

# LEGEND

### PLAN SYMBOLS

BENCHMARK	
SECTION CORNER	
FENCE POST	<u> </u>
ELECTRIC PEDISTAL	
TELEPHONE PEDISTAL	m
LIGHT POLE	
POWER POLE	<u> </u>
MAIL BOX	
FIRE HYDRANT	—
WATER VALVE	—— ў
FIBER OPTIC MARKER	
WETLAND SYMBOL	
SANITARY MANHOLE	S
STORM MANHOLE	
LIFT STATION	
DECIDUOUS TREE	
CONIFEROUS TREE	
CATCH BASIN	
DROP INLET	<u>=</u>
CULVERT	
RIGHT-OF-WAY LINE	
RAILROAD TRACKS	-+++++
SILT FENCE	* * * *
SILT FENCE TYPE MS	
DRAIN TILE	
PERF TILE LINE	
GUARDRAIL	
BIO ROLL	
FENCE WOOD	
FENCE CHAIN LINK	
FENCE BARB WIRE	
SLOPE EASEMENT	
TEMPORARY EASEMENT	те—те—_

## **UTILITIES SYMBOLS**

OVERHEAD POWER LINE	ar
OVERHEAD TELEPHONE LINE	ап
OVERHEAD CABLE TV	—
WATER MAIN SEVICE	vxs
WATER SERVICE LINE	vsvs
BURRIED TELEPHONE CABLE	——ugr———
BURRIED POWER LINE	——ugp——
BURRIED PETROLIUM PIPELINE	PETRO
BURRIED GAS PIPELINE	GAS
BURRIED FIBER OPTIC	——ugr———

### DRAINAGE

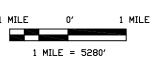
DIVITIVOL	
INTERMITTENT STREAM	_~~
NARROW STREAM	
WIDE STREAMS	
MARSH OR SWAMP LAND	
DRAINAGE DITCH	
LAKE OR POND	_
	ر <i>ک</i>

## **STRUCTURES**

PLAN	0	100′	200′
PROFILE			

HIGHWAY BRIDGE . . . . . . . . . . . .

INDEX



## MINNESOTA DEPARTMENT OF TRANSPORTATION

## CHIPPEWA COUNTY

## CONSTRUCTION PLAN FOR: BITUMINOUS SURFACING, AGGREGATE BASE, & SHOULDER BASE AGGREGATE

LOCATED ON C.S.A.H. 4 BETWEEN 1st ST E AND T.H. 40 8 MILES NORTH OF MAYNARD (Geographic Description) FROM 604' S OF THE NE COR. SEC. 19 T118N R38W TO 20' S OF THE NE COR. SEC. 19 T119N R38W (Legal Description)

STATE AID PROJECT NO. 012-604-021 32,298 **GROSS LENGTH** 6.117 MILES **EXCEPTIONS-LENGTH** 32,298 15,42' 6.117 MILES **BRIDGES-LENGTH** 0.003 MILES **NET LENGTH** END S.A.P. 012-604-021 STA. 808+98 BEGIN S.A.P. 012-604-021 STA. 486+00 ROAD SYSTEM DESIGNATIONS INTERSTATE TRUNK HIGHWAY . . . . . . . U.S. NUMBERED TRUNK HIGHWAY . . . . . STATE NUMBERED TRUNK HIGHWAY . . . 18 Outline Map of the County. Area of this County 588 Sq. Miles Land Area 581 Sq. Miles

**INDEX MAP 1** 

MINN. PROJ. NO.	
MINN. PROJ. NO.	

## **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 LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

### **INDEX**

SHEET NO. 1 TITLE SHEET ESTIMATED QUANTITIES SHEET NO. 2 SHEET NO. 3 TYPICAL SECTION SHEETS TABULATED SHEET SHEET NO. 5-6 SWPPP SHEETS SHEET NO. 7 TRAFFIC CONTROL SHEET

### THIS PLAN CONTAINS 7 SHEETS

Graded Under S.A.P. 012-604-019 (2024)

#### DESIGN DESIGNATION

DESIGN DESIGNATION
\$\( \)\( \)\( \)\( \)\( \)\( \)\( \)\( \
DESIGN SPEED NOT ACHIEVED AT: STATO STAMPH STATO STAMPH STATO STAMPH STATO STAMPH  SIGNATURE:TYPED OR PRINTED NAME: JEREMY L GILB
DESIGN ENGINEER: 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.

DATE: 12/16/2024 LICENSE NUMBER:

DATE: 12/16/2024

Todd Broadwell Date: 2024.12.17 12:21:11 -06'00' Digitally signed by Todd Broadwell

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID

Todd Broadwell Date: 2024.12.17 12:20:29 -06'00' Digitally signed by Todd Broadwell

STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DIDCUMENTING EXISTING UTILITIES." THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AND DEPTHS RELEVANT TO CONSTRUCTION. EXCAVATION TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCIDENTAL. THE CONTRACTOR SHALL NOTIFY THE UTILITY OWNERS AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION. GOPHER STATE ONE CALL

STATE PROJECT NO. 012-604-021 STATE AID PROJ. NO.\_ SHEET NO. 1 OF 7 SHEETS

	ESTIMATED QUANTITIES					
	SPECIFICATION No.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES		
(1)	2011.601	CONSTRUCTION SURVEYING	LUMP SUM	1		
	2021.501	MOBILIZATION	LUMP SUM	1		
(2)	2112.519	SUBGRADE PREPARATION	RD STA	323		
(3)	2123.510	MOTOR GRADER	HOUR	40		
(4)	2123.610	TRACTOR & DISC	HOUR	40		
(5)	2211.509	AGGREGATE BASE CLASS 5 MDD	TON	22978		
(6)	2221.609	SHOULDER BASE AGGREGATE CLASS 5 MOD	TON	12219		
(7)	2360.509	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,B)	TDN	16401		
(8)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,C)	TON	19530		
(9)	2360.509	TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING	TON	100		
(10)	2563.601	TRAFFIC CONTROL	LUMP SUM	1		
(11)	2574.507	COMMON TOPSOIL BORROW	CU. YD.	54		
	2574.508	FERTILIZER TYPE 3	POUND	8844		
	2575.505	SEEDING (P)	ACRE	20.8		
	2575.505	DISC ANCHORING (P)		20.8		
(12)	2575.505	RAPID STABILIZATION METHOD 4	SQ. YD.	6328		
	2575.508	SEED MIXTURE 25-142	POUND	911		
2575.508   SEED MIXT		SEED MIXTURE 25-151	POUND	112		
(13)	(13) 2575.509 MULCH MATERIAL TYPE 1		TON	41.6		
(14)	(14) 2580.501 INTERIM PAVEMENT MARKING		LUMP SUM	1		
(15)(16)	2582.503	4" BROKEN LINE PAINT	LIN. FT.	6504		
(16)	2582.503	4" SOLID LINE PAINT	LIN. FT.	4168		
(17)	2582.503	6" SOLID LINE PAINT	LIN. FT.	62390		
(18)	2582.503	24" SOLID LINE PAINT	LIN. FT.	14		
	-		1			
			1			
			1			

- BASIS FOR PLAN QUANTITIES WEAR & BASE COURSE MIXTURE: II5 LBS. PER SQ. YD./IN.
- AGGREGATE BASE: 105 LBS. PER SQ. YD./IN.
- TOPSOIL BORROW: I TON = 0.7 YD3 (LV)

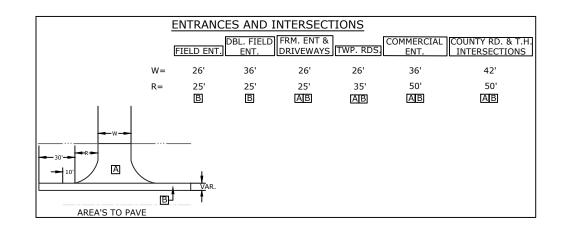
## STANDARD PLATES

THE FOLLOWING STANDARD PLATES AS APPROVED BY F.H.W.A. SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
8000 K	TEMPORARY CHANNELIZERS
9000 E	APPROACHES AND ENTRANCES

- (1) MACHINE CONTROL IS REQUIRED FOR THIS PROJECT. MACHINE CONTROL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 2011.601 CONSTRUCTION SURVEYING. CHIPPEWA COUNTY CAN PROVIDE INFORMATION IN AUTOCAD (.DWG) FORMAT DNLY. THE CONTRACTOR IS RESPONSIBLE FOR CREATING A WORKING MODEL. PLEASE NOTE THAT CHIPPEWA COUNTY BELIEVES THIS ELECTRONIC DATA TO BE ACCURATE BUT DOES NOT GUARANTEE IT. THE DOCUMENTS ORIGINALLY PROVIDED WITH THE CONTRACT REMAIN THE BASIS OF THE CONTRACT, AND THE ELECTRONIC DATA BEING PROVIDED IS FOR INFORMATIONAL USE ONLY IN ORDER TO ASSIST THE CONTRACTOR WITH THE USE OF MACHINE CONTROL/SURVEYING. THEREFORE, IF USE OF THIS DATA CAUSES AN ERROR, ANY COSTS TO THE CONTRACTOR IN TIME OR MONEY TO MAKE CORRECTIONS AS A RESULT OF THIS ERROR WILL NOT BE CONSIDERED "EXTRA WORK" AS THAT TERM IS DEFINED IN MNDDT'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION.
- (2) PROVIDED FOR GRADING OF INPLACE AGGREGATE. INCLUDES REMOVAL OF EXISTING AGGREGATE TAPERS AT PROJECT LIMITS. SHALL BE USED AS AGGREGATE BASE.
- (3) HOURS PROVIDED FOR SHAPING AND GRADING TOPSOIL ON PROPOSED INSLOPES AS DIRECTED BY THE ENGINEER.
- (4) HOURS PROVIDED FOR DISKING TOP 8' OF TOPSOIL TO BE PULLED UP.
- (5) TO BE PLACED UNDER ROADWAY BITUMINOUS PAVEMENT.
- (6) AGGREGATE SHOULDERS, INCLUDES 2267 TONS FOR APPROACHES, ENTRANCES, AND INTERSECTIONS.
- (7) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) INCLUDES 1539 TON FOR SHOULDER PAVING, ENTRANCES, AND INTERSECTIONS. PAVE ENTRANCES AND INTERSECTIONS TO THE R/W OR AS DIRECTED BY THE ENGINEER. SAW CUTS AT ±STA 486+00, ±STA 808+98, AND ON C.S.A.H. 13 LT & RT TO BE INCLUDED IN BID PRICE FOR SP 12.5 NON WEARING COARSE MIXTURE 2360.509.
- (8) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) INCLUDES 1851 TON FOR SHOULDER PAVING, ENTRANCES, AND INTERSECTIONS. PAVE ENTRANCES AND INTERSECTIONS TO THE R/W OR AS DIRECTED BY THE ENGINEER. 1.5" MILLING AT 5' LENGTH ON C.S.A.H. 13 FOR FINAL LIFT TO BE INCLUDED IN BID PRICE FOR 2360.509 TYPE SP 12.5 WEARING COARSE MIXTURE (2,C) SEE DETAIL C ON SHEET 3.
- (9) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) TO BE USED AS DIRECTED BY THE ENGINEER.
- (10) CONTRACTOR WILL FURNISH AND MAINTAIN ALL ADVANCE WARNING AND CONSTRUCTION ZONE SIGNS. SEE SPECIAL PROVISIONS.
- (11) TO BE USED AROUND MAILBOX'S, UTILITIES, AND AS DIRECTED BY THE ENGINEER.
- (12) TO BE USED FROM STA. 790+00 808+98 LT & RT AT 15' WIDE. RAPID STABILIZATION METHOD 4 SHALL ALSO INCLUDE SEED MIXTURE 25-142 APPLIED AT A RATE OF 45 LBS/ACRE OVER ENTIRE AREA OF RAPID STABILIZATION. ALL COSTS RELATED TO RAPID STABILIZATION INCLUDING SEED MIXTURE 25-142, EROSION CONTROL BLANKET (CATEGORY 25), AND TYPE 3 FERTILIZER, AS PER SPEC. IN TABLE 2575.3-3, SHALL BE INCLUDED IN "RAPID STABILIZATION METHOD 4".
- (13) APPLICATION RATE 2 TON/ACRE.
- (14) TO BE PLACED ON EACH LIFT 4" WIDE  $\times$  4' LONG MARKING TAPE AT 50' INTERVALS.
- (15) PAYMENT IS FOR ACTUAL STRIPE PLACED, BASED ON THE 50 FOOT CYCLE, 40 FOOT SKIP AND 10 FOOT STRIPE. SEE SPECIAL PROVISIONS
- (16) YELLOW, CENTERLINE. INCLUDES GLASS BEADS. SEE TABLE ON SHEET 4. SEE SPECIAL PROVISIONS.
- (17) WHITE, TURN LINE 502', FOG LINE 61888'. INCLUDES GLASS BEADS. SEE TABLE ON SHEET 4. SEE SPECIAL PROVISIONS.
- (18) WHITE, STOP LINE. INCLUDES GLASS BEADS. SEE TABLE ON SHEET 4. SEE SPECIAL PROVISIONS.

