

PLOTTED/REVISED: 12-APR-2024

DISTRICT #: Metro
PLOT NAME: Sample Plan TS (03-25-24)
PATH & FILENAME: 01ST\SIGNALS\SamplePlan\Sample Plan TS (03-25-24).dgn

ABBREVIATIONS

AWF	ADVANCE WARNING FLASHER
C.D.	COUNT DOWN
D2-1 (e.g.)	DETECTOR (PHASE 2, NO. 1)
DEG	DEGREES
DWK	DON'T WALK
F&I	FURNISH AND INSTALL
FL	FLASH/FLASHING
FYA	FLASHING YELLOW ARROW
FYLA	FLASHING YELLOW LEFT ARROW
G	GREEN
GLA	GREEN LEFT ARROW
GRN	GREEN
GR. RD.	GROUND ROD
GRA	GREEN RIGHT ARROW
GTA	GREEN THRU ARROW
HH	HANDHOLE
IND	INDICATION
INP	INPLACE
INS. GR.	INSULATED GROUND
JB	JUNCTION BOX
LED	LIGHT EMITTING DIODE
LUM	LUMINAIRE
NEU	NEUTRAL
P1-1 (e.g.)	PEDESTRIAN HEAD (PHASE 1, NO. 1)
PB	PUSH BUTTON
PB2-1 (e.g.)	PUSH BUTTON (PHASE 2, NO. 1)
PED	PEDESTRIAN
R	RED
R&S	REMOVE AND SALVAGE
RLA	RED LEFT ARROW
S&I	SALVAGE AND INSTALL
SPR	SPARE
STA	STATION
TRA MGMT CAM	TRAFFIC MANAGEMENT CAMERA
V-1 (e.g.)	VIDEO DETECTION CAMERA (NO. 1)
WLK	WALK
Y	YELLOW
YEL	YELLOW
YLA	YELLOW LEFT ARROW
YRA	YELLOW RIGHT ARROW

SYMBOLS

■	HANDHOLE
○	EQ.G CONNECTION
⬇	EVP CONFIRMATORY LIGHT
⬆	EVP DETECTOR
⬆⬆	EVP DETECTOR AND CONFIRMATORY LIGHT
●	SPLICE
Ⓛ	FIBER OPTIC SPLICE VAULT
Ⓟ	PULL VAULT
△	LUMINAIRE NO.
③	SIGNAL BASE NO.
⑤-2	SIGNAL HEAD NO./FLASHER HEAD NO.
Ⓜ	BARREL MOUNT BASE NO.
Ⓜ	WOOD POLE NO.
PTZ	PAN TILT ZOOM CAMERA (PTZ)
V	VIDEO DETECTION

