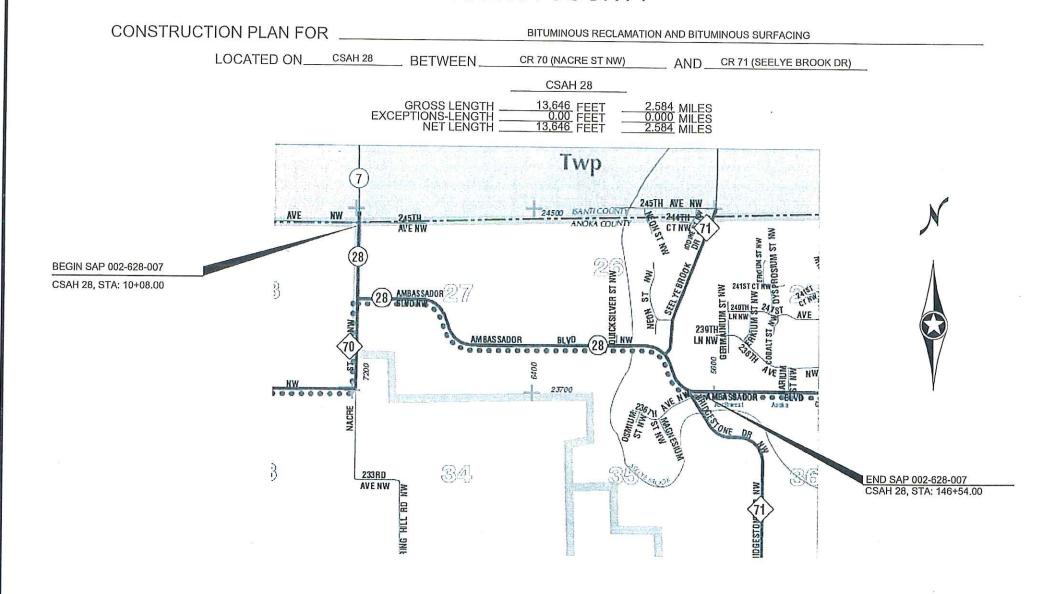
MINNESOTA DEPARTMENT OF TRANSPORTATION **ANOKA COUNTY**



PROJECT LOCATION

ANOKA COUNTY

DESIGN DESIGNATION (CSAH 28) 135,149 ESAL 20 FUNCTIONAL CLASSIFICATION _____ A MINOR COLLECTOR R VALUE NO. OF TRAFFIC LANES 2 NO. OF PARKING LANES 0 ADT (2018) 1144 DESIGN SPEED 55 MPH 1144 STOPPING SIGHT DISTANCE BASED ON: PROJ. ADT (2038) 67 PROJ. HCADT (2038) HEIGHT OF EYE 3.5' HEIGHT OF OBJECT 2.0' N/A SOIL FACTOR DESIGN SPEED NOT ACHIEVED AT: 10 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY A

CITY OF ST FRANCIS ANOKA COUNTY MN/DOT TRANSPORTATION DISTRICT - METRO **SECTIONS 26 & 27**

TOWNSHIP 34 NORTH RANGE 25 WEST

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN, ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE INSTALLED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MNMUTCD), AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC

GOVERNING SPECIFICATIONS

THIS PLAN CONTAINS 20 SHEETS

INDEX

SHEET NO.	DESCRIPTION
	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4 - 6	DETAILS
7 - 12	CONSTRUCTION PLAN
13 - 20	SIGNING AND STRIPING PLANS

DISTRICT STATE AID ENGINEER: REVIEWED FOR

COMPLIANCE WITH STATE AID RULES/POLICY

STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING

TITLE SHEET

Sheet 1 of 20 Sheets

STATE AID PROJECT 002-628-007

DATE BY CKD APPR REVISION 10:42:50 AM 04/12/2018

OR UNDER MY DIRECT SUPERVISION LICENSED PROFESSIONAL ENGINE SIGNATURE: DATE: 4/18/18

DRAWN BY ___ SRK __ DATE 04/12/201 ESIGN BY ____SRK __ DATE _04/12/2011

HIGHWAY DEPT.

	STATEMENT OF ESTIMATED QUANTITIES							
	NAMES AND ASSOCIATION OF THE PROPERTY OF THE P			TOTAL PROJECT				
NOTES	ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITIES ESTIMATED				
	2021.501	MOBILIZATION	LUMP SUM	1				
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	270				
1	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	131				
	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	284				
2	2123.510	MOTOR GRADER	HOUR	45				
	2130.523	WATER	MGAL	235				
	2211.509	AGGREGATE BASE CLASS 5 (LV)	TON	326				
	2215.504	FULL DEPTH RECLAMATION	SQ YD	33572				
3	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	160				
	2221.509	SHOULDER BASE AGGREGATE CLASS 5	TON	1100				
4	2232.604	MILL BITUMINOUS PAVEMENT (SPECIAL)	SQ YD	79				
	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	1909				
1,5	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	21				
6	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (4,C)	TON	125				
	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (4,C)	TON	8544				
7	2540.602	MAIL BOX SUPPORT	EACH	18				
8	2563.601	TRAFFIC CONTROL	LUMP SUM	1				
9	2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	40				
10	2574.507	COMMON TOPSOIL BORROW (LV)	CU YD	986				
11	2575.504	EROSION CONTROL BLANKETS CATEGORY 0	SQ YD	8732				
12	2581.503	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	LIN FT	546				
13	2582.503	4" SOLID LINE MULTI COMP	LIN FT	32454				
13	2582.503	4" BROKEN LINE MULTI COMP	LIN FT	1370				
13	2582.503	4" DOUBLE SOLID LINE MULTI COMP	LIN FT	6914				

	CONSTRUCTION NOTES
1	CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
2	ITEM USED TO MOVE EXCESS RECLAIM MATERIAL AT THE RECLAIM AREA LIMITS TO CREATE A SMOOTH TRANSITION BETWEEN THE PROPOSED AND EXISTING PAVEMENT.
3	MATERIAL SHALL BE HAULED AND USED FOR PROFILE AND SUPERELEVATION CORRECTION AREAS. ITEM INCLUDES PLACEMENT, SHAPING, COMPACTION, AND MAINENANCE OF MATERIAL. EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
4	ITEM USED FOR MILLING STREET APPROACHES AND/OR DETAIL MILLING AREAS AS IDENTIFIED IN THE PLAN. BITUMINOUS MILLING AT TIMBER BRIDGE TO BE DONE IMMEDIATELY PRIOR TO WEAR COURSE PAVING.
5	ITEM FOR BITUMINOUS DRIVEWAYS. DRIVEWAYS SHALL BE PAVED AFTER MAINLINE PAVING, AND BEFORE FINAL STRIPING.
6	ITEM FOR STREET APPROACHES. STREET APPROACHES SHALL BE PAVED AFTER MAINLINE PAVING, AND BEFORE FINAL STRIPING
7	MAILBOXES ARE TO BE INSTALLED AT THE EXISTING MAILBOX LOCATION OR AS DIRECTED BY THE LOCAL POSTAL AUTHORITY, CONTRACTOR RESPONSIBLE FOR CONTACTING THE LOCAL POSTAL AUTHORITY. MAILBOX REMOVAL AND ALL MATERIALS ARE INCIDENTAL TO INSTALLAT
8	ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO, AND BE INSTALLED IN ACCORDANCE WITH, THE MOST CURRENT REVISION OF THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". DO NOT PASS, PASS WITH CARE, NO CENTER STRIPE, AND STOP HERE ON RED SIGNS SHALL BE INPLACE WHENEVER PAVEMENT MARKINGS ARE NOT PRESENT.
9	2 MESSAGE BOARDS, ONE ON THE EACH END OF PROJECT, WILL BE INSTALLED 10 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
10	ITEM USED AT THE ENGINEER'S DISCRETION FOR THE RESTORATION OF DISTURBED AREAS ALONG DRIVEWAY AND STREET
11	TYPE 1 FERTILIZER AND TYPE 25-121 SEED ARE INCIDENTAL TO THIS ITEM.
12	CENTERLINE AND LANE DESIGNATION SKIPS TO BE APPLIED AS SOON AS POSSIBLE ON EACH NEW LIFT OF PAVEMENT; SKIPS MUST BE INPLACE BEFORE THE CONTRACTOR LEAVES FOR THE DAY. CONTRACTOR SHALL REMOVE PRIOR TO FINAL PAINT STRIP!
13	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING.

BASIS OF PLANNED QUANTITIES								
2357	BITUMINOUS MATERIAL FOR TACK COAT	0.05 GAL / SQ YD						
2211	AGGREGATE BASE CLASS 5 (LV)	1.4 TONS / CU YD						
2360	ALL BITUMINOUS PAVEMENT	115 LBS / SQ YD / IN THICKNESS						
2581	REMOVABLE PREFORM PAVEMENT MARKING TAPE	2' AT 50' INTERVALS						
2575	SEED MIXTURE 25-121	61 LBS. / ACRE						
2574	FERTILIZER TYPE 3	350 LBS. / ACRE						

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

PLATE NUMBER	DESCRIPTION
8000J	CHANNELIZERS (3 SHEETS)
9350A	MAILBOX SUPPORT (SWING-AWAY TYPE)

NAME: P:18-01-00/CSAH_28_(NacreSt-SeelyeBrookDr)|Base\ProposeDiproposeD.dgn

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME
OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY
LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF
THE STATE OF MINNESOTA.
PRINT NAME:

JOSEPH J. MACPHERSON

DESIGN BY SRK

CHECKED BY HG

O18 ANOKA COUNTY

ANOKA COUNTY HIGHWAY DEPT.

