Purchasing Division
Finance Department

Room 120
411 West First Street
Duluth, Minnesota 55802

218-730-5340
purchasing@duluthmn.gov

Addendum 2
Solicitation 25-99414
6th Avenue East Reconditioning and Lead Water Service Replacement (High Priority Sites 100-118)

This addendum serves to notify all bidders of the following changes to the solicitation documents:

QUESTIONS: The following questions were asked and are answered below in *italics*.

1. It appears that the removals including concrete pavement, curb & gutter, sidewalk, and stairs in the areas associated with the lead service work are included in the SEQ and not incidental to the work. Please verify that this is correct.
   a) *All removal work within the right-of-way is included in the SEQ and will be paid for under those items, work outside of the right-of-way associated with the lead service work is incidental to those items. Excavation is always incidental to the lead service items.*
2) Is there soil boring information available for this project.
   a) *The soil boring information is attached.*
3) In the areas where the water service piping is called out to be horizontally directionally drilled, how many attempts are required to be included in that pay item if bed rock is encountered.
   a) *The Contractor means and methods for installing the water service piping can include trenchless or open trench methods. The City does not have any direction for what method is appropriate for each service. Water main piping will be paid for under whichever method is used to install it, refer to the City Standard Spec 2503/2504/2505 Horizontal Directional Drilling.*
4) If bedrock is encountered during drilling operations and the service cannot be horizontally directionally drilled, will the additional removals to open cut be covered at the contract unit pricing.
   a) *All required removals will be paid for if they are in the right-of-way, otherwise the private service pipe item includes complete restoration regardless of method, refer to Special Provision S-77.*
5) Phase 4 Traffic Control (Plan Sheet 95 (Traffic Control Phase Description)) – Is the intent to perform all milling, seal coat, and paving over the entire project alignment after the completion of the work called out in phases 1-3 under traffic.
   a) *All work between STA 162+50 and 176+50 must be completed prior to reopening the road following phase 2, including milling, seal coat, and paving. The intent for the rest of the alignment would be to complete these items following the work in phases 1-3*

utilizing lane closures and flagging within intersections. Milling may be completed at any time but the outside lane will need to remain closed once the milling is complete if it is not promptly paved and additional bump signs will be required at intersections. Seal coat just prior to paving. Phase 3 work may be combined with either phases 1 or 2 with the submission of an updated traffic control plan. Work behind the curb line that would not mar the new pavement surface may be allowed following paving at the discretion of the Engineer.

Please acknowledge receipt of this Addendum by checking the acknowledgement box within the www.bidexpress.com solicitation.

Posted: **5/9/25**

Geotechnical • Environmental • Materials Engineering
539 Garfield Ave. | Phone: 218-727-1239
Duluth, MN 55802 | Web: epcduluth.com

February 21, 2025
EPC# 25G1807

City of Duluth
411 W. 1st Street Room 240
Duluth, MN 55802

Attn: Mr. Jon Maruska, City Engineering Specialist

Re: Soil Boring Log Report
N. 6th Ave East Watermain Extension Rock Probes
Duluth, MN

Dear Mr. Maruska:

This letter report is in regard to the five (5) Flyte Auger Rock Probes performed by EPC on February 19, 2025. All work was performed at the direction of yourself, according to EPC proposal dated February 10, 2025. All borings were staked and numbered in the field by EPC personnel. Boring surface elevations were determined by the City of Duluth. Borings were performed with EPC's CME 55 truck mounted drill rig.

Generally speaking, soils consisted of 7 to 10-inches of concrete pavement over 2 to 4-feet of Granular Fill Road Base material, over Sandy Clay to substantial auger refusal depths of 10, 10.75, 7, 6.5, and 6.75-feet below existing grade (BEG) respectively.

The probable bedrock surface was reached in all Borings. Water was not observed during and/or shortly after the relatively short drilling process.

Please refer to the table below and the boring logs in the appendix for details.

