

MINNESOTA DEPARTMENT OF TRANSPORTATION

ANOKA COUNTY

CONSTRUCTION PLAN FOR BITUMINOUS RECLAMATION AND BITUMINOUS SURFACING
 LOCATED ON CSAH 18 BETWEEN 700' EAST OF KETTLE RIVER BLVD AND EAST COUNTY LINE

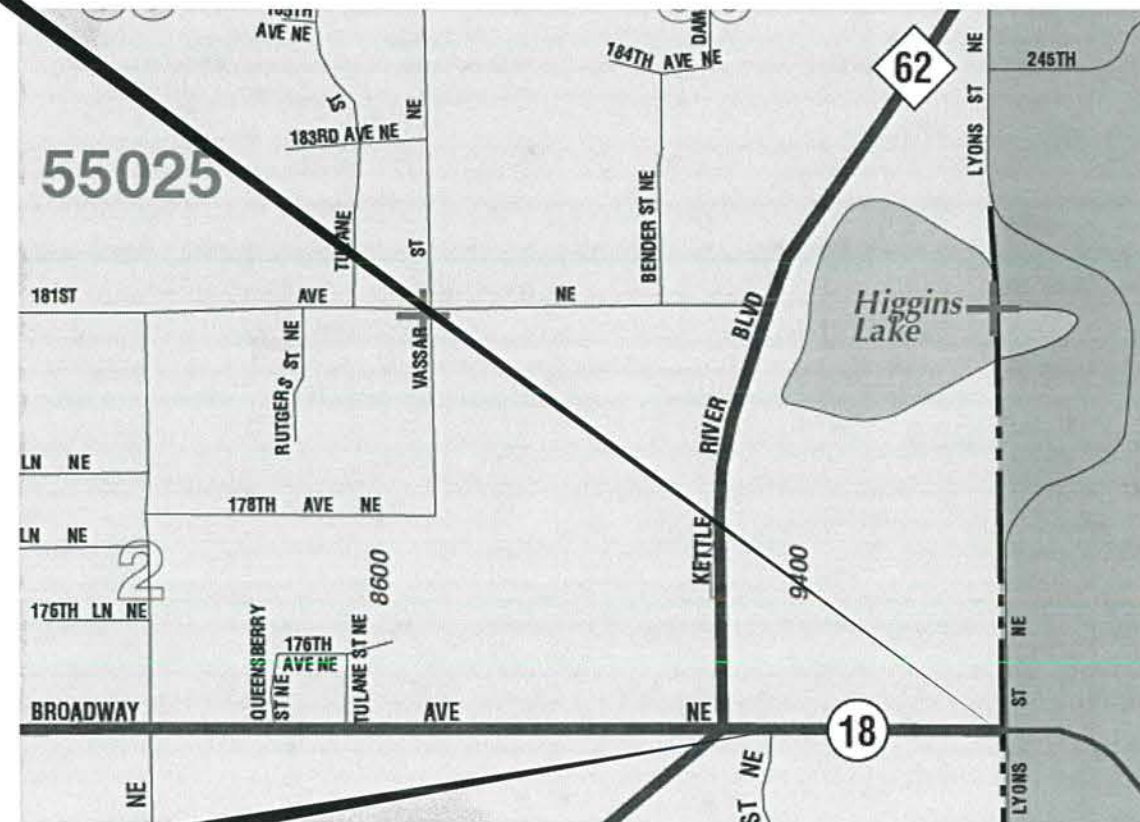
GOVERNING SPECIFICATIONS
 THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2014 EDITION OF THE "MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE INSTALLED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MNMUTCD), AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."

THIS PLAN CONTAINS 9 SHEETS

INDEX

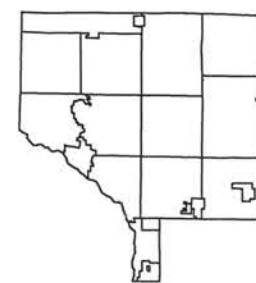
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4-5	DETAILS
6	CONSTRUCTION PLAN
7-9	SIGNING AND STRIPING PLANS

