MAD DECEMBER 2023

PROJECT ID: 3670-00-74

WITH: N/A

COUNTY: DANE

04

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

LAKE MILLS - COLUMBUS

CLARKSON ROAD TO AVALON ROAD

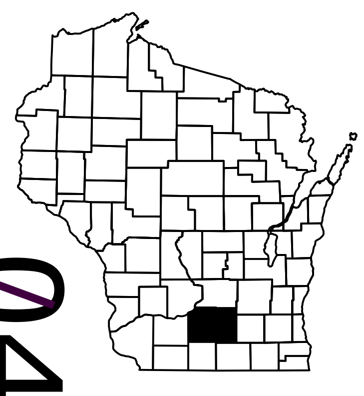
STH 89
DANE COUNTY

STATE PROJECT NUMBER
3670-00-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3670-00-74	WISC 2024055	1

ORDER OF SHEETS

TOTAL SHEETS = 178



N

DESIGN DESIGNATION

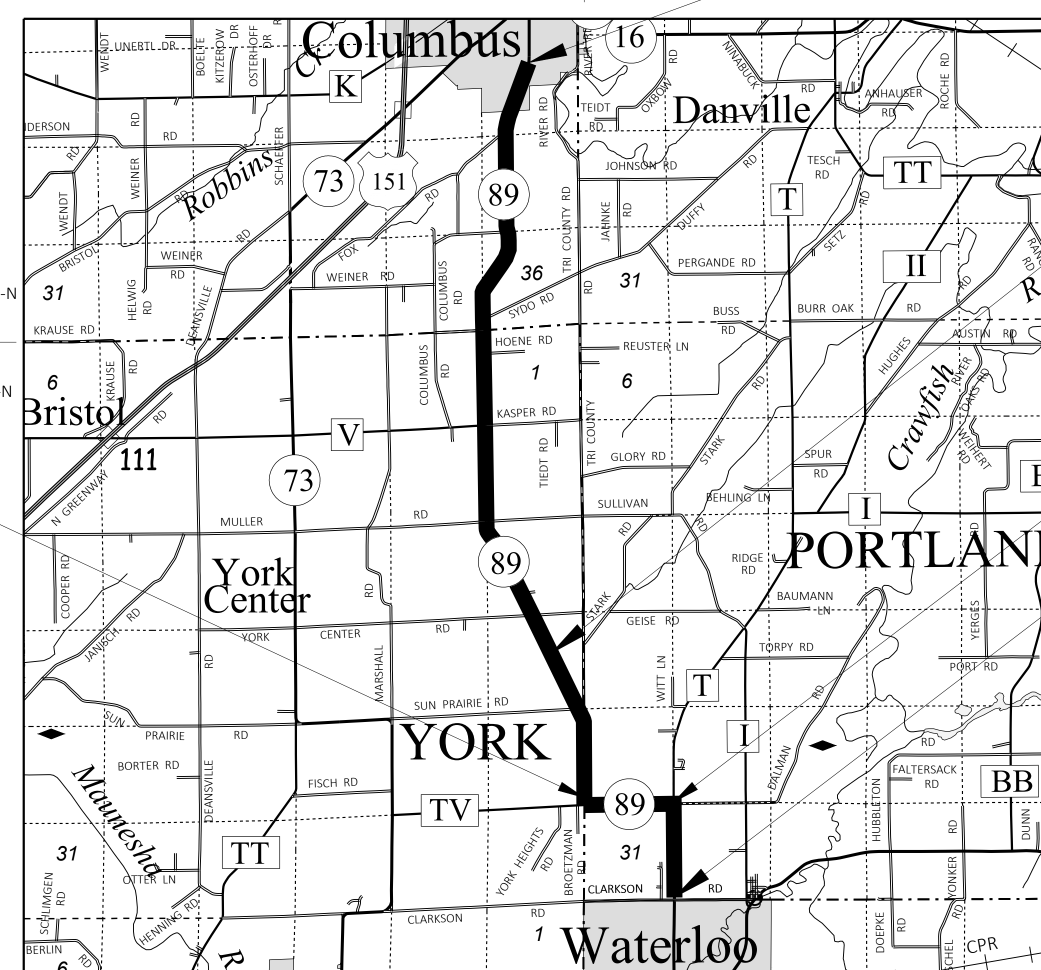
A.A.D.T.	2024	=	1,960
A.A.D.T.	2044	=	1,960
D.H.V.	2044	=	81
D.D.		=	56/44
T.		=	7.7%
DESIGN SPEED		=	55 MPH (STA. 62+00 - STA. 559+25); 40 MPH (STA. 559+25 - STA. 575+65); 25 MPH (STA. 575+65 - STA. 579+82.63)
ESALS		=	270,000

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE



LAYOUT

SCALE 0 — 2 MI

END PROJECT
STA 577+71.74
Y=572,946.10
X=917,768.61

STRUCTURE C-13-2087

NET EXCEPTION TO C/L LENGTH
STA 111+09.69 - STA 116+14.80

BEGIN PROJECT
STA 62+00.00
Y=528,131.01
X= 926,190.02

STATION EQUATION
STA 171+50.00 - STA 173+00.96

TOTAL NET LENGTH OF CENTERLINE = 9.643 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET, EVEN THOUGH PORTIONS OF THE PROJECT IS ALSO IN DODGE AND COLUMBIA COUNTIES. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18. *CONTACT THE REGION SURVEY COORDINATOR BEFORE USING/CREATING/MODIFYING COORDINATE DATA OUTSIDE OF THE DANE COUNTY LIMITS.*

ORIGINAL PLANS PREPARED BY

JEWELL associates engineers, inc
Engineers - Architects - Surveyors

WISCONSIN DANIEL J. TRACY E-47578-6 MUSCODA, WI PROFESSIONAL ENGINEER

Dan Tracy 7/26/2023

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NE REGION
Designer	JEWELL ASSOCIATES ENGINEERS, INC.
Project Manager	KRISTEN BERG, P.E.
Regional Examiner	SW REGION
Regional Supervisor	DANIEL SEGERSTROM, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 7/26/2023 (Signature)

E

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXISTING SHOULDER AGGREGATE SHALL BE INCORPORATED INTO THE NEW SHOULDERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 20), AND EROSION MATTED/MULCHED AS DIRECTED BY THE ENGINEER. MULCH/EROSION MAT ALL MAINLINE SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD. ALL POST CONSTRUCTION WET AREAS SHALL BE SEEDED WITH SEEDING MIX NO. 60. DO NOT USE FERTILIZER IN WETLAND AREAS.

SILT FENCE, TEMPORARY DITCH CHECK, AND CULVERT PIPE CHECK BID ITEMS SHALL BE PLACED AS SHOWN IN THE PLAN OR AS DIRECTED BY THE ENGINEERS IN THE FIELD. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A VERTICAL EDGE MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

FILL EXPANSION IS VARIABLE AND IS ESTIMATED AT 25%.

HMA PAVEMENT QUANTITIES WERE CALCULATED USING 112 LB/SY/IN.

FROM STA. 62+00 - STA. 157+00 AND FROM STA. 171+50/173+00.96 - STA. 579+82.63 2-INCHES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH A SINGLE 2-INCH LAYER OF HMA PAVEMENT 4 LT 58-28 S AND FROM STA. 157+00 - STA. 171+50/173+00.36 4-INCHES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH A 2-INCH UPPER LAYER HMA PAVEMENT 4 LT 58-28 S AND A 2-INCH LOWER LAYER HMA PAVEMENT 4 LT 58-28 S.

CONSTRUCTION SHOULD BE BASED ON TYPICAL SECTIONS AND HARD SURFACES RATHER THAN THE ALIGNMENT.

PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

CURB AND GUTTER ELEVATIONS ARE GIVEN ON THE FLANGE LINE, UNLESS OTHERWISE NOTED.

ALL RADII DIMENSIONS ON THE PLAN FOR CURB & GUTTER ARE TO THE FLANGE OF THE CURB AND GUTTER.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ADJUST DITCH GRADING AS NECESSARY TO FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD. DITCH GRADING TO BE PAID FOR AS EXCAVATION COMMON.

APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO THE MILLED SURFACE AND AT A RATE OF 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, OR PASSING LANE.

EXACT LOCATIONS FOR THE REMOVING DISTRESSED PAVEMENT MILLING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION WHEN THE SUPERELEVATION IS GREATER THAN 0.04 FT./FT. IF THE SUPERELEVATION IS LESS THAN OR EQUALS 0.04 FT./FT., THEN THE LOW SIDE SHOULDER SLOPE IS 0.04 FT./FT. THE HIGH SIDE SHOULDER SLOPE ON THE SUPERELEVATED SECTION EQUALS THE SUPERELEVATION.

CURVE DATA IS BASED ON THE ARC DEFINITION.

THE SOILS REPORT MAY BE OBTAINED FROM THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, ALL SIGNS RELATING TO THIS OPERATION SHALL BE COVERED OR REMOVED AND FACILITY RESTORED TO NORMAL OPERATIONS.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE (OR ARE) OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

MILL AND PAVE ADJACENT TO MONUMENTS WITHOUT DAMAGING THE MONUMENTS. AFTER MILLING AROUND MONUMENT, DELINEATE ANY EXPOSED MONUMENTS WITH A CONE OR DRUM.

JACOB ROCKWEILER, P.E., WISCONSIN HEIGHT MODERNIZATION PROGRAM MANAGER WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION WHOSE PHONE NUMBER IS (608) 526-6362 AND EMAIL IS JACOB.ROCKWEILER@DOT.WI.GOV

DNR LIAISON:

ERIC HEGGELUND
(SOUTHWEST COLUMBIA, DANE, DODGE)
DNR SOUTH CENTRAL REGION HEADQUARTERS
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
(608) 228-7927
eric.heggelund@wisconsin.gov

COLUMBIA COUNTY HIGHWAY COMMISSIONER:

CHRIS HARDY
338 OLD HIGHWAY 16 WEST
PO BOX 875
WYOCENA, WI 53969-0875
(608) 429-2136
chris.hardy@co.columbia.wi.us

DANE COUNTY HIGHWAY COMMISSIONER:

GERALD MANDLI
2302 FISH HATCHERY RD
PO BOX 2495
MADISON, WI 53713-2495
(608) 266-4039
mandli@countyofdane.com

DODGE COUNTY HIGHWAY COMMISSIONER:

BRIAN FIELD
211 E CENTER ST
JUNEAU, WI 53039-1309
(920) 386-3653
bfield@co.dodge.wi.us

DESIGN CONSULTANT:

JEWELL ASSOCIATES ENGINEERS, INC.
DAN TRACY, P.E.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PH: (608) 459-6052
CELL: (608) 604-6905
dan.tracy@jewellassoc.com

WISCONSIN DEPARTMENT OF TRANSPORTATION:

WisDOT PROJECT MANAGER
KRISTEN BERG, P.E.
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920) 492-0139
kristen.berg@dot.wi.gov

NE REGION SURVEY COORDINATOR

CORMAC MCINNIS, RLS
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920) 492-5638
cormac.mcinnis@dot.wi.gov

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PLAN DETAILS
TRAFFIC CONTROL
DETOUR PLAN
PERMANENT SIGNING
EROSION CONTROL

UTILITIES CONTACTS

ADAMS-COLUMBIA ELECTRIC COOP. - ELECTRIC
SHAWN PIETRZAK
401 E. LAKE ST
PO BOX 70
FRIENDSHIP, WI 53934
(800) 831-8629 EXT. 323
spietrzak@acecwi.com

ANR PIPELINE CO - GAS/PETROLEUM
TODD BRISTER
W3925 PIPELINE LANE
EDEN, WI 53019
(920) 979-0060
todd_brister@tcenery.com

ATC MANAGEMENT, INC. - ELECT-TRANS
DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
(608) 877-7650
dvosberg@atcllc.com

AT&T WISCONSIN - COMMUNICATION
CHARLES BARTELT
70 E DIVISION ST
FOND DU LAC, WI 54986
(920) 410-5104
cb1461@att.com

BLUEBIRD NETWORK
KIRI HERALLY
N114WI8937 CLINTON DR
GERMANTOWN, WI 53022
(262) 293-3610
kheraly@visiontelcom.com

COLUMBUS WATER AND LIGHT DEPT - ELECTRIC
DALTON HILEY
950 MAPLE AVE
COLUMBUS, WI 53925
(847) 623-5912
dhiley@columbuswaterandlight.com

FLINT HILLS RESOURCES, LC - GAS/PETROLEUM
CODY NELSON
3660 SPRUCE ROAD
ELEVA, WI 54738
(715) 286-0002
cody.nelson@fhr.com

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION
RUSS RYAN
315 OAK STREET
OAKFIELD, WI 53065
(920) 563-3275
russell.w.ryan@ftr.com

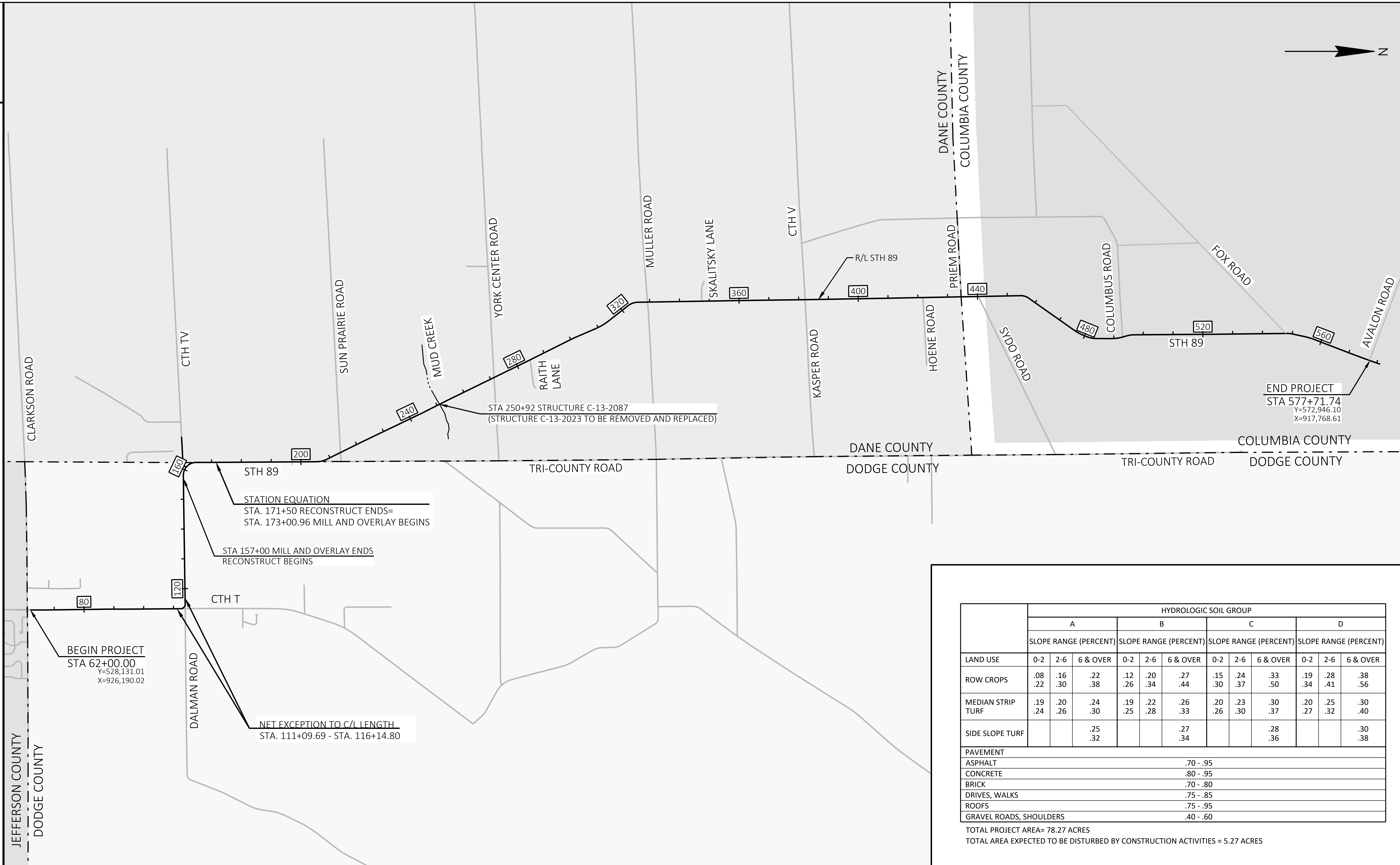
SPECTRUM - COMMUNICATION
JOSEPH McCLEARN
2701 DANIELS ST
MADISON,WI 53718
(920) 979-2603
joe.mcclearn2@charter.com

WATERLOO WATER & LIGHT - ELECTRIC
BARRY SORENSON
575 COMMERCIAL AVE
WATERLOO, WI 53594
(920) 478-2260
bsorenson@waterlooutilities.com

WE ENERGIES - ELECTRIC
ERIC KICKHAVER
500 S 116TH ST
WEST ALLIS, WI 53214
OFFICE: (414) 944-5917
CELL: (414) 588-7472
eric.kickhaver@we-energies.com

WE ENERGIES - GAS/PETROLEUM
SCOTT HOLSTEIN
700 S KANE ST
BURLINGTON, WI 53105
(262) 763-1084
scott.holstein@we-energies.com

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com



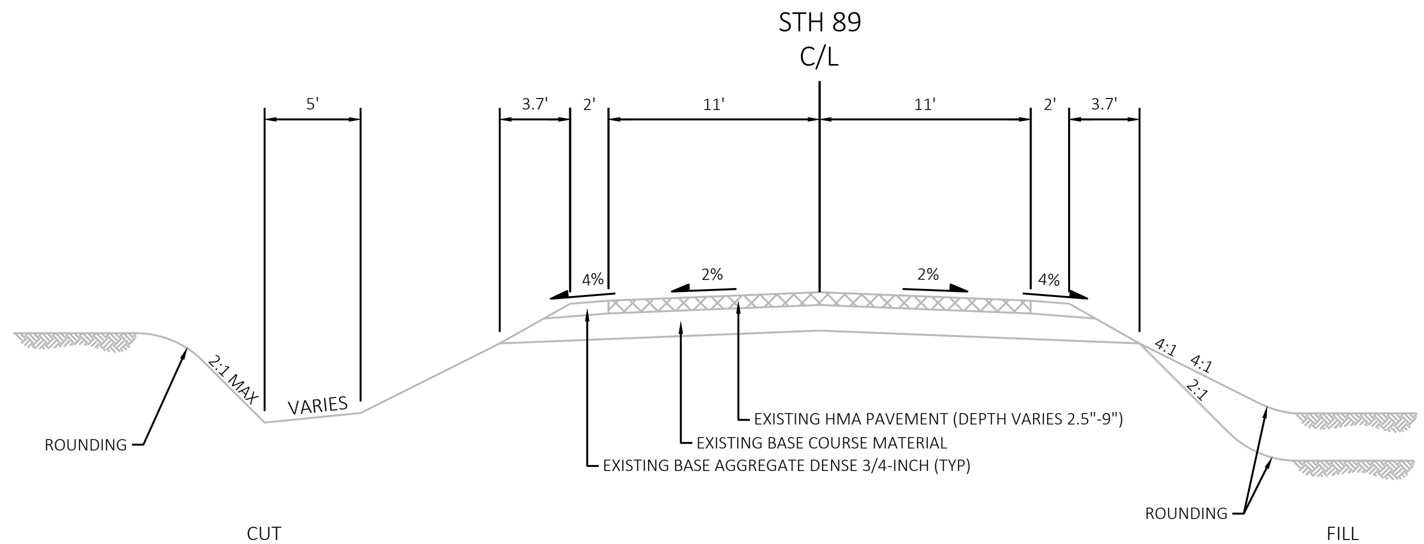
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA= 78.27 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.27 ACRES

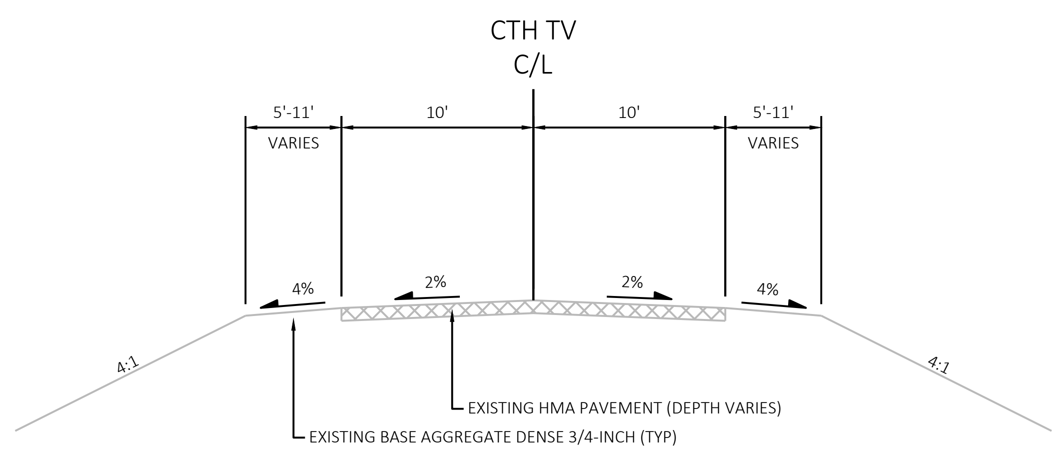
2

2



EXISTING TYPICAL SECTION STH 89

STA 62+00.00 - STA 577+71.74



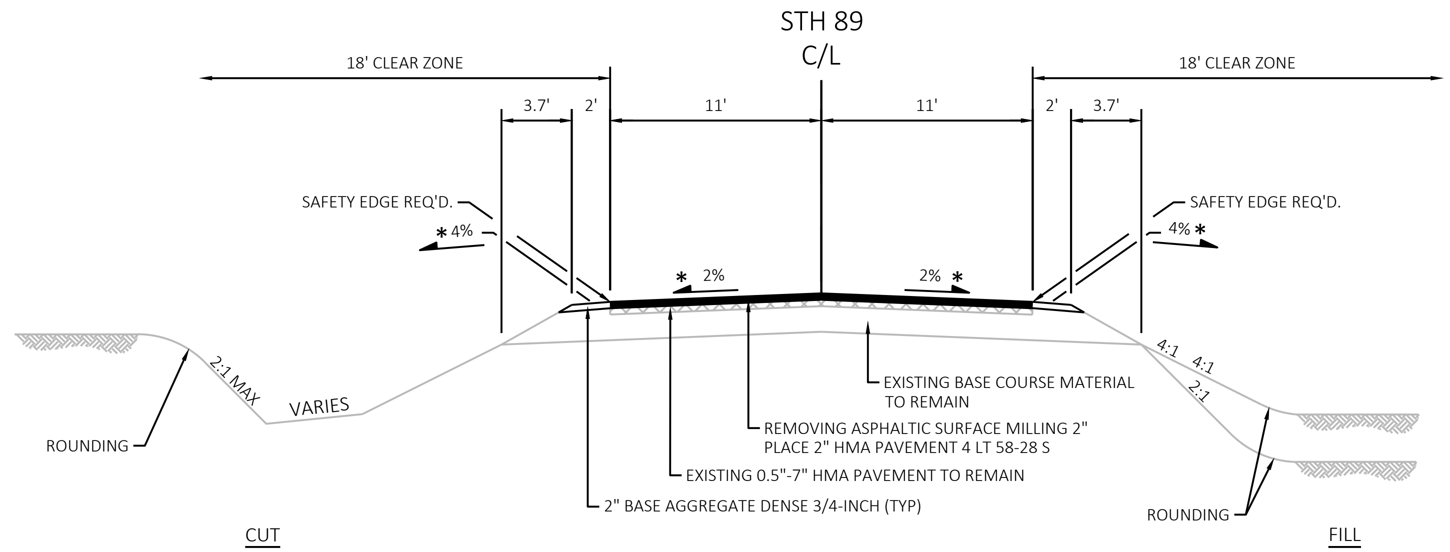
EXISTING TYPICAL SECTION CTH TV

PAVEMENT CORING TABLE

BORING NO.	STATION	OFFSET	ASPHALT DEPTH	MATERIAL BELOW
C-01	65+11	8.4' RT	3.25"	RECLAIMED
C-02	74+41	7.4' LT	3"	BASE
C-03	84+95	5.5' RT	3.875"	RECLAIMED
C-04	94+56	9.6' LT	4.5"	RECLAIMED
C-05	104+53	9.7' RT	3.25"	RECLAIMED
C-06	112+31	10.4' LT	6.5"	BASE
C-07	124+02	6.1' RT	4"	0.75" RECLAIMED
C-08	133+85	8.4' LT	6"	1" RECLAIMED
C-09	144+16	5.7' RT	4.125"	RECLAIMED
C-10	153+09	7.7' LT	3.5"	RECLAIMED
C-11	162+23	81.3' LT	7.5"	BASE
C-12	171+50	3.7' LT	5.75"	RECLAIMED
C-13	183+14	2.8' RT	5.5"	BASE
C-14	191+93	9.2' LT	5.75"	RECLAIMED
C-15	203+32	10.9' RT	5"	RECLAIMED
C-16	212+37	4.2' LT	4"	1" RECLAIMED
C-17	223+78	7.2' RT	4.625"	BASE
C-18	233+58	9.7' LT	4.5"	BASE
C-19	243+70	6.1' RT	6"	RECLAIMED
C-20	253+72	7.0' LT	7.75"	RECLAIMED
C-21	263+38	8.8' RT	3"	RECLAIMED
C-22	272+23	2.8' LT	6.375"	RECLAIMED
C-23	283+10	5.9' RT	5.75"	BASE
C-24	291+58	10.6' LT	6"	BASE
C-25	303+64	5.3' RT	5.25"	RECLAIMED
C-26	311+81	9.2' LT	3.5"	RECLAIMED
C-27	321+34	9.4' RT	3.5"	RECLAIMED
C-28	331+67	7.9' LT	7.5"	BASE
C-29	341+06	8.3' RT	9.75"	BASE
C-30	350+58	3.3' LT	6"	BASE
C-31	361+52	6.2' RT	3"	RECLAIMED
C-32	371+22	8.7' LT	8.5"	RECLAIMED
C-33	380+41	11.0' RT	7"	RECLAIMED
C-34	390+51	9.0' LT	2.5"	RECLAIMED
C-35	400+28	7.8' RT	9"	RECLAIMED
C-36	411+77	9.2' LT	4.625"	BASE
C-37	420+69	3.7' RT	6.75"	RECLAIMED
C-38	432+11	7.7' LT	3.5"	RECLAIMED
C-39	440+58	6.8' RT	5"	RECLAIMED
C-40	451+35	11.1' LT	4.5"	0.5" RECLAIMED
C-41	460+83	10.3' RT	3.75"	RECLAIMED
C-42	470+90	6.0' LT	3.5"	RECLAIMED
C-43	480+11	6.4' RT	4"	RECLAIMED
C-44	489+90	8.9' LT	4.25"	RECLAIMED
C-45	501+80	8.3' RT	6.5"	RECLAIMED
C-46	511+56	10.7' LT	4.125"	RECLAIMED
C-47	521+19	12.3' RT	3.375"	RECLAIMED
C-48	530+45	8.6' LT	4.375"	RECLAIMED
C-49	541+59	4.5' RT	3.5"	2.5" RECLAIMED
C-50	549+03	3.3' LT	3.25"	RECLAIMED
C-51	561+12	8.9' RT	5"	0.75" RECLAIMED
C-52	569+98	7.4' LT	4.25"	3" RECLAIMED
C-53	579+47	7.5' RT	7"	BASE

* ALL MATERIALS RECOVERED IN CORES ARE LISTED. THE ENTIRE THICKNESS OF THE LOWEST MATERIAL WAS LIKELY NOT RECOVERED IN EACH CORE. WHERE NO THICKNESS IS GIVEN FOR THE LOWEST METERIAL, THAT MATERIAL TYPE WAS OBSERVED IN THE BOTTOM OF THE CORE HOLE OR AT THE BOTTOM OF THE RECOVERED CORE.

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	TYPICAL EXISTING SECTIONS	SHEET	E

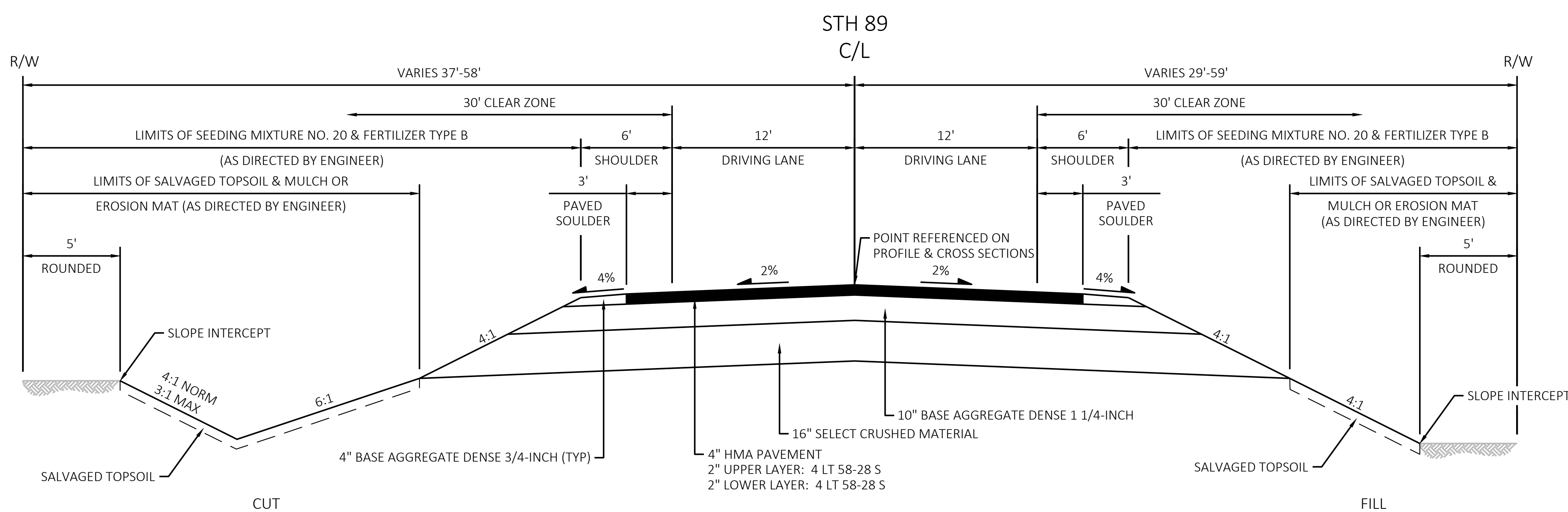


FINISHED TYPICAL SECTION STH 89

STA 62+00.00 - STA 111+09.69
STA 116+14.80 - STA 157+00.00
** STA 171+50.00/173+00.96 - STA 577+71.74

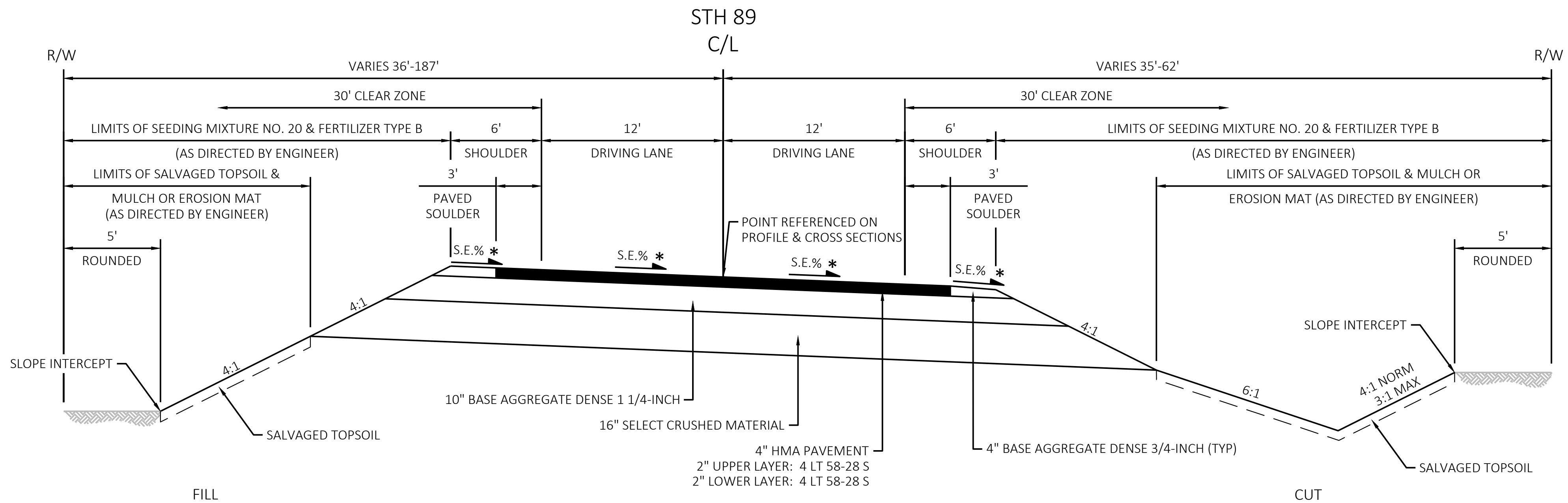
* IN AREAS OF SUPERELEVATION, MATCH EXISTING SLOPE

** STA 249+39 - STA 255+47
SEE CONSTRUCTION DETAILS FOR GUARDRAIL REPLACEMENT AND STRUCTURE REPLACEMENT SECTIONS



FINISHED TYPICAL SECTION STH 89

STA. 165+98 - STA 171+50/STA 173+00.96



FINISHED TYPICAL SUPERELEVATED SECTION STH 89

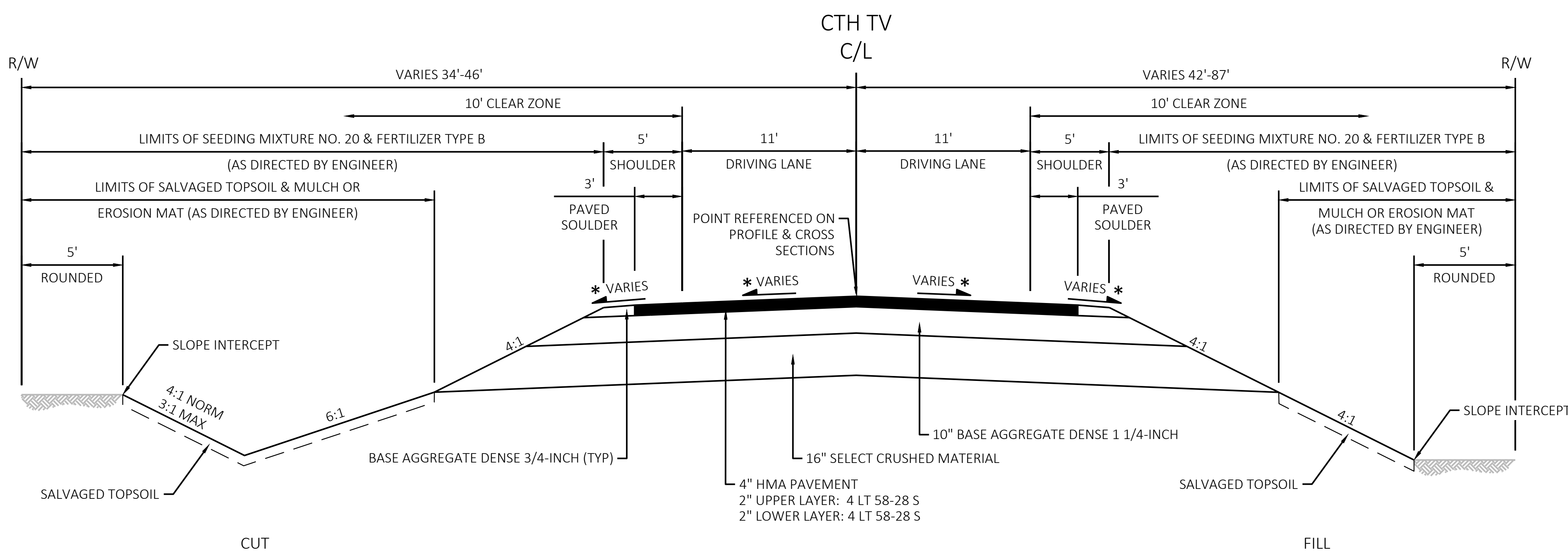
STA 157+00 - STA 165+98

CURVE 4 SUPERELEVATION TABLE

STATION	LEFT(%)	RIGHT(%)
156+87	2.0	2.0
157+00	1.3	2.0
157+26	0.0	2.0
157+50	1.2	2.0
157+65	2.0	2.0
158+00	3.8	3.8
158+40	5.9	5.9
FULL SUPERELEVATION		
164+45	5.9	5.9
164+50	5.7	5.7
165+00	3.1	3.1
165+21	2.0	2.0
165+50	0.5	2.0
165+59	0.0	2.0
165+98	2.0	2.0

* SEE SUPERELEVATION TABLE

THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION WHEN THE SUPERELEVATION IS GREATER THAN 0.04 FT./FT. IF THE SUPERELEVATION IS LESS THAN OR EQUALS 0.04 FT./FT., THEN THE LOW SIDE SHOULDER SLOPE IS 0.04 FT./FT. THE HIGH SIDE SHOULDER SLOPE ON THE SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION.



FINISHED TYPICAL SECTION CTH TV

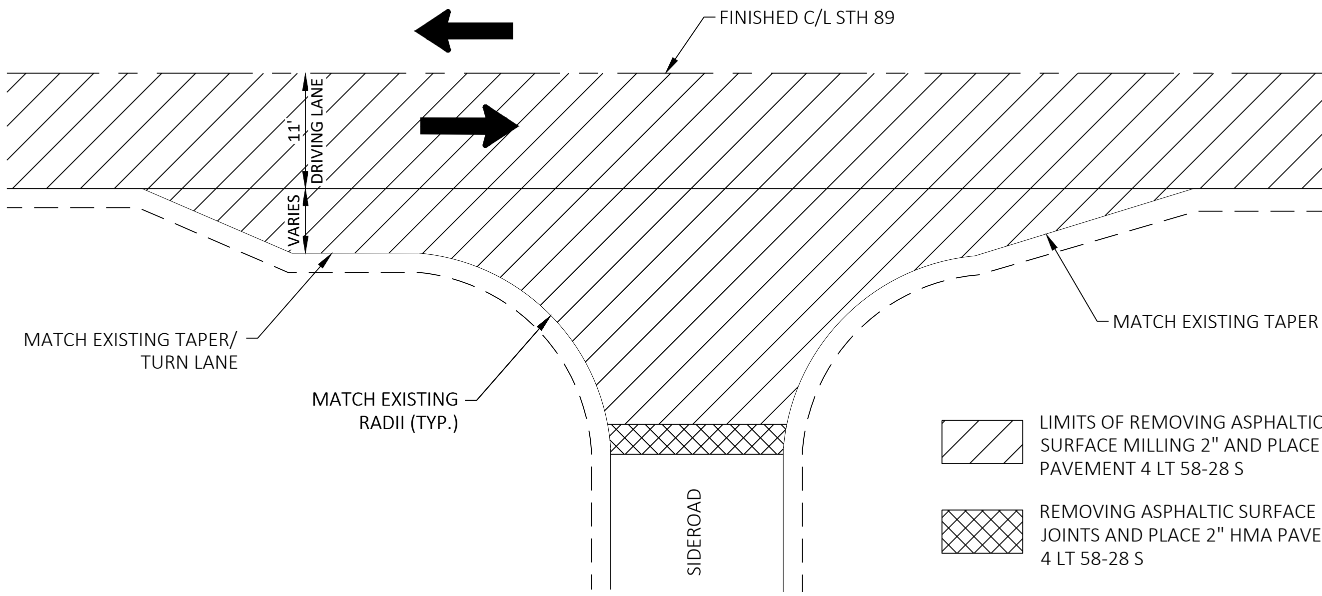
STA 10'A'+00.00 - STA 13'A'+85.54

CURVE 18 SUPERELEVATION TABLE

STATION	LEFT(%)	RIGHT(%)
10+36	2.0	2.0
10+50	2.0	1.2
10+72	2.0	0.0
11+00	2.0	1.5
11+09	2.0	2.0
11+50	4.3	4.3
11+81	6.0	6.0
FULL SUPERELEVATION		
12+66	6.0	6.0
13+00	4.1	4.1
13+50	0.8	1.4
13+86	0.6	0.6

* SEE SUPERELEVATION TABLE

THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION WHEN THE SUPERELEVATION IS GREATER THAN 0.04 FT./FT. IF THE SUPERELEVATION IS LESS THAN OR EQUALS 0.04 FT./FT., THEN THE LOW SIDE SHOULDER SLOPE IS 0.04 FT./FT. THE HIGH SIDE SHOULDER SLOPE ON THE SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION.

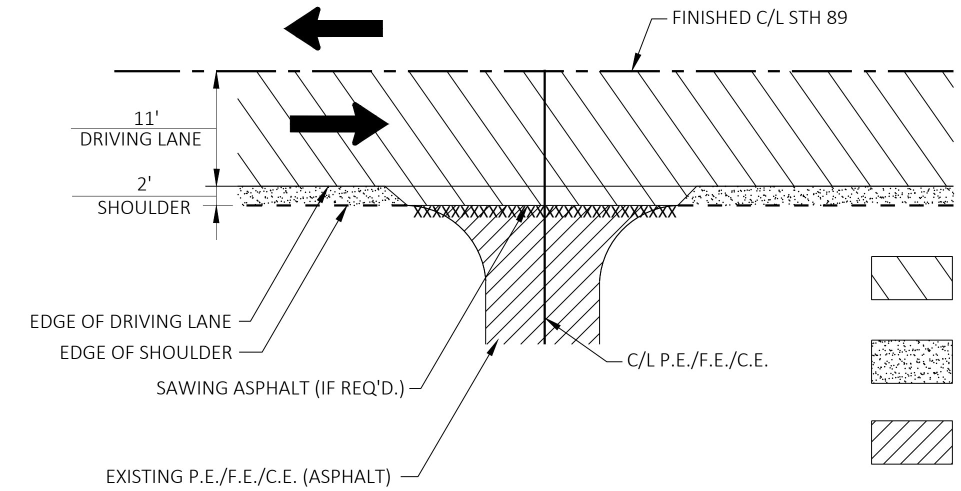


LIMITS OF REMOVING ASPHALTIC SURFACE MILLING 2" AND PLACE 2" HMA PAVEMENT 4 LT 58-28 S

REMOVING ASPHALTIC SURFACE BUTT JOINTS AND PLACE 2" HMA PAVEMENT 4 LT 58-28 S

TYPICAL RURAL SIDEROAD DETAIL WITHOUT CURB & GUTTER

SUN PRAIRIE RD (EAST)	MULLER RD (EAST)	HOENE RD
SUN PRAIRIE RD (WEST)	MULLER RD (WEST)	PRIEM RD
YORK CENTER RD (EAST)	SKALITSKY LN	SYDO RD
YORK CENTER RD (WEST)	CTH V	COLUMBUS RD
RAITH LN	KASPER RD	

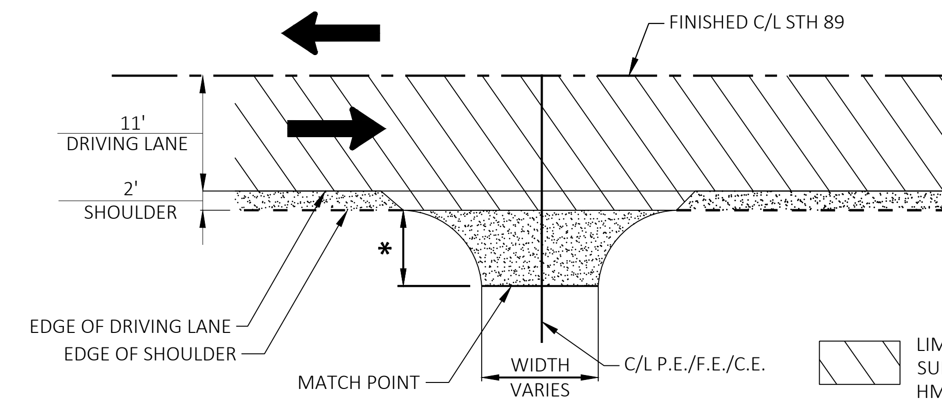


LIMITS OF REMOVING ASPHALTIC SURFACE MILLING 2" AND PLACE 2" HMA PAVEMENT 4 LT 58-28 S

LIMITS OF BASE AGGREGATE DENSE 3/4-INCH

LIMITS OF EXISTING ASPHALTIC SURFACE P.E./F.E./C.E. TO REMAIN

P.E./F.E./C.E. (EXISTING ASPHALT) DRIVEWAY DETAIL-RURAL

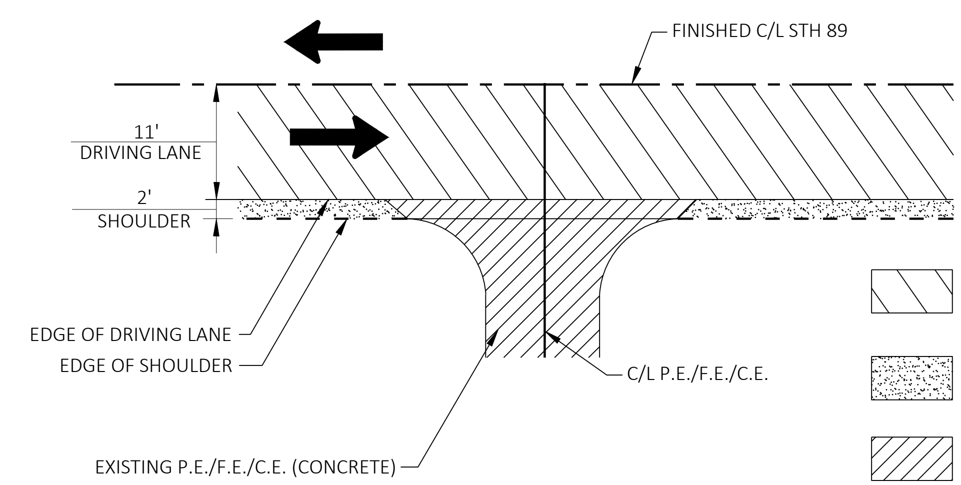


LIMITS OF REMOVING ASPHALTIC SURFACE MILLING 2" AND PLACE 2" HMA PAVEMENT 4 LT 58-28 S

LIMITS OF BASE AGGREGATE DENSE 3/4-INCH

P.E./F.E./C.E. (EXISTING B.A.D.) DRIVEWAY DETAIL-RURAL

* REPLACE IN KIND TO THE RADIUS POINTS OF EACH DRIVEWAY



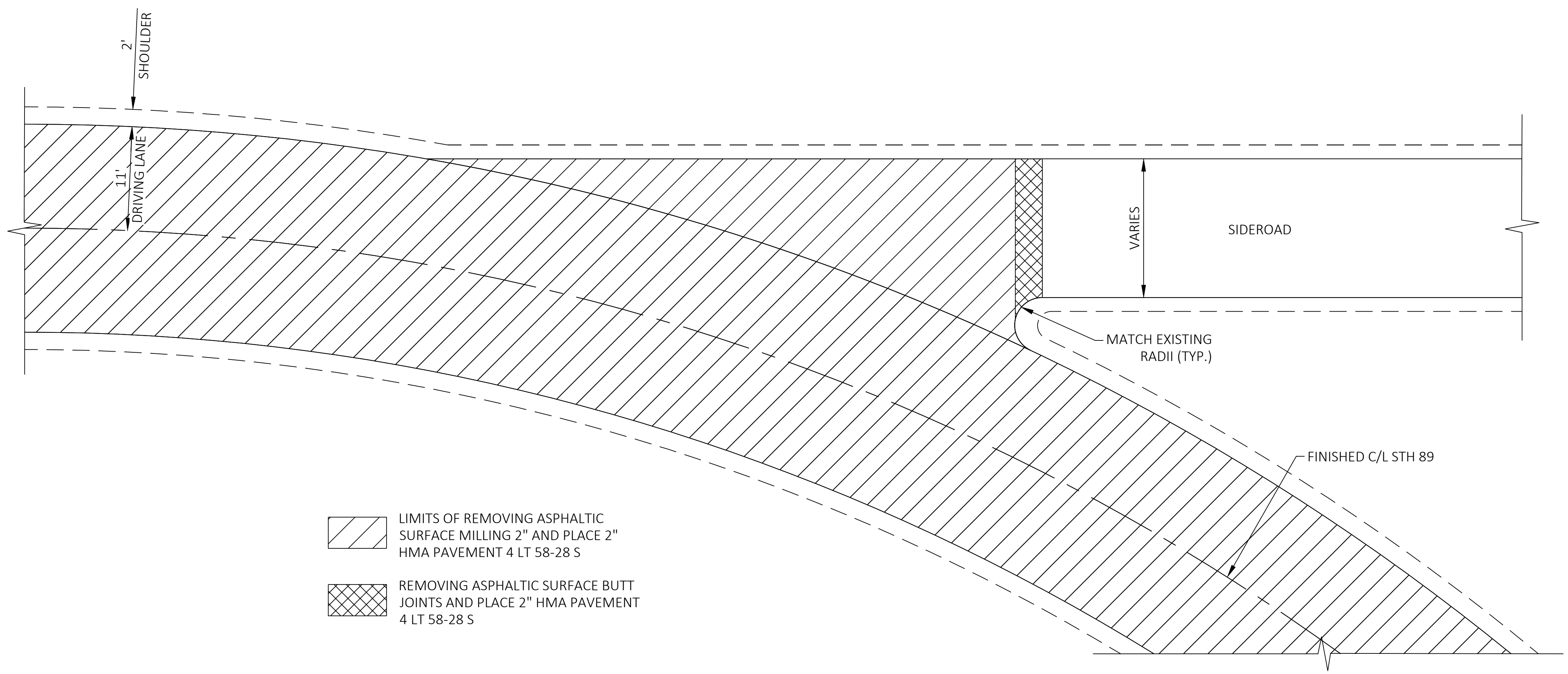
LIMITS OF REMOVING ASPHALTIC SURFACE MILLING 2" AND PLACE 2" HMA PAVEMENT 4 LT 58-28 S

LIMITS OF BASE AGGREGATE DENSE 3/4-INCH

LIMITS OF EXISTING CONCRETE SURFACE P.E./F.E./C.E. TO REMAIN

P.E./F.E./C.E. (EXISTING CONCRETE) DRIVEWAY DETAIL-RURAL

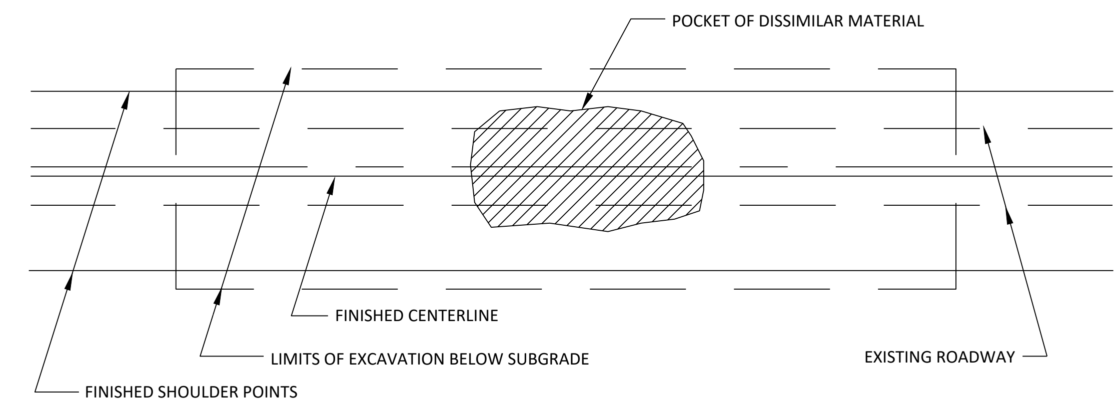
2



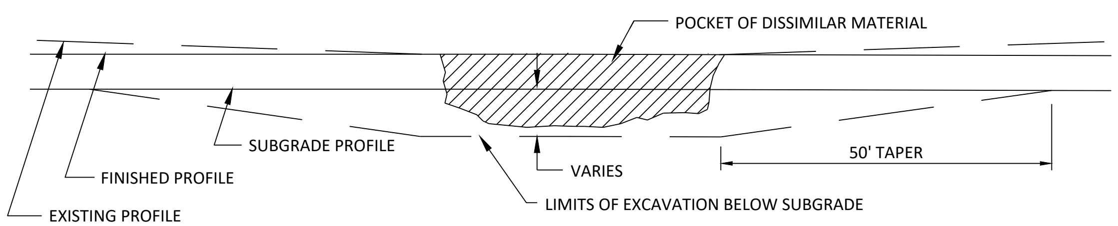
TYPICAL Y-SHAPED SIDEROAD DETAIL

TRI-COUNTY RD

FOX RD

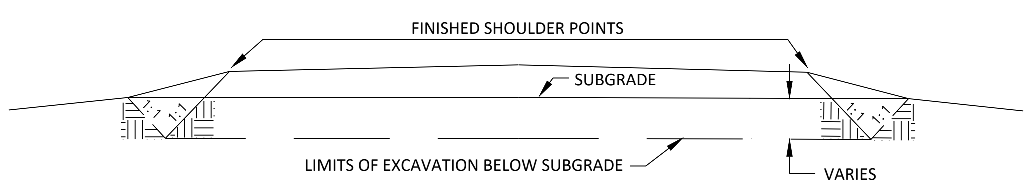


PLAN VIEW



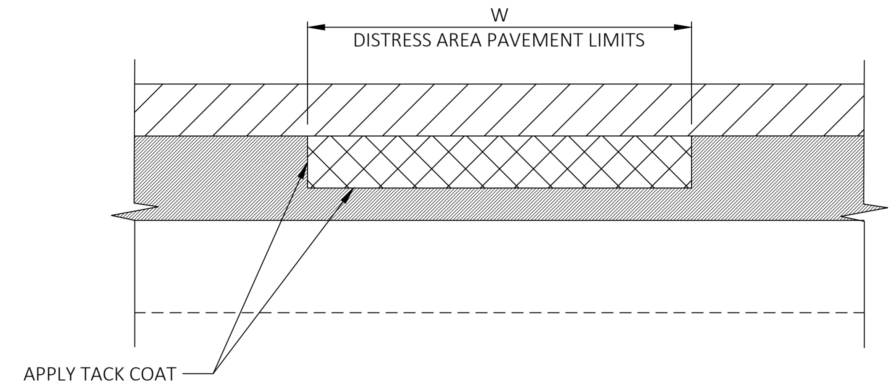
PROFILE VIEW

RURAL EXCAVATION BELOW SUBGRADE (E.B.S.)