Boring Number SB-1_-	Surface Elevation (ft)	Depth of Concrete Pavement (inches)	Depth/Elevation to Bottom of Roadbase Fill (ft)	Depth/Elevation to Bottom of Sandy Clay (CL) Native (ft)	Depth/Elevation to Top of Probable Bedrock Surface (ft)
01	874.19	10	4.0/870.19	10.0/864.19	10.0/864.19
02	869.25	10	2.0/867.25	10.75/858.50	10.75/858.50
03	869.19	8	3.0/866.19	7.0/862.19	7.0/862.19
04	863.90	7	2.0/861.90	6.5/857.40	6.5/857.40
05	858.08	10	2.0/856.08	6.75/851.33	6.75/851.33

If the refusal depths are deemed critical, bedrock cores and/or test pits should be performed to confirm the identity of the refusal material.

This report completes EPC's work on this project to date. We must caution you that this report, prepared for soils classification and refusal depth information only, is not a complete geotechnical engineering report. EPC cannot be responsible for possible misinterpretation of the contents of the boring logs, or the strengths of the soils described in them. Soil samples from this project will be saved for two months from the date of this report unless EPC is directed in writing to do otherwise.

We would like to thank you for allowing EPC to be of service to you on this project. If you have any questions or comments, please call us at (218) 727-1239.

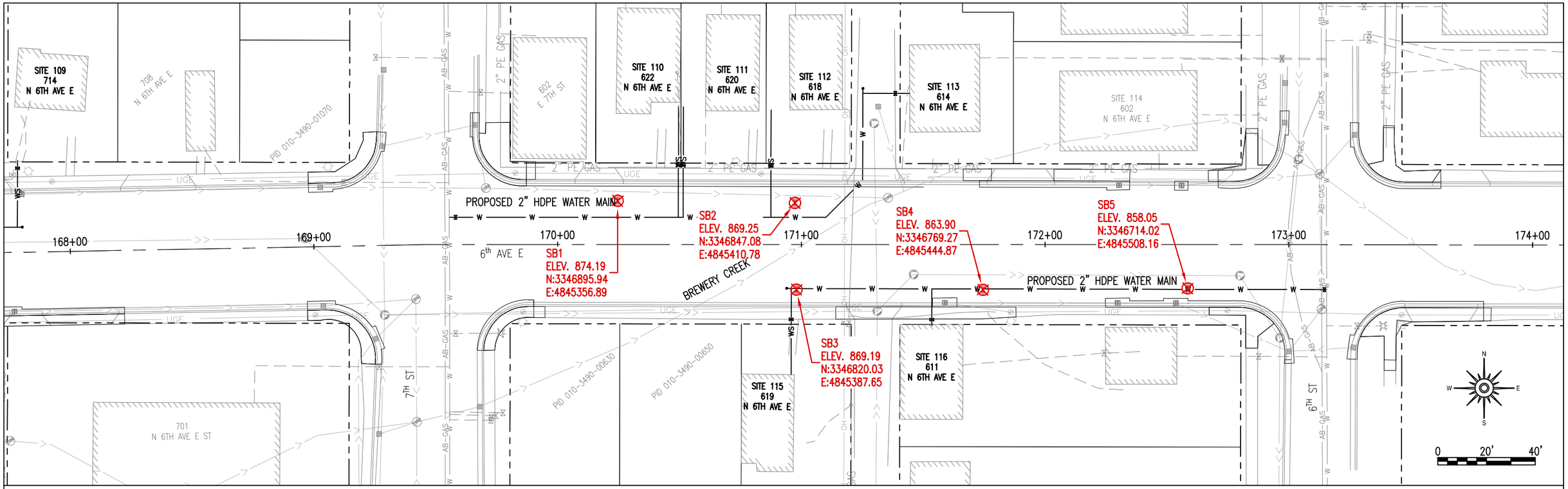
Sincerely,

_____

Chad R. Lowney, ICC
Sr. Engineering Tech.