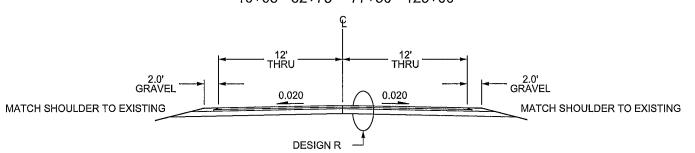
STATEMENT OF ESTIMATED QUANTITIES

STATE AID PROJECT<u>002-628-007</u>

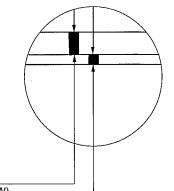
Sheet 2 of 20 Sheets

CSAH 28 - AMBASSADOR BLVD NW

PROPOSED RECLAIM SECTION 10+08 - 52+75 77+50 - 125+00



EXISTING SECTION

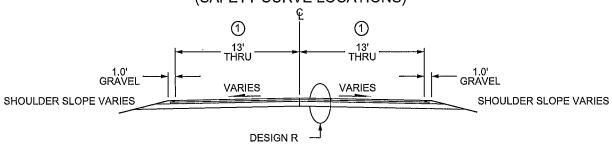


4.5" EXISTING BITUMINOUS 2.0" AGGREGATE BASE (SAND BELOW)

FOR INFORMATIONAL PURPOSES ONLY CONTRACTOR SHALL FIELD VERIFY EXISTING SECTION

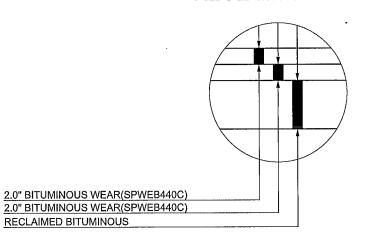
CSAH 28 - AMBASSADOR BLVD NW

PROPOSED RECLAIM SECTION 52+75 - 77+50 125+00 - 147+00 (SAFETY CURVE LOCATIONS)



1 : 13' WIDTH (LOW SIDE OF SUPER) & 12' WIDTH (HIGH SIDE OF SUPER) IN SAFETY CURVE LOCATIONS. LOCATIONS TO BE MARKED IN THE FIELD BY ENGINEER.

DESIGN R RECLAIM SECTION



CONSTRUCTION NOTE: ALL PAVING SHALL BE PULLED IN THE SAME DIRECTION AS TRAFFIC FOR THAT LANE OF TRAVEL.

NO DATE BY CKD APPR REVISION 04/12/2018 NAME: P:\18-01-00\CSAH_28_(NacreSt-SeelyeBrookDr)\Base\PROPOSED\PROPOSED.dgn

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 LICENSED PROFESSIONAL END THE STATE OF MINNESOTA. LICENSE NO. 46732



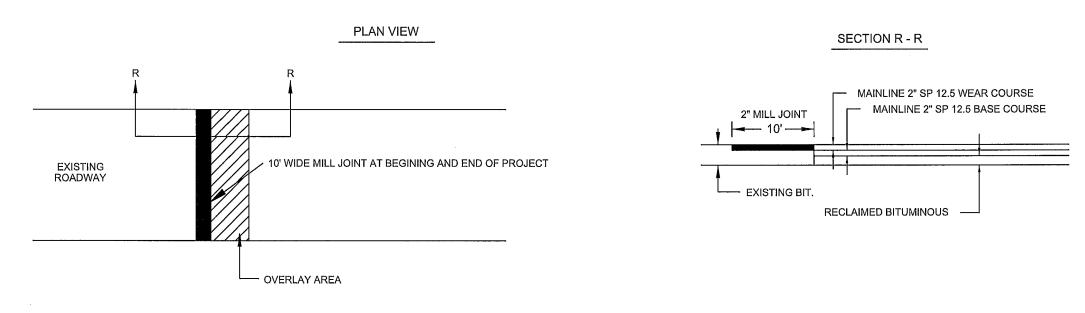
ANOKA COUNTY HIGHWAY DEPT.

TYPICAL SECTIONS

STATE AID PROJECT 002-628-007

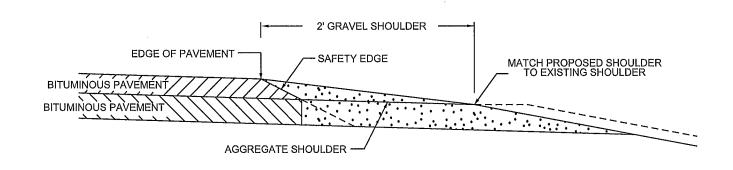
Sheet 3 of 20 Sheets

MAINLINE JOINT DETAIL (RECLAIM)



SHOULDER DETAIL

BITUMINOUS SAFETY EDGE GRAVEL SHOULDER



								OR LIC TH
NO	DATE	BY	CKD	APPR	REVISION	04/12/2018	10:43:06 AM	SIC
NAME: P:\18-01-00\CSAH_28_(NacreSt-SeelyeBrookDr)\Base\PROPOSED\PROPOSED.dgn								DA

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME
OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY
LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF
THE STATE OF MINNESOTA.
PRINT NAME:
JOSEPH MACPHERSON
SIGNATURE:

DATE: LICENSE NO. 46732

BY SRK DATE 04/12/2018
BY SRK DATE 04/12/2018
DBY HG DATE 04/12/2018

ANOKA COUNTY
HIGHWAY DEPT.

DETAILS

STATE AID PROJECT 002-628-007

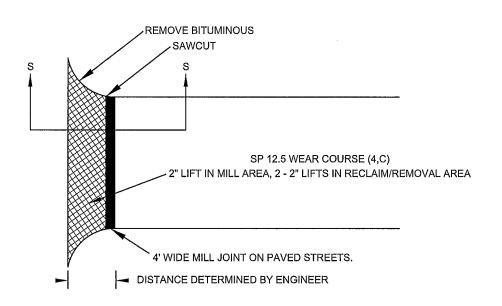
Sheet 4 of 20 Sheets

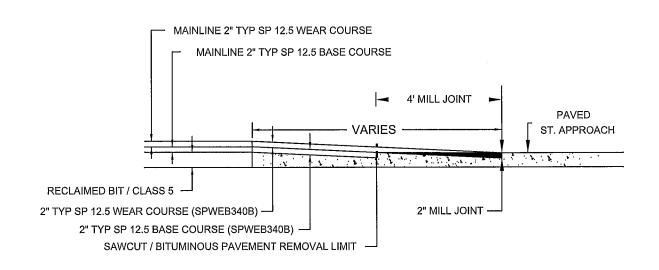
STREET APPROACH DETAIL

BITUMINOUS STREET

PLAN VIEW

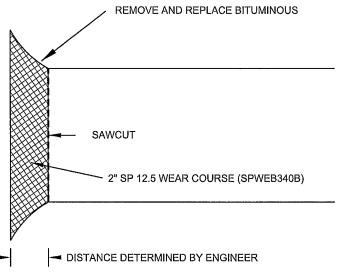
SECTION S - S





RECLAIM AREA - DRIVEWAY DETAIL **BITUMINOUS**

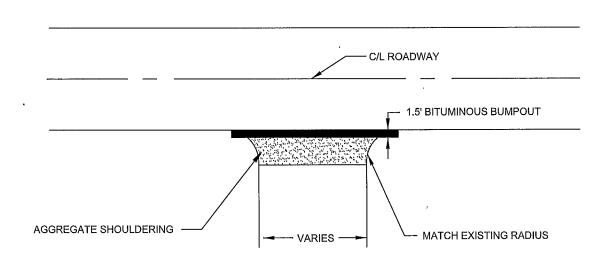
PLAN VIEW



RECLAIM AREA - DRIVEWAY DETAIL

GRAVEL / FIELD ENTRANCE

PLAN VIEW



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER ON FER THE LAWS OF THE STATE OF MINNESOTA. NO DATE BY CKD APPR REVISION

ANOKA COUNTY

ANOKA COUNTY HIGHWAY DEPT.

DETAILS

STATE AID PROJECT 002-628-007

Sheet 5 of 20 Sheets

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GRADE CORRECTION / SUPERELEVATION TAB (STA 52+75 - 77+50) LEFT RIGHT STATION GRADE GRADE SAFETY CURVE (RT SIDE) % BEG. TRANS -2.00 -2.00 52+75 53+00 -2.00 -2.00 53+50 -0.86 -2.57 54+00 0.29 -3.14 54+50 1.43 -3.71 55+00 2.57 -4.29 55+50 3.72 -4.86 56+00 4.86 -5.43 -6.00 END TRANS / BEGIN FULL SUPER 56+50 6.00 57+00 6.00 -6.00 57+50 6.00 -6.00 58+00 6.00 -6.00 6.00 58+50 -6.00 59+00 6.00 -6.00 59+50 6.00 -6.00 END FULL SUPER 6.00 60+00 -6.00 60+50 5.33 -5.33 61+00 4.67 -4.67 61+50 4.00 -4.00 62+00 3.33 -3.33 62+50 2.67 -2.67 63+00 2.00 -2.00 63+50 1.33 -1.33 64+00 0.67 -0.67 64+50 0.00 0.00 PRC RIGHT LEFT **STATION** GRADE **GRADE** SAFETY CURVE (LT SIDE) % % 65+00 -2.00 -2.00 65+50 -2.75 -1.25 66+00 -3.50 -0.50 66+50 -4.25 0.25 67+00 -5.00 1.00 67+50 -5.75 1.75 68+00 -6.00 2.50 68+50 -6.00 3.25 **BEGIN FULL SUPER** 69+00 -6.00 4.00 -6.00 4.75 70+00 -6.00 5.25 70+50 -6.00 6.00 71+00 -6.00 6.00 71+50 -6.00 6.00 72+00 -6.00 6.00 END FULL SUPER 72+50 -6.00 6.00 73+00 -5.50 5.00 73+50 -5.00 4.00 74+00 -4.50 3.00 74+50 -4.00 2.00 75+00 -3.50 1.00 75+50 -3.00 0.00 76+00 -2.50 -1.00 76+50 -2.00 -2.00 77+00 -2.00 END TRANS -2.00