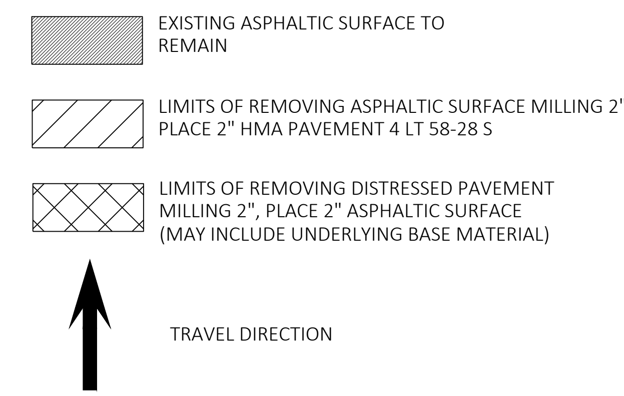


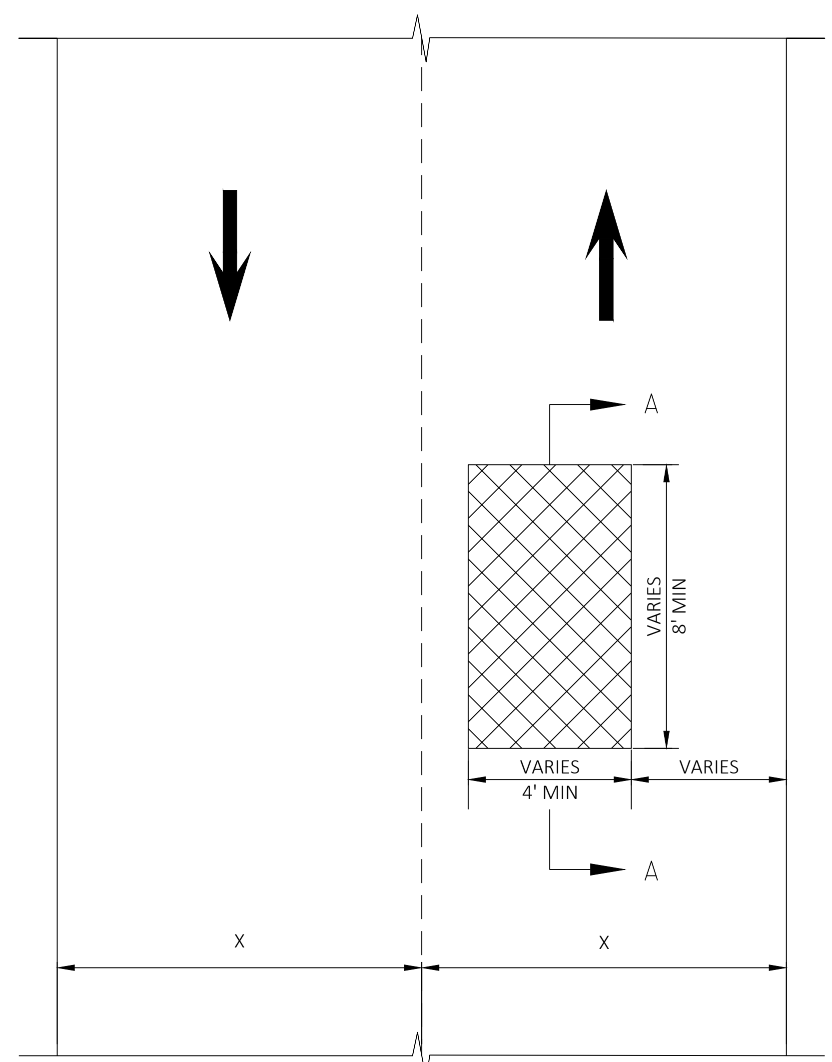
CROSS SECTION VIEW

1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.



REMOVING DISTRESS PAVEMENT MILLING
SECTION A-A





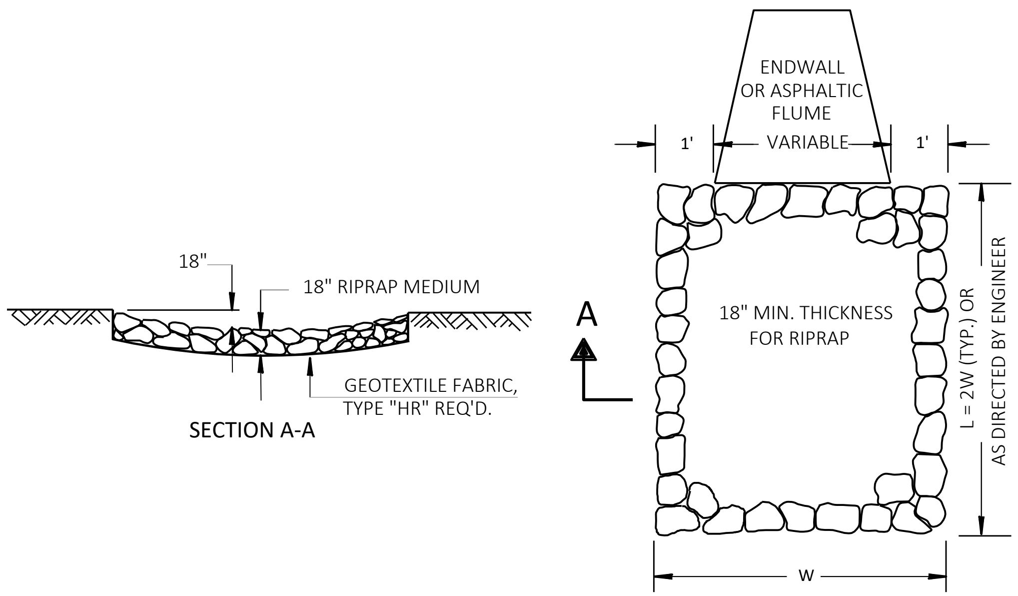
PLAN VIEW

STATION-STATION	W (FT)
62+40 - 62+60, RT.	8
67+50 - 68+00, LT.	8
68+50 - 72+00, RT.	6
80+00 - 83+00, RT.	6
84+70 - 85+50, RT.	11
87+00 - 88+50, RT.	6
117+20 - 119+20, LT.	8
118+50 - 120+00, RT.	7
119+20 - 120+00, LT.	6
120+50 - 121+00, LT.	7
125+00 - 127+50, LT.	6
129+50 - 133+50, RT.	8
130+50 - 133+00, LT.	6
135+00 - 135+50, LT.	6
145+20 - 147+50, LT.	4
152+00 - 153+50, RT.	6
179+00 - 181+50, LT.	6
184+00 - 187+50, LT.	6
185+00 - 188+50, RT.	6
189+00 - 190+00, LT.	6
192+50 - 193+00, LT.	6
193+50 - 194+50, LT.	8
197+00 - 198+00, LT.	6
204+00 - 207+50, RT.	6
216+00 - 216+50, RT.	8
216+50 - 219+50, RT.	6
221+80 - 222+80, LT.	5
227+50 - 229+00, RT.	8
233+00 - 336+50, LT.	6
247+00 - 248+00, LT.	6
249+50 - 250+50, LT.	5
255+00 - 257+00, RT.	5
257+00 - 257+50, LT.	6
258+00 - 261+00, LT.	6
261+00 - 262+50, LT.	8
263+00 - 264+00, LT.	10
271+20 - 272+00, LT.	6
274+00 - 275+00, LT. & RT.	22
277+00 - 278+00, LT. & RT.	22
280+00 - 281+50, RT.	8
284+00 - 285+00, RT.	6
304+00 - 310+50, LT.	6
310+50 - 312+00, LT. & RT.	22
318+50 - 319+50, LT.	6
326+00 - 328+50, RT.	6
333+00 - 335+00, LT.	6
347+50 - 350+50, LT.	6
351+50 - 355+00, LT.	6

(CONTINUED)

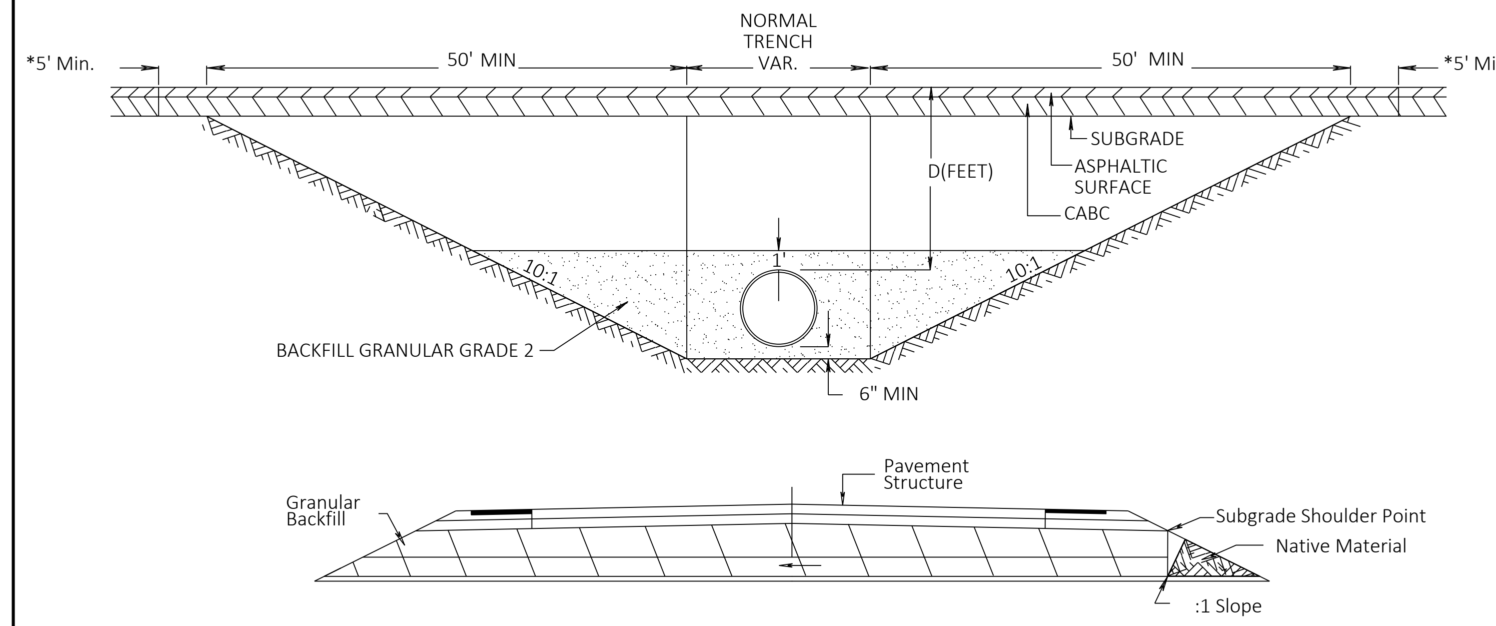
STATION-STATION	W (FT)
356+00 - 356+50, LT.	6
357+50 - 359+00, LT.	6
360+00 - 362+50, LT.	6
361+00 - 367+00, RT.	6
363+00 - 365+00, LT.	6
369+00 - 371+00, LT.	5
374+00 - 377+50, LT.	6
378+00 - 380+00, LT.	6
384+00 - 387+00, RT.	6
386+00 - 388+00, LT.	5
391+00 - 393+00, LT.	6
391+00 - 391+10, RT.	11
399+30 - 400+30, LT.	8
406+00 - 408+00, LT.	8
408+00 - 410+00, LT.	5
411+80 - 412+00, LT. & RT.	22
421+00 - 423+50, LT.	5
428+50 - 429+50, LT. & RT.	22
436+50 - 437+50, LT. & RT.	22
440+00 - 440+50, RT.	11
446+50 - 447+00, LT.	6
448+50 - 449+00, LT.	5
451+50 - 452+00, LT. & RT.	22
457+50 - 458+00, RT.	8
463+00 - 453+40, LT. & RT.	22
465+00 - 466+30, LT. & RT.	22
469+50 - 469+70, LT. & RT.	22
471+00 - 471+20, LT. & RT.	22
472+00 - 474+50, RT.	4
472+50 - 474+00, LT.	6
474+00 - 475+00, LT	5
475+00 - 476+00, LT. & RT.	22
478+50 - 479+50, LT. & RT.	22
484+00 - 485+20, LT.	11
487+00 - 490+00, LT.	11
495+00 - 496+50, LT. & RT.	16
496+50 - 498+00, LT. & RT.	10
502+00 - 504+00, LT. & RT.	22
521+00 - 522+00, LT.	6
524+00 - 525+00, LT.	6
537+00 - 538+00, LT.	6
545+25 - 545+75, LT. & RT.	22
547+00 - 548+00, LT.	11
548+00 - 549+00, LT.	8
551+50 - 552+00, LT. & RT.	22
566+00 - 567+00, LT.	6
576+00 - 577+00, LT. & RT.	22

NOTE: EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD.



RIPRAP MEDIUM TREATMENT AT CULVERTS AND ASPHALTIC FLUMES

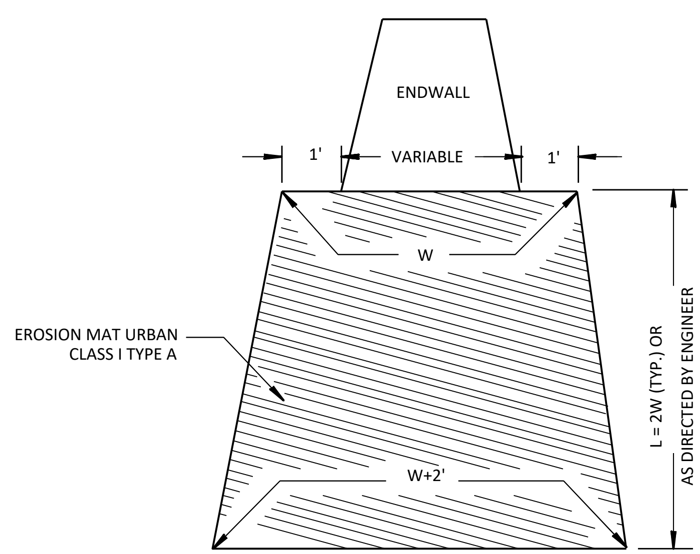
STA. 160+80, LT.
STA. 161+86, RT.
STA. 184+81, RT.
STA. 567+70, RT.



CROSS DRAIN INSTALLATION DETAIL

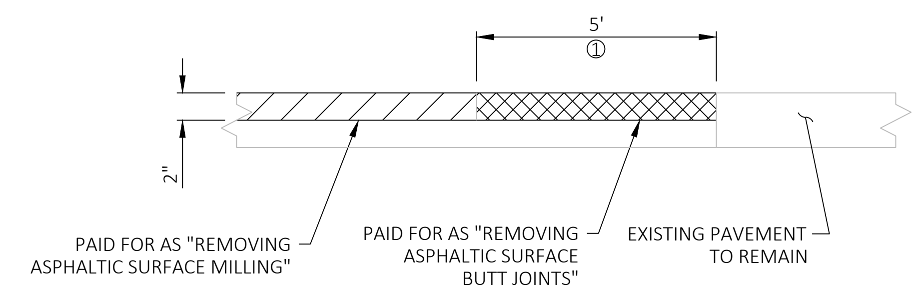
FOR D ≤ 5'

* Pavement Removal Limits (Typical)



EROSION MAT URBAN CLASS I TYPE A TREATMENT AT CULVERTS

SEE EROSION CONTROL PLAN
SHEET FOR LOCATION AND DIMENSIONS

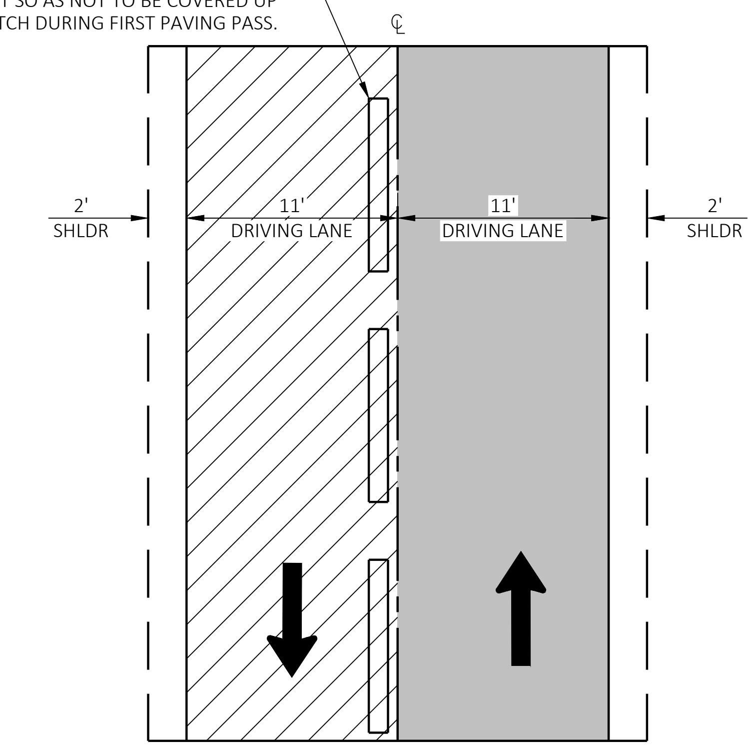


REMOVING ASPHALTIC SURFACE BUTT JOINTS DETAIL

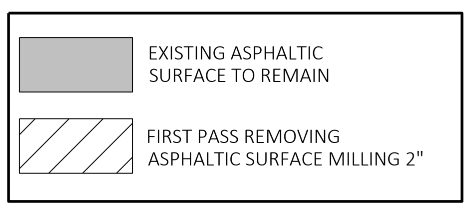
STA. 62+00	SKALITSKY LN
STA. 111+09.69	CTH V
STA. 116+14.80	KASPER RD
TRI-COUNTY RD	HOENE RD
SUN PRAIRIE RD (EAST)	PRIEM RD
SUN PRAIRIE RD (WEST)	SYDO RD
YORK CENTER RD (EAST)	COLUMBUS RD
YORK CENTER RD (WEST)	FOX RD
RAITH LN	AVALON RD
MULLER RD (EAST)	STA. 578+31.67
MULLER RD (WEST)	

① LIMITS OF REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D.

TEMPORARY MARKING LINE PAINT 6-INCH (SINGLE LINE 4' SKIPS) TO BE PLACED ON MILLED SURFACE SAME DAY AS FIRST MILLING PASS OPERATION. PLACE PAINT SO AS NOT TO BE COVERED UP BY PAVING NOTCH DURING FIRST PAVING PASS.

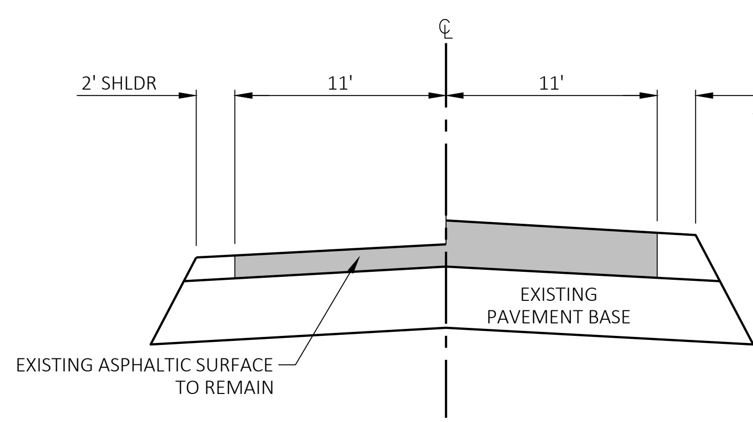


PLAN VIEW



NOTES:
PLACE "NO PASSING ZONE (R4-1, 24"x30"), "UNEVEN LANES" (W8-11, 36"x36"), "LOW SHOULDER" (W8-9, 36"x36"), OR "SHOULDER DROPOFF" (W8-9A, 36"x36") EVERY 2 MILES ALONG THE PROJECT LENGTH.

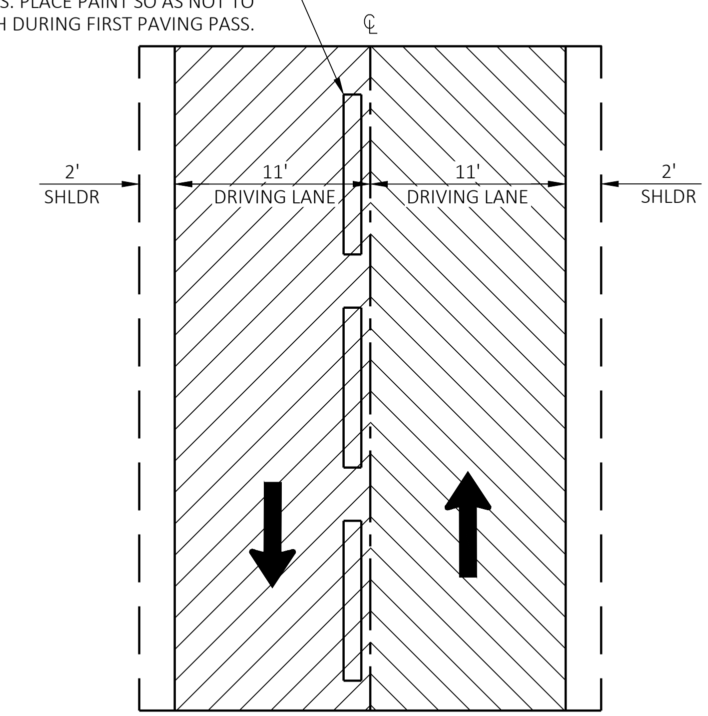
REFER TO STANDARD DETAIL DRAWINGS "TEMPORARY LONGITUDINAL PAVEMENT MARKING", "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION", AND "TRAFFIC CONTROL, DROP-OFF SIGNING" FOR ADDITIONAL INFORMATION



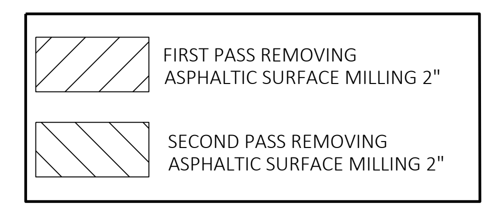
CROSS SECTION VIEW

FIRST MILLING PASS DETAIL

TEMPORARY MARKING LINE PAINT 6-INCH (SINGLE LINE 4' SKIPS) PLACED AFTER FIRST MILLING PASS TO REMAIN FOR SECOND MILLING PASS AND FIRST PAVING PASS. PLACE PAINT SO AS NOT TO BE COVERED UP BY PAVING NOTCH DURING FIRST PAVING PASS.

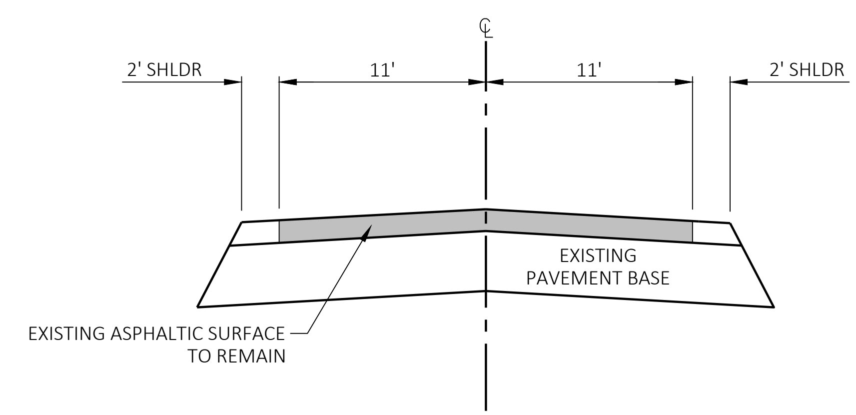


PLAN VIEW



NOTES:
PLACE "NO PASSING ZONE (R4-1, 24"x30"), "UNEVEN LANES" (W8-11, 36"x36"), "LOW SHOULDER" (W8-9, 36"x36"), OR "SHOULDER DROPOFF" (W8-9A, 36"x36") EVERY 2 MILES ALONG THE PROJECT LENGTH.

REFER TO STANDARD DETAIL DRAWINGS "TEMPORARY LONGITUDINAL PAVEMENT MARKING", "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION", AND "TRAFFIC CONTROL, DROP-OFF SIGNING" FOR ADDITIONAL INFORMATION

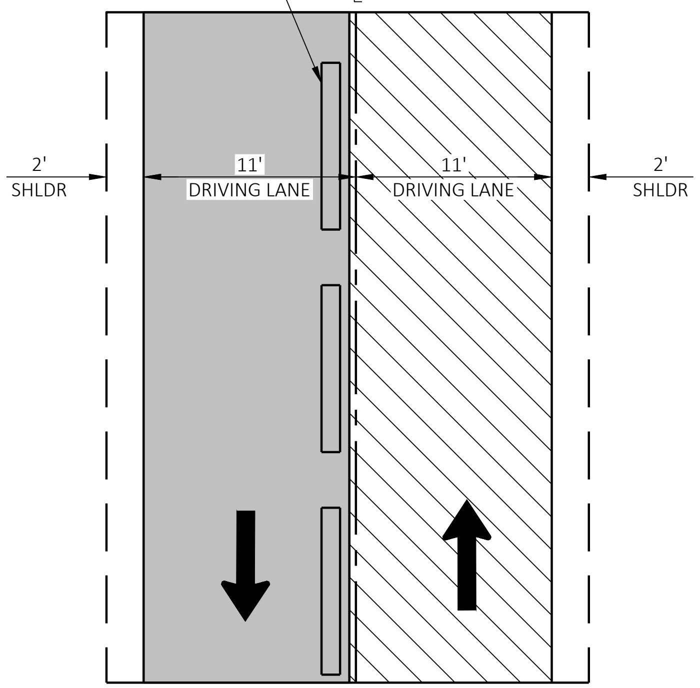


CROSS SECTION VIEW

SECOND MILLING PASS DETAIL

2

TEMPORARY MARKING LINE PAINT 6-INCH (SINGLE LINE 4' SKIPS) PLACED AFTER FIRST MILLING PASS TO REMAIN FOR SECOND MILLING PASS AND FIRST PAVING PASS. PLACE PAINT SO AS NOT TO BE COVERED UP BY PAVING NOTCH DURING FIRST PAVING PASS.

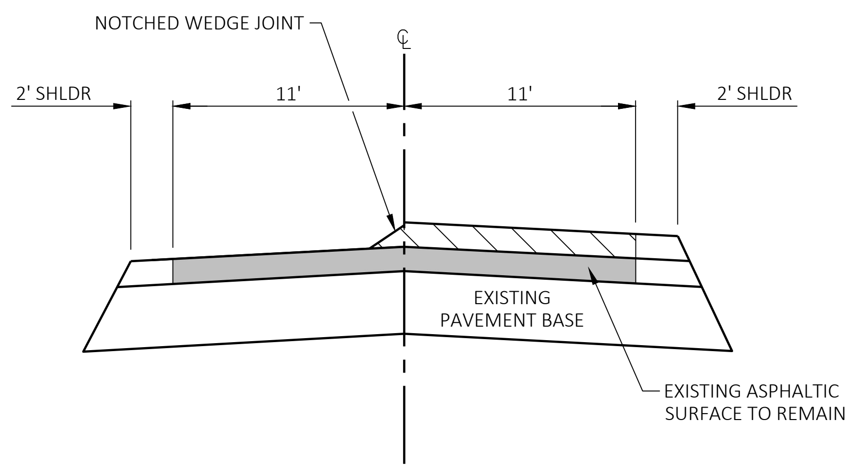


PLAN VIEW

(hatch)	FIRST PASS 2" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS
(shaded)	FIRST PASS REMOVING ASPHALTIC SURFACE MILLING 2"

NOTES:
PLACE "NO PASSING ZONE (R4-1, 24"x30"), "UNEVEN LANES" (W8-11, 36"x36"), "LOW SHOULDER" (W8-9, 36"x36"), OR "SHOULDER DROPOFF" (W8-9A, 36"x36") EVERY 2 MILES ALONG THE PROJECT LENGTH.

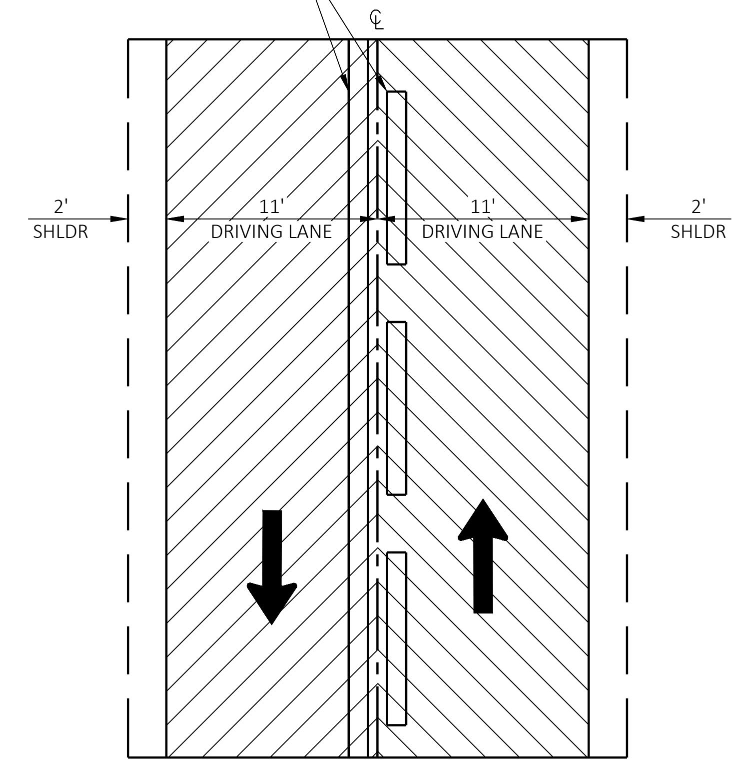
REFER TO STANDARD DETAIL DRAWINGS "TEMPORARY LONGITUDINAL PAVEMENT MARKING", "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION", AND "TRAFFIC CONTROL, DROP-OFF SIGNING" FOR ADDITIONAL INFORMATION



CROSS SECTION VIEW

FIRST PAVING PASS DETAIL

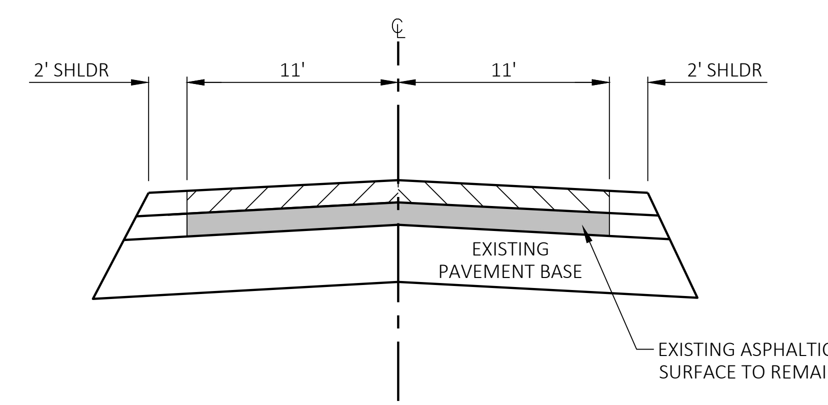
MARKING LINE SAME DAY EPOXY 6-INCH TO BE PLACED SAME DAY AS SECOND PAVING PASS OPERATION.



PLAN VIEW

(hatch)	FIRST PASS 2" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS
(hatch)	SECOND PASS 2" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS

NOTE: REFER TO STANDARD DETAIL DRAWING "LONGITUDINAL MARKING (MAINLINE)" FOR ADDITIONAL INFORMATION



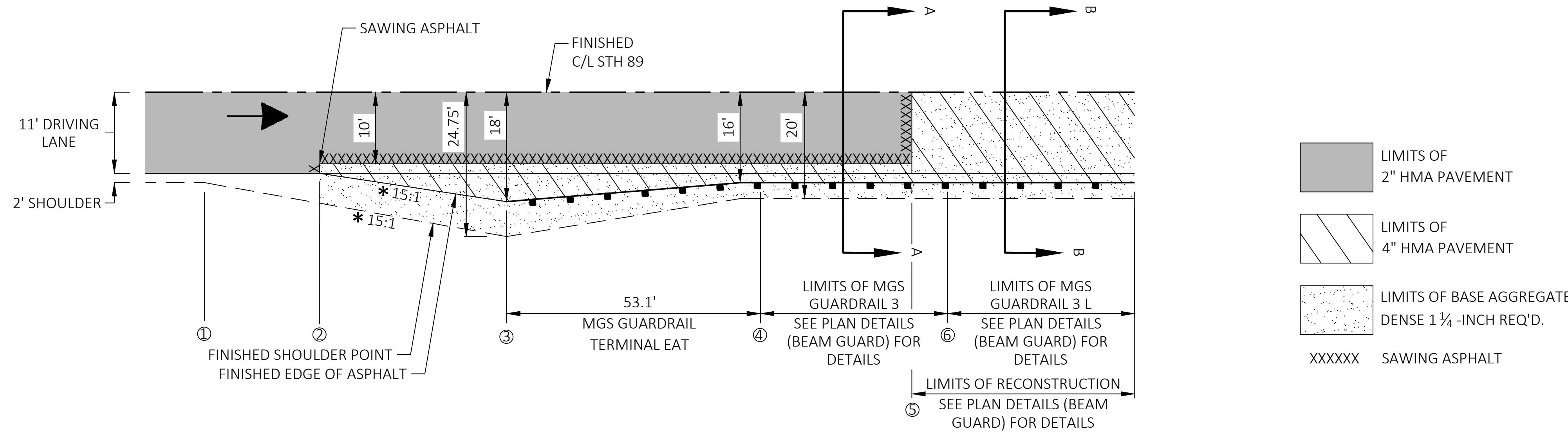
CROSS SECTION VIEW

SECOND PAVING PASS DETAIL

2

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CONSTRUCTION DETAILS: PAVING SEQUENCE OF OPERATIONS	SHEET 12	E

2

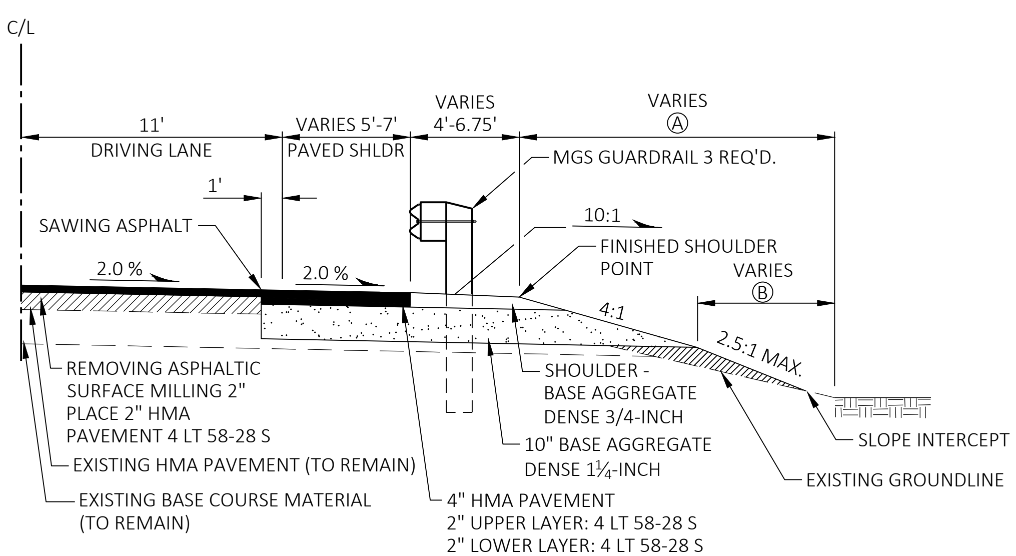


* 15:1 TAPER EXCEPT WHERE NOTED.
SEE PLAN DETAILS (BEAMGUARD) FOR MORE INFORMATION.

BEAMGUARD LAYOUT DETAIL

BEAMGUARD LAYOUT TABLE

		STATION					
STATION-STATION	LOCATION	①	②	③	④	⑤	⑥
249+32 - 251+93	MAINLINE, RT.	249+32	249+71	250+41	250+94	251+87	251+93
249+50 - 251+92	MAINLINE, LT.	249+50	250+09	251+14	251+67	251+87	251+92
252+93 - 255+35	MAINLINE, RT.	255+35	254+77	253+72	253+19	253+50	252+93
252+92 - 255+96	MAINLINE, LT.	255+96	255+37	254+32	253+79	253+50	252+92



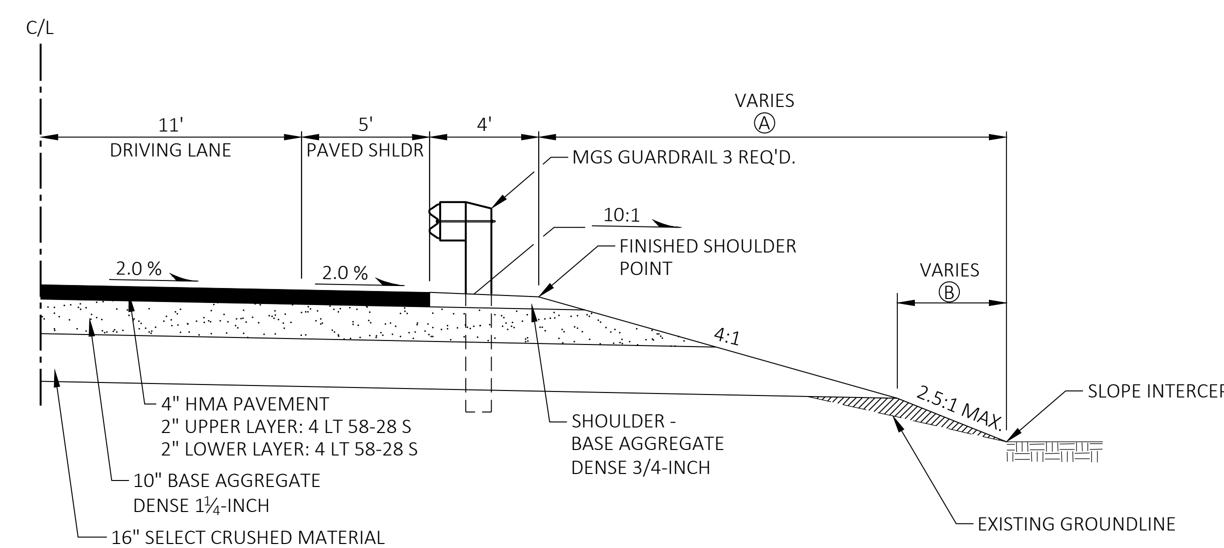
SECTION A-A

BASE AGGREGATE DENSE 1¼-INCH REQ'D.

FILL MATERIAL

Ⓐ LIMITS OF FERTILIZER TYPE B AND SEEDING MIXTURE NO. 20 OR NO. 60 (AS DIRECTED BY THE ENGINEER).

Ⓑ LIMITS OF SALVAGED TOPSOIL AND EROSION MAT URBAN CLASS 1 TYPE A



SECTION B-B

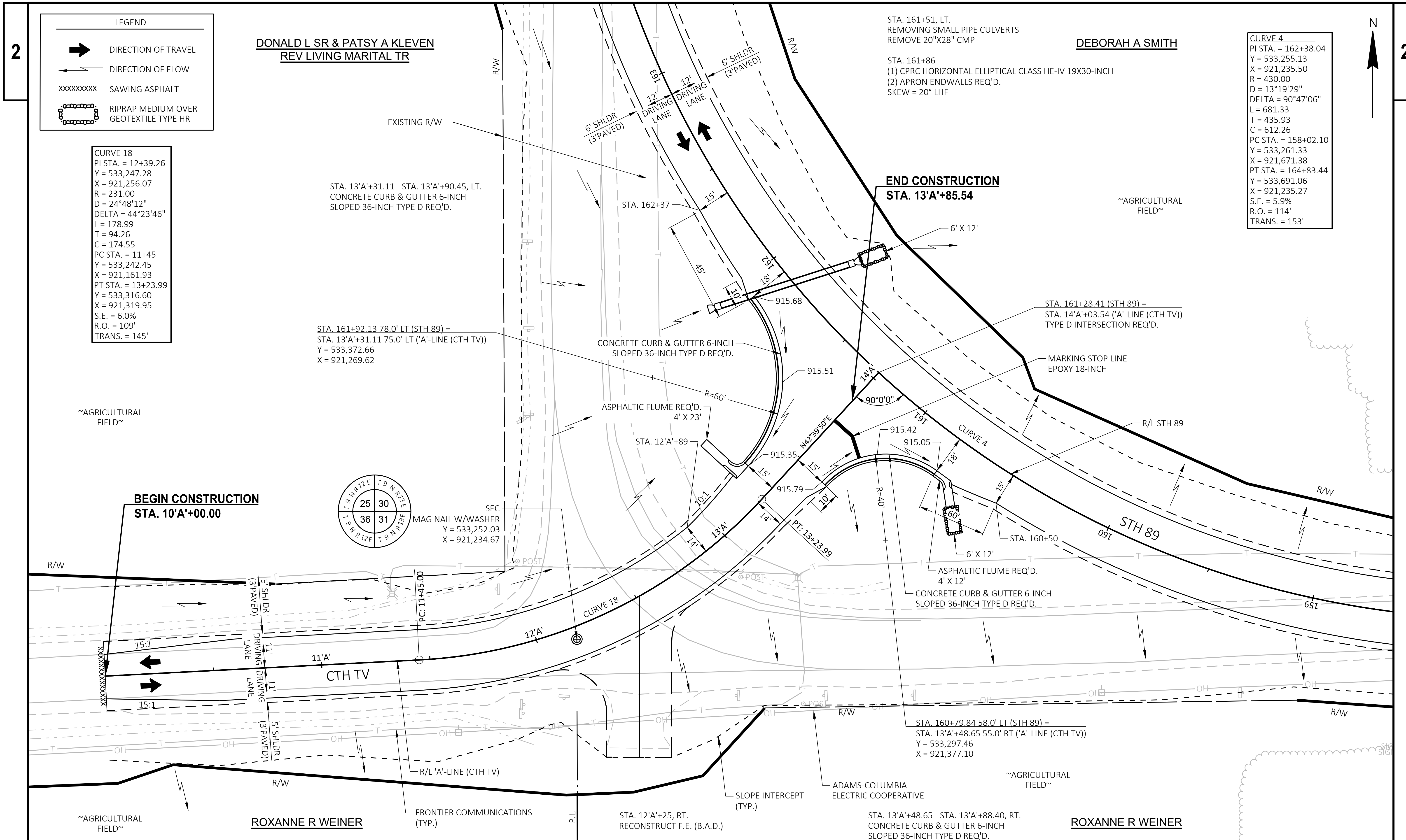
BASE AGGREGATE DENSE 1¼-INCH REQ'D.

FILL MATERIAL

Ⓐ LIMITS OF FERTILIZER TYPE B AND SEEDING MIXTURE NO. 20 OR NO. 60 (AS DIRECTED BY THE ENGINEER).

Ⓑ LIMITS OF SALVAGED TOPSOIL AND EROSION MAT URBAN CLASS 1 TYPE A (AS DIRECTED BY THE ENGINEER).

