24-034

SANITARY SEWER SMOKING REPORT
SANITARY SEWER INVESTIGATIONS
DONNELLSON, IOWA

2025

CITY OFFICIALS

Brian Moeller, ***Mayor***

Rebecca Schau, ***City Clerk***

Todd Herdrich, ***Public Works Director***

CITY COUNCIL

Dan Benner
Tony Keefe
Jeremy Marshall
David Newton
Erin Wagner

Prepared by:

1501 South Main
Fairfield, IA 52556
Phone: 641-472-5145
Fax: 641-472-2653

FRENCH-RENEKER-ASSOCIATES
ENGINEERS & SURVEYORS

email: email@french-reneker.com
website: www.french-reneker.com

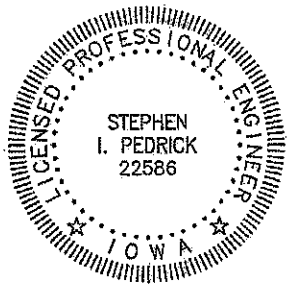
SANITARY SEWER SMOKING REPORT

SANITARY SEWER INVESTIGATIONS

DONNELLSON, IOWA

2025

Project No. 24-034



CERTIFICATION OF ENGINEER

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Stephen I. Pedrick, PE

Signature Date 6/24/25

License Number 22586

My license renewal date is December 31, 2026

Pages or Sheets covered by this seal: ALL

PREPARED BY

FRENCH-RENEKER-
ASSOCIATES
ENGINEERS & SURVEYORS

Table of Contents

Purpose

The City of Donnellson (City) has received multiple complaints of sanitary sewer backups in the basements of private residences over the past several years. The complaints are focused on the eastern half of town, and more specifically along Maple and Oak Streets. In response to the basement backups, the City has cleaned and video inspected significant portions of the collection system over the years. The periodic cleaning of the sewers has become too frequent, and the City would like to develop a more long-term solution to address the sanitary sewer collection system issues.

The City contracted with French-Reneker-Associates to conduct a sewer smoking analysis as a next step in determining the condition of the collection system and potential sources of inflow and infiltration (I/I), which could be contributing to the basement backups. Inflow and infiltration is defined as unwanted clean water that enters the sanitary sewer collection system. Most sanitary sewer collection systems are designed for a certain amount of I/I. As collection systems age, the I/I flow can exceed the design values. Inflow and infiltration can come from a variety of sources including, but not limited to: cracked or broken sewer main, joints, and lateral connections; leaking manhole riser joints; manhole lids with open tops; and illegal direct connections to the sanitary sewer such as storm sewers, roof drains, sump pumps, and foundation drains. In many cases, I/I originates on private property and is outside the City's direct control.

The purpose of this report is to summarize the methods and findings of the sewer smoking and suggest potential next steps in the collection system improvements. Collection system facility planning, cost estimates, and funding applications are beyond the scope of this report.

Analysis

The investigations included blowing low-pressure smoke through the sanitary sewer collection system and making visual inspections of accessible manholes. The locations where smoke escaped from the system can be used to help identify defects in the collection system, which may allow surface and groundwater into the system. This method will not identify all defects. Weather conditions before and during the investigations were dry, which helped to identify defects. The field investigations and smoke tests were conducted between May 12 and May 13, 2025.

The smoking investigations were conducted on the sanitary sewer collection system east of Main Street. This included 8,930 linear feet of sanitary sewer and 35 manholes. A total of 7 defects were identified, all of which appear to be on private property. A list of the defects is included in Appendix A, and a map of the defects is in Appendix D.

Visual inspections were made on every accessible manhole of the sanitary sewer collection system that was smoked. Of 35 total manholes, 26 were able to be accessed. Visual

inspections were conducted from ground level while looking into the manhole without entering the structure; refer to Appendix C for representative photos. The inspections were conducted during dry conditions and generally outside the typical morning and evening daily peak flow timeframes for municipal wastewater systems. Some manholes were found with visible flowing water into the structure. It can be assumed that infiltration would be exacerbated during a heavy rain event and wet weather. Not all signs of infiltration and defects can be observed or identified from ground level or during dry conditions.

During the manhole inspections, the manholes were inventoried and mapped with a GNSS/GPS handheld unit. The coordinates of the manholes collected were used to create a GIS map of the sanitary sewer collection system. Information regarding smoking defects was also mapped as a part of the project. The GIS maps are included in Appendix D.

The manhole inspections involved collecting information about each manhole, including: manhole construction material, details of the manhole covers, elevation of the manhole top in relation to the surrounding ground, and signs of I/I at each manhole. The reviewed portion of the collection system is comprised of 11 brick or lined brick manholes and 14 concrete manholes. The majority of the manhole covers have open pick holes, with 19 manhole covers having non-concealed pick-holes. None of the manholes had visible internal chimney seals. Five manholes were noted to be subject to ponding, and 12 were noted to have visible signs of I/I on the manhole walls. A copy of the manhole inspection sheets and sewer smoking sequencing is included in Appendix E.

After the manhole conditions were collected and tabulated, the potential sources of I/I and their severity were assigned values. The various I/I values were totaled into an overall I/I rating for each manhole to assist with planning proposed improvements. The manhole I/I ratings are summarized in Appendix B.

Recommendations

French-Reneker-Associates conducted sanitary sewer smoking and inspection of all the manholes east of Main Street in Donnellson, Iowa, from May 12 to 13, 2025. The smoking identified seven sewer defects, while the manhole inspections classified the manhole conditions in relation to the severity of I/I. All seven of the smoking defects appeared to be on privately owned sanitary sewer laterals. All of the manholes were rated as being in fair or good condition in relation to I/I severity.

Smoking is a relatively inexpensive way of identifying sanitary sewer defects, however it will not identify all defects present. Preparing recommended improvements for the sanitary sewer collection system needs to be done with a combination of reviewing sanitary sewer videos, sanitary sewer smoking, manhole inspections, and potentially basement inspections. Based on the results of this smoking investigation, significant sources of I/I were not evident in the

sanitary sewer collection system. The lack of significant smoking defects leads us to believe there could be sump pumps or foundation drains connected to the sanitary sewer, which cannot be detected with smoking due to check valves in most sump pump installations. Another source of I/I could be cracks or leaking joints in the sanitary sewer main, which did not smoke due to being sealed off by the street pavement.

Based on the smoking and manhole inspection results, we recommend the following improvements to reduce I/I in the collection system. The improvements listed below are generally in order from least expensive and easiest to implement, to most expensive and hardest to implement.

1. Work with the property owners to have them fix the seven identified defects.
2. Conduct basement inspections to identify illegal connections to the sanitary sewer (sump pumps). Work with the property owners to disconnect sump pumps from the sanitary sewer.
3. Replace manhole castings with open pick holes and install new adjusting rings with chimney seals.
4. Line manholes with signs of I/I.
5. Review sewer videos and consider a sanitary sewer lining or reconstruction project.

This study and report on their own will not reduce extraneous water from entering the sanitary sewer collection system. The city needs to pursue the repairs needed, as described above. French-Reneker-Associates, Inc. is available to assist the city in this process. Our overall goal is to help the city achieve a functioning sanitary sewer system that serves your customers well, at a reasonable cost.

Appendix A
Defects Identified by Smoking

Defects Identified by Smoking

Defects found on private property:

1. HSE 305 Maple – Broken Sewer Cap
2. HSE 102 Maple – Broken Sewer Cap
3. HSE 103 Orchard - Broken Sewer Cap
4. Dollar General - Broken Sewer Cap / Smoke From Ground
5. HSE 416 Lyn - Broken Sewer Cap
6. Fair Ground – Broken Sewer Cleanout (at elbow)
7. Fair Ground – Broken Sewer Cap

Appendix B
List of Manhole Conditions

Manhole I&I Ratings (Located on GIS Map)

Each manhole was graded based on five potential defects including: manhole material, seepage through manhole wall, presence of chimney seals, presence of a sealed cover, and potential for surface water ponding. The defects were graded with numerical values using lower numbers for less I/I, and higher numbers meaning there is more I/I present. The manhole material values range from 0 to 1, with concrete manholes receiving a 0 and brick manholes receiving a 1. Seepage through the manhole walls was visually observed and graded from 0 to 3, with 0 meaning no seepage and 3 being the most severe amount of I/I. Manholes with visible chimney seals received a score of 0, while manholes without visible chimney seals received a score of 1. Likewise, manholes with concealed pick holes in the covers received a 0, while manholes with open pick holes in the covers received a 1. Finally, the ground surrounding the manholes was reviewed for the potential to pond water at the manhole lid, with scores ranging from 0 for no ponding to 3 for severe ponding.