UTILITY COMPANIES		
COMPANY NAME	PHONE NUMBER	
CENTURYLINK	(800)-283-4237	
MEDIACOM	(800)-778-9140	
CLARA CITY TELEPHONE	(320)-847-2211	
TDS TELECOM	(763)-682-3514	
FARMERS MUTUAL	(800)-692-0021	
MINNESOTA VALLEY COOP	(320)-269-2163	
EXCEL ENERGY	(800)-848-7558	
MNDDT	(651)-366-5750	



ESTIMATED QUANTITY SHEET

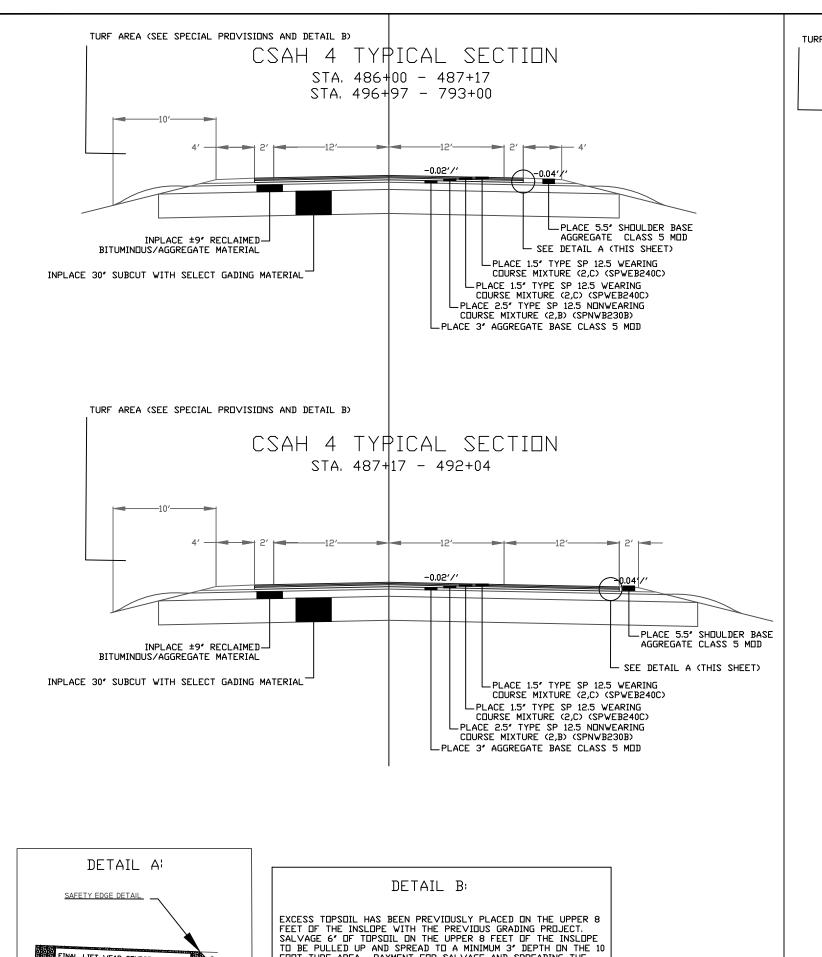
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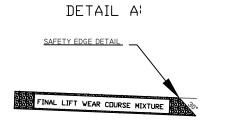
	COAN	
$\overline{}$	1	12/16/2024
	PROFESSIONAL	ENGINEER

County Proj. No. S.A.P. 012-604-021

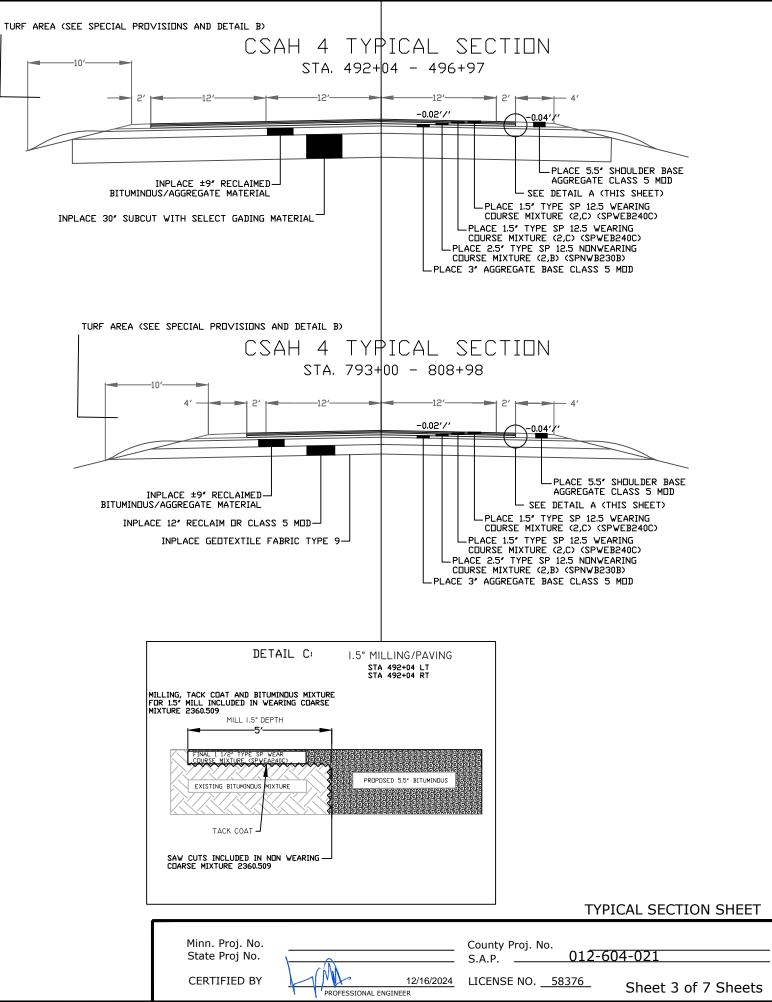
LICENSE NO. <u>58376</u>

Sheet 2 of 7 Sheets





EXCESS TOPSOIL HAS BEEN PREVIOUSLY PLACED ON THE UPPER 8 FEET OF THE INSLOPE WITH THE PREVIOUS GRADING PROJECT. SALVAGE 6' OF TOPSOIL ON THE UPPER 8 FEET OF THE INSLOPE TO BE PULLED UP AND SPREAD TO A MINIMUM 3' DEPTH ON THE 10 FIODT TURF AREA. PAYMENT FOR SALVAGE AND SPREADING THE TOPSOIL IS TO BE INCLUDED IN BID ITEM 2123.510 MOTOR GRADER AND 2123.610 TRACTOR AND DISK. PROVIDE COVERING AS SHOWN.



	SEEDING					
		LT.		POU	NDS	
STA.	STA.	OR	ACRES	MIX	ΓURE	
		RT.		25-142	25-151	
486+00	491+83	LT/RT	0.40	18.0		
492+25	515+32	LT/RT	3.66	164.7		
545+58	597+78	LT/RT	3.60	162.0		
598+04	649+73	LT/RT	3.56	160.2		
649+99	702+86	LT	1.82	81.9		
649+99	679+72	RT	1.02	45.9		
679+98	688+74	RT	0.30		60.0	
689+00	702+86	RT	0.48	21.6		
703+12	745+90	LT	1.47	66.2		
703+12	755+99	RT	1.82	81.9		
745+90	749+90	LT	0.14		28.0	
749+90	755+99	LT	0.21	9.5		
756+25	790+00	LT	1.16	52.3		
756+25	774+50	RT	0.63	28.4		
774+50	777+97	RT	0.12		24.0	
778+19	790+00	RT	0.41	18.5		
ТПТ	TDTALS 20.80 911.1 112.0					

NOTE: 25-142 APPLICATION RATE 45 LBS/ ACRE 25-151 APPLICATION RATE 200 LBS/ ACRE FERTILIZER RATE AT 400 LBS/ ACRE

RAPID	RAPID STABILIZATION METHOD 4					
STA. STA. LT./RT. 25-142 SQ. YD.						
790+00	3164					
790+00 808+98		RT	29.3	3164		
TDTALS 58.6 6328						

NOTE: 25-142 APPLICATION RATE 45 LBS/ ACRE (1) FOR INFORMATION ONLY

PAVEMENT LOCATION MARKINGS								
STATION	STATION	LOCATION	ITEM DESCRIPTION	FOG	TURN	BROKEN	SOLID	STOP
486+00	808+98	CL	4" BROKEN LINE PAINT			6460		
492+04		CL	4" BROKEN LINE PAINT			44		
492+04		CL	4" SOLID LINE PAINT EAST BOUND				110	
492+04		CL	4" SOLID LINE PAINT WEST BOUND				110	
678+25	683+50	CL	4" SOLID LINE PAINT NORTH BOUND				525	
688+25	693+50	CL	4" SOLID LINE PAINT SOUTH BOUND				525	
739+75	744+25	CL	4" SOLID LINE PAINT NORTH BOUND				450	
749+75	754+25	CL	4" SOLID LINE PAINT SOUTH BOUND				450	
776+75	782+75	CL	4" SOLID LINE PAINT NORTH BOUND				600	
786+75	792+75	CL	4" SOLID LINE PAINT SOUTH BOUND				600	
801+00	808+98	CL	4" SOLID LINE PAINT NORTH BOUND				798	
486+00	491+42	LT & RT	6" SOLID LINE PAINT	1084				
488+91	491+42	RT	6" SOLID LINE PAINT		251			
491+93		LT & RT	6" SOLID LINE PAINT	220				
492+15		LT & RT	6" SOLID LINE PAINT	220				
492+66	495+17	LT	6" SOLID LINE PAINT		251			
492+66	545+00	LT & RT	6" SOLID LINE PAINT	10468				
555+50	597+49	LT & RT	6" SOLID LINE PAINT	8398				
598+39	649+43	LT & RT	6" SOLID LINE PAINT	10208				
650+33	702+56	LT & RT	6" SOLID LINE PAINT	10446				
703+46	755+67	LT & RT	6" SOLID LINE PAINT	10442				
756+57	808+58	LT & RT	6" SOLID LINE PAINT	10402				
808+58		RT	24" SOLID LINE PAINT					14
TO <sup>-</sup>	TAL			61888	502	6504	4168	14

TABULATED SHEET

Minn. Proj. No. State Proj No.

CERTIFIED BY



County Proj. No.

12-604-021

12/16/2024 LICENSE NO. <u>58376</u>

Sheet 4 of 7 Sheets

## STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

Applicant: Chippewa County Highway Department
Project Name: CSAH 4 Reconstruction 012-604-021
Application date: TBD and will be documented in this SWPPP narrative prior to the start of construction.
Nature of construction activity description:  This project will include the placement of aggregate base class 5 mod, bituminous pavement, shlouldere base aggregate class 5 mod.
The proposed site consists of 12 soil types.  Tara silt loam, 1 to 3 percent slopes Arvilla-Sandbergy complex, 2 to 6 percent slopes Byrne-Buse complex, 2 to 6 percent slopes Langhei-Barnes, moderately eroded, complex, 12 to 20 percent slopes Byrne silt loam, 1 to 6 percent slopes Bigstone and Parnell soils, ponded, 0 to 1 percent slopes Bearden-Quam, depressional, complex, 0 to 2 percent slopes Rondell silty clay loam, 1 to 3 percent slopes Balaton-Hamerly complex, 1 to 4 percent slopes Lakepark-Parnell, occasionally ponded, complex, 0 to 2 percent slopes Buse-Donald complex, 6 to 12 percent slopes Calvin-Quam complex, depressional 0 to 1 percent slopes
The project is anticipated to begin in the Spring of 2024 with construction scheduled to be complete in the Fall of 2025.
Total estimated area to be disturbed by the project is: Estimated Disturbed Area = 15 AC
Name of person with BMP experience who will oversee SWPPP implementation and coordinate with contractor:  TBD and will be documented in this SWPPP narrative prior to start of construction.
Person, organization, or entity responsible for long term maintenance of permanent stormwater treatment system:  The permanent biofiltration ditch system being installed will be maintained by Chippewa County.
Documentation of all trained individuals:
SWPPP preparer:  Company: Widseth Name: Ella Kohls Address: 5368 266 <sup>th</sup> Street City, State Zip: Wyoming, MN 55092 Email: Ella.Kohls@Widseth.com Phone: 651-358-2351 Training organization/sponsor: University of Minnesota Training date(s):3/15/2022 Training activity/content: Design of Construction SWPPP Instructor(s) name(s): John Chapman and Rebecca Forman
Individual overseeing implementation, revision and/or amendment the SWPPP that are available for an onsite inspection within 72 hours upon request of MPCA: TBD and will be documented in this SWPPP narrative prior to start of construction.
Company:
Name:
Address: City, State Zip:
Email:
Phone:
Training organization/sponsor:
Training date(s):
Training activity/content:
Instructor(s) name(s):
Individual overseeing implementation, revision and/or amendment the SWPPP: TBD and will be documented in this SWPPP narrative prior to start of construction.
Company:
Name:
Address: City, State Zip:
City, State Zip: Email:
Phone:
Training organization/sponsor:
Training date(s):
Training activity/content:
Instructor(s) name(s):

Individual performing or supervising the installation, maintenance and repair of BMPs: TBD

and will be decamented in the event in the	rative prior to otart
Company:	
Name:	
Address:	
City, State Zip:	
Email:	
Phone:	
Training organization/sponsor:	
Training date(s):	
Training activity/content:	
Instructor(s) name(s):	

#### Installation Timing of Erosion Prevention and Sediment Control BMPs:

Erosion and sediment control BMP's must be installed as necessary to minimize erosion from disturbed surfaces and capture sediment onsite. All BMP's must conform to 2018 MNR100001 Permit 2018 sections 7, 8 and 9.

#### Temporary erosion control BMPs

The General Contractor is responsible for the Erosion Prevention Practices contained in 2018 MNR100001 Permit 2018 section 8. The General Contractor must plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading and other construction practices that minimize erosion. The location of areas not to be disturbed must be delineated (marked) on the development site before work begins.

