

STATEMENT OF ESTIMATED QUANTITIES

Notes	Item Number	Code	ITEM DESCRIPTION	Unit	TOTAL PROJECT QUANTITIES ESTIMATED
	2021.501	00010	MOBILIZATION	LUMP SUM	1
1	2104.503	00195	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	53
1	2104.503	00205	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	243
1,2	2104.504	00080	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	113
1,3	2104.504	00110	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	343
1,3	2104.504	00120	REMOVE BITUMINOUS PAVEMENT	SQ YD	1267
4,7	2123.510	00020	MOTOR GRADER	HOUR	12
5	2123.510	00130	DOZER	HOUR	8
	2130.523	00010	WATER	M GALLON	191
6	2211.509	00070	AGGREGATE BASE CLASS 5	TON	46
	2215.504	00010	FULL DEPTH RECLAMATION	SQ YD	27246
7	2215.507	00010	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	115
8	2221.509	00080	SHOULDER BASE AGGREGATE CLASS 5	TON	591
9	2232.604	00470	MILL BITUMINOUS PAVEMENT (SPECIAL)	SQ YD	162
	2357.506	00010	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	1522
10	2360.509	13200	TYPE SP 9.5 WEARING COURSE MIXTURE (3;B)	TON	39
20	2360.509	20100	TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING	TON	22
11	2360.509	24300	TYPE SP 12.5 WEARING COURSE MIXTURE (4;C)	TON	247
	2360.509	24300	TYPE SP 12.5 WEARING COURSE MIXTURE (4;C)	TON	6753
12	2531.503	02080	CONCRETE CURB AND GUTTER DESIGN B418	LIN FT	854
2	2531.504	00060	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	113
13	2540.602	00155	RELOCATE MAIL BOX SUPPORT	EACH	25
	2563.601	00001	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	1
14,15	2563.601	00010	TRAFFIC CONTROL	LUMP SUM	1
16	2563.613	01100	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	20
	2574.507	00100	COMMON TOPSOIL BORROW	CU YD	271
17	2575.508	40003	HYDRAULIC REINFORCED FIBER MATRIX	POUND	2534
18	2581.503	00010	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	LIN FT	380
19	2582.503	36104	4" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	22717
19	2582.503	36204	4" BROKEN LINE MULTI-COMPONENT GROUND IN	LIN FT	858
19	2582.503	36404	4" DOUBLE SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	9578

CONSTRUCTION NOTES

1	REFERENCE DETAILS (PAGE 4-5) FOR REMOVAL DETAILS
2	ITEM FOR CONCRETE DRIVEWAYS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
3	ITEM FOR BITUMINOUS DRIVEWAYS AND STREET APPROACHES. CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
4	ITEM USED FOR SUPERELEVATION / GRADE CORRECTION IN SUPERELEVATION AREAS
5	TO BE USED FOR DITCH GRADING AS DIRECTED BY THE ENGINEER
6	GRAVEL BASE FOR CONCRETE AND BITUMINOUS STREET APPROACHES, DRIVEWAYS AND SUPER ELEVATION AREAS.
7	ITEM USED TO MOVE EXCESS RECLAIM MATERIAL AT THE RECLAIM AREA LIMITS TO CREATE A SMOOTH TRANSITION BETWEEN THE PROPOSED AND EXISTING PAVEMENT AS WELL AS RIGHT TURN LANE CURB SECTION.
8	ITEM INCLUDES 7 TONS FOR EACH GRAVEL ENTRANCE AND GRAVEL STREET APPROACH.
9	ITEM INCLUDES 2" DEEP MILL AT BEGINNING AND END OF PROJECT, ALL PAVED STREET APPROACHES, AND DRIVEWAYS; SEE DETAILS FOR DIMENSIONS.
10	ITEM FOR BITUMINOUS DRIVEWAYS. DRIVEWAYS SHALL BE PAVED AFTER MAINLINE AND BEFORE FINAL STRIPING.
11	STREET APPROACHES SHALL BE PAVED AFTER MAINLINE, AND BEFORE FINAL STRIPING
12	B418 CURB AND GUTTER TO BE USED IF NECESSARY, AS INDICATED IN THE PLAN OR AS DIRECTED BY THE ENGINEER
13	MAILBOXES ARE TO BE INSTALLED AT THE EXISTING MAILBOX LOCATION OR AS DIRECTED BY THE LOCAL POSTAL AUTHORITY, CONTRACTOR IS RESPONSIBLE FOR CONTACTING. MAILBOX REMOVAL AND ALL MATERIALS ARE INCIDENTAL TO INSTALLATION.
14	CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY SIGNAGE WHENEVER EXISTING SIGNAGE IS REMOVED. TEMPORARY SIGNAGE SHALL BE INCIDENTAL TO TRAFFIC CONTROL.
15	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 PERMANENT PAVEMENT MARKINGS ARE NOT PRESENT.
16	2 MESSAGE BOARDS, ONE ON THE EACH END OF PROJECT, SHALL BE INSTALLED 10 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
17	TYPE 3 FERTILIZER AND TYPE 25-121 SEED ARE INCIDENTAL TO THIS ITEM. SEE "BASIS OF PLANNED QUANTITIES" FOR APPLICATION RATES.
18	CENTERLINE AND LANE DESIGNATION SKIPS TO BE APPLIED AS SOON AS POSSIBLE ON MILLED SURFACE AND EACH NEW LIFT OF PAVEMENT; SKIPS MUST BE INPLACE BEFORE THE CONTRACTOR LEAVES FOR THE DAY. CONTRACTOR IS TO REMOVE PRIOR TO FINAL STRIPING.
19	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING. CANNOT BE INSTALLED SOONER THAN 48 HOURS.
20	ITEM TO BE USED TO FILL IN BETWEEN THE BASE BITUMINOUS LIFT AND NEW CURB.

BITUMINOUS STREET SUMMARY

LOCATION	BITUMINOUS		NOTES
	2360 TYPE SP 12.5 WEAR (4,C)	TON	
KRYPTON ST S	31	[1]	
KRYPTON ST N	41	[1]	
187TH AVE	45	[1]	
LITHIUM ST	34	[1]	
191ST LN	26	[1]	
189TH LN	40	[1]	
195TH AVE	29	[1]	
PROJECT TOTAL	247		

BITUMINOUS SUMMARY NOTES:
[1] QUANTITY ESTIMATED FOR 2 LIFTS

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

MNDOT STANDARD PLATES

PLATE NO.	DESCRIPTION
7100H	CONCRETE CURB AND GUTTER (DESIGN B AND DESIGN V)
8000K	TEMPORARY CHANNELIZERS (3 SHEETS)
9350B	MAILBOX SUPPORT - SWING-AWAY TYPE


BASIS OF PLANNED QUANTITIES

2357	BITUMINOUS MATERIAL FOR TACK COAT	0.05 GAL / SQ YD
2211	AGGREGATE BASE CLASS 5	1.8 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
2575	HYDRAULIC REINFORCED FIBER MATRIX	3900 LBS./ ACRE

NO	DATE	BY	CKD	APPR	REVISION	
	04/20/2023					7:47:47 AM

NAME: P:\20-01-00\CR_66_(TH47-CSAH22)\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 THE STATE OF MINNESOTA.