Enclosures: Location Map, Boring Logs and Cross Section

i:\pwu\engineer\projects\2000-2499\2229_citywide_priority_lead_service_line_replacements_phase_1_site files\sites 100-119 (6th ave e)\water main
last saved by joetterer 2025/02/20 12:29:18 PM until



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: _____ TYPE NAME

DATE: 2025/02/20

LIC. NO: _____

CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

N 6TH AVE E (LEAD SERVICE LINE REPLACEMENT) BETWEEN 6TH AND 7TH STREET

CITY PROJECT NO.: 2229 | STATE AID PROJECT NO.: N/A

DRAWN BY: JDO

SOIL BORINGS

SHEET NO. SB1 OF SB1

EPC Engineering & Testing
Geotechnical • Environmental • Materials Engineering
539 Garfield Avenue
Duluth, Minnesota 55802

BORING NUMBER SB-25-01

CLIENT City of Duluth - Engineering
PROJECT NAME N. 6th Ave East Watermain Extension Rock Probes
PROJECT NUMBER 25G1807
PROJECT LOCATION Duluth, MN
DATE STARTED 2/19/25 **COMPLETED** 2/19/25
GROUND ELEVATION 874.19 ft **HOLE SIZE** 4"
DRILLING CONTRACTOR EPC Engineering & Testing
GROUND WATER LEVELS:
DRILLING METHOD CME 55 Truck Rig with Flyte Auger
AT TIME OF DRILLING None
LOGGED BY LT **CHECKED BY** CRL
AT END OF DRILLING None
NOTES
AFTER DRILLING None

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	Pocket Penetrometer	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
	0.0		10" Concrete Pavement	GB 1	100				
872.5	2.5		Granular Fill Road Base, brown, moist, with gravel.	GB 2	100				
870.0	5.0		Sandy Clay (CL) reddish brown, moist, trace gravel..						
867.5	7.5			GB 3	100				
865.0	10.0		Auger refusal at 10', probable bedrock surface.						
			Bottom of hole at 10.0 feet.						

EPC Engineering & Testing
Geotechnical • Environmental • Materials Engineering
539 Garfield Avenue
Duluth, Minnesota 55802

BORING NUMBER SB-25-02

CLIENT City of Duluth - Engineering
PROJECT NAME N. 6th Ave East Watermain Extension Rock Probes
PROJECT NUMBER 25G1807
PROJECT LOCATION Duluth, MN
DATE STARTED 2/19/25 **COMPLETED** 2/19/25
GROUND ELEVATION 869.25 ft **HOLE SIZE** 4"
DRILLING CONTRACTOR EPC Engineering & Testing
GROUND WATER LEVELS:
DRILLING METHOD CME 55 Truck Rig with Flyte Auger
AT TIME OF DRILLING None
LOGGED BY LT **CHECKED BY** CRL
AT END OF DRILLING None
NOTES
AFTER DRILLING None

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	Pocket Penetrometer	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
	0.0		10" Concrete Pavement	GB 1	100				
867.5			Granular Fill Road Base, brown, moist, with gravel.	GB 2	100				
	2.5		Sandy Clay (CL), reddish brown, moist, trace gravel.						
865.0									
	5.0								
862.5				GB 3	100				
	7.5								
860.0			Auger refusal at 10.75', probable bedrock surface.						
	10.0								
			Bottom of hole at 10.8 feet.						