END CP 15-17-18
 CSAH 18, STA: 326+77



BEGIN CP 15-17-18
 CSAH 18, STA: 306+39

PROJECT LOCATION



CITY OF COLUMBUS
 ANOKA COUNTY
 MN/DOT TRANSPORTATION DISTRICT - METRO
 SECTION 1
 TOWNSHIP 32 NORTH
 RANGE 22 WEST

Approved: 4/2/15
 ANOKA COUNTY ENGINEER

CSAH 18	
GROSS LENGTH	2038 FEET 0.386 MILES
EXCEPTIONS-LENGTH	0.00 FEET 0.000 MILES
NET LENGTH	2038 FEET 0.386 MILES
DESIGN SPEED	55 MPH
CURRENT ADT	7500

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: MATTHEW J. JOHN
 SIGNATURE:
 DATE: 4/2/15 LICENSE NO. 51639

DRAWN BY SRK DATE 03/15/2015
 DESIGN BY SRK DATE 03/15/2015
 CHECKED BY MJJ DATE 03/20/2015



**ANOKA COUNTY
 HIGHWAY DEPT.**

COUNTY PROJECT 15-17-18

TITLE SHEET

Sheet 1 of 9 Sheets

srkerr

STATEMENT OF ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	NOTES	UNIT	TOTAL PROJECT QUANTITIES ESTIMATED
2021.501	MOBILIZATION		LUMP SUM	1
2104.505	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	1, 2	SQ YD	280
2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	2	LIN FT	190
2123.503	MOTOR GRADER	5	HOUR	10
2130.501	WATER		MGAL	65
2211.501	AGGREGATE BASE CLASS 5	3	TON	55
2215.501	FULL DEPTH RECLAMATION		SQ YD	9314
2215.502	HAUL FULL DEPTH RECLAMATION (LV)	6	CU YD	20
2221.501	SHOULDER BASE AGGREGATE CLASS 5	4	TON	170
2232.501	MILL BITUMINOUS SURFACE (2.0")		SQ YD	68
2357.502	BITUMINOUS MATERIAL FOR TACK COAT		GAL	475
2360.501	TYPE SP 12.5 WEARING COURSE MX (3,B)	11	TON	52
2360.501	TYPE SP 12.5 WEARING COURSE MX (4,E)		TON	2142
2540.602	MAIL BOX SUPPORT	7	EACH	5
2563.601	TRAFFIC CONTROL	8	LUMP SUM	1
2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	12	UNIT DAY	14
2581.501	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	9	LIN FT	82
2582.502	4" SOLID LINE WHITE-EPOXY	10	LIN FT	4000
2582.502	4" SOLID LINE YELLOW-EPOXY	10	LIN FT	770
2582.502	4" BROKEN LINE YELLOW-EPOXY	10	LIN FT	400

CONSTRUCTION NOTES

1	ITEM FOR BITUMINOUS DRIVEWAYS AND STREET APPROACHES. CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
2	REFERENCE DETAILS (PAGES 4 & 5) FOR REMOVAL DETAILS
3	GRAVEL BASE FOR CONCRETE AND BITUMINOUS STREET APPROACHES AND DRIVEWAYS.
4	ITEM INCLUDES 7 TONS FOR EACH GRAVEL ENTRANCE AND GRAVEL STREET APPROACH.
5	ITEM USED TO MOVE EXCESS RECLAIM MATERIAL AT THE RECLAIM AREA LIMITS TO CREATE A SMOOTH TRANSITION BETWEEN THE PROPOSED AND EXISTING PAVEMENT.
6	TO BE USED AT ENGINEERS DISGRESSION FOR GRADE & PROFILE CORRECTION
7	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.
8	DO NOT PASS, PASS WITH CARE AND NO CENTER STRIPE SIGNS MUST BE INPLACE DURING MILLING, RECLAIMING OR PAVING OPERATIONS.
9	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 IS TO REMOVE PRIOR TO FINAL PAINT STRIPING.
10	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING.
11	STREET APPROACHES & DRIVEWAYS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
12	2 MESSAGE BOARDS, ONE ON THE EACH END OF PROJECT WILL BE INSTALLED 7 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.

