

K:\Projects\2 - 40 CSA\HCSAH 9\SAP 069-609-040\400 Drawings\10 Base\Acad Drawings\Title sheet SAP.dwg, 11/9/2015 7:48:05 AM

PLAN SYMBOLS

COUNTY LINE	---
TOWNSHIP OR RANGE LINE	----
SECTION LINE	-----
QUARTER LINE	-----
SIXTEENTH LINE	-----
EXISTING R/W	=====
NEW R/W	=====
TEMP EASE	-----
RAILROAD R/W	=====
UNSURFACED RD. OR SHLD.	-----
EDGE OF LAKE	-----
SWAMP BOUNDARY	-----
MISCELLANEOUS BOUNDARY	-----
CORPORATE OR CITY LIMITS	=====
ALIGNMENT STATIONS	-----
ALIGNMENT POINTS	-----
PROPERTY LINES	-----
VACATED PLATTED PROPERTY	-----
RIVER OR CREEK	-----
DRAINAGE DITCH	-----
BRIDGE	-----
RECREATIONAL TRAIL	-----
RAILROAD (SINGLE TRACK)	-----
RR CROSSING PAVEMENT MARKING	-----
RR CROSSING SIGNAL AND GATE	-----
RR CROSSBUCK SIGN	-----
RR CROSSBUCK SIGN W/LIGHTS	-----
RR SWITCH	-----
BARBED WIRE FENCE	-----
CHAIN LINK FENCE	-----
WOVEN WIRE, OR WOVEN AND BARB	-----
WOOD FENCE	-----
BILLBOARD	-----
GUARD POST	-----
RETAINING WALL	-----
GUARDRAIL (CABLE)	-----
GUARDRAIL (PLATE BEAM)	-----
DRAIN TILE	-----
FLUME	-----
CULVERT APRON	-----
CULVERT	-----
WOODS OR BRUSH, NURSERY	-----
DECIDUOUS TREES	-----
CONIFER (EVERGREEN) TREES	-----
HEDGE	-----
BUSH OR SHRUB	-----
STUMP	-----
SWAMP OR MARSH	-----
CONCRETE OR STONE MONUMENT	-----
IRON PIPE	-----
CAST IRON OR CAPPED PIPE MONUMENT	-----
HUB	-----
NAIL OR SPIKE OR PK NAIL	-----
IRON PIN OR REBAR	-----
IRON PIN WITH BRASS DISK	-----
VERTICAL CONTROL	-----
HORIZONTAL CONTROL	-----
POWER POLE	-----
LIGHT POLE	-----
LIGHT AND TELEPHONE POLE	-----
LIGHT, TELEPHONE AND POWER POLE	-----
GUY POLE	-----
POLE ANCHOR	-----
TELEPHONE POLE	-----
TELEPHONE AND POWER POLE	-----
UNDERGROUND CABLE PEDESTAL	-----
TELEPHONE OR POWER MANHOLE (VAULT)	-----
ELECTRIC CABLE IN CONDUIT	-----
TELEPHONE CABLE IN CONDUIT	-----
BURIED ELECTRIC CABLE	-----
BURIED TELEPHONE CABLE	-----
GAS LINE	-----
GAS METER	-----
WATER LINE	-----
VALVE	-----
FIRE HYDRANT	-----
WATER MANHOLE	-----
WELL	-----
LAWN SPRINKLER HEAD	-----
STORM SEWER MANHOLE	-----
SEPTIC TANK	-----
SANITARY SEWER MANHOLE	-----
CATCH BASIN	-----
FORCE MAIN LIFT STA.	-----
SEWER LINE	-----
BARRICADE	-----
SIGN	-----
TRAFFIC SIGNAL W/MAST ARM	-----
PED. PUSH BUTTON STA.	-----
HAND HOLE	-----
YARD LIGHT	-----
ENTRANCE	-----
BUILDING	-----
SATELLITE DISH	-----
STEEL TOWER	-----
FLAG POLE	-----

MINNESOTA DEPARTMENT OF TRANSPORTATION
SAINT LOUIS COUNTY

CONSTRUCTION PLAN FOR: GRADING, STORM SEWER, WATERMAIN, SANITARY SEWER, AGGREGATE BASE,
CURB AND GUTTER, PLANT MIXED BITUMINOUS SURFACE, SIDEWALKS,
RETAINING WALLS.