2

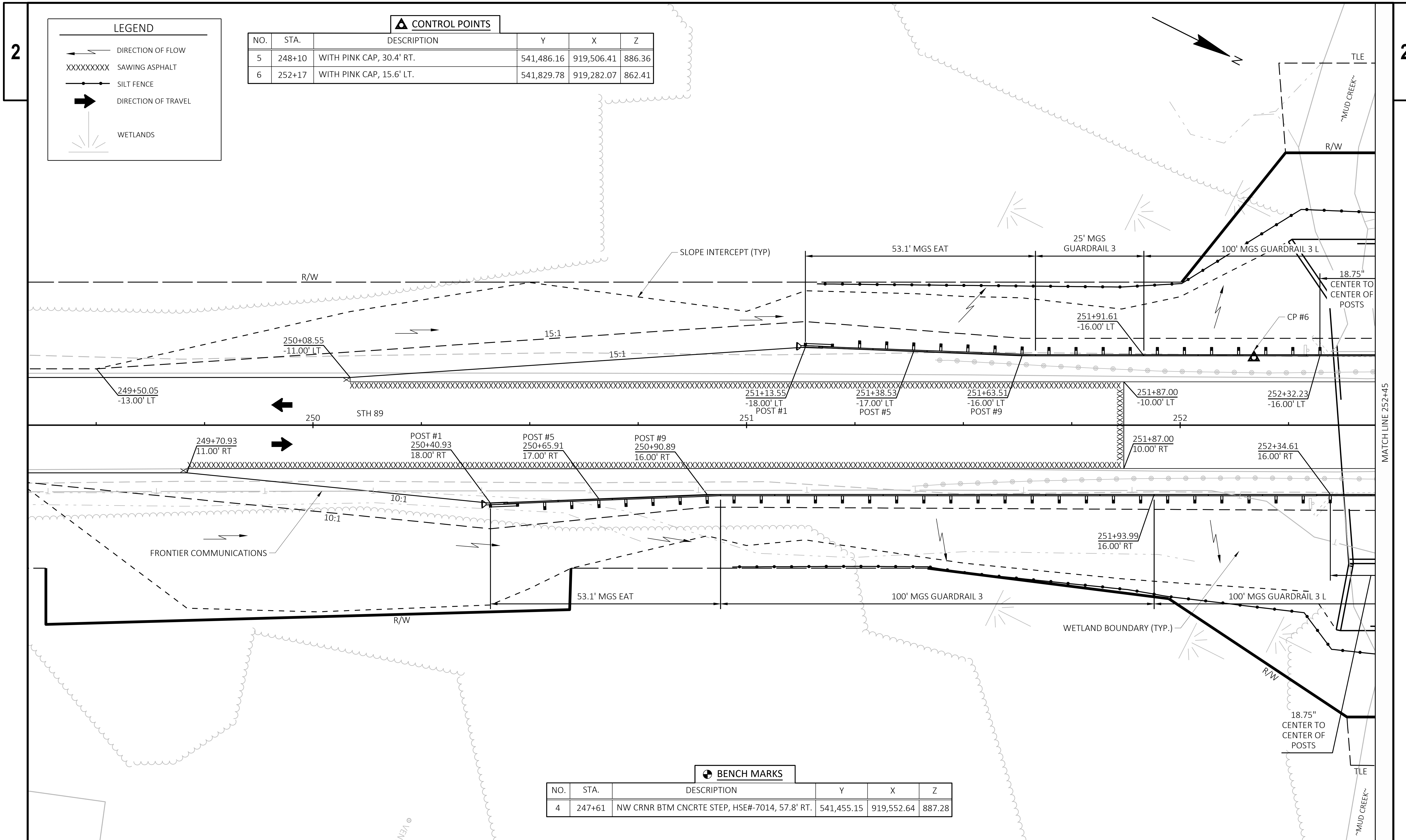


PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	INTERSECTION DETAILS	SHEET 14	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\DETAILS\W11659_INTERSECTION DETAILS.DWG
LAYOUT NAME - Layout1
PLOT DATE : 5/30/2023 9:20 AM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

CONTROL POINTS

NO.	STA.	DESCRIPTION	Y	X	Z
5	248+10	WITH PINK CAP, 30.4' RT.	541,486.16	919,506.41	886.36
6	252+17	WITH PINK CAP, 15.6' LT.	541,829.78	919,282.07	862.41



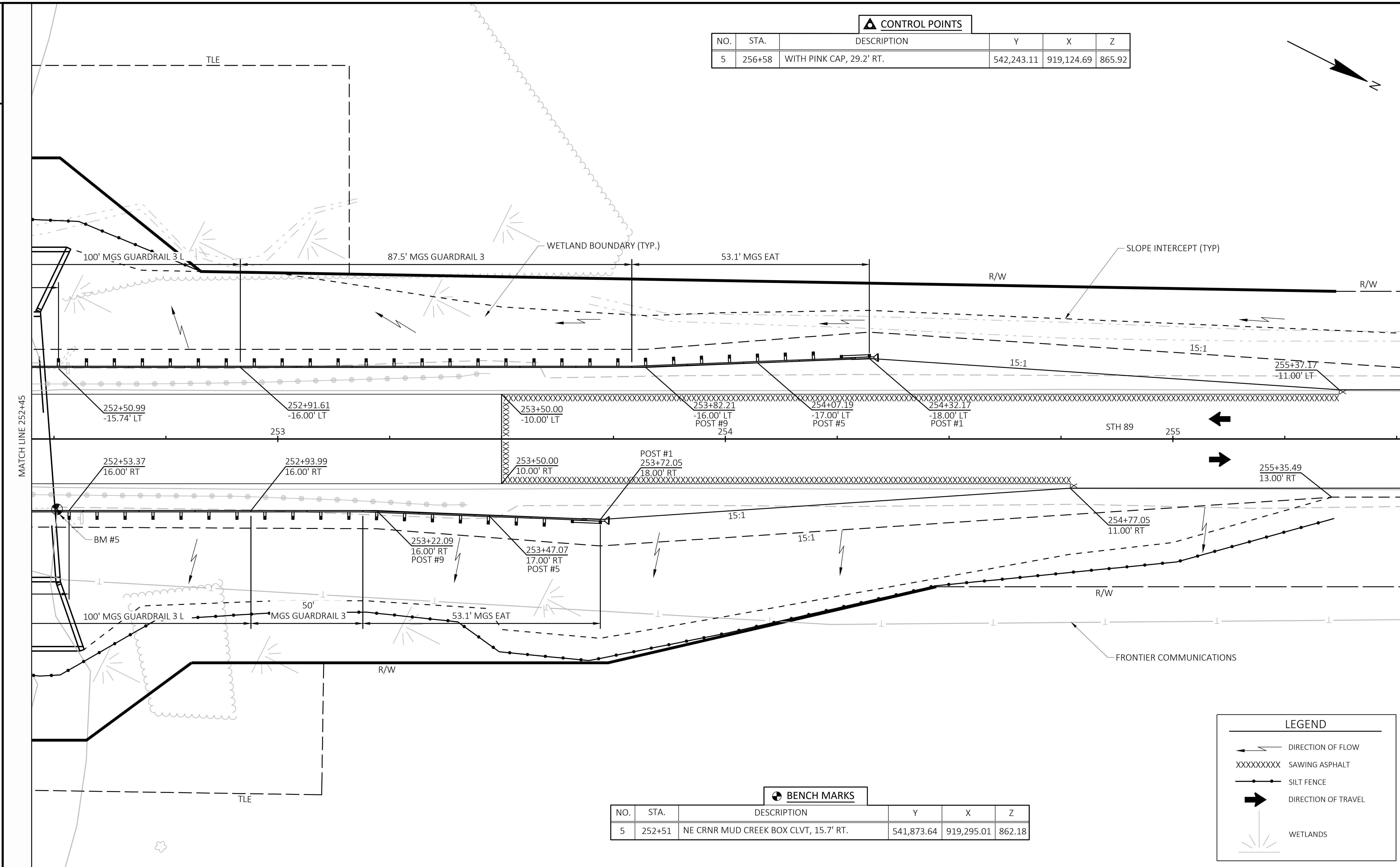
BENCH MARKS

NO.	STA.	DESCRIPTION	Y	X	Z
4	247+61	NW CRNR BTM CNCRTE STEP, HSE#-7014, 57.8' RT.	541,455.15	919,552.64	887.28

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN DETAILS - BEAMGUARD	SHEET 15	E

NO.	STA.	DESCRIPTION	Y	X	Z
5	256+58	WITH PINK CAP, 29.2' RT.	542,243.11	919,124.69	865.92

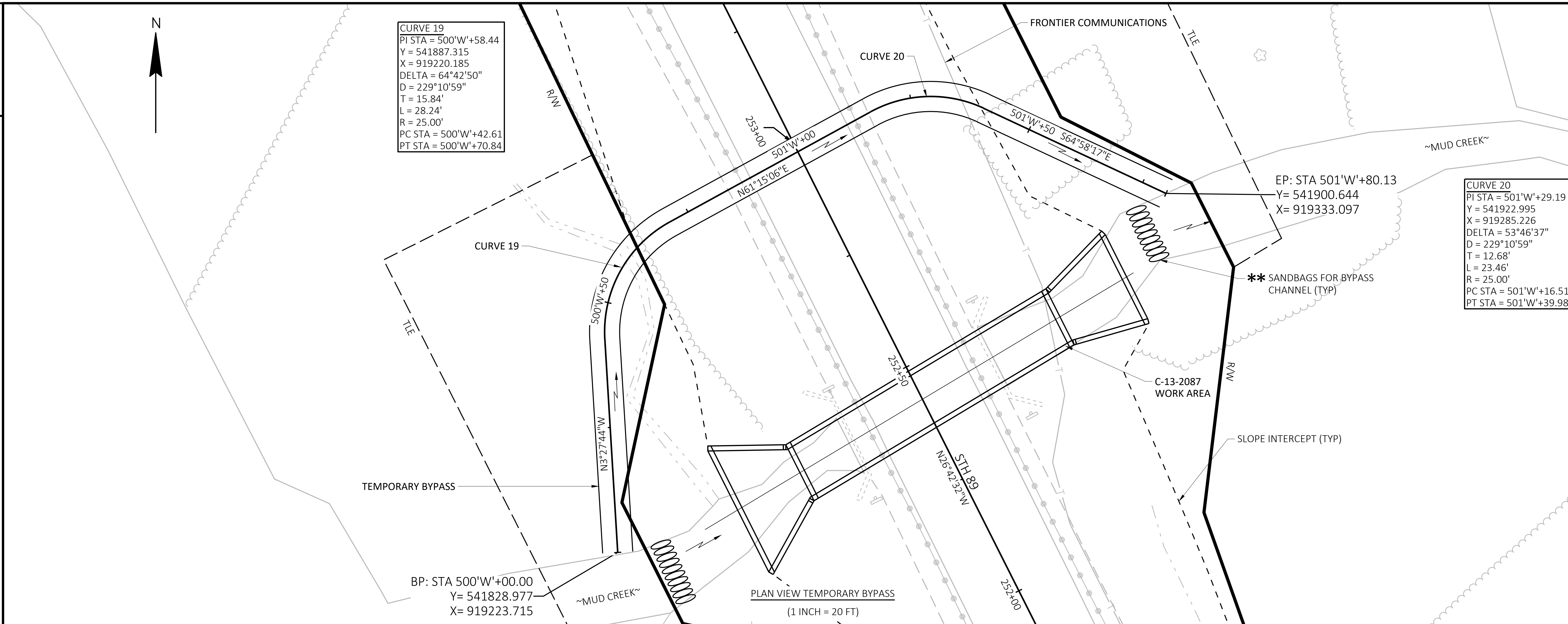
CONTROL POINTS



BENCH MARKS

NO.	STA.	DESCRIPTION	Y	X	Z
5	252+51	NE CRNR MUD CREEK BOX CLVT, 15.7' RT.	541,873.64	919,295.01	862.18

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN DETAILS - BEAMGUARD	SHEET 16	E

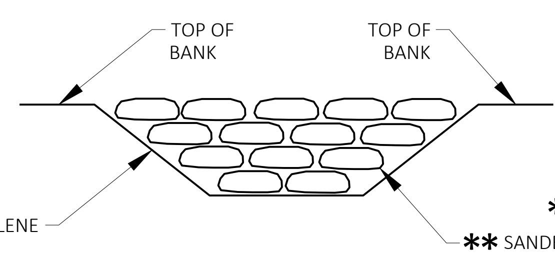


PLAN VIEW TEMPORARY BYPASS

(1 INCH = 20 FT)

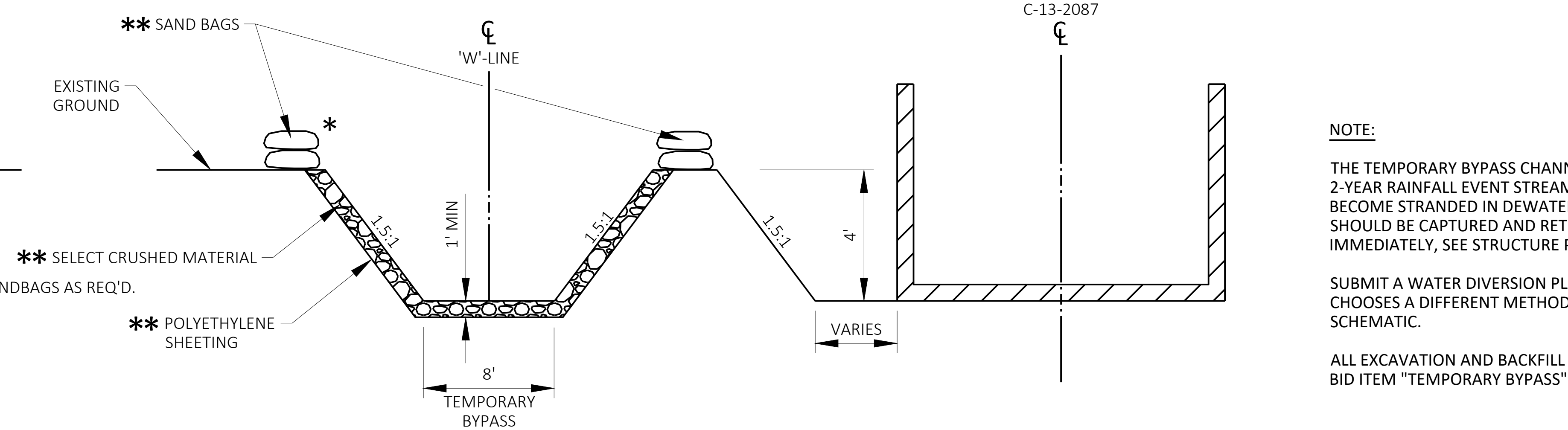
** CONSIDERED INCIDENTAL TO THE BID ITEM "TEMPORARY BYPASS".

* EDGES OF CHANNEL LINER SHALL BE TRENCHED AND SECURED BY SAND BAGS.



TYPICAL SANDBAG INSTALLATION

IN EXISTING CHANNEL



TYPICAL SECTION TEMPORARY BYPASS

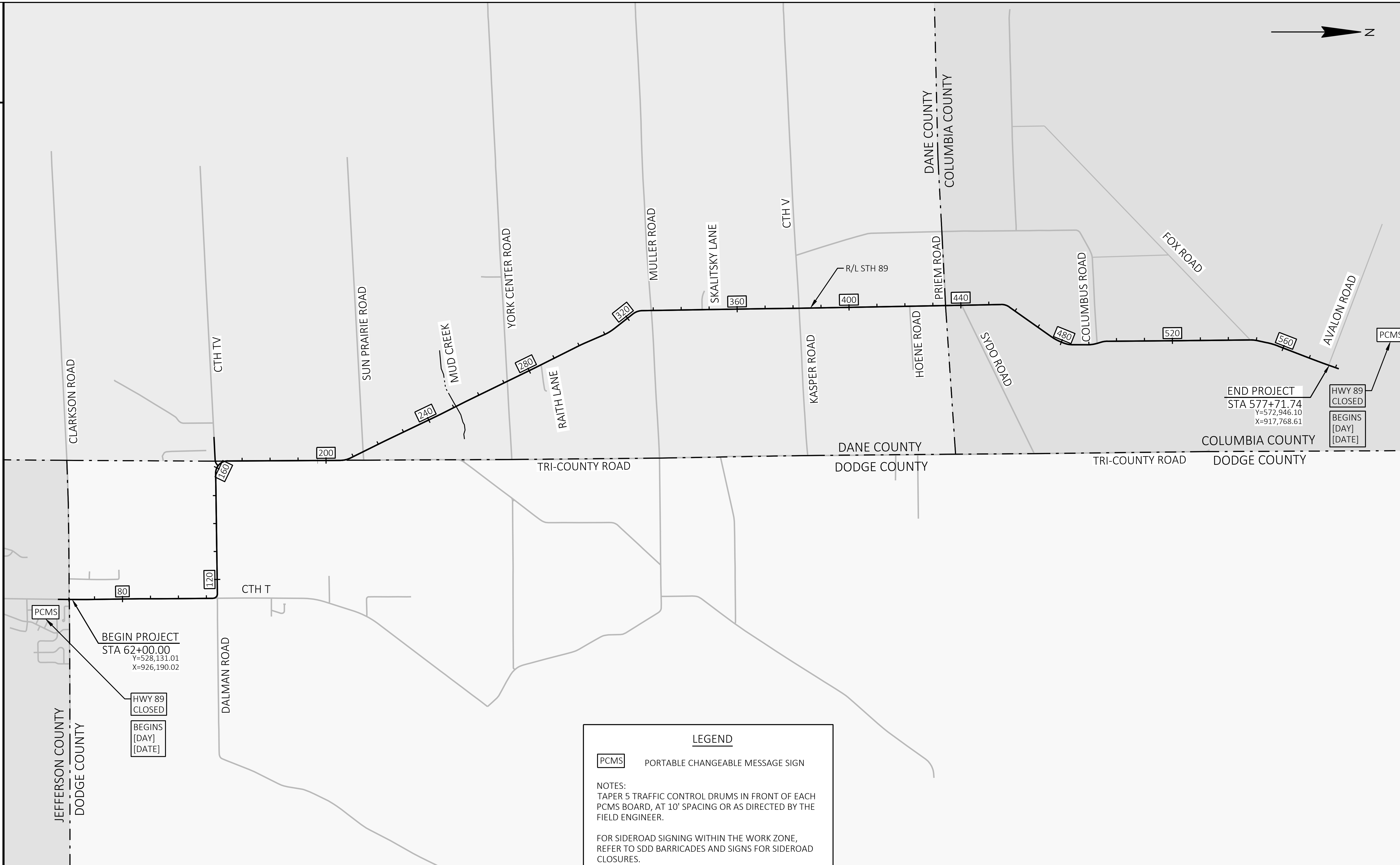
(1 INCH = 10 FT)

NOTE:

THE TEMPORARY BYPASS CHANNEL MUST BE CAPABLE OF DIVERTING THE 2-YEAR RAINFALL EVENT STREAM FLOW, FISH AND AQUATIC SPECIES THAT BECOME STRANDED IN DEWATERED AREAS OR TEMPORARY CHANNELS SHOULD BE CAPTURED AND RETURNED TO THE ACTIVE CHANNEL IMMEDIATELY, SEE STRUCTURE PLANS FOR HYDRAULIC INFORMATION.

SUBMIT A WATER DIVERSION PLAN TO THE ENGINEER IF CONTRACTOR CHOOSES A DIFFERENT METHOD THAN WHAT IS SHOWN IN THE SCHEMATIC.

ALL EXCAVATION AND BACKFILL SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "TEMPORARY BYPASS".



LEGEND

PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

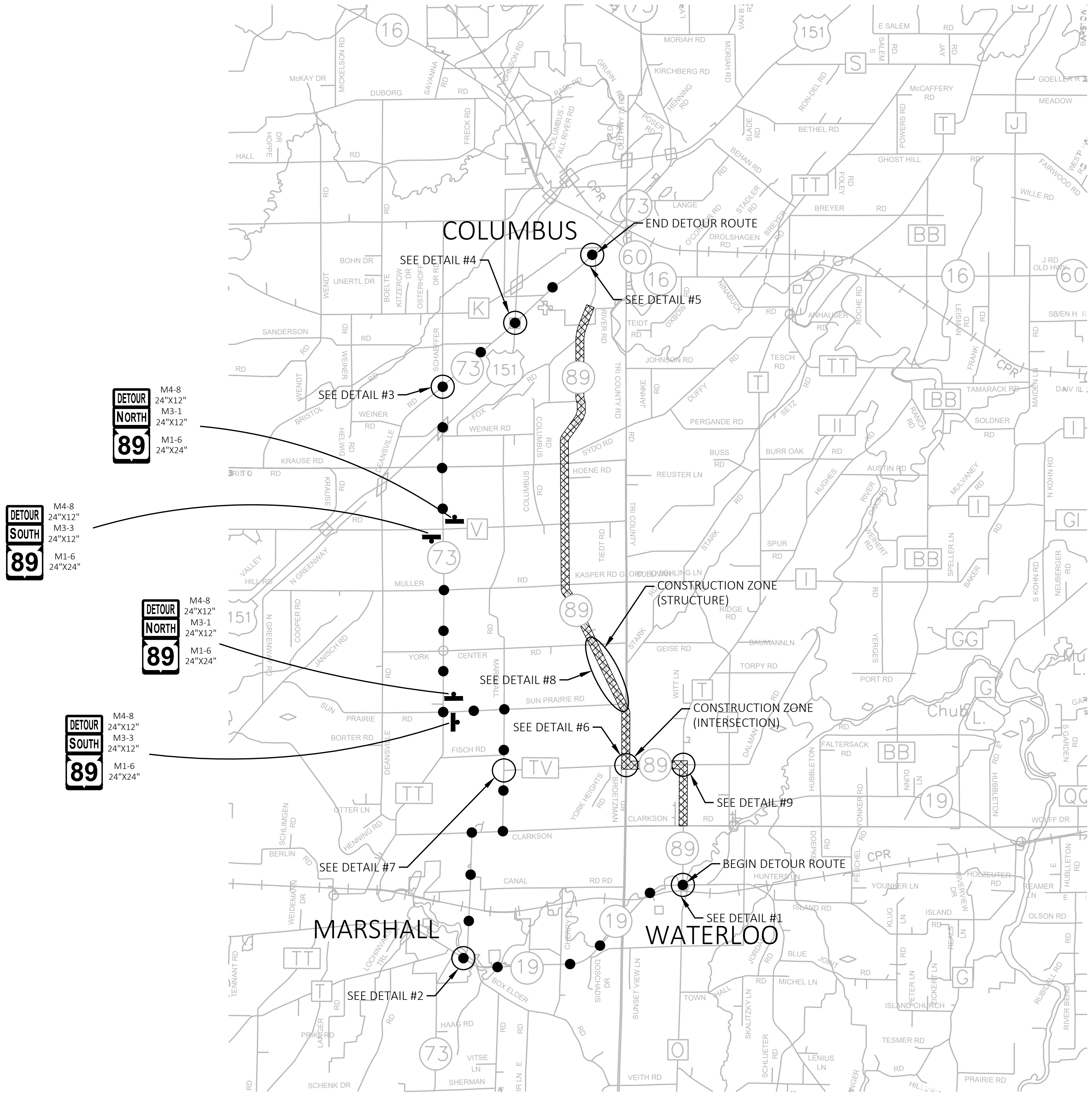
NOTES:
TAPER 5 TRAFFIC CONTROL DRUMS IN FRONT OF EACH PCMS BOARD, AT 10' SPACING OR AS DIRECTED BY THE FIELD ENGINEER.

FOR SIDEROAD SIGNING WITHIN THE WORK ZONE, REFER TO SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES.

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	TRAFFIC CONTROL PCMS	SHEET	E

2

N

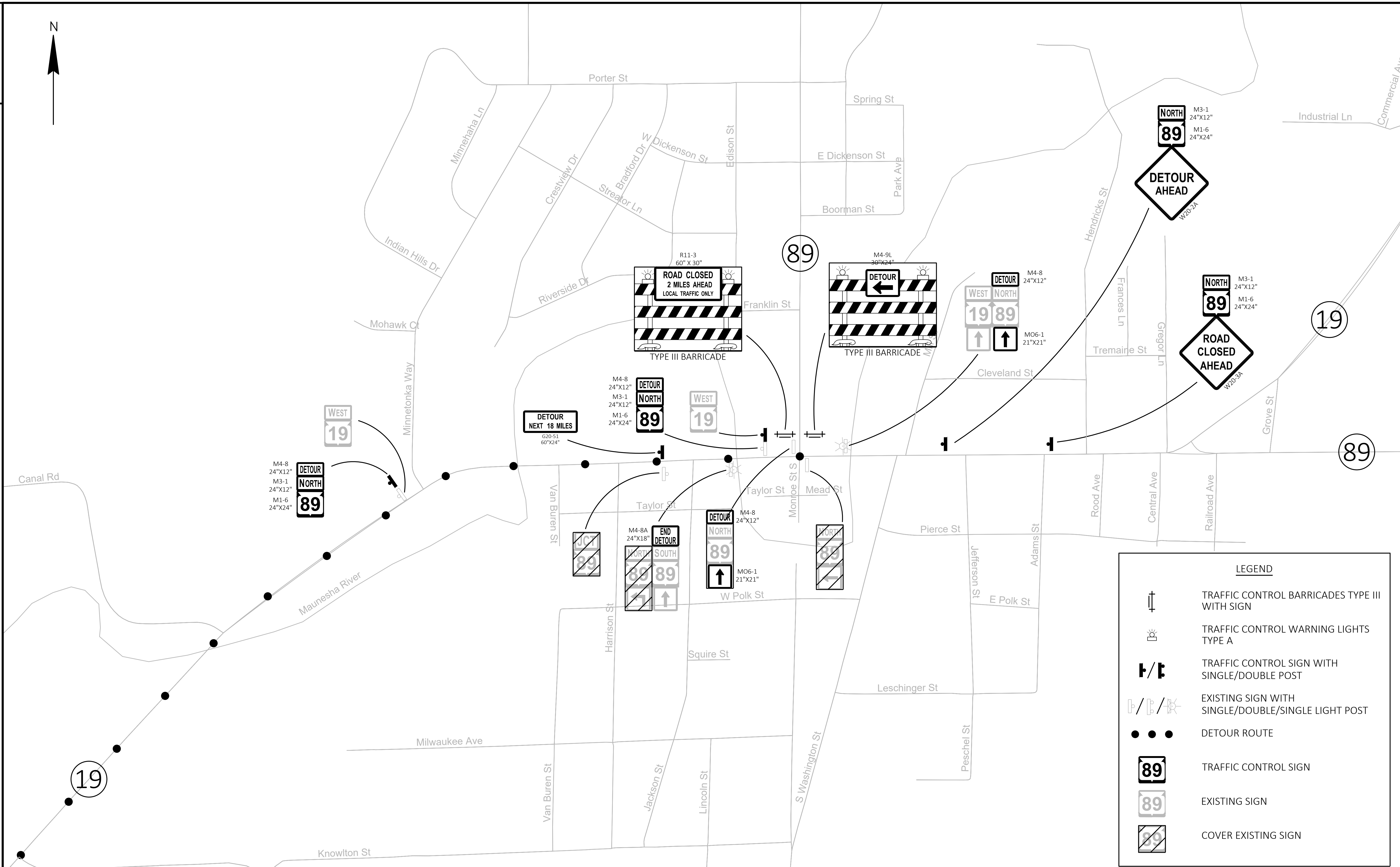


LEGEND

- TRAFFIC CONTROL BARRICADES TYPE III WITH SIGN
- TRAFFIC CONTROL WARNING LIGHTS TYPE A
- TRAFFIC CONTROL SIGN WITH SINGLE/DOUBLE POST
- EXISTING SIGN WITH SINGLE/DOUBLE/SINGLE LIGHT POST
- DETOUR ROUTE
- WORK ZONE
- 89 TRAFFIC CONTROL SIGN
- 89 EXISTING SIGN
- 89 COVER EXISTING SIGN

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS OVERVIEW	SHEET 19	E

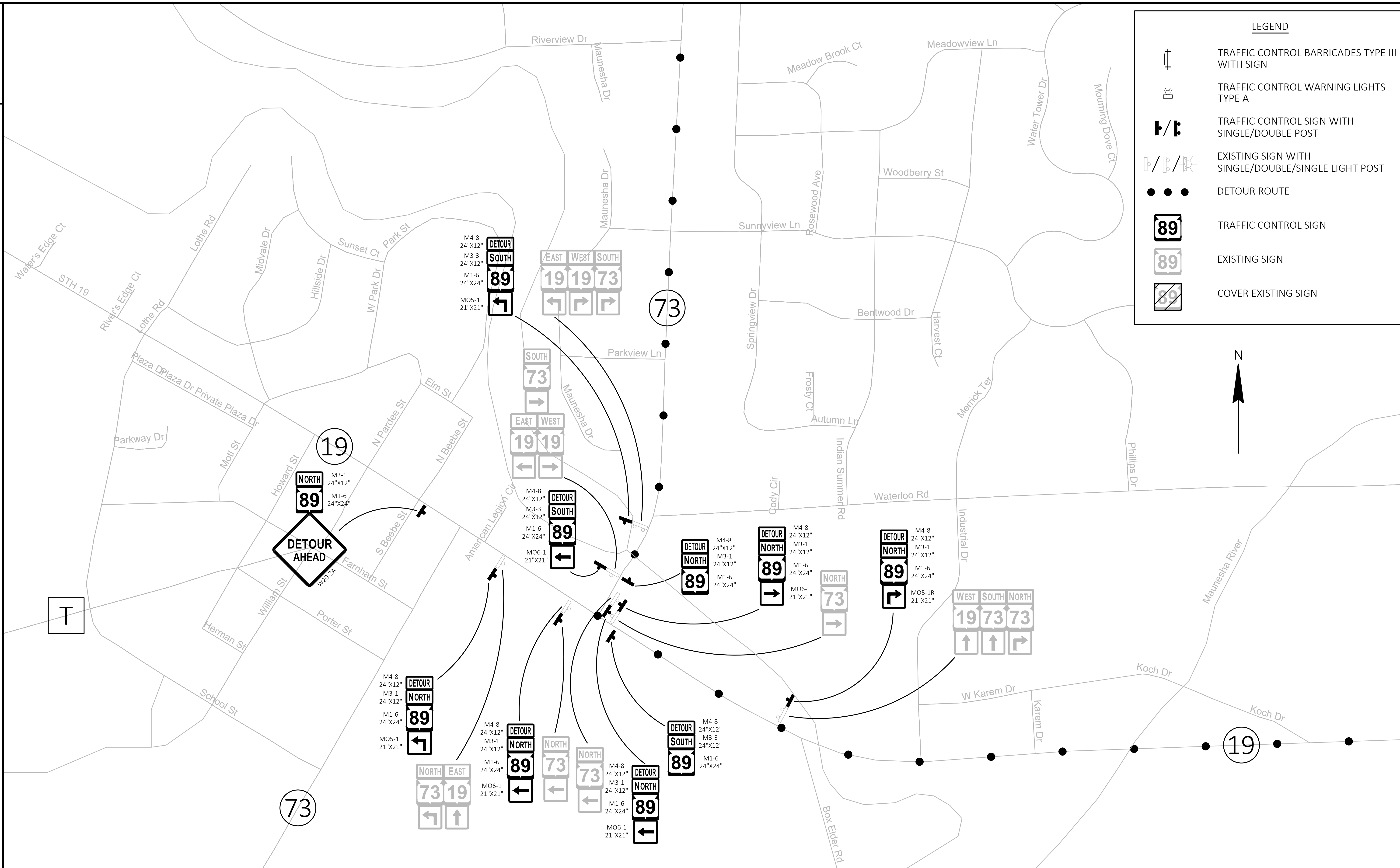
2



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #1	SHEET 20	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\DETAILS\W11659_DETOUR PLAN.DWG
LAYOUT NAME - Layout2
PLOT DATE : 5/2/2023 4:07 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

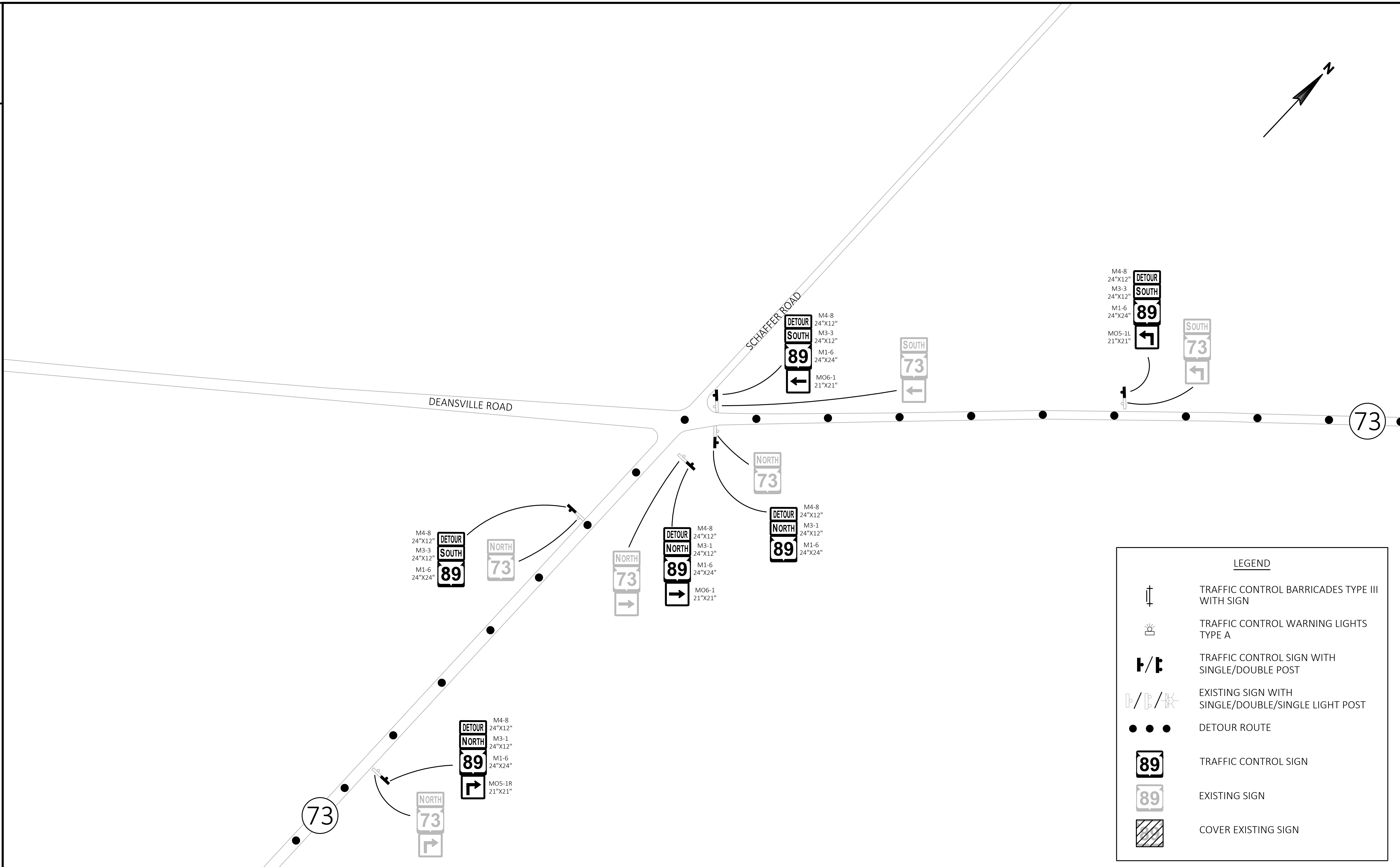


PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #2	SHEET 21	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\DETAILS\W11659_DETOUR PLAN.DWG
LAYOUT NAME - Layout3
PLOT DATE : 5/2/2023 4:07 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:500 FT

2

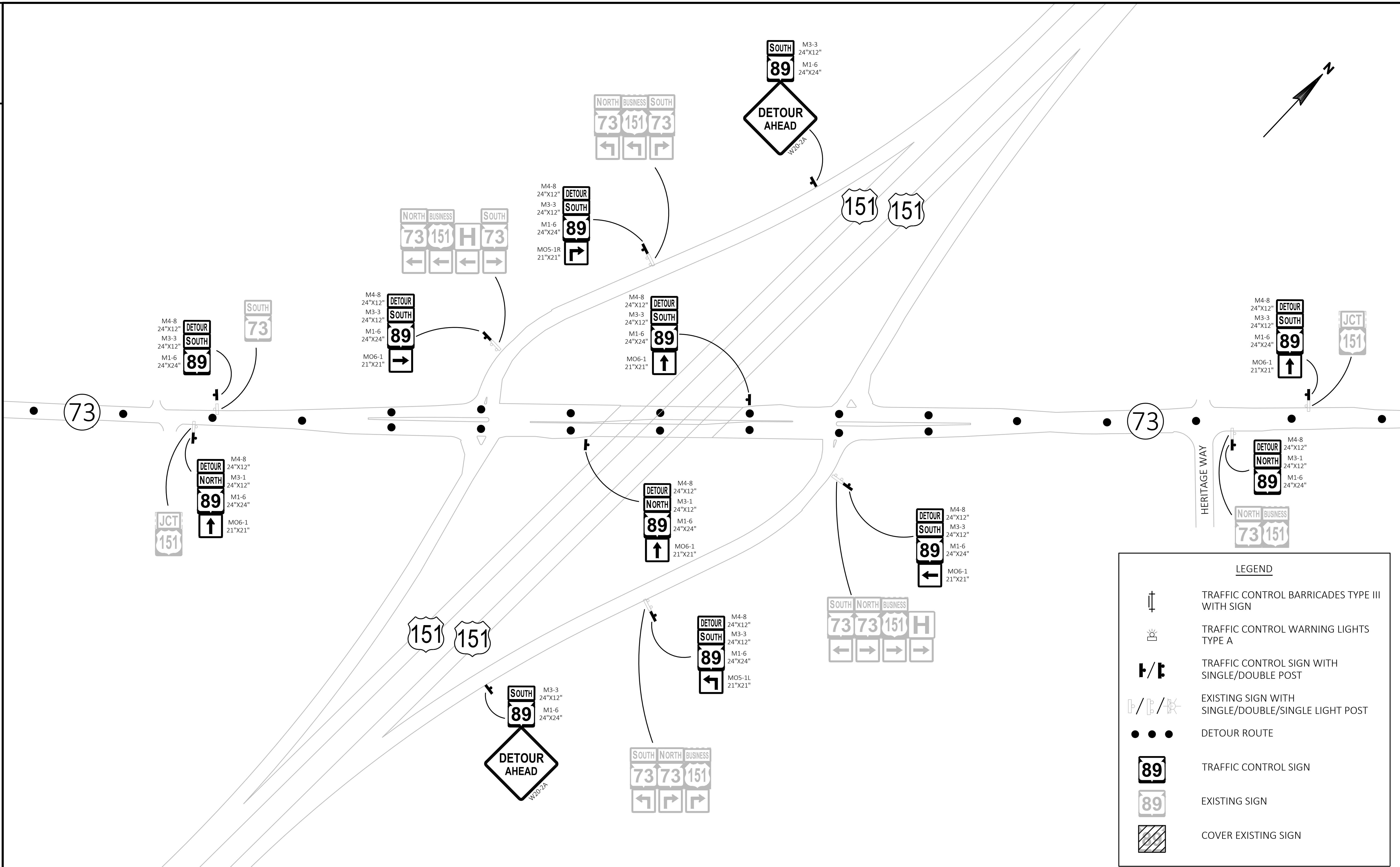
2



2

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #3	SHEET 22	E

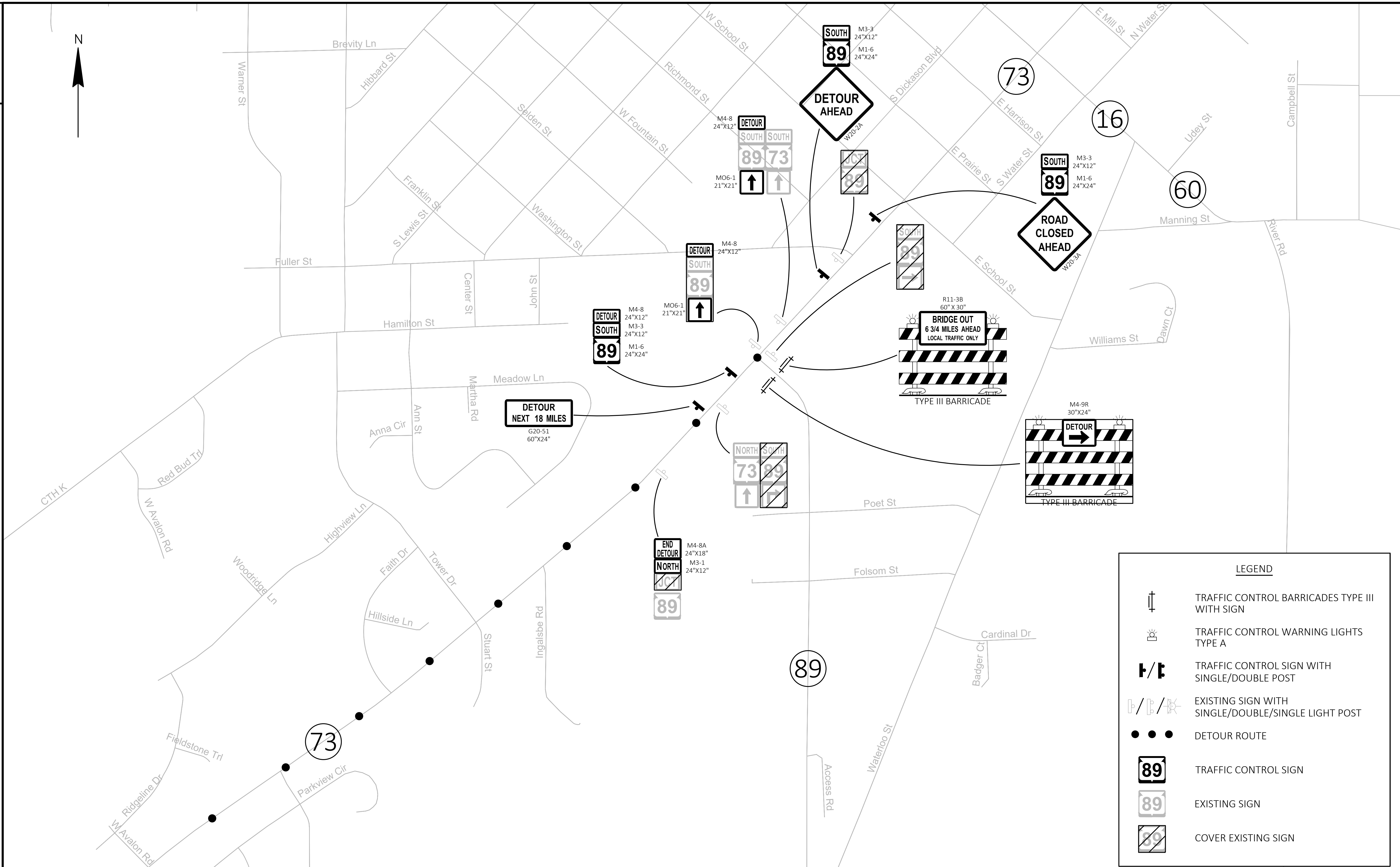
FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\DETAILS\W11659_DETOUR PLAN.DWG
LAYOUT NAME - Layout4
PLOT DATE : 5/2/2023 4:08 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:250 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #4	SHEET 23	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\DETAILS\W11659_DETOUR PLAN.DWG
LAYOUT NAME - Layout5
PLOT DATE : 5/2/2023 4:08 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:250 FT
WISDOT/CADDS SHEET 42

2

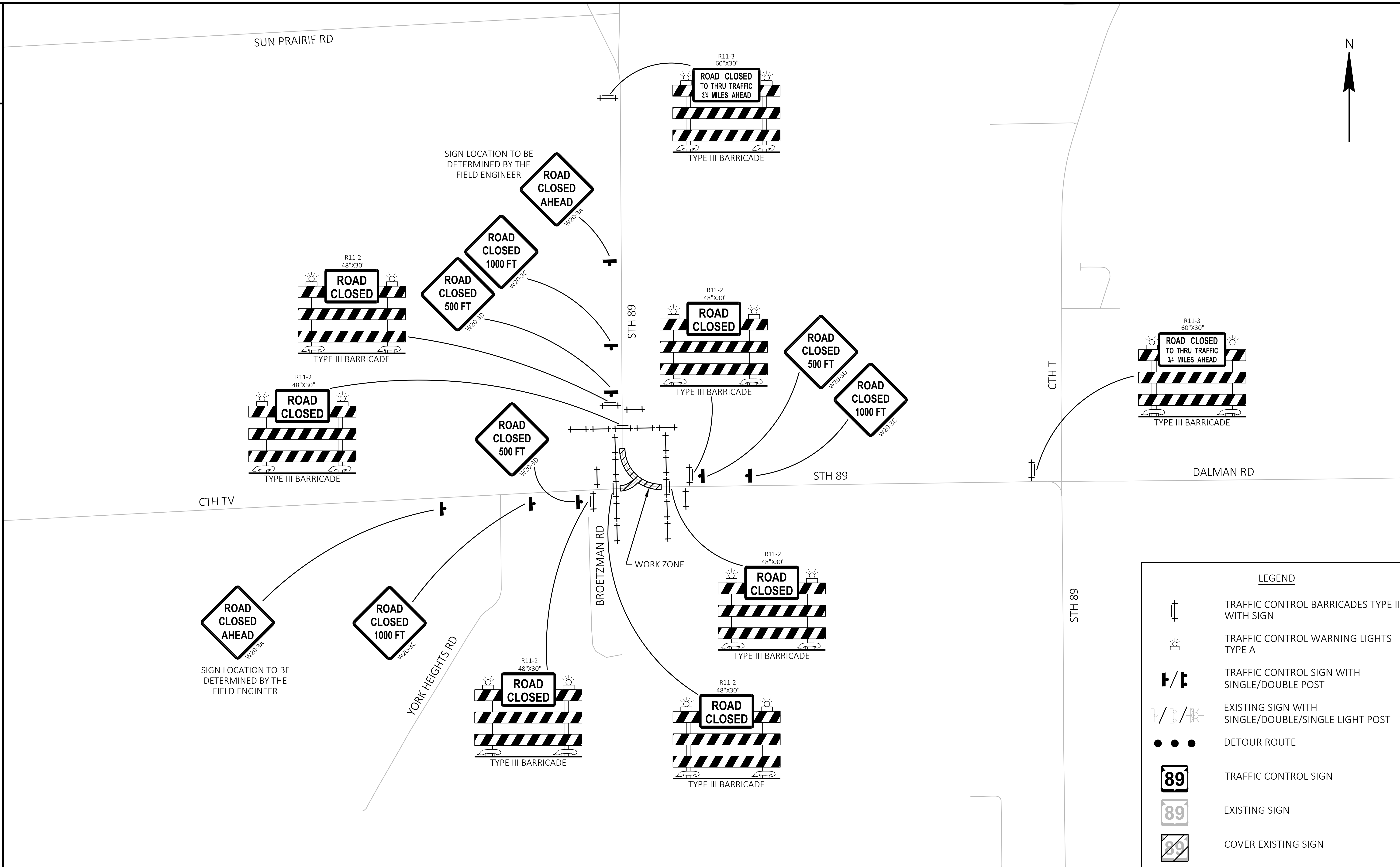


2

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #5	SHEET 24	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\DETAILS\W11659_DETOUR PLAN.DWG
LAYOUT NAME - Layout6
PLOT DATE : 5/2/2023 4:08 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2



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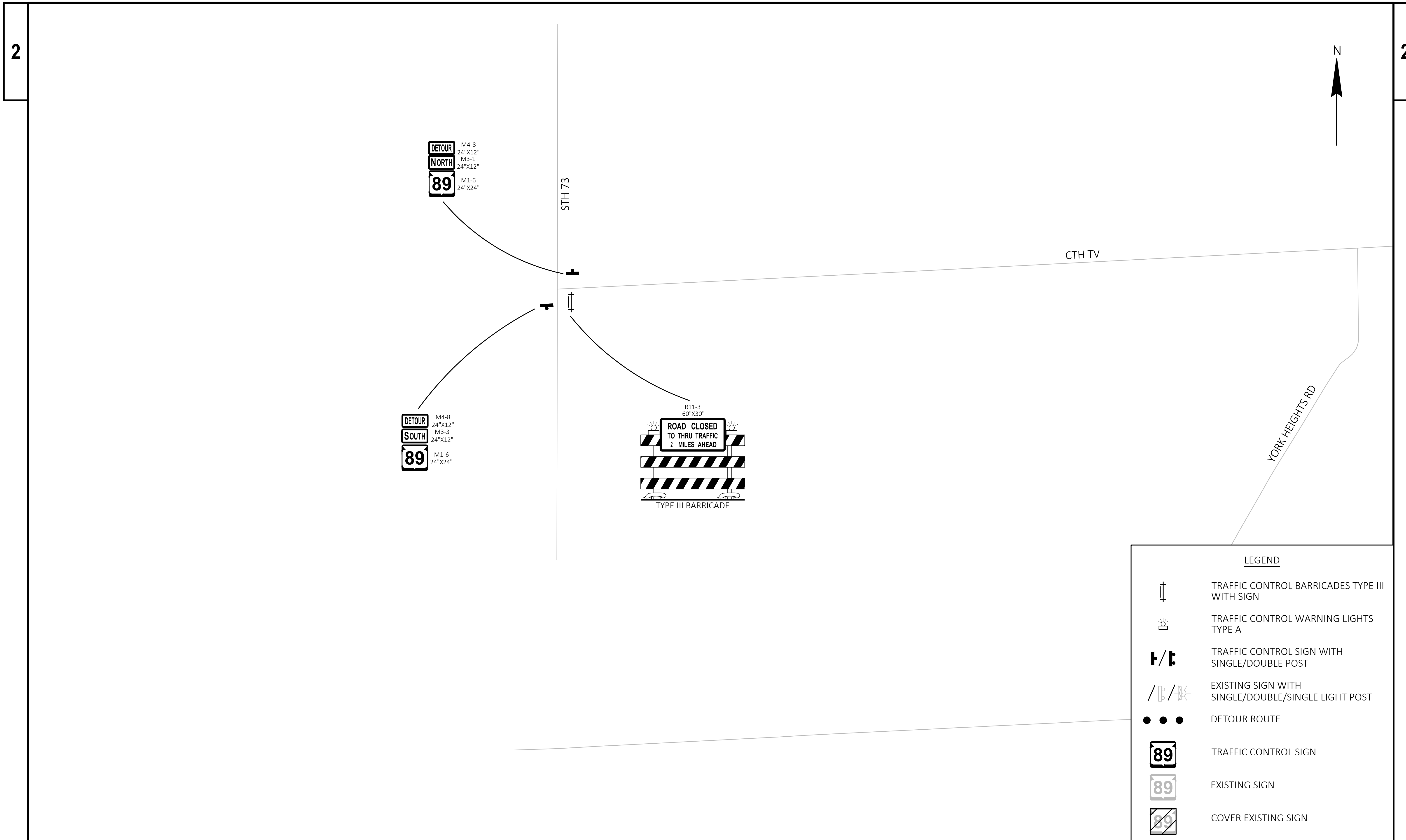
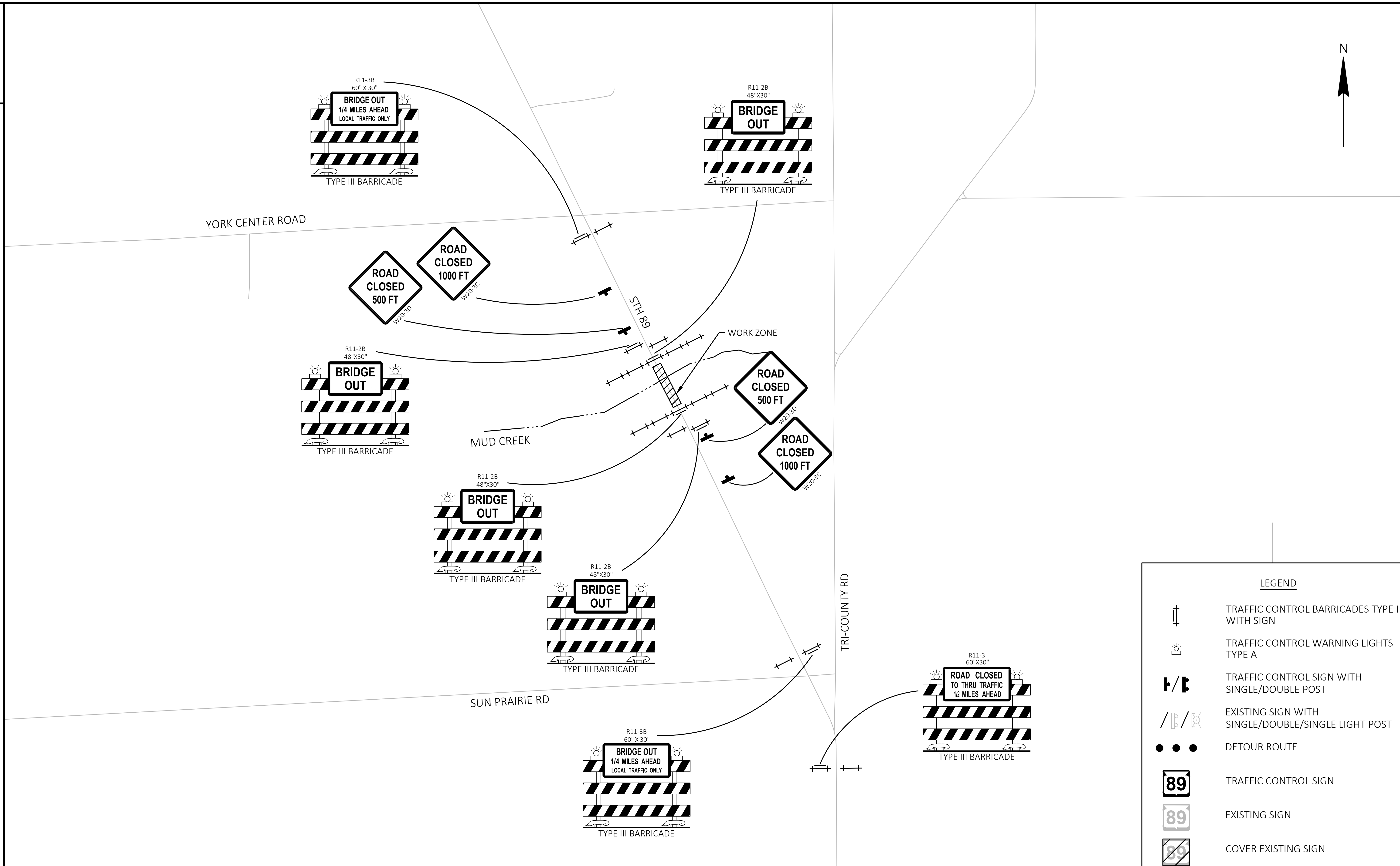
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #6	SHEET 25	E