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Duluth, Minnesota 55802

BORING NUMBER SB-25-03

CLIENT City of Duluth - Engineering
PROJECT NAME N. 6th Ave East Watermain Extension Rock Probes
PROJECT NUMBER 25G1807
PROJECT LOCATION Duluth, MN
DATE STARTED 2/19/25 **COMPLETED** 2/19/25
GROUND ELEVATION 869.19 ft **HOLE SIZE** 4"
DRILLING CONTRACTOR EPC Engineering & Testing
GROUND WATER LEVELS:
DRILLING METHOD CME 55 Truck Rig with Flyte Auger
AT TIME OF DRILLING None
LOGGED BY LT **CHECKED BY** CRL
AT END OF DRILLING None
NOTES
AFTER DRILLING None

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	Pocket Penetrometer	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
	0.0		8" Concrete Pavement	GB 1	100				
867.5	2.5		Granular Fill Road Base, brown, moist, with gravel.	GB 2	100				
865.0	5.0		Sandy Clay (CL) reddish brown, moist, trace gravel.	GB 3	100				
862.5			Auger refusal at 7', probable bedrock surface						
			Bottom of hole at 7.0 feet.						

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539 Garfield Avenue
Duluth, Minnesota 55802

BORING NUMBER SB-25-04

CLIENT City of Duluth - Engineering
PROJECT NAME N. 6th Ave East Watermain Extension Rock Probes
PROJECT NUMBER 25G1807
PROJECT LOCATION Duluth, MN
DATE STARTED 2/19/25 **COMPLETED** 2/19/25
GROUND ELEVATION 863.9 ft **HOLE SIZE** 4"
DRILLING CONTRACTOR EPC Engineering & Testing
GROUND WATER LEVELS:
DRILLING METHOD CME 55 Truck Rig with Flyte Auger
AT TIME OF DRILLING None
LOGGED BY LT **CHECKED BY** CRL
AT END OF DRILLING None
NOTES
AFTER DRILLING None

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	Pocket Penetrometer	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
	0.0		7" Concrete Pavement	GB 1	100				
862.5			Granular Fill Road Base, brown, moist, with gravel.	GB 2	100				
	2.5		Sandy Clay (CL) reddish brown, moist, trace gravel.						
860.0				GB 3	100				
	5.0		Auger refusal at 6.5', probable bedrock surface.						
857.5			Bottom of hole at 6.5 feet.						

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Geotechnical • Environmental • Materials Engineering
539 Garfield Avenue
Duluth, Minnesota 55802

