

MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION SHALL GOVERN.

**MINNESOTA DEPARTMENT OF TRANSPORTATION  
SAINT LOUIS COUNTY**

**CONSTRUCTION PLAN FOR:** CULVERT EXTENSION, LANE WIDENING, STORM SEWER,  
MILL BITUMINOUS SURFACE, AGGREGATE BASE, CONCRETE  
CURB & GUTTER, PLANT MIXWD BITUMINOUS SURFACE

LOCATED ON CSAH 32 (W. ARROWHEAD ROAD)  
BETWEEN 1,510' EAST OF CSAH 91 (HAINES RD.) AND CSAH 4 (RICE LAKE RD.)

FROM 1,510 FEET EAST OF THE NW CORNER OF SECTION 18, T50N, R14W TO 85 FEET WEST OF THE NE CORNER OF SECTION 17, T50N, R14W

STATE AID PROJECT 069-632-023

GROSS LENGTH	9,085.00	FEET	1.721	MILES
BRIDGES-LENGTH	0.00	FEET	0.000	MILES
EXCEPTIONS-LENGTH	0.00	FEET	0.000	MILES
NET LENGTH	9,085.00	FEET	1.721	MILES



THIS PLAN CONTAINS 56 SHEETS

DESIGN DESIGNATION

ADT (CURRENT YEAR)	2018	=	13,390
ADT (FUTURE YEAR)	2038	=	14,729
D (DIRECTIONAL DISTR.)		=	50/50%
T (HEAVY COMMERCIAL - 6%)		=	869
PROJ. SOIL FACTOR		=	12.0'
TRAFFIC LANE WIDTH		=	2.0'
FUNCTIONAL CLASSIFICATION		=	MINOR ARTERIAL

URBAN RECONDITIONING STA 45+00.00 TO STA 135+85.00

DESIGNERS: D. MILLER,

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: \_\_\_\_\_ ST. LOUIS CO. HWY. ENGINEER DATE: \_\_\_\_\_

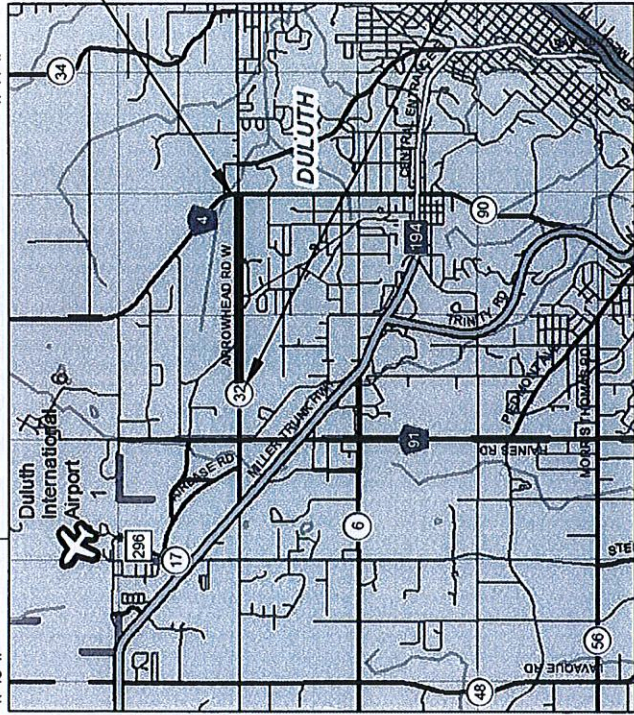
DISTRICT STATE HWY. ENGINEER, REVIEWED FOR COMPLIANCE WITH STATE AID RULES / POLICY DATE: \_\_\_\_\_

STATE HWY. ENGINEER, APPROVED FOR FEDERAL AND STATE AID FUNDING DATE: \_\_\_\_\_

SHEET NO. 1 OF 56 SHEETS

PLAN SYMBOLS

SECTION SUBDIVISION LINE	EXISTING R/W	NEW R/W	RAILROAD R/W	ROAD SHOULDER	EDGE OF LAKE	MISCELLANEOUS BOUNDARY	CORPORATE OR CITY LIMITS	RECREATIONAL TRAIL	ROAD ALIGNMENT	ALIGNMENT POINTS	RIVER OR CREEK	DRAINAGE DITCH	BRIDGE	RAILROAD (SINGLE TRACK)	RR CROSSING PAVEMENT MARKING	RR CROSSING GATE	RR CROSSBRICK SIDE W/LIGHTS	RR CROSSBRICK SIDE W/O LIGHTS	CHUNK LINK FENCE	WOOD PILE COMBINATION WOOD AND BRUSH	RAILROAD	RETAINING WALL	GUARDRAIL (CABLE)	GUARDRAIL (PLATE BEAM)	CULVERT	CULVERT WITH APRONS	TREELINE OR BRUSHLINE	DECIDUOUS TREES	CONIFER (EVERGREEN) TREES	BUSH OR SHRUB	SWAMP OR MARSH	MONUMENT (C/ACT/ADP, BCP, ...)	CONCRETE OR STONE MONUMENT	IRON PIPE, PIN OR REBAR	IRON PIN WITH BRASS DISK	NAIL, PK, NAIL, SPIKE, SFP, T-BAR, ...	VERTICAL CONTROL	POWER POLE	LIGHT POLE	LIGHT AND TELEPHONE POLE	TELEPHONE AND POWER POLE	TELEPHONE POLE	TELEPHONE AND POWER POLE	UNDERGROUND UTILITY (PODESTAL)	TELEPHONE CABLE IN CONDUIT	BURIED ELECTRIC CABLE	GAS LINE	TELEPHONE CABLE	WATER LINE	VALVE	FIRE HYDRANT	WATER MANHOLE	WATER SPRINKLER HEAD	MANHOLE	CATCH BASIN	SEPTIC TANK	SEWER MAN LIFT STA.	D LIFT	PERMANENT BARRIAGE	TRAFFIC SIGNAL LIGHT	HAND HOLE	ENTRANCE	BUILDING	SATELLITE DISH	STEEL TOWER	FLAG POLE	SIGN	TYPE III BARRIAGE	CHANNELIZING DEVICE	TYPE A WARNING LIGHT
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DATE	PLAN REVISIONS	SHEET NO.	APPROVED BY

SAP 069-632-023  
CP 0032-341774