

PLAN LEGEND

RIGHT OF WAY LINE	---
DITCH CENTERLINE	---
FENCE LINE	-X-
RETAINING WALL	---
GRAVEL LINE	---
GUARD RAIL LINE	---
RAILROAD TRACK LINE	
ROAD CENTERLINE	---
TREE LINE	~~~~~
STREAM LINE	~~~~~
WETLAND LINE	---
EX SANITARY LINE	-->>
PR SANITARY LINE	-->>
AB SANITARY LINE	AB-SAN
EX FORCEMAIN LINE	FM >>
PR FORCEMAIN LINE	FM >>
AB FORCEMAIN LINE	AB-FM
EX STORM LINE	-->
PR STORM LINE	-->
AB STORM LINE	AB-STRM
EX WATER LINE	W W
PR WATER LINE	W W
AB WATER LINE	AB-W
EX GAS LINE	GAS
PR GAS LINE	3" PE GAS
AB GAS LINE	AB-GAS
EX STEAM LINE	STEAM
AB STEAM LINE	AB-STEAM
UG CABLE TV LINE	UGTV
AB CABLE TV LINE	AB-CATV
UG ELECTRIC LINE	UGE
AB ELECTRIC LINE	AB-ELEC
UG FIBEROPTIC LINE	UGFO
AB FIBEROPTIC LINE	AB-FO
UG TELEPHONE LINE	UGT
AB TELEPHONE LINE	AB-TELE
OH UTILITIES	OH

SYMBOLS

EX SANITARY MANHOLE	(SAN)
EX SANITARY CLEANOUT	(X)
EX STORM MANHOLE	(STRM)
EX STORM CATCHBASIN	(Hatched)
EX. WATER MANHOLE	(W)
EX. WATER VALVE	(V)
EX. WATER HYDRANT	(H)
EX. WATER SHUTOFF	(S)
EX. WATER & GAS MH	(W&G)
EX. GAS MANHOLE	(GAS)
EX. GAS VALVE	(GV)
EX. GAS SHUTOFF	(GS)
EX. STEAM MANHOLE	(STEAM)
EX. TELEPHONE MANHOLE	(T)
EX. ELECTRIC MANHOLE	(E)
EX. POWERPOLE	(P)
EX. LIGHT POLE	(L)
EX. ELECTRIC VAULT	(EV)
EX. ANCHOR	(A)
EX. ELECTRIC TRANSFORMER	(ET)
EX. STREET LIGHT	(SL)
EX. SIGNAL W/ STREET LIGHT	(SSL)
EX. HANDHOLE	(H.H.)
EX. HANDHOLE	(H.H.)
EX. TELEPHONE PEDESTAL	(TP)
EX. WELL	(W)
BENCHMARK	(B)
FOUND CI MONUMENT	(M)
EX. SIGN	(S)
CONTROL POINT	(CP)
EX DECIDUOUS TREE	(DT)
EX CONIFEROUS TREE	(CT)
EX. PARKING METER	(PM)
EX. SOIL BORING	(SB)