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

NO	DATE	BY	CKD	APPR	REVISION	
	03/20/2015					10:40:16 AM

NAME: P:\15-01-00\CSAH_18(CSAH62-CountyLine)\Base\PROPOSED\TEMPLATE_PLAN.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: MATTHEW J. JOHN
 SIGNATURE: *Matthew J. John*
 DATE: 4/2/15 LICENSE NO. 51639

DRAWN BY: SRK DATE: 03/15/2015
 DESIGN BY: SRK DATE: 03/15/2015
 CHECKED BY: MJJ DATE: 03/20/2015



ANOKA COUNTY
HIGHWAY DEPT.

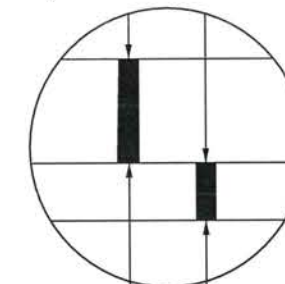
COUNTY PROJECT 15-17-18

STATEMENT OF ESTIMATED QUANTITIES
 Sheet 2 of 9 Sheets

srker

EXISTING SECTION

306+39 - 326+77
(ENTIRE PROJECT)



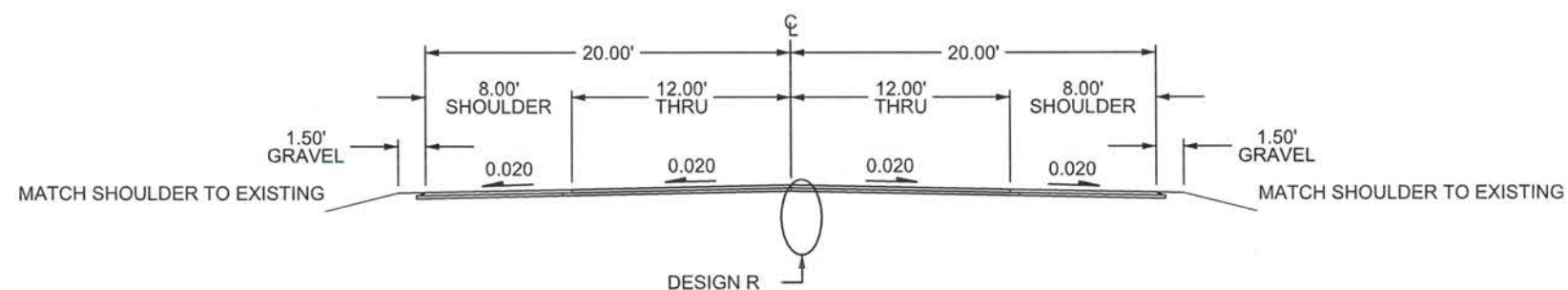
7" EXISTING BITUMINOUS

4" EXISTING BASE

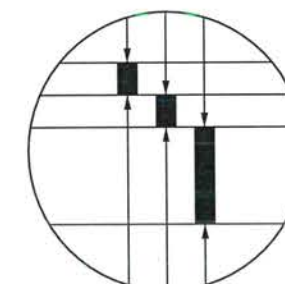
CSAH 18 - BROADWAY AVE NE

RECLAIM SECTION

306+39 - 326+77



DESIGN R RECLAIM SECTION



2.0" BITUMINOUS WEAR(SPWEB440E)

2.0" BITUMINOUS WEAR(SPWEB440E)

RECLAIMED BITUMINOUS

NO	DATE	BY	CKD	APPR	REVISION	

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**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 15-17-18