GRADE CORRECTION / SUPERELEVATION							
TAB (STA 125+00 - 147+00)							
LEFT GRADE	RIGHT GRADE	SAFETY CURVE (RT SIDE)					
		BEG. TRANS					
		DEC. IMAG					
		BEGIN FULL SUPER					
		BEGIN FOLL SOFER					
		END FULL SUPER / BEGIN TRANS					
		SAFETY CURVE (RT SIDE)					
	-2.00						
	-2.00						
-2.00	-2.00						
-2.00	-2.00						
-2.89	-1.05						
-3.45	-0.25						
-4.23	0.59	SAFETY CURVE (LT SIDE 139+75)					
-5.06	1.24						
-6.00	2.36	BEGIN FULL SUPER (LT)					
-6.00	3.45						
-6.00	4.36						
-6.00	5.20						
-6.00	6.00	BEGIN FULL SUPER (RT)					
-6.00	6.00						
-6.00	6.00						
-6.00	6.00	END FULL SUPER (RT)					
-6.00	5.25						
-6.00	4.36						
-6.00	3.65						
-6.00	3.36						
-6.00	2.95	MATCH EXISTING					
	TAB LEFT GRADE % -2.00 -1.13 -0.07 0.98 2.03 3.09 4.14 5.19 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0	TAB (STA LEFT GRADE % -2.00 -2.00 -1.13 -2.53 -0.07 -3.05 0.98 -3.58 2.03 -4.11 3.09 -4.63 4.14 -5.16 5.19 -5.69 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -3.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -6.00 6.00 -3.21 1.69 -2.42 0.69 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -2.00 -6.00 6.00					

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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: OSEPH MACPHERSON

DRAWN BY SRK DATE <u>04/12/2018</u>

DESIGN BY SRK DATE <u>04/12/2018</u>

HECKED BY HG DATE 04/12/2018



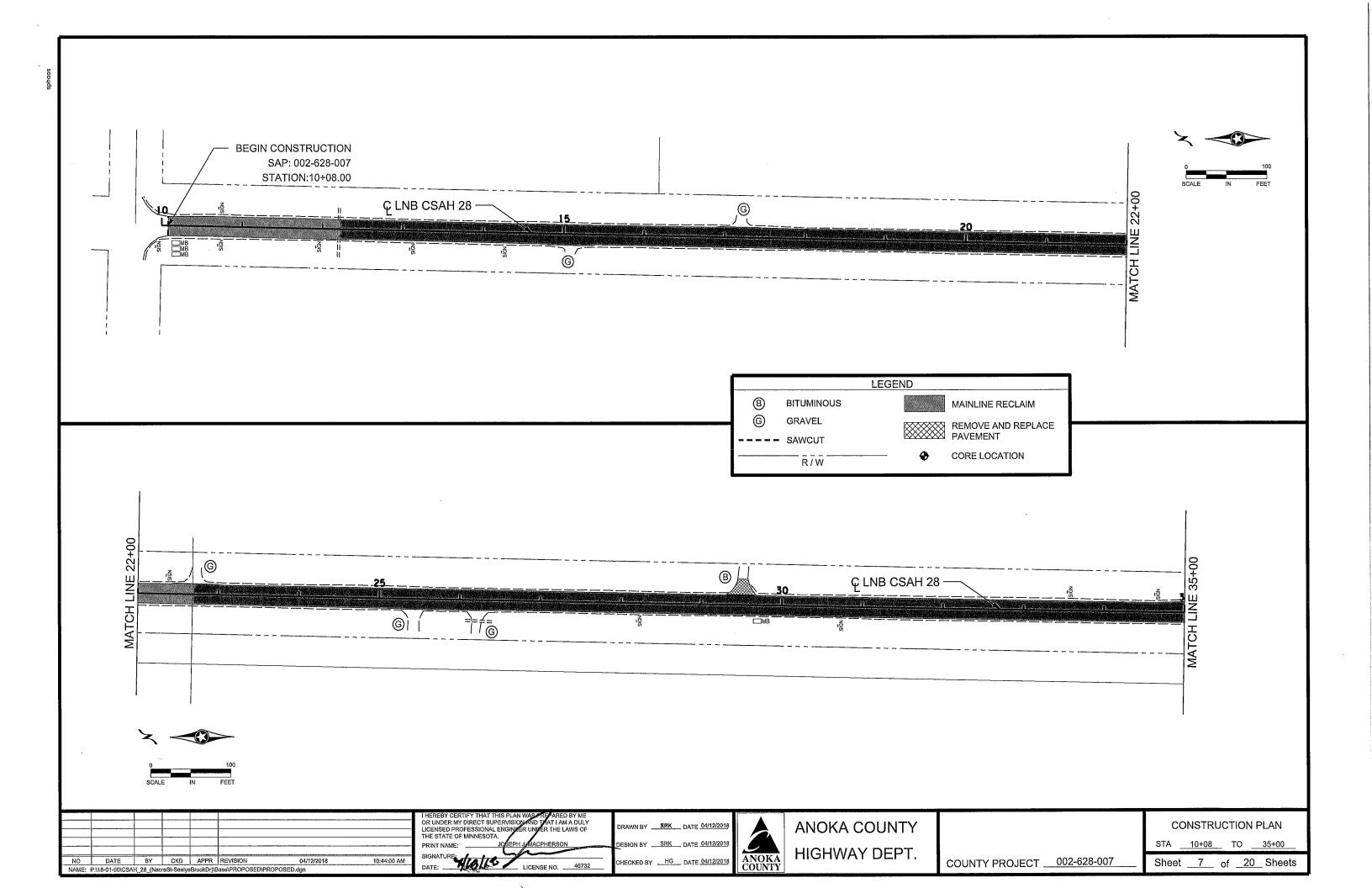
146+75 -6.00 2.65

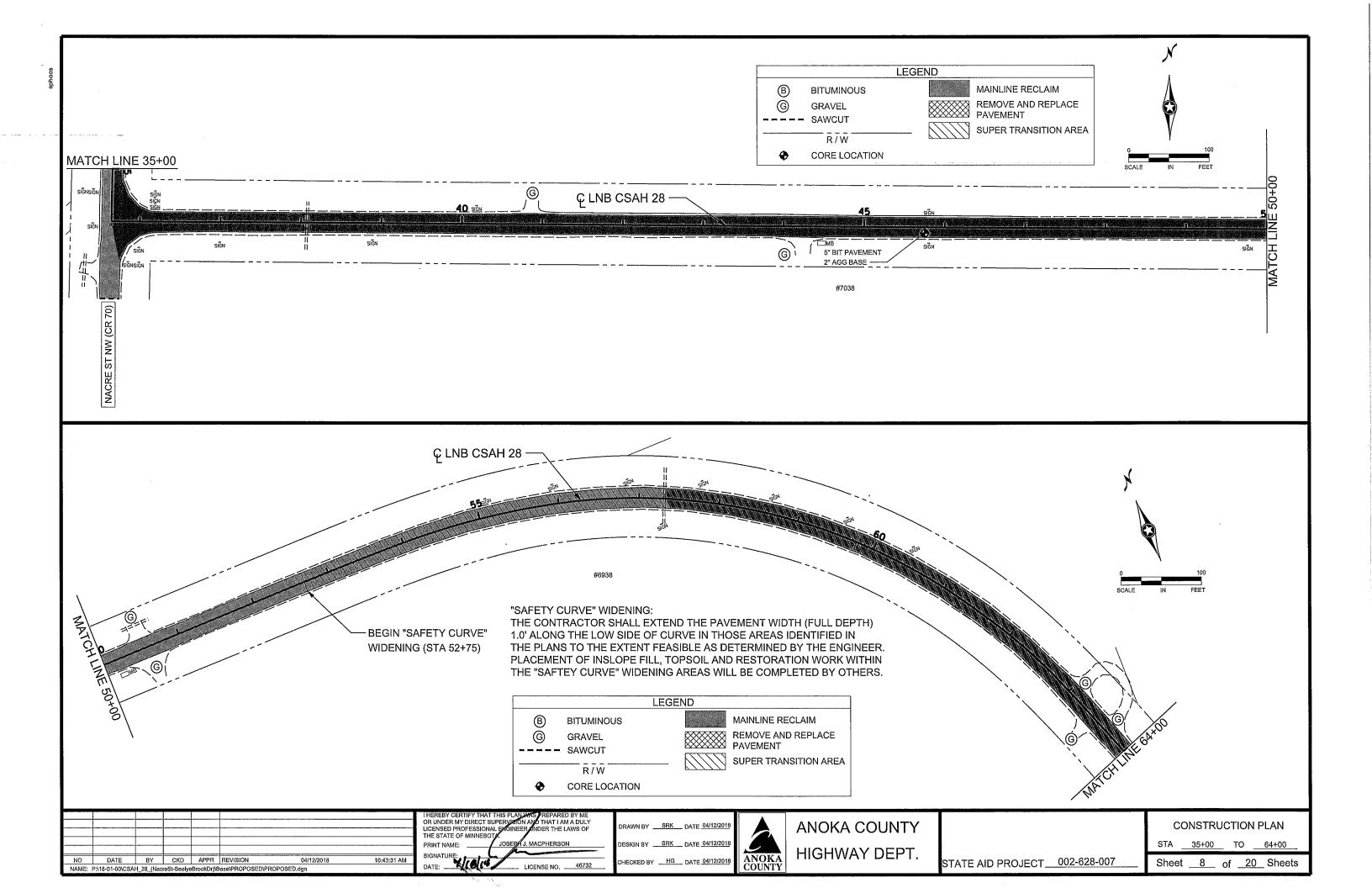
ANOKA COUNTY HIGHWAY DEPT.

