



To:

Kariann Payton, GIS Specialist
City of Duluth GIS
Shawn Krizaj, Duluth Fire Chief
John Otis, Duluth Deputy Fire Chief
Lisa Consie, Fire Marshal
Amanda Mangan, Assistant City Attorney
Nicholas Bax, Assistant City Attorney
Danielle Erjavec, Senior Property Services Specialist
Ben VanTassel, Planning and Economic Development Director
Steven Robertson, Construction Services Manager
Jenn Reed Moses, Planning & Community Development Mgr.
Tricia Hobbs, Economic Development and DEDA Manager
Blake Nelson, Building Inspections Supervisor
Armella Bijold, Permitting Services Administrator
Tom Church, Senior Housing Developer
Kyle Deming, Senior Planner
Carolyn Gurske, Construction Services Permit Coordinator
Dehli Heikes, Construction Services Permit Coordinator
Emily Schouweiler, Construction Services Permit Coordinator
James Gittemeier, Senior Transportation Planner
Christian Huelsman, Planner II
Suzanne Kelley, Senior Planner
Chris Lee, Planner II
Jason Mozol, Senior Planner
Reina Owecke, Planner II
Sam Smith, Administrative Info Specialist
Tara Smith, Plans Examiner
Mike Ceynowa, Duluth Police Chief
Mark Bauer, Parking Manager
Erik Birkeland, Director, Property, Parks and Libraries Director
Jessica Peterson, Parks & Recreation Manager
Abbie Hopper, Parks & Grounds Maintenance Manager
Cliff Knettel, Parks & Recreation Assistant Manager
Hank Martinsen, Property Services Supervisor
Bryan Thoreson, Facility Operations & Maintenance Supr.

Clark Christensen, City Forester
Katie Bennett, Senior Parks Planner
Jim Shoberg, Senior Landscape Architect
Cari Pedersen, Interim Public Works and Utilities Director
Cindy Voigt, City Engineer
Cari Pedersen, Chief Engineer of Transportation
Howard Smith, Chief Engineer of Utilities
Greg Guerrero, Utility Operations Manager
Chris Kleist, Utility Operations Supervisor
Bill Bergstrom, Senior Engineering Specialist
Peggy Billings, Senior Engineering Specialist
Ryan Granlund, Utility Programs Coordinator
Tom Johnson, Senior Engineer
Patrick Loomis, Senior Engineer
Duncan Schwensohn, Senior Engineer
Andy Swanson, Sanitary I/I Programs Coordinator
Chris Belden, Duluth Transit Authority
Ron Chicka, MIC Director
John Hinzmann, MnDOT District 1 Land Mgmt Supr.
Jim Miles, MnDOT District 1 Traffic Engineer
Cliff Bentley, MnDNR EWR District Manager
Patricia Fowler, MnDNR Liaison
Brianna Speldrich MnDNR Region 2 Area Hydrologist
Anne Sims, St. Louis County Assessor's Office
Jon Osterberg, St. Louis County Assessor's Office
Stacy Caldwell Melcher, St. Louis County Land & Minerals
Jim Foldesi, St Louis Co. Public Works & Transportation
Brandon Kohlts, WLSDD Dir. of Planning & Tech Services
Michael Coughlin, CenturyLink
Chad Lawrence, Charter Communications
Bill Byers, Lumen
Daniel Scribner, Lumen
Dean Dulinski, Minnesota Power
Jill Helmer, Minnesota Power

Date: May 14, 2026

Subject: Planning Commission Meeting Agenda Items for June 9, 2026

The Duluth City Planning Commission has received **9** new application(s) for review. Please review the technical aspects and desirability of the proposals and provide comments at your earliest convenience. **Note that City of Duluth reviewers with access to EPL can view the applications there as well, by searching for the project number under "Manage Plans"**

- PLCUP-2603-0008** Concurrent Use Permit for Wireless Utility near 3850 Haines Rd by Smartlink Group [CH]
- PLSUP-2605-0007** Special Use Permit for Electric Substation at 507-511 W College St by Minnesota Power [JM]
- PLVAC-2605-0003** Vacation of Right of Way near 422 N 19th Ave W by Michael Contardo [CL]
- PLVAR-2602-0003** Variance from Shoreland Standards at 3821 W 7th St by Randy Gafner [RO]
- PLVAR-2604-0011** Variance from Shoreland Standards along Chester Creek by City of Duluth, Parks [JM]

PLVAR-2604-0012 Variance from Shoreland Standards along a Tributary of Merritt Creek by City of Duluth Parks and Recreation [JM]

PLVAR-2605-0013 Variance to Side Yard Setback at 828 E 2nd St by Emma Hamilton [CL]

PLUMA-2604-0001* Rezoning Form Districts to Main Street Districts in the Unified Development Code

PLUMA-2605-0002 Rezoning of Piedmont Trail System Parcels from RR-1 to P-1 by City of Duluth [RO]

* This rezoning will include all areas currently zoned as Form District. Maps and full reports for review will be made available on the City's website the week prior to the meeting within the associated meeting agenda:

<https://duluthmn.gov/boards-commissions/planning-commission/>.

We appreciate your time and input. If you have any questions, comments or need additional background information, please find the initials of the assigned planner at the end of the application item and contact the planner directly.

Christian Huelsman - chuelsman@duluthmn.gov

Chris Lee - clee@duluthmn.gov

Jason Mozol - jmozol@duluthmn.gov

Reina Owecke – rowecke@duluthmn.gov

Map for PLCUP-2603-0008:

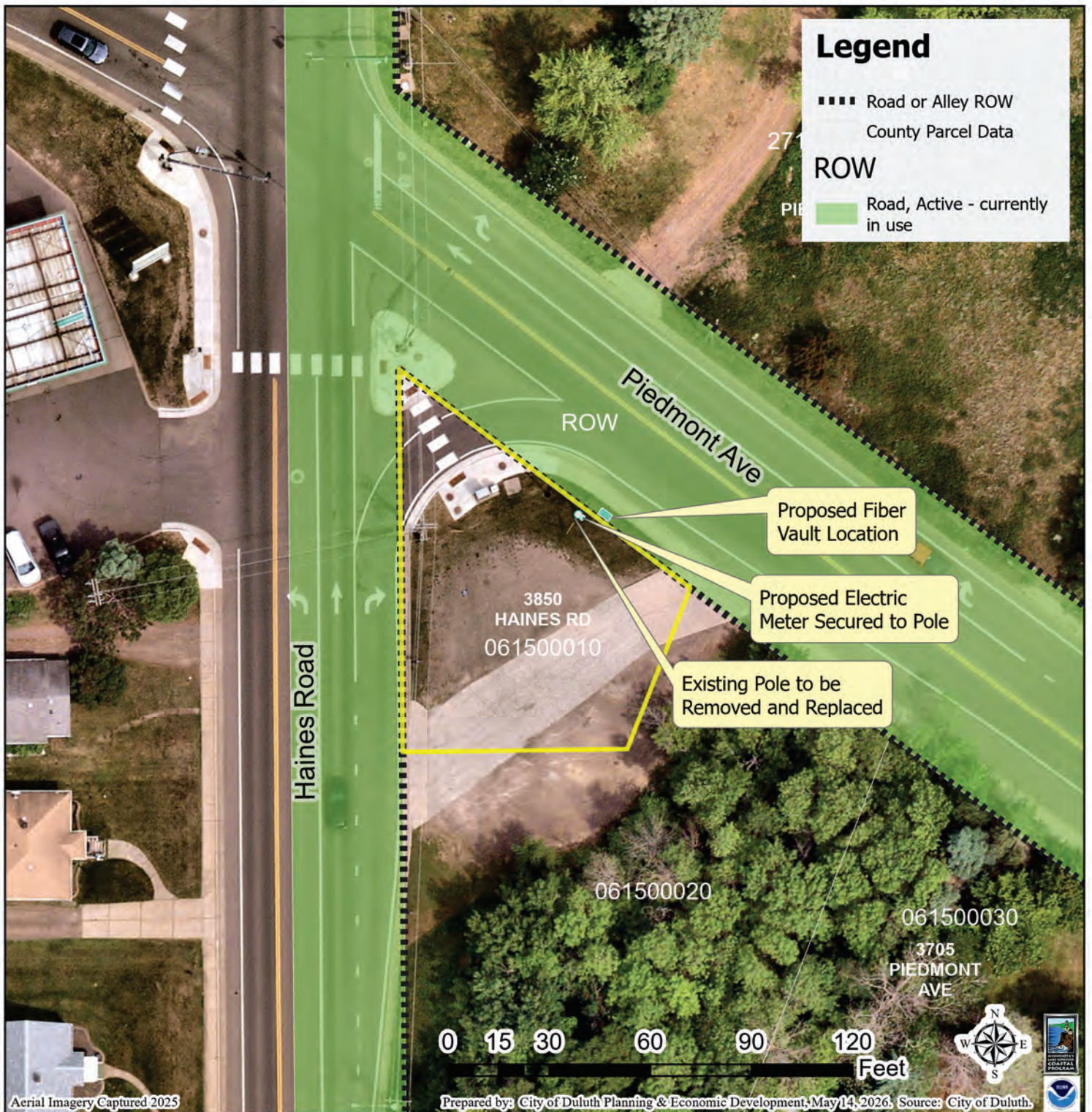


Figure 1.

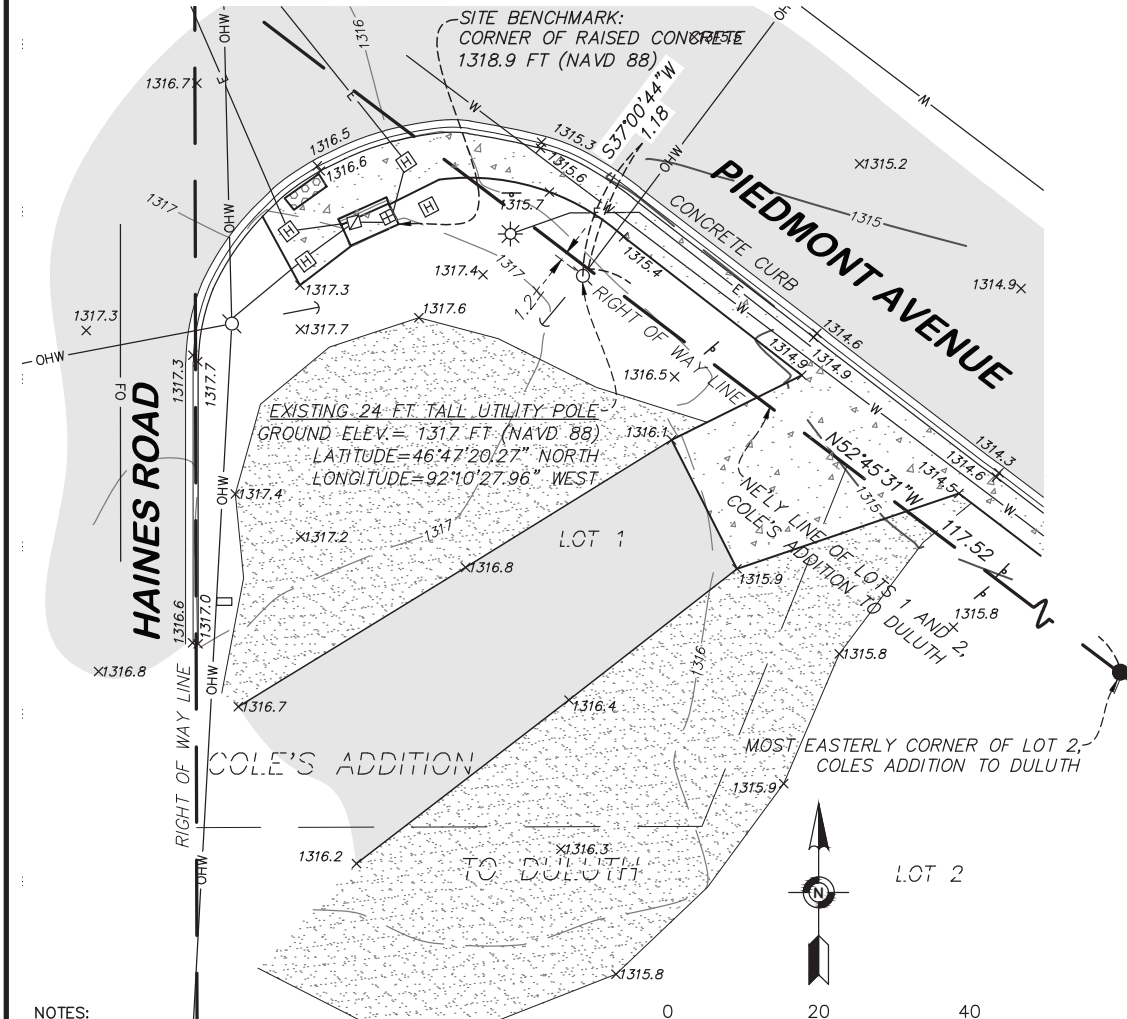
Aerial imagery captured in 2025, showing Parcel #010-0615-00010 outlined along the southeast corner of Piedmont Ave and Haines Rd. Proposed location of the fiber vault is within the Piedmont Ave right-of-way.

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

**SITE LOCATION SURVEY FOR:
EDGE CONSULTING ENGINEERS, INC.**

SITE LOCATION: Piedmont Avenue and Haines Road, Duluth, Minnesota

SITE NAME: CRAN RUMW GECHL 008



NOTES:

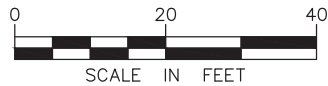
1. The orientation of this survey is based on the St. Louis County (South), Minnesota Coordinate Grid, NAD 83-2011 Adjustment.
2. The contours depicted hereon are per elevation data collected while conducting the fieldwork using Vertical Datum of 1988 (NAVD 88). The contour interval is 1 foot.
3. Existing utilities, services and underground structures shown hereon were located either physically, from existing records made available to us, by resident testimony, or by locations provided by Gopher State One Call, per Ticket No. 253112008. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Other utilities and services may be present and verification and location of all utilities and services should be obtained from the owners of the respective utilities prior to any design, planning or excavation.

DESCRIPTION

A point located within that part Lot 1, Cole's Addition to Duluth, St. Louis County, Minnesota described as follows:

Commencing at the most easterly corner of Lot 2, Cole's Addition to Duluth; thence North 52 degrees 45 minutes 31 seconds West, assumed bearing, along the northeasterly line of Lots 1 and 2, Cole's Addition to Duluth, a distance of 117.52 feet; thence South 37 degrees 00 minutes 44 seconds West, a distance of 1.18 feet to said point.

Dated this 25th day of February, 2026



LEGEND

- ELECTRIC METER
- HANDHOLE
- LIGHT
- UTILITY POLE
- GUY WIRE
- TRAFFIC CONTROL BOX
- SIGN
- WATERMAIN
- UNDERGROUND ELECTRIC
- OVERHEAD WIRE
- UNDERGROUND FIBER OPTIC
- TRUNCATED DOME RAMP
- SPOT ELEVATION
- EXISTING CONTOUR LINE
- BITUMINOUS SURFACE
- CONCRETE SURFACE
- GRAVEL SURFACE

SITE LOCATION SURVEY FOR:
EDGE CONSULTING ENGINEERS, INC.
SITE LOCATION: Piedmont Avenue
and Haines Road, Duluth, Minnesota



475 Old Highway 8 NW, Suite 200
New Brighton, Minnesota 55112
PHONE: (612) 466-3300
WWW.EFNSURVEY.COM
COPYRIGHT © 2025 By EGAN, FIELD & NOWAK, INC.



7800 HERMES AVE. S., 3RD FLR
PRIMROSE, MN 55378



ENGINEER SEAL:
I HEREBY CERTIFY THAT THIS REPORT WAS PREPARED BY ME OR UNDER MY SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
SIGNATURE: _____
TYPED OR PRINTED NAME: _____
U.S. STATE: _____
DATE: _____

NOT FOR CONSTRUCTION

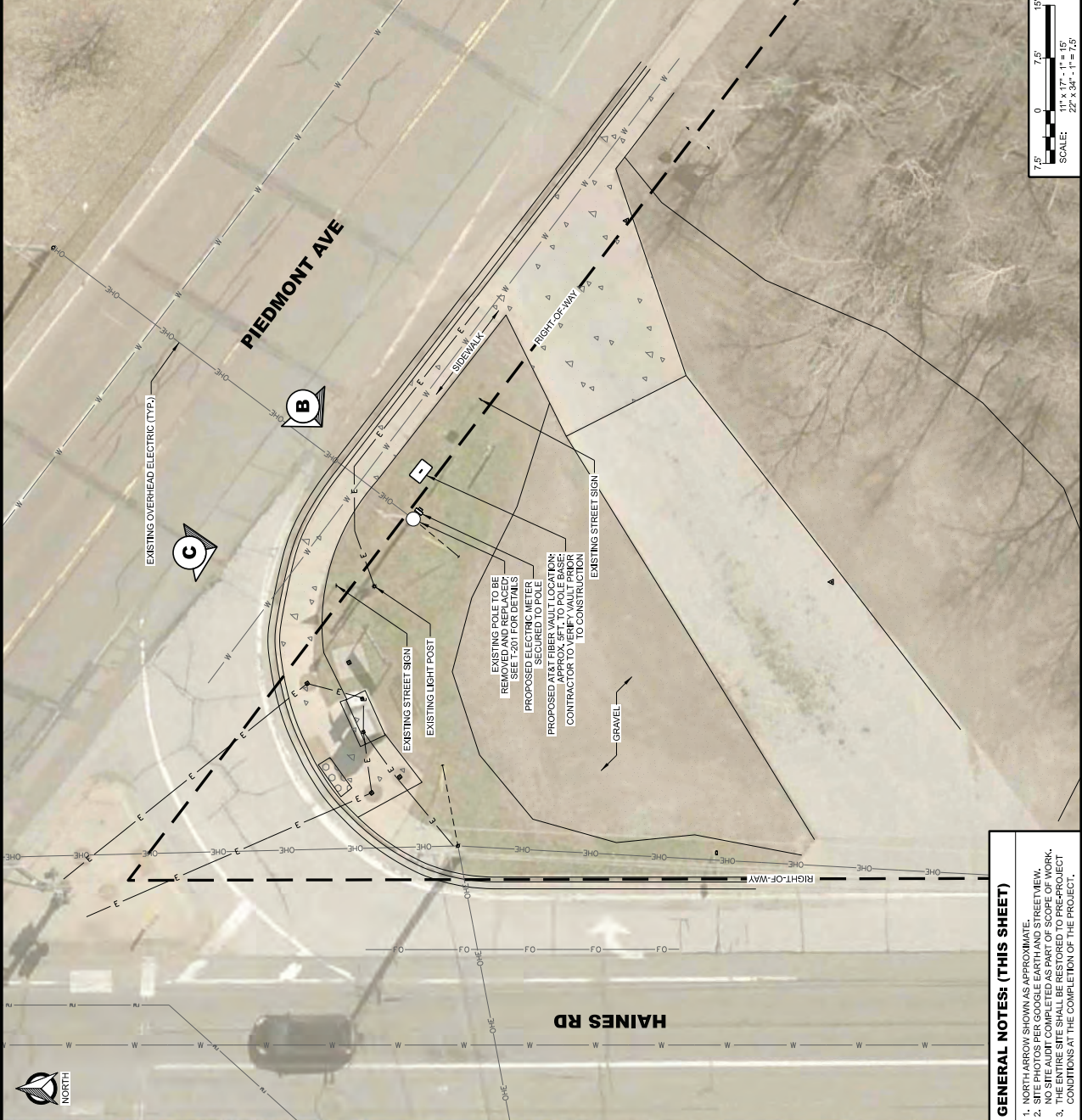
SITE PLAN

DULUTH, MINNESOTA

CRAN RUMW, GECHL 008

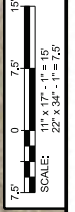
NO.	DATE	DESCRIPTION
1	12/12/23	REV A
2	02/26/24	REV B

CHECKED BY:	MLM
EDGE SITE ID:	S18112
EDGE PROJ.#:	44880
SET:	PRELIM
SHEET NUMBER:	C-101



GENERAL NOTES: (THIS SHEET)

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. SITE PHOTOS PER GOOGLE EARTH AND STREET VIEW.
3. NO SITE AUDIT COMPLETED AS PART OF SCOPE OF WORK.
4. THE ENTIRE SITE SHALL BE RESTORED TO PRE-PROJECT CONDITIONS AT THE COMPLETION OF THE PROJECT.