PRINT NAME: GERALD J AUGER JR.
SIGNATURE: 
DATE: 03-06-2023 LICENSE NO. 26511

DRAWN BY: BFL/SPH DATE: 02/16/2023
DESIGN BY: SPH DATE: 02/16/2023
CHECKED BY: CO DATE: 03/02/2023



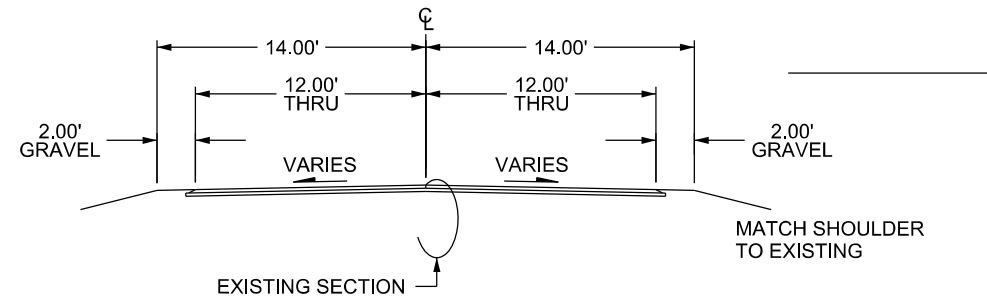
COUNTY PROJECT 20-13-66

STATEMENT OF ESTIMATED QUANTITIES
Sheet 2 of 16 Sheets

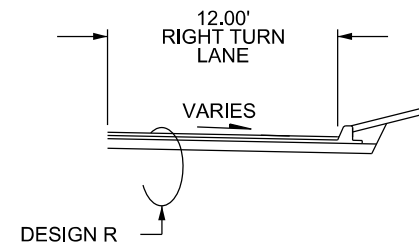
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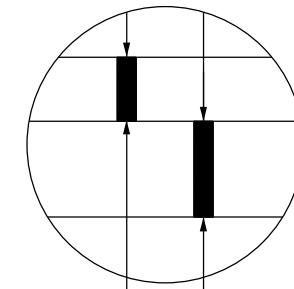
153+44.00 - 245+48.90



150+27.10 - 153+44.00



EXISTING SECTION



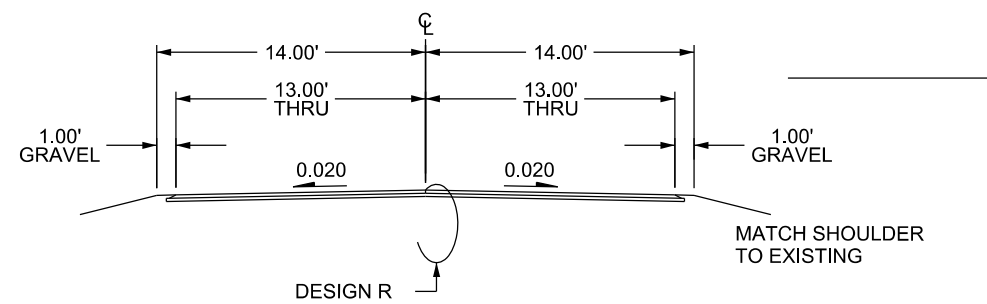
3" EXISTING BITUMINOUS

8" EXISTING AGGREGATE BASE

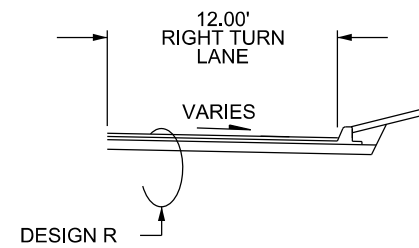
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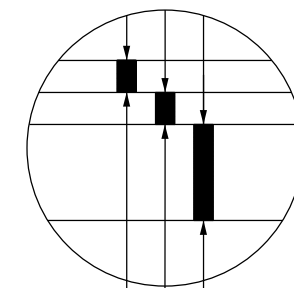
153+44.00 - 245+48.90



150+27.10 - 153+44.00



**DESIGN R
RECLAIM SECTION**



2.0" BITUMINOUS WEAR(SPWEB440C)

2.0" BITUMINOUS WEAR(SPWEB440C)

FULL DEPTH RECLAMATION

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ANOKA COUNTY
HIGHWAY DEPT.