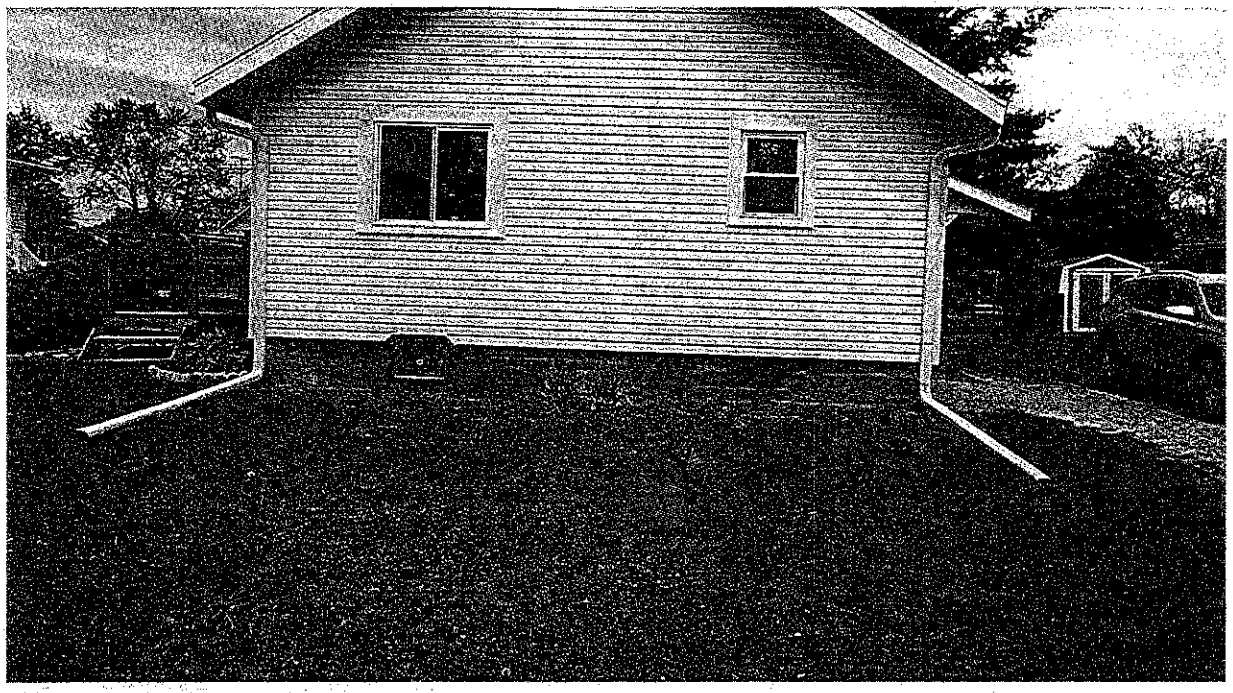
After the manholes were graded, the numerical values were totaled for each manhole, resulting in a maximum possible score of 9 points for a poor manhole with severe I/I. The total score was divided in three categories as follows: poor manhole (scoring 7-9), fair manhole (scoring 3-6), and good manhole (scoring 0-2). A summary of the manhole I/I ratings appears below.

MANHOLE I/I RATING MATRIX

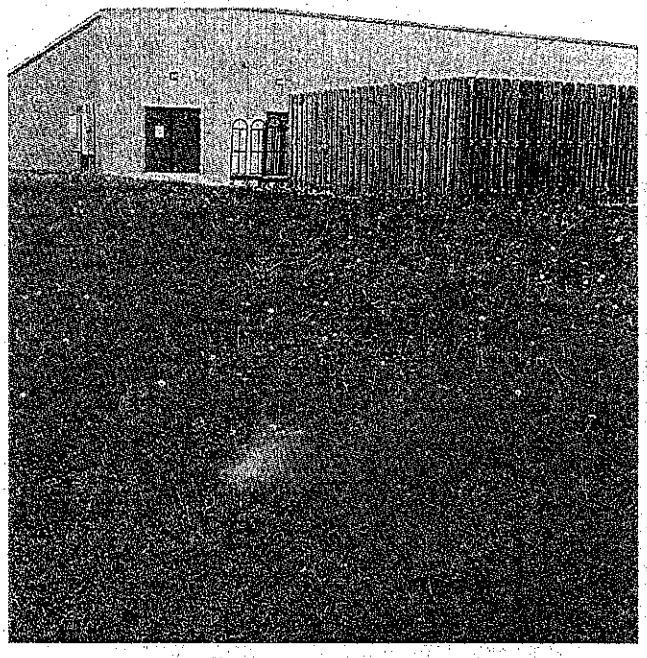
Manhole No.	Material	Wall Seepage	Chimney Seal	Sealed Cover	Subject to Ponding	I/I Rating
2-01	1		1	1		3 - Fair
3-01	1		1	1		3 - Fair
3-02	1	1	1			3 - Fair
3-2A						
3-2B		2	1	1		4 – Fair
3-04	1	1	1	1		4 – Fair
3-05	1		1	1		3 – Fair
3-06			1		2	3 - Fair
3-07			1			1 – Good
3-07A			1			1 – Good
3-09						
3-10		2	1	1	2	6 – Fair
3-11			1	1	3	5 - Fair
3-12		2	1	1	1	5 - Fair

Manhole No.	Material	Wall Seepage	Chimney Seal	Sealed Cover	Subject to Ponding	I/I Rating
3-13	1		1	1		3 - Fair
3-14	1		1	1		3 – Fair
3-15	1	1	1	1		4 – Fair
3-17						
3-17A		1	1		1	3 – Fair
3-18						
3-19		2	1	1		4 – Fair
3-20			1			1 - Good
3-21		2	1	1		4 – Fair
3-22			1	1		2 – Good
3-23			1	1		2 – Good
3-24			1	1		2 – Good
3-25						
3-26	1	1	1	1		4 – Fair
3-27						
3-28	1		1			2 – Good
3-29		1	1	1		3 – Fair
3-30	1	2	1	1		5 – Fair
3-31						

