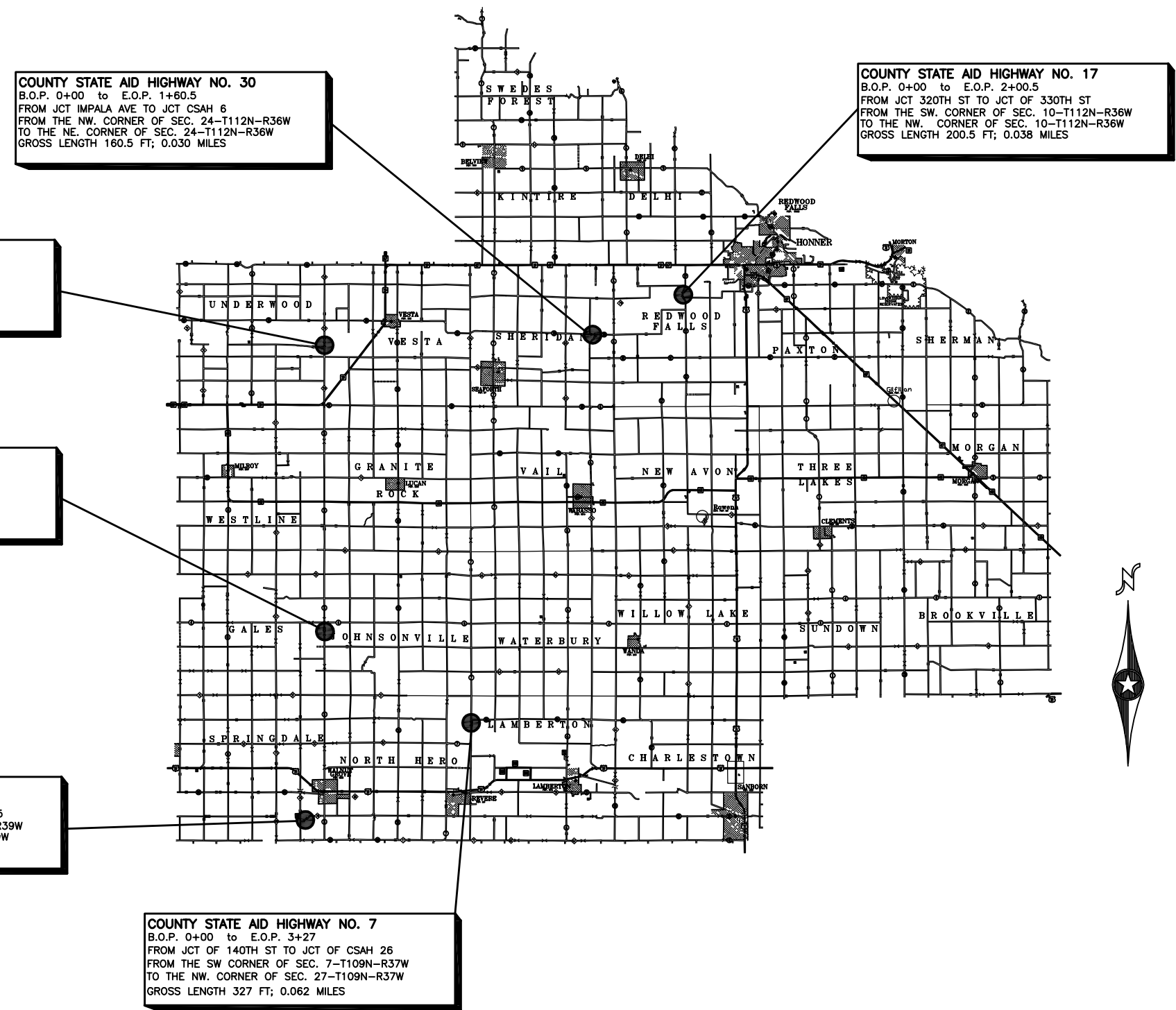


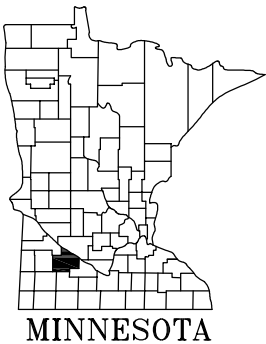
MINNESOTA DEPARTMENT OF TRANSPORTATION

COUNTY OF REDWOOD  
S.A.P. 064-030-021

CONSTRUCTION PLAN FOR BITUMINOUS MILL AND OVERLAY  
C.S.A.H. 5, C.S.A.H. 7, C.S.A.H. 17, C.S.A.H. 30, CR 59, AND CR 78



REDWOOD COUNTY



GOVERNING SPECIFICATIONS

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION  
"STANDARD SPECIFICATIONS FOR CONSTRUCTION".

