits Settled: Gravel @ 33.3 m.



DSGV - Deposits Settled: Gravel @ 41.1 m.



DSGV - Deposits Settled: Gravel @ 54.2 m.

Upstream MH 10	Downstream MH 9	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:52	Length Surveyed 89.2
Additional Information					Media Label 128



DSGV - Deposits Settled: Gravel @ 59.9 m.



DSGV - Deposits Settled: Gravel @ 66.1 m.



DSGV - Deposits Settled: Gravel @ 73.0 m.



AMH - Access Point - Manhole @ 89.2 m.
ST MH 9

Upstream MH	Downstream MH	Size	Material	Total Length	City
10	CB 10	300	Polyvinyl Chloride	0	Linden

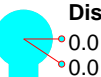
Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 305 Picci Court	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-21-2020	12:14	16.6

Additional Information	Media Label
	129

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 10
0.0		MWL	Water Level		0			



16.6

ACB Access Point - Catch Basin

CB 10

Upstream MH 10	Downstream MH CB 10	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Urban		Sewer Use Stormwater
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 12:14	Length Surveyed 16.6
Additional Information					Media Label 129



AMH - Access Point - Manhole @ 0.0 m.
ST MH 10



MWL - Water Level @ 0.0 m.



ACB - Access Point - Catch Basin @ 16.6
m. CB 10

Upstream MH 11	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 01:31	Length Surveyed 30.3
Additional Information					Media Label 133

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 11
0.0		MWL	Water Level		0			
10.8		JOL	Joint Offset (displaced): Large					
13.8		MWL	Water Level		5			
15.8		MWL	Water Level		0			
29.1		DSGV	Deposits Settled: Gravel	5 to 7	10			
30.3		MSA	Survey Abandoned					Unable to proceed. Outlet in view.

Upstream MH	Downstream MH	Size	Material	Total Length	City
11	Outfall	300	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-22-2020	01:31	30.3

Additional Information	Media Label
	133

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 11
0.0		MWL	Water Level		0			
10.8		JOL	Joint Offset (displaced): Large					
13.8		MWL	Water Level		5			
15.8		MWL	Water Level		0			
29.1		DSGV	Deposits Settled: Gravel	5 to 7	10			
30.3		MSA	Survey Abandoned					Unable to proceed. Outlet in view.

Upstream MH 11	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 01:31	Length Surveyed 30.3
Additional Information					Media Label 133



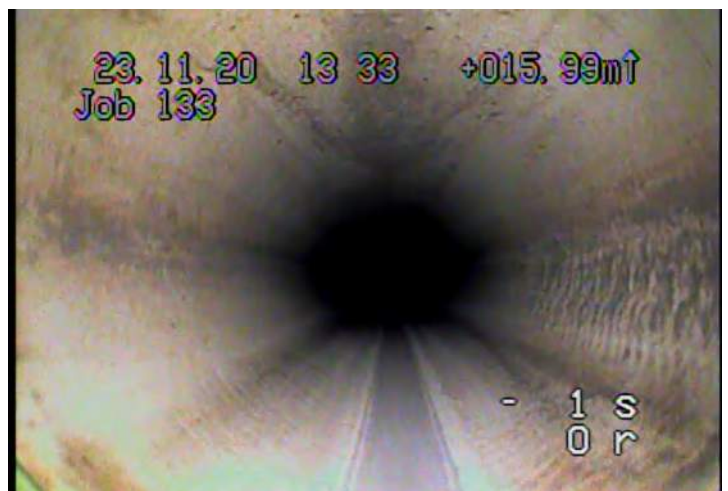
AMH - Access Point - Manhole @ 0.0 m.
ST MH 11



MWL - Water Level @ 0.0 m.

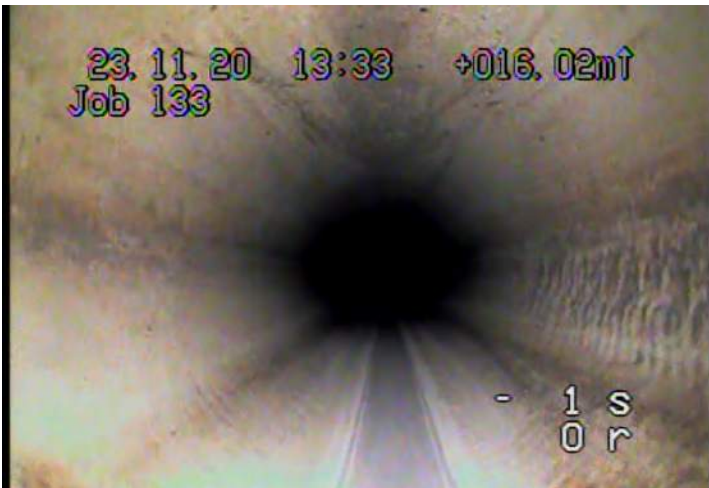


JOL - Joint Offset (displaced): Large @ 10.8 m.

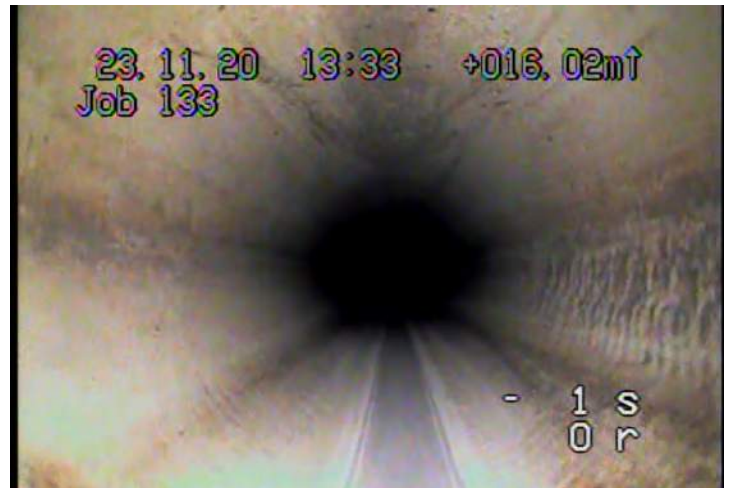


MWL - Water Level @ 13.8 m.

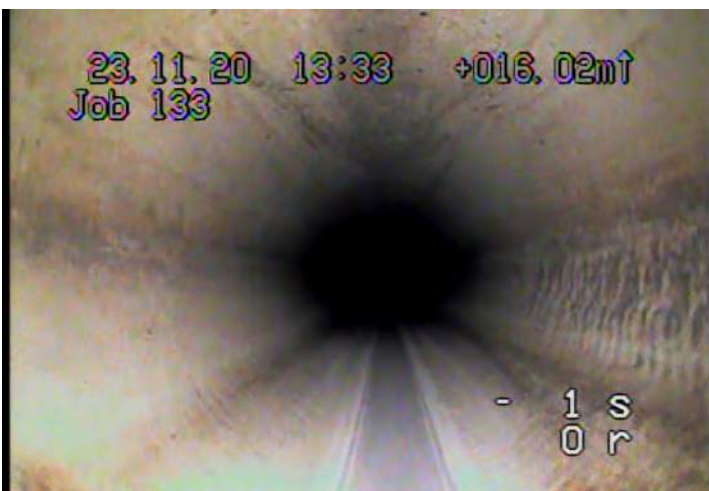
Upstream MH 11	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 01:31	Length Surveyed 30.3
Additional Information					Media Label 133



MWL - Water Level @ 15.8 m.

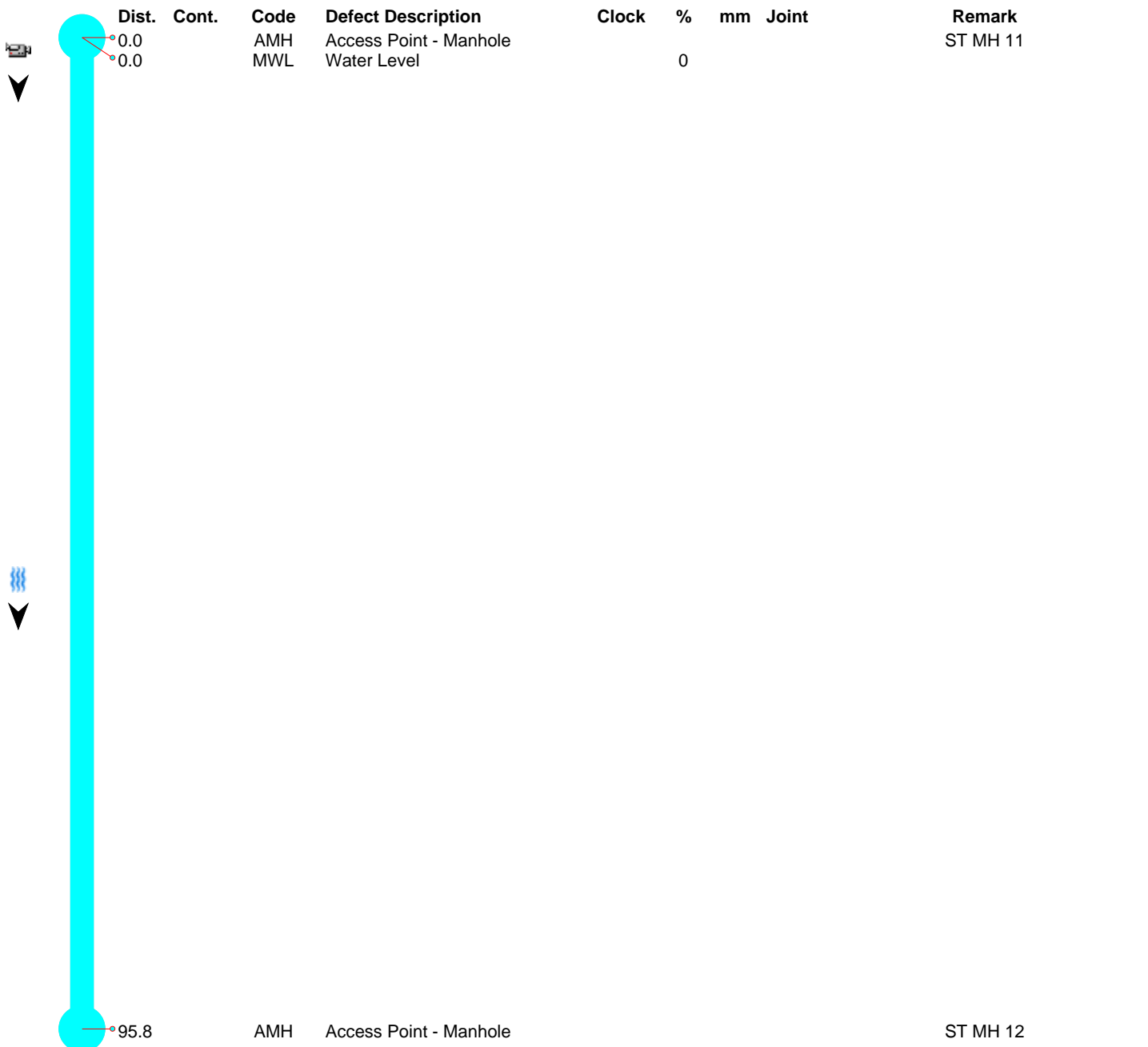


DSGV - Deposits Settled: Gravel @ 29.1 m.



MSA - Survey Abandoned @ 30.3 m.
Unable to proceed. Outlet in view.

Upstream MH 12	Downstream MH 11	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 01:25	Length Surveyed 95.8
Additional Information					Media Label 132



Upstream MH 12	Downstream MH 11	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 01:25	Length Surveyed 95.8
Additional Information					Media Label 132



AMH - Access Point - Manhole @ 0.0 m.
ST MH 11



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 95.8 m.
ST MH 12






Upstream MH	Downstream MH	Size	Material	Total Length	City
14	Outfall	525	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	1st St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-22-2020	02:03	43.8

Additional Information	Media Label
	107

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 14
	0.0		MWL	Water Level		0			
	0.0	S01	DSGV	Deposits Settled: Gravel	5 to 7	5			
	4.2	F01	DSGV	Deposits Settled: Gravel	6 to 7	5			Branch
	4.2		OBJ	Obstacle - Object Wedged in Joint	9 to 3	5		J	
	10.5		TS	Tap, Saddle	2				
	10.8		MWL	Water Level		5			
									
	43.7		ADP	Access Point - Discharge Point					Outfall

Upstream MH 14	Downstream MH Outfall	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:03	Length Surveyed 43.8
Additional Information					Media Label 107



AMH - Access Point - Manhole @ 0.0 m.
ST MH 14



MWL - Water Level @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 4.2 m.

Upstream MH 14	Downstream MH Outfall	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:03	Length Surveyed 43.8
Additional Information					Media Label 107



OBJ - Obstacle - Object Wedged in Joint
@ 4.2 m. Branch



TS - Tap, Saddle @ 10.5 m.

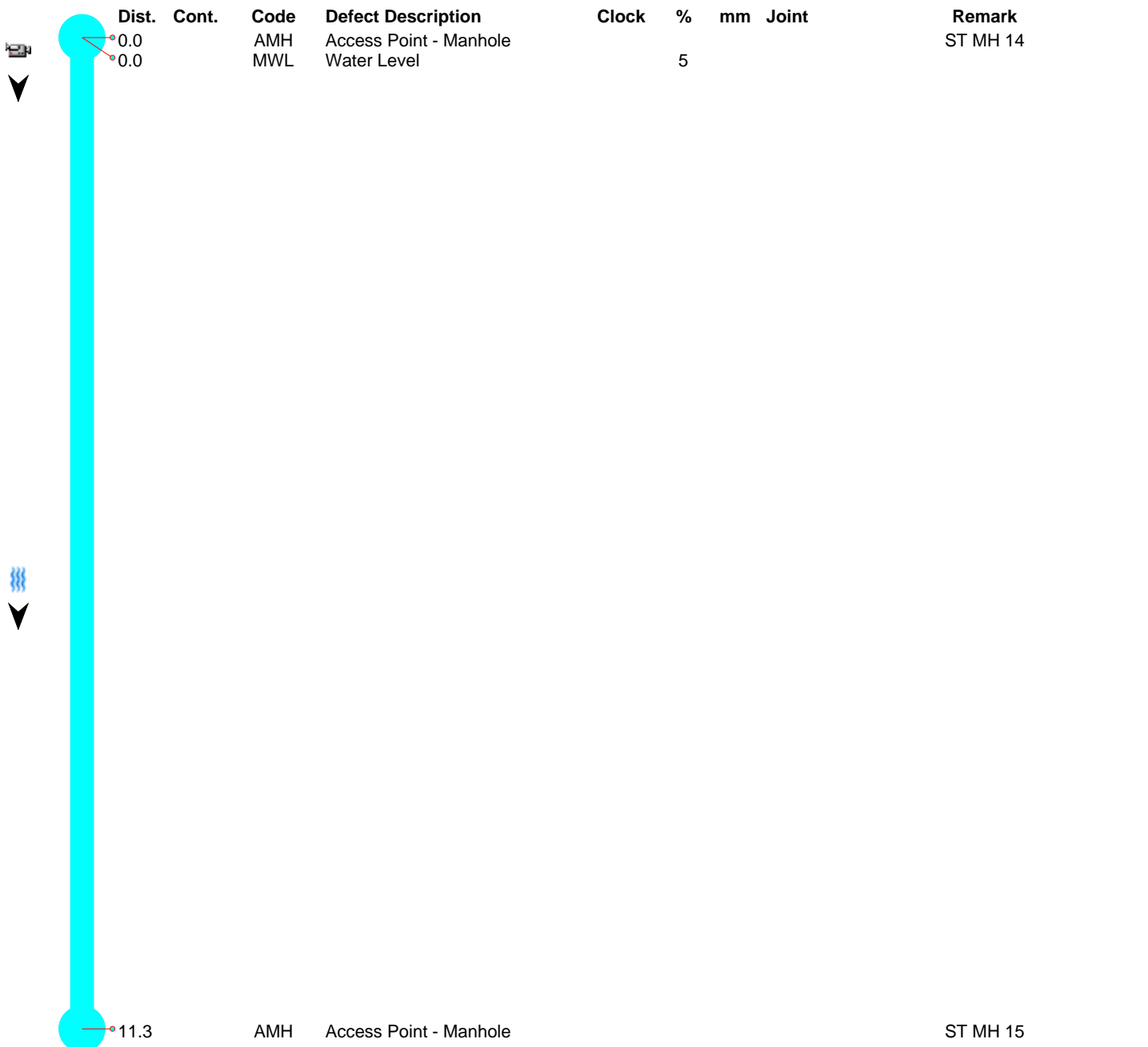


MWL - Water Level @ 10.8 m.

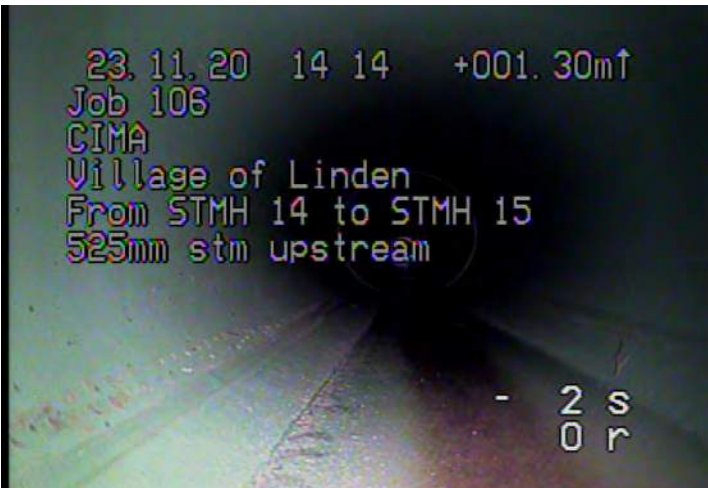


ADP - Access Point - Discharge Point @
43.7 m. Outfall

Upstream MH 15	Downstream MH 14	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:14	Length Surveyed
Additional Information					Media Label 106



Upstream MH 15	Downstream MH 14	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 1st Ave NW	Location Details Village of Linden	
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:14	Length Surveyed
Additional Information					Media Label 106



AMH - Access Point - Manhole @ 0.0 m.
ST MH 14

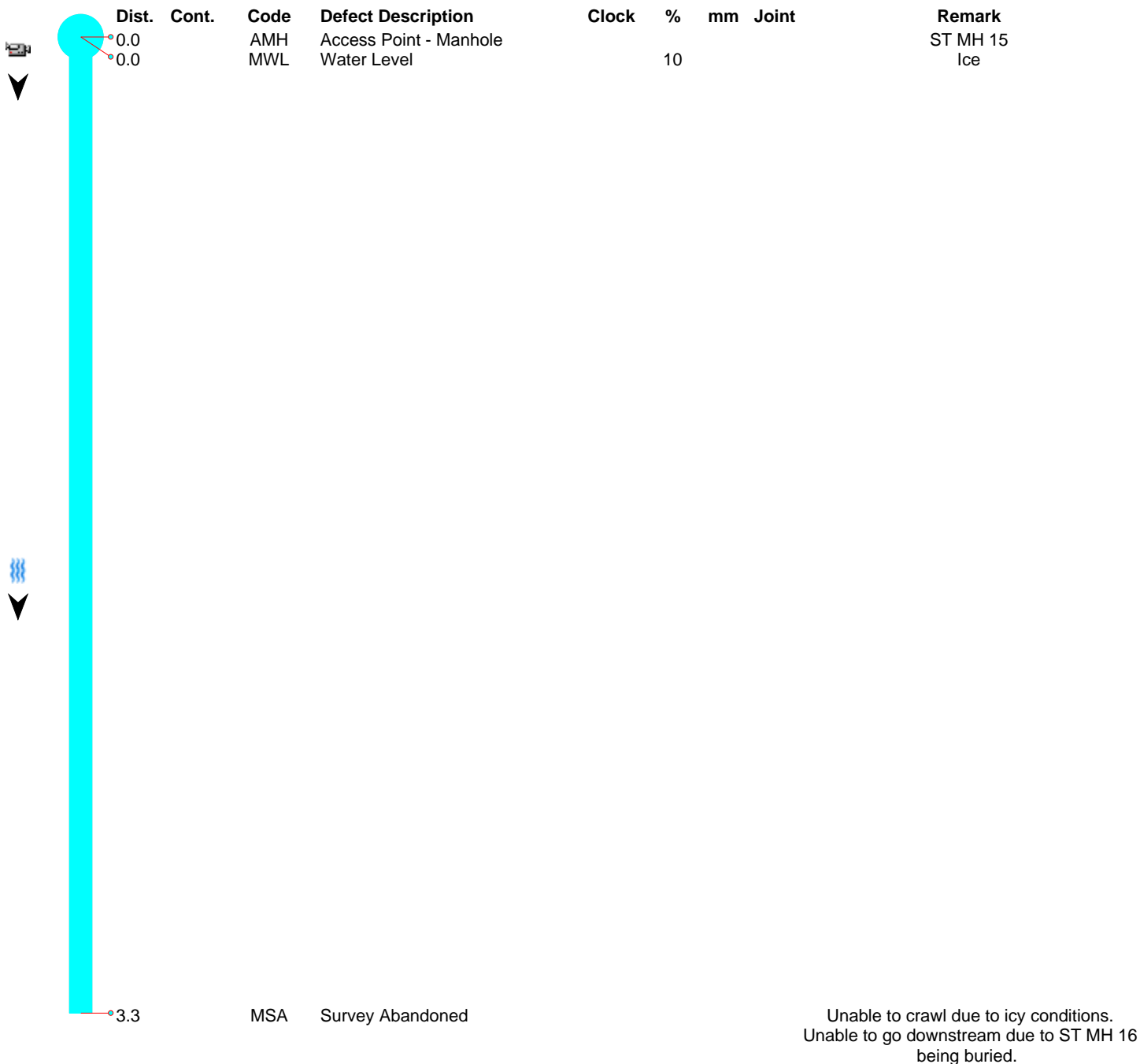


MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 11.3 m.
ST MH 15

Upstream MH 16	Downstream MH 15	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:20	Length Surveyed 19.2
Additional Information					Media Label 105



Upstream MH 16	Downstream MH 15	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:20	Length Surveyed 19.2
Additional Information					Media Label 105



AMH - Access Point - Manhole @ 0.0 m.
ST MH 15

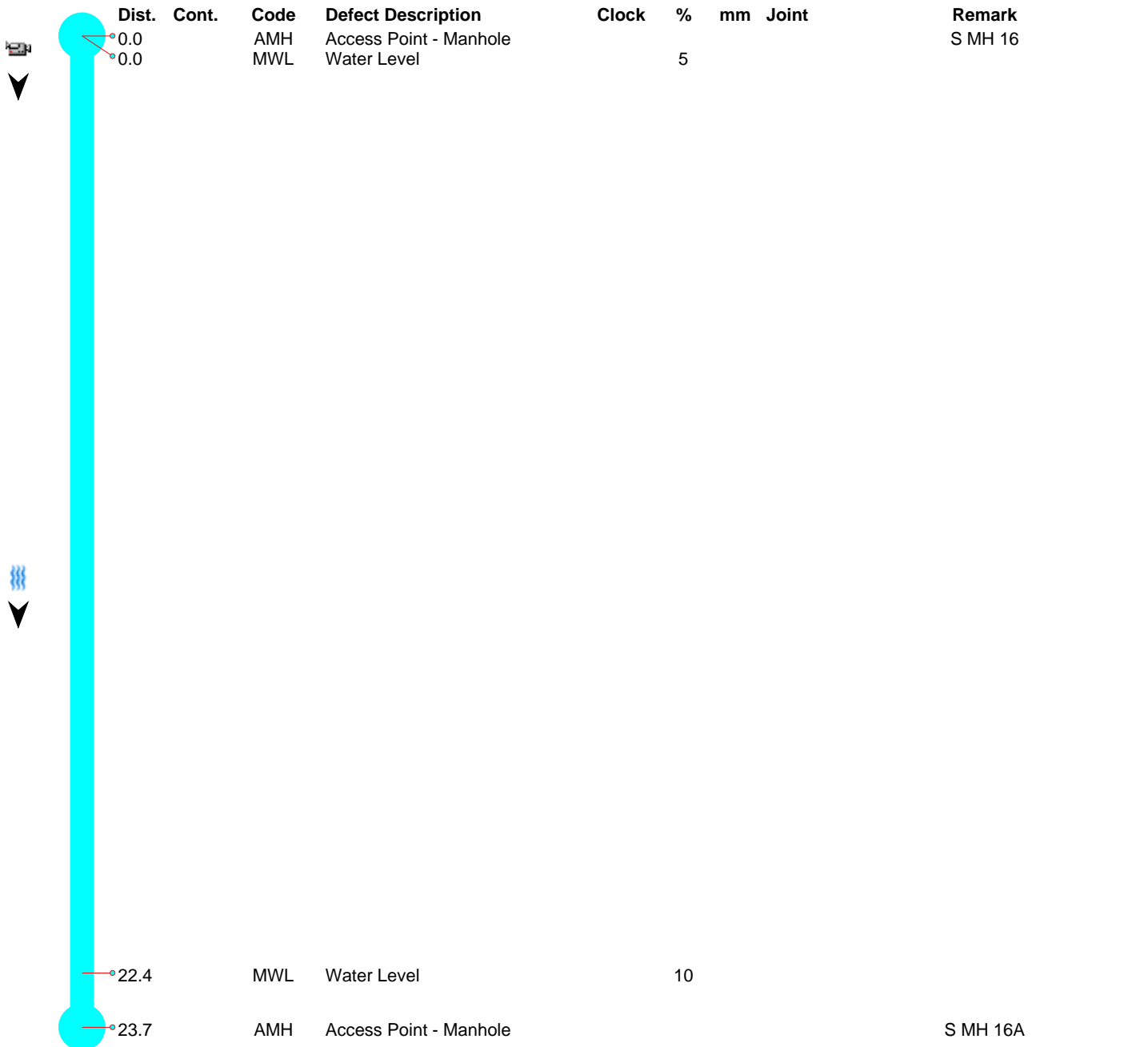


MWL - Water Level @ 0.0 m. Ice

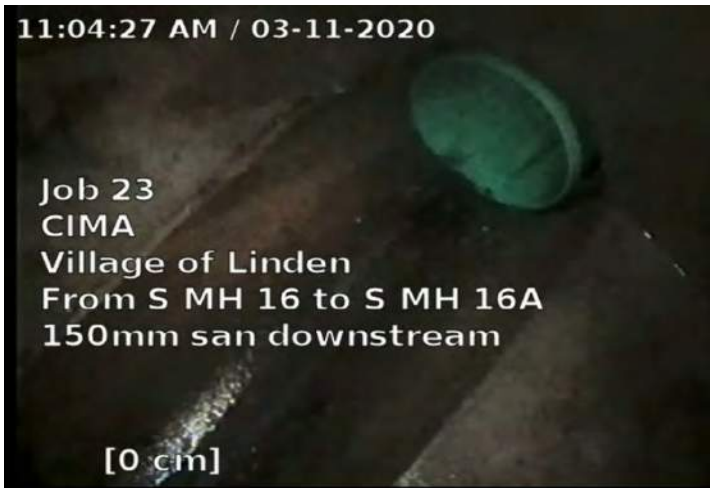


MSA - Survey Abandoned @ 3.3 m.
Unable to crawl due to icy conditions.
Unable to go downstream due to ST MH
16 being buried.

Upstream MH 16	Downstream MH 16A	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:04	Length Surveyed 23.7
Additional Information					Media Label 23



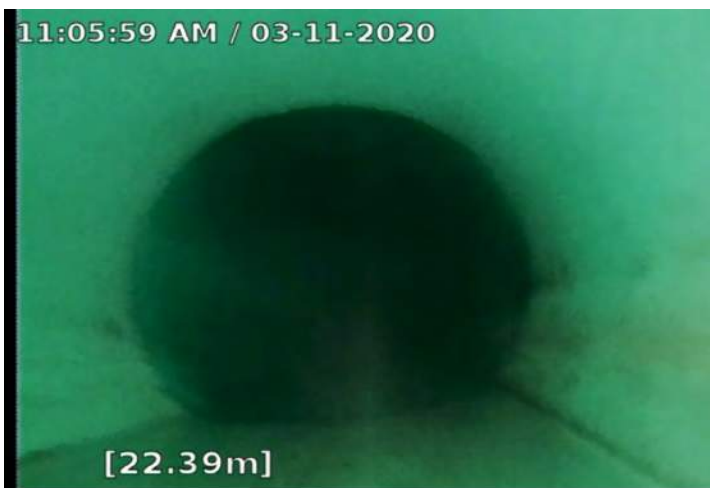
Upstream MH 16	Downstream MH 16A	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:04	Length Surveyed 23.7
Additional Information					Media Label 23



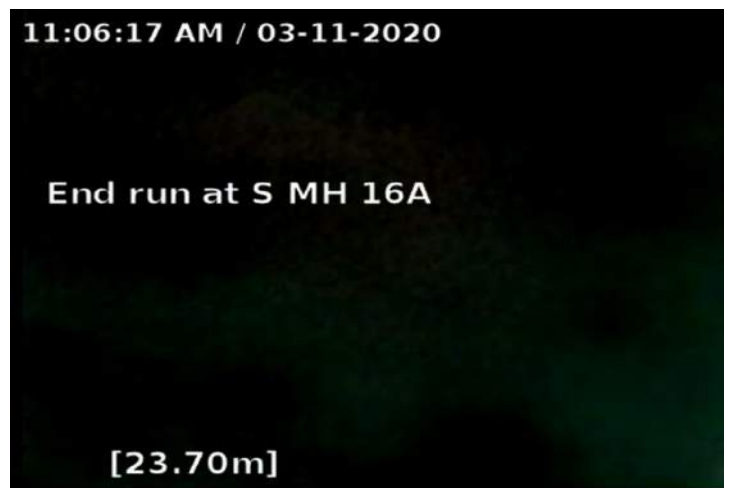
AMH - Access Point - Manhole @ 0.0 m.
S MH 16



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 22.4 m.



AMH - Access Point - Manhole @ 23.7 m.
S MH 16A


Upstream MH	Downstream MH	Size	Material	Total Length	City
19	16	150	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	1st Ave NW & 5th St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-03-2020	11:00	24.2

Additional Information	Media Label
	22

 	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 16
0.0		MWL	Water Level			5			
 									
	24.2		AMH	Access Point - Manhole					S MH 19

Upstream MH 19	Downstream MH 16	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NW & 5th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:00	Length Surveyed 24.2
Additional Information					Media Label 22



AMH - Access Point - Manhole @ 0.0 m.
S MH 16



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 24.2 m.
S MH 19

Upstream MH 20	Downstream MH Outlet	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:03	Length Surveyed 26.8
Additional Information					Media Label 127

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 20
	0.0		MWL	Water Level		0			
	2.9	S01	ISGT	Intruding Seal Material - Grout	5 to 7	5			
	10.6		MWL	Water Level		10			
	17.1	F01	ISGT	Intruding Seal Material - Grout	5 to 7	5			
	21.3		MCU	Camera Underwater					
	26.8		ADP	Access Point - Discharge Point					Outlet

Upstream MH 20	Downstream MH Outlet	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:03	Length Surveyed 26.8
Additional Information					Media Label 127



AMH - Access Point - Manhole @ 0.0 m.
ST MH 20



MWL - Water Level @ 0.0 m.



ISGT - Intruding Seal Material - Grout @
2.9 m.



MWL - Water Level @ 10.6 m.

Upstream MH 20	Downstream MH Outlet	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:03	Length Surveyed 26.8
Additional Information					Media Label 127



ISGT - Intruding Seal Material - Grout @ 17.1 m.



MCU - Camera Underwater @ 21.3 m.



ADP - Access Point - Discharge Point @ 26.8 m. Outlet

Upstream MH 21	Downstream MH 20	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:13	Length Surveyed 2.8
Additional Information					Media Label 126R

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 20
0.0		MWL	Water Level		5			
1.3		ISGT	Intruding Seal Material - Grout	5 to 7	10			
2.3		ISGT	Intruding Seal Material - Grout	5 to 7	20			
2.8		MSA	Survey Abandoned					Unable to get over grout.

Upstream MH 21	Downstream MH 20	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:13	Length Surveyed 2.8
Additional Information					Media Label 126R



AMH - Access Point - Manhole @ 0.0 m.
ST MH 20



MWL - Water Level @ 0.0 m.



ISGT - Intruding Seal Material - Grout @
1.3 m.






ISGT - Intruding Seal Material - Grout @
2.3 m.

Upstream MH 21	Downstream MH 20	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:13	Length Surveyed 2.8
Additional Information					Media Label 126R



MSA - Survey Abandoned @ 2.8 m.
 Unable to get over grout.

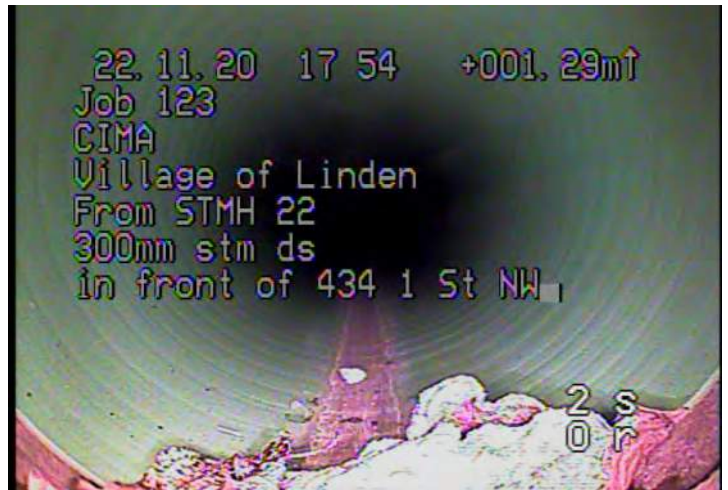
Upstream MH 22	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front Of 434 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 03:54	Length Surveyed 67.8
Additional Information					Media Label 123

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 22
	0.0		MWL	Water Level		0			
									
	66.4		MMC	Material Change					PVC to Concrete Snow Outlet
	67.1		MWL	Water Level		20			
	67.8		ADP	Access Point - Discharge Point					

Upstream MH 22	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front Of 434 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 03:54	Length Surveyed 67.8
Additional Information					Media Label 123



AMH - Access Point - Manhole @ 0.0 m.
ST MH 22



MWL - Water Level @ 0.0 m.



MMC - Material Change @ 66.4 m. PVC
to Concrete



MWL - Water Level @ 67.1 m. Snow

Upstream MH 22	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front Of 434 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 03:54	Length Surveyed 67.8
Additional Information					Media Label 123



ADP - Access Point - Discharge Point @
67.8 m. Outlet

Upstream MH	Downstream MH	Size	Material	Total Length	City
25	24	300	Polyethylene	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

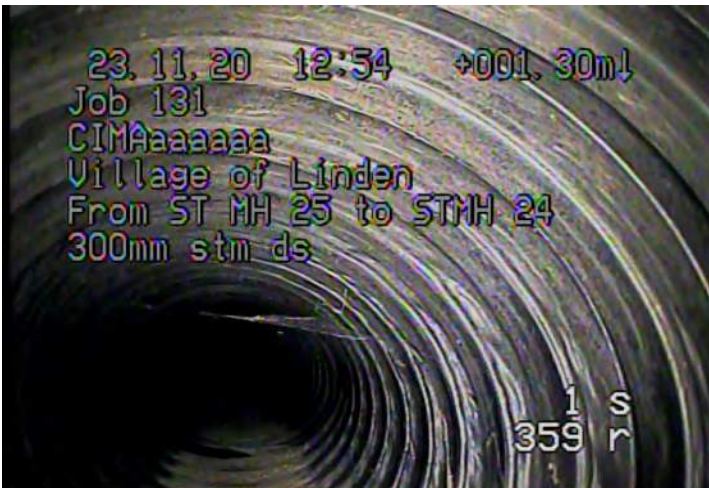
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	4th Ave SE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-22-2020	01:30	46.1

Additional Information	Media Label
	131

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 25
	0.0		MWL	Water Level		0			
	8.0		MWL	Water Level		5			
	27.5		MWL	Water Level		0			
	46.1		AMH	Access Point - Manhole					ST MH 24

Upstream MH 25	Downstream MH 24	Size 300	Material Polyethylene	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 4th Ave SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 01:30	Length Surveyed 46.1
Additional Information					Media Label 131



AMH - Access Point - Manhole @ 0.0 m.
ST MH 25



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 8.0 m.



MWL - Water Level @ 27.5 m.

Upstream MH 25	Downstream MH 24	Size 300	Material Polyethylene	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 4th Ave SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 01:30	Length Surveyed 46.1
Additional Information					Media Label 131



AMH - Access Point - Manhole @ 46.1 m.
 ST MH 24




Upstream MH	Downstream MH	Size	Material	Total Length	City
29	30	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Off Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-22-2020	02:54	

Additional Information	Media Label
	29R

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 30
	0.0		MWL	Water Level		40			
									
	1.6		DSGV	Deposits Settled: Gravel	3 to 7	20			Unable to pass debris in water.
	1.6		MSA	Survey Abandoned					

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:54	Length Surveyed
Additional Information					Media Label 29R



AMH - Access Point - Manhole @ 0.0 m.
S MH 30



MWL - Water Level @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 1.6 m.



MSA - Survey Abandoned @ 1.6 m.
Unable to pass debris in water.

Upstream MH	Downstream MH	Size	Material	Total Length	City
30	31	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Off Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-22-2020	02:58	1

Additional Information	Media Label
	134

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 30
	0.0		MWL	Water Level		10			
									
	0.5		DSGV	Deposits Settled: Gravel	4 to 7	10			
									
	1.0		MSA	Survey Abandoned					Unable to pass gravel in line.

Upstream MH 30	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 02:58	Length Surveyed 1
Additional Information					Media Label 134



AMH - Access Point - Manhole @ 0.0 m.
S MH 30



MWL - Water Level @ 0.0 m.

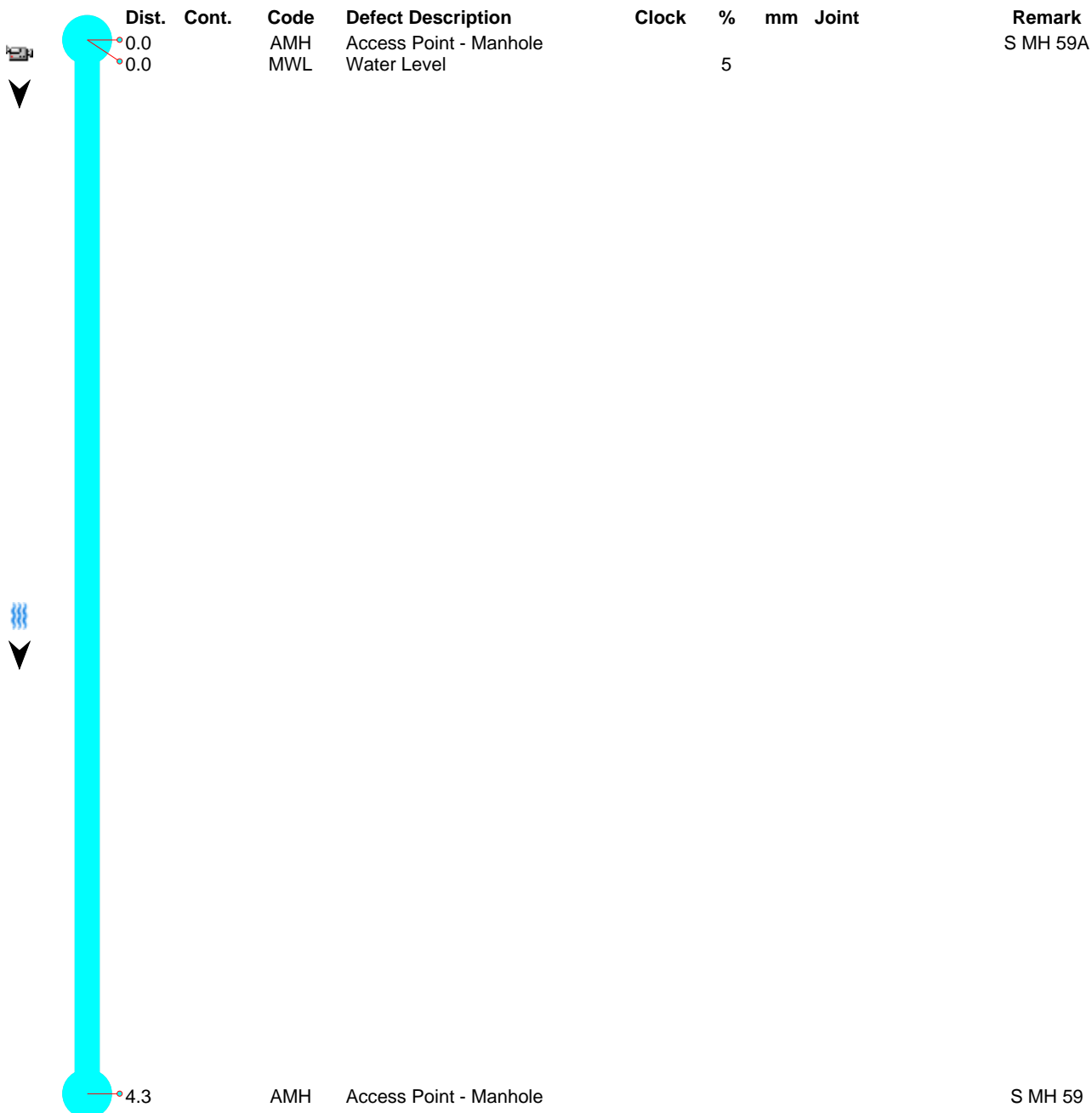


DSGV - Deposits Settled: Gravel @ 0.5 m.



MSA - Survey Abandoned @ 1.0 m.
Unable to pass gravel in line.

Upstream MH 59A	Downstream MH 59	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St N & 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:22	Length Surveyed 4.3
Additional Information					Media Label 53



Upstream MH 59A	Downstream MH 59	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St N & 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:22	Length Surveyed 4.3
Additional Information					Media Label 53



AMH - Access Point - Manhole @ 0.0 m.
S MH 59A



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 4.3 m.
S MH 59

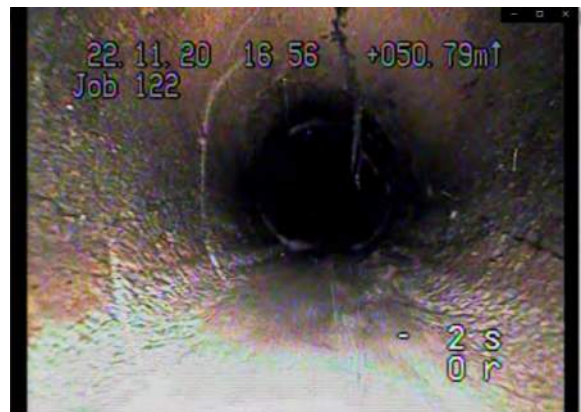
Town of Linden

Job 122

SMH 62B – SMH 31

Snapshots





Upstream MH 62B	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 04:51	Length Surveyed 78.2

Additional Information	Media Label 122
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Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 62B (75)
0.0		MWL	Water Level		5			
2.1		RMJ	Roots, Medium, Joint	7 to 5	50		J	
3.7		RFJ	Roots, Fine: Joint	7 to 5				
5.2		RFJ	Roots, Fine: Joint	7 to 5				
6.6		RMJ	Roots, Medium, Joint	7 to 3	30			
18.6		FC	Fracture Circumferential	2 to 6			J	
20.1		FC	Fracture Circumferential	6 to 5				
21.5		RFJ	Roots, Fine: Joint	2 to 3				
23.3		FC	Fracture Circumferential	2 to 5				
24.5		RMJ	Roots, Medium, Joint	9 to 3	50			
27.5		RMJ	Roots, Medium, Joint	2 to 4	10			
29.0		RMJ	Roots, Medium, Joint	9 to 3	45			
29.5		FM	Fracture Multiple	11 to 5				
30.3		RMJ	Roots, Medium, Joint	9 to 3	50			
30.5		FM	Fracture Multiple	7 to 2			J	
31.9		RFJ	Roots, Fine: Joint	7 to 5				
33.4		RBj	Roots, Ball, Joint	7 to 5	80			
34.9		CC	Crack Circumferential	3 to 7			J	
36.4		RMJ	Roots, Medium, Joint	10 to 2	20			
37.9		RFJ	Roots, Fine: Joint	8 to 10				
38.0		B	Pipe Broken	5 to 11				
38.5		FM	Fracture Multiple	7 to 5				
39.1		RFB	Roots, Fine: Barrel	2 to 4				
40.4		FM	Fracture Multiple	12 to 12				
40.8	S01	B	Pipe Broken	12 to 12				
43.4		RFB	Roots, Fine: Barrel	10 to 11				
43.9	F01	B	Pipe Broken	12 to 12			J	
46.8		CL	Crack Longitudinal	12				
47.6		RFJ	Roots, Fine: Joint	7 to 5				
48.3		RFJ	Roots, Fine: Joint	7 to 5				
49.4		B	Pipe Broken	7 to 5				
50.0		FL	Fracture Longitudinal	12				
50.8	S02	FM	Fracture Multiple	12 to 12				
52.7	F02	FM	Fracture Multiple	12 to 12				
54.2		RMJ	Roots, Medium, Joint	9 to 3	35			
55.7		RFJ	Roots, Fine: Joint	7 to 5				
57.2		RMJ	Roots, Medium, Joint	8 to 4	30			
58.6		RFJ	Roots, Fine: Joint	7 to 5				
60.2		RFJ	Roots, Fine: Joint	2 to 4				
61.6		RBj	Roots, Ball, Joint	7 to 5	80		J	
63.1		RMJ	Roots, Medium, Joint	8 to 4	50			
64.4		B	Pipe Broken	12 to 12				
64.5		RMJ	Roots, Medium, Joint	7 to 4	50			
66.0		RFJ	Roots, Fine: Joint	7 to 5				
66.1		JOL	Joint Offset (displaced): Large					
67.5		RMJ	Roots, Medium, Joint	9 to 4	20			
69.1		FL	Fracture Longitudinal	8			J	
69.1		RMJ	Roots, Medium, Joint	8 to 4	20		J	
70.5		RFJ	Roots, Fine: Joint	7 to 5				
72.0		RFJ	Roots, Fine: Joint	2 to 5				
73.5		RFJ	Roots, Fine: Joint	7 to 5				
75.0		RBj	Roots, Ball, Joint	8 to 4	80			

Upstream MH 62B	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 04:51	Length Surveyed 78.2
Additional Information					Media Label 122

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
76.5	RFJ	MSA	Roots, Fine: Joint Survey Abandoned	7	to 5			Unable to proceed due tro pipe being full of water.

Upstream MH	Downstream MH	Size	Material	Total Length	City
66	59A	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Centre St N	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-05-2020	09:29	21

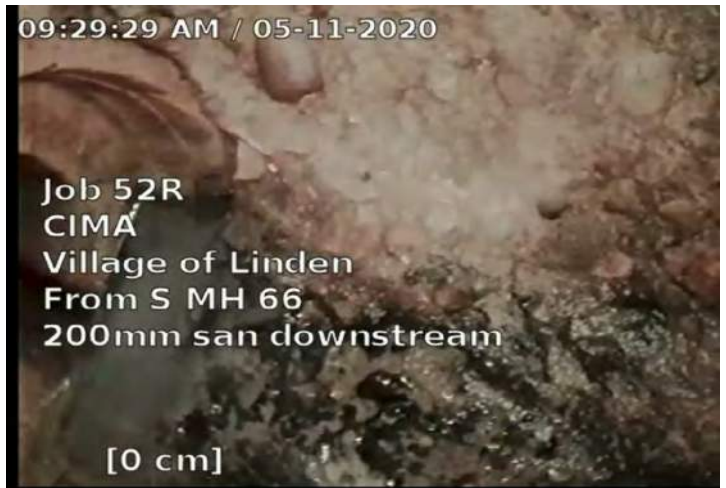
Additional Information	Media Label
	52R

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 66
	0.0		MWL	Water Level		5			
	0.5		CC	Crack Circumferential	4 to 7				
	14.2		TB	Tap, Break-in / Hammer	2				
	18.6		FS	Fracture Spiral	7 to 11			J	
	21.0		TB	Tap, Break-in / Hammer	10				
	21.0		MSA	Survey Abandoned					@ Service. Rest of line seen in Job 52.

Upstream MH 66	Downstream MH 59A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St N	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:29	Length Surveyed 21
Additional Information					Media Label 52R



AMH - Access Point - Manhole @ 0.0 m.
S MH 66



MWL - Water Level @ 0.0 m.



CC - Crack Circumferential @ 0.5 m.



TB - Tap, Break-in / Hammer @ 14.2 m.

Upstream MH 66	Downstream MH 59A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St N	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:29	Length Surveyed 21
Additional Information					Media Label 52R



FS - Fracture Spiral @ 18.6 m.

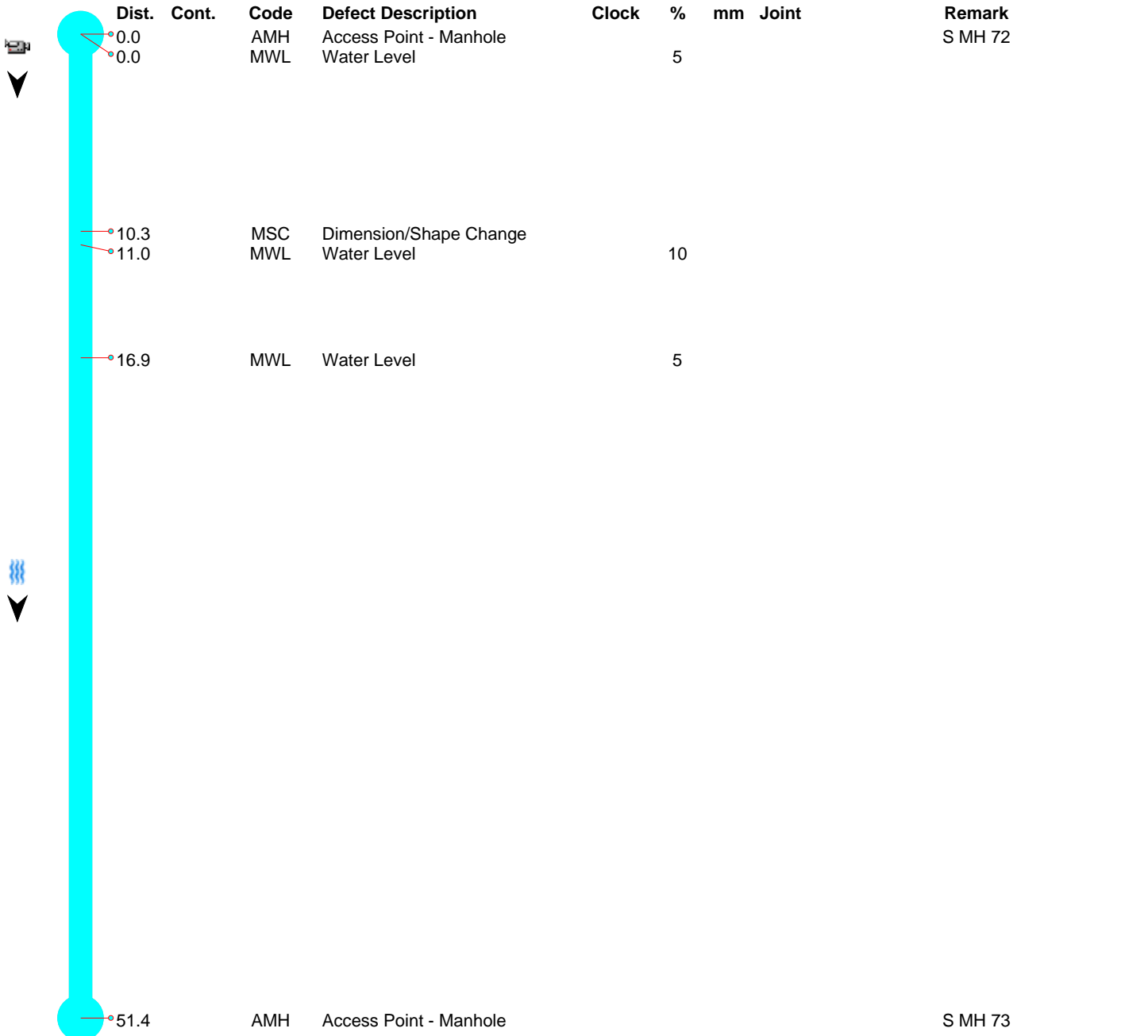


TB - Tap, Break-in / Hammer @ 21.0 m.



MSA - Survey Abandoned @ 21.0 m. @ Service. Rest of line seen in Job 52.

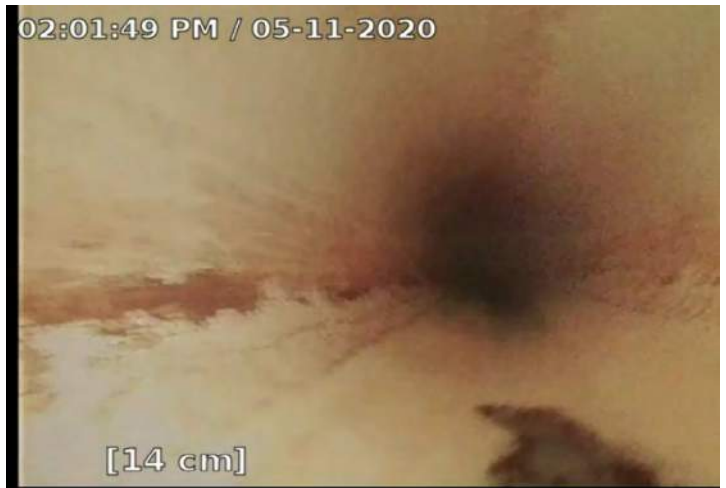
Upstream MH 73	Downstream MH 72	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 02:01	Length Surveyed 51.4
Additional Information					Media Label 62



Upstream MH 73	Downstream MH 72	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 02:01	Length Surveyed 51.4
Additional Information					Media Label 62



AMH - Access Point - Manhole @ 0.0 m.
S MH 72



MWL - Water Level @ 0.0 m.



MSC - Dimension/Shape Change @ 10.3 m.



MWL - Water Level @ 11.0 m.

Upstream MH 73	Downstream MH 72	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 02:01	Length Surveyed 51.4
Additional Information					Media Label 62



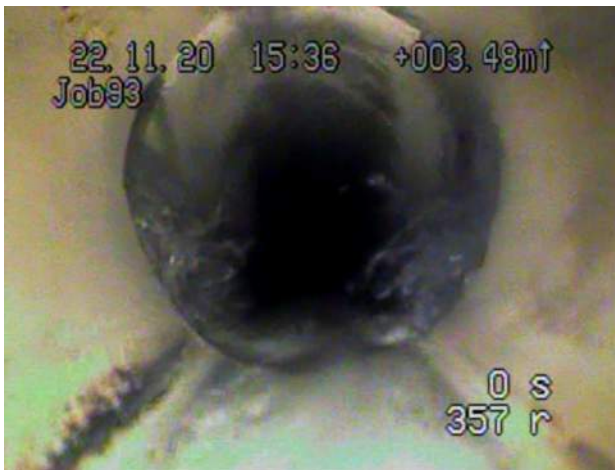
AMH - Access Point - Manhole @ 51.4 m.
 S MH 73

Town of Linden

Job 93

SMH 80 – SMH 33

Snapshots







Upstream MH 80	Downstream MH 33	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address Off 1st St SE	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 03:34	Length Surveyed 87.9
Additional Information					Media Label 93

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 80
0.0		MWL	Water Level		5			
0.5		JSL	Joint Separated (open): Large					
3.3	S01	RFJ	Roots, Fine: Joint	3 to 9			J	Roots at most joints
3.6		JSM	Joint Separated (open): Medium					
12.3		FC	Fracture Circumferential	5 to 10				
18.1		FC	Fracture Circumferential	7 to 10			J	
35.0		FM	Fracture Multiple	4 to 8				
38.5		FM	Fracture Multiple	5 to 8				
44.6		FM	Fracture Multiple	12 to 12				
46.5	S02	B	Pipe Broken	12 to 12				
47.3		D	Pipe Deformed		15			
47.9	F02	B	Pipe Broken	12 to 12				
49.4	S03	B	Pipe Broken	12 to 12				
50.9	F03	B	Pipe Broken	12 to 12				
59.3		JOL	Joint Offset (displaced): Large					
59.6		FH4	Fracture Longitudinal Hinge, 4	12 to 12				
60.8		B	Pipe Broken	7 to 5				
63.7		JOM	Joint Offset (displaced): Medium					
64.3		FM	Fracture Multiple	3 to 10				
65.0		B	Pipe Broken	12 to 12				
69.2		FC	Fracture Circumferential	2 to 6			J	
73.4		FC	Fracture Circumferential	8 to 11			J	
76.0		CC	Crack Circumferential	4 to 8			J	
77.6		FM	Fracture Multiple	12 to 12			J	
79.5		FM	Fracture Multiple	12 to 12				
83.2		RMJ	Roots, Medium, Joint	8 to 4	15			
87.4		LD	Line - Down		45			
87.4		JAL	Joint Angular: Large					
87.5	F01	RFJ	Roots, Fine: Joint	7 to 5			J	
87.9		MSA	Survey Abandoned					Unable to get over joint with crawler.

Town of Linden

Job 92

SMH 80 – SMH 8-A

Snapshots







Upstream MH	Downstream MH	Size	Material	Total Length	City
80A	80	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Off 1st St SE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-21-2020	01:04	

Additional Information

Media Label
92

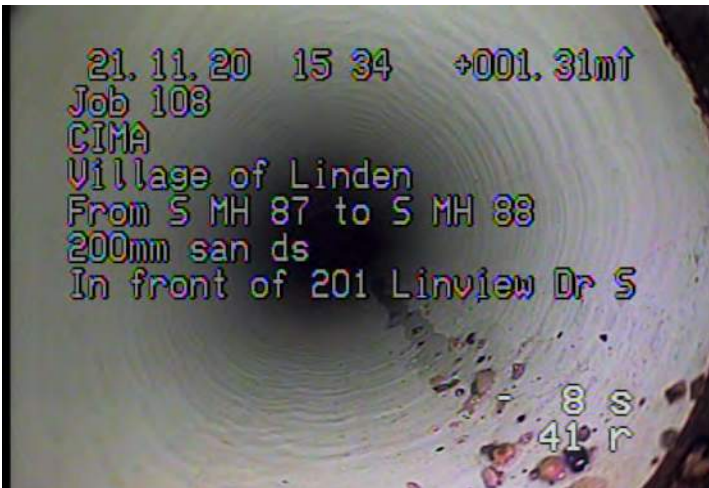
Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 80
0.0		MWL	Water Level		10			
1.0		RFJ	Roots, Fine: Joint	8 to 10			J	
1.0		HVV	Hole in Pipe: Void Visible	1 to 4				
1.3		MWL	Water Level		5			
2.5		MWL	Water Level		10			
3.2		RFJ	Roots, Fine: Joint	7 to 5				
4.3		MWL	Water Level		5			
4.5		RMJ	Roots, Medium, Joint	8 to 5	15			
7.3		HSV	Hole in Pipe: Soil Visible	11 to 1				
7.9		FL	Fracture Longitudinal	1				
9.4		RMJ	Roots, Medium, Joint	2 to 5	10			
10.7		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
13.3		TB	Tap, Break-in / Hammer	1				
13.6		RFJ	Roots, Fine: Joint	7 to 5				
13.7		CM	Crack Multiple	1 to 3			J	
16.6		DAE	Deposits Attached: Encrustation	8 to 5	5		J	
18.0		RFJ	Roots, Fine: Joint	7 to 5				
19.3		RFJ	Roots, Fine: Joint	7 to 5				
20.8		RFJ	Roots, Fine: Joint	7 to 5				
22.3		RFJ	Roots, Fine: Joint	7 to 5				
23.7		RMJ	Roots, Medium, Joint	8 to 4	15			
25.1		RMJ	Roots, Medium, Joint	7 to 5	10			
26.6		RFJ	Roots, Fine: Joint	7 to 5				
28.1		RMJ	Roots, Medium, Joint	7 to 5	15		J	
29.5		RMJ	Roots, Medium, Joint	7 to 5	25		J	
30.9		RFJ	Roots, Fine: Joint	7 to 5				
32.5		RFJ	Roots, Fine: Joint	7 to 5				
33.7		RFJ	Roots, Fine: Joint	7 to 5				
35.2		RFJ	Roots, Fine: Joint	7 to 5				
36.6		RFJ	Roots, Fine: Joint	7 to 5				
38.1		RFJ	Roots, Fine: Joint	7 to 5				
39.5		RFJ	Roots, Fine: Joint	3 to 5				
42.3		RFJ	Roots, Fine: Joint	7 to 5				
43.7		RFJ	Roots, Fine: Joint	7 to 5				
45.2		RFJ	Roots, Fine: Joint	7 to 5				
48.0		RFJ	Roots, Fine: Joint	7 to 5				
69.2		TB	Tap, Break-in / Hammer	12				
77.3		TB	Tap, Break-in / Hammer	12				
83.5		TB	Tap, Break-in / Hammer	1				
84.0		FC	Fracture Circumferential	7 to 11			J	
112.9		TB	Tap, Break-in / Hammer	2				
117.6		TB	Tap, Break-in / Hammer	2			J	
121.2		RFJ	Roots, Fine: Joint	7 to 5				
128.7		AMH	Access Point - Manhole					S MH 80A



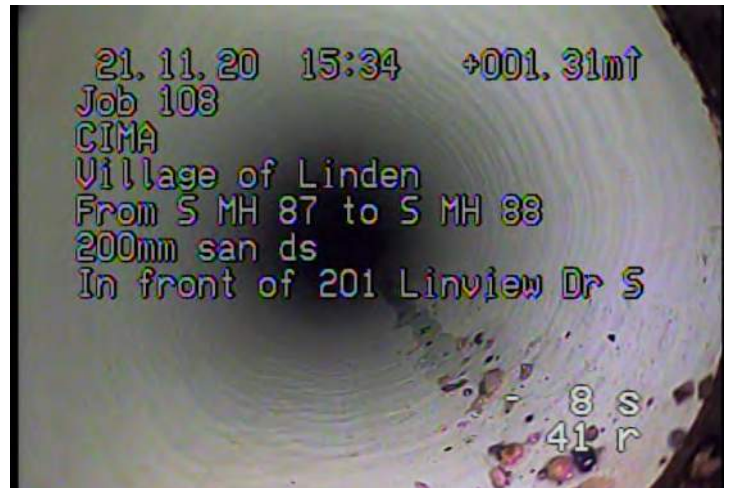
Upstream MH	Downstream MH	Size	Material	Total Length	City
87	88	200	Polyvinyl Chloride	0	Linden
Customer	Work Order #	Location		Sewer Use	
CIMA	14257	Main Highway - Urban		Sanitary	
Surveyor's Name	Certificate Number	Street Address	Location Details		
Dillon Belisle	U-409-8658	In front of 201 Linview Dr S	Village of Linden		
Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-20-2020	03:34	79.9
Additional Information				Media Label	
				108	

Generated on Thursday, 12/17/2020 at 09:08 PM by the PipeTech® TV inspection system.