Appendix C
Representative Photos

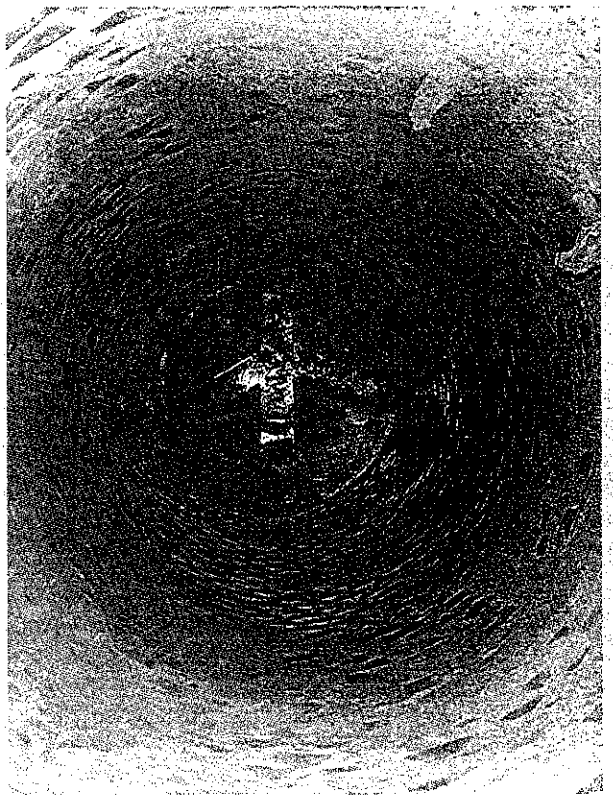


HSE 305 MAPLE – BROKEN SEWER CAP

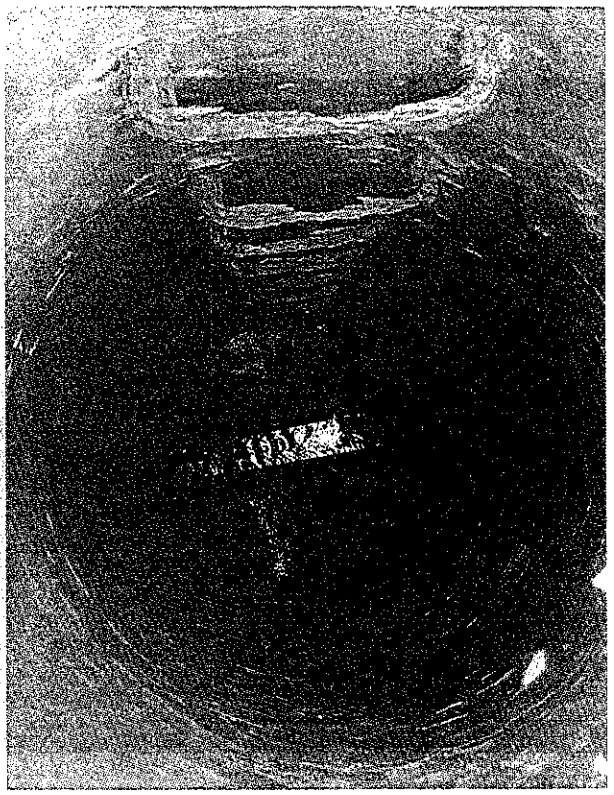


DOLLAR GENERAL – BROKEN SEWER CAP

HSE 103 ORCHARD – BROKEN SEWER CAP

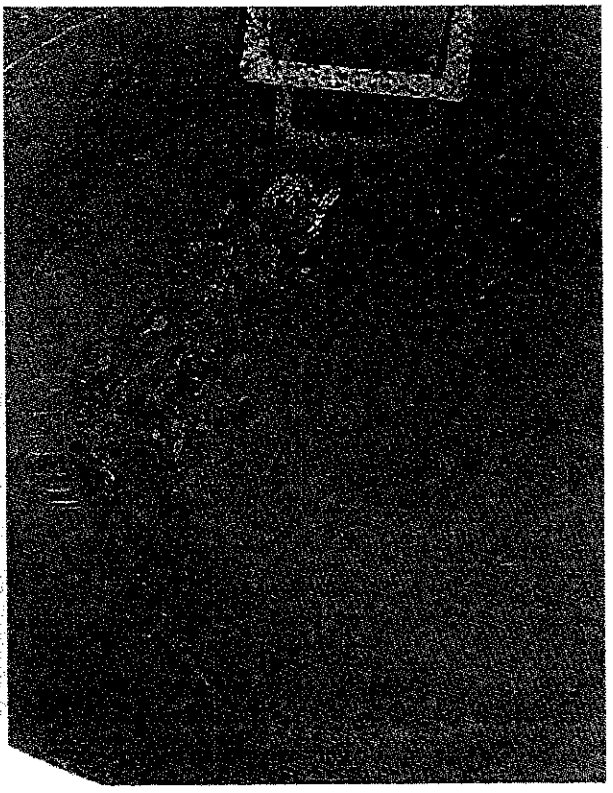


MANHOLE 3-01

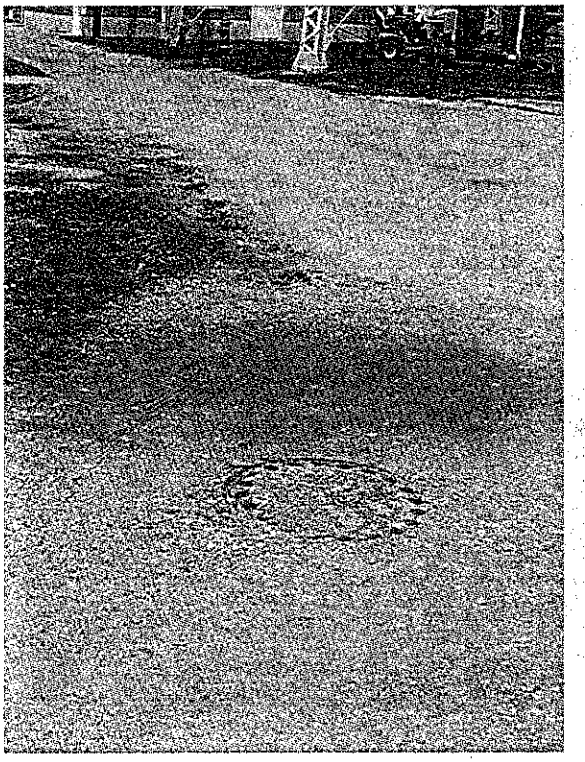


MANHOLE 3-05

MANHOLE 3-15



MANHOLE 3-24

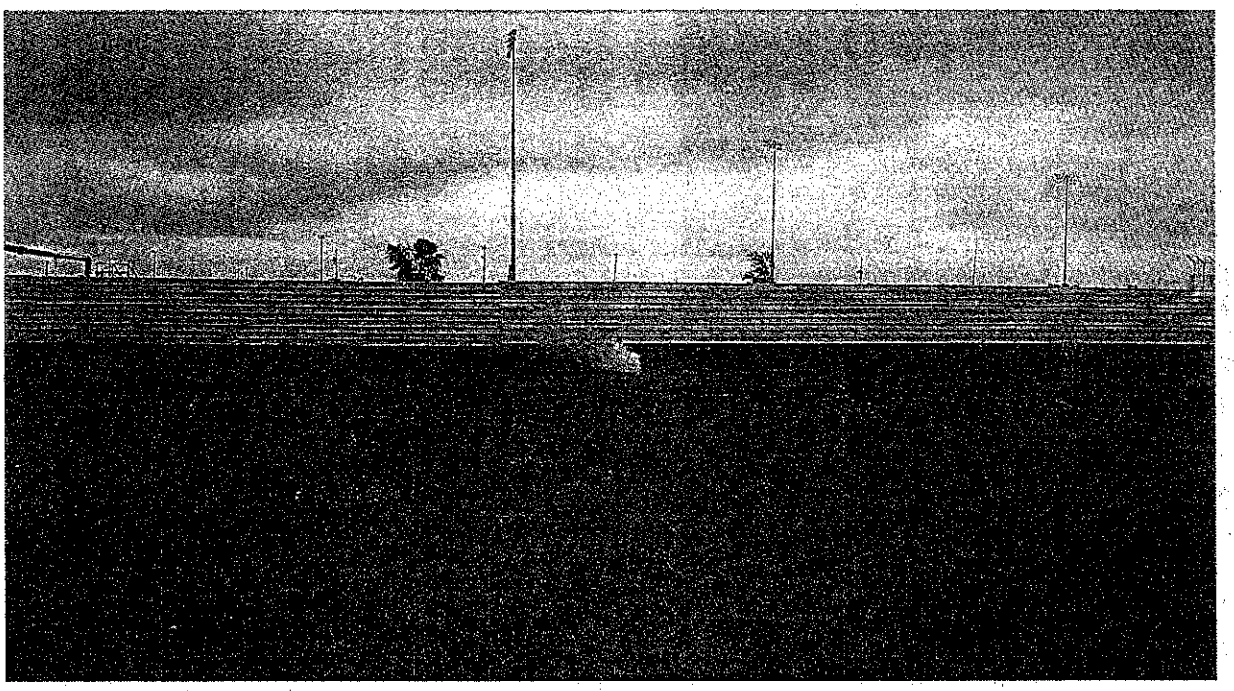


MANHOLE 3-06 SURFACE CONDITIONS

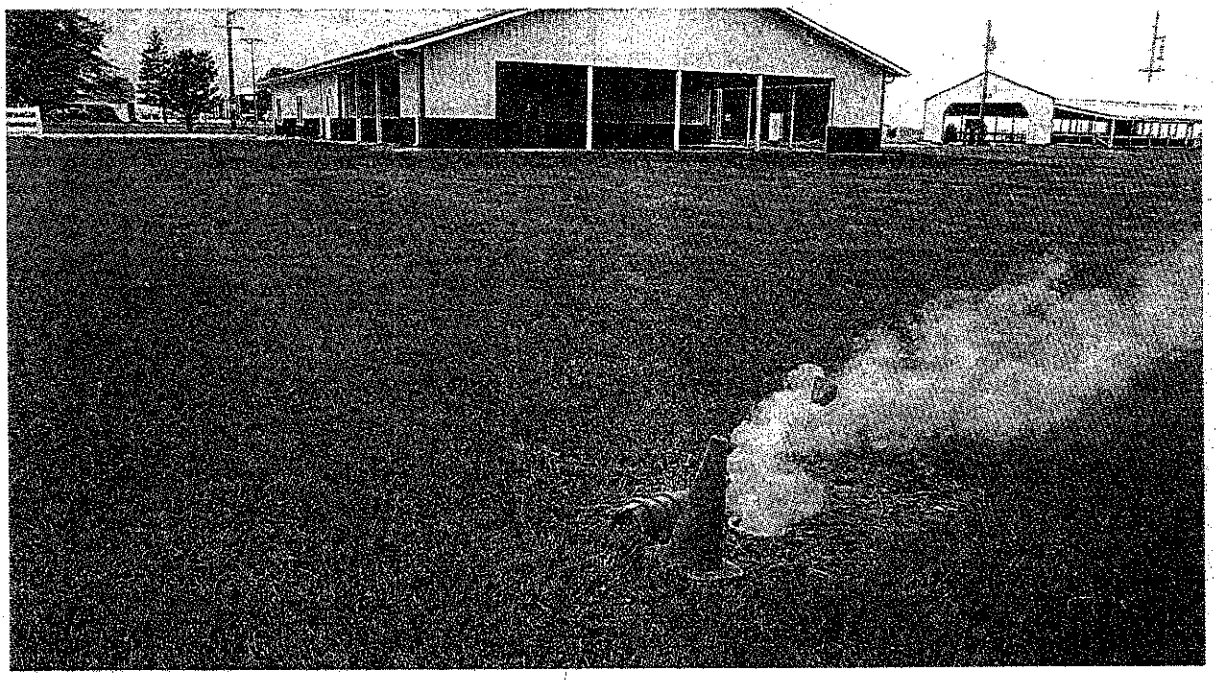
MANHOLE 3-10 SURFACE CONDITIONS

MANHOLE 3-11 SURFACE CONDITIONS

MANHOLE 3-12 SURFACE CONDITIONS



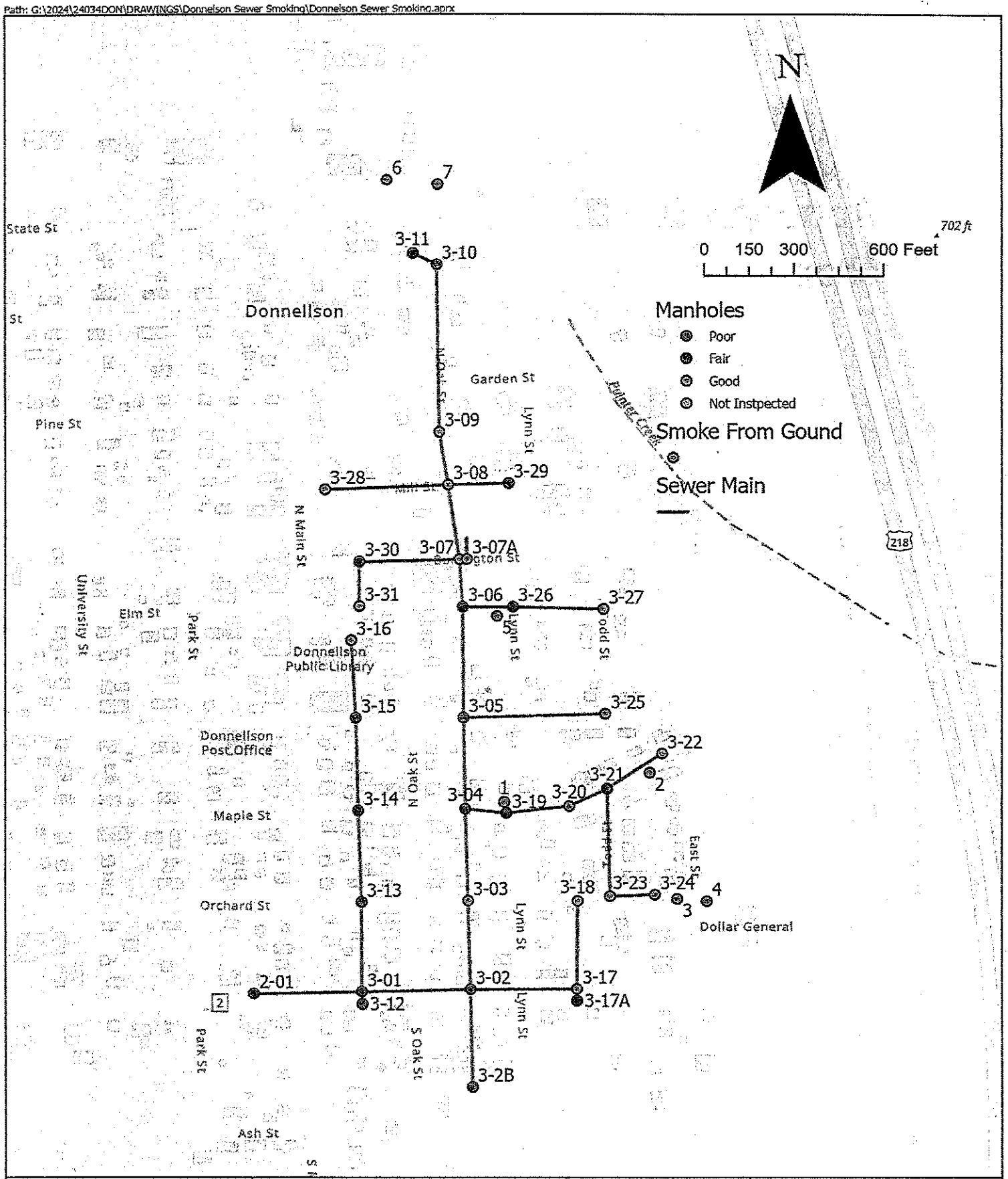
FAIRGROUNDS – BROKEN SEWER CAP



FAIRGROUNDS – BROKEN SEWER CAP

Appendix D
Map

Path: G:\2024\24034DON\DRAWINGS\Donnelson Sewer Smoking\Donnelson Sewer Smoking.aprx



Date 5-22-25	Donnellson Sanitary Sewer Smoking Showing Area of Inspected Sewer	FRENCH-RENEKER-ASSOCIATES ENGINEERS & SURVEYORS
PN 24-034		641-472-5145 1501 S. Main St. www.French-Reneker.com Fairfield, IA. 52556
Created By AH		

Appendix E
Sewer Smoke Testing Field Data
Log Sheets

Sewer Smoking and Manhole Condition Summary

Manhole No.	Inspected? *	Depth (ft)	Material	Open Cover	Subject to Ponding	I/I Rating	Set-up No.	Smoke to MH No.	Comments
2-01	Yes	13.1	Brick	X		3 - Fair	1	3-01, 3-12	
3-01	Yes	14.4	Brick	X		3 - Fair			
3-02	Yes	15.4	Brick			3 - Fair	4	3-04	Moisture Near Bottom
3-2A	No								
3-2B	Yes	12.2	Precast	X		4 - Fair	2		Seeping Joint Bottom 8'
3-04	Yes	15.1	Lined Brick	X		4 - Fair	7	3-05, 3-19	Moisture Bottom 6'
3-05	Yes	14.4	Lined Brick	X		3 - Fair	10	3-25	
3-06	Yes	10.8			X	3 - Fair	13	3-09	
3-07	Yes	12.4	Precast			1 - Good			
3-07A	Yes	12.1	Precast			1 - Good			
3-09	No								
3-10	Yes	9.0	Precast	X	X	6 - Fair	14	3-11	Seepage-Bottom 6'
3-11	Yes	5.9	Precast	X	X	5 - Fair			
3-12	Yes	10.2	Precast	X					Moisture Bottom 4'
3-13	Yes	10.6	Brick	X		3 - Fair	5	3-14	
3-14	Yes	10.8	Lined Brick	X		3 - Fair			
3-15	Yes	10.2	Lined Brick	X		4 - Fair	6	3-16	Moisture Bottom 1'
3-17	No								
3-17A	Yes	8.2	Precast		X	3 - Fair	3	3-17, 3-18	Moisture Bottom 4'
3-18	No								
3-19	Yes	13.4	Precast	X		4 - Fair			Riser Shifted
3-20	Yes	10.4	Precast			1 - Good			
3-21	Yes	8.6	Precast	X		4 - Fair	8	3-22, 3-23	Groundwater on walls
3-22	Yes	5.5	Precast	X		2 - Good			
3-23	Yes	8.7	Precast	X		2 - Good			
3-24	Yes	7.2	Precast	X		2 - Good	9	3-23	
3-25	No								
3-26	Yes	12.1	Lined Brick	X		4 - Fair	11	3-27	Moisture Bottom 4'