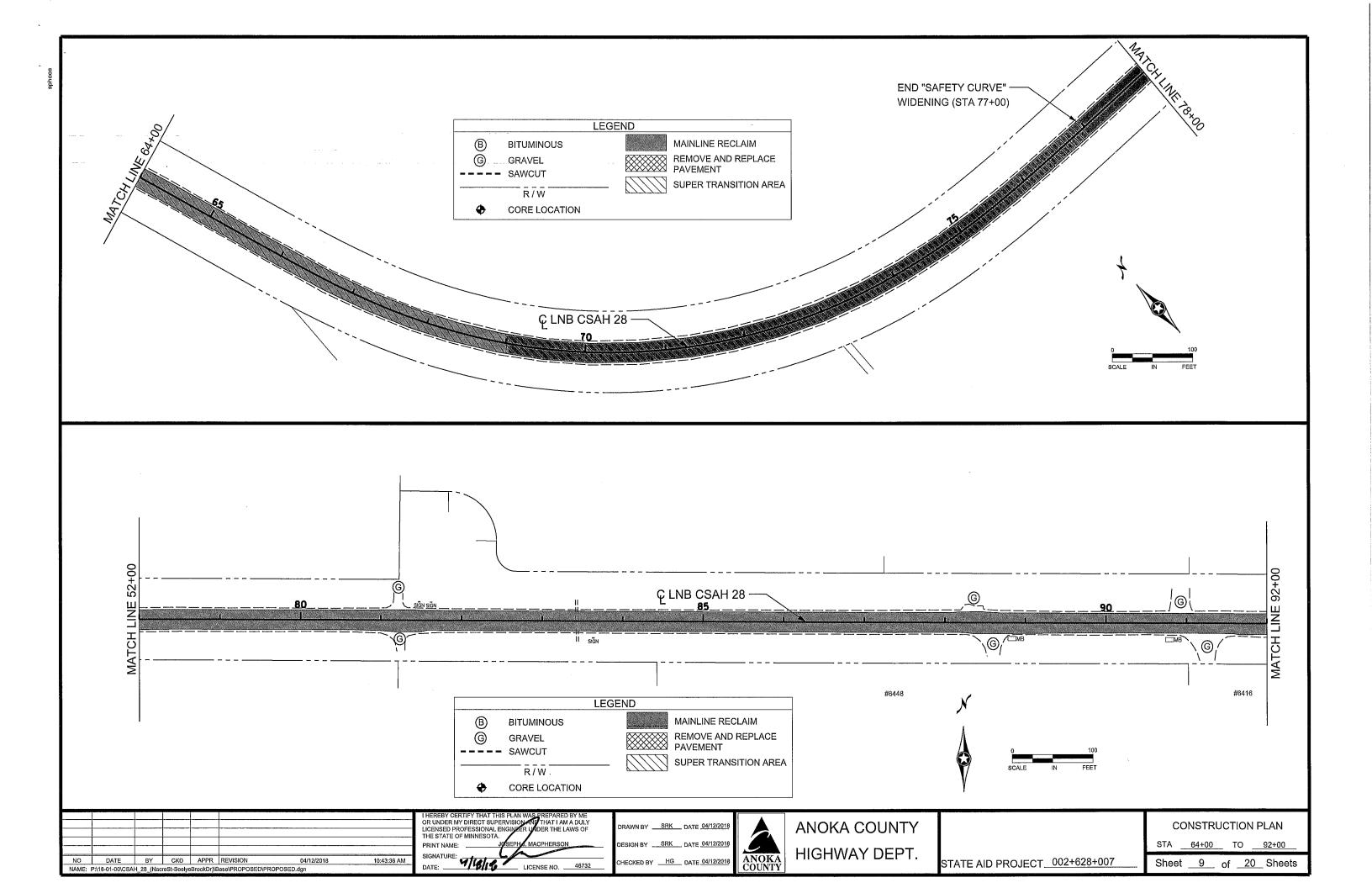
DETAILS

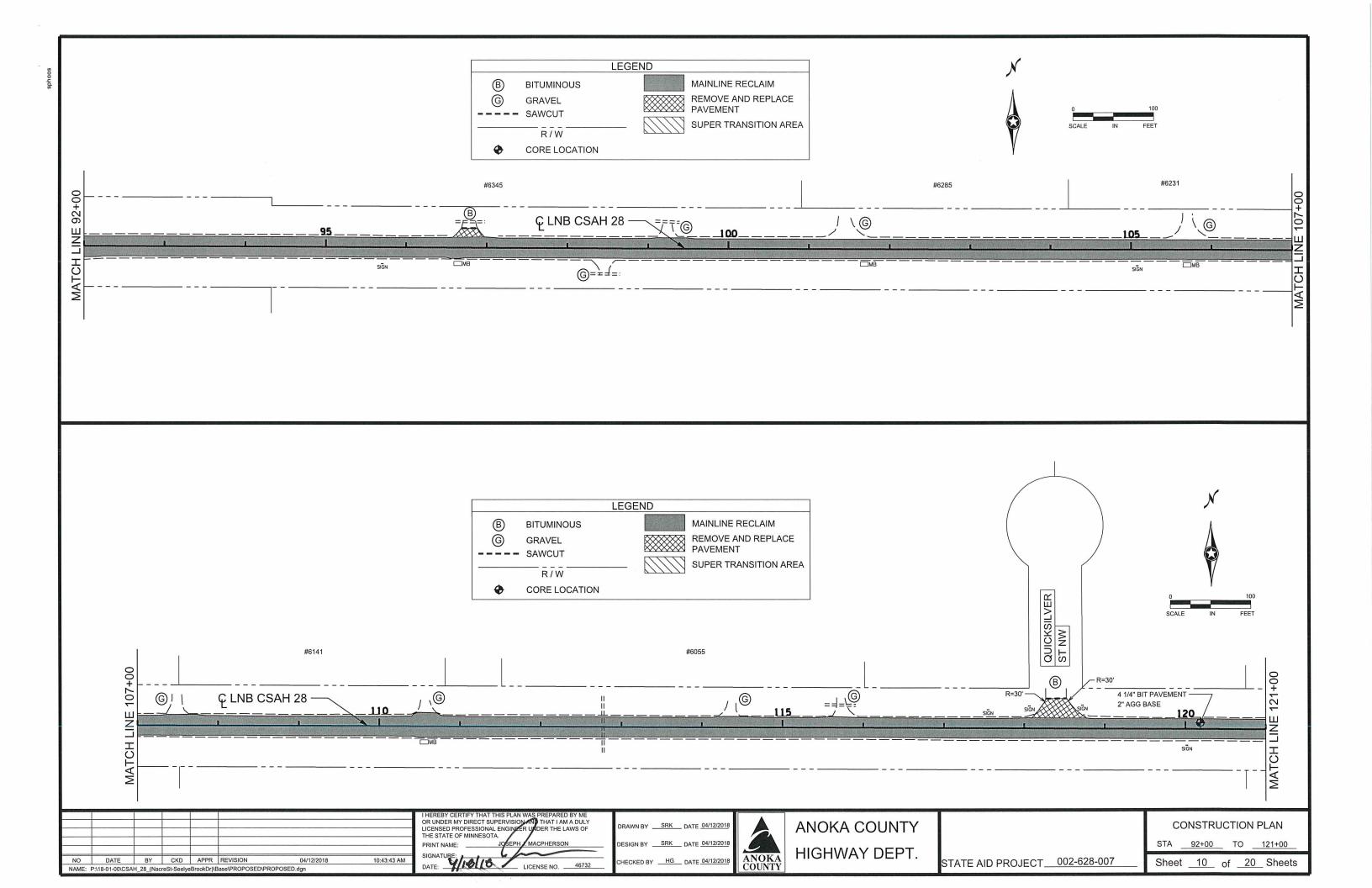
STATE AID PROJECT 002-628-007

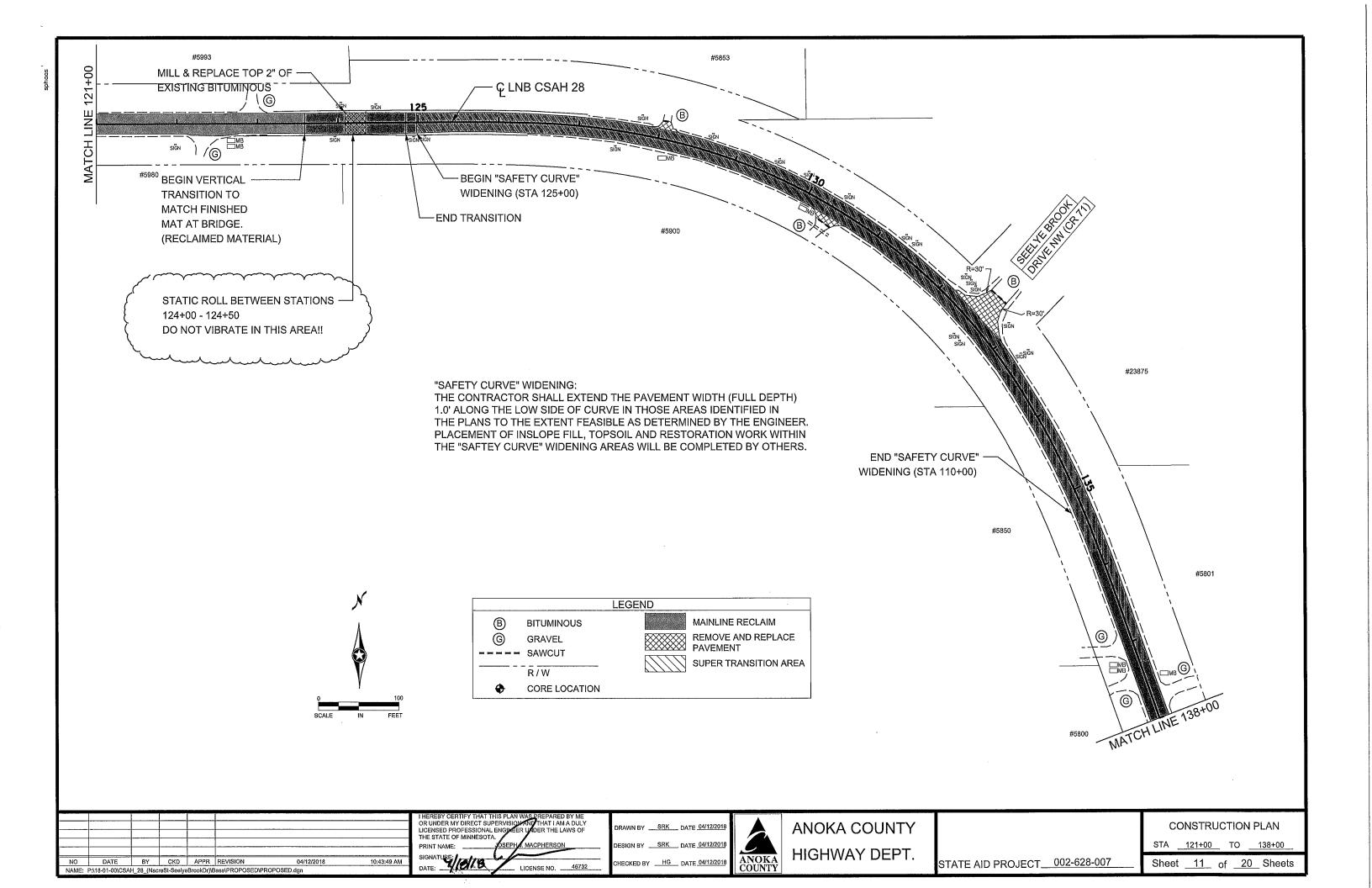
Sheet 6 of 20 Sheets

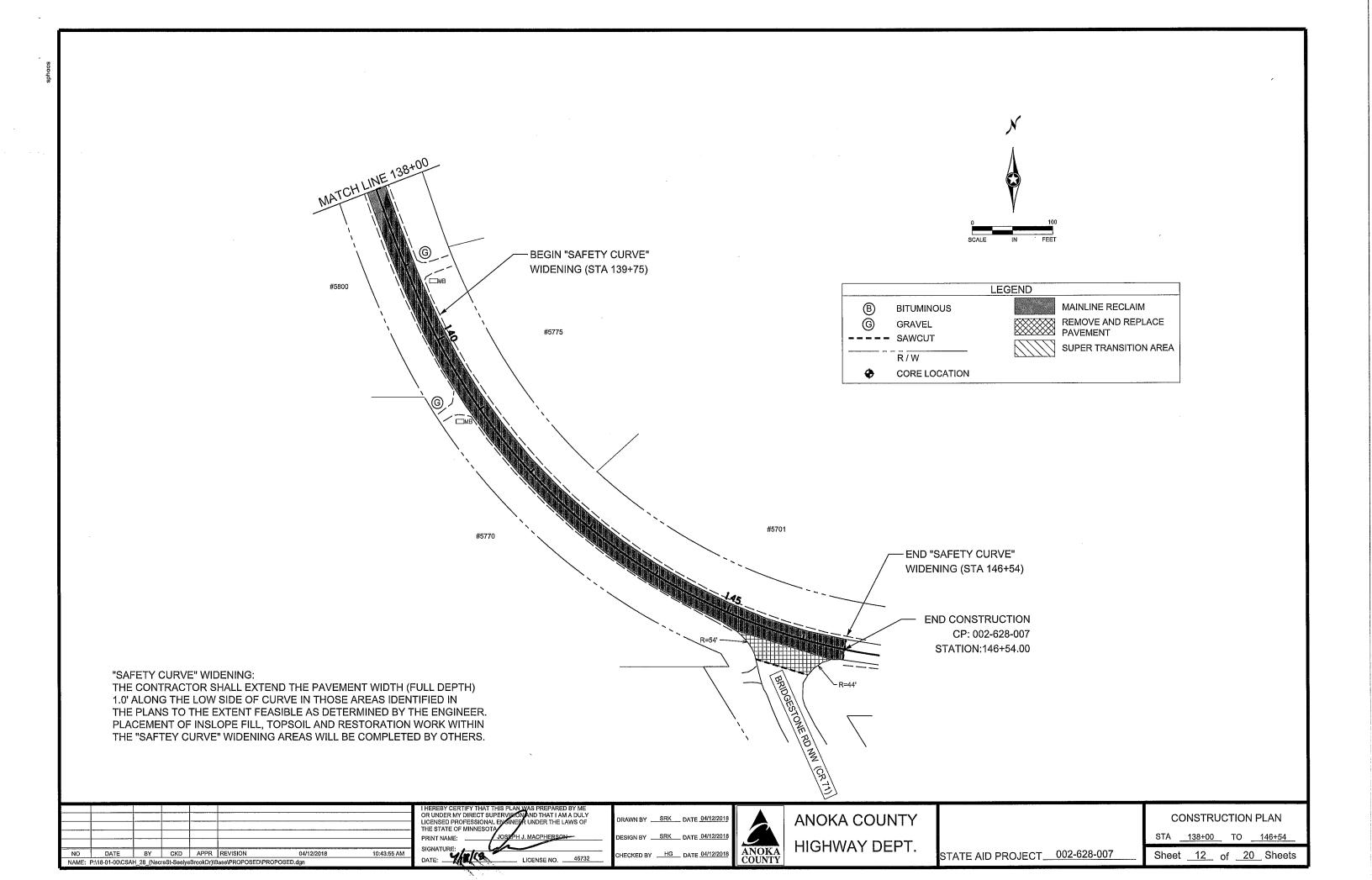












PERMANENT PAVEMENT MARKING PLAN

NOTES AND GUIDELINES

GENERAL INFORMATION:

THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. ANOKA COUNTY HIGHWAY DEPARTMENT WILL PLACE NECESSARY "SPOTTING" AT APPROPRIATE POINTS TO PROVIDE HORIZONTAL CONTROL FOR STRIPING AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS, LONGITUDINAL JOINTS, PAVEMENT EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.

EDGE LINES AND LANE LINES ARE TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES OR CROSSWALKS.

A TOLERANCE OF $\frac{1}{4}$ INCH UNDER OR $\frac{1}{4}$ INCH OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS MAY VARY UP TO ONE-HALF FOOT FROM THE SPECIFIED LENGTHS PROVIDED THE OVER AND UNDER VARIATIONS ARE REASONABLY COMPENSATORY. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 1 INCH. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS, ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.

EPOXY

THE ROAD SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE ENGINEER JUST PRIOR TO APPLICATION. PAVEMENT CLEANING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY BROOM (NON-METALLIC) OR AS RECOMMENDED BY THE MATERIAL MANUFACTURER AND ACCEPTABLE TO THE ENGINEER. NEW PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE ANY SURFACE TREATMENT AND/OR LAITANCE ON LOW SPEED (SPEED LIMIT 35 MPH OR LESS) URBAN PORTLAND CEMENT CONCRETE ROADWAYS. SANDBLAST CLEANING SHALL BE USED FOR ALL EPOXY PAVEMENT MARKINGS.