A AERIAL OVERVIEW



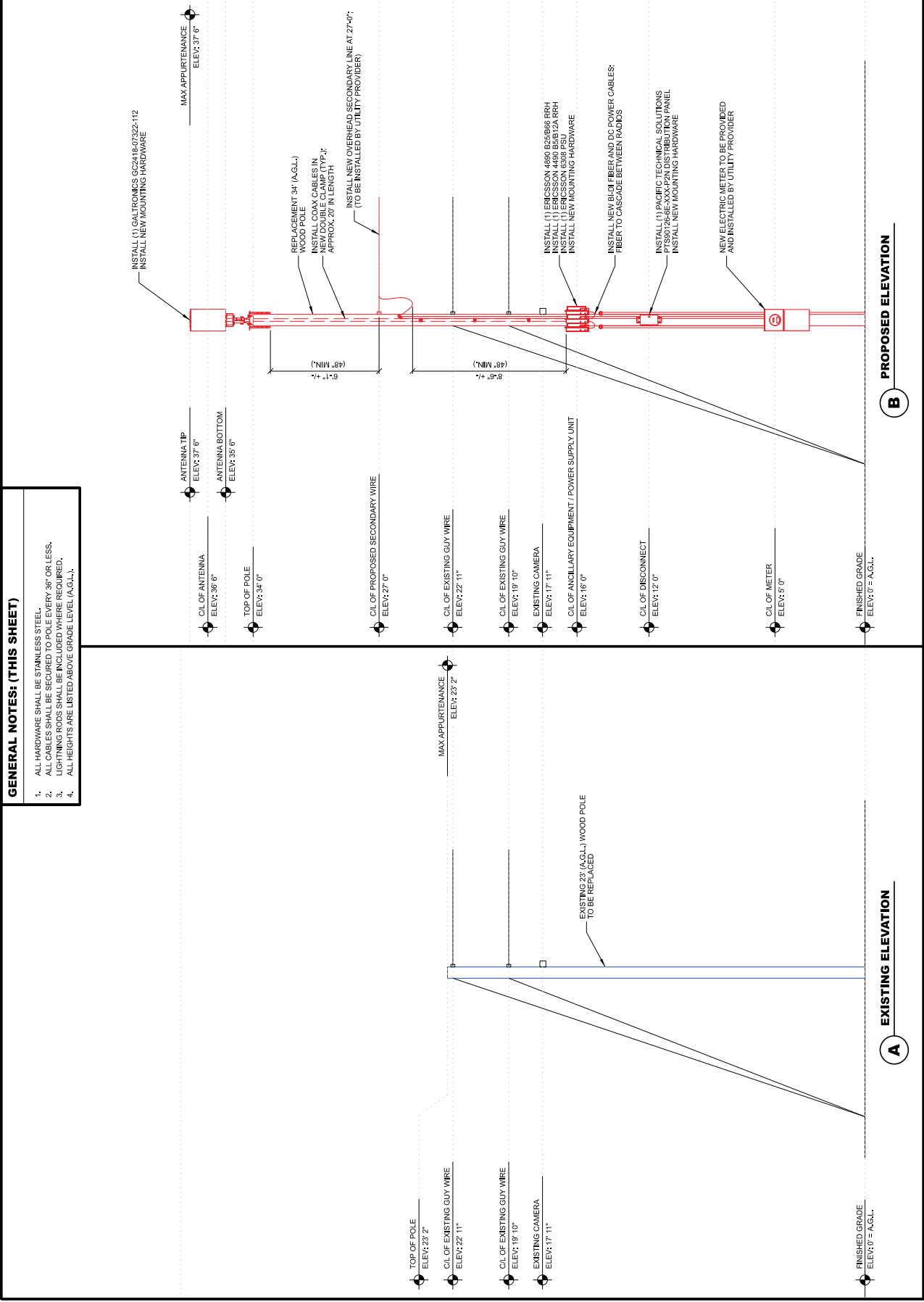
B OVERVIEW OF SITE



C OVERVIEW OF SITE

GENERAL NOTES: (THIS SHEET)

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING FODS SHALL BE INCLUDED WHERE REQUIRED.
4. ALL HEIGHTS ARE LISTED ABOVE GRADE LEVEL (A.G.L.).



ENGINEER SEAL:
 I HEREBY CERTIFY THAT THIS REPORT WAS PREPARED BY ME OR UNDER MY SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: _____
 TYPED OR PRINTED NAME: _____
 U.S. MAIL ADDRESS: _____
 DATED: _____

NOT FOR CONSTRUCTION

SITE ELEVATION
 CRAN RUMW, GECHL 008
 DULUTH, MINNESOTA

REV	DATE	DESCRIPTION
T-1	12/12/23	REV A
M-1	02/28/24	REV B

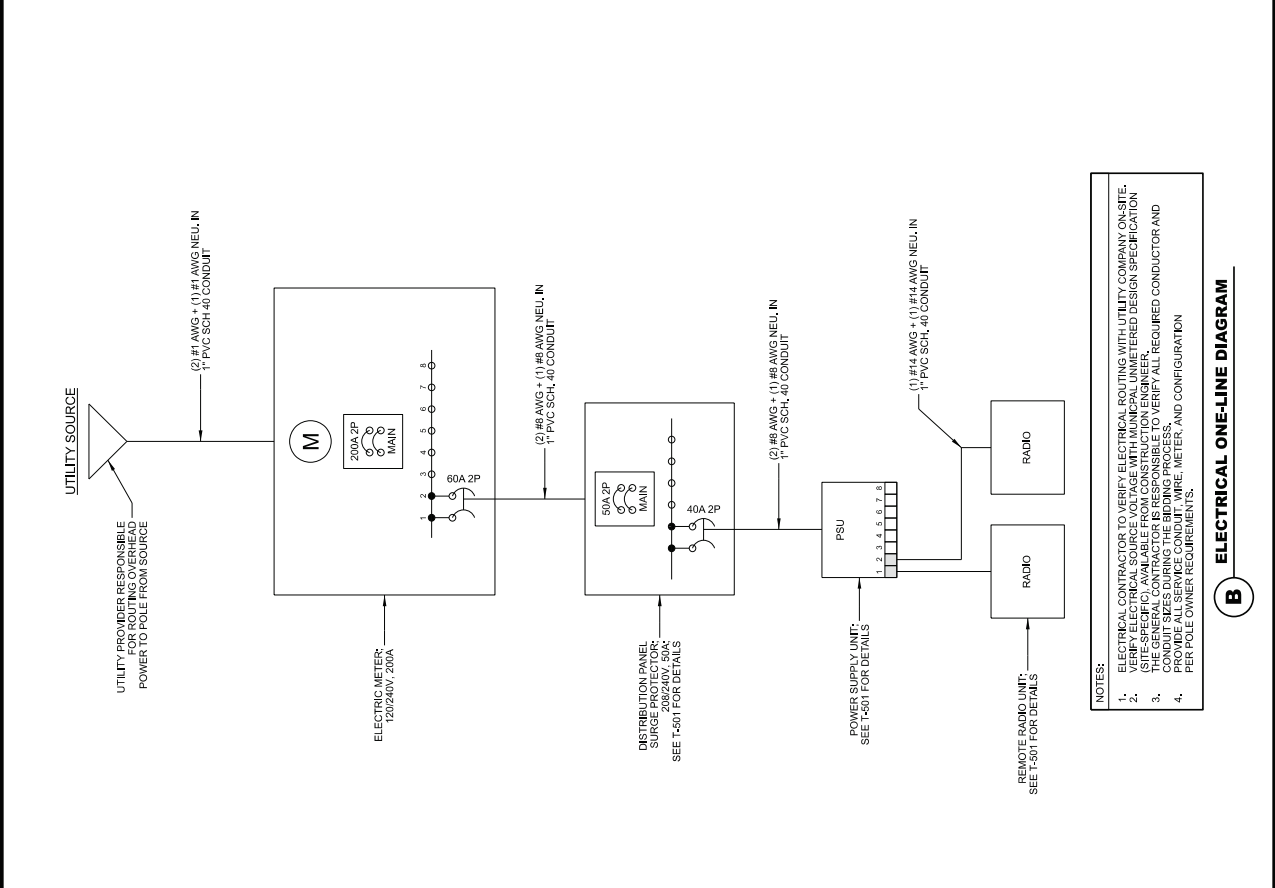
CHECKED BY:	MJM
EDGE SITE ID:	S18112
EDGE PROJ.#:	44880
SET TYPE:	PRELIM
SHEET NUMBER:	T-201

UTILITY DETAILS
CRAN RUMW GECHL 008
DULUTH, MINNESOTA

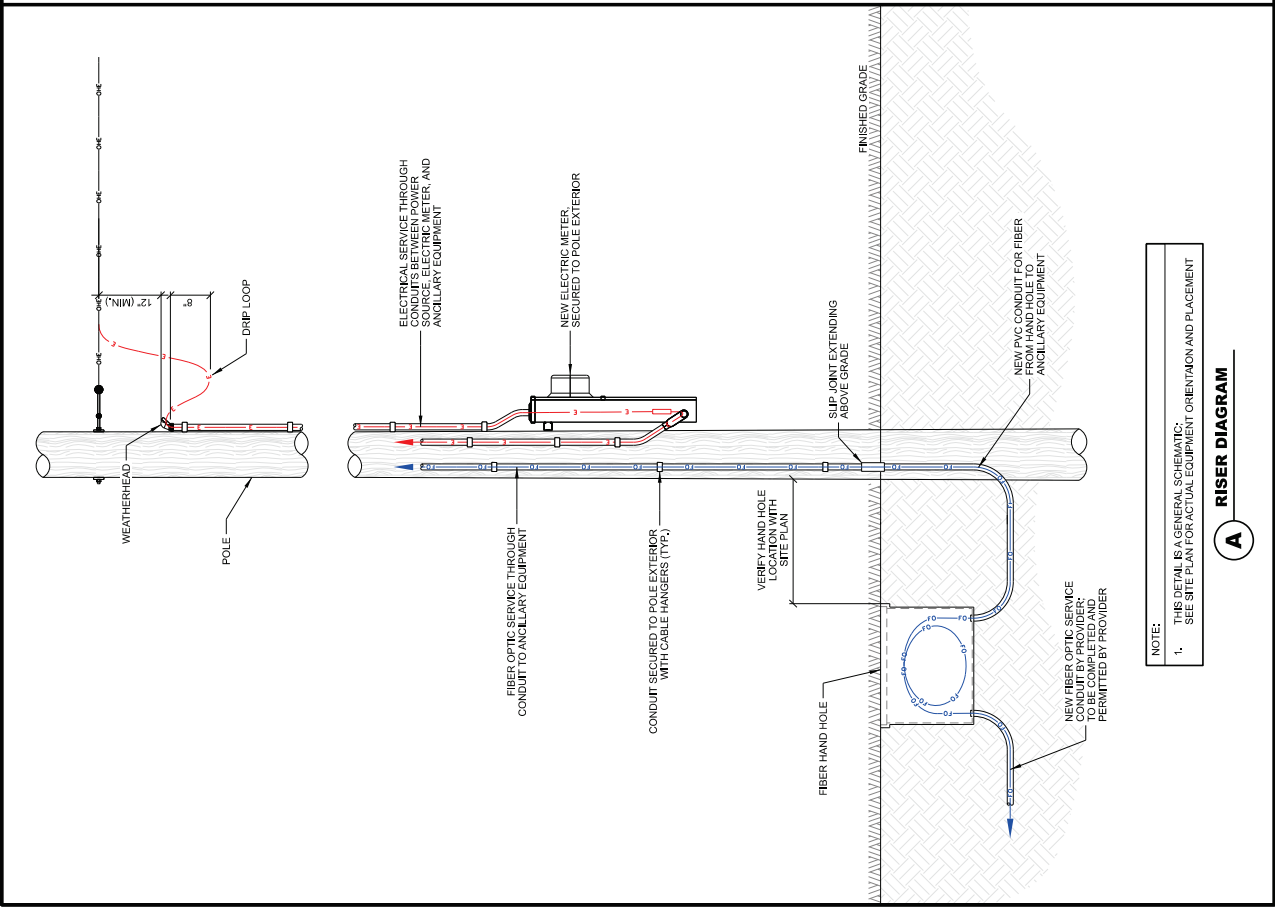
NO.	DATE	DESCRIPTION
1	12/12/25	REV A
2	02/26/26	REV B

CHECKED BY	MJM
DATE	12/12/25
SHEET NUMBER	44880
SET TYPE	PRELIM

E-501



B ELECTRICAL ONE-LINE DIAGRAM



A RISER DIAGRAM

REV#	DATE	DESCRIPTION
T-1	10/21/2024	REV A
M-1	02/02/2025	REV B

CHECKED BY:	MJM
DATE:	10/21/2024
PROJECT #:	44880
SHEET #:	PRELIM



AT&T MOBILITY - CRAN/ SMALL CELL RADIO FREQUENCY (RF) EXPOSURE COMPLIANCE LETTER

RF EXPOSURE COMPLIANCE LETTER

Date: 10/22/2024

Band	Model	700	850	PCS	AWS	WCS	5 GHz	m
Antenna Power Input (W)	Gamma Nu OY9X360F16	0	0	240	240	0	0	0

PURPOSE OF THIS DOCUMENT

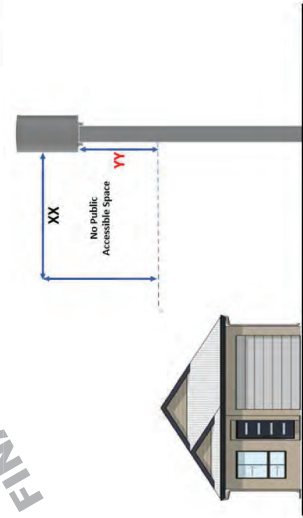
This Compliance Letter ("CL") confirms that the AT&T Mobility Centralized Radio Access Network (CRAN) or Small Cell node defined below meets Federal Communications Commission (FCC) RF exposure compliance requirements specified in 47 CFR §1.1310, provided that the actions specified in the "Compliance Actions" and "Compliance Letter Document" sections of this document are completed before the CRAN or Small Cell is placed into service.

DEFINITION OF SMALL CELLS INCLUDED IN THIS COMPLIANCE LETTER

The small cell antenna and its operating parameters covered by this Compliance Letter are:

- 1) Antennas: Gamma Nu OY9X360F16
- 2) Lowest Antenna Centerline (LAC): 25 feet above ground level
- 3) Transmission Frequency: PCS/AWS
- 4) Maximum Power Input: 240 Watts per antenna (100/240)
- 5) Antenna Position: Top Mount (TGP)
- 6) Co-located: No other emitters are on pole/post mounting location
- 7) Separation Distance: No publicly accessible locations (e.g., other poles, apartment balconies, rooftop, windows) within the space identified by XX x 13 feet horizontal distance from the antenna and YY-03 feet beneath the antenna bottom HP.

Depiction:



April 17, 2025
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AT&T MOBILITY - CRAN/ SMALL CELL RADIO FREQUENCY (RF) EXPOSURE COMPLIANCE LETTER

INVALIDATION OF THIS COMPLIANCE LETTER

This Compliance Letter becomes invalid if there are any RF modifications to the site, including but not limited to, changes to the conditions above, changes to antenna positions, additional sectors deployed, or other nearby emitters installed, etc.

The CRAN or Small Cell team managing the cell(s) to which this Compliance Letter applies must inform HQ/RAN when any of the listed changes occur and request a new Compliance Letter study.

Class 2C Sites:

These are host-operated sites. AT&T RAN HQ will review EME reports provided by host companies and make a determination for compliance based on these reports. CL will not be required for host operated sites.

RF EXPOSURE COMPLIANCE ANALYSIS

RF exposure compliance was computationally evaluated using theoretical modeling contained in the FCC's OET Bulletin 65, considering a worst-case scenario in which peak power was transmitted 100% of the time. The MPE distance calculation incorporates cable loss of 0.5 dB for PCS and 0.5 dB for AWS bands, as applicable. The results, which are based on the FCC's maximum permissible exposure (MPE) limits for the general population, indicates the following MPE distance from the antenna.