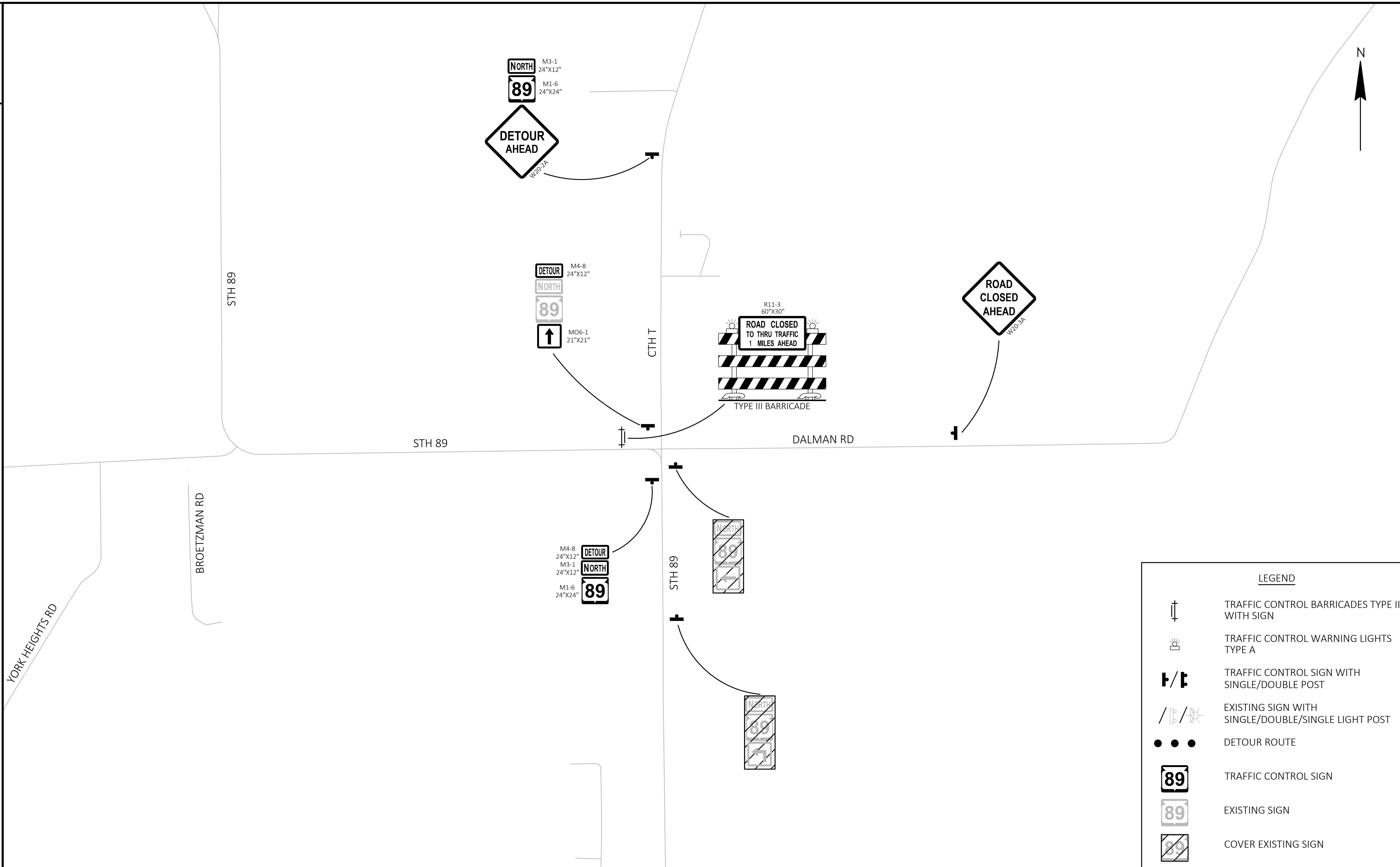
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #7	SHEET 26	E



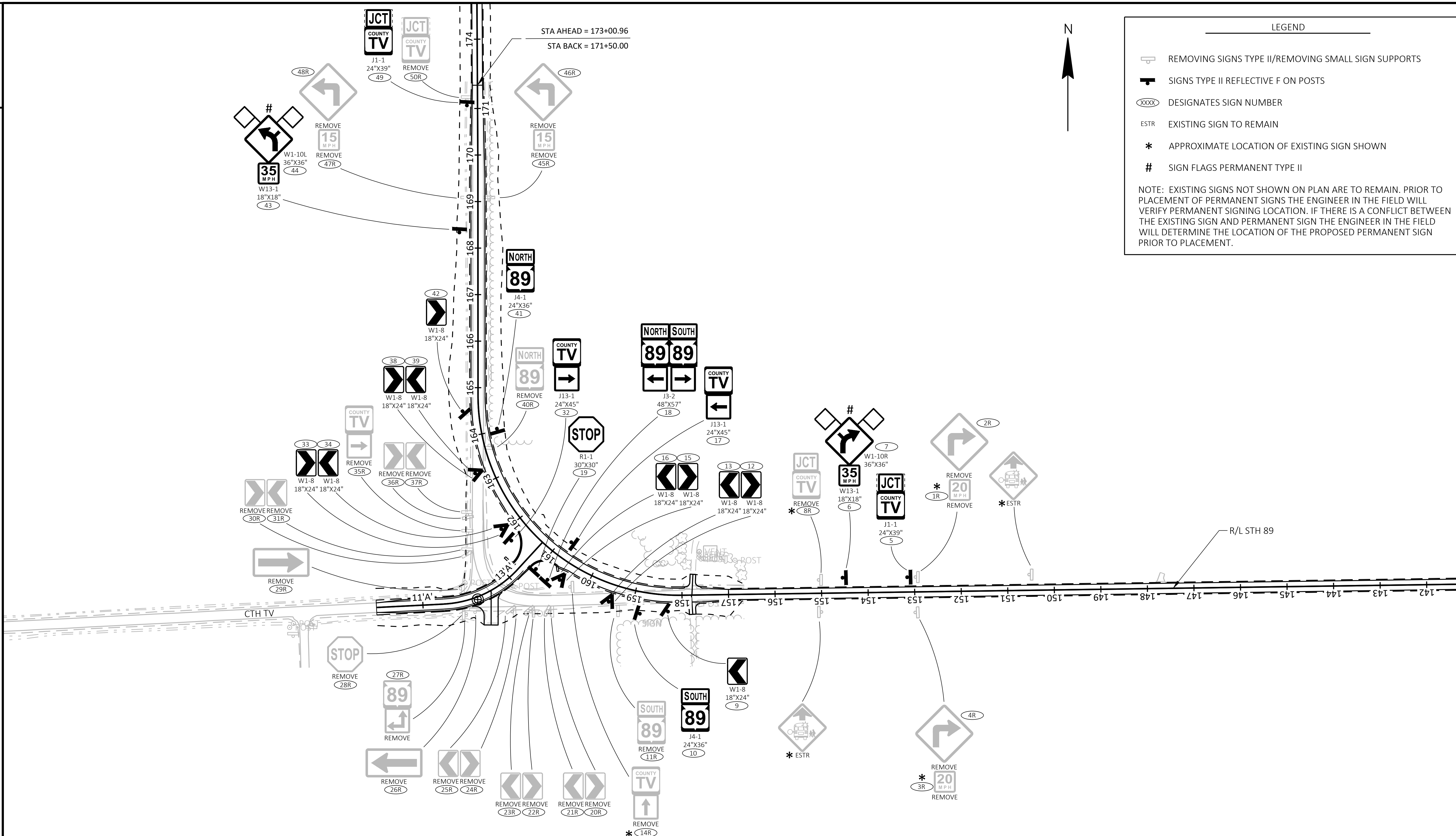
2

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #8	SHEET 27	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\DETAILS\W11659_DETOUR PLAN.DWG
LAYOUT NAME - Layout9
PLOT DATE : 5/2/2023 4:08 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:1000 FT



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	DETOUR DETAILS #9	SHEET 28	E

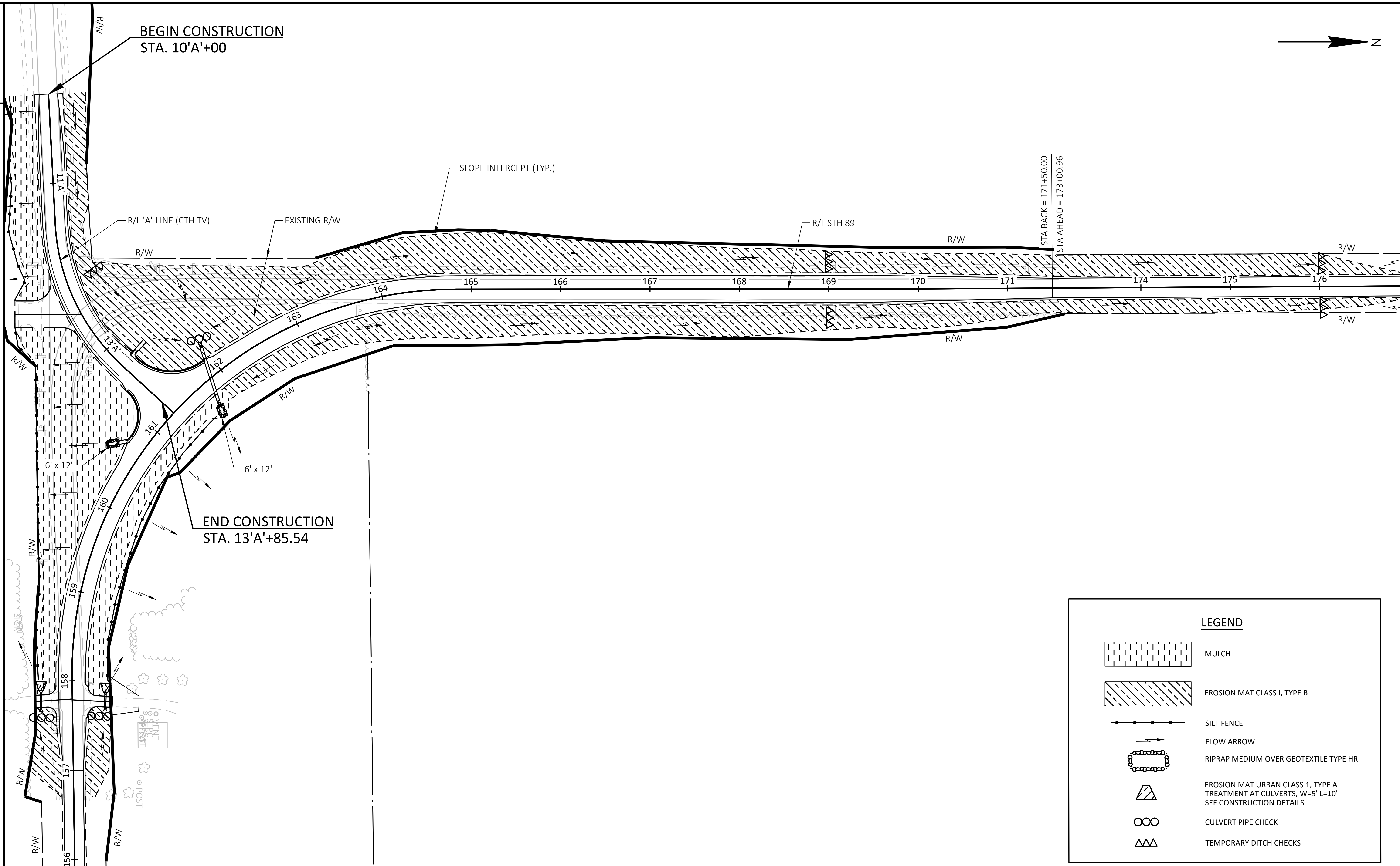


LEGEND

- REMOVING SIGNS TYPE II/REMOVING SMALL SIGN SUPPORTS
- SIGNS TYPE II REFLECTIVE F ON POSTS
- (XXXX) DESIGNATES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- * APPROXIMATE LOCATION OF EXISTING SIGN SHOWN
- # SIGN FLAGS PERMANENT TYPE II

NOTE: EXISTING SIGNS NOT SHOWN ON PLAN ARE TO REMAIN. PRIOR TO PLACEMENT OF PERMANENT SIGNS THE ENGINEER IN THE FIELD WILL VERIFY PERMANENT SIGNING LOCATION. IF THERE IS A CONFLICT BETWEEN THE EXISTING SIGN AND PERMANENT SIGN THE ENGINEER IN THE FIELD WILL DETERMINE THE LOCATION OF THE PROPOSED PERMANENT SIGN PRIOR TO PLACEMENT.

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PERMANENT SIGNING	SHEET 29	E



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	EROSION CONTROL	SHEET 30	E

Estimate Of Quantities

				3670-00-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	13.000	13.000
0004	203.0100	Removing Small Pipe Culverts	EACH	5.000	5.000
0006	203.0220	Removing Structure (structure) 01. C-13-2023	EACH	1.000	1.000
0008	204.0110	Removing Asphaltic Surface	SY	90.000	90.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	290.000	290.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	127,000.000	127,000.000
0014	204.0165	Removing Guardrail	LF	410.000	410.000
0016	204.0180	Removing Delineators and Markers	EACH	6.000	6.000
0018	205.0100	Excavation Common	CY	12,880.000	12,880.000
0020	206.2001	Excavation for Structures Culverts (structure) 01. C-13-2087	EACH	1.000	1.000
0022	210.2500	Backfill Structure Type B	TON	1,093.000	1,093.000
0024	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 3670-00-74	EACH	1.000	1.000
0026	213.0100	Finishing Roadway (project) 01. 3670-00-74	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,340.000	3,340.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	6,900.000	6,900.000
0032	311.0110	Breaker Run	TON	120.000	120.000
0034	312.0110	Select Crushed Material	TON	11,700.000	11,700.000
0036	450.4000	HMA Cold Weather Paving	TON	4,100.000	4,100.000
0038	455.0605	Tack Coat	GAL	9,600.000	9,600.000
0040	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0042	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0044	460.2000	Incentive Density HMA Pavement	DOL	620.000	620.000
0046	460.2005	Incentive Density PWL HMA Pavement	DOL	12,610.000	12,610.000
0048	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	10,200.000	10,200.000
0050	460.2010	Incentive Air Voids HMA Pavement	DOL	16,100.000	16,100.000
0052	460.5224	HMA Pavement 4 LT 58-28 S	TON	16,400.000	16,400.000
0054	465.0105	Asphaltic Surface	TON	1,570.000	1,570.000
0056	465.0315	Asphaltic Flumes	SY	25.000	25.000
0058	504.0100	Concrete Masonry Culverts	CY	100.000	100.000
0060	505.0400	Bar Steel Reinforcement HS Structures	LB	10,710.000	10,710.000
0062	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	2,690.000	2,690.000
0064	516.0500	Rubberized Membrane Waterproofing	SY	21.000	21.000
0066	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	4.000	4.000
0068	520.3318	Culvert Pipe Class III-A 18-Inch	LF	34.000	34.000
0070	520.8700	Cleaning Culvert Pipes	EACH	7.000	7.000
0072	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	6.000	6.000
0074	521.1036	Apron Endwalls for Culvert Pipe Steel 36-Inch	EACH	2.000	2.000
0076	521.1042	Apron Endwalls for Culvert Pipe Steel 42-Inch	EACH	1.000	1.000
0078	521.1235	Apron Endwalls for Pipe Arch Steel 35x24-Inch	EACH	1.000	1.000
0080	522.2329	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 29x45-Inch	LF	96.000	96.000
0082	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	62.000	62.000
0084	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0086	522.2629	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	EACH	4.000	4.000
0088	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	150.000	150.000
0090	606.0200	Riprap Medium	CY	19.000	19.000
0092	614.2300	MGS Guardrail 3	LF	263.000	263.000
0094	614.2340	MGS Guardrail 3 L	LF	200.000	200.000
0096	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0098	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3670-00-74	EACH	1.000	1.000

				3670-00-74	
Line	Item	Item Description	Unit	Total	Qty
0100	619.1000	Mobilization	EACH	1.000	1.000
0102	624.0100	Water	MGAL	330.000	330.000
0104	625.0100	Topsoil	SY	4,730.000	4,730.000
0106	625.0500	Salvaged Topsoil	SY	21,200.000	21,200.000
0108	627.0200	Mulching	SY	4,950.000	4,950.000
0110	628.1504	Silt Fence	LF	1,910.000	1,910.000
0112	628.1520	Silt Fence Maintenance	LF	3,820.000	3,820.000
0114	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0116	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0118	628.2004	Erosion Mat Class I Type B	SY	13,900.000	13,900.000
0120	628.2006	Erosion Mat Urban Class I Type A	SY	2,350.000	2,350.000
0122	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0124	628.7555	Culvert Pipe Checks	EACH	17.000	17.000
0126	629.0210	Fertilizer Type B	CWT	17.000	17.000
0128	630.0120	Seeding Mixture No. 20	LB	580.000	580.000
0130	630.0160	Seeding Mixture No. 60	LB	7.000	7.000
0132	630.0200	Seeding Temporary	LB	150.000	150.000
0134	630.0500	Seed Water	MGAL	540.000	540.000
0136	633.5200	Markers Culvert End	EACH	6.000	6.000
0138	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	6.000	6.000
0140	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	10.000	10.000
0142	637.0620	Sign Flags Permanent Type II	EACH	4.000	4.000
0144	637.2210	Signs Type II Reflective H	SF	65.250	65.250
0146	637.2230	Signs Type II Reflective F	SF	52.500	52.500
0148	638.2602	Removing Signs Type II	EACH	28.000	28.000
0150	638.3000	Removing Small Sign Supports	EACH	19.000	19.000
0152	642.5001	Field Office Type B	EACH	1.000	1.000
0154	643.0300	Traffic Control Drums	DAY	370.000	370.000
0156	643.0420	Traffic Control Barricades Type III	DAY	5,340.000	5,340.000
0158	643.0705	Traffic Control Warning Lights Type A	DAY	4,920.000	4,920.000
0160	643.0900	Traffic Control Signs	DAY	17,220.000	17,220.000
0162	643.0920	Traffic Control Covering Signs Type II	EACH	9.000	9.000
0164	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0166	643.3165	Temporary Marking Line Paint 6-Inch	LF	4,100.000	4,100.000
0168	643.5000	Traffic Control	EACH	1.000	1.000
0170	645.0105	Geotextile Type C	SY	205.000	205.000
0172	645.0120	Geotextile Type HR	SY	60.000	60.000
0174	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	101,300.000	101,300.000
0176	646.4720	Marking Line Same Day Epoxy 6-Inch	LF	79,200.000	79,200.000
0178	646.6120	Marking Stop Line Epoxy 18-Inch	LF	40.000	40.000
0180	648.0100	Locating No-Passing Zones	MI	9.650	9.650
0182	650.4500	Construction Staking Subgrade	LF	2,000.000	2,000.000
0184	650.5000	Construction Staking Base	LF	2,000.000	2,000.000
0186	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	150.000	150.000
0188	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0190	650.6501	Construction Staking Structure Layout (structure) 01. C-13-2087	EACH	1.000	1.000
0192	650.8000	Construction Staking Resurfacing Reference	LF	49,310.000	49,310.000
0194	650.9911	Construction Staking Supplemental Control (project) 01. 3670-00-74	EACH	1.000	1.000
0196	650.9920	Construction Staking Slope Stakes	LF	3,090.000	3,090.000

Estimate Of Quantities

3670-00-74

Line	Item	Item Description	Unit	Total	Qty
0198	690.0150	Sawing Asphalt	LF	825.000	825.000
0200	715.0502	Incentive Strength Concrete Structures	DOL	600.000	600.000
0202	740.0440	Incentive IRI Ride	DOL	39,000.000	39,000.000
0204	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	800.000	800.000
0206	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	575.000	575.000
0208	SPV.0060	Special 01. Verify Landmark Reference Monuments	EACH	7.000	7.000
0210	SPV.0060	Special 02. Temporary Bypass	EACH	1.000	1.000
0212	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	13,400.000	13,400.000

ALL BID ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

3

GRUBBING

STATION - STATION	LOCATION	201.0205 GRUBBING (STA)
163+50 - 171+50	MAINLINE	8
249+00 - 254+00	MAINLINE	5
	TOTAL =	13

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	DESCRIPTION	203.0100 (EACH)
157+79	MAINLINE, RT.	15" CMCP	1
157+80	MAINLINE, LT.	15" CMCP	1
161+51	MAINLINE	20"X28" CMCP	1
372+73	MAINLINE	42"X30" CPCS	2
		TOTAL =	5

REMOVING ASPHALTIC SURFACE

STATION - STATION	LOCATION	204.0110 (SY)
249+70 - 251+87	MAINLINE, RT.	15
250+08 - 251+87	MAINLINE, RT.	40
253+50 - 255+77	MAINLINE, RT.	15
253+50 - 255+37	MAINLINE, LT.	20
	TOTAL =	90

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 (SY)
62+00 - 111+10	MAINLINE	12,600
116+15 - 157+00	MAINLINE	10,500
173+01 - 577+72	MAINLINE	103,900
	TOTAL =	127,000

3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

LOCATION	204.0115 (SY)
STA. 62+00	14
STA. 111+09	14
STA 116+14	14
TRI COUNTY RIVER RD	14
SUN PRAIRIE RD (EAST)	14
SUN PRAIRIE RD (WEST)	14
YORK CENTER RD (EAST)	12
YORK CENTER RD (WEST)	13
RAITH LN	12
MULLER RD (EAST)	14
MULLER RD (WEST)	16
SKALITSKY LN	11
CTH V/KASPER RD (EAST)	16
CTH V/KASPER RD (WEST)	15
HOENE RD	14
PRIEM RD	14
SYDO RD	20
COLUMBUS RD	14
FOX RD	14
STA. 577+72	21
TOTAL =	290

REMOVING GUARDRAIL

STATION - STATION	LOCATION	204.0165 (LF)
251+38 - 253+43, RT.	MAINLINE	205
251+43 - 253+48, LT.	MAINLINE	205
	TOTAL=	410

REMOVING DELINEATORS AND MARKERS

STATION	LOCATION	204.0180 (EACH)
161+50	MAINLINE	2
372+73	MAINLINE	4
	TOTAL=	6

EARTHWORK SUMMARY

STATION - STATION	LOCATION	(1) 205.0100 COMMON EXCAVATION CUT (2) (CY)	AVAILABLE MATERIAL (CY) (3)	UNEXPANDED FILL (CY)	EXPANDED FILL (CY) FACTOR 1.25 (4)	MASS ORDINATE +/- (CY) (5)	WASTE (CY)
156+70 - 177+00	MAINLINE	11360	11360	1108	1387	9973	9973
249+71 - 254+77	MAINLINE, RT	240	240	138	173	67	67
250+09 - 255+37	MAINLINE, LT	160	160	18	22	132	132
10'A'+00 - 13'A'+85.54	A'-LINE (CTH TV)	1120	1120	1127	1410	-290	-290
SUBTOTALS =		12880	12880	2391	2992	9882	9882
TOTALS =		12880	12880	2391	2992	9882	9882

NOTES:
1.) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
2.) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
3.) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
4.) EXPANDED FILL FACTOR 1.25: EXPANDED FILL = (UNEXPANDED FILL)*1.25
5.) THE MASS ORDINATE+ OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.

BASE AGGREGATE DENSE AND SELECT CRUSHED MATERIAL

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	312.0110 SELECT CRUSHED MATERIAL (TON)
62+00 - 111+10	MAINLINE	265	-	-
116+15 - 157+00	MAINLINE	220	-	-
157+00 - 171+50	MAINLINE	255	4,280	8,550
173+01 - 249+32	MAINLINE	415	-	-
249+32 - 255+96	MAINLINE/CULVERT	105	1,560	1,000
255+96 - 577+72	MAINLINE	1,730	-	-
10'A'+00 - 13'A'+86	'A' -LINE (CTH TV)	50	1,060	2,150
	DRIVEWAYS	300	-	-
	TOTAL =	3,340	6,900	11,700

ASPHALTIC FLUMES

STATION	LOCATION	465.0315 (SY)
160+80	MAINLINE, LT.	10
13'A'+31	MAINLINE, LT.	15
	TOTAL =	25

CLEANING CULVERT PIPES

STATION	LOCATION	520.8700 (EACH)
272+54	MAINLINE, RT.	1
297+52	MAINLINE	1
314+25	MAINLINE	1
325+84	MAINLINE	1
411+79	MAINLINE	1
484+04	MAINLINE	1
494+85	MAINLINE	1
	TOTAL =	7

ALL BID ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

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HMA PAVEMENT

STA. - STA.	211.0101 PREPARE FOUNDATION FOR ASPHALTIC PAVING 01. 3670-00-74 (EACH)	450.4000 HMA COLD WEATHER PAVING (TON)	455.0605 TACK COAT (GAL)	460.5224 HMA PAVEMENT 4 LT 58-28 S (TON)	465.0105 ASPHALTIC SURFACE (TON)	* SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING (SY)
62+00 - 111+10	-	-	885	1,415	-	-
116+15 - 157+00	-	-	735	1,175	-	-
157+00 - 171+50	-	-	255	1,195	-	-
173+01 - 577+32	-	-	7,660	12,315	-	-
10'A'+00 - 13'A'+86	-	-	65	300	-	-
372+13 - 373+33	-	-	-	-	70	-
PROJECT	1	4,100	-	-	1,500	13,400
TOTAL =	1	4,100	9,600	16,400	1,570	13,400

* EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY ENGINEER IN THE FIELD.

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEMS	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
11 foot Driving Lane	62+00 - 111+10; 116+15 - 157+00; 173+01 - 577+72	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	12,610	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12 foot Driving Lane	157+00 - 171+50	Upper Layer	4 LT 58-28 S	4 LT 58-28 S	480	2"	PWL Incentive Air Voids HMA Pavement 460.2010	QMP Incentive Density HMA Pavement 460.2000
12 foot Driving	157+00 - 171+50	Lower Layer	B.A.D. 1 1/4-Inch	4 LT 58-28 S	480	2"	PWL Incentive Air Voids HMA Pavement 460.2010	QMP Incentive Density HMA Pavement 460.2000
12 foot Driving	372+13 - 373+33	Culvert Patches	B.A.D. 1 1/4-Inch	Asphaltic Surface	70	4" total	QMP as per SS 465.	Acceptance by ordinary compaction
Shoulders/ Other	62+00 - 111+10; 116+15 - 157+00; 173+01 - 577+72	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	2,295	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance Testing by the department; Not eligible for incentive or disincentive
Shoulders/ Other	157+00 - 171+50	Upper Layer	4 LT 58-28 S	4 LT 58-28 S	118	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance Testing by the department; Not eligible for incentive or disincentive
Shoulders/ Other	157+00 - 171+50	Lower Layer	B.A.D. 1 1/4-Inch	4 LT 58-28 S	117	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance Testing by the department; Not eligible for incentive or disincentive

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CULVERT PIPE

STATION	LOCATION	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH (EACH)	520.3318 CULVERT PIPE CLASS III-A 18-INCH (LF)	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH (EACH)	521.1036 APRON ENDWALLS FOR CULVERT PIPE STEEL 36-INCH (EACH)	521.1042 APRON ENDWALLS FOR CULVERT PIPE STEEL 42-INCH (EACH)	521.1235 APRON ENDWALLS FOR PIPE ARCH STEEL 35X24-INCH (EACH)	522.2329 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH (LF)	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH (LF)	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH (EACH)	522.2629 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH (EACH)
157+79	MAINLINE, RT.	2	16	-	-	-	-	-	-	-	-
157+80	MAINLINE, LT.	2	18	-	-	-	-	-	-	-	-
161+86	MAINLINE	-	-	-	-	-	-	-	62	2	-
184+81	MAINLINE, LT.	-	-	-	-	1	-	-	-	-	-
215+77	MAINLINE	-	-	2	-	-	-	-	-	-	-
274+93	MAINLINE	-	-	2	-	-	-	-	-	-	-
289+58	MAINLINE	-	-	2	-	-	-	-	-	-	-
372+73	MAINLINE	-	-	-	-	-	-	96	-	-	4
428+82	MAINLINE, LT.	-	-	-	-	-	1	-	-	-	-
567+70	MAINLINE	-	-	-	2	-	-	-	-	-	-
	TOTALS =	4	34	6	2	1	1	96	62	2	4

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

LOCATION	601.0557 (LF)
STH 89/CTH TV INTERSECTION, SOUTH QUADRANT	60
STH 89/CTH TV INTERSECTION, WEST QUADRANT	90
TOTAL=	150

RIPRAP & GEOTEXTILE

STATION	LOCATION	606.0200 RIPRAP MEDIUM (CY)	645.0120 GEOTEXTILE TYPE HR (SY)
160+80	MAINLINE, LT.	5	16
161+86	MAINLINE, RT.	5	16
184+81	MAINLINE, RT.	5	16
567+70	MAINLINE, RT.	4	12
	TOTAL =	19	60

GUARDRAIL

STATION-STATION	LOCATION	614.2300 MGS GUARDRAIL 3 (LF)	614.2340 MGS GUARDRAIL 3L (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)
250+41 - 250+94	MAINLINE, RT.	-	-	1
250+94 - 251+94	MAINLINE, RT.	100	-	-
251+14 - 251+67	MAINLINE, LT.	-	-	1
251+67 - 251+92	MAINLINE, LT.	25	-	-
251+92 - 253+92	MAINLINE, LT.	-	100	-
251+94 - 253+94	MAINLINE, RT.	-	100	-
252+92 - 253+79	MAINLINE, LT.	88	-	-
252+94 - 253+19	MAINLINE, RT.	50	-	-
253+19 - 253+72	MAINLINE, RT.	-	-	1
253+82 - 254+32	MAINLINE, LT.	-	-	1
	TOTAL =	263	200	4

ALL BID ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

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FINISHING ITEMS

STATION-STATION	LOCATION	625.0100 TOPSOIL (SY)	625.0500 SALVAGED TOPSOIL (SY)	627.0200 MULCHING (SY)	628.2004 EROSION MAT CLASS I TYPE B (SY)	628.2006 EROSION MAT URBAN CLASS I TYPE A (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0120 SEEDING MIXTURE NO. 20 (LB)	630.0160 SEEDING MIXTURE NO. 60 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0500 SEED WATER (MGAL)
156+70 - 157+79	MAINLINE, RT.	-	260	-	260	6	0.5	7	-	-	7
156+70 - 157+80	MAINLINE, LT.	-	270	-	270	6	0.5	8	-	-	7
157+79 - 161+60	MAINLINE, RT.	-	690	690	-	-	1	19	-	-	18
157+80 - 161+60 / 10'A'+00 - 13'A'+74	MAINLINE, LT. & "A'-LINE (CTH TV), RT.	-	3,270	3,270	-	-	2	89	-	-	82
161+60 - 177+00 / 10'A'+00 - 13'A'+74	MAINLINE, LT. & "A'-LINE (CTH TV), LT.	-	7,000	-	7,000	-	3	97	-	-	89
161+60 - 177+00	MAINLINE, RT.	-	3,560	-	3,560	-	5	190	-	-	175
249+71 - 254+77	MAINLINE, RT.	-	1,050	-	-	1,050	1	29	3	-	26
250+09 - 255+37	MAINLINE, LT.	-	840	-	-	840	1	23	2	-	21
UNDISTRIBUTED	PROJECT	4,730	4,260	990	2,810	448	4	118	2	150	115
	TOTAL =	4,730	21,200	4,950	13,900	2,350	17	580	7	150	540

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WATER

STATION - STATION	LOCATION	624.0100 (MGAL)
62+00 - 111+10	MAINLINE	4
116+15 - 157+00	MAINLINE	4
157+00 - 171+50	MAINLINE	200
173+01 - 249+39	MAINLINE	7
249+39 - 255+47	MAINLINE	32
255+47 - 577+72	MAINLINE	28
10'A'+00 - 13'A'+86	'A'-LINE (CTH TV)	50
	DRIVEWAYS	5
	TOTAL =	330

MOBILIZATIONS EROSION CONTROL

PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
3670-00-74	6	3
TOTAL =	6	3

TEMPORARY DITCH CHECKS

STATION - STATION	LOCATION	628.7504 (LF)
STA. 169+00	RT	8
STA. 169+00	LT	8
STA. 176+00	RT	8
STA. 176+00	LT	8
STA. 12'A'+00	LT	8
	UNDISTRIBUTED	10
	TOTAL =	50

CULVERT PIPE CHECKS

STATION - STATION	LOCATION	628.7555 (EACH)
157+79	MAINLINE, RT.	3
157+80	MAINLINE, LT.	3
161+86	MAINLINE, LT.	5
UNDISTRIBUTED	PROJECT	6
	TOTAL =	17

SILT FENCE

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
157+82 - 161+86	MAINLINE, RT.	340	680
157+85 - 161+02	MAINLINE, LT.	300	600
250+96 - 254+50	MAINLINE, RT.	365	730
251+15 - 252+82	MAINLINE, LT.	180	360
10'A'+00 - 13'A'+74	A'-LINE (CTH TV), RT.	340	680
UNDISTRIBUTED	PROJECT	385	770
	TOTAL =	1910	3820

MARKERS CULVERT END

STATION - STATION	LOCATION	633.5200 (EACH)
161+86	MAINLINE	2
372+73	MAINLINE	4
	TOTAL =	6

LOCATING NO PASSING ZONES

PROJECT	STATION - STATION	LOCATION	648.0100 (MI)
3670-00-74	62+00 - 577+72	MAINLINE	9.65
		TOTAL =	9.65

TRAFFIC CONTROL

LOCATION	643.0300 DRUMS (DAY)	643.0420 BARRICADES TYPE III (DAY)	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0900 SIGNS (DAY)	* 643.0920 COVERING SIGNS TYPE II (EACH)	643.1050 SIGNS PCMS (DAY)	643.5000 TRAFFIC CONTROL (EACH)
SIDEROADS	-	2,400	2,400	5,400	-	-	-
PROJECT	370	2,940	2,520	11,820	9	14	1
TOTAL =	370	5,340	4,920	17,220	9	14	1

* ONE CYCLE PER LOCATION

NOTE: 90 CALENDAR DAYS USED FOR BARRICADES TYPE III, WARNING LIGHTS TYPE A, & SIGNS QUANTITIES

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE (LF)	650.5000 CONSTRUCTION STAKING BASE (LF)	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH)	CATEGORY 020 650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT 01. C-13-2087 (EACH)	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	650.9911 CONSTRUCTION STAKING SUPPLEMENT CONTROL 01. 3670-00-74 (EACH)	650.9920 CONSTRUCTION STAKING SLOPE STAKES (LF)
62+00 - 111+10	MAINLINE	-	-	-	-	-	4,910	-	-
116+15 - 157+00	MAINLINE	-	-	-	-	-	4,085	-	-
173+01 - 251+87	MAINLINE	-	-	-	-	-	7,887	-	-
253+50 - 312+00	MAINLINE	-	-	-	-	-	5,850	-	-
312+00 - 449+25	MAINLINE	-	-	-	-	-	13,725	-	-
449+25 - 577+72	MAINLINE	-	-	-	-	-	12,853	-	-
156+70 - 177+00	MAINLINE	-	-	-	-	-	-	-	2030
157+00 - 171+50	MAINLINE	1,450	1,450	-	-	-	-	-	-
161+51	MAINLINE	-	-	-	1	-	-	-	-
249+32 - 255+96	MAINLINE	-	-	-	-	-	-	-	670
251+87 - 253+50	MAINLINE	164	164	-	-	-	-	-	-
10'A'+00 - 13'A'+86	A'-LINE (CTH TV)	386	386	-	-	-	-	-	390
13'A'+31 - 13'A'+90	A'-LINE (CTH TV), LT.	-	-	60	-	-	-	-	-
13'A'+48 - 13'A'+88	A'-LINE (CTH TV), RT.	-	-	90	-	-	-	-	-
	PROJECT	-	-	-	-	1	-	1	-
	TOTAL =	2,000	2,000	150	1	1	49,310	1	3,090

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PERMANENT SIGNING

SIGN NUMBER	APPROX. STATION	LOCATION	POSITIION	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIZE (INCH X INCH)	637.0620 SIGN FLAGS PERMANENT TYPE II (EACH)	637.2210 SIGNS TYPE II REFLECTIVE H (SF)	637.2230 SIGNS TYPE II REFLECTIVE F (SF)	POSTS WOOD 4X6-INCH 634.0616 16 FT (EACH)	POSTS WOOD 4X6-INCH 634.0618 18 FT (EACH)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	SIGN MOUNTED ON SAME POST AS
1R	153+00	MAINLINE	RIGHT	W13-1	ADVISORY SPEED PLAQUE	20	-	-	-	-	-	-	1	1	-
2R	153+00	MAINLINE	RIGHT	W1-1R	RIGHT TURN	-	-	-	-	-	-	-	1	-	1R
3R	153+00	MAINLINE	LEFT	W13-1	ADVISORY SPEED PLAQUE	20	-	-	-	-	-	-	1	1	-
4R	153+00	MAINLINE	LEFT	W1-1R	RIGHT TURN	-	-	-	-	-	-	-	1	-	3R
5	153+00	MAINLINE	RIGHT	J1-1 (M1-5A, M2-1)	CTH ROUTE MARKER, JUNCTION	TV	24X39	-	6.50	-	-	1	-	-	-
6	154+50	MAINLINE	RIGHT	W13-1	ADVISORY SPEED PLAQUE	35	18X18	-	-	2.25	-	1	-	-	-
7	154+50	MAINLINE	RIGHT	W1-10R	RIGHT CURVE WITH INTERSECTION	-	36X36	2	-	9.00	-	-	-	-	6
8R	155+00	MAINLINE	RIGHT	J1-1 (M1-5A, M2-1)	CTH ROUTE MARKER, JUNCTION	TV	-	-	-	-	-	-	1	1	-
9	158+30	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	1	-	-	-	-
10	158+90	MAINLINE	LEFT	J4-1 (M1-6, M3-3)	STH ROUTE MARKER, CARDINAL DIRECTION MARKER	89	24X36	-	6.00	-	-	1	-	-	-
11R	159+20	MAINLINE	LEFT	J4-1 (M1-6, M3-3)	STH ROUTE MARKER, CARDINAL DIRECTION MARKER	89	-	-	-	-	-	-	1	1	-
12	159+50	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	1	-	-	-	-
13	159+50	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	-	-	-	-	12
14R	160+20	MAINLINE	LEFT	J13-1 (M6-1, M1-5A)	DIRECTIONAL ARROW AHEAD, CTH ROUTE MARKER	TV	-	-	-	-	-	-	1	1	-
15	160+70	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	1	-	-	-	-
16	160+70	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	-	-	-	-	15
17	160+85	MAINLINE	RIGHT	J13-1 (M6-1, M1-5A)	DIRECTIONAL ARROW LEFT, CTH ROUTE MARKER	TV	24X45	-	7.50	-	-	1	-	-	-
18	13'A'+50	A' (CTH TV)	RIGHT	J3-2 (M6-1, M6-1, M1-6, M1-6, M3-3, M3-1)	DIRECTIONAL ARROW LEFT/RIGHT, (2)STH ROUTE MARKER, (2)CARDINAL DIRECTION MARKER	(2)89	48X57	-	19.00	-	-	1	-	-	-
19	13'A'+65	A' (CTH TV)	RIGHT	R1-1	STOP	-	30X30	-	6.25	-	-	1	-	-	-
20R	160+38	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	1	-
21R	160+38	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	-	20R
22R	160+65	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	1	-
23R	160+65	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	-	22R
24R	160+90	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	1	-
25R	160+90	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	-	24R
26R	161+32	MAINLINE	LEFT	W1-6	ONE DIRECTIONAL ARROW	-	-	-	-	-	-	-	1	1	-
27R	11'A'+86	A' (CTH TV)	RIGHT	J13-1 (M6-6L, M1-6)	DIRECTIONAL ARROW AHEAD LEFT, STH ROUTE MARKER	89	-	-	-	-	-	-	1	1	-
28R	11'A'+87	A' (CTH TV)	RIGHT	R1-1	STOP	-	-	-	-	-	-	-	1	1	-
29R	161+71	MAINLINE	LEFT	W1-6	ONE DIRECTIONAL ARROW	-	-	-	-	-	-	-	1	1	-
30R	162+09	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	1	-
31R	162+09	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	-	30R
32	161+80	MAINLINE	LEFT	J13-1 (M6-1, M1-5A)	DIRECTIONAL ARROW AHEAD, CTH ROUTE MARKER	TV	24X45	-	7.50	-	-	1	-	-	-
33	162+00	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	1	-	-	-	-
34	162+00	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	-	-	-	-	33
35R	162+34	MAINLINE	LEFT	J13-1 (M6-1, M1-5A)	DIRECTIONAL ARROW RIGHT, CTH ROUTE MARKER	TV	-	-	-	-	-	-	1	1	-
36R	162+62	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	1	-
37R	162+62	MAINLINE	LEFT	W1-8	CHEVRON	-	-	-	-	-	-	-	1	-	36R
38	163+20	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	1	-	-	-	-
39	163+20	MAINLINE	LEFT	W1-8	CHEVRON	-	18X24	-	-	3.00	-	-	-	-	38
40R	163+72	MAINLINE	RIGHT	J4-1 (M1-6, M3-1)	STH ROUTE MARKER, CARDINAL DIRECTION MARKER	89	-	-	-	-	-	-	1	1	-
41	164+00	MAINLINE	RIGHT	J4-1 (M1-6, M3-1)	STH ROUTE MARKER, CARDINAL DIRECTION MARKER	89	24X36	-	6.00	-	-	1	-	-	-
42	164+50	MAINLINE	RIGHT	W1-8	CHEVRON	-	18X24	-	-	3.00	1	-	-	-	-
43	168+35	MAINLINE	RIGHT	W13-1	ADVISORY SPEED PLAQUE	35	18X18	-	-	2.25	-	1	-	-	-
44	168+35	MAINLINE	RIGHT	W1-10L	LEFT CURVE WITH INTERSECTION	-	36X36	2	-	9.00	-	-	-	-	43
45R	168+35	MAINLINE	LEFT	W13-1	ADVISORY SPEED PLAQUE	35	-	-	-	-	-	-	1	1	-
46R	168+35	MAINLINE	LEFT	W1-10L	LEFT CURVE WITH INTERSECTION	-	-	-	-	-	-	-	1	-	45R
47R	168+35	MAINLINE	RIGHT	W13-1	ADVISORY SPEED PLAQUE	15	-	-	-	-	-	-	1	1	-
48R	169+03	MAINLINE	RIGHT	W1-1L	LEFT TURN	-	-	-	-	-	-	-	1	-	47R
49	169+03	MAINLINE	LEFT	J1-1 (M1-5A, M2-1)	CTH ROUTE MARKER, JUNCTION	TV	24X39	-	6.50	-	-	1	-	-	-
50R	171+15	MAINLINE	LEFT	J1-1 (M1-5A, M2-1)	CTH ROUTE MARKER, JUNCTION	TV	-	-	-	-	-	-	1	1	-
							TOTAL =	4	65.25	52.50	6	10	28	19	

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ALL BID ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

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PAVEMENT MARKING

STATION - STATION	LOCATION	DESCRIPTION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH YELLOW 4' SKIPS (LF)	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH WHITE SOLID (LF)	646.4720 MARKING LINE SAME DAY EPOXY 6-INCH YELLOW SOLID (LF)	646.4720 MARKING LINE SAME DAY EPOXY 6-INCH YELLOW 12.5' SKIPS (LF)	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE SOLID (LF)
62+00 - 83+50	MAINLINE	DOUBLE YELLOW	-	-	4,300	-	-
83+50 - 95+00	MAINLINE	NB PASSING	-	-	1,150	290	-
95+00 - 97+00	MAINLINE	PASSING	-	-	-	50	-
97+00 - 107+90	MAINLINE	SB PASSING	-	-	1,090	275	-
107+90 - 111+10	MAINLINE	DOUBLE YELLOW	-	-	640	-	-
116+15 - 121+00	MAINLINE	DOUBLE YELLOW	-	-	970	-	-
121+00 - 133+00	MAINLINE	NB PASSING	-	-	1,200	300	-
133+00 - 143+00	MAINLINE	PASSING	-	-	-	250	-
143+00 - 153+40	MAINLINE	SB PASSING	-	-	1,040	265	-
153+40 - 171+50	MAINLINE	DOUBLE YELLOW	-	-	3,620	-	-
161+00, LT.	CTH TV	STOP LINE	-	-		-	20
173+01 - 177+00	MAINLINE	DOUBLE YELLOW	-	-	800	-	-
177+00 - 188+00	MAINLINE	NB PASSING	-	-	1,100	275	-
188+00 - 197+00	MAINLINE	PASSING	-	-	-	225	-
197+00 - 208+00	MAINLINE	SB PASSING	-	-	1,100	275	-
208+00 - 223+40	MAINLINE	DOUBLE YELLOW	-	-	3,080	-	-
223+40 - 235+00	MAINLINE	NB PASSING	-	-	1,160	300	-
235+00 - 336+80	MAINLINE	PASSING	-	-	-	50	-
236+80 - 246+70	MAINLINE	SB PASSING	-	-	990	250	-
246+70 - 329+40	MAINLINE	DOUBLE YELLOW	-	-	16,620	-	-
329+40 - 338+30	MAINLINE	NB PASSING	-	-	890	225	-
338+30 - 341+00	MAINLINE	DOUBLE YELLOW	-	-	540	-	-
341+00 - 349+50	MAINLINE	SB PASSING	-	-	850	215	-
349+50 - 364+00	MAINLINE	DOUBLE YELLOW	-	-	2,900	-	-
364+00 - 373+30	MAINLINE	NB PASSING	-	-	930	240	-
373+30 - 375+50	MAINLINE	DOUBLE YELLOW	-	-	440	-	-
375+50 - 384+50	MAINLINE	SB PASSING	-	-	900	225	-
383+50, LT.	CTH V/KASPER LN (WEST)	STOP LINE	-	-	-	-	20
384+50 - 386+80	MAINLINE	DOUBLE YELLOW	-	-	460	-	-
386+80 - 398+00	MAINLINE	NB PASSING	-	-	1,120	290	-
398+00 - 409+00	MAINLINE	SB PASSING	-	-	1,100	275	-
409+00 - 416+50	MAINLINE	DOUBLE YELLOW	-	-	1,500	-	-
416+50 - 427+50	MAINLINE	NB PASSING	-	-	1,100	275	-
427+50 - 428+50	MAINLINE	PASSING	-	-	-	25	-
428+50 - 440+00	MAINLINE	SB PASSING	-	-	1,150	290	-
440+00 - 500+00	MAINLINE	DOUBLE YELLOW	-	-	12,000	-	-
500+00 - 511+00	MAINLINE	NB PASSING	-	-	1,100	275	-
511+00 - 516+50	MAINLINE	PASSING	-	-	-	140	-
516+50 - 527+50	MAINLINE	SB PASSING	-	-	1,100	275	-
527+50 - 528+50	MAINLINE	DOUBLE YELLOW	-	-	200	-	-
528+50 - 539+70	MAINLINE	NB PASSING	-	-	1,120	290	-
539+70 - 551+00	MAINLINE	SB PASSING	-	-	1,170	300	-
551+00 - 557+00	MAINLINE	DOUBLE YELLOW	-	-	1,200	275	-
557+00 - 568+00	MAINLINE	NB PASSING	-	-	1,100	-	-
568+00 - 577+72	MAINLINE	PASSING	-	-	-	300	-
10'A'+00 - 13'A'+74	'A'-LINE (CTH TV)	DOUBLE YELLOW	-	-	750	-	-
62+00 - 577+72	MAINLINE	WHITE EDGELINES	-	100,600	-	-	-
10'A'+00 - 13'A'+31	'A'-LINE (CTH TV)	WHITE EDGELINES	-	700	-	-	-
62+00 - 111+10	MAINLINE	TEMPORARY C/L	400	-	-	-	-
116+15 - 171+50	MAINLINE	TEMPORARY C/L	450	-	-	-	-
173+01 - 312+00	MAINLINE	TEMPORARY C/L	1,115	-	-	-	-
312+00 - 449+25	MAINLINE	TEMPORARY C/L	1,100	-	-	-	-
449+25 - 577+72	MAINLINE	TEMPORARY C/L	1,035	-	-	-	-
		SUBTOTAL =	-	-	72,480	6,720	-
		TOTAL =	4,100	101,300	79,200		40

SAWING ASPHALT

STATION - STATION	LOCATION	690.0150 SAWING ASPHALT (LF)
157+00	MAINLINE	22
171+50	MAINLINE	22
249+71 - 251+87	MAINLINE	420
253+50 - 255+37	MAINLINE	340
10'A'+00	'A'-LINE (CTH V)	21
	TOTAL =	825

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	SPV.0060.01 VERIFY LANDMARK REFERENCE MONUMENTS (EACH)
87+45	MAINLINE, 3' RT.	1
139+68	MAINLINE, 2' LT.	1
161+42	MAINLINE, 185 LT.	1
188+40	MAINLINE, 2' LT.	1
357+31	MAINLINE, C/L	1
383+67	MAINLINE, 1' RT.	1
436+11	MAINLINE, 4' RT.	1
	TOTAL =	7

TEMPORARY BYPASS

STATION	LOCATION	SPV.0060.02 (EACH)
252+98	MAINLINE	1
	TOTAL =	1

3

TRANSPORTATION PROJECT PLAT NO: 3670-00-24 - 4.01

THAT PART OF LOT 1, CERTIFIED SURVEY MAP NO. 3582, V. 21, P. 228, DOCUMENT NUMBER 809031, AND LOT 1, CERTIFIED SURVEY MAP NO. 4916, V. 31, P. 285, DOCUMENT NUMBER 930377, LOCATED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 30, AND PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 31, ALL IN TOWNSHIP 9 NORTH, RANGE 13 EAST, TOWN OF PORTLAND, DODGE COUNTY, WISCONSIN; ALSO THAT PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 25, AND THE NE 1/4 OF THE NE 1/4 OF SECTION 36, ALL IN TOWNSHIP 9 NORTH, RANGE 12 EAST, TOWN OF YORK, DANE COUNTY, WISCONSIN.