TYPICAL SECTIONS

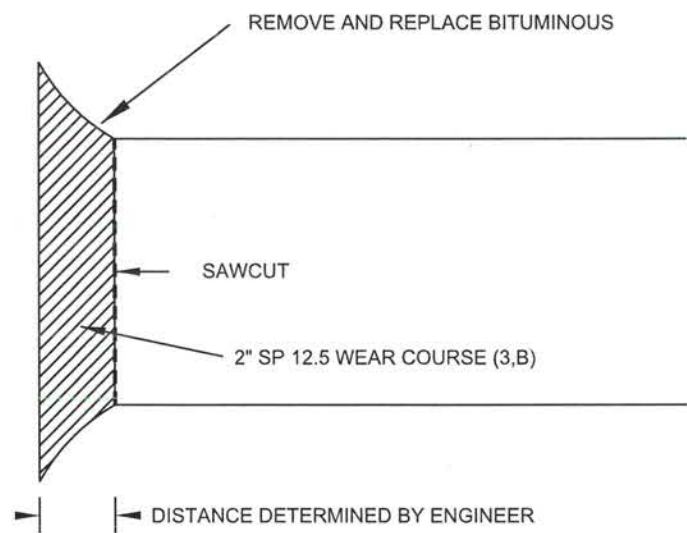
Sheet 3 of 9 Sheets

srker

RECLAIM AREA - DRIVEWAY DETAIL

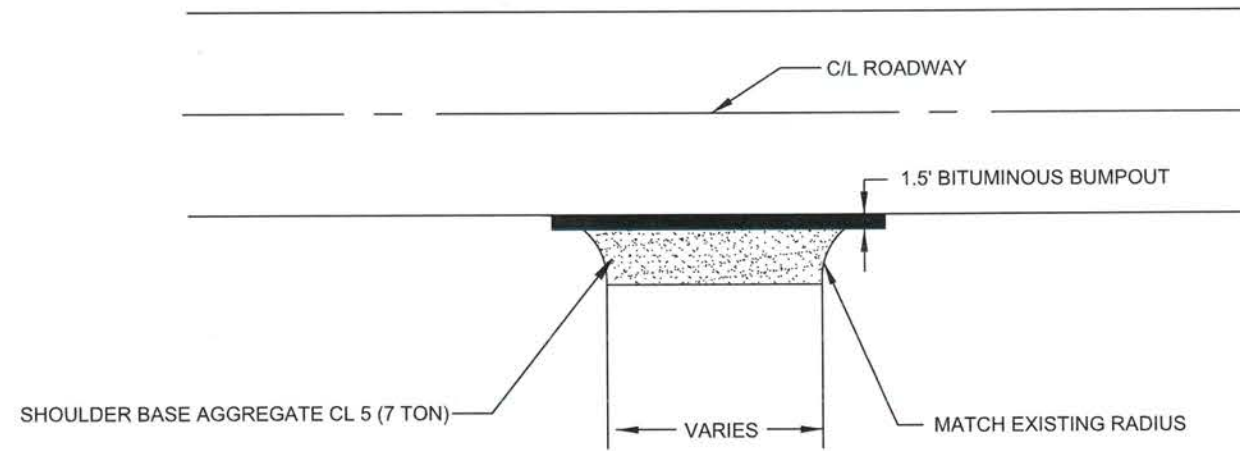
BITUMINOUS

PLAN VIEW



DRIVEWAY DETAIL

GRAVEL / FIELD ENTRANCE



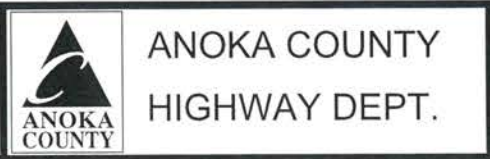
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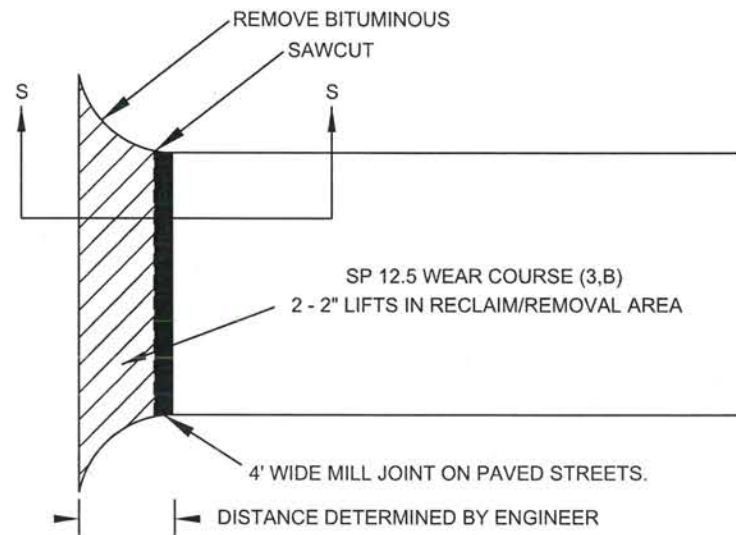
COUNTY PROJECT 15-17-18