**Manholes not inspected were buried or inaccessible*

Sewer Smoking and Manhole Condition Summary (continued)

Manhole No.	Inspected? *	Depth (ft)	Material	Open Cover	Subject to Ponding	I/I Rating	Set-up No.	Smoke to MH No.	Comments
3-27	No								
3-28	Yes	9.7	Lined Brick			2 - Good			
3-29	Yes	8.8	CIP Concrete	X		3 - Fair			Water Seepage
3-30	Yes	9.3	Brick	X		5 - Fair	12	3-31	Seepage-Bottom 4'
3-31	No								

**Manholes not inspected were buried or inaccessible*

Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 2-01 ✓ Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street MADISON 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 3

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0038	
Frame	1 (2) 3		0 1 2 3	110-0165	OPEN PICK HOLE
Chimney	1 2 (3)		0 1 2 3		
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 (2) 3	BRICK	0 1 2 3		
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

0 = No I/I

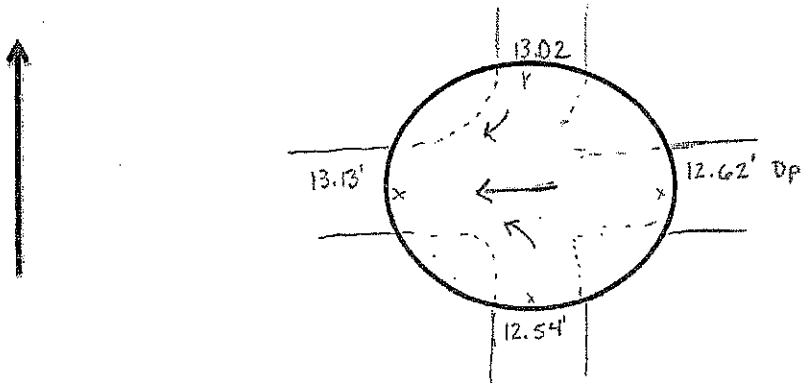
1 = Low Flow

2 = Medium Flow

3 = High Flow

____ Evidence of Surcharge

Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-01 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street MADISON 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 3

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0039	
Frame	1 (2) 3		0 1 2 3	110-0166	Open pick hole
Chimney	1 (2) 3		0 1 2 3		
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 (2) 3	BRICK	0 1 2 3		
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

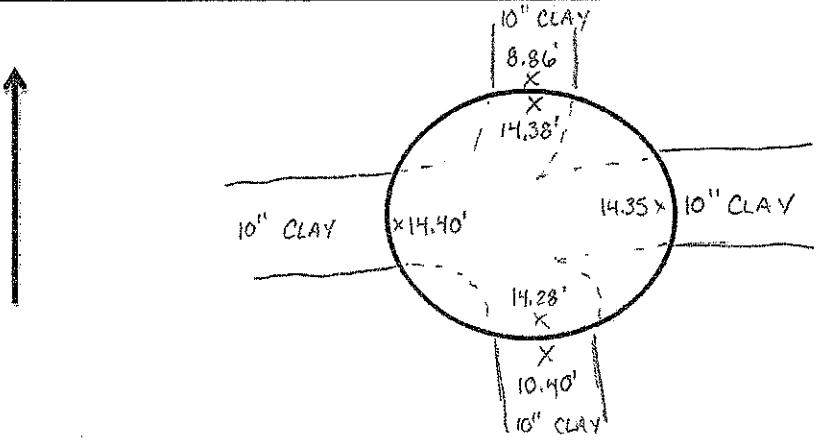
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/2/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-02
Survey Pt. _____
Street N. OAK ST.

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 3
1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

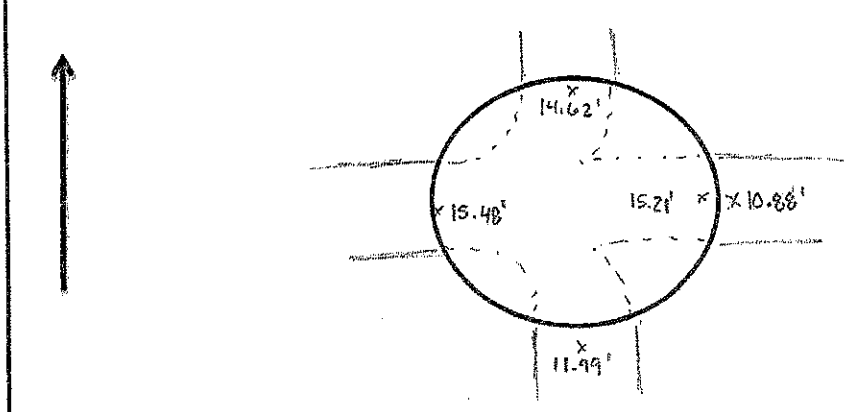
___ Subject to Ponding
Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0047	
Frame	1 (2) 3		0 1 2 3	110-0167	Concealed pick holes
Chimney	1 (2) 3		0 1 2 3	110-0170	No apparent I/I
Corbel	~~1~~ 2 3		0 1 2 3		
Wall	1 (2) 3	BRICK	0 1 2 3		MOISTURE NEAR BOTTOM
Bench	~~1~~ 2 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-2B
Survey Pt. _____
Street S. OAK ST

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 8
1 = Paved Street 5 = Sidewalk
2 = Unpaved Street 6 = Ditch
3 = Paved Alley 7= Curb/Gutter
4 = Unpaved Alley 8 = Yard/field
9 = Other _____

Grade Code: 2
1= Even
2 = Above 18 (in.)
3 = Below _____ (in.)