RELOCATION ORDER   STH 89   LAKE MILLS-COLUMBUS   CLARKSON ROAD TO AVALON ROAD   DODGE/DANE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD 83(2011), IN U.S. SURVEY FEET, VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

NGS CONTROL POINT UTILIZED: PID: DH5452, DESIGNATION: YORK E GPS, DANE COUNTY, WI.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

REFERENCE LINE NOT NECESSARILY CONSTRUCTION REFERENCE LINE.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN MADISON, WI.

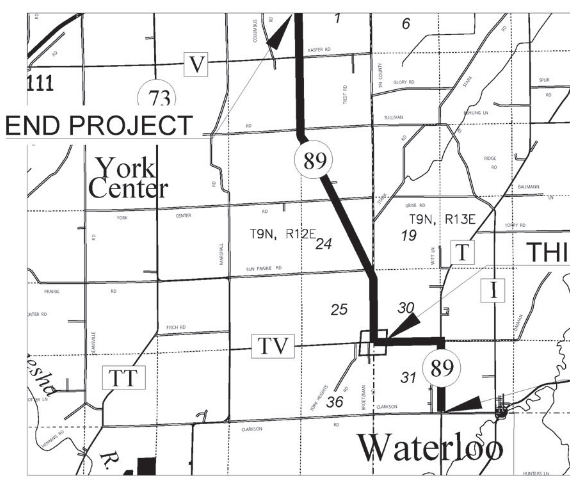
EXISTING HIGHWAY RIGHT-OF-WAY FOR STATE HIGHWAY 89 AND COUNTY TRUNK HIGHWAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

CERTIFIED SURVEY MAP NO. 4916 , CERTIFIED SURVEY MAP NO. 3582 AND PG 188 OF TOWN ROAD RECORDS LAYING OUT OF BROETZMAN ROAD.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STATE HIGHWAY 89 SHOWN HEREIN IS ESTABLISHED FROM STATUTE 82.31 USING CENTERLINE OF EXISTING PAVEMENTS, PRESUMED 66' WIDTH.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.

4

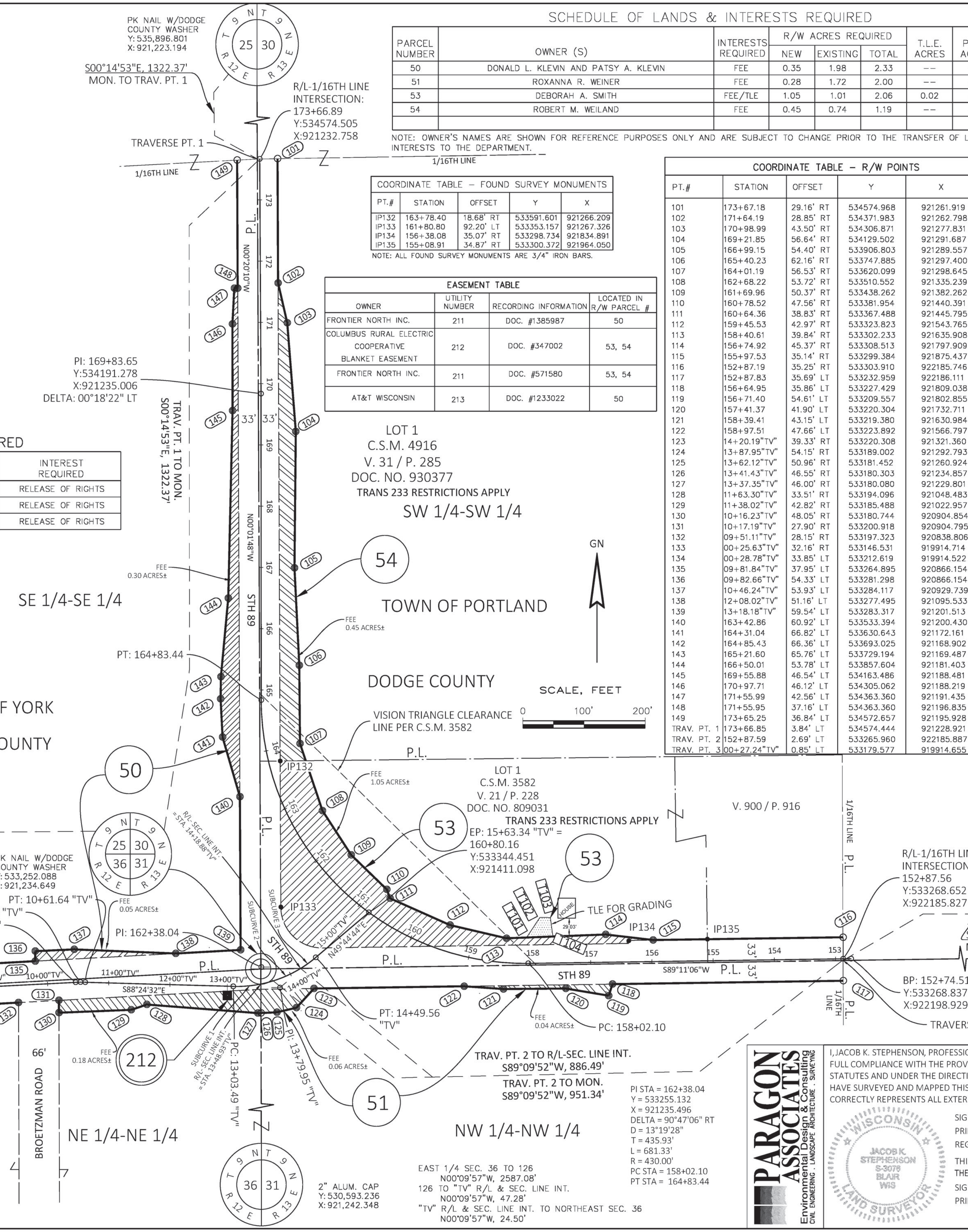


LOCATION SKETCH NOT TO SCALE

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
211	FRONTIER NORTH INC.	RELEASE OF RIGHTS
212	COLUMBUS RURAL ELECTRIC COOPERATIVE	RELEASE OF RIGHTS
213	AT&T WISCONSIN	RELEASE OF RIGHTS

SECTION CORNER BEARING AND DISTANCES
SOUTH 1/4 SEC. 25–SOUTHEAST SEC. 25 N86°51'21"E, 2643.96'
EAST 1/4 SEC. 25–SOUTHEAST SEC. 25 S00°14'53"E, 2644.74'
SOUTH 1/4 SEC. 30–SOUTHEAST SEC. 25 S89°09'52"W, 2271.34'
EAST 1/4 SEC. 36–SOUTHEAST SEC. 25 N00°09'57"W, 2658.86'



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTERESTS REQUIRED	R/W ACRES REQUIRED			T.L.E. ACRES	P.L.E. ACRES
			NEW	EXISTING	TOTAL		
50	DONALD L. KLEVIN AND PATSY A. KLEVIN	FEE	0.35	1.98	2.33	--	--
51	ROXANNA R. WEINER	FEE	0.28	1.72	2.00	--	--
53	DEBORAH A. SMITH	FEE/TLE	1.05	1.01	2.06	0.02	--
54	ROBERT M. WEILAND	FEE	0.45	0.74	1.19	--	--

NOTE: OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

COORDINATE TABLE – FOUND SURVEY MONUMENTS				
PT.#	STATION	OFFSET	Y	X
IP132	163+78.40	18.68' RT	533591.601	921266.209
IP133	161+80.80	92.20' LT	533353.157	921267.326
IP134	156+38.08	35.07' RT	533298.734	921834.891
IP135	155+08.91	34.87' RT	533300.372	921964.050

NOTE: ALL FOUND SURVEY MONUMENTS ARE 3/4" IRON BARS.

EASEMENT TABLE

OWNER	UTILITY NUMBER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #
FRONTIER NORTH INC.	211	DOC. #1385987	50
COLUMBUS RURAL ELECTRIC COOPERATIVE BLANKET EASEMENT	212	DOC. #347002	53, 54
FRONTIER NORTH INC.	211	DOC. #571580	53, 54
AT&T WISCONSIN	213	DOC. #1233022	50

COORDINATE TABLE – R/W POINTS

PT.#	STATION	OFFSET	Y	X
101	173+67.18	29.16' RT	534574.968	921261.919
102	171+64.19	28.85' RT	534371.983	921262.798
103	170+98.99	43.50' RT	534306.871	921277.831
104	169+21.85	56.64' RT	534129.502	921291.687
105	166+99.15	54.40' RT	533906.803	921289.557
106	165+40.23	62.16' RT	533747.885	921297.400
107	164+01.19	56.53' RT	533620.099	921298.645
108	162+68.22	53.72' RT	533510.552	921335.239
109	161+69.96	50.37' RT	533438.262	921382.262
110	160+78.52	47.56' RT	533381.954	921440.391
111	160+64.36	38.83' RT	533367.488	921445.795
112	159+45.53	42.97' RT	533323.823	921543.765
113	158+40.61	39.84' RT	533302.233	921635.908
114	156+74.92	45.37' RT	533308.513	921797.909
115	155+97.53	35.14' RT	533299.384	921875.437
116	152+87.19	35.25' RT	533303.910	922185.746
117	152+87.83	35.69' LT	533232.959	922186.111
118	156+64.95	35.86' LT	533227.429	921809.038
119	156+71.40	54.61' LT	533209.557	921802.855
120	157+41.37	41.90' LT	533220.304	921732.711
121	158+39.41	43.15' LT	533219.380	921630.984
122	158+97.51	47.66' LT	533223.892	921566.797
123	14+20.19"TV"	39.33' RT	533220.308	921321.360
124	13+87.95"TV"	54.15' RT	533189.002	921292.793
125	13+62.12"TV"	50.96' RT	533181.452	921260.924
126	13+41.43"TV"	46.55' RT	533180.303	921234.857
127	13+37.35"TV"	46.00' RT	533180.080	921229.801
128	11+63.30"TV"	33.51' RT	533194.096	921048.483
129	11+38.02"TV"	42.82' RT	533185.488	921022.957
130	10+16.23"TV"	48.05' RT	533180.744	920904.854
131	10+17.19"TV"	27.90' RT	533200.918	920904.795
132	09+51.11"TV"	28.15' RT	533197.323	920838.806
133	00+25.63"TV"	32.16' RT	533146.531	919914.714
134	00+28.78"TV"	33.85' LT	533212.619	919914.522
135	09+81.84"TV"	37.95' LT	533264.895	920866.154
136	09+82.66"TV"	54.33' LT	533281.298	920866.154
137	10+46.24"TV"	53.93' LT	533284.117	920929.739
138	12+08.02"TV"	51.16' LT	533277.495	921095.533
139	13+18.18"TV"	59.54' LT	533283.317	921201.513
140	163+42.86	60.92' LT	533533.394	921200.430
141	164+31.04	66.82' LT	533630.643	921172.161
142	165+85.43	66.36' LT	533693.025	921168.902
143	165+21.60	65.76' LT	533729.194	921169.487
144	166+50.01	53.78' LT	533857.604	921181.403
145	169+55.88	46.54' LT	534163.486	921188.481
146	170+97.71	46.12' LT	534305.062	921188.219
147	171+55.99	42.56' LT	534363.360	921191.435
148	171+55.95	37.16' LT	534363.360	921196.835
149	173+65.25	36.84' LT	534572.657	921195.928
TRAV. PT. 1	173+66.85	3.84' LT	534574.444	921228.921
TRAV. PT. 2	152+87.59	2.69' LT	533265.960	922185.887
TRAV. PT. 3	00+27.24"TV"	0.85' LT	533179.577	919914.655

R/W COURSE TABLE

PT. TO PT.	DIRECTION	DISTANCE
TRAV. PT. 1 TO R/L	N89°05'28"E	3.84'
R/L TO 101	N89°05'28"E	29.16'
101 TO 102	S00°14'53"E	202.99'
102 TO 103	S13°00'00"E	66.82'
103 TO 104	S04°27'51"E	177.91'
104 TO 105	S00°32'45"W	222.71'
105 TO 106	S02°49'32"E	159.11'
106 TO 107	S00°33'30"E	127.79'
107 TO 108	S18°28'18"E	115.50'
108 TO 109	S33°02'34"E	86.24'
109 TO 110	S45°54'43"E	80.93'
110 TO 111	S20°28'55"E	15.44'
111 TO 112	S65°58'41"E	107.26'
112 TO 113	S76°48'47"E	94.64'
113 TO 114	N87°46'49"E	162.12'
114 TO 115	S83°17'03"E	78.06'
115 TO 116	N89°09'52"E	310.34'
116 TO R/L	S00°12'47"E	35.26'
R/L TO TRAV. PT. 2	S00°12'47"E	2.69'
TRAV. PT. 2 TO 117	S00°23'17"E	33.00'
117 TO 118	S89°09'52"W	377.10'
118 TO 119	S18°08'21"W	19.89'
119 TO 120	N80°29'35"W	71.12'
120 TO 121	S89°28'36"W	101.73'
121 TO 122	N85°58'46"W	64.77'
122 TO 123	S89°09'52"W	245.00'
123 TO 124	S42°22'49"W	42.44'
124 TO 125	S76°40'21"W	32.75'
125 TO 126	S87°28'38"W	26.09'
126 TO 127	S87°28'38"W	5.06'
127 TO 128	N85°34'48"W	181.86'
128 TO 129	S71°21'56"W	26.94'
129 TO 130	S87°41'59"W	118.20'
130 TO 131	N00°09'57"W	20.17'
131 TO 132	S86°51'21"W	66.09'
132 TO 133	S86°51'21"W	925.48'
133 TO R/L	N00°06'11"W	32.19'
R/L TO TRAV. PT. 3	N00°06'11"W	0.86'
TRAV. PT. 3 TO 134	N00°13'51"W	33.04'
134 TO 135	N86°51'21"E	953.07'
135 TO 136	N00°00'00"E	16.40'
136 TO 137	N87°27'40"E	63.65'
137 TO 138	S87°42'46"E	165.93'
138 TO 139	N86°51'21"E	106.14'
139 TO 140	N00°14'53"W	250.08'
140 TO 141	N16°12'31"W	101.27'
141 TO 142	N02°59'26"W	62.47'
142 TO 143	N00°55'41"E	36.17'
143 TO 144	N05°18'05"E	128.96'
144 TO 145	N01°19'32"E	305.96'
145 TO 146	N00°06'22"W	141.58'
146 TO 147	N02°56'31"E	58.37'
147 TO 148	N90°00'00"E	5.62'
148 TO 149	N00°14'53"W	209.30'
149 TO TRAV. PT. 1	N86°53'56"E	33.04'

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COORDINATE TABLE – TLE POINTS

PT.#	STATION	OFFSET	Y	X
T101	158+04.39	42.20' RT	533302.233	921668.725
T102	157+81.83	74.81' RT	533336.425	921690.590
T103	157+64.85	74.07' RT	533335.924	921707.580
T104	157+61.08	43.26' RT	533305.175	921711.793

PI STA = 10+53.80 "TV"
Y = 533230.634
X = 920939.950
DELTA = 4°29'21" RT
D = 28°38'52"
T = 7.84'
L = 15.67'
R = 200.00'
PC STA = 10+45.97 "TV"
PT STA = 10+61.64 "TV"

PI STA = 13+79.95 "TV"
Y = 533221.578
X = 921265.979
DELTA = 41°50'44" LT
D = 28°38'52"
T = 76.46'
L = 146.07'
R = 200.00'
PC STA = 13+03.49 "TV"
PT STA = 14+49.56 "TV"

SUBCURVE 1
STA 13+03.49"TV" TO 13+48.93"TV"
L=45.44'
R=200.00'
LCH=45.34'
LCB=N85°04'56"E

SUBCURVE 2
STA 13+48.93"TV" TO 14+18.88"TV"
R/L-SEC. LINE INT.
L=69.95'
R=200.00'
LCH=69.59'
LCB=N68°33'14"E

SUBCURVE 3
STA 14+18.88"TV"
R/L-SEC. LINE INT.
TO 14+49.56"TV"
L=30.68'
R=200.00'
LCH=30.65'
LCB=N54°08'24"E

TRAV. PT. 2 TO R/L-SEC. LINE INT.
S89°09'52"W, 886.49'

TRAV. PT. 2 TO MON.
S89°09'52"W, 951.34'

PI STA = 162+38.04
Y = 533255.132
X = 921235.496
DELTA = 90°47'06" RT
D = 13°19'28"
T = 435.93'
L = 681.33'
R = 430.00'
PC STA = 158+02.10
PT STA = 164+83.44

EAST 1/4 SEC. 36 TO 126
N00°09'57"W, 2587.08'
126 TO "TV" R/L & SEC. LINE INT.
N00°09'57"W, 47.28'
"TV" R/L & SEC. LINE INT. TO NORTHEAST SEC. 36
N00°09'57"W, 24.50'

PARAGON ASSOCIATES
Environmental Design & Consulting
CIVIL ENGINEERING . LANDSCAPE ARCHITECTURE . SURVEYING

I, JACOB K. STEPHENSON, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JACOB K. STEPHENSON S-3076 BLAIR WIS LAND SURVEYOR

SIGNATURE: Jacob Stephenson DATE: 5/3/2022
PRINT NAME: JACOB K. STEPHENSON
REGISTRATION NUMBER: S-3076

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DEPARTMENT OF TRANSPORTATION, MADISON OFFICE
SIGNATURE: Cory Schlagel DATE: 5/3/2022
PRINT NAME: CORY SCHLAGEL

APPRAISAL DATE:05/04/2022

DOCUMENT#: **1325017**

Recorded: **05-04-2022 at 11:53 AM**
CHRIS PLANASCH, REGISTER OF DEEDS
Chris Planasch
DODGE COUNTY , WI
Fee Amount: **$25.00** Pages: 2

***The above recording information verifies this document has been electronically recorded and Returned to: **WisDOT - NE Region - Green Bay - P**

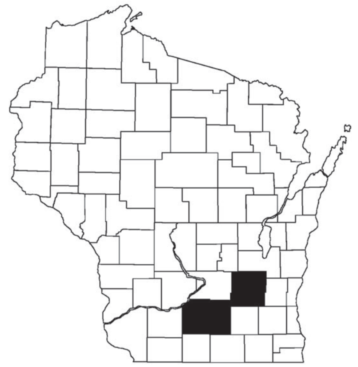
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER : 3670-00-24-4.01
AMENDMENT NO:___ SHEET 1 OF 2

FILE NAME : F:\SURVEY\2020\20-099 DOT DANE COUNTY TPP\BASEDATA\SURVEY\3670-00-04-03-08-22 UPDATES.DWG
APPRAISAL PLAT DATE : ___________
PLOT DATE : 5/3/2022 3:16 PM   PLOT BY : JACOB S   PLOT NAME :   PLOT SCALE : 1" = 200'

3670-00-24-4.01

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
3670-00-24
LAKE MILLS-COLUMBUS
CLARKSON ROAD TO AVALON ROAD
STH 89
DANE/DODGE COUNTY

4



CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE (P.L.)
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W — (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL (18, 23, 24, 26, 25, 9, T, N, R, W)
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN — SIGN
OFF-PREMISE SIGN — #1-25 SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

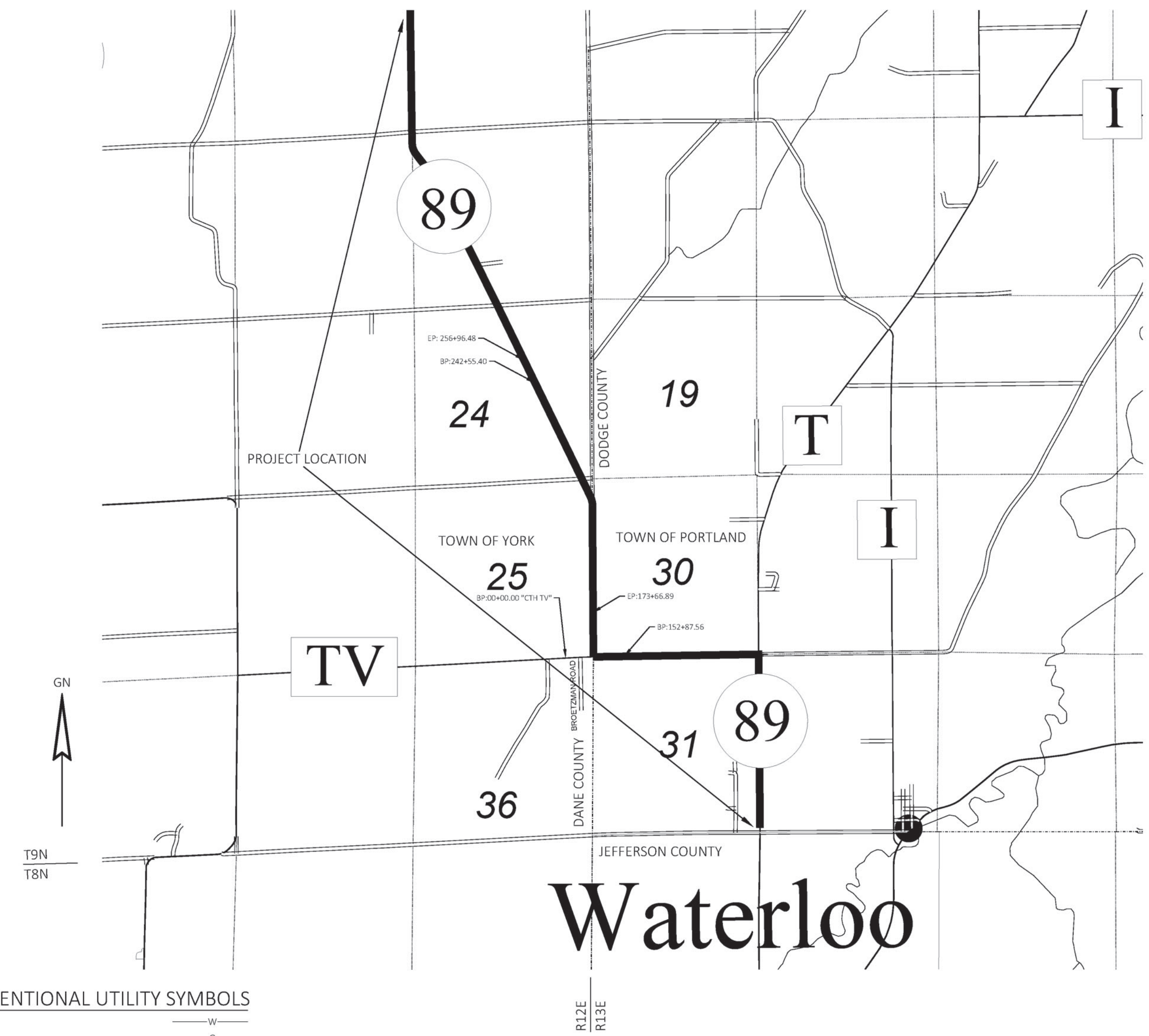
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM		
CONCRETE	CONC	RIGHT	RT
COUNTY	CO	RIGHT OF WAY	R/W
COUNTY TRUNK HIGHWAY	CTH	SECTION	SEC
DISTANCE	DIST	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED EASEMENT	TLE
GRID NORTH	GN		
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	



LAYOUT
SCALE 0 0.5 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 3670-00-24

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

4

PROJECT NUMBER 3670-00-24 - 4. 01
SHEET 2 OF 2
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 3670-00-24 - 4.01

THAT PART OF LOT 1, CERTIFIED SURVEY MAP NO. 3582, V. 21, P. 228, DOCUMENT NUMBER 809031, AND LOT 1, CERTIFIED SURVEY MAP NO. 4916, V. 31, P. 285, DOCUMENT NUMBER 930377, LOCATED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 30, AND PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 31, ALL IN TOWNSHIP 9 NORTH, RANGE 13 EAST, TOWN OF PORTLAND, DODGE COUNTY, WISCONSIN; ALSO THAT PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 25, AND THE NE 1/4 OF THE NE 1/4 OF SECTION 36, ALL IN TOWNSHIP 9 NORTH, RANGE 12 EAST, TOWN OF YORK, DANE COUNTY, WISCONSIN.

RELOCATION ORDER   STH 89   LAKE MILLS-COLUMBUS   CLARKSON ROAD TO AVALON ROAD   DODGE/DANE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD 83(2011), IN U.S. SURVEY FEET, VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

NGS CONTROL POINT UTILIZED: PID: DH5452, DESIGNATION: YORK E GPS, DANE COUNTY, WI.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

REFERENCE LINE NOT NECESSARILY CONSTRUCTION REFERENCE LINE.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN MADISON, WI.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STATE HIGHWAY 89 AND COUNTY TRUNK HIGHWAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

CERTIFIED SURVEY MAP NO. 4916 , CERTIFIED SURVEY MAP NO. 3582 AND PG 188 OF TOWN ROAD RECORDS LAYING OUT OF BROETZMAN ROAD.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STATE HIGHWAY 89 SHOWN HEREIN IS ESTABLISHED FROM STATUTE 82.31 USING CENTERLINE OF EXISTING PAVEMENTS, PRESUMED 66' WIDTH.

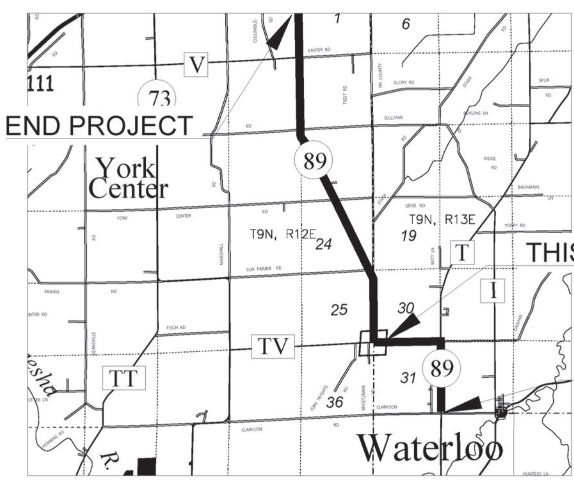
4

UTILITY INTERESTS REQUIRED

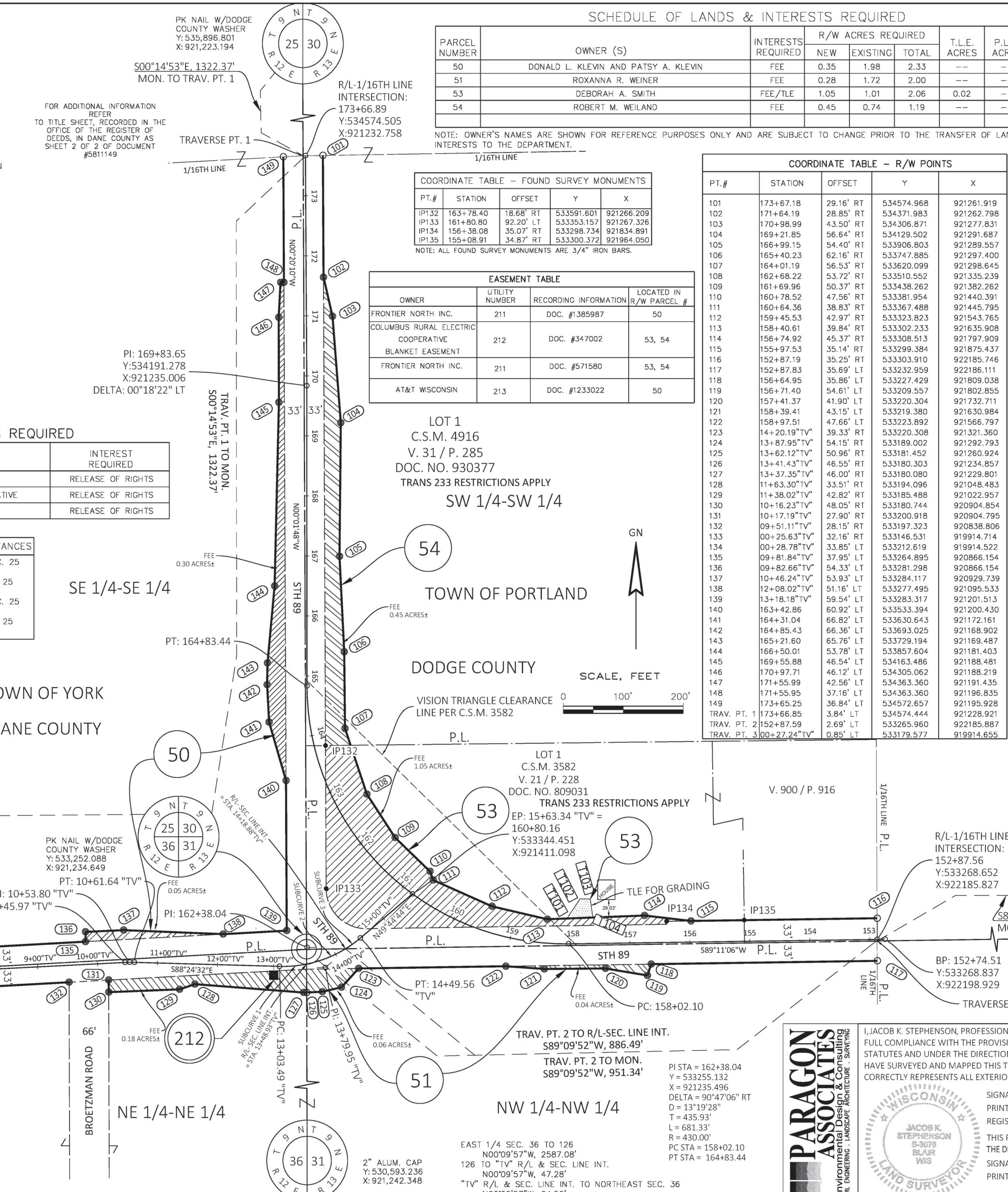
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
211	FRONTIER NORTH INC.	RELEASE OF RIGHTS
212	COLUMBUS RURAL ELECTRIC COOPERATIVE	RELEASE OF RIGHTS
213	AT&T WISCONSIN	RELEASE OF RIGHTS

SECTION CORNER BEARING AND DISTANCES

SOUTH 1/4 SEC. 25–SOUTHEAST SEC. 25
N86°51'21"E, 2643.96'
EAST 1/4 SEC. 25–SOUTHEAST SEC. 25
S00°14'53"E, 2644.74'
SOUTH 1/4 SEC. 30–SOUTHEAST SEC. 25
S89°09'52"W, 2271.34'
EAST 1/4 SEC. 36–SOUTHEAST SEC. 25
N00°09'57"W, 2658.86'



LOCATION SKETCH NOT TO SCALE



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTERESTS REQUIRED	R/W ACRES REQUIRED			T.L.E. ACRES	P.L.E. ACRES
			NEW	EXISTING	TOTAL		
50	DONALD L. KLEVIN AND PATSY A. KLEVIN	FEE	0.35	1.98	2.33	--	--
51	ROXANNA R. WEINER	FEE	0.28	1.72	2.00	--	--
53	DEBORAH A. SMITH	FEE/TLE	1.05	1.01	2.06	0.02	--
54	ROBERT M. WEILAND	FEE	0.45	0.74	1.19	--	--

NOTE: OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

COORDINATE TABLE – FOUND SURVEY MONUMENTS

PT.#	STATION	OFFSET	Y	X
IP132	163+78.40	18.68' RT	533591.601	921266.209
IP133	161+80.80	92.20' LT	533353.157	921267.326
IP134	156+38.08	35.07' RT	533298.734	921834.891
IP135	155+08.91	34.87' RT	533300.372	921964.050

NOTE: ALL FOUND SURVEY MONUMENTS ARE 3/4" IRON BARS.

EASEMENT TABLE

OWNER	UTILITY NUMBER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #
FRONTIER NORTH INC.	211	DOC. #1385987	50
COLUMBUS RURAL ELECTRIC COOPERATIVE BLANKET EASEMENT	212	DOC. #347002	53, 54
FRONTIER NORTH INC.	211	DOC. #571580	53, 54
AT&T WISCONSIN	213	DOC. #1233022	50

COORDINATE TABLE – R/W POINTS

PT.#	STATION	OFFSET	Y	X
101	173+67.18	29.16' RT	534574.968	921261.919
102	171+64.19	28.85' RT	534371.983	921262.798
103	170+98.99	43.50' RT	534306.871	921277.831
104	169+21.85	56.64' RT	534129.502	921291.687
105	166+99.15	54.40' RT	533906.803	921289.557
106	165+40.23	62.16' RT	533747.885	921297.400
107	164+01.19	56.53' RT	533620.099	921298.645
108	162+68.22	53.72' RT	533510.552	921335.239
109	161+69.96	50.37' RT	533438.262	921382.262
110	160+78.52	47.56' RT	533381.954	921440.391
111	160+64.36	38.83' RT	533367.488	921445.795
112	159+45.53	42.97' RT	533323.823	921543.765
113	158+40.61	39.84' RT	533302.233	921635.908
114	156+74.92	45.37' RT	533308.513	921797.909
115	155+97.53	35.14' RT	533299.384	921875.437
116	152+87.19	35.25' RT	533303.910	922185.746
117	152+87.83	35.69' LT	533232.959	922186.111
118	156+64.95	35.86' LT	533227.429	921809.038
119	156+71.40	54.61' LT	533209.557	921802.855
120	157+41.37	41.90' LT	533220.304	921732.711
121	158+39.41	43.15' LT	533219.380	921630.984
122	158+97.51	47.66' LT	533223.892	921566.797
123	14+20.19"TV"	39.33' RT	533220.308	921321.360
124	13+87.95"TV"	54.15' RT	533189.002	921292.793
125	13+62.12"TV"	50.96' RT	533181.452	921260.924
126	13+41.43"TV"	46.55' RT	533180.303	921234.857
127	13+37.35"TV"	46.00' RT	533180.080	921229.801
128	11+63.30"TV"	33.51' RT	533194.096	921048.483
129	11+38.02"TV"	42.82' RT	533185.488	921022.957
130	10+16.23"TV"	48.05' RT	533180.744	920904.854
131	10+17.19"TV"	27.90' RT	533200.918	920904.795
132	09+51.11"TV"	28.15' RT	533197.323	920838.806
133	00+25.63"TV"	32.16' RT	533146.531	919914.714
134	00+28.78"TV"	33.85' LT	533212.619	919914.522
135	09+81.84"TV"	37.95' LT	533264.895	920866.154
136	09+82.66"TV"	54.33' LT	533281.298	920866.154
137	10+46.24"TV"	53.93' LT	533284.117	920929.739
138	12+08.02"TV"	51.16' LT	533277.495	921095.533
139	13+18.18"TV"	59.54' LT	533283.317	921201.513
140	163+42.86	60.92' LT	533533.394	921200.430
141	164+31.04	66.82' LT	533630.643	921172.161
142	164+85.43	66.36' LT	533693.025	921168.902
143	165+21.60	65.76' LT	533729.194	921169.487
144	166+50.01	53.78' LT	533857.604	921181.403
145	169+55.88	46.54' LT	534163.486	921188.481
146	170+97.71	46.12' LT	534305.062	921188.219
147	171+55.99	42.56' LT	534363.360	921191.435
148	171+55.95	37.16' LT	534363.360	921196.835
149	173+65.25	36.84' LT	534572.657	921195.928
TRAV. PT. 1	173+66.85	3.84' LT	534574.444	921228.921
TRAV. PT. 2	152+87.59	2.69' LT	533265.960	922185.887
TRAV. PT. 3	00+27.24"TV"	0.85' LT	533179.577	919914.655

COORDINATE TABLE – TLE POINTS

PT.#	STATION	OFFSET	Y	X
T101	158+04.39	42.20' RT	533302.233	921668.725
T102	157+81.83	74.81' RT	533336.425	921690.590
T103	157+64.85	74.07' RT	533335.924	921707.580
T104	157+61.08	43.26' RT	533305.175	921711.793

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
5831298
05/04/2022 01:01 PM
Trans Fee:
Exempt #:
Rec. Fee: 25.00
Pages:
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER : 3670-00-24-4.01
AMENDMENT NO:___

R/W COURSE TABLE

PT. TO PT.	DIRECTION	DISTANCE
TRAV. PT. 1 TO R/L	N89°05'28"E	3.84'
R/L TO 101	N89°05'28"E	29.16'
101 TO 102	S00°14'53"E	202.99'
102 TO 103	S13°00'00"E	66.82'
103 TO 104	S04°27'51"E	177.91'
104 TO 105	S00°32'45"W	222.71'
105 TO 106	S02°49'32"E	159.11'
106 TO 107	S00°33'30"E	127.79'
107 TO 108	S18°28'18"E	115.50'
108 TO 109	S33°02'34"E	86.24'
109 TO 110	S45°54'43"E	80.93'
110 TO 111	S20°28'55"E	15.44'
111 TO 112	S65°58'41"E	107.26'
112 TO 113	S76°48'47"E	94.64'
113 TO 114	N87°46'49"E	162.12'
114 TO 115	S83°17'03"E	78.06'
115 TO 116	N89°09'52"E	310.34'
116 TO R/L	S00°12'47"E	35.26'
R/L TO TRAV. PT. 2	S00°12'47"E	2.69'
TRAV. PT. 2 TO 117	S00°23'17"E	33.00'
117 TO 118	S89°09'52"W	377.10'
118 TO 119	S18°08'21"W	19.89'
119 TO 120	N80°29'35"W	71.12'
120 TO 121	S89°28'47"W	101.73'
121 TO 122	N85°58'46"W	64.77'
122 TO 123	S89°09'52"W	245.00'
123 TO 124	S42°22'49"W	42.44'
124 TO 125	S76°40'21"W	32.75'
125 TO 126	S87°28'38"W	26.09'
126 TO 127	S87°28'38"W	5.06'
127 TO 128	N85°34'48"W	181.86'
128 TO 129	S71°21'56"W	26.94'
129 TO 130	S87°41'59"W	118.20'
130 TO 131	N00°09'57"W	20.17'
131 TO 132	S86°51'21"W	66.09'
132 TO 133	S86°51'21"W	925.48'
133 TO R/L	N00°06'11"W	32.19'
R/L TO TRAV. PT. 3	N00°06'11"W	0.86'
TRAV. PT. 3 TO 134	N00°13'51"W	33.04'
134 TO 135	N86°51'21"E	953.07'
135 TO 136	N00°00'00"E	16.40'
136 TO 137	N87°27'40"E	63.65'
137 TO 138	S87°42'46"E	165.93'
138 TO 139	N86°51'21"E	106.14'
139 TO 140	N00°14'53"W	250.08'
140 TO 141	N16°12'31"W	101.27'
141 TO 142	N02°59'26"W	62.47'
142 TO 143	N00°55'41"E	36.17'
143 TO 144	N05°18'05"E	128.96'
144 TO 145	N01°19'32"E	305.96'
145 TO 146	N00°06'22"W	141.58'
146 TO 147	N02°56'31"E	58.37'
147 TO 148	N90°00'00"E	5.62'
148 TO 149	N00°14'53"W	209.30'
149 TO TRAV. PT. 1	N86°53'56"E	33.04'

4

PI STA = 10+53.80 "TV"
Y = 533230.634
X = 920939.950
DELTA = 4°29'21" RT
D = 28°38'52"
T = 7.84'
L = 15.67'
R = 200.00'
PC STA = 10+45.97 "TV"
PT STA = 10+61.64 "TV"

PI STA = 13+79.95 "TV"
Y = 533221.578
X = 921265.979
DELTA = 41°50'44" LT
D = 28°38'52"
T = 76.46'
L = 146.07'
R = 200.00'
PC STA = 13+03.49 "TV"
PT STA = 14+49.56 "TV"

SUBCURVE 1
STA 13+03.49"TV"
TO 13+48.93"TV"
L=45.44'
R=200.00'
LCH=45.34'
LCB=N85°04'56"E

SUBCURVE 2
STA 13+48.93"TV"
TO 14+18.88"TV"
R/L-SEC. LINE INT.
L=69.95'
R=200.00'
LCH=69.59'
LCB=N68°33'14"E

SUBCURVE 3
STA 14+18.88"TV"
R/L-SEC. LINE INT.
TO 14+49.56"TV"
L=30.68'
R=200.00'
LCH=30.65'
LCB=N54°08'24"E

PI STA = 162+38.04
Y = 533255.132
X = 921235.496
DELTA = 90°47'06" RT
D = 13°19'28"
T = 435.93'
L = 681.33'
R = 430.00'
PC STA = 158+02.10
PT STA = 164+83.44

EAST 1/4 SEC. 36 TO 126
N00°09'57"W, 2587.08'
126 TO "TV" R/L & SEC. LINE INT.
N00°09'57"W, 47.28'
"TV" R/L & SEC. LINE INT. TO NORTHEAST SEC. 36
N00°09'57"W, 24.50'

PARAGON ASSOCIATES
Environmental Design & Consulting
CIVIL ENGINEERING . LANDSCAPE ARCHITECTURE . SURVEYING

I, JACOB K. STEPHENSON, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Jacob Stephenson DATE: 5/3/2022
PRINT NAME: JACOB K. STEPHENSON
REGISTRATION NUMBER: S-3076

WISCONSIN JACOB K. STEPHENSON S-3076 BLAIR WIS LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DEPARTMENT OF TRANSPORTATION, MADISON OFFICE
SIGNATURE: Cory Schlagel DATE: 5/4/2022
PRINT NAME: CORY SCHLAGEL

APPRAISAL DATE:05/04/2022

TRANSPORTATION PROJECT PLAT NO: 3670-00-24 - 4.02

PART OF THE SW 1/4 OF THE NE 1/4, SECTION 24, TOWNSHIP 9 NORTH, RANGE 12 EAST, TOWN OF YORK, DANE COUNTY, WISCONSIN.

RELOCATION ORDER STH 89 LAKE MILLS-COLUMBUS CLARKSON ROAD TO AVALON ROAD DODGE/DANE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD 83(2011), IN U.S. SURVEY FEET, VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

NGS CONTROL POINT UTILIZED: PID: DH5452, DESIGNATION: YORK E GPS, DANE COUNTY, WI.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

REFERENCE LINE NOT NECESSARILY CONSTRUCTION REFERENCE LINE.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN MADISON, WI.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STATE HIGHWAY 89 SHOWN HEREIN IS ESTABLISHED FROM STATUTE 82.31 USING CENTERLINE OF EXISTING PAVEMENTS, PRESUMED 66' WIDTH.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.

4

COORDINATE TABLE – TLE POINTS				
PT.#	STATION	OFFSET	Y	X
T201	250+71.80	83.52' LT	541804.112	919218.900
T202	251+65.00	83.52' LT	541887.367	919177.011
T203	251+65.00	36.86' LT	541908.337	919218.689
T204	251+59.29	50.00' RT	541942.275	919298.847
T205	251+58.84	79.51' RT	541955.134	919325.410
T206	250+88.33	78.43' RT	541891.666	919356.136

UTILITY INTERESTS REQUIRED

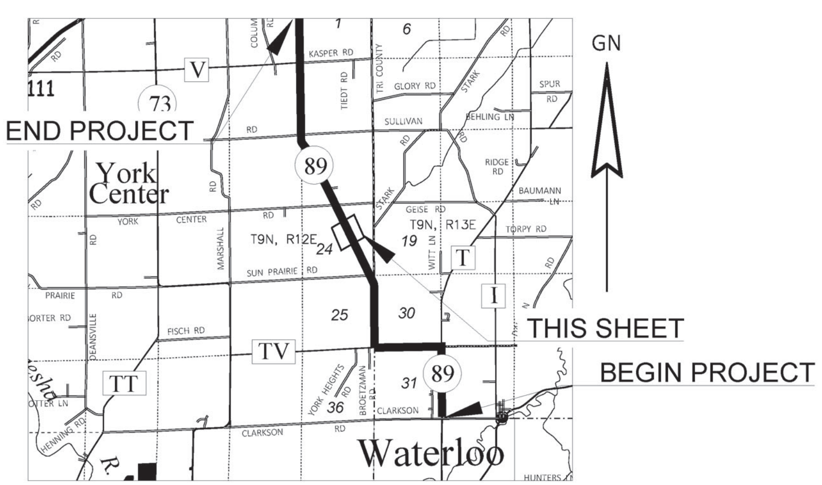
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
211	FRONTIER NORTH INC.	RELEASE OF RIGHTS

EASEMENT TABLE			
UTILITY NUMBER	OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #
211	FRONTIER NORTH INC.	DOC. #1384954	60

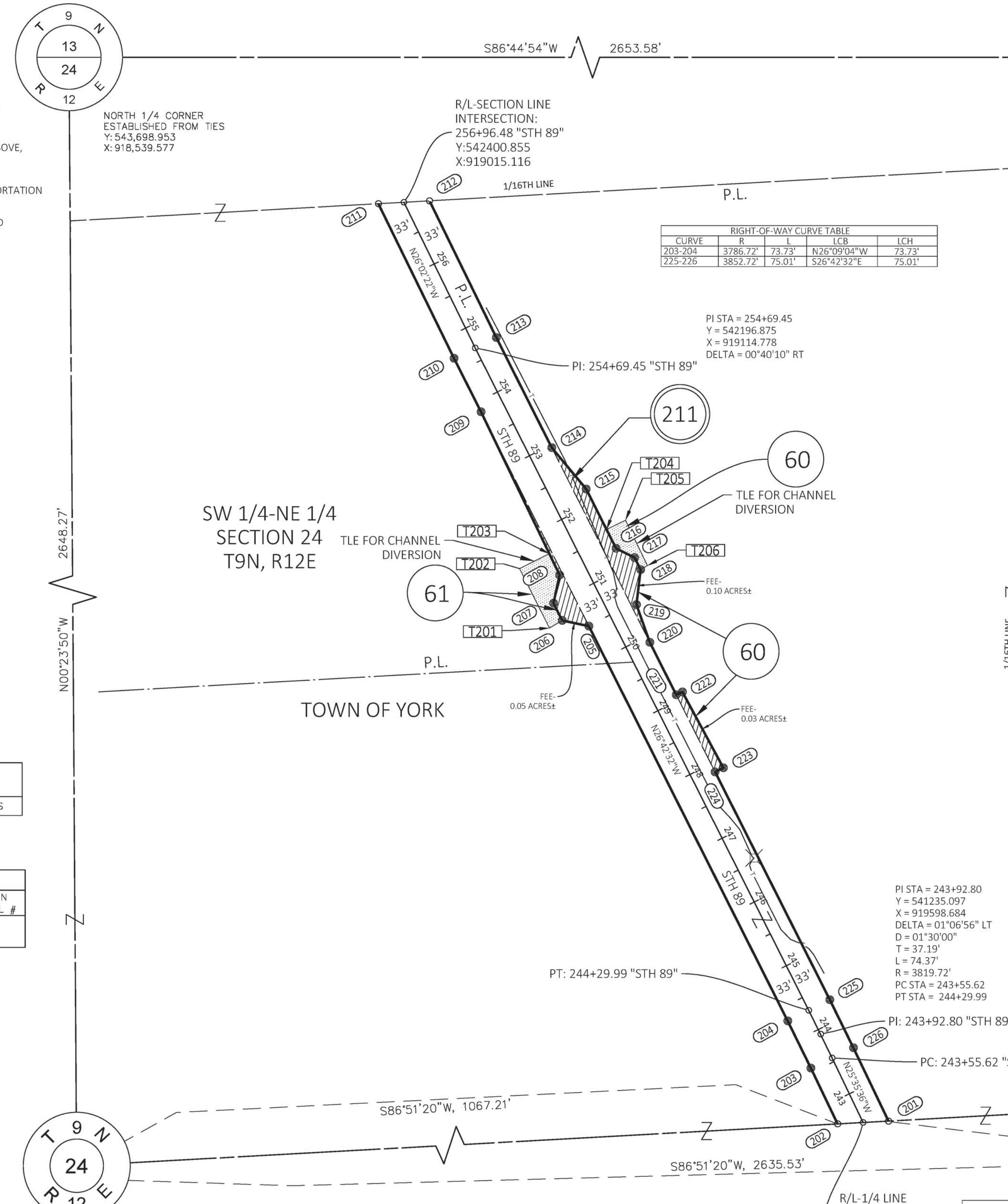
GN

SCALE, FEET

0 100' 200'



LOCATION SKETCH NOT TO SCALE



RIGHT-OF-WAY CURVE TABLE				
CURVE	R	L	LCB	LCH
203-204	3786.72'	73.73'	N26°09'04"W	73.73'
225-226	3852.72'	75.01'	S26°42'32"E	75.01'

PI STA = 254+69.45
Y = 542196.875
X = 919114.778
DELTA = 00°40'10" RT

PI STA = 243+92.80
Y = 541235.097
X = 919598.684
DELTA = 01°06'56" LT
D = 01°30'00"
T = 37.19'
L = 74.37'
R = 3819.72'
PC STA = 243+55.62
PT STA = 244+29.99

NORTHEAST CORNER
ESTABLISHED FROM TIES
Y: 543,849.468
X: 921,188.887

R/W COURSE TABLE		
PT. TO PT.	DIRECTION	DISTANCE
201 TO ALI	S86°51'20"W	35.71'
ALI TO 202	S86°51'20"W	35.71'
202 TO 203	N25°35'36"W	86.58'
204 TO 205	N26°42'32"W	619.40'
205 TO 206	N77°56'43"W	38.25'
206 TO 207	N26°42'32"W	27.03'
207 TO 208	N12°09'37"E	40.46'
208 TO 209	N25°42'23"W	253.70'
209 TO 210	N26°42'32"W	83.92'
210 TO 211	N26°02'22"W	241.31'
211 TO ALI	N86°48'02"E	35.81'
ALI TO 212	N86°48'02"E	35.81'
212 TO 213	S26°02'22"E	213.13'
213 TO 214	S26°42'32"E	172.90'
214 TO 215	S39°45'21"E	75.30'
215 TO 216	S26°42'32"E	93.06'
216 TO 217	S63°08'31"E	29.15'
217 TO 218	S26°42'32"E	18.79'
218 TO 219	S06°53'53"W	49.35'
219 TO 220	S19°32'18"E	56.08'
220 TO 221	S26°42'32"E	82.23'
221 TO 222	N65°12'20"E	9.56'
222 TO 223	S28°18'49"E	120.84'
223 TO 224	S63°17'19"W	12.94'
224 TO 225	S26°42'32"E	357.43'
226 TO 201	S25°35'36"E	113.85'