Horizontal MPE Distance (in feet): 13

COMPLIANCE ACTIONS

Design Changes:

The following RF design changes are required by this CL to comply:

- NA

Signage Actions

Two AT&T 7" x 7" Caution sign(s) must be placed 3 feet beneath the antenna on the antenna's boresight or, in the event of an obstruction or other impediment to such placement, within 1 foot above or below that location. The Caution signs must specify that a distance of 13 feet must be kept from the antenna. The drawing in Appendix D of this document illustrates signage placement. Other options for deployment of signage may be discussed with HQ RAN Compliance Team if the pole/post owner refuses to allow signage to be posted on the pole or if other obstacles arise. The sign will inform the person of the potential for high exposure levels and provide a phone number to call and arrange for power to be removed from the antennas for the duration of work.

April 17, 2025
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7900 HERMES AVE. S., 3RD FLOOR
MINNEAPOLIS, MN 55425
PHONE: 763-833-1537
FAX: 763-833-1538
WWW.EDGECONSULTINGENGINEERS.COM



10 BOURCHIER DRIVE
ANDOVER, MN 55002



7900 HERMES AVE. S., 3RD FLOOR
MINNEAPOLIS, MN 55425

ENGINEER SEAL:
I HEREBY CERTIFY THAT THIS REPORT WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: _____
TYPED OR PRINTED NAME: _____
U.S. _____
DATE: _____
NOT FOR CONSTRUCTION

COMPLIANCE LETTER

CRAN RUMW GECHL 008
DULUTH, MINNESOTA

REV	DATE	DESCRIPTION
TJ	12/12/22	REV A
MM	02/28/23	REV B

CHECKED BY	MJM
DATE	5/18/23
PROJECT #	44880
SET TYPE	PRELIM
SHEET NUMBER	R-002

AT&T MOBILITY - CRAN/ SMALL CELL RADIO FREQUENCY (RF) EXPOSURE COMPLIANCE LETTER



Actions to be taken by the RAN RF Design Engineer (RFDE)

The RFDE shall populate and approve the fields below, by adding a signature and date.

Name of CRAN or Small Cell RF Engineering POC: **Kate Klungtvedt**

Title: **MNP - RAN Design Engineer**

Phone: **612-425-6461**

Signature: _____

Date of Signature: _____

Upon completing the information above and signing, C&E or RFDE will upload the completed CL as instructed in Appendix B below.

Actions to be taken by the Mobility C&E National PMO

The Mobility C&E National PMO shall upload a copy of the unsigned CL into a SharePoint location managed by the Mobility C&E National PMO prior to site construction start. Following completion of site construction and signage actions, Mobility C&E PM will upload the signed copy of the CL into Comply, which will flow to FileNet, by following the instructions in Appendix B.

APPENDICES ON FOLLOWING PAGES

- APPENDIX A: Accessing the CRAN and Small Cell CL Library
- APPENDIX B: Naming Conventions for Uploading Completed CLs into Comply
- APPENDIX C: Denatification SharePoint Link
- APPENDIX D: RF Signage Placement

AT&T MOBILITY - CRAN/ SMALL CELL RADIO FREQUENCY (RF) EXPOSURE COMPLIANCE LETTER



Leasing Agreements

In anticipation of inquiries and concerns of employees, contract workers, and others that may enter areas in close proximity to the antennas (collectively, "Covered Persons"), leasing agreements should include language that obligates site owners to:

- Show the antennas to all Covered Persons, as necessary;
- Instruct all Covered Persons to remain at least 13 feet away from the antennas;
- Instruct all Covered Persons to inform the pole/post owner if there is a need to get closer than 13 feet from the antennas;
- Instruct all Covered Persons to coordinate work near the antennas with the pole/post owner;
- Contact AT&T at 800-638-2822, opt. 9, 3, to arrange for the appropriate antenna(s) to be denatified when needed if Covered Persons must work near the antennas, to provide confirmation to the Covered Persons when the antenna(s) have been de-energized, and to inform AT&T when it's safe to restore energy to the antennas.

In the event any RF modifications are made to a site, AT&T must also reassess the technical parameters of the small cells identified above to confirm compliance with the FCC exposure limits.

COMPLETING THIS CL

Review the **CRAN and Small Cell RF Safety Compliance Job Aid** for assistance with completing this Compliance Letter. The job aid may be retrieved from the Duplication SharePoint using the link in Appendix C.

Actions to be taken by the HQ RF Safety Compliance Team

The HQ RAN RF Safety Compliance Team will collaborate with the C&E Denatification N-PMO Team to address new issues with signage permitting, deployments, etc., as those issues arise during CRAN/Small Cell deployment.

Actions to be taken by the AT&T Market Site Acquisition PM (AMSAP)

The AMSAP shall complete the fields below for each site, but are **NOT TO SIGN** the section below.

The AMSAP may account for multiple sites/nodes by entering USIDs, FA#s, and addresses for each in the spaces below.

CRAN or Small Cell USID: 182767
CRAN or Small Cell FA#: 14803941
Site Address: 2816-2820 BRYANT AVENUE SOUTH, MINNEAPOLIS, MN 55408

Staff Report Map for PLSUP-2605-0007:



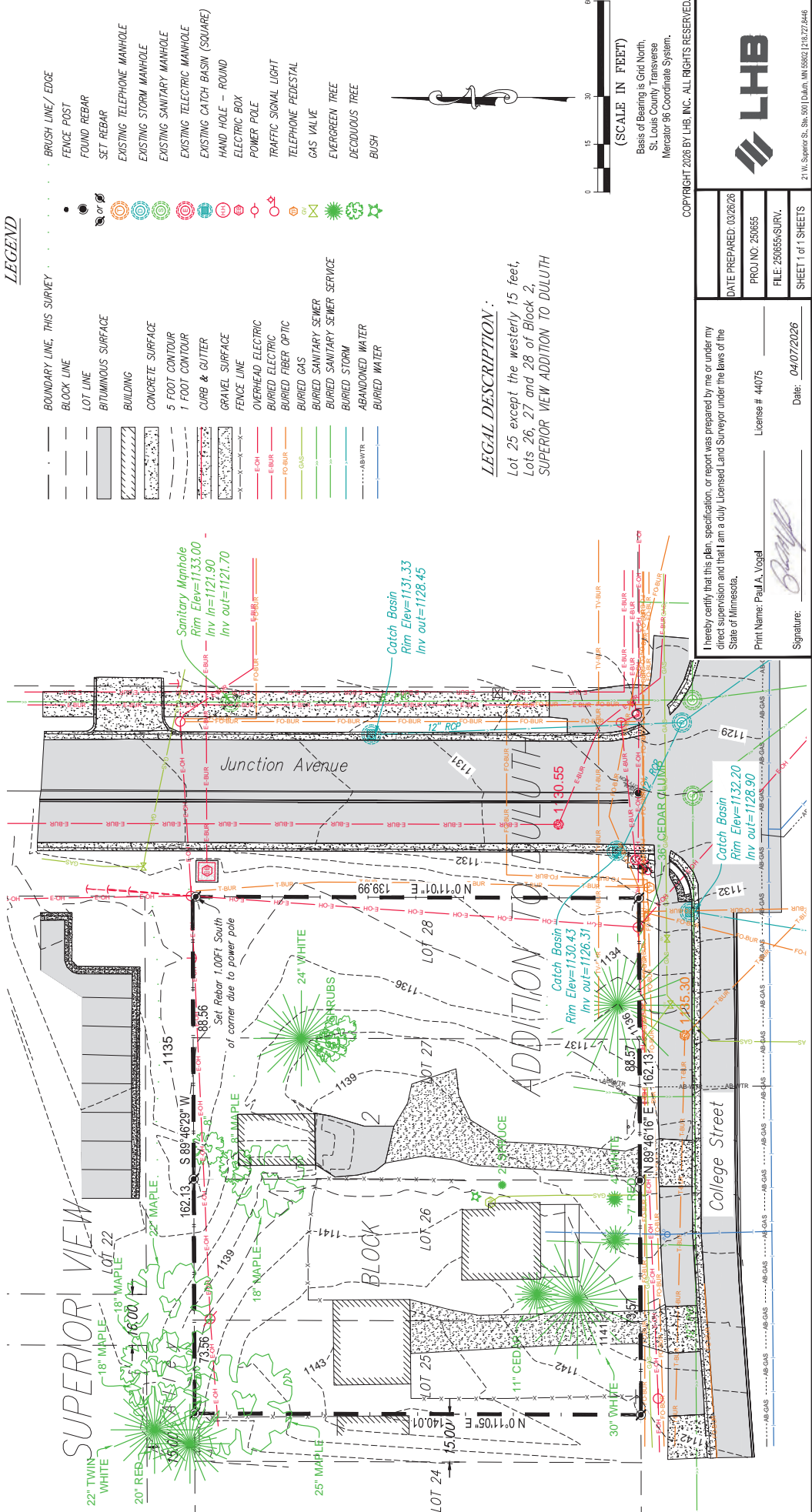
Figure 1.

Aerial imagery captured in 2025, showing Parcels #010-3110-01780, #010-3110-01780, and #010-3120-03940 outlined at the southwest corner of South Lake Avenue and South 36th Street, a property shown to exist within the R-1 (Residential-Traditional) zone district.

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

Certificate of Survey

Prepared for Minnesota Power
part of the SE 1/4 of the NE 1/4
Section 13, T50N, R14W of the 4th P.M.
St. Louis County, Minnesota



LEGAL DESCRIPTION:

Lot 25 except the westerly 15 feet,
Lots 26, 27 and 28 of Block 2,
SUPERIOR VIEW ADDITION TO DULUTH

LEGEND

- | | |
|-----------------------------------|---------------------------------|
| --- BOUNDARY LINE, THIS SURVEY | ● BRUSH LINE/ EDGE |
| --- BLOCK LINE | ○ FENCE POST |
| --- LOT LINE | ○ FOUND REBAR |
| ▭ BITUMINOUS SURFACE | ○ SET REBAR |
| ▭ BUILDING | ○ EXISTING TELEPHONE MANHOLE |
| ▭ CONCRETE SURFACE | ○ EXISTING STORM MANHOLE |
| ▭ 5 FOOT CONTOUR | ○ EXISTING SANITARY MANHOLE |
| ▭ 1 FOOT CONTOUR | ○ EXISTING TELETRIC MANHOLE |
| ▭ CURB & GUTTER | ○ EXISTING CATCH BASIN (SQUARE) |
| ▭ GRAVEL SURFACE | ○ HAND HOLE - ROUND |
| --- FENCE LINE | ○ ELECTRIC BOX |
| --- E-OH | ○ POWER POLE |
| --- FO-BUR | ○ TRAFFIC SIGNAL LIGHT |
| --- GAS | ○ TELEPHONE PEDESTAL |
| --- OVERHEAD ELECTRIC | ○ GAS VALVE |
| --- BURIED ELECTRIC | ○ EVERGREEN TREE |
| --- BURIED FIBER OPTIC | ○ DECIDUOUS TREE |
| --- BURIED GAS | ○ BUSH |
| --- BURIED SANITARY SEWER | |
| --- BURIED SANITARY SEWER SERVICE | |
| --- BURIED STORM | |
| --- ABANDONED WATER | |
| --- BURIED WATER | |

DATE PREPARED: 03/26/26
PROJ. NO: 26065
FILE: 26065-SURV.
SHEET 1 of 1 SHEETS

Print Name: Paul A. Vogel
Signature: *[Signature]*
License # 44075
Date: 04/07/2026

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.



21 W. Superior St., Ste. 500 Duluth, MN 55802 | 218.727.6446
FILE: 26065-SURV Drawings/Survey/26065-SURV.dwg

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WARNING
 LOCATION OF ALL UNDERGROUND UTILITIES TO BE REVEALED BY THE CONTRACTOR SHALL BE CALLED BEFORE DIGGING.
 MINNESOTA
 ONE-CALL SYSTEM
 1-800-252-1166
 REQUIRED BY
 MN STATUTE 21B0

CONTROL POINTS			
DESCRIPTION	NO.	NORTHING	EASTING
CP 1	113.30	33339.643	647142.326
CP 2	113.72	33337.563	647096.172

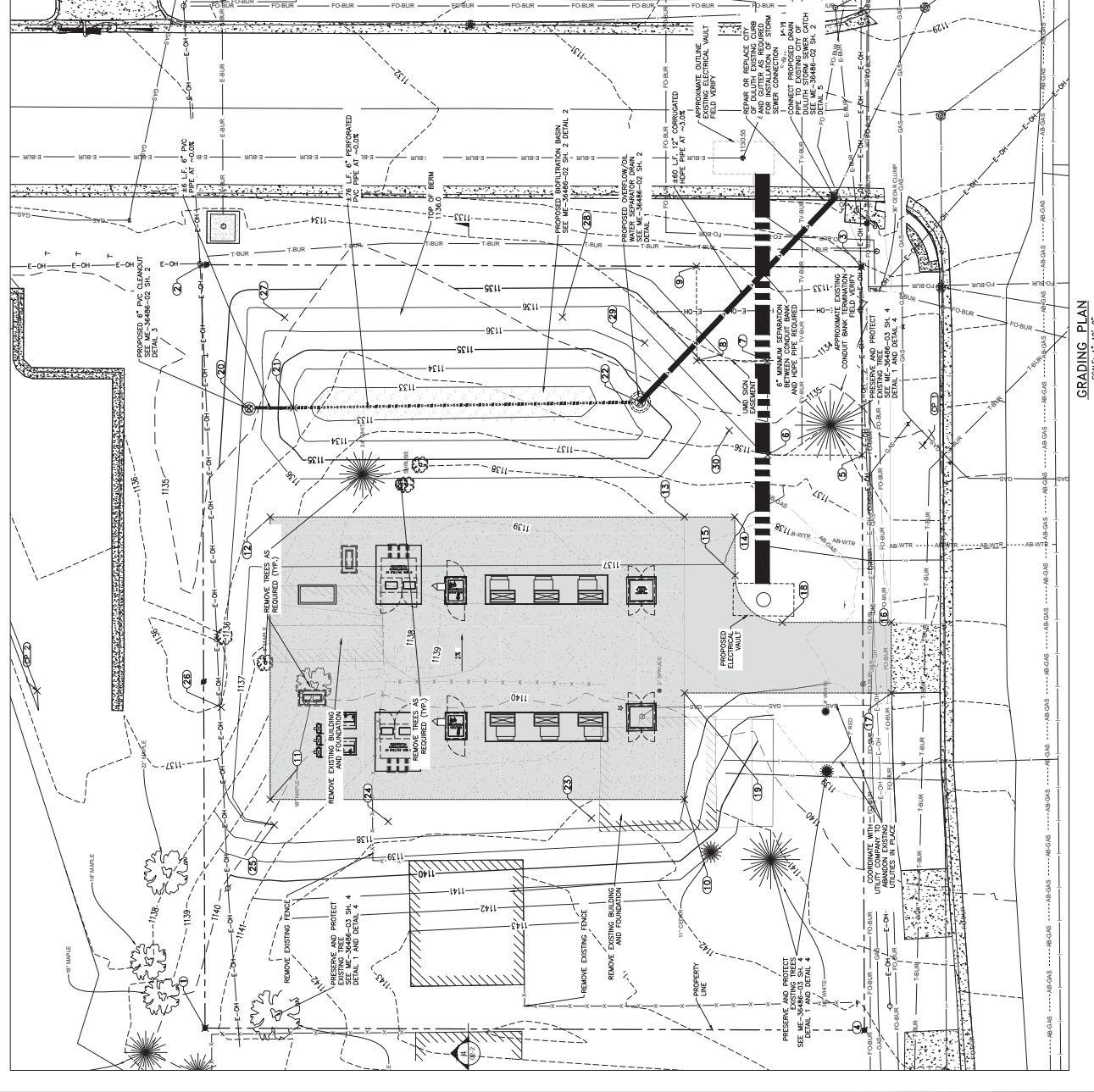
CONSTRUCTION POINTS				
PART	DESCRIPTION	ELEV.	EASTING	
1	PROPERTY CORNER	114.64	33335.006	647100.004
2	PROPERTY CORNER	114.41	33332.684	647102.022
3	PROPERTY CORNER	114.33	33336.689	647101.734
4	PROPERTY CORNER	114.32	33334.527	647101.732
5	SOIL EXHUMPT	113.73	33334.526	647148.470
6	SOIL EXHUMPT	113.63	33334.526	647148.470
7	SOIL EXHUMPT	113.62	33334.527	647148.482
8	SOIL EXHUMPT	113.68	33334.527	647148.482
9	SOIL EXHUMPT	113.37	33334.523	647149.344
10	SOIL EXHUMPT	113.78	33334.523	647148.627
11	SOIL EXHUMPT	113.78	33334.523	647148.627
12	SOIL EXHUMPT	113.78	33334.523	647148.627
13	SOIL EXHUMPT	113.78	33334.523	647148.627
14	SOIL EXHUMPT	113.78	33334.523	647148.627
15	SOIL EXHUMPT	113.78	33334.523	647148.627
16	SOIL EXHUMPT	113.78	33334.523	647148.627
17	SOIL EXHUMPT	113.78	33334.523	647148.627
18	SOIL EXHUMPT	113.78	33334.523	647148.627
19	SOIL EXHUMPT	113.78	33334.523	647148.627
20	SOIL EXHUMPT	113.78	33334.523	647148.627
21	SOIL EXHUMPT	113.78	33334.523	647148.627
22	SOIL EXHUMPT	113.78	33334.523	647148.627
23	SOIL EXHUMPT	113.78	33334.523	647148.627
24	SOIL EXHUMPT	113.78	33334.523	647148.627
25	SOIL EXHUMPT	113.78	33334.523	647148.627
26	SOIL EXHUMPT	113.78	33334.523	647148.627
27	SOIL EXHUMPT	113.78	33334.523	647148.627
28	SOIL EXHUMPT	113.78	33334.523	647148.627
29	SOIL EXHUMPT	113.78	33334.523	647148.627
30	SOIL EXHUMPT	113.78	33334.523	647148.627

REFERENCE DRAWINGS	
TITLE	DRAWING NO. SERIES
SITE DEVELOPMENT GRADING DETAILS	ME-34486-02 SH. 2
CONCRETE FOUNDATION AND SEWER CONTROL PLAN	ME-34486-03 SH. 1
SITE DEVELOPMENT LANDSCAPE PLAN	ME-34486-03 SH. 3
SITE DEVELOPMENT LANDSCAPE DETAILS	ME-34486-03 SH. 4

- GRADING NOTES:**
- ANY UNACCEPTABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF IN AN APPROPRIATE MANNER AS APPROVED BY MINNESOTA POWER (MP) ON-SITE REPRESENTATIVE.
 - CONSTRUCTION POINT COORDINATES BASED ON THE FOLLOWING DATUMS:
 • HORIZONTAL DATUM: SAINT LOUIS COUNTY TRANSVERSE MERCATOR 94, US SURVEY FOOT
 - GRADE EXHUMPTION OF PAD REPRESENTS TOP OF COMPACTED AGGREGATE BASE LAYER PRIOR TO PLACEMENT OF CRUSHED ROCK SURFACING.
 - WATER TO BE MAINTAINED AT OR BELOW FINISHED GRADE THROUGHOUT THE CONSTRUCTION PROCESS TO MAINTAIN ALL EXISTING DRAINAGE PATTERNS, CHANNELS AND GRASSING BEFORE ANY LANDSCAPING ACTIVITIES.
 - THE CONTRACTOR SHALL MAINTAIN THE ELEVATION OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION ACTIVITIES. THE ONE-CALL LOCATION NOTICE SYSTEM OF "DOPHER" UNDERGROUND UTILITIES SHALL BE CLEARLY IDENTIFIED IN COORDINATION WITH MINNESOTA POWER. ALL UTILITIES SHALL BE CLEARLY IDENTIFIED IN COORDINATION WITH MINNESOTA POWER.
 - ALL MATERIAL FOR EMBANKMENT SHALL CONFORM WITH CODES.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DIFFERENCE BETWEEN ESTIMATED AND ACTUAL CONSTRUCTION QUANTITIES.
 - CONVULSED (NATIVE OR COMPACTED) STATE OF THE MATERIAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PURPOSES OF BIDDING, HAULING OR PLACING.
 - WORK SHALL BE IN ACCORDANCE WITH MINNESOTA POWER SPECIFICATION 01015.
 - CONTRACTOR SHALL DEVELOP AN APPROVED TRAFFIC CONTROL PLAN AT THE REQUEST OF THE GOVERNING BODY.