DETAILS
 Sheet 4 of 9 Sheets

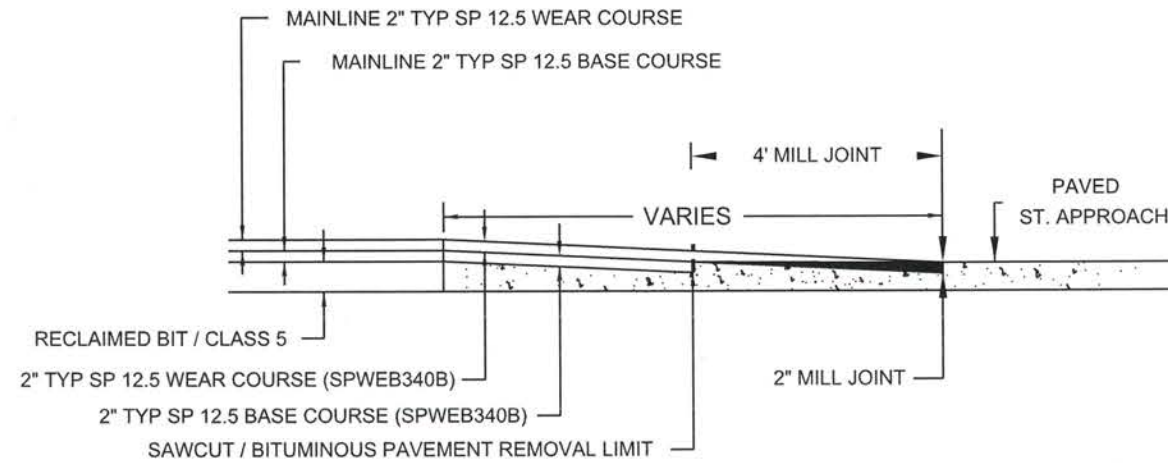
RECLAIM AREA - STREET APPROACH DETAIL

BITUMINOUS STREET

PLAN VIEW

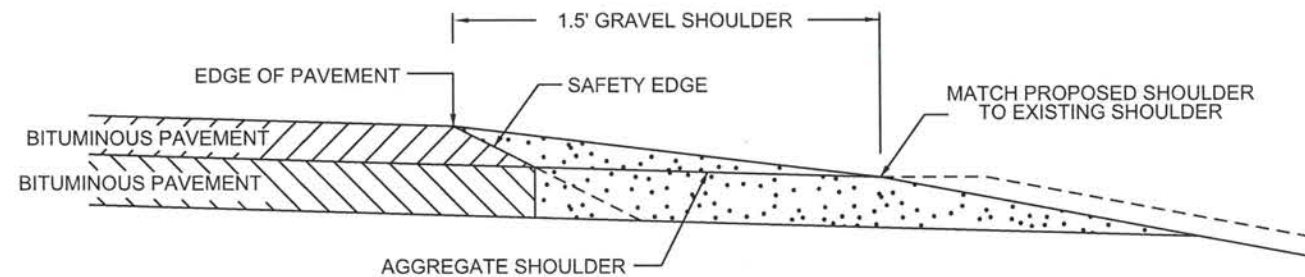


SECTION S - S



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.