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

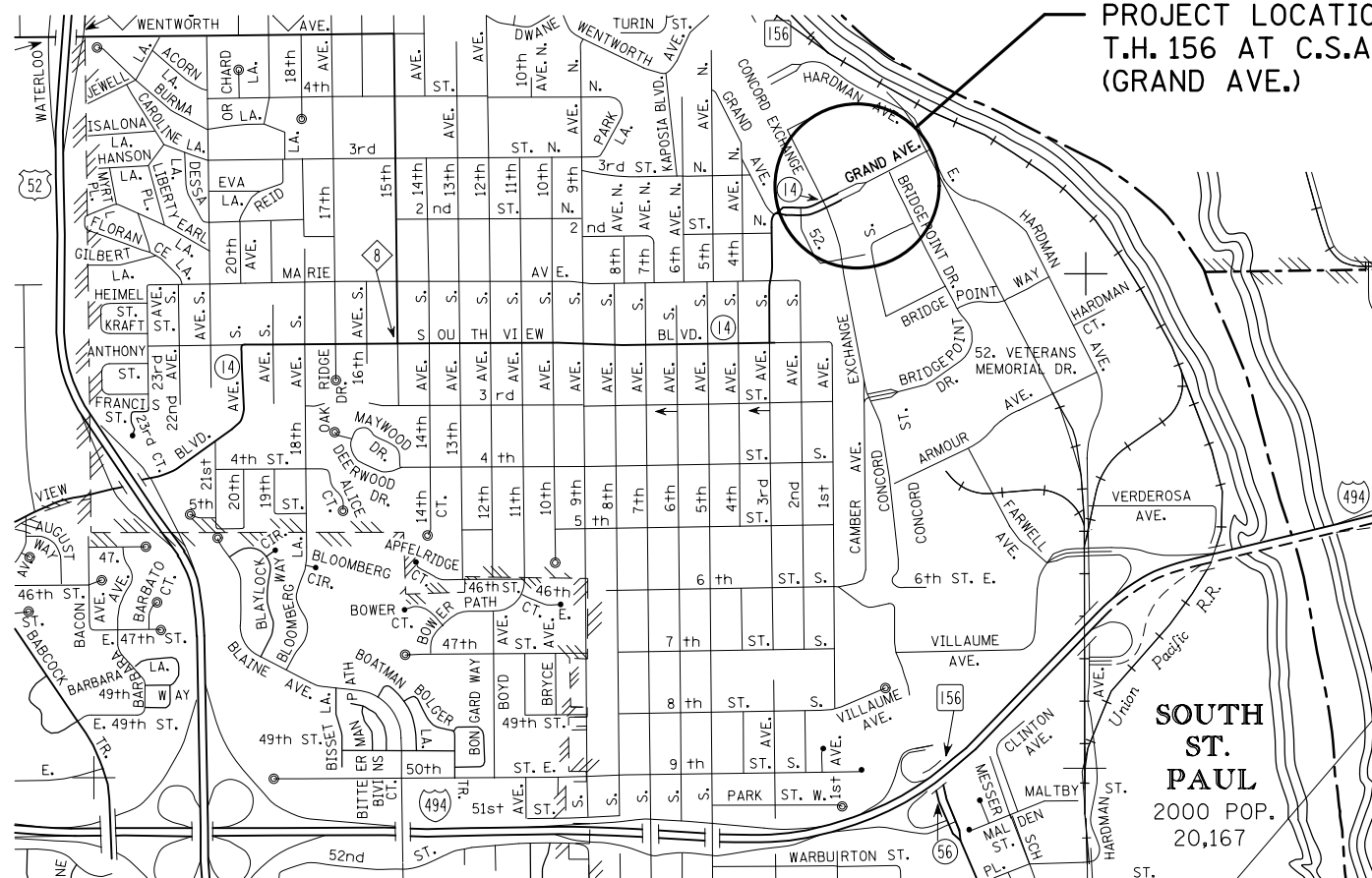
MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR TRAFFIC CONTROL SIGNAL SYSTEMS, INTERCONNECT AND ADA IMPROVEMENTS

AT THE INTERSECTION OF: T.H. 156 AT C.S.A.H. 14 (GRAND AVE.), SOUTH ST. PAUL MN, DAKOTA COUNTY

STATE PROJ. NO. XXXX-XXX

REF POINT XXX+XX.XXX



PROJECT LOCATION
T.H. 156 AT C.S.A.H. 14
(GRAND AVE.)

SOUTH ST. PAUL
2000 POP.
20,167



STATE PROJECT NO. CHARGE IDENTIFIER

XXXX-XX	

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

FED. PROJ. NO. _____ STATE FUNDS _____

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

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

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12	PAVEMENT MARKINGS & SIGNS
13	PEDESTRIAN CURB RAMP DETAIL
14	UTILITIES LAYOUT

THIS PLAN CONTAINS 14 SHEETS

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.