- POLE ANCHOR
 SIGN
 CONSTRUCTION POINT
 CONTROL POINT
 FINISHED GRADE 1' CONTOUR
 EXISTING 1' CONTOUR
 EXISTING 5' CONTOUR
 EXISTING UNDERGROUND FIBER OPTIC
 EXISTING UNDERGROUND ELECTRIC
 EXISTING BURIED COMMUNICATION LINES
 EXISTING BURIED GAS
 EXISTING BURIED WATER
 EXISTING BURIED WATER
 EXISTING BURIED WATER
 ABANDONED BURIED WATER
 ABANDONED BURIED GAS
 EXISTING OVERHEAD ELECTRIC
 ELECTRICAL DUCT BANK (CONCRETE ENCASED)
 4" THICKNESS CRUSHED ROCK SURFACING
 (PROPOSED)
 MAINT CLASS 5 AGGREGATE BASE
 (PROPOSED)
 PROPOSED BIOFILTRATION BASIN
 EXISTING SANITARY SEWER
 EXISTING STORMSEWER
 PROPOSED STORMSEWER
 PROPOSED PERFORATED STORMSEWER
 UMD SIGN PLACEMENT
 PROPERTY LINE
 PROPOSED POND OVERFLOW STRUCTURE
 PROPOSED CLEANOUT

ESTIMATED QTYS.		
DESCRIPTION	UNIT	EST. QUANTITY
MAINT CLASS 5 AGGREGATE BASE (CY)	C.Y.	260
CRUSHED ROCK SURFACING (CY)	C.Y.	70
COMMON FILL (CY) (SALVED)	C.Y.	150
TOPSOIL (CY) (SALVED)	C.Y.	485
OFFSITE DISPOSAL (CY)	C.Y.	670
BIOFILTRATION SOIL	C.Y.	24
CHOKER STONE	C.Y.	16
DRAINAGE FILL	C.Y.	76
6" PERFORATED PVC	L.F.	9
6" PVC PIPE	L.F.	2
6" PVC CLEANOUT AND FITTINGS	EA.	2
12" CORRUGATED HDPE DRAIN PIPE	L.F.	60
CLEARING AND GRUBBING	L.S.	1



GRADING PLAN
 SCALE: 1"=10'-0"

NOT TO BE USED FOR CONSTRUCTION

NO.	DATE	REVISION DESCRIPTION	BY	APPROVED	NO.	DATE	REVISION DESCRIPTION	BY	APPROVED
0A	07/22/26	NEW STEP-DOWN SITE - ISSUED FOR CORE REVIEW	RSR/RSR		01	07/22/26		RSR/RSR	
0B	07/22/26	NEW STEP-DOWN SITE - ISSUED FOR DATE REVIEW	RSR/RSR		02	07/22/26		RSR/RSR	
0C	07/22/26	NEW STEP-DOWN SITE - RE-FOUR REVIEW - PROPERTY ADJUSTION	RSR/RSR		03	07/22/26		RSR/RSR	

DRAWN BY: RSR/RSR
 CHECKED BY: RSR/RSR
 APPROVED BY: RSR/RSR
 DATE: 07/22/26
 SCALE: 1"=10'-0"

UMD 344K/13.8K/STEP-DOWN SITE
 SITE DEVELOPMENT
 GRADING PLAN

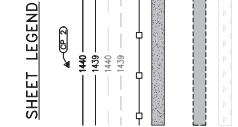
CADD DRAWING - FOR REPRODUCTION ONLY

SHEET 1 REV. 01
 UMD 344K/13.8K/STEP-DOWN SITE
 ME-36486-02

DATE: 08/03/23
 LICENSE NO.: 46178
 SIGNATURE: ROBERT LSI
 PROJECT: UMD 344K/13.8K/STEP-DOWN SITE

WARNING
 LOCATION OF ALL UNDERGROUND UTILITIES TO BE IDENTIFIED BY THE CONTRACTOR BEFORE DIGGING.
 MINNESOTA
 ONE-CALL SYSTEM
 1-800-252-1166
 REQUIRED BY
 MN STATUTE 216D

DESCRIPTION	UNIT	EST. QUANTITY
SILT FENCE	LF	280
TURF ESTABLISHMENT	ARES	0.46
STABILIZED CONSTRUCTION ENTRANCE	EA	1
STORM SEWER INLET PROTECTION	EA	2



TURF ESTABLISHMENT:
 AREA OUTSIDE OF SUBSTANDARD PAD
 SEE LANDSCAPE PLAN DRAWING
 ME-36486-03 SHEET 3 FOR SEED MIX

EROSION CONTROL NOTES

- PERMIT NOT BEING ANY OTHER EROSION CONTROL ACTIVITIES UNTIL ALL REQUIRED PERMITS ARE OBTAINED, INCLUDING THE MWCA GENERAL STORMWATER PERMIT.
- STORMWATER PERMIT SHALL BE OBTAINED WITH MINNESOTA POWER SPECIFICATION CODES.
- THE WORK SHALL BE ACCORDANCE WITH MINNESOTA POWER SPECIFICATION CODES.
- PROJECT CONTRACTOR SHALL PLACE OF TEMPORARY EROSION CONTROL AND SEDIMENT CONTAINMENT DEVICES TO PREVENT THE RUNOFF.
- TOTAL DISTURBED AREA IS 0.53 ACRES. EXISTING IMPERVIOUS TOTAL IS 0.17 ACRES. PROPOSED IMPERVIOUS TOTAL IS 0.17 ACRES. NET IMPERVIOUS AREA IS 0.00 ACRES.
- RECORDING WATER IS CITY OF DULUTH STORM SEWER CATCH BASIN.
- PROVIDE A MINIMUM 4 INCHES TOPSOIL ON ALL DISTURBED AREA TO BE SEEDED AND STABILIZED.
- ACTUAL DISTURBANCE AREAS MUST HAVE TEMPORARY EROSION PROTECTION OR PERMANENT COVER INSTALLED NO LATER THAN 7 DAYS AFTER SCHEDULED OR START OF CONSTRUCTION.
- STORMWATER CONVEYANCES SHALL BE INSTALLED AND OPERATIONAL BEFORE ANY EROSION CONTROL MEASURES ARE INSTALLED.
- VERTICAL PASSING OF SEDIMENT FROM THE CONSTRUCTION SITE MUST BE MINIMIZED BY USE OF APPROPRIATE PRACTICAL MEASURES. STREET SWEEPING COMPLETED PRIOR TO THE END OF EACH WORK DAY.
- PROVIDE THE FOLLOWING MINIMUM INSPECTION REPORTING REQUIREMENTS:
 - EVERY 7 DAYS DURING AND AFTER CONSTRUCTION UNTIL TERMINATION OF PERMIT.
 - AFTER ANY RAINFALL OF 0.5 INCHES OR MORE DURING A 24 HOUR PERIOD.
 - DAILY DURING RAINFALL AND / OR WHEN CORRECTIVE ACTIONS ARE TAKEN UNTIL CORRECTIONS ARE ACCEPTED.
 - EROSION AND SEDIMENT CONTROLS SHALL BE FUNCTIONAL IMMEDIATELY CONCURRENT WITH THE CLEARING AND GRUBBING BEFORE ANY EARTHWORK ACTIVITIES.
 - THE EROSION CONTROL MEASURES WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE.
- PERMANENT VEGETATION WILL BE ESTABLISHED AFTER TOPSOIL PLACEMENT
- STABILIZE VEGETATION WITH EROSION CONTROL MATS
- INLET PROTECTION ON STORMWATER STRUCTURES
- PROTECT BODIES WITH BURLAP
- WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION (VERTICALLY SHALL BE PUMPED INTO A FILTER BOX AND THEN DIRECTED TO THE STORMWATER COLLECTION SYSTEM.
- THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT AND EROSION CONTROL MEASURES IDENTIFIED ON THIS PLAN UNTIL THE EROSION CONTROL MEASURES IDENTIFIED BY THE OWNER SHALL MAINTAIN THE SEDIMENT AND EROSION CONTROL MEASURES IDENTIFIED ON THIS PLAN UNTIL THE SITE IS STABILIZED. ALL NONFUNCTIONAL DEVICES SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF IDENTIFICATION BY THE OWNER.
- CONTRACTOR SHALL MAINTAIN ALL DOWN SLOPES, BUFFER STRIPS, HORIZONTAL SLOPES, AND OTHER MEASURES TO MAINTAIN SOIL STABILITY.
- CONTRACTOR TO PLAN FOR AND IMPLEMENT APPROPRIATE PHASING, VEGETATIVE BUFFER STRIPS, AND OTHER MEASURES TO MAINTAIN SOIL STABILITY.
- IF ANY DOWN GRADIENT EROSION AND SEDIMENTATION CONTROLS BECOME OVERLOADED THEN ADDITIONAL UPGRADATION CONTROLS SHALL BE INSTALLED TO PRIORITIZE DOWN GRADIENT AREAS AHEAD OF UPGRADATION AREAS WHEREVER POSSIBLE DURING INSTALLATION OF EROSION AND SEDIMENTATION CONTROLS.
- SILT FENCES SHALL BE DEMOLISHED IMMEDIATELY IF SEDIMENT REACHES 1/3 HEIGHT OF THE FENCE. RUNOFF FROM THE SITE IS ALLOWED BY LEGAL, REGULATORY OR PRIVATE ACCESS RESTRICTIONS. CONTRACTOR SHALL USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS TO SUCH AREAS.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND SURROUNDING PUBLIC OR PRIVATE PROPERTIES.
- FINAL STABILIZATION MATS TO BE REACHED WHEN ALL SURFACES HAVE BEEN STABILIZED AND COVER ESTABLISHED OVER 75% OF THE TOTAL DISTURBED AREAS.
- OTHER CONSTRUCTION RELATED REQUIREMENTS SHALL BE OBTAINED FROM THE LOCAL JURISDICTION AND OTHER STAKEHOLDERS.
- REQUIREMENTS AND/OR THE OWNERS ACCEPTANCE.

TITLE	DRAWING NO. SERIES
SITE DEVELOPMENT EROSION PLAN	ME-36486-02 SH. 1
SITE DEVELOPMENT EROSION AND SEDIMENT CONTROL DETAILS	ME-36486-03 SH. 2
SITE DEVELOPMENT LANDSCAPE PLAN	ME-36486-03 SH. 3

NO.	DATE	REVISION DESCRIPTION	BY	APPROVED	NO.	DATE	REVISION DESCRIPTION	BY	APPROVED
01	07/22/26	NEW STEP-DOWN SITE - ISSUED FOR 60% REVIEW	RSR	REV/JHB	02	07/22/26			
02	07/22/26	REV STEP-DOWN SITE - ISSUED FOR 60% REVIEW	RSR	REV/JHB	03	07/22/26			
03	07/22/26	REV STEP-DOWN SITE - REVISION REVIEW - PROPERTY ADJUSTION	RSR	REV/JHB					

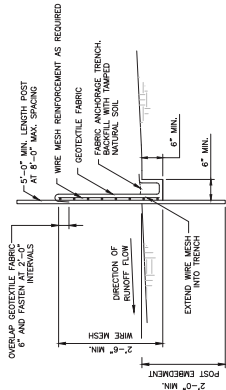
NOT TO BE USED FOR CONSTRUCTION

NO.	DATE	REVISION DESCRIPTION	BY	APPROVED
01	07/22/26	REV STEP-DOWN SITE - ISSUED FOR 60% REVIEW	RSR	REV/JHB
02	07/22/26	REV STEP-DOWN SITE - ISSUED FOR 60% REVIEW	RSR	REV/JHB
03	07/22/26	REV STEP-DOWN SITE - REVISION REVIEW - PROPERTY ADJUSTION	RSR	REV/JHB

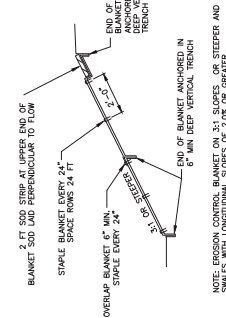
UWD 34K/13.8KV STEP-DOWN SITE
 SITE DEVELOPMENT
 EROSION AND SEDIMENT CONTROL PLAN
 ME-36486-03
 SHEET 1
 REV. 01
 DATE: XX/XX/XX
 LICENSE NO.: 46178

CADD DRAWING - FOR REPRODUCTION ONLY
 UWD 4000 1203

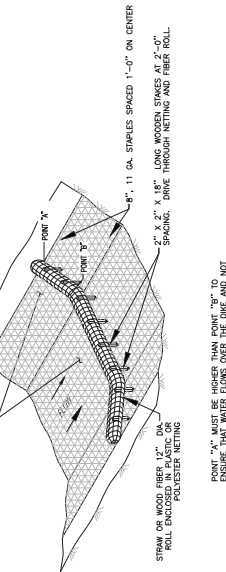
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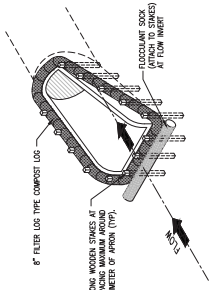
SILT FENCE
NOT TO SCALE



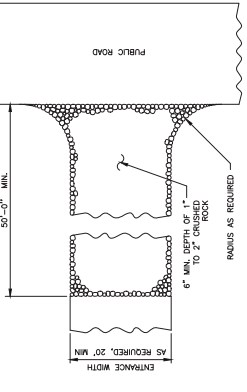
EROSION CONTROL BLANKET
NOT TO SCALE



BIOROLL
NOT TO SCALE

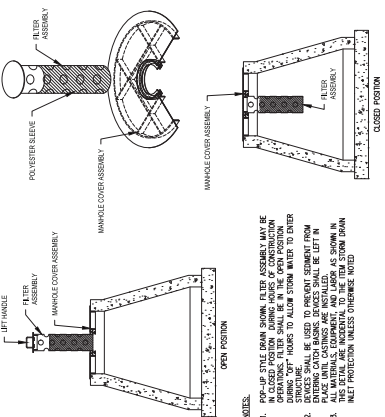


INLET PROTECTION
NOT TO SCALE



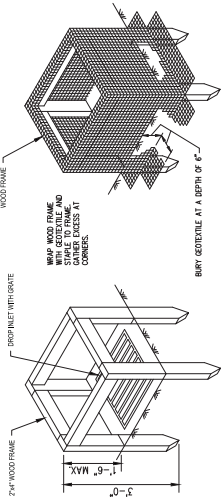
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

- CONSTRUCTION ENTRANCE SPECIFICATIONS**
- STONE SIZE: USE 1"-2" CRUSHED ROCK OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - CONCRETE CURB: 4" MIN. THICK, 6" HIGH.
 - FILTER CLOTH: SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
 - MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT SHALL BE PERFORMED IMMEDIATELY UPON VISUAL EVIDENCE OF PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
 - WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY WHEN WASHING STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - RINSE AND WASHING AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.

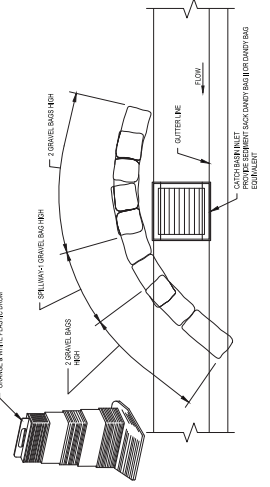


STORM DRAIN INLET PROTECTION
NOT TO SCALE

- NOTES:**
- FOR USE WITH STORM DRAIN. FILTER ASSEMBLY MAY BE IN CLOSED POSITION DURING PERIODS OF CONSTRUCTION. DURING OFF HOURS TO ALLOW STORM WATER TO ENTER, FILTER SHALL BE OPENED.
 - ENTRANCE OPENING SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING DRAIN BASINS. SEDIMENT SHALL BE LEFT IN PLACE UNTIL IT CAN BE REMOVED BY THE MAINTENANCE PERSONNEL.
 - ALL MATERIALS, EQUIPMENT, AND LABOR AS SHOWN IN THIS DRAWING SHALL BE USED UNLESS OTHERWISE NOTED.