LOCATED ON C.S.A.H. 9 (FOURTH STREET) & (WALLACE AVE.)

BETWEEN 6TH AVENUE EAST AND ARROWHEAD ROAD

FROM A POINT APPROX. 1542' SOUTH OF THE TO A POINT 463' WEST OF THE WEST 1/16 CORNER
NORTHWEST CORNER OF SEC. 22, T50N, R16W. OF SECTION 11, T50N, R14W.

STATE PROJ. NO. 069-609-040

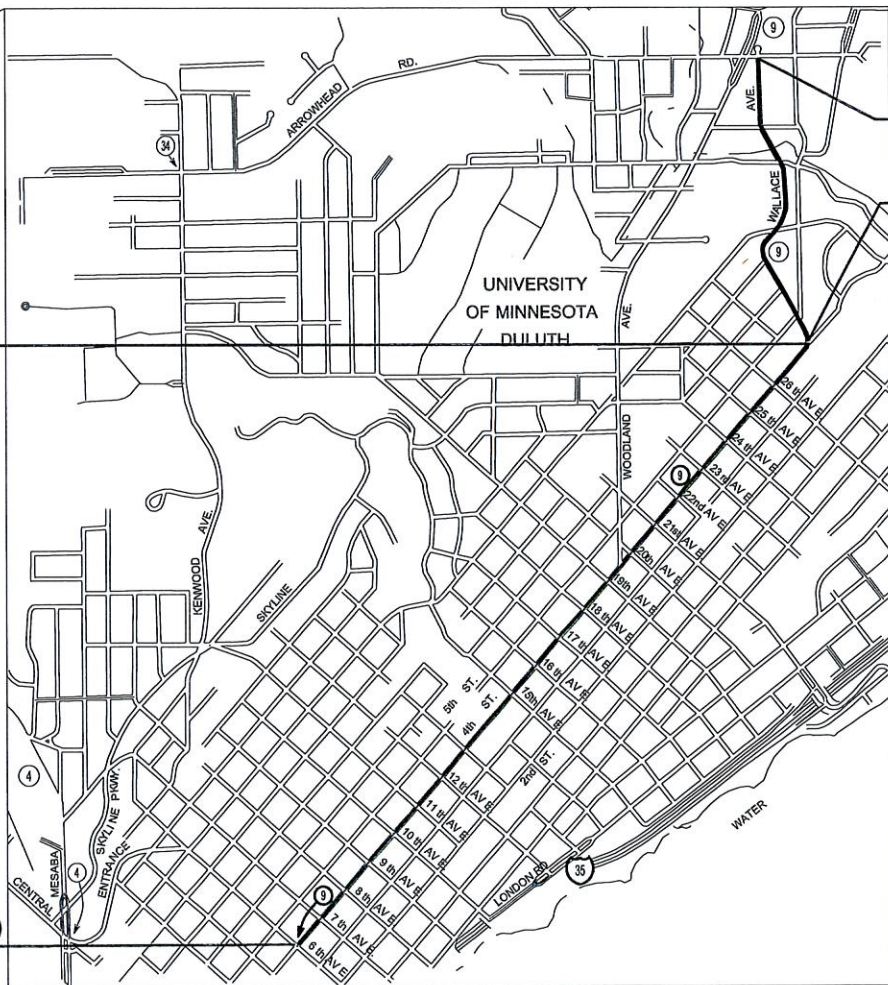
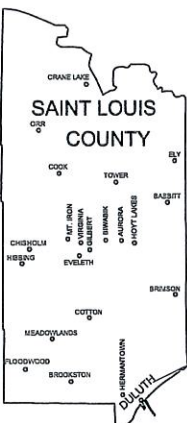
Urban Reconstruction