Upstream MH 87	Downstream MH 88	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Urban	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 201 Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 03:34	Length Surveyed 79.9
Additional Information					Media Label 108



AMH - Access Point - Manhole @ 0.0 m.
S MH 87



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 3.0 m.



TS - Tap, Saddle @ 3.5 m.

Upstream MH 87	Downstream MH 88	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 201 Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 03:34	Length Surveyed 79.9
Additional Information					Media Label 108



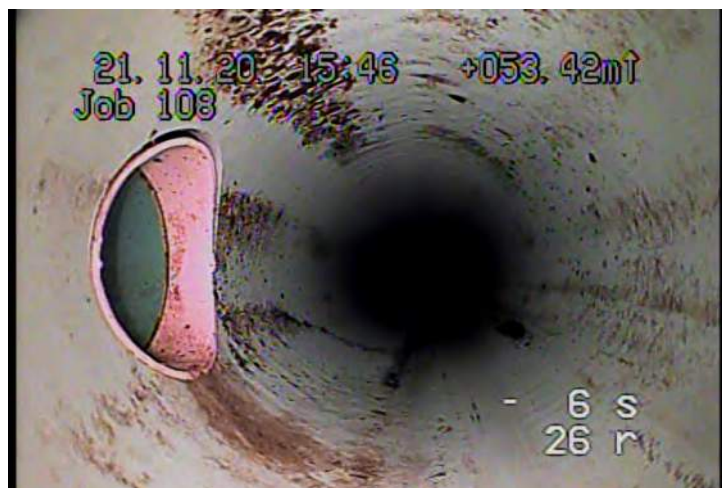
TS - Tap, Saddle @ 20.0 m.



TSD - Tap, Saddle: Defective @ 20.5 m.

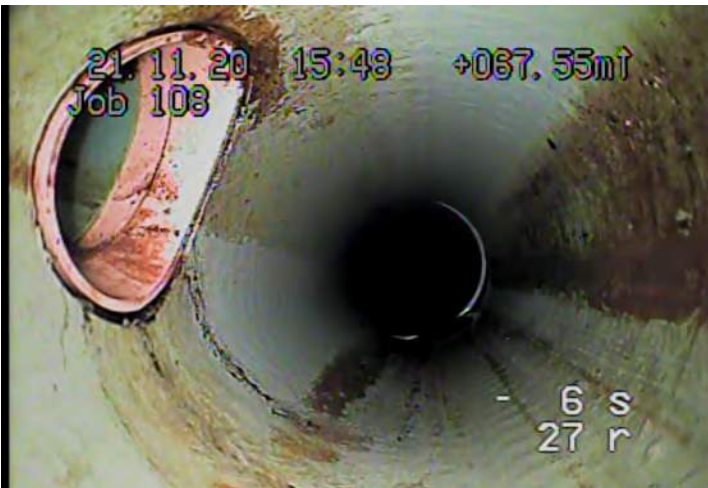


TS - Tap, Saddle @ 36.7 m.



TS - Tap, Saddle @ 53.1 m.

Upstream MH 87	Downstream MH 88	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 201 Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 03:34	Length Surveyed 79.9
Additional Information					Media Label 108



TS - Tap, Saddle @ 67.6 m.




JOM - Joint Offset (displaced): Medium @ 68.4 m.



AMH - Access Point - Manhole @ 79.9 m.
S MH 88

Upstream MH 88	Downstream MH 90	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 211 Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:15	Length Surveyed 62.7
Additional Information					Media Label 109

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 88
	0.0		MWL	Water Level		5			
	3.2		TS	Tap, Saddle	11				
	20.1		TS	Tap, Saddle	11				
	36.1		TS	Tap, Saddle	11				
	51.6		TS	Tap, Saddle	11				
	62.7		AMH	Access Point - Manhole					S MH 90

Upstream MH 88	Downstream MH 90	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 211 Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:15	Length Surveyed 62.7
Additional Information					Media Label 109



AMH - Access Point - Manhole @ 0.0 m.
S MH 88



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 3.2 m.



TS - Tap, Saddle @ 20.1 m.

Upstream MH 88	Downstream MH 90	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Urban	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 211 Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:15	Length Surveyed 62.7
Additional Information					Media Label 109



TS - Tap, Saddle @ 36.1 m.



TS - Tap, Saddle @ 51.6 m.



AMH - Access Point - Manhole @ 62.7 m.
S MH 90

Upstream MH 89	Downstream MH 88	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Dr S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:44	Length Surveyed 15
Additional Information					Media Label 111



Upstream MH 89	Downstream MH 88	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address Linview Dr S	Location Details Village of Linden	
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:44	Length Surveyed 15
Additional Information					Media Label 111



AMH - Access Point - Manhole @ 0.0 m.
S MH 88



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 15.0 m.
S MH 89







Upstream MH	Downstream MH	Size	Material	Total Length	City
90	92A	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Linview Dr S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-20-2020	04:29	33.5

Additional Information	Media Label
	110

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 90
	0.0		MWL	Water Level		5			
									
	6.2		TS	Tap, Saddle	11				
									
	22.1		TS	Tap, Saddle	11				
	33.5		AMH	Access Point - Manhole					S MH 92A

Upstream MH 90	Downstream MH 92A	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address Linview Dr S	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:29	Length Surveyed 33.5
Additional Information					Media Label 110



AMH - Access Point - Manhole @ 0.0 m.
S MH 90



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 6.2 m.



TS - Tap, Saddle @ 22.1 m.

Upstream MH 90	Downstream MH 92A	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:29	Length Surveyed 33.5
Additional Information					Media Label 110



AMH - Access Point - Manhole @ 33.5 m.
S MH 92A

Upstream MH	Downstream MH	Size	Material	Total Length	City
92	95	250	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Linview Rd S & Linview Dr S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-20-2020	04:20	30.9

Additional Information	Media Label
	115

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 92
	0.0		MWL	Water Level		5			
	18.4		TS	Tap, Saddle	11				
	19.0		TS	Tap, Saddle	1				
	30.9		AMH	Access Point - Manhole					S MH 95

Upstream MH 92	Downstream MH 95	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Urban	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Rd S & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:20	Length Surveyed 30.9
Additional Information					Media Label 115



AMH - Access Point - Manhole @ 0.0 m.
S MH 92



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 18.4 m.



TS - Tap, Saddle @ 19.0 m.

Upstream MH 92	Downstream MH 95	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Rd S & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 04:20	Length Surveyed 30.9
Additional Information					Media Label 115

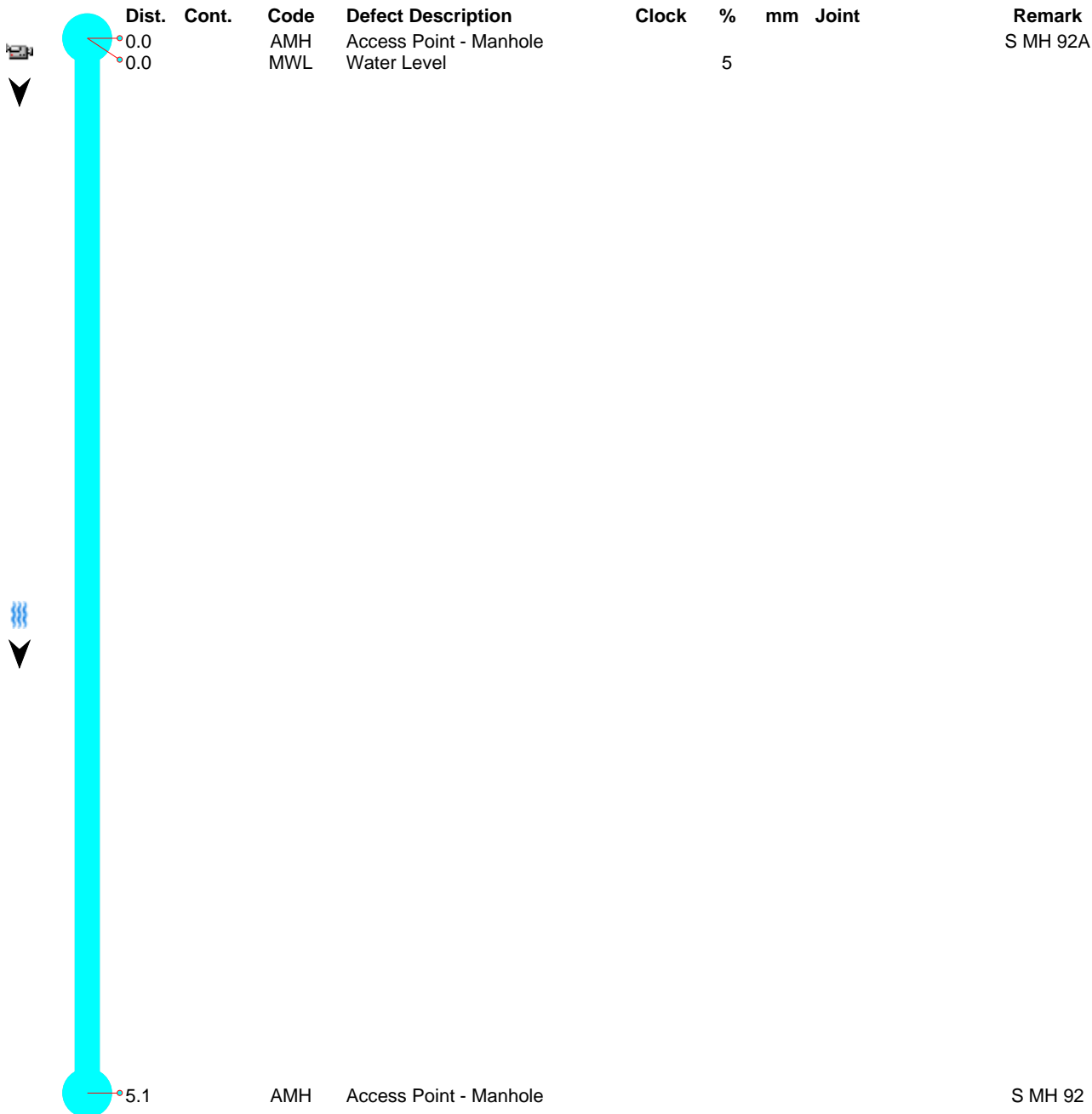


AMH - Access Point - Manhole @ 30.9 m.
 S MH 95

Upstream MH 92A	Downstream MH 92	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Rd S & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 05:28	Length Surveyed 5.1
Additional Information					Media Label 114



Upstream MH 92A	Downstream MH 92	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Rd S & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 05:28	Length Surveyed 5.1
Additional Information					Media Label 114



Upstream MH 92A	Downstream MH 92	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Rd S & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 05:28	Length Surveyed 5.1
Additional Information					Media Label 114



AMH - Access Point - Manhole @ 0.0 m.
S MH 92A

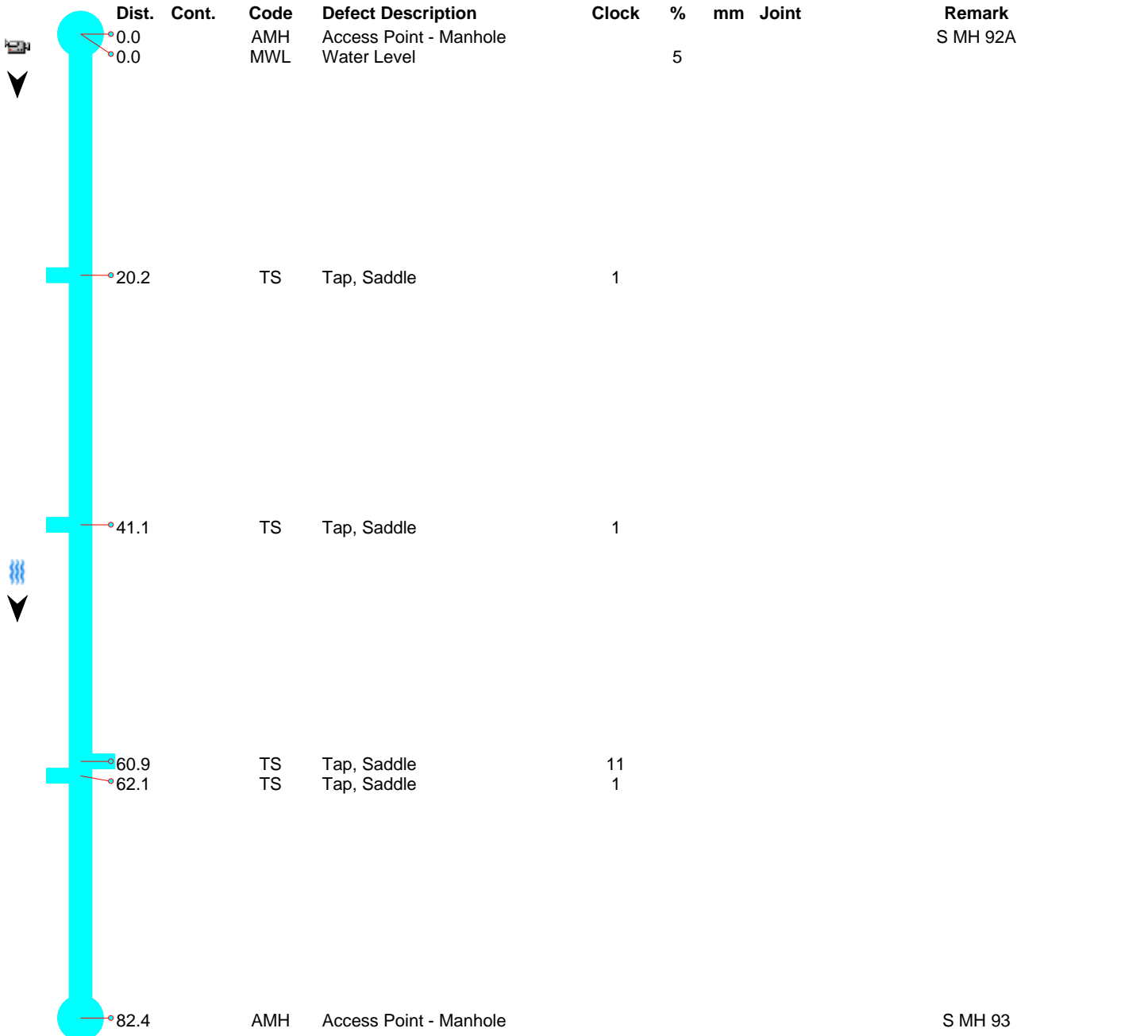


MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 5.1 m.
S MH 92

Upstream MH 93	Downstream MH 92A	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 228 Linview Dr S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 05:09	Length Surveyed 82.4
Additional Information					Media Label 112



Upstream MH 93	Downstream MH 92A	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 228 Linview Dr S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 05:09	Length Surveyed 82.4
Additional Information					Media Label 112



AMH - Access Point - Manhole @ 0.0 m.
S MH 92A



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 20.2 m.



TS - Tap, Saddle @ 41.1 m.

Upstream MH 93	Downstream MH 92A	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 228 Linview Dr S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 05:09	Length Surveyed 82.4
Additional Information					Media Label 112



TS - Tap, Saddle @ 60.9 m.



TS - Tap, Saddle @ 62.1 m.



AMH - Access Point - Manhole @ 82.4 m.
S MH 93

Upstream MH	Downstream MH	Size	Material	Total Length	City
93A	93	250	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 503 Linview Rd S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-21-2020	09:48	82.2

Additional Information	Media Label
	113

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 93
0.0		MWL	Water Level		5			
20.5		TS	Tap, Saddle	1				
20.7		TS	Tap, Saddle	11				
40.6		TS	Tap, Saddle	1				
41.1		TS	Tap, Saddle	11				
61.1		TS	Tap, Saddle	11				
61.6		TS	Tap, Saddle	1				
64.4		MWL	Water Level		0			
82.2		AMH	Access Point - Manhole					S MH 93A

SEWER CONDITION INSPECTION REPORT






4650 - 50th Avenue SE
Calgary, Alberta T2B 3R4
Phone: (403) 243-0276
Fax: (403) 243-3371
Email: thuro@thuro.ca

Surveyors name Dillon Belisle	Certificate Number U-409-8658	System Owner 	Survey Customer CIMA	Drainage Area 	Sheet 1
P/O No. 	Pipeline Segment Reference S MH 93 - S MH 93A	Date 11-21-2020	Time 09:48	Location (Street Name and number) In front of 503 Linview Rd S	Locality Linden
Further Location details Village of Linden		Upstream Manhole Number 93A	Rim to Invert 3	Grade to Invert 	Rim to Grade
Downstream Manhole Number 93	Rim to Invert 2.9	Grade to Invert 	Rim to Grade 	Use of Sewer Sanitary	Direction Upstream
Flow Control 	Height 250				
Width 250	Shape Circular	Material PVC	Ln. Method 	Pipe Joint Length 	Total Length 0
Length Surveyed 82.2	Year Laid 	Year Rehabilitated 	Tape / Media Number 113		
Purpose D	Sewer Category 	Pre-Cleaning Jetting	Cleaned 	Weather Dry	Additional Information

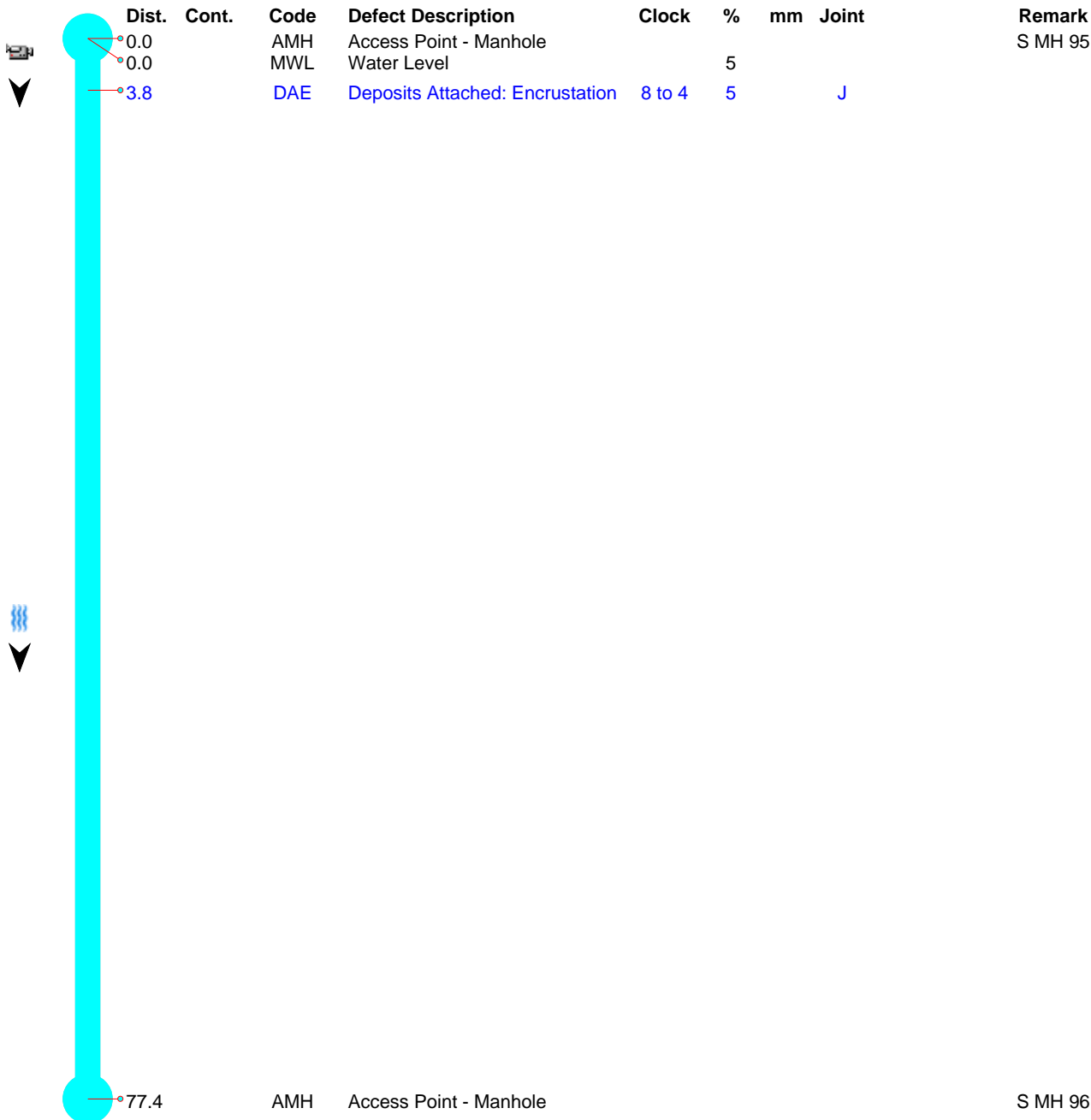
Distance (Meters)	Code		Continuous defect	Value				Joint	Circumferential Location		Image Ref.	Struct. Grade	O&M Grade	Remarks
	Group/ Descriptor	Modifier/ severity		S/M/L	Inches		%		At / From	To				
					1st	2nd								
0.0	AMH													S MH 93
0.0	MWL						5							
20.5	TS				100				1					
20.7	TS				100				11					
40.6	TS				100				1					
41.1	TS				100				11					
61.1	TS				100				11					
61.6	TS				100				1					
64.4	MWL						0							
82.2	AMH													S MH 93A

Segment	Structural									O & M									Overall								
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index		Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index		Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index	
14257-113-CIMA- S MH 93 - S MH 93A	0	0	0	0	0	0	0000			0	0	0	0	0	0	0000			0	0	0	0	0	0	0000		

Upstream MH 93A	Downstream MH 93	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 503 Linview Rd S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 09:48	Length Surveyed 82.2
Additional Information					Media Label 113

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 93
	0.0		MWL	Water Level		5			
	20.5		TS	Tap, Saddle	1				
	20.7		TS	Tap, Saddle	11				
	40.6		TS	Tap, Saddle	1				
	41.1		TS	Tap, Saddle	11				
	61.1		TS	Tap, Saddle	11				
	61.6		TS	Tap, Saddle	1				
	64.4		MWL	Water Level		0			
	82.2		AMH	Access Point - Manhole					S MH 93A

Upstream MH 95	Downstream MH 96	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 222 Linview Rd S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 10:28	Length Surveyed 77.4
Additional Information					Media Label 116



Upstream MH 95	Downstream MH 96	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 222 Linview Rd S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 10:28	Length Surveyed 77.4
Additional Information					Media Label 116



AMH - Access Point - Manhole @ 0.0 m.
S MH 95



MWL - Water Level @ 0.0 m.



DAE - Deposits Attached: Encrustation @
3.8 m.



AMH - Access Point - Manhole @ 77.4 m.
S MH 96

Upstream MH 98	Downstream MH 85	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & 4th Ave SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 02:59	Length Surveyed 42.3
Additional Information					Media Label 121

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 85
0.0		MWL	Water Level		5			
13.3		RMJ	Roots, Medium, Joint	7 to 11	25			
16.1		RFJ	Roots, Fine: Joint	7 to 11				
18.7		RFJ	Roots, Fine: Joint	7 to 5			J	
20.9		RFJ	Roots, Fine: Joint	7 to 5				
22.3		RFJ	Roots, Fine: Joint	7 to 5				
25.9		RMJ	Roots, Medium, Joint	7 to 5	20			
27.5		RMJ	Roots, Medium, Joint	7 to 5	20		J	
30.8		RFJ	Roots, Fine: Joint	7 to 5				
42.3		MSA	Survey Abandoned					Unable to push further.

Upstream MH 98	Downstream MH 85	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & 4th Ave SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 02:59	Length Surveyed 42.3
Additional Information					Media Label 121



AMH - Access Point - Manhole @ 0.0 m.
S MH 85



MWL - Water Level @ 0.0 m.



RMJ - Roots, Medium, Joint @ 13.3 m.



RFJ - Roots, Fine: Joint @ 16.1 m.

Upstream MH 98	Downstream MH 85	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & 4th Ave SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 02:59	Length Surveyed 42.3
Additional Information					Media Label 121



RFJ - Roots, Fine: Joint @ 18.7 m.



RFJ - Roots, Fine: Joint @ 20.9 m.



RFJ - Roots, Fine: Joint @ 22.3 m.



RMJ - Roots, Medium, Joint @ 25.9 m.

Upstream MH 98	Downstream MH 85	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & 4th Ave SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-20-2020	Time 02:59	Length Surveyed 42.3
Additional Information					Media Label 121



RMJ - Roots, Medium, Joint @ 27.5 m.



RFJ - Roots, Fine: Joint @ 30.8 m.

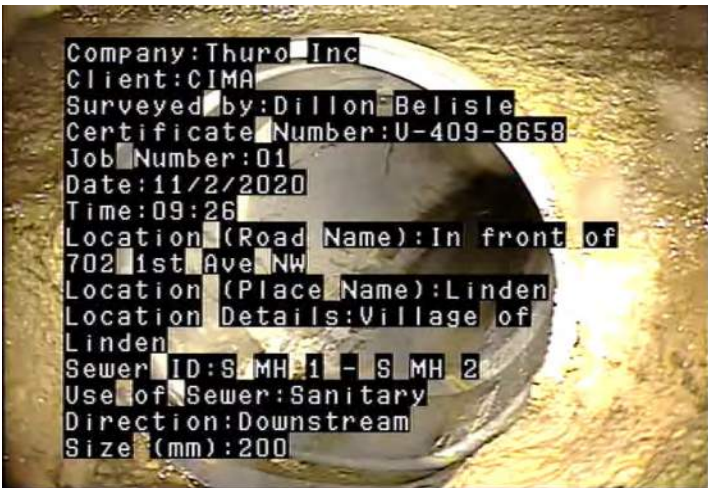


MSA - Survey Abandoned @ 42.3 m.
Unable to push further.

Upstream MH 1	Downstream MH 2	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 702 1st Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:26	Length Surveyed 87.6
Additional Information					Media Label 01

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 1
0.0		MWL	Water Level		5			
13.1		TSA	Tap, Saddle: Active	3				
14.0		MWL	Water Level		10			
16.5		MWL	Water Level		5			
21.6		MWL	Water Level		10			
24.3		D	Pipe Deformed		5			Pipe oval (visible at joint)
28.3		D	Pipe Deformed		5			Pipe oval (visible at joint)
35.6		MWL	Water Level		5			
37.2		MWL	Water Level		10			
41.2		TSA	Tap, Saddle: Active	10				
47.4		MWL	Water Level		5			
60.7		D	Pipe Deformed		10			
62.0		D	Pipe Deformed		10			
66.9		D	Pipe Deformed		10			
69.4		D	Pipe Deformed		10			
75.1		D	Pipe Deformed		10			
77.0		D	Pipe Deformed		10			
77.8		TS	Tap, Saddle	10				
82.7		D	Pipe Deformed		5			
87.6		AMH	Access Point - Manhole					S MH 2

Upstream MH 1	Downstream MH 2	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 702 1st Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:26	Length Surveyed 87.6
Additional Information					Media Label 01



AMH - Access Point - Manhole @ 0.0 m.
S MH 1



MWL - Water Level @ 0.0 m.



TSA - Tap, Saddle: Active @ 13.1 m.



MWL - Water Level @ 14.0 m.

Upstream MH 1	Downstream MH 2	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 702 1st Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:26	Length Surveyed 87.6
Additional Information					Media Label 01



MWL - Water Level @ 16.5 m.



MWL - Water Level @ 21.6 m.



D - Pipe Deformed @ 24.3 m. Pipe oval (visible at joint)



D - Pipe Deformed @ 28.3 m. Pipe oval (visible at joint)

Upstream MH 1	Downstream MH 2	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 702 1st Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:26	Length Surveyed 87.6
Additional Information					Media Label 01



MWL - Water Level @ 35.6 m.



MWL - Water Level @ 37.2 m.



TSA - Tap, Saddle: Active @ 41.2 m.



MWL - Water Level @ 47.4 m.

Upstream MH 1	Downstream MH 2	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 702 1st Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:26	Length Surveyed 87.6
Additional Information					Media Label 01



D - Pipe Deformed @ 60.7 m.



D - Pipe Deformed @ 62.0 m.



D - Pipe Deformed @ 66.9 m.



D - Pipe Deformed @ 69.4 m.

Upstream MH 1	Downstream MH 2	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 702 1st Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:26	Length Surveyed 87.6
Additional Information					Media Label 01



D - Pipe Deformed @ 75.1 m.



D - Pipe Deformed @ 77.0 m.



TS - Tap, Saddle @ 77.8 m.



D - Pipe Deformed @ 82.7 m.

Upstream MH 1	Downstream MH 2	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 702 1st Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:26	Length Surveyed 87.6
Additional Information					Media Label 01



AMH - Access Point - Manhole @ 87.6 m.
 S MH 2

Upstream MH	Downstream MH	Size	Material	Total Length	City
2	4	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

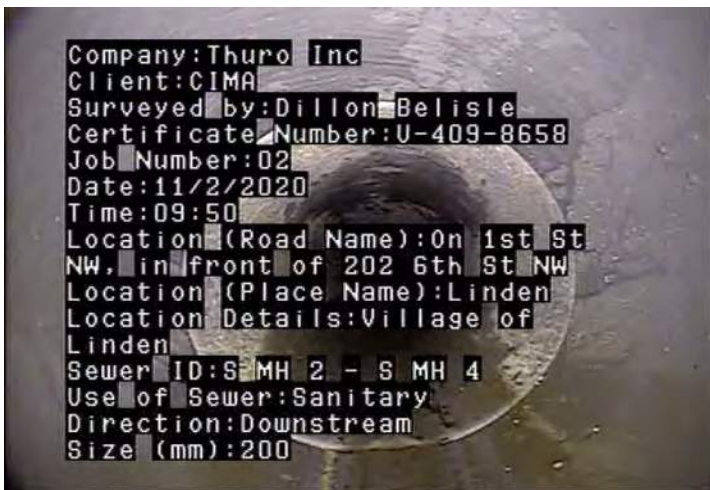
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	On 1st St NW, in front of 202 6th St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-02-2020	09:50	80

Additional Information	Media Label
	02

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 2
0.0		MWL	Water Level		0			
10.2		D	Pipe Deformed		5			Pipe ovalled (possible offset joint)
11.3		MWLS	Water Level: Sag		10			
12.8		D	Pipe Deformed		10			
13.2		MWL	Water Level		5			
18.7		D	Pipe Deformed		10			
32.9		MMC	Material Change					Grey PVC to Blue PVC
36.2		D	Pipe Deformed		5			Blue PVC to Grey PVC
37.0		MMC	Material Change					
42.9		D	Pipe Deformed		10			
80.0		AMH	Access Point - Manhole					S MH 4

Upstream MH 2	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address On 1st St NW, in front of 202 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:50	Length Surveyed 80
Additional Information					Media Label 02



AMH - Access Point - Manhole @ 0.0 m.
S MH 2



MWL - Water Level @ 0.0 m.



D - Pipe Deformed @ 10.2 m.



MWLS - Water Level: Sag @ 11.3 m.

Upstream MH 2	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address On 1st St NW, in front of 202 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:50	Length Surveyed 80
Additional Information					Media Label 02



D - Pipe Deformed @ 12.8 m. Pipe ovalled (possible offset joint)



MWL - Water Level @ 13.2 m.



D - Pipe Deformed @ 18.7 m.



MMC - Material Change @ 32.9 m. Grey PVC to Blue PVC

Upstream MH 2	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address On 1st St NW, in front of 202 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 09:50	Length Surveyed 80
Additional Information					Media Label 02



D - Pipe Deformed @ 36.2 m.



MMC - Material Change @ 37.0 m. Blue PVC to Grey PVC



D - Pipe Deformed @ 42.9 m.

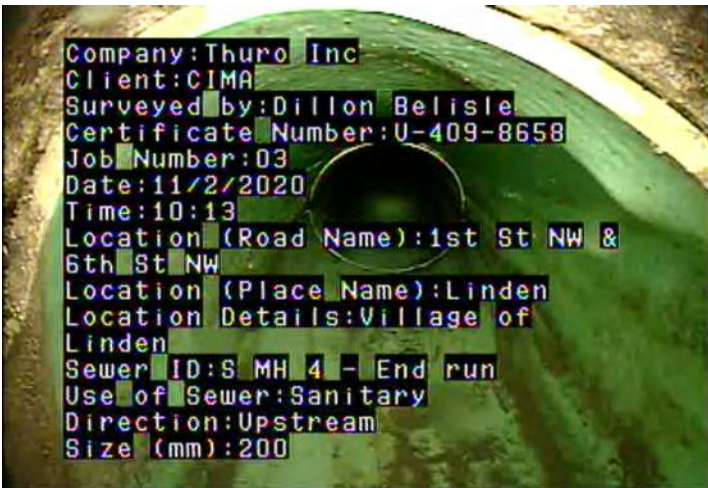


AMH - Access Point - Manhole @ 80.0 m.
S MH 4

Upstream MH 3	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden	
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 10:13	Length Surveyed 179.2
Additional Information					Media Label 03

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 4
0.5	S04	MWLS	Water Level: Sag		50			
6.6		MMC	Material Change					Blue PVC to Grey PVC
6.8		TS	Tap, Saddle	3				
8.2		MMC	Material Change					Grey PVC to Blue PVC
11.7	F04	MWLS	Water Level: Sag		10			
52.3		TSA	Tap, Saddle: Active	10				
59.4		MWL	Water Level		0			
68.0		MWL	Water Level		5			
72.8		MWL	Water Level		0			
88.3		TSD	Tap, Saddle: Defective	2				Broken gasket intruding at bottom of service.
123.7	S01	DSF	Deposits Settled: Fine	5 to 7	10			
126.5	F01	DSF	Deposits Settled: Fine	5 to 7	10			
143.8	S02	DSF	Deposits Settled: Fine	5 to 7	10			
147.5		MWL	Water Level		10			
147.5		TS	Tap, Saddle	2				
147.5	F02	DSF	Deposits Settled: Fine	5 to 7	10			
148.0	S03	DSF	Deposits Settled: Fine	5 to 7	20			
150.6	F03	DSF	Deposits Settled: Fine	4 to 7	10			
152.1		MWL	Water Level		0			
172.1		MWL	Water Level		10			
174.1		MWL	Water Level		0			
179.2		AMH	Access Point - Manhole					S MH 3 - Buried

Upstream MH 3	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 10:13	Length Surveyed 179.2
Additional Information					Media Label 03



AMH - Access Point - Manhole @ 0.0 m.
S MH 4



MWLS - Water Level: Sag @ 0.5 m.



MMC - Material Change @ 6.6 m. Blue PVC to Grey PVC



TS - Tap, Saddle @ 6.8 m.

Upstream MH 3	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 10:13	Length Surveyed 179.2
Additional Information					Media Label 03



MMC - Material Change @ 8.2 m. Grey PVC to Blue PVC



MWLS - Water Level: Sag @ 11.7 m.



TSA - Tap, Saddle: Active @ 52.3 m.



MWL - Water Level @ 59.4 m.

Upstream MH 3	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 10:13	Length Surveyed 179.2
Additional Information					Media Label 03



MWL - Water Level @ 68.0 m.



MWL - Water Level @ 72.8 m.



TSD - Tap, Saddle: Defective @ 88.3 m.
Broken gasket intruding at bottom of service.



DSF - Deposits Settled: Fine @ 123.7 m.

Upstream MH 3	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 10:13	Length Surveyed 179.2
Additional Information					Media Label 03



DSF - Deposits Settled: Fine @ 126.5 m.



DSF - Deposits Settled: Fine @ 143.8 m.



MWL - Water Level @ 147.5 m.



TS - Tap, Saddle @ 147.5 m.

Upstream MH 3	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 10:13	Length Surveyed 179.2
Additional Information					Media Label 03



DSF - Deposits Settled: Fine @ 147.5 m.



DSF - Deposits Settled: Fine @ 148.0 m.



DSF - Deposits Settled: Fine @ 150.6 m.



MWL - Water Level @ 152.1 m.

Upstream MH 3	Downstream MH 4	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 10:13	Length Surveyed 179.2
Additional Information					Media Label 03



MWL - Water Level @ 172.1 m.



MWL - Water Level @ 174.1 m.

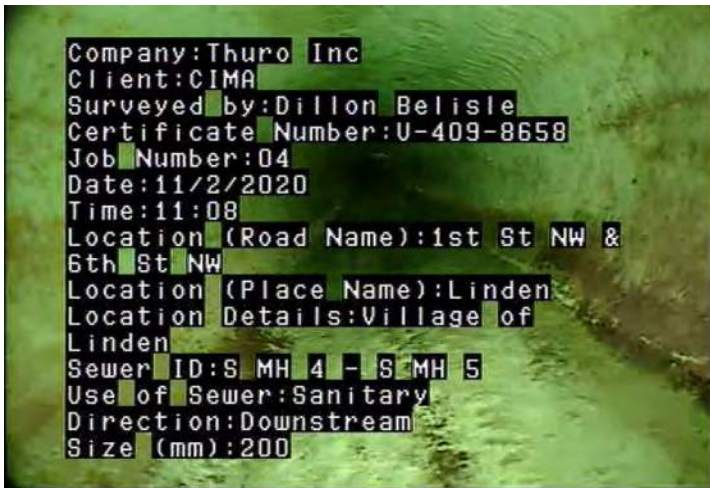


AMH - Access Point - Manhole @ 179.2 m.
S MH 3 - Buried

Upstream MH 4	Downstream MH 5	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:08	Length Surveyed 108.2
Additional Information					Media Label 04

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 4
0.0		MWL	Water Level		10			
24.3		MWL	Water Level		20			
25.3		TS	Tap, Saddle	9				
30.0	S01	MWLS	Water Level: Sag		40			
30.5		TS	Tap, Saddle	3				
34.4		TS	Tap, Saddle	12				
38.1	F01	MWLS	Water Level: Sag		20			
46.9	S02	MWLS	Water Level: Sag		50			
53.0	F02	MWLS	Water Level: Sag		10			
56.4		TS	Tap, Saddle	9				
59.5		TS	Tap, Saddle	9				
63.9	S03	MWLS	Water Level: Sag		50			
77.5	F03	MWLS	Water Level: Sag		20			
86.2		MWL	Water Level		10			
92.7		TSD	Tap, Saddle: Defective	10				Gasket at bottom of service holding back debris.
94.5		TS	Tap, Saddle	2				
98.7		MWL	Water Level		25			
103.7	S04	MWLS	Water Level: Sag		50			
107.4	F04	MWLS	Water Level: Sag		20			
108.2		AMH	Access Point - Manhole					S MH 5

Upstream MH 4	Downstream MH 5	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:08	Length Surveyed 108.2
Additional Information					Media Label 04



AMH - Access Point - Manhole @ 0.0 m.
S MH 4



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 24.3 m.



TS - Tap, Saddle @ 25.3 m.

Upstream MH 4	Downstream MH 5	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:08	Length Surveyed 108.2
Additional Information					Media Label 04



MWLS - Water Level: Sag @ 30.0 m.



TS - Tap, Saddle @ 30.5 m.



TS - Tap, Saddle @ 34.4 m.



MWLS - Water Level: Sag @ 38.1 m.

Upstream MH 4	Downstream MH 5	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:08	Length Surveyed 108.2
Additional Information					Media Label 04



MWLS - Water Level: Sag @ 46.9 m.



MWLS - Water Level: Sag @ 53.0 m.



TS - Tap, Saddle @ 56.4 m.



TS - Tap, Saddle @ 59.5 m.

Upstream MH 4	Downstream MH 5	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:08	Length Surveyed 108.2
Additional Information					Media Label 04



MWLS - Water Level: Sag @ 63.9 m.



MWLS - Water Level: Sag @ 77.5 m.



MWL - Water Level @ 86.2 m.



TSD - Tap, Saddle: Defective @ 92.7 m.
Gasket at bottom of service holding back debris.

Upstream MH 4	Downstream MH 5	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:08	Length Surveyed 108.2
Additional Information					Media Label 04



TS - Tap, Saddle @ 94.5 m.



MWL - Water Level @ 98.7 m.



MWLS - Water Level: Sag @ 103.7 m.



MWLS - Water Level: Sag @ 107.4 m.

Upstream MH 4	Downstream MH 5	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:08	Length Surveyed 108.2
Additional Information					Media Label 04



AMH - Access Point - Manhole @ 108.2 m.
 S MH 5

Upstream MH	Downstream MH	Size	Material	Total Length	City
5	10	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

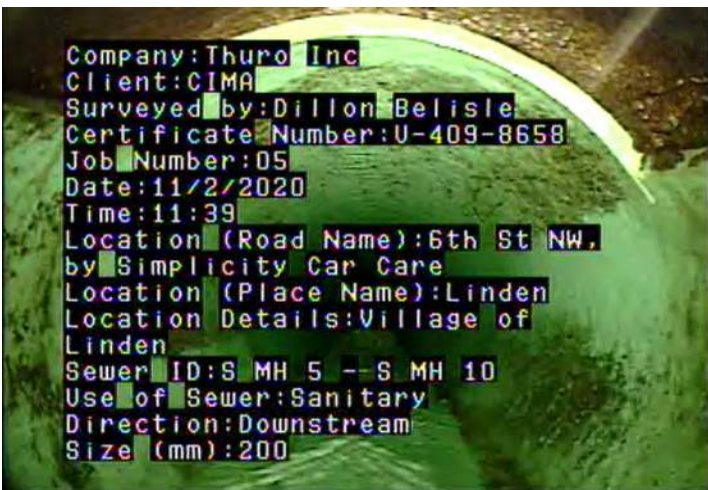
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	6th St NW, by Simplicity Car Care	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-02-2020	11:39	91.4

Additional Information	Media Label
	05

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 5
	0.0		MWL	Water Level		10			
	6.7		MWL	Water Level		15			
	17.8	S01	MWLS	Water Level: Sag		55			
	30.4	F01	MWLS	Water Level: Sag		10			
	67.9		TS	Tap, Saddle		9			
	91.4		AMH	Access Point - Manhole					S MH 10

Upstream MH 5	Downstream MH 10	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW, by Simplicity Car Care	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:39	Length Surveyed 91.4
Additional Information					Media Label 05



AMH - Access Point - Manhole @ 0.0 m.
S MH 5



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 6.7 m.



MWLS - Water Level: Sag @ 17.8 m.

Upstream MH 5	Downstream MH 10	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW, by Simplicity Car Care	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 11:39	Length Surveyed 91.4
Additional Information					Media Label 05



MWLS - Water Level: Sag @ 30.4 m.




TS - Tap, Saddle @ 67.9 m.



AMH - Access Point - Manhole @ 91.4 m.
S MH 10

Upstream MH 10	Downstream MH 9	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 14:16	Length Surveyed 14.8
Additional Information					Media Label 06

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 9
	0.0		MWL	Water Level		5			
	11.6	S01	MWLS	Water Level: Sag		15			
	13.9	F01	MWLS	Water Level: Sag		5			
	14.4		MMC	Material Change					PVC to Clay tile
	14.4		JOL	Joint Offset (displaced): Large					
	14.4		FM	Fracture Multiple	7 to 5				

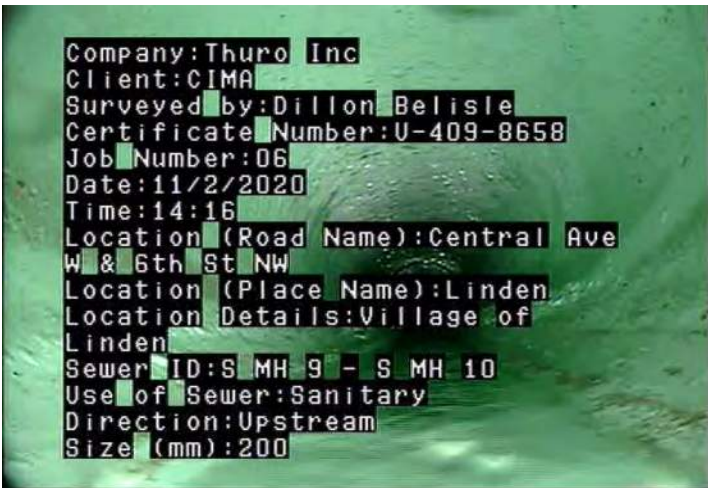
Rest of line observed with camera zoom to S MH 10. First length of clay tile line full of fractures. Second length fine. Joint going into S MH 10 is offset large.



Upstream MH	Downstream MH	Size	Material	Total Length	City
10	9	200	Polyvinyl Chloride	0	Linden
Customer	Work Order #		Location	Sewer Use	
CIMA	14257		Main Highway - Suburban/Rural	Sanitary	
Surveyor's Name	Certificate Number	Street Address	Location Details		
Dillon Belisle	U-409-8658	Central Ave W & 6th St NW	Village of Linden		
Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-02-2020	14:16	14.8
Additional Information				Media Label	
				06	

Generated on Thursday, 12/17/2020 at 10:58 PM by the PipeTech® TV inspection system.

Upstream MH 10	Downstream MH 9	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 14:16	Length Surveyed 14.8
Additional Information					Media Label 06



AMH - Access Point - Manhole @ 0.0 m.
S MH 9

MWL - Water Level @ 0.0 m.



MWLS - Water Level: Sag @ 11.6 m.

MWLS - Water Level: Sag @ 13.9 m.

Upstream MH 10	Downstream MH 9	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 6th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 14:16	Length Surveyed 14.8
Additional Information					Media Label 06



MMC - Material Change @ 14.4 m. PVC to Clay tile



JOL - Joint Offset (displaced): Large @ 14.4 m.



FM - Fracture Multiple @ 14.4 m. Rest of line observed with camera zoom to S MH 10. First length of clay tile line full of fractures. Second length fine. Joint going into S MH 10 is offset large.

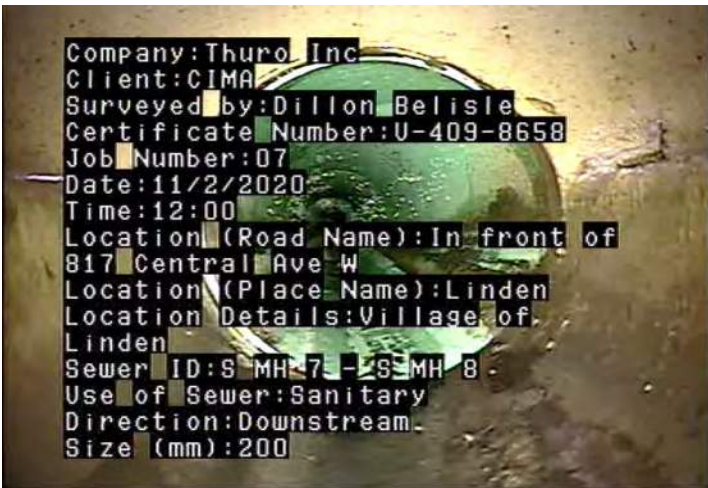


MSA - Survey Abandoned @ 14.8 m. Unable to go over joint with crawler.

Upstream MH 7	Downstream MH 8	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 817 Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 12:00	Length Surveyed 113.1
Additional Information					Media Label 07

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 7
0.0		MWL	Water Level		0			
26.9		MWL	Water Level		5			
28.2		MWL	Water Level		0			
30.8		MWL	Water Level		5			
32.5		MWL	Water Level		0			
38.8		TS	Tap, Saddle	3				
98.0		TS	Tap, Saddle	3				
107.8		MWL	Water Level		5			
111.7		DSGV	Deposits Settled: Gravel	5 to 7	10			
113.1		AMH	Access Point - Manhole					S MH 8

Upstream MH 7	Downstream MH 8	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 817 Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 12:00	Length Surveyed 113.1
Additional Information					Media Label 07



AMH - Access Point - Manhole @ 0.0 m.
S MH 7



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 26.9 m.



MWL - Water Level @ 28.2 m.

Upstream MH 7	Downstream MH 8	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 817 Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 12:00	Length Surveyed 113.1
Additional Information					Media Label 07



MWL - Water Level @ 30.8 m.



MWL - Water Level @ 32.5 m.



TS - Tap, Saddle @ 38.8 m.



TS - Tap, Saddle @ 98.0 m.

Upstream MH 7	Downstream MH 8	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 817 Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 12:00	Length Surveyed 113.1
Additional Information					Media Label 07



MWL - Water Level @ 107.8 m.



DSGV - Deposits Settled: Gravel @ 111.7 m.

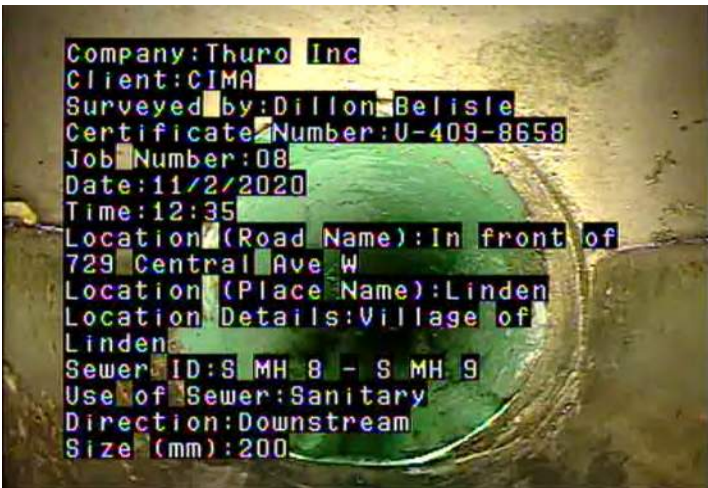


AMH - Access Point - Manhole @ 113.1 m.
S MH 8

Upstream MH 8	Downstream MH 9	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 729 Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 12:35	Length Surveyed 113.9
Additional Information					Media Label 08

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 8
0.0		MWL	Water Level		5			
2.3		TSA	Tap, Saddle: Active	3				
24.5		TS	Tap, Saddle	3				
59.0		TS	Tap, Saddle	2				
101.1		TS	Tap, Saddle	3				
111.7		MWL	Water Level		10			
113.9		AMH	Access Point - Manhole					S MH 9

Upstream MH 8	Downstream MH 9	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 729 Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 12:35	Length Surveyed 113.9
Additional Information					Media Label 08



AMH - Access Point - Manhole @ 0.0 m.
S MH 8



MWL - Water Level @ 0.0 m.



TSA - Tap, Saddle: Active @ 2.3 m.



TS - Tap, Saddle @ 24.5 m.

Upstream MH 8	Downstream MH 9	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 729 Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 12:35	Length Surveyed 113.9
Additional Information					Media Label 08



TS - Tap, Saddle @ 59.0 m.



TS - Tap, Saddle @ 101.1 m.



MWL - Water Level @ 111.7 m.



AMH - Access Point - Manhole @ 113.9 m.
S MH 9

Upstream MH	Downstream MH	Size	Material	Total Length	City
9	11	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

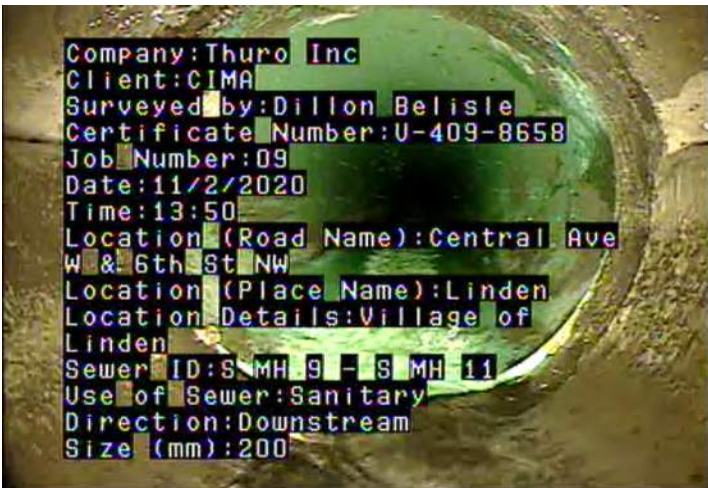
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave W & 6th St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-02-2020	13:50	82.6

Additional Information	Media Label
	09

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 9
0.0		MWL	Water Level		5			
78.1		TS	Tap, Saddle		1			
82.6		AMH	Access Point - Manhole					S MH 11

Upstream MH 9	Downstream MH 11	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 13:50	Length Surveyed 82.6
Additional Information					Media Label 09



AMH - Access Point - Manhole @ 0.0 m.
S MH 9



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 78.1 m.



AMH - Access Point - Manhole @ 82.6 m.
S MH 11

Upstream MH	Downstream MH	Size	Material	Total Length	City
12	11	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Courtney Way	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-02-2020	15:41	79

Additional Information	Media Label
	10

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 12
0.0		MWL	Water Level		0			
71.1		MWL	Water Level		10			
79.0		AMH	Access Point - Manhole					S MH 11

Upstream MH 12	Downstream MH 11	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 15:41	Length Surveyed 79
Additional Information					Media Label 10



AMH - Access Point - Manhole @ 0.0 m.
S MH 12



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 71.1 m.



AMH - Access Point - Manhole @ 79.0 m.
S MH 11

Upstream MH 13	Downstream MH 12	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 14:48	Length Surveyed 66.2
Additional Information					Media Label 11

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 13
0.0		MWL	Water Level		5			
10.9		TF	Tap, Factory Made	9				
62.5		MWL	Water Level		10			
65.2		DSGV	Deposits Settled: Gravel	5 to 7	10			
66.2		AMH	Access Point - Manhole					S MH 12

Upstream MH 13	Downstream MH 12	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 14:48	Length Surveyed 66.2
Additional Information					Media Label 11



AMH - Access Point - Manhole @ 0.0 m.
S MH 13



MWL - Water Level @ 0.0 m.



TF - Tap, Factory Made @ 10.9 m.



MWL - Water Level @ 62.5 m.

Upstream MH 13	Downstream MH 12	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 14:48	Length Surveyed 66.2
Additional Information					Media Label 11



DSGV - Deposits Settled: Gravel @ 65.2 m.

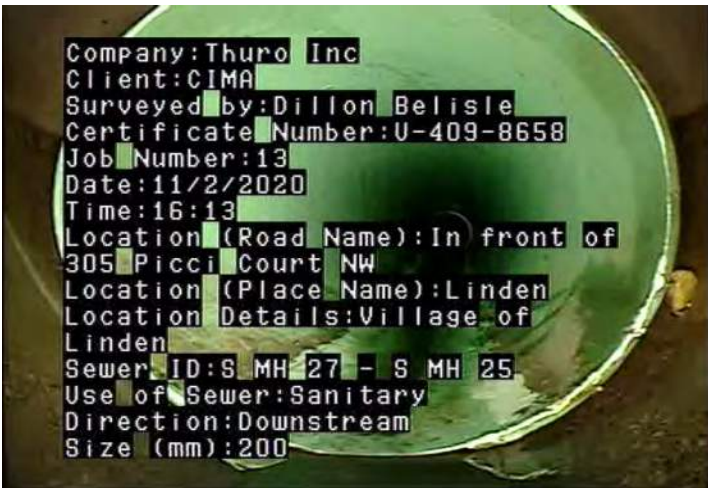


AMH - Access Point - Manhole @ 66.2 m.
S MH 12

Upstream MH 27	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:13	Length Surveyed 84.8
Additional Information					Media Label 13

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 27
0.0		MWL	Water Level		5			
8.6		D	Pipe Deformed		10			
9.9		TS	Tap, Saddle	9				
24.2		TSA	Tap, Saddle: Active	9				
30.6	S02	MWLS	Water Level: Sag		10			Stain looks worse 25%
32.0		TS	Tap, Saddle	3				
32.7	F02	MWLS	Water Level: Sag		5			
37.3		MWL	Water Level		0			
38.0		D	Pipe Deformed		5			
39.7		TS	Tap, Saddle	10				
47.3		MWLS	Water Level: Sag		10			Stain looks worse (20%)
48.5		TS	Tap, Saddle	3				
52.1		MWL	Water Level		0			
54.1		MWM	Water Mark		90			Pipe is 90% stained black from holding material from this point to MH.
55.2		TS	Tap, Saddle	9				
62.9	S01	DAGS	Deposits Attached: Grease	10 to 1	10			
63.5		TS	Tap, Saddle	3				
66.4		TSD	Tap, Saddle: Defective	9				Full of grease.
66.7		MWLS	Water Level: Sag		25			
71.4		MWL	Water Level		0			
73.2	F01	DAGS	Deposits Attached: Grease	10 to 1	10			
84.8		AMH	Access Point - Manhole					S MH 25

Upstream MH 27	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:13	Length Surveyed 84.8
Additional Information					Media Label 13



AMH - Access Point - Manhole @ 0.0 m.
S MH 27



MWL - Water Level @ 0.0 m.



D - Pipe Deformed @ 8.6 m.



TS - Tap, Saddle @ 9.9 m.

Upstream MH 27	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:13	Length Surveyed 84.8
Additional Information					Media Label 13



TSA - Tap, Saddle: Active @ 24.2 m.



MWLS - Water Level: Sag @ 30.6 m.
Stain looks worse 25%



TS - Tap, Saddle @ 32.0 m.



MWLS - Water Level: Sag @ 32.7 m.

Upstream MH 27	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:13	Length Surveyed 84.8
Additional Information					Media Label 13



MWL - Water Level @ 37.3 m.



D - Pipe Deformed @ 38.0 m.



TS - Tap, Saddle @ 39.7 m.



MWLS - Water Level: Sag @ 47.3 m.
Stain looks worse (20%)

Upstream MH 27	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:13	Length Surveyed 84.8
Additional Information					Media Label 13



TS - Tap, Saddle @ 48.5 m.



MWL - Water Level @ 52.1 m.