#### Examples of Temporary Erosion Control BMPs

- Poly Cover Stockpile or Slope
- · Construction Phasing

#### Sequence of construction:

1.Install stabilized construction exits

2.Prepare temporary parking and storage area

3. Construct the silt fences and sediment control logs on the site

4.Clear and grub the site

5.Begin grading the site

6.Start construction of building pad and structures

7. Complete grading and permanent seeding and planting

When Permit termination conditions has been achieved, remove all temporary erosion and sediment control devices

Phasing must be implemented to ensure that more area than can be effectively inspected and maintained in accordance with the MNR100001 permit is not

#### disturbed. Rolled Frosion Control Products

The contractor must minimize the need for disturbance of portions of the project that have steep slopes (3:1 or steeper). For steep sloped areas that must be disturbed. the contractor must use techniques such as phasing, and stabilization practices designed for steep slopes including draining and terracing. Slopes steeper than 3:1 must be protected by rolled erosion prevention products

### MnDOT reference:

- > Rolled erosion control products must be placed in the areas as shown on the plan included in this SWPPP.
- > Rolled erosion control products must be Rolled Erosion Prevention Products, Turf Reinforcement Mats, or Winter Blankets, according to plan. Materials must meet the requirements of MnDOT spec. 3885
- > Rolled erosion control products must be placed as per MnDOT spec. 2575.3.G.
- Wood Chins
- Vegetation

#### MnDOT reference:

- > Protect and preserve vegetation per the requirements of MnDOT spec. 2572.3.A.
- ➤ Before work begins, permittees must delineate the location of areas not to be

#### Mulch

All disturbed soil areas must be temporarily mulched with Rapid Stabilization, Method 3, initiated immediately, when the area will not actively be worked for 7/14 days. 3884, Stabilized Fiber Matrix, placed at 330 lb. per 1,000 gal. of slurry mix. Seed mixture 22-111 placed at a rate of 10 lb. per 1,000 gal. of slurry mix

Type 3 Slow Release Fertilizer 10-10-10 placed at a rate of 50 lb, per 1,000 gal, of

Water placed at a rate of 875 gal per 1,000 gal of slurry mix

#### Apply mixture at a rate of 6,000 gal per acre. MnDOT reference:

- > Mulch must be placed in the areas as shown on the plan included in this SWPPP.
- > Mulch must be Temporary, Type 1, Type 3, Type 4, Type 5, Type 6, Type 7, Type 8. Type 9. Winter, or Hydraulic Mulch according to plan. Materials must meet the irements of MnDOT spec. 3882 or MnDOT spec. 3884.
- ➤ Mulch must be applied as per MnDOT spec. 2575.3.C or MnDOT spec. 3575.3.E.

#### Temporary Sediment Control BMPs

The General Contractor is responsible for the Sediment Control Practices contained in MNR100001 Permit 2018 reference 9 of the NPDES Permit. Sediment Control Practices must be installed on all down gradient perimeters before any upgradient land disturbing activities begin. These practices must remain in place until Permit Termination Conditions have been established in accordance with MNR100001 Permit 2018 reference 13 of the

### Examples of Temporary Sediment Control BMPs

Silt Fence

#### MnDOT reference:

- > Silt fence must be placed in the areas as shown on the plan included in this SWPPP
- > Silt fence must be preassembled, machine sliced, hand installed, super duty, or turbidity barrier type, according to plan. Materials must meet the requirements o MnDOT spec, 3886.
- > Silt fence must be installed as per MnDOT spec. 2573.3.B.
- Sediment Control Logs

#### MnDOT reference:

- > Sediment control logs must be placed in the areas as shown on the plan included in this SWPPP.
- > Sediment control logs must be Type Straw, Wood Fiber, Coir, Wood Chip. Compost, Rock, or Wood Fiber and Blanket Systems and meet the requirements of MnDOT spec. 3897.
- Sediment control logs must be installed as per MnDOT spec. 2573.3.F.

#### Filter Berms

Silt fence or windrowed topsoil will be used as the primary control. Sediment control logs will be used as secondary control along each side of roadway at all low points and areas of high velocity drainage to prevent sediment from draining off roadway. MnDOT reference

- > Filter berms must be placed in the areas as shown on the plan included in this
- > Filter berms must be Type 1, 2, 3, 4, or 5. Materials must meet the requirements of MnDOT spec. 3874.
- > Filter berms must be installed as per MnDOT spec. 2573.3.E
- · Filter Bag Insert Inlet Protection
- Silt Fence Ring and Rock Filter Berm Inlet Protection
- Sand Bag Barriers

#### MnDOT reference

- > Sand bag barriers must be placed in the areas as shown on the plan included in this SWPPP
- Sandbag Barriers must be installed as per MnDOT spec, 2573.3.D.
- Slash Mulch, Crushed Rock, or Sheet Pad Construction Exit

Rock construction exits must be placed at all locations construction vehicles will be exiting the project area. If the contractor chooses to access the site from locations other than where temporary rock construction exits are shown on the plan, additional construction exit controls must be placed at these locations as well. If sediment tracking is discovered on adjacent streets, the sediment must be removed with a street sweeper or other approved method within one calendar day of discovery. This must be done throughout the duration of the project. The sediment may be returned to the exposed areas of the site or disposed of offsite per MPCA requirements.

- > Construction exit controls must be placed in the areas as shown on the plan included in this SWPPP.
- > Construction exit controls must be constructed with slash mulch, crushed rock, temporary paving, reinforced geotextile, sheet pads, floating road, timber pad, or
- Construction exit controls must be installed as per MnDOT spec. 2573.3 K.
- · Rumble Pad Construction Exit
- Culvert End Controls

- > Culvert end controls must be placed in the areas as shown on the plan included in this SWPPP
- > Culvert End Controls must be installed as per MnDOT spec. 2573.3.L
- Storm Drain Inlet Protection

#### MnDOT reference:

- > Storm drain inlet protection must be placed in the areas as shown on the plan included in this SWPPP
- Storm Drain Inlet Protection must be installed as per MnDOT spec. 2573.3.J.
- Geotextile Fabric Culvert Inlet Protection
  - > Geotextile Fabric Culvert Inlet Protection must be placed in the areas as shown on the plan included in this SWPPP
  - Geotextile Fabric Culvert Inlet Protection must meet requirements of MnDOT spec.

#### Geotextile Fabric Culvert Inlet Protection

- a). Culvert inlet protection must be provided at all culvert inlet locations immediately after construction of the culvert. See plan included in this SWPPP
- b) Culvert inlet protection must consist of geotextile fabric wrapped around, and completely covering the inlet end section. The geotextile fabric must be the same fabric used in silt fence applications and meet the requirements of MNDOT Spec. c). The culvert inlet protection must remain in place and adequately maintained
- until Permit Termination Conditions have been established.
- d). Culvert inlet protection must be repaired or replaced if damaged during, or after, rain events, or if accumulated sediment reaches 1/2 of the diameter of the culvert pipe. Repair or replacement of culvert inlet protection must be completed within 24 hours of discovery.
- Temporary Sediment Basins

Contractor may construct temporary sedimentation basins in accordance with MNR100001 Permit 2018 reference 14 of the NPDES Permit.

· Temporary Diversion Ditch

Measures must be taken to ensure that "clean" runoff from off site is diverted around disturbed areas on site. Care should be taken that re-routing off site runoff does not esult in flooding or other issues on adjacent properties

#### Permanent Erosion Cover Methods for all exposed soil areas

#### Permanent Erosion Cover Methods for all exposed soil areas:

- · Aggregate Surfacing, Class 5
- Concrete
- Rituminous Roof tops
- · Landscape material that will permanently attest soil erosion
- Perennial cover

Permanent erosion control will be achieved with a density of 70% of the native background vegetation by using Seed Mixture 25-141 at a rate of 59 lbs/ac of Pure Live Seed, 25-151 at a rate of 120 lbs/ac of Pure Live Seed, Type 3 Fertilizer with a composition of 22-5-10 at a rate of 200 lbs/ac, and Mulch Material Type 1 at a rate of 2 ton/ac on all disturbed

#### Stormwater Mitigation Measures proposed as part of environmental, endangered species, archaeological or other required local, state or federal reviews conducted by the project.

No local, state or federal reviews were conducted for the Project.

## Discharges to any U.S. EPA approved TMDL for the pollutants/stressors described in MNR100001 Permit 2018 reference item 23.7

There are no special or impaired waters within one mile of the project site that will receive

#### Permanent Stormwater Treatment System:

Permanent biofiltration ditch system being installed.

#### Procedures to Amend SWPPP:

The General Contractor must amend the SWPPP as necessary to include additional requirements. such as additional or modified BMP's, designed to correct problems or address situations in accordance with MNR100001 Permit 2018 reference 6 of the NPDES Permit.

*************
Amendments to the SWPPP:
1. Date:
2. Date:
3. Date:

#### Methods to Minimize Soil Compaction and to Preserve Topsoil:

The General Contractor must avoid construction traffic and maintain the existing condition of

\*\*\*\*\*\*\*\*\*\*\*\*

## Stormwater Control Design:

4. Date:

Date:

#### Chemical Treatment Systems to Enhance Sedimentation:

No chemical treatment systems to enhance sedimentation are anticipated for this Project However, if there are, the contractor needs to reference the below permit requirement

Flocculants

## MnDOT reference:

- > Flocculants must be applied as specified on the plan included in this SWPPP.
- > Liquid, Stock, or Granular Flocculant must be used and meet requirements of
- ➤ Flocculants must be installed as per MnDOT spec. 2573.3.N.

#### Impervious Surfaces pre- and post-construction: (See sheet E1.16 once updated)

Existing Impervious =	22.28 AC
Proposed Impervious Area =	29.20 AC
Increase of Total Impervious Surface Area=	6.92 AC

### Infeasibility Documentation Requirements:

ble documentation requirements are anticipated for the Project

### Site Assessments for Groundwater or Soil Contamination

No site assessment for groundwater or soil contamination was conducted for the Project.

#### **Tabulated Quantities**

\*See sheet 2. Estimated Quantities

SWPPP SHEETS

County Proj. No. 012-604-021 S.A.P.

12/16/2024 LICENSE NO. <u>58376</u>

Sheet 5 of 7 Sheets

State Proj No.

Minn. Proj. No.

**CERTIFIED BY** 

PROFESSIONAL ENGINEER

## STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

#### CONSTRUCTION ACTIVITY REQUIREMENTS:

- \* Exposed soils (including stockpiles) must have erosion protection/cover initiated immediately and completed within 14 days (or 7 days per Section 23).
- For DNR Public Waters with "work in waters restrictions" during specified fish spawning time frames, stabilization must be completed for all exposed soil areas within 200 feet of the water's edge, and draining to the water, within 24 hours during the restriction period.
- The wetted perimeter of the last 200 linear feet of ditches must be stabilized within 24 hours of connecting to a surface water or property line.
- \* Temporary or permanent ditches or swales that are being used as a sediment containment system during construction must be stabilized within 24 hours after no longer being used as a sediment containment system.
- \* Pipe outlets must have energy dissipation within 24 hours of connecting to a surface water or permanent stormwater treatment system.
- \* Mulch, hydromulch, tackifier, polyacrylamide, or similar erosion prevention practices cannot be used within the normal wetted perimeter of drainage ditches or swale sections with a continuous slope greater than 2%.

#### Sediment Control Measures

- Sediment control practices must be established on downgradient perimeters and upgradient of any buffer zones.
- . Sediment control practices must be established at the base of stockpiles on the downgradient
- Stockpiles must be located outside of natural buffers or surface waters, including stormwater conveyances (e.g., curb and gutter systems) unless there is a bypass.
- . Inlet protection BMPs must be installed according to plan.
- ❖ Vehicle tracking BMPs must be established where vehicles are exiting the site to minimize street tracking. Sediment tracked onto a public street must be removed within 24 hours.
- . Topsoil must be preserved unless infeasible.
- Discharges from BMPs must be directed to vegetated areas, unless infeasible.
- \* 50-foot natural buffers must be preserved or (if maintaining buffer is infeasible) redundant sediment controls must be provided when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water

#### Dewatering and Basin Draining:

If dewatering is required on the site, there must be a plan in place to prevent nuisance conditions, erosion, and inundation of wetlands.

Dewatering related to the construction activity must comply with MNR100001 Permit 2018 reference 10 of the NPDES Permit. Dewatering discharge that may have turbid or sediment laden discharge must be discharged to a temporary or permanent sedimentation basin on the project site whenever possible and BMP's must be implemented to prevent water containing sediment or other pollutants from being discharged to surface waters or downstream properties.

. If using filters with backwash water, backwash water must be hauled away for disposal, returned to the beginning of the treatment process, or incorporated into the site in a manner that does not erode into runoff.

