

MINNESOTA DEPARTMENT OF TRANSPORTATION
LINCOLN COUNTY
CONSTRUCTION PLAN FOR BITUMINOUS OVERLAY
COUNTY STATE AID HIGHWAY NO. 7

LOCATED ON CSAH 7 BETWEEN THE INT. OF CSAH 17 AND 170 FT. NORTH OF THE INT. OF CSAH 18

(Geographic
Description)

FROM 71.92' NORTH OF THE NORTHEAST CORNER OF SECTION 19-T112N-R44W TO 170' NORTH OF THE NORTHEAST CORNER OF

(Legal
Description)

SECTION 32-T113-R44W

SPECIFICATIONS

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

INDEX

SHEET 1	TITLE SHEET / INDEX MAP
SHEET 2	ESTIMATED QUANTITIES / STANDARD PLATES
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SHEET 5	TRAFFIC CONTROL

THIS PLAN CONTAINS 5 SHEETS

LAST PROJECTS:

CP 900-007-022 (BITUMINOUS PATCHING 2022)
SAP 041-607-043 (AGGREGATE BASE & BITUMINOUS SURFACING 2013)
SAP 041-607-34 (BITUMINOUS OVERLAY 2004)
SAP 041-607-06 (GRAVEL SUBBASE, GRAVEL BASE & ROAD MIXED BIT. BASE 1964)
SAP 041-607-04 (GRADING 1963)
SAP 041-607-03 (GRADING, GRAVEL BASE & ROAD MIXED BIT. BASE 1962)

DESIGN DESIGNATION

(STA. 160+29 TO STA. 368+94.20)

Design Strength	10 TON
R-VALUE	10 (ASSUMED)
ADT (2025)	152
PROJ. ADT (2045)	167
PROJ. HCADT (2045)	10 (6%)
SOIL FACTOR	100
SHOULDER WIDTH	3.5 FT.

DESIGN DESIGNATION

(STA. 375+00 TO STA. 376+70)

Design Strength	10 TON
R-VALUE	10
ADT (2025)	107
PROJ. ADT (2045)	118
PROJ. HCADT (2045)	7 (6%)
SOIL FACTOR	100
SHOULDER WIDTH	5.0 FT.

OR

FUNCTIONAL CLASSIFICATION MAJOR COLLECTOR

NO. OF TRAFFIC LANES 2 NO. OF PARKING LANES 0

POSTED SPEED 55 MPH

BASED ON STOPPING SIGHT DISTANCE

HEIGHT OF EYE 3.5 FT. HEIGHT OF OBJECT 2.0 FT.

DESIGN SPEED NOT ACHIEVED AT:

STA. TO STA.

SAP 041-607-052

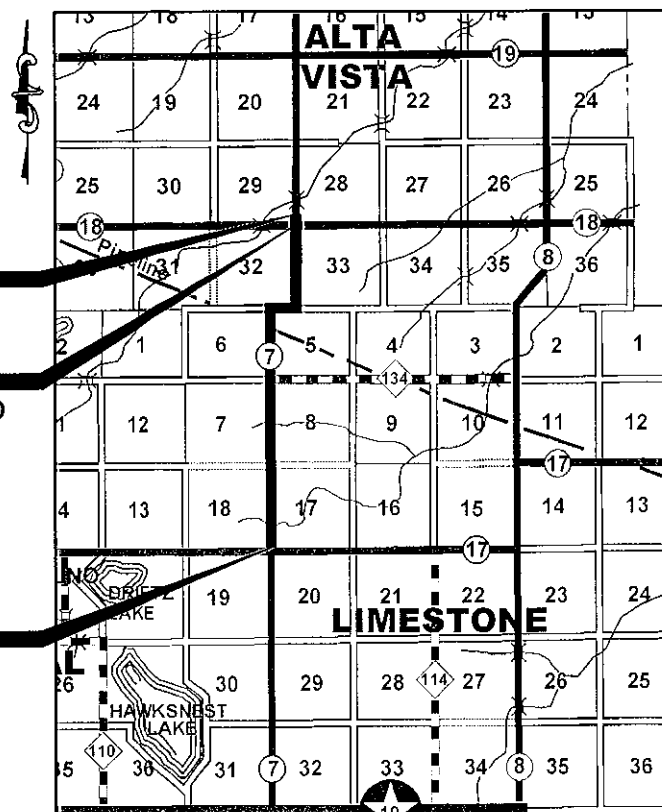
EOP STA. 376+70

EXCEPTION

STA. 368+94.20 TO
STA. 375+00

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BOP STA. 160+29



SCALE: 1 MILE

LOCAL AGENCY SIGNATURES:

Signature: Joseph M. Wilson Typed or Printed Name: JOSEPH M. WILSON,
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: 3-21-25

License Number: 54947

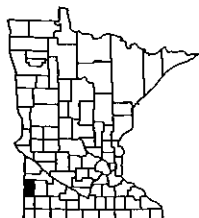
Joseph M. Wilson 3-21-2025
Approved: Lincoln County Engineer

District State-Aid Engineer: Reviewed for Compliance with State-Aid Rules/Policy

State-Aid Engineer: Approved for State-Aid Funding

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GROSS LENGTH	21641.0 FT.	4.099 MI.
BRIDGES LENGTH	0.0 FT.	0.000 MI.
EXCEPTIONS LENGTH	605.8 FT.	0.115 MI.
NET LENGTH	21035.2 FT.	3.984 MI.



SAP NO. 041-607-052

SHEET NO. 1 OF 5 SHEETS

ESTIMATED QUANTITIES / STANDARD PLATES

NOTES	ITEM NUMBER	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
	2016.601	QUALITY MANAGEMENT-THERMAL PROFILING	LUMP SUM	1
	2021.501	MOBILIZATION	LUMP SUM	1
1	2104.607	SALVAGE AGGREGATE	CU YD	149
2	2221.609	SHOULDER BASE AGGREGATE CLASS 1 MOD	TON	2282
3	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B)	TON	23
3,4,5	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	5465
	2563.601	TRAFFIC CONTROL	LUMP SUM	1
6	2582.503	4" SOLID LINE PAINT	LIN FT	58292
7	2582.503	4" BROKEN LINE PAINT	LIN FT	3334

NOTES:

- THE CONTRACTOR SHALL MILL 10 FT. TAPERS FROM A DEPTH OF 0" TO A DEPTH OF 5.25" AT CULVERT LOCATIONS. PLACEMENT OF 5.25" BITUMINOUS SHALL OCCUR IMMEDIATELY AFTER MILLING AND SALVAGING OPERATIONS. ALL WORK SHALL BE PERFORMED IN A MANNER THAT ALLOWS TRAFFIC TO FLOW THROUGH THESE AREAS. MILLING TAPERS SHALL BE INCLUDED IN THE BID PRICE FOR SALVAGE AGGREGATE.
- SHOULDER BASE AGGREGATE CLASS 1 MOD INCLUDES AN ADDITIONAL 80 TON PER LANE MILE TO ACCOUNT FOR THE EXISTING SHOULDER MATERIAL BEING LOW. SEE SPECIAL PROVISION 2211 FOR MODIFICATION OF THE SPECIFICATION FOR BID ITEM 2221.609
- THE CONTRACTOR SHALL REFER TO APPLICATION RATES SPECIFIED IN TABLE 2357.3-1 IN THE MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. BITUMINOUS TACK MATERIAL SHALL BE INCLUDED IN THE BID PRICE OF TYPE SP 9.5 WEARING COURSE MIXTURE (2,B) AND TYPE SP 12.5 WEARING COURSE MIXTURE (2,B).
- THE CONTRACTOR SHALL MILL BUTT JOINTS AT THE BOP AND EOP. MILLING BUTT JOINTS SHALL BE INCLUDED IN THE BID PRICE OF TYPE SP 12.5 WEARING COURSE MIXTURE (2,B).
- COUNTY FORCES WILL PREPARE THE SHOULDER FOR 2" DEEP X 2 FT. WIDE BUMP OUT ON THE INSIDE OF THE CURVES FROM STA. 297+00 TO STA. 311+00 RT. AND STA. 311+00 TO STA 324+00 LT. CONTRACTOR SHALL PLACE A 2" LIFT OF BITUMINOUS ON THE PREPARED SHOULDER PRIOR TO THE 1.5" MAINLINE OVERLAY.
- QUANTITY CONTAINS 41433 LINEAR FEET OF WHITE PAINT AND 16859 LINEAR FEET OF YELLOW PAINT.
- QUANTITIES DO NOT INCLUDE 40' SKIP. 4" BROKEN LINE PAINT SHALL BE YELLOW IN COLOR.