THE EPOXY MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING. GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE EPOXY RESIN LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.

AN EPOXY RESIN LINE 4" WIDE AND 15 MILL THICKNESS (WET), REQUIRES AN APPLICATION RATE OF ONE (1) GALLON OF COMPONENTS FOR 320 FEET OF LINE. GLASS BEADS SHALL BE APPLIED AT A POUND PER GALLON RATE SUFFICIENT TO ACHIEVE AN ACCEPTABLE NO-TRACK SYSTEM.

OPERATIONS SHALL BE CONDUCTED ONLY WHEN THE ROAD PAVEMENT SURFACE TEMPERATURES ARE 50 DEGREES FAHRENHEIT OR GREATER.

PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.

PREFORMED THERMOPLASTIC:

THE PREFORMED THERMOPLASTIC MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS ON CLEAN AND DRY SURFACES. SEE SPECIAL PROVISIONS FOR PREFORMED THERMOPLASTIC MARKING SPECIFICATIONS.

PAINT:

AT THE TIME OF APPLYING THE MARKING MATERIAL, THE APPLICATION AREA SHALL BE FREE OF CONTAMINATION. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE PRIOR TO THE LINE APPLICATION IN A MANNER AND TO THE EXTENT REQUIRED BY THE ENGINEER.

GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE PAINT LINE.

EXCEPT WHEN USED AS A TEMPORARY MARKING, PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SEASONABLE WEATHER WHEN AIR TEMPERATURE IS 50 DEGREES FARHENHEIT OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR OTHER CONDITIONS CAUSE A FILM OR DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.

THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.

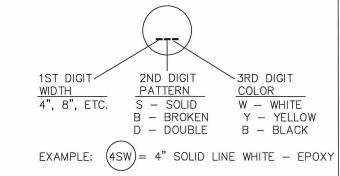
O PERMANENT MARKING QUANTITIES		
ITEM	UNIT	TOTAL QUANTITY
4" SOLID LINE WHITE -EPOXY PAINT	LIN FT	27672
4" SOLID LINE YELLOW - EPOXY PAINT	LIN FT	4782
4" BROKEN LINE YELLOW - EPOXY PAINT	LIN FT	1370
4" DOUBLE SOLID LINE YELLOW - EPOXY PAINT	LIN FT	6914

SYMBOLS & MATERIALS LEGEND

- CROSSWALK BLOCK WHITE PREFORMED THERMOPLASTIC
- PAVEMENT MESSAGE (LEFT ARROW)
 PREFORMED THERMOPLASTIC

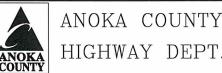
STRIPING KEY

- CIRCLE EPOXY --- SQUARE PREFORMED THERMOPLASTIC
- --- TRIANGLE PAINT
- PENTAGON REMOVABLE PREFORMED PLASTIC MARKING



						I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
						PRINT NAME: DOUGLAS W EISCHER
NO	DATE	BY	CKD	APPR	REVISION	SIGNATURE: 20235
NAME:	P:\16-01-00\C	R 60\Bas	e\TRAFF	IC\Perm p	vmt mrkg guide notes_guidelines.dwg	DATE: LICENSE NO. 20233