MWM - Water Mark @ 54.1 m. Pipe is 90% stained black from holding material from this point to MH.



TS - Tap, Saddle @ 55.2 m.

Upstream MH 27	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:13	Length Surveyed 84.8
Additional Information					Media Label 13



DAGS - Deposits Attached: Grease @ 62.9 m.



TS - Tap, Saddle @ 63.5 m.



TSD - Tap, Saddle: Defective @ 66.4 m.
Full of grease.



MWLS - Water Level: Sag @ 66.7 m.

Upstream MH 27	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 305 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:13	Length Surveyed 84.8
Additional Information					Media Label 13



MWL - Water Level @ 71.4 m.



DAGS - Deposits Attached: Grease @ 73.2 m.



AMH - Access Point - Manhole @ 84.8 m.
S MH 25

Upstream MH	Downstream MH	Size	Material	Total Length	City
26	25	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

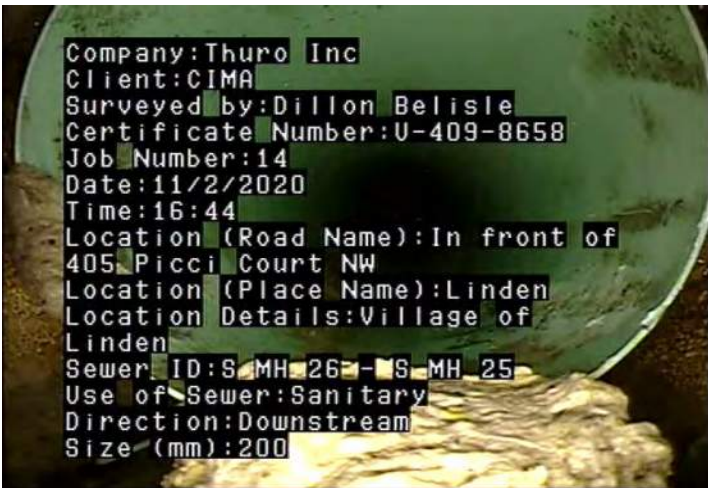
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 405 Picci Court NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-02-2020	16:44	62.4

Additional Information	Media Label
	14

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 26
0.0		MWL	Water Level		5			
3.4		TS	Tap, Saddle	9				
3.4		DAE	Deposits Attached: Encrustation	7 to 11	5			Around service.
10.2		TS	Tap, Saddle	3				
11.3		MWL	Water Level		10			
16.0		DAE	Deposits Attached: Encrustation	7 to 10	5			
16.0		TS	Tap, Saddle	9				Broken
16.1		MWL	Water Level		5			
25.3		TS	Tap, Saddle	3				
29.2		D	Pipe Deformed		5			
30.6		MWLS	Water Level: Sag		15			
31.7		D	Pipe Deformed		5			Oval
31.7		TS	Tap, Saddle	9				
41.6		TS	Tap, Saddle	3				
44.2		TS	Tap, Saddle	9				
45.0		MWL	Water Level		5			
62.4		AMH	Access Point - Manhole					S MH 25

Upstream MH 26	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 405 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:44	Length Surveyed 62.4
Additional Information					Media Label 14



AMH - Access Point - Manhole @ 0.0 m.
S MH 26



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 3.4 m.



DAE - Deposits Attached: Encrustation @ 3.4 m. Around service.

Upstream MH 26	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 405 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:44	Length Surveyed 62.4
Additional Information					Media Label 14



TS - Tap, Saddle @ 10.2 m.



MWL - Water Level @ 11.3 m.



DAE - Deposits Attached: Encrustation @ 16.0 m.



TS - Tap, Saddle @ 16.0 m. Broken

Upstream MH 26	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 405 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:44	Length Surveyed 62.4
Additional Information					Media Label 14



MWL - Water Level @ 16.1 m.



TS - Tap, Saddle @ 25.3 m.



D - Pipe Deformed @ 29.2 m.



MWLS - Water Level: Sag @ 30.6 m.

Upstream MH 26	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 405 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:44	Length Surveyed 62.4
Additional Information					Media Label 14



D - Pipe Deformed @ 31.7 m. Oval



TS - Tap, Saddle @ 31.7 m.



TS - Tap, Saddle @ 41.6 m.



TS - Tap, Saddle @ 44.2 m.

Upstream MH 26	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 405 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 16:44	Length Surveyed 62.4
Additional Information					Media Label 14



MWL - Water Level @ 45.0 m.

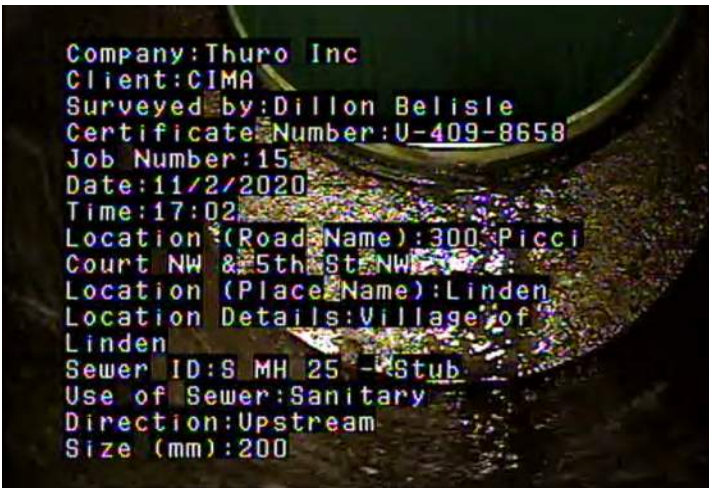


AMH - Access Point - Manhole @ 62.4 m.
S MH 25

Upstream MH Stub	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 17:02	Length Surveyed 12.8
Additional Information					Media Label 15



Upstream MH Stub	Downstream MH 25	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 17:02	Length Surveyed 12.8
Additional Information					Media Label 15



AMH - Access Point - Manhole @ 0.0 m.
S MH 25

MWL - Water Level @ 0.0 m.



AEP - Access Point - End of Pipe @ 12.8 m. Stub - Crack in cap.



Upstream MH	Downstream MH	Size	Material	Total Length	City
25	24	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

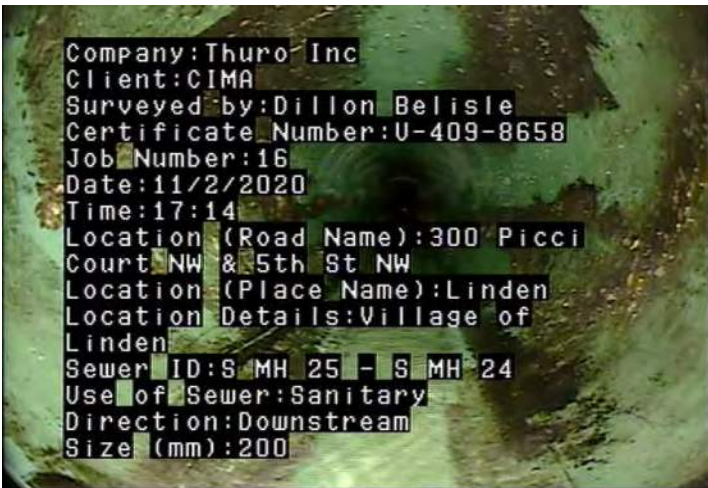
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	300 Picci Court NW & 5th St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-02-2020	17:14	55.5

Additional Information	Media Label
	16

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 25
	0.0		MWL	Water Level		5			
	9.2		MWL	Water Level		10			
	12.5		MWL	Water Level		5			
	18.7		MWL	Water Level		10			
	23.7		MWL	Water Level		5			
	25.6	S01	MWLS	Water Level: Sag		20			
	31.6	F01	MWLS	Water Level: Sag		5			
	55.5		AMH	Access Point - Manhole					S MH 24

Upstream MH 25	Downstream MH 24	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 17:14	Length Surveyed 55.5
Additional Information					Media Label 16



AMH - Access Point - Manhole @ 0.0 m.
S MH 25



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 9.2 m.



MWL - Water Level @ 12.5 m.

Upstream MH 25	Downstream MH 24	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 17:14	Length Surveyed 55.5
Additional Information					Media Label 16



MWL - Water Level @ 18.7 m.



MWL - Water Level @ 23.7 m.



MWLS - Water Level: Sag @ 25.6 m.



MWLS - Water Level: Sag @ 31.6 m.

Upstream MH 25	Downstream MH 24	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 17:14	Length Surveyed 55.5
Additional Information					Media Label 16

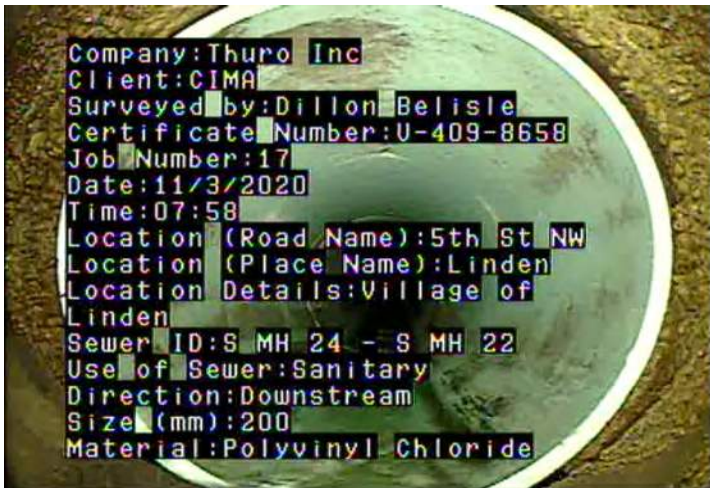


AMH - Access Point - Manhole @ 55.5 m.
 S MH 24

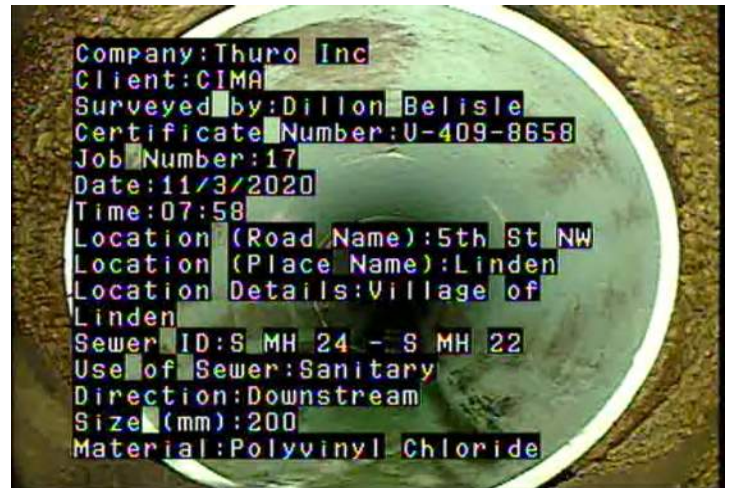
Upstream MH 24	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 07:58	Length Surveyed 64
Additional Information					Media Label 17

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 24
0.0		MWL	Water Level		5			
11.0	S01	MWLS	Water Level: Sag		10			
17.0	F01	MWLS	Water Level: Sag		5			
21.0		MMC	Material Change					Blue PVC to White PVC
23.5	S02	MWLS	Water Level: Sag		20			
24.9		D	Pipe Deformed		10			
26.8	F02	MWLS	Water Level: Sag		5			
35.8		MWL	Water Level		15			
40.3		MWL	Water Level		5			
50.9		TSI	Tap, Saddle: Intruding	2				Broken
58.0		TSI	Tap, Saddle: Intruding	2				
64.0		AMH	Access Point - Manhole					S MH 22

Upstream MH 24	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 07:58	Length Surveyed 64
Additional Information					Media Label 17



AMH - Access Point - Manhole @ 0.0 m.
S MH 24



MWL - Water Level @ 0.0 m.



MWLS - Water Level: Sag @ 11.0 m.



MWLS - Water Level: Sag @ 17.0 m.

Upstream MH 24	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 07:58	Length Surveyed 64
Additional Information					Media Label 17



MMC - Material Change @ 21.0 m. Blue PVC to White PVC



MWLS - Water Level: Sag @ 23.5 m.



D - Pipe Deformed @ 24.9 m.



MWLS - Water Level: Sag @ 26.8 m.

Upstream MH 24	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 07:58	Length Surveyed 64
Additional Information					Media Label 17



MWL - Water Level @ 35.8 m.



MWL - Water Level @ 40.3 m.



TSI - Tap, Saddle: Intruding @ 50.9 m.
Broken



TSI - Tap, Saddle: Intruding @ 58.0 m.

Upstream MH 24	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 07:58	Length Surveyed 64
Additional Information					Media Label 17

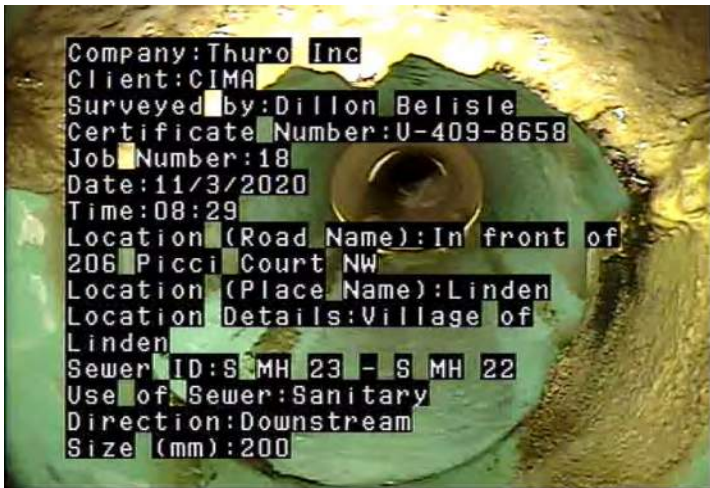


AMH - Access Point - Manhole @ 64.0 m.
S MH 22

Upstream MH 23	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 206 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:29	Length Surveyed 63
Additional Information					Media Label 18

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 23
	0.0		MWL	Water Level		5			
	0.0		DAE	Deposits Attached: Encrustation	10 to 2	5			At pipe opening
	1.9		MMC	Material Change					Blue to White PVC
	2.6		TS	Tap, Saddle	10				
	3.0		TSA	Tap, Saddle: Active	2				
	4.6		MMC	Material Change					White to Blue PVC
	12.5		MMC	Material Change					Blue to White PVC
	12.8		TS	Tap, Saddle	10				
	13.3		TS	Tap, Saddle	1				
25.6	S01	MWLS	Water Level: Sag		10				
27.7		TS	Tap, Saddle	10					
28.5		TS	Tap, Saddle	2					
29.3	F01	MWLS	Water Level: Sag		5				
35.9		MMC	Material Change						White to Blue PVC
40.0		MMC	Material Change						Blue to White PVC
44.7		TS	Tap, Saddle	10					
45.4		TS	Tap, Saddle	2					
58.7		MWL	Water Level		10				
62.0		MWL	Water Level		5				
63.0		AMH	Access Point - Manhole						S MH 22

Upstream MH 23	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 206 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:29	Length Surveyed 63
Additional Information					Media Label 18



AMH - Access Point - Manhole @ 0.0 m.
S MH 23



MWL - Water Level @ 0.0 m.



DAE - Deposits Attached: Encrustation @ 0.0 m. At pipe opening



MMC - Material Change @ 1.9 m. Blue to White PVC

Upstream MH 23	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 206 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:29	Length Surveyed 63
Additional Information					Media Label 18



TS - Tap, Saddle @ 2.6 m.



TSA - Tap, Saddle: Active @ 3.0 m.



MMC - Material Change @ 4.6 m. White to Blue PVC



MMC - Material Change @ 12.5 m. Blue to White PVC

Upstream MH 23	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 206 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:29	Length Surveyed 63
Additional Information					Media Label 18



TS - Tap, Saddle @ 12.8 m.



TS - Tap, Saddle @ 13.3 m.



MWLS - Water Level: Sag @ 25.6 m.



TS - Tap, Saddle @ 27.7 m.

Upstream MH 23	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 206 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:29	Length Surveyed 63
Additional Information					Media Label 18



TS - Tap, Saddle @ 28.5 m.



MWLS - Water Level: Sag @ 29.3 m.



MMC - Material Change @ 35.9 m. White to Blue PVC



MMC - Material Change @ 40.0 m. Blue to White PVC

Upstream MH 23	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 206 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:29	Length Surveyed 63
Additional Information					Media Label 18



TS - Tap, Saddle @ 44.7 m.



TS - Tap, Saddle @ 45.4 m.



MWL - Water Level @ 58.7 m.



MWL - Water Level @ 62.0 m.

Upstream MH 23	Downstream MH 22	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 206 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:29	Length Surveyed 63
Additional Information					Media Label 18



AMH - Access Point - Manhole @ 63.0 m.
S MH 22

Upstream MH	Downstream MH	Size	Material	Total Length	City
22	20	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	200 Picci Court NW & 5th St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-03-2020	08:58	118

Additional Information	Media Label
	19

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 22
0.0		MWL	Water Level		5			
20.5		TSI	Tap, Saddle: Intruding	2				
23.4	S01	MWLS	Water Level: Sag		40			
28.1		TSI	Tap, Saddle: Intruding	2				
32.2	F01	MWLS	Water Level: Sag		5			
51.3		TSI	Tap, Saddle: Intruding	2				
59.7	S02	MWLS	Water Level: Sag		20			
67.5	F02	MWLS	Water Level: Sag		5			
71.3	S03	MWLS	Water Level: Sag		15			
72.5		TSI	Tap, Saddle: Intruding	2				
73.0		MMC	Material Change					White to Blue PVC
78.1	F03	MWLS	Water Level: Sag		5			
93.7		TS	Tap, Saddle	2				
95.3		MWL	Water Level		10			
107.9		MWL	Water Level		5			
111.7		TS	Tap, Saddle	2				
113.1		MWLS	Water Level: Sag		20			
117.0		MWL	Water Level		5			
118.0		AMH	Access Point - Manhole					S MH 20

Upstream MH 22	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 200 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:58	Length Surveyed 118
Additional Information					Media Label 19



AMH - Access Point - Manhole @ 0.0 m.
S MH 22



MWL - Water Level @ 0.0 m.



TSI - Tap, Saddle: Intruding @ 20.5 m.



MWLS - Water Level: Sag @ 23.4 m.

Upstream MH 22	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 200 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:58	Length Surveyed 118
Additional Information					Media Label 19



TSI - Tap, Saddle: Intruding @ 28.1 m.



MWLS - Water Level: Sag @ 32.2 m.



TSI - Tap, Saddle: Intruding @ 51.3 m.



MWLS - Water Level: Sag @ 59.7 m.

Upstream MH 22	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 200 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:58	Length Surveyed 118
Additional Information					Media Label 19



MWLS - Water Level: Sag @ 67.5 m.



MWLS - Water Level: Sag @ 71.3 m.



TSI - Tap, Saddle: Intruding @ 72.5 m.



MMC - Material Change @ 73.0 m. White to Blue PVC

Upstream MH 22	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 200 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:58	Length Surveyed 118
Additional Information					Media Label 19



MWLS - Water Level: Sag @ 78.1 m.



TS - Tap, Saddle @ 93.7 m.



MWL - Water Level @ 95.3 m.



MWL - Water Level @ 107.9 m.

Upstream MH 22	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 200 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 08:58	Length Surveyed 118
Additional Information					Media Label 19



TS - Tap, Saddle @ 111.7 m.



MWLS - Water Level: Sag @ 113.1 m.



MWL - Water Level @ 117.0 m.



AMH - Access Point - Manhole @ 118.0 m.
S MH 20




Upstream MH	Downstream MH	Size	Material	Total Length	City
21	20	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

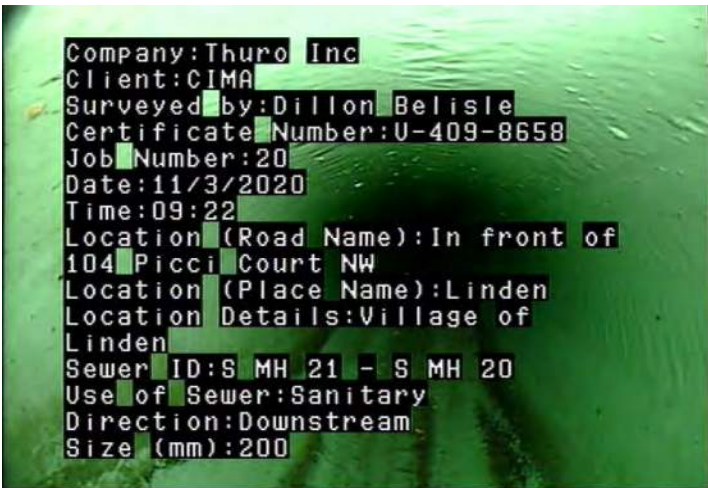
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 104 Picci Court NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-03-2020	09:22	66

Additional Information	Media Label
	20

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 21
	0.0		MWL	Water Level		5			
	5.8		TS	Tap, Saddle	10				
	10.0		TS	Tap, Saddle	2				
	18.7	S01	MWLS	Water Level: Sag		25			
	25.2		TS	Tap, Saddle	9				
	28.1		TS	Tap, Saddle	2				
	29.3	F01	MWLS	Water Level: Sag		5			
	44.9		TS	Tap, Saddle	2				
	45.1		TS	Tap, Saddle	10				
	63.6		MMC	Material Change					Blue to White PVC
	66.0		AMH	Access Point - Manhole					S MH 20

Upstream MH 21	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 104 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 09:22	Length Surveyed 66
Additional Information					Media Label 20



AMH - Access Point - Manhole @ 0.0 m.
S MH 21

MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 5.8 m.

TS - Tap, Saddle @ 10.0 m.

Upstream MH 21	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 104 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 09:22	Length Surveyed 66
Additional Information					Media Label 20



MWLS - Water Level: Sag @ 18.7 m.



TS - Tap, Saddle @ 25.2 m.



TS - Tap, Saddle @ 28.1 m.



MWLS - Water Level: Sag @ 29.3 m.

Upstream MH 21	Downstream MH 20	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 104 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 09:22	Length Surveyed 66
Additional Information					Media Label 20



TS - Tap, Saddle @ 44.9 m.



TS - Tap, Saddle @ 45.1 m.







MMC - Material Change @ 63.6 m. Blue to White PVC

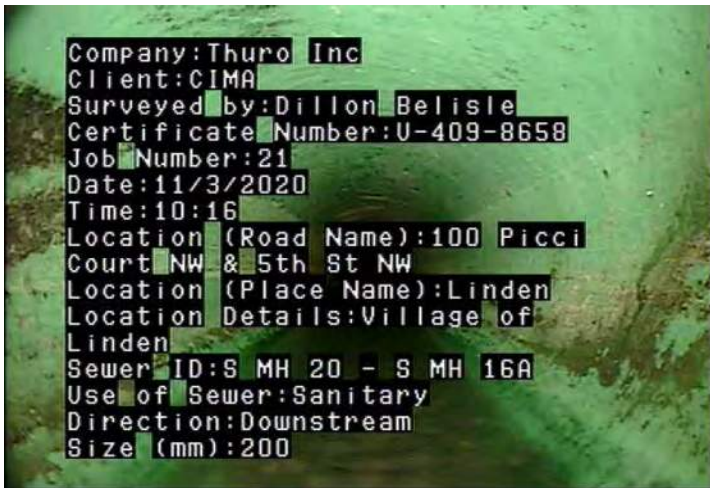


AMH - Access Point - Manhole @ 66.0 m.
S MH 20

Upstream MH 20	Downstream MH 16A	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 100 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 10:16	Length Surveyed 118.6
Additional Information					Media Label 21

 		0.0		AMH	Access Point - Manhole					S MH 20
		0.0		MWL	Water Level		10			
		3.1		MWL	Water Level		5			
 		70.5		TS	Tap, Saddle		10			
		84.2		TS	Tap, Saddle		10			
		104.9		TS	Tap, Saddle		10			
		118.6		AMH	Access Point - Manhole					S MH 16A

Upstream MH 20	Downstream MH 16A	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 100 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 10:16	Length Surveyed 118.6
Additional Information					Media Label 21



AMH - Access Point - Manhole @ 0.0 m.
S MH 20

MWL - Water Level @ 0.0 m.



MWL - Water Level @ 3.1 m.

TS - Tap, Saddle @ 70.5 m.

Upstream MH 20	Downstream MH 16A	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 100 Picci Court NW & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 10:16	Length Surveyed 118.6
Additional Information					Media Label 21



TS - Tap, Saddle @ 84.2 m.



TS - Tap, Saddle @ 104.9 m.



AMH - Access Point - Manhole @ 118.6 m.
S MH 16A



Upstream MH	Downstream MH	Size	Material	Total Length	City
16A	15	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

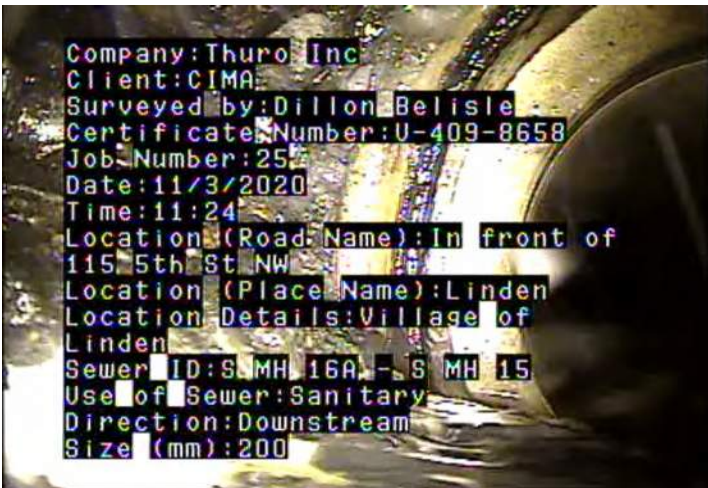
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 115 5th St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-03-2020	11:24	121.4

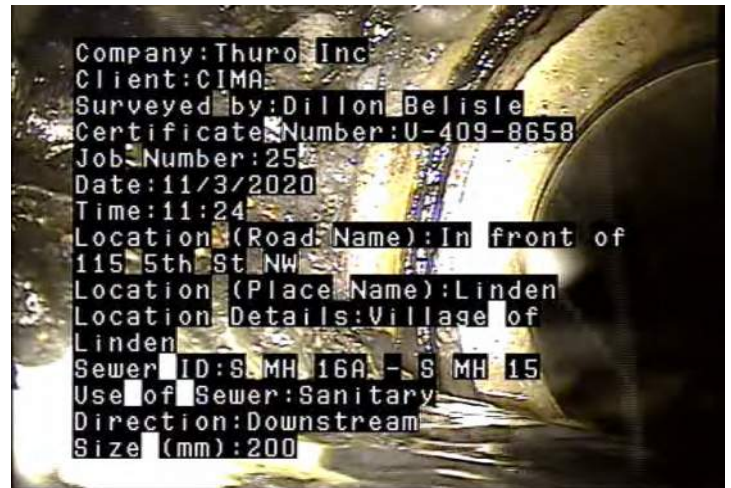
Additional Information	Media Label
	25

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 16A
	0.0		MWL	Water Level		5			
	5.5	S02	MWLS	Water Level: Sag		20			
	14.8	F02	MWLS	Water Level: Sag		5			
	21.6	S03	MWLS	Water Level: Sag		20			
	31.1	F03	MWLS	Water Level: Sag		5			
	33.6	S04	MWLS	Water Level: Sag		20			
	34.9		TB	Tap, Break-in / Hammer	2				
	37.8	F04	MWLS	Water Level: Sag		5			
	40.4		CL	Crack Longitudinal	1			J	
	43.0	S05	MWLS	Water Level: Sag		20			
	44.6		TB	Tap, Break-in / Hammer	12				
	61.9	F05	MWLS	Water Level: Sag		5			
	65.5	S06	MWLS	Water Level: Sag		20			
	68.0		TB	Tap, Break-in / Hammer	2				
	68.6		TB	Tap, Break-in / Hammer	10				
	82.0	S01	DAGS	Deposits Attached: Grease	10 to 12	10			
	82.2		TBI	Tap, Break-in / Hammer: Intruding	9				
	85.6	F01	DAGS	Deposits Attached: Grease	10 to 1	10			
	93.7	F06	MWLS	Water Level: Sag		5			
	102.8		MMC	Material Change					Clay tile to PVC
	110.4		MWL	Water Level		20			
	116.3		MWL	Water Level		50			
	117.2		MCU	Camera Underwater					
	118.2		MWL	Water Level		40			
	121.4		AMH	Access Point - Manhole					S MH 15

Upstream MH 16A	Downstream MH 15	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 115 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:24	Length Surveyed 121.4
Additional Information					Media Label 25



AMH - Access Point - Manhole @ 0.0 m.
S MH 16A



MWL - Water Level @ 0.0 m.



MWLS - Water Level: Sag @ 5.5 m.



MWLS - Water Level: Sag @ 14.8 m.

Upstream MH 16A	Downstream MH 15	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 115 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:24	Length Surveyed 121.4
Additional Information					Media Label 25



MWLS - Water Level: Sag @ 21.6 m.



MWLS - Water Level: Sag @ 31.1 m.



MWLS - Water Level: Sag @ 33.6 m.



TB - Tap, Break-in / Hammer @ 34.9 m.

Upstream MH 16A	Downstream MH 15	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 115 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:24	Length Surveyed 121.4
Additional Information					Media Label 25



MWLS - Water Level: Sag @ 37.8 m.



CL - Crack Longitudinal @ 40.4 m.



MWLS - Water Level: Sag @ 43.0 m.



TB - Tap, Break-in / Hammer @ 44.6 m.

Upstream MH 16A	Downstream MH 15	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 115 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:24	Length Surveyed 121.4
Additional Information					Media Label 25



MWLS - Water Level: Sag @ 61.9 m.



MWLS - Water Level: Sag @ 65.5 m.



TB - Tap, Break-in / Hammer @ 68.0 m.

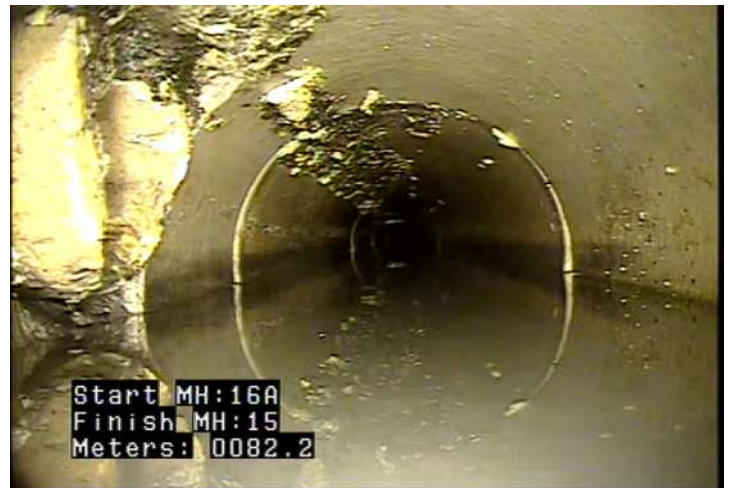


TB - Tap, Break-in / Hammer @ 68.6 m.

Upstream MH 16A	Downstream MH 15	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 115 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:24	Length Surveyed 121.4
Additional Information					Media Label 25



DAGS - Deposits Attached: Grease @ 82.0 m.



TBI - Tap, Break-in / Hammer: Intruding @ 82.2 m.



DAGS - Deposits Attached: Grease @ 85.6 m.



MWLS - Water Level: Sag @ 93.7 m.

Upstream MH 16A	Downstream MH 15	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 115 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:24	Length Surveyed 121.4
Additional Information					Media Label 25



MMC - Material Change @ 102.8 m. Clay tile to PVC



MWL - Water Level @ 110.4 m.



MWL - Water Level @ 116.3 m.



MCU - Camera Underwater @ 117.2 m.

Upstream MH 16A	Downstream MH 15	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 115 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:24	Length Surveyed 121.4
Additional Information					Media Label 25



MWL - Water Level @ 118.2 m.



AMH - Access Point - Manhole @ 121.4 m.
S MH 15

Upstream MH	Downstream MH	Size	Material	Total Length	City
11	15	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave W & Courtney Way	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-03-2020	12:08	77.4

Additional Information	Media Label
	26

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 11
0.0		MWL	Water Level		5			
13.3		TSA	Tap, Saddle: Active	11				
18.8		TSA	Tap, Saddle: Active	11				
24.8		MWL	Water Level		10			
26.8		MWL	Water Level		5			
40.3		TS	Tap, Saddle	2				
57.6		TS	Tap, Saddle	1				
74.6		MWL	Water Level		10			
77.4		AMH	Access Point - Manhole					S MH 15

Upstream MH 11	Downstream MH 15	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & Courtney Way	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 12:08	Length Surveyed 77.4
Additional Information					Media Label 26



AMH - Access Point - Manhole @ 0.0 m.
S MH 11

MWL - Water Level @ 0.0 m.



TSA - Tap, Saddle: Active @ 13.3 m.

TSA - Tap, Saddle: Active @ 18.8 m.

Upstream MH 11	Downstream MH 15	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & Courtney Way	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 12:08	Length Surveyed 77.4
Additional Information					Media Label 26



MWL - Water Level @ 24.8 m.



MWL - Water Level @ 26.8 m.



TS - Tap, Saddle @ 40.3 m.



TS - Tap, Saddle @ 57.6 m.

Upstream MH 11	Downstream MH 15	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & Courtney Way	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 12:08	Length Surveyed 77.4
Additional Information					Media Label 26



MWL - Water Level @ 74.6 m.



AMH - Access Point - Manhole @ 77.4 m.
S MH 15

Upstream MH 15	Downstream MH 28	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 12:24	Length Surveyed 88.7
Additional Information					Media Label 27

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 15
0.0		MWL	Water Level		5			
25.8	S01	DSF	Deposits Settled: Fine	5 to 7	10			
46.7		MWL	Water Level		15			
47.6		TF	Tap, Factory Made	2				
50.5		MWL	Water Level		5			
63.4		TSI	Tap, Saddle: Intruding	2				
80.9	F01	DSF	Deposits Settled: Fine	5 to 7	5			
85.2	S02	MWLS	Water Level: Sag		35			
86.2		TF	Tap, Factory Made	11				
87.8	F02	MWLS	Water Level: Sag		15			
88.7		AMH	Access Point - Manhole					S MH 28

Upstream MH 15	Downstream MH 28	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 12:24	Length Surveyed 88.7
Additional Information					Media Label 27



AMH - Access Point - Manhole @ 0.0 m.
S MH 15

MWL - Water Level @ 0.0 m.



DSF - Deposits Settled: Fine @ 25.8 m.

MWL - Water Level @ 46.7 m.

Upstream MH 15	Downstream MH 28	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 12:24	Length Surveyed 88.7
Additional Information					Media Label 27



TF - Tap, Factory Made @ 47.6 m.



MWL - Water Level @ 50.5 m.



TSI - Tap, Saddle: Intruding @ 63.4 m.



DSF - Deposits Settled: Fine @ 80.9 m.

Upstream MH 15	Downstream MH 28	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W & 5th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 12:24	Length Surveyed 88.7
Additional Information					Media Label 27



MWLS - Water Level: Sag @ 85.2 m.



TF - Tap, Factory Made @ 86.2 m.



MWLS - Water Level: Sag @ 87.8 m.



AMH - Access Point - Manhole @ 88.7 m.
S MH 28

Upstream MH	Downstream MH	Size	Material	Total Length	City
28	29	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

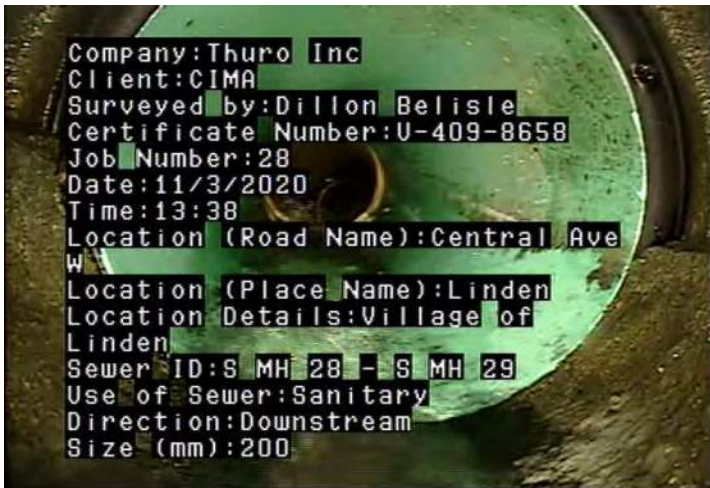
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-03-2020	13:38	69

Additional Information	Media Label
	28

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 28
0.0		MWL	Water Level		5			
2.4		JOM	Joint Offset (displaced): Medium					
2.4		MMC	Material Change					PVC to Clay tile
2.8		DAE	Deposits Attached: Encrustation	3 to 5	5		J	
4.2		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
9.8		DAE	Deposits Attached: Encrustation	2 to 5	5		J	
9.8		JOM	Joint Offset (displaced): Medium					
13.9		JOM	Joint Offset (displaced): Medium					
18.0		JAM	Joint Angular: Medium					
18.1		RFJ	Roots, Fine: Joint	9 to 11				
23.6		B	Pipe Broken	6 to 6				
23.6		RFB	Roots, Fine: Barrel	6 to 4				
26.4		FM	Fracture Multiple	7 to 5			J	
26.4		RFJ	Roots, Fine: Joint	2 to 4				
27.8		RFJ	Roots, Fine: Joint	1 to 3				
29.2		RFJ	Roots, Fine: Joint	12 to 5				
33.3		RFJ	Roots, Fine: Joint	1 to 3				
37.5		OBJ	Obstacle - Object Wedged in Joint	6	5		J	Fork wedged in joint
43.0		RFJ	Roots, Fine: Joint	12				
54.1		RFJ	Roots, Fine: Joint	2 to 5				
56.8		RFJ	Roots, Fine: Joint	11 to 5				
58.3		RFJ	Roots, Fine: Joint	8 to 5				
59.7		RMJ	Roots, Medium, Joint	8 to 5	15			
60.1		RMB	Roots, Medium: Barrel	1 to 5	20			Possible hole in pipe at this spot.
61.1		RFJ	Roots, Fine: Joint	7 to 10				
62.4		RFJ	Roots, Fine: Joint	8 to 4				
63.8		RFJ	Roots, Fine: Joint	8 to 4				
65.1		RFJ	Roots, Fine: Joint	4 to 5				
66.6		RMJ	Roots, Medium, Joint	8 to 5	15			
67.9		CC	Crack Circumferential	7 to 5				
69.0		AMH	Access Point - Manhole					S MH 29

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



AMH - Access Point - Manhole @ 0.0 m.
S MH 28

MWL - Water Level @ 0.0 m.



JOM - Joint Offset (displaced): Medium @ 2.4 m.

MMC - Material Change @ 2.4 m. PVC to Clay tile

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



DAE - Deposits Attached: Encrustation @ 2.8 m.



DAE - Deposits Attached: Encrustation @ 4.2 m.



DAE - Deposits Attached: Encrustation @ 9.8 m.



JOM - Joint Offset (displaced): Medium @ 9.8 m.

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



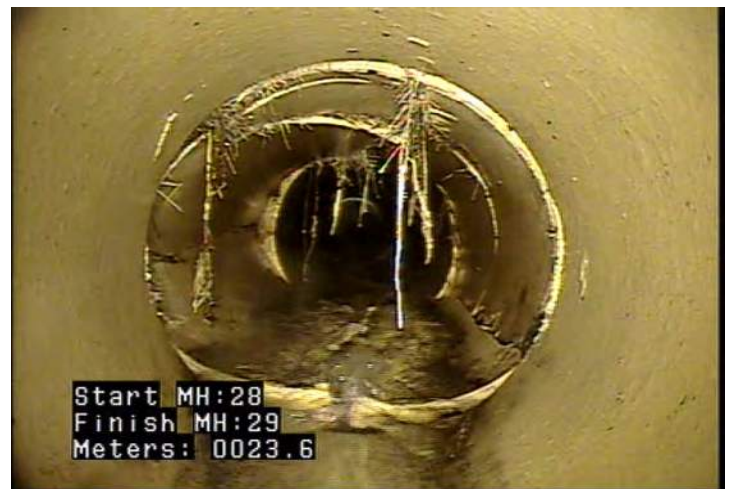
JOM - Joint Offset (displaced): Medium @ 13.9 m.



JAM - Joint Angular: Medium @ 18.0 m.



RFJ - Roots, Fine: Joint @ 18.1 m.



B - Pipe Broken @ 23.6 m.

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



RFB - Roots, Fine: Barrel @ 23.6 m.



FM - Fracture Multiple @ 26.4 m.



RFJ - Roots, Fine: Joint @ 26.4 m.



RFJ - Roots, Fine: Joint @ 27.8 m.

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



RFJ - Roots, Fine: Joint @ 29.2 m.



RFJ - Roots, Fine: Joint @ 33.3 m.



OBJ - Obstacle - Object Wedged in Joint @ 37.5 m. Fork wedged in joint



RFJ - Roots, Fine: Joint @ 43.0 m.

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



RFJ - Roots, Fine: Joint @ 54.1 m.



RFJ - Roots, Fine: Joint @ 56.8 m.



RFJ - Roots, Fine: Joint @ 58.3 m.



RMJ - Roots, Medium, Joint @ 59.7 m.

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



RMB - Roots, Medium: Barrel @ 60.1 m.
Possible hole in pipe at this spot.



RFJ - Roots, Fine: Joint @ 61.1 m.



RFJ - Roots, Fine: Joint @ 62.4 m.



RFJ - Roots, Fine: Joint @ 63.8 m.

Upstream MH 28	Downstream MH 29	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 13:38	Length Surveyed 69
Additional Information					Media Label 28



RFJ - Roots, Fine: Joint @ 65.1 m.



RMJ - Roots, Medium, Joint @ 66.6 m.



CC - Crack Circumferential @ 67.9 m.



AMH - Access Point - Manhole @ 69.0 m.
S MH 29





Upstream MH	Downstream MH	Size	Material	Total Length	City
29	30	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Off Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-03-2020	15:10	19.2

Additional Information	Media Label
	29

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 29
	0.0		MWL	Water Level		5			
	1.7		JOL	Joint Offset (displaced): Large					
	1.7		RBJ	Roots, Ball, Joint	7 to 5	80			
	3.9	S01	RFJ	Roots, Fine: Joint	7 to 5			J	
	18.1	F01	RFJ	Roots, Fine: Joint	8 to 4			J	
	19.2		MSA	Survey Abandoned					
									Unable to pass rock wedged in joint.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:10	Length Surveyed 19.2
Additional Information					Media Label 29



AMH - Access Point - Manhole @ 0.0 m.
S MH 29

MWL - Water Level @ 0.0 m.



JOL - Joint Offset (displaced): Large @ 1.7 m.

RBJ - Roots, Ball, Joint @ 1.7 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:10	Length Surveyed 19.2
Additional Information					Media Label 29



RFJ - Roots, Fine: Joint @ 3.9 m.



RFJ - Roots, Fine: Joint @ 18.1 m.

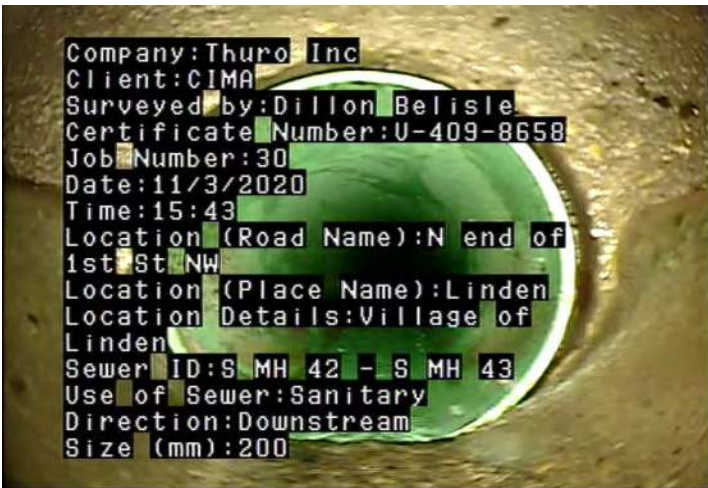


MSA - Survey Abandoned @ 19.2 m.
Unable to pass rock wedged in joint.

Upstream MH 42	Downstream MH 43	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:43	Length Surveyed 121
Additional Information					Media Label 30

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 42
0.0		MWL	Water Level		5			
20.1		TS	Tap, Saddle	10				
25.3		MWL	Water Level		10			
27.7		TS	Tap, Saddle	10				
28.9		MWL	Water Level		5			
37.9		TS	Tap, Saddle	2				
38.3		TS	Tap, Saddle	2				
38.8		MWL	Water Level		10			
44.5		MWL	Water Level		5			
46.2		MWL	Water Level		10			
48.4		MWL	Water Level		5			
55.0		MWL	Water Level		10			
56.7		TS	Tap, Saddle	11				
57.1		TS	Tap, Saddle	11				
57.7		MWL	Water Level		5			
59.5		MWL	Water Level		10			
63.1		MWL	Water Level		5			
83.3		TS	Tap, Saddle	2				
83.7		TS	Tap, Saddle	10				
97.6		TSA	Tap, Saddle: Active	10				
99.5		TSA	Tap, Saddle: Active	2				
115.6		TS	Tap, Saddle	11				
121.0		AMH	Access Point - Manhole					S MH 43

Upstream MH 42	Downstream MH 43	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:43	Length Surveyed 121
Additional Information					Media Label 30



AMH - Access Point - Manhole @ 0.0 m.
S MH 42



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 20.1 m.



MWL - Water Level @ 25.3 m.

Upstream MH 42	Downstream MH 43	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:43	Length Surveyed 121
Additional Information					Media Label 30



TS - Tap, Saddle @ 27.7 m.



MWL - Water Level @ 28.9 m.



TS - Tap, Saddle @ 37.9 m.



TS - Tap, Saddle @ 38.3 m.

Upstream MH 42	Downstream MH 43	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:43	Length Surveyed 121
Additional Information					Media Label 30



MWL - Water Level @ 38.8 m.



MWL - Water Level @ 44.5 m.



MWL - Water Level @ 46.2 m.



MWL - Water Level @ 48.4 m.

Upstream MH 42	Downstream MH 43	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:43	Length Surveyed 121
Additional Information					Media Label 30



MWL - Water Level @ 55.0 m.



TS - Tap, Saddle @ 56.7 m.



TS - Tap, Saddle @ 57.1 m.



MWL - Water Level @ 57.7 m.

Upstream MH 42	Downstream MH 43	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:43	Length Surveyed 121
Additional Information					Media Label 30



MWL - Water Level @ 59.5 m.



MWL - Water Level @ 63.1 m.



TS - Tap, Saddle @ 83.3 m.



TS - Tap, Saddle @ 83.7 m.

Upstream MH 42	Downstream MH 43	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 15:43	Length Surveyed 121
Additional Information					Media Label 30



TSA - Tap, Saddle: Active @ 97.6 m.



TSA - Tap, Saddle: Active @ 99.5 m.



TS - Tap, Saddle @ 115.6 m.



AMH - Access Point - Manhole @ 121.0 m.
S MH 43

Upstream MH 43	Downstream MH 44	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:22	Length Surveyed 57
Additional Information					Media Label 31

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 44
0.0		MWL	Water Level		5			
12.7		DSF	Deposits Settled: Fine	6	5			
22.0		DSF	Deposits Settled: Fine	6	5			
22.5		TS	Tap, Saddle	1				
22.8		TS	Tap, Saddle	11				
38.9	S01	MWLS	Water Level: Sag		15			
41.0		TS	Tap, Saddle	2				
44.0	F01	MWLS	Water Level: Sag		5			
54.9		TS	Tap, Saddle	11				
57.0		AMH	Access Point - Manhole					S MH 43

Upstream MH 43	Downstream MH 44	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:22	Length Surveyed 57
Additional Information					Media Label 31



AMH - Access Point - Manhole @ 0.0 m.
S MH 44



MWL - Water Level @ 0.0 m.



DSF - Deposits Settled: Fine @ 12.7 m.



DSF - Deposits Settled: Fine @ 22.0 m.

Upstream MH 43	Downstream MH 44	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:22	Length Surveyed 57
Additional Information					Media Label 31



TS - Tap, Saddle @ 22.5 m.



TS - Tap, Saddle @ 22.8 m.



MWLS - Water Level: Sag @ 38.9 m.



TS - Tap, Saddle @ 41.0 m.

Upstream MH 43	Downstream MH 44	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:22	Length Surveyed 57
Additional Information					Media Label 31



MWLS - Water Level: Sag @ 44.0 m.







TS - Tap, Saddle @ 54.9 m.



AMH - Access Point - Manhole @ 57.0 m.
S MH 43

Upstream MH Stub NE	Downstream MH 44	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:33	Length Surveyed 56.3
Additional Information					Media Label 32

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 44
	0.0		MWL	Water Level		0			
									
	17.9		D	Pipe Deformed		5			
	30.1		D	Pipe Deformed		5			
	48.1		MWL	Water Level		5			
	48.8		TS	Tap, Saddle	2				
	51.3		MWL	Water Level		0			
	55.8		AEP	Access Point - End of Pipe					Stub NE

Upstream MH Stub NE	Downstream MH 44	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:33	Length Surveyed 56.3
Additional Information					Media Label 32



AMH - Access Point - Manhole @ 0.0 m.
S MH 44



MWL - Water Level @ 0.0 m.



D - Pipe Deformed @ 17.9 m.



D - Pipe Deformed @ 30.1 m.

Upstream MH Stub NE	Downstream MH 44	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:33	Length Surveyed 56.3
Additional Information					Media Label 32



MWL - Water Level @ 48.1 m.



TS - Tap, Saddle @ 48.8 m.



MWL - Water Level @ 51.3 m.



AEP - Access Point - End of Pipe @ 55.8 m. Stub NE

Upstream MH	Downstream MH	Size	Material	Total Length	City
44	45	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	5th Ave NW & 1st St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-03-2020	16:48	83.5

Additional Information	Media Label
	33

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 44
0.0		MWL	Water Level		5			
6.3		MWLS	Water Level: Sag		20			
6.4		TS	Tap, Saddle	2				
7.9		TS	Tap, Saddle	1				
8.1		B	Pipe Broken	11 to 3				
8.5		MWL	Water Level		5			
10.6		MWL	Water Level		10			
14.0		MWL	Water Level		5			
16.3		MWLS	Water Level: Sag		15			
19.7		MWL	Water Level		5			
21.2		MWL	Water Level		10			
23.5		TS	Tap, Saddle	2				
23.8		MWL	Water Level		5			
24.6		MWLS	Water Level: Sag		15			
27.5		MWL	Water Level		5			
30.0		MWLS	Water Level: Sag		15			
31.6		MWL	Water Level		5			
32.5		MWLS	Water Level: Sag		15			
33.3		TS	Tap, Saddle	11				
48.5		TS	Tap, Saddle	3				
50.0		MWL	Water Level		5			
53.3		MWLS	Water Level: Sag		20			
55.8		MWL	Water Level		10			
58.1		MWL	Water Level		10			
62.3		MWL	Water Level		20			
69.3		TS	Tap, Saddle	2				
71.1		MWL	Water Level		30			
72.3		TS	Tap, Saddle	9				
72.5		ISSR	Intruding Seal Material - Sealing Ring	8 to 4	5			Possibly sealing ring holding back debris/water at bottom of pipe
72.9		MWL	Water Level		5			
74.9		MWL	Water Level		20			
80.4		MWL	Water Level		40			
81.7		TS	Tap, Saddle	3				
83.5		AMH	Access Point - Manhole					S MH 45

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



AMH - Access Point - Manhole @ 0.0 m.
S MH 44

MWL - Water Level @ 0.0 m.



MWLS - Water Level: Sag @ 6.3 m.

TS - Tap, Saddle @ 6.4 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



TS - Tap, Saddle @ 7.9 m.



B - Pipe Broken @ 8.1 m.



MWL - Water Level @ 8.5 m.



MWL - Water Level @ 10.6 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



MWL - Water Level @ 14.0 m.



MWLS - Water Level: Sag @ 16.3 m.



MWL - Water Level @ 19.7 m.



MWL - Water Level @ 21.2 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



TS - Tap, Saddle @ 23.5 m.



MWL - Water Level @ 23.8 m.



MWLS - Water Level: Sag @ 24.6 m.



MWL - Water Level @ 27.5 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



MWLS - Water Level: Sag @ 30.0 m.



MWL - Water Level @ 31.6 m.



MWLS - Water Level: Sag @ 32.5 m.



TS - Tap, Saddle @ 33.3 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



TS - Tap, Saddle @ 48.5 m.



MWL - Water Level @ 50.0 m.



MWLS - Water Level: Sag @ 53.3 m.



MWL - Water Level @ 55.8 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



MWL - Water Level @ 58.1 m.



MWL - Water Level @ 62.3 m.



TS - Tap, Saddle @ 69.3 m.



MWL - Water Level @ 71.1 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



TS - Tap, Saddle @ 72.3 m.



ISSR - Intruding Seal Material - Sealing Ring @ 72.5 m. Possibly sealing ring holding back debris/water at bottom of pipe



MWL - Water Level @ 72.9 m.



MWL - Water Level @ 74.9 m.

Upstream MH 44	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 16:48	Length Surveyed 83.5
Additional Information					Media Label 33



MWL - Water Level @ 80.4 m.



TS - Tap, Saddle @ 81.7 m.



AMH - Access Point - Manhole @ 83.5 m.
S MH 45

Upstream MH 45	Downstream MH 46	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 426 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:49	Length Surveyed 66.7
Additional Information					Media Label 34

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		MWL	Water Level		5			
0.0		AMH	Access Point - Manhole					S MH 45
4.0		MWL	Water Level		15			
18.5		MWL	Water Level		10			
19.4		TSI	Tap, Saddle: Intruding	9				
20.1		TSI	Tap, Saddle: Intruding	3				Connecting pipe broken
38.9		TSI	Tap, Saddle: Intruding	9				
39.1		MWL	Water Level		15			
49.6		MWL	Water Level		20			
52.4		TSI	Tap, Saddle: Intruding	9				
53.0		TSI	Tap, Saddle: Intruding	2				Connecting pipe broken
53.0		MWL	Water Level		35			
53.2		B	Pipe Broken	8 to 11				See Job 34R
53.5		MGO	General Observation					Flusher on
56.9		MGO	General Observation					Flusher off
58.3		MWL	Water Level		50			
61.5		MWL	Water Level		35			
66.7		AMH	Access Point - Manhole					S MH 46

Upstream MH 45	Downstream MH 46	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 426 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:49	Length Surveyed 66.7
Additional Information					Media Label 34



MWL - Water Level @ 0.0 m.

AMH - Access Point - Manhole @ 0.0 m.
S MH 45



MWL - Water Level @ 4.0 m.

MWL - Water Level @ 18.5 m.

Upstream MH 45	Downstream MH 46	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 426 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:49	Length Surveyed 66.7
Additional Information					Media Label 34



TSI - Tap, Saddle: Intruding @ 19.4 m.



TSI - Tap, Saddle: Intruding @ 20.1 m.
Connecting pipe broken



TSI - Tap, Saddle: Intruding @ 38.9 m.



MWL - Water Level @ 39.1 m.

Upstream MH 45	Downstream MH 46	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 426 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:49	Length Surveyed 66.7
Additional Information					Media Label 34



MWL - Water Level @ 49.6 m.



TSI - Tap, Saddle: Intruding @ 52.4 m.



TSI - Tap, Saddle: Intruding @ 53.0 m.
Connecting pipe broken



MWL - Water Level @ 53.0 m.

Upstream MH 45	Downstream MH 46	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 426 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:49	Length Surveyed 66.7
Additional Information					Media Label 34



B - Pipe Broken @ 53.2 m. See Job 34R



MGO - General Observation @ 53.5 m.
Flusher on



MGO - General Observation @ 56.9 m.
Flusher off



MWL - Water Level @ 58.3 m.

Upstream MH 45	Downstream MH 46	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 426 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:49	Length Surveyed 66.7
Additional Information					Media Label 34



MWL - Water Level @ 61.5 m.



AMH - Access Point - Manhole @ 66.7 m.
S MH 46






Upstream MH	Downstream MH	Size	Material	Total Length	City
46	45	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

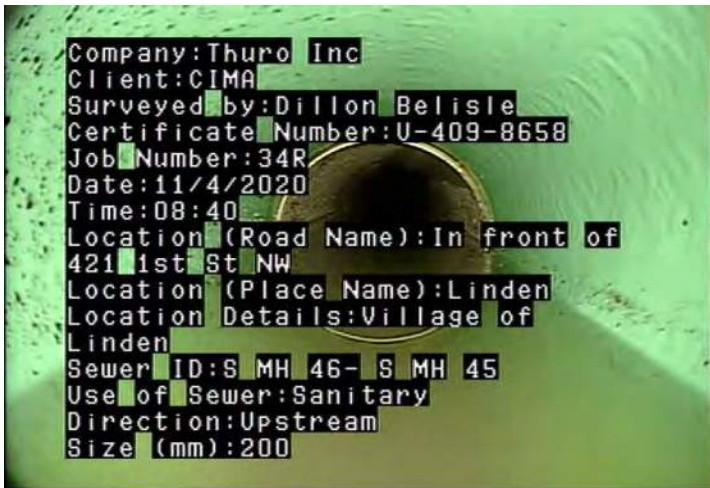
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 421 1st St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-04-2020	08:40	13.9

Additional Information	Media Label
	34R

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 46
	0.0		MWL	Water Level		40			
									
	2.1		MCU	Camera Underwater					
									
	13.2		B	Pipe Broken		9 to 2			Unable to pass intruding service.
	13.6		TSI	Tap, Saddle: Intruding		9			
	13.9		TSI	Tap, Saddle: Intruding		3			
	13.9		MSA	Survey Abandoned					

Upstream MH 46	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:40	Length Surveyed 13.9
Additional Information					Media Label 34R



AMH - Access Point - Manhole @ 0.0 m.
S MH 46



MWL - Water Level @ 0.0 m.



MCU - Camera Underwater @ 2.1 m.



B - Pipe Broken @ 13.2 m.

Upstream MH 46	Downstream MH 45	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 08:40	Length Surveyed 13.9
Additional Information					Media Label 34R



TSI - Tap, Saddle: Intruding @ 13.6 m.



TSI - Tap, Saddle: Intruding @ 13.9 m.



MSA - Survey Abandoned @ 13.9 m.
Unable to pass intruding service.

Upstream MH	Downstream MH	Size	Material	Total Length	City
46	47	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 421 1st St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-04-2020	09:08	111.3

Additional Information	Media Label
	35

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 46
0.0		MWL	Water Level		5			
4.0		MWL	Water Level		10			
5.1		DSGV	Deposits Settled: Gravel	5 to 7	10			
10.0	S01	MWLS	Water Level: Sag		30			
11.8		TS	Tap, Saddle	3				
12.6		TSD	Tap, Saddle: Defective	9				Gasket intruding around service.
16.3	F01	MWLS	Water Level: Sag		5			Flusher on
25.3		D	Pipe Deformed		5			Oval
26.5		DSGV	Deposits Settled: Gravel	5 to 7	10			
29.0		MWL	Water Level		20			
32.1		TS	Tap, Saddle	3				
33.0		TS	Tap, Saddle	9				
34.9		MWL	Water Level		10			
52.0		TS	Tap, Saddle	3				
53.1		TS	Tap, Saddle	9				
67.4		MWL	Water Level		5			
72.3		TS	Tap, Saddle	3				
73.2		TS	Tap, Saddle	9				
80.3		MWL	Water Level		20			
85.7		MWLS	Water Level: Sag		40			
86.4		D	Pipe Deformed		10			Oval
89.2		MWL	Water Level		50			
92.6		TSD	Tap, Saddle: Defective	3				Service offset from hole cut in pipe.
93.6		TSD	Tap, Saddle: Defective	9				Pipe chipped above service.
104.7		MWL	Water Level		60			
106.0		MCU	Camera Underwater					
110.9		MWL	Water Level		10			
111.3		AMH	Access Point - Manhole					S MH 47

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35



AMH - Access Point - Manhole @ 0.0 m.
S MH 46

MWL - Water Level @ 0.0 m.