BURY BOTTLE AT A DEPTH OF 6" TO 8"



DIET 1

REFERENCE DRAWINGS	
TITLE	DRAWING NO. / SERIES
SITE DEVELOPMENT GRADING PLAN	ME-36486-02 SH. 1
SITE DEVELOPMENT EROSION AND SEDIMENT CONTROL PLAN	ME-36486-03 SH. 1
SITE DEVELOPMENT LANDSCAPE PLAN	ME-36486-03 SH. 3

NOT TO BE USED FOR CONSTRUCTION

DRAWING NO. / SERIES		SHEET	
TITLE	DRAWING NO. / SERIES	SHEET	2
SITE DEVELOPMENT GRADING PLAN	ME-36486-02 SH. 1	SHEET	2
SITE DEVELOPMENT EROSION AND SEDIMENT CONTROL PLAN	ME-36486-03 SH. 1	SHEET	4000
SITE DEVELOPMENT LANDSCAPE PLAN	ME-36486-03 SH. 3	SHEET	1203

UMD 344V/13.8KV STEP-DOWN SITE
SITE DEVELOPMENT
EROSION & SEDIMENT CONTROL DETAILS



AN ALLESTE COMPANY

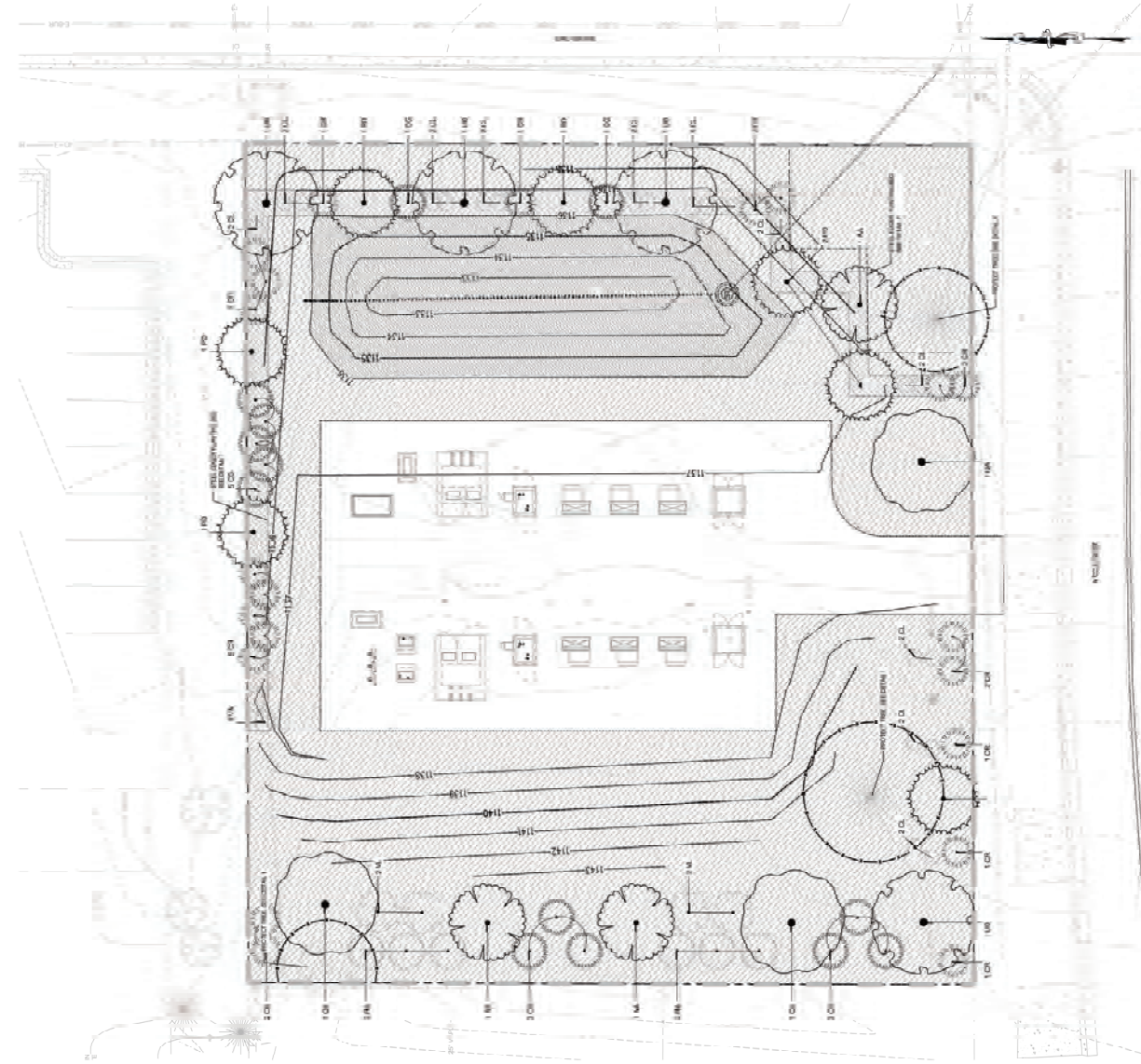
UMD 344V/13.8KV STEP-DOWN SITE
SITE DEVELOPMENT
EROSION & SEDIMENT CONTROL DETAILS

UMD 344V/13.8KV STEP-DOWN SITE
SITE DEVELOPMENT
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UMD 344V/13.8KV STEP-DOWN SITE
SITE DEVELOPMENT
EROSION & SEDIMENT CONTROL DETAILS

UMD 344V/13.8KV STEP-DOWN SITE
SITE DEVELOPMENT
EROSION & SEDIMENT CONTROL DETAILS



PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL COMMON NAME	CONT.
	1A	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	1B	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	2A	1	ORANGE BLOSSOM WILLOW	8" X 10"
	2B	1	ORANGE BLOSSOM WILLOW	8" X 10"
	3A	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3B	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3C	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3D	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3E	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3F	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3G	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3H	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3I	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3J	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3K	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3L	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3M	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3N	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3O	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3P	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3Q	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3R	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3S	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3T	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3U	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3V	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3W	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3X	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3Y	1	WINDSOR MERRYWOOD BERRY	8" X 10"
	3Z	1	WINDSOR MERRYWOOD BERRY	8" X 10"

SYMBOL	CODE	QTY	BOTANICAL COMMON NAME	SIZE
	4A	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4B	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4C	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4D	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4E	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4F	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4G	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4H	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4I	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4J	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4K	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4L	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4M	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4N	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4O	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4P	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4Q	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4R	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4S	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4T	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4U	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4V	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4W	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4X	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4Y	1	ORANGE BLOSSOM WILLOW	4" X 4"
	4Z	1	ORANGE BLOSSOM WILLOW	4" X 4"

LANDSCAPE NOTES

1. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
2. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
3. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
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15. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
16. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
17. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
18. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
19. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.
20. ALL PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IRLANDIA COUNTY PLANTING SPECIFICATIONS.

UDC SUMMARY

UDC	DESCRIPTION	QTY	UNIT
100	WINDSOR MERRYWOOD BERRY	1	CONT.
200	ORANGE BLOSSOM WILLOW	1	CONT.
300	ORANGE BLOSSOM WILLOW	1	CONT.
400	ORANGE BLOSSOM WILLOW	1	CONT.
500	ORANGE BLOSSOM WILLOW	1	CONT.
600	ORANGE BLOSSOM WILLOW	1	CONT.
700	ORANGE BLOSSOM WILLOW	1	CONT.
800	ORANGE BLOSSOM WILLOW	1	CONT.
900	ORANGE BLOSSOM WILLOW	1	CONT.
1000	ORANGE BLOSSOM WILLOW	1	CONT.
1100	ORANGE BLOSSOM WILLOW	1	CONT.
1200	ORANGE BLOSSOM WILLOW	1	CONT.
1300	ORANGE BLOSSOM WILLOW	1	CONT.
1400	ORANGE BLOSSOM WILLOW	1	CONT.
1500	ORANGE BLOSSOM WILLOW	1	CONT.
1600	ORANGE BLOSSOM WILLOW	1	CONT.
1700	ORANGE BLOSSOM WILLOW	1	CONT.
1800	ORANGE BLOSSOM WILLOW	1	CONT.
1900	ORANGE BLOSSOM WILLOW	1	CONT.
2000	ORANGE BLOSSOM WILLOW	1	CONT.

WARNING
 LOCATION OF ALL WINDSOR MERRYWOOD BERRY PLANTINGS SHALL BE AS SHOWN ON THIS PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.

REFERENCE DRAWINGS

DATE	DESCRIPTION	BY	CHKD
01/15/20	PRELIMINARY	JK	JK
02/10/20	REVISED	JK	JK
03/05/20	REVISED	JK	JK
04/01/20	REVISED	JK	JK
05/01/20	REVISED	JK	JK
06/01/20	REVISED	JK	JK
07/01/20	REVISED	JK	JK
08/01/20	REVISED	JK	JK
09/01/20	REVISED	JK	JK
10/01/20	REVISED	JK	JK
11/01/20	REVISED	JK	JK
12/01/20	REVISED	JK	JK

LAND 34477/03/01 STEP-DOWN SITE DEVELOPMENT LANDSCAPE PLAN
 ME-304566-03
 1/15/20

NO.	DATE	BY	DESCRIPTION
1	01/15/20	JK	PRELIMINARY
2	02/10/20	JK	REVISED
3	03/05/20	JK	REVISED
4	04/01/20	JK	REVISED
5	05/01/20	JK	REVISED
6	06/01/20	JK	REVISED
7	07/01/20	JK	REVISED
8	08/01/20	JK	REVISED
9	09/01/20	JK	REVISED
10	10/01/20	JK	REVISED
11	11/01/20	JK	REVISED
12	12/01/20	JK	REVISED

NOT TO BE USED FOR CONSTRUCTION

LANDSCAPE PLAN
 SCALE: 1/4" = 1'-0"

Map for PLVAC-2605-0003

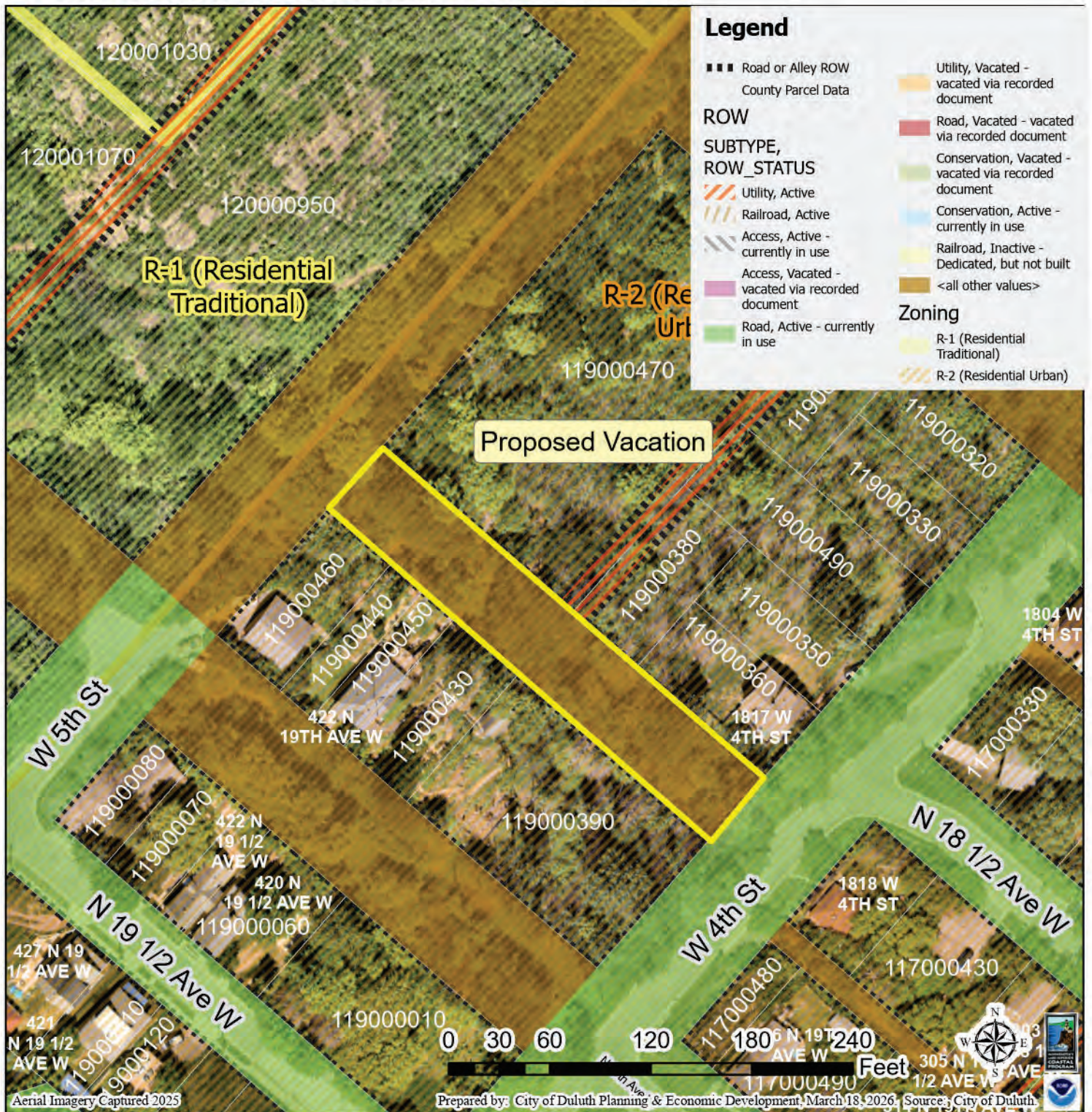


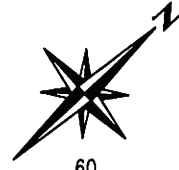
Figure 1.

Aerial imagery captured in 2025, showing the right of way for North 18 1/2 Avenue West highlighted in yellow.

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

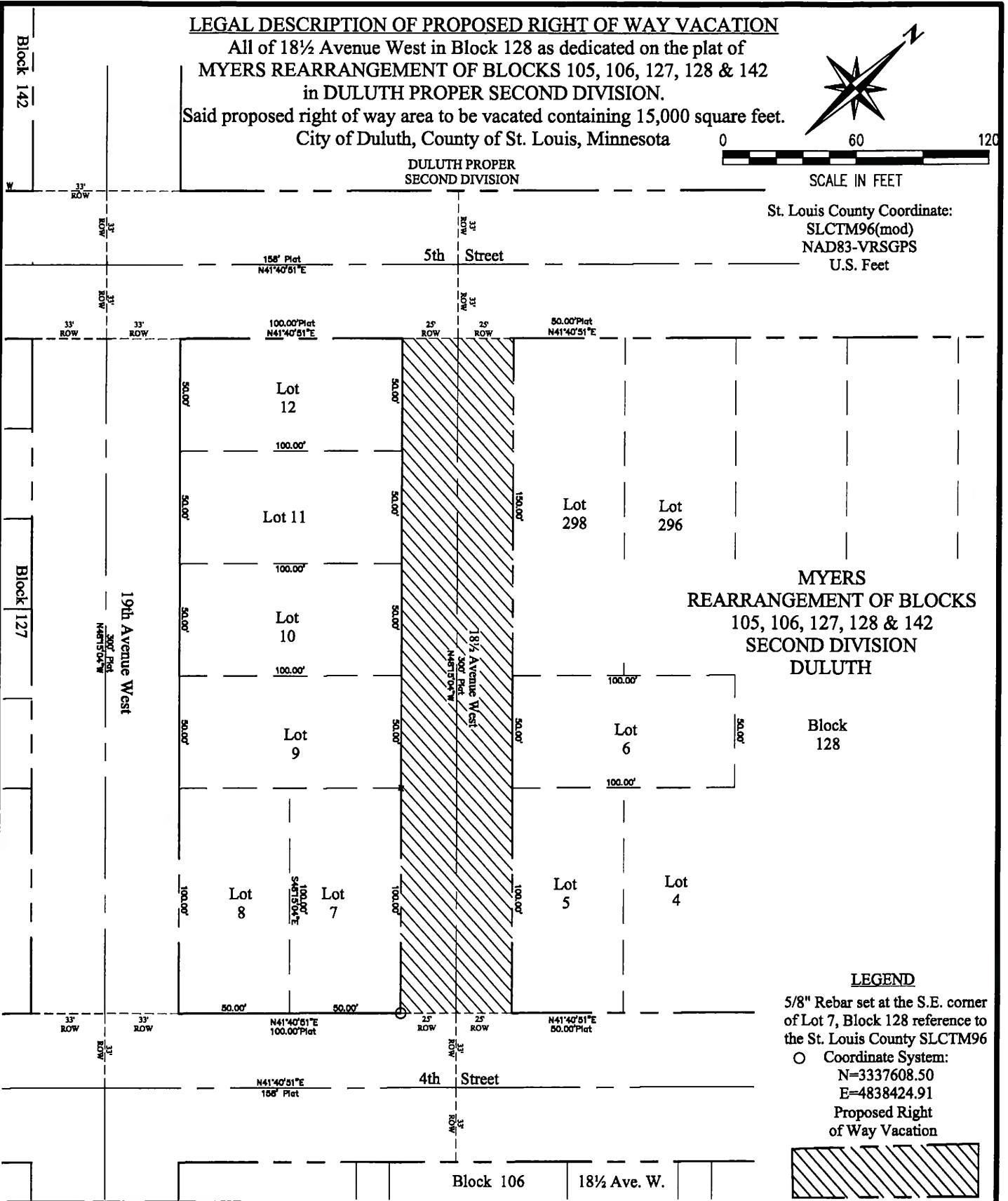
LEGAL DESCRIPTION OF PROPOSED RIGHT OF WAY VACATION

All of 18½ Avenue West in Block 128 as dedicated on the plat of
MYERS REARRANGEMENT OF BLOCKS 105, 106, 127, 128 & 142
 in **DULUTH PROPER SECOND DIVISION**.
 Said proposed right of way area to be vacated containing 15,000 square feet.
 City of Duluth, County of St. Louis, Minnesota



St. Louis County Coordinate:
 SLCTM96(mod)
 NAD83-VRSGPS
 U.S. Feet

DULUTH PROPER
 SECOND DIVISION



**MYERS
 REARRANGEMENT OF BLOCKS
 105, 106, 127, 128 & 142
 SECOND DIVISION
 DULUTH**

Block
 128

LEGEND

5/8" Rebar set at the S.E. corner
 of Lot 7, Block 128 reference to
 the St. Louis County SLCTM96

- Coordinate System:
 N=3337608.50
 E=4838424.91
 Proposed Right
 of Way Vacation



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION,
 OR REPORT WAS PREPARED BY ME OR UNDER MY
 DIRECT SUPERVISION AND THAT I AM A DULY
 LICENSED Land Surveyor UNDER THE
 LAWS OF THE STATE OF MINNESOTA

NAME: Anthony Lueck

SIGNATURE: _____

DATE: 5/1/2026 LIC. No: 24587

Approved by the City Engineer
 of the City of Duluth, Minnesota
 this ____ day of _____, 2026.