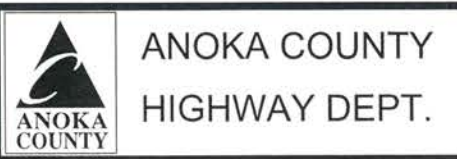
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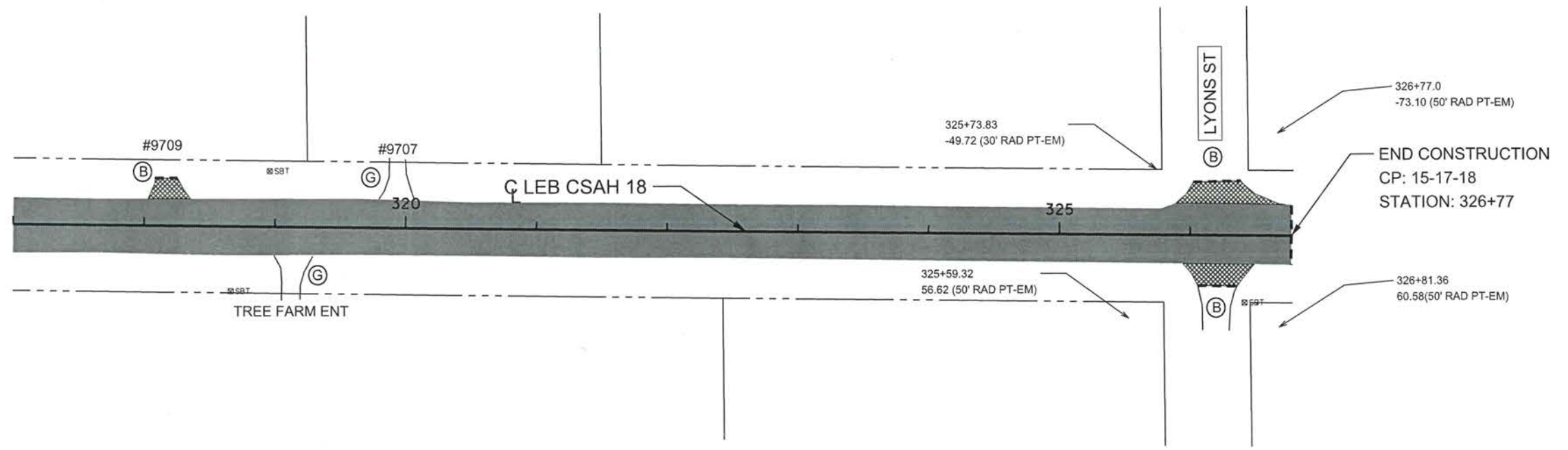
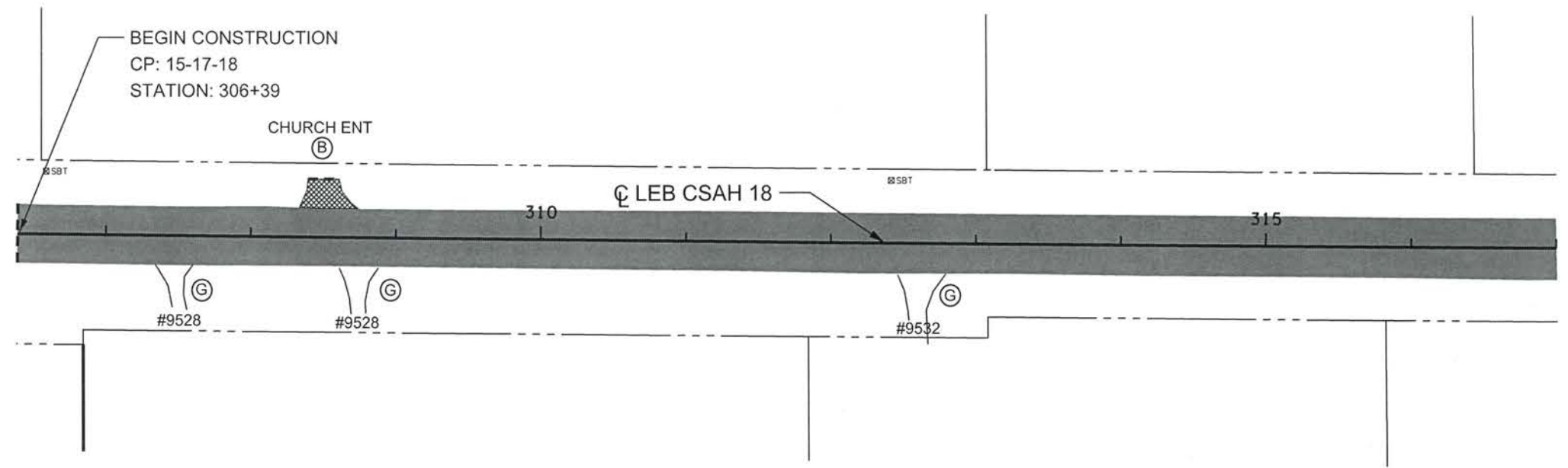


COUNTY PROJECT 15-17-18

DETAILS

Sheet 5 of 9 Sheets

LEGEND	
(B)	BITUMINOUS
(G)	GRAVEL
- - -	SAWCUT
[Solid Grey Box]	MAINLINE RECLAIM
[Hatched Box]	REMOVE AND REPLACE BITUMINOUS
- - -	R / W