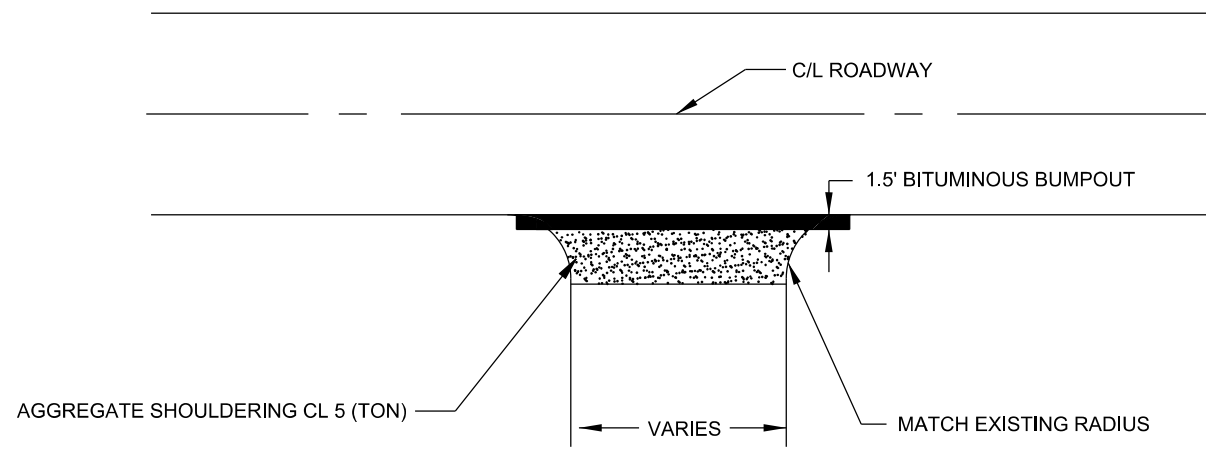
COUNTY PROJECT 20-13-66

TYPICAL SECTIONS

Sheet 3 of 16 Sheets

DRIVEWAY DETAIL

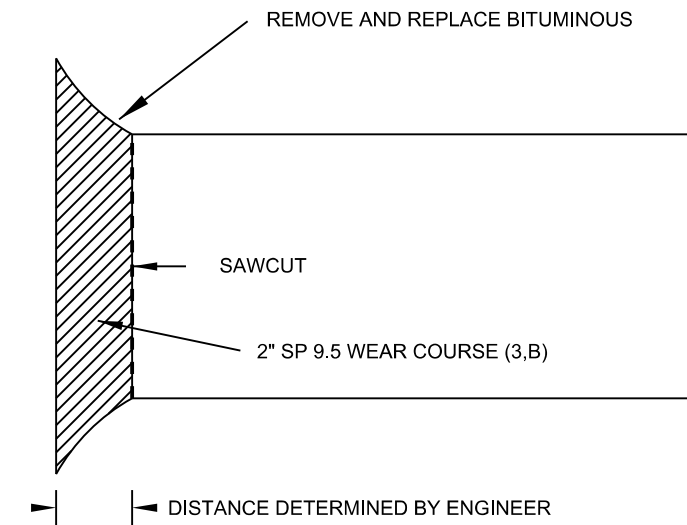
GRAVEL / FIELD ENTRANCE



RECLAIM AREA - DRIVEWAY DETAIL

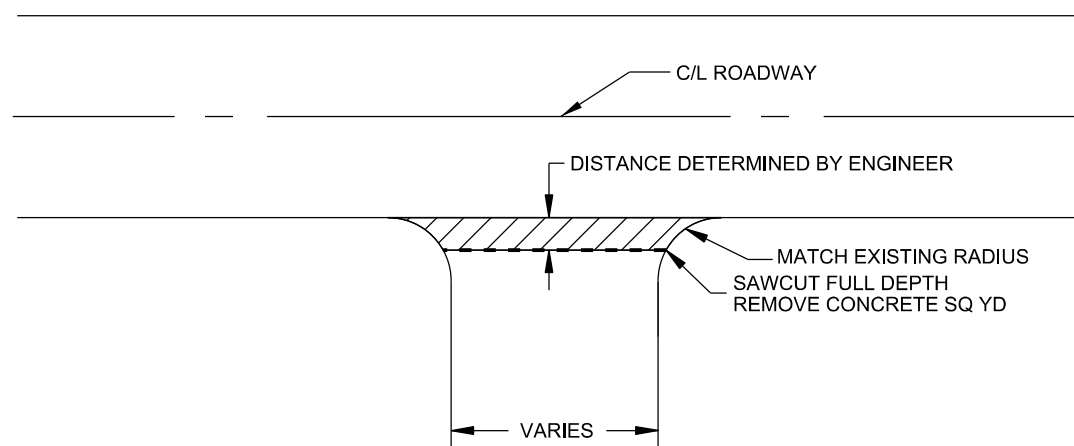
BITUMINOUS

PLAN VIEW



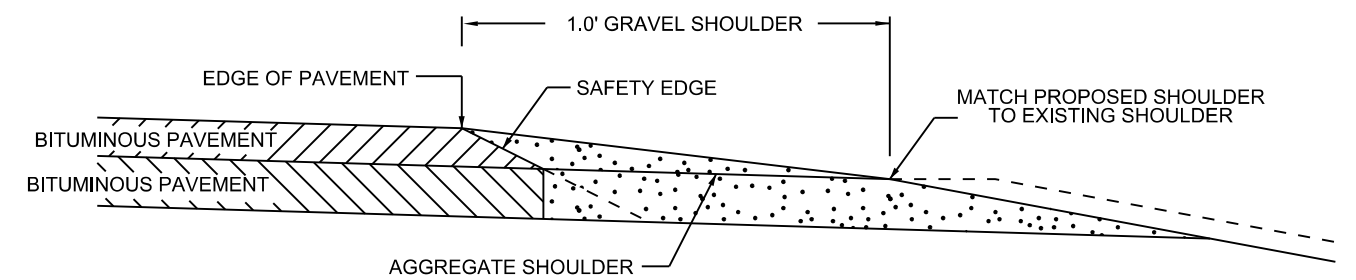
DRIVEWAY DETAIL

CONCRETE DRIVEWAY



SHOULDER DETAIL

BITUMINOUS SAFETY EDGE
GRAVEL SHOULDER



SAFETY EDGE TO BE USED IN ALL NON-CURB AREAS ON SHOULDER.

OPTIONAL DESIGN EXTENDS SAFETY EDGE DEEPER THAN 6" AND WIDER THAN 10.5". SEE SPECIAL PROVISIONS.

NO	DATE	BY	CKD	APPR	REVISION	04/20/2023	7:47:52 AM
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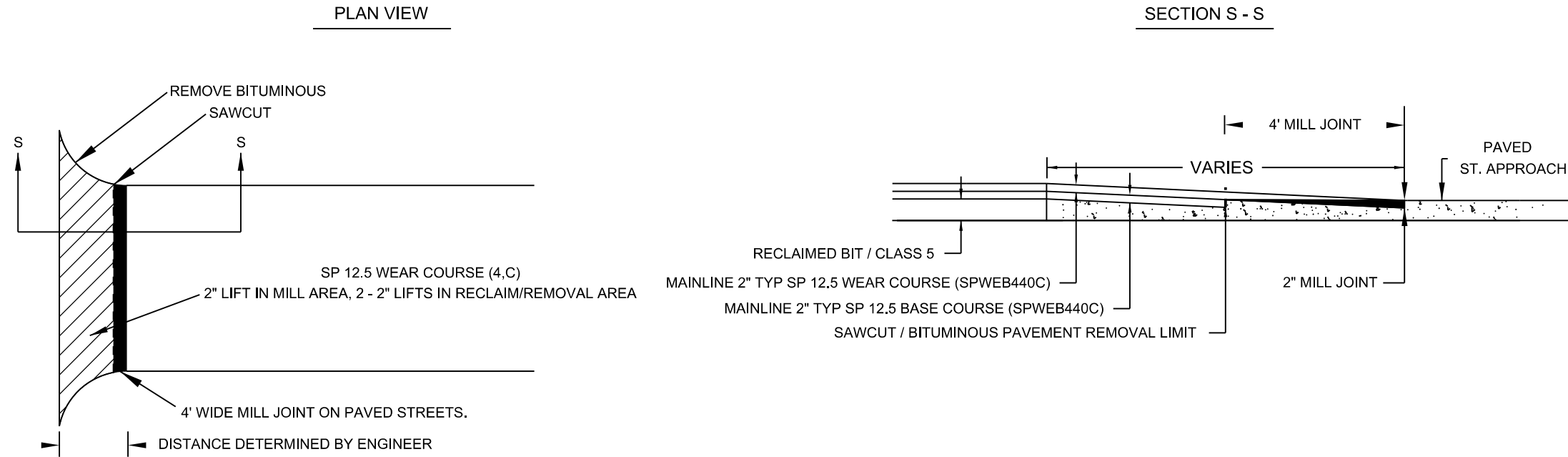
COUNTY PROJECT 20-13-66

DETAILS

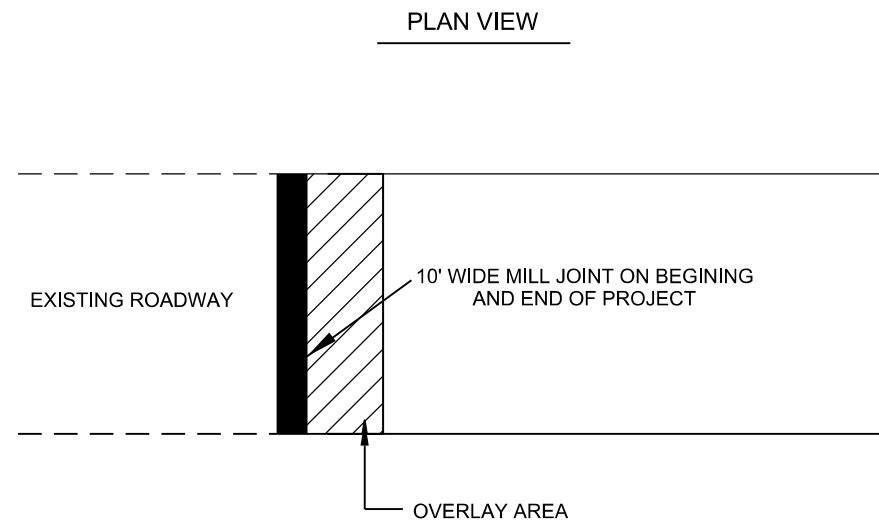
Sheet 4 of 16 Sheets

STREET APPROACH DETAIL (RECLAIM)

BITUMINOUS STREET



MAINLINE JOINT DETAIL (RECLAIM)