COORDINATE TABLE – R/W POINTS				
PT.#	STATION	OFFSET	Y	X
201	242+41.77	33.00' RT	541113.134	919693.692
202	242+69.03	33.00' LT	541109.217	919622.388
203	243+55.62	33.00' LT	541187.304	919584.986
204	244+29.99	33.00' LT	541253.484	919552.192
205	250+49.39	33.00' LT	541806.795	919274.099
206	250+73.34	62.83' LT	541814.784	919236.690
207	251+00.37	62.83' LT	541838.934	919224.539
208	251+31.87	37.44' LT	541878.483	919233.061
209	253+85.53	33.00' LT	542107.076	919123.016
210	254+69.45	33.00' LT	542182.042	919085.297
211	257+10.38	33.00' LT	542398.857	918979.365
212	256+82.58	33.00' RT	542402.854	919050.868
213	254+69.45	33.00' RT	542211.362	919144.428
214	252+96.17	33.00' RT	542056.914	919222.137
215	252+22.81	50.00' RT	541999.022	919270.295
216	251+29.75	50.00' RT	541915.889	919312.123
217	251+06.29	67.31' RT	541902.717	919338.133
218	250+87.50	67.31' RT	541885.933	919346.578
219	250+46.40	40.00' RT	541836.940	919340.651
220	249+90.76	33.00' RT	541784.089	919359.406
221	249+08.54	33.00' RT	541710.637	919396.363
222	249+08.22	42.55' RT	541717.646	919405.042
223	247+87.42	45.94' RT	541608.258	919462.358
224	247+87.42	33.00' RT	541602.442	919450.800
225	244+29.99	33.00' RT	541283.147	919611.450
226	243+55.62	33.00' RT	541215.815	919644.510

EAST 1/4 CORNER
ESTABLISHED FROM TIES
Y: 541,195.244
X: 921,188.339

4

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
5811149
02/09/2022 09:37 AM
Trans Fee:
Exempt #:
Rec. Fee: 25.00
Pages:
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER : 3670-00-24-4.02
AMENDMENT NO:___ SHEET 1 OF 2

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTERESTS REQUIRED	R/W ACRES REQUIRED			T.L.E. ACRES	P.L.E. ACRES
			NEW	EXISTING	TOTAL		
60	MCKAY NURSERY HOLDING COMPANY, INC.	FEE/TLE	0.13	1.64	1.77	0.04	--
61	JOHN AND KAREN WADDELL	FEE/TLE	0.05	0.55	0.60	0.07	--

NOTE: OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

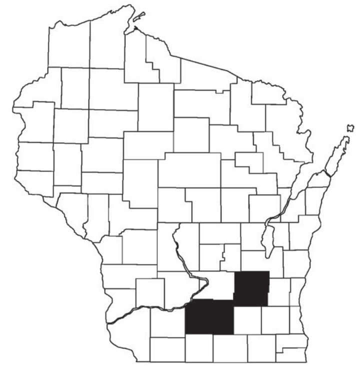
PARAGON ASSOCIATES
Environmental Design & Consulting
CIVIL ENGINEERING . LANDSCAPE ARCHITECTURE . SURVEYING

I, JACOB K. STEPHENSON, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Jacob Stephenson DATE: 2/07/2022
PRINT NAME: JACOB K. STEPHENSON
REGISTRATION NUMBER: S-3076

WISCONSIN JACOB K. STEPHENSON S-3076 BLAIR WIS LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DEPARTMENT OF TRANSPORTATION, MADISON OFFICE
SIGNATURE: Cory Schlagel DATE: 2/08/2022
PRINT NAME: CORY SCHLAGEL



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
3670-00-24
LAKE MILLS-COLUMBUS
CLARKSON ROAD TO AVALON ROAD
STH 89
DANE/DODGE COUNTY

4

4

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE (P.L.)
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W — (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL (18, 23, 24, 26, 25, 9, T, N, R, W)
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN (SIGN)
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
OFF-PREMISE SIGN (#1-25, SIGN)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

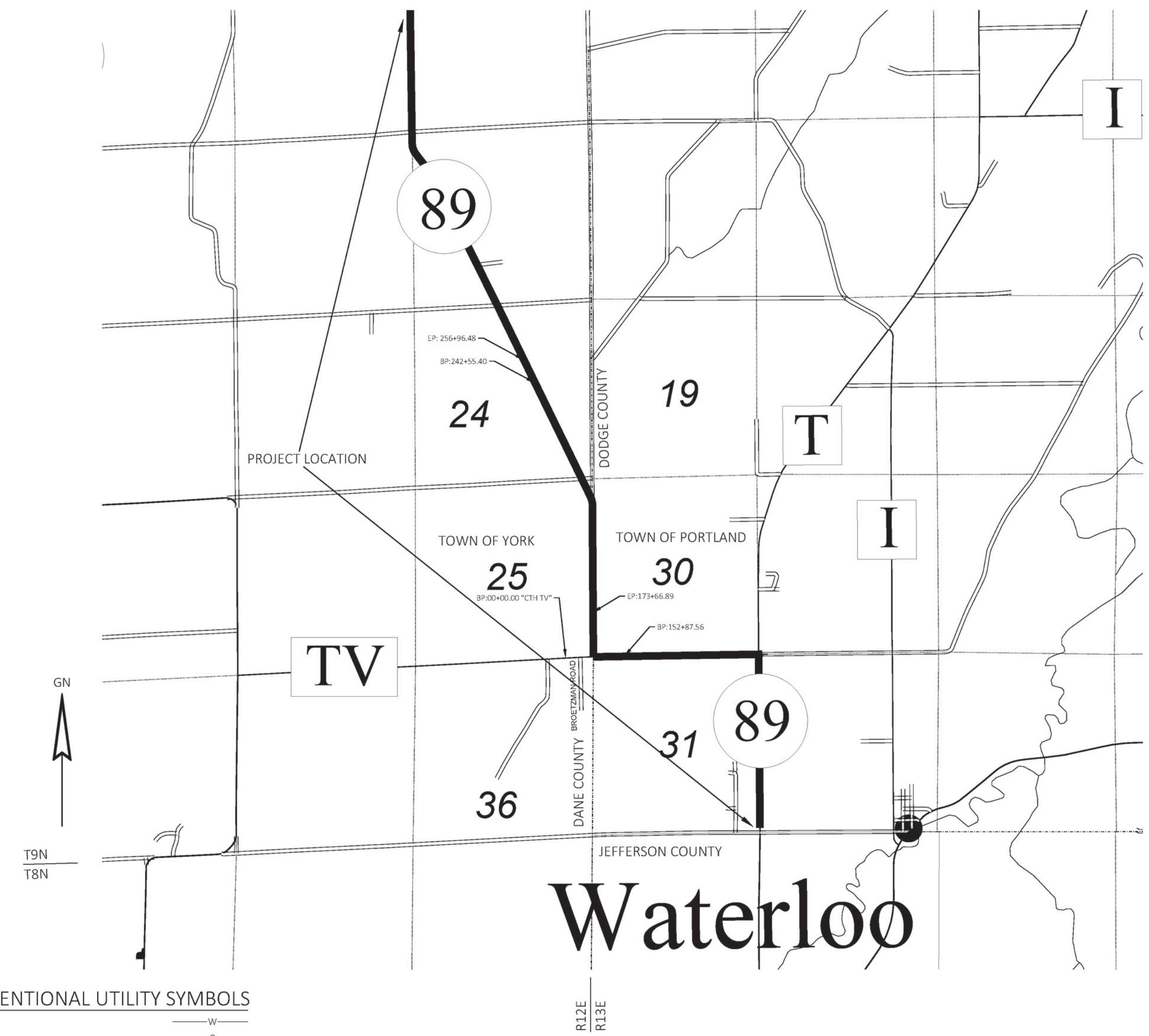
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM		
CONCRETE	CONC	RIGHT	RT
COUNTY	CO	RIGHT OF WAY	R/W
COUNTY TRUNK HIGHWAY	CTH	SECTION	SEC
DISTANCE	DIST	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED EASEMENT	TLE
GRID NORTH	GN		
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	



LAYOUT
SCALE 0 0.5 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 3670-00-24

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

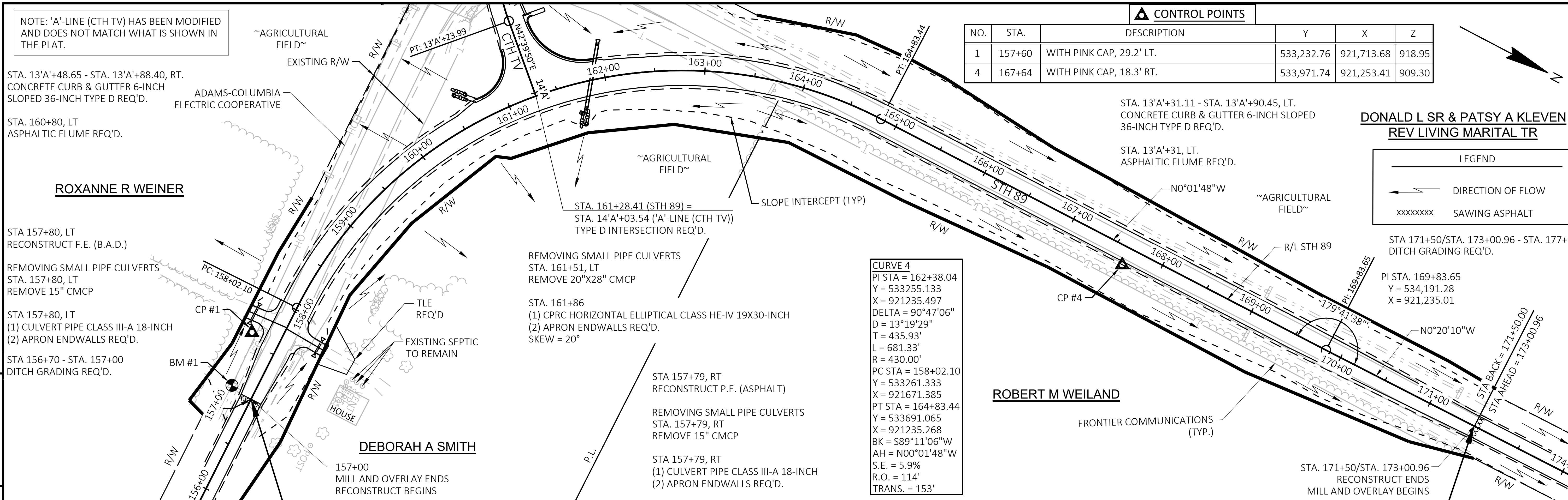
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 3670-00-24 - 4. 02
SHEET 2 OF 2
AMENDMENT NO:

NOTE: 'A'-LINE (CTH TV) HAS BEEN MODIFIED AND DOES NOT MATCH WHAT IS SHOWN IN THE PLAT.



CURVE 4
PI STA = 162+38.04
Y = 533255.133
X = 921235.497
DELTA = 90°47'06"
D = 13°19'29"
T = 435.93'
L = 681.33'
R = 430.00'
PC STA = 158+02.10
Y = 533261.333
X = 921671.385
PT STA = 164+83.44
Y = 533691.065
X = 921235.268
BK = S89°11'06"W
AH = N00°01'48"W
S.E. = 5.9%
R.O. = 114'
TRANS. = 153'

CONTROL POINTS

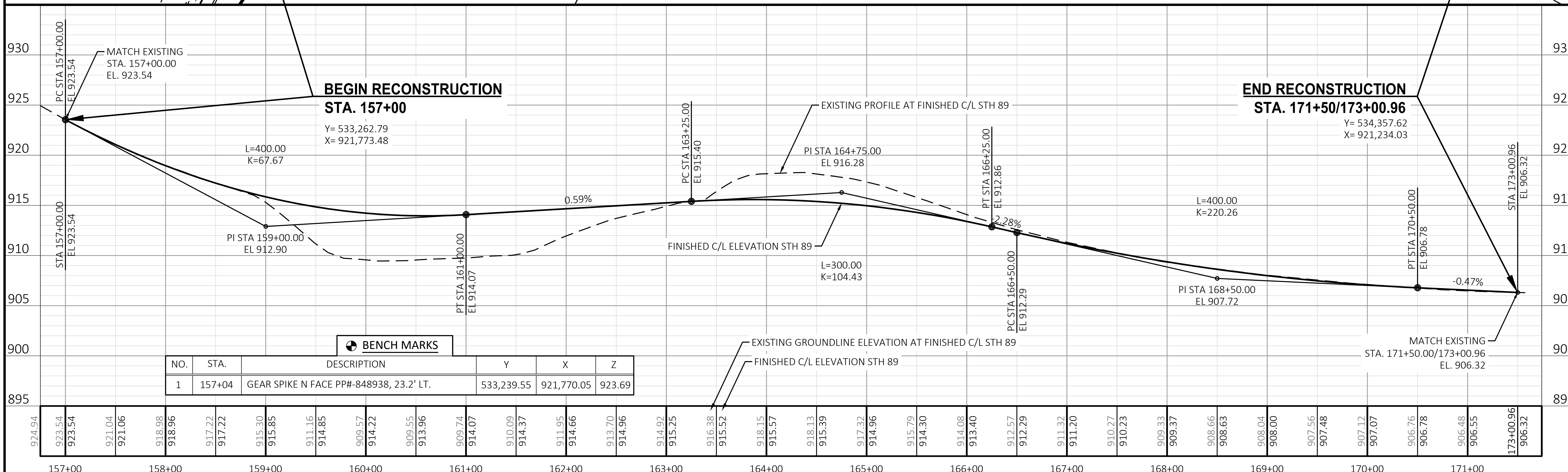
NO.	STA.	DESCRIPTION	Y	X	Z
1	157+60	WITH PINK CAP, 29.2' LT.	533,232.76	921,713.68	918.95
4	167+64	WITH PINK CAP, 18.3' RT.	533,971.74	921,253.41	909.30

LEGEND

DIRECTION OF FLOW
xxxxxxxx SAWING ASPHALT

5

5



BENCH MARKS

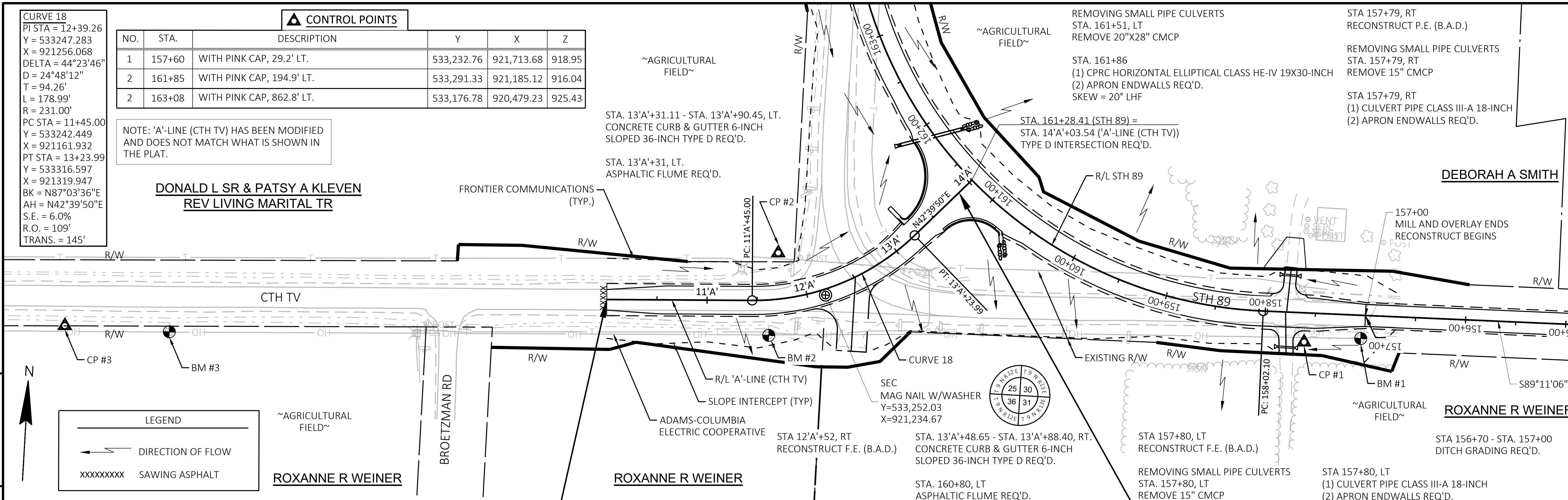
NO.	STA.	DESCRIPTION	Y	X	Z
1	157+04	GEAR SPIKE N FACE PP#-848938, 23.2' LT.	533,239.55	921,770.05	923.69

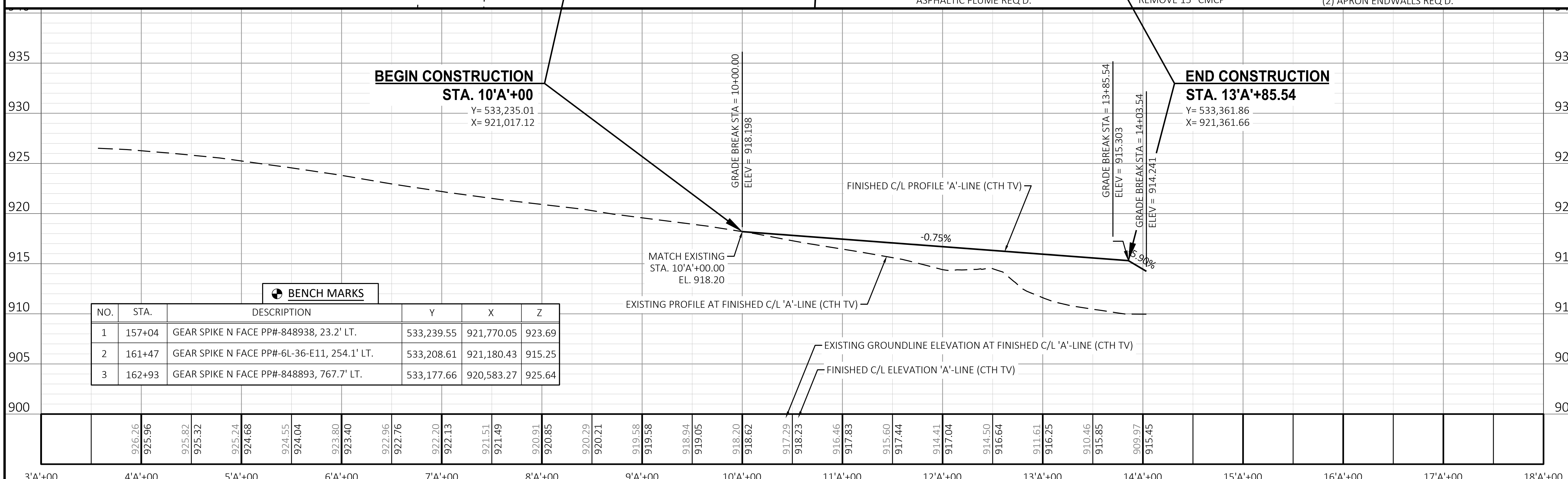
CURVE 18
PI STA = 12+39.26
Y = 533247.283
X = 921256.068
DELTA = 44°23'46"
D = 24°48'12"
T = 94.26'
L = 178.99'
R = 231.00'
PC STA = 11+45.00
Y = 533242.449
X = 921161.932
PT STA = 13+23.99
Y = 533316.597
X = 921319.947
BK = N87°03'36"E
AH = N42°39'50"E
S.E. = 6.0%
R.O. = 109'
TRANS. = 145'

CONTROL POINTS

NO.	STA.	DESCRIPTION	Y	X	Z
1	157+60	WITH PINK CAP, 29.2' LT.	533,232.76	921,713.68	918.95
2	161+85	WITH PINK CAP, 194.9' LT.	533,291.33	921,185.12	916.04
2	163+08	WITH PINK CAP, 862.8' LT.	533,176.78	920,479.23	925.43

NOTE: 'A'-LINE (CTH TV) HAS BEEN MODIFIED AND DOES NOT MATCH WHAT IS SHOWN IN THE PLAT.

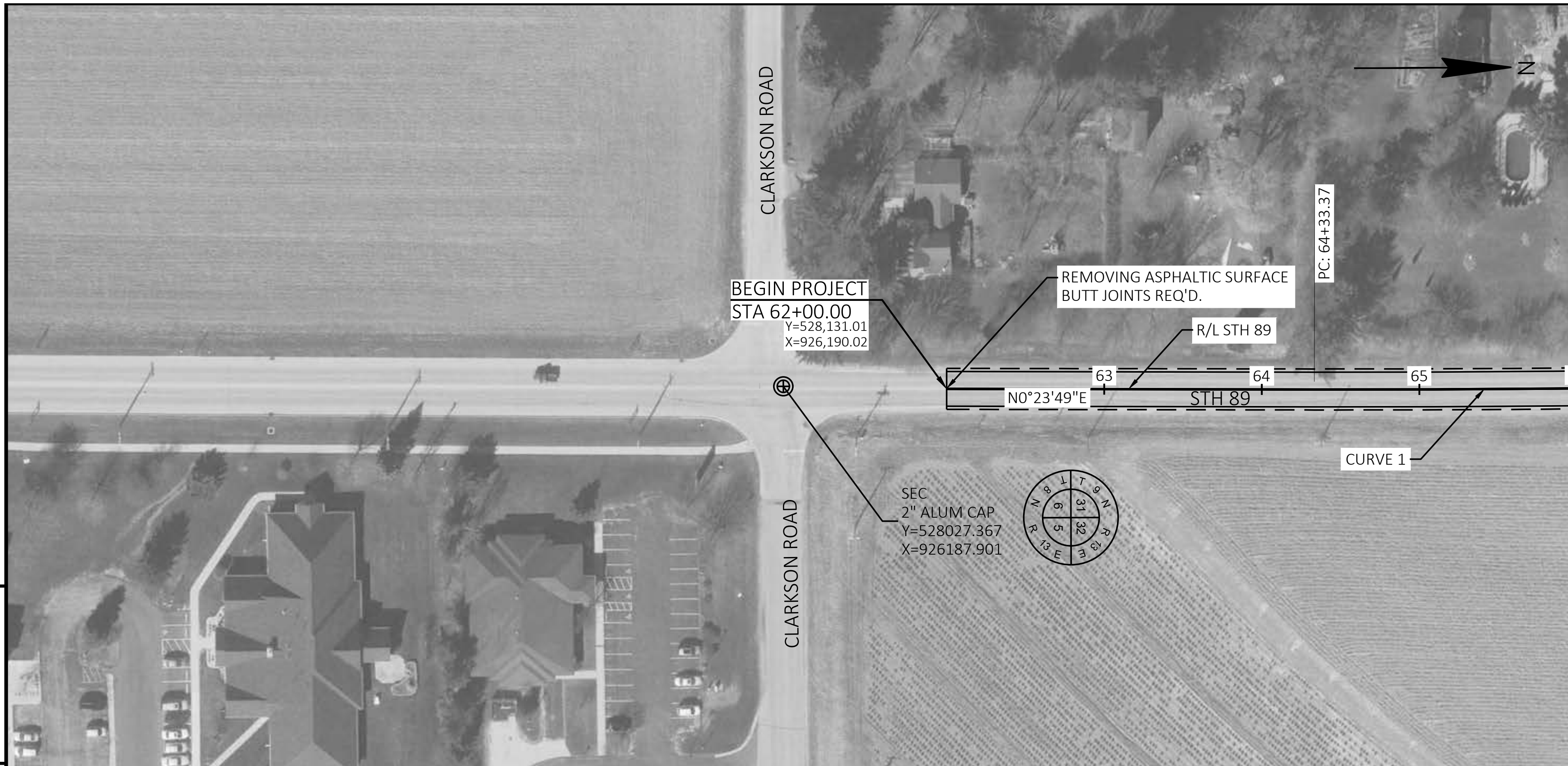




BENCH MARKS

NO.	STA.	DESCRIPTION	Y	X	Z
1	157+04	GEAR SPIKE N FACE PP#-848938, 23.2' LT.	533,239.55	921,770.05	923.69
2	161+47	GEAR SPIKE N FACE PP#-6L-36-E11, 254.1' LT.	533,208.61	921,180.43	915.25
3	162+93	GEAR SPIKE N FACE PP#-848893, 767.7' LT.	533,177.66	920,583.27	925.64

5



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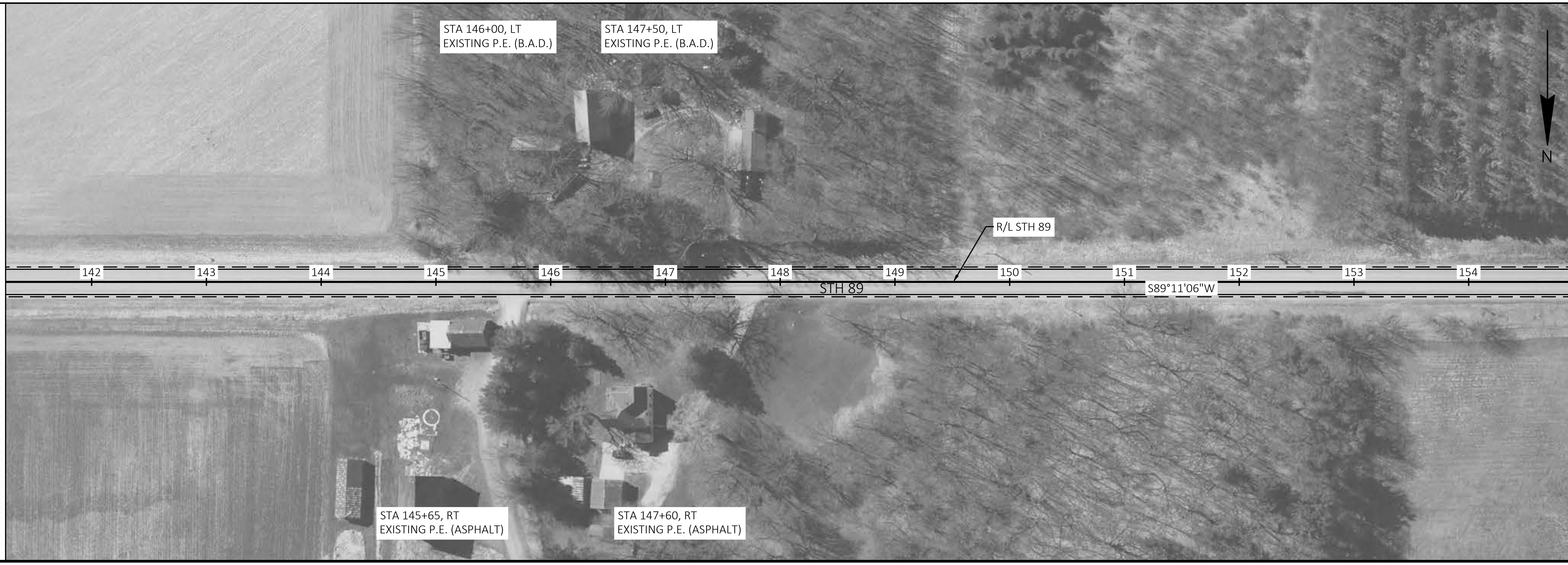
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET 47	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\PLAN & PROFILE SHEETS\W11659_PLAN SHEETS.DWG
LAYOUT NAME - Layout 2
PLOT DATE : 5/2/2023 4:11 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:100 FT WISI HEET 44

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E



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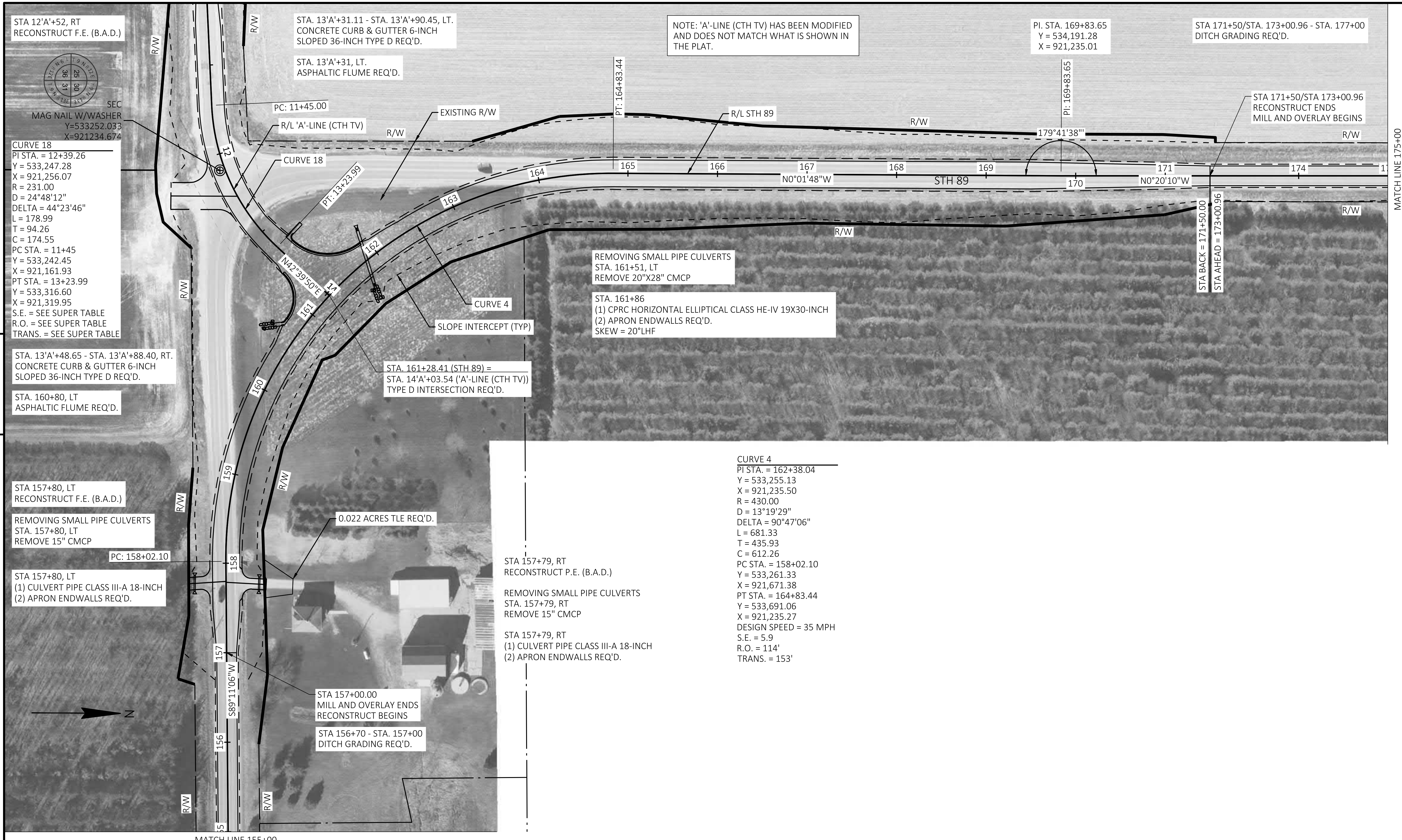
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET 50	E

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LAYOUT NAME - Layout 5
PLOT DATE : 5/30/2023 9:23 AM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:100 FT

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

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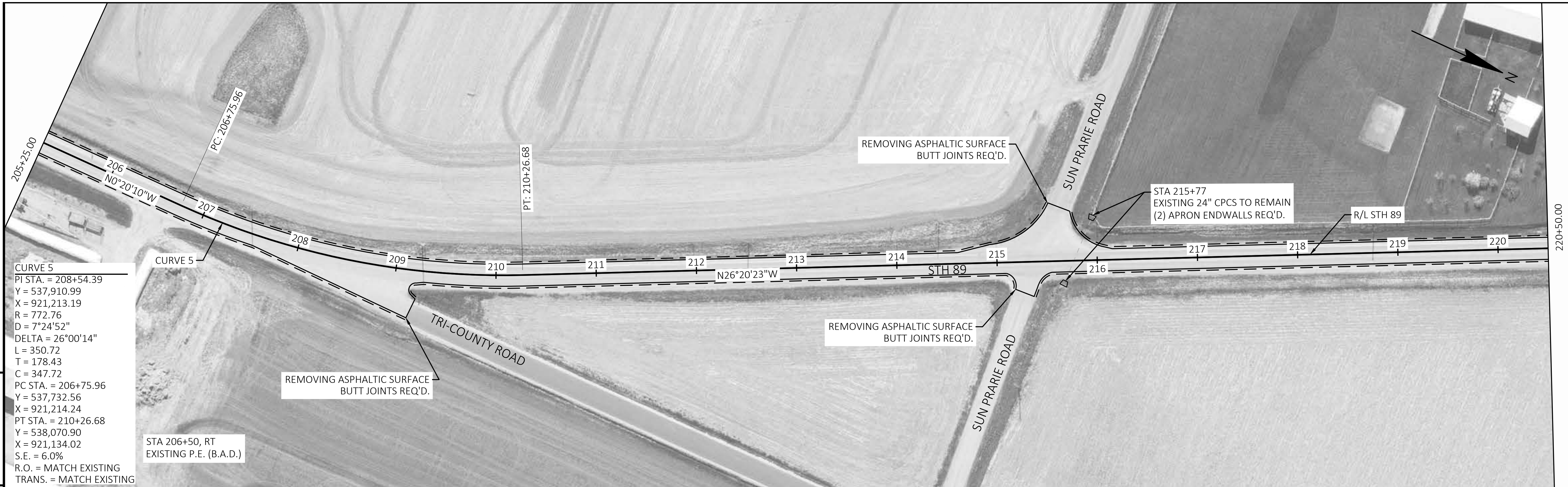

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PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\PLAN & PROFILE SHEETS\W11659_PLAN SHEETS.DWG
LAYOUT NAME - Layout 7
PLOT DATE : 5/2/2023 4:11 PM
PLOT BY : CODY KINTZ
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISI HEET 44

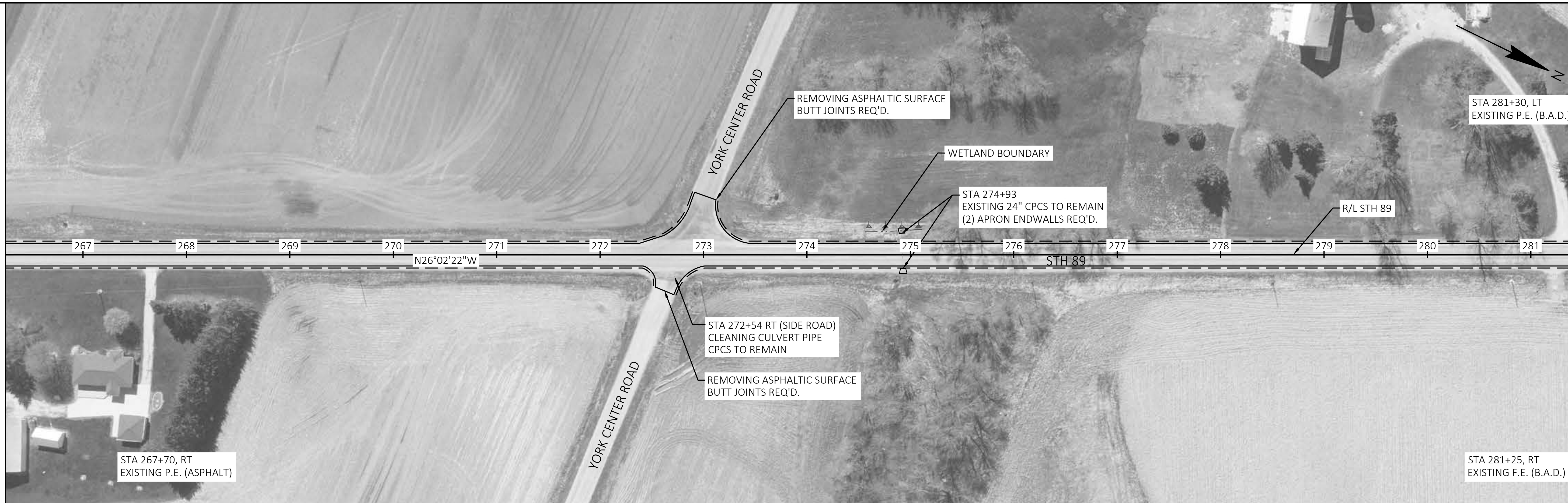
5

5

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\PLAN & PROFILE SHEETS\W11659_PLAN SHEETS.DWG
LAYOUT NAME - Layout 8
PLOT DATE : 5/30/2023 9:23 AM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:100 FT WISI

HEET 44



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PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

5

5

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

5

357+75.00

373+00.00

5

388+25.00

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\PLAN & PROFILE SHEETS\W11659_PLAN SHEETS.DWG
LAYOUT NAME - Layout 12

PLOT DATE : 5/2/2023 4:12 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:100 FT

5

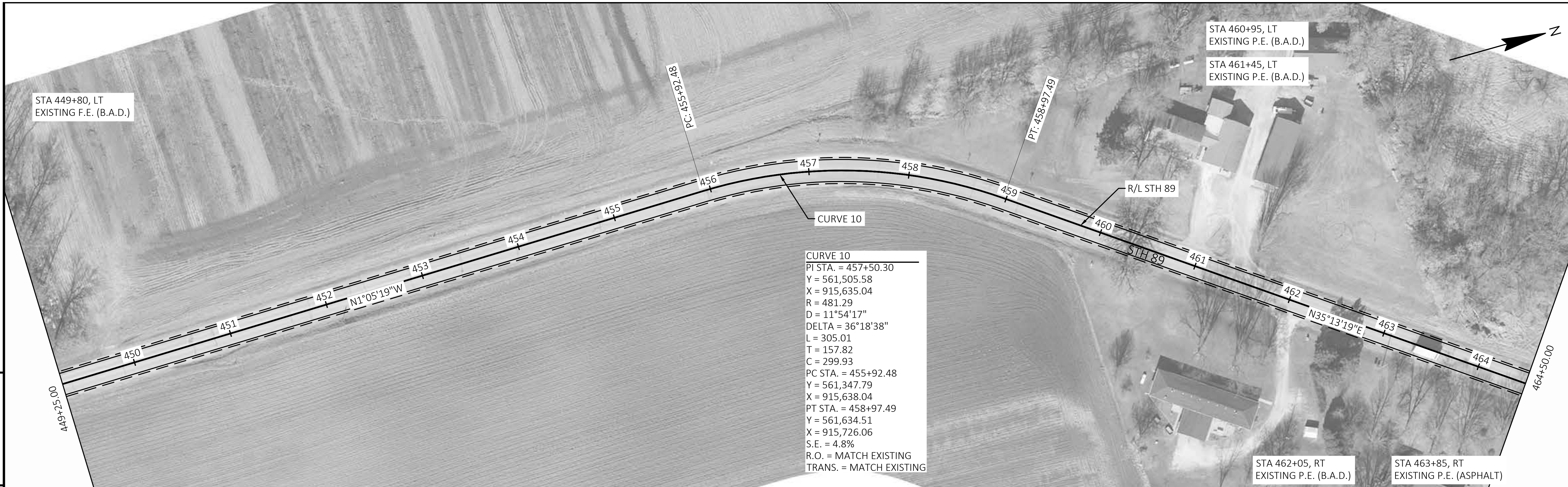
5

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\PLAN & PROFILE SHEETS\W11659_PLAN SHEETS.DWG
LAYOUT NAME - Layout 13
PLOT DATE : 5/2/2023 4:12 PM
PLOT BY : CODY KINTZ
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISD
HEET 44

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\SHEETSPLAN\PLAN & PROFILE SHEETS\W11659_PLAN SHEETS.DWG
LAYOUT NAME - Layout 14
PLOT DATE : 5/2/2023 4:12 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:100 FT



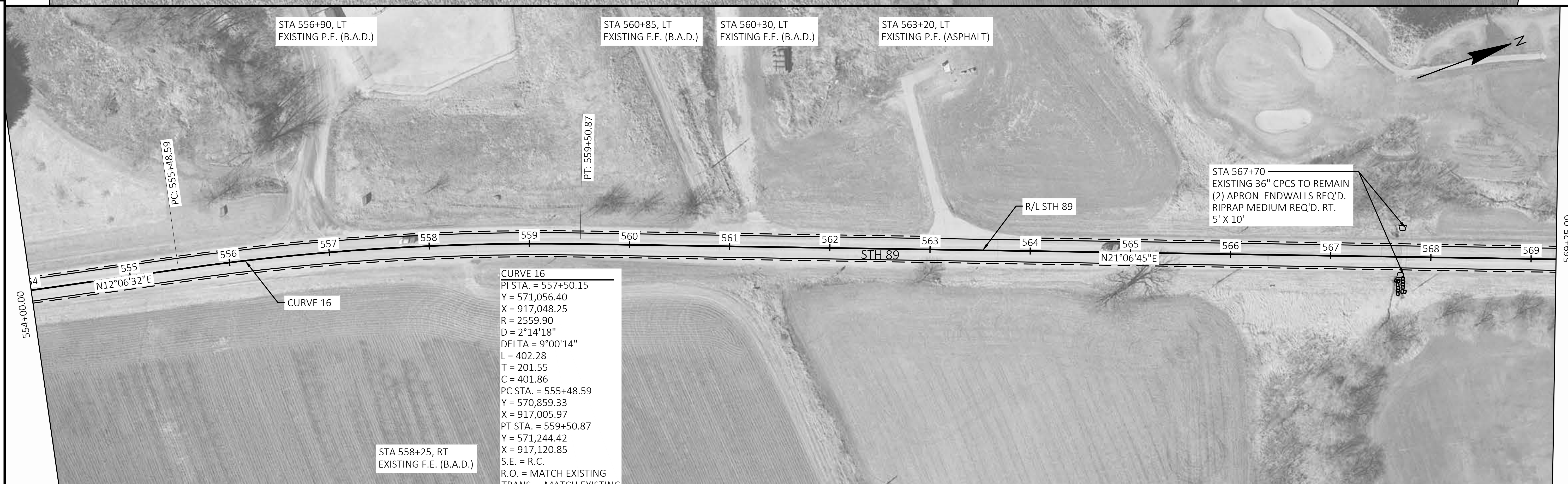
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E

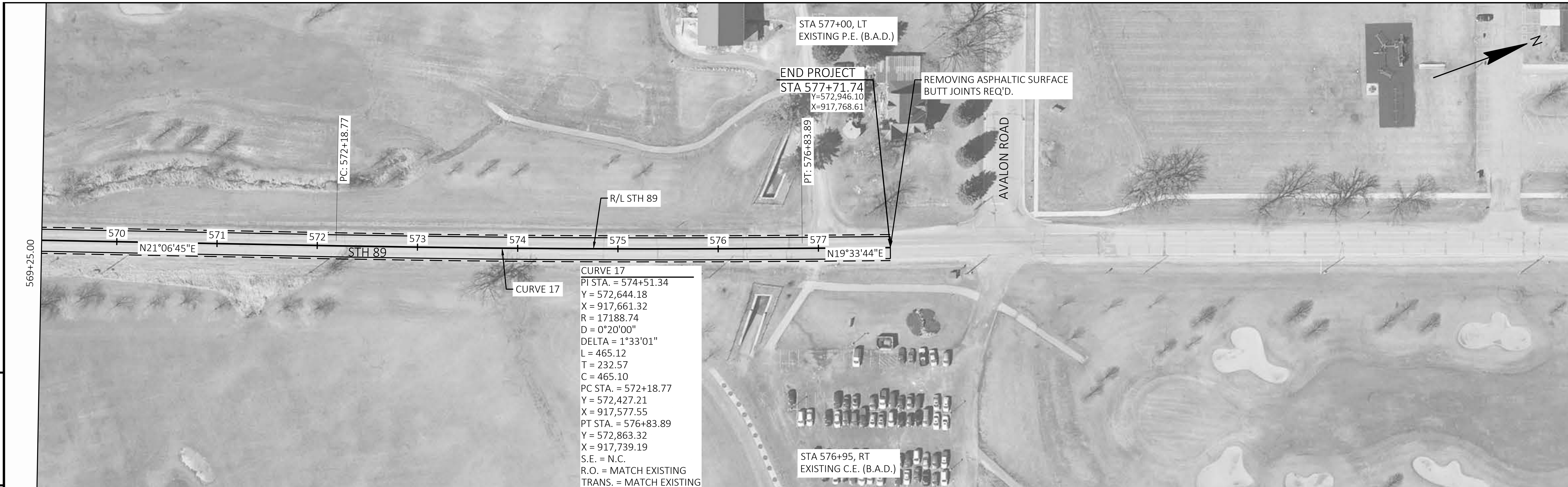
5

5

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E



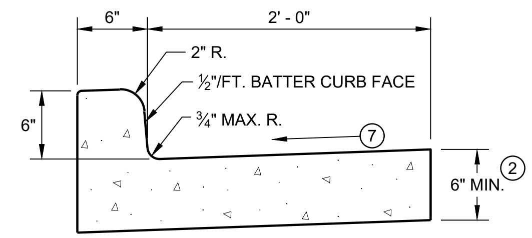
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	PLAN SHEETS	SHEET	E


5
5
569+25.00
STA 577+00, LT
EXISTING P.E. (B.A.D.)
END PROJECT
STA 577+71.74
Y=572,946.10
X=917,768.61
REMOVING ASPHALTIC SURFACE
BUTT JOINTS REQ'D.
PC: 572+18.77
PT: 576+83.89
AVALON ROAD
R/L STH 89
570
571
572
573
574
575
576
577
N21°06'45"E
STH 89
N19°33'44"E
CURVE 17
CURVE 17
PI STA. = 574+51.34
Y = 572,644.18
X = 917,661.32
R = 17188.74
D = 0°20'00"
DELTA = 1°33'01"
L = 465.12
T = 232.57
C = 465.10
PC STA. = 572+18.77
Y = 572,427.21
X = 917,577.55
PT STA. = 576+83.89
Y = 572,863.32
X = 917,739.19
S.E. = N.C.
R.O. = MATCH EXISTING
TRANS. = MATCH EXISTING
STA 576+95, RT
EXISTING C.E. (B.A.D.)
N

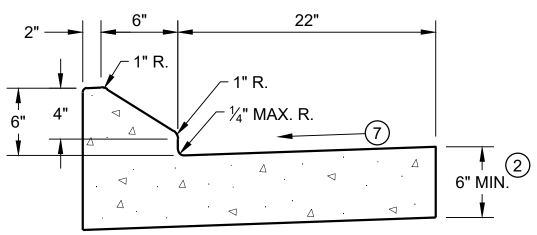
Standard Detail Drawing List

08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-14B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A01-13B	FLEXIBLE MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

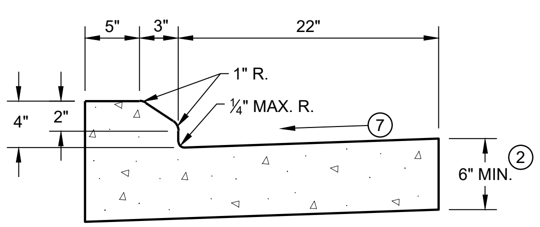
6



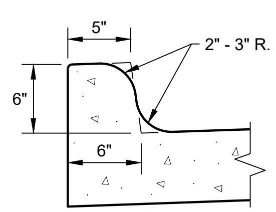
TYPES A (1) & D



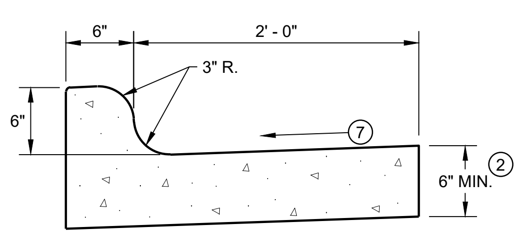
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

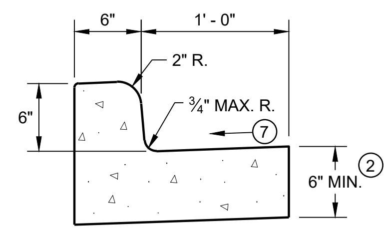


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



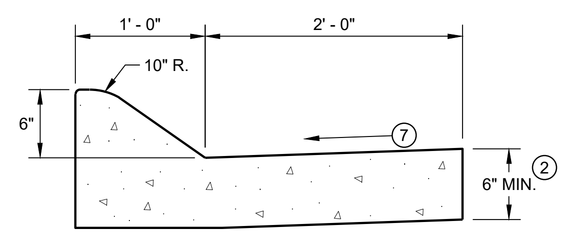
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

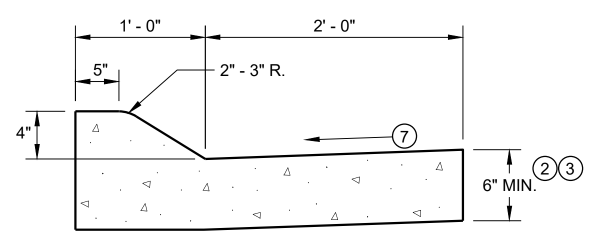


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

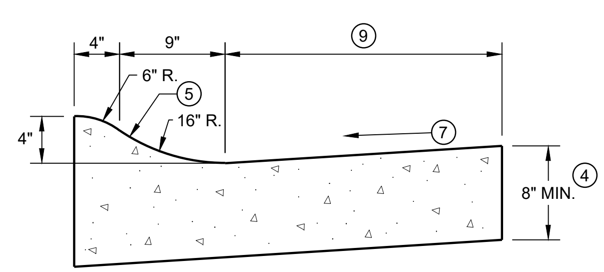


6" SLOPED CURB TYPES A (1) & D



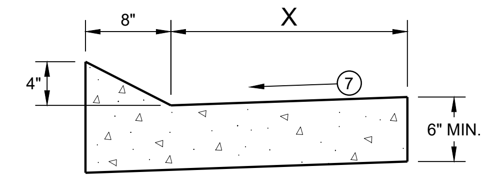
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"



TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

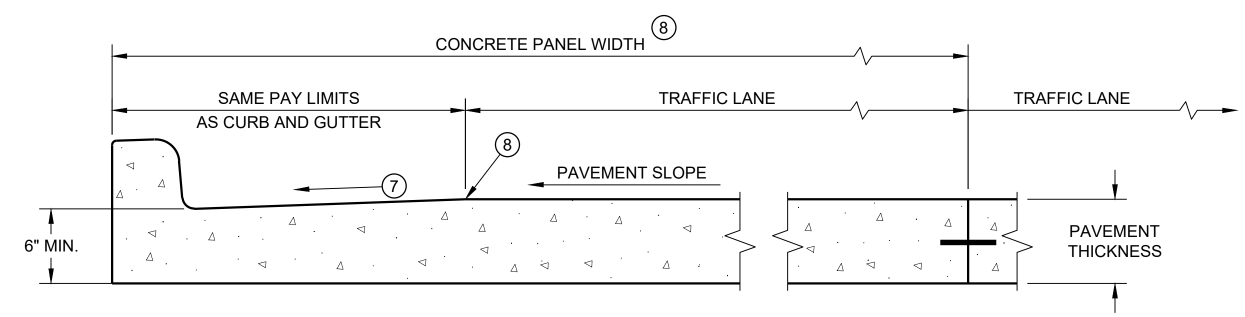
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
4. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
5. UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
6. WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
7. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
8. INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
9. CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

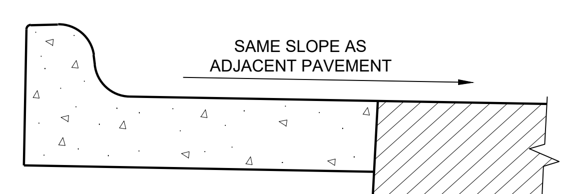
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