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

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

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

CERTIFIED BY

Joseph M. Lutz
LICENSED ENGINEER

LIC. NO.

54947

DATE:

3-21-25

SAP 041-607-052

SHEET NO. 2 OF 5 SHEETS

QUANTITY TABLES

BASIS FOR PLANNED QUANTITIES

SHOULDER BASE AGGREGATE CLASS 1 (CV)	140 LBS. / CUBIC FOOT (DRY WEIGHT)
TYPE SP 9.5 & 12.5 WEARING COURSE MIXTURE (2,B)	110 LBS. / INCH SQ. YD.

(2104) SALVAGE AGGREGATE QUANTITIES

STA. 183+46 TO STA. 184+75 CULVERT PATCH DIG OUT (5.25" DEEP)	48	CU YD
STA. 228+30 TO STA. 228+83 CULVERT PATCH DIG OUT (5.25" DEEP)	20	CU YD
STA. 238+49 TO STA. 239+51 CULVERT PATCH DIG OUT (5.25" DEEP)	38	CU YD
STA. 251+21 TO STA. 251+81 CULVERT PATCH DIG OUT (5.25" DEEP)	22	CU YD
STA. 282+99 TO STA. 283+56 CULVERT PATCH DIG OUT (5.25" DEEP)	21	CU YD

(2221) SHOULDER BASE AGGREGATE CLASS 1 MOD

STA. 160+29 TO STA. 368+94.20 MAINLINE	1864	TON
1 COUNTY ROAD INTERSECTION @ 30 TON PER APP	30	TON
7 TWP. ROAD INTERSECTIONS @ 20 TON PER APP	140	TON
11 DRIVEWAYS @ 8 TON PER APP	88	TON
20 FIELD APPROACHES @ 8 TON PER APP	160	TON

(2360) BITUMINOUS QUANTITIES

STA. 375+61 TO STA. 376+70 LEVELING COURSE	23	TON
STA. 160+29 TO STA. 368+94.20 MAINLINE	4400	TON
STA. 375+00 TO STA. 376+70 MAINLINE	53	TON
PATCH STA. 183+56 TO STA. 184+64 (5.25" THICK)	95	TON
PATCH STA. 228+40 TO STA. 228+73 (5.25" THICK)	39	TON
PATCH STA. 238+59 TO STA. 239+41 (5.25" THICK)	75	TON
PATCH STA. 251+31 TO STA. 251+71 (5.25" THICK)	45	TON
PATCH STA. 283+09 TO STA. 283+46 (5.25" THICK)	42	TON
STA. 297+00 TO STA. 311+00 RT. SIDE (3.5" THICK @ 2 FT. CURVE BUMP OUT)	60	TON
STA. 311+00 TO STA. 324+00 LT. SIDE (3.5" THICK @ 2 FT. CURVE BUMP OUT)	56	TON
2 CSAH ROAD INTERSECTIONS @ 40 TON PER APP	80	TON
1 COUNTY ROAD INTERSECTION @ 40 TON PER APP	40	TON
7 TWP. ROAD INTERSECTIONS @ 30 TON PER APP	210	TON
11 DRIVEWAYS @ 20 TON PER APP	220	TON
20 FIELD APPROACHES @ 2 TON PER APP	40	TON
5 MAILBOXES @ 2 TON PER APP	10	TON

CERTIFIED BY

Joseph M. Gibson
LICENCED ENGINEER

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DATE:

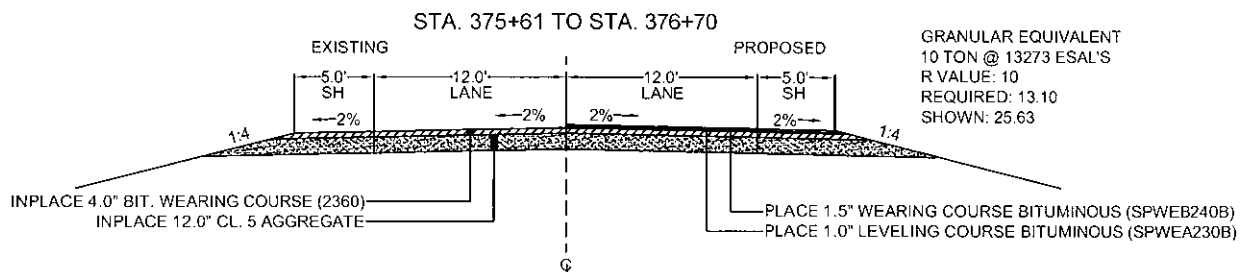
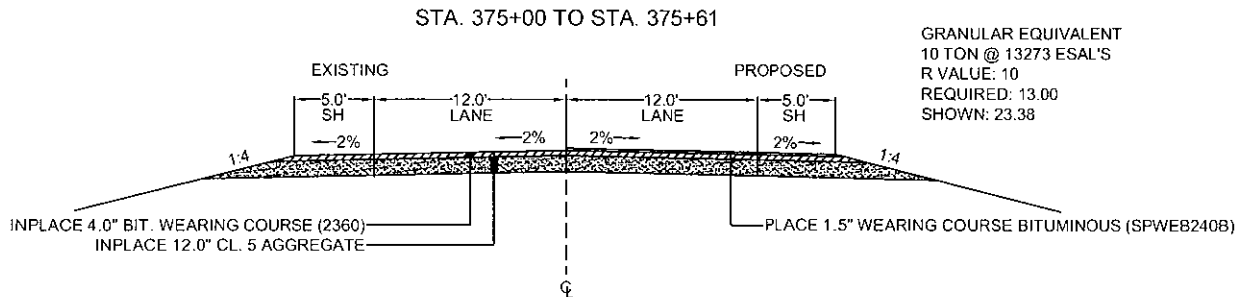
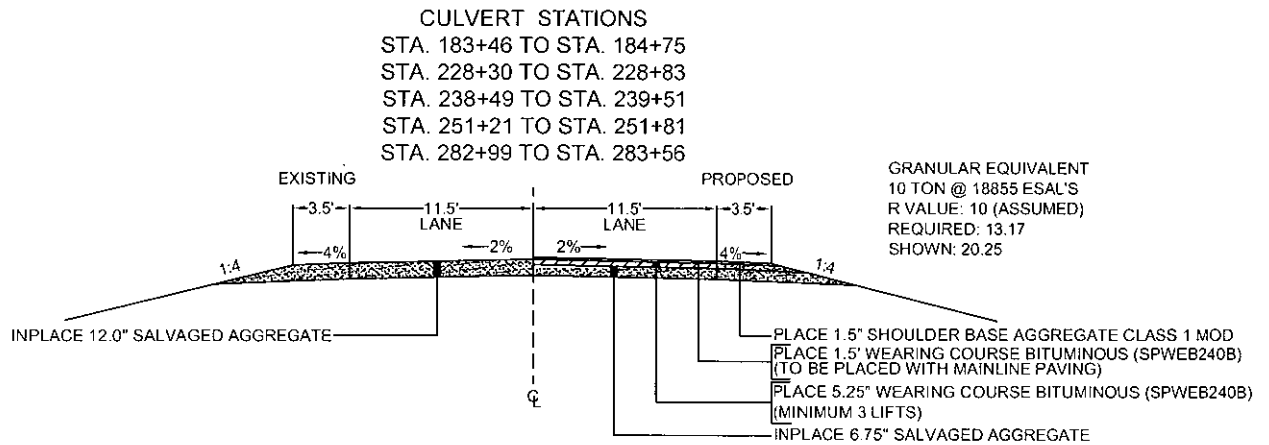