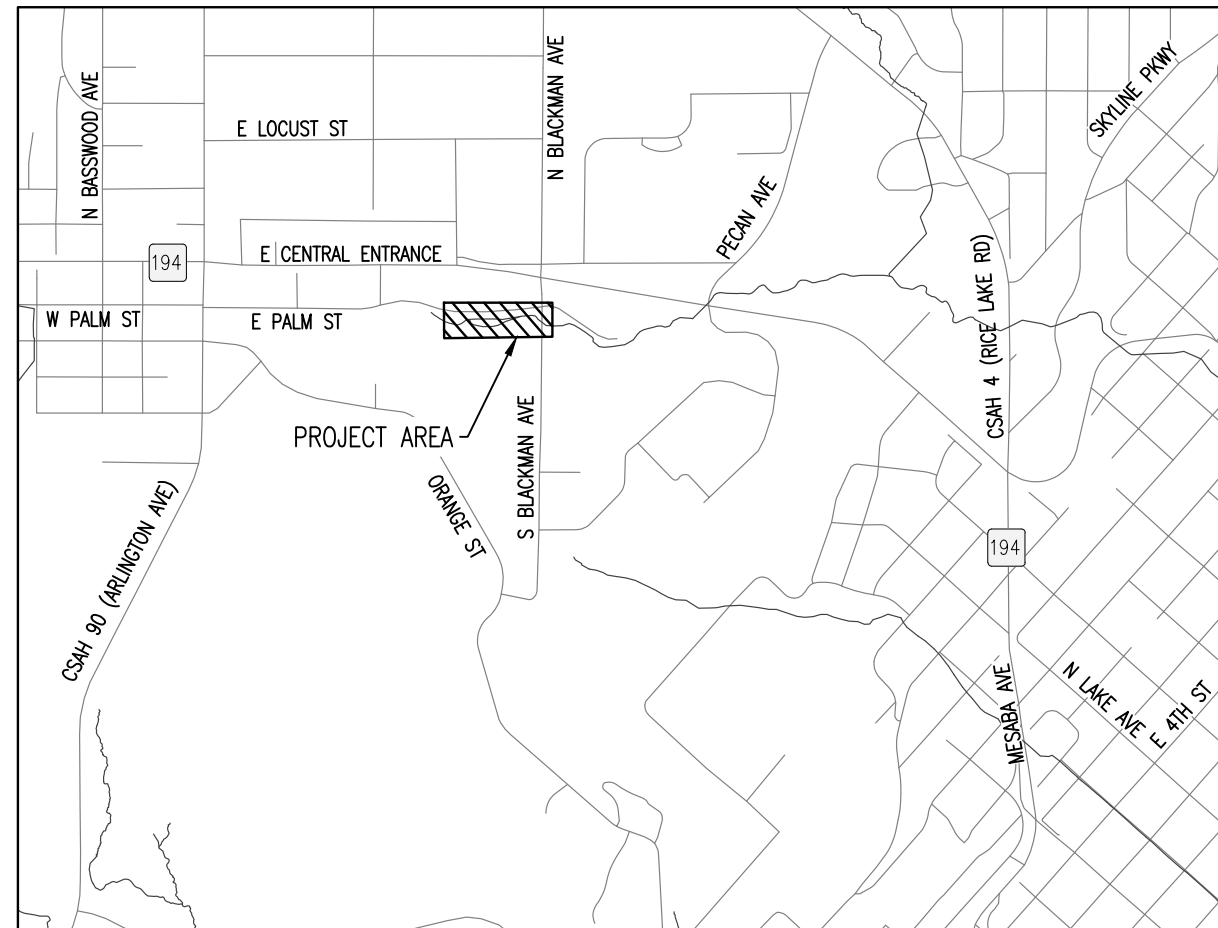
# CITY OF DULUTH

## DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

### CONSTRUCTION PLANS FOR:

**PALM STREET PERMANENT STORMWATER MANAGEMENT SYSTEM IMPROVEMENTS**  
(PERMANENT STORMWATER TREATMENT, FLOOD MITIGATION, SMARTPOND TECHNOLOGY, STORM SEWER, GRADING, BITUMINOUS SURFACING, CONCRETE WALK, PERIMETER FENCING, AND RETAINING WALLS)

CITY PROJECT NO. 2208



**BASIS OF DATUM**

- HORIZONTAL DATUM IS SAINT LOUIS COUNTY TRANSVERSE MERCATOR 1996 (SLCTM\_96)
- VERTICAL DATUM IS NAVD 88 USING VERTICAL CONTROL MONUMENT "XXXXXX" (EL=XXX.XXX).

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".

PLAN REVISIONS		
DATE	SHEET NO.	APPROVER



CITY OF DULUTH PROJECT NO. 2208

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/index.html>

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

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST MNUCTD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

INDEX

SHEET NO	DESCRIPTION
1	TITLE
2	GENERAL LAYOUT
3-4	SEQ & NOTES
5-6	CHARTS
7	TYPICAL SECTIONS
8-19	CONSTRUCTION DETAILS
20-22	EXISTING CONDITIONS & REMOVALS
23-25	PLAN & PROFILE
26	SEWER PROFILES
27-28	CROSS SECTIONS
33-37	SWPPP
38-39	TRAFFIC CONTROL

---THIS PLAN CONTAINS 39 SHEETS---

DESIGN TEAM: JDO

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.

BRAD SCOTT  
PROJECT ENGINEER (TYPED OR PRINTED NAME)

95% PLANS	46198
PROJECT ENGINEER	DATE LIC. NO.

CITY APPROVAL

APPROVED CHIEF ENGINEER OF TRANSPORTATION DATE

APPROVED CHIEF ENGINEER OF UTILITIES DATE

APPROVED CITY ENGINEER DATE