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HIGHWAY DEPT.**

COUNTY PROJECT 20-13-66

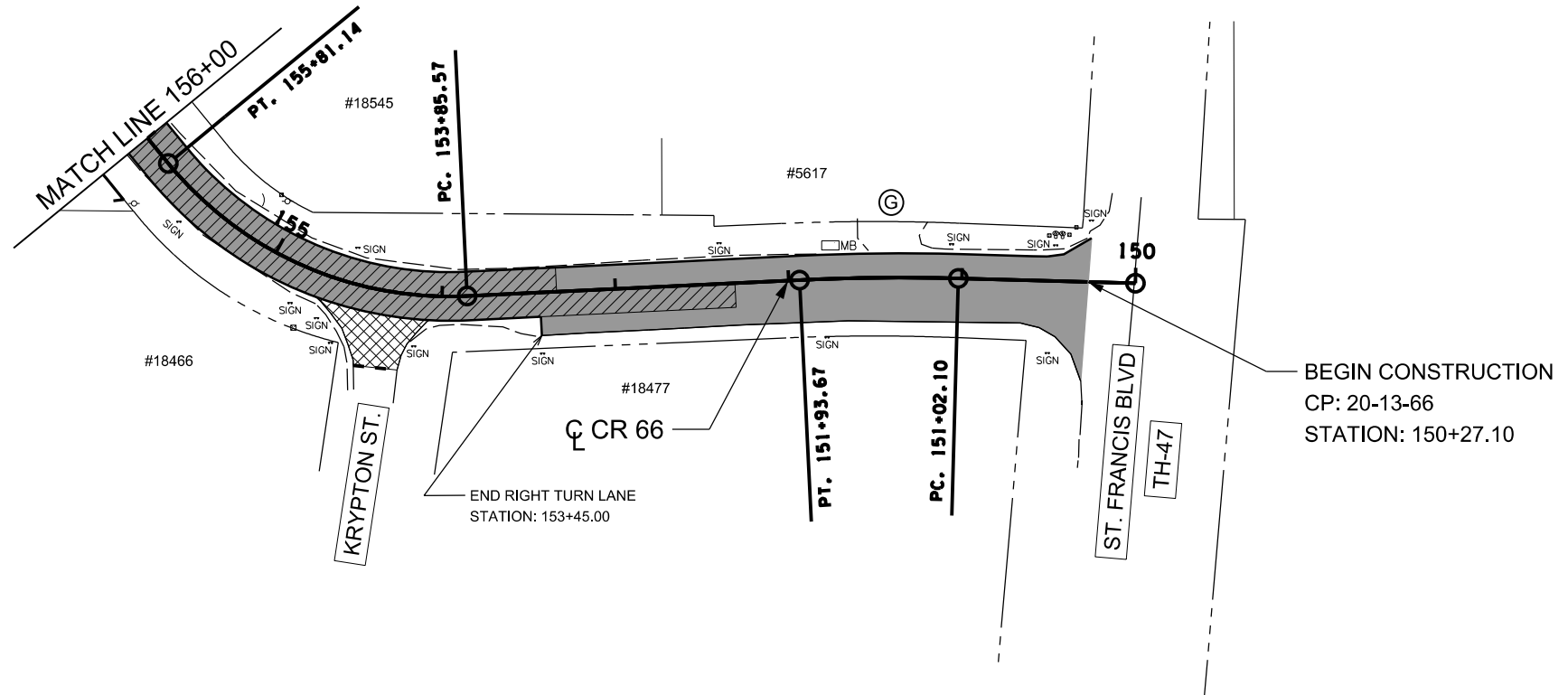
DETAILS

Sheet 5 of 16 Sheets

SPH005

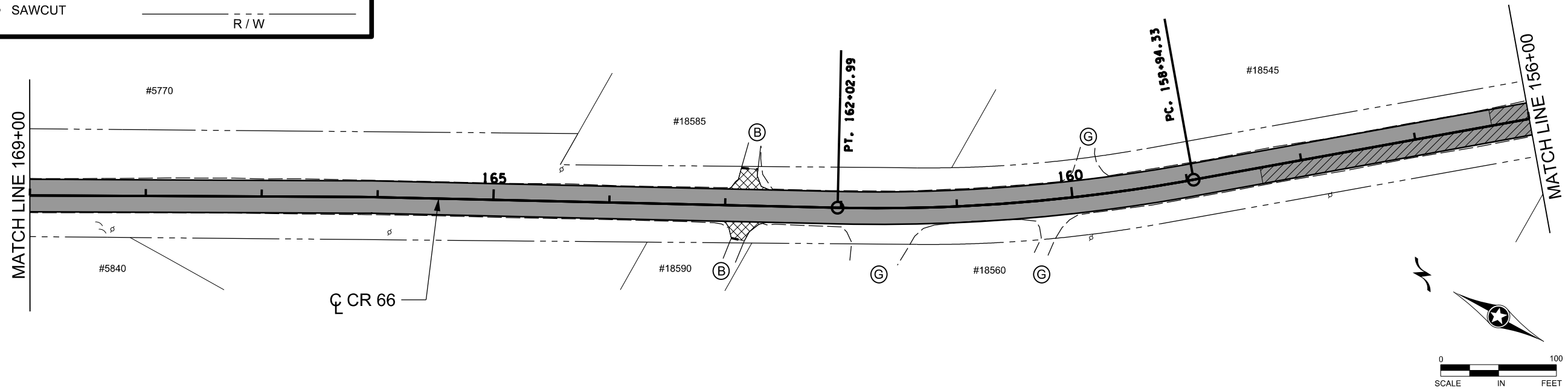
SUPERELEVATION CORRECTION TAB

STATION	POINT	LEFT GRADE	RIGHT GRADE
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151+50		-2.0%	-2.0%
152+00		-2.0%	-2.0%
152+31	BEGIN SUPER LT	-2.0%	-2.0%
152+50		-1.3%	-2.0%
153+00		0.7%	-2.0%
153+34	BEGIN SUPER RT	2.0%	-2.0%
153+50		2.6%	-2.6%
153+86	PC	4.0%	-4.0%
154+00		4.5%	-4.5%
154+38	BEGIN FULL SUPER	6.0%	-6.0%
154+50		6.0%	-6.0%
155+00		6.0%	-6.0%
155+29	END FULL SUPER	6.0%	-6.0%
155+50		5.2%	-5.2%
155+81	PT	4.0%	-4.0%
156+00		3.3%	-3.3%
156+33	END SUPER RT	2.0%	-2.0%
156+50		1.3%	-2.0%
157+00		-0.6%	-2.0%
157+36	END SUPER LT	-2.0%	-2.0%
157+50		-2.0%	-2.0%
158+00		-2.0%	-2.0%
158+50		-2.0%	-2.0%



LEGEND

- (B) BITUMINOUS
- (C) CONCRETE
- (G) GRAVEL
- ⊕ CORE LOCATION
- SAWCUT
- █ MAINLINE RECLAIM AREA
- ▨ REMOVE AND REPLACE PAVEMENT
- ▩ SUPER TRANSITION AREA
- R/W



NO	DATE	BY	CKD	APPR	REVISION	TIME
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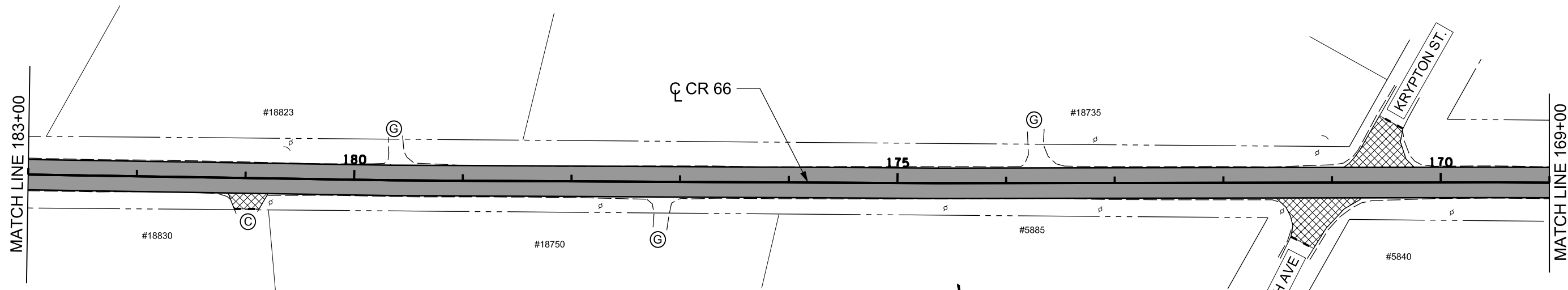
ANOKA COUNTY HIGHWAY DEPT.

COUNTY PROJECT 20-13-66

CONSTRUCTION PLAN

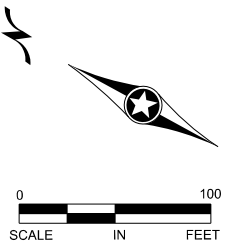
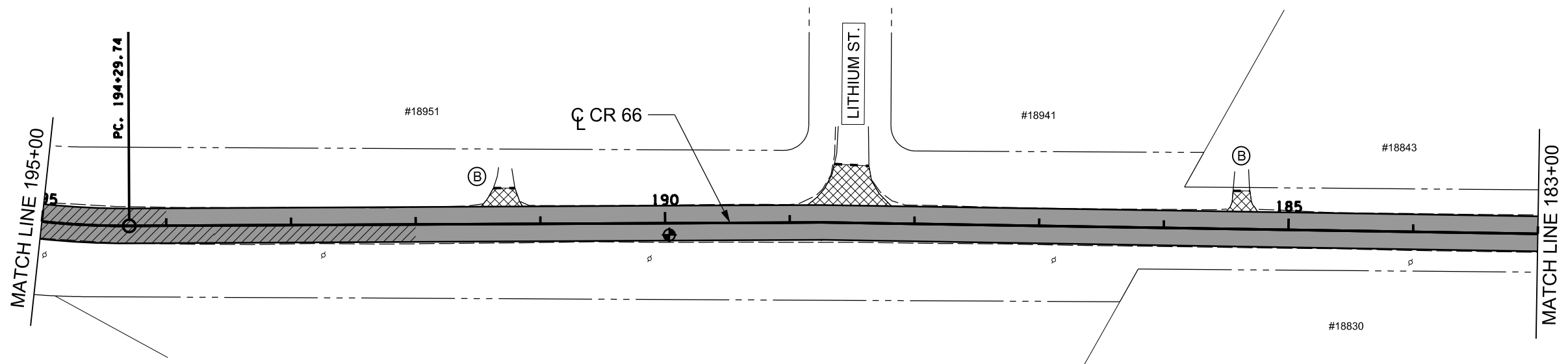
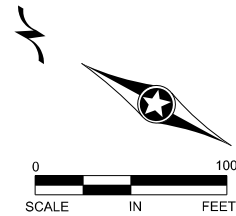
STA 150+27.10 TO 169+00