#### Inspection Requirements:

- \* The SWPPP must identify the trained person (as identified in item 21.2.b) who will conduct
- . Inspections must be performed once every 7 days.
- Inspections must be performed within 24 hours of a rain event greater than 0.5 inches in 24
- \* Inspection and Maintenance records should include:
  - 1. Date and time of inspection
  - 2 Name of person(s) conducting inspections
  - 3. Accurate findings of inspections, including the specific location where
  - corrective actions are needed.
  - 4. Corrective actions taken (including dates, times, and party completing
  - 5.Date and amount of rainfall events greater than 0.5 inch in 24 hours.
  - 6. Rainfall amounts must be obtained by a properly maintained rain gauge reporting system.
  - 7.Requirements to observe any discharge that may be occurring during the inspection. Discharge should also be described and photographed

- All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow.
- Perimeter control devices must be repaired, replaced, or supplemented when nonfunctiona or sediment reaches one-half the height of the device.
- \* Temporary and permanent sediment basins must be drained, and sediment removed when the depth of sediment collected reaches one-half storage volume.
- \* All sediment deposits and deltas must be removed from surface waters (including drainage ways, catch basins, and other drainage systems) and the removal areas restabilized within
- Sediment on paved surfaces (e.g., sediment tracked from vehicles) must be removed within

#### Pollution Prevention Management Measures:

Proper storage, handling, and disposal of construction products, materials, and wastes is

Hazardous materials and toxic waste (including oil, diesel fuel, gasoline, hydraulic fluids paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) must be stored in waterproof containers with secondary containment. Storage and disposal of hazardous waste must be in compliance with MPCA regulations. Runoff containing such material must be collected, removed from the site, treated, and disposed at an approved solid waste or chemical disposal facility. Building products that have the potential to leach pollutants and pesticides, fertilizers, treatment chemicals and landscape materials must be under cover by plastic sheeting or temporary roofs to prevent discharge or protected by similar effective means to prevent contact with

- \* Address fueling and maintenance of equipment or vehicles and spill prevention and response Spill cleanup materials must be available on site. Material must include but not limited to brooms, mops, rags, gloves, absorbent material, sand plastic and metal containers. Spills greater than 5 gallons that reach storm water conveyance systems connected to a Water of the State must be immediately reported to the MPCA State Duty Officer.
- Limit exterior vehicle and equipment washing to a defined area of the site. External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained, and waste properly disposed of.
- Describe of the containment for concrete and other washout wastes.

Concrete washout site: all liquid and solid wastes generated by concrete washout operations must be contained in a leak proof containment facility or impermeable liner The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with the MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the

. Portable toilets must be positioned so that they are secure

Licensed sanitary waste management handler must dispose of sanitary waste

#### Permit Termination Conditions:

- ❖ Permanent uniform perennial vegetative cover must be established at minimum 70% density of its expected final growth.
- The permanent stormwater treatment system is constructed, meets all requirements, and is
- operating as designed. All temporary synthetic erosion prevention and sediment control BMPs must be removed and
- the surrounding area must be restored to as designed. Clean out sediment from conveyance systems and permanent stormwater treatment systems
- For residential sites, install temporary erosion protection and downgradient perimeter control and distribute the MPCA's Homeowner Fact Sheet.
- Submit a Notice of Termination (NOT) to the MPCA.

## Record Retention Requirements:

Permittees must keep the SWPPP, including all changes to it, and inspections and maintenance records at the site during normal working hours by permittees who have operational control of that portion of the site.

The SWPPP and associated records must be stored and maintained by an employee or representative of the Owner for 3 years after the submission of the Notice of Termination (NOT). Responsibility for overseeing the records will be transferred to another employee or representative should the current personnel become uninvolved with the project or Owner. These records must include the following:

- 1). The final SWPPP
- 2). Any other stormwater related permits required for the project
- 3). Records of all inspection and maintenance conducted during construction
- 4). All permanent operation and maintenance agreements that have been implemented, including all right-of-way, contracts, covenants and other binding requirements
- 5). All required calculations for design of the temporary and permanent Stormwater

#### MNDOT 2573.3 CONSTRUCTION REQUIREMENTS:

PERMITTEES MUST COMPLY WITH MINNESOTA 2018 STANDARD SPECIFICATIONS STORM WATER MANAGEMENT CONSTRUCTION REQUIREMENTS 2573.3 A THRU S

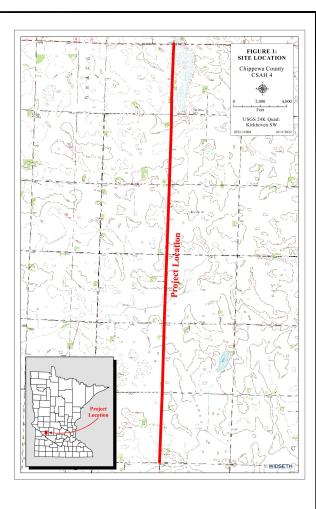
EROSION CONTROL SUPERVISOR: TBD and will be documented prior to start of construction.

Company:	
Name	
Address	
City, State Zip	
Email	
Phone	
Training organization/sponsor _	
Fraining date(s)	
Fraining activity/content	
nstructor(s) name(s)	

CHAIN OF RESPONSIBILITY: TBD and will be documented prior to start of construction.

#### Contacts

Agency	Permit	Name	Phone Number
MPCA	NPDES	Marshall Office	507-537-7146
Chippewa County	Zoning/ Environmental	Scott Williams	320-269-6231
SWCD	WCA	Zach Bothun	320-269-2694
MNDNR	Area Hydrologist	Kyle Jarcho	507-537-7258
MNDNR	Groundwater Appropriations	Joshua prososki	218-671-7944
	Hydrologist		
ACOE	404	St. Paul Office	651-290-5976
SWPPP Design	NPDES	Widseth	320-335-5051
EC Supervisor	NPDES	TBD	TBD
MPCA Duty Officer	NPDES	N/A	1-800-422-0798



Minn. Proj. No. State Proj No. **CERTIFIED BY** 

PROFESSIONAL ENGINEER

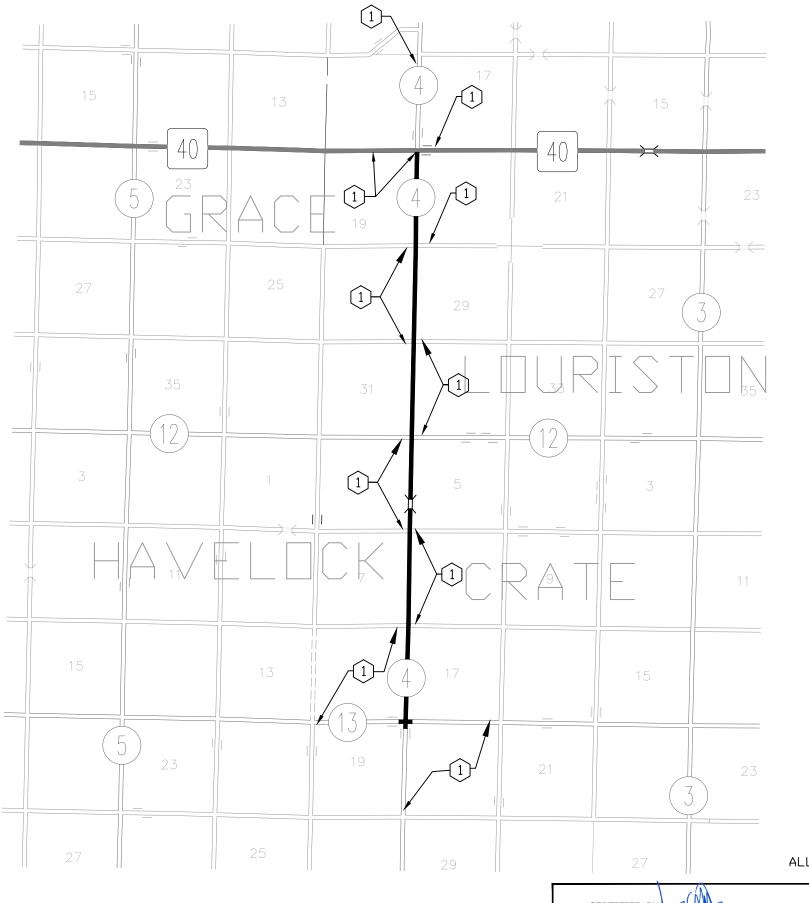
S.A.P.

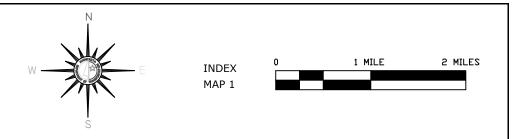
12/16/2024 LICENSE NO. <u>58376</u>

**SWPPP SHEETS** 

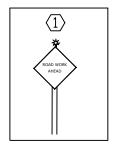
County Proj. No. 012-604-021

Sheet 6 of 7 Sheets





- 1.) ALL TRAFFIC CONTROL SIGNING AND DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."
- 2.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADVANCE WARNING AND CONSTRUCTION ZONE SIGNING. MINIMUM ADVANCE WARNING SIGNING REQUIRED FOR THIS PROJECT ARE "ROAD WORK AHEAD" AT THE TERMINI AND ALL CROSS ROADS.
- 3.) CONSTRUCTION SIGNS AND BARRICADES THAT ARE PERIODICALLY REQUIRED TO BE MOVED DUE TO CONSTRUCTION OPERATIONS, SHALL BE PLACED AT LOCATIONS WHERE THEY GIVE SUFFICIENT WARNING TO MOTORISTS AND PEDESTRIANS OF THE CONDITIONS AHEAD AND SHALL BE RELOCATED AS NEEDED TO KEEP SIGNING CURRENT AT REQUIRED LOCATIONS.
- 4.) THE CONTRACTOR SHALL PROTECT AND RESTRICT ALL PEDESTRIANS FROM WORK AREAS.
- 5.) THE EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE DETERMINED AT THE SITE.
- 6.) ALL WARNING SIGNS SHALL HAVE A TYPE A FLASHER IN ALL LOCATIONS.
- 7.) SIGNING MUST BE APPROVED BY THE ENGINEER 24 HOURS BEFORE ANY WORK IS STARTED.
- 8.) SIGNS SHALL BE COVERED OR REMOVED WHEN THERE IS NO ACTIVE CONSTRUCTION ACTIVITY OR AS DIRECTED BY THE ENGINEER.



ALL SIGNS ARE SUPPLIED BY CONTRACTOR.

TRAFFIC CONTROL SHEET

CERTIFIED BY	ICENSE NO. <u>583</u>	376 Minn. Proj. No.	County Proj	
12/16/2024		State Proj No.	S.A.P	012-604-021
			Chippewa County, Minneso	ota. Sheet 7 of 7 Sheets



## LEGEND

### PLAN SYMBOLS

BENCHMARK	- <b>⊕</b> -
SECTION CORNER	- <del>ф</del>
FENCE POST	- Ō
ELECTRIC PEDISTAL	- E
TELEPHONE PEDISTAL	- m
LIGHT POLE	- *
POWER POLE	- <b>e</b>
MAIL BOX	ბ-
WATER VALVE	-ŏ
FIBER OPTIC MARKER	–⁄a
WETLAND SYMBOL	_*
SANITARY MANHOLE	<b>-</b> ©
STORM MANHOLE	— (T)
LIFT STATION	_@
DECIDUOUS TREE	-€3
CONIFEROUS TREE	-
CATCH BASIN	
DROP INLET	-
CULVERT	
RIGHT-OF-WAY LINE	
RAILROAD TRACKS	
SILT FENCE	
SILT FENCE TYPE MS	
DRAIN TILE	
PERF TILE LINE	
GUARDRAIL	
BIO ROLL	
FENCE WOOD	
FENCE CHAIN LINK	
FENCE BARB WIRE	
SLOPE EASEMENT	
TEMPORARY EASEMENT	

### **UTILITIES SYMBOLS**

OVERHEAD POWER LINE	_
OVERHEAD TELEPHONE LINE_	
OVERHEAD CABLE TV	
WATER MAIN SEVICE	
WATER SERVICE LINE	
BURRIED TELEPHONE CABLE_	
BURRIED POWER LINE	
BURRIED PETROLIUM PIPELINE	
BURRIED GAS PIPELINE	
BURRIED FIBER OPTIC	

### DRAINAGE

DRAINAGE	_
INTERMITTENT STREAM	_~~
NARROW STREAM	
WIDE STREAMS	
MARSH OR SWAMP LAND	
DRAINAGE DITCH	
LAKE OR POND	

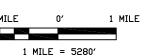
### **STRUCTURES**

HIGHWAY	BRIDGE					 _	_	





INDEX MAP 1



# MINNESOTA DEPARTMENT OF TRANSPORTATION

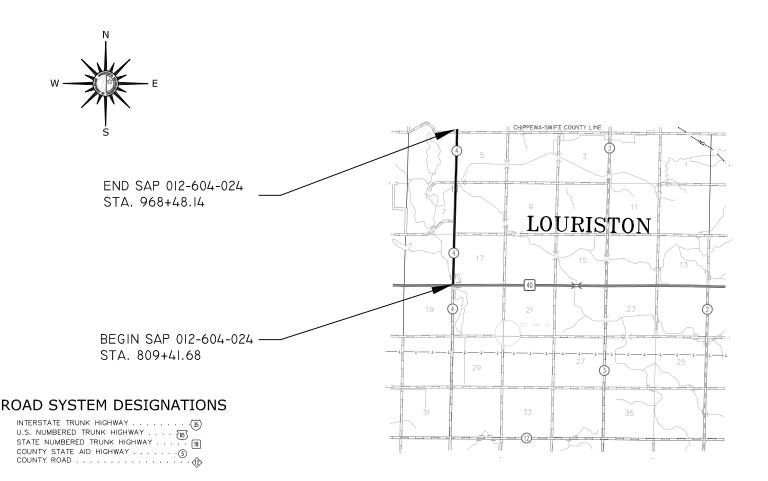
## CHIPPEWA COUNTY

## CONSTRUCTION PLAN FOR: MILL, OVERLAY & AGGREGATE SHOULDERING

LOCATED ON C.S.A.H. 4 BETWEEN T.H. 40 AND THE NORTH COUNTY LINE (CHIPPEWA-SWIFT ST NE) 13.5 MILES N OF MAYNARD (Geographic Description)

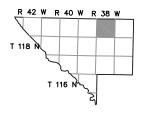
23' N OF THE SW COR. SEC.17 T119N R38W TO 27' N OF THE NW COR. SEC.5 T119N R38W (Legal Description)

GROSS LENGTH 15,906.46' 3.013 MILES **EXCEPTIONS-LENGTH** NET LENGTH 15,906.46' 3.013 MILES **BRIDGES-LENGTH** 





Outline Map of the County. Area of this County 588 Sq. Miles Land Area 581 Sq. Miles County Population 12,598



**INDEX MAP 1** 

MINN. PROJ. NO
MINN. PROJ. NO.