MWL - Water Level @ 4.0 m.

DSGV - Deposits Settled: Gravel @ 5.1 m.

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35



MWLS - Water Level: Sag @ 10.0 m.



TS - Tap, Saddle @ 11.8 m.



TSD - Tap, Saddle: Defective @ 12.6 m.
Gasket intruding around service.



MWLS - Water Level: Sag @ 16.3 m.
Flusher on

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35



D - Pipe Deformed @ 25.3 m. Oval



DSGV - Deposits Settled: Gravel @ 26.5 m.



MWL - Water Level @ 29.0 m.



TS - Tap, Saddle @ 32.1 m.

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35



TS - Tap, Saddle @ 33.0 m.



MWL - Water Level @ 34.9 m.



TS - Tap, Saddle @ 52.0 m.



TS - Tap, Saddle @ 53.1 m.

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35



MWL - Water Level @ 67.4 m.



TS - Tap, Saddle @ 72.3 m.



TS - Tap, Saddle @ 73.2 m.



MWL - Water Level @ 80.3 m.

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35



MWLS - Water Level: Sag @ 85.7 m.



D - Pipe Deformed @ 86.4 m. Oval



MWL - Water Level @ 89.2 m.



TSD - Tap, Saddle: Defective @ 92.6 m.
Service offset from hole cut in pipe.

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35



TSD - Tap, Saddle: Defective @ 93.6 m.
Pipe chipped above service.



MWL - Water Level @ 104.7 m.



MCU - Camera Underwater @ 106.0 m.



MWL - Water Level @ 110.9 m.

Upstream MH 46	Downstream MH 47	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 421 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:08	Length Surveyed 111.3
Additional Information					Media Label 35

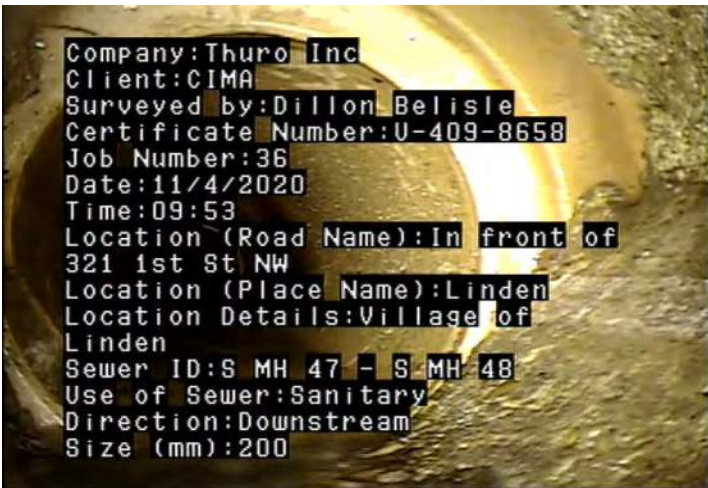


AMH - Access Point - Manhole @ 111.3 m.
 S MH 47

Upstream MH 47	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 321 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:53	Length Surveyed 41.2
Additional Information					Media Label 36

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 47
	0.0		MWL	Water Level		10			
	0.5		B	Pipe Broken	7 to 9				
	1.8		CC	Crack Circumferential	11 to 8				
	1.8		TBD	Tap, Break-in / Hammer: Defective	10				Plastic intruding from top of service.
	2.7	S01	MWLS	Water Level: Sag		25			
	19.5	F01	MWLS	Water Level: Sag		10			
	23.5		TBD	Tap, Break-in / Hammer: Defective	10				Plastic intruding from top of service.
	24.8		TBD	Tap, Break-in / Hammer: Defective	10				Plastic intruding from top of service.
	41.2		AMH	Access Point - Manhole					S MH 48

Upstream MH 47	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 321 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:53	Length Surveyed 41.2
Additional Information					Media Label 36



AMH - Access Point - Manhole @ 0.0 m.
S MH 47



MWL - Water Level @ 0.0 m.



B - Pipe Broken @ 0.5 m.



CC - Crack Circumferential @ 1.8 m.

Upstream MH 47	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 321 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:53	Length Surveyed 41.2
Additional Information					Media Label 36



TBD - Tap, Break-in / Hammer: Defective @ 1.8 m. Plastic intruding from top of service.



MWLS - Water Level: Sag @ 2.7 m.



MWLS - Water Level: Sag @ 19.5 m.



TBD - Tap, Break-in / Hammer: Defective @ 23.5 m. Plastic intruding from top of service.

Upstream MH 47	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 321 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 09:53	Length Surveyed 41.2
Additional Information					Media Label 36



TBD - Tap, Break-in / Hammer: Defective @ 24.8 m. Plastic intruding from top of service.

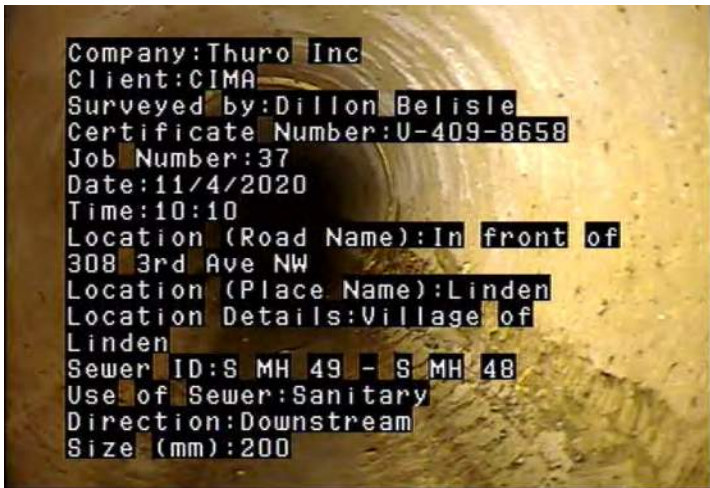


AMH - Access Point - Manhole @ 41.2 m. S MH 48

Upstream MH 49	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 308 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:10	Length Surveyed 109.6
Additional Information					Media Label 37

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 49
0.0		MWL	Water Level		0			
10.1		TBI	Tap, Break-in / Hammer: Intruding	10				
10.9		TB	Tap, Break-in / Hammer	1				
23.9		CS	Crack Spiral	7 to 11				
24.7		FS	Fracture Spiral	2 to 9			J	
31.4		TBI	Tap, Break-in / Hammer: Intruding	10				
31.7		TBI	Tap, Break-in / Hammer: Intruding	2				
34.8		CS	Crack Spiral	6 to 12				
37.5		FM	Fracture Multiple	1 to 6			J	
40.3		FM	Fracture Multiple	12 to 11			J	
43.0		DAE	Deposits Attached: Encrustation	1 to 5	5		J	Possible hairline crack at 12-1:00
44.0		B	Pipe Broken	12 to 12				
44.6		TB	Tap, Break-in / Hammer	10				
45.2		TBI	Tap, Break-in / Hammer: Intruding	1				
46.4		FM	Fracture Multiple	6 to 6				
47.9		FM	Fracture Multiple	7 to 6				
48.6	S01	B	Pipe Broken	7 to 6				
51.7	S02	B	Pipe Broken	7 to 6				
98.0		DAE	Deposits Attached: Encrustation	1 to 5	5		J	
107.8		FM	Fracture Multiple	3 to 8			J	
109.6		AMH	Access Point - Manhole					S MH 48

Upstream MH 49	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 308 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:10	Length Surveyed 109.6
Additional Information					Media Label 37



AMH - Access Point - Manhole @ 0.0 m.
S MH 49



MWL - Water Level @ 0.0 m.



TBI - Tap, Break-in / Hammer: Intruding @ 10.1 m.



TB - Tap, Break-in / Hammer @ 10.9 m.

Upstream MH 49	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 308 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:10	Length Surveyed 109.6
Additional Information					Media Label 37



CS - Crack Spiral @ 23.9 m.



FS - Fracture Spiral @ 24.7 m.



TBI - Tap, Break-in / Hammer: Intruding @ 31.4 m.



TBI - Tap, Break-in / Hammer: Intruding @ 31.7 m.

Upstream MH 49	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 308 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:10	Length Surveyed 109.6
Additional Information					Media Label 37



CS - Crack Spiral @ 34.8 m.



FM - Fracture Multiple @ 37.5 m.

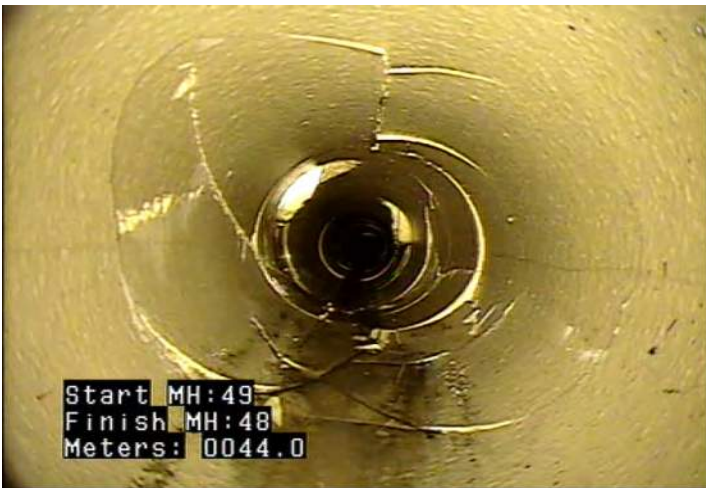


FM - Fracture Multiple @ 40.3 m.



DAE - Deposits Attached: Encrustation @ 43.0 m. Possible hairline crack at 12-1:00

Upstream MH 49	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 308 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:10	Length Surveyed 109.6
Additional Information					Media Label 37



B - Pipe Broken @ 44.0 m.



TB - Tap, Break-in / Hammer @ 44.6 m.



TBI - Tap, Break-in / Hammer: Intruding @ 45.2 m.



FM - Fracture Multiple @ 46.4 m.

Upstream MH 49	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 308 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:10	Length Surveyed 109.6
Additional Information					Media Label 37



FM - Fracture Multiple @ 47.9 m.



B - Pipe Broken @ 48.6 m.



B - Pipe Broken @ 51.7 m.



DAE - Deposits Attached: Encrustation @ 98.0 m.

Upstream MH 49	Downstream MH 48	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 308 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:10	Length Surveyed 109.6
Additional Information					Media Label 37



FM - Fracture Multiple @ 107.8 m.

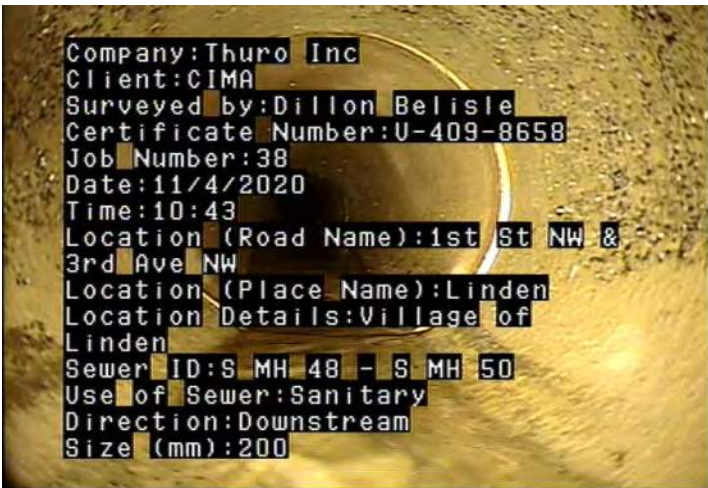


AMH - Access Point - Manhole @ 109.6 m.
S MH 48

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 48
0.0		MWL	Water Level		10			
1.7		FS	Fracture Spiral	4 to 8			J	
1.8		MWL	Water Level		20			
3.8		MWL	Water Level		5			
21.1		TBI	Tap, Break-in / Hammer: Intruding	10				
28.3		FS	Fracture Spiral	8 to 11			J	
29.7	S01	FM	Fracture Multiple	9 to 4				
30.6		HVV	Hole in Pipe: Void Visible	12 to 3				
31.4	F01	FM	Fracture Multiple	7 to 5				
36.2	S02	B	Pipe Broken	8 to 4				
37.4	F02	B	Pipe Broken	7 to 5				
39.3	S03	B	Pipe Broken	8 to 6				
40.2		TBD	Tap, Break-in / Hammer: Defective	10				Plastic intruding from top of service.
42.7		MWL	Water Level		20			
43.1	F03	B	Pipe Broken	6 to 6				
45.1	S04	CM	Crack Multiple	11 to 4				
47.2	F04	CM	Crack Multiple	8 to 11				
50.9		MWL	Water Level		10			
52.3		TBD	Tap, Break-in / Hammer: Defective	10				Plastic intruding from top of service.
52.5		CS	Crack Spiral	6 to 8				
57.2		FS	Fracture Spiral	6 to 2			J	
72.9		TBD	Tap, Break-in / Hammer: Defective	10				Plastic intruding from bottom of service.
93.0		DAE	Deposits Attached: Encrustation	7 to 5	10		J	
93.0		FS	Fracture Spiral	11 to 1			J	
94.5		DAE	Deposits Attached: Encrustation	7 to 5	10		J	
95.4		MWL	Water Level		5			
95.9		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
97.6		AMH	Access Point - Manhole					S MH 50

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



AMH - Access Point - Manhole @ 0.0 m.
S MH 48

MWL - Water Level @ 0.0 m.



FS - Fracture Spiral @ 1.7 m.

MWL - Water Level @ 1.8 m.

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



MWL - Water Level @ 3.8 m.



TBI - Tap, Break-in / Hammer: Intruding @ 21.1 m.



FS - Fracture Spiral @ 28.3 m.



FM - Fracture Multiple @ 29.7 m.

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



HVV - Hole in Pipe: Void Visible @ 30.6 m.



FM - Fracture Multiple @ 31.4 m.



B - Pipe Broken @ 36.2 m.



B - Pipe Broken @ 37.4 m.

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



B - Pipe Broken @ 39.3 m.



TBD - Tap, Break-in / Hammer: Defective @ 40.2 m. Plastic intruding from top of service.



MWL - Water Level @ 42.7 m.



B - Pipe Broken @ 43.1 m.

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



CM - Crack Multiple @ 45.1 m.



CM - Crack Multiple @ 47.2 m.



MWL - Water Level @ 50.9 m.



TBD - Tap, Break-in / Hammer: Defective @ 52.3 m. Plastic intruding from top of service.

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



CS - Crack Spiral @ 52.5 m.



FS - Fracture Spiral @ 57.2 m.



TBD - Tap, Break-in / Hammer: Defective @ 72.9 m. Plastic intruding from bottom of service.



DAE - Deposits Attached: Encrustation @ 93.0 m.

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



FS - Fracture Spiral @ 93.0 m.



DAE - Deposits Attached: Encrustation @ 94.5 m.



MWL - Water Level @ 95.4 m.



DAE - Deposits Attached: Encrustation @ 95.9 m.

Upstream MH 48	Downstream MH 50	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW & 3rd Ave NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 10:43	Length Surveyed 97.6
Additional Information					Media Label 38



AMH - Access Point - Manhole @ 97.6 m.
 S MH 50

Upstream MH 56	Downstream MH 55	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:13	Length Surveyed 47.1
Additional Information					Media Label 39



Upstream MH 56	Downstream MH 55	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:13	Length Surveyed 47.1
Additional Information					Media Label 39



AMH - Access Point - Manhole @ 0.0 m.
S MH 56



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 15.1 m.



TS - Tap, Saddle @ 36.7 m.

Upstream MH 56	Downstream MH 55	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address N end of 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:13	Length Surveyed 47.1
Additional Information					Media Label 39



AMH - Access Point - Manhole @ 47.1 m.
 S MH 55

Upstream MH 55A	Downstream MH 55	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 324 3rd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:35	Length Surveyed 61.3
Additional Information					Media Label 40



Upstream MH 55A	Downstream MH 55	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 324 3rd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:35	Length Surveyed 61.3
Additional Information					Media Label 40



AMH - Access Point - Manhole @ 0.0 m.
S MH 55A

MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 21.3 m.

TS - Tap, Saddle @ 21.9 m.

Upstream MH 55A	Downstream MH 55	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 324 3rd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:35	Length Surveyed 61.3
Additional Information					Media Label 40



TS - Tap, Saddle @ 41.4 m.



TS - Tap, Saddle @ 42.1 m.

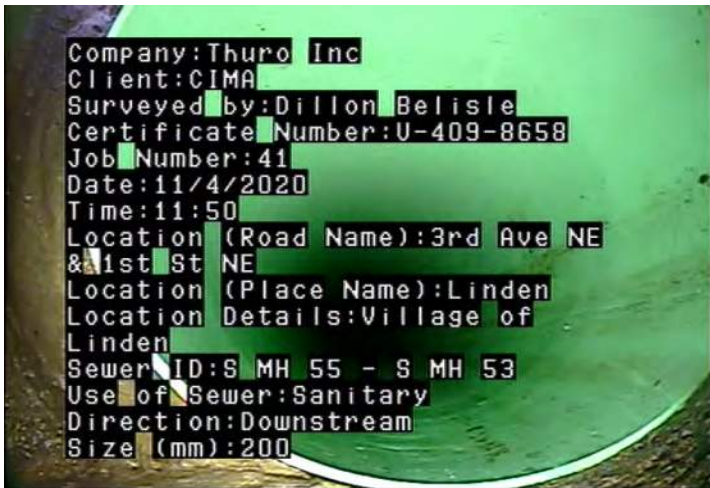


AMH - Access Point - Manhole @ 61.3 m.
S MH 55

Upstream MH 55	Downstream MH 53	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 3rd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:50	Length Surveyed 95
Additional Information					Media Label 41

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 55
0.0		MWL	Water Level		5			
12.1		TS	Tap, Saddle	2				
34.0		TS	Tap, Saddle	2				
84.0		FS	Fracture Spiral	8 to 12			J	
84.0		H	Hole in Pipe	3 to 8				
84.0		MMC	Material Change					PVC to Clay tile
84.1		IR	Infiltration - Runner	12 to 3				
92.1		RFJ	Roots, Fine: Joint	3 to 4				
93.6		B	Pipe Broken	7 to 3			J	
95.0		AMH	Access Point - Manhole					S MH 53

Upstream MH 55	Downstream MH 53	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 3rd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:50	Length Surveyed 95
Additional Information					Media Label 41



AMH - Access Point - Manhole @ 0.0 m.
S MH 55



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 12.1 m.



TS - Tap, Saddle @ 34.0 m.

Upstream MH 55	Downstream MH 53	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 3rd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:50	Length Surveyed 95
Additional Information					Media Label 41



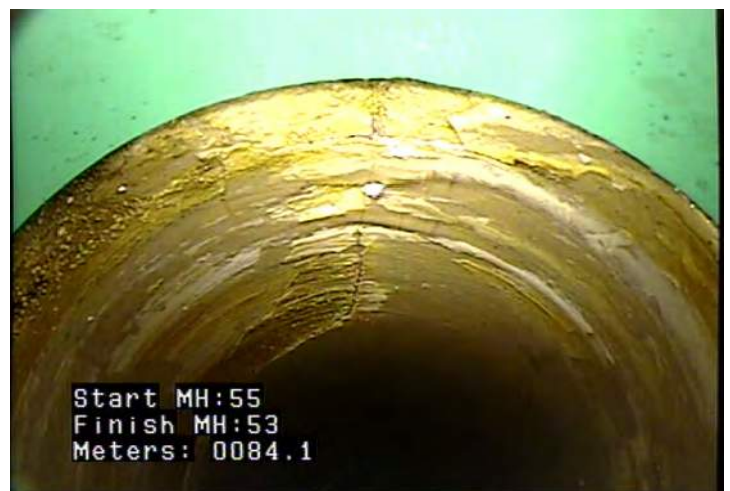
FS - Fracture Spiral @ 84.0 m.



H - Hole in Pipe @ 84.0 m.



MMC - Material Change @ 84.0 m. PVC to Clay tile



IR - Infiltration - Runner @ 84.1 m.

Upstream MH 55	Downstream MH 53	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 3rd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 11:50	Length Surveyed 95
Additional Information					Media Label 41



RFJ - Roots, Fine: Joint @ 92.1 m.



B - Pipe Broken @ 93.6 m.



AMH - Access Point - Manhole @ 95.0 m.
S MH 53

SEWER CONDITION INSPECTION REPORT

4650 - 50th Avenue SE
Calgary, Alberta T2B 3R4
Phone: (403) 243-0276
Fax: (403) 243-3371
Email: thuro@thuro.ca

Surveyors name Dillon Belisle	Certificate Number U-409-8658	System Owner 	Survey Customer CIMA	Drainage Area 	Sheet 1
P/O No. 	Pipeline Segment Reference S MH 53 - S MH 54	Date 11-04-2020	Time 13:35	Location (Street Name and number) 2nd Ave NE & 1st St NE	Locality Linden
Further Location details Village of Linden		Upstream Manhole Number 54	Rim to Invert 2.91	Grade to Invert 	Rim to Grade
Downstream Manhole Number 53	Rim to Invert 3.3	Grade to Invert 	Rim to Grade 	Use of Sewer Sanitary	Direction Upstream
Flow Control 	Height 200				
Width 200	Shape Circular	Material PVC	Ln. Method 	Pipe Joint Length 	Total Length 0
Length Surveyed 62.3	Year Laid 	Year Rehabilitated 	Tape / Media Number 42		
Purpose D	Sewer Category 	Pre-Cleaning Jetting	Cleaned 11-04-2020	Weather Dry	Additional Information

Distance (Meters)	Code		Continuous defect	Value				Joint	Circumferential Location		Image Ref.	Struct. Grade	O&M Grade	Remarks
	Group/ Descriptor	Modifier/ severity		S/M/L	Inches		%		At / From	To				
					1st	2nd								
0.0	AMH													S MH 53
0.0	MWL						0							
23.9	TS				100			9						
24.0	TS				100			3						
39.2	TS				100			9						
39.5	TS				100			3						
61.9	JO			L							2			
61.9	MSC				200	150								
61.9	MMC													PVC to Clay tile
62.3	AMH													S MH 54

Segment	Structural									O & M									Overall								
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index		Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index		Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Rating	Quick	Index	
14257-42- CIMA-S MH 53 - S MH 54	0	2	0	0	0	2	2100	2.0		0	0	0	0	0	0	0000			0	2	0	0	0	2	2100	2.0	

Upstream MH	Downstream MH	Size	Material	Total Length	City
54	53	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary





Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	2nd Ave NE & 1st St NE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-04-2020	13:35	62.3

Additional Information	Media Label
	42

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 53
0.0		MWL	Water Level		0			
23.9		TS	Tap, Saddle	9				
24.0		TS	Tap, Saddle	3				
39.2		TS	Tap, Saddle	9				
39.5		TS	Tap, Saddle	3				
61.9		JOL	Joint Offset (displaced): Large					
61.9		MSC	Dimension/Shape Change					
61.9		MMC	Material Change					PVC to Clay tile
62.3		AMH	Access Point - Manhole					S MH 54

Upstream MH 53	Downstream MH 52	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 13:51	Length Surveyed 45.5
Additional Information					Media Label 43

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 52 Concrete patch repair
	0.0		MGO	General Observation					
	1.7		MWLS	Water Level: Sag		10			
	2.8		TS	Tap, Saddle	3				
	5.7		MWL	Water Level		5			
	7.1		TS	Tap, Saddle	9				
	20.1		TSD	Tap, Saddle: Defective	10				Hole for service overcut.
	23.4		TS	Tap, Saddle	3				
	45.1		MSC	Dimension/Shape Change					
	45.1		MMC	Material Change					
	45.5		AMH	Access Point - Manhole					

Upstream MH 53	Downstream MH 52	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 13:51	Length Surveyed 45.5
Additional Information					Media Label 43



AMH - Access Point - Manhole @ 0.0 m.
S MH 52



MGO - General Observation @ 0.0 m.
Concrete patch repair



MWLS - Water Level: Sag @ 1.7 m.



TS - Tap, Saddle @ 2.8 m.

Upstream MH 53	Downstream MH 52	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 13:51	Length Surveyed 45.5
Additional Information					Media Label 43



MWL - Water Level @ 5.7 m.



TS - Tap, Saddle @ 7.1 m.



TSD - Tap, Saddle: Defective @ 20.1 m.
Hole for service overcut.



TS - Tap, Saddle @ 23.4 m.

Upstream MH 53	Downstream MH 52	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 13:51	Length Surveyed 45.5
Additional Information					Media Label 43



MSC - Dimension/Shape Change @ 45.1 m.



MMC - Material Change @ 45.1 m. PVC to Clay tile



AMH - Access Point - Manhole @ 45.5 m.
S MH 53

Upstream MH	Downstream MH	Size	Material	Total Length	City
52	51	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 212 2nd Ave NE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-04-2020	14:04	106.7

Additional Information	Media Label
	44

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 52
0.0		MWL	Water Level		0			
0.5		CC	Crack Circumferential	8 to 11				At MH opening
1.0		DSGV	Deposits Settled: Gravel	5 to 8	10			
2.4		JOM	Joint Offset (displaced): Medium					
2.9		MMC	Material Change					Clay tile to PVC
20.1		TS	Tap, Saddle	2				
20.7		TS	Tap, Saddle	11				
36.4		TS	Tap, Saddle	2				
36.8		TSD	Tap, Saddle: Defective	10				Gasket visible around service.
60.7		D	Pipe Deformed		15			
60.7		TS	Tap, Saddle	10				
65.9		TS	Tap, Saddle	2				
74.9		D	Pipe Deformed		10			
85.9		TSD	Tap, Saddle: Defective	2				Gasket visible around service.
98.8		TS	Tap, Saddle	10				
99.2		TS	Tap, Saddle	2				
106.7		AMH	Access Point - Manhole					S MH 51

Upstream MH 52	Downstream MH 51	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:04	Length Surveyed 106.7
Additional Information					Media Label 44



AMH - Access Point - Manhole @ 0.0 m.
S MH 52



MWL - Water Level @ 0.0 m.



CC - Crack Circumferential @ 0.5 m. At
MH opening



DSGV - Deposits Settled: Gravel @ 1.0 m.

Upstream MH 52	Downstream MH 51	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:04	Length Surveyed 106.7
Additional Information					Media Label 44



JOM - Joint Offset (displaced): Medium @ 2.4 m.



MMC - Material Change @ 2.9 m. Clay tile to PVC



TS - Tap, Saddle @ 20.1 m.



TS - Tap, Saddle @ 20.7 m.

Upstream MH 52	Downstream MH 51	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:04	Length Surveyed 106.7
Additional Information					Media Label 44



TS - Tap, Saddle @ 36.4 m.



TSD - Tap, Saddle: Defective @ 36.8 m.
Gasket visible around service.



D - Pipe Deformed @ 60.7 m.



TS - Tap, Saddle @ 60.7 m.

Upstream MH 52	Downstream MH 51	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:04	Length Surveyed 106.7
Additional Information					Media Label 44



TS - Tap, Saddle @ 65.9 m.



D - Pipe Deformed @ 74.9 m.



TSD - Tap, Saddle: Defective @ 85.9 m.
Gasket visible around service.



TS - Tap, Saddle @ 98.8 m.

Upstream MH 52	Downstream MH 51	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 212 2nd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:04	Length Surveyed 106.7
Additional Information					Media Label 44



TS - Tap, Saddle @ 99.2 m.



AMH - Access Point - Manhole @ 106.7 m.
S MH 51

Upstream MH	Downstream MH	Size	Material	Total Length	City
51	50	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 201 2nd Ave NE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-04-2020	14:22	57.6

Additional Information	Media Label
	45

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 51
	0.0		MWL	Water Level		5			
	1.4		KD	Buckling Dimpling	9 to 11				
	54.9		MWLS	Water Level: Sag		10			
	57.2		MWL	Water Level		5			
	57.2		TF	Tap, Factory Made	6				Drop structure
	57.6		AMH	Access Point - Manhole					S MH 50

Upstream MH 51	Downstream MH 50	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 201 2nd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:22	Length Surveyed 57.6
Additional Information					Media Label 45



AMH - Access Point - Manhole @ 0.0 m.
S MH 51



MWL - Water Level @ 0.0 m.



KD - Buckling Dimpling @ 1.4 m.



MWLS - Water Level: Sag @ 54.9 m.

Upstream MH 51	Downstream MH 50	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 201 2nd Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:22	Length Surveyed 57.6
Additional Information					Media Label 45



MWL - Water Level @ 57.2 m.



TF - Tap, Factory Made @ 57.2 m. Drop structure



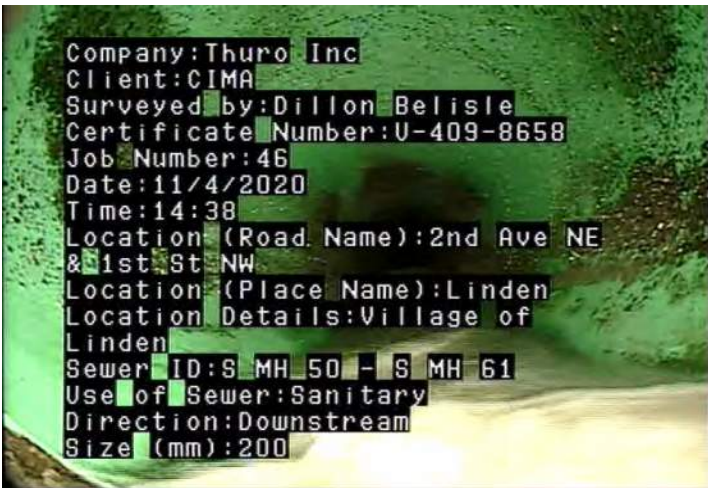
AMH - Access Point - Manhole @ 57.6 m.
S MH 50

Upstream MH 50	Downstream MH 61	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:38	Length Surveyed 125.7

Additional Information	Media Label 46
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Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 50
0.0		MWL	Water Level		15			
20.1		TS	Tap, Saddle	10				
30.3		TSD	Tap, Saddle: Defective	10				Chipped
44.2		MWL	Water Level		25			
53.1		TSI	Tap, Saddle: Intruding	10				
55.1		MWL	Water Level		10			
74.1		TSI	Tap, Saddle: Intruding	10				
97.2		TS	Tap, Saddle	10				
118.1		MWL	Water Level		25			
123.9		MWL	Water Level		50			
124.7		MCU	Camera Underwater					
125.7		AMH	Access Point - Manhole					S MH 61

Upstream MH 50	Downstream MH 61	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:38	Length Surveyed 125.7
Additional Information					Media Label 46



AMH - Access Point - Manhole @ 0.0 m.
S MH 50

MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 20.1 m.

TSD - Tap, Saddle: Defective @ 30.3 m.
Chipped

Upstream MH 50	Downstream MH 61	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:38	Length Surveyed 125.7
Additional Information					Media Label 46



MWL - Water Level @ 44.2 m.



TSI - Tap, Saddle: Intruding @ 53.1 m.



MWL - Water Level @ 55.1 m.



TSI - Tap, Saddle: Intruding @ 74.1 m.

Upstream MH 50	Downstream MH 61	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:38	Length Surveyed 125.7
Additional Information					Media Label 46



TS - Tap, Saddle @ 97.2 m.



MWL - Water Level @ 118.1 m.



MWL - Water Level @ 123.9 m.



MCU - Camera Underwater @ 124.7 m.

Upstream MH 50	Downstream MH 61	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 14:38	Length Surveyed 125.7
Additional Information					Media Label 46



AMH - Access Point - Manhole @ 125.7 m.
S MH 61




Upstream MH	Downstream MH	Size	Material	Total Length	City
61	62	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

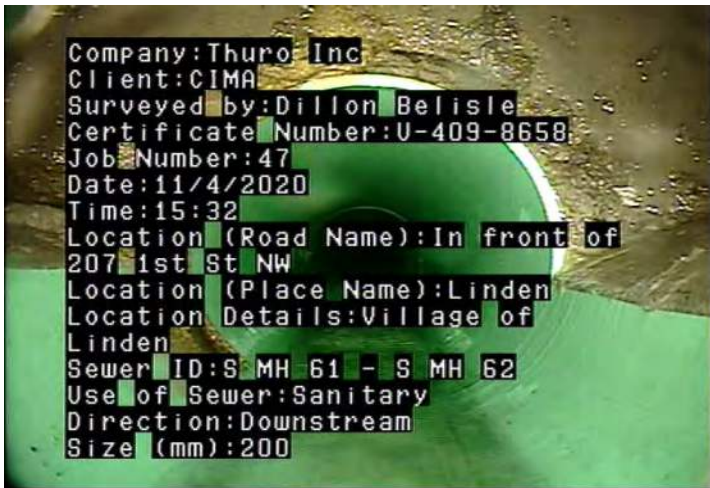
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 207 1st St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-04-2020	15:32	124.8

Additional Information	Media Label
	47

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 61
	0.0		MWL	Water Level		10			
	10.8		MWL	Water Level		25			
	17.7		MWL	Water Level		10			
	23.5	S01	MWLS	Water Level: Sag		20			
	28.7	F01	MWLS	Water Level: Sag		5			
	32.6	S02	MWLS	Water Level: Sag		20			
	39.9	F02	MWLS	Water Level: Sag		10			
	113.6		MWL	Water Level		20			
	119.3		MWL	Water Level		50			
	123.9		MMC	Material Change					PVC to Clay tile
	124.3		FC	Fracture Circumferential	8 to 4				
	124.8		AMH	Access Point - Manhole					S MH 62

Upstream MH 61	Downstream MH 62	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 207 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 15:32	Length Surveyed 124.8
Additional Information					Media Label 47



AMH - Access Point - Manhole @ 0.0 m.
S MH 61

MWL - Water Level @ 0.0 m.



MWL - Water Level @ 10.8 m.

MWL - Water Level @ 17.7 m.

Upstream MH 61	Downstream MH 62	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 207 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 15:32	Length Surveyed 124.8
Additional Information					Media Label 47



MWLS - Water Level: Sag @ 23.5 m.



MWLS - Water Level: Sag @ 28.7 m.



MWLS - Water Level: Sag @ 32.6 m.



MWLS - Water Level: Sag @ 39.9 m.

Upstream MH 61	Downstream MH 62	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 207 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 15:32	Length Surveyed 124.8
Additional Information					Media Label 47



MWL - Water Level @ 113.6 m.



MWL - Water Level @ 119.3 m.



MMC - Material Change @ 123.9 m. PVC to Clay tile







FC - Fracture Circumferential @ 124.3 m.

Upstream MH 61	Downstream MH 62	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 207 1st St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 15:32	Length Surveyed 124.8
Additional Information					Media Label 47

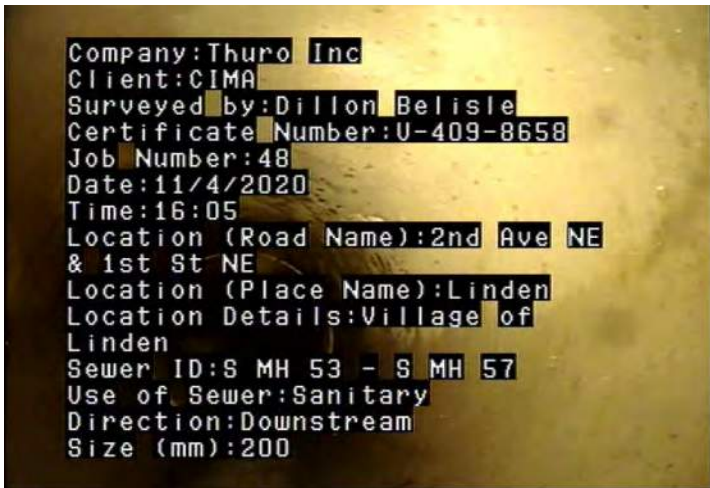


AMH - Access Point - Manhole @ 124.8 m.
 S MH 62

Upstream MH 53	Downstream MH 57	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NE	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:05	Length Surveyed 53
Additional Information					Media Label 48

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 53
	0.0		MWL	Water Level		5			
	1.7		RFJ	Roots, Fine: Joint	12 to 3				
	2.6		MMC	Material Change					Clay tile to PVC
	8.5		MWL	Water Level		10			
	12.1		MWL	Water Level		5			
	12.5		JOM	Joint Offset (displaced): Medium					
	12.5		MMC	Material Change					PVC to Clay tile
	13.9		RFJ	Roots, Fine: Joint	11 to 5				
	25.2		RFJ	Roots, Fine: Joint	8 to 11				
	27.7		RTJ	Roots, Tap: Joint	10	10		J	
	29.2		RFJ	Roots, Fine: Joint	8 to 4				
	32.0		FS	Fracture Spiral	6 to 12			J	
	32.0		RFJ	Roots, Fine: Joint	8 to 10				
	37.7		RFJ	Roots, Fine: Joint	8 to 10				
	53.0		AMH	Access Point - Manhole					S MH 57

Upstream MH 53	Downstream MH 57	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:05	Length Surveyed 53
Additional Information					Media Label 48



AMH - Access Point - Manhole @ 0.0 m.
S MH 53

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 1.7 m.



MMC - Material Change @ 2.6 m. Clay tile to PVC

Upstream MH 53	Downstream MH 57	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:05	Length Surveyed 53
Additional Information					Media Label 48



MWL - Water Level @ 8.5 m.



MWL - Water Level @ 12.1 m.



JOM - Joint Offset (displaced): Medium @ 12.5 m.



MMC - Material Change @ 12.5 m. PVC to Clay tile

Upstream MH 53	Downstream MH 57	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:05	Length Surveyed 53
Additional Information					Media Label 48



RFJ - Roots, Fine: Joint @ 13.9 m.



RFJ - Roots, Fine: Joint @ 25.2 m.



RTJ - Roots, Tap: Joint @ 27.7 m.



RFJ - Roots, Fine: Joint @ 29.2 m.

Upstream MH 53	Downstream MH 57	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 2nd Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:05	Length Surveyed 53
Additional Information					Media Label 48



FS - Fracture Spiral @ 32.0 m.



RFJ - Roots, Fine: Joint @ 32.0 m.



RFJ - Roots, Fine: Joint @ 37.7 m.



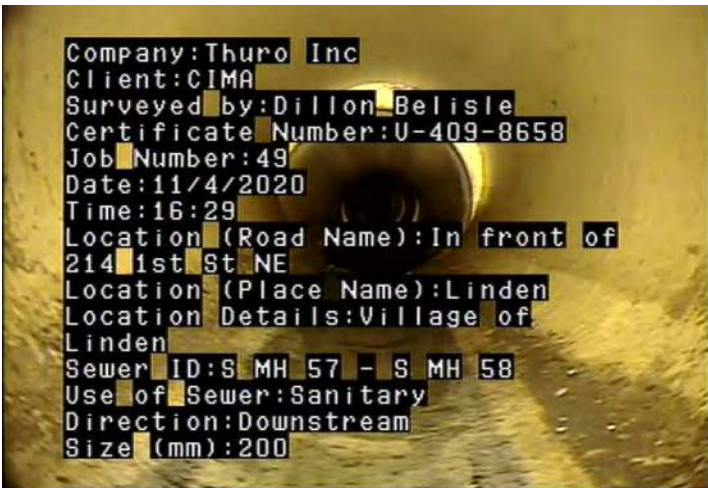
AMH - Access Point - Manhole @ 53.0 m.
S MH 57

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2

Additional Information	Media Label 49
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Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 57
0.0		MWL	Water Level		5			
1.7		JOL	Joint Offset (displaced): Large					
4.6		FS	Fracture Spiral	6 to 1			J	
6.9		MWLS	Water Level: Sag		15			
9.8		TB	Tap, Break-in / Hammer	1				
10.7		MWL	Water Level		5			
11.4		B	Pipe Broken	12 to 9				
11.6		TB	Tap, Break-in / Hammer	10				
12.8		CM	Crack Multiple	10 to 4			J	
25.2		RFJ	Roots, Fine: Joint	1 to 2				
26.6		FM	Fracture Multiple	7 to 6			J	
28.3		TB	Tap, Break-in / Hammer	10				
31.3		MWL	Water Level		10			
32.2		FM	Fracture Multiple	8 to 10				
32.3		TB	Tap, Break-in / Hammer	12				
33.3		MWL	Water Level		5			
49.3		TB	Tap, Break-in / Hammer	10				
50.0		B	Pipe Broken	12 to 12				
51.9		TB	Tap, Break-in / Hammer	2				
54.3		FS	Fracture Spiral	7 to 11			J	
57.8		MWL	Water Level		10			
62.6		MWL	Water Level		5			
66.9		FS	Fracture Spiral	7 to 11			J	
67.8		MWL	Water Level		20			
68.3		JOM	Joint Offset (displaced): Medium					
72.3		MWL	Water Level		45			
72.3		TBD	Tap, Break-in / Hammer: Defective	12				Roots in service
72.4		B	Pipe Broken	9 to 2			J	After tap
75.6		DAGS	Deposits Attached: Grease	1	5			
75.6		MCU	Camera Underwater					
78.5		MWL	Water Level		25			
81.0		MMC	Material Change					Clay tile to PVC
82.1		MWL	Water Level		5			
94.9		DSGV	Deposits Settled: Gravel	4 to 6	10			
96.2		AMH	Access Point - Manhole					S MH 58

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



AMH - Access Point - Manhole @ 0.0 m.
S MH 57



MWL - Water Level @ 0.0 m.



JOL - Joint Offset (displaced): Large @ 1.7 m.



FS - Fracture Spiral @ 4.6 m.

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



MWLS - Water Level: Sag @ 6.9 m.



TB - Tap, Break-in / Hammer @ 9.8 m.



MWL - Water Level @ 10.7 m.



B - Pipe Broken @ 11.4 m.

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



TB - Tap, Break-in / Hammer @ 11.6 m.



CM - Crack Multiple @ 12.8 m.



RFJ - Roots, Fine: Joint @ 25.2 m.



FM - Fracture Multiple @ 26.6 m.

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



TB - Tap, Break-in / Hammer @ 28.3 m.



MWL - Water Level @ 31.3 m.



FM - Fracture Multiple @ 32.2 m.



TB - Tap, Break-in / Hammer @ 32.3 m.

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



MWL - Water Level @ 33.3 m.



TB - Tap, Break-in / Hammer @ 49.3 m.



B - Pipe Broken @ 50.0 m.



TB - Tap, Break-in / Hammer @ 51.9 m.

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



FS - Fracture Spiral @ 54.3 m.



MWL - Water Level @ 57.8 m.



MWL - Water Level @ 62.6 m.



FS - Fracture Spiral @ 66.9 m.

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



MWL - Water Level @ 67.8 m.



JOM - Joint Offset (displaced): Medium @ 68.3 m.



MWL - Water Level @ 72.3 m.



TBD - Tap, Break-in / Hammer: Defective @ 72.3 m. Roots in service

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



B - Pipe Broken @ 72.4 m. After tap



DAGS - Deposits Attached: Grease @ 75.6 m.



MCU - Camera Underwater @ 75.6 m.



MWL - Water Level @ 78.5 m.

Upstream MH 57	Downstream MH 58	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 214 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-04-2020	Time 16:29	Length Surveyed 96.2
Additional Information					Media Label 49



MMC - Material Change @ 81.0 m. Clay tile to PVC



MWL - Water Level @ 82.1 m.



DSGV - Deposits Settled: Gravel @ 94.9 m.



AMH - Access Point - Manhole @ 96.2 m. S MH 58

Upstream MH 68	Downstream MH 58	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE & 1st Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 07:41	Length Surveyed 55.2
Additional Information					Media Label 50



Upstream MH 68	Downstream MH 58	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE & 1st Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 07:41	Length Surveyed 55.2
Additional Information					Media Label 50



AMH - Access Point - Manhole @ 0.0 m.
S MH 58



MWL - Water Level @ 0.0 m.



TFA - Tap, Factory Made: Active @ 28.4 m.






TS - Tap, Saddle @ 44.9 m.

Upstream MH 68	Downstream MH 58	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE & 1st Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 07:41	Length Surveyed 55.2
Additional Information					Media Label 50



AMH - Access Point - Manhole @ 55.2 m.
 S MH 68

Upstream MH 58	Downstream MH 59	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE & 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 08:07	Length Surveyed 99.4
Additional Information					Media Label 51

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 58
	0.0		MWL	Water Level		10			
	24.3		TS	Tap, Saddle	2				
	63.6		TS	Tap, Saddle	2				
	73.7		RFC	Roots, Fine: Connection	9 to 10				
	73.7		TS	Tap, Saddle	11				
	74.4		TS	Tap, Saddle	10				
	99.4		AMH	Access Point - Manhole					S MH 59

Upstream MH 58	Downstream MH 59	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE & 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 08:07	Length Surveyed 99.4
Additional Information					Media Label 51



AMH - Access Point - Manhole @ 0.0 m.
S MH 58

MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 24.3 m.

TS - Tap, Saddle @ 63.6 m.

Upstream MH 58	Downstream MH 59	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE & 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 08:07	Length Surveyed 99.4
Additional Information					Media Label 51



RFC - Roots, Fine: Connection @ 73.7 m.



TS - Tap, Saddle @ 73.7 m.



TS - Tap, Saddle @ 74.4 m.

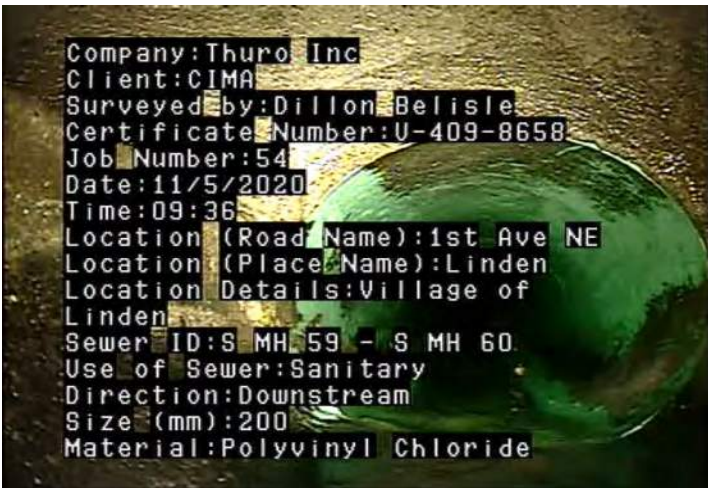


AMH - Access Point - Manhole @ 99.4 m.
S MH 59

Upstream MH 59	Downstream MH 60	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 1st Ave NE	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:36	Length Surveyed 60.4
Additional Information					Media Label 54

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 59
0.0		MWL	Water Level		10			
9.8		TS	Tap, Saddle	2				
29.8		TS	Tap, Saddle	10				
43.4		TS	Tap, Saddle	10				
44.4		TS	Tap, Saddle	10				
55.5		MWL	Water Level		20			
59.7		DSGV	Deposits Settled: Gravel	3 to 8	10			
60.4		AMH	Access Point - Manhole					S MH 60

Upstream MH 59	Downstream MH 60	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:36	Length Surveyed 60.4
Additional Information					Media Label 54



AMH - Access Point - Manhole @ 0.0 m.
S MH 59



MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 9.8 m.



TS - Tap, Saddle @ 29.8 m.

Upstream MH 59	Downstream MH 60	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:36	Length Surveyed 60.4
Additional Information					Media Label 54



TS - Tap, Saddle @ 43.4 m.



TS - Tap, Saddle @ 44.4 m.



MWL - Water Level @ 55.5 m.



DSGV - Deposits Settled: Gravel @ 59.7 m.

Upstream MH 59	Downstream MH 60	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:36	Length Surveyed 60.4
Additional Information					Media Label 54

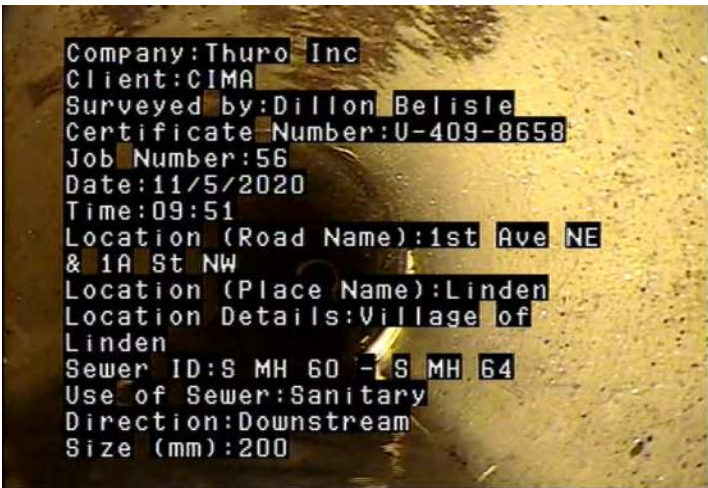


AMH - Access Point - Manhole @ 60.4 m.
 S MH 60

Upstream MH 60	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 1st Ave NE & 1A St NW	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:51	Length Surveyed 6.6
Additional Information					Media Label 56

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 60
0.0		MWL	Water Level		10			
1.2		RFJ	Roots, Fine: Joint	8 to 4			J	
2.3		MWLS	Water Level: Sag		20			
2.6		MSC	Dimension/Shape Change					
2.6		RFJ	Roots, Fine: Joint	8 to 10				
2.6	S01	RPR	Point Repair - Pipe Replaced					PVC
5.3		MSC	Dimension/Shape Change					
5.6	F01	RPR	Point Repair - Pipe Replaced					PVC Ends
6.6		MSA	Survey Abandoned					Unable to pass diameter change

Upstream MH 60	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 1A St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:51	Length Surveyed 6.6
Additional Information					Media Label 56



AMH - Access Point - Manhole @ 0.0 m.
S MH 60

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 1.2 m.

MWLS - Water Level: Sag @ 2.3 m.

Upstream MH 60	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 1A St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:51	Length Surveyed 6.6
Additional Information					Media Label 56



MSC - Dimension/Shape Change @ 2.6 m. RFJ - Roots, Fine: Joint @ 2.6 m.



RPR - Point Repair - Pipe Replaced @ 2.6 m. PVC MSC - Dimension/Shape Change @ 5.3 m.

Upstream MH 60	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 1A St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 09:51	Length Surveyed 6.6
Additional Information					Media Label 56



RPR - Point Repair - Pipe Replaced @ 5.6 m. PVC Ends



MSA - Survey Abandoned @ 6.6 m. Unable to pass diameter change

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 64
0.0		MWL	Water Level		5			
2.0		RFJ	Roots, Fine: Joint	3 to 4				
4.9		RFJ	Roots, Fine: Joint	7 to 9				
6.2		MWLS	Water Level: Sag		20			
11.0		MWL	Water Level		5			
15.9		RFJ	Roots, Fine: Joint	8 to 10				
17.0		RFJ	Roots, Fine: Joint	2 to 4				
18.6		RFJ	Roots, Fine: Joint	2 to 5				
20.0		RFJ	Roots, Fine: Joint	8 to 4				
20.4		MWL	Water Level		15			
21.3		RFJ	Roots, Fine: Joint	9 to 3				
22.8		RFJ	Roots, Fine: Joint	1 to 3				
23.0		MWL	Water Level		10			
24.2		RFJ	Roots, Fine: Joint	8 to 2				
26.2		MWL	Water Level		25			
26.9		RFJ	Roots, Fine: Joint	9 to 4				
27.1		TB	Tap, Break-in / Hammer	12				
28.3		RFJ	Roots, Fine: Joint	8 to 5				
28.6		MWL	Water Level		5			
29.6		RFJ	Roots, Fine: Joint	8 to 10				
35.0		MWL	Water Level		10			
36.9		TBA	Tap, Break-in / Hammer: Active	2				
37.1		CS	Crack Spiral	2 to 5				
37.7		RFJ	Roots, Fine: Joint	9 to 5				
37.7		JOM	Joint Offset (displaced): Medium					
39.3		RFJ	Roots, Fine: Joint	9 to 4				
40.7		RFJ	Roots, Fine: Joint	9 to 3				
42.0		RFJ	Roots, Fine: Joint	9 to 4				
43.4		RFJ	Roots, Fine: Joint	1 to 5				
44.6		RFJ	Roots, Fine: Joint	7 to 11				
46.3		MWLS	Water Level: Sag		20			
47.6		RFJ	Roots, Fine: Joint	8 to 4				
49.0		RFJ	Roots, Fine: Joint	8 to 4				
50.0		MWL	Water Level		10			
50.0		TB	Tap, Break-in / Hammer	12				
50.4		RFJ	Roots, Fine: Joint	8 to 4				
51.8		RFJ	Roots, Fine: Joint	8 to 4				
56.7		MWL	Water Level		5			
57.3		RFJ	Roots, Fine: Joint	8 to 4				
58.7		MWL	Water Level		10			
60.2		RFJ	Roots, Fine: Joint	2 to 4				
63.7		MWL	Water Level		5			
65.8		MWL	Water Level		10			
89.4		CS	Crack Spiral	2 to 4				
94.8		MMC	Material Change					Clay tile to PVC
94.8		MSC	Dimension/Shape Change					
95.1		MSA	Survey Abandoned					

Abandon Survey at dimension change. See Job 56 for rest of video.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



AMH - Access Point - Manhole @ 0.0 m.
S MH 64

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 2.0 m.

RFJ - Roots, Fine: Joint @ 4.9 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



MWLS - Water Level: Sag @ 6.2 m.



MWL - Water Level @ 11.0 m.



RFJ - Roots, Fine: Joint @ 15.9 m.

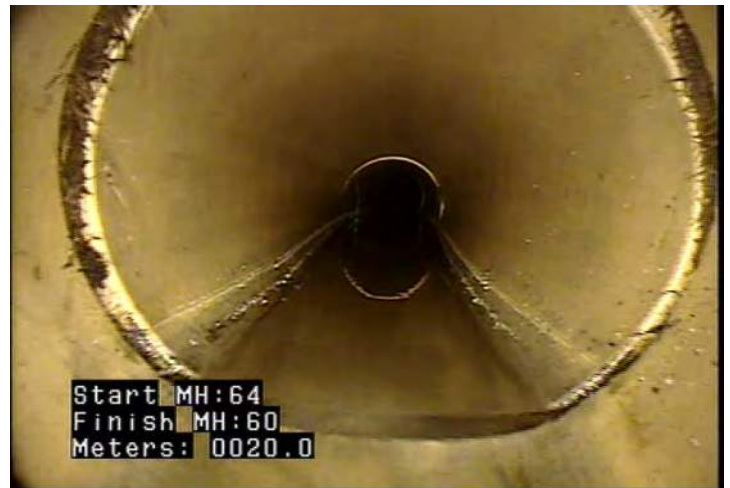


RFJ - Roots, Fine: Joint @ 17.0 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 18.6 m.



RFJ - Roots, Fine: Joint @ 20.0 m.



MWL - Water Level @ 20.4 m.



RFJ - Roots, Fine: Joint @ 21.3 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 22.8 m.



MWL - Water Level @ 23.0 m.



RFJ - Roots, Fine: Joint @ 24.2 m.



MWL - Water Level @ 26.2 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 26.9 m.



TB - Tap, Break-in / Hammer @ 27.1 m.



RFJ - Roots, Fine: Joint @ 28.3 m.



MWL - Water Level @ 28.6 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 29.6 m.



MWL - Water Level @ 35.0 m.



TBA - Tap, Break-in / Hammer: Active @ 36.9 m.



CS - Crack Spiral @ 37.1 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 37.7 m.



JOM - Joint Offset (displaced): Medium @ 37.7 m.



RFJ - Roots, Fine: Joint @ 39.3 m.



RFJ - Roots, Fine: Joint @ 40.7 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 42.0 m.



RFJ - Roots, Fine: Joint @ 43.4 m.



RFJ - Roots, Fine: Joint @ 44.6 m.



MWLS - Water Level: Sag @ 46.3 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 47.6 m.



RFJ - Roots, Fine: Joint @ 49.0 m.



MWL - Water Level @ 50.0 m.



TB - Tap, Break-in / Hammer @ 50.0 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



RFJ - Roots, Fine: Joint @ 50.4 m.



RFJ - Roots, Fine: Joint @ 51.8 m.



MWL - Water Level @ 56.7 m.



RFJ - Roots, Fine: Joint @ 57.3 m.

Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



MWL - Water Level @ 58.7 m.



RFJ - Roots, Fine: Joint @ 60.2 m.



MWL - Water Level @ 63.7 m.

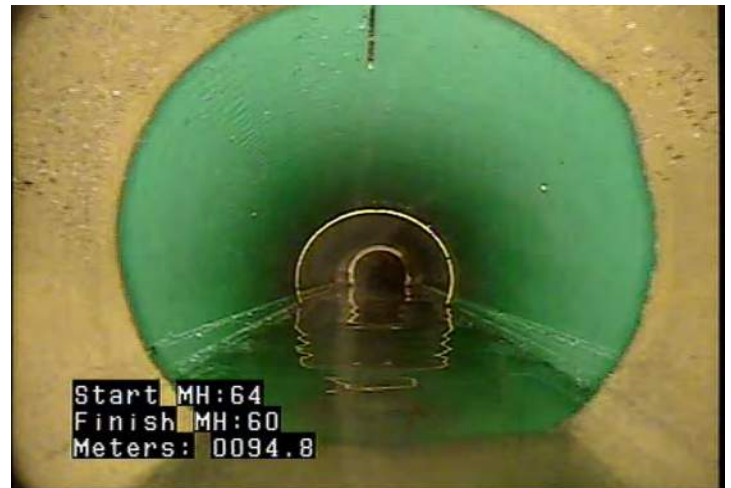


MWL - Water Level @ 65.8 m.

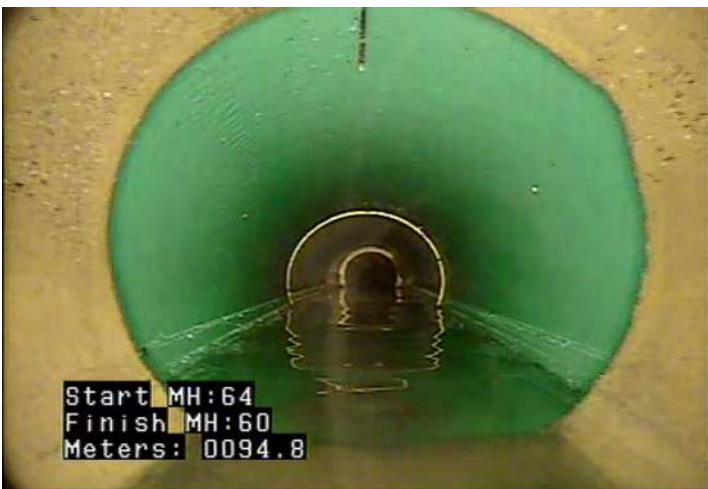
Upstream MH 64	Downstream MH 60	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:49	Length Surveyed 95.1
Additional Information					Media Label 56R



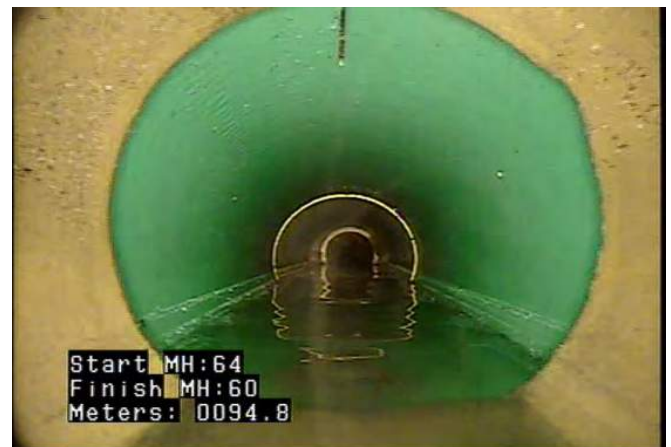
CS - Crack Spiral @ 89.4 m.



MMC - Material Change @ 94.8 m. Clay tile to PVC



MSC - Dimension/Shape Change @ 94.8 m.



MSA - Survey Abandoned @ 95.1 m.
Abandon Survey at dimension change.
See Job 56 for rest of video.

Upstream MH 69A	Downstream MH 69	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 10:21	Length Surveyed 130.2
Additional Information					Media Label 57

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 69A
0.0		MWL	Water Level		0			
11.1		D	Pipe Deformed		5			
45.9		D	Pipe Deformed		5			
51.3		D	Pipe Deformed		5			
92.5		D	Pipe Deformed		5			
124.8		D	Pipe Deformed		5			
130.2		AMH	Access Point - Manhole					S MH 69

Upstream MH 69A	Downstream MH 69	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 10:21	Length Surveyed 130.2
Additional Information					Media Label 57



AMH - Access Point - Manhole @ 0.0 m.
S MH 69A

MWL - Water Level @ 0.0 m.