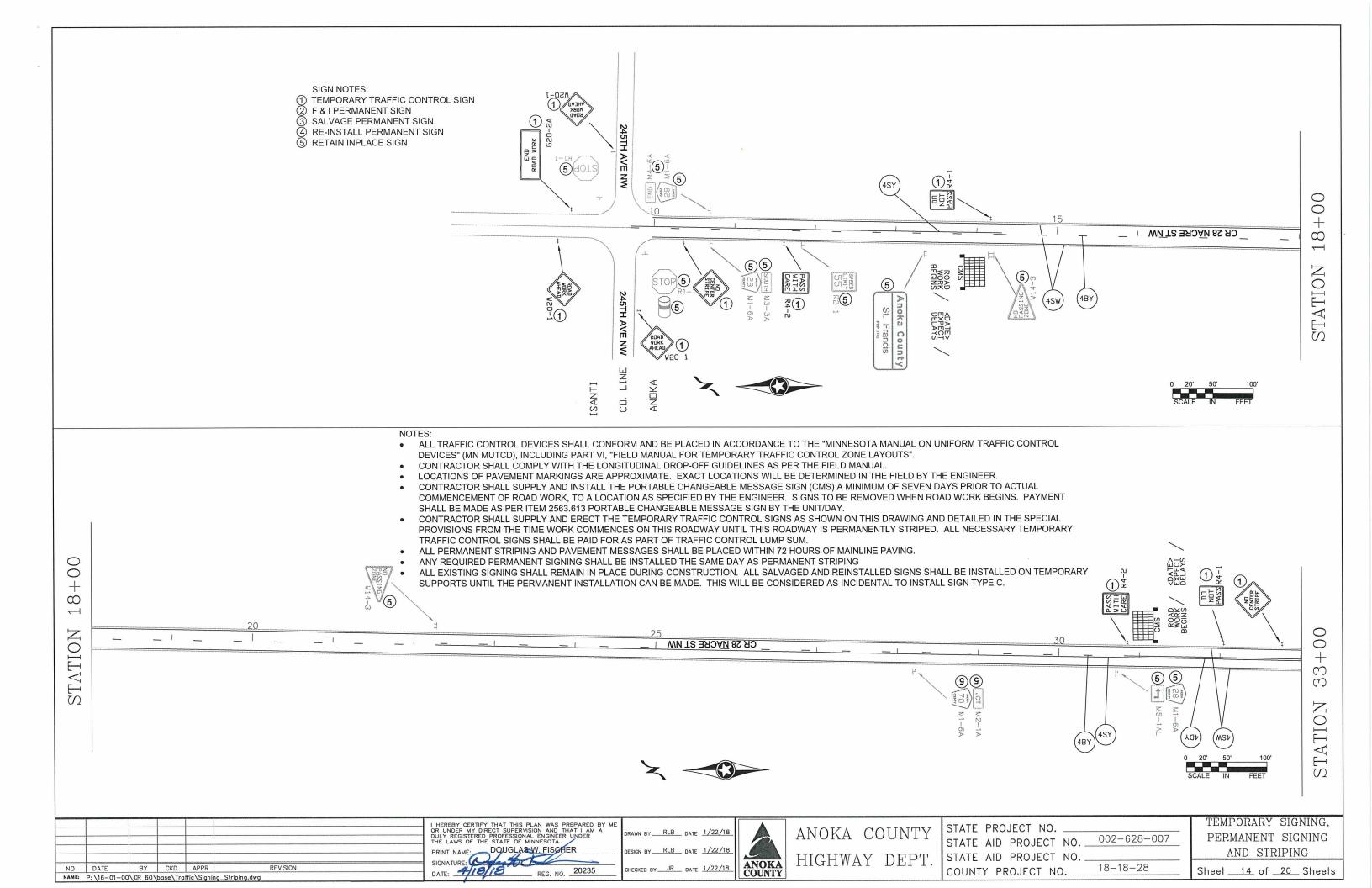


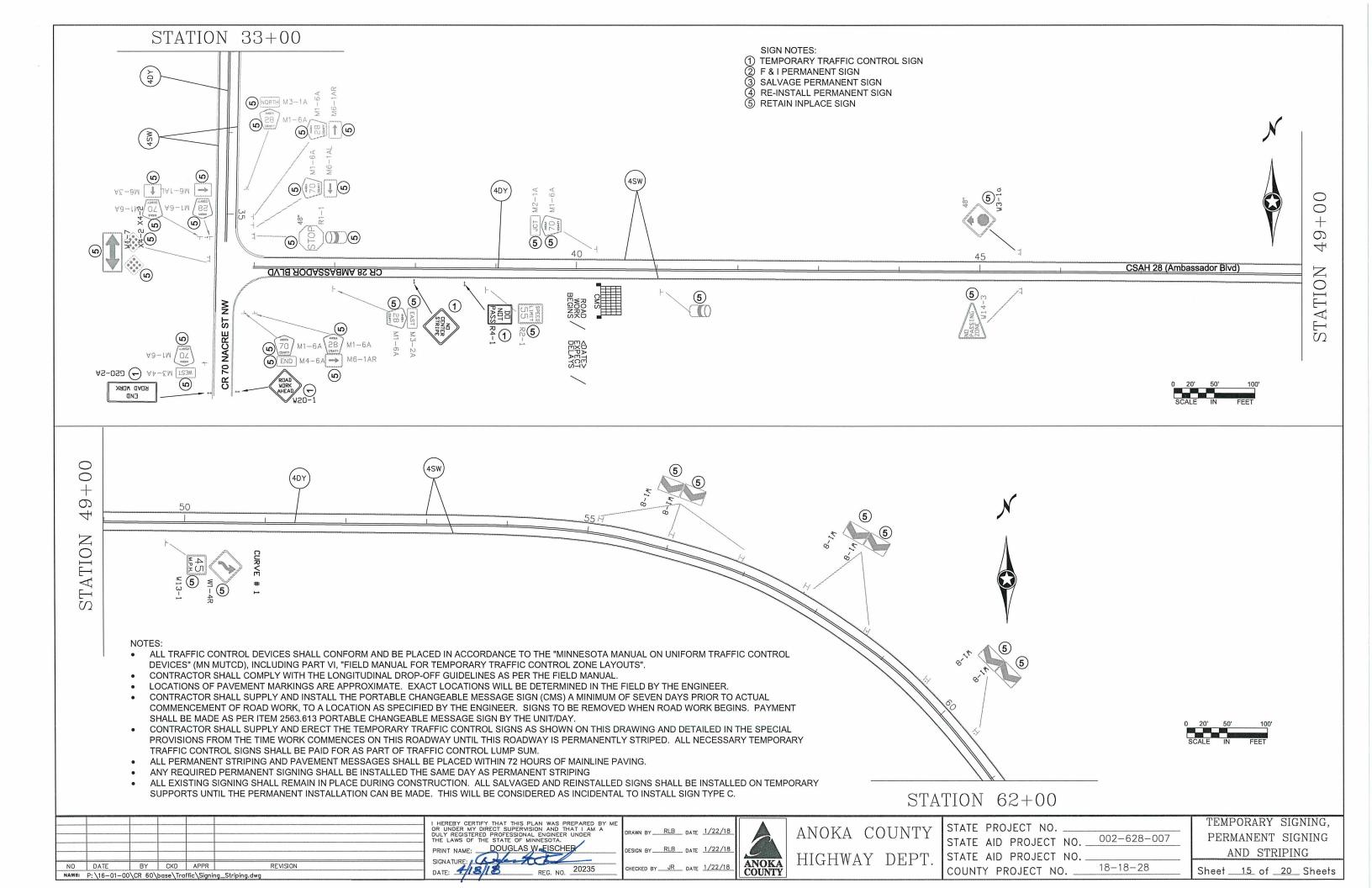


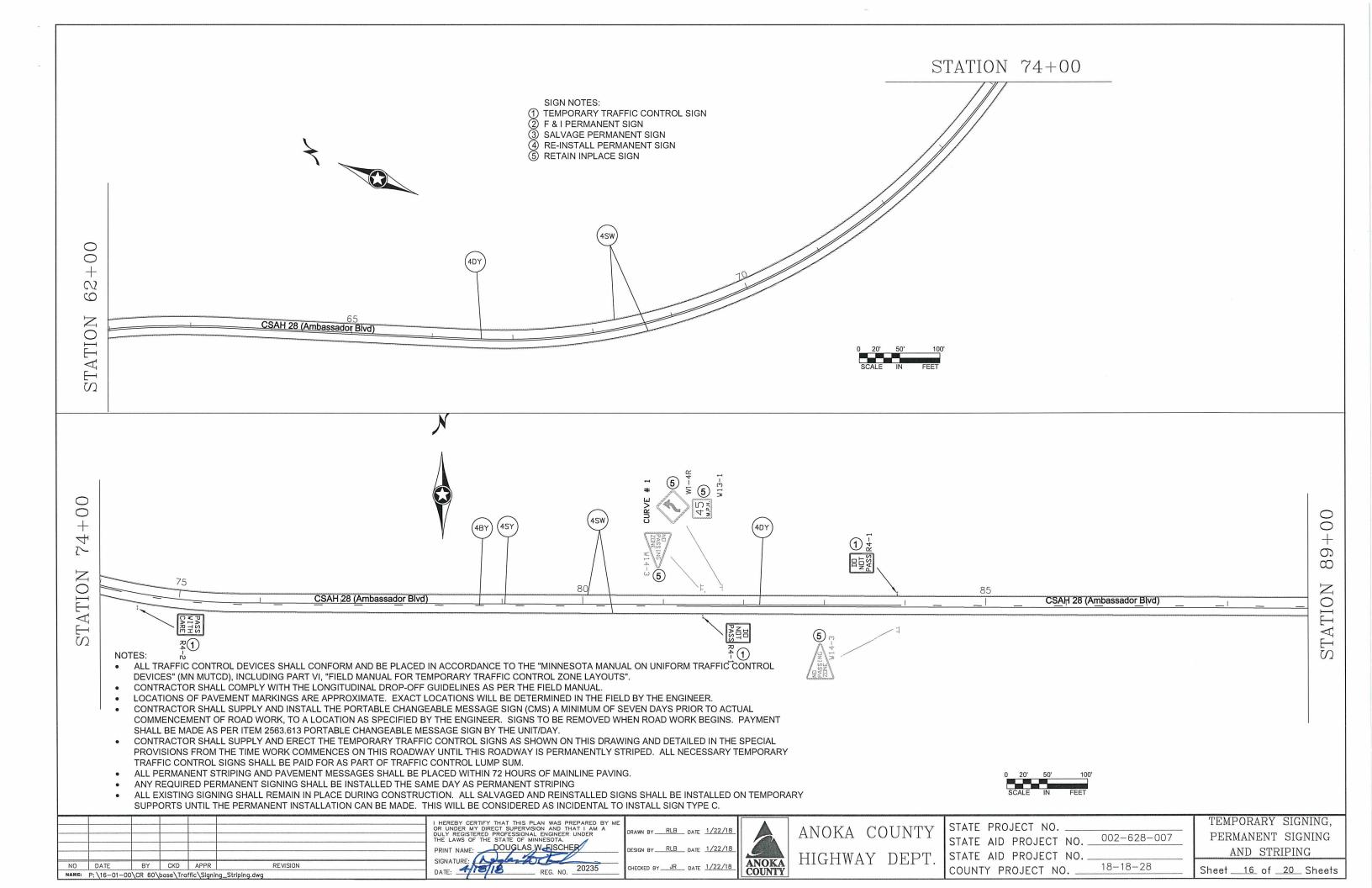
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	AID PROJECT NO	
COUNT	Y PROJECT NO. <u>18-18-28</u>	