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION  
OF MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES,  
INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL  
ZONE LAYOUTS.

INDEX

- SHEET NO. 1 TITLE SHEET  
2 ESTIMATED QUANTITIES  
3 GENERAL NOTES & TYPICAL SECTION  
\*\*THIS PLAN CONTAINS 3 SHEETS\*\*

DESIGN DESIGNATION

C.S.A.H. NO.	ADT (2025)	PROJ. ADT (2045)	SOIL FACTOR	TON DESIGN
5	495	540	130	10
7	117	222	130	10
17	120	132	130	10
30	65	71	130	10
C.R. 59	85	93	130	10
C.R. 78	115	126	130	10

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

*Anthony J. Sellner*  
SIGNATURE:

ANTHONY J. SELLNER  
TYPED OR PRINTED NAME:

DATE: 05/1/2025 LIC. NO. 54241

COUNTY OF REDWOOD

*Anthony J. Sellner*  
Approved: County Engineer

DATE 05/1/2025

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

APPROVED FOR STATE-AID FUNDING: FOR STATE AID ENGINEER

STATEMENT OF ESTIMATED QUANTITIES											
ITEM NO.	ITEM	UNIT	C.S.A.H. 5 Participating	C.S.A.H. 7 Participating	C.S.A.H. 17 Participating	C.S.A.H. 30 Participating	CO. RD. 59 Non-Participating	CO. RD. 78 Non-Participating	TOTAL Non-Participating	TOTAL Participating	TOTALS
2021.501	MOBILIZATION	LUMP SUM	0.17	0.17	0.17	0.17	0.16	0.16	0.32	0.68	1
2123.510	MOTOR GRADER	hour	2	2	2	2	2	2	4	8	12
2123.510	12 CU YD TRUCK	hour	2	2	2	2	2	2	4	8	12
2123.510	PNEUMATIC TIRED ROLLER	hour	2	2	2	2	2	2	4	8	12
2123.610	SKID LOADER	hour	2	2	2	2	2	2	4	8	12
2232.504	MILL BITUMINOUS SURFACE (2")	SQ YD	890	674	0	0	0	623	623	1564	2187
2232.604	MILL BITUMINOUS SURFACE BRIDGE	SQ YD	800	428	713	539	302	286	588	2480	3068
2360.509	TYPE SP 9.5 WEARING COURSE MIX (2,C)	TONS	342	229	118	90	50	150	200	779	979
2563.601	TRAFFIC CONTROL	LUMP SUM	0.17	0.17	0.17	0.17	0.16	0.16	0.32	0.68	1

~STANDARD PLATES~

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, APPLY ON THIS PROJECT.