NO	DATE	BY	CKD	APPR	REVISION	TIME
	03/20/2015					11:02:00 AM

NAME: P:\15-01-00\CSAH_18(CSAH62-CountyLine)\Base\PROPOSED\TEMPLATE_PLAN.dgn

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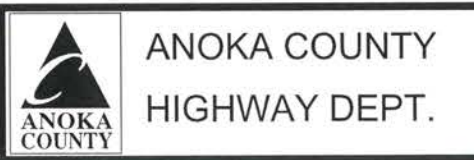
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CHECKED BY: MJJ DATE: 03/20/2015



ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 15-17-18

CONSTRUCTION PLAN

STA 306+39 TO 326+77

Sheet 6 of 9 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.

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 BEANS 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 BEANS 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.

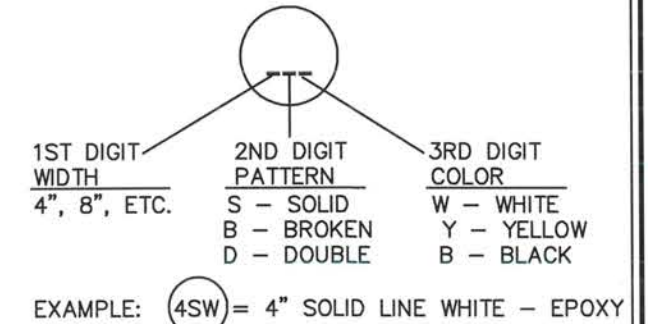
PERMANENT MARKING QUANTITIES		
ITEM	UNIT	TOTAL QUANTITY
4" SOLID LINE WHITE - EPOXY PAINT	LIN FT	4000
4" SOLID LINE YELLOW - EPOXY PAINT	LIN FT	770
4" BROKEN LINE YELLOW - EPOXY PAINT	LIN FT	400
4" DOUBLE SOLID LINE YELLOW - EPOXY PAINT	LIN FT	0

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



NO	DATE	BY	CKD	APPR	REVISION

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 PRINT NAME: MATTHEW J. JOHN
 SIGNATURE: *[Signature]*
 DATE: 4/2/15 LICENSE NO. 51639

DRAWN BY: RLB DATE: 2/14/14
 DESIGN BY: RLB DATE: 2/14/14
 CHECKED BY: JR DATE: 2/14/14



ANOKA COUNTY
HIGHWAY DEPT.