GROSS LENGTH	11125.05	FEET	2.107	MILES
BRIDGES-LENGTH	0.00	FEET	0.000	MILES
EXCEPTIONS-LENGTH	0.00	FEET	0.000	MILES
NET LENGTH	11125.05	FEET	2.107	MILES

Urban Reconditioning

GROSS LENGTH	3859.00	FEET	0.731	MILES
BRIDGES-LENGTH	0.00	FEET	0.000	MILES
EXCEPTIONS-LENGTH	0.00	FEET	0.000	MILES
NET LENGTH	3859.00	FEET	0.731	MILES

R14W
GENERAL LAYOUT



END: S.P. 069-609-040
STA. 111+25.05

BEGIN: S.P. 069-609-040
STA. 10+00.00

SCALES

PLAN	20 ft.
PROFILE	50 ft. 10 ft. HORIZ. VERT.
INDEX MAP	25 mi.
GENERAL LAYOUT	0.50 mi.

PLAN REVISIONS

DATE	SHEET NO.	APPROVED BY

END: S.P. 069-609-040
STA. 538+59.00

BEGIN: S.P. 069-609-040
STA. 500+00.00

T50N



MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 2016 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>

INDEX OF SHEETS

1	TITLE SHEET
2-?	ESTIMATED QUANTITIES
?	STANDARD PLATES, BASIS FOR ESTIMATED QUANTITIES
?	EARTHWORK SUMMARY
?-?	TYPICAL SECTIONS
?-?	UTILITY REARRANGEMENT SCHEDULE
?-?	CONSTRUCTION DETAILS
?-?	QUANTITY TABULATIONS
?-?	TRAFFIC CONTROL
?-?	STORM SEWER PLAN AND DETAILS
?-?	PLAN SHEETS
?-?	PROFILE SHEETS
?-?	EROSION CONTROL PLAN AND DETAILS (SWPPP)
?-?	CROSS SECTIONS
?-?	STRIPING, SIGNING AND GUARDRAIL PLAN
?-?	RETAINING WALL PLANS
?-?	WATER & SANITARY UTILITY IMPROVEMENTS
-	THIS PLAN CONTAINS ??? SHEETS -

DESIGN DESIGNATION - 8820.9941 (URBAN)

R VALUE	10	$\Sigma N1820$	=	1,199,608
ADT (Current Year)	2016	=	8,300	
ADT (Future Year)	2036	=	9,900	
D (Directional Distr.)		=	50/50%	
T (Heavy Commercial)		=	3.6%	
Proj. Soil Factor		=	130 (R=10)	

Design Loading	=	10 TON
Traffic Lanes	=	11'
Parking Width	=	7'
Bike Lanes	=	5'
Functional Class	=	Major Collector
Design Speed	=	30 mph

Based on STOPPING Sight Distance
Height Of Eye 3.5' Height of object 2.0'

DESIGN DESIGNATION - 8820.9946 (URBAN)
Urban Reconditioning sta. 500+00.00 to sta. 538+59.00

DESIGN SQUAD: JEFF ISACKSON, DARRELL MILLER, MARK ROMANO

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.

PRINT NAME: STEPHEN E. KRASAWAY

SIGNATURE: _____

DATE: _____ LIC. NO.: 45397

APPROVED: _____ DATE: _____
ST. LOUIS COUNTY HIGHWAY ENGINEER

APPROVED: _____ DATE: _____
CITY OF DULUTH

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

STATE AID ENGINEER: APPROVED FOR FEDERAL AND STATE AID FUNDING
DATE: _____

STATE PRO. NO. 069-609-040 CP 0009-147349 TST SHEET NO. 1 OF SHEETS