TYPED NAME LIC. NO. XXXXX DATE: _____

DESIGN SQUAD _____ XXXXX

APPROVED _____

RECOMMENDED FOR APPROVAL _____ DATE: _____
CITY OF ENGINEER

RECOMMENDED FOR APPROVAL _____ DATE: _____
COUNTY ENGINEER

OFFICE OF LAND MANAGEMENT APPROVAL _____ DATE: _____
DIRECTOR, LAND MANAGEMENT

APPROVED _____ DATE: _____
STATE DESIGN ENGINEER

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY

APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINTED NAME: LIC. NO. _____ DATE: _____

PLOTTED/REVISED: 12-APR-2024

DISTRICT #: Metro
 I/PLOT NAME: Sample Plan TS (03-25-24)
 PATH & FILENAME: OTST\Signal\SamplePlan\Sample Plan TS (03-25-24).dgn

STATEMENT OF ESTIMATED QUANTITIES				COST BREAKDOWN			
ITEM NO.	DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITIES	STATE SP XXXX-XX	COUNTY SAP XXX-XXX-XXX	FEDERAL SP XXXX-XX	CITY SAP XXX-XXX-XXX
2021.501	MOBILIZATION	LUMP SUM					
2104.501	REMOVE CURB AND GUTTER	LIN FT					
2104.503	REMOVE CONCRETE WALK	SQ FT					
2104.503	REMOVE BRICK MEDIAN	SQ FT					
2104.503	REMOVE BRICK SIDEWALK	SQ FT					
2104.603	REMOVE AND REPLACE BITUMINOUS PAVEMENT	LIN FT					
2104.618	SALVAGE BRICK PAVERS	SQ FT					
2232.603	MILL AND PATCH BITUMINOUS PAVEMENT	LIN FT					
2521.618	CONCRETE WALK	SQ FT					
2531.603	CONCRETE CURB AND GUTTER	LIN FT					
2565.511	CONCRETE CURB DESIGN V	LIN FT					
2531.618	TRUNCATED DOMES	SQ FT					
2563.601	TRAFFIC CONTROL	LUMP SUM					
2565.511	TRAFFIC CONTROL SIGNAL SYSTEM	SIG SYS					
2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM	LUMP SUM					
2565.601	TRAFFIC CONTROL INTERCONNECTION	LUMP SUM					
2565.616	REVISE SIGNAL SYSTEM	SYSTEM					

THE FOLLOWING STANDARD PLATES AND PLANS,
 APPROVED BY THE MINNESOTA DEPT. OF
 TRANSPORTATION AND THE FEDERAL HIGHWAY
 ADMINISTRATION SHALL APPLY TO THIS PROJECT.

STANDARD PLATES	
PLATE NO.	DESCRIPTION
7113A	CONCRETE APPROACH NOSE DETAIL
8124A	POLE AND MAST ARM TYPE TS FOR MAST ARM LENGTHS 15' TO 55'
8132B	PREFORMED RIGID PVC CONDUIT LOOP DETECTOR
8130E	SAW CUT LOOP DETECTORS
8127E	LIGHTING FOUNDATION
8129A	SHIM AND WASHER

STANDARD PLANS	
PLAN NO.	DESCRIPTION
5-297.250	STANDARD PLANS PEDESTRIAN CURB RAMP DETAILS
5-297.730	SIGNING MOUNTING SYSTEMS FOR ROUND SUPPORTS
5-297.731	SIGN MOUNTING DETAILS FOR SIGNAL MAST ARMS
5-297.869	350 ATCC AND SSB CABINET EQUIPMENT PAD
5-297.885	ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSHBUTTON STATION AND LOCATION
5-297.861	POLE FOUNDATION TYPE TS

BY	DATE	REVISIONS	SYSTEM ID: XXXXX METER ADDRESS: 9999 GRAND AVE. OLD SYSTEM ID:	T.E. XXXX	STATEMENT OF ESTIMATED QUANTITIES T.H. 156 AT C.S.A.H. 14 (GRAND AVE.) IN SOUTH ST. PAUL, DAKOTA COUNTY	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
						CERTIFIED BY _____ <small>LICENSED PROFESSIONAL ENGINEER</small>	LIC. NO. _____	DATE: _____	
						STATE PROJ. NO. XXXX-XX (T.H. 156)	SHEET NO. 2 OF 14 SHEETS		