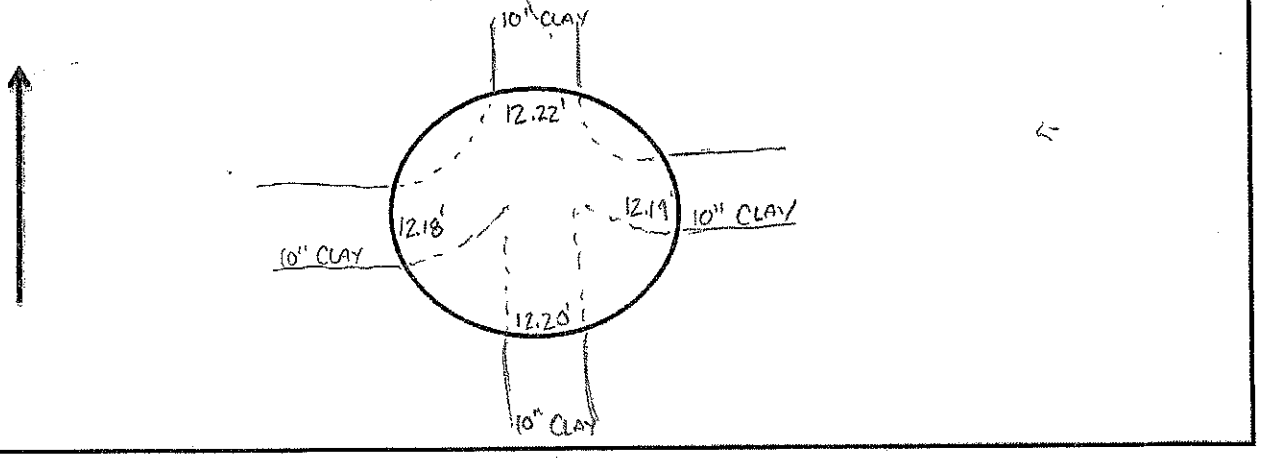
___ Subject to Ponding
Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0044	
Frame	1 2 (3)		0 1 2 3	110-0171	Been Pick holes
Chimney	1 2 (3)		0 1 2 3		SMOKE FROM UNDER FRAME
Corbel	~~1 2 3~~		0 1 2 3	110-0172	I/I at Joints
Wall	1 2 (3)	PRECAST	0 1 2 3		SEEPING JOINT 8' FROM BOTTOM
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 2 (3)		0 1 2 3		
Steps	1 2 (3)		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

____ Evidence of Surcharge
Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. S-04 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street MAPLE 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0052	
Frame	1 (2) 3		0 1 2 3	~~110-0184~~	~~Open Pick Holes~~
Chimney	1 2 (3)		0 1 2 3	~~110-0185~~	
Corbel	~~1~~ 2 3		0 1 2 3		
Wall	1 (2) 3	LINED BRICK	0 1 2 3	~~110-0186~~	MOISTURE BOTTOM 6' ±
Bench	~~1~~ 2 3		0 1 2 3	110-0182	Open Pick Holes
Invert	1 (2) 3		0 1 2 3	110-0183	
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

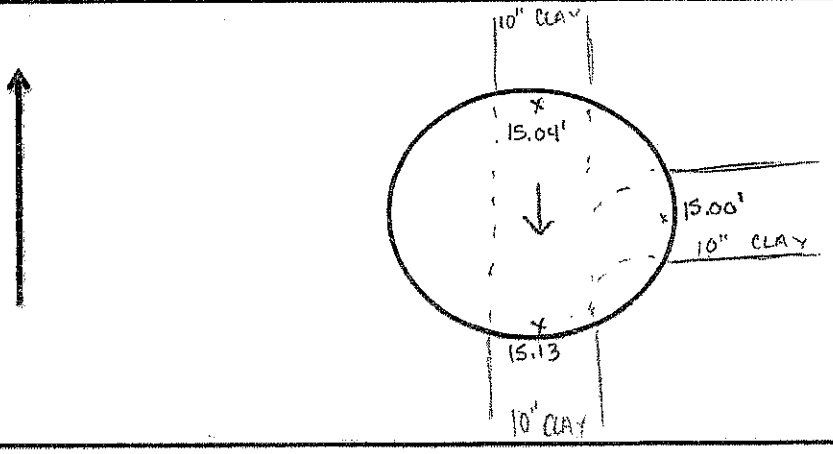
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. S-05

Survey Pt. _____

Street CHESTNUT

X Inspected

Reason Not Inspected: _____

1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1

1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

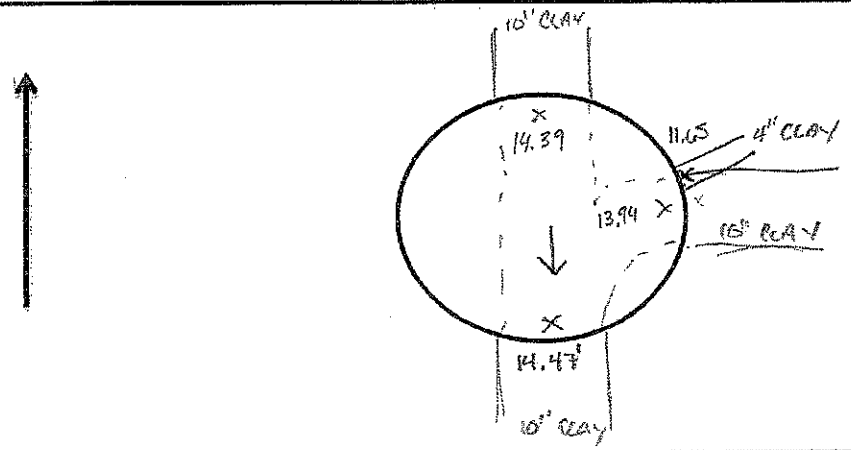
	Condition	Material	I/I	Photo ID	Comments
Cover	(1) 2 3		0 1 2 3	110-0065	
Frame	1 (2) 3		0 1 2 3	~~110-0195~~	~~Open pick holes~~
Chimney	1 2 (3)		0 1 2 3	110-0194	Open Pick holes
Corbel	~~1 2~~ 3		0 1 2 3		
Wall	1 2 (3)	LINED BRICK	0 1 2 3		
Bench	~~1 2~~ 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

____ Evidence of Surcharge

Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-06
Survey Pt. _____
Street MILL

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 1
1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

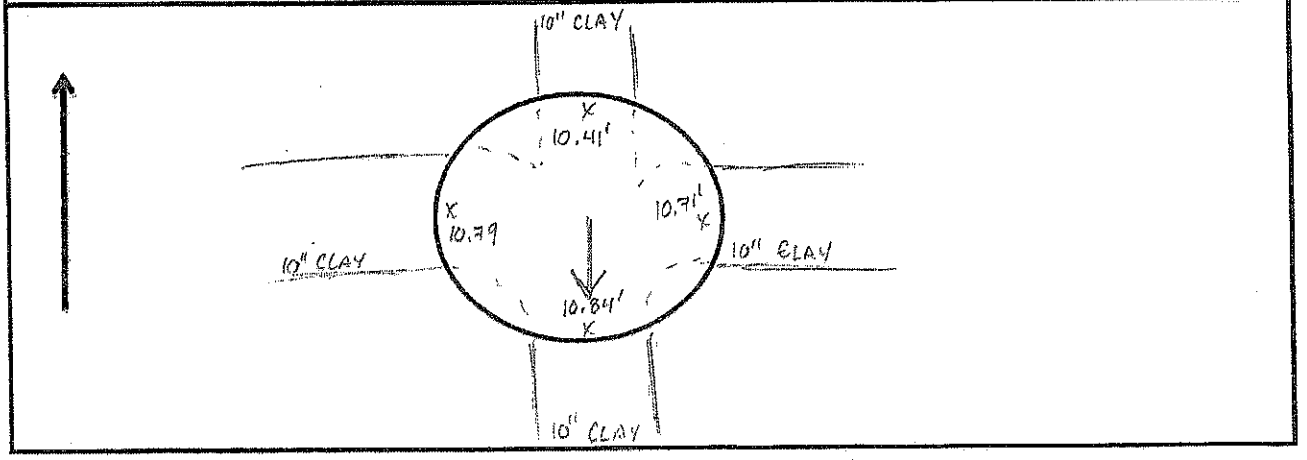
X Subject to Ponding
Ponding Depth 2 (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	114-0198	Open Pick Holes
Frame	1 (2) 3		0 1 2 3		
Chimney	1 2 (3)		0 1 2 3		
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 (2) 3		0 1 2 3		
Bench	~~1~~ 2 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-07 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street Burlington 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0199	Concealed Pick Holes
Frame	1 2 (3)		0 1 2 3		
Chimney	1 2 (3)		0 1 2 3		
Corbel	1 ~~2~~ ~~3~~		0 1 2 3		
Wall	1 2 (3)		0 1 2 3		
Bench	1 ~~2~~ ~~3~~		0 1 2 3		
Invert	1 2 (3)		0 1 2 3		
Steps	1 2 (3)		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

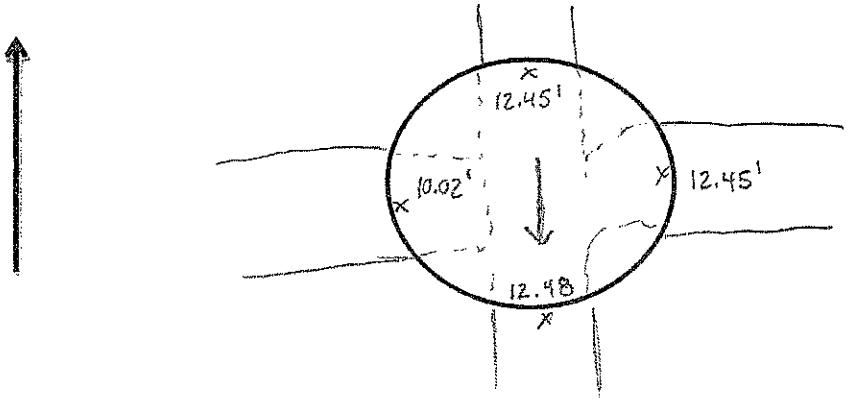
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. B-07A
Survey Pt. _____
Street BURLINGTON

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 1
1 = Paved Street 5 = Sidewalk
2 = ~~Unpaved Street~~ 6 = Ditch
3 = Paved Alley 7= Curb/Gutter
4 = Unpaved Alley 8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below 6.99' (in.)