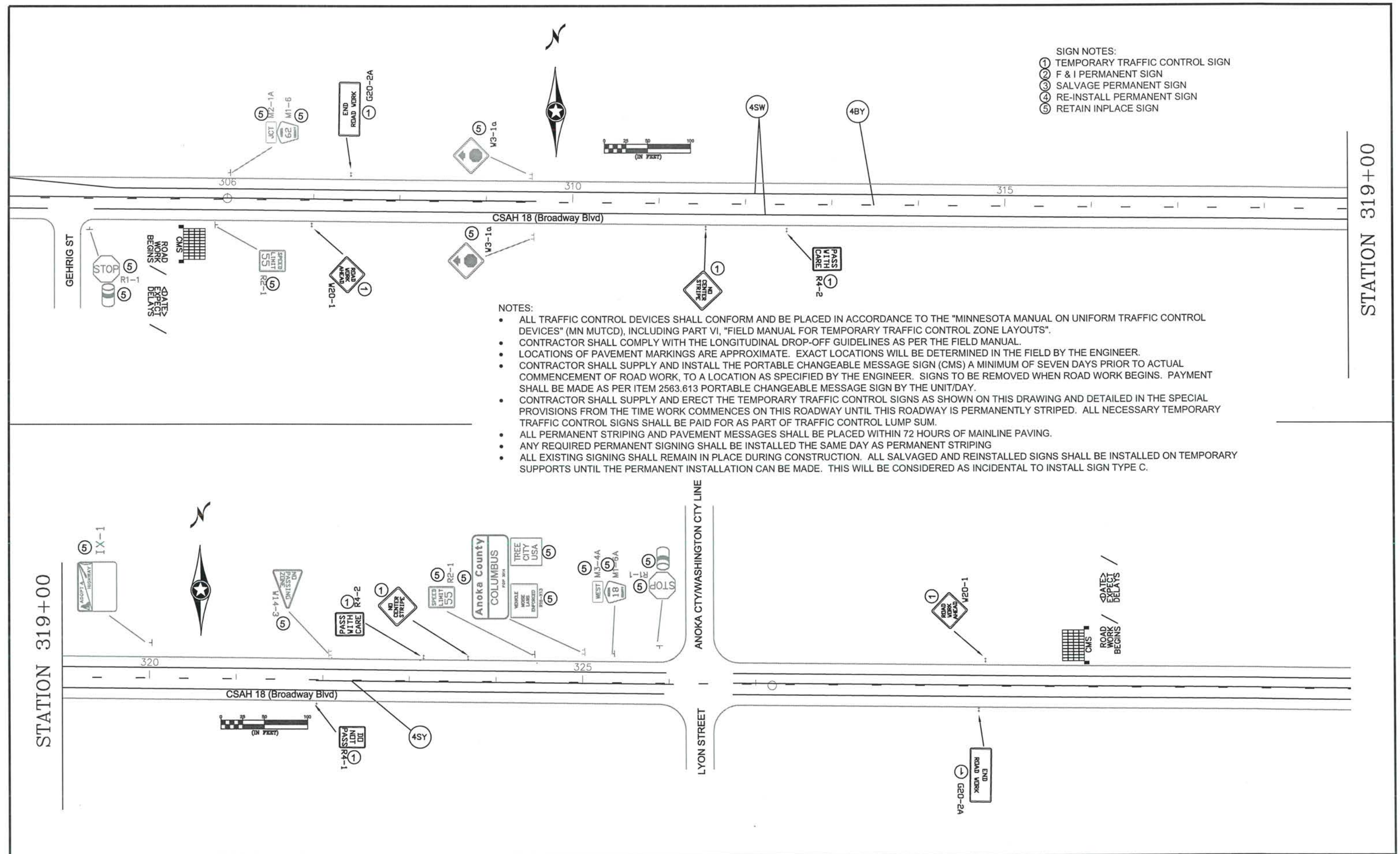
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-17-18

PERMANENT MARKING
TABULATION
 Sheet 7 of 9 Sheets

- SIGN NOTES:
- ① TEMPORARY TRAFFIC CONTROL SIGN
 - ② F & I PERMANENT SIGN
 - ③ SALVAGE PERMANENT SIGN
 - ④ RE-INSTALL PERMANENT SIGN
 - ⑤ RETAIN INPLACE SIGN

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.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-617-19\base\Traffic\Curves from CSAH 18 to CSAH 22.dwg

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PRINT NAME: MATTHEW J. JOHN
 SIGNATURE: *[Signature]*
 DATE: 4/2/15 REG. NO. 51639

DRAWN BY: RLB DATE: 1/23/15
 DESIGN BY: RLB DATE: 1/23/15
 CHECKED BY: JLR DATE: 1/30/15

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-17-18

TEMPORARY SIGNING,
 PERMANENT SIGNING
 AND STRIPING

Sheet 8 of 9 Sheets

TEMPORARY TRAFFIC CONTROL SIGNS

M.U.T.C.D. CODE	SIZE	PANEL AREA FT. ²	INSERT	QUANTITY		MOUNTING HEIGHT TO PAVEMENT EDGE FT.
					No. POST	
W8-12	48" x 48"	16.00		2	2	7.0'
R4-1	24" x 30"	5.00		1	1	7.0'
R4-2	24" x 30"	5.00		2	1	7.0'
G20-2A	48" x 24"	8.00		2	2	7.0'
W8-1A	48" x 48"	16.00		AS NEEDED		
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		
	48" x 48"	16.00		AS NEEDED		
W8-11	48" x 48"	16.00		AS NEEDED		
W20-1	48" x 48"	16.00		AS NEEDED (ESTIMATED 2)		
CMS sign to be installed a minimum of seven days prior to actual commencement of road work. Signs to be removed when road work begins.				2		

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- 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.

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

CMS sign to be installed a minimum of seven 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: MATTHEW J. JOHN
 SIGNATURE:
 DATE: 4/2/15 REG. NO. 51639

DRAWN BY: RLB DATE: 1/23/15
 DESIGN BY: RLB DATE: 1/23/15
 CHECKED BY: JR DATE: 1/30/15



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-17-18

TRAFFIC CONTROL
 QUANTITY