D - Pipe Deformed @ 11.1 m.

D - Pipe Deformed @ 45.9 m.

Upstream MH 69A	Downstream MH 69	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 10:21	Length Surveyed 130.2
Additional Information					Media Label 57



D - Pipe Deformed @ 51.3 m.



D - Pipe Deformed @ 92.5 m.



D - Pipe Deformed @ 124.8 m.

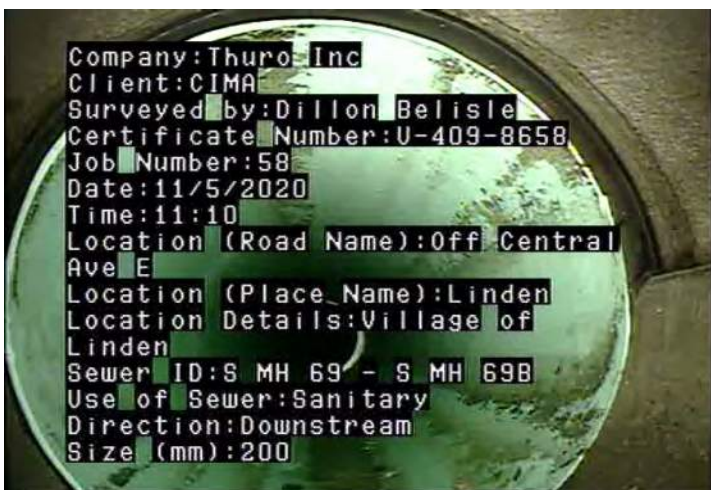


AMH - Access Point - Manhole @ 130.2 m.
S MH 69

Upstream MH 69	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Ditch	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:10	Length Surveyed 61.8
Additional Information					Media Label 58

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 69
0.0		MWL	Water Level		5			
2.1		JOM	Joint Offset (displaced): Medium					
8.9		D	Pipe Deformed		5			
18.2		D	Pipe Deformed		10			
25.6		D	Pipe Deformed		5			Oval
25.6		JSM	Joint Separated (open): Medium					
27.9		D	Pipe Deformed		5			
30.8		D	Pipe Deformed		5			
54.5		D	Pipe Deformed		5			
57.3		D	Pipe Deformed		5			Oval
57.3		JAM	Joint Angular: Medium					
60.1		TS	Tap, Saddle	9				
61.8		AMH	Access Point - Manhole					S MH 69B

Upstream MH 69	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Ditch	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:10	Length Surveyed 61.8
Additional Information					Media Label 58



AMH - Access Point - Manhole @ 0.0 m.
S MH 69



MWL - Water Level @ 0.0 m.



JOM - Joint Offset (displaced): Medium @
2.1 m.



D - Pipe Deformed @ 8.9 m.

Upstream MH 69	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Ditch	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:10	Length Surveyed 61.8
Additional Information					Media Label 58



D - Pipe Deformed @ 18.2 m.



D - Pipe Deformed @ 25.6 m. Oval



JSM - Joint Separated (open): Medium @ 25.6 m.



D - Pipe Deformed @ 27.9 m.

Upstream MH 69	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:10	Length Surveyed 61.8
Additional Information					Media Label 58



D - Pipe Deformed @ 30.8 m.



D - Pipe Deformed @ 54.5 m.



D - Pipe Deformed @ 57.3 m. Oval



JAM - Joint Angular: Medium @ 57.3 m.

Upstream MH 69	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:10	Length Surveyed 61.8
Additional Information					Media Label 58



TS - Tap, Saddle @ 60.1 m.



AMH - Access Point - Manhole @ 61.8 m.
S MH 69B

Upstream MH	Downstream MH	Size	Material	Total Length	City
70	69B	200	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Ditch	Sanitary

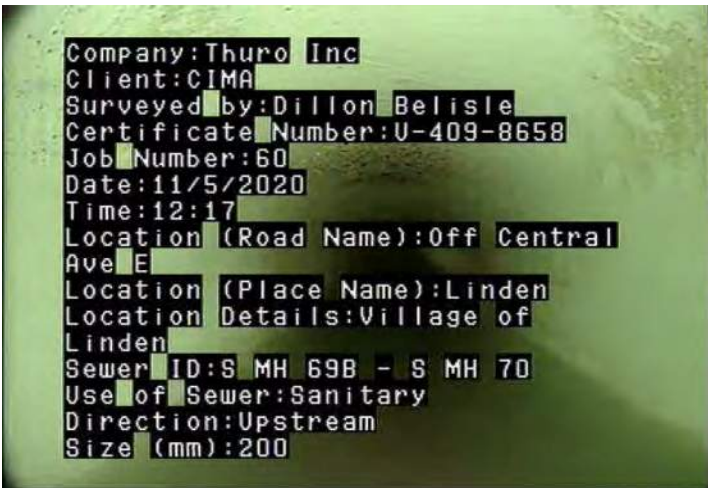
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Off Central Ave E	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-05-2020	12:17	44.1

Additional Information	Media Label
	60

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 69B
	0.0	S01	MWLS	Water Level: Sag		20			
	6.3	F01	MWLS	Water Level: Sag		10			
	9.0		MWL	Water Level		15			
	12.3		MWL	Water Level		5			
	13.9		MWL	Water Level		15			
	15.0	S02	MWLS	Water Level: Sag		20			
	20.3	F02	MWLS	Water Level: Sag		5			
	24.0	S03	MWLS	Water Level: Sag		20			
	26.1	F03	MWLS	Water Level: Sag		5			
	38.8	S04	MWLS	Water Level: Sag		20			
	40.0		D	Pipe Deformed		10			Oval
	40.8		TS	Tap, Saddle	10				
	42.1	F04	MWLS	Water Level: Sag		0			
	44.1		AMH	Access Point - Manhole					S MH 70

Upstream MH 70	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 12:17	Length Surveyed 44.1
Additional Information					Media Label 60



AMH - Access Point - Manhole @ 0.0 m.
S MH 69B

MWLS - Water Level: Sag @ 0.0 m.



MWLS - Water Level: Sag @ 6.3 m.

MWLS - Water Level: Sag @ 15.0 m.

Upstream MH 70	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 12:17	Length Surveyed 44.1
Additional Information					Media Label 60



MWLS - Water Level: Sag @ 20.3 m.



MWLS - Water Level: Sag @ 24.0 m.



MWLS - Water Level: Sag @ 26.1 m.



MWLS - Water Level: Sag @ 38.8 m.

Upstream MH 70	Downstream MH 69B	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 12:17	Length Surveyed 44.1
Additional Information					Media Label 60



D - Pipe Deformed @ 40.0 m. Oval



TS - Tap, Saddle @ 40.8 m.






MWLS - Water Level: Sag @ 42.1 m.

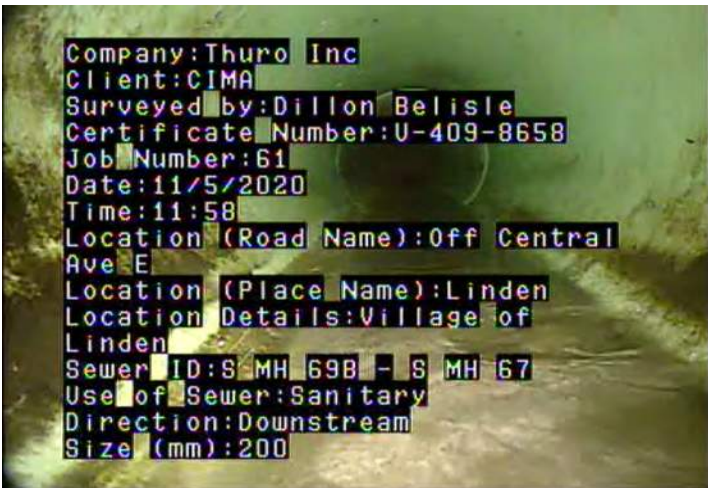


AMH - Access Point - Manhole @ 44.1 m.
S MH 70

Upstream MH 69B	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:58	Length Surveyed 105.8
Additional Information					Media Label 61

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 69B
	0.0		MWL	Water Level		10			
	18.7	S01	MWLS	Water Level: Sag		20			
	23.4	F01	MWLS	Water Level: Sag		5			
	33.7		TS	Tap, Saddle	10				
	36.2	S02	MWLS	Water Level: Sag		20			
	41.5	F02	MWLS	Water Level: Sag		10			
	75.2		MWL	Water Level		15			
	83.8		MWL	Water Level		5			
	105.8		AMH	Access Point - Manhole					S MH 67

Upstream MH 69B	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:58	Length Surveyed 105.8
Additional Information					Media Label 61



AMH - Access Point - Manhole @ 0.0 m.
S MH 69B

MWL - Water Level @ 0.0 m.



MWLS - Water Level: Sag @ 18.7 m.

MWLS - Water Level: Sag @ 23.4 m.

Upstream MH 69B	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Ditch	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:58	Length Surveyed 105.8
Additional Information					Media Label 61



TS - Tap, Saddle @ 33.7 m.



MWLS - Water Level: Sag @ 36.2 m.










MWLS - Water Level: Sag @ 41.5 m.

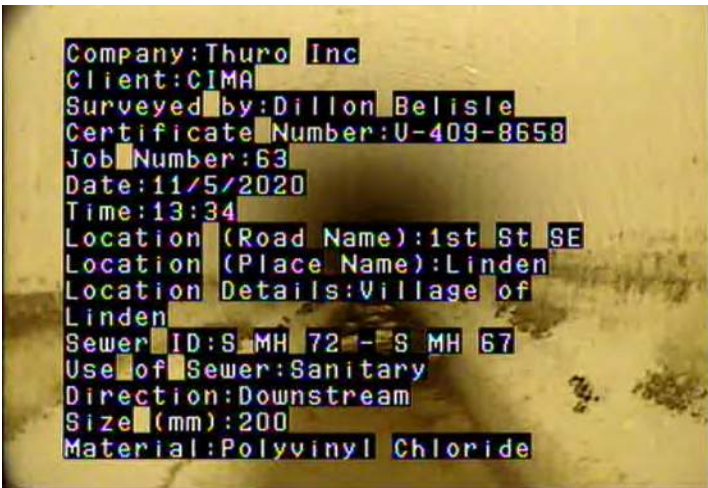


AMH - Access Point - Manhole @ 105.8 m.
S MH 67

Upstream MH 72	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 13:34	Length Surveyed 59.9
Additional Information					Media Label 63

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 72
	0.0		MWL	Water Level		5			
	8.4		TS	Tap, Saddle	3				
	19.9		D	Pipe Deformed		5			
	20.0		MWL	Water Level		0			
	22.5		TS	Tap, Saddle	3				
	23.0		TS	Tap, Saddle	3				
	32.0		MMC	Material Change					White to Blue PVC
	34.6	S01	MWLS	Water Level: Sag		20			
	36.1		TS	Tap, Saddle	3				
	39.6		CL	Crack Longitudinal	11				Closer view of crack
	39.9		MGP	General Photograph					
	44.0	F01	MWLS	Water Level: Sag		5			
	59.9		AMH	Access Point - Manhole					S MH 67

Upstream MH 72	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 13:34	Length Surveyed 59.9
Additional Information					Media Label 63



AMH - Access Point - Manhole @ 0.0 m.
S MH 72

MWL - Water Level @ 0.0 m.



TS - Tap, Saddle @ 8.4 m.

D - Pipe Deformed @ 19.9 m.

Upstream MH 72	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 13:34	Length Surveyed 59.9
Additional Information					Media Label 63



TS - Tap, Saddle @ 22.5 m.



TS - Tap, Saddle @ 23.0 m.



MMC - Material Change @ 32.0 m. White to Blue PVC



MWLS - Water Level: Sag @ 34.6 m.

Upstream MH 72	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 13:34	Length Surveyed 59.9
Additional Information					Media Label 63



TS - Tap, Saddle @ 36.1 m.



CL - Crack Longitudinal @ 39.6 m.



MGP - General Photograph @ 39.9 m.
Closer view of crack




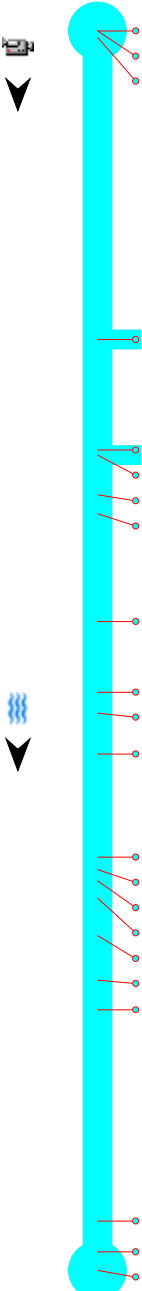
MWLS - Water Level: Sag @ 44.0 m.

Upstream MH 72	Downstream MH 67	Size 200	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 13:34	Length Surveyed 59.9
Additional Information					Media Label 63

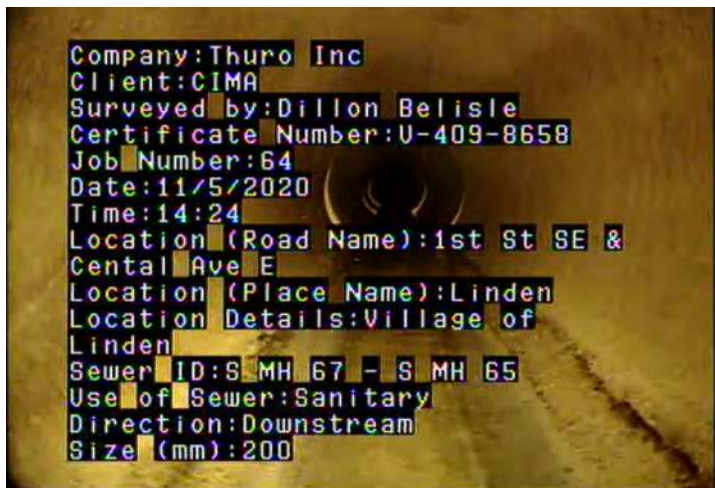


AMH - Access Point - Manhole @ 59.9 m.
S MH 67

Upstream MH 67	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Cental Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:24	Length Surveyed 99.9
Additional Information					Media Label 64

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 67
	0.0		MWL	Water Level		5			
	0.5		CS	Crack Spiral	7 to 10				
	24.9		TB	Tap, Break-in / Hammer	10				
	33.8	S01	MWLS	Water Level: Sag		30			Deepest point of sag 30%
	34.2		TBA	Tap, Break-in / Hammer: Active	9				
	37.4		MGP	General Photograph					
	38.9	F01	MWLS	Water Level: Sag		10			
	47.6	S02	MWLS	Water Level: Sag		15			
	53.3	F02	MWLS	Water Level: Sag		5			
	55.0	S03	MWLS	Water Level: Sag		15			
	58.3	F03	MWLS	Water Level: Sag		5			
	66.6		VZ	Vermin - Other					Frog
	67.6		MWLS	Water Level: Sag		10			
	68.5		MWL	Water Level		5			
	69.9		MWL	Water Level		10			
	72.9		MWL	Water Level		5			
	76.5	S04	MWLS	Water Level: Sag		15			
	78.9	F04	MWLS	Water Level: Sag		5			
	95.9	S05	MWLS	Water Level: Sag		15			
	98.4	F05	MWLS	Water Level: Sag		5			
	99.9		AMH	Access Point - Manhole					S MH 65

Upstream MH 67	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Cental Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:24	Length Surveyed 99.9
Additional Information					Media Label 64



AMH - Access Point - Manhole @ 0.0 m.
S MH 67

MWL - Water Level @ 0.0 m.



CS - Crack Spiral @ 0.5 m.



TB - Tap, Break-in / Hammer @ 24.9 m.

Upstream MH 67	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Cental Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:24	Length Surveyed 99.9
Additional Information					Media Label 64



MWLS - Water Level: Sag @ 33.8 m.



TBA - Tap, Break-in / Hammer: Active @ 34.2 m.



MGP - General Photograph @ 37.4 m.
Deepest point of sag 30%



MWLS - Water Level: Sag @ 38.9 m.

Upstream MH 67	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Cental Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:24	Length Surveyed 99.9
Additional Information					Media Label 64



MWLS - Water Level: Sag @ 47.6 m.



MWLS - Water Level: Sag @ 53.3 m.



MWLS - Water Level: Sag @ 55.0 m.



MWLS - Water Level: Sag @ 58.3 m.

Upstream MH 67	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Cental Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:24	Length Surveyed 99.9
Additional Information					Media Label 64



VZ - Vermin - Other @ 66.6 m. Frog



MWLS - Water Level: Sag @ 67.6 m.



MWLS - Water Level: Sag @ 76.5 m.



MWLS - Water Level: Sag @ 78.9 m.

Upstream MH 67	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Cental Ave E	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:24	Length Surveyed 99.9
Additional Information					Media Label 64



MWLS - Water Level: Sag @ 95.9 m.



MWLS - Water Level: Sag @ 98.4 m.



AMH - Access Point - Manhole @ 99.9 m.
S MH 65

Upstream MH 76	Downstream MH 97	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SE & Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:57	Length Surveyed 54.3
Additional Information					Media Label 65

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 76
0.0		MWL	Water Level		5			
16.5	S01	RFJ	Roots, Fine: Joint	4 to 5			J	Fine roots at most joints throughout ipe from 16.5 - 52.4
21.4		TB	Tap, Break-in / Hammer	10				
22.2		TB	Tap, Break-in / Hammer	1				
29.2		TBD	Tap, Break-in / Hammer: Defective	1				Roots in service
29.2		MGP	General Photograph					View of root ball inside service
38.4		TB	Tap, Break-in / Hammer	10				
38.6		JOM	Joint Offset (displaced): Medium					
41.4		FS	Fracture Spiral	10 to 1			J	
43.8		RMC	Roots, Medium: Connection	8 to 11	10			Roots around service
44.0		TBD	Tap, Break-in / Hammer: Defective	10				
49.3		MWL	Water Level		15			
52.4	F01	RFJ	Roots, Fine: Joint	7 to 4			J	
53.5		CC	Crack Circumferential	7 to 4				
54.3		AMH	Access Point - Manhole					S MH 97

Upstream MH 76	Downstream MH 97	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SE & Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:57	Length Surveyed 54.3
Additional Information					Media Label 65



AMH - Access Point - Manhole @ 0.0 m.
S MH 76



MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 16.5 m. Fine roots at most joints throughout ipe from 16.5 - 52.4



TB - Tap, Break-in / Hammer @ 21.4 m.

Upstream MH 76	Downstream MH 97	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SE & Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:57	Length Surveyed 54.3
Additional Information					Media Label 65



TB - Tap, Break-in / Hammer @ 22.2 m.



TBD - Tap, Break-in / Hammer: Defective @ 29.2 m. Roots in service



MGP - General Photograph @ 29.2 m.
View of root ball inside service



TB - Tap, Break-in / Hammer @ 38.4 m.

Upstream MH 76	Downstream MH 97	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SE & Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:57	Length Surveyed 54.3
Additional Information					Media Label 65



JOM - Joint Offset (displaced): Medium @ 38.6 m.



FS - Fracture Spiral @ 41.4 m.



RMC - Roots, Medium: Connection @ 43.8 m.



TBD - Tap, Break-in / Hammer: Defective @ 44.0 m. Roots around service

Upstream MH 76	Downstream MH 97	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SE & Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 14:57	Length Surveyed 54.3
Additional Information					Media Label 65



MWL - Water Level @ 49.3 m.



CC - Crack Circumferential @ 53.5 m.



AMH - Access Point - Manhole @ 54.3 m.
S MH 97

Upstream MH	Downstream MH	Size	Material	Total Length	City
97	65	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Centre St S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-05-2020	15:10	119.1

Additional Information	Media Label
	66

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 97
0.0		MWL	Water Level		5			
0.7	S01	RFJ	Roots, Fine: Joint	7 to 3			J	Fine roots at most joints throughout pipe
2.7		TB	Tap, Break-in / Hammer	3				
13.4		TB	Tap, Break-in / Hammer	10				
24.9		TBA	Tap, Break-in / Hammer: Active	2				
35.6		TB	Tap, Break-in / Hammer	10				
39.7	S02	MWLS	Water Level: Sag		15			
41.8	F02	MWLS	Water Level: Sag		5			
45.3		TB	Tap, Break-in / Hammer	3				
52.9	S03	MWLS	Water Level: Sag		15			
53.5		FS	Fracture Spiral	8 to 12			J	
54.2		TB	Tap, Break-in / Hammer	10				
54.7	F03	MWLS	Water Level: Sag		0			
54.7		MWL	Water Level		5			
58.8	S04	MWLS	Water Level: Sag		15			
61.2		TB	Tap, Break-in / Hammer	2				
63.0		FM	Fracture Multiple	7 to 11				
64.6	F04	MWLS	Water Level: Sag		5			
66.1	S05	MWLS	Water Level: Sag		50			
67.2		RMJ	Roots, Medium, Joint	8 to 4	15			
67.6		MCU	Camera Underwater					
68.3		RMJ	Roots, Medium, Joint	9 to 3	20			
68.3		H	Hole in Pipe	9 to 3				Pipe missing at joint
68.5		FS	Fracture Spiral	12 to 3				Fracture visible in pipesegment after hole
69.8		H	Hole in Pipe	7 to 9				Under service.
69.8		TB	Tap, Break-in / Hammer	11				
71.9		MWL	Water Level		5			
72.7		H	Hole in Pipe	8 to 9			J	Piece missing at joint
86.9		TB	Tap, Break-in / Hammer	1				
95.4		TB	Tap, Break-in / Hammer	10				
103.1	F01	RFJ	Roots, Fine: Joint	8 to 4			J	
119.1		AMH	Access Point - Manhole					S MH 65

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



AMH - Access Point - Manhole @ 0.0 m.
S MH 97



MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 0.7 m. Fine roots at most joints throughout pipe



TB - Tap, Break-in / Hammer @ 2.7 m.

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



TB - Tap, Break-in / Hammer @ 13.4 m.



TBA - Tap, Break-in / Hammer: Active @ 24.9 m.



TB - Tap, Break-in / Hammer @ 35.6 m.



MWLS - Water Level: Sag @ 39.7 m.

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



MWLS - Water Level: Sag @ 41.8 m.



TB - Tap, Break-in / Hammer @ 45.3 m.



MWLS - Water Level: Sag @ 52.9 m.



FS - Fracture Spiral @ 53.5 m.

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



TB - Tap, Break-in / Hammer @ 54.2 m.



MWLS - Water Level: Sag @ 54.7 m.



MWL - Water Level @ 54.7 m.



MWLS - Water Level: Sag @ 58.8 m.

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



TB - Tap, Break-in / Hammer @ 61.2 m.



FM - Fracture Multiple @ 63.0 m.



MWLS - Water Level: Sag @ 64.6 m.



MWLS - Water Level: Sag @ 66.1 m.

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



RMJ - Roots, Medium, Joint @ 67.2 m.



MCU - Camera Underwater @ 67.6 m.



RMJ - Roots, Medium, Joint @ 68.3 m.



H - Hole in Pipe @ 68.3 m. Pipe missing at joint

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



FS - Fracture Spiral @ 68.5 m. Fracture visible in pipesegment after hole



H - Hole in Pipe @ 69.8 m. Under service.



TB - Tap, Break-in / Hammer @ 69.8 m.



MWL - Water Level @ 71.9 m.

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66



H - Hole in Pipe @ 72.7 m. Piece missing at joint



TB - Tap, Break-in / Hammer @ 86.9 m.



TB - Tap, Break-in / Hammer @ 95.4 m.



RFJ - Roots, Fine: Joint @ 103.1 m.

Upstream MH 97	Downstream MH 65	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre St S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 15:10	Length Surveyed 119.1
Additional Information					Media Label 66

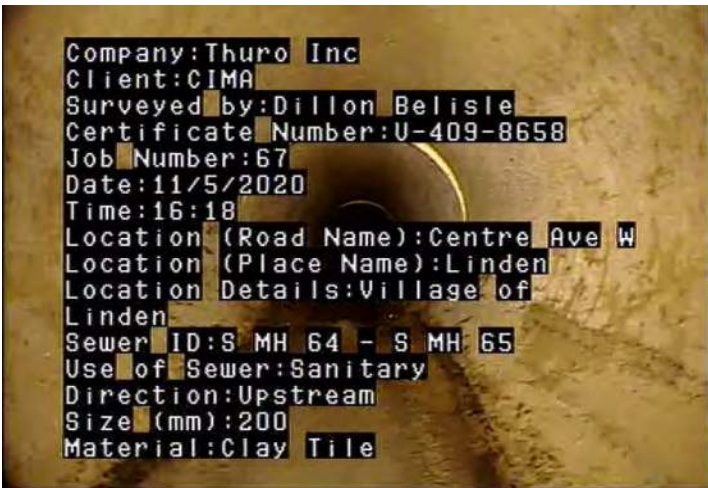


AMH - Access Point - Manhole @ 119.1 m.
 S MH 65

Upstream MH 65	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:18	Length Surveyed 60
Additional Information					Media Label 67

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 64
0.0		MWL	Water Level		5			
5.9		CC	Crack Circumferential	7 to 11				
5.9		TB	Tap, Break-in / Hammer	12				
22.7		JOL	Joint Offset (displaced): Large					
22.9	S01	MWLS	Water Level: Sag		40			
26.5		MGP	General Photograph					Deepest point of sag
29.3	F01	MWLS	Water Level: Sag		5			
58.9		DSGV	Deposits Settled: Gravel	4 to 6	5			
60.0		AMH	Access Point - Manhole					S MH 65

Upstream MH 65	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:18	Length Surveyed 60
Additional Information					Media Label 67



AMH - Access Point - Manhole @ 0.0 m.
S MH 64

MWL - Water Level @ 0.0 m.



CC - Crack Circumferential @ 5.9 m.

TB - Tap, Break-in / Hammer @ 5.9 m.

Upstream MH 65	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:18	Length Surveyed 60
Additional Information					Media Label 67



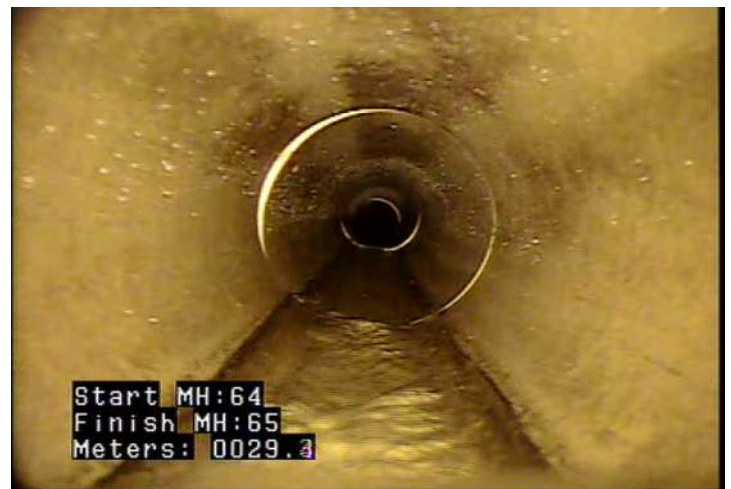
JOL - Joint Offset (displaced): Large @ 22.7 m.



MWLS - Water Level: Sag @ 22.9 m.



MGP - General Photograph @ 26.5 m.
Deepest point of sag



MWLS - Water Level: Sag @ 29.3 m.

Upstream MH 65	Downstream MH 64	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:18	Length Surveyed 60
Additional Information					Media Label 67



DSGV - Deposits Settled: Gravel @ 58.9 m.



AMH - Access Point - Manhole @ 60.0 m.
S MH 65

Upstream MH	Downstream MH	Size	Material	Total Length	City
64	62	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Centre Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-05-2020	16:36	49.6

Additional Information	Media Label
	68

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 64
0.0		MWL	Water Level		5			
0.5		FC	Fracture Circumferential	4 to 10				
5.6	S01	DAE	Deposits Attached: Encrustation	12 to 12	5		J	Deposits/Encrustation at most joints throughout pipe
11.0		DAE	Deposits Attached: Encrustation	8 to 4	5		J	
13.7		DAE	Deposits Attached: Encrustation	2 to 5	5		J	
15.0		DAE	Deposits Attached: Encrustation	8 to 4	5		J	
16.6		RFJ	Roots, Fine: Joint	7 to 4				
19.3		DAE	Deposits Attached: Encrustation	8 to 4	5		J	
22.0		DAE	Deposits Attached: Encrustation	8 to 11	10		J	
23.4		DAE	Deposits Attached: Encrustation	8 to 4	5		J	
24.8		DAE	Deposits Attached: Encrustation	7 to 11	10		J	
26.1		DAE	Deposits Attached: Encrustation	2 to 4	10		J	
27.6		DAE	Deposits Attached: Encrustation	2 to 5	10		J	
28.9		DAE	Deposits Attached: Encrustation	8 to 4	5		J	
30.3		FC	Fracture Circumferential	11 to 5			J	
30.3		DAE	Deposits Attached: Encrustation	2 to 4	5		J	
31.7		DAE	Deposits Attached: Encrustation	8 to 4	10		J	
33.1		DAE	Deposits Attached: Encrustation	8 to 11	10		J	
37.2		DAE	Deposits Attached: Encrustation	7 to 9	5		J	
38.6		DAE	Deposits Attached: Encrustation	8 to 10	5		J	
41.3		DAE	Deposits Attached: Encrustation	8 to 4	10		J	
42.7		DAE	Deposits Attached: Encrustation	7 to 9	5		J	
45.6		CM	Crack Multiple	11 to 5			J	
46.5	F01	DAE	Deposits Attached: Encrustation	12 to 12	5			
47.0		MMC	Material Change					Clay tile to PVC
47.0		LD	Line - Down		20			
47.8		JSM	Joint Separated (open): Medium					
47.8		D	Pipe Deformed		20			
47.8		LU	Line - Up		20			Return to horizontal
49.1		TF	Tap, Factory Made	6				Drop Structure
49.6		AMH	Access Point - Manhole					S MH 62

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



AMH - Access Point - Manhole @ 0.0 m.
S MH 64

MWL - Water Level @ 0.0 m.



FC - Fracture Circumferential @ 0.5 m.



DAE - Deposits Attached: Encrustation @ 5.6 m. Deposits/Encrustation at most joints throughout pipe

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



DAE - Deposits Attached: Encrustation @ 11.0 m.



DAE - Deposits Attached: Encrustation @ 13.7 m.



DAE - Deposits Attached: Encrustation @ 15.0 m.



RFJ - Roots, Fine: Joint @ 16.6 m.

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



DAE - Deposits Attached: Encrustation @ 19.3 m.



DAE - Deposits Attached: Encrustation @ 22.0 m.



DAE - Deposits Attached: Encrustation @ 23.4 m.



DAE - Deposits Attached: Encrustation @ 24.8 m.

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



DAE - Deposits Attached: Encrustation @ 26.1 m.



DAE - Deposits Attached: Encrustation @ 27.6 m.



DAE - Deposits Attached: Encrustation @ 28.9 m.



FC - Fracture Circumferential @ 30.3 m.

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



DAE - Deposits Attached: Encrustation @ 30.3 m.



DAE - Deposits Attached: Encrustation @ 31.7 m.



DAE - Deposits Attached: Encrustation @ 33.1 m.



DAE - Deposits Attached: Encrustation @ 37.2 m.

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



DAE - Deposits Attached: Encrustation @ 38.6 m.



DAE - Deposits Attached: Encrustation @ 41.3 m.



DAE - Deposits Attached: Encrustation @ 42.7 m.



CM - Crack Multiple @ 45.6 m.

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



DAE - Deposits Attached: Encrustation @ 46.5 m.



MMC - Material Change @ 47.0 m. Clay tile to PVC



LD - Line - Down @ 47.0 m.



JSM - Joint Separated (open): Medium @ 47.8 m.

Upstream MH 64	Downstream MH 62	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Centre Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 16:36	Length Surveyed 49.6
Additional Information					Media Label 68



D - Pipe Deformed @ 47.8 m.



LU - Line - Up @ 47.8 m. Return to horizontal



TF - Tap, Factory Made @ 49.1 m. Drop Structure



AMH - Access Point - Manhole @ 49.6 m. S MH 62

Upstream MH	Downstream MH	Size	Material	Total Length	City
74A	74	200	Clay Tile	0	Linden
Customer	Work Order #		Location	Sewer Use	
CIMA	14257		Main Highway - Suburban/Rural	Sanitary	
Surveyor's Name	Certificate Number	Street Address	Location Details		
Dillon Belisle	U-409-8658	1st St SW	Village of Linden		
Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-06-2020	08:24	66.7

Additional Information	Media Label 69
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Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 74A
0.0		MWL	Water Level		10			
1.0		CC	Crack Circumferential	2 to 5				
1.7	S01	RFJ	Roots, Fine: Joint	7 to 4			J	Fine roots at most joints
7.6		MWL	Water Level		5			
9.4		MWL	Water Level		10			
14.7		MWL	Water Level		15			
15.7		MWL	Water Level		30			
19.0		TB	Tap, Break-in / Hammer	10				
22.1	F01	RFJ	Roots, Fine: Joint	8 to 3			J	
23.6	S02	RMJ	Roots, Medium, Joint	2 to 6	15		J	Moderate roots at most joints
26.5		JOL	Joint Offset (displaced): Large					
31.9		RMJ	Roots, Medium, Joint	3 to 8	15		J	
32.2		RMC	Roots, Medium: Connection	9 to 11	20			
32.2		TB	Tap, Break-in / Hammer	10				
36.0		RBJ	Roots, Ball, Joint	2 to 10	80		J	
51.0		TB	Tap, Break-in / Hammer	10				
51.2		FL	Fracture Longitudinal	8			J	
63.6		B	Pipe Broken	12 to 10				
63.7		MGP	General Photograph					Additional view of break
65.0	F02	RMJ	Roots, Medium, Joint	7 to 5	5		J	
66.7		AMH	Access Point - Manhole					S MH 74

Upstream MH 74A	Downstream MH 74	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 08:24	Length Surveyed 66.7
Additional Information					Media Label 69



AMH - Access Point - Manhole @ 0.0 m.
S MH 74A



MWL - Water Level @ 0.0 m.



CC - Crack Circumferential @ 1.0 m.



RFJ - Roots, Fine: Joint @ 1.7 m. Fine roots at most joints

Upstream MH 74A	Downstream MH 74	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 08:24	Length Surveyed 66.7
Additional Information					Media Label 69



MWL - Water Level @ 7.6 m.



MWL - Water Level @ 9.4 m.



MWL - Water Level @ 14.7 m.



MWL - Water Level @ 15.7 m.

Upstream MH 74A	Downstream MH 74	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 08:24	Length Surveyed 66.7
Additional Information					Media Label 69



TB - Tap, Break-in / Hammer @ 19.0 m.



RFJ - Roots, Fine: Joint @ 22.1 m.



RMJ - Roots, Medium, Joint @ 23.6 m.
Moderate roots at most joints



JOL - Joint Offset (displaced): Large @ 26.5 m.

Upstream MH 74A	Downstream MH 74	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 08:24	Length Surveyed 66.7
Additional Information					Media Label 69



RMJ - Roots, Medium, Joint @ 31.9 m.



RMC - Roots, Medium: Connection @ 32.2 m.



TB - Tap, Break-in / Hammer @ 32.2 m.



RBJ - Roots, Ball, Joint @ 36.0 m.

Upstream MH 74A	Downstream MH 74	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 08:24	Length Surveyed 66.7
Additional Information					Media Label 69



TB - Tap, Break-in / Hammer @ 51.0 m.



FL - Fracture Longitudinal @ 51.2 m.



B - Pipe Broken @ 63.6 m.



MGP - General Photograph @ 63.7 m.
Additional view of break

Upstream MH 74A	Downstream MH 74	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 08:24	Length Surveyed 66.7
Additional Information					Media Label 69







RMJ - Roots, Medium, Joint @ 65.0 m.



AMH - Access Point - Manhole @ 66.7 m.
S MH 74

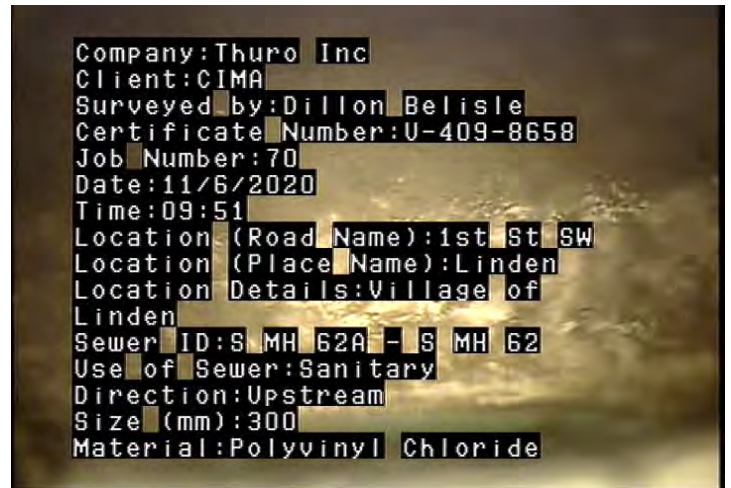
Upstream MH 62	Downstream MH 62A	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:51	Length Surveyed 64.6
Additional Information					Media Label 70

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 62A
	0.0		MWL	Water Level		20			
	7.7		MWL	Water Level		10			
	18.4	S01	MWLS	Water Level: Sag		40			
	28.5		TS	Tap, Saddle	10				
	31.4		MWL	Water Level		40			
	40.1		TSI	Tap, Saddle: Intruding	2				
	48.3		TS	Tap, Saddle	11				
	52.5	F01	MWLS	Water Level: Sag		10			
	64.6		AMH	Access Point - Manhole					S MH 62

Upstream MH 62	Downstream MH 62A	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:51	Length Surveyed 64.6
Additional Information					Media Label 70



AMH - Access Point - Manhole @ 0.0 m.
S MH 62A



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 7.7 m.



MWLS - Water Level: Sag @ 18.4 m.

Upstream MH 62	Downstream MH 62A	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:51	Length Surveyed 64.6
Additional Information					Media Label 70



TS - Tap, Saddle @ 28.5 m.



MWL - Water Level @ 31.4 m.



TSI - Tap, Saddle: Intruding @ 40.1 m.



TS - Tap, Saddle @ 48.3 m.

Upstream MH 62	Downstream MH 62A	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:51	Length Surveyed 64.6
Additional Information					Media Label 70



MWLS - Water Level: Sag @ 52.5 m.



AMH - Access Point - Manhole @ 64.6 m.
S MH 62

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1

Additional Information	Media Label 71
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Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					MH 62A
0.0		MWL	Water Level		25			
1.8	S01	DAGS	Deposits Attached: Grease	1 to 2	5			
1.9		RFJ	Roots, Fine: Joint	7 to 10				
5.9		MWL	Water Level		10			
6.1		RFJ	Roots, Fine: Joint	7 to 5				
6.1	F01	DAGS	Deposits Attached: Grease	9 to 3	5			
9.9		MWL	Water Level		15			
10.2		RFJ	Roots, Fine: Joint	7 to 9				
13.0		RFJ	Roots, Fine: Joint	7 to 10				
17.1		RFJ	Roots, Fine: Joint	7 to 5				
18.2	S03	MWLS	Water Level: Sag		35			
21.2	F03	MWLS	Water Level: Sag		10			
21.3		RFJ	Roots, Fine: Joint	3 to 5				
22.5		MWL	Water Level		20			
23.8		MWL	Water Level		10			
24.1		RFJ	Roots, Fine: Joint	3 to 6				
25.1	S04	MWLS	Water Level: Sag		30			
29.6	F04	MWLS	Water Level: Sag		15			
29.7		RFJ	Roots, Fine: Joint	7 to 10				
32.4		RFJ	Roots, Fine: Joint	7 to 10				
33.8	S02	DAGS	Deposits Attached: Grease	9 to 2	10			
35.2		RFJ	Roots, Fine: Joint	7 to 10				
40.7		RFJ	Roots, Fine: Joint	7 to 5				
43.4		RFJ	Roots, Fine: Joint	7 to 5				
43.4	F02	DAGS	Deposits Attached: Grease	10 to 2	5			
45.5	S05	MWLS	Water Level: Sag		60			
47.3	S06	MCU	Camera Underwater					
53.3		RFJ	Roots, Fine: Joint	7 to 5				
53.3	F06	MCU	Camera Underwater					
54.7		RFJ	Roots, Fine: Joint	7 to 5				
55.3		MWL	Water Level		20			
56.0		RFJ	Roots, Fine: Joint	7 to 5				
58.7		RFJ	Roots, Fine: Joint	8 to 10				
60.4	F05	MWLS	Water Level: Sag		10			
61.4		JOM	Joint Offset (displaced): Medium					
61.5		RFJ	Roots, Fine: Joint	7 to 5				
63.1		AMH	Access Point - Manhole					S MH 62B

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



AMH - Access Point - Manhole @ 0.0 m.
MH 62A



MWL - Water Level @ 0.0 m.



DAGS - Deposits Attached: Grease @ 1.8 m.



RFJ - Roots, Fine: Joint @ 1.9 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



MWL - Water Level @ 5.9 m.



RFJ - Roots, Fine: Joint @ 6.1 m.



DAGS - Deposits Attached: Grease @ 6.1 m.



MWL - Water Level @ 9.9 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



RFJ - Roots, Fine: Joint @ 10.2 m.



RFJ - Roots, Fine: Joint @ 13.0 m.



RFJ - Roots, Fine: Joint @ 17.1 m.



MWLS - Water Level: Sag @ 18.2 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



MWLS - Water Level: Sag @ 21.2 m.



RFJ - Roots, Fine: Joint @ 21.3 m.



MWL - Water Level @ 22.5 m.



MWL - Water Level @ 23.8 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



RFJ - Roots, Fine: Joint @ 24.1 m.



MWLS - Water Level: Sag @ 25.1 m.



MWLS - Water Level: Sag @ 29.6 m.



RFJ - Roots, Fine: Joint @ 29.7 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



RFJ - Roots, Fine: Joint @ 32.4 m.



DAGS - Deposits Attached: Grease @ 33.8 m.



RFJ - Roots, Fine: Joint @ 35.2 m.



RFJ - Roots, Fine: Joint @ 40.7 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



RFJ - Roots, Fine: Joint @ 43.4 m.



DAGS - Deposits Attached: Grease @ 43.4 m.



MWLS - Water Level: Sag @ 45.5 m.



MCU - Camera Underwater @ 47.3 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



RFJ - Roots, Fine: Joint @ 53.3 m.



MCU - Camera Underwater @ 53.3 m.



RFJ - Roots, Fine: Joint @ 54.7 m.



MWL - Water Level @ 55.3 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



RFJ - Roots, Fine: Joint @ 56.0 m.



RFJ - Roots, Fine: Joint @ 58.7 m.



MWLS - Water Level: Sag @ 60.4 m.



JOM - Joint Offset (displaced): Medium @ 61.4 m.

Upstream MH 62A	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 09:18	Length Surveyed 63.1
Additional Information					Media Label 71



RFJ - Roots, Fine: Joint @ 61.5 m.



AMH - Access Point - Manhole @ 63.1 m.
S MH 62B

Upstream MH	Downstream MH	Size	Material	Total Length	City
74	62B	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	1st St SW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-06-2020	10:20	5.4

Additional Information	Media Label
	72

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 74
0.0		MWL	Water Level		5			
1.7		CL	Crack Longitudinal	1			J	
1.7		RMJ	Roots, Medium, Joint	8 to 3	20			
3.6		RFJ	Roots, Fine: Joint	7 to 5				
5.4		AMH	Access Point - Manhole					S MH 62B

Upstream MH 74	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:20	Length Surveyed 5.4
Additional Information					Media Label 72



AMH - Access Point - Manhole @ 0.0 m.
S MH 74



MWL - Water Level @ 0.0 m.



CL - Crack Longitudinal @ 1.7 m.



RMJ - Roots, Medium, Joint @ 1.7 m.

Upstream MH 74	Downstream MH 62B	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:20	Length Surveyed 5.4
Additional Information					Media Label 72



RFJ - Roots, Fine: Joint @ 3.6 m.

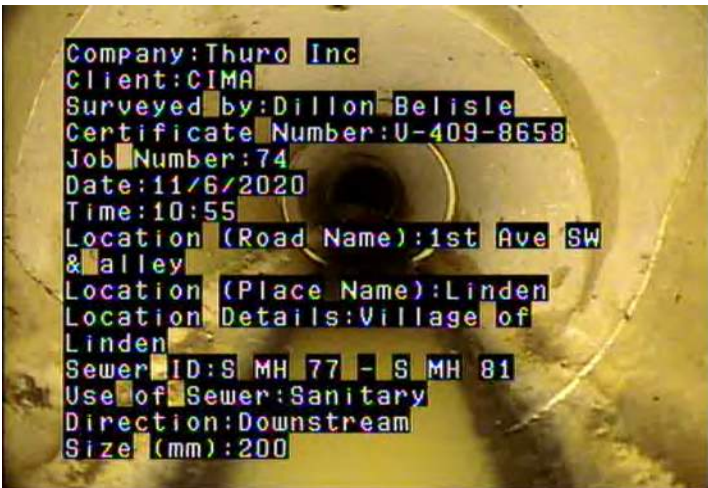


AMH - Access Point - Manhole @ 5.4 m.
S MH 62B

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 77
0.0		MWL	Water Level		5			
0.5		CM	Crack Multiple	10 to 5				
1.7		RFJ	Roots, Fine: Joint	7 to 5			J	
1.8		RMJ	Roots, Medium, Joint	4 to 8	25		J	
3.3	S01	RFJ	Roots, Fine: Joint	7 to 5			J	
10.3		TB	Tap, Break-in / Hammer	1				
10.4		FS	Fracture Spiral	3 to 7			J	
13.1	F01	RFJ	Roots, Fine: Joint	9 to 5			J	
22.7		RFJ	Roots, Fine: Joint	9 to 10			J	
23.1		TB	Tap, Break-in / Hammer	10				
24.0		RFJ	Roots, Fine: Joint	7 to 8			J	
34.8		TB	Tap, Break-in / Hammer	12				
35.2		RFJ	Roots, Fine: Joint	7 to 5			J	
36.4		H	Hole in Pipe	11 to 1			J	Piece of pipe missing at joint, ground visible, roots
36.8		MGP	General Photograph					Additional view of hole at joint
42.1		RFJ	Roots, Fine: Joint	7 to 5			J	
44.9		RFJ	Roots, Fine: Joint	7 to 5				
45.1		TB	Tap, Break-in / Hammer	10				
45.1		RFC	Roots, Fine: Connection	7 to 9				
47.5		RFJ	Roots, Fine: Joint	7 to 5			J	
51.7		RFJ	Roots, Fine: Joint	10 to 11			J	
53.9		TB	Tap, Break-in / Hammer	10				
58.7		RFJ	Roots, Fine: Joint	7 to 5				
58.9		TB	Tap, Break-in / Hammer	12				
61.5		RFJ	Roots, Fine: Joint	7 to 10				
62.9		RFJ	Roots, Fine: Joint	7 to 5				
63.1		TBI	Tap, Break-in / Hammer: Intruding	11				
63.3		RFC	Roots, Fine: Connection	9 to 11				
64.3		RFJ	Roots, Fine: Joint	7 to 5				
68.1		RFC	Roots, Fine: Connection	12 to 2				
68.1		TB	Tap, Break-in / Hammer	1				
74.0		RFJ	Roots, Fine: Joint	7 to 5				
75.4		RFJ	Roots, Fine: Joint	2 to 5				
76.0		CS	Crack Spiral	3 to 5				
77.0		AMH	Access Point - Manhole					S MH 81

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



AMH - Access Point - Manhole @ 0.0 m.
S MH 77



MWL - Water Level @ 0.0 m.



CM - Crack Multiple @ 0.5 m.



RFJ - Roots, Fine: Joint @ 1.7 m.

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



RMJ - Roots, Medium, Joint @ 1.8 m.



RFJ - Roots, Fine: Joint @ 3.3 m.



TB - Tap, Break-in / Hammer @ 10.3 m.



FS - Fracture Spiral @ 10.4 m.

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



RFJ - Roots, Fine: Joint @ 13.1 m.



RFJ - Roots, Fine: Joint @ 22.7 m.



TB - Tap, Break-in / Hammer @ 23.1 m.



RFJ - Roots, Fine: Joint @ 24.0 m.

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



TB - Tap, Break-in / Hammer @ 34.8 m.



RFJ - Roots, Fine: Joint @ 35.2 m.



H - Hole in Pipe @ 36.4 m. Piece of pipe missing at joint, ground visible, roots



MGP - General Photograph @ 36.8 m. Additional view of hole at joint

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



RFJ - Roots, Fine: Joint @ 42.1 m.



RFJ - Roots, Fine: Joint @ 44.9 m.



TB - Tap, Break-in / Hammer @ 45.1 m.



RFC - Roots, Fine: Connection @ 45.1 m.

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



RFJ - Roots, Fine: Joint @ 47.5 m.



RFJ - Roots, Fine: Joint @ 51.7 m.



TB - Tap, Break-in / Hammer @ 53.9 m.



RFJ - Roots, Fine: Joint @ 58.7 m.

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



TB - Tap, Break-in / Hammer @ 58.9 m.



RFJ - Roots, Fine: Joint @ 61.5 m.



RFJ - Roots, Fine: Joint @ 62.9 m.



TBI - Tap, Break-in / Hammer: Intruding @ 63.1 m.

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



RFC - Roots, Fine: Connection @ 63.3 m.



RFJ - Roots, Fine: Joint @ 64.3 m.



RFC - Roots, Fine: Connection @ 68.1 m.



TB - Tap, Break-in / Hammer @ 68.1 m.

Upstream MH 77	Downstream MH 81	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 10:55	Length Surveyed 77
Additional Information					Media Label 74



RFJ - Roots, Fine: Joint @ 74.0 m.



RFJ - Roots, Fine: Joint @ 75.4 m.



CS - Crack Spiral @ 76.0 m.



AMH - Access Point - Manhole @ 77.0 m.
S MH 81

Upstream MH 81	Downstream MH 82	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:41	Length Surveyed 92.7
Additional Information					Media Label 75

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 81
0.0		MWL	Water Level		5			
0.5		CS	Crack Spiral	8 to 4				
1.7		TB	Tap, Break-in / Hammer	2				
1.7		RFB	Roots, Fine: Barrel	1 to 3				
1.7		RFC	Roots, Fine: Connection	1 to 2				
1.8	S01	RFJ	Roots, Fine: Joint	7 to 5			J	Fine roots at most joints throughout pipe
22.4		TB	Tap, Break-in / Hammer	10				
22.5		RFC	Roots, Fine: Connection	7 to 10				
24.0		TB	Tap, Break-in / Hammer	3				
60.6		TB	Tap, Break-in / Hammer	12				
67.7		TBI	Tap, Break-in / Hammer: Intruding	3				
91.5	F01	RFJ	Roots, Fine: Joint	7 to 4			J	
92.7		AMH	Access Point - Manhole					S MH 82

Upstream MH 81	Downstream MH 82	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:41	Length Surveyed 92.7
Additional Information					Media Label 75



AMH - Access Point - Manhole @ 0.0 m.
S MH 81



MWL - Water Level @ 0.0 m.



CS - Crack Spiral @ 0.5 m.



TB - Tap, Break-in / Hammer @ 1.7 m.

Upstream MH 81	Downstream MH 82	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:41	Length Surveyed 92.7
Additional Information					Media Label 75



RFB - Roots, Fine: Barrel @ 1.7 m.



RFC - Roots, Fine: Connection @ 1.7 m.



RFJ - Roots, Fine: Joint @ 1.8 m. Fine roots at most joints throughout pipe



TB - Tap, Break-in / Hammer @ 22.4 m.

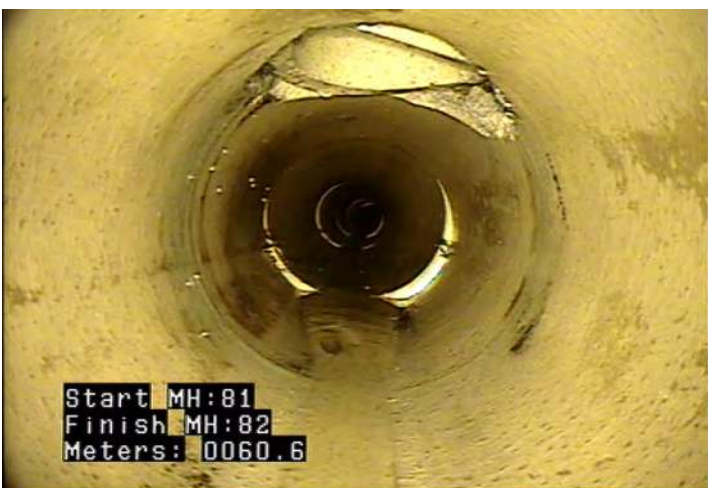
Upstream MH 81	Downstream MH 82	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:41	Length Surveyed 92.7
Additional Information					Media Label 75



RFC - Roots, Fine: Connection @ 22.5 m.



TB - Tap, Break-in / Hammer @ 24.0 m.



TB - Tap, Break-in / Hammer @ 60.6 m.



TBI - Tap, Break-in / Hammer: Intruding @ 67.7 m.

Upstream MH 81	Downstream MH 82	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:41	Length Surveyed 92.7
Additional Information					Media Label 75



RFJ - Roots, Fine: Joint @ 91.5 m.



AMH - Access Point - Manhole @ 92.7 m.
S MH 82

Upstream MH 82	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 12:31	Length Surveyed 30.3

Additional Information	Media Label 76
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Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 82
0.0		MWL	Water Level		5			
0.5		RFJ	Roots, Fine: Joint	7 to 5				
1.8		RFJ	Roots, Fine: Joint	7 to 5				
3.1		RFJ	Roots, Fine: Joint	7 to 5			J	
3.8		ISSRL	Intruding Seal Material - Sealing Ring: Loose/Poorly Fitting	1 to 4	20			
3.8		RMC	Roots, Medium: Connection	12 to 5	10			
3.8		TBD	Tap, Break-in / Hammer: Defective	2				Gasket off
3.8		MWLS	Water Level: Sag		10			
4.6		RFJ	Roots, Fine: Joint	7 to 5			J	
5.9		RFJ	Roots, Fine: Joint	7 to 5				
6.2		MWL	Water Level		5			
7.1	S01	RFJ	Roots, Fine: Joint	7 to 5			J	Fine roots at most joints
7.1		JOM	Joint Offset (displaced): Medium					
8.1		MWL	Water Level		5			
18.8		MWL	Water Level		10			
26.4		MWL	Water Level		10			
28.0	F01	RFJ	Roots, Fine: Joint	7 to 5			J	
29.5		RFJ	Roots, Fine: Joint	7 to 5				
30.3		AMH	Access Point - Manhole					S MH 83

Upstream MH 82	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 12:31	Length Surveyed 30.3
Additional Information					Media Label 76



AMH - Access Point - Manhole @ 0.0 m.
S MH 82



MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 0.5 m.



RFJ - Roots, Fine: Joint @ 1.8 m.

Upstream MH 82	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 12:31	Length Surveyed 30.3
Additional Information					Media Label 76



RFJ - Roots, Fine: Joint @ 3.1 m.



ISSRL - Intruding Seal Material - Sealing Ring: Loose/Poorly Fitting @ 3.8 m.



RMC - Roots, Medium: Connection @ 3.8 m.



TBD - Tap, Break-in / Hammer: Defective @ 3.8 m. Gasket off

Upstream MH 82	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 12:31	Length Surveyed 30.3
Additional Information					Media Label 76



MWLS - Water Level: Sag @ 3.8 m.



RFJ - Roots, Fine: Joint @ 4.6 m.



RFJ - Roots, Fine: Joint @ 5.9 m.



MWL - Water Level @ 6.2 m.

Upstream MH 82	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 12:31	Length Surveyed 30.3
Additional Information					Media Label 76



RFJ - Roots, Fine: Joint @ 7.1 m. Fine roots at most joints



JOM - Joint Offset (displaced): Medium @ 7.1 m.



MWL - Water Level @ 8.1 m.



MWL - Water Level @ 18.8 m.

Upstream MH 82	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 12:31	Length Surveyed 30.3
Additional Information					Media Label 76



MWL - Water Level @ 26.4 m.



RFJ - Roots, Fine: Joint @ 28.0 m.



RFJ - Roots, Fine: Joint @ 29.5 m.



AMH - Access Point - Manhole @ 30.3 m.
S MH 83

Upstream MH 83	Downstream MH 84	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 13:47	Length Surveyed 81.9
Additional Information					Media Label 78

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 83
0.0		MWL	Water Level		5			
1.7	S01	RFJ	Roots, Fine: Joint	7 to 4			J	
59.5		TBA	Tap, Break-in / Hammer: Active	2				
72.1		JOM	Joint Offset (displaced): Medium					
80.6	F01	RFJ	Roots, Fine: Joint	7 to 5			J	
81.3		B	Pipe Broken	6 to 6				
81.9		AMH	Access Point - Manhole					S MH 84

Upstream MH 83	Downstream MH 84	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 13:47	Length Surveyed 81.9
Additional Information					Media Label 78



AMH - Access Point - Manhole @ 0.0 m.
S MH 83

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 1.7 m.

TBA - Tap, Break-in / Hammer: Active @ 59.5 m.

Upstream MH 83	Downstream MH 84	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 13:47	Length Surveyed 81.9
Additional Information					Media Label 78



JOM - Joint Offset (displaced): Medium @ 72.1 m.



RFJ - Roots, Fine: Joint @ 80.6 m.



B - Pipe Broken @ 81.3 m.



AMH - Access Point - Manhole @ 81.9 m.
S MH 84

Upstream MH 1	Downstream MH 2	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:09	Length Surveyed 100.1
Additional Information					Media Label 79

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 1
	0.0		MWL	Water Level		5			
	1.7		SRP	Surface: Reinforcement Projecting	4 to 6				
	9.1		CC	Crack Circumferential	12 to 9				
	9.1		IS	Infiltration - Stain	3 to 6				
	16.5		CS	Crack Spiral	8 to 4				
	16.7		IS	Infiltration - Stain	2 to 9				
	22.8		OBJ	Obstacle - Object Wedged in Joint	6 to 9	5		J	Branch
	32.7		MGO	General Observation					Chip at joint
	47.8		CL	Crack Longitudinal	9				
	88.6		CC	Crack Circumferential	2 to 8				
	93.5		CC	Crack Circumferential	4 to 8				
	99.4		AMH	Access Point - Manhole					ST MH 2

Upstream MH 1	Downstream MH 2	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:09	Length Surveyed 100.1
Additional Information					Media Label 79



AMH - Access Point - Manhole @ 0.0 m.
ST MH 1

MWL - Water Level @ 0.0 m.



SRP - Surface: Reinforcement Projecting @ 1.7 m.



CC - Crack Circumferential @ 9.1 m.

Upstream MH 1	Downstream MH 2	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:09	Length Surveyed 100.1
Additional Information					Media Label 79



IS - Infiltration - Stain @ 9.1 m.



CS - Crack Spiral @ 16.5 m.



IS - Infiltration - Stain @ 16.7 m.



OBJ - Obstacle - Object Wedged in Joint @ 22.8 m. Branch

Upstream MH 1	Downstream MH 2	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:09	Length Surveyed 100.1
Additional Information					Media Label 79



MGO - General Observation @ 32.7 m.
Chip at joint



CL - Crack Longitudinal @ 47.8 m.



CC - Crack Circumferential @ 88.6 m.



CC - Crack Circumferential @ 93.5 m.