By _____

Map for PLVAR-2602-0003:

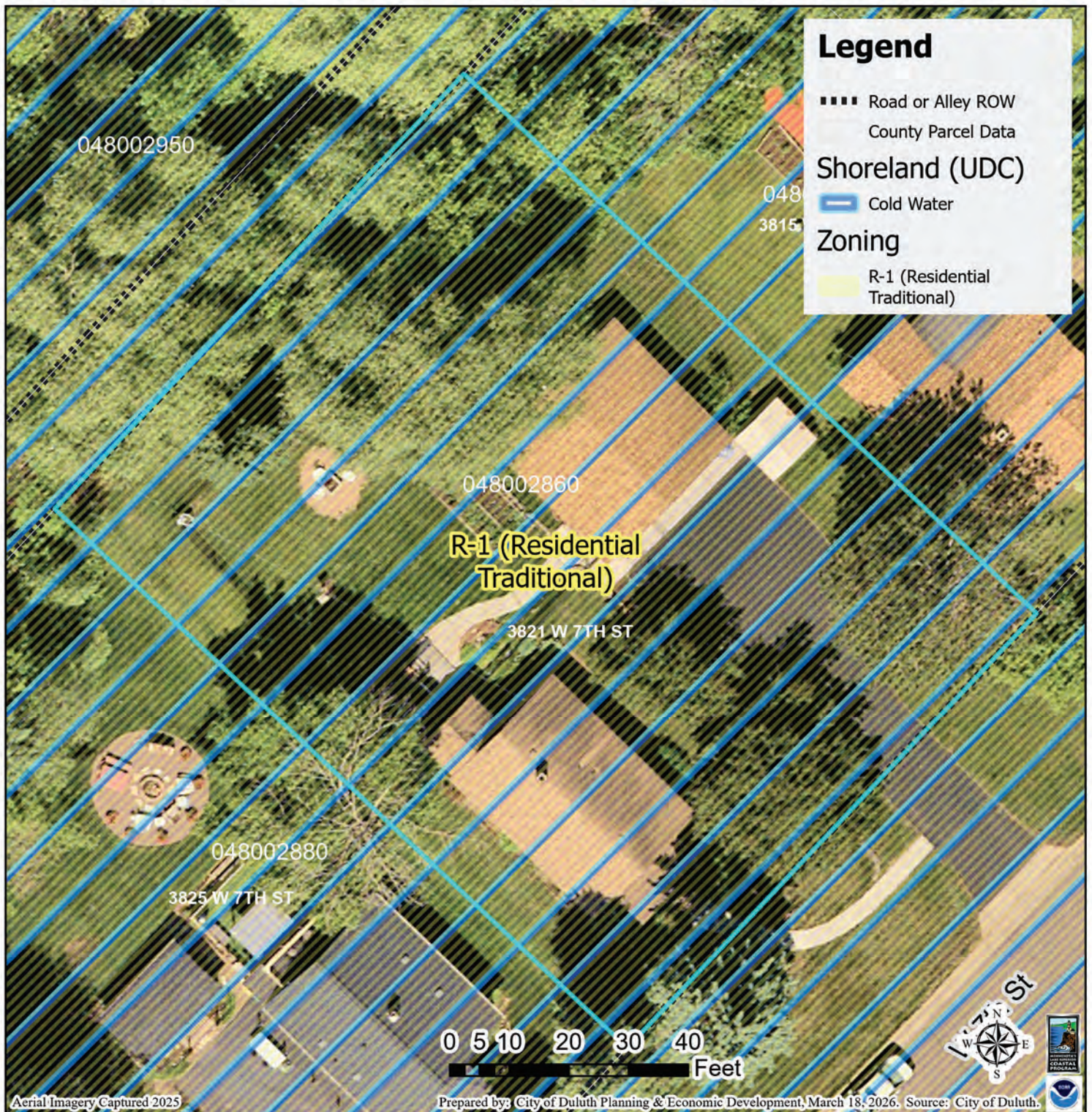
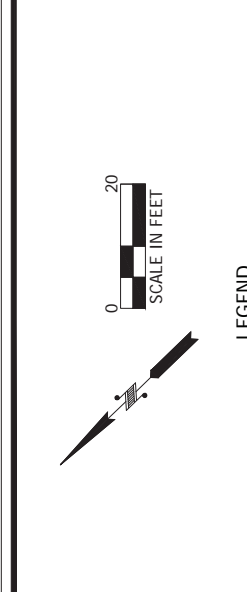
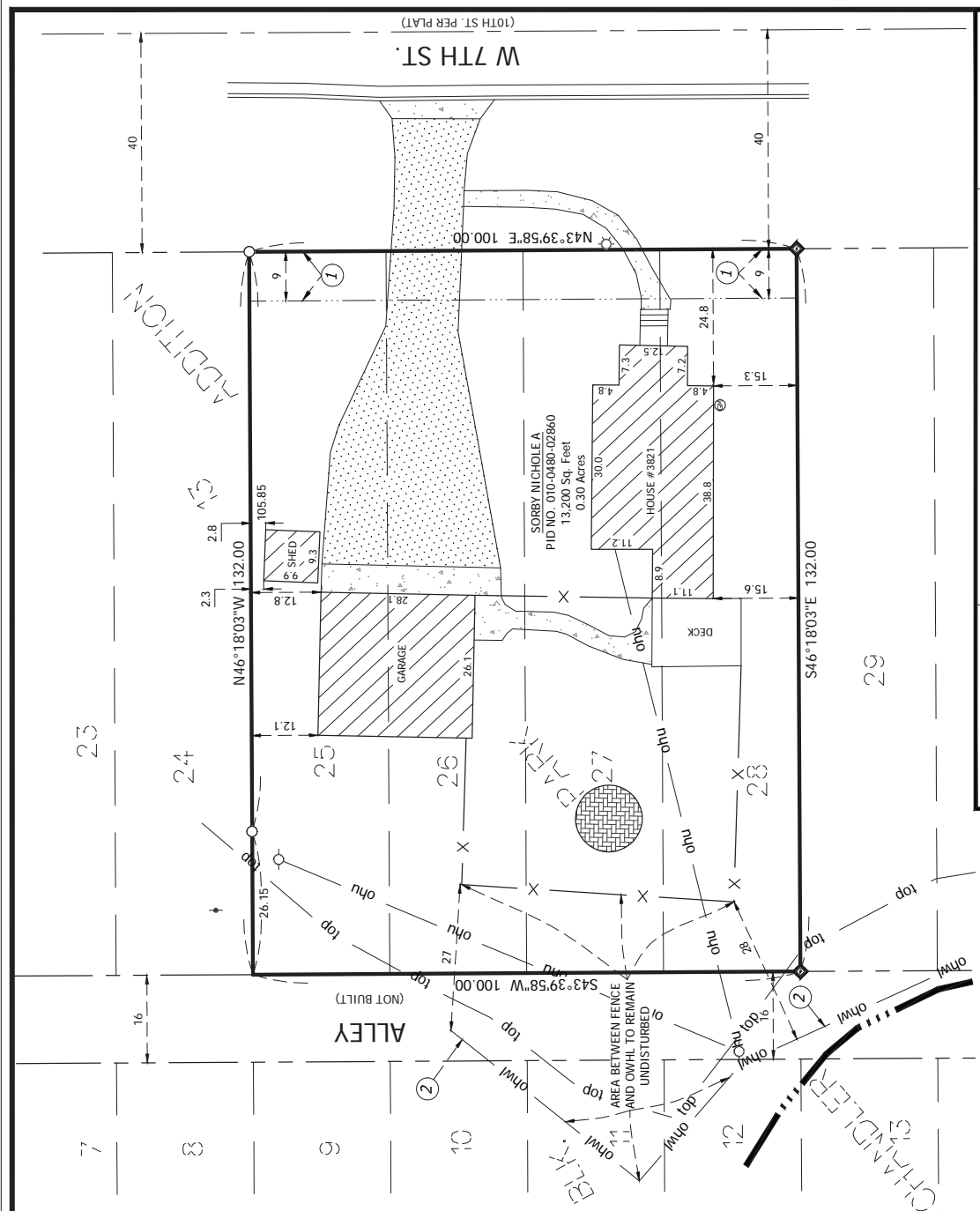


Figure 1.

Aerial imagery captured in 2025, showing Parcel #010-0480-02860 along the northern side of W 7th St.

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.



LEGEND

	CONCRETE SURFACE		TOP OF BANK OR GRADE BREAK
	CENTERLINE OF CREEK		FENCE LINE
	CONCRETE CURB & GUTTER		ORDINARY HIGH WATER LEVEL
	BITUMINOUS SURFACE		CENTER LINE
	OVERHEAD UTILITIES		RIGHT OF WAY LINE
	PAVER SURFACE		EXISTING EASEMENT LINE
	EXISTING BUILDINGS		BOUNDARY LINE AS SURVEYED
	GAS METER		EXISTING PLAT LINE
	UTILITY POLE		REFER TO SURVEYOR'S NOTES
	FOUND CAPPED REBAR PLS. NO. 49505		SET CAPPED REBAR PLS. NO. 49505

LEGAL DESCRIPTION PER DOCUMENT NO. 678724
 Lots Twenty-five (25) and Twenty-six (26), in Block Thirteen (13), CHANDLER PARK ADDITION TO DULUTH, according to the plat thereof, on file and of record in the office of the Register of Deeds in and for said County and State.

LEGAL DESCRIPTION PER DOCUMENT NO. 625012
 Lots numbered Twenty-seven (27) and Twenty-eight (28), in Block numbered Thirteen (13), CHANDLER PARK ADDITION TO DULUTH, according to the plat thereof, on file and of record in the office of the Register of Deeds in and for said County and State.

- SURVEYOR'S NOTES**
- 9 FOOT WIDE BUILDING LINE EASEMENT PER DOCUMENT NO. 8144.
 - ORDINARY HIGH WATER LEVEL LOCATED BY MN/DNR.
 - THIS SURVEY HAS BEEN PREPARED WITHOUT BENEFIT OF A TITLE COMMITMENT OR TITLE OPINION. A TITLE SEARCH FOR RECORDED OR UNRECORDED EASEMENTS WHICH MAY BENEFIT OR ENCUMBER THIS PROPERTY HAS NOT BEEN COMPLETED BY ALTA LAND SURVEY COMPANY. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR SHOWING THE LOCATION OF RECORDED OR UNRECORDED EASEMENTS OR OTHER ENCUMBRANCES NOT PROVIDED TO THE SURVEYOR AS OF THE DATE OF THE SURVEY.
 - BEARINGS ARE BASED ON THE ST. LOUIS COUNTY TRANSVERSE MERCATOR COORDINATE SYSTEM OF 1996. (NAD 83 2011)
 - BUILDING DIMENSIONS SHOWN ARE FOR HORIZONTAL & VERTICAL PLACEMENT OF STRUCTURE ONLY. SEE ARCHITECTURAL PLAN FOR BUILDING FOUNDATION DIMENSIONS.
 - NO SPECIFIC SOILS INVESTIGATION HAS BEEN COMPLETED ON THIS LOT BY ALTA LAND SURVEY COMPANY. THE SUITABILITY OF SOILS TO SUPPORT THE SPECIFIC STRUCTURE PROPOSED IS NOT THE RESPONSIBILITY OF ALTA LAND SURVEY COMPANY OR THE SURVEYOR. DUE TO SNOW AND ICE COVERAGE, SOME FEATURES MAY NOT HAVE BEEN VISIBLE DURING THE COURSE OF THIS SURVEY.

CERTIFICATE OF SURVEY

CLIENT: RANDY GARNER
 ADDRESS: 3821 WEST 7TH STREET
 DULUTH, MN 55807
 DATE: 04-28-2026
 JOB NO: 26-106
 SHEET 1 OF 1

REVISIONS:

David R. Eason
 Min. License #49505
 www.alta-land.com

ALTA
 LAND SURVEY COMPANY
 PHONE: 218-727-5211
 A LICENSED SURVEYOR
 www.alta-land.com

Map for PLVAR-2605-0011:



Figure 1.

Aerial imagery captured in 2025, showing the location of a proposed retaining wall along a Chester Creek below the 9th St bridge on a property shown to exist within the P-1 (Parks) zone district.

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COD FLOOD DAMAGES

CITY OF DULUTH

8TH/9TH STREET BRIDGE

DULUTH, MN



VICINITY MAP



SITE IMAGE

SHEET INDEX

TITLE SHEET	DESCRIPTION
G1.0	EXISTING CONDITIONS
C1.0	PROPOSED CONDITIONS
C2.0	RETAINING WALL
C3.0	EROSION CONTROL AND VEGETATION PLAN
C3.1	EROSION CONTROL AND VEGETATION DETAILS
S1.0	RETAINING WALL DETAILS
S1.1	TYPICAL DETAILS
S1.2	TYPICAL DETAILS

Survey Layout Information
 Coordinate System: US State Plane
 Datum: NAD 1983
 Geoid: G16

GOVERNING SPECIFICATIONS
 THE LATEST EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
 STANDARD SPECIFICATIONS FOR CONSTRUCTION SHALL GOVERN.
 THE CITY OF DULUTH, MN CONSTRUCTION STANDARDS SHALL GOVERN.

AMI Consulting Engineers P.A.
 91 MAIN STREET SUPERIOR, WI
 TWIN CITIES - IRON RANGE
 715-218-2193 - amienr@ce.com

DATE	DESCRIPTION	REV.	BY

JOB NO. 251009
 DATE: 03/04/2026
 DRAWN BY: ARN
 DESIGNED BY: PRD
 SHEET: **G1.0**

OWNER CONTACT

CITY OF DULUTH
 JAMES SHOBERG, PLA
 218-730-4415
 JSHOBERG@DULUTHMN.GOV
 1532 W. MICHIGAN ST.
 DULUTH, MN

DESIGN TEAM

MARINE CIVIL/COASTAL ENGINEER
 AMI CONSULTING ENGINEERS, P.A.
 RYAN DAGGER, PE
 RYAN.DAGGER@AMIENGINEERS.COM
 91 MAIN STREET
 SUPERIOR, WI 54880
 715-718-5722

MARINE CIVIL ENGINEER
 AMI CONSULTING ENGINEERS, P.A.
 ANDREW NELSON, EIT
 ANDREW.NELSON@AMIENGINEERS.COM
 91 MAIN STREET
 SUPERIOR, WI 54880
 218-452-1760

CIVIL ENGINEER
 AMI CONSULTING ENGINEERS, P.A.
 SCOTT WEYANDT, PE
 SCOTT.WEYANDT@AMIENGINEERS.COM
 91 MAIN STREET
 SUPERIOR, WI 54880
 715-718-2193

DATE: 03/04/2026
 SCOTT WEYANDT
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR DESIGN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 03/04/2026
 SCOTT WEYANDT
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR DESIGN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SITE LEGEND:

- FLOW ARROW AND GRADE
- EXISTING MAJOR CONTOUR
- EXISTING MAJOR CONTOUR
- ELEC. LINE
- SS
- STORM SEWER
- POWER POLE

GENERAL PROJECT NOTES:

1. CONTRACTOR WILL VISIT THE SITE TO UNDERSTAND THE SCOPE OF THE WORK AND TO IDENTIFY ANY EXISTING UTILITIES THAT COULD HAVE BEEN HIDDEN BY A SITE. NOT INCLUDING THE TOPOGRAPHIC SURVEY, THOROUGHLY REVIEWING ALL PLANS AND SPECIFICATIONS AND VERIFYING THE INFORMATION REQUESTED FOR CLARIFICATION PRIOR TO BIDDING.
2. EXISTING LEAK INFORMATION TAKEN FROM 2019 USACE NCP REPORTS, PROPERTY LINES AND SHOWN UTILITIES ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY THE LOCATION OF ANY DISCREPANCIES ARE DISCOVERED.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO STARTING WORK.
4. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN VERIFIED BY FIELD SURVEY. THE ENGINEER HAS BEEN ADVISED BY THE UTILITY COMPANIES FOR THE POSITIVE LOCATIONS OF EXISTING UTILITIES. MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE.
5. CONTRACTOR SHALL MAINTAIN TRAFFIC CONTROL DEVICES THROUGHOUT THE CONSTRUCTION AND SHALL BE RESPONSIBLE FOR MAINTAINING THE REQUIREMENTS OF THE NOTICED CONSTRUCTION ORDER.
6. CONTRACTOR SHALL MAINTAIN TRAFFIC CONTROL DEVICES THROUGHOUT THE CONSTRUCTION AND SHALL BE RESPONSIBLE FOR MAINTAINING THE REQUIREMENTS OF THE NOTICED CONSTRUCTION ORDER.
7. ALL CONSTRUCTION WORK SHALL BE COMPLETED WITHIN OWNER APPROVED WORKING HOURS.

Know what's below. Call before you dig.

STATE LAW REQUIRES CONTRACTORS TO CALL BEFORE DIGGING TO IDENTIFY EXISTING UTILITIES. FAILURE TO CALL BEFORE DIGGING MAY RESULT IN PROPERTY DAMAGE AND PERSONAL INJURY. CALL 811 AT LEAST 48 HOURS BEFORE ANY EXCAVATION. THE LOCATIONS OF UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND HAVE NOT BEEN VERIFIED BY FIELD SURVEY. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PUBLIC AND PRIVATE MUST BE DETERMINED BEFORE COMMENCING WORK.