6

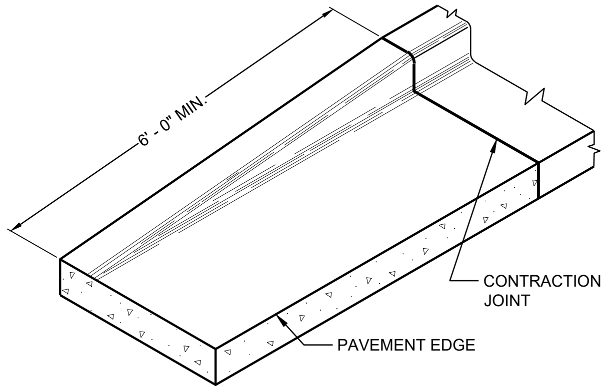
6

CONCRETE CURB AND GUTTER

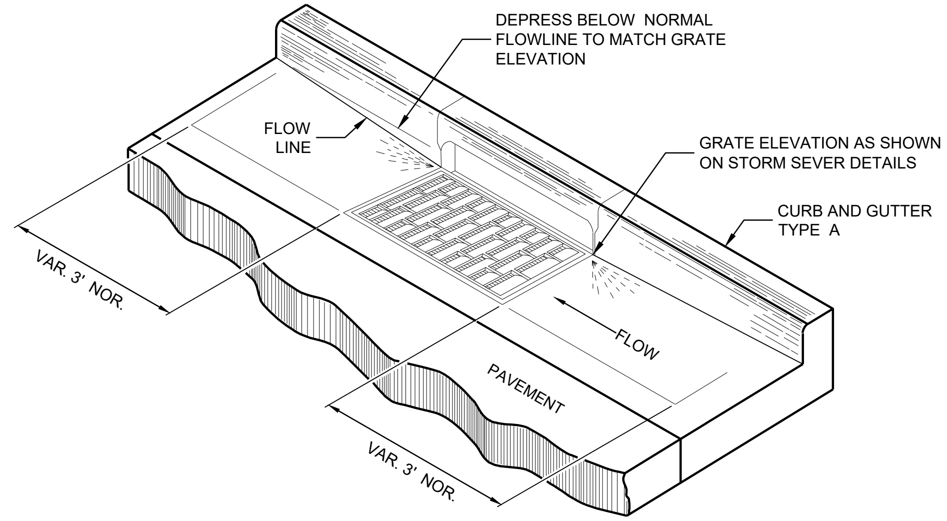
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01 - 23a

SDD 08D01 - 23a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

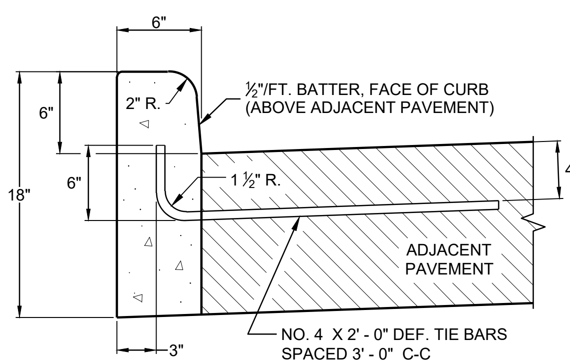
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

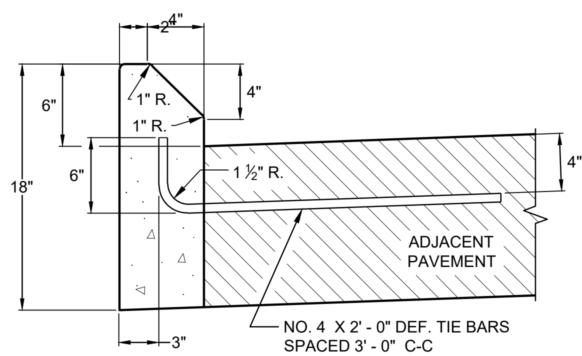
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

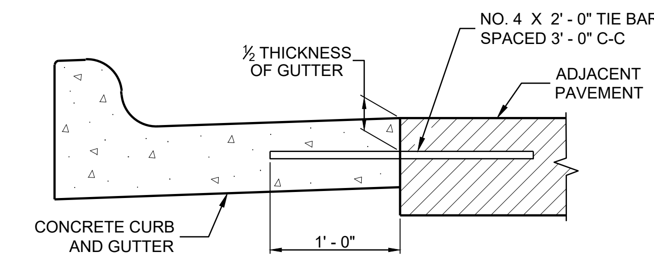


TYPES A(1) & D

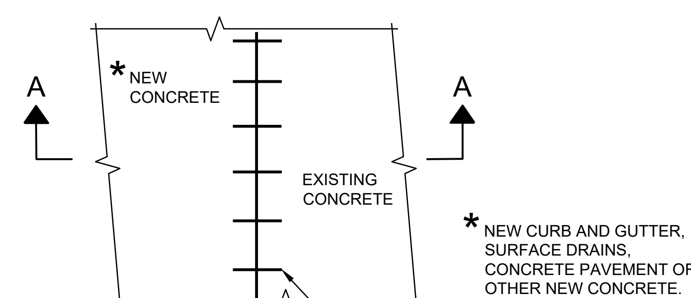


TYPES G(1) & J

CONCRETE CURB

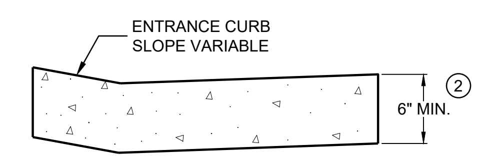


TYPICAL TIE BAR LOCATION (1)



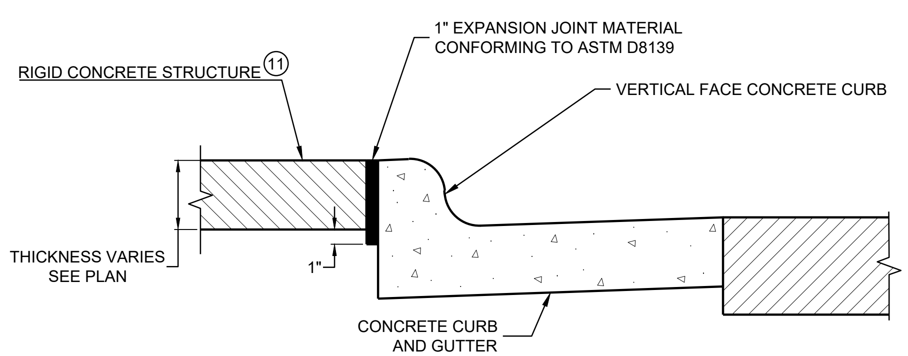
* NEW CURB AND GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

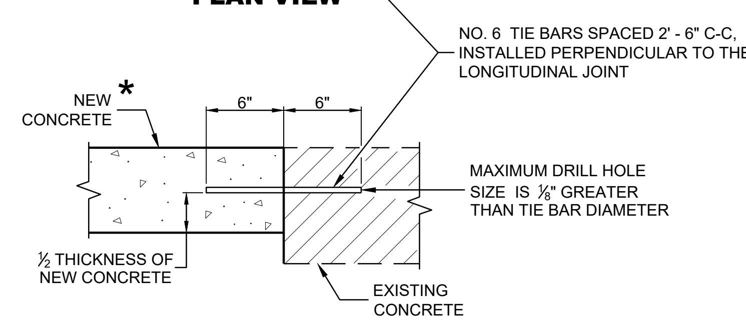


DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023 — DATE

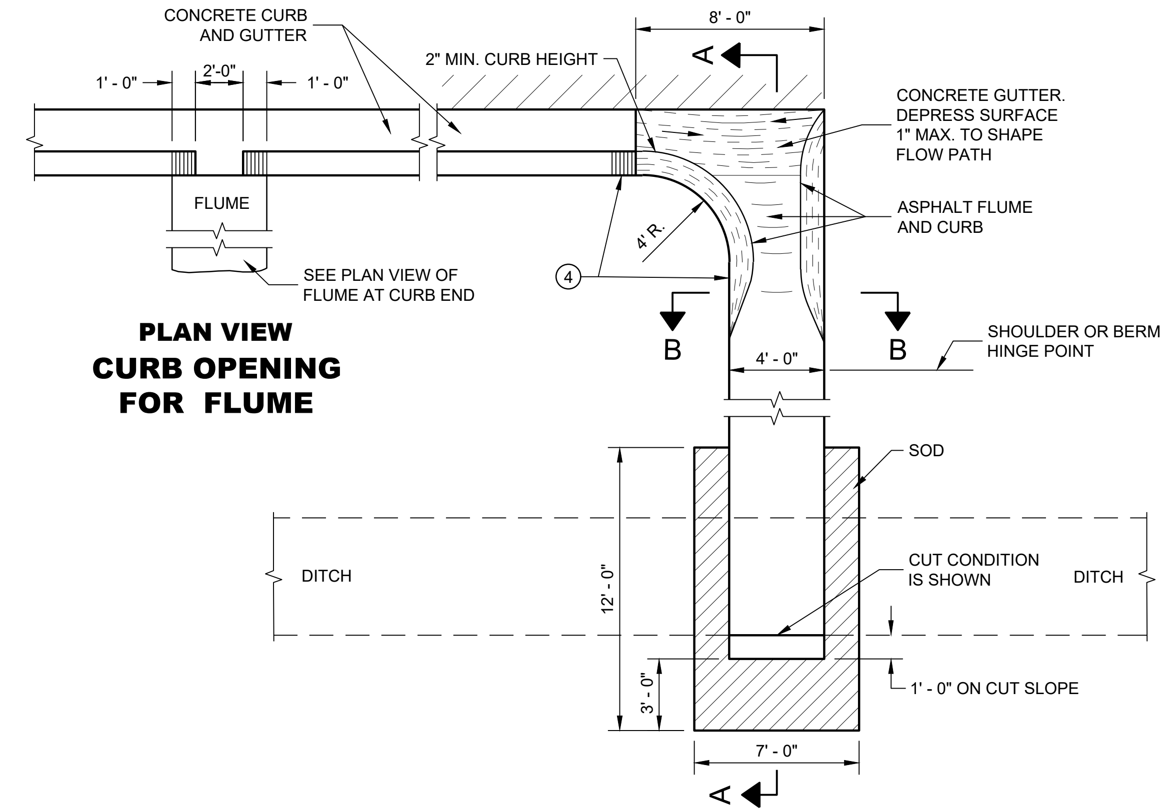
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08D01 - 23b

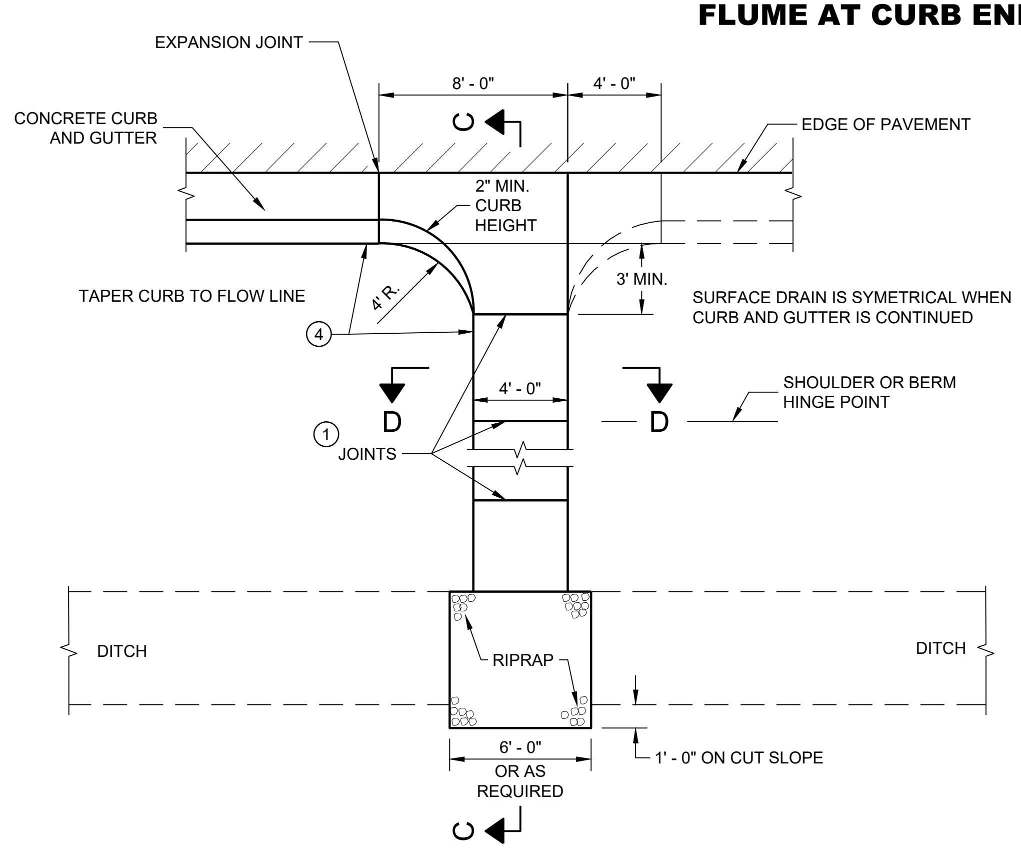
ASPHALTIC FLUME

NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



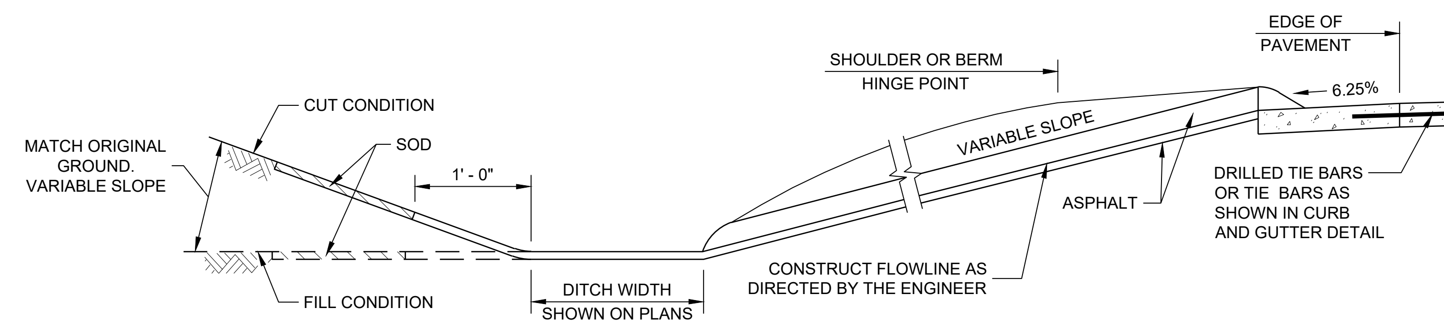
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

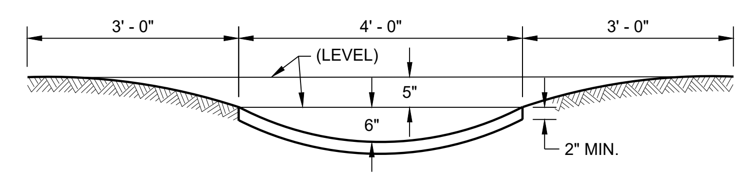
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

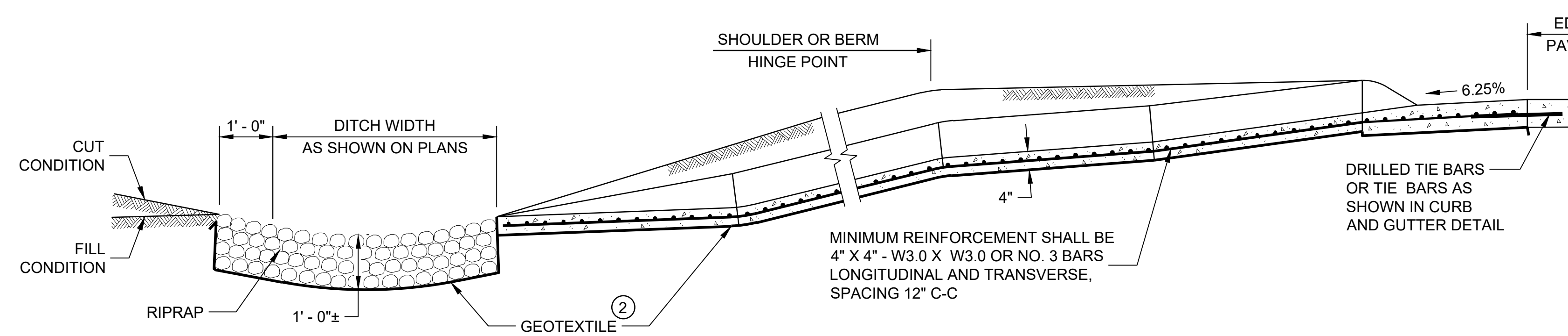
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



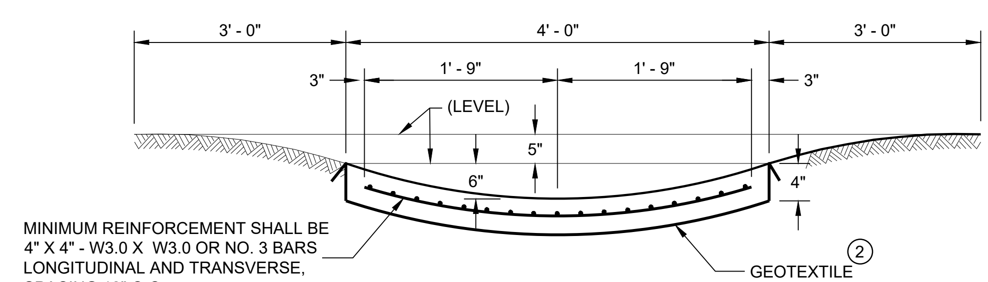
SECTION A - A



SECTION B - B

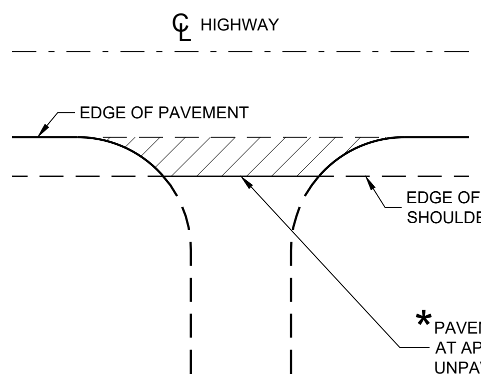


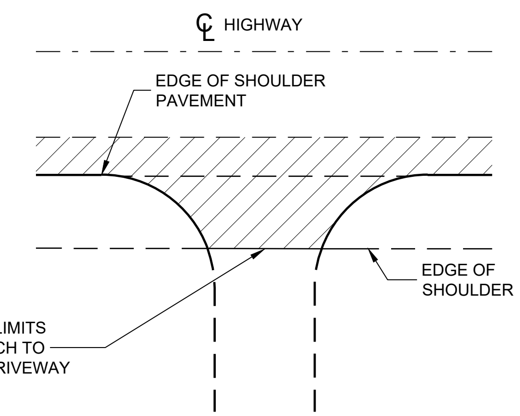
SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED May 2023 DATE /S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER FHWA



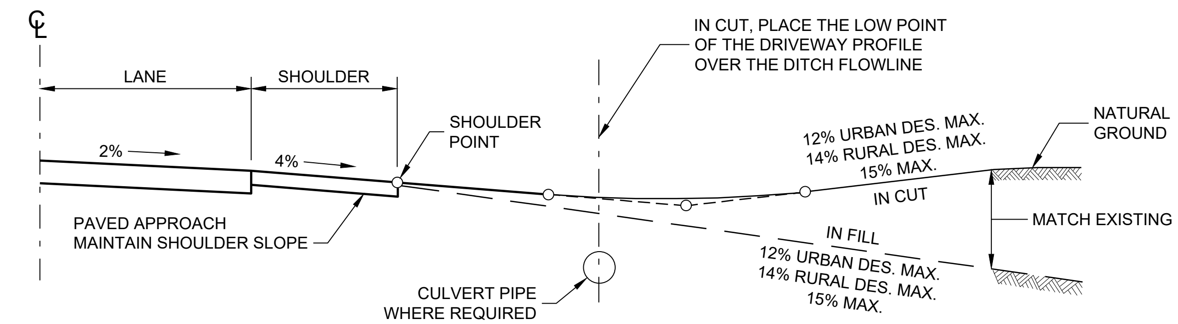


* WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

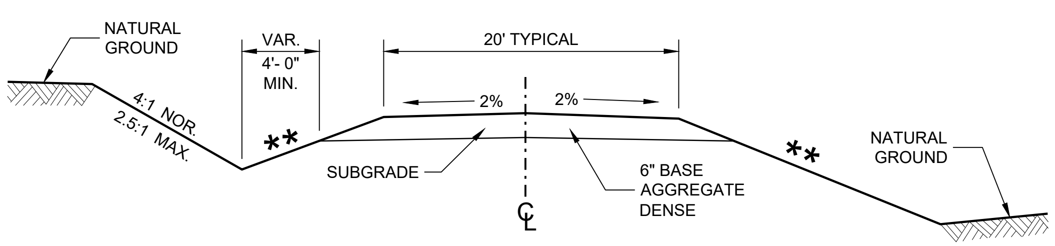
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

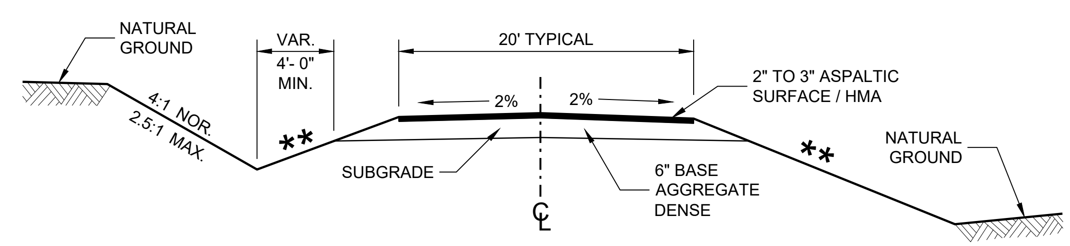


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

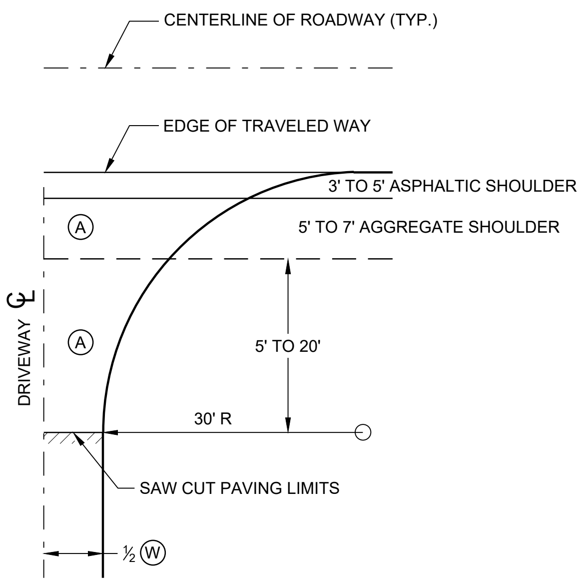
APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

SDD 08D21 - 01

SDD 08D21 - 01

GENERAL NOTES

1. DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



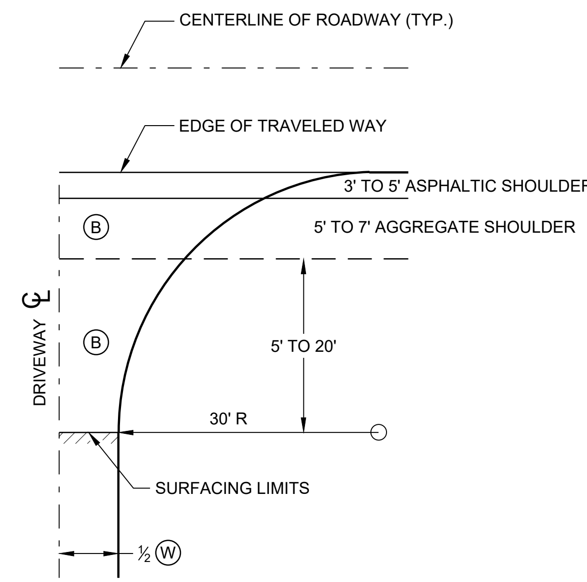
A : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

B : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

W : DRIVEWAY WIDTH 16' MIN. - 24' MAX.

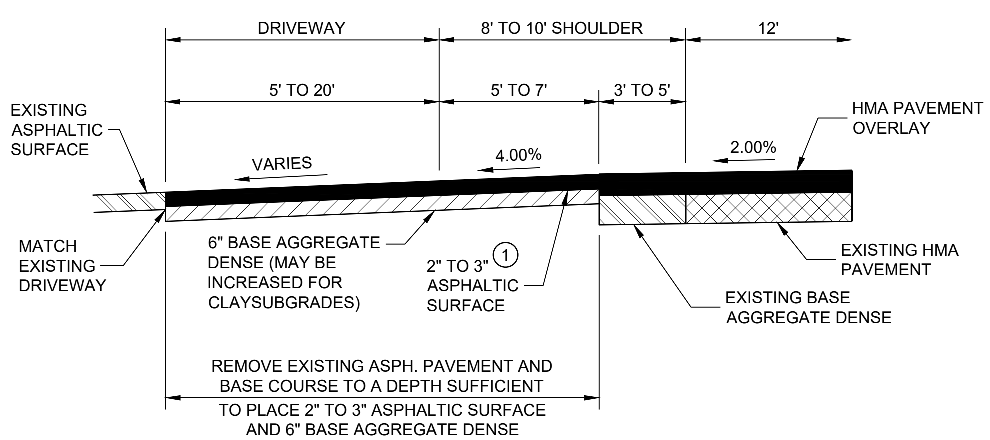
PLAN VIEW

HALF SECTION



PLAN VIEW

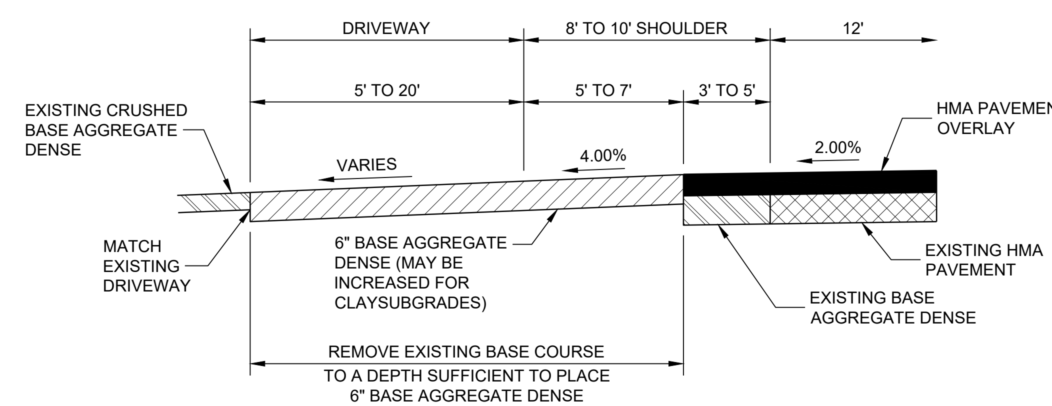
HALF SECTION



PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE
WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

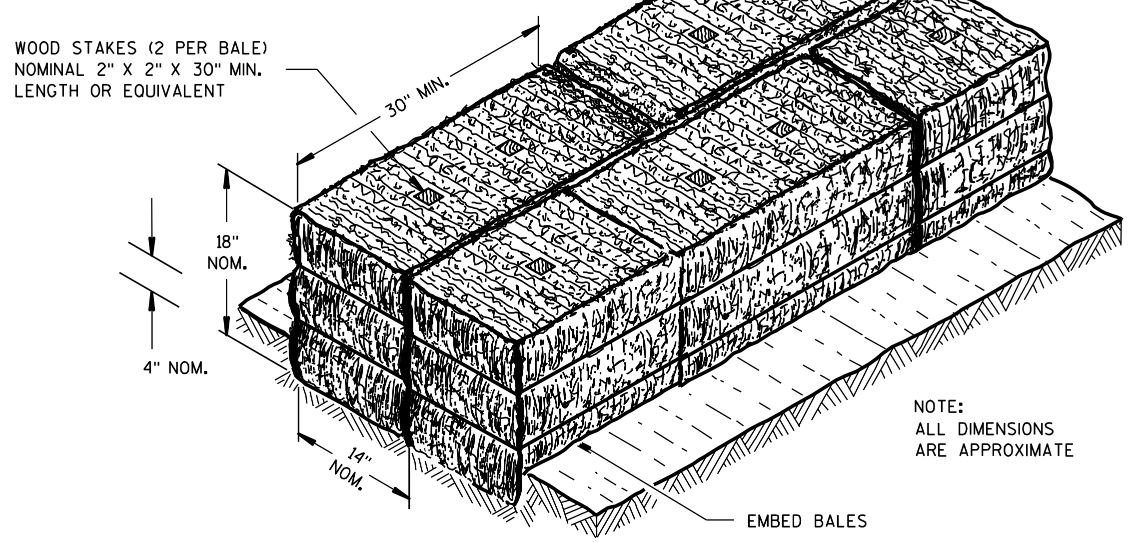
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

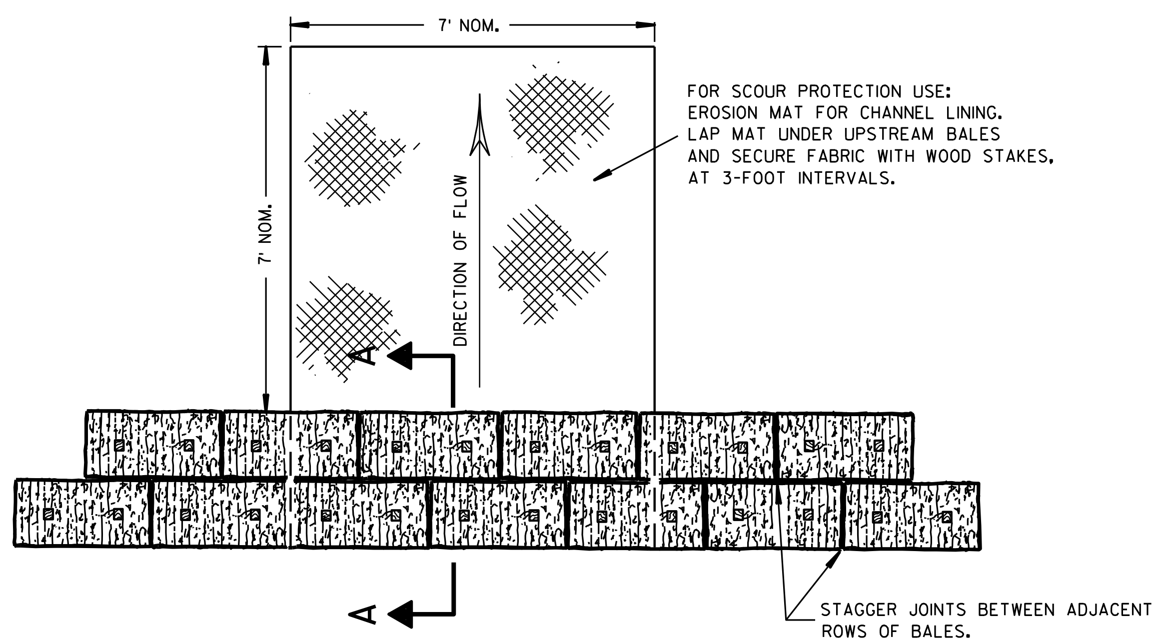
December 2016 — DATE

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER

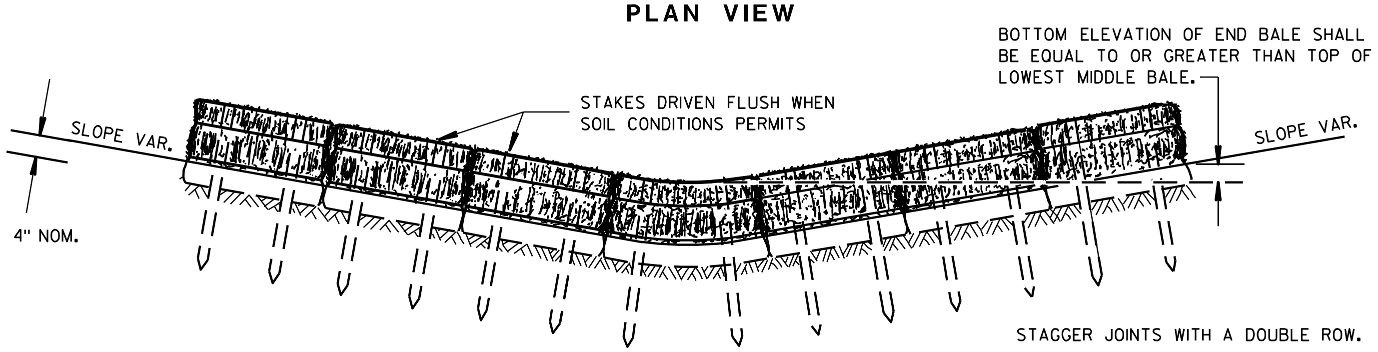
FHWA



SECTION A-A



PLAN VIEW



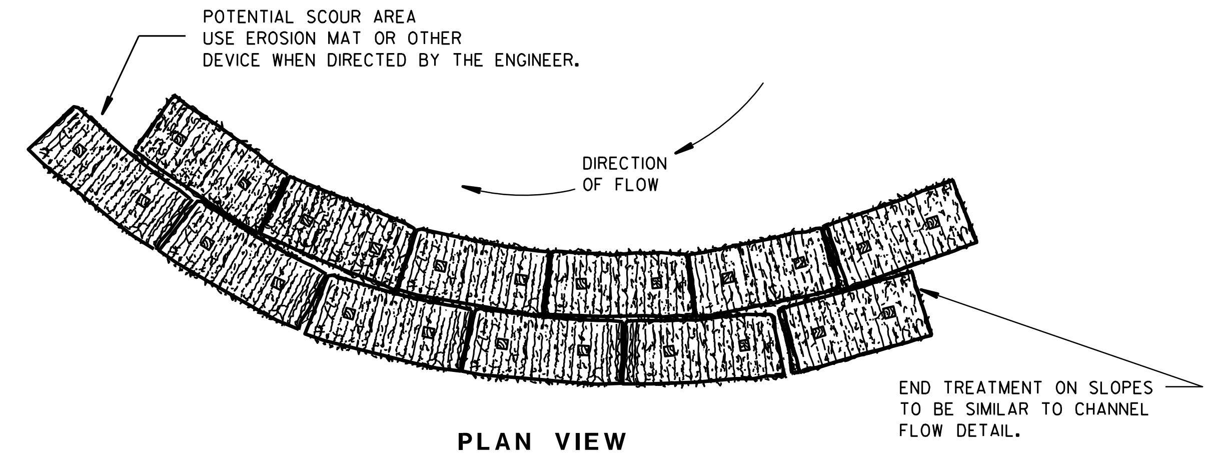
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

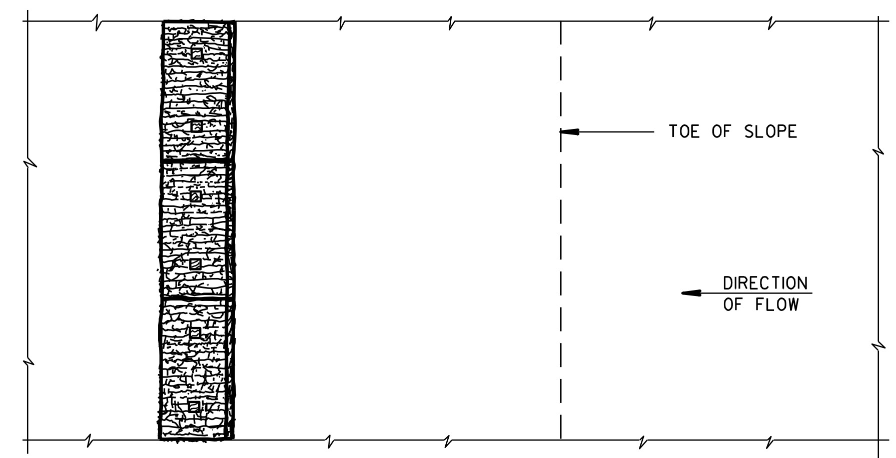
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

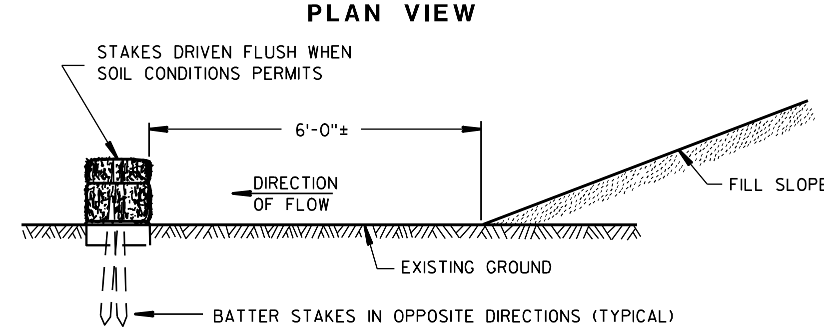


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW

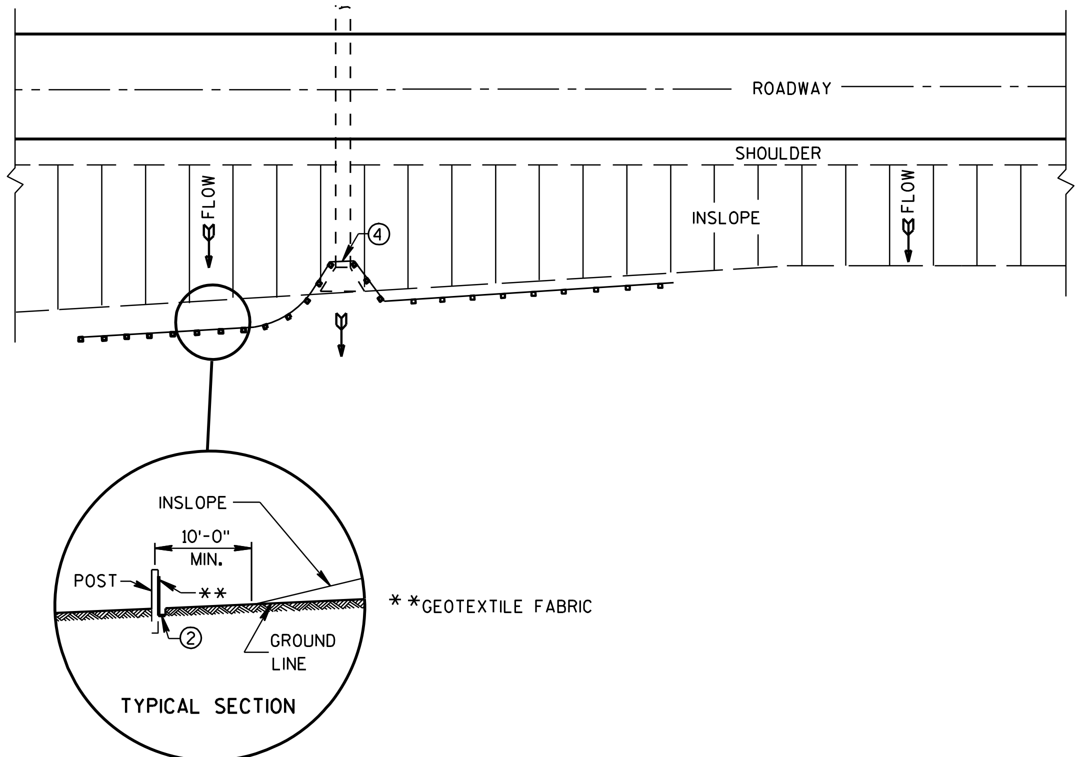


FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

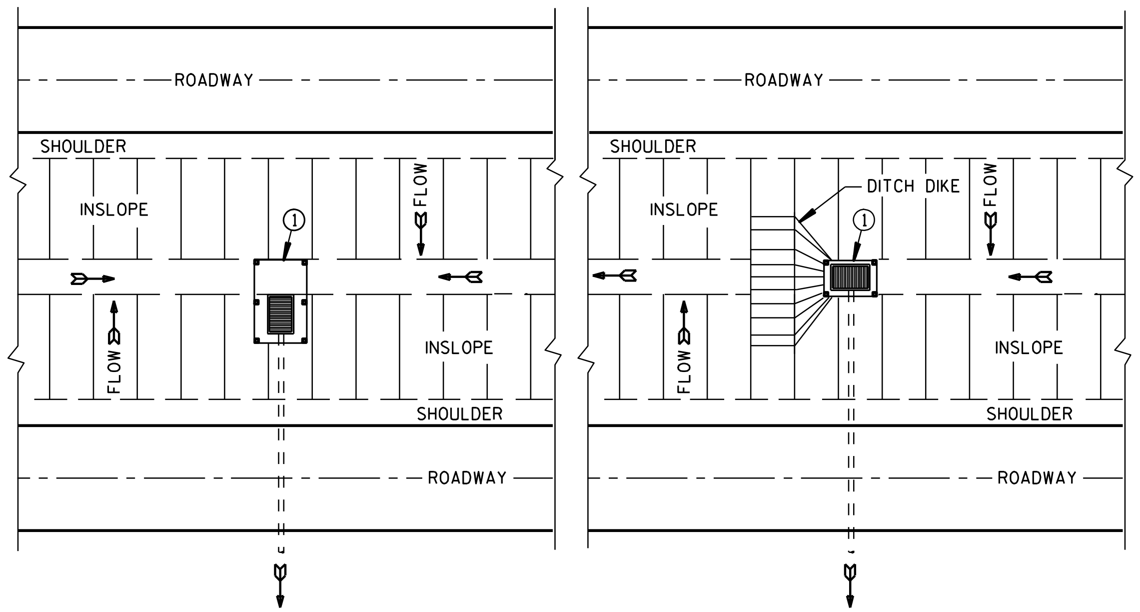
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 6/04/02 DATE /S/ Beth Conn... CHIEF ROADWAY DEVELOP... ...INEER FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



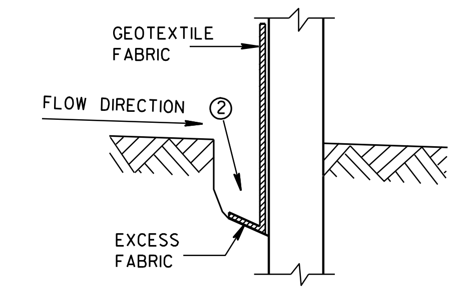
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

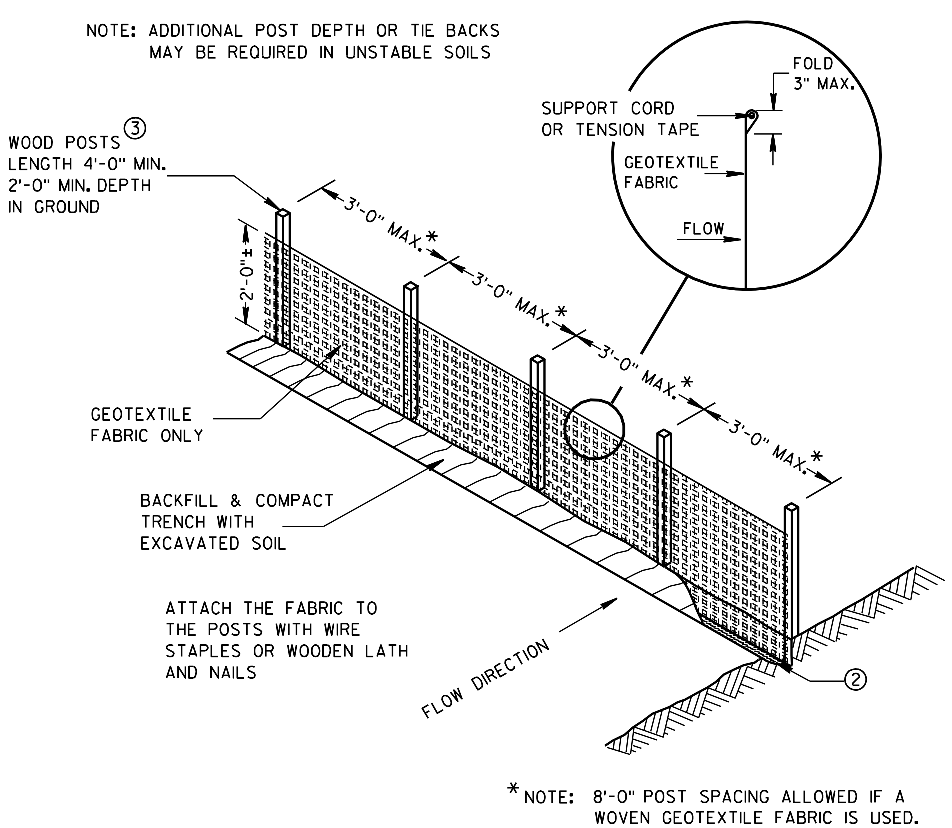
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

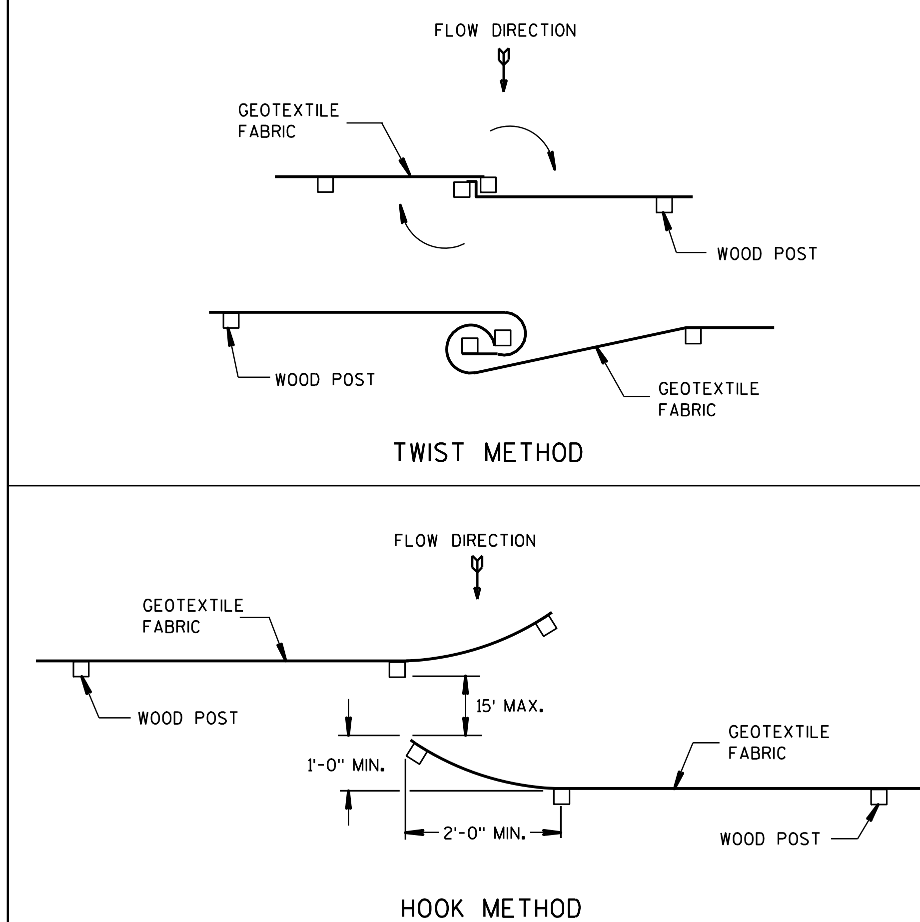


TRENCH DETAIL

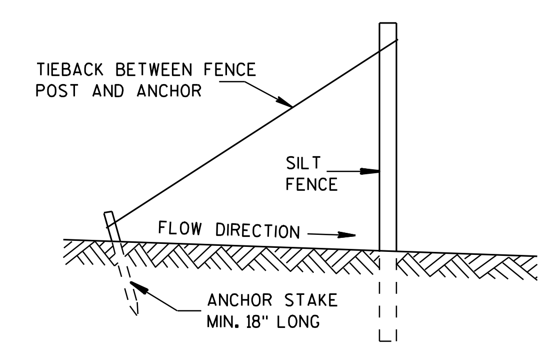


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



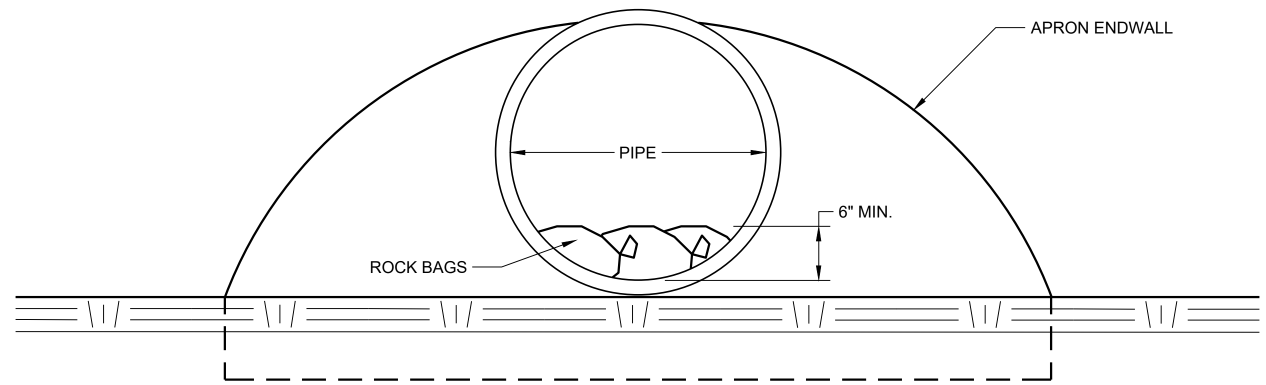
JOINING TWO LENGTHS OF SILT FENCE ⑤



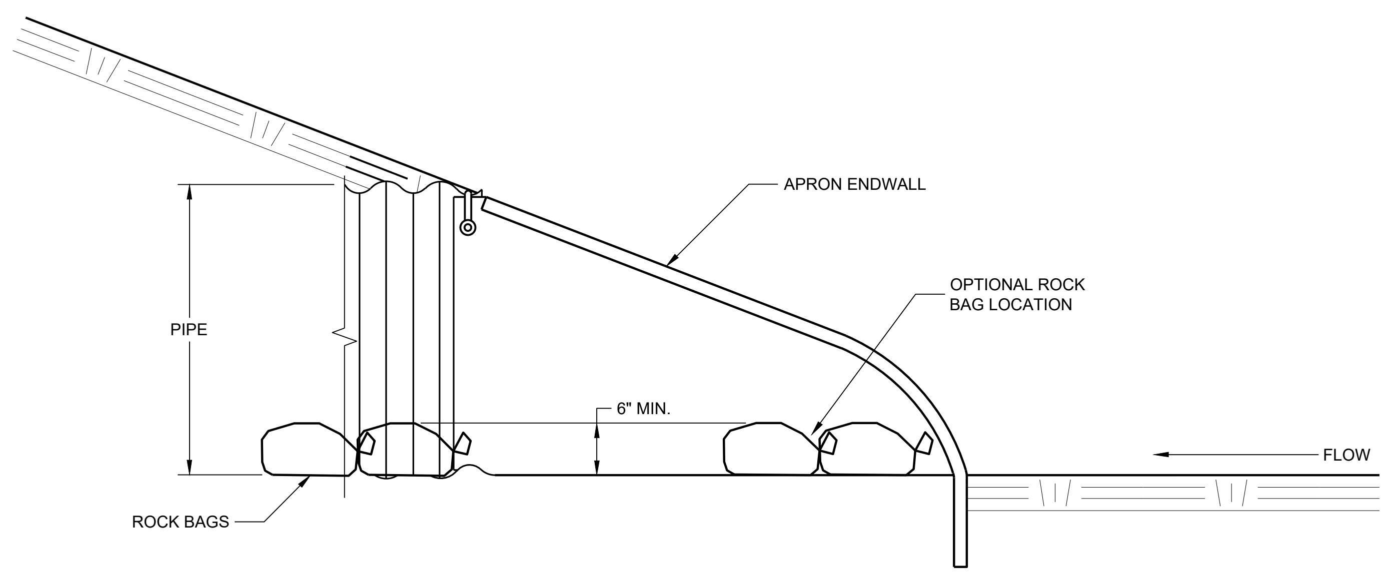
SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 4-29-05 DATE /S/ Beth Cann... CHIEF ROADWAY DEVELOP...INEER FHWA