BORING NUMBER SB-25-05

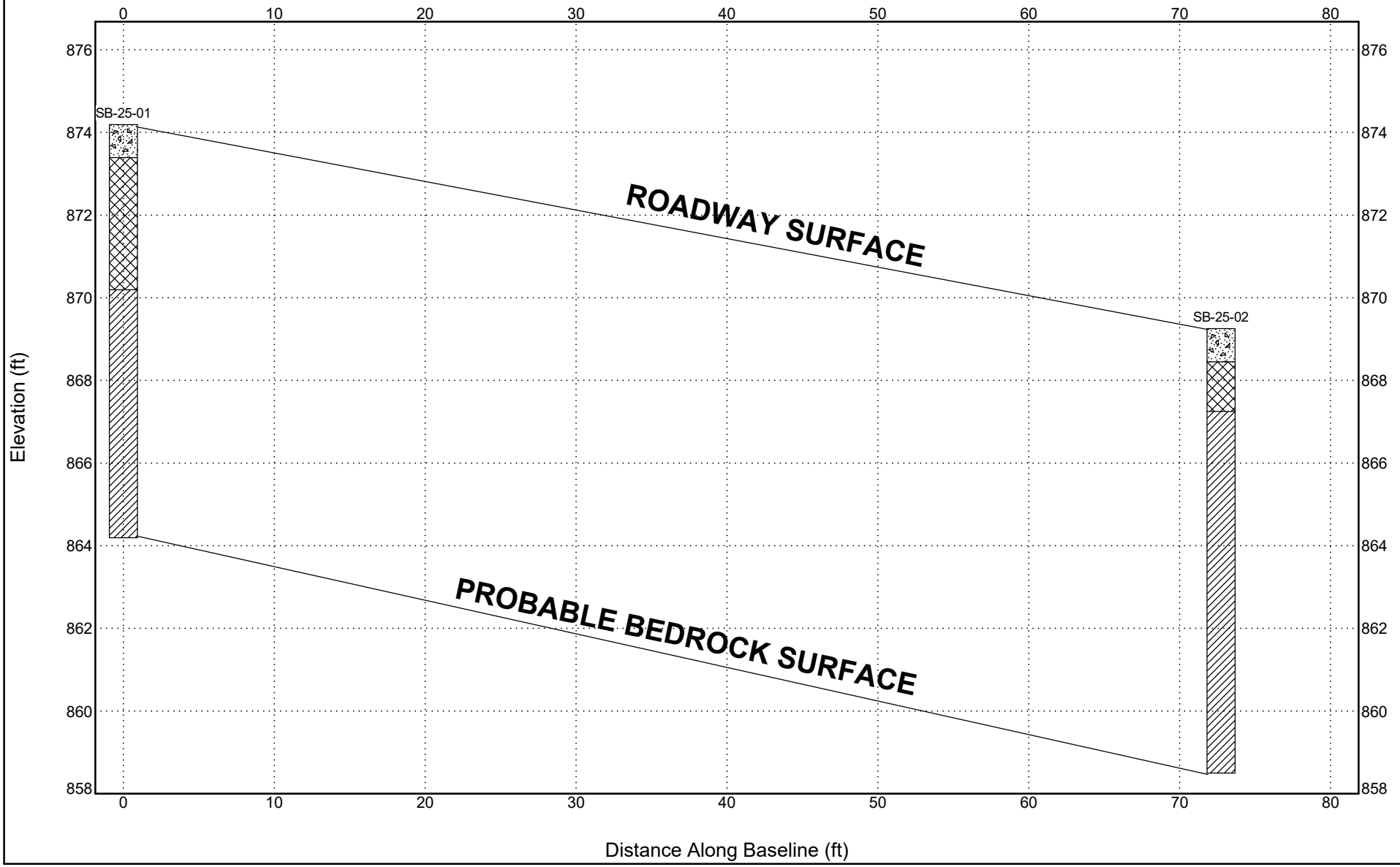
CLIENT City of Duluth - Engineering
PROJECT NAME N. 6th Ave East Watermain Extension Rock Probes
PROJECT NUMBER 25G1807
PROJECT LOCATION Duluth, MN
DATE STARTED 2/19/25 **COMPLETED** 2/19/25
GROUND ELEVATION 858.05 ft **HOLE SIZE** 4"
DRILLING CONTRACTOR EPC Engineering & Testing
GROUND WATER LEVELS:
DRILLING METHOD CME 55 Truck Rig with Flyte Auger
AT TIME OF DRILLING None
LOGGED BY LT **CHECKED BY** CRL
AT END OF DRILLING None
NOTES
AFTER DRILLING None

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	Pocket Penetrometer	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
857.5	0.0		10" Concrete Pavement	GB 1	100				
			Granular Fill Road Base, brown, moist, with gravel.	GB 2	100				
	2.5		Sandy Clay (CL) reddish brown, moist, trace gravel.						
855.0				GB 3	100				
	5.0								
852.5			Auger refusal at 6.75', probable bedrock surface.						
			Bottom of hole at 6.8 feet.						

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SUBSURFACE DIAGRAM

CLIENT City of Duluth - Engineering
PROJECT NUMBER 25G1807
PROJECT NAME N. 6th Ave East Watermain Extension Rock Probes
PROJECT LOCATION Duluth, MN