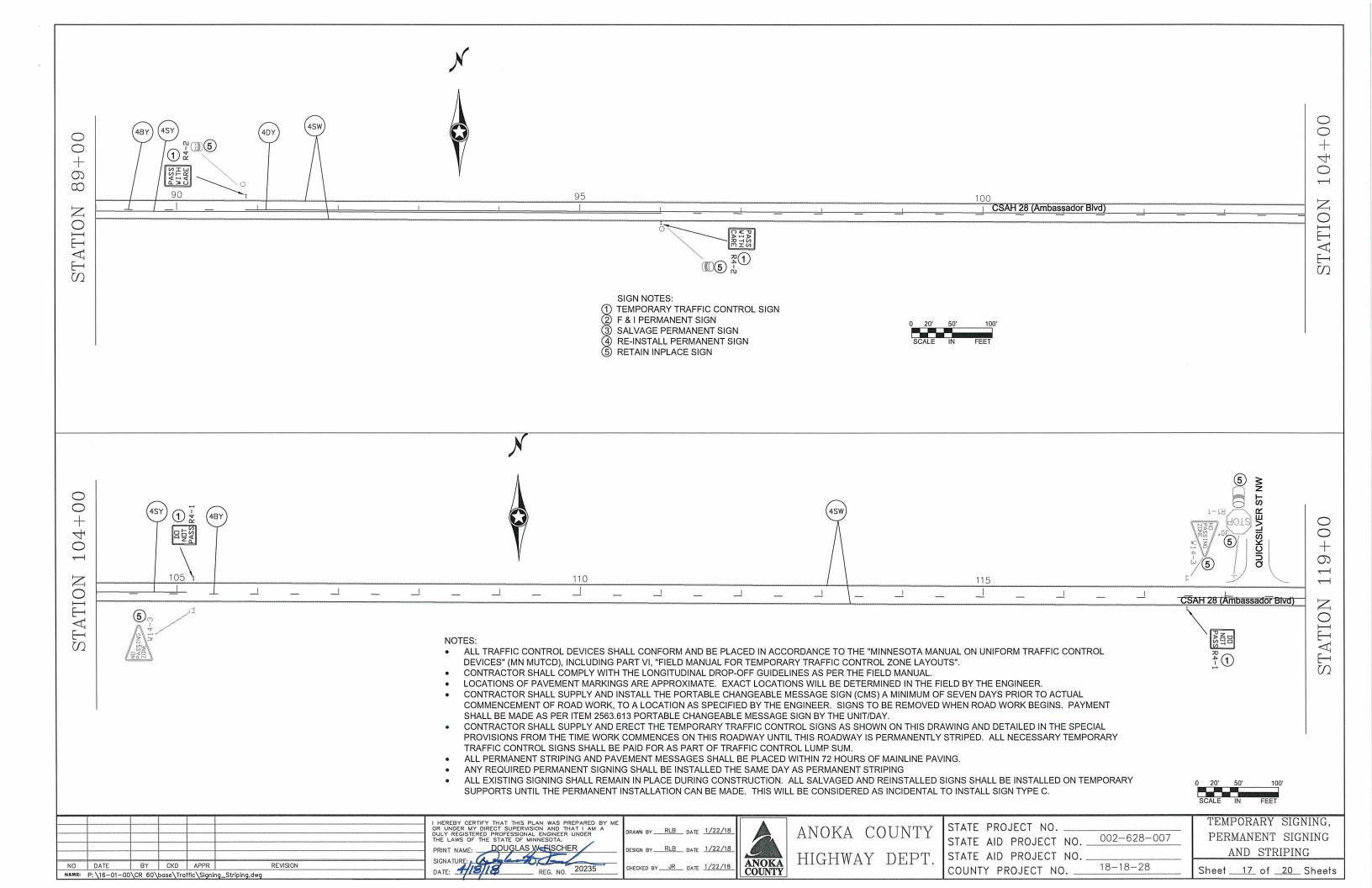
PERMANENT MARKING TABULATION

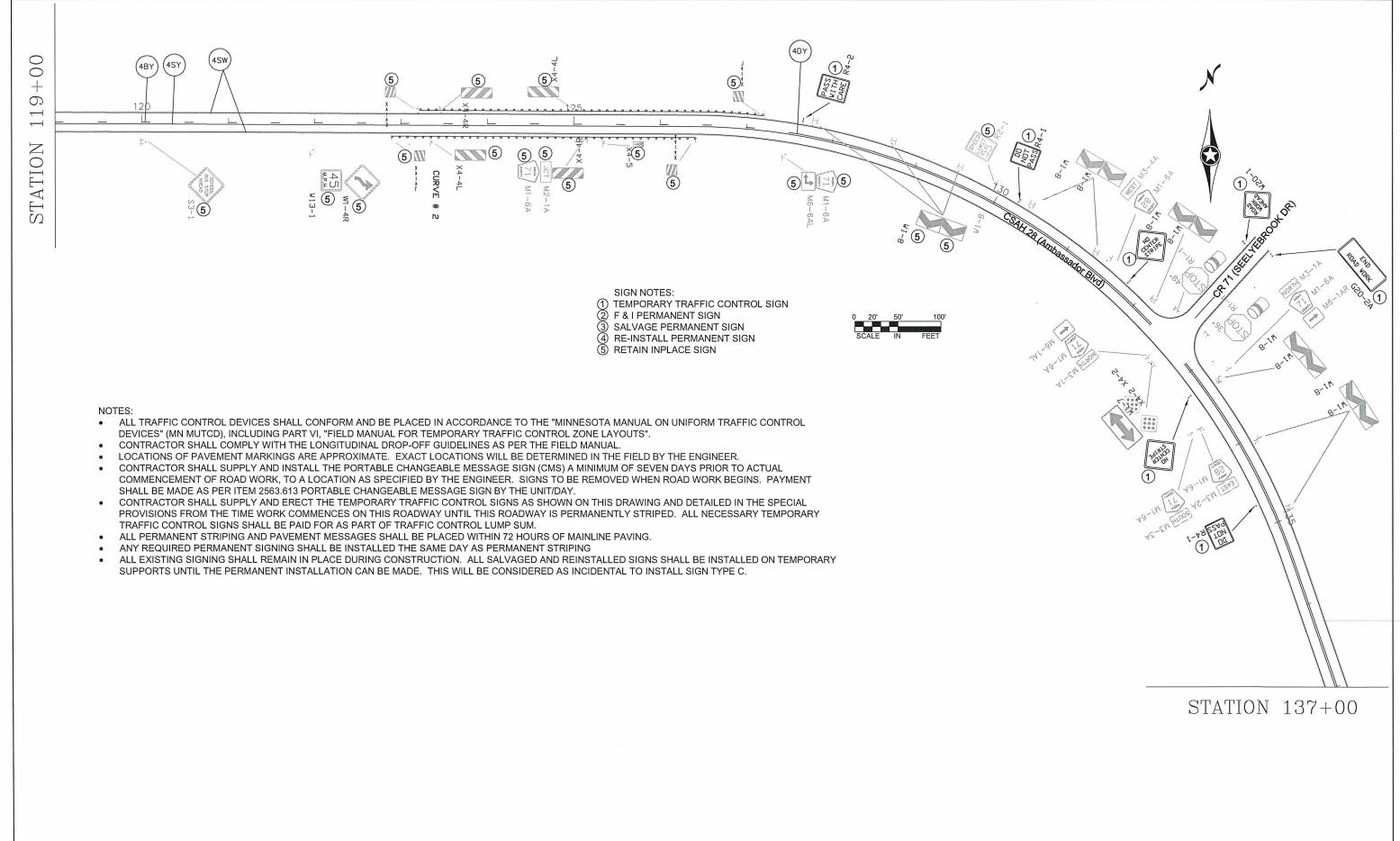
Sheet <u>13</u> of <u>20</u> Sheets







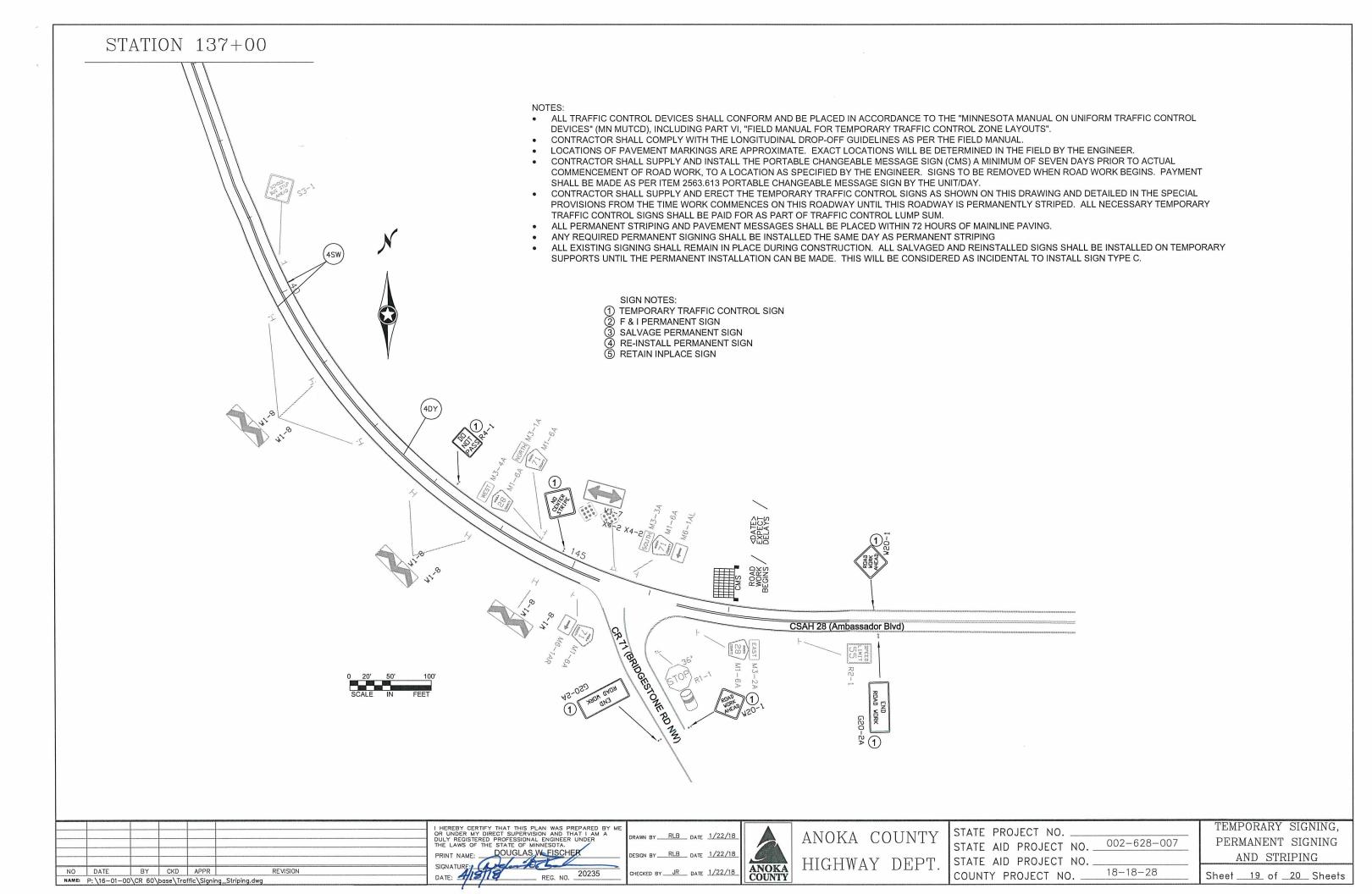


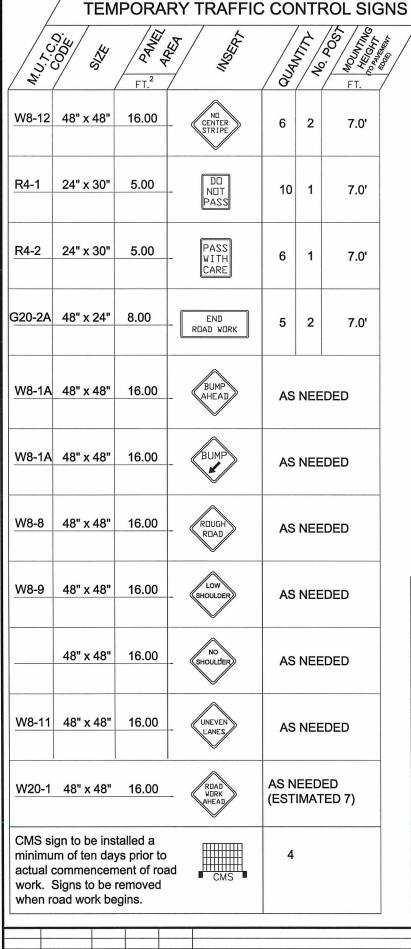


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						I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	DRAW
						PRINT NAME: DOUGLAS W. FISCHER	DESIG
NO	DATE	BY	CKD	APPR	REVISION	SIGNATURE: 20235	CHECK
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ANOKA COUNTY HIGHWAY DEPT.

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING
Sheet 18 of 20 Sheets





NOTES:

- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL
 DEVICES" (MN MUTCD), INCLUDING PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
- CONTRACTOR SHALL COMPLY WITH THE LONGITUDINAL DROP-OFF GUIDELINES AS PER THE FIELD MANUAL.
- LOCATIONS OF PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CONTRACTOR SHALL SUPPLY AND INSTALL THE PORTABLE CHANGEABLE MESSAGE SIGN (CMS) A MINIMUM OF SEVEN DAYS PRIOR TO ACTUAL COMMENCEMENT OF ROAD WORK, TO A LOCATION AS SPECIFIED BY THE ENGINEER. SIGNS TO BE REMOVED WHEN ROAD WORK BEGINS. PAYMENT SHALL BE MADE AS PER ITEM 2563.613 PORTABLE CHANGEABLE MESSAGE SIGN BY THE UNIT/DAY.
- CONTRACTOR SHALL SUPPLY AND ERECT THE TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON THIS DRAWING AND DETAILED IN THE SPECIAL PROVISIONS FROM THE TIME WORK COMMENCES ON THIS ROADWAY UNTIL THIS ROADWAY IS PERMANENTLY STRIPED. ALL NECESSARY TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PAID FOR AS PART OF TRAFFIC CONTROL LUMP SUM.
- ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
- ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING
- ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. ALL SALVAGED AND REINSTALLED SIGNS SHALL BE INSTALLED ON TEMPORARY SUPPORTS UNTIL THE PERMANENT INSTALLATION CAN BE MADE. THIS WILL BE CONSIDERED AS INCIDENTAL TO INSTALL SIGN TYPE C.

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CMS sign to be installed a minimum of ten days prior to actual commencement of road work. Signs to be removed when road work begins.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: DOUGLAS W. FISCHER

SIGNATURE:

SIGNATURE:

REG. NO. 20235

DRAWN BY RLB DATE 1/22/18

DESIGN BY RLB DATE 1/22/18

CHECKED BY JR DATE 1/22/18



ANOKA COUNTY HIGHWAY DEPT. TRAFFIC CONTROL QUANTITY

Sheet <u>20</u> of <u>20</u> Sheets