Upstream MH 1	Downstream MH 2	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:09	Length Surveyed 100.1
Additional Information					Media Label 79



AMH - Access Point - Manhole @ 99.4 m.
 ST MH 2

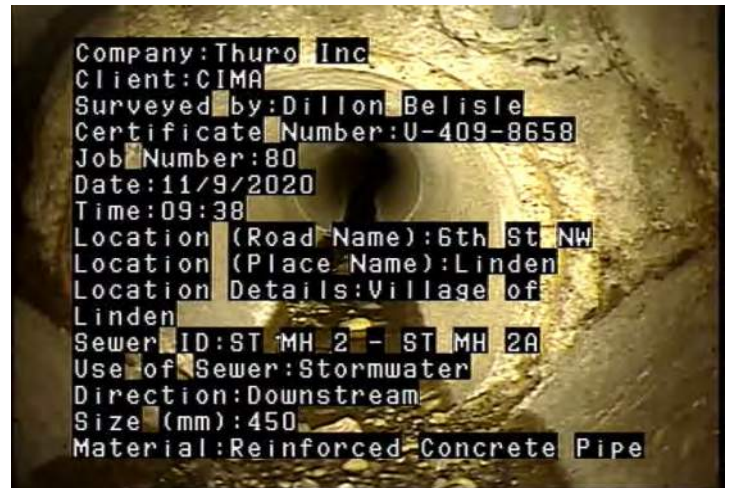
Upstream MH 2	Downstream MH 2A	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:38	Length Surveyed 99.9
Additional Information					Media Label 80

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 2
0.0		MWL	Water Level		5			
0.6		DSGV	Deposits Settled: Gravel	5 to 7	5			
35.6		MGO	General Observation					Chipped joint
47.3		CS	Crack Spiral	9 to 1			J	
68.8		CC	Crack Circumferential	2 to 10				
77.6		MGO	General Observation					Chipped joint 12:00
90.0		DSGV	Deposits Settled: Gravel	5 to 7	10			
91.7		MWLS	Water Level: Sag		10			
99.9		AMH	Access Point - Manhole					ST MH 2A

Upstream MH 2	Downstream MH 2A	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:38	Length Surveyed 99.9
Additional Information					Media Label 80



AMH - Access Point - Manhole @ 0.0 m.
ST MH 2



MWL - Water Level @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 0.6 m.



MGO - General Observation @ 35.6 m.
Chipped joint

Upstream MH 2	Downstream MH 2A	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:38	Length Surveyed 99.9
Additional Information					Media Label 80



CS - Crack Spiral @ 47.3 m.



CC - Crack Circumferential @ 68.8 m.



MGO - General Observation @ 77.6 m.
Chipped joint 12:00



DSGV - Deposits Settled: Gravel @ 90.0 m.

Upstream MH 2	Downstream MH 2A	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 09:38	Length Surveyed 99.9
Additional Information					Media Label 80



MWLS - Water Level: Sag @ 91.7 m.

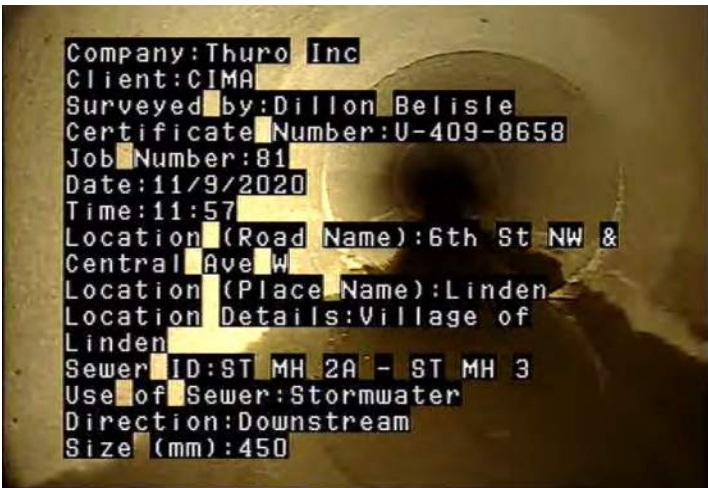


AMH - Access Point - Manhole @ 99.9 m.
ST MH 2A

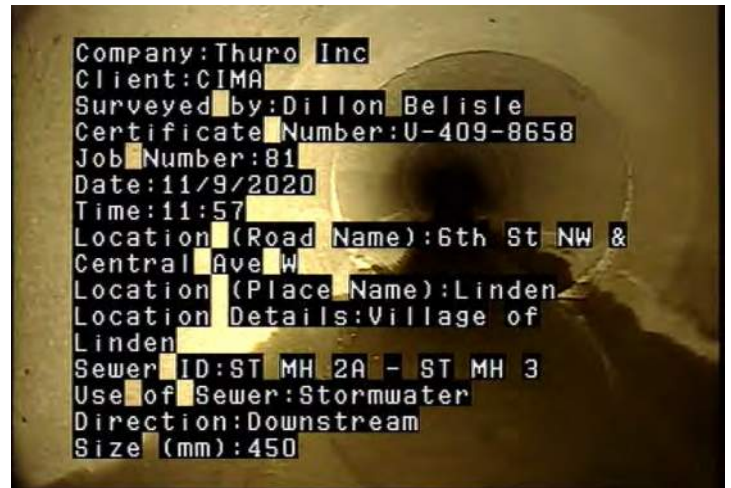
Upstream MH 2A	Downstream MH 3	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW & Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 11:57	Length Surveyed 78.1
Additional Information					Media Label 81



Upstream MH 2A	Downstream MH 3	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW & Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 11:57	Length Surveyed 78.1
Additional Information					Media Label 81



AMH - Access Point - Manhole @ 0.0 m.
ST MH 2A



MWL - Water Level @ 0.0 m.



MGO - General Observation @ 8.9 m.
Chipped joint 9:00



MWL - Water Level @ 73.2 m. Debris in manhole holding back water

Upstream MH 2A	Downstream MH 3	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 6th St NW & Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 11:57	Length Surveyed 78.1
Additional Information					Media Label 81



AMH - Access Point - Manhole @ 78.1 m.
 ST MH 3

Upstream MH	Downstream MH	Size	Material	Total Length	City
3	4	450	Reinforced Concrete Pipe	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-09-2020	12:15	76.5

Additional Information	Media Label
	82

 	0.0		AMH	Access Point - Manhole					ST MH 3
	0.0		MWL	Water Level		5			
									
 	73.4		MWL	Water Level		10			ST MH 4
	76.5		AMH	Access Point - Manhole					

Upstream MH 3	Downstream MH 4	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 12:15	Length Surveyed 76.5
Additional Information					Media Label 82



AMH - Access Point - Manhole @ 0.0 m.
ST MH 3



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 73.4 m.

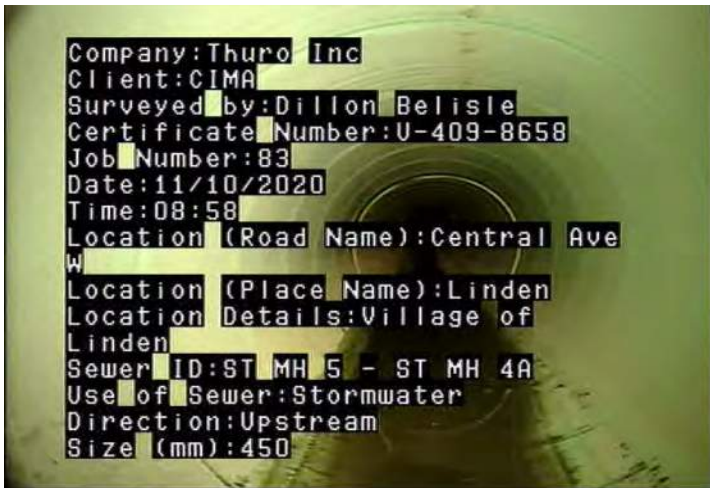


AMH - Access Point - Manhole @ 76.5 m.
ST MH 4

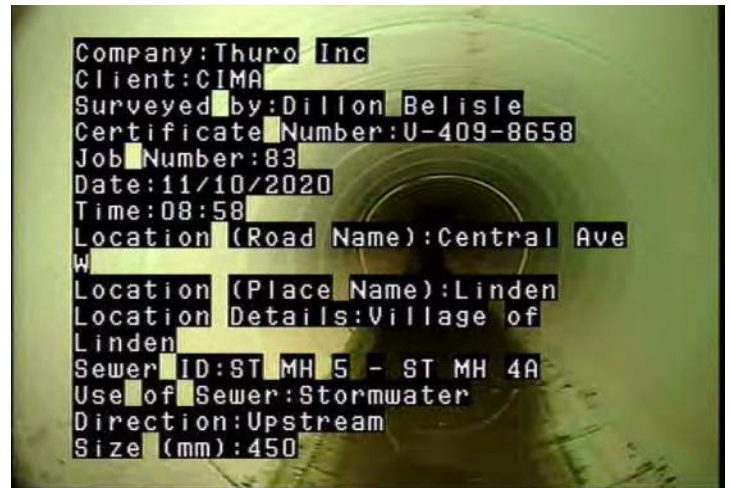
Upstream MH 4A	Downstream MH 5	Size 450	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 08:58	Length Surveyed 39.2
Additional Information					Media Label 83



Upstream MH 4A	Downstream MH 5	Size 450	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 08:58	Length Surveyed 39.2
Additional Information					Media Label 83



AMH - Access Point - Manhole @ 0.0 m.
ST MH 5



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 39.2 m.
ST MH 4A

Upstream MH 5	Downstream MH 6	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:09	Length Surveyed 44.4
Additional Information					Media Label 84

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 5
0.0		MWL	Water Level		5			
39.8	S01	MWLS	Water Level: Sag		10			
43.1	F01	MWLS	Water Level: Sag		5			
44.4		AMH	Access Point - Manhole					ST MH 6

Upstream MH 5	Downstream MH 6	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:09	Length Surveyed 44.4
Additional Information					Media Label 84



AMH - Access Point - Manhole @ 0.0 m.
ST MH 5



MWL - Water Level @ 0.0 m.



MWLS - Water Level: Sag @ 39.8 m.



MWLS - Water Level: Sag @ 43.1 m.

Upstream MH 5	Downstream MH 6	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:09	Length Surveyed 44.4
Additional Information					Media Label 84



AMH - Access Point - Manhole @ 44.4 m.
 ST MH 6




Upstream MH	Downstream MH	Size	Material	Total Length	City
6	7	600	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

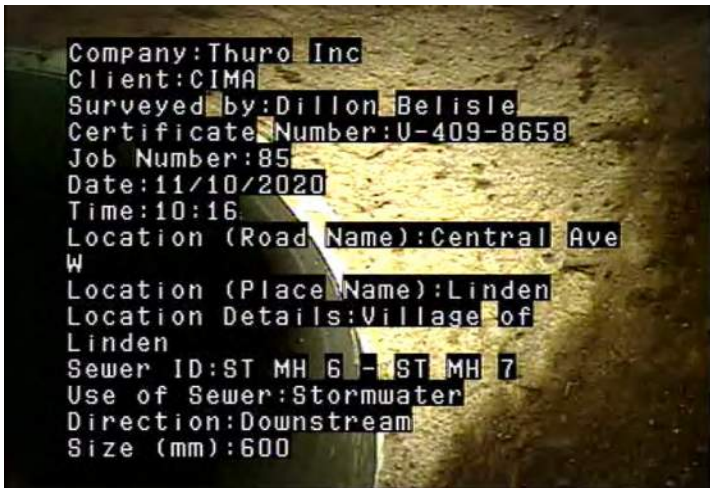
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-10-2020	10:16	21.3

Additional Information	Media Label
	85

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 6
	0.0		MWL	Water Level		5			
									
	20.2		JOM	Joint Offset (displaced): Medium					ST MH 7
	21.3		AMH	Access Point - Manhole					

Upstream MH 6	Downstream MH 7	Size 600	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:16	Length Surveyed 21.3
Additional Information					Media Label 85



AMH - Access Point - Manhole @ 0.0 m.
ST MH 6



MWL - Water Level @ 0.0 m.



JOM - Joint Offset (displaced): Medium @ 20.2 m.

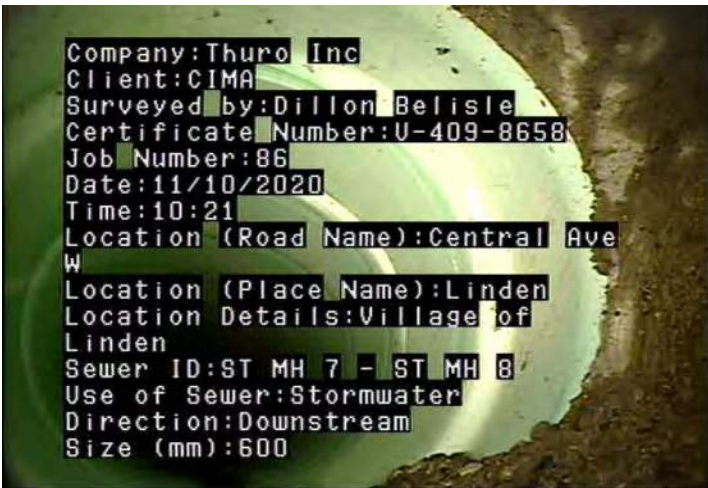


AMH - Access Point - Manhole @ 21.3 m.
ST MH 7

Upstream MH 7	Downstream MH 8	Size 600	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Stormwater		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:21	Length Surveyed 36.7
Additional Information					Media Label 86



Upstream MH 7	Downstream MH 8	Size 600	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Stormwater		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:21	Length Surveyed 36.7
Additional Information					Media Label 86



AMH - Access Point - Manhole @ 0.0 m.
ST MH 7



MWL - Water Level @ 0.0 m.



D - Pipe Deformed @ 5.7 m.



TBI - Tap, Break-in / Hammer: Intruding @ 16.6 m.

Upstream MH 7	Downstream MH 8	Size 600	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Stormwater		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:21	Length Surveyed 36.7
Additional Information					Media Label 86



MWL - Water Level @ 35.5 m. Ice



AMH - Access Point - Manhole @ 36.7 m.
ST MH 8



**4650 - 50th Avenue SE
Calgary, Alberta T2B 3R4
Phone: (403) 243-0276
Fax: (403) 243-3371
Email: thuro@thuro.ca**

Upstream MH	Downstream MH	Size	Material	Total Length	City
8	Outlet	600	Corrugated Metal Pipe	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Stormwater

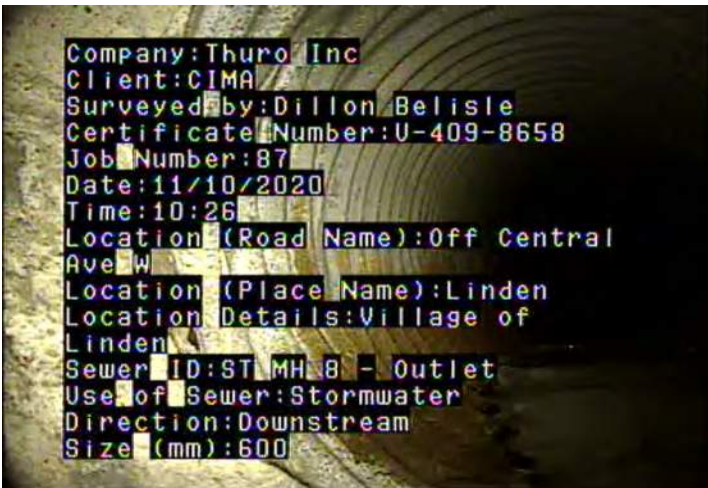
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Off Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-10-2020	10:26	5.1

Additional Information	Media Label
	87

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 8
0.0		MWL	Water Level		5			
2.4		MWL	Water Level		20			Ice
5.1		MSA	Survey Abandoned					Ts into a bigger storm line.

Upstream MH 8	Downstream MH Outlet	Size 600	Material Corrugated Metal Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Stormwater		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:26	Length Surveyed 5.1
Additional Information					Media Label 87



AMH - Access Point - Manhole @ 0.0 m.
ST MH 8



MWL - Water Level @ 0.0 m.




MWL - Water Level @ 2.4 m. Ice

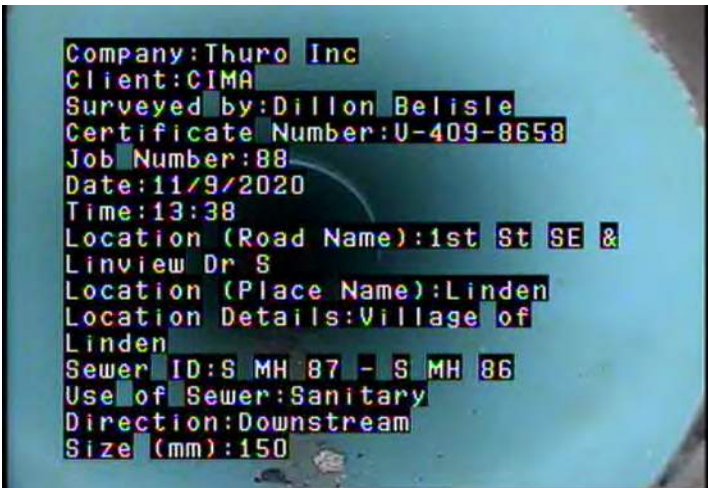


MSA - Survey Abandoned @ 5.1 m. Ts into a bigger storm line.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 13:38	Length Surveyed 38.2
Additional Information					Media Label 88

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark	
	0.0		AMH	Access Point - Manhole					S MH 87	
	0.0		MWL	Water Level			0			
	1.8		MWL	Water Level			5			
	2.3		MMC	Material Change					PVC to Clay tile	
	3.8		DSZ	Deposits Settled: Other	4 to 8	20			Sewage	
	3.8		TB	Tap, Break-in / Hammer	2					
	4.3		RFJ	Roots, Fine: Joint	10 to 5					
	25.7	S01	TF	Tap, Factory Made	3					
26.2	FM		Fracture Multiple	12 to 12				Additional view of multiple fracture Broken joint, piece missing		
26.3	MGP		General Photograph							
26.6	B		Pipe Broken	10 to 2						
34.2		MWL	Water Level			0				
37.7		MLC	Lining Change						Clay tile to PVC	
37.9		LR	Line - Right			45				
38.2		MSA	Survey Abandoned						Unable to pass bend	

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 13:38	Length Surveyed 38.2
Additional Information					Media Label 88



AMH - Access Point - Manhole @ 0.0 m.
S MH 87

MWL - Water Level @ 0.0 m.



MWL - Water Level @ 1.8 m.

MMC - Material Change @ 2.3 m. PVC to Clay tile

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 13:38	Length Surveyed 38.2
Additional Information					Media Label 88



DSZ - Deposits Settled: Other @ 3.8 m.
Sewage



TB - Tap, Break-in / Hammer @ 3.8 m.



RFJ - Roots, Fine: Joint @ 4.3 m.



TF - Tap, Factory Made @ 25.7 m.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 13:38	Length Surveyed 38.2
Additional Information					Media Label 88



FM - Fracture Multiple @ 26.2 m.



MGP - General Photograph @ 26.3 m.
Additional view of multiple fracture



B - Pipe Broken @ 26.6 m. Broken joint, piece missing



MWL - Water Level @ 34.2 m.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 13:38	Length Surveyed 38.2
Additional Information					Media Label 88



MLC - Lining Change @ 37.7 m. Clay tile to PVC

LR - Line - Right @ 37.9 m.

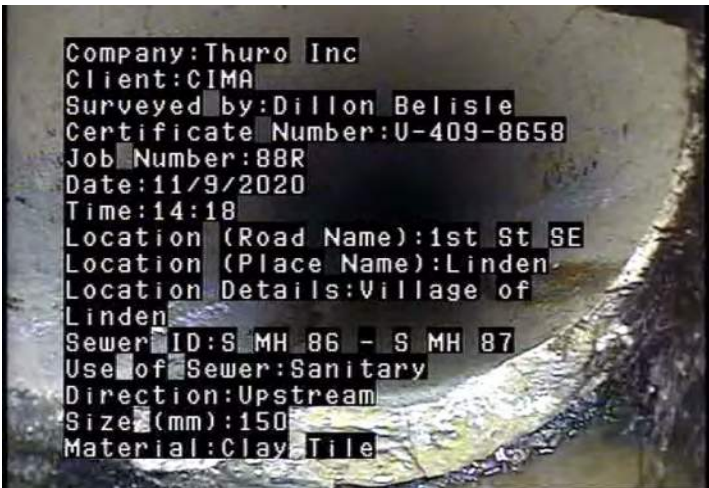


MSA - Survey Abandoned @ 38.2 m.
Unable to pass bend

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 86 - Roots around MH opening
0.0		MWL	Water Level		0			
2.1		RFJ	Roots, Fine: Joint	2 to 4				
3.0		RFJ	Roots, Fine: Joint	7 to 10			J	
3.9		RFJ	Roots, Fine: Joint	7 to 5				
16.4		RFJ	Roots, Fine: Joint	7 to 5				
17.6		RFJ	Roots, Fine: Joint	7 to 5				
19.8		RFC	Roots, Fine: Connection	7 to 10				
19.8		TB	Tap, Break-in / Hammer	9				
22.6		RFJ	Roots, Fine: Joint	7 to 5				
25.1		RFJ	Roots, Fine: Joint	7 to 5				
26.3		RFJ	Roots, Fine: Joint	7 to 5			J	
31.0		FM	Fracture Multiple	4 to 8				
31.2		JOL	Joint Offset (displaced): Large					
31.2		MMC	Material Change					Clay tile to PVC
31.2	S01	RPR	Point Repair - Pipe Replaced					PVC Repair
33.0	F01	RPR	Point Repair - Pipe Replaced					PVC to Clay tile
33.3		MWL	Water Level		0			
34.4		TBD	Tap, Break-in / Hammer: Defective	9				Hole overcut
38.4		MWL	Water Level		5			
45.3		RFJ	Roots, Fine: Joint	7 to 5				
46.5		RFJ	Roots, Fine: Joint	7 to 5			J	
51.2		RFJ	Roots, Fine: Joint	7 to 5				
52.8		RFJ	Roots, Fine: Joint	7 to 5				
53.9		RFJ	Roots, Fine: Joint	7 to 1				
55.7		RFJ	Roots, Fine: Joint	7 to 5				
68.9		CL	Crack Longitudinal	12			J	
69.0		TF	Tap, Factory Made	10				
71.7		MWL	Water Level		5			
80.8		MWLS	Water Level: Sag		15			
84.0		MWL	Water Level		5			
87.7		MMC	Material Change					Clay tile to PVC
87.7		JOM	Joint Offset (displaced): Medium					
88.0		LL	Line - Left		45			
88.2		MSA	Survey Abandoned					Unable to pass bend

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



AMH - Access Point - Manhole @ 0.0 m.
S MH 86 - Roots around MH opening

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 2.1 m.

RFJ - Roots, Fine: Joint @ 3.0 m.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



RFJ - Roots, Fine: Joint @ 3.9 m.



RFJ - Roots, Fine: Joint @ 16.4 m.



RFJ - Roots, Fine: Joint @ 17.6 m.



RFC - Roots, Fine: Connection @ 19.8 m.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



TB - Tap, Break-in / Hammer @ 19.8 m.



RFJ - Roots, Fine: Joint @ 22.6 m.



RFJ - Roots, Fine: Joint @ 25.1 m.

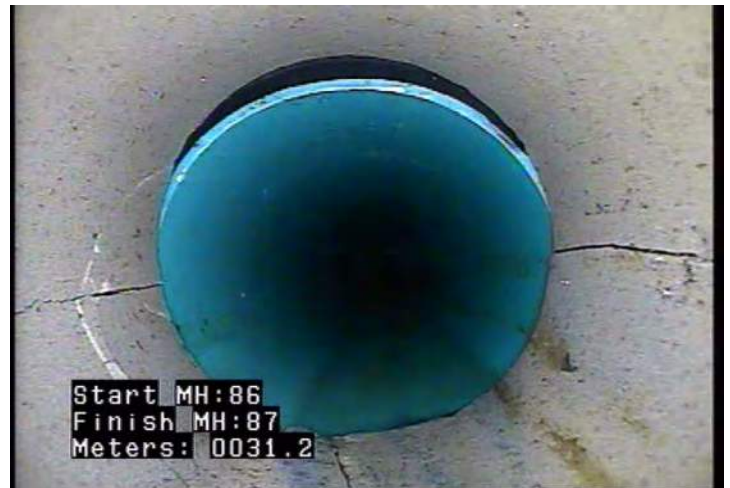


RFJ - Roots, Fine: Joint @ 26.3 m.

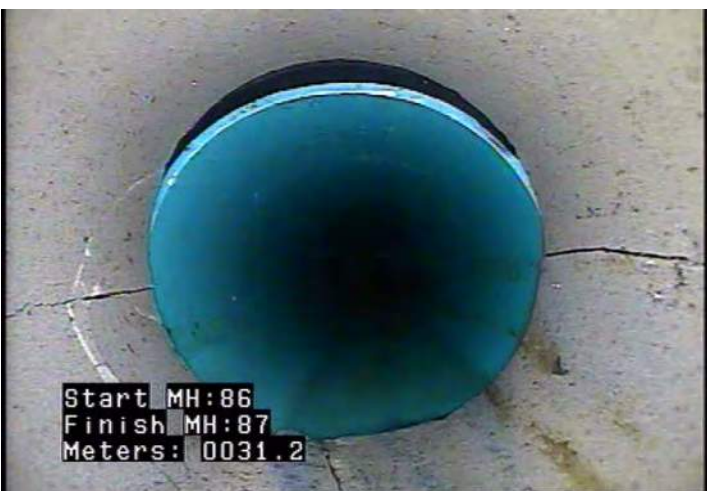
Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



FM - Fracture Multiple @ 31.0 m.



JOL - Joint Offset (displaced): Large @ 31.2 m.

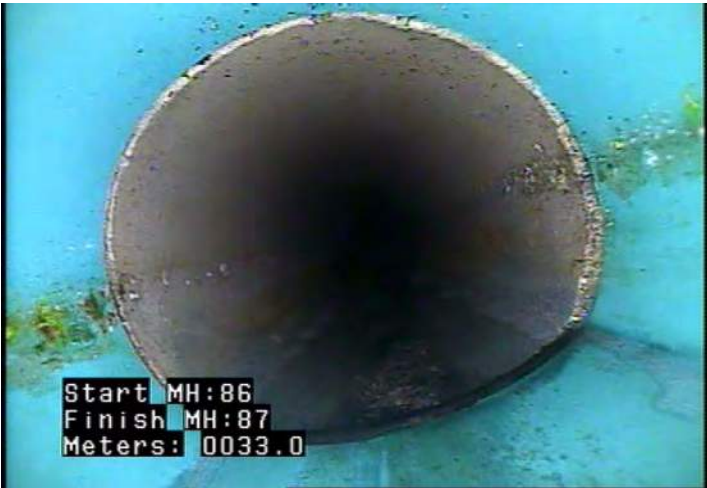


MMC - Material Change @ 31.2 m. Clay tile to PVC



RPR - Point Repair - Pipe Replaced @ 31.2 m. PVC Repair

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



RPR - Point Repair - Pipe Replaced @ 33.0 m. PVC to Clay tile



MWL - Water Level @ 33.3 m.

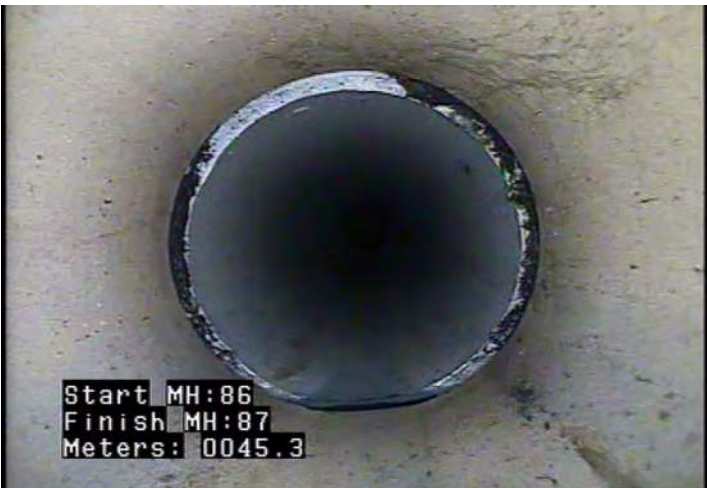


TBD - Tap, Break-in / Hammer: Defective @ 34.4 m. Hole overcut



MWL - Water Level @ 38.4 m.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



RFJ - Roots, Fine: Joint @ 45.3 m.



RFJ - Roots, Fine: Joint @ 46.5 m.



RFJ - Roots, Fine: Joint @ 51.2 m.



RFJ - Roots, Fine: Joint @ 52.8 m.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



RFJ - Roots, Fine: Joint @ 53.9 m.



RFJ - Roots, Fine: Joint @ 55.7 m.



CL - Crack Longitudinal @ 68.9 m.



TF - Tap, Factory Made @ 69.0 m.

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



MWL - Water Level @ 71.7 m.



MWLS - Water Level: Sag @ 80.8 m.



MWL - Water Level @ 84.0 m.



MMC - Material Change @ 87.7 m. Clay tile to PVC

Upstream MH 87	Downstream MH 86	Size 150	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 14:18	Length Surveyed 88.2
Additional Information					Media Label 88R



JOM - Joint Offset (displaced): Medium @ 87.7 m.



LL - Line - Left @ 88.0 m.



MSA - Survey Abandoned @ 88.2 m.
Unable to pass bend

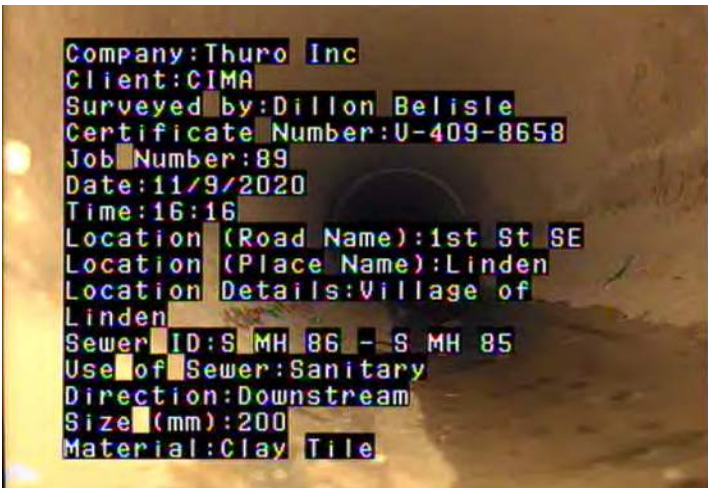
Upstream MH 85	Downstream MH 86	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 15:15	Length Surveyed 8.8
Additional Information					Media Label 89

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
8.8		MSA	Survey Abandoned					Unable to pass broken pipe.

Upstream MH 86	Downstream MH 85	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:16	Length Surveyed 94.5
Additional Information					Media Label 89

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 86
	0.0		MWL	Water Level		5			
	2.8		RFJ	Roots, Fine: Joint	4 to 5			J	
	4.2		RFJ	Roots, Fine: Joint	11 to 12				
	5.7		RFJ	Roots, Fine: Joint	7 to 11				
	8.4		RFJ	Roots, Fine: Joint	2				
	9.8		RFJ	Roots, Fine: Joint	7 to 5				
	11.2		RFJ	Roots, Fine: Joint	7 to 5				
	12.6		RFJ	Roots, Fine: Joint	8 to 11				
	19.8		TB	Tap, Break-in / Hammer	2				
	33.5		RFJ	Roots, Fine: Joint	10 to 2			J	
	49.2		TB	Tap, Break-in / Hammer	3				
	61.6		TB	Tap, Break-in / Hammer	2				
	81.6	S01	MWLS	Water Level: Sag		15			
	84.3		TB	Tap, Break-in / Hammer	2				
	86.0	F01	MWLS	Water Level: Sag		5			
	93.9		MWLS	Water Level: Sag		20			
	94.4		BSV	Pipe Broken: Soil Visible	12 to 12				Unable to pass broken pipe
	94.5		MSA	Survey Abandoned					

Upstream MH 86	Downstream MH 85	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:16	Length Surveyed 94.5
Additional Information					Media Label 89



AMH - Access Point - Manhole @ 0.0 m.
S MH 86

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 2.8 m.

RFJ - Roots, Fine: Joint @ 4.2 m.

Upstream MH 86	Downstream MH 85	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:16	Length Surveyed 94.5
Additional Information					Media Label 89



RFJ - Roots, Fine: Joint @ 5.7 m.



RFJ - Roots, Fine: Joint @ 8.4 m.



RFJ - Roots, Fine: Joint @ 9.8 m.



RFJ - Roots, Fine: Joint @ 11.2 m.

Upstream MH 86	Downstream MH 85	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:16	Length Surveyed 94.5
Additional Information					Media Label 89



RFJ - Roots, Fine: Joint @ 12.6 m.



TB - Tap, Break-in / Hammer @ 19.8 m.



RFJ - Roots, Fine: Joint @ 33.5 m.



TB - Tap, Break-in / Hammer @ 49.2 m.

Upstream MH 86	Downstream MH 85	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:16	Length Surveyed 94.5
Additional Information					Media Label 89



TB - Tap, Break-in / Hammer @ 61.6 m.



MWLS - Water Level: Sag @ 81.6 m.



TB - Tap, Break-in / Hammer @ 84.3 m.



MWLS - Water Level: Sag @ 86.0 m.

Upstream MH 86	Downstream MH 85	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:16	Length Surveyed 94.5
Additional Information					Media Label 89



MWLS - Water Level: Sag @ 93.9 m.



BSV - Pipe Broken: Soil Visible @ 94.4 m.

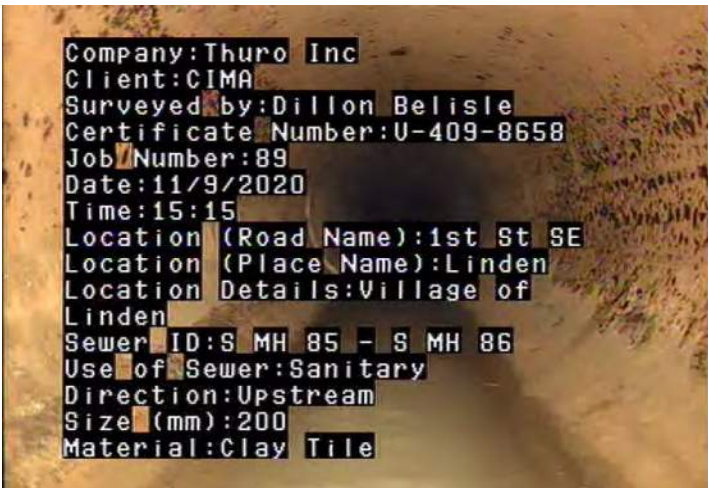


MSA - Survey Abandoned @ 94.5 m.
Unable to pass broken pipe

Upstream MH 86	Downstream MH 86	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 15:15	Length Surveyed 8.8
Additional Information					Media Label 89R

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 85
0.0		MWL	Water Level		5			
1.3		RFJ	Roots, Fine: Joint	8 to 9				
6.9		MWLS	Water Level: Sag		40			
8.2		B	Pipe Broken	7 to 4				
8.8		MSA	Survey Abandoned					Unable to pass broken pipe.

Upstream MH 86	Downstream MH 86	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 15:15	Length Surveyed 8.8
Additional Information					Media Label 89R



AMH - Access Point - Manhole @ 0.0 m.
S MH 85

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 1.3 m.

MWLS - Water Level: Sag @ 6.9 m.

Upstream MH 86	Downstream MH 86	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 15:15	Length Surveyed 8.8
Additional Information					Media Label 89R



B - Pipe Broken @ 8.2 m.

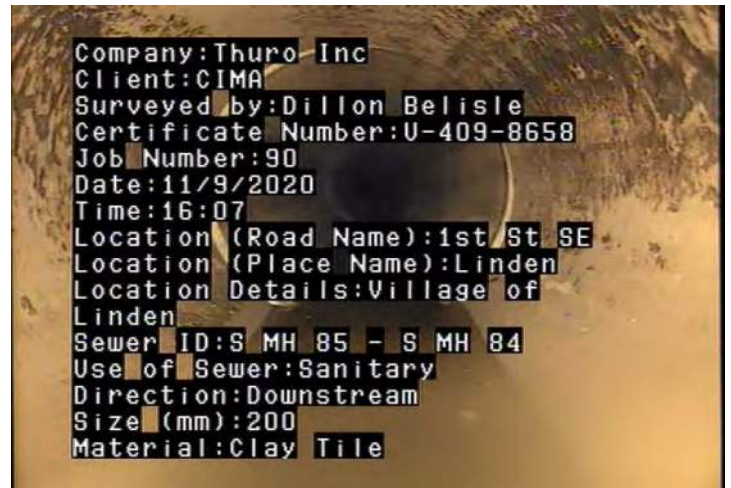
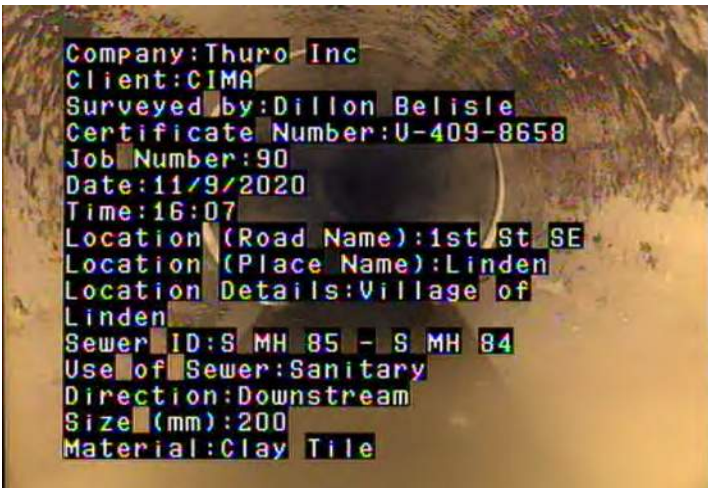


MSA - Survey Abandoned @ 8.8 m.
Unable to pass broken pipe.

Upstream MH 85	Downstream MH 84	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:07	Length Surveyed 31.7
Additional Information					Media Label 90

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 85
0.0		MWL	Water Level		5			
9.5		RFJ	Roots, Fine: Joint	4 to 6			J	
12.3		RFJ	Roots, Fine: Joint	1 to 2			J	
13.7		RFJ	Roots, Fine: Joint	2 to 6			J	
16.3		RFJ	Roots, Fine: Joint	7 to 10				
21.4	S01	MWLS	Water Level: Sag		20			
23.4		RFJ	Roots, Fine: Joint	7 to 2			J	
30.4		RFJ	Roots, Fine: Joint	7 to 9				
31.0	F01	MWLS	Water Level: Sag		5			
31.1		FC	Fracture Circumferential	6 to 10				
31.7		AMH	Access Point - Manhole					S MH 84

Upstream MH 85	Downstream MH 84	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:07	Length Surveyed 31.7
Additional Information					Media Label 90



AMH - Access Point - Manhole @ 0.0 m.
S MH 85

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 9.5 m.

RFJ - Roots, Fine: Joint @ 12.3 m.

Upstream MH 85	Downstream MH 84	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:07	Length Surveyed 31.7
Additional Information					Media Label 90



RFJ - Roots, Fine: Joint @ 13.7 m.



RFJ - Roots, Fine: Joint @ 16.3 m.



MWLS - Water Level: Sag @ 21.4 m.

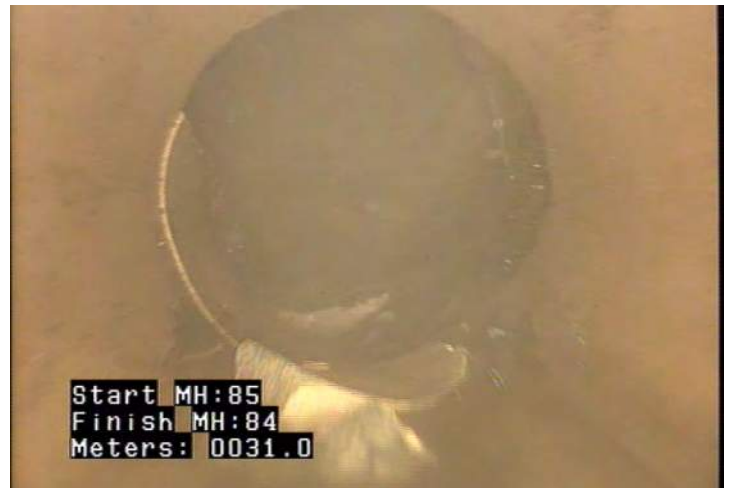


RFJ - Roots, Fine: Joint @ 23.4 m.

Upstream MH 85	Downstream MH 84	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:07	Length Surveyed 31.7
Additional Information					Media Label 90



RFJ - Roots, Fine: Joint @ 30.4 m.



MWLS - Water Level: Sag @ 31.0 m.



FC - Fracture Circumferential @ 31.1 m.



AMH - Access Point - Manhole @ 31.7 m.
S MH 84

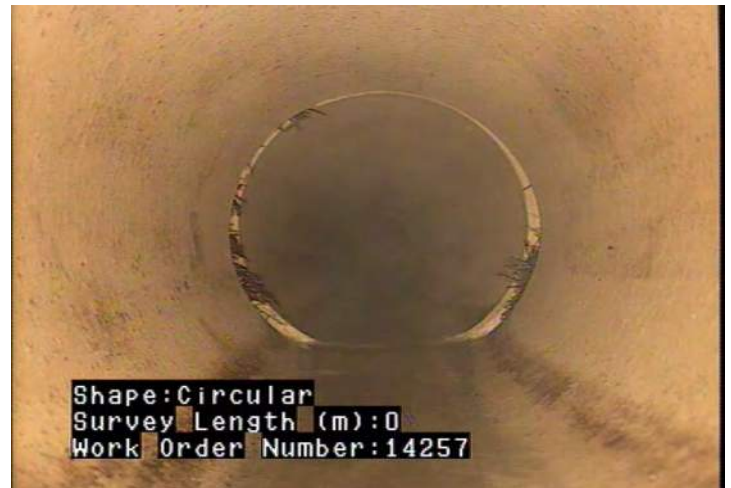
Upstream MH 84	Downstream MH 80	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden	
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:50	Length Surveyed 87.4
Additional Information					Media Label 91

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 84
	0.0		MWL	Water Level		5			
	1.0	S01	RFJ	Roots, Fine: Joint	7 to 5			J	Fine roots at most joints
	15.4		RBL	Roots, Ball: Lateral	1 to 2	80			
	15.4		TBD	Tap, Break-in / Hammer: Defective	2				Roots
	26.4		RFC	Roots, Fine: Connection	11 to 2				
	26.4		TB	Tap, Break-in / Hammer	12				
	36.2		CS	Crack Spiral	4 to 6			J	
	37.5		CL	Crack Longitudinal	11				
	63.3		TB	Tap, Break-in / Hammer	2				
	86.1	F01	RFJ	Roots, Fine: Joint	7 to 5			J	
	87.4		AMH	Access Point - Manhole					S MH 80

Upstream MH 84	Downstream MH 80	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:50	Length Surveyed 87.4
Additional Information					Media Label 91



AMH - Access Point - Manhole @ 0.0 m.
S MH 84



MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 1.0 m. Fine roots at most joints



RBL - Roots, Ball: Lateral @ 15.4 m.

Upstream MH 84	Downstream MH 80	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:50	Length Surveyed 87.4
Additional Information					Media Label 91



TBD - Tap, Break-in / Hammer: Defective @ 15.4 m. Roots



RFC - Roots, Fine: Connection @ 26.4 m.



TB - Tap, Break-in / Hammer @ 26.4 m.



CS - Crack Spiral @ 36.2 m.

Upstream MH 84	Downstream MH 80	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-09-2020	Time 16:50	Length Surveyed 87.4
Additional Information					Media Label 91



CL - Crack Longitudinal @ 37.5 m.



TB - Tap, Break-in / Hammer @ 63.3 m.



RFJ - Roots, Fine: Joint @ 86.1 m.

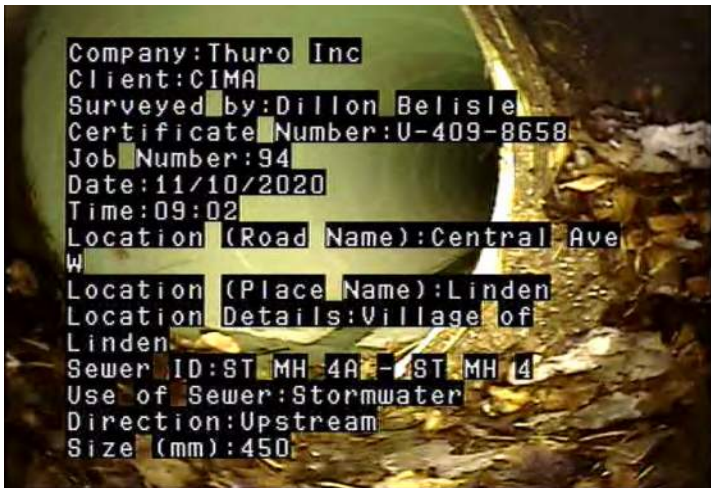


AMH - Access Point - Manhole @ 87.4 m.
S MH 80

Upstream MH 4B	Downstream MH 4A	Size 450	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 09:02	Length Surveyed 18.6
Additional Information					Media Label 94



Upstream MH 4B	Downstream MH 4A	Size 450	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 09:02	Length Surveyed 18.6
Additional Information					Media Label 94



AMH - Access Point - Manhole @ 0.0 m.
ST MH 4A



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 18.6 m.
ST MH 4B

Upstream MH	Downstream MH	Size	Material	Total Length	City
4	4A	450	Reinforced Concrete Pipe	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave W	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-10-2020	10:53	24

Additional Information	Media Label
	95

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 4
0.0		MWL	Water Level		5			
15.5		FC	Fracture Circumferential	4 to 7			J	
24.0		AMH	Access Point - Manhole					ST MH 4A

Upstream MH 4	Downstream MH 4A	Size 450	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave W	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 10:53	Length Surveyed 24
Additional Information					Media Label 95



AMH - Access Point - Manhole @ 0.0 m.
ST MH 4



MWL - Water Level @ 0.0 m.



FC - Fracture Circumferential @ 15.5 m.



AMH - Access Point - Manhole @ 24.0 m.
ST MH 4A




Upstream MH	Downstream MH	Size	Material	Total Length	City
13	End run S	375	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

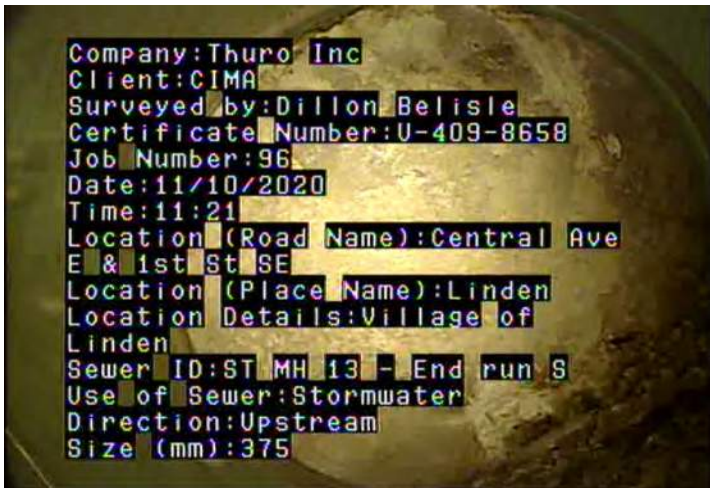
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave E & 1st St SE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-10-2020	11:21	1.7

Additional Information	Media Label
	96

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 13
	0.0		MWL	Water Level		0			
									
	1.7		MSA	Survey Abandoned					Line plugged with concrete.

Upstream MH 13	Downstream MH End run S	Size 375	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E & 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:21	Length Surveyed 1.7
Additional Information					Media Label 96



AMH - Access Point - Manhole @ 0.0 m.
ST MH 13



MWL - Water Level @ 0.0 m.



MSA - Survey Abandoned @ 1.7 m. Line plugged with concrete.

Upstream MH	Downstream MH	Size	Material	Total Length	City
13	22	450	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

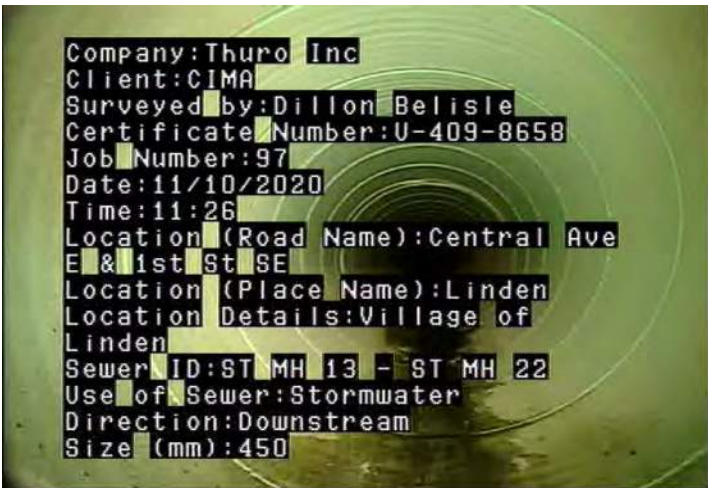
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave E & 1st St SE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-10-2020	11:26	22.8

Additional Information	Media Label
	97

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 13
	0.0		MWL	Water Level		5			
									
	22.8		AMH	Access Point - Manhole					ST MH 22 - No Access/Buried

Upstream MH 13	Downstream MH 22	Size 450	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E & 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:26	Length Surveyed 22.8
Additional Information					Media Label 97



AMH - Access Point - Manhole @ 0.0 m.
ST MH 13



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 22.8 m.
ST MH 22 - No Access/Buried

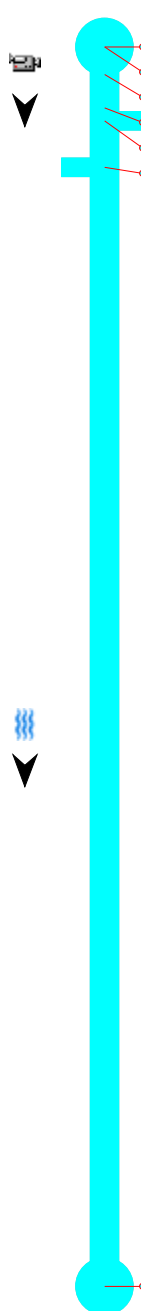
Upstream MH	Downstream MH	Size	Material	Total Length	City
22	19	525	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Central Ave E & 1st St SE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-10-2020	11:32	85.4

Additional Information	Media Label
	98

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 22 - No access/Buried
	0.0		MWL	Water Level		0			
	1.9		MWL	Water Level		5			
	4.2		MWL	Water Level		0			
	5.1		TSI	Tap, Saddle: Intruding	9				
	8.3		TB	Tap, Break-in / Hammer	3				Concrete around service
	85.4		AMH	Access Point - Manhole					ST MH 19

Upstream MH 22	Downstream MH 19	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E & 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:32	Length Surveyed 85.4
Additional Information					Media Label 98



AMH - Access Point - Manhole @ 0.0 m.
ST MH 22 - No access/Buried

MWL - Water Level @ 0.0 m.



MWL - Water Level @ 1.9 m.



MWL - Water Level @ 4.2 m.

Upstream MH 22	Downstream MH 19	Size 525	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E & 1st St SE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:32	Length Surveyed 85.4
Additional Information					Media Label 98



TSI - Tap, Saddle: Intruding @ 5.1 m.

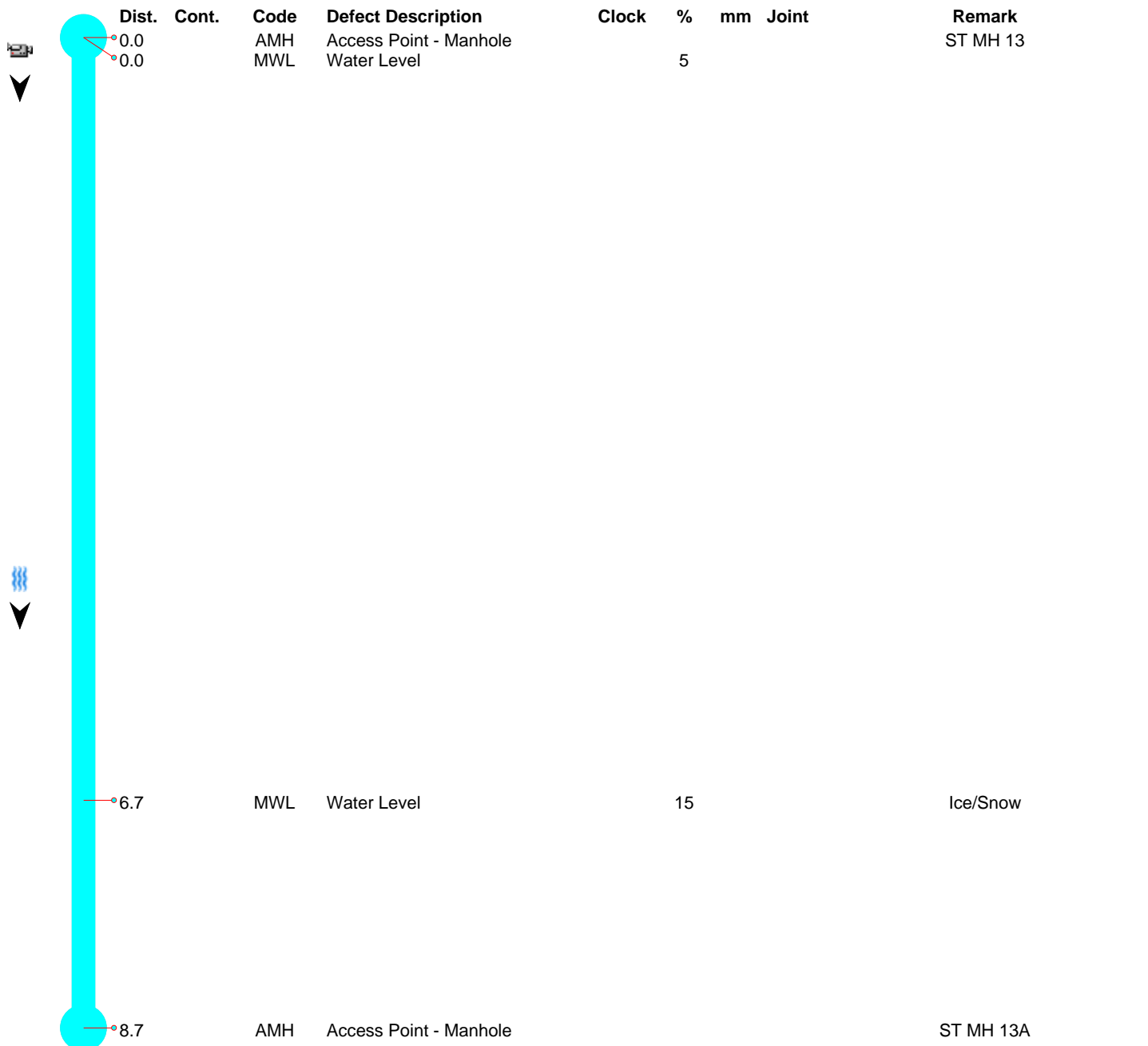


TB - Tap, Break-in / Hammer @ 8.3 m.
Concrete around service



AMH - Access Point - Manhole @ 85.4 m.
ST MH 19

Upstream MH 13A	Downstream MH 13	Size 375	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E & 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:52	Length Surveyed 8.7
Additional Information					Media Label 99



Upstream MH 13A	Downstream MH 13	Size 375	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Central Ave E & 1st St SE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:52	Length Surveyed 8.7
Additional Information					Media Label 99



AMH - Access Point - Manhole @ 0.0 m.
ST MH 13



MWL - Water Level @ 0.0 m.

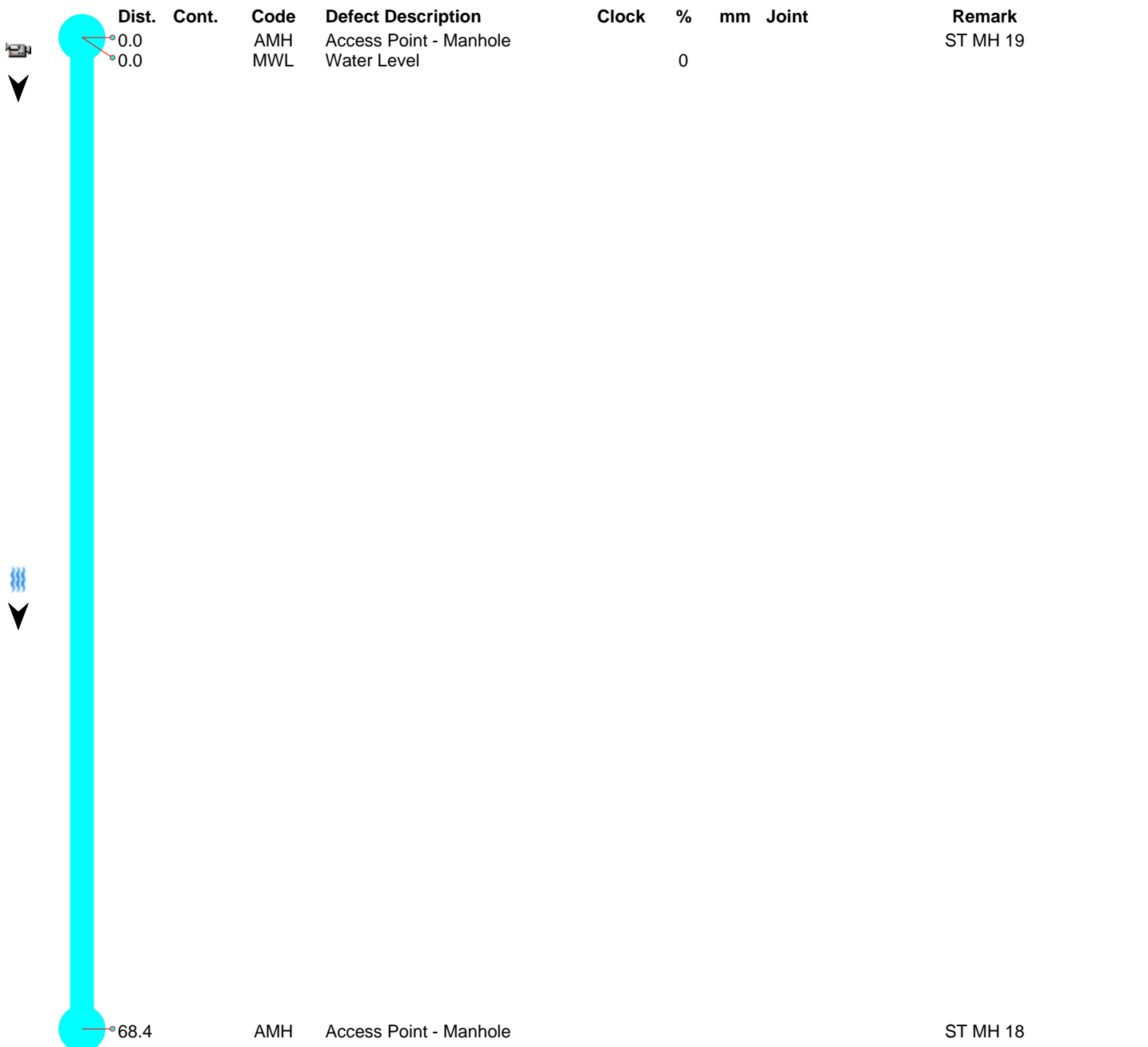


MWL - Water Level @ 6.7 m. Ice/Snow



AMH - Access Point - Manhole @ 8.7 m.
ST MH 13A

Upstream MH 19	Downstream MH 18	Size 750	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:56	Length Surveyed 68.4
Additional Information					Media Label 100



Upstream MH 19	Downstream MH 18	Size 750	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 1st St NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 11:56	Length Surveyed 68.4
Additional Information					Media Label 100



AMH - Access Point - Manhole @ 0.0 m.
ST MH 19



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 68.4 m.
ST MH 18

Upstream MH	Downstream MH	Size	Material	Total Length	City
19A	19	600	Polyethylene	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	1st Ave NE & 1st St NE	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-10-2020	12:22	18.6

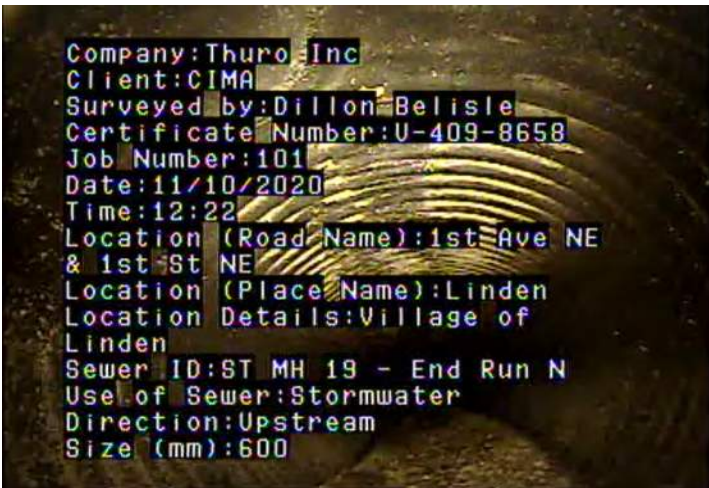
Additional Information	Media Label
	101

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 19
0.0		MWL	Water Level		0			
0.5	S01	DSGV	Deposits Settled: Gravel	5 to 7	10			



18.6	F01	DSGV	Deposits Settled: Gravel	5 to 7	10			ST MH 19A
18.6		AMH	Access Point - Manhole					

Upstream MH 19A	Downstream MH 19	Size 600	Material Polyethylene	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 1st St NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 12:22	Length Surveyed 18.6
Additional Information					Media Label 101



AMH - Access Point - Manhole @ 0.0 m.
ST MH 19



MWL - Water Level @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 0.5 m.