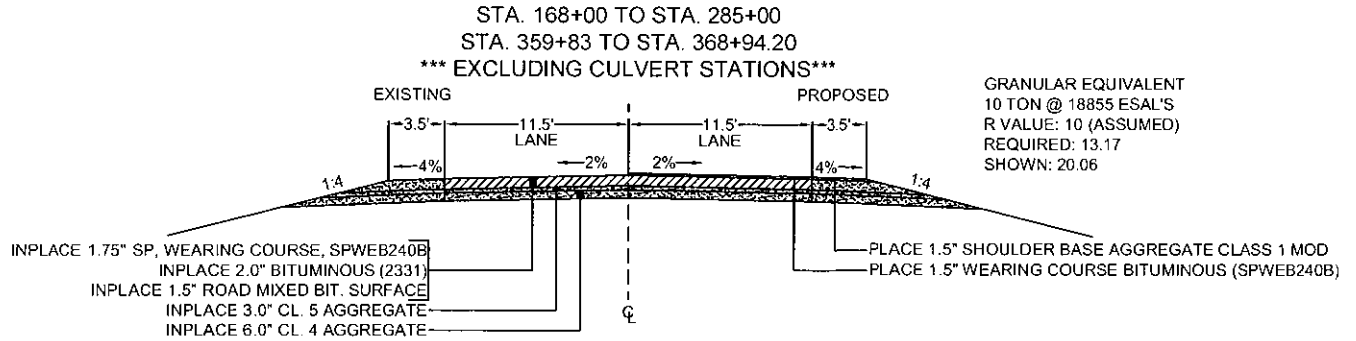
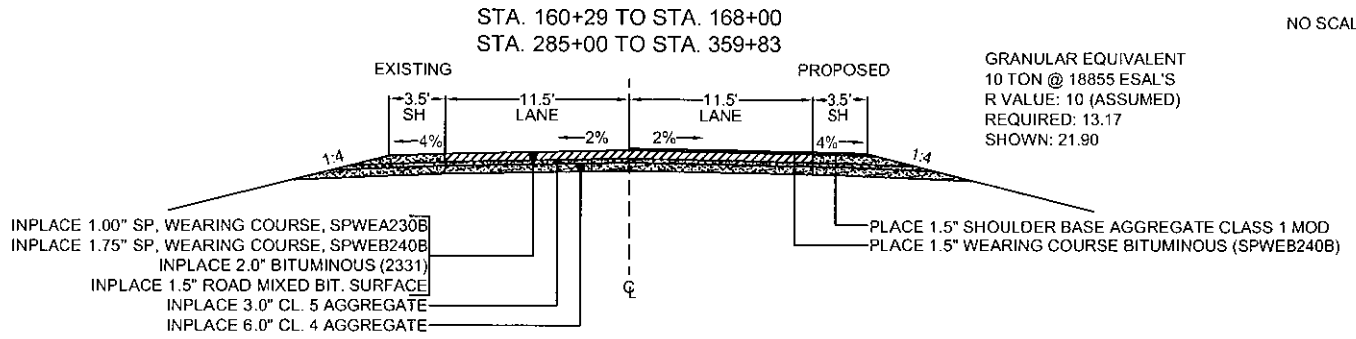
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SAP 041-607-052