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

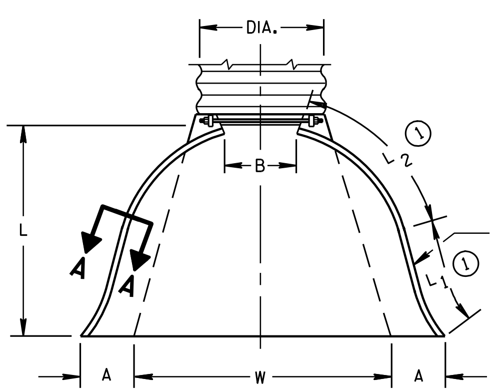
CULVERT PIPE CHECK
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED May 2019 /S/ Daniel Schave DATE EROSION CONTROL ENGI 73 FHWA

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

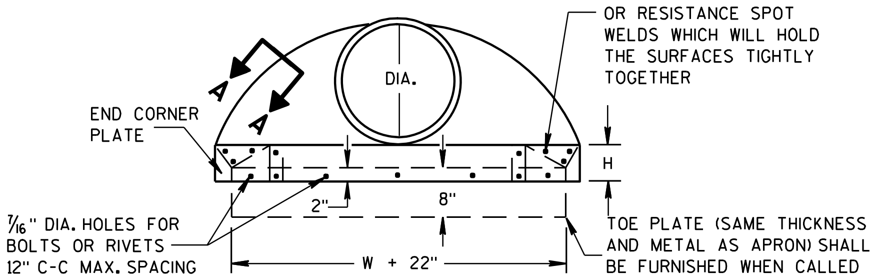
× EXCEPT CENTER PANEL
SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	*33 1/4-35**	*98 1/4-100**	90	5 1/2	2 2/5 to 1
60	6	*30-35**	60	39	99	96	5	2 to 1
66	6 1/2	*24-30**	*72-78**	*21-27**	99	102	5 1/2	2 to 1
72	7	*24-36**	78	21	99	108	6	2 to 1
78	7 1/2	*24-36**	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

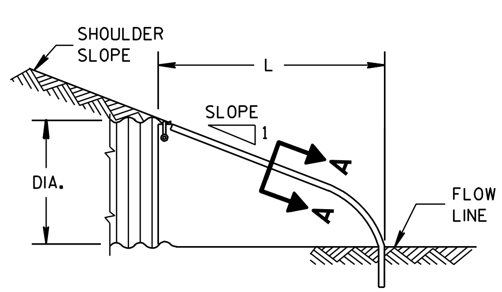
*MINIMUM
**MAXIMUM



PLAN VIEW

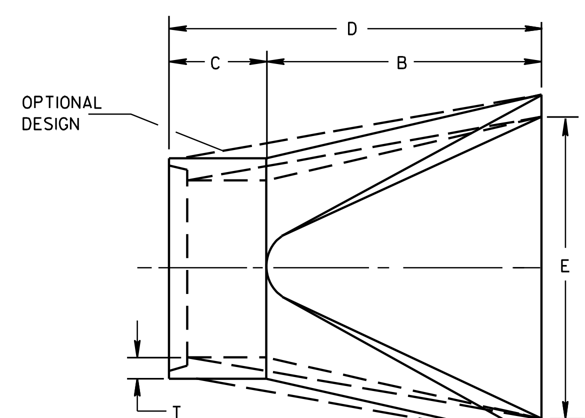


END VIEW

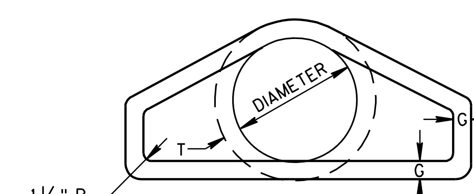


SIDE ELEVATION

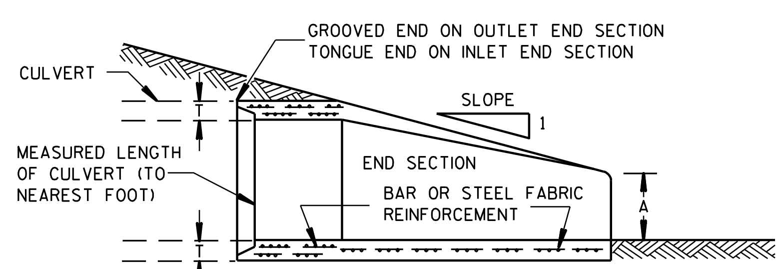
METAL ENDWALLS



PLAN

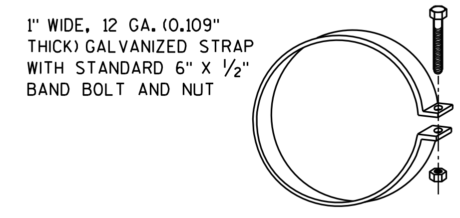


END VIEW



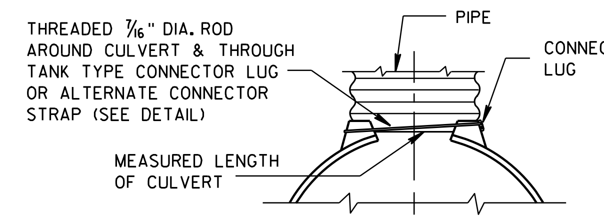
LONGITUDINAL SECTION

CONCRETE ENDWALLS

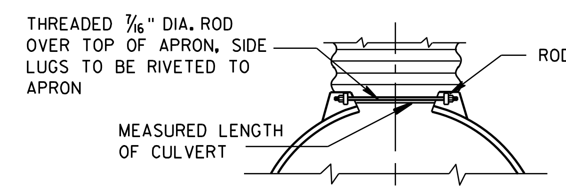


ALTERNATE FOR TYPE 1 CONNECTION

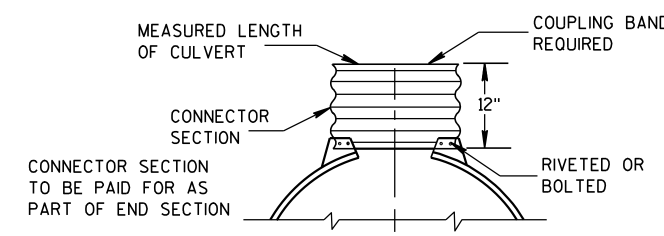
END SECTION CONNECTOR STRAP



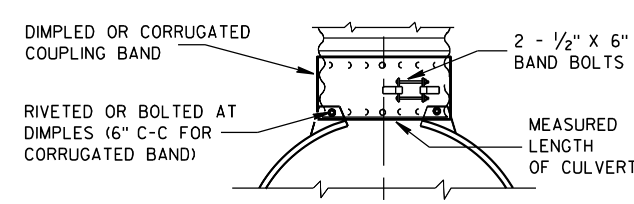
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

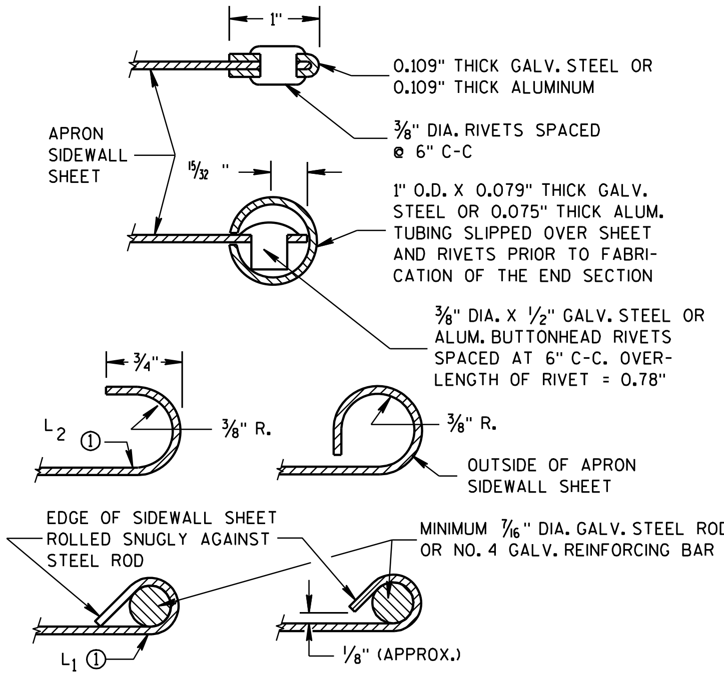
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

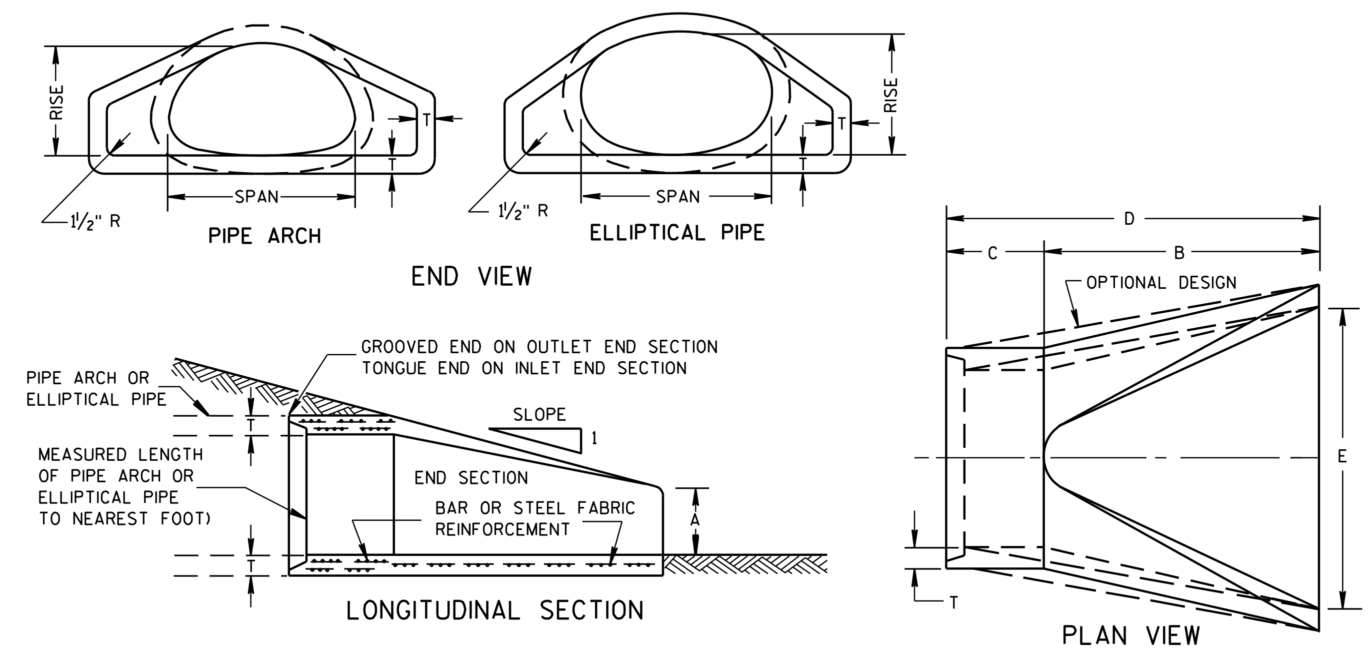
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 1-11



CONCRETE ENDWALLS

2- ⅔" X ½" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 ½")	L1 ①	L2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 ½")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

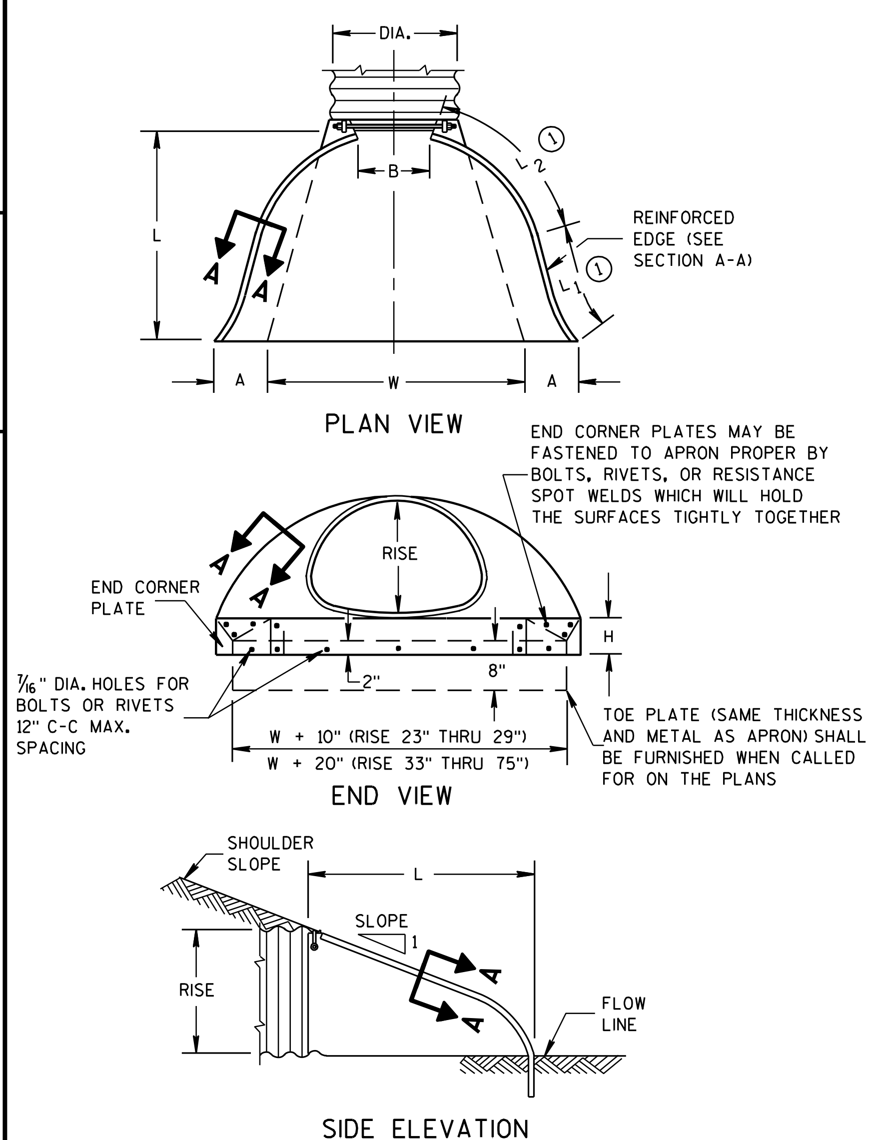
NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

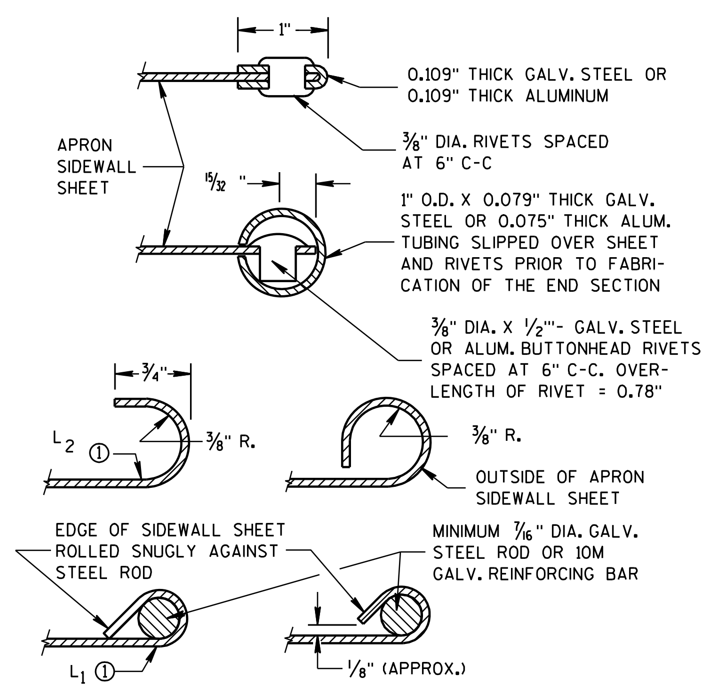
REINFORCED CONCRETE PIPE ARCH									
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE									
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

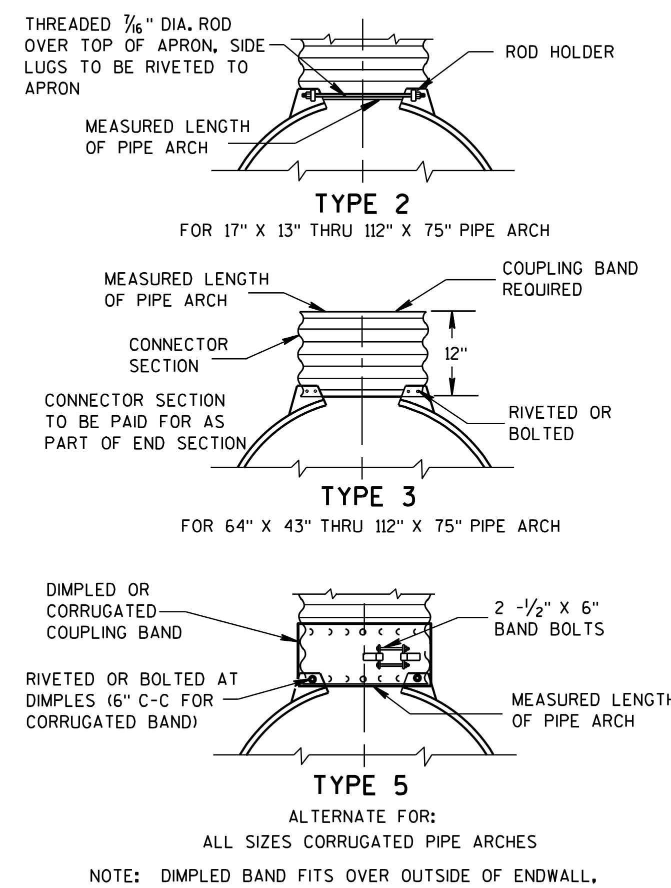
** NOMINAL SIZE



METAL ENDWALLS



SECTION A-A



NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 — /S/ Rory L. Rhi[illegible]
DATE — CHIEF ROADWAY DEVELO[illegible] [illegible]GINEER
FHWA

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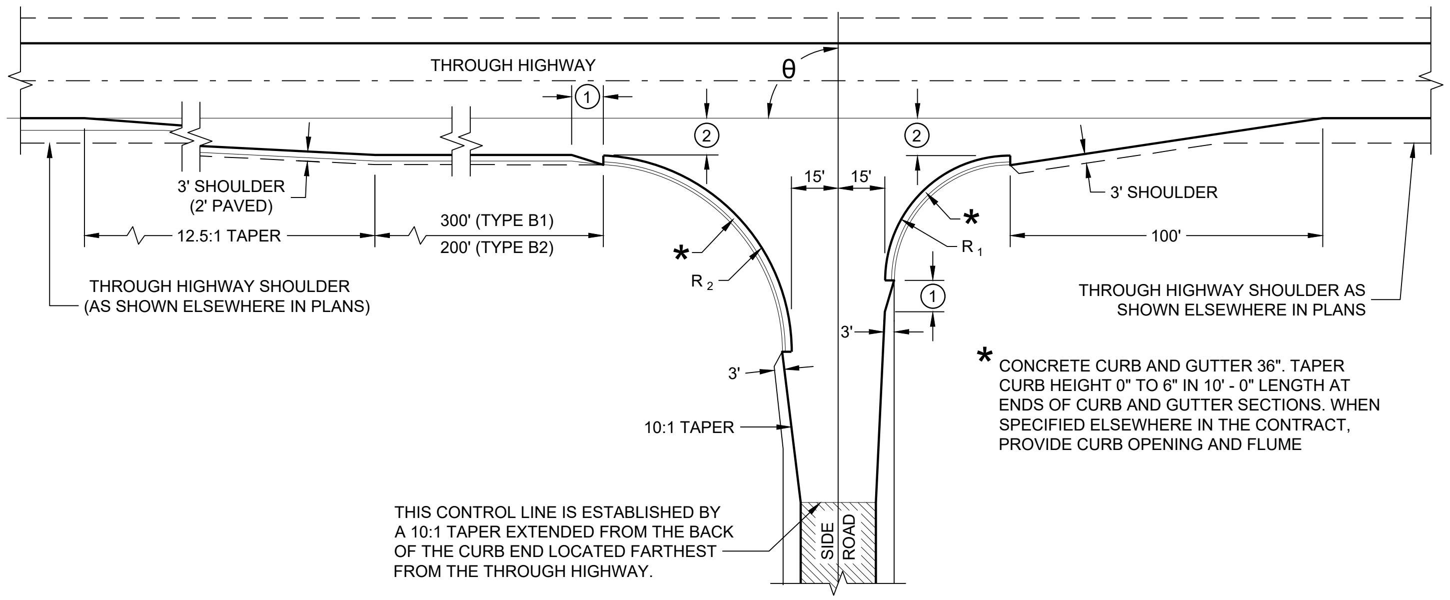
S.D.D. 8 F 2-1



TYPE "B1" AND "B2"

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65 - 70	35	70
71 - 80	40	70
81 - 90	40	60
91 - 100	50	55
101 - 110	60	45

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

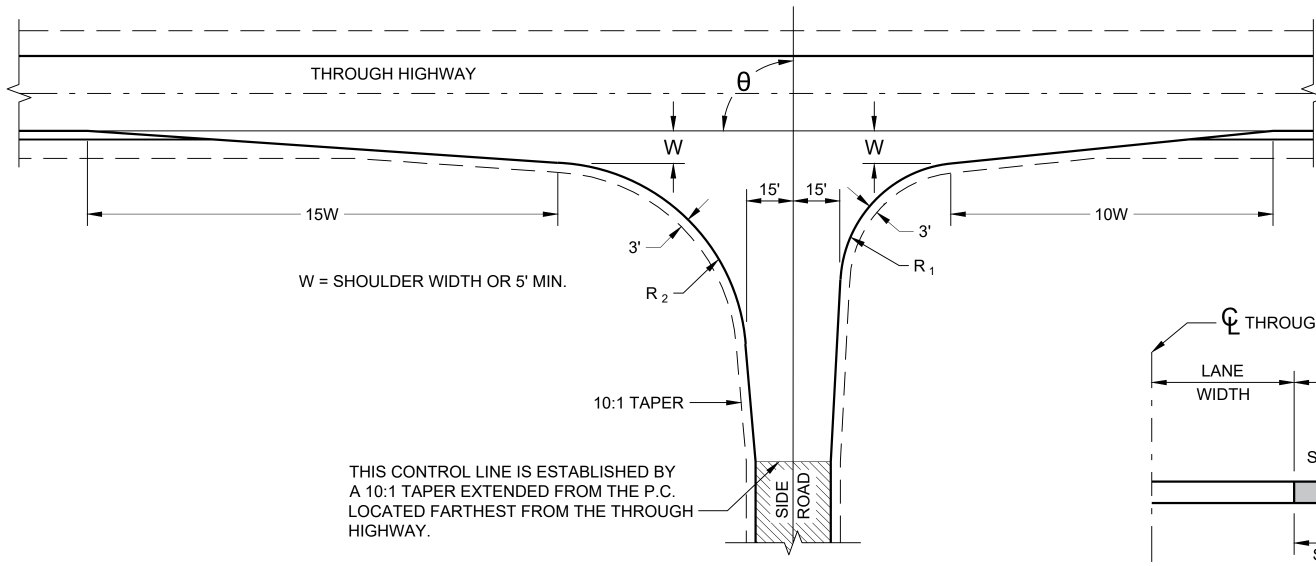
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

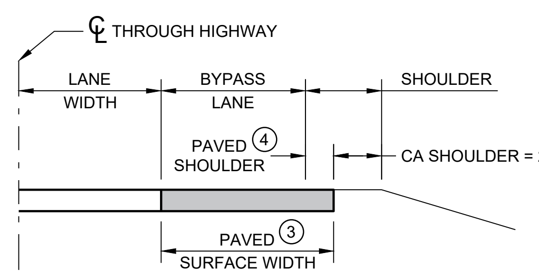
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
- ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH
- PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.

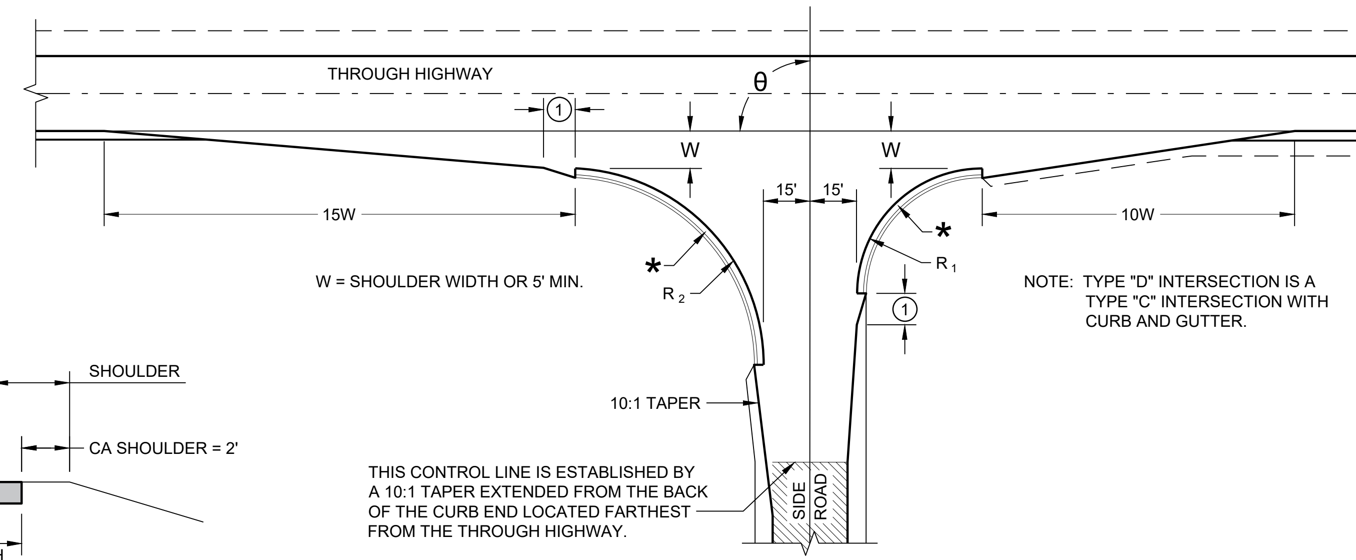


TYPE "C"

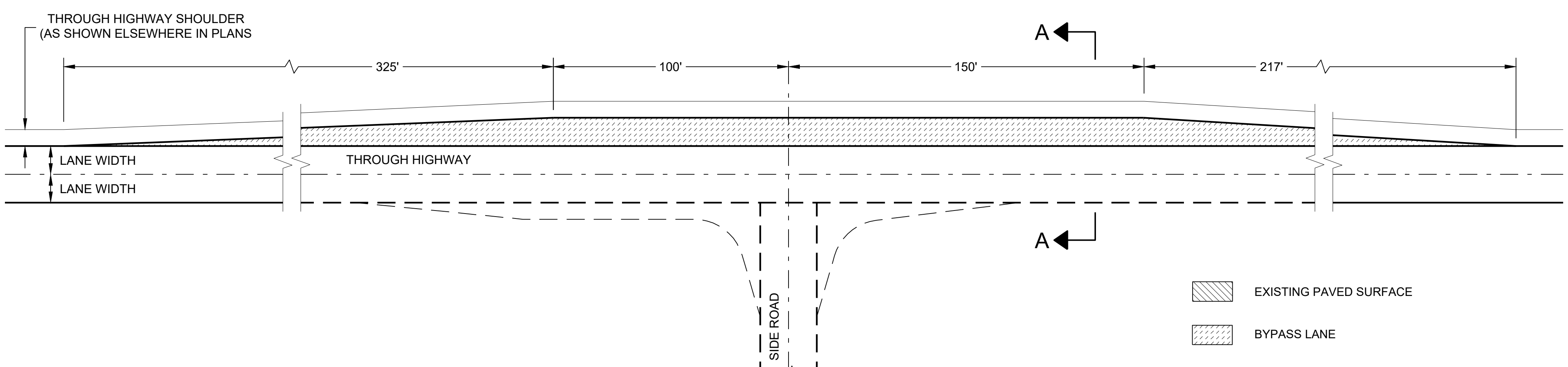


SECTION A - A

(SHOWING BYPASS LANE AND SHOULDER)



TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

AT GRADE SIDE ROAD INTERSECTION TYPES "B1", "B2", "C", "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 09A01 - 14a

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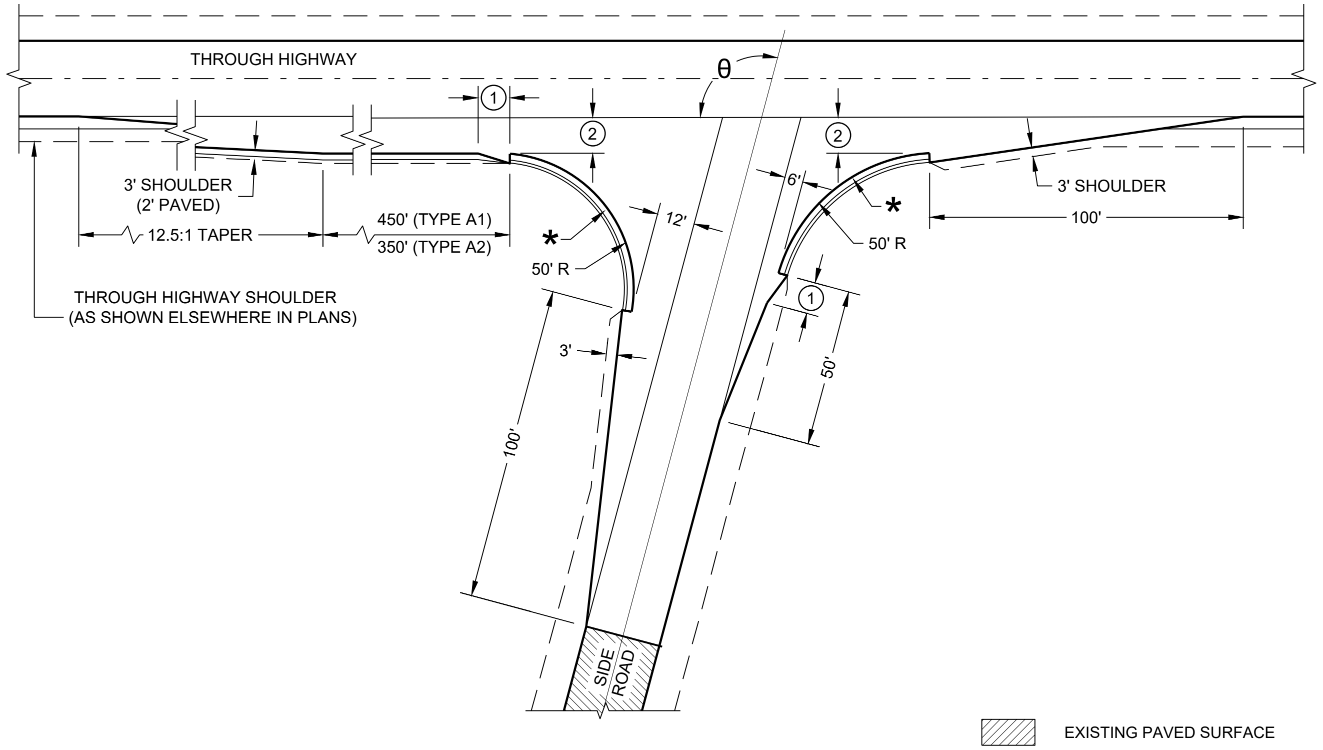
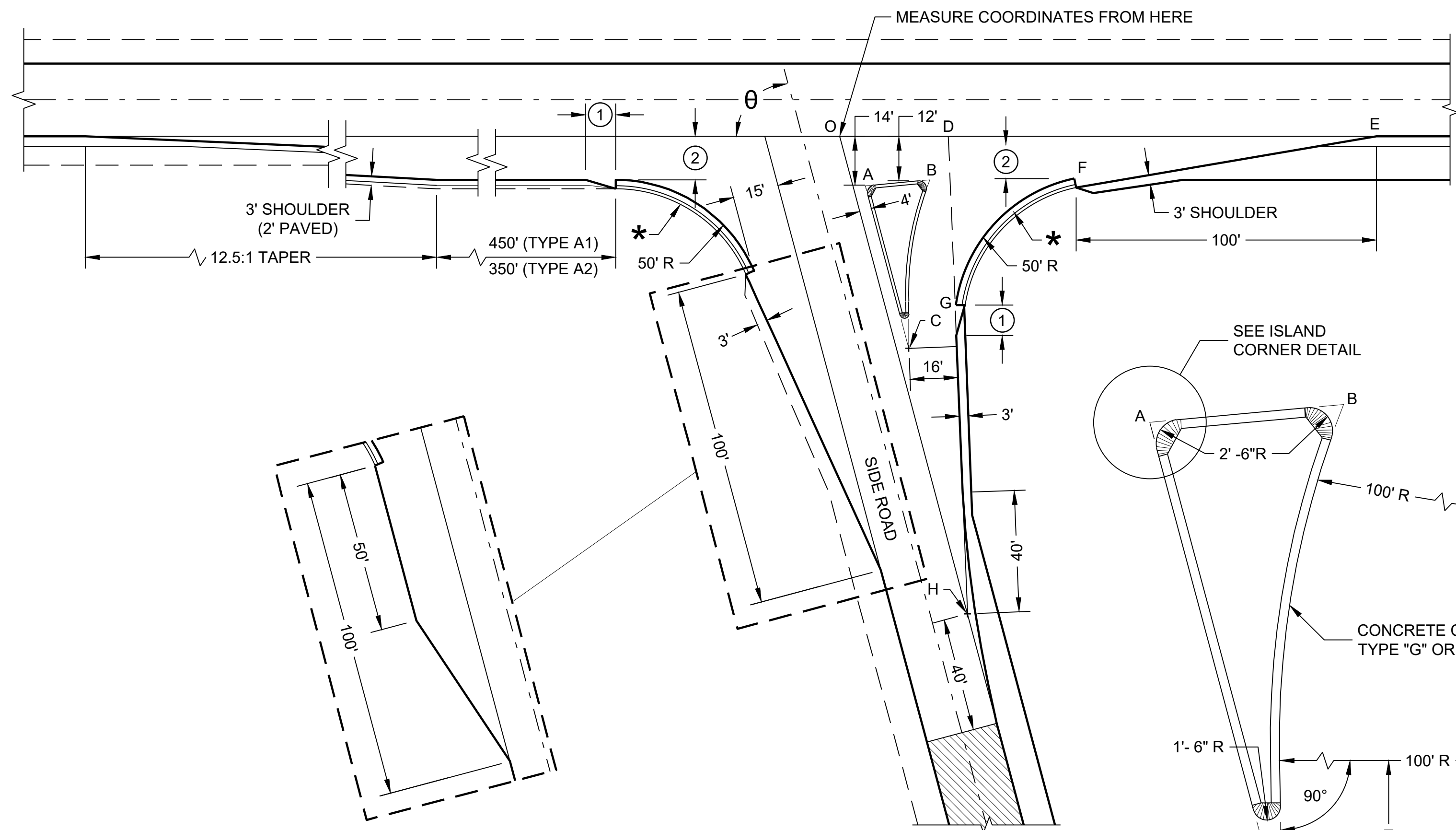
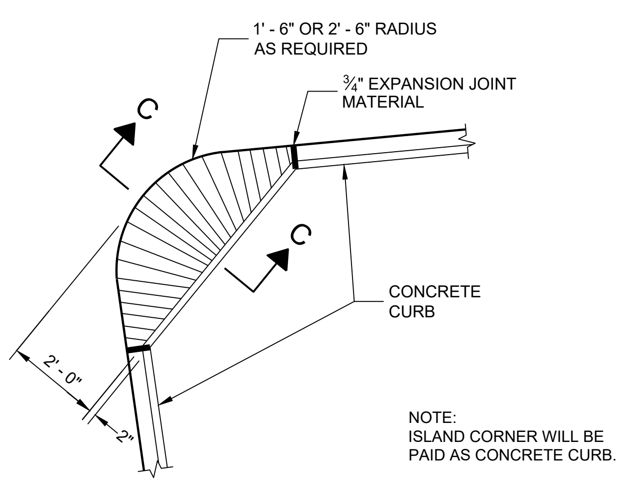


θ = MORE THAN 80°



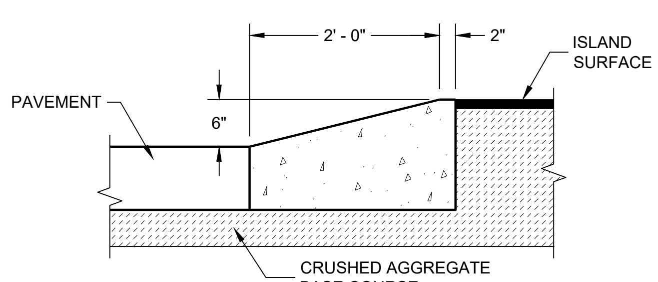
SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

θ = ACUTE ANGLES 80° OR LESS



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C - C

ISLAND CORNER DETAIL

(TO BE CONSTUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT 'O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE 'A1" AND "A2" SIDE ROAD INTERSECTION DETAILS

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AT GRADE SIDE ROAD INTERSECTIONS TYPES "A1" AND "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

SDD 09A01 - 14b

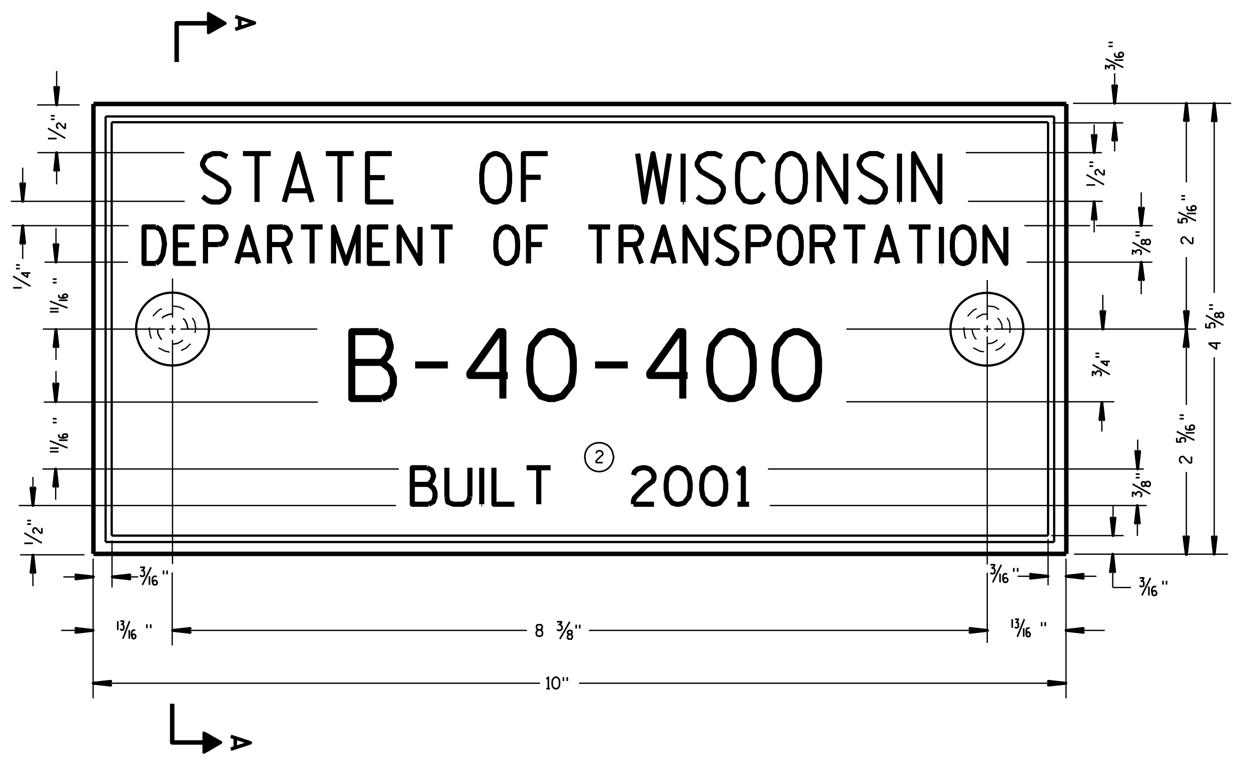
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

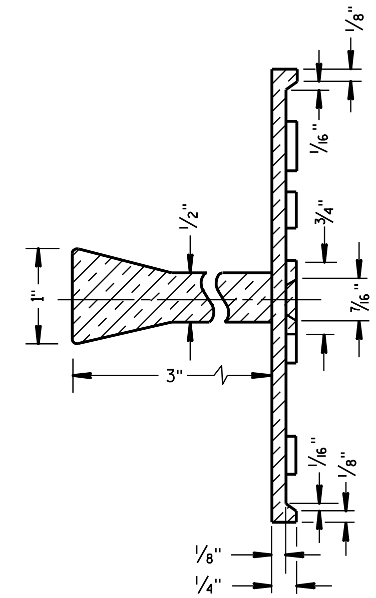
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

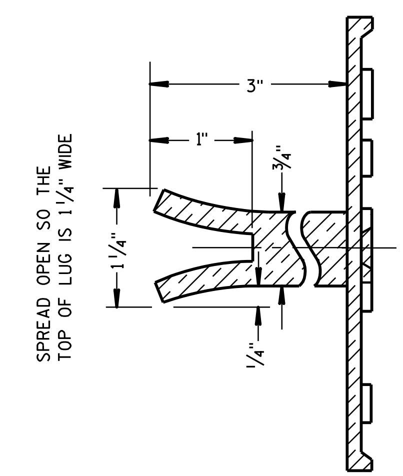
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



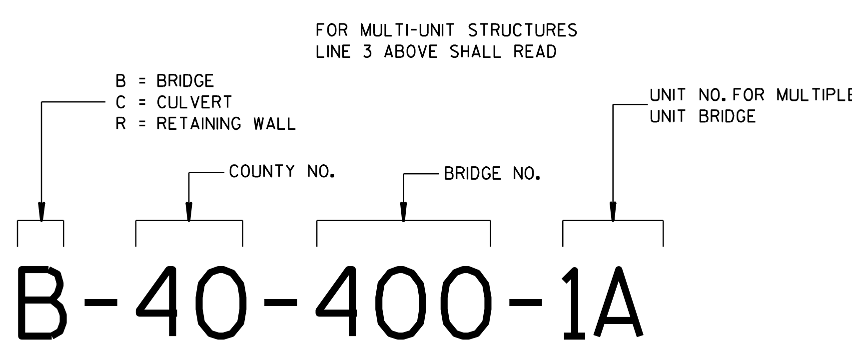
TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



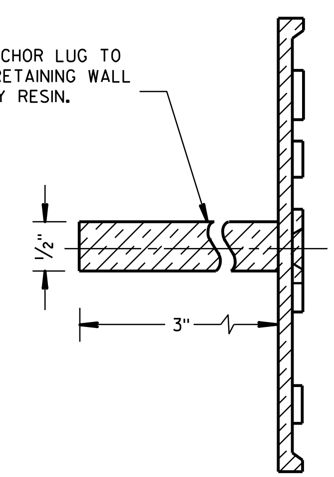
SECTION A-A



ALTERNATE LUG



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 3/26/10 DATE /S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER FHWA

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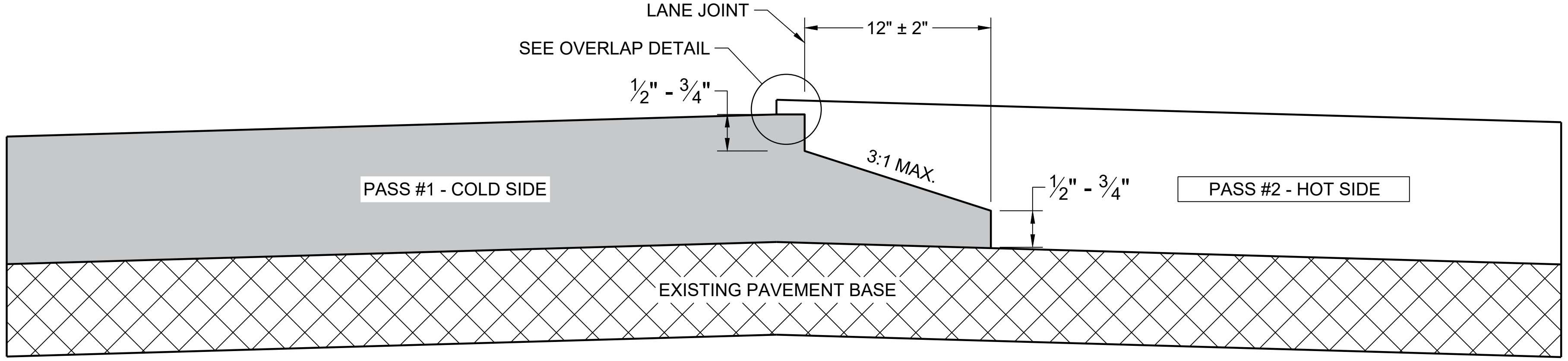


TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT

GENERAL NOTES

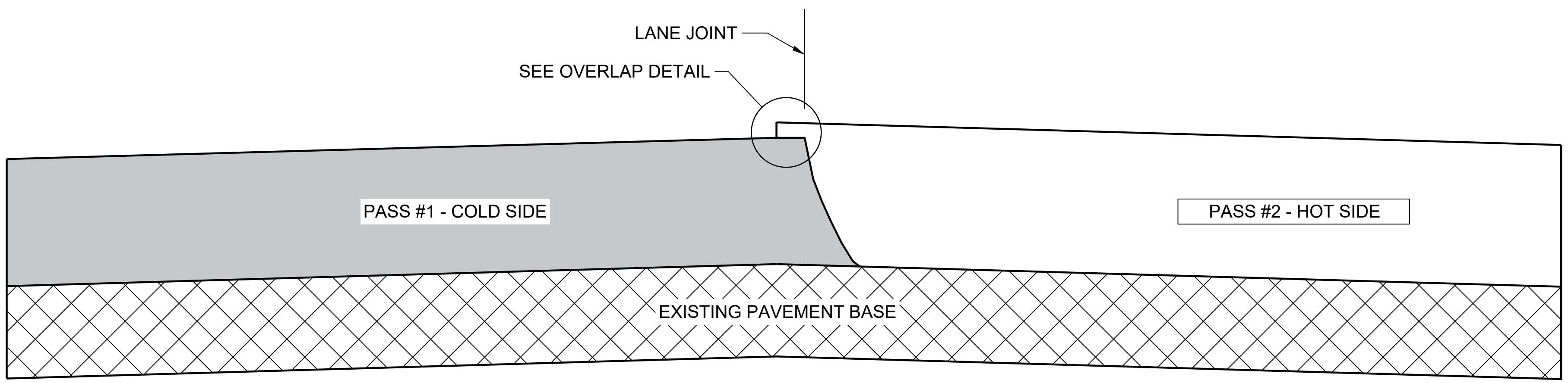
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

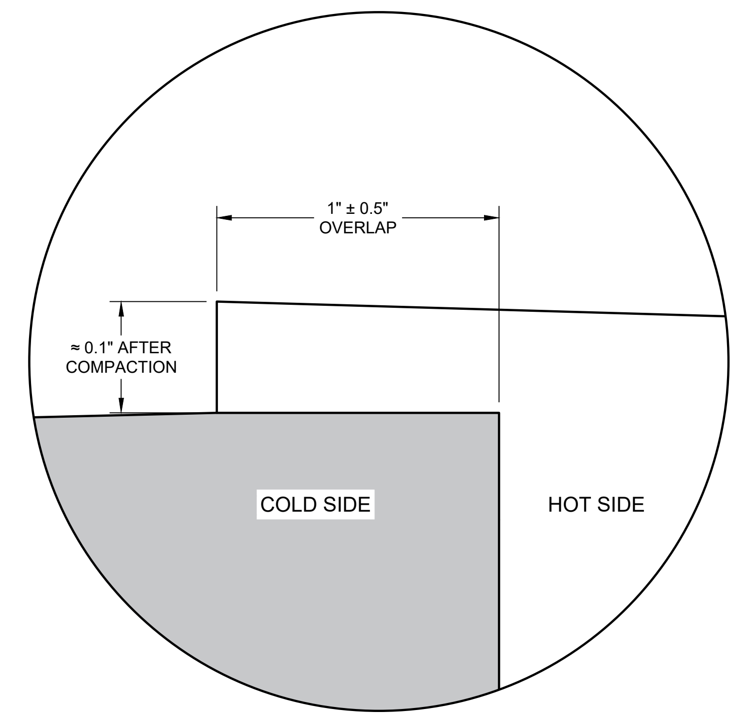
ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