Sheet 6 of 16 Sheets



LEGEND

(B)	BITUMINOUS		MAINLINE RECLAIM AREA
(C)	CONCRETE		REMOVE AND REPLACE PAVEMENT
(G)	GRAVEL		SUPER TRANSITION AREA
	CORE LOCATION		
- - - -	SAWCUT		
			R / W



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ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 20-13-66

CONSTRUCTION PLAN

STA 169+00 TO 195+00

Sheet 7 of 16 Sheets

MATCH LINE 208+00

END B418 C&G
STATION: 207+75.00

CR 66

#19144

BEGIN B418 C&G
STATION: 203+75.00

#19121

191ST LANE

(G)

(B)

#19111

200

#19070

PT. 197+59.25

#6041

189TH LANE

#6030

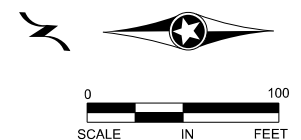
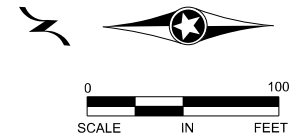
MATCH LINE 195+00

SUPERELEVATION CORRECTION TAB

STATION	POINT	LEFT GRADE	RIGHT GRADE
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191+00		-2.0%	-2.0%
191+50		-2.0%	-2.0%
192+00	BEGIN SUPER LT	-2.0%	-2.0%
192+50		-1.0%	-2.0%
193+00		0.0%	-2.0%
193+50		1.0%	-2.0%
194+00	BEGIN SUPER RT	2.0%	-2.0%
194+29	PC	2.6%	-2.6%
194+50		3.0%	-3.0%
195+00	BEGIN FULL SUPER	4.0%	-4.0%
195+50		4.0%	-4.0%
196+00		4.0%	-4.0%
196+50		4.0%	-4.0%
197+00	END FULL SUPER	4.0%	-4.0%
197+50		3.0%	-3.0%
197+59	PT	2.8%	-2.8%
198+00	END SUPER RT	2.0%	-2.0%
198+50		1.0%	-2.0%
199+00		0.0%	-2.0%
199+50		-1.0%	-2.0%
200+00	END SUPER LT	-2.0%	-2.0%
200+50		-2.0%	-2.0%
201+00		-2.0%	-2.0%
201+50		-2.0%	-2.0%

LEGEND

- (B) BITUMINOUS
- (C) CONCRETE
- (G) GRAVEL
- ⊕ CORE LOCATION
- - - SAWCUT
- █ MAINLINE RECLAIM AREA
- ▨ REMOVE AND REPLACE PAVEMENT
- ▩ SUPER TRANSITION AREA
- R/W



MATCH LINE 222+00

#5800

(G)

220

#19420

(G)

CR 66

215

#19243

(G)

(B)

210

(G)

MATCH LINE 208+00

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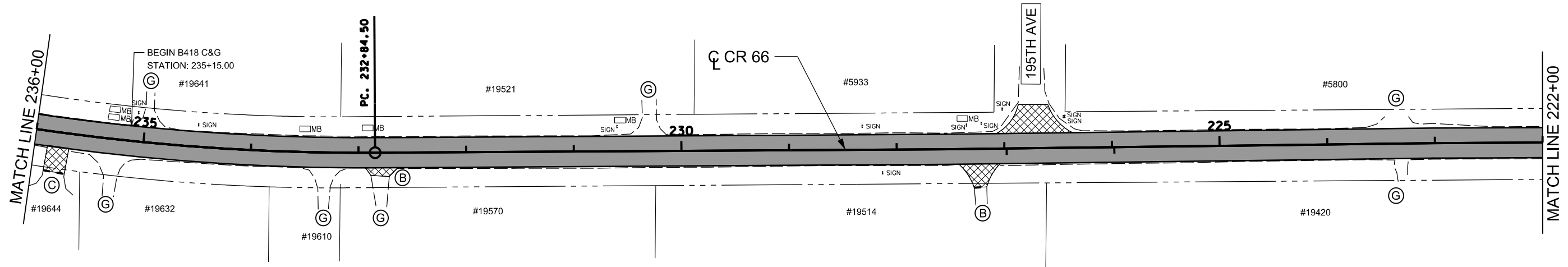
**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 20-13-66

CONSTRUCTION PLAN

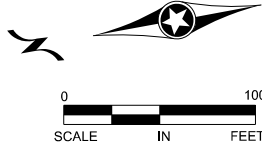
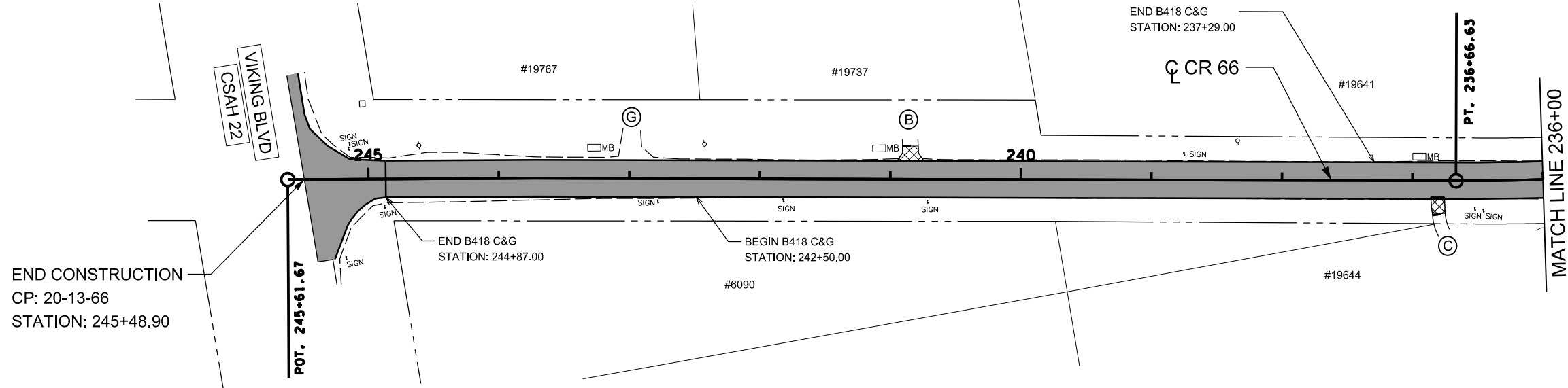
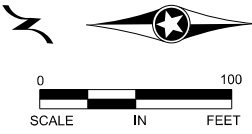
STA 195+00 TO 222+00

Sheet 8 of 16 Sheets



LEGEND

(B)	BITUMINOUS	[Solid Grey]	MAINLINE RECLAIM AREA
(C)	CONCRETE	[Cross-hatch]	REMOVE AND REPLACE PAVEMENT
(G)	GRAVEL	[Diagonal Hatch]	SUPER TRANSITION AREA
◆	CORE LOCATION		
- - -	SAWCUT		
			R / W



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	04/20/2023					7:47:55 AM	

NAME: P:\20-01-00\CR_66_(TH47-CSAH22)\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 THE STATE OF MINNESOTA.