SHEET NO. 3 OF 5 SHEETS

TYPICAL SECTIONS

NO SCALE



CERTIFIED BY

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LIC. NO.

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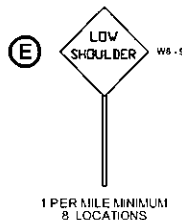
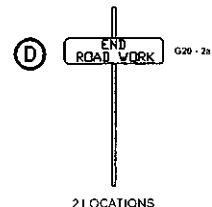
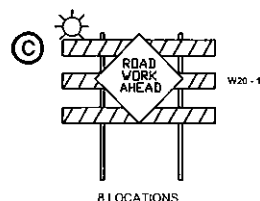
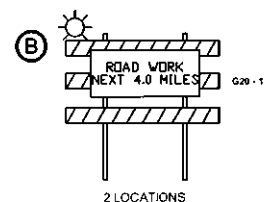
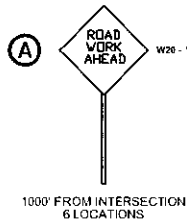
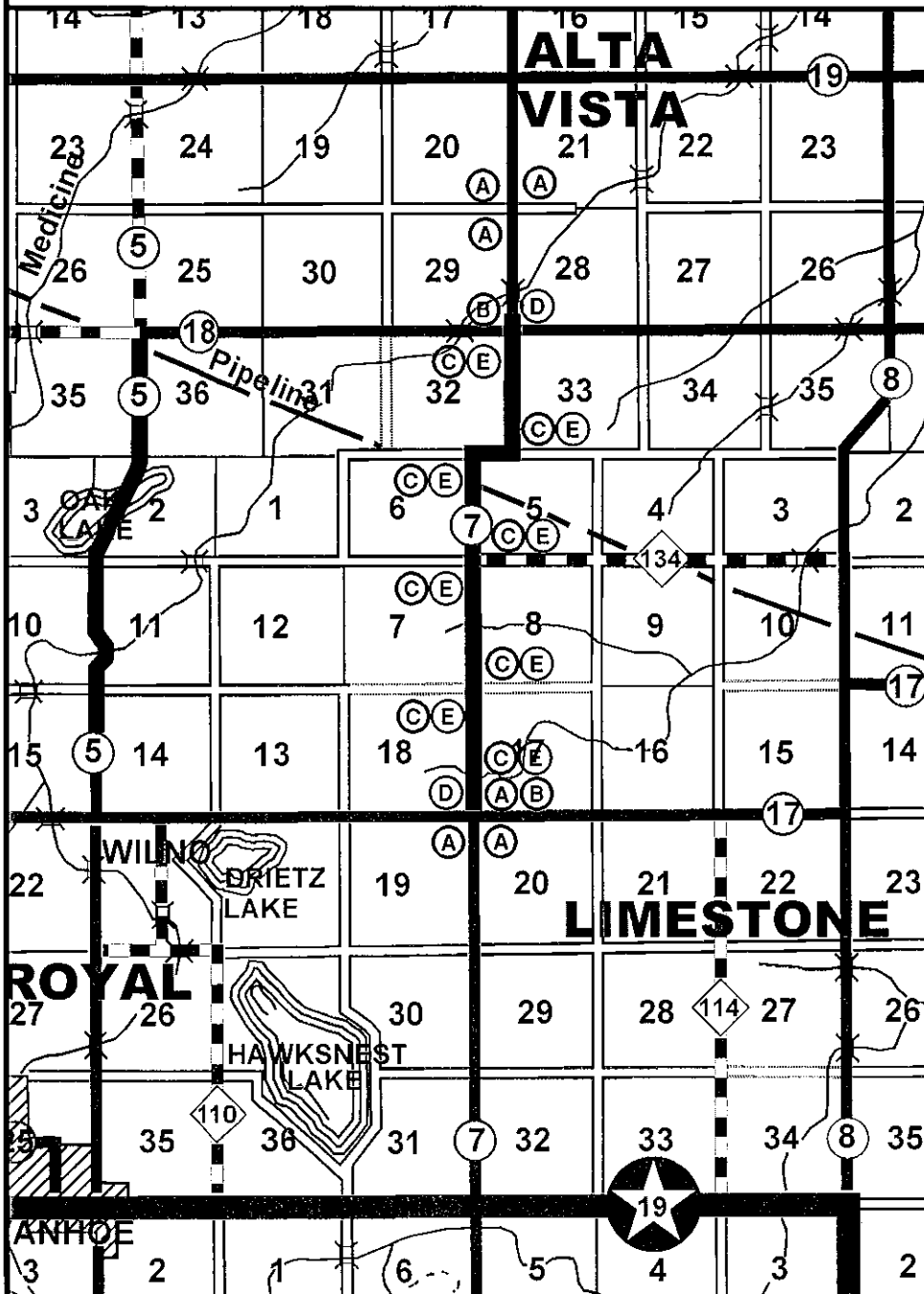
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SAP 041-607-052

SHEET NO. 4 OF 5 SHEETS

TRAFFIC CONTROL

NO SCALE



SIGN	SIGN NO.	QUANTITY	SIZE	COLOR	FLASHERS
	TYPE III BARRICADE	10	60" X 48"	ORANGE ON WHITE	10
	W20 - 1	14	36" X 36"	BLACK ON ORANGE	
	G20 - 1	2	60" X 24"	BLACK ON ORANGE	
	G20 - 2a	2	48" X 24"	BLACK ON ORANGE	
	W8 - 9	8	48" X 48"	BLACK ON ORANGE	

THE ATTACHED LAYOUT AND TABULATION SHOULD BE CONSIDERED A MINIMUM. ADDITIONAL SIGNING MAY BE REQUIRED TO MEET SAFETY STANDARDS BASED ON THE CONTRACTOR'S OPERATIONS.

ALL NECESSARY TRAFFIC CONTROL DEVICES ON THIS PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

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

CERTIFIED BY

Joseph M. Nelson
LICENSED ENGINEER

LIC. NO.

54947

DATE:

3-21-25

SAP 041-607-052

SHEET NO. 5 OF 5 SHEETS