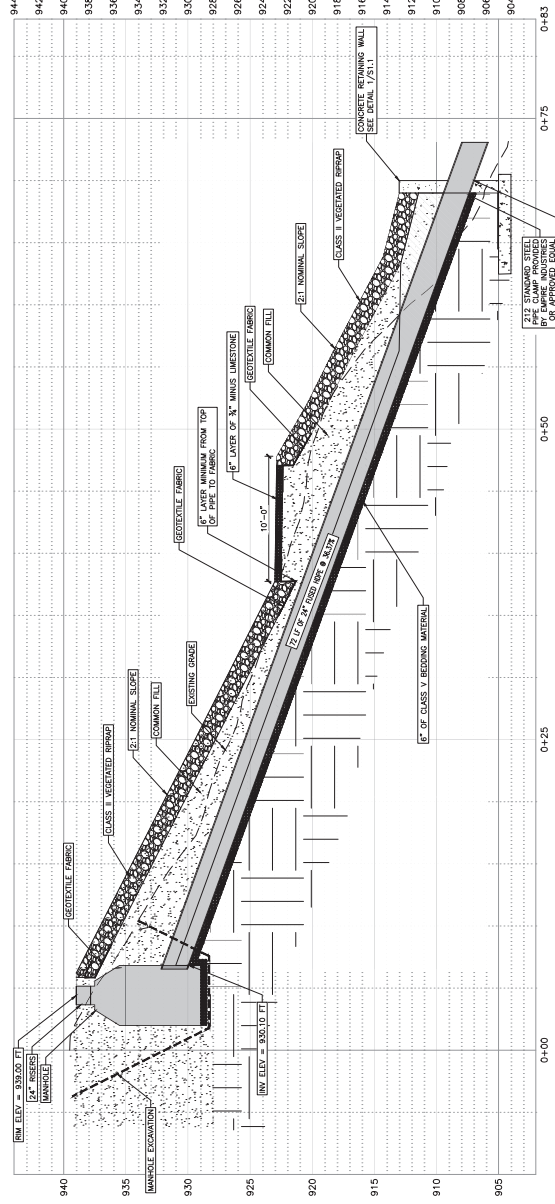
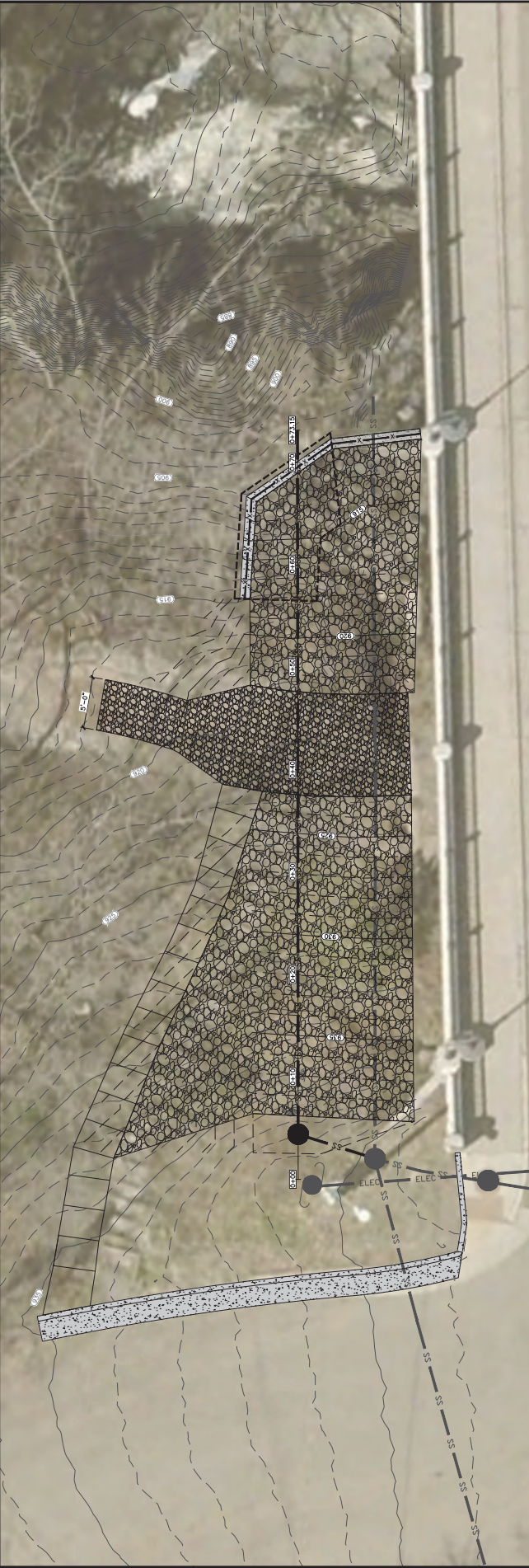
DATE	REVISION	DESCRIPTION

CITY OF DULUTH
 819/1917 STREET BRIDGE
 EXISTING CONDITIONS
 JOB NO: 251 009
 DATE: 03/04/2026
 DRAWN BY: ARN
 DESIGNED BY: PED

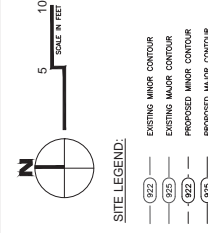


REV.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION



1 PROPOSED 24" HDPE SECTION
C2.1



ESTIMATED QUANTITIES BREAKDOWN

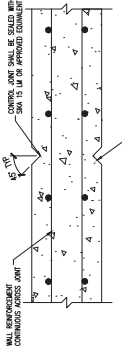
CLASS II RIPRAP	56 CY
VEGETATION FOR EROSION CONTROL BLANKET	120 SF
VEGETATED EROSION CONTROL BLANKET	75 SF
THESSTONE	5 CY
MAJOR WOODLAND 5" - 12" SEED MIX	6 CZ. PER 1000
MINOR WOODLAND 1" - 4" SEED MIX	1.66 PLUS PER 1000
CEDEAR PLUS	100.50 FT



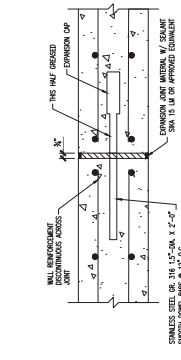
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3	1	ISSUED FOR PERMITS	03/04/2026
4	1	ISSUED FOR PERMITS	03/04/2026
5	1	ISSUED FOR PERMITS	03/04/2026
6	1	ISSUED FOR PERMITS	03/04/2026
7	1	ISSUED FOR PERMITS	03/04/2026
8	1	ISSUED FOR PERMITS	03/04/2026
9	1	ISSUED FOR PERMITS	03/04/2026
10	1	ISSUED FOR PERMITS	03/04/2026

CITY OF DULUTH
819 1/2 STREET BRIDGE
DULUTH, MN
RETAINING WALL DETAILS

PROJECT NO: 251009
DATE: 03/04/2026
DRAWN BY: ARN
DESIGNED BY: PED
SHEET: S1.0



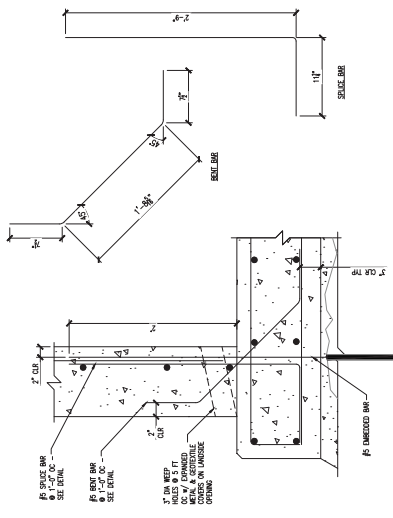
5 TYP WALL CONTROL JOINT DETAIL
NOT TO SCALE



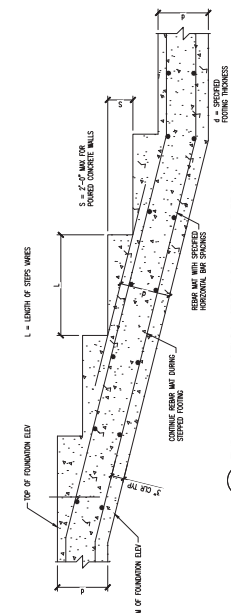
6 TYP WALL EXPANSION JOINT DETAIL
NOT TO SCALE

GENERAL INSTALLATION NOTES:

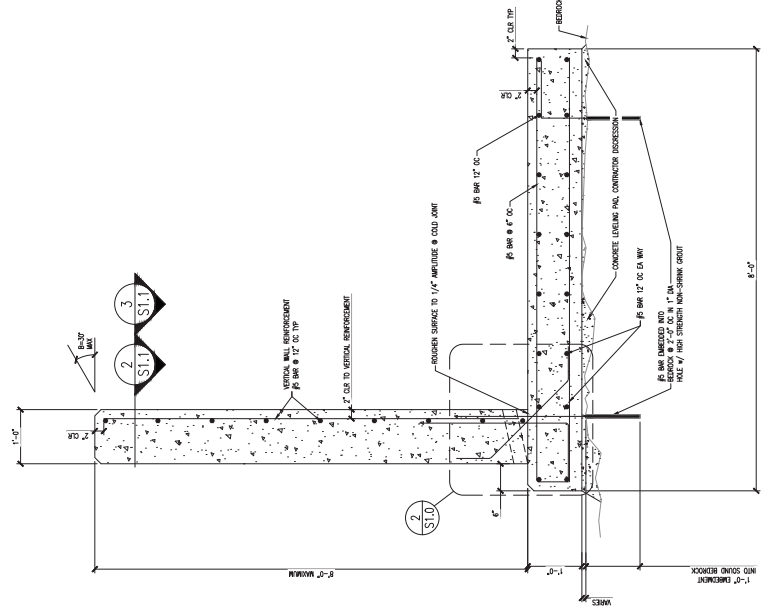
- CONTRACTOR SHALL ALTERNATE BETWEEN EXPANSION & CONTROL JOINTS. SPACING OF JOINTS SHALL OCCUR AT 3 TIMES THE WALL HEIGHT UNLESS NOTED OTHERWISE.
- CONCRETE FOOTING FORMWORK SHALL BE SOBBED TO BACKROCK VARIATIONS TO BEST EXTENTS PRACTICAL.
- IF BACKROCK GRADE EXCEEDS 2:1:1 SLOPE (SEE GRADING) IN ANY DIRECTION THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY TO DISCUSS ADDITIONAL REINFORCEMENT REQUIREMENTS.
- IF THE CONCRETE FOOTING IS CAST AGAINST AN EXISTING SLOPE DURING THE CONCRETE POUR, THE MINIMUM FOOTING DIMENSIONS MUST STILL BE MET AS SHOWN IN THE DRAWINGS.
- ALL LOOSE ROCK AND SOIL ALONG BACKROCK SHALL BE REMOVED PRIOR TO INSTALLING FOOTING FORMS.
- CONTRACTOR SHALL DISPOSE OF ANY EXCESS CONCRETE IN ACCORDANCE WITH ANY & ALL APPLICABLE BEST MANAGEMENT PRACTICES.
- AT THE WALL RETIENS, ANCHOR STONE SHALL BE PLACED FROM THE BOTTOM OF THE FOOTING ELEVATION TO THE TOP OF THE WALL AT A 2:1 SLOPE AS ADDITIONAL WAVE PROTECTION.
- COLORED CONCRETE SHALL NOT BE PLACED WITHIN 300 FT OF ANY WATER BODY IF WATER IS PRESENT RUNNING ADJACENT TO THE WALL. IF THE CONSTRUCTION AREA SHALL BE DIVERTED AWAY FROM THE FOUR LOCATIONS BEFORE PLACING ANY CONCRETE IN THE FORMS.
- PREVIOUSLY USED COLORED CONCRETE OPTIONS ARE ALUMINA, CHAMEL, CAMEL AND BROWN FROM BAYBROOK.
- SOILS & LOG COLOR SHALL BE MATCHED AS CLOSE TO THE CONCRETE COLOR AS POSSIBLE. PREVIOUSLY USED COLORS INCLUDE ALUMINA, BAYBROOK, STONE AND CAPTAIN WALK.



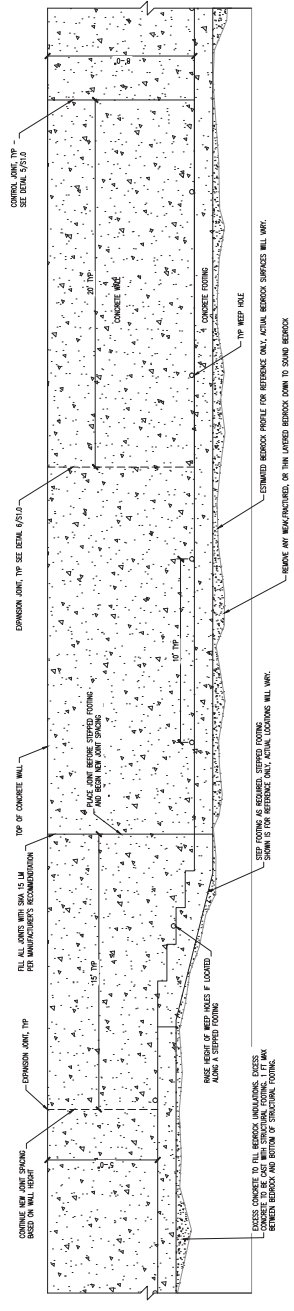
2 BENT BAR DETAIL
NOT TO SCALE



3 TYP WALL TRANSITION STEP FOOTING DETAIL
NOT TO SCALE



1 TYP 8 FT HEIGHT RETAINING WALL
NOT TO SCALE

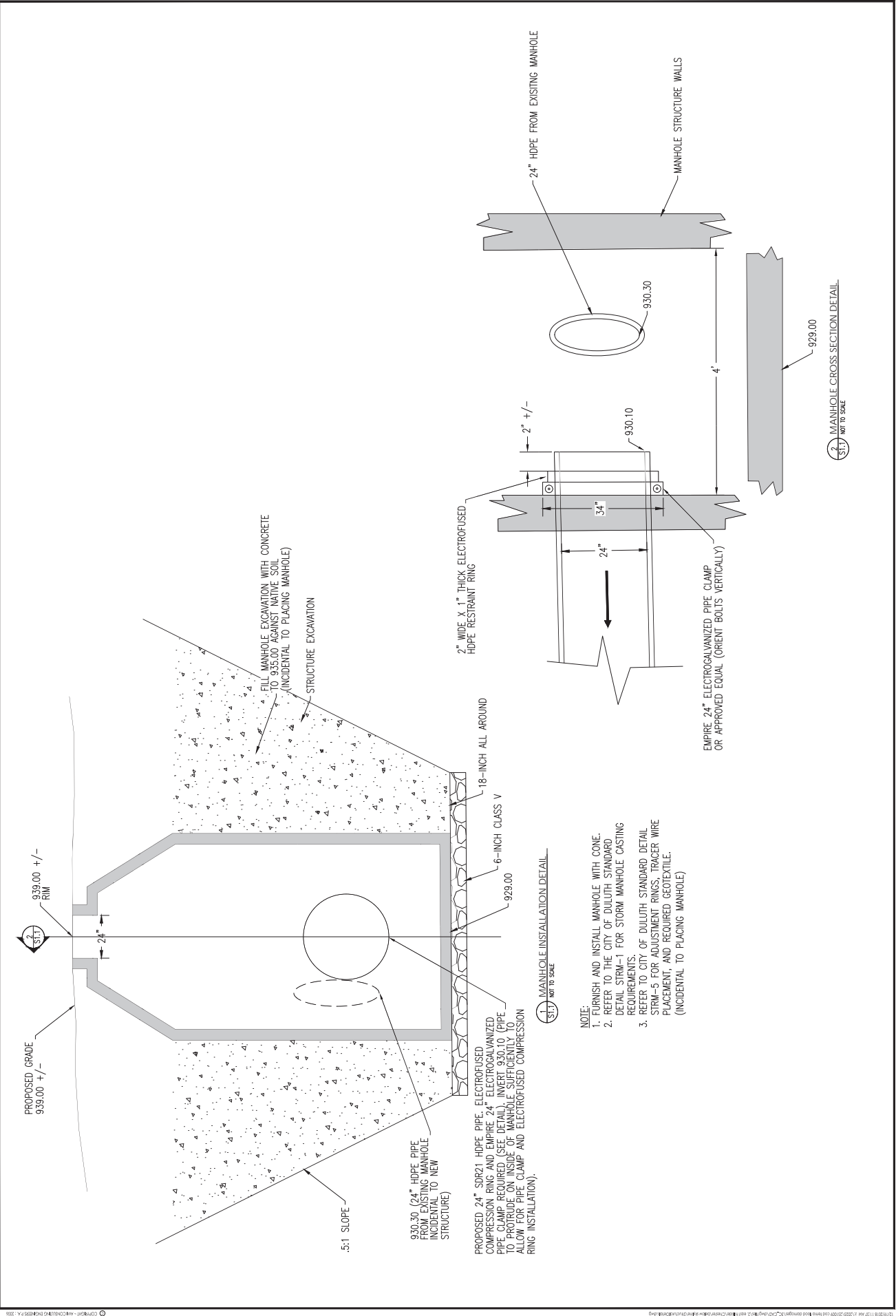


4 ALTERNATING JOINT SPACE DETAIL
NOT TO SCALE

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CITY OF DULUTH
 819/1914 STREET BRIDGE
 DULUTH, MN
 TYPICAL DETAILS

JOB NO: 251009
 DATE: 03/04/2026
 DRAWN BY: ARN
 DESIGNED BY: PED
 SHEET: S1.1



- NOTE:**
- FURNISH AND INSTALL MANHOLE WITH CONE.
 - REFER TO THE CITY OF DULUTH STANDARD DETAIL STRM-1 FOR STORM MANHOLE CASTING REQUIREMENTS.
 - REFER TO CITY OF DULUTH STANDARD DETAIL STRM-5 FOR ADJUSTMENT RINGS, TRACER WIRE PLACEMENT, AND REQUIRED GEOTEXTILE. (INCIDENTAL TO PLACING MANHOLE)