PRINT NAME: GERALD J AUGER JR.
 SIGNATURE: *[Signature]*
 DATE: 03-06-2023 LICENSE NO. 26511

DRAWN BY: BFL/SPH DATE: 02/16/2023
 DESIGN BY: SPH DATE: 02/16/2023
 CHECKED BY: CO DATE: 03/02/2023

ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 20-13-66

CONSTRUCTION PLAN
 STA 222+00 TO 245+48.90
 Sheet 9 of 16 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 1/4 INCH UNDER OR 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.

MULTI COMPONENT (MULTI COMP):

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 MULTI COMP PAVEMENT MARKINGS.

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

A MULTI COMP LINE SHALL BE APPLIED WITH A MINIMUM THICKNESS OF 20 MILS (WET) AND 4" WIDE. GLASS BEADS SHALL BE APPLIED AT A MINIMUM RATE OF 25LBS POUNDS 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 FILD 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.

PAVEMENT MARKING TABULATION

ITEM	UNIT	TOTAL QUANTITY	NOTES
4" SOLID LINE - MULTI COMP GROUND IN (WHITE)	LIN FT	18414	
4" BROKEN LINE - MULTI COMP GROUND IN (YELLOW)	LIN FT	858	1
4" SOLID LINE - MULTI COMP GROUND IN (YELLOW)	LIN FT	4303	
4" DOUBLE LINE - MULTI COMP GROUND IN (YELLOW)	LIN FT	9578	

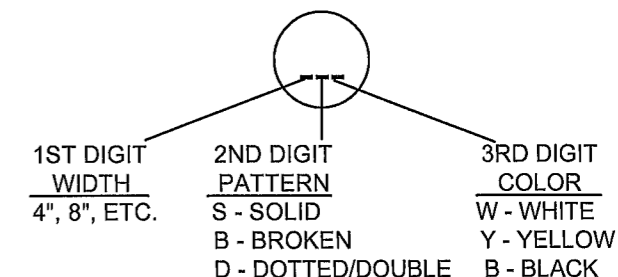
1 - 10' STRIPE, 40' GAP

SYMBOLS & MATERIALS LEGEND

- CROSSWALK BLOCK WHITE-POLY PREFORM
- ← PAVEMENT MESSAGE (LEFT ARROW)
POLY PREFORM

STRIPING KEY

- CIRCLE - MULTI COMP
- SQUARE - POLY PREFORM THERMOPLASTIC
- △ TRIANGLE - PAINT
- ⬠ PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING



EXAMPLE: (4SW) = 4" SOLID LINE WHITE - MULTI COMP

NO	DATE	BY	CKD	APPR	REVISION

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: SEAN R. THIEL
 SIGNATURE: *Sean R. Thiel*
 DATE: 4/12/2023 LICENSE NO. 45129

DRAWN BY _FL_ DATE 01/21/20
 DESIGN BY _FL_ DATE 01/21/20
 CHECKED BY _SRT_ DATE 04/12/23



**ANOKA COUNTY
HIGHWAY DEPT.**

CP 20-13-66

PERMANENT MARKING
TABULATION
Sheet 10 of 16 Sheets

NOTES (TYP.):

- 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 TEN 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 2563.813 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.
- ACCESS SHALL BE MAINTAINED TO ALL STREETS AND DRIVEWAYS IN CONSTRUCTION AREA.
- 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. ANY 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.

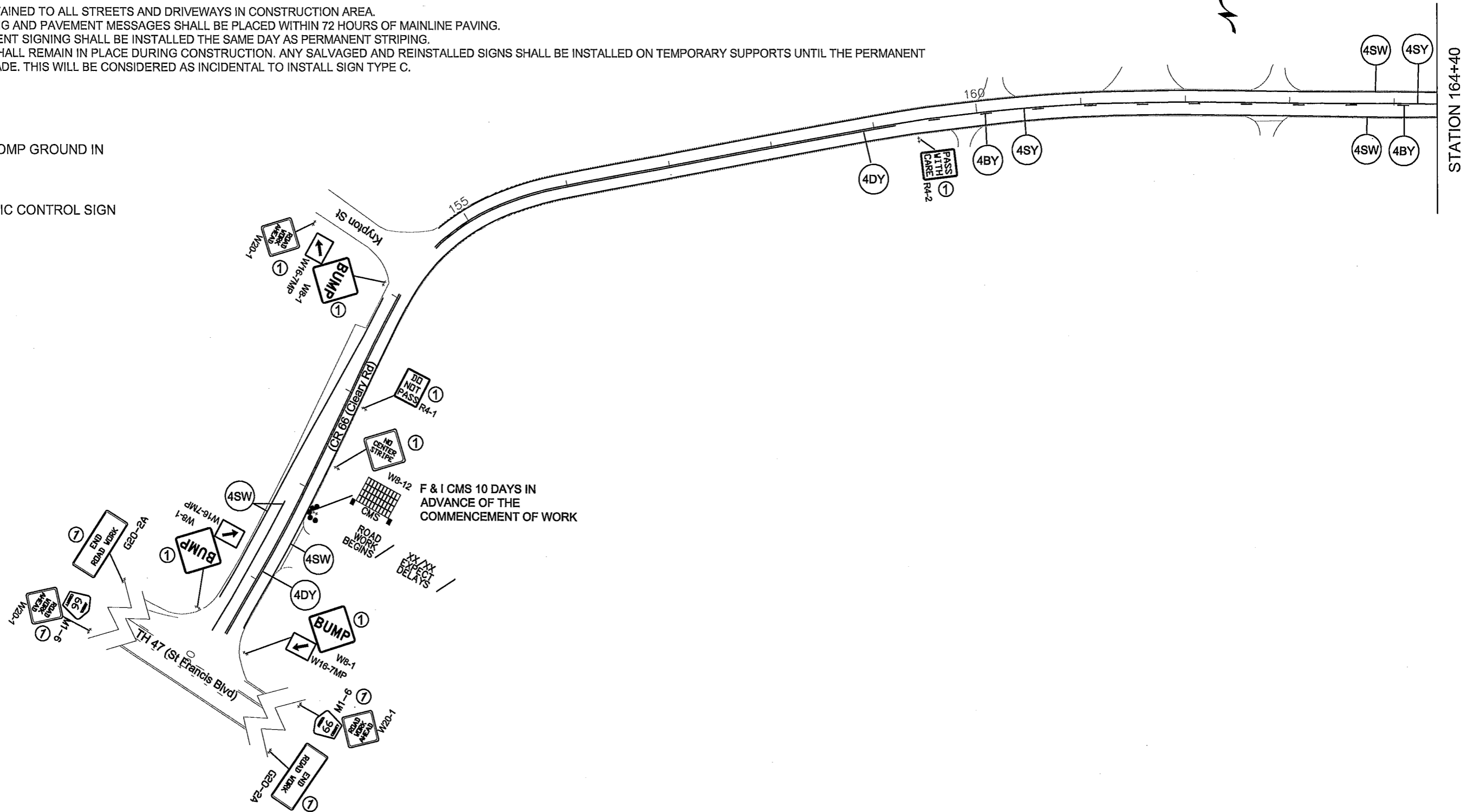


STRIPING KEY:

○ CIRCLE - MULTI COMP GROUND IN

SIGNING NOTES:

① TEMPORARY TRAFFIC CONTROL SIGN



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ANOKA COUNTY
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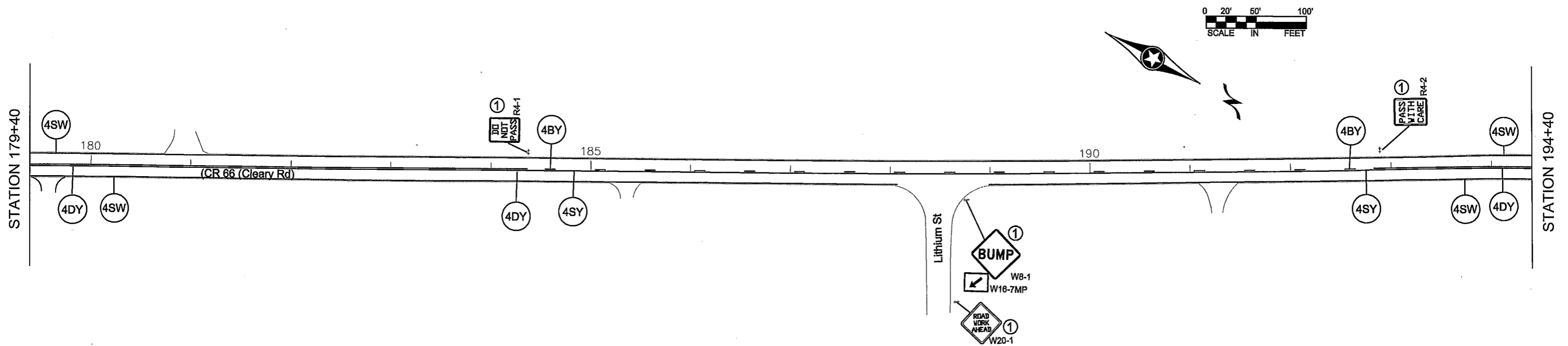
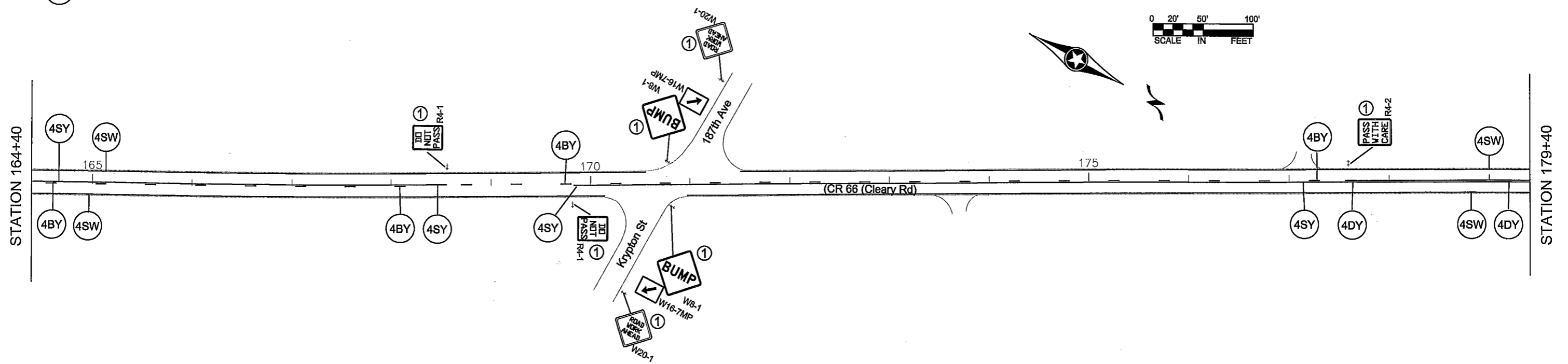
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 PERMANENT STRIPING

STRIPING KEY:

○ CIRCLE - MULTI COMP GROUND IN

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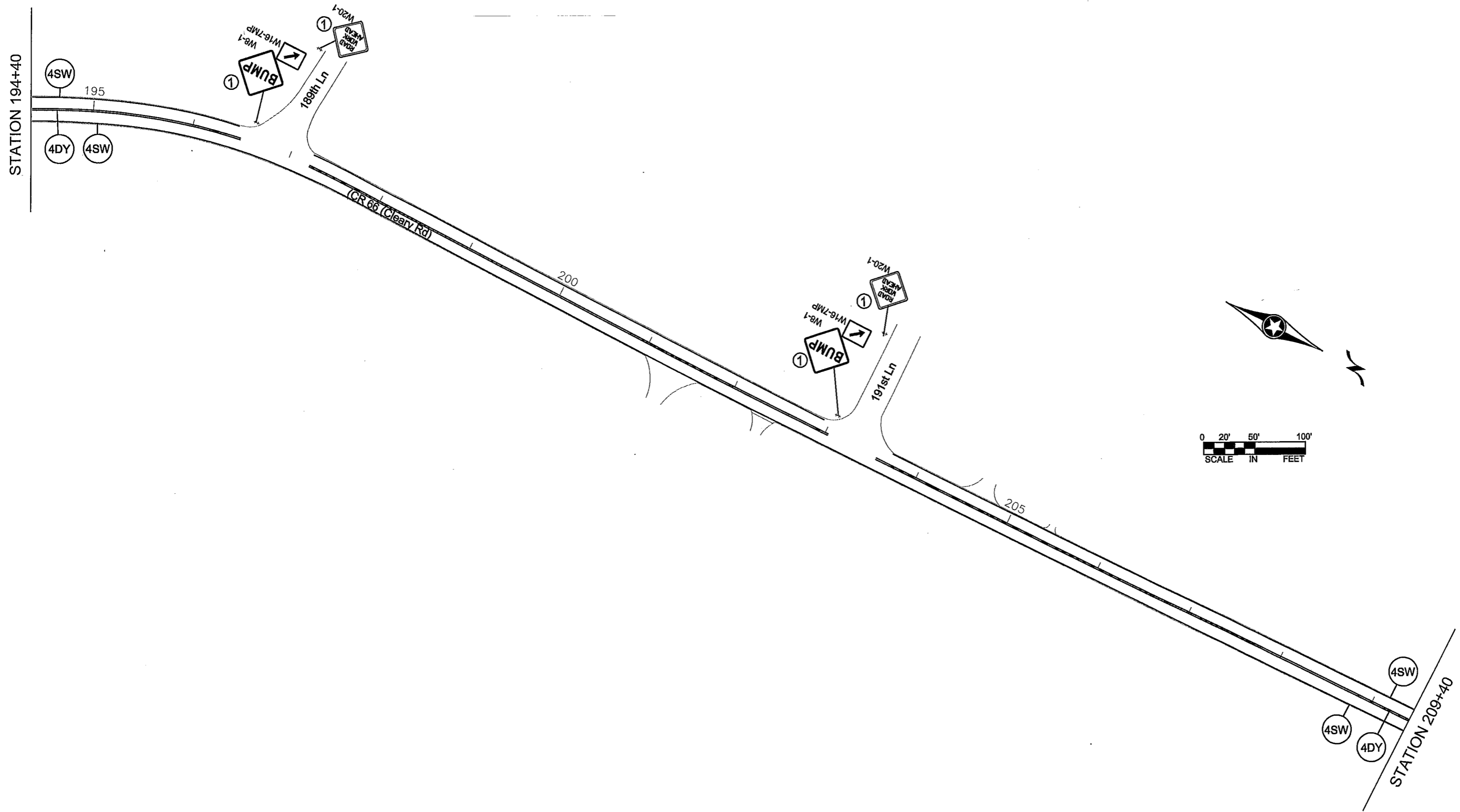
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STRIPING KEY:

○ CIRCLE - MULTI COMP GROUND IN

SIGNING NOTES:

① TEMPORARY TRAFFIC CONTROL SIGN



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:120-01-00\CR 66\Base\Traffic\Temp Signling & Perm Striping.dwg

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ANOKA COUNTY
HIGHWAY DEPT.