___ Subject to Ponding
Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0068	
Frame	1 2 (3)		0 1 2 3	110-0200	Concealed Pick Holes
Chimney	1 2 (3)		0 1 2 3	110-0201	apparent I/I
Corbel	1 2 3		0 1 2 3		
Wall	1 2 (3)	PRECAST	0 1 2 3		WATER ON INTERIOR OF MH.
Bench	1 2 3	(in)	Surcharge Depth 0 1 2 3		Evidence of Surcharge
Invert	1 2 (3)		0 1 2 3		3 = High Flow
Steps	1 (2) 3		0 1 2 3		2 = Good Condition

1 = Bad Condition 0 = No I/I
2 = Poor Condition 1 = Low Flow
3 = Good Condition 2 = Medium Flow
3 = High Flow
Evidence of Surcharge Surcharge Depth 0 1 2 (in)

Location Code: 1
1 = Paved Street 5 = Sidewalk
2 = Unpaved Street 6 = Ditch
3 = Paved Alley 7= Curb/Gutter
4 = Unpaved Alley 8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

X Subject to Ponding
Ponding Depth 2 (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0071	0.21'
Frame	1 (2) 3		0 1 2 3	110-0210	0.01' Open Pick Holes
Chimney	1 (2) 3		0 1 2 3	110-0211	
Corbel	1 2 3		0 1 2 3	12.06'	
Wall	1 2 (3)	PRECAST	0 1 2 3		SEEPAGE 6' FROM BOTTOM
Bench	1 2 3	(in)	Surcharge Depth 0 1 2 (in)		Evidence of Surcharge
Invert	1 (2) 3		0 1 2 3		3 = High Flow
Steps	(1) 2 3		0 1 2 3		2 = Good Condition

1 = Bad Condition 0 = No I/I
2 = Poor Condition 1 = Low Flow
3 = Good Condition 2 = Medium Flow
3 = High Flow

Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-10 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street N. OAK 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

X Subject to Ponding

Ponding Depth 2 (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0071	
Frame	1 (2) 3		0 1 2 3	110-0210	Open Pick Holes
Chimney	1 (2) 3		0 1 2 3	110-0211	
Corbel	~~1~~ 2 3		0 1 2 3		
Wall	1 2 (3)	PRECAST	0 1 2 3	X	SEEPAGE 6' FROM BOTTOM
Bench	~~1~~ 2 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

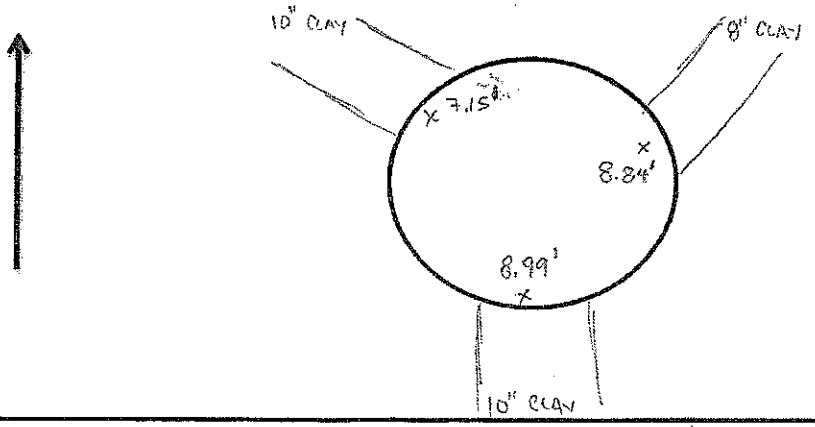
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

X Evidence of Surcharge Surcharge Depth 24 (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-11

Survey Pt. _____

Street N. OAK

X Inspected

Reason Not Inspected: _____

1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: _____

1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: _____

1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

X Subject to Ponding

Ponding Depth 2 (in)

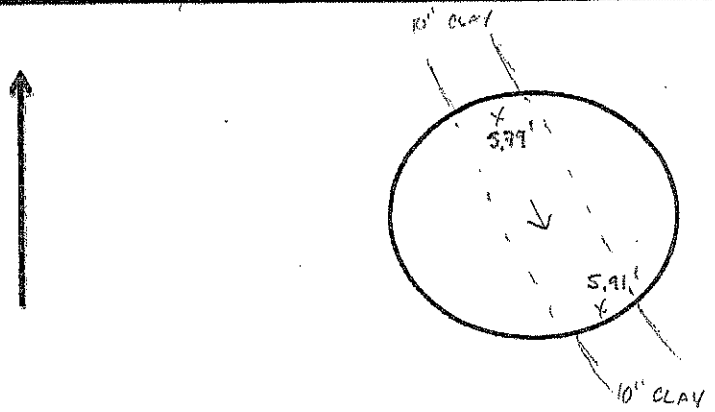
	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 3		0 1 2 3	110-0212	
Frame	1 2 3		0 1 2 3		
Chimney	1 2 3		0 1 2 3		
Corbel	1 2 3		0 1 2 3		
Wall	1 2 3	PRECAST	0 1 2 3		
Bench	1 2 3		0 1 2 3		
Invert	1 2 3		0 1 2 3		
Steps	1 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

____ Evidence of Surcharge

Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-12
Survey Pt. _____
Street MADISON

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 8
1 = Paved Street 5 = Sidewalk
2 = Unpaved Street 6 = Ditch
3 = Paved Alley 7= Curb/Gutter
4 = Unpaved Alley 8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

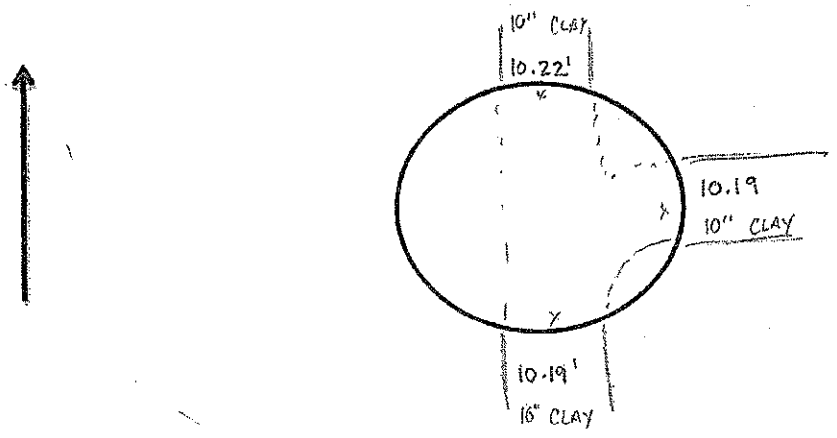
X Subject to Ponding
Ponding Depth 1 (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	~~110-0040~~	
Frame	1 (2) 3		0 1 2 3	~~110-0041~~	
Chimney	1 2 (3)		0 1 2 3	~~110-0042~~	
Corbel	~~1~~ 2 3		0 1 2 3	110-0043	
Wall	1 2 (3)	PRECAST	0 1 2 3		MOISTURE BOTTOM 4'
Bench	~~1 2 3~~		0 1 2 3	110-0167	Open Pick hole
Invert	1 (2) 3		0 1 2 3	110-0168	NO APPARENT I/I
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. B-13 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street ORCHARD 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0048	
Frame	1 (2) 3		0 1 2 3	110-0178	Open Pick holes
Chimney	1 (2) 3		0 1 2 3		
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 (2) 3	BRICK-LINED?	0 1 2 3		
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

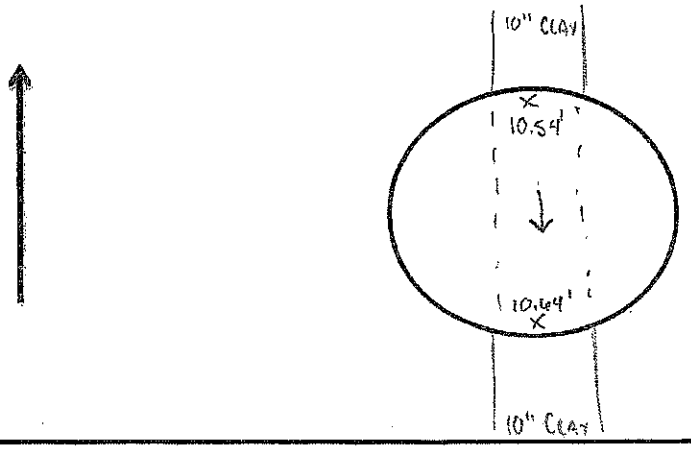
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-14 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street CHESTNUT 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0049	
Frame	1 (2) 3		0 1 2 3	110-0184	Open Pick holes
Chimney	1 (2) 3		0 1 2 3	110-0185	
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 2 (3)	LINED BRICK	0 1 2 3		
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