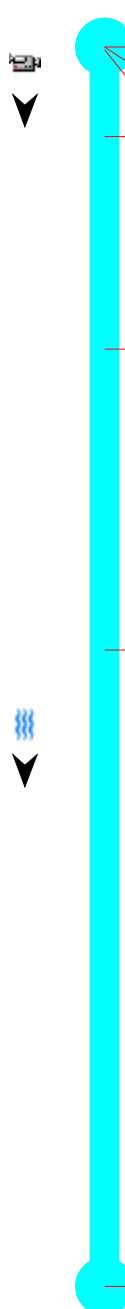
DSGV - Deposits Settled: Gravel @ 18.6 m.

Upstream MH 19A	Downstream MH 19	Size 600	Material Polyethylene	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & 1st St NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 12:22	Length Surveyed 18.6
Additional Information					Media Label 101



AMH - Access Point - Manhole @ 18.6 m.
ST MH 19A

Upstream MH 19B	Downstream MH 19A	Size 600	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 12:26	Length Surveyed 85.7
Additional Information					Media Label 102

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 19A
	0.0		MWL	Water Level		0			
	0.2	S01	DSGV	Deposits Settled: Gravel	5 to 7	10			
	6.2	F01	DSGV	Deposits Settled: Gravel	6 to 7	5			
	20.9		DSGV	Deposits Settled: Gravel	5 to 7	5			
	41.7		DSF	Deposits Settled: Fine	5 to 7	5			
	85.7		AMH	Access Point - Manhole					ST MH 19B

Upstream MH 19B	Downstream MH 19A	Size 600	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 12:26	Length Surveyed 85.7
Additional Information					Media Label 102



AMH - Access Point - Manhole @ 0.0 m.
ST MH 19A



MWL - Water Level @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 0.2 m.



DSGV - Deposits Settled: Gravel @ 6.2 m.

Upstream MH 19B	Downstream MH 19A	Size 600	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 12:26	Length Surveyed 85.7
Additional Information					Media Label 102



DSGV - Deposits Settled: Gravel @ 20.9 m.









DSF - Deposits Settled: Fine @ 41.7 m.



AMH - Access Point - Manhole @ 85.7 m.
ST MH 19B

Upstream MH 18	Downstream MH 17	Size 750	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 101B 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 13:05	Length Surveyed 42.4
Additional Information					Media Label 103

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 18
	0.0		DSGV	Deposits Settled: Gravel	5 to 7	10			
	0.0		MWL	Water Level		0			
	2.2		MWL	Water Level		10			
									
	18.9		MWL	Water Level		0			
									
	36.6		MWL	Water Level		5			
	42.4		AMH	Access Point - Manhole					ST MH 17

Upstream MH 18	Downstream MH 17	Size 750	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 101B 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 13:05	Length Surveyed 42.4
Additional Information					Media Label 103



AMH - Access Point - Manhole @ 0.0 m.
ST MH 18



DSGV - Deposits Settled: Gravel @ 0.0 m.



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 2.2 m.

Upstream MH 18	Downstream MH 17	Size 750	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 101B 1st Ave NE	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 13:05	Length Surveyed 42.4
Additional Information					Media Label 103



MWL - Water Level @ 18.9 m.



MWL - Water Level @ 36.6 m.

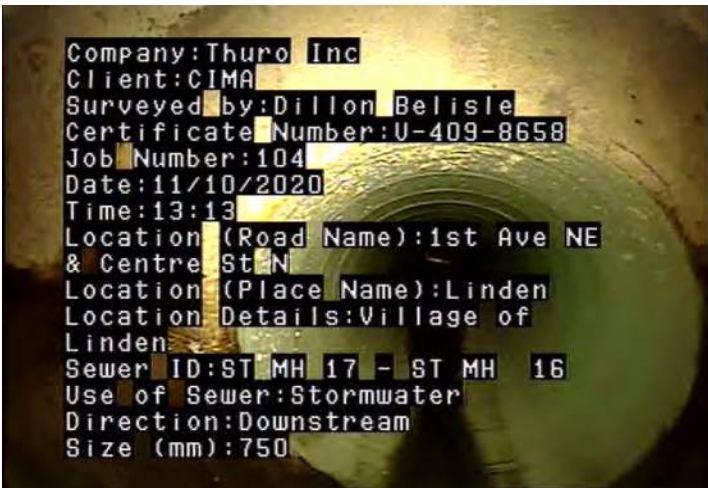


AMH - Access Point - Manhole @ 42.4 m.
ST MH 17

Upstream MH 17	Downstream MH 16	Size 750	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & Centre St N	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 13:13	Length Surveyed 19.2
Additional Information					Media Label 104

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 17
0.0		MWL	Water Level		5			
18.2		OBP	Obstacle - External Pipe or Cable in Sewer	10 to 8	10			
19.2		MSA	Survey Abandoned					Unable to pass pipe

Upstream MH 17	Downstream MH 16	Size 750	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NE & Centre St N	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-10-2020	Time 13:13	Length Surveyed 19.2
Additional Information					Media Label 104



AMH - Access Point - Manhole @ 0.0 m.
ST MH 17



MWL - Water Level @ 0.0 m.









OBP - Obstacle - External Pipe or Cable in
Sewer @ 18.2 m.



MSA - Survey Abandoned @ 19.2 m.
Unable to pass pipe

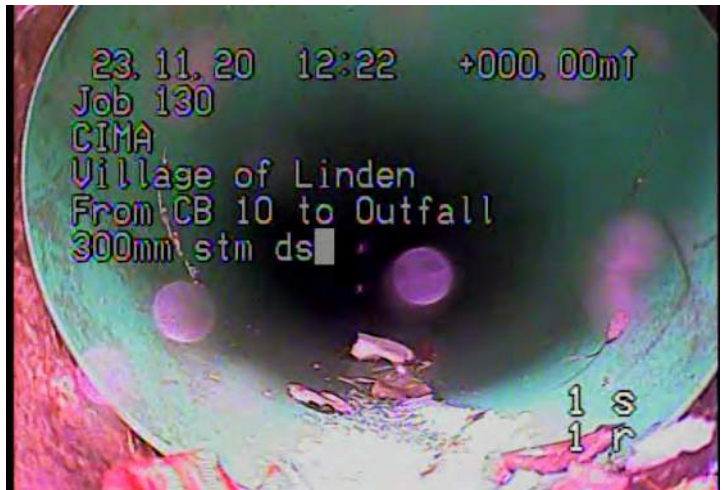
Upstream MH CB 10	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 12:22	Length Surveyed 25
Additional Information					Media Label 130

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		ACB	Access Point - Catch Basin					CB 10
	0.0		MWL	Water Level		0			
									
									
									
	19.9		MWL	Water Level		10			Ice
	24.1		MWL	Water Level		20			Ice PVC to Concrete Outfall
	24.5		MMC	Material Change					
	25.0		ADP	Access Point - Discharge Point					

Upstream MH CB 10	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 12:22	Length Surveyed 25
Additional Information					Media Label 130



ACB - Access Point - Catch Basin @ 0.0 m. CB 10



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 19.9 m. Ice



MWL - Water Level @ 24.1 m. Ice

Upstream MH CB 10	Downstream MH Outfall	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 300 Picci Court NW	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 12:22	Length Surveyed 25
Additional Information					Media Label 130



MMC - Material Change @ 24.5 m. PVC to Concrete



ADP - Access Point - Discharge Point @ 25.0 m. Outfall

Upstream MH	Downstream MH	Size	Material	Total Length	City
CB 21	21	300	Reinforced Concrete Pipe	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Suburban/Rural	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	1st St NW	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-22-2020	11:23	

Additional Information	Media Label
	125

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 21
	0.0		MWL	Water Level		0			
	0.5		CM	Crack Multiple	2 to 5				
	1.6	S01	ISGT	Intruding Seal Material - Grout	3 to 6	5			
	29.6		MGO	General Observation					Chipped joint
	47.9	F01	ISGT	Intruding Seal Material - Grout	4 to 7	5			
	50.7		ACB	Access Point - Catch Basin					CB 21

Upstream MH CB 21	Downstream MH 21	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:23	Length Surveyed
Additional Information					Media Label 125



AMH - Access Point - Manhole @ 0.0 m.
ST MH 21



MWL - Water Level @ 0.0 m.



CM - Crack Multiple @ 0.5 m.



ISGT - Intruding Seal Material - Grout @ 1.6 m.

Upstream MH CB 21	Downstream MH 21	Size 300	Material Reinforced Concrete Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:23	Length Surveyed
Additional Information					Media Label 125



MGO - General Observation @ 29.6 m.
Chipped joint



ISGT - Intruding Seal Material - Grout @
47.9 m.



ACB - Access Point - Catch Basin @ 50.7
m. CB 21

Upstream MH	Downstream MH	Size	Material	Total Length	City
CB 23A	23B	300	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Linview Rd S & Linview Dr S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-22-2020	11:23	47.2

Additional Information	Media Label
	118

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		ACB	Access Point - Catch Basin					CB 23A
	0.0		MWL	Water Level		0			
									
									
									
									
									
									
									
									
									
									
									
									
									

Upstream MH CB 23A	Downstream MH 23B	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Linview Rd S & Linview Dr S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-22-2020	Time 11:23	Length Surveyed 47.2
Additional Information					Media Label 118



ACB - Access Point - Catch Basin @ 0.0 m. CB 23A



MWL - Water Level @ 0.0 m.



ACB - Access Point - Catch Basin @ 47.2 m. CB 23B

Upstream MH	Downstream MH	Size	Material	Total Length	City
CB 23B	23	300	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In front of 222 Linview Rd S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Pre-Rehabilitation Survey	Dry	11-21-2020	11:42	68.4

Additional Information	Media Label
	119

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		ACB	Access Point - Catch Basin					CB 23B
0.0		MWL	Water Level		0			
2.0		MMC	Material Change					PVC to Corrugated Plastic



68.4

AMH Access Point - Manhole

ST MH 23

Upstream MH CB 23B	Downstream MH 23	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In front of 222 Linview Rd S	Location Details Village of Linden		
Direction Downstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 11:42	Length Surveyed 68.4
Additional Information					Media Label 119



ACB - Access Point - Catch Basin @ 0.0 m. CB 23B



MWL - Water Level @ 0.0 m.







MMC - Material Change @ 2.0 m. PVC to Corrugated Plastic

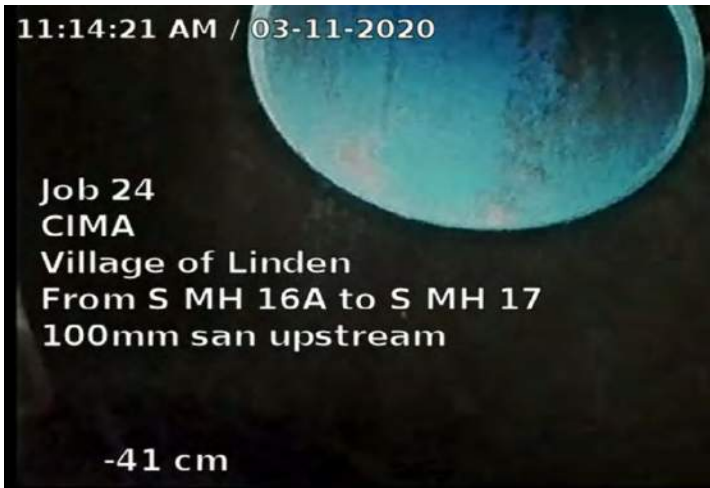


AMH - Access Point - Manhole @ 68.4 m. ST MH 23

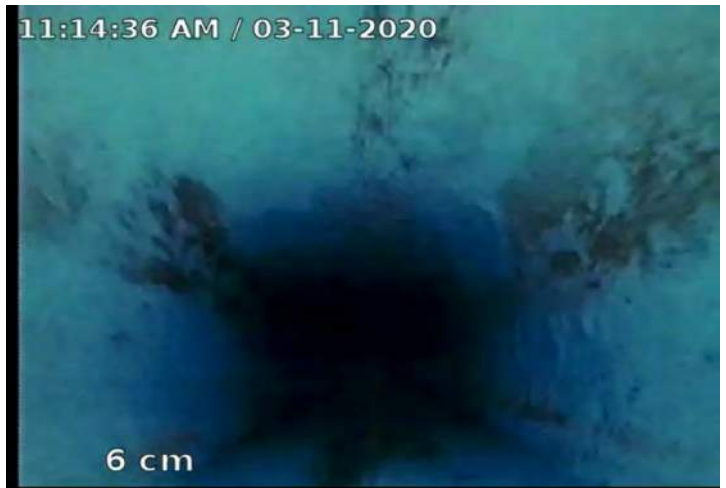
Upstream MH Dump line	Downstream MH 16A	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NW & 5th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:14	Length Surveyed 45.1
Additional Information S MH 17 doesn't exist.					Media Label 24

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 16A
	0.0		MWL	Water Level		20			
	2.9		MWL	Water Level		0			
	6.1		MMC	Material Change					PVC to Clay tile
	25.6		RFJ	Roots, Fine: Joint	8 to 4				
	38.5		CL	Crack Longitudinal	10				
	41.9		H	Hole in Pipe	1 to 3				Patched on outside
	43.7		MMC	Material Change					Clay tile to ABS
	44.8		LU	Line - Up	90				
	45.1		MSA	Survey Abandoned					Unable to proceed.

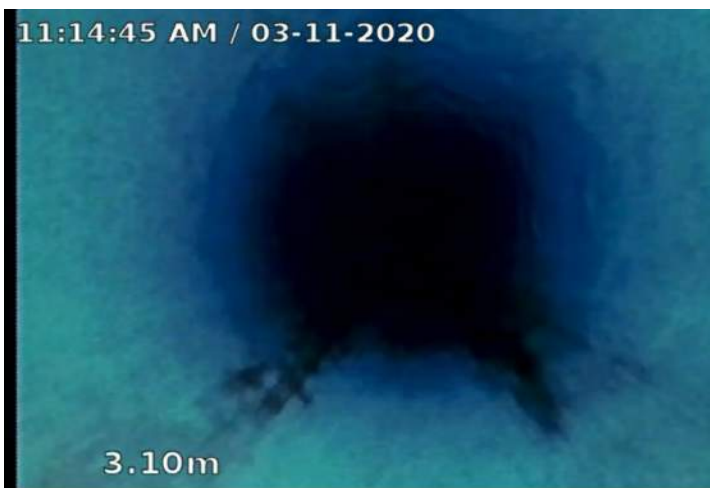
Upstream MH Dump line	Downstream MH 16A	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NW & 5th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:14	Length Surveyed 45.1
Additional Information S MH 17 doesn't exist.					Media Label 24



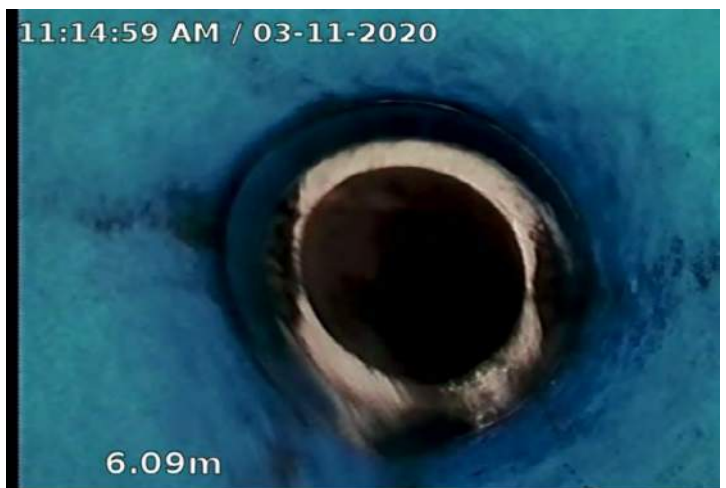
AMH - Access Point - Manhole @ 0.0 m.
S MH 16A



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 2.9 m.



MMC - Material Change @ 6.1 m. PVC to Clay tile

Upstream MH Dump line	Downstream MH 16A	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NW & 5th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:14	Length Surveyed 45.1
Additional Information S MH 17 doesn't exist.					Media Label 24



RFJ - Roots, Fine: Joint @ 25.6 m.



CL - Crack Longitudinal @ 38.5 m.



H - Hole in Pipe @ 41.9 m. Patched on outside



MMC - Material Change @ 43.7 m. Clay tile to ABS

Upstream MH Dump line	Downstream MH 16A	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave NW & 5th St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-03-2020	Time 11:14	Length Surveyed 45.1
Additional Information S MH 17 doesn't exist.					Media Label 24



LU - Line - Up @ 44.8 m.

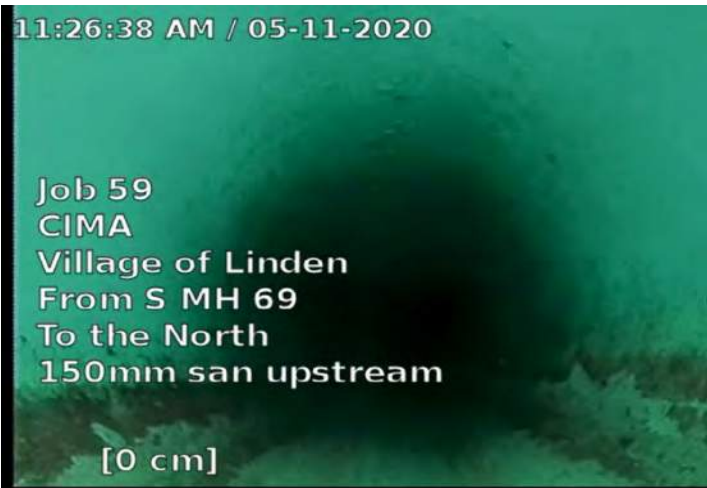


MSA - Survey Abandoned @ 45.1 m.
Unable to proceed.

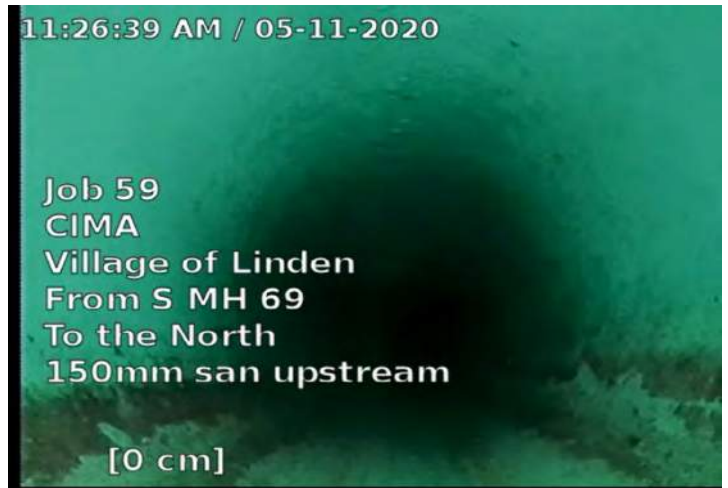
Upstream MH End run N	Downstream MH 69	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Centre Ave E	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:26	Length Surveyed 62.2
Additional Information					Media Label 59

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 69
	0.0		MWL	Water Level		5			
	16.9	S01	MWLS	Water Level: Sag		20			
	28.4	F01	MWLS	Water Level: Sag		10			
	62.2		MSA	Survey Abandoned					Unable to push camera further.

Upstream MH End run N	Downstream MH 69	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Centre Ave E	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:26	Length Surveyed 62.2
Additional Information					Media Label 59



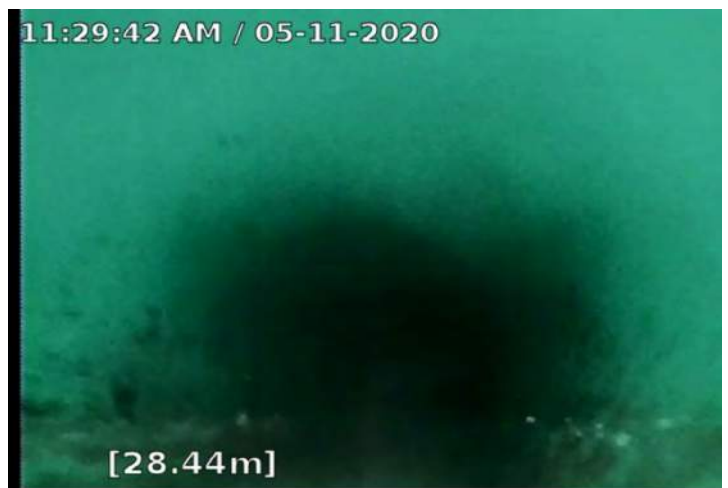
AMH - Access Point - Manhole @ 0.0 m.
S MH 69



MWL - Water Level @ 0.0 m.

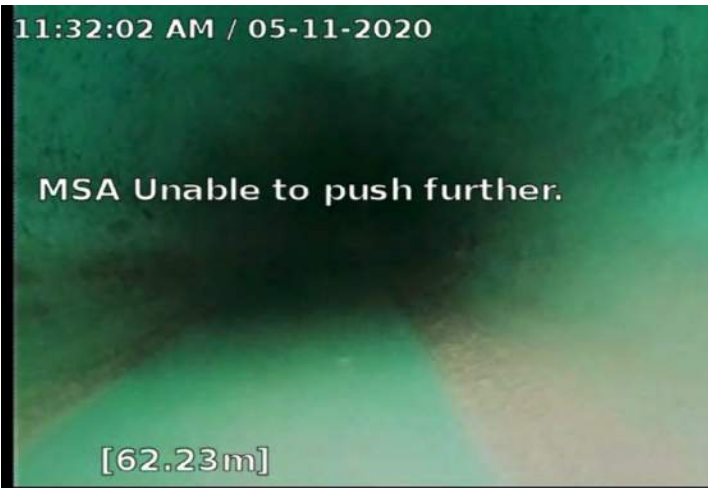


MWLS - Water Level: Sag @ 16.9 m.



MWLS - Water Level: Sag @ 28.4 m.

Upstream MH End run N	Downstream MH 69	Size 150	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Off Centre Ave E	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 11:26	Length Surveyed 62.2
Additional Information					Media Label 59



MSA - Survey Abandoned @ 62.2 m.
 Unable to push camera further.

Upstream MH End run SE	Downstream MH 77	Size 100	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:09	Length Surveyed 33.7
Additional Information					Media Label 73

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 77
	0.0		MWL	Water Level		5			
	0.2		RFJ	Roots, Fine: Joint	7 to 9				
	2.2		RFJ	Roots, Fine: Joint	11				
	4.7		RFJ	Roots, Fine: Joint	9 to 12				
	8.1		RFJ	Roots, Fine: Joint	7 to 3				
	9.4		RFJ	Roots, Fine: Joint	9 to 4				
	11.8		RFJ	Roots, Fine: Joint	7 to 2				
	15.6		RFJ	Roots, Fine: Joint	10 to 2				
	16.6		RFJ	Roots, Fine: Joint	9 to 3				
	19.1		LL	Line - Left		45			
	22.1		RMJ	Roots, Medium, Joint	10 to 2	20			
	26.9		RMJ	Roots, Medium, Joint	11 to 4	25			
	28.4		RMJ	Roots, Medium, Joint	10 to 2	20			
	31.3		RMJ	Roots, Medium, Joint	8 to 3	25			
	33.4		RMJ	Roots, Medium, Joint	11 to 6	40			Unable to push camera further.
	33.7		MSA	Survey Abandoned					

Upstream MH End run SE	Downstream MH 77	Size 100	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:09	Length Surveyed 33.7
Additional Information					Media Label 73



AMH - Access Point - Manhole @ 0.0 m.
S MH 77



MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 0.2 m.



RFJ - Roots, Fine: Joint @ 2.2 m.

Upstream MH End run SE	Downstream MH 77	Size 100	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:09	Length Surveyed 33.7
Additional Information					Media Label 73



RFJ - Roots, Fine: Joint @ 4.7 m.



RFJ - Roots, Fine: Joint @ 8.1 m.

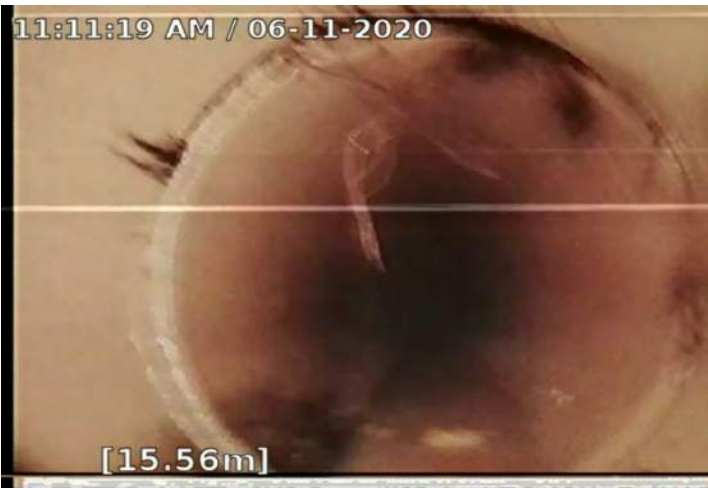


RFJ - Roots, Fine: Joint @ 9.4 m.



RFJ - Roots, Fine: Joint @ 11.8 m.

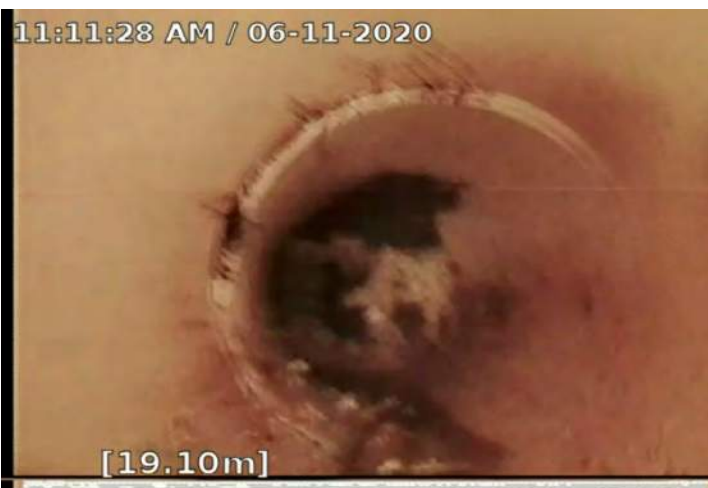
Upstream MH End run SE	Downstream MH 77	Size 100	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:09	Length Surveyed 33.7
Additional Information					Media Label 73



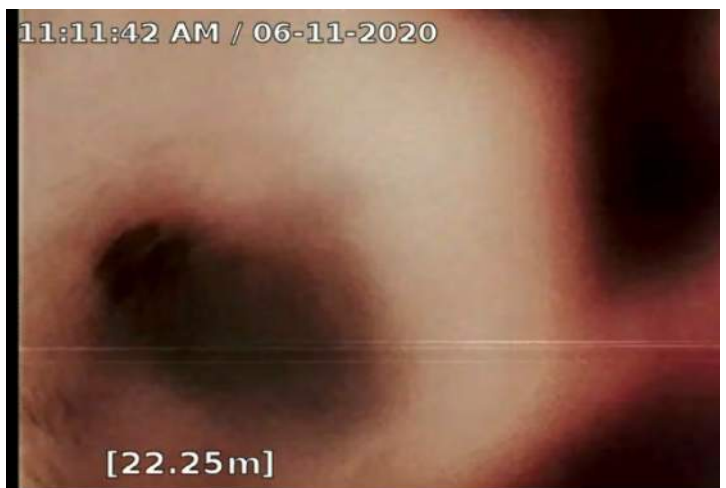
RFJ - Roots, Fine: Joint @ 15.6 m.



RFJ - Roots, Fine: Joint @ 16.6 m.



LL - Line - Left @ 19.1 m.



RMJ - Roots, Medium, Joint @ 22.1 m.

Upstream MH End run SE	Downstream MH 77	Size 100	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:09	Length Surveyed 33.7
Additional Information					Media Label 73



RMJ - Roots, Medium, Joint @ 26.9 m.



RMJ - Roots, Medium, Joint @ 28.4 m.



RMJ - Roots, Medium, Joint @ 31.3 m.




RMJ - Roots, Medium, Joint @ 33.4 m.

Upstream MH End run SE	Downstream MH 77	Size 100	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st Ave SW & alley	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-06-2020	Time 11:09	Length Surveyed 33.7
Additional Information					Media Label 73



MSA - Survey Abandoned @ 33.7 m.
 Unable to push camera further.

Upstream MH End run	Downstream MH 13	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 03:05	Length Surveyed 57.4
Additional Information S MH 14 doesn't exist.					Media Label 12

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 13
	0.0		MWL	Water Level		10			
	1.7		MWL	Water Level		0			
	50.2		LR	Line - Right		45			PVC to ABS
	51.0		MMC	Material Change					
	51.4	S01	DAGS	Deposits Attached: Grease	10 to 3	20			
	57.1		LL	Line - Left		20			Unable to push further.
	57.4	F01	DAGS	Deposits Attached: Grease	8 to 4	20			
	57.4		MSA	Survey Abandoned					

Upstream MH End run	Downstream MH 13	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 03:05	Length Surveyed 57.4
Additional Information S MH 14 doesn't exist.					Media Label 12



AMH - Access Point - Manhole @ 0.0 m.
S MH 13



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 1.7 m.



LR - Line - Right @ 50.2 m.

Upstream MH End run	Downstream MH 13	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 03:05	Length Surveyed 57.4
Additional Information S MH 14 doesn't exist.					Media Label 12



MMC - Material Change @ 51.0 m. PVC to ABS



DAGS - Deposits Attached: Grease @ 51.4 m.



LL - Line - Left @ 57.1 m.



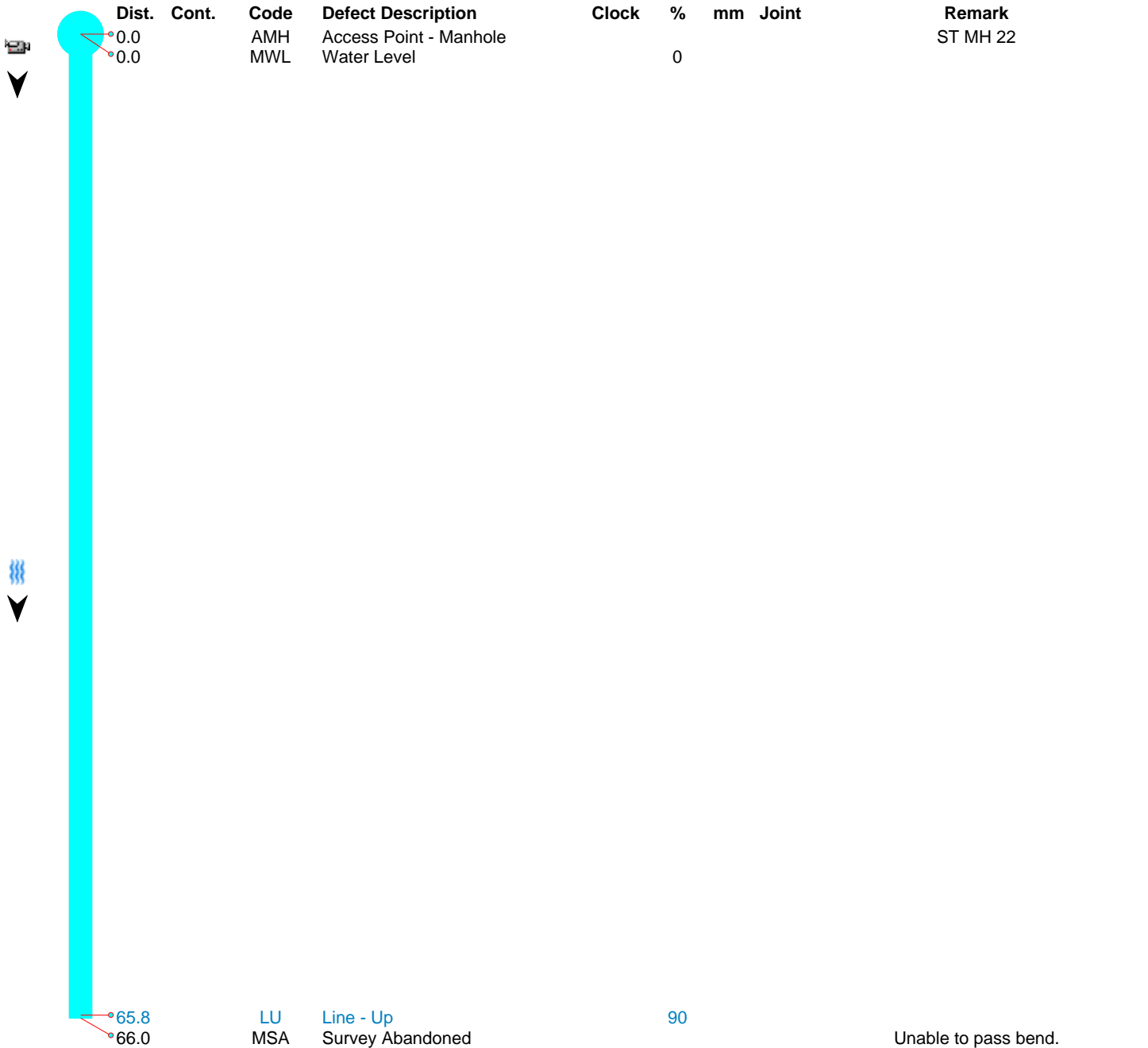
DAGS - Deposits Attached: Grease @ 57.4 m.

Upstream MH End run	Downstream MH 13	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Courtney Way	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-02-2020	Time 03:05	Length Surveyed 57.4
Additional Information S MH 14 doesn't exist.					Media Label 12



MSA - Survey Abandoned @ 57.4 m.
 Unable to push further.

Upstream MH End run	Downstream MH 22	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 04:00	Length Surveyed 66
Additional Information					Media Label 124



Upstream MH End run	Downstream MH 22	Size 300	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 5th Ave NW & 1st St NW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 04:00	Length Surveyed 66
Additional Information					Media Label 124



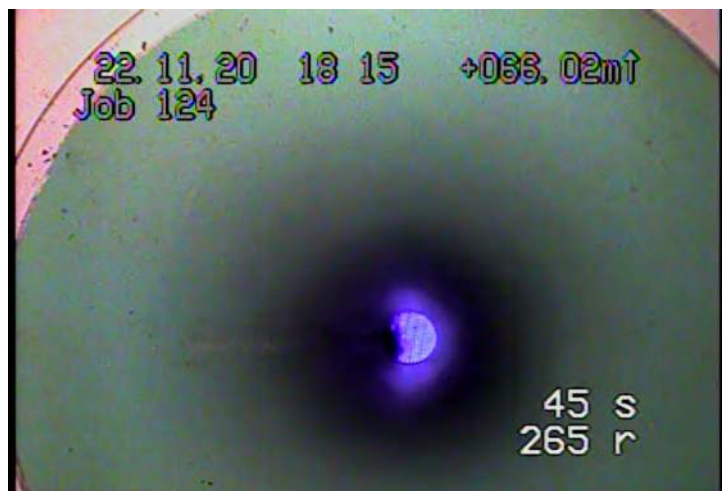
AMH - Access Point - Manhole @ 0.0 m.
ST MH 22



MWL - Water Level @ 0.0 m.



LU - Line - Up @ 65.8 m.



MSA - Survey Abandoned @ 66.0 m.
Unable to pass bend.

Upstream MH End run	Downstream MH 60	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1A St NW & 1st Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 10:10	Length Surveyed 22
Additional Information					Media Label 55

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 60
0.0		MWL	Water Level		5			
14.7		LL	Line - Left		45			
19.2		LL	Line - Left		45			
20.5		LL	Line - Left		45			
21.0		TF	Tap, Factory Made	12				
22.0		MGO	General Observation					Backflow Preventer
22.0		MSA	Survey Abandoned					End run at building

Upstream MH End run	Downstream MH 60	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1A St NW & 1st Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 10:10	Length Surveyed 22
Additional Information					Media Label 55



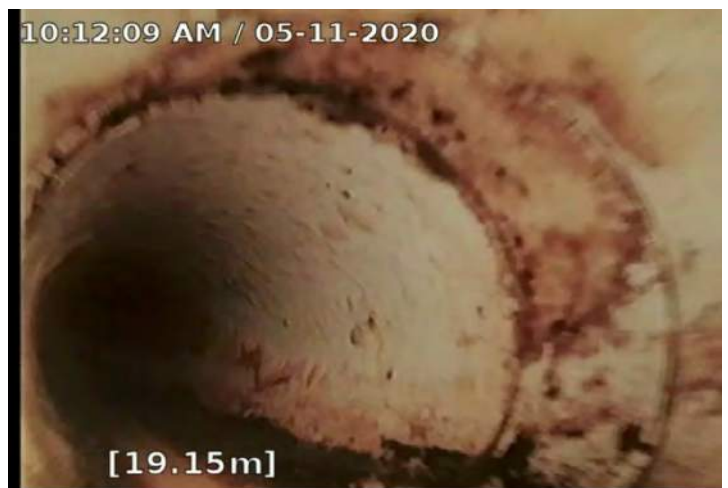
AMH - Access Point - Manhole @ 0.0 m.
S MH 60



MWL - Water Level @ 0.0 m.



LL - Line - Left @ 14.7 m.



LL - Line - Left @ 19.2 m.

Upstream MH End run	Downstream MH 60	Size 100	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1A St NW & 1st Ave NE	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-05-2020	Time 10:10	Length Surveyed 22
Additional Information					Media Label 55



LL - Line - Left @ 20.5 m.



TF - Tap, Factory Made @ 21.0 m.



MGO - General Observation @ 22.0 m.
Backflow Preventer



MSA - Survey Abandoned @ 22.0 m. End run at building












Upstream MH	Downstream MH	Size	Material	Total Length	City
End run	80A	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In alley behind houses on Centre St S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-21-2020	01:53	70.3

Additional Information	Media Label
	120

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 80A
	0.0		MWL	Water Level		5			
									
	18.6		TB	Tap, Break-in / Hammer	2				
	25.2		TBA	Tap, Break-in / Hammer: Active	12				
									
									
	51.7		RMJ	Roots, Medium, Joint	7 to 5	10			
	54.8		RMJ	Roots, Medium, Joint	7 to 5	10			
	60.4		RMJ	Roots, Medium, Joint	7 to 5	10			
	60.4		FS	Fracture Spiral	10 to 11			J	
	63.5		TB	Tap, Break-in / Hammer	1				
	64.1		TB	Tap, Break-in / Hammer	1				
	69.0		JOL	Joint Offset (displaced): Large					Unable to crawl over joint.
	70.3		MSA	Survey Abandoned					











Upstream MH	Downstream MH	Size	Material	Total Length	City
End run	80A	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Main Highway - Urban	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	In alley behind houses on Centre St S	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Pre-Rehabilitation Survey	Dry	11-21-2020	01:53	70.3

Additional Information	Media Label
	120

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 80A
	0.0		MWL	Water Level		5			
									
	18.6		TB	Tap, Break-in / Hammer	2				
	25.2		TBA	Tap, Break-in / Hammer: Active	12				
									
									
	51.7		RMJ	Roots, Medium, Joint	7 to 5	10			
	54.8		RMJ	Roots, Medium, Joint	7 to 5	10			
	60.4		RMJ	Roots, Medium, Joint	7 to 5	10			
	60.4		FS	Fracture Spiral	10 to 11			J	
	63.5		TB	Tap, Break-in / Hammer	1				
	64.1		TB	Tap, Break-in / Hammer	1				
	69.0		JOL	Joint Offset (displaced): Large					Unable to crawl over joint.
	70.3		MSA	Survey Abandoned					

Upstream MH End run	Downstream MH 80A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In alley behind houses on Centre St S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 01:53	Length Surveyed 70.3
Additional Information					Media Label 120



AMH - Access Point - Manhole @ 0.0 m.
S MH 80A



MWL - Water Level @ 0.0 m.



TB - Tap, Break-in / Hammer @ 18.6 m.



TBA - Tap, Break-in / Hammer: Active @
25.2 m.

Upstream MH End run	Downstream MH 80A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In alley behind houses on Centre St S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 01:53	Length Surveyed 70.3
Additional Information					Media Label 120



RMJ - Roots, Medium, Joint @ 51.7 m.



RMJ - Roots, Medium, Joint @ 54.8 m.



RMJ - Roots, Medium, Joint @ 60.4 m.



FS - Fracture Spiral @ 60.4 m.

Upstream MH End run	Downstream MH 80A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address In alley behind houses on Centre St S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 01:53	Length Surveyed 70.3
Additional Information					Media Label 120



TB - Tap, Break-in / Hammer @ 63.5 m.



TB - Tap, Break-in / Hammer @ 64.1 m.







JOL - Joint Offset (displaced): Large @ 69.0 m.



MSA - Survey Abandoned @ 70.3 m.
Unable to crawl over joint.

Upstream MH End run	Downstream MH 93A	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address End of Linview Rd S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 10:57	Length Surveyed 9
Additional Information					Media Label 117

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
 	0.0		AMH	Access Point - Manhole					S MH 93A
	0.0		MWL	Water Level		0			
	0.0	S01	DSGV	Deposits Settled: Gravel	5 to 7	5			
	4.3	F01	DSGV	Deposits Settled: Gravel	5 to 7	5			
 	8.9		DNGV	Deposits Ingress: Gravel	4 to 8	20			Pipe ends in gravel
	9.0		MSA	Survey Abandoned					

Upstream MH End run	Downstream MH 93A	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address End of Linview Rd S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 10:57	Length Surveyed 9
Additional Information					Media Label 117



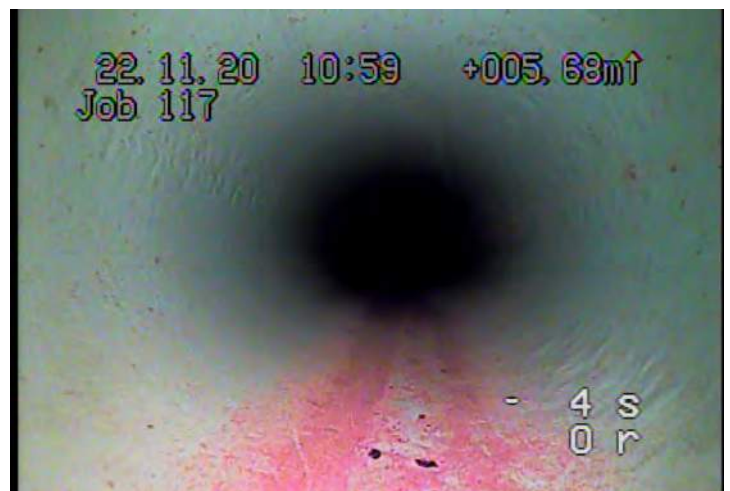
AMH - Access Point - Manhole @ 0.0 m.
S MH 93A



MWL - Water Level @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 0.0 m.



DSGV - Deposits Settled: Gravel @ 4.3 m.

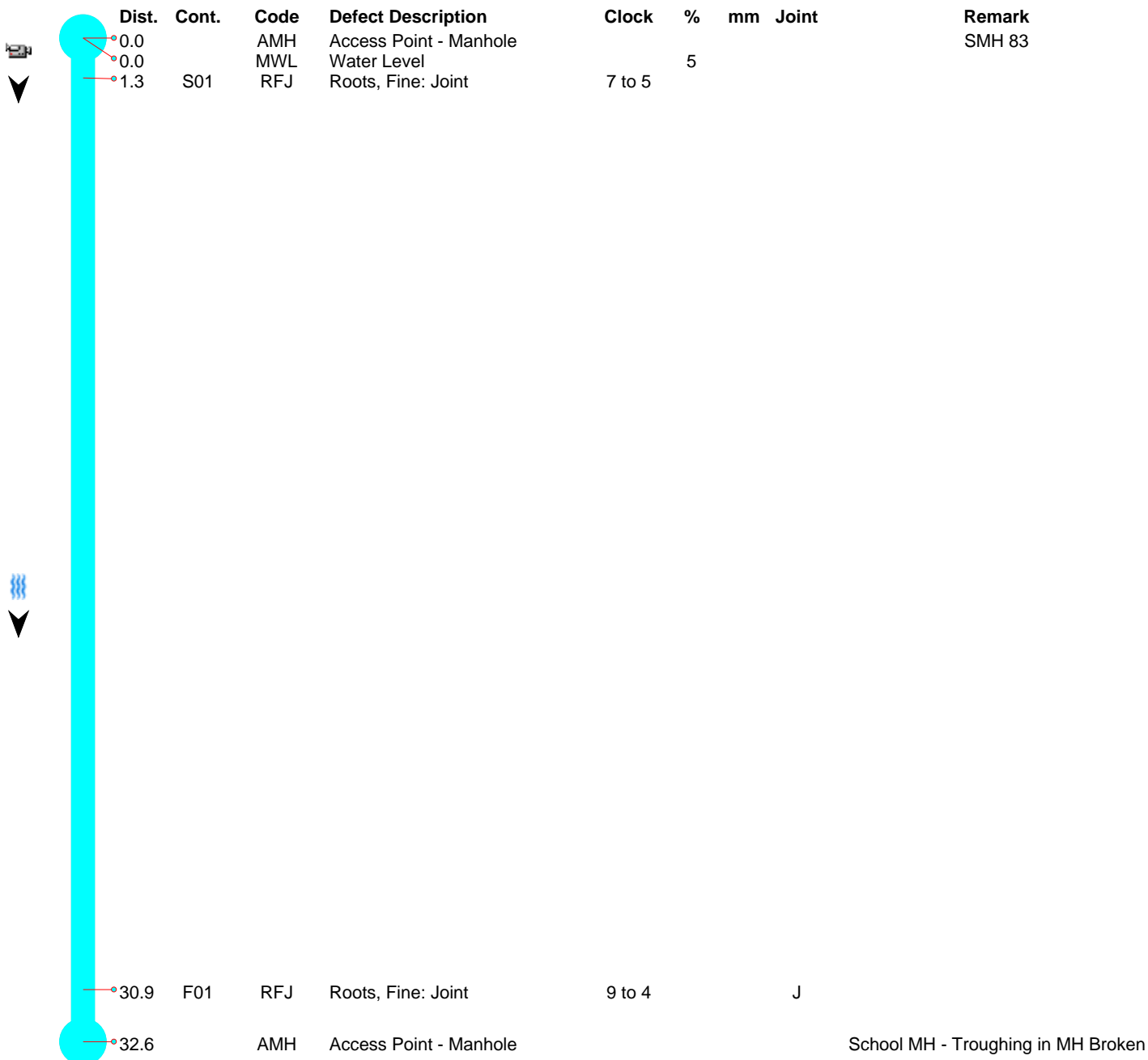
Upstream MH End run	Downstream MH 93A	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address End of Linview Rd S	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 10:57	Length Surveyed 9
Additional Information					Media Label 117



DNGV - Deposits Ingress: Gravel @ 8.9 m.

MSA - Survey Abandoned @ 9.0 m. Pipe ends in gravel

Upstream MH School MH	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 05:00	Length Surveyed 32.6
Additional Information					Media Label 77



Upstream MH School MH	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 05:00	Length Surveyed 32.6
Additional Information					Media Label 77



AMH - Access Point - Manhole @ 0.0 m.
SMH 83



MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 1.3 m.



RFJ - Roots, Fine: Joint @ 30.9 m.

Upstream MH School MH	Downstream MH 83	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Suburban/Rural		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Alley off of 1st Ave SW	Location Details Village of Linden		
Direction Upstream	Purpose Pre-Rehabilitation Survey	Weather Dry	Date 11-21-2020	Time 05:00	Length Surveyed 32.6
Additional Information					Media Label 77



AMH - Access Point - Manhole @ 32.6 m.
School MH - Troughing in MH Broken

VIDEO INSPECTION SUMMARY

Project Information

Client: Cima
Project: Village of Linden
Date: 20-May-21
WO/File: 14257

Video #	Start MH	End MH	Use	Size	Material	Length	Defects
1	29	30	SAN	200	CT	104.5	Large Joint Displace @ 2.1m - Sag 10% @ 17.1m - Sag 10% @ 21.3m - Sag 10% @ 32.1m - Roots 15% @ 54.4m - Sag 10% @ 78.8 - Pipe Broken @ 82.7m - Pipe Broken @ 83.8m - Roots 15% @ 101.4m
2	30	31	SAN	200	CT	63.7	Sag 10% @ 34.4m
3	31	32A	SAN	200	CT	87.5	Hole in pipe @ 10.2m - Hole in pipe @ 10.6m - Hole in pipe @ 11.4 m - Medium Joint Displaced @ 14.6m - Hole in pipe @ 15.5m - Pipe Broken @ 16.0m - Pipe Fracture @ 45.9m - Pipe Fracture @ 79.3m
4	32A	32	SAN	200	CT	30.1	Pipe Crack @ 6.3m - Defective Patch Repair @ 6.7m - Hole in pipe @ 14.5m - Crack in pipe @ 20.4m - Pipe Fracture @ 21.4m - Pipe Crack @ 23.1m - Pipe Crack @ 24.6m - Pipe Crack @ 29.1m
5	32	33A	SAN	200	CT	124.8	Pipe Crack @ 3.8m - Pipe crack @ 7.3m - Pipe crack @ 25.1m - Pipe broken @ 77.2m
6	33	34	SAN	200	CT	122.3	Pipe Crack @ 3.4m - Pipe Broken @ 21.3m - Pipe Fracture @ 57.5m - Pipe Crack @ 107.2m
7	23	23A	SAN	450	CT	65.1	
8	23A	Outlet	SAN	450	CT	32.4	
9	96	36	SAN	250	CT	17.7	
10	24	Outlet	ST	600	CMP	13.6	Unable to pass rocks in line.
11	34	35	SAN	200	CT	120	Pipe Fracture @ 1.0m - Roots 20% @ 71.2m - Pipe Fracture @ 92.0m - Roots 10% @ 93.4m - Roots 10% @ 100.4m - Roots 20% @ 117.0m - Pipe fracture @ 117.3 - Pipe broken @ 120m
12	35	36	SAN	200	CT	97.6	Pipe Crack @ 43.4m - Pipe Fracture @ 73.6m
13	36	37	SAN	200	CT	41.5	

14	37	38	SAN	200	CT	106.4	Pipe Broken @ 33.9m
15	33A	33	SAN	200	CT	123.3	Pipe Crack @ 3.5m - Pipe Crack @ 22.0 - Pipe Crack @ 63.4m - Pipe Broken @ 87.2m -
104R	16	17	ST	525	CMP	32.7	External pipe running through main @ 32.7m
105	16	15	ST	525	PVC	38.7	

All mandrel tests passed

total 1221.9

Upstream MH	Downstream MH	Size	Material	Total Length	City
29	30	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

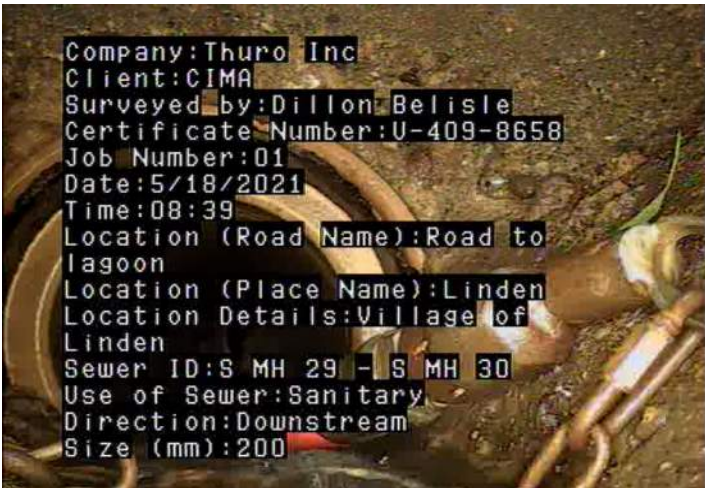
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-18-2021	08:39	104.5

Additional Information	Media Label
Previously Job 29	01

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 29
0.0		MWL	Water Level		10			
2.1		JOL	Joint Offset (displaced): Large					
2.1		RBJ	Roots, Ball, Joint	8 to 4	70		J	
2.2		ID	Infiltration - Dripper	11				
4.8	S01	RFJ	Roots, Fine: Joint	7 to 5			J	
17.1	S02	MWLS	Water Level: Sag		20			
19.8	F02	MWLS	Water Level: Sag		20			
19.9		MWL	Water Level		10			
21.3	S03	MWLS	Water Level: Sag		20			
23.2		DSGV	Deposits Settled: Gravel	5 to 7	10			
24.0	F03	MWLS	Water Level: Sag		20			
24.1		MWL	Water Level		10			
32.1	S04	MWLS	Water Level: Sag		20			
33.6	F04	MWLS	Water Level: Sag		20			
33.6		MWL	Water Level		10			
54.4		RMJ	Roots, Medium, Joint	4 to 5	15			
59.9	F01	RFJ	Roots, Fine: Joint	10 to 5			J	
62.7		RFJ	Roots, Fine: Joint	7 to 9				
68.1		RFJ	Roots, Fine: Joint	1 to 3				
78.8	S05	MWLS	Water Level: Sag		20			
81.3	F05	MWLS	Water Level: Sag		20			
81.4		MWL	Water Level		10			
81.9	S07	RFJ	Roots, Fine: Joint	2 to 5			J	
82.7	S06	B	Pipe Broken	8 to 4				
83.8	F06	B	Pipe Broken	7 to 3				
94.4	F07	RFJ	Roots, Fine: Joint	7 to 5			J	
98.6		RFJ	Roots, Fine: Joint	7 to 5				
99.8		RFJ	Roots, Fine: Joint	4 to 9				
101.4		RMJ	Roots, Medium, Joint	8 to 5	15			
102.5		MWL	Water Level		25			
104.5		AMH	Access Point - Manhole					SMH 30

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



AMH - Access Point - Manhole @ 0.0 m.
S MH 29



MWL - Water Level @ 0.0 m.



JOL - Joint Offset (displaced): Large @ 2.1 m.



RBJ - Roots, Ball, Joint @ 2.1 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



ID - Infiltration - Dripper @ 2.2 m.



RFJ - Roots, Fine: Joint @ 4.8 m.

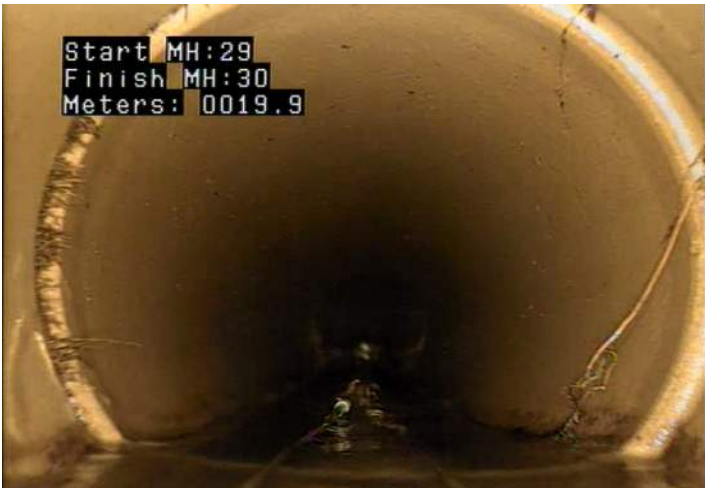


MWLS - Water Level: Sag @ 17.1 m.



MWLS - Water Level: Sag @ 19.8 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



MWL - Water Level @ 19.9 m.



MWLS - Water Level: Sag @ 21.3 m.



DSGV - Deposits Settled: Gravel @ 23.2 m.



MWLS - Water Level: Sag @ 24.0 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



MWL - Water Level @ 24.1 m.



MWLS - Water Level: Sag @ 32.1 m.



MWLS - Water Level: Sag @ 33.6 m.



MWL - Water Level @ 33.6 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



RMJ - Roots, Medium, Joint @ 54.4 m.



RFJ - Roots, Fine: Joint @ 59.9 m.



RFJ - Roots, Fine: Joint @ 62.7 m.



RFJ - Roots, Fine: Joint @ 68.1 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



MWLS - Water Level: Sag @ 78.8 m.



MWLS - Water Level: Sag @ 81.3 m.



MWL - Water Level @ 81.4 m.



RFJ - Roots, Fine: Joint @ 81.9 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



B - Pipe Broken @ 82.7 m.



B - Pipe Broken @ 83.8 m.



RFJ - Roots, Fine: Joint @ 94.4 m.



RFJ - Roots, Fine: Joint @ 98.6 m.

Upstream MH 29	Downstream MH 30	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 08:39	Length Surveyed 104.5
Additional Information Previously Job 29					Media Label 01



RFJ - Roots, Fine: Joint @ 99.8 m.



RMJ - Roots, Medium, Joint @ 101.4 m.



MWL - Water Level @ 102.5 m.



AMH - Access Point - Manhole @ 104.5 m.
SMH 30

Upstream MH	Downstream MH	Size	Material	Total Length	City
30	31	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

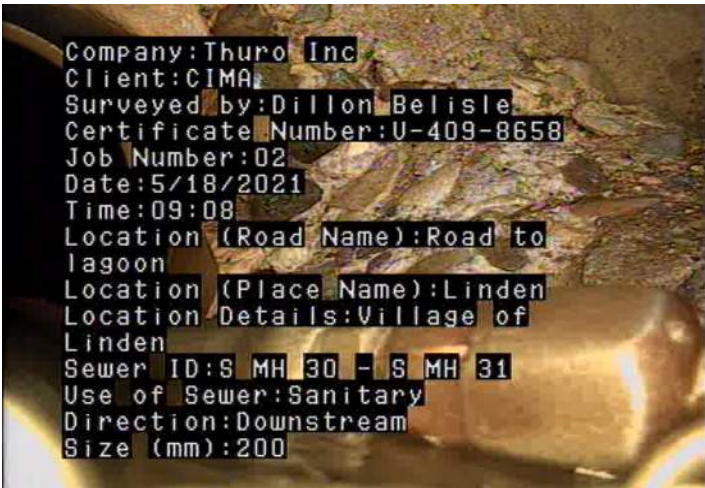
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-18-2021	09:08	63.7

Additional Information	Media Label
	02

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					S MH 30
	0.0		MWL	Water Level			20		
	2.2		RFJ	Roots, Fine: Joint	7 to 5			J	
	2.4		MWL	Water Level			10		
	3.3		RFJ	Roots, Fine: Joint	7 to 4				
	7.3		RFJ	Roots, Fine: Joint	1 to 3				
	8.1		MWL	Water Level			20		
	10.0		RFJ	Roots, Fine: Joint	1 to 4				
	12.8		MWL	Water Level			10		
17.1		MWL	Water Level			20			
19.1		MWL	Water Level			10			
	31.6		MWL	Water Level			20		
	32.7		MWL	Water Level			10		
	34.4	S01	MWLS	Water Level: Sag			20		
	37.6		MGO	General Observation					Flusher on to reduce flow
	40.9	F01	MWLS	Water Level: Sag			20		
	41.0		MWL	Water Level			10		
	48.8		RFJ	Roots, Fine: Joint	8 to 4				
	50.2	S02	RFJ	Roots, Fine: Joint	10 to 2			J	
	58.3	F02	RFJ	Roots, Fine: Joint	10 to 4			J	
	61.0		MWL	Water Level			50		
63.7		AMH	Access Point - Manhole					S MH 31	

Upstream MH 30	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 09:08	Length Surveyed 63.7
Additional Information					Media Label 02



AMH - Access Point - Manhole @ 0.0 m.
S MH 30



MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 2.2 m.



