

LEGEND

DESCRIPTION	PROPOSED	EXISTING
SITE PROPERTY		
SECTION		
RIGHT OF WAY		
EASEMENT		
LOT		
BENCHMARK	△	△
SURVEY MONUMENT	⊙	⊙ ⊙ ⊙ ⊙
CENTERLINE	---	---
PAVEMENT		
PAVERS		
CONCRETE		
SIDEWALK		
GRAVEL		
RIP RAP		
CURB & GUTTER		N/A
STRIPING		
ADA DOMES		
FLAG POLE		
MAIL BOX		
POST		
BOLLARD		
PARKING METER		
SIGN		
CHAIN LINK FNC		
BARB WIRE FNC		
FNC		
GUARD RAIL		
VEGETATION		
TREE	⊙	⊙
WETLAND	N/A	
BUILDING		
WALL		
DOORS		
OVERHANG		
STOOP		N/A
FOOTING		
DOWN DRAIN		
MJR CONTOUR	-500-	-500-
MNR CONTOUR	499	499
TOP OF SLOPE	TOP	TOP
TOE OF SLOPE	TOE	TOE
DAYLIGHT FILL	F	N/A
DAYLIGHT CUT	C	N/A
FLOW LINE		
OVERHEAD	OH	OH
UTILITY POLE		
GUY WIRE		
VALVE		
UTILITY BOX		
METER		
CLEANOUT		
STORM PIPE		
STORM MH		
CB - SQUARE		
CB - ROUND		
APRON		
FORCEMAIN	FM	FM
SANITARY		
SANITARY MH		
WATER LINE	W	W
WATER MH		
HYDRANT		
WELL		
GAS PIPE	G	G
GAS MH		
REGULATOR		
ELECTRICAL	E	E
ELEC MH		
LIGHT POLE		
TRANSFORMER		
OUTLET		
FIBER OPTIC	FO	FO
TELECOM	T	T
CABLE	CBL	CBL
COMM MH		

CITY OF DULUTH
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION

CONSTRUCTION PLANS FOR:

UPPER LAKESIDE ZONE WATER MAIN INTERCONNECT - PHASE 1
CITY OF DULUTH PROJECT #1741
3901 E SUPERIOR ST, DULUTH, MN 55804

CITY PROJECT NO. 1741

VICINITY MAP



GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
'STANDARD SPECIFICATIONS FOR CONSTRUCTION' SHALL GOVERN.
AVAILABLE AT: <http://www.dot.state.mn.us/pre-letting/spec/>

THE 2019 EDITION OF THE CITY OF DULUTH STANDARD CONSTRUCTION
SPECIFICATIONS AND SUPPLEMENTS OR ADDENDUMS SHALL APPLY.
AVAILABLE AT: <http://www.duluthmn.gov/engineering/standard-construction-specifications/>

UTILITY DETAIL LEVEL

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL D.
THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF
CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION
AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

WARNING:
LOCATION OF UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR.
CALL BEFORE DIGGING. GOPHER STATE ONE CALL 1-800-252-1166
REQUIRED BY LAW.

BASIS OF BEARING/CONTROL

CONTROL BASED ON THE ST. LOUIS COUNTY TRANSVERSE MERCATOR
COORDINATE SYSTEM OF 1996

POINT NAME:	NORTHING:	EASTING:	ELEVATION:
WV COVER	3358312.92	4859277.52	749.35

SHEET INDEX

SHEET NO	DESCRIPTION
1	TITLE
2	SEQ
3-6	DETAILS
7-8	TOPOGRAPHIC & BOUNDARY SURVEY
EX-1	WATER MAIN
9	KEY PLAN
10-13	EXISTING CONDITIONS & REMOVALS
14-22	PLAN & PROFILE
23-26	SITE RESTORATION
27	SWPPP NOTES
28-29	SWPPP DETAILS

---THIS PLAN CONTAINS 30 SHEETS---

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
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

David G. Bolf
PROJECT ENGINEER

[Signature]
PROJECT ENGINEER

40926
LIC. NO.

CITY APPROVAL

DocuSigned by:

Cari Pedersen

11/12/2024

5CBDF26E53834EA...

APPROVED

CHIEF ENGINEER OF TRANSPORTATION

DATE

APPROVED

CHIEF ENGINEER OF UTILITIES

DATE

APPROVED

CITY ENGINEER

DATE

CITY OF DULUTH PROJECT NO. 1741

Northland
Consulting Engineers L.L.P.



Structural, Civil and Forensic Engineering Services
Voice: (218) 727-5995
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UPPER LAKESIDE ZONE WATER MAIN
INTERCONNECT - PHASE 1
CITY OF DULUTH PROJECT #1741
3901 E SUPERIOR ST, DULUTH, MN 55804

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
Professional Engineer under the laws of the State of Minnesota.

11/13/24
Lic. No: 40926
Engineer: DAVID G. BOLF

revision

Proj: 24-525
Date: 11/13/24
Drawn: DRH
Checked: TIP

TITLE

Sheet Title
Sheet Number

1