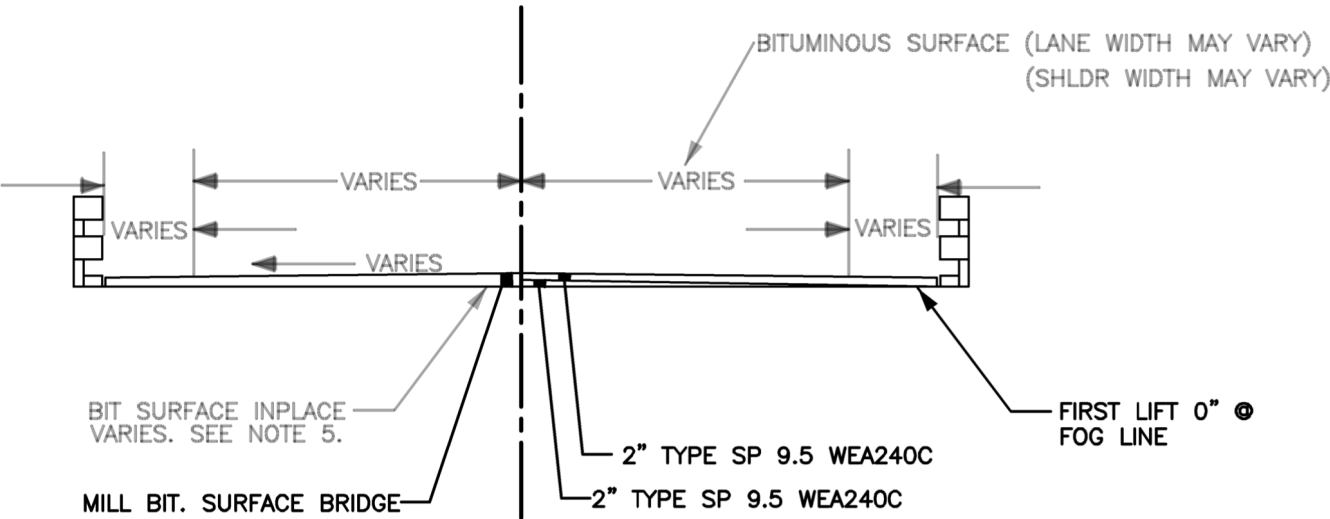
PLATE NO.	DESCRIPTION
8000 K	TEMPORARY CHANNELIZERS
9000 E	APPROACHES AND ENTRANCES

~BASIS FOR PLANNED QUANTITIES~

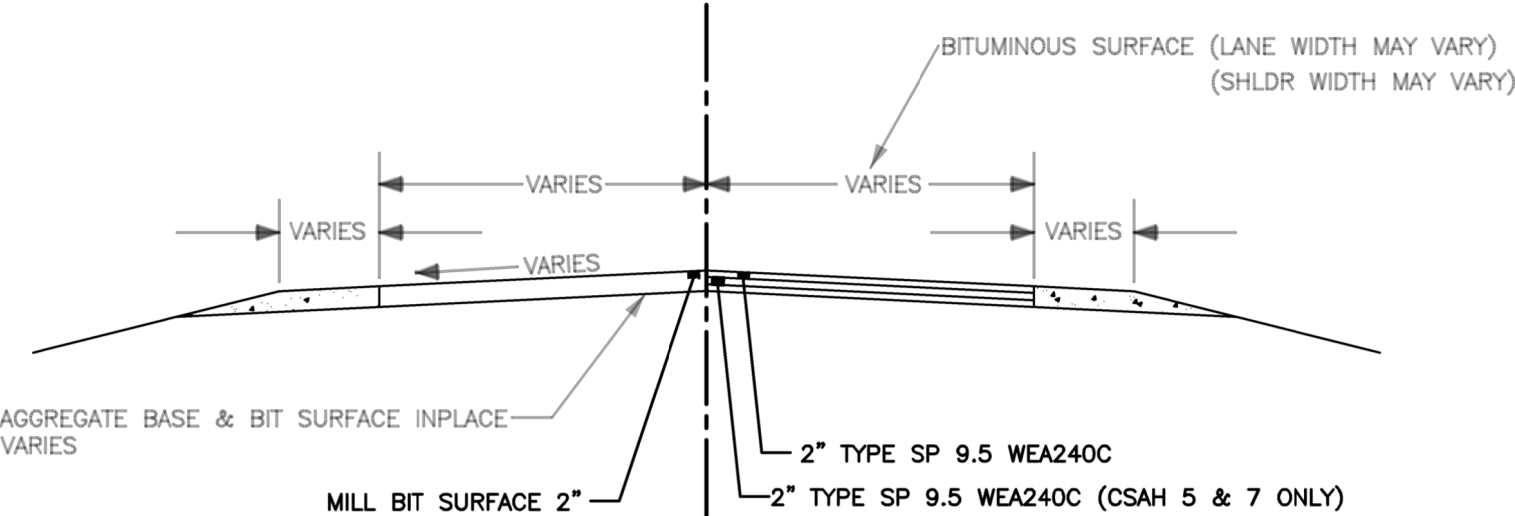
- PLANT MIXED BITUMINOUS MIXTURES CALCULATED AT 110 POUNDS PER SQUARE YARD PER 1" COMPACTED THICKNESS.
- BITUMINOUS MATERIAL FOR MIX SHALL BE PERFORMANCE GRADED ASPHALT PG 58-34.
- BITUMINOUS MATERIAL FOR TACK COAT SHALL BE PER MN/DOT SPEC 2357 & 3151 SEE 2357.3 FOR APPLICATION RATES.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDE LINES FOR THE INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."