MWL - Water Level @ 2.4 m.

Upstream MH 30	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 09:08	Length Surveyed 63.7
Additional Information					Media Label 02



RFJ - Roots, Fine: Joint @ 3.3 m.



RFJ - Roots, Fine: Joint @ 7.3 m.



MWL - Water Level @ 8.1 m.



RFJ - Roots, Fine: Joint @ 10.0 m.

Upstream MH 30	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 09:08	Length Surveyed 63.7
Additional Information					Media Label 02



MWL - Water Level @ 12.8 m.



MWL - Water Level @ 17.1 m.



MWL - Water Level @ 19.1 m.



MWL - Water Level @ 31.6 m.

Upstream MH 30	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 09:08	Length Surveyed 63.7
Additional Information					Media Label 02



MWL - Water Level @ 32.7 m.



MWLS - Water Level: Sag @ 34.4 m.



MGO - General Observation @ 37.6 m.
Flusher on to reduce flow

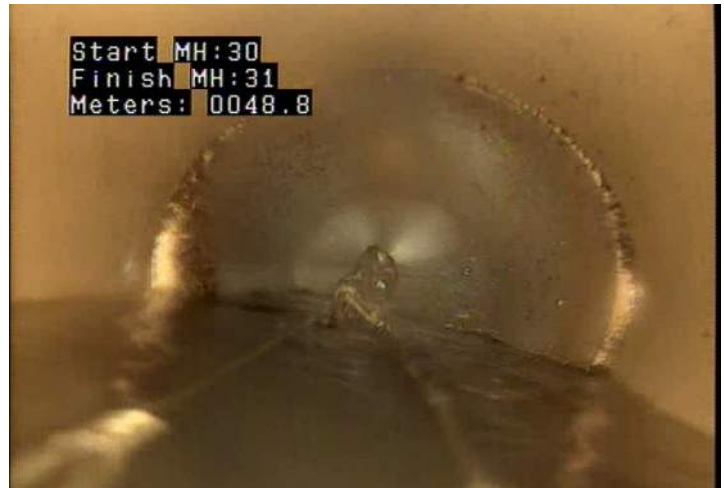


MWLS - Water Level: Sag @ 40.9 m.

Upstream MH 30	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 09:08	Length Surveyed 63.7
Additional Information					Media Label 02



MWL - Water Level @ 41.0 m.



RFJ - Roots, Fine: Joint @ 48.8 m.



RFJ - Roots, Fine: Joint @ 50.2 m.

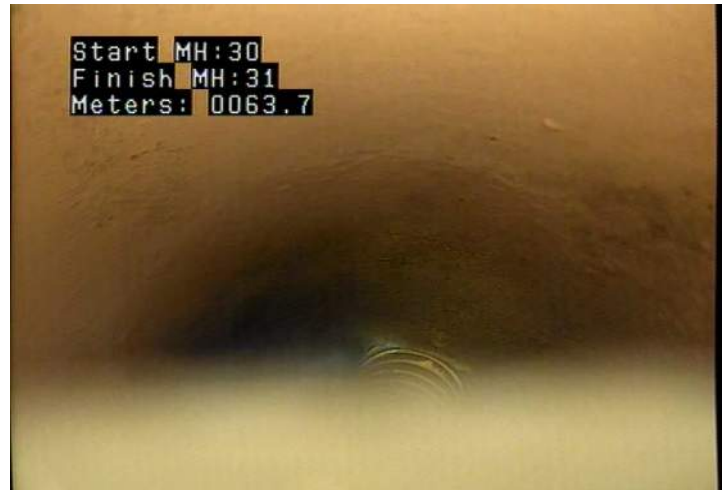


RFJ - Roots, Fine: Joint @ 58.3 m.

Upstream MH 30	Downstream MH 31	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 09:08	Length Surveyed 63.7
Additional Information					Media Label 02



MWL - Water Level @ 61.0 m.

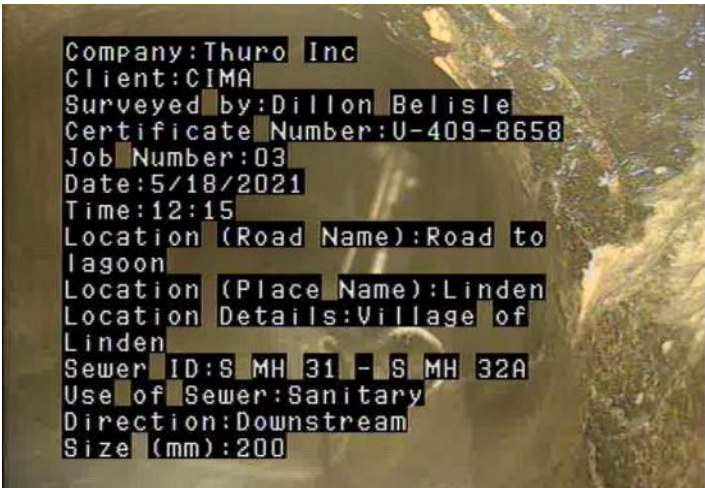


AMH - Access Point - Manhole @ 63.7 m.
 S MH 31

Upstream MH	Downstream MH	Size	Material	Total Length	City
31	32A	200	Clay Tile	0	Linden
Customer	Work Order #		Location	Sewer Use	
CIMA	14257		Woods	Sanitary	
Surveyor's Name	Certificate Number	Street Address	Location Details		
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden		
Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-18-2021	12:15	87.5
Additional Information				Media Label	
				03	

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 31
0.0		MWL	Water Level		10			
2.1		RFJ	Roots, Fine: Joint	9 to 3				
3.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
7.4		DAE	Deposits Attached: Encrustation	7 to 4	5		J	
7.7		MWL	Water Level		20			
10.2		H	Hole in Pipe	11 to 1				
10.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
10.6		H	Hole in Pipe	11 to 2				Cut into pipe
11.4		H	Hole in Pipe	11 to 12				Hole cut
12.6		MGO	General Observation					Flusher on to reduce flow
13.0		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
14.5		RFJ	Roots, Fine: Joint	8 to 4				
14.6		JOM	Joint Offset (displaced): Medium					
15.5		H	Hole in Pipe	11 to 1				Hole cut
16.0		B	Pipe Broken	8 to 4			J	
25.3		DAE	Deposits Attached: Encrustation	11 to 4	5		J	
26.8		MCU	Camera Underwater					
31.0		MWL	Water Level		20			
33.7		RFJ	Roots, Fine: Joint	9 to 3				
35.1		RFJ	Roots, Fine: Joint	12 to 3				
36.5		DAE	Deposits Attached: Encrustation	7 to 9	5		J	
37.8		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
39.1		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
40.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
42.0		DAE	Deposits Attached: Encrustation	2 to 5	5		J	
45.9		FM	Fracture Multiple	7 to 5			J	
46.2		RFJ	Roots, Fine: Joint	10 to 11				
50.3		MCU	Camera Underwater					
51.5		MWL	Water Level		20			
51.7		DAE	Deposits Attached: Encrustation	8 to 11	5		J	
53.6		MCU	Camera Underwater					
65.8		MWL	Water Level		20			
76.0		MWL	Water Level		10			
79.3		FC	Fracture Circumferential	9 to 3				
80.7		RFJ	Roots, Fine: Joint	8 to 11				
85.6		MWL	Water Level		30			
87.5		AMH	Access Point - Manhole					S MH 32A

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



AMH - Access Point - Manhole @ 0.0 m.
S MH 31

MWL - Water Level @ 0.0 m.



RFJ - Roots, Fine: Joint @ 2.1 m.

DAE - Deposits Attached: Encrustation @ 3.5 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



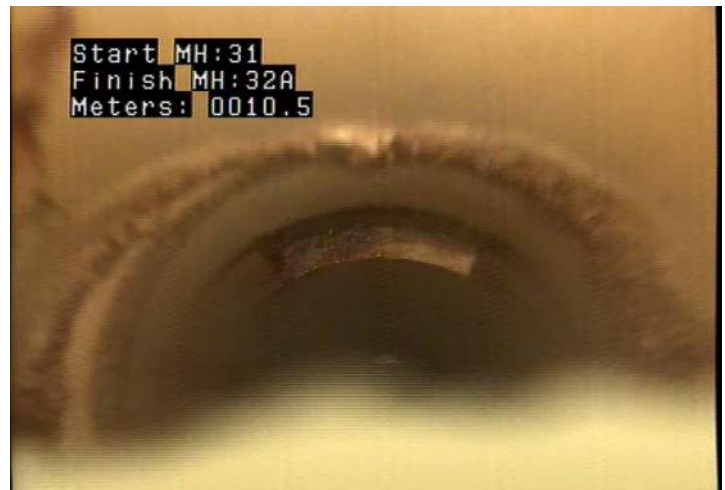
DAE - Deposits Attached: Encrustation @ 7.4 m.



MWL - Water Level @ 7.7 m.



H - Hole in Pipe @ 10.2 m.



DAE - Deposits Attached: Encrustation @ 10.5 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



H - Hole in Pipe @ 10.6 m. Cut into pipe



H - Hole in Pipe @ 11.4 m. Hole cut



MGO - General Observation @ 12.6 m.
 Flusher on to reduce flow



DAE - Deposits Attached: Encrustation @ 13.0 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



RFJ - Roots, Fine: Joint @ 14.5 m.



JOM - Joint Offset (displaced): Medium @ 14.6 m.

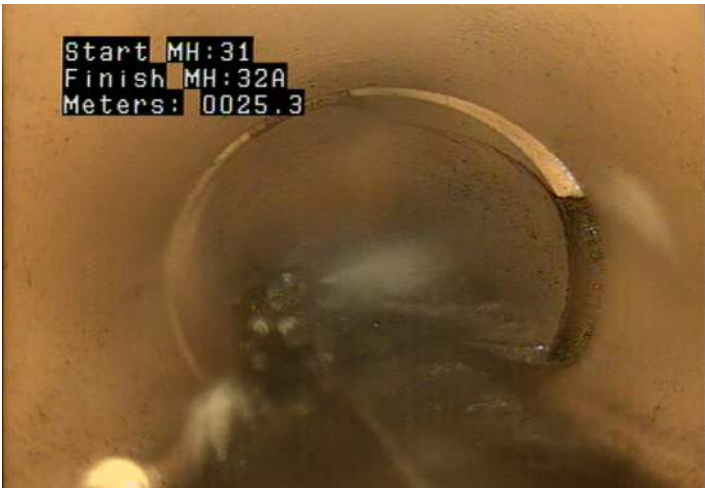


H - Hole in Pipe @ 15.5 m. Hole cut



B - Pipe Broken @ 16.0 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



DAE - Deposits Attached: Encrustation @ 25.3 m.



MCU - Camera Underwater @ 26.8 m.



MWL - Water Level @ 31.0 m.



RFJ - Roots, Fine: Joint @ 33.7 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



RFJ - Roots, Fine: Joint @ 35.1 m.



DAE - Deposits Attached: Encrustation @ 36.5 m.



DAE - Deposits Attached: Encrustation @ 37.8 m.



DAE - Deposits Attached: Encrustation @ 39.1 m.

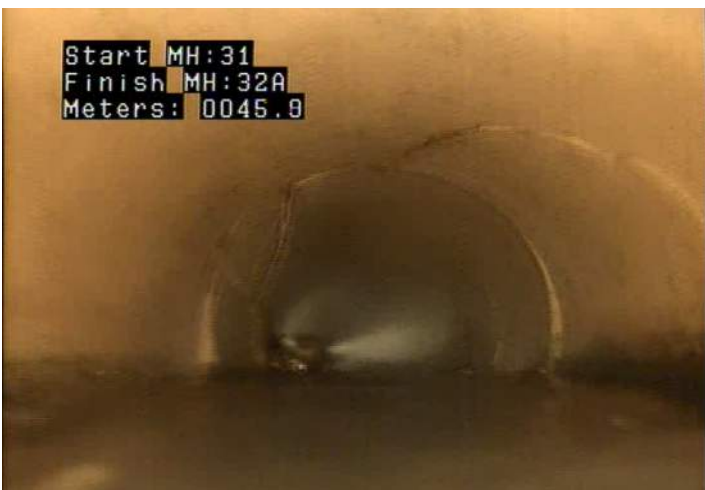
Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



DAE - Deposits Attached: Encrustation @ 40.5 m.



DAE - Deposits Attached: Encrustation @ 42.0 m.



FM - Fracture Multiple @ 45.9 m.



RFJ - Roots, Fine: Joint @ 46.2 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



MCU - Camera Underwater @ 50.3 m.



MWL - Water Level @ 51.5 m.



DAE - Deposits Attached: Encrustation @ 51.7 m.



MCU - Camera Underwater @ 53.6 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



MWL - Water Level @ 65.8 m.



MWL - Water Level @ 76.0 m.



FC - Fracture Circumferential @ 79.3 m.



RFJ - Roots, Fine: Joint @ 80.7 m.

Upstream MH 31	Downstream MH 32A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 12:15	Length Surveyed 87.5
Additional Information					Media Label 03



MWL - Water Level @ 85.6 m.



AMH - Access Point - Manhole @ 87.5 m.
S MH 32A

Upstream MH 32A	Downstream MH 32	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 13:15	Length Surveyed 30.1
Additional Information					Media Label 04

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 32A
0.0		MWL	Water Level		20			
3.4		DAE	Deposits Attached: Encrustation	2 to 5	5		J	
5.2		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
6.3		CL	Crack Longitudinal	1			J	
6.7		RPPD	Point Repair - Patch Repair: Defective	11 to 1				Leaking
6.7		DAE	Deposits Attached: Encrustation	7 to 5	10		J	
6.8		ID	Infiltration - Dripper	12				
12.4		MGO	General Observation					Flusher on to reduce flow
14.5		H	Hole in Pipe	10 to 12				
20.4		CM	Crack Multiple	8 to 4			J	
21.4		FM	Fracture Multiple	7 to 5				
23.1		CM	Crack Multiple	8 to 11				
24.6		CM	Crack Multiple	7 to 4				
27.1		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
29.1		CC	Crack Circumferential	8 to 5				
30.1		AMH	Access Point - Manhole					S MH 32

Upstream MH 32A	Downstream MH 32	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 13:15	Length Surveyed 30.1
Additional Information					Media Label 04



AMH - Access Point - Manhole @ 0.0 m.
S MH 32A



MWL - Water Level @ 0.0 m.



DAE - Deposits Attached: Encrustation @ 3.4 m.



DAE - Deposits Attached: Encrustation @ 5.2 m.

Upstream MH 32A	Downstream MH 32	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 13:15	Length Surveyed 30.1
Additional Information					Media Label 04



CL - Crack Longitudinal @ 6.3 m.



RPPD - Point Repair - Patch Repair:
Defective @ 6.7 m. Leaking



DAE - Deposits Attached: Encrustation @
6.7 m.



ID - Infiltration - Dripper @ 6.8 m.

Upstream MH 32A	Downstream MH 32	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 13:15	Length Surveyed 30.1
Additional Information					Media Label 04



MGO - General Observation @ 12.4 m.
Flusher on to reduce flow



H - Hole in Pipe @ 14.5 m.



CM - Crack Multiple @ 20.4 m.



FM - Fracture Multiple @ 21.4 m.

Upstream MH 32A	Downstream MH 32	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 13:15	Length Surveyed 30.1
Additional Information					Media Label 04



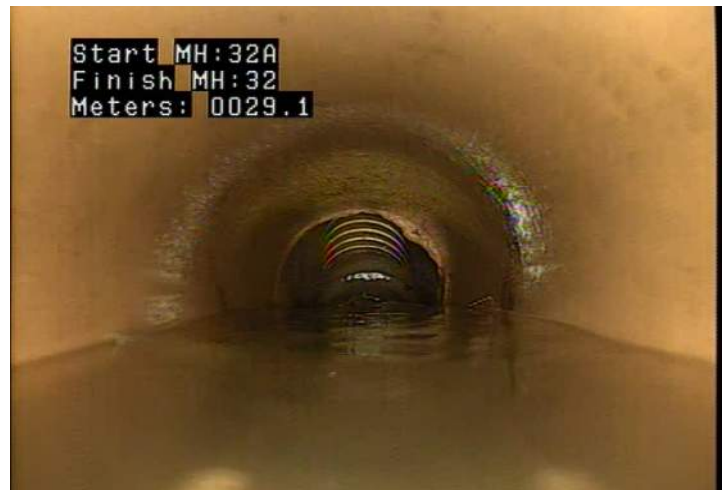
CM - Crack Multiple @ 23.1 m.



CM - Crack Multiple @ 24.6 m.



DAE - Deposits Attached: Encrustation @ 27.1 m.



CC - Crack Circumferential @ 29.1 m.

Upstream MH 32A	Downstream MH 32	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 13:15	Length Surveyed 30.1
Additional Information					Media Label 04



AMH - Access Point - Manhole @ 30.1 m.
 S MH 32

Upstream MH 32	Downstream MH 33A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden	
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 09:19	Length Surveyed 124.8
Additional Information					Media Label 05

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 32
0.0		MWL	Water Level		20			
3.8		CM	Crack Multiple	9 to 4			J	
4.1		DAE	Deposits Attached: Encrustation	8 to 12	5		J	
5.6		MGO	General Observation					Flusher on to reduce flow
7.3		CC	Crack Circumferential	1 to 4				
8.3		DAE	Deposits Attached: Encrustation	7 to 5	10		J	
8.6		CC	Crack Circumferential	11 to 4				
10.0		DAE	Deposits Attached: Encrustation	8 to 12	5		J	
23.4		DAE	Deposits Attached: Encrustation	8 to 9	5		J	
24.9		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
25.1		CM	Crack Multiple	8 to 5				
28.9		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
33.0		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
37.2		DAE	Deposits Attached: Encrustation	8 to 11	5		J	
38.4		DAE	Deposits Attached: Encrustation	1 to 5	5		J	
41.4		DAE	Deposits Attached: Encrustation	1 to 4	5		J	
49.7		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
77.2		B	Pipe Broken	7 to 5				
89.6		DAE	Deposits Attached: Encrustation	1 to 5	5		J	
96.6		DAE	Deposits Attached: Encrustation	7 to 5	10		J	
106.2		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
124.8		AMH	Access Point - Manhole					SMH 33A

Upstream MH 32	Downstream MH 33A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 09:19	Length Surveyed 124.8
Additional Information					Media Label 05



AMH - Access Point - Manhole @ 0.0 m.
S MH 32



MWL - Water Level @ 0.0 m.

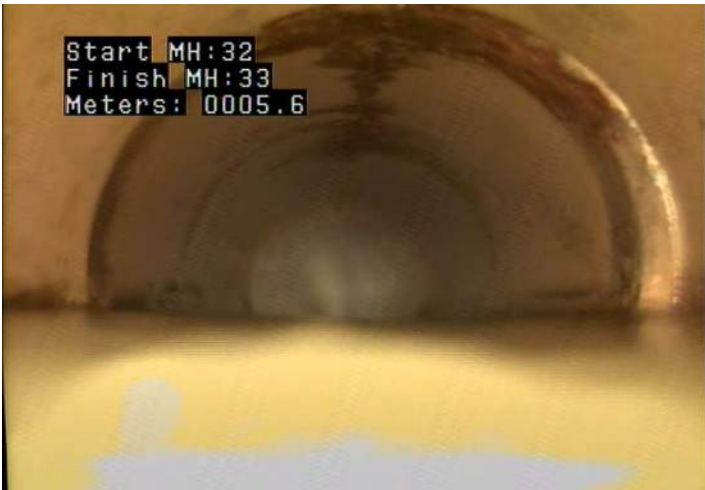


CM - Crack Multiple @ 3.8 m.



DAE - Deposits Attached: Encrustation @ 4.1 m.

Upstream MH 32	Downstream MH 33A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 09:19	Length Surveyed 124.8
Additional Information					Media Label 05



MGO - General Observation @ 5.6 m.
Flusher on to reduce flow



CC - Crack Circumferential @ 7.3 m.

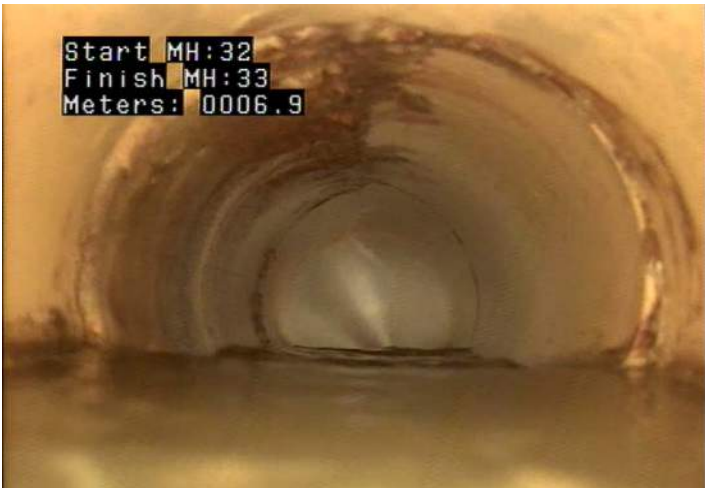


DAE - Deposits Attached: Encrustation @ 8.3 m.



CC - Crack Circumferential @ 8.6 m.

Upstream MH 32	Downstream MH 33A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 09:19	Length Surveyed 124.8
Additional Information					Media Label 05



DAE - Deposits Attached: Encrustation @ 10.0 m.



DAE - Deposits Attached: Encrustation @ 23.4 m.



DAE - Deposits Attached: Encrustation @ 24.9 m.



CM - Crack Multiple @ 25.1 m.

Upstream MH 32	Downstream MH 33A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 09:19	Length Surveyed 124.8
Additional Information					Media Label 05



DAE - Deposits Attached: Encrustation @ 28.9 m.



DAE - Deposits Attached: Encrustation @ 33.0 m.



DAE - Deposits Attached: Encrustation @ 37.2 m.



DAE - Deposits Attached: Encrustation @ 38.4 m.

Upstream MH 32	Downstream MH 33A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 09:19	Length Surveyed 124.8
Additional Information					Media Label 05



DAE - Deposits Attached: Encrustation @ 41.4 m.



DAE - Deposits Attached: Encrustation @ 49.7 m.

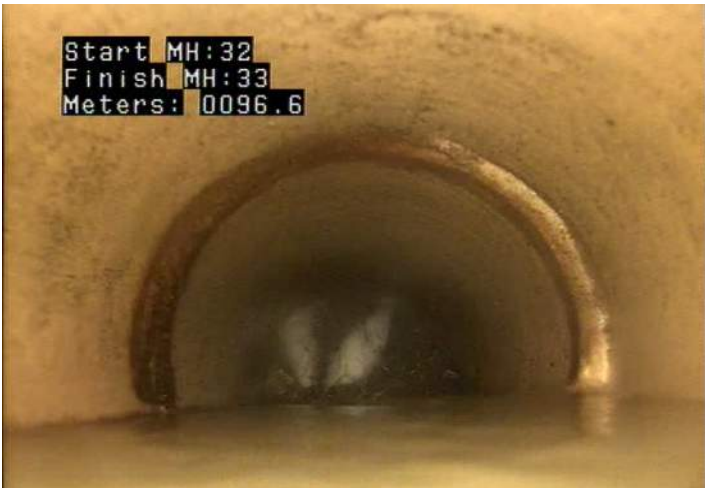


B - Pipe Broken @ 77.2 m.

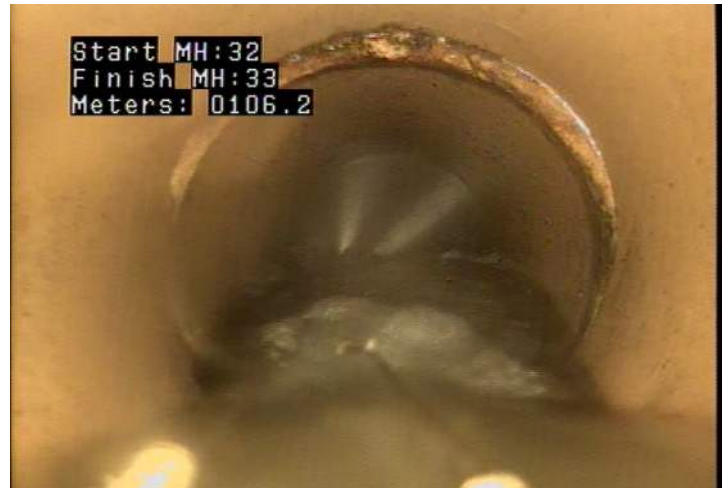


DAE - Deposits Attached: Encrustation @ 89.6 m.

Upstream MH 32	Downstream MH 33A	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 09:19	Length Surveyed 124.8
Additional Information					Media Label 05



DAE - Deposits Attached: Encrustation @ 96.6 m.



DAE - Deposits Attached: Encrustation @ 106.2 m.

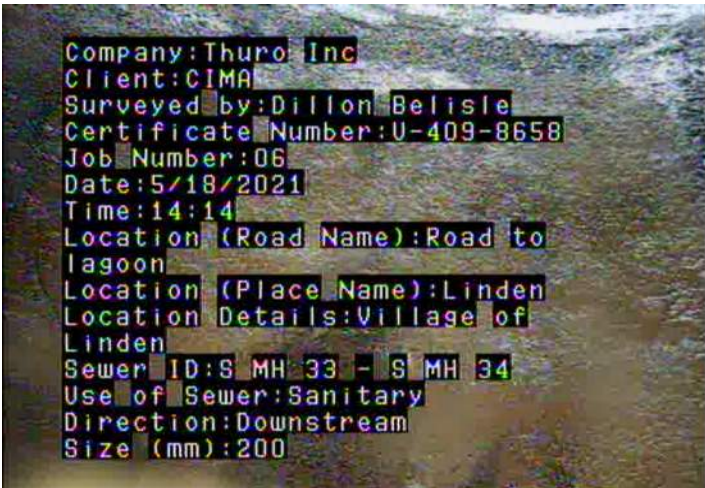


AMH - Access Point - Manhole @ 124.8 m.
 SMH 33A

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06

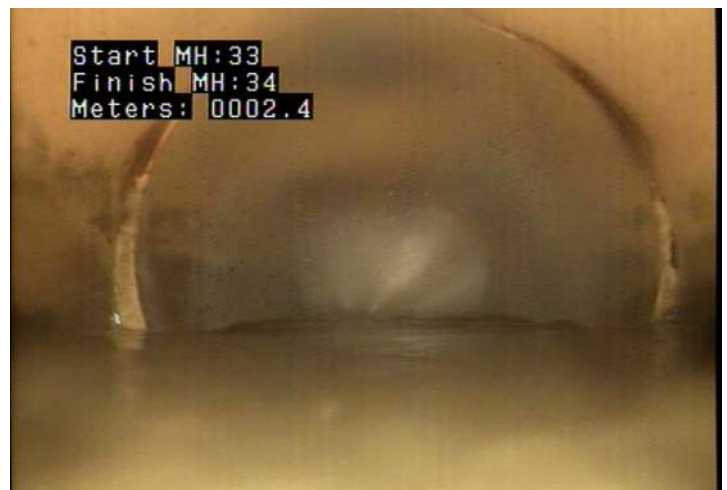
Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 33
0.0		MWL	Water Level		20			
0.0		MGO	General Observation					Flusher on to reduce flow.
2.4		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
3.4		CL	Crack Longitudinal	1				
6.4		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
11.9		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
14.6		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
21.3		B	Pipe Broken	8 to 3				
37.0		DAE	Deposits Attached: Encrustation	8 to 11	5		J	
37.5		MCU	Camera Underwater					
38.3		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
50.6		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
56.3		MWL	Water Level		25			
57.5		FC	Fracture Circumferential	7 to 1			J	
61.5		DAE	Deposits Attached: Encrustation	1 to 5	5		J	
63.0		DAE	Deposits Attached: Encrustation	10 to 2	5		J	
65.2		MCU	Camera Underwater					
68.0		MWL	Water Level		25			
68.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
70.0		DAE	Deposits Attached: Encrustation	8 to 11	10		J	
70.1		MCU	Camera Underwater					
82.6		MWL	Water Level		10			
89.4		MCU	Camera Underwater					
94.1		MWL	Water Level		20			
96.0		JAM	Joint Angular: Medium					
97.5		JAM	Joint Angular: Medium					
100.2		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
101.7		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
104.4		DAE	Deposits Attached: Encrustation	4 to 5	5		J	
107.2		CC	Crack Circumferential	8 to 11			J	
122.3		AMH	Access Point - Manhole					S MH 34

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



AMH - Access Point - Manhole @ 0.0 m.
S MH 33

MWL - Water Level @ 0.0 m.



MGO - General Observation @ 0.0 m.
Flusher on to reduce flow.

DAE - Deposits Attached: Encrustation @
2.4 m.

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



CL - Crack Longitudinal @ 3.4 m.



DAE - Deposits Attached: Encrustation @ 6.4 m.



DAE - Deposits Attached: Encrustation @ 11.9 m.



DAE - Deposits Attached: Encrustation @ 14.6 m.

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



B - Pipe Broken @ 21.3 m.



DAE - Deposits Attached: Encrustation @ 37.0 m.

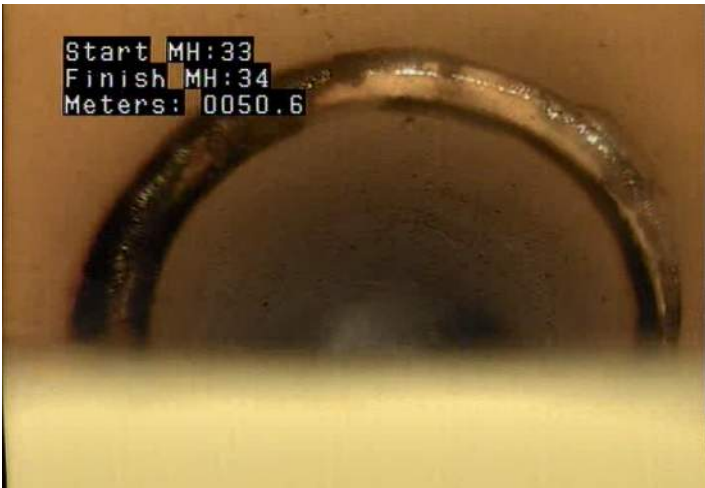


MCU - Camera Underwater @ 37.5 m.



DAE - Deposits Attached: Encrustation @ 38.3 m.

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



DAE - Deposits Attached: Encrustation @ 50.6 m.



MWL - Water Level @ 56.3 m.



FC - Fracture Circumferential @ 57.5 m.



DAE - Deposits Attached: Encrustation @ 61.5 m.

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



DAE - Deposits Attached: Encrustation @ 63.0 m.



MCU - Camera Underwater @ 65.2 m.

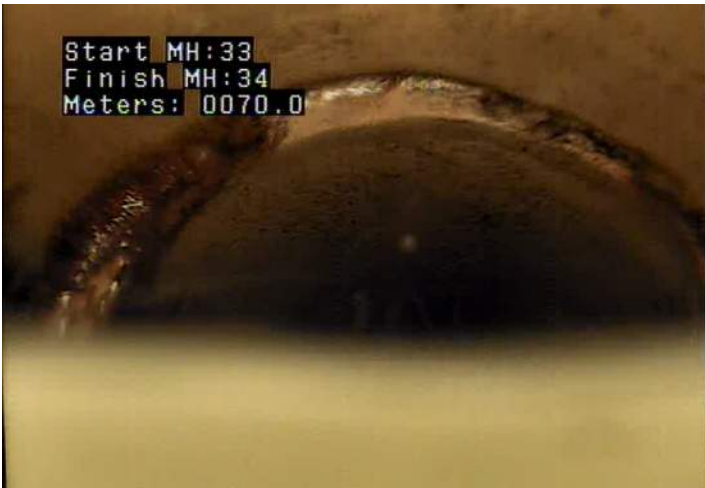


MWL - Water Level @ 68.0 m.



DAE - Deposits Attached: Encrustation @ 68.5 m.

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



DAE - Deposits Attached: Encrustation @ 70.0 m.



MCU - Camera Underwater @ 70.1 m.



MWL - Water Level @ 82.6 m.



MCU - Camera Underwater @ 89.4 m.

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



MWL - Water Level @ 94.1 m.



JAM - Joint Angular: Medium @ 96.0 m.



JAM - Joint Angular: Medium @ 97.5 m.



DAE - Deposits Attached: Encrustation @ 100.2 m.

Upstream MH 33	Downstream MH 34	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-18-2021	Time 14:14	Length Surveyed 122.3
Additional Information					Media Label 06



DAE - Deposits Attached: Encrustation @ 101.7 m.



DAE - Deposits Attached: Encrustation @ 104.4 m.



CC - Crack Circumferential @ 107.2 m.



AMH - Access Point - Manhole @ 122.3 m.
 S MH 34

Upstream MH	Downstream MH	Size	Material	Total Length	City
23	23A	450	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Stormwater

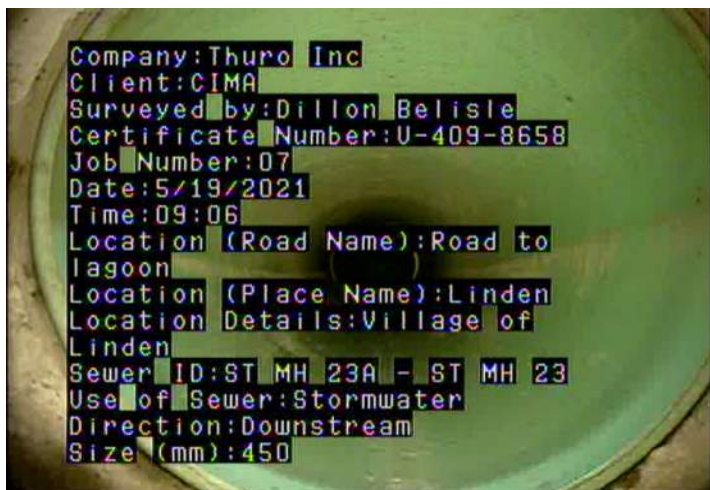
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Routine Assessment	Dry	05-19-2021	09:06	65.1

Additional Information	Media Label
	07

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 23A
0.0		MWL	Water Level		0			
65.1		AMH	Access Point - Manhole					ST MH 23

Upstream MH 23	Downstream MH 23A	Size 450	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Upstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 09:06	Length Surveyed 65.1
Additional Information					Media Label 07



AMH - Access Point - Manhole @ 0.0 m.
 ST MH 23A



MWL - Water Level @ 0.0 m.



AMH - Access Point - Manhole @ 65.1 m.
 ST MH 23

Upstream MH	Downstream MH	Size	Material	Total Length	City
23A	Outlet	450	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Stormwater

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-19-2021	09:25	32.4

Additional Information	Media Label
	08

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					ST MH 23A
0.0		MWL	Water Level		0			
12.9		MWL	Water Level		5			
32.4		ADP	Access Point - Discharge Point					Outlet

Upstream MH 23A	Downstream MH Outlet	Size 450	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Stormwater		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 09:25	Length Surveyed 32.4
Additional Information					Media Label 08



AMH - Access Point - Manhole @ 0.0 m.
ST MH 23A



MWL - Water Level @ 0.0 m.



MWL - Water Level @ 12.9 m.



ADP - Access Point - Discharge Point @
32.4 m. Outlet

Upstream MH	Downstream MH	Size	Material	Total Length	City
96	36	250	Polyvinyl Chloride	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-19-2021	09:43	17.7

Additional Information	Media Label
	09

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 96
0.0		MWL	Water Level		10			
2.4		DSZ	Deposits Settled: Other	4 to 7	15			Excrement
3.4		MWL	Water Level		5			
17.7		AMH	Access Point - Manhole					S MH 36

Upstream MH 96	Downstream MH 36	Size 250	Material Polyvinyl Chloride	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden	
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 09:43	Length Surveyed 17.7
Additional Information					Media Label 09



AMH - Access Point - Manhole @ 0.0 m.
S MH 96



MWL - Water Level @ 0.0 m.



DSZ - Deposits Settled: Other @ 2.4 m.
Excrement






MWL - Water Level @ 3.4 m.

Upstream MH	Downstream MH	Size	Material	Total Length	City
96	36	250	Polyvinyl Chloride	0	Linden
Customer	Work Order #	Location	Sewer Use		
CIMA	14257	Woods	Sanitary		
Surveyor's Name	Certificate Number	Street Address	Location Details		
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden		
Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-19-2021	09:43	17.7
Additional Information					Media Label
					09



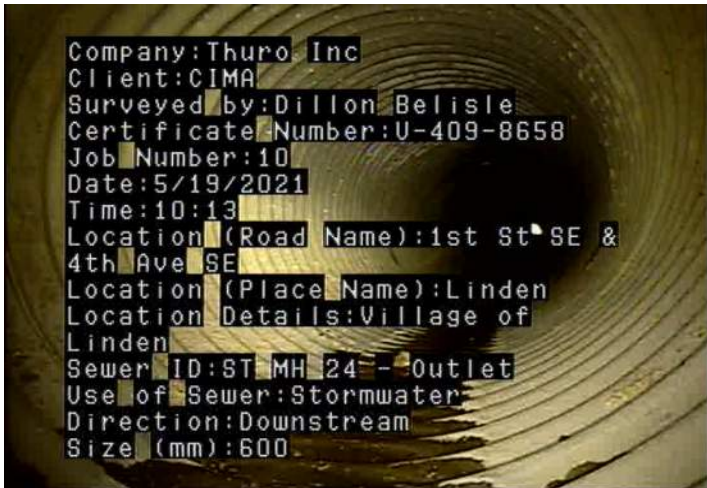
AMH - Access Point - Manhole @ 17.7 m.
S MH 36

Upstream MH 24	Downstream MH Outlet	Size 600	Material Corrugated Metal Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & 4th Ave SE	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 10:13	Length Surveyed 13.6
Additional Information					Media Label 10

	Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
	0.0		AMH	Access Point - Manhole					ST MH 24
	0.0		MWL	Water Level		0			
									
	11.2		OBR	Obstacle - Rocks	5 to 8	20			
	13.6		MSA	Survey Abandoned					Unable to pass rocks. Rest of line

Unable to pass rocks. Rest of line examined with zoom. 10% gravel viewed.

Upstream MH 24	Downstream MH Outlet	Size 600	Material Corrugated Metal Pipe	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Main Highway - Urban		Sewer Use Stormwater	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address 1st St SE & 4th Ave SE	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 10:13	Length Surveyed 13.6
Additional Information					Media Label 10



AMH - Access Point - Manhole @ 0.0 m.
ST MH 24



MWL - Water Level @ 0.0 m.



OBR - Obstacle - Rocks @ 11.2 m.

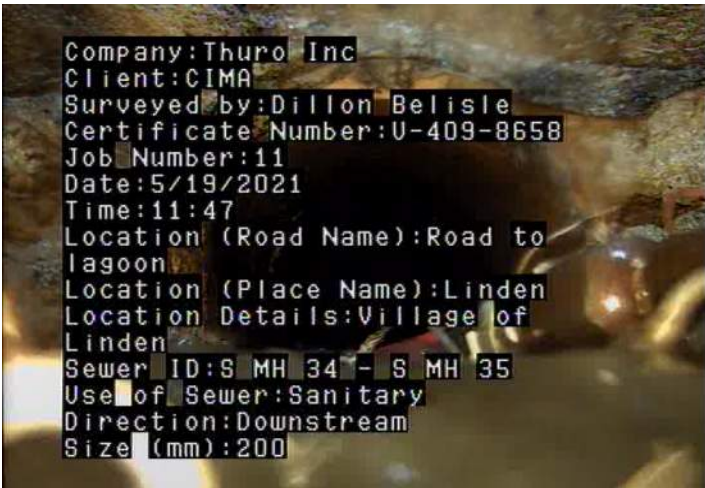


MSA - Survey Abandoned @ 13.6 m.
Unable to pass rocks. Rest of line
examined with zoom. 10% gravel viewed.

Upstream MH 34	Downstream MH 35	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle		Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden	
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 11:47	Length Surveyed 120
Additional Information					Media Label 11

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 34
0.0		MWL	Water Level		10			
1.0		FM	Fracture Multiple	9 to 3				
21.9		DAE	Deposits Attached: Encrustation	3 to 5	5		J	
23.2		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
26.0		DAE	Deposits Attached: Encrustation	2 to 5	5		J	
31.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
44.4		MGO	General Observation					Flusher on to reduce flow.
52.2	S01	RFJ	Roots, Fine: Joint	7 to 4			J	
71.2		RMJ	Roots, Medium, Joint	8 to 4	20			
92.0		FC	Fracture Circumferential	1 to 5				
93.4		RMJ	Roots, Medium, Joint	8 to 12	10			
100.4		RMJ	Roots, Medium, Joint	9 to 2	10			
111.2	F01	RFJ	Roots, Fine: Joint	7 to 5			J	
117.0		RMJ	Roots, Medium, Joint	9 to 3	20			
117.3		FL	Fracture Longitudinal	11				
120.0		MSA	Survey Abandoned					Unable to pull camera into S MH 35 due to pipe being broken.

Upstream MH 34	Downstream MH 35	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 11:47	Length Surveyed 120
Additional Information					Media Label 11



AMH - Access Point - Manhole @ 0.0 m.
S MH 34



MWL - Water Level @ 0.0 m.



FM - Fracture Multiple @ 1.0 m.



DAE - Deposits Attached: Encrustation @ 21.9 m.

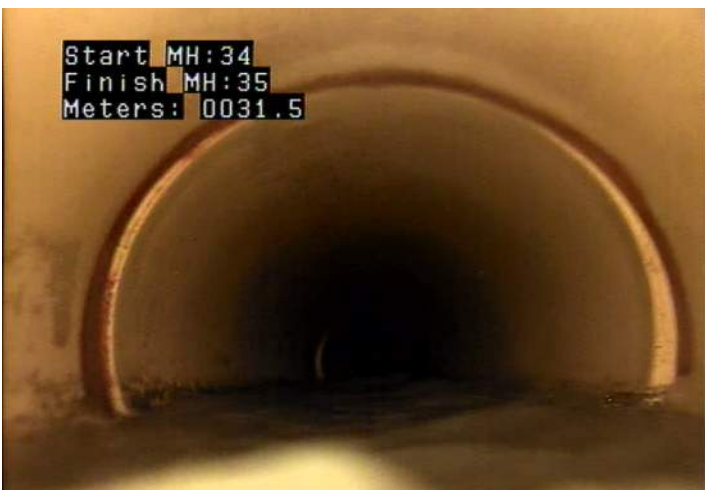
Upstream MH 34	Downstream MH 35	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 11:47	Length Surveyed 120
Additional Information					Media Label 11



DAE - Deposits Attached: Encrustation @ 23.2 m.



DAE - Deposits Attached: Encrustation @ 26.0 m.

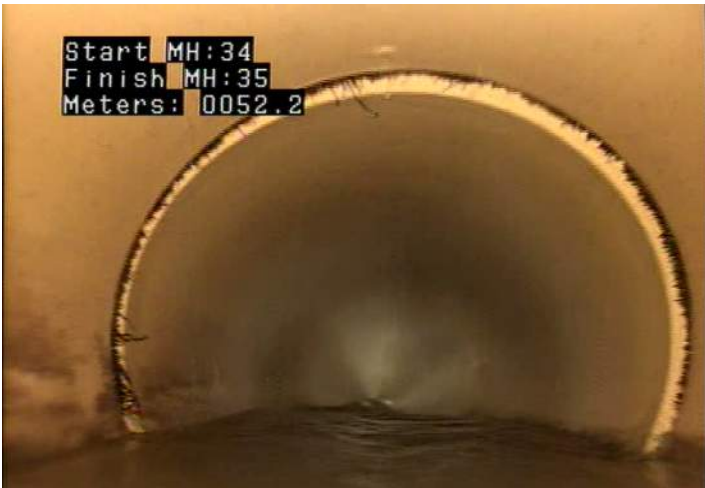


DAE - Deposits Attached: Encrustation @ 31.5 m.

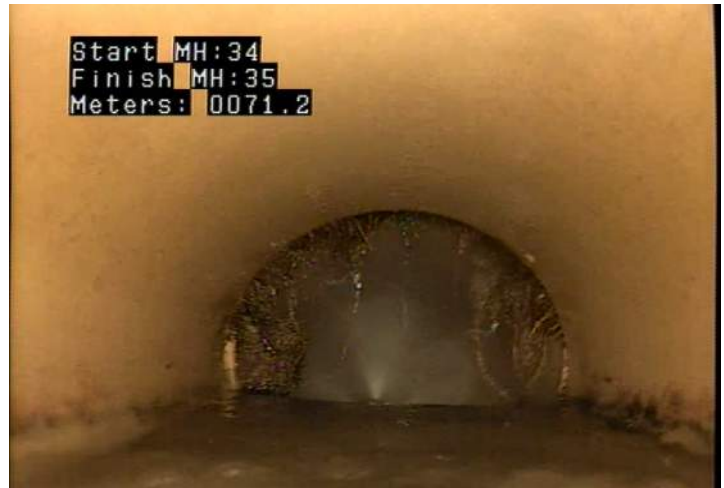


MGO - General Observation @ 44.4 m.
 Flusher on to reduce flow.

Upstream MH 34	Downstream MH 35	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 11:47	Length Surveyed 120
Additional Information					Media Label 11



RFJ - Roots, Fine: Joint @ 52.2 m.



RMJ - Roots, Medium, Joint @ 71.2 m.



FC - Fracture Circumferential @ 92.0 m.



RMJ - Roots, Medium, Joint @ 93.4 m.

Upstream MH 34	Downstream MH 35	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 11:47	Length Surveyed 120
Additional Information					Media Label 11



RMJ - Roots, Medium, Joint @ 100.4 m.



RFJ - Roots, Fine: Joint @ 111.2 m.



RMJ - Roots, Medium, Joint @ 117.0 m.



FL - Fracture Longitudinal @ 117.3 m.

Upstream MH 34	Downstream MH 35	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 11:47	Length Surveyed 120
Additional Information					Media Label 11



MSA - Survey Abandoned @ 120.0 m.
Unable to pull camera into S MH 35 due to pipe being broken.

Upstream MH	Downstream MH	Size	Material	Total Length	City
35	36	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

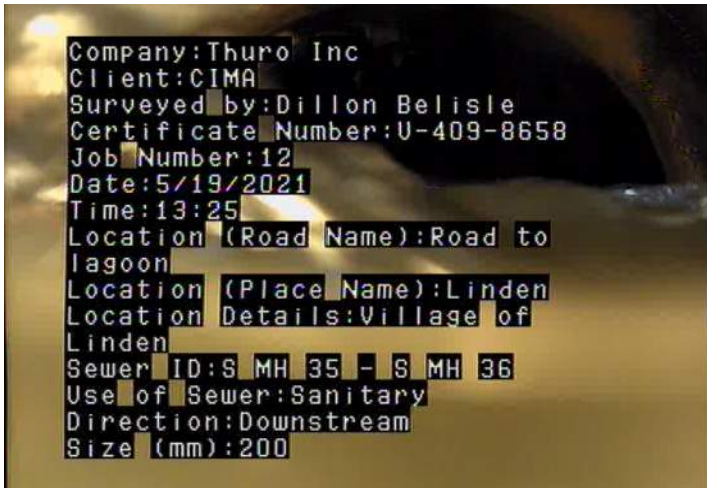
Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-19-2021	13:25	97.6

Additional Information	Media Label
	12

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 35
0.0		MWL	Water Level		20			
2.4		MGO	General Observation					Flusher on to reduce flow
14.3		DAE	Deposits Attached: Encrustation	9 to 11	5		J	
18.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
21.2		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
26.7		DAE	Deposits Attached: Encrustation	7 to 5	10		J	
29.4		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
30.7		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
43.4		CL	Crack Longitudinal	9			J	
51.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
55.6		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
61.1		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
62.1	S01	DAGS	Deposits Attached: Grease	8 to 3	5			
63.8	F01	DAGS	Deposits Attached: Grease	9 to 3	5			
63.8		DAE	Deposits Attached: Encrustation	1 to 4	5		J	
66.8		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
68.0		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
72.2		DAE	Deposits Attached: Encrustation	2 to 5	5		J	
73.6		FC	Fracture Circumferential	11 to 2			J	
73.6		DAE	Deposits Attached: Encrustation	1 to 5	5		J	
79.2		DAE	Deposits Attached: Encrustation	12 to 4	5		J	
83.2		RFJ	Roots, Fine: Joint	2 to 3				
97.6		AMH	Access Point - Manhole					S MH 36

Upstream MH 35	Downstream MH 36	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 13:25	Length Surveyed 97.6
Additional Information					Media Label 12



AMH - Access Point - Manhole @ 0.0 m.
S MH 35

MWL - Water Level @ 0.0 m.



MGO - General Observation @ 2.4 m.
Flusher on to reduce flow

DAE - Deposits Attached: Encrustation @ 14.3 m.

Upstream MH 35	Downstream MH 36	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 13:25	Length Surveyed 97.6
Additional Information					Media Label 12



DAE - Deposits Attached: Encrustation @ 18.5 m.



DAE - Deposits Attached: Encrustation @ 21.2 m.



DAE - Deposits Attached: Encrustation @ 26.7 m.



DAE - Deposits Attached: Encrustation @ 29.4 m.

Upstream MH 35	Downstream MH 36	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 13:25	Length Surveyed 97.6
Additional Information					Media Label 12



DAE - Deposits Attached: Encrustation @ 30.7 m.



CL - Crack Longitudinal @ 43.4 m.



DAE - Deposits Attached: Encrustation @ 51.5 m.



DAE - Deposits Attached: Encrustation @ 55.6 m.

Upstream MH 35	Downstream MH 36	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 13:25	Length Surveyed 97.6
Additional Information					Media Label 12



DAE - Deposits Attached: Encrustation @ 61.1 m.



DAGS - Deposits Attached: Grease @ 62.1 m.



DAGS - Deposits Attached: Grease @ 63.8 m.



DAE - Deposits Attached: Encrustation @ 63.8 m.

Upstream MH 35	Downstream MH 36	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 13:25	Length Surveyed 97.6
Additional Information					Media Label 12



DAE - Deposits Attached: Encrustation @ 66.8 m.



DAE - Deposits Attached: Encrustation @ 68.0 m.



DAE - Deposits Attached: Encrustation @ 72.2 m.



FC - Fracture Circumferential @ 73.6 m.

Upstream MH 35	Downstream MH 36	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 13:25	Length Surveyed 97.6
Additional Information					Media Label 12



DAE - Deposits Attached: Encrustation @ 73.6 m.



DAE - Deposits Attached: Encrustation @ 79.2 m.



RFJ - Roots, Fine: Joint @ 83.2 m.



AMH - Access Point - Manhole @ 97.6 m.
 S MH 36

Upstream MH	Downstream MH	Size	Material	Total Length	City
36	37	200	Clay Tile	0	Linden

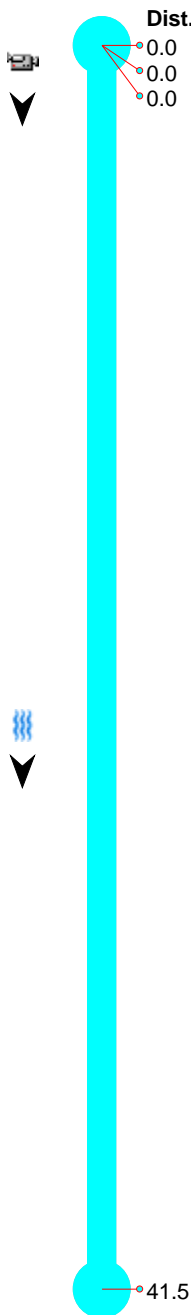
Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-19-2021	13:47	41.5

Additional Information	Media Label
	13

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 36
0.0		MWL	Water Level		10			
0.0		MGO	General Observation					Flusher on to reduce flow.



AMH Access Point - Manhole

S MH 37

Upstream MH 36	Downstream MH 37	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 13:47	Length Surveyed 41.5
Additional Information					Media Label 13



AMH - Access Point - Manhole @ 0.0 m.
S MH 36



MWL - Water Level @ 0.0 m.



MGO - General Observation @ 0.0 m.
Flusher on to reduce flow.



AMH - Access Point - Manhole @ 41.5 m.
S MH 37

Upstream MH	Downstream MH	Size	Material	Total Length	City
37	38	200	Clay Tile	0	Linden

Customer	Work Order #	Location	Sewer Use
CIMA	14257	Woods	Sanitary

Surveyor's Name	Certificate Number	Street Address	Location Details
Dillon Belisle	U-409-8658	Road to lagoon	Village of Linden

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Routine Assessment	Dry	05-19-2021	14:18	106.4

Additional Information	Media Label
	14

Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					S MH 37
0.0		MWL	Water Level		20			
0.0		MGO	General Observation					Flusher on to reduce flow.
17.7		MCU	Camera Underwater					
21.5		MWL	Water Level		20			
30.1		MCU	Camera Underwater					
33.6		MWL	Water Level		20			
33.9		B	Pipe Broken	8 to 3				
41.1		MCU	Camera Underwater					
46.8		MWL	Water Level		20			
59.2		MCU	Camera Underwater					
71.7		MWL	Water Level		25			
105.0		MCU	Camera Underwater					
106.4		AMH	Access Point - Manhole					S MH 38

Upstream MH 37	Downstream MH 38	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 14:18	Length Surveyed 106.4
Additional Information					Media Label 14



AMH - Access Point - Manhole @ 0.0 m.
S MH 37



MWL - Water Level @ 0.0 m.



MGO - General Observation @ 0.0 m.
Flusher on to reduce flow.



MCU - Camera Underwater @ 17.7 m.

Upstream MH 37	Downstream MH 38	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 14:18	Length Surveyed 106.4
Additional Information					Media Label 14



MWL - Water Level @ 21.5 m.



MCU - Camera Underwater @ 30.1 m.



MWL - Water Level @ 33.6 m.



B - Pipe Broken @ 33.9 m.

Upstream MH 37	Downstream MH 38	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 14:18	Length Surveyed 106.4
Additional Information					Media Label 14



MCU - Camera Underwater @ 41.1 m.



MWL - Water Level @ 46.8 m.



MCU - Camera Underwater @ 59.2 m.



MWL - Water Level @ 71.7 m.

Upstream MH 37	Downstream MH 38	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-19-2021	Time 14:18	Length Surveyed 106.4
Additional Information					Media Label 14



MCU - Camera Underwater @ 105.0 m.



AMH - Access Point - Manhole @ 106.4 m.
S MH 38

Upstream MH 33A	Downstream MH 33	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 10:44	Length Surveyed 123.2
Additional Information					Media Label 15

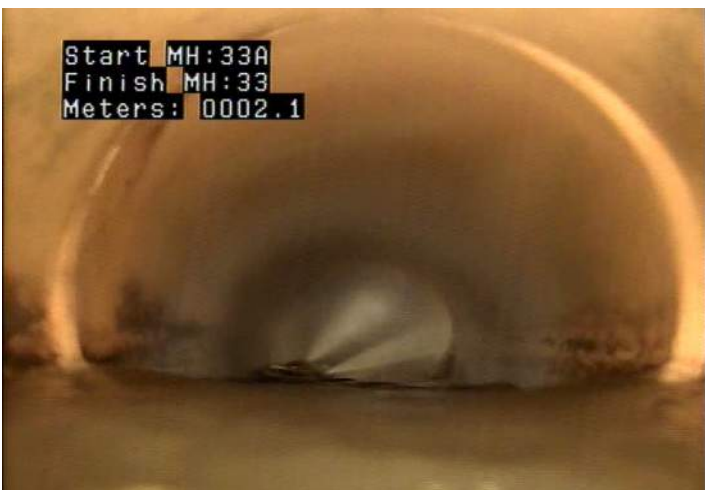
Dist.	Cont.	Code	Defect Description	Clock	%	mm	Joint	Remark
0.0		AMH	Access Point - Manhole					SMH 33A
0.0		MWL	Water Level		20			
0.0		MGO	General Observation					Flusher on to lower flow.
3.5		CL	Crack Longitudinal	11			J	
6.8		DAE	Deposits Attached: Encrustation	12 to 4	5		J	
9.5		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
15.0		JAL	Joint Angular: Large					
22.0		CC	Crack Circumferential	2 to 5			J	
39.7		MCU	Camera Underwater					
42.0		MWL	Water Level		25			
47.1		DAE	Deposits Attached: Encrustation	8 to 11	5		J	
55.3		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
62.3		DAE	Deposits Attached: Encrustation	7 to 5	5		J	
63.4		CC	Crack Circumferential	11 to 4			J	
87.2		B	Pipe Broken	8 to 4				
91.5		DAE	Deposits Attached: Encrustation	1 to 4	5		J	
101.2		DAE	Deposits Attached: Encrustation	8 to 12	5		J	
123.2		AMH	Access Point - Manhole					SMH 33

Upstream MH 33A	Downstream MH 33	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 10:44	Length Surveyed 123.2
Additional Information					Media Label 15



AMH - Access Point - Manhole @ 0.0 m.
SMH 33A

MWL - Water Level @ 0.0 m.



MGO - General Observation @ 0.0 m.
Flusher on to lower flow.

CL - Crack Longitudinal @ 3.5 m.

Upstream MH 33A	Downstream MH 33	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods	Sewer Use Sanitary		
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 10:44	Length Surveyed 123.2
Additional Information					Media Label 15



DAE - Deposits Attached: Encrustation @ 6.8 m.



DAE - Deposits Attached: Encrustation @ 9.5 m.



JAL - Joint Angular: Large @ 15.0 m.



CC - Crack Circumferential @ 22.0 m.

Upstream MH 33A	Downstream MH 33	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA		Work Order # 14257	Location Woods	Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 10:44	Length Surveyed 123.2
Additional Information					Media Label 15



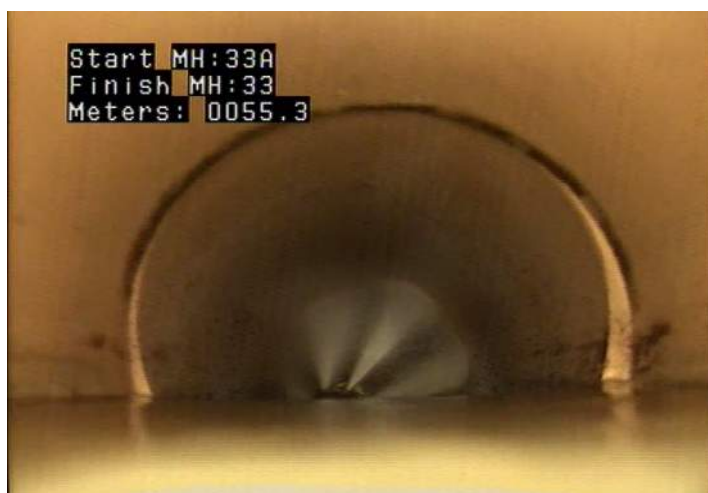
MCU - Camera Underwater @ 39.7 m.



MWL - Water Level @ 42.0 m.



DAE - Deposits Attached: Encrustation @ 47.1 m.



DAE - Deposits Attached: Encrustation @ 55.3 m.

Upstream MH 33A	Downstream MH 33	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 10:44	Length Surveyed 123.2
Additional Information					Media Label 15



DAE - Deposits Attached: Encrustation @ 62.3 m.



CC - Crack Circumferential @ 63.4 m.



B - Pipe Broken @ 87.2 m.



DAE - Deposits Attached: Encrustation @ 91.5 m.

Upstream MH 33A	Downstream MH 33	Size 200	Material Clay Tile	Total Length 0	City Linden
Customer CIMA	Work Order # 14257	Location Woods		Sewer Use Sanitary	
Surveyor's Name Dillon Belisle	Certificate Number U-409-8658	Street Address Road to lagoon	Location Details Village of Linden		
Direction Downstream	Purpose Routine Assessment	Weather Dry	Date 05-20-2021	Time 10:44	Length Surveyed 123.2
Additional Information					Media Label 15



DAE - Deposits Attached: Encrustation @ 101.2 m.



AMH - Access Point - Manhole @ 123.2 m. SMH 33