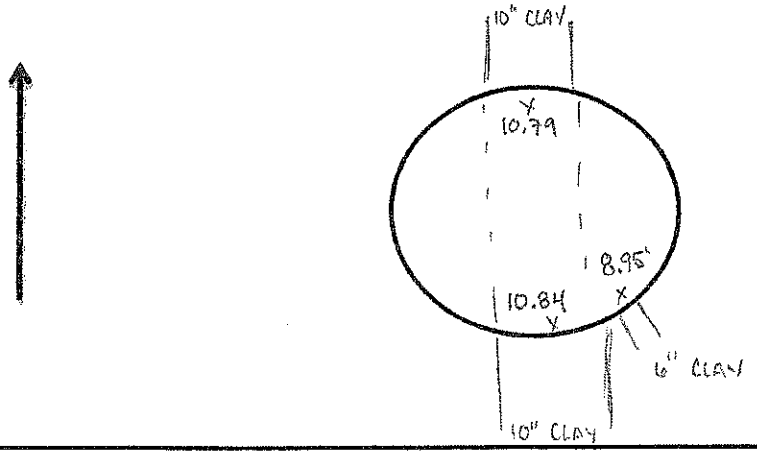
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

X Evidence of Surcharge Surcharge Depth 12 (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-15
Survey Pt. _____
Street CHESTNUT

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 1
1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

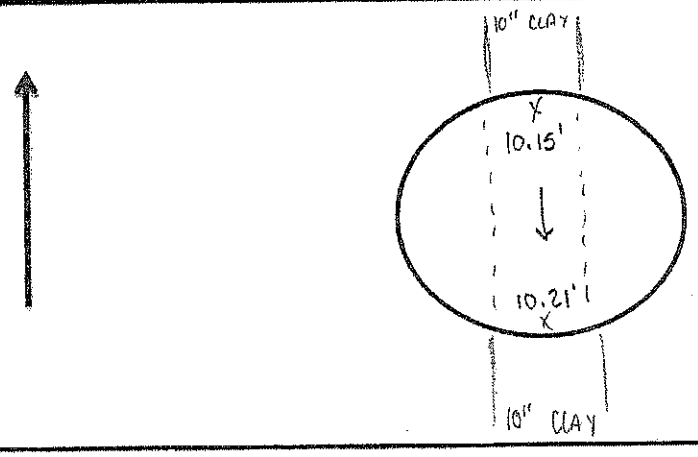
___ Subject to Ponding
Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0050	
Frame	1 (2) 3		0 1 2 3	110-0186	Open Pick holes
Chimney	1 2 (3)		0 1 2 3	110-0187	
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 2 (3)	LINED BRICK	0 1 2 3	X	MOISTURE BOTTOM 12"
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

X Evidence of Surcharge
Surcharge Depth 6 (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-17A
Survey Pt. _____
Street MADISON

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 8
1 = Paved Street 5 = Sidewalk
2 = Unpaved Street 6 = Ditch
3 = Paved Alley 7= Curb/Gutter
4 = Unpaved Alley 8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

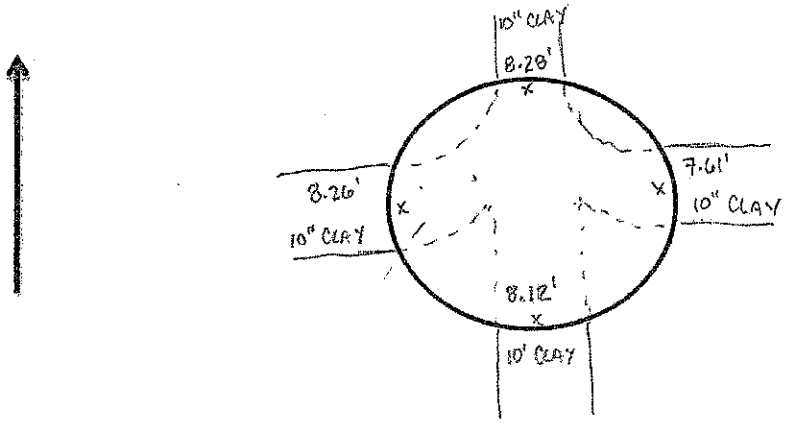
X Subject to Ponding
Ponding Depth 1 (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	[redacted]	
Frame	1 2 (3)		0 1 2 3	110-0046	
Chimney	1 2 (3)		0 1 2 3	110-0174	Concealed pick hole
Corbel	~~1 2 3~~		0 1 2 3	110-0175	
Wall	1 2 (3)	PRECAST	0 1 2 3	☆	MOISTURE BOTTOM 4'
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

X Evidence of Surcharge Surcharge Depth 12 (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-19 [X] Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street MAPLE

1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 8

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0055	
Frame	1 2 (3)		0 1 2 3	~~110-0182~~	~~Open pick holes~~
Chimney	1 2 (3)		0 1 2 3	~~110-0183~~	
Corbel	~~1 2 3~~		0 1 2 3	110-0190	Open Pick holes
Wall	1 2 (3)	PRECAST	0 1 2 3	X	BOTTOM RISER WET
Bench	~~1 2 3~~		0 1 2 3	110-0191	
Invert	1 (2) 3		0 1 2 3	110-0192	
Steps	(1) 2 3		0 1 2 3	110-0193	Riser shifted

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

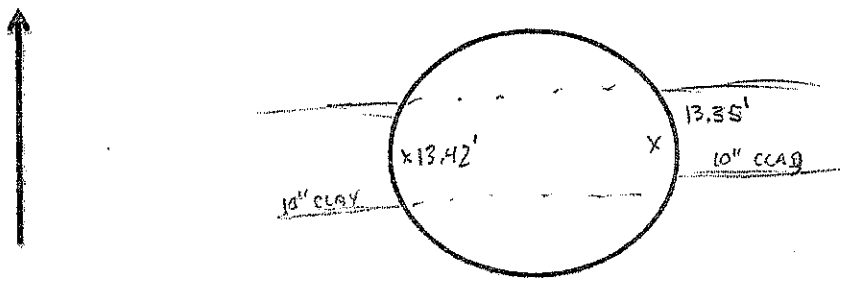
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-20 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street MAPLE

1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1

1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

___ Subject to Ponding

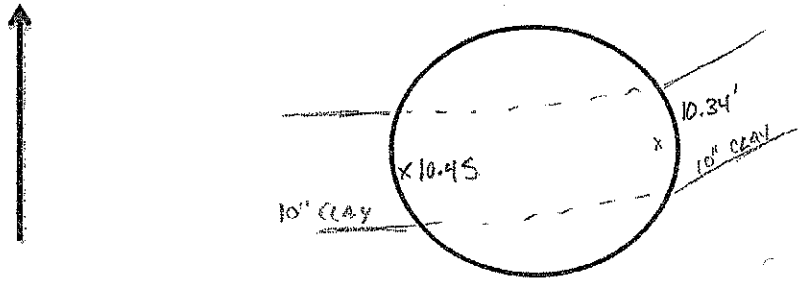
Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	118-0056	
Frame	1 2 (3)		0 1 2 3	118-0181	Open Pick holes
Chimney	1 2 (3)		0 1 2 3		
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 2 (3)	PRECAST	0 1 2 3		
Bench	1 ~~2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

___ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-21 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street MAPLE 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0059	
Frame	1 (2) 3		0 1 2 3	110-0179	Open PICK holes
Chimney	1 (2) 3		0 1 2 3	110-0180	
Corbel	~~1~~ 2 3		0 1 2 3		
Wall	1 2 (3)	PRECAST	0 1 2 3		GROUNDWATER ON WALLS
Bench	~~1~~ 2 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	1 (2) 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

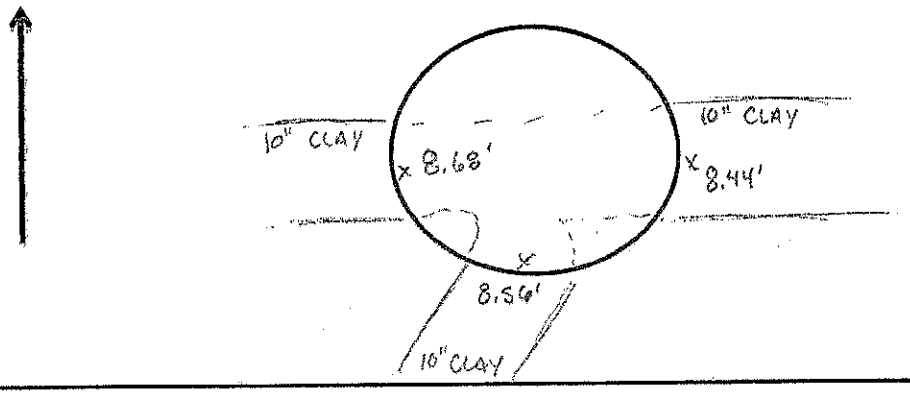
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

___ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-27

Survey Pt. _____

Street MAPLE

X Inspected

Reason Not Inspected: _____

1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1

1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

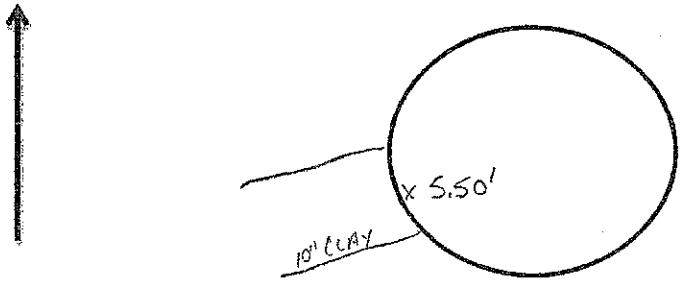
	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0060	
Frame	1 2 (3)		0 1 2 3	110-0178	Open Pick holes
Chimney	1 2 (3)		0 1 2 3		
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 2 (3)	PRECAST	0 1 2 3		
Bench	1 ~~2~~ 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	~~1 2 3~~		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

_____ Evidence of Surcharge

Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. S-23 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street ORCHARD 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0061	
Frame	1 2 (3)		0 1 2 3	110-0176	Open Pick hole
Chimney	1 2 (3)		0 1 2 3		
Corbel	~~1~~ 2 3		0 1 2 3		
Wall	1 2 (3)	PRECAST	0 1 2 3		
Bench	~~1~~ ~~2~~ 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	1 (2) 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

0 = No I/I

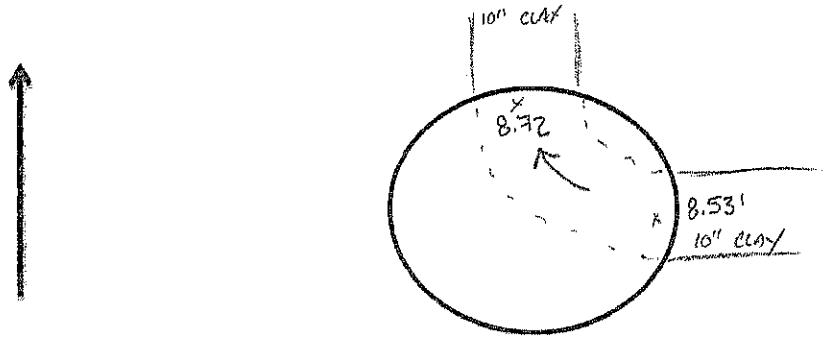
1 = Low Flow

2 = Medium Flow

3 = High Flow

____ Evidence of Surcharge

Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. S-24 ___ Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street ORCHARD

1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0064	
Frame	1 2 (3)		0 1 2 3	110-0127	Open Pick hole
Chimney	1 2 (3)		0 1 2 3		
Corbel	~~1 2~~ 3		0 1 2 3		
Wall	1 2 (3)	PRECAST	0 1 2 3		
Bench	~~1 2~~ 3		0 1 2 3		
Invert	1 2 (3)		0 1 2 3		
Steps	1 (2) 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

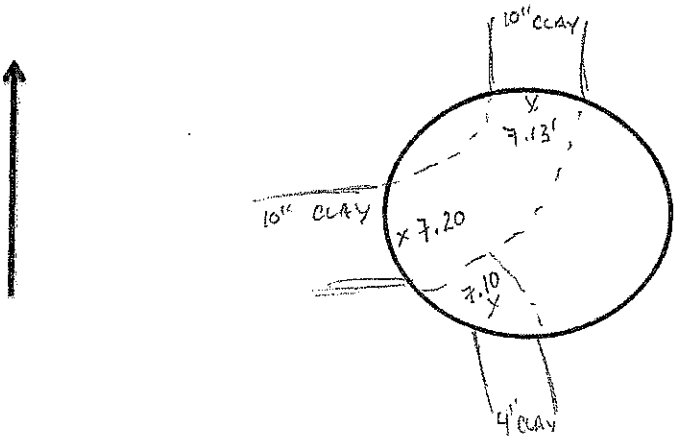
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

_____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-26
Survey Pt. _____
Street ELM

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 1
1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

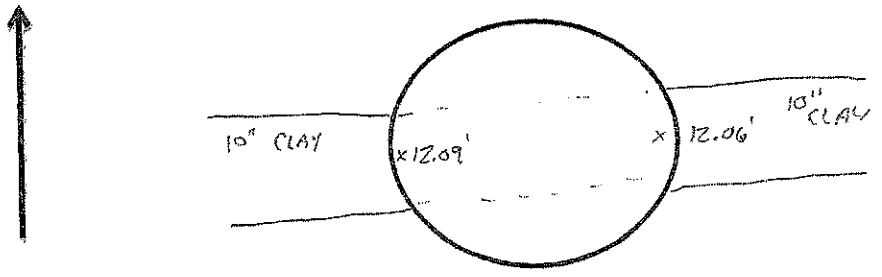
___ Subject to Ponding
Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0066	
Frame	1 (2) 3		0 1 2 3	110-0196	Open Pick holes
Chimney	1 2 (3)		0 1 2 3	110-0197	
Corbel	~~1 2~~ 3		0 1 2 3		
Wall	1 2 (3)	LINED BRICK	0 1 2 3	X	MOISTURE BOTTOM 4'
Bench	~~1 2~~ 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

X Evidence of Surcharge Surcharge Depth 24 (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-28 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street MILL 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0070	
Frame	1 (2) 3		0 1 2 3	110-0207	Open Pick Holes
Chimney	1 2 (3)		0 1 2 3	110-0208	Riser Shifting
Corbel	~~1 2 3~~		0 1 2 3	110-0209	
Wall	1 (2) 3	LINED BRICK	0 1 2 3	X	MOISTURE BOTTOM 4'
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

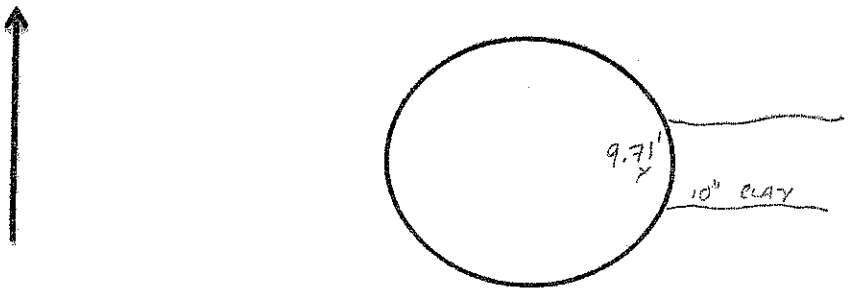
0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

_____ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-29
Survey Pt. _____
Street LYNN

X Inspected
Reason Not Inspected: _____
1 = Buried 3 = C. N. O.
2 = Bolted 4 = Other _____

Location Code: 1
1 = Paved Street
2 = Unpaved Street
3 = Paved Alley
4 = Unpaved Alley
5 = Sidewalk
6 = Ditch
7= Curb/Gutter
8 = Yard/field
9 = Other _____

Grade Code: 1
1= Even
2 = Above _____ (in.)
3 = Below _____ (in.)

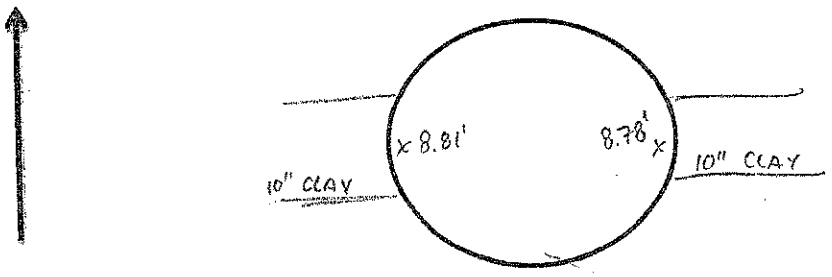
___ Subject to Ponding
Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 2 (3)		0 1 2 3	110-0069	
Frame	1 2 (3)		0 1 2 3	110-0204	Open Pick Holes
Chimney	1 2 (3)		0 1 2 3	110-0205	
Corbel	~~1 2 3~~		0 1 2 3		
Wall	1 2 (3)	CIP CONC.	0 1 2 3	★	WATER SEEPAGE
Bench	~~1 2 3~~		0 1 2 3		
Invert	1 2 (3)		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition
2 = Poor Condition
3 = Good Condition

0 = No I/I
1 = Low Flow
2 = Medium Flow
3 = High Flow

___ Evidence of Surcharge Surcharge Depth _____ (in)



Manhole Inspection

Date: 5/12/25 Crew: GC & AH Project No. 24-034

Manhole No. 3-30 X Inspected

Survey Pt. _____ Reason Not Inspected: _____

Street BURLINGTON 1 = Buried 3 = C. N. O.

2 = Bolted 4 = Other _____

Location Code: 1

1 = Paved Street 5 = Sidewalk

2 = Unpaved Street 6 = Ditch

3 = Paved Alley 7= Curb/Gutter

4 = Unpaved Alley 8 = Yard/field

9 = Other _____

Grade Code: 1

1= Even

2 = Above _____ (in.)

3 = Below _____ (in.)

___ Subject to Ponding

Ponding Depth _____ (in)

	Condition	Material	I/I	Photo ID	Comments
Cover	1 (2) 3		0 1 2 3	110-0067	
Frame	1 (2) 3		0 1 2 3	110-0202	Open Pick Holes
Chimney	1 2 (3)		0 1 2 3	110-0203	No apparent I/I
Corbel	~~1~~ 2 3		0 1 2 3		
Wall	1 (2) 3	LINED BRICK	0 1 2 3		SEEPAGE BOTTOM 4'
Bench	~~1~~ 2 3		0 1 2 3		
Invert	1 (2) 3		0 1 2 3		
Steps	(1) 2 3		0 1 2 3		

1 = Bad Condition

2 = Poor Condition

3 = Good Condition

0 = No I/I

1 = Low Flow

2 = Medium Flow

3 = High Flow

___ Evidence of Surcharge Surcharge Depth _____ (in)