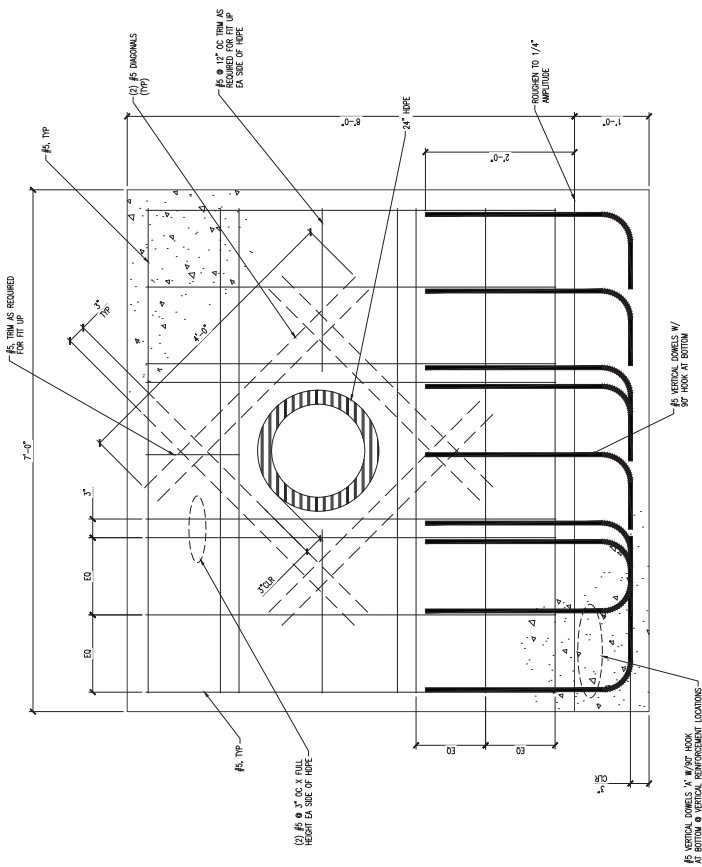
(S1.1) MANHOLE INSTALLATION DETAIL
 NOT TO SCALE

(S1.1) MANHOLE CROSS SECTION DETAIL
 NOT TO SCALE

NO.	DATE	DESCRIPTION	BY	CHK
1				
2				
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CITY OF DULUTH
 814/19TH STREET BRIDGE
 DULUTH, MN
 TYPICAL DETAILS

JOB NO: 251.009
 DATE: 03/04/2026
 DRAWN BY: ARN
 DESIGNED BY: PED
 SHEET: 7.1S



24" HDPE HEADWALL SECTION
 NOT TO SCALE

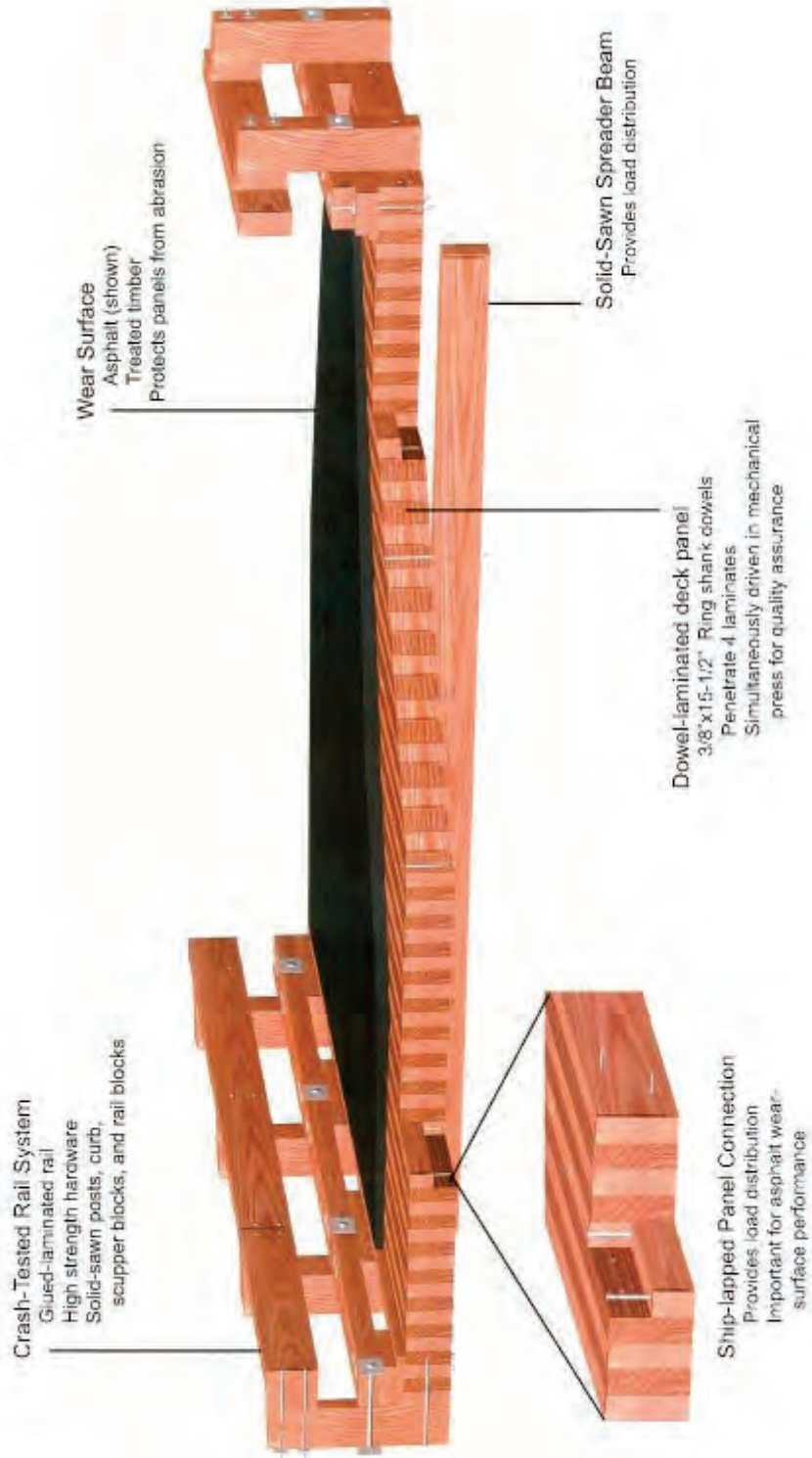
Map for PLVAR-2605-0012:



Figure 1.

Aerial imagery captured in 2025, showing the location of a proposed stream crossing along a tributary of Merritt Creek below a Haines Rd on a property shown to exist within the RR-1 (Rural Residential-1) zone district.

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Crash-Tested Rail System

- Glued-laminated rail
- High strength hardware
- Solid-sawn posts, curb, scupper blocks, and rail blocks

Wear Surface
Asphalt (shown)
Treated timber
Protects panels from abrasion

Solid-Sawn Spreader Beam
Provides load distribution

Dowel-laminated deck panel
3/8" x 15-1/2" Ring shank dowels
Penetrate 4 laminates
Simultaneously driven in mechanical press for quality assurance

Ship-lapped Panel Connection
Provides load distribution
Important for asphalt wear-surface performance

Map for PLVAR-2605-0013

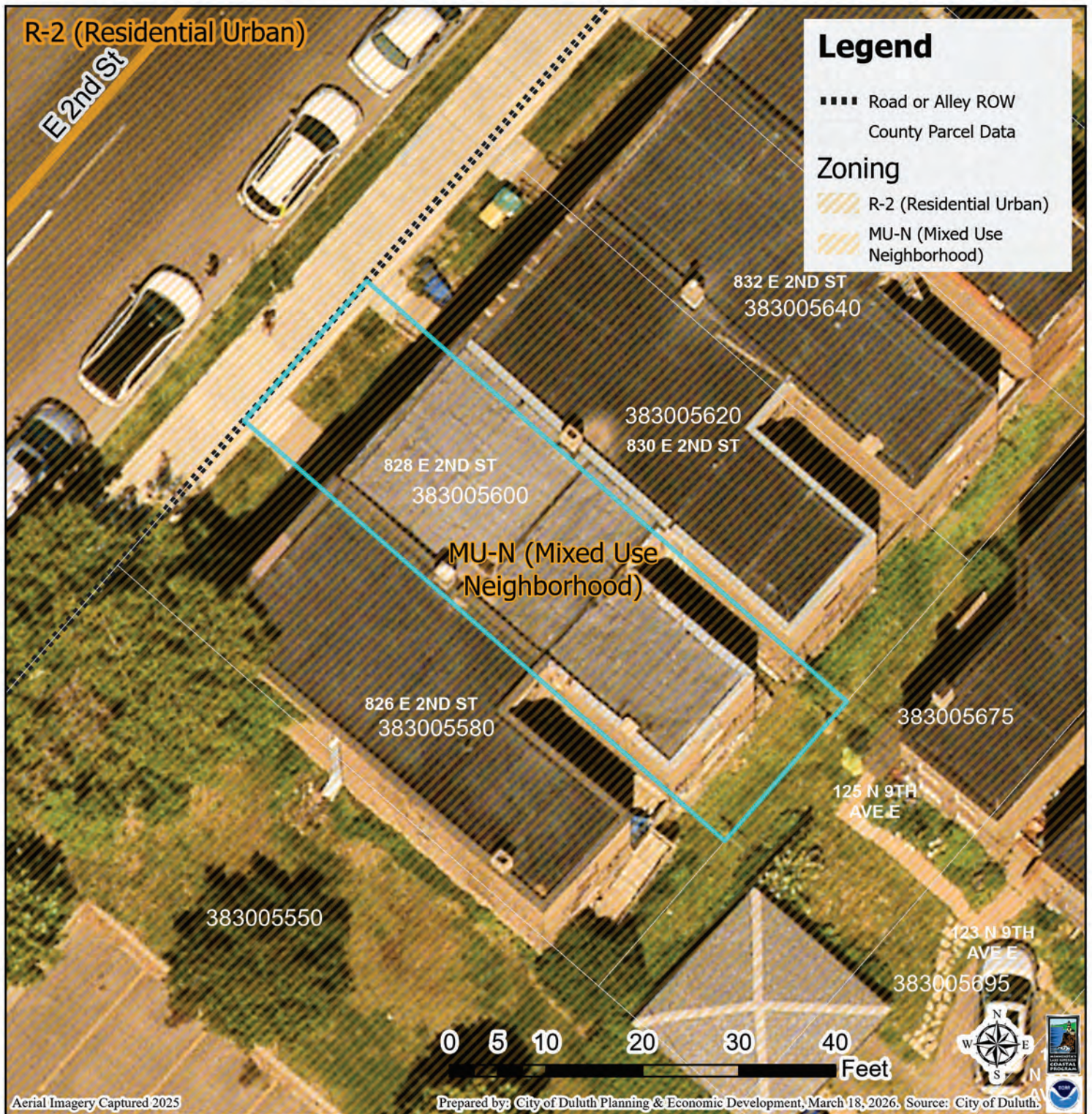
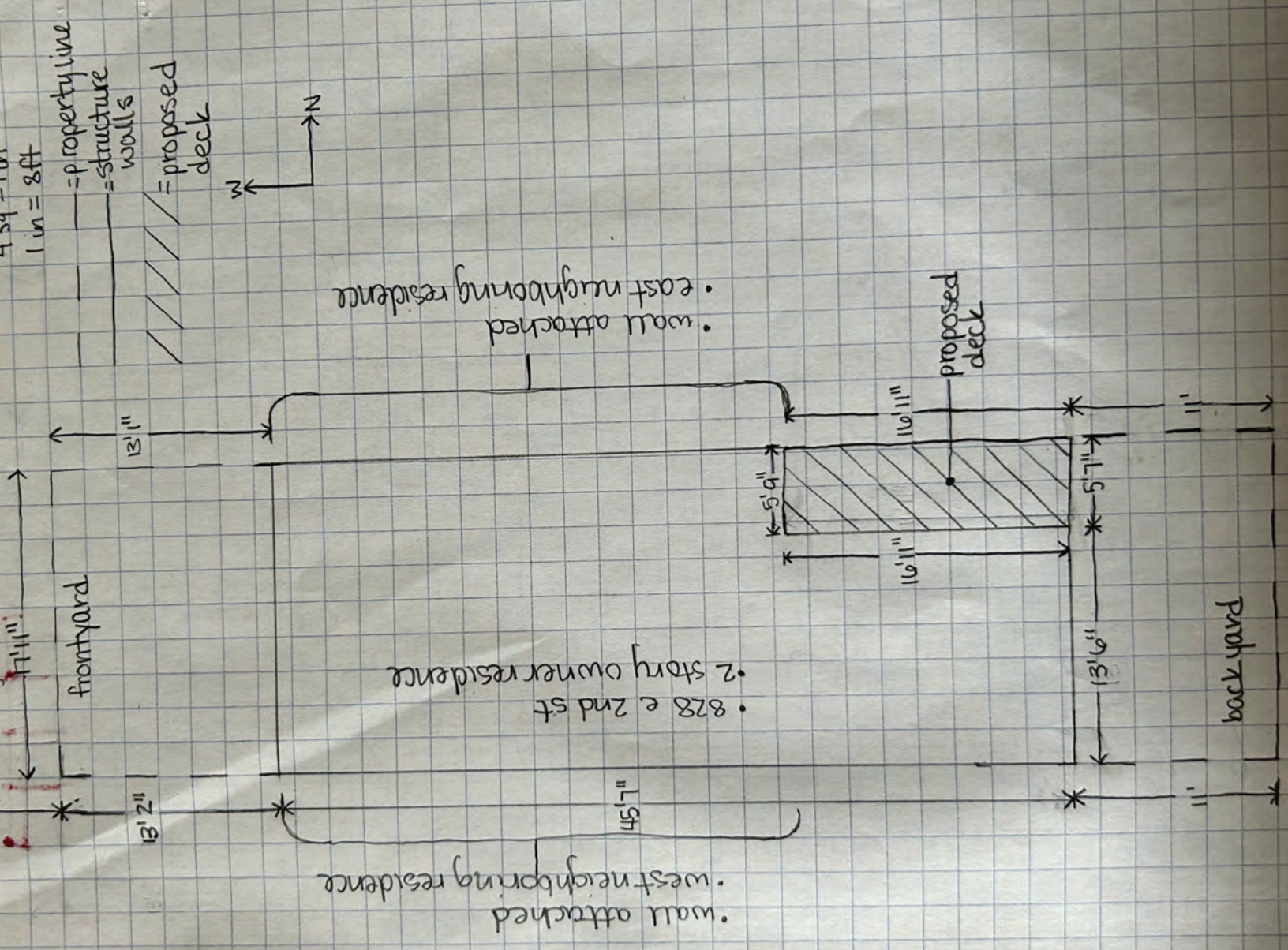


Figure 1.

Aerial imagery captured in 2025, showing the property at 828 E 2nd St. highlighted.

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FIVE STAR. ★★★★★

FIVE STAR. ★★★★★

FIVE STAR. ★★★★★

FIVE STAR. ★★★★★

Map for PLUMA-2605-0002:

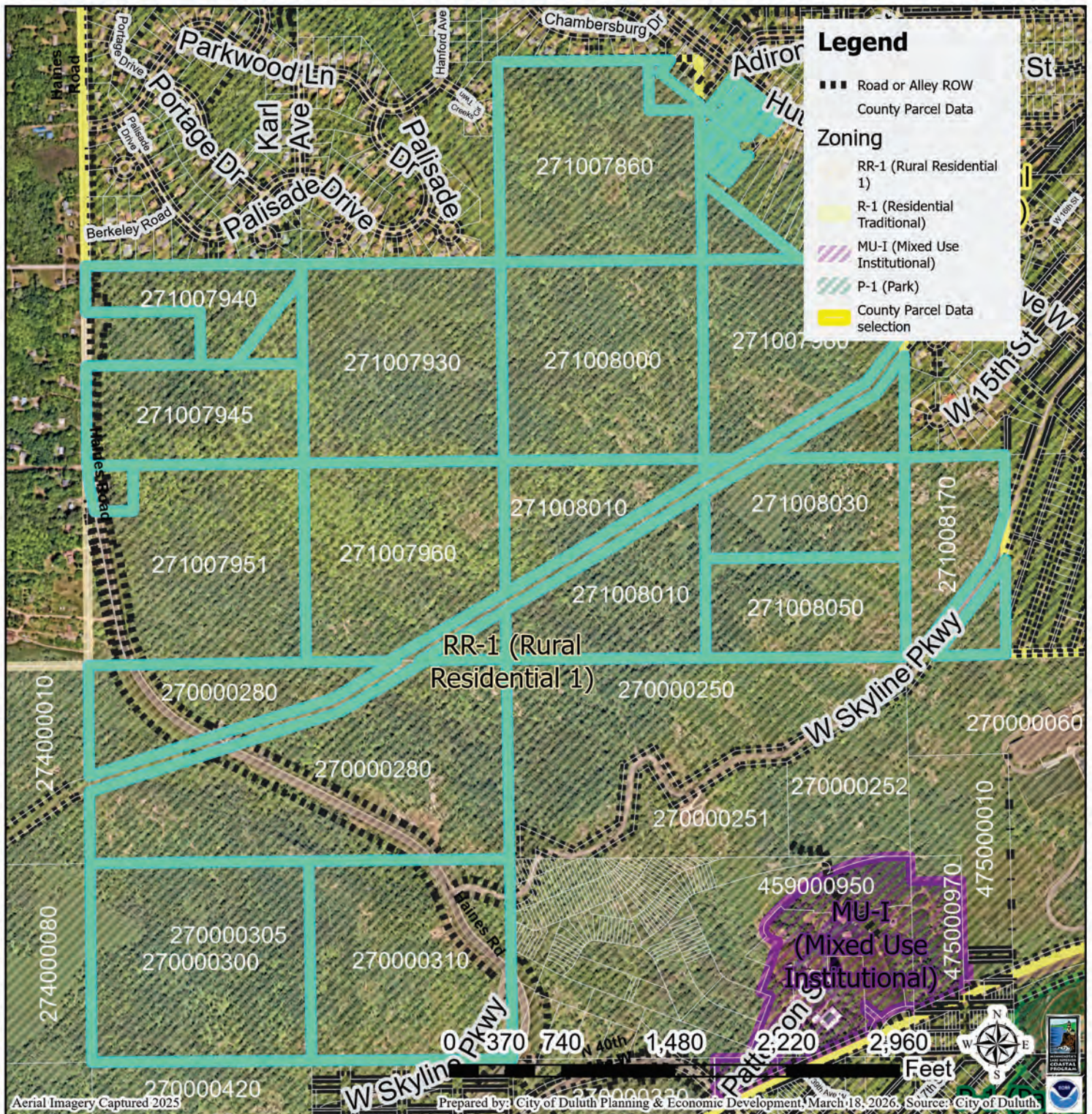


Figure 1.

Aerial imagery captured in 2025, showing parcels included in the Piedmont Trail System Parcels rezone.

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