### **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 LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

### **INDEX**

SHEET NO. 1 TITLE SHEET ESTIMATED QUANTITIES & TYPICAL SECTION SHEET SHEET NO 2 SHEET NO. 3 TRAFFIC CONTROL

Graded Under S.A.P. 012-604-001 (1967)

## THIS PLAN CONTAINS 3 SHEETS **DESIGN DESIGNATION**

₹N18 <sub>20</sub>
R VALUE
ADT (2025) 400
PROJ. ADT (2045) 520
PROJ. HCADT (2045) 70
SOIL FACTOR 130
10 TON DESIGN
SHOULDER WIDTH 6 FEET
BASED ON STOPPING SIGHT DISTANCE
HEIGHT OF EYE 3.5 HEIGHT OF OBJECT 2.0
POSTED SPEED 55 MPH

DESIGN	SPEED NOT	<b>ACHIEVED</b>	TA C
STA	TO STA	MPH	
STA	TO STA	MPH	

'	\	c M						
SIGNATURE: _		100		TYPED O	R PRINTED	NAME:_	JEREMY L G	ILB
DESIGN ENGI	NEER:	I HEREBY CE	RTIFY THAT	THIS PLAN	WAS PREPA	RED BY	ME OR UI	NDER I
DIRECT SUPER	OISIV	N, AND THAT	I AM A DULY	LICENSED	PROFESSIO	ONAL EN	NGINEER L	JNDER
THE LAWS OF	THE ST	TATE OF MIN	NESOTA.					

LICENSE NUMBER:

Lim	DATE:	11/12/20
APPROVED: COUNTY ENGINEER	<del></del>	

Todd Broadwell Digitally signed by Todd Broadwell Date: 2024.11.13 12:19:25 -06'00'

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID

Todd Broadwell Digitally Signled by Toda Broadwell Date: 2024.11.13 12:20:00 -06'00' Digitally signed by Todd Broadwell

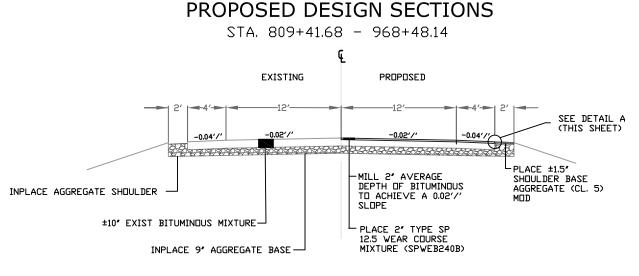
STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING

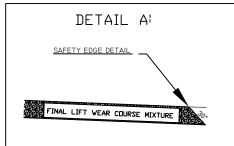
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY
QUALITY LEVEL D. THIS UTILITY LEVEL WAS DETERMINED ACCORDING
TO THE GUIDELINES OF CIVASCE 38-22, ENTITLED "STANDARD GUIDELINES
FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."
THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AND DEPTHS
RELEVANT TO CONSTRUCTION. EXCAVATION TO LOCATE EXISTING UNDERGROUND
UTILITY DUWERS AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION.
GUPHER STATE ONE CALL 1-800-252-1166.

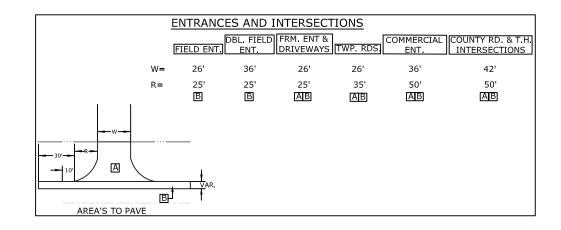
STATE AID PROJ. NO. 012-604-024 SHEET NO. 1 OF 3 SHEETS STATE PROJ. NO.,

	ESTIMATED QUANTITIES			
	SPECIFICATION No.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM	1
(1)	2221.609	SHOULDER BASE AGGREGATE CLASS 5 MOD	TDN	912
(2)	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ. YD.	58,807
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	6,730
(4)	2360.509	TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING	TON	50
(5)	2563.601	TRAFFIC CONTROL	LUMP SUM	1
(6)	2580.501	INTERIM PAVEMENT MARKING	LUMP SUM	1
(7)	2582.603	4" BROKEN LINE PAINT	LIN. FT.	3,175
(8X9)	2582.603	4" SOLID LINE PAINT	LIN. FT.	32,112

- (1) SEE SPECIAL PROVISIONS, SEE THIS SHEET FOR PROPOSED DESIGN SECTION AND ALSO TO BE USED AS DIRECTED BY THE ENGINEER.
- (2) MILLINGS TO BECOME PROPERTY OF THE CONTRACTOR, INCLUDES 16,389 SQ. YD. FOR 4'-6' PAVED SHOULDERS, COUNTY ROAD RADUIS, TOWNSHIP ROAD RADIUS, FARM ENTRANCES, TOWN HALL ENTRANCE, FIELD ENTRANCES AT STA. 858+07 LT & AND STA. 875+45 RT, AND 2' MAILBOX BUMPOUTS.
- (3) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) INLLUDES 1,851 TON FOR THE 4-6' SHOULDER PAVEMENT, COUNTY AND TOWNSHIP ROAD RADIUS, FARM ENTRANCES TOWN HALL ENTRANCE AND 2' MAILBOX BUMPOUTS.
- (4) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION RATE SEE TABLE 2357.3-1) INCLUDES PARKING ENTRANCE AT STA. 893+27. REMAINDER TO BE USED AS DIRECTED BY THE ENGINEER.
- (5) CONTRACTOR WILL FURNISH AND MAINTAIN ALL ADVANCE WARNING AND CONSTRUCTION ZONE SIGNS. SEE SPECIAL PROVISIONS.
- (6) INTERIM PAVEMENT MARKINGS SHALL BE PLACED ON MILLED AND PAVED LIFTS 4' WIDE x 4' LONG WITH MARKING TAPE AT 50' INTERVALS.
- (7) YELLOW PAINT, INCLUDES GLASS BEADS, PAYMENT IS FOR ACTUAL STRIPE PLACED, BASED ON THE 50 FOOT CYCLE, 40 FOOT SKIP AND 10 FOOT STRIPE, SEE SPECIAL PROVISIONS
- (8) YELLOW, CENTERLINE, INCLUDES GLASS BEADS, SEE SPECIAL PROVISIONS, FOR ESTIMATED QUANTITIES: 4" YELLOW SOLID= 900 LIN, FT.
- (9) WHITE, EDGE LINES, INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS, LOCATION: (809+75 TO 967+73 LT AND RT) AND TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS, AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY AN AGENCY PLACED YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE MAINLINE RADIUS, FOR ESTIMATED QUANTITIES: 4" WHITE EDGE LINE = 31,212 LIN. FT.







## **CONSTRUCTION NOTES:**

BASIS FOR PLAN QUANTITIES WEAR & BASE COURSE MIXTURE: II5 LBS. PER SQ. YD./IN.

AGGREGATE BASE: 105 LBS. PER SQ. YD./IN.

## STANDARD PLATES

THE FOLLOWING STANDARD PLATES AS APPROVED BY F.H.W.A. SHALL APPLY ON THIS PROJECT.

PROFESSIONAL ENGINEER

PLATE NO.	DESCRIPTION
8000 K	TEMPORARY CHANNELIZERS
9000 E	APPROACHES AND ENTRANCES

## **ESTIMATED OUANTITY & TYPICAL SECTION SHEET**

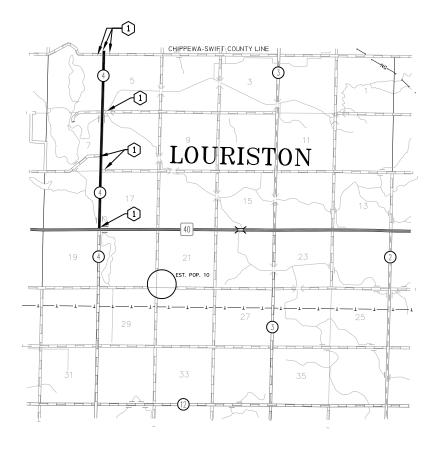
Minn Proj. No. State Proj No

**CERTIFIED BY** 

County Proj. No. 012-604-024 S.A.P.

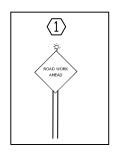
11/12/2024 LICENSE NO. 58376

Sheet 2 of 3 Sheets





- 1.) ALL TRAFFIC CONTROL SIGNING AND DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."
- 2.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADVANCE WARNING AND CONSTRUCTION ZONE SIGNING. MINIMUM ADVANCE WARNING SIGNING REQUIRED FOR THIS PROJECT ARE "ROAD WORK AHEAD" AT THE TERMINI AND ALL CROSS ROADS.
- 3.) CONSTRUCTION SIGNS AND BARRICADES THAT ARE PERIODICALLY REQUIRED TO BE MOVED DUE TO CONSTRUCTION OPERATIONS, SHALL BE PLACED AT LOCATIONS WHERE THEY GIVE SUFFICIENT WARNING TO MOTORISTS AND PEDESTRIANS OF THE CONDITIONS AHEAD AND SHALL BE RELOCATED AS NEEDED TO KEEP SIGNING CURRENT AT REQUIRED LOCATIONS.
- 4.) THE CONTRACTOR SHALL PROTECT AND RESTRICT ALL PEDESTRIANS FROM WORK AREAS.
- 5.) THE EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE DETERMINED AT THE SITE.
- 6.) ALL WARNING SIGNS SHALL HAVE A TYPE A FLASHER IN ALL LOCATIONS.
- 7.) SIGNING MUST BE APPROVED BY THE ENGINEER 24 HOURS BEFORE ANY WORK IS STARTED.
- 8.) SIGNS SHALL BE COVERED OR REMOVED WHEN THERE IS NO ACTIVE CONSTRUCTION ACTIVITY OR AS DIRECTED BY THE ENGINEER.



ALL SIGNS ARE SUPPLIED BY CONTRACTOR.

TRAFFIC CONTROL SHEET

2024 LICENSE NO.	58376
/	/ <u>2024</u> LICENSE NO



## LEGEND

### PLAN SYMBOLS

BENCHMARK	<b>4</b>
SECTION CORNER	Ť
FENCE POST	Ò
ELECTRIC PEDISTAL	Ē
TELEPHONE PEDISTAL	$\overline{\Box}$
LIGHT POLE	*
POWER POLE	•
MAIL BOX	Ė
FIRE HYDRANT	⊹
WATER VALVE	ğ
FIBER OPTIC MARKER	۵
WETLAND SYMBOL	-₩-
SANITARY MANHOLE	-S
STORM MANHOLE	(T2)
LIFT STATION	G
DECIDUOUS TREE	-€3
CONIFEROUS TREE	Ò
	Ē
DROP INLET	Ӛ
CULVERT	
RIGHT-OF-WAY LINE	
RAILROAD TRACKS	_
SILT FENCE	_
SILT FENCE TYPE MS	_
DRAIN TILE	_
PERF TILE LINE	_
GUARDRAIL	_
BIO ROLL	_
FENCE WOOD	_
FENCE CHAIN LINK	_
FENCE BARB WIRE	_
SLOPE EASEMENT	_
TEMPORARY EASEMENT	_

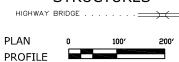
### **UTILITIES SYMBOLS**

OVERHEAD POWER LINE	
OVERHEAD TELEPHONE LINE	
OVERHEAD CABLE TV	
WATER MAIN SEVICE	
WATER SERVICE LINE	_
BURRIED TELEPHONE CABLE	
BURRIED POWER LINE	_
BURRIED PETROLIUM PIPELINE	
BURRIED GAS PIPELINE	
BURRIED FIBER OPTIC	

### DRAINAGE

DIVITIVIOL	_
INTERMITTENT STREAM	_~~
NARROW STREAM	
WIDE STREAMS	
MARSH OR SWAMP LAND	
DRAINAGE DITCH	
LAKE OR POND	

### **STRUCTURES**



INDEX



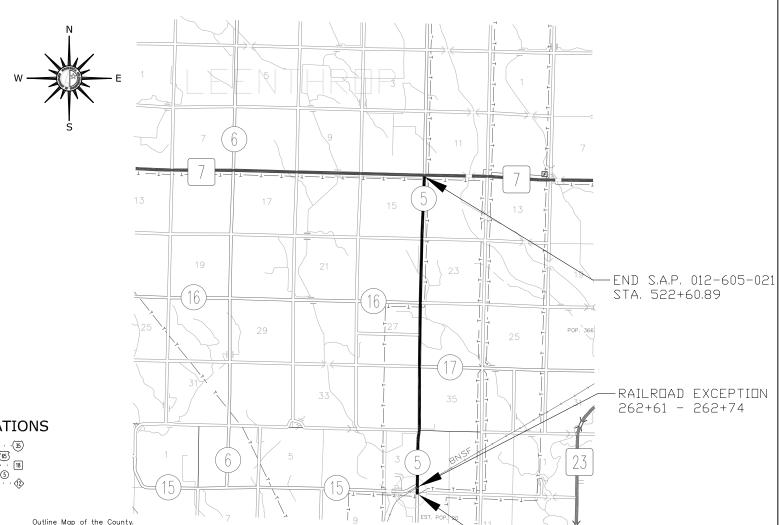
# MINNESOTA DEPARTMENT OF TRANSPORTATION

## CHIPPEWA COUNTY

## CONSTRUCTION PLAN FOR: MILL, OVERLAY & AGGREGATE SHOULDERING

LOCATED ON C.S.A.H. 5 BETWEEN 100th ST SE AND T.H. 7 3 MILES WEST OF MAYNARD (Geographic Description) FROM 82' S OF THE N 1/4 COR. SEC. 10 T116N R39W TO 26' S OF THE NE COR. SEC. 15 T117N R39W (Legal Description)

GROSS LENGTH 26,437.59' 5.007 MILES 0.002 MILES **EXCEPTIONS-LENGTH** 26,424.59 5,005 MILES **BRIDGES-LENGTH NET LENGTH** 



### ROAD SYSTEM DESIGNATIONS

INTERSTATE TRUNK HIGHWAY (35)
U.S. NUMBERED TRUNK HIGHWAY FET
STATE NUMBERED TRUNK HIGHWAY
COUNTY STATE AID HIGHWAY
COUNTY STATE AID HIGHWAY



Area of this County 588 Sq. Miles Land Area 581 Sq. Miles 2020 Total County Population 12,598

R 42	W R	40	W R	38	w
1					
T 118 N					
	4	لہ			
	T 1	16 N	ممح		
			9		

BEGIN S.A.P. 012-605-021 STA. 258+23.30

**INDEX MAP 1** 

STATE PROJECT NO. STATE AID PROJ. NO. 012-605-021 MINN. PROJ. NO. MINN. PROJ. NO.

## **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 LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

### **INDEX**

SHEET NO. 1 TITLE SHEET ESTIMATED QUANTITIES & TYPICAL SECTION SHEETS SHEET NO. 2

SHEET NO. 3 TRAFFIC CONTROL SHEET

### THIS PLAN CONTAINS 3 SHEETS

Graded Under S.A.P. 012-605-015 (2004)

### **DESIGN DESIGNATION**

₹N18 <sub>20</sub>
R VALUE
ADT (2025) 720
PROJ. ADT (2045) <u>1,210</u>
PROJ. HCADT (2045)
SOIL FACTOR 130
10 TON DESIGN
SHOULDER WIDTH 6'
BASED ON STOPPING SIGHT DISTANCE
HEIGHT OF EYE 3.5 HEIGHT OF OBJECT 2.0
POSTED SPEED 55 MPH

DESIGN S	PEED NOT A	ACHIEVED AT:
STA	TO STA	MPH
STA	TO STA	MPH

J 1/4		- 10 51	^		
STA		_TO ST	Α	MPH	
	X .	_			

TYPED OR PRINTED NAME: JEREMY L GILB DESIGN ENGINEER. I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR LINDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Lacas	DATE: 11/12/2024
	DATE: 11/12/2024
APPROVED: COUNTY ENGINEER	

Todd Broadwell Digitally signed by Todd Broadwell Date: 2024.11.13 12:21:46-06'00'

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID

Todd Broadwell Digitally signed by Todd Broadwell Date: 2024.11.13 12:22:19 -06'00'

STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING

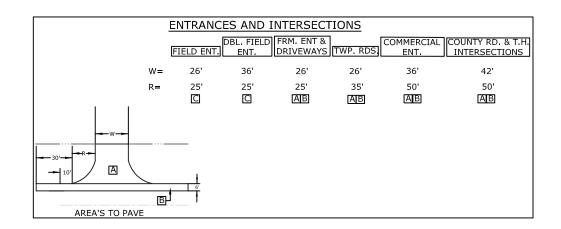
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY
QUALITY LEVEL D. THIS UTILITY LEVEL WAS DETERMINED ACCORDING
TO THE GUIDELINES OF CIVASCE 38-22, ENTITLED "STANDARD GUIDELINES
FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."
THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AND DEPTHS
RELEVANT TO CONSTRUCTION. EXCAVATION TO LOCATE EXISTING UNDERGROUND
UTILITY DUWERS AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION.
GUPHER STATE ONE CALL 1-800-252-1166.

SHEET NO.  $\frac{1}{}$  OF  $\frac{3}{}$  SHEETS

	ESTIMATED QUANTITIES				
	SPECIFICATION No. ITEM UN			TOTAL ESTIMATED QUANTITIES	
	2021.501	MOBILIZATION	LUMP SUM	1	
(1)	2221.609	SHOULDER BASE AGGREGATE CLASS 5 MOD	TON	3,923	
(2)	2232.504	MILL BITUMINOUS SURFACE (1.75°)	SQ. YD.	88,391	
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	8,895	
(4)	2360.509	TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING	TON	150	
(5)	2563.601	TRAFFIC CONTROL	LUMP SUM	1	
(6)	2580.501	INTERIM PAVEMENT MARKING	LUMP SUM	1	
(7)	2582.518	PAVEMENT MESSAGE PAINT	SQ. FT.	62	
(8)(9)	2582.603	4" BROKEN LINE PAINT	LIN. FT.	5,145	
(9)	2582.603	4" SOLID LINE PAINT	LIN. FT.	2,338	
(9)	2582.603	4" DOUBLE SOLID LINE PAINT	LIN. FT.	671	
(10)	2582.603	6" SOLID LINE PAINT	LIN. FT.	51,927	
(11)	2582,603	24" SOLID LINE PAINT	LIN. FT.	58	

BASIS FOR PLAN QUANTITIES WEAR & BASE COURSE MIXTURE: II5 LBS. PER SQ. YD./IN.

AGGREGATE BASE: 105 LBS. PER SQ. YD./IN.



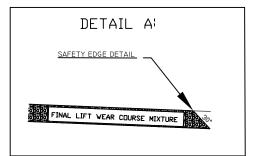
#### SEE SPECIAL PROVISIONS, SEE THIS SHEET FOR PROPOSED DESIGN SECTION AND ALSO TO BE USED AS DIRECTED BY THE ENGINEER.

- (2) MILLINGS TO BECOME PROPERTY OF THE CONTRACTOR, INCLUDES 9,216 SQ. YD. FOR ±6' PAVED SHOULDERS, TRUNK HIGHWAY RADIUS, COUNTY ROAD RADIUS, TOWNSHIP ROAD RADIUS AND FARM ENTRANCES.
- (3) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) INCLUDES 916 TON FOR THE ±6' SHOULDER PAVEMENT, FARM ENTRANCES, TRUNK HIGHWAY, COUNTY AND TOWNSHIP ROAD RADIUS.
- (4) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION RATE SEE TABLE 2357.3-1) INCLUDES 56 TON FOR 4 INCH BASE LAYERS FOR NEW FARM ENTRANCE AT STA. 395+50 RT AND PAVED SHOULDER FROM STA. 395+70 RT TO 396+50 RT. REMAINDER TO BE USED AS DIRECTED BY THE ENGINEER.
- (5) CONTRACTOR WILL FURNISH AND MAINTAIN ALL ADVANCE WARNING AND CONSTRUCTION ZONE SIGNS, SEE SPECIAL PROVISIONS.
- (6) INTERIM PAVEMENT MARKINGS SHALL BE PLACED ON MILLED AND PAVED LIFTS 4" WIDE x 4' LONG WITH MARKING TAPE AT 50' INTERVALS.
- (7) WHITE, RAILROAD PAVEMENT MARKINGS. EACH INCLUDE A 36"x72" (RR) & 78"x240" (X). TO BE PLACED AT ORIGINAL LOCATIONS AND LENGTHS. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS.
- (8) PAYMENT IS FOR ACTUAL STRIPE PLACED, BASED ON THE 50 FOOT CYCLE, 40 FOOT SKIP AND 10 FOOT STRIPE. SEE SPECIAL PROVISIONS
- (9) YELLOW, CENTERLINE, INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS.
- (10) WHITE, EDGE LINES. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS. LOCATION: (258+23.30 TO 522+00.89 LT) AND (258+23.30 TO 522+24.89 RT)
  AND TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS, AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY AN
  AGENCY PLACED YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE MAINLINE RADIUS.
- (11) WHITE, STOP LINES AND BARS FOR RAILROAD CROSSING TO BE PLACED AT ORIGINAL LOCATIONS AND LENGTHS. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS.

## STANDARD PLATES

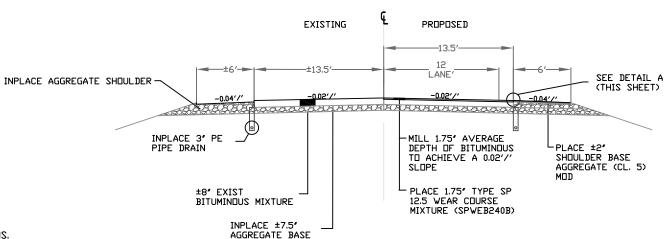
THE FOLLOWING STANDARD PLATES AS APPROVED BY F.H.W.A. SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
8000 K	TEMPORARY CHANNELIZERS
9000 E	APPROACHES AND ENTRANCES



## PROPOSED DESIGN SECTIONS

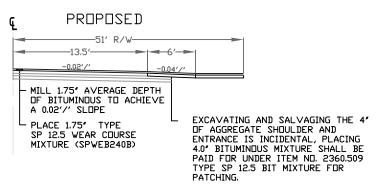
STA. 258+20.35 - 522+60.89



## PROPOSED DESIGN SECTIONS

6' PAVED SHOULDER STA. 395+70 RT TO STA. 396+50 RT

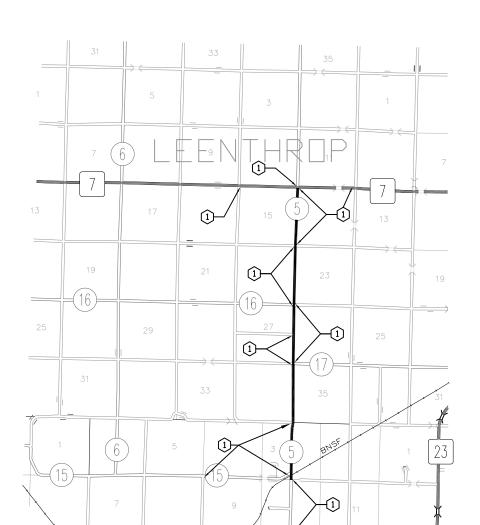
FARM ENTRANCE STA. 395+50 RT

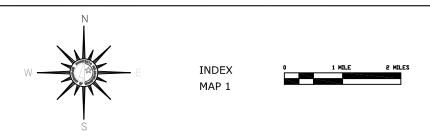


\*\*\*\*(MUST BE PLACED PRIOR TO WEAR COURSE MIXTURE)

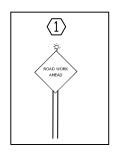
## ESTIMATED QUANTITY & TYPICAL SECTION SHEET

	_	
Minn. Proj. No.	County Proj. No.	
State Proj No	SAP 012	2-6 <u>05-021</u>
CERTIFIED BY	11/12/2024 LICENSE NO. <u>58376</u>	Sheet 2 of 3 Sheets





- 1.) ALL TRAFFIC CONTROL SIGNING AND DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."
- 2.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADVANCE WARNING AND CONSTRUCTION ZONE SIGNING. MINIMUM ADVANCE WARNING SIGNING REQUIRED FOR THIS PROJECT ARE "ROAD WORK AHEAD" AT THE TERMINI AND ALL CROSS ROADS.
- 3.) CONSTRUCTION SIGNS AND BARRICADES THAT ARE PERIODICALLY REQUIRED TO BE MOVED DUE TO CONSTRUCTION OPERATIONS, SHALL BE PLACED AT LOCATIONS WHERE THEY GIVE SUFFICIENT WARNING TO MOTORISTS AND PEDESTRIANS OF THE CONDITIONS AHEAD AND SHALL BE RELOCATED AS NEEDED TO KEEP SIGNING CURRENT AT REQUIRED LOCATIONS.
- 4.) THE CONTRACTOR SHALL PROTECT AND RESTRICT ALL PEDESTRIANS FROM WORK AREAS.
- 5.) THE EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE DETERMINED AT THE SITE.
- 6.) ALL WARNING SIGNS SHALL HAVE A TYPE A FLASHER IN ALL LOCATIONS.
- 7.) SIGNING MUST BE APPROVED BY THE ENGINEER 24 HOURS BEFORE ANY WORK IS STARTED.
- 8.) SIGNS SHALL BE COVERED OR REMOVED WHEN THERE IS NO ACTIVE CONSTRUCTION ACTIVITY OR AS DIRECTED BY THE ENGINEER.



ALL SIGNS ARE SUPPLIED BY CONTRACTOR.

TRAFFIC CONTROL SHEET

CERTIFIED BY 11/12/2024 LICENSE NO. 5837	<u>'6</u>
--	-----------

Minn. Proj. No. State Proj No. \_\_\_\_\_ County Proj. No. S.A.P. 012-605-021



## LEGEND

### PLAN SYMBOLS

BENCHMARK	4
SECTION CORNER	Ă
FENCE POST	Õ
ELECTRIC PEDISTAL	· F
TELEPHONE PEDISTAL	m
LIGHT POLE	
POWER POLE	A.
MAIL BOX	
FIRE HYDRANT	-ბ-
WATER VALVE	ď
FIBER OPTIC MARKER	ã
WETLAND SYMBOL	-¥-
SANITARY MANHOLE	-(S)
STORM MANHOLE	- (\$1)
LIFT STATION	ß
DECIDUOUS TREE	-Õ
CONIFEROUS TREE	ě
CATCH BASIN	ě
DROP INLET	▔
CULVERT	_
RIGHT-OF-WAY LINE	_
RAILROAD TRACKS	_
SILT FENCE	_
SILT FENCE TYPE MS	_
DRAIN TILE	_
PERF TILE LINE	_
GUARDRAIL	_
BIO ROLL	_
FENCE WOOD	_
FENCE CHAIN LINK	_
FENCE BARB WIRE	_
SLOPE EASEMENT	_
TEMPORARY EASEMENT	_

## **UTILITIES SYMBOLS**

OVERHEAD POWER LINE	
OVERHEAD TELEPHONE LINE	
OVERHEAD CABLE TV	
WATER MAIN SEVICE	
WATER SERVICE LINE	
BURRIED TELEPHONE CABLE	
BURRIED POWER LINE	
BURRIED PETROLIUM PIPELINE	
BURRIED GAS PIPELINE	
BURRIED FIBER OPTIC	

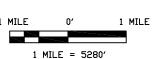
### DRAINAGE

DIVATINAGE	
INTERMITTENT STREAM	_~~
NARROW STREAM	
WIDE STREAMS	
MARSH OR SWAMP LAND	
DRAINAGE DITCH	
LAKE OR POND	-

### **STRUCTURES**



INDEX MAP 1

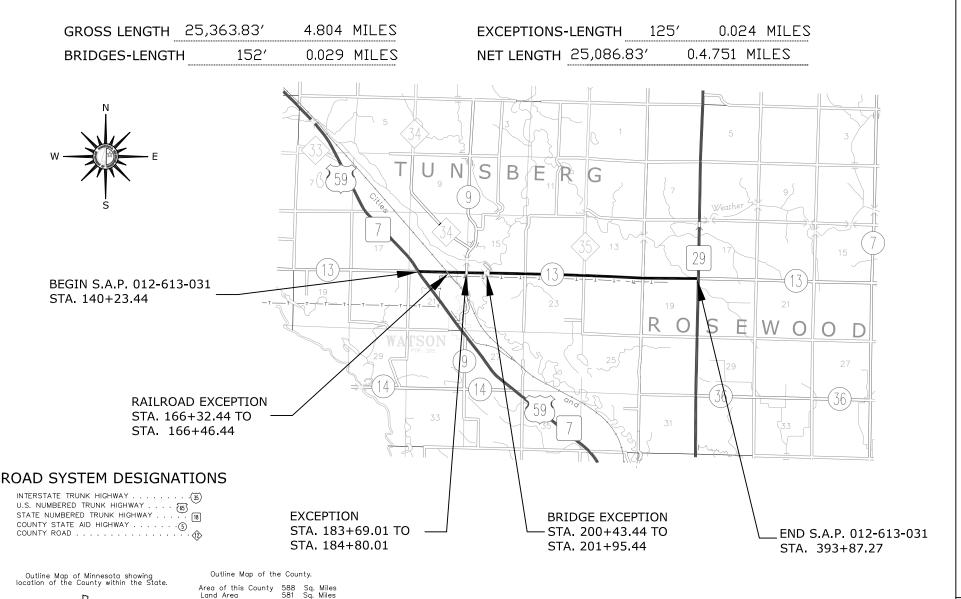


# MINNESOTA DEPARTMENT OF TRANSPORTATION

## CHIPPEWA COUNTY

## CONSTRUCTION PLAN FOR: MILL, OVERLAY & AGGREGATE SHOULDERING

LOCATED ON C.S.A.H. 13 BETWEEN T.H. 7/59 AND T.H. 29 0.89 MILES NW OF WATSON (Geographic Description) 858.7' E OF THE NW COR. SEC. 21 T118N R41W TO 21' W OF THE NE COR. SEC. 19 T118N R40W (Legal Description)



County Population 12,598

MINN. PROJ. NO. MINN. PROJ. NO.

## **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 LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

### **INDEX**

SHEET NO. 1 TITLE SHEET ESTIMATED QUANTITIES & TYPICAL SECTION SHEET SHEET NO. 2 SHEET NO. 3 TRAFFIC CONTROL

Graded Under S.A.P. 012-613-017 (1986)

## THIS PLAN CONTAINS 3 SHEETS **DESIGN DESIGNATION**

₹N18 <sub>20</sub>
R VALUE
ADT (2025) 540
PROJ. ADT (2045) 594
PROJ. HCADT (2045) 53
SOIL FACTOR 110
10 TON DESIGN
SHOULDER WIDTH 6 FEET
BASED ON STOPPING SIGHT DISTANCE
HEIGHT OF EYE 3.5 HEIGHT OF OBJECT 2.0
POSTED SPEED 55 MPH

## DESIGN SPEED NOT ACHIEVED AT: ..TO STA.

TYPED OR PRINTED NAME: JEREMY L GILB DESIGN ENGINEER : I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR LINDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 11/12/2024

DATE: 11/12/2024

Todd Broadwell Digitally signed by Todd Broadwell Date: 2024.11.13 12:23:37 -06'00'

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID

Todd Broadwell Digitally signed by 1048 5.182. Date: 2024.11.13 12:24:14 -06'00' Digitally signed by Todd Broadwell

STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY
QUALITY LEVEL D. THIS UTILITY LEVEL WAS DETERMINED ACCORDING
TO THE GUIDELINES OF CIVASCE 38-22, ENTITLED "STANDARD GUIDELINES
FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."
THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AND DEPTHS
RELEVANT TO CONSTRUCTION. EXCAVATION TO LOCATE EXISTING UNDERGROUND
UTILITY DUWERS AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION.
GUPHER STATE ONE CALL 1-800-252-1166.

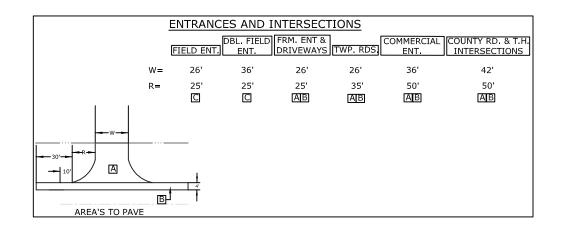
STATE AID PROJ. NO. 012-613-031 SHEET NO. 1 OF 3 SHEETS STATE PROJ. NO..

**INDEX MAP 1** 

	ESTIMATED QUANTITIES					
	SPECIFICATION No.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES		
	2021.501	MOBILIZATION	LUMP SUM	1		
(1)	2221.609	SHOULDER BASE AGGREGATE CLASS 5 MOD	TON	2805		
(2)	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ. YD.	82,230		
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	9,457		
(4)	(4) 2360.509 TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING		TON	150		
(5)	2563.601	TRAFFIC CONTROL	LUMP SUM	1		
(6)	2580.501	INTERIM PAVEMENT MARKING	LUMP SUM	1		
(11)	2582.518	PAVEMENT MESSAGE PAINT	SQ. FT.	124		
(7)(8)	2582,603	4" BROKEN LINE PAINT	LIN. FT.	4,014		
(8)	2582.603	4" SOLID LINE PAINT	LIN. FT.	7,314		
(8)	2582.603	4" DOUBLE SOLID LINE PAINT	LIN. FT.	5,124		
(9) 2582.603 6" SOLID LINE PAINT		6" SOLID LINE PAINT	LIN. FT.	49,924		
(10)	2582.603	24" SOLID LINE PAINT	LIN. FT.	94		

BASIS FOR PLAN QUANTITIES WEAR & BASE COURSE MIXTURE: II5 LBS. PER SQ. YD./IN.

AGGREGATE BASE: 105 LBS. PER SQ. YD./IN.



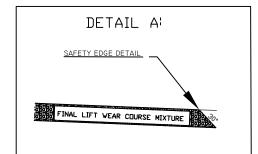
# 1) SEE SPECIAL PROVISIONS. SEE THIS SHEET FOR PROPOSED DESIGN SECTION AND ALSO TO BE USED AS DIRECTED BY THE ENGINEER.

- (2) MILLINGS TO BECOME PROPERTY OF THE CONTRACTOR, INCLUDES 4,182 SQ. YD. FOR ±4' PAVED SHOULDERS, TRUNK HIGHWAY RADIUS, COUNTY ROAD RADIUS, TOWNSHIP ROAD RADIUS AND FARM ENTRANCES.
- (3) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) INCLUDES 481 TON FOR THE ±4' SHOULDER PAVEMENT, FARM ENTRANCES, TRUNK HIGHWAY, COUNTY AND TOWNSHIP ROAD RADIUS.
- (4) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION RATE SEE TABLE 2357.3-1)
  INCLUDES 84 TON FOR BASE LAYER FOR NEW COMMERCIAL ENTRANCE AT STA. 147+03 LT, FARM ENTRANCE AT STA. 149+43
  LT AND PAVED SHOULDER FROM STA. 146+35 LT TO 150+11 LT. REMAINDER TO BE USED AS DIRECTED BY THE ENGINEER.
- (5) CONTRACTOR WILL FURNISH AND MAINTAIN ALL ADVANCE WARNING AND CONSTRUCTION ZONE SIGNS, SEE SPECIAL PROVISIONS.
- (6) INTERIM PAVEMENT MARKINGS SHALL BE PLACED ON MILLED AND PAVED LIFTS 4" WIDE x 4' LONG WITH MARKING TAPE AT 50' INTERVALS.
- (7) PAYMENT IS FOR ACTUAL STRIPE PLACED, BASED ON THE 50 FOOT CYCLE, 40 FOOT SKIP AND 10 FOOT STRIPE. SEE SPECIAL PROVISIONS
- (8) YELLOW, CENTERLINE, INCLUDES GLASS BEADS, SEE SPECIAL PROVISIONS.
- (9) WHITE, EDGE LINES. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS. LOCATION: (140+30.44 TO 393+51.27 LT) AND (141+20.44 TO 393+51.27 RT) AND TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS, AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY AN AGENCY PLACED YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE MAINLINE RADIUS.
- (10) WHITE, STOP LINES AND BARS FOR RAILROAD CROSSING TO BE PLACED AT ORIGINAL LOCATIONS AND LENGTHS. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS.
- (11) WHITE, RAILROAD PAVEMENT MARKINGS. EACH INCLUDE A 36"x72" (RR) & 78"x240" (X), TO BE PLACED AT ORIGINAL LOCATIONS AND LENGTHS. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS.

## STANDARD PLATES

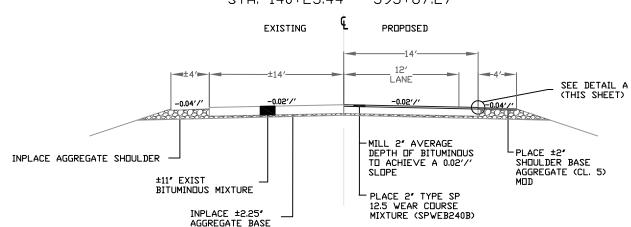
THE FOLLOWING STANDARD PLATES AS APPROVED BY F.H.W.A. SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
8000 K	TEMPORARY CHANNELIZERS
9000 E	APPROACHES AND ENTRANCES



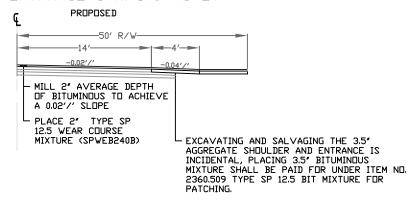
## PROPOSED DESIGN SECTIONS

STA. 140+23.44 - 393+87.27



## PROPOSED DESIGN SECTIONS

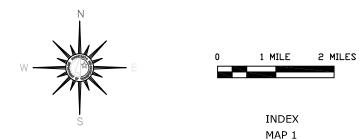
4' PAVED SHOULDER STA. 146+35 LT TO STA. 150+11 LT COMMERCIAL ENTRANCE STA. 147+03 LT FARM ENTRANCE STA. 149+43 LT

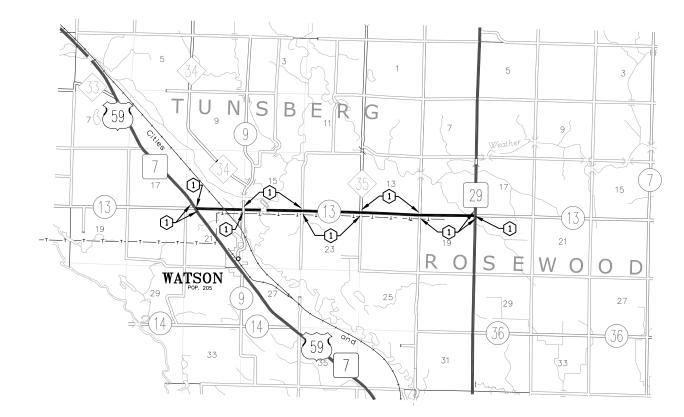


\*\*\*\*(MUST BE PLACED PRIOR TO WEAR COURSE MIXTURE)

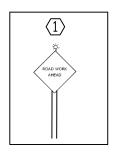
## **ESTIMATED QUANTITY & TYPICAL SECTION SHEET**

Minn. Proj. No.	County Proj. No.
State Proj No	S.A.P. 012-613-031
CERTIFIED BY	11/12/2024 LICENSE NO. 58376 Sheet 2 of 3 Sheets





- 1.) ALL TRAFFIC CONTROL SIGNING AND DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."
- 2.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADVANCE WARNING AND CONSTRUCTION ZONE SIGNING. MINIMUM ADVANCE WARNING SIGNING REQUIRED FOR THIS PROJECT ARE "ROAD WORK AHEAD" AT THE TERMINI AND ALL CROSS ROADS.
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- 4.) THE CONTRACTOR SHALL PROTECT AND RESTRICT ALL PEDESTRIANS FROM WORK AREAS.
- 5.) THE EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE DETERMINED AT THE SITE.
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- 7.) SIGNING MUST BE APPROVED BY THE ENGINEER 24 HOURS BEFORE ANY WORK IS STARTED.
- 8.) SIGNS SHALL BE COVERED OR REMOVED WHEN THERE IS NO ACTIVE CONSTRUCTION ACTIVITY OR AS DIRECTED BY THE ENGINEER.



ALL SIGNS ARE SUPPLIED BY CONTRACTOR.

TRAFFIC CONTROL SHEET

\	$\sim \Omega$		
CERTIFIED BY	11/12/2024	LICENSE NO.	58376
7	,	-	

Minn. Proj. No. State Proj No. County Proj. No. S.A.P. <u>012-613-031</u>



## LEGEND

### PLAN SYMBOLS

BENCHMARK	4
SECTION CORNER	À
FENCE POST	0
ELECTRIC PEDISTAL	Ē
TELEPHONE PEDISTAL	m
LIGHT POLE	*
POWER POLE	À
MAIL BOX	۵
FIRE HIDRANI	()
WATER VALVE	ğ
FIBER OPTIC MARKER	Ó
WETLAND SYMBOL	*
SANITARY MANHOLE	S
STORM MANHOLE.	· (\$T)
LIFT STATION	G
DECIDUOUS TREE	₿
CONIFEROUS TREE	•
CATCH BASIN	
DROP INLET	
CULVERT	
RIGHT-OF-WAY LINE	
RAILROAD TRACKS	
SILT FENCE.	*
SILT FENCE TYPE MS	_
DRAIN TILE	
PERF TILE LINE	
GUARDRAIL	
BIO ROLL	
FENCE WOOD	
FENCE CHAIN LINK	
FENCE BARB WIRE	
SLOPE EASEMENTse—	
TEMPORARY EASEMENT	_

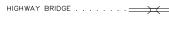
#### UTILITIES SYMBOLS

OVERHEAD POWER LINE	-OHP
OVERHEAD TELEPHONE LINE	—онт——
OVERHEAD CABLE TV	—анс
WATER MAIN SEVICE	wms
WATER SERVICE LINE	_ws
BURRIED TELEPHONE CABLE	-UGT
BURRIED POWER LINE	-UGP
BURRIED PETROLIUM PIPELINE	PETRO
BURRIED GAS PIPELINE	-GAS
BURRIED FIBER OPTIC	

### DRAINAGE

DIVATIVACE
INTERMITTENT STREAM
NARROW STREAM
WIDE STREAMS
MARSH OR SWAMP LAND
DRAINAGE DITCH
LAKE OR POND

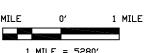
### **STRUCTURES**







INDEX



# MINNESOTA DEPARTMENT OF TRANSPORTATION

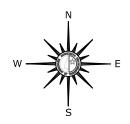
## CHIPPEWA COUNTY

CONSTRUCTION PLAN FOR: MILL, OVERLAY & AGGREGATE SHOULDERING

LOCATED ON C.S.A.H. 18 BETWEEN C.S.A.H. 4 AND C.S.A.H. 3 1 MILE SOUTH OF MAYNARD(Geographic Description) FROM 60' W OF THE S 1/4 COR. SEC. 32 T117N R38W TO 114' E OF THE SW COR. SEC. 34 T117N R38W (Legal Description)

STATE AID PROJECT NO. 012-618-003 **GROSS LENGTH** 8.139 1.541 MILES **BRIDGES-LENGTH** 

**EXCEPTIONS-LENGTH** 8,139 1.541 MILES **NET LENGTH** 

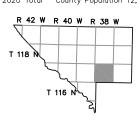


### ROAD SYSTEM DESIGNATIONS

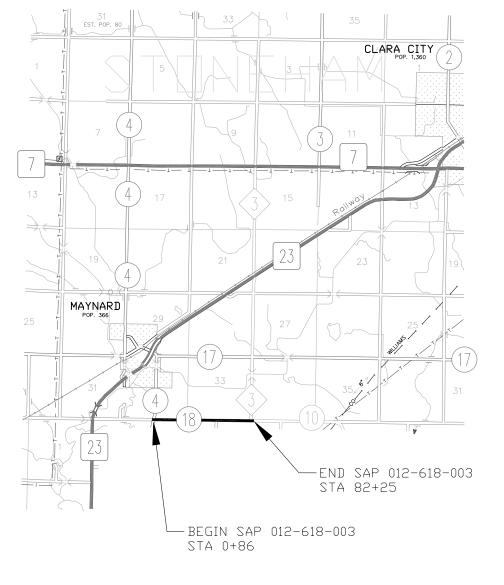
INTERSTATE TRUNK HIGHWAY	5)
U.S. NUMBERED TRUNK HIGHWAY 7657	/
STATE NUMBERED TRUNK HIGHWAY	B
COUNTY STATE AID HIGHWAY	_
COUNTY ROAD	2>



Outlin



ne	М	эр	of t	he C	oun	ty.			
th ea	is I	Co	unty	58 58 ty Po	38 31 opulo	Sq. Sq. atic	Mil Mile n 12	es es 2,59	18
2	w	R	40	W I	R 38	8 W	<u> </u>	1	
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MINN. PROJ. NO. MINN. PROJ. NO.

## **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 LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

### **INDEX**

SHEET NO. 1 TITLE SHEET ESTIMATED QUANTITIES/TYPICAL SECTION SHEET SHEET NO. 2 SHEET NO. 3 TRAFFIC CONTROL SHEET

### THIS PLAN CONTAINS 3 SHEETS

Graded Under S.A.P. 012-618-01 (1980)

### **DESIGN DESIGNATION**

₹N18 <sub>20</sub>
R VALUE
ADT (2025) 90
PROJ. ADT (2045) 99
PROJ. HCADT (2045)
SOIL FACTOR 75
10 TON_DESIGN
SHOULDER WIDTH 4'
BASED ON_STOPPING_SIGHT DISTANCE
HEIGHT OF EYE 3.5 HEIGHT OF OBJECT 2.0
POSTED SPEED 55 MPH

DESIGN	SPEED NOT A	ACHIEVED AT:
STA	TO STA	MPH
STA	TO STA	MPH

SIA		. 10 STA	
STA		_TO STA	MPH
	1	A	

DESIGN ENGINEER: 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 OR PRINTED NAME: JEREMY L GILB

DATE:_	11/12/2024	LICENSE NUMBER:	58376
_			

DATE: 11/12/2024

Todd Broadwell Digitally signed by Todd Broadwell Date: 2024.11.13 12:26:25 -06'00' DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID

Todd Broadwell Digitally signed by Todd Broadwell Date: 2024.11.13 12:26:55 -06'00' Digitally signed by Todd Broadwell

STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING

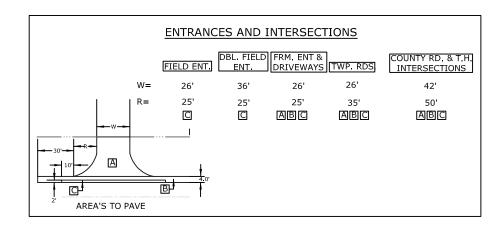
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY
QUALITY LEVEL D. THIS UTILITY LEVEL WAS DETERMINED ACCORDING
TO THE GUIDELINES OF CIVASCE 38-22, ENTITLED "STANDARD GUIDELINES
FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."
THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AND DEPTHS
RELEVANT TO CONSTRUCTION. EXCAVATION TO LOCATE EXISTING UNDERGROUND
UTILITY DUWERS AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION.
GUPHER STATE ONE CALL 1-800-252-1166.

**INDEX MAP 1** 

STATE PROJECT NO. STATE AID PROJ. NO. 012-618-003 SHEET NO.  $\frac{1}{}$  OF  $\frac{3}{}$  SHEETS

	ESTIMATED QUANTITIES				
	SPECIFICATION No. UNIT			TOTAL ESTIMATED QUANTITIES	
	2021.501	MOBILIZATION	LUMP SUM	1	
(1) (2)	2221.609 2232.504	SHOULDER BASE AGGREGATE CLASS 5 MOD MILL BITUMINOUS SURFACE (1.75°)	TON SQ, YD,	760 23,269	
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	2,684	
(4)	2360.509	TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING	TON	100	
(5) (6)	2563.601	TRAFFIC CONTROL INTERIM PAVEMENT MARKING	LUMP SUM	1	
(7)	2580.501 2582.603	4" BROKEN LINE PAINT	LUMP SUM	1,630	
(8) (9)	2582.603	4' SOLID LINE PAINT	LIN. FT.	17,097	

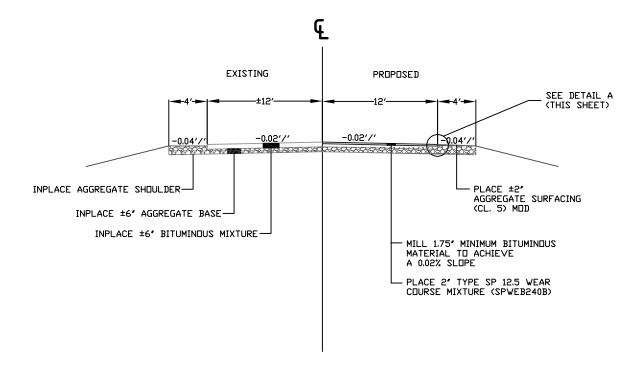
- BASIS FOR PLAN QUANTITIES WEAR & BASE COURSE MIXTURE: II5 LBS. PER SQ. YD./IN.
- AGGREGATE BASE:
   105 LBS. PER SQ. YD./IN.



- (1) SEE SPECIAL PROVISIONS. SEE THIS SHEET FOR PROPOSED DESIGN SECTION AND ALSO TO BE USED AS DIRECTED BY THE ENGINEER.
- (2) MILLINGS TO BECOME PROPERTY OF THE CONTRACTOR, INCLUDES 1,384 SQ. YD. FOR ±4' PAVED SHOULDERS, BUMPOUTS, COUNTY ROAD RADIUS, TOWNSHIP ROAD RADIUS AND FARM ENTRANCES.
- (3) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) INCLUDES 162 TON FOR BUMPOUTS, SHOULDER PAVING, ENTRANCES, AND INTERSECTIONS.
- (4) BITUMINOUS TACK MATERIAL INCLUDED IN BID PRICE FOR BITUMINOUS MIXTURE (APPLICATION SEE TABLE 2357.3-1) TO BE USED AS DIRECTED BY THE ENGINEER.
- (5) CONTRACTOR WILL FURNISH AND MAINTAIN ALL ADVANCE WARNING AND CONSTRUCTION ZONE SIGNS. SEE SPECIAL PROVISIONS
- (6) INTERIM PAVEMENT MARKINGS SHALL BE PLACED ON MILLED AND PAVED LIFTS 4" WIDE x 4' LONG WITH MARKING TAPE AT 50' INTERVALS.
- (7) YELLOW PAINT, INCLUDES GLASS BEADS, PAYMENT IS FOR ACTUAL STRIPE PLACED, BASED ON THE 50 FOOT CYCLE, 40 FOOT SKIP AND 10 FOOT STRIPE, SEE SPECIAL PROVISIONS
- (8) YELLOW, CENTERLINE. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS. FOR ESTIMATED QUANTITIES: 4' YELLOW SOLID= 997 LIN. FT.
- (9) WHITE, EDGE LINES. INCLUDES GLASS BEADS. SEE SPECIAL PROVISIONS. LOCATION: (0+86 TO 82+25 LT) AND (0+86 TO 82+25 RT) AND TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS, AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY AN AGENCY PLACED YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE MAINLINE RADIUS. FOR ESTIMATED QUANTITIES: 4" WHITE EDGE LINE= 16,100 LIN. FT.

## PROPOSED DESIGN SECTIONS

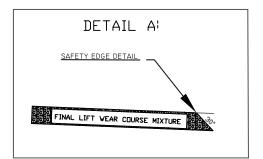
STA, 0+86 - 82+25



## STANDARD PLATES

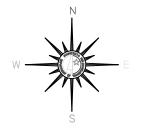
THE FOLLOWING STANDARD PLATES AS APPROVED BY F.H.W.A. SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION	
8000 K	TEMPORARY CHANNELIZERS	
9000 E	APPROACHES AND ENTRANCES	



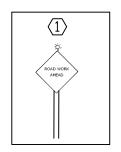
## ESTIMATED QUANTITY/TYPICAL SECTION SHEET

Minn. Proj. No.		County Proj. No.	
State Proj No		$\frac{1}{10000000000000000000000000000000000$	-003
CERTIFIED BY	11/12/2024 PROFESSIONAL ENGINEER	LICENSE NO. <u>58376</u>	Sheet 2 of 3 Sheets





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TRAFFIC CONTROL SHEET

CERTIFIED BY 11/12/2024 LICENSE NO. \_\_58376\_

Minn. Proj. No. State Proj No. \_\_\_\_\_ County Proj. No. S.A.P. <u>012-618-003</u>

Chippewa County, Minnesota.

Sheet 3 of 3 Sheets