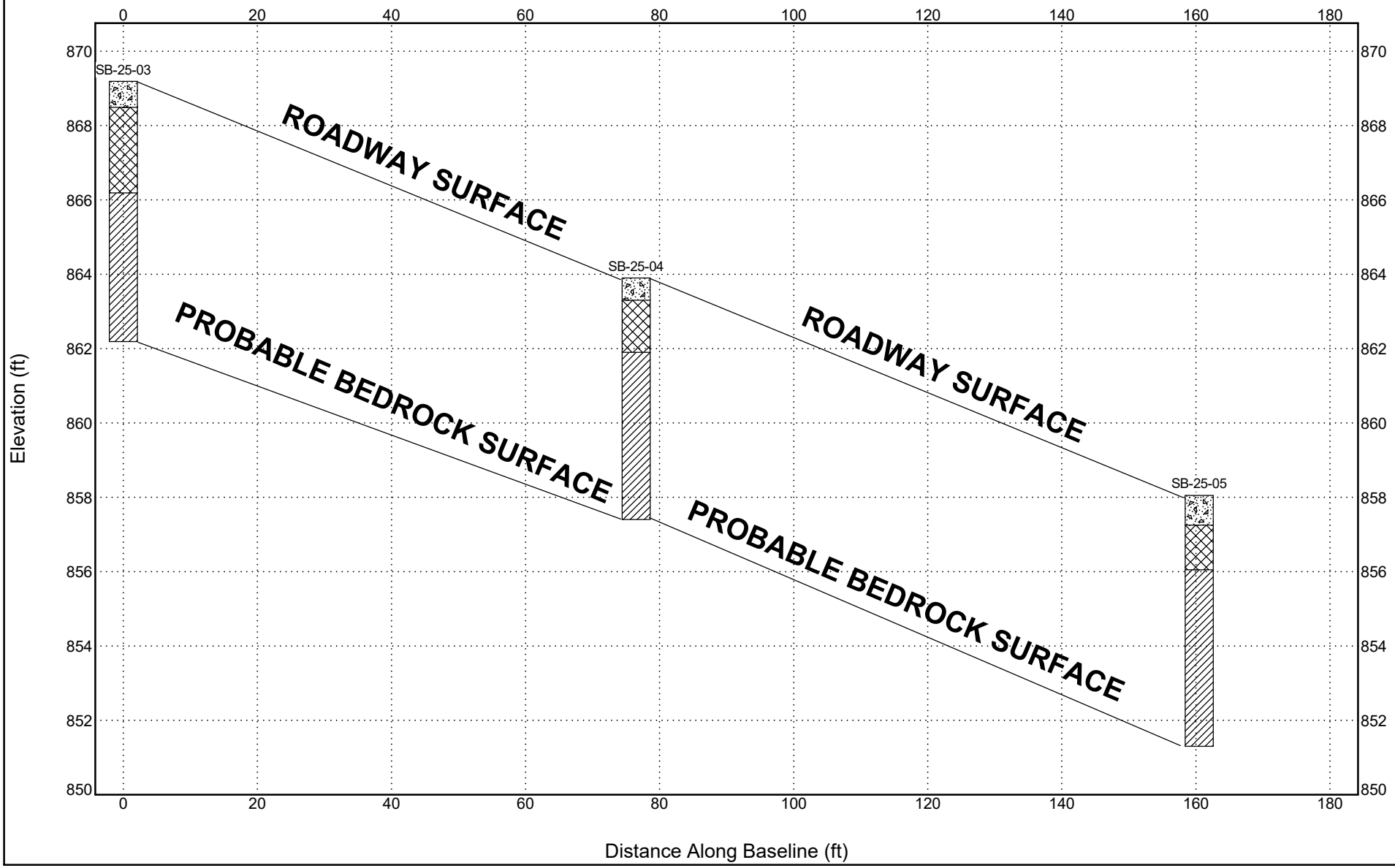


STRATIGRAPHY & GW - A SIZE 25G1807 N. 6TH AVE EAST ROCK PROBES.GPJ GINT US LAB.GDT 2/21/25

EPC Engineering & Testing
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SUBSURFACE DIAGRAM

CLIENT City of Duluth - Engineering
PROJECT NUMBER 25G1807
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STRATIGRAPHY & GW - A SIZE 25G1807 N. 6TH AVE EAST ROCK PROBES.GPJ GINT US LAB.GDT 2/21/25