TYPICAL INPLACE SECTION BRIDGE



TYPICAL INPLACE SECTION



~ GENERAL NOTES ~

- 1. EQUIPMENT HOURS HAVE BEEN PROVIDED FOR ADDITIONAL APPROACH SHAPING AS DIRECTED BY PROJECT ENGINEER.
- 2. BITUMINOUS MATERIAL FOR TACK COAT SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 2360.509 TYPE SP 9.5 WEARING COURSE MIX (2,C).
- 3. COMPACTION OF ALL BITUMINOUS COURSES SHALL BE BY THE ORDINARY COMPACTION METHOD AS PER MN/DOT SPEC. 2360.3.D2.
- 4. BITUMINOUS PAVEMENT MILLINGS MAY BE INCORPORATED INTO THE NEW BITUMINOUS MIXTURE ANY MATERIAL NOT RECYCLED SHALL BE HAULED OFF THE SITE AND DISPOSED OF BY THE CONTRACTOR AT A SITE APPROVED BY THE ENGINEER.
- 5. CONTRACTOR TO MILL ALL BITUMINOUS ON BRIDGE DECKS AND 2" ON ROADWAYS WITH PAVEMENT APPROACHES. LOCATIONS TO BE MARKED BY THE PROJECT ENGINEER.

ROADWAY	BRIDGE NUMBER	EXISTING BITUMINOUS DEPTHS	
CSAH 5	64531	@ CL 7.5"	@ FOG 5.75"
CSAH 7	64514	@ CL 5.0"	@ FOG 3.0"
CSAH 17	64512	@ CL 4.0"	@ FOG 2.5"
CSAH 30	64516	@ CL 2.25"	@ FOG 2"
CR. RD. 59	64515	@ CL 0.75"	@ FOG 0.75"
CR. RD. 78	64528	@ CL 3.5"	@ FOG 2.25"

- 6. CONTRACTOR TO PAVE BRIDGE DECKS IN TWO LIFTS AND BRIDGE APPROACHES IN TWO LIFTS, WITH THE FINAL LIFT BEING A UNIFORM 2" THICKNESS AND PAVING OPERATIONS ACROSS THE ROAD APPROACH AND BRIDGE SECTION. CONTRACTOR TO ENSURE NO MORE THAN 4" OF NEW BITUMINOUS AT CENTERLINE AND 2"AT THE FOG LINE ON BRIDGE DECKS.
- 7. CONTRACTOR WILL NOT BE ALLOWED TO VIBRATORY COMPACT MIX ON THE TIMBER BRIDGE DECKS.

NOTES:

- ① TYPICAL BITUMINOUS ROADWAY SLOPE IS 2.0%. TYPICAL BRIDGE SLOPE VARIES. SEE DIVISION S.
- ② TYPICAL AGGREGATE SHOULDER SLOPE IS 4.0%
- ③ SLOPES VARY IN SUPERELEVATED SECTIONS. NEW SLOPES TO FOLLOW INPLACE CONDITIONS.
- ④ THE CONTRACTOR SHALL PROTECT THE EXISTING INSLOPE AND PREVENT AGGREGATE SPILLAGE. ANY MILLING OR SHOULDERING MATERIAL LEFT ON THE INSLOPE SHALL BE SALVAGED BY THE CONTRACTOR AT NO EXPENSE TO THE DEPARTMENT.

CERTIFIED BY Anthony J. Selha  
Approved: County Engineer

Date: 05-1-2025 Registration number 54241

STATE AID PROJECT NUMBER 064-030-021 SHEET NO. 3 OF 3 SHEETS