CP 20-13-66

TEMPORARY SIGNING
 PERMANENT STRIPING

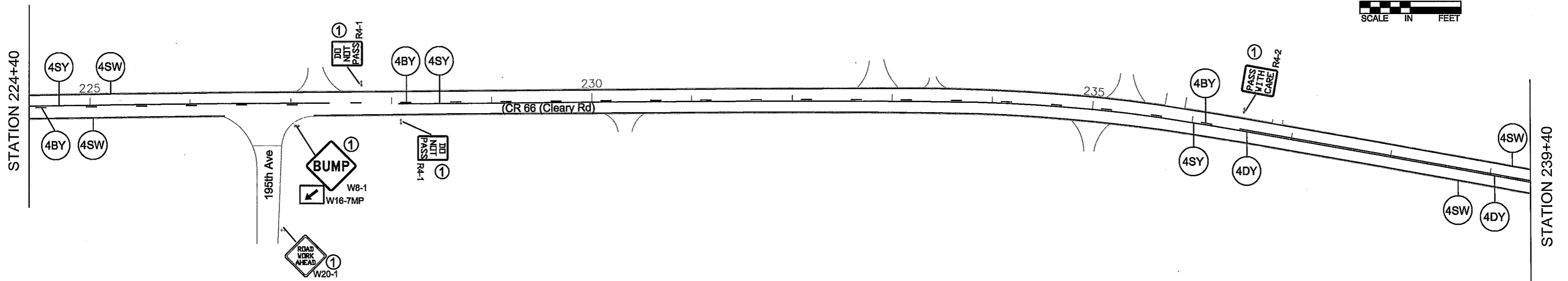
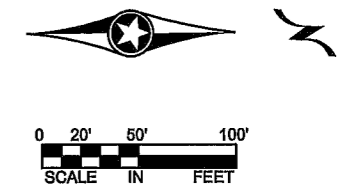
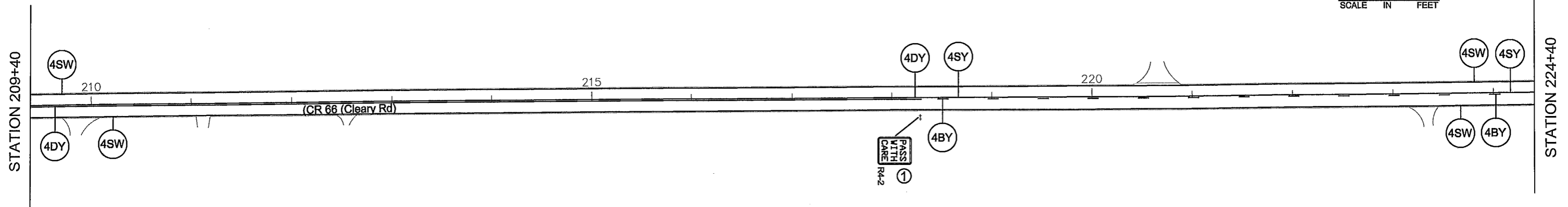
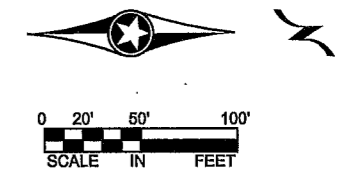
Sheet 13 of 16 Sheets

STRIPING KEY:

○ CIRCLE - MULTI COMP GROUND IN

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ANOKA COUNTY
 HIGHWAY DEPT.

CP 20-13-66

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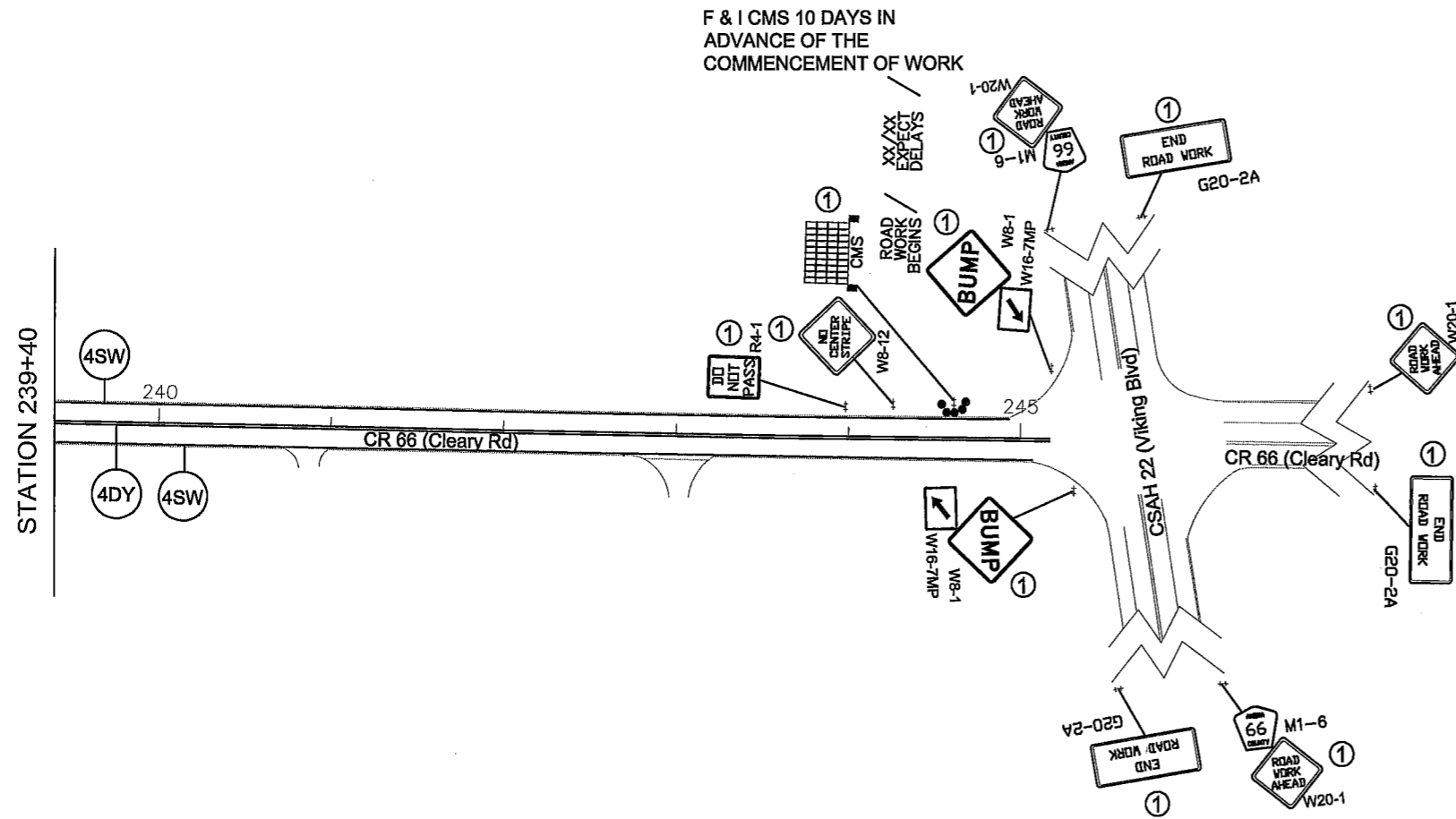
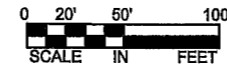
Sheet 14 of 16 Sheets

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**ANOKA COUNTY
 HIGHWAY DEPT.**

CP 20-13-66

TEMPORARY SIGNING
 PERMANENT STRIPING
 Sheet 15 of 16 Sheets

TEMPORARY TRAFFIC CONTROL SIGNS				
M.U.T.C.D. CODE	SIZE	PANEL AREA	INSERT	QUANTITY
		SQ FT		
R4-1	24" x 30"	5.00		7
R4-2	24" x 30"	5.00		5
W3-4	48" x 48"	16.00		AS NEEDED
W8-1	48" x 48"	16.00		10
W16-7P	30" x 18"	3.75		10
W8-1a	48" x 48"	16.00		AS NEEDED
W8-8	48" x 48"	16.00		AS NEEDED
W8-9	48" x 48"	16.00		AS NEEDED
W8-11	48" x 48"	16.00		AS NEEDED
W8-23	48" x 48"	16.00		AS NEEDED
W8-12a	48" x 48"	16.00		2
M1-6M	24" x 24"	4.00		4
W20-1	48" x 48"	16.00		AS NEEDED (ESTIMATED 12)
W20-4	48" x 48"	16.00		AS NEEDED
W20-7	48" x 48"	16.00		AS NEEDED
G20-2A	48" x 24"	8.00		2

		QUANTITY
REFLECTORIZED REBOUNDBLE DRUM		AS NEEDED (ESTIMATED 10)
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.		2 AT 10 DAYS EA

CHANGEABLE MESSAGE BOARD - MESSAGE SEQUENCE LAYOUT

		R	O	A	D		
		W	O	R	K		
		B	E	G	I	N	S

	<	D	A	T	E	>	
		E	X	P	E	C	T
		D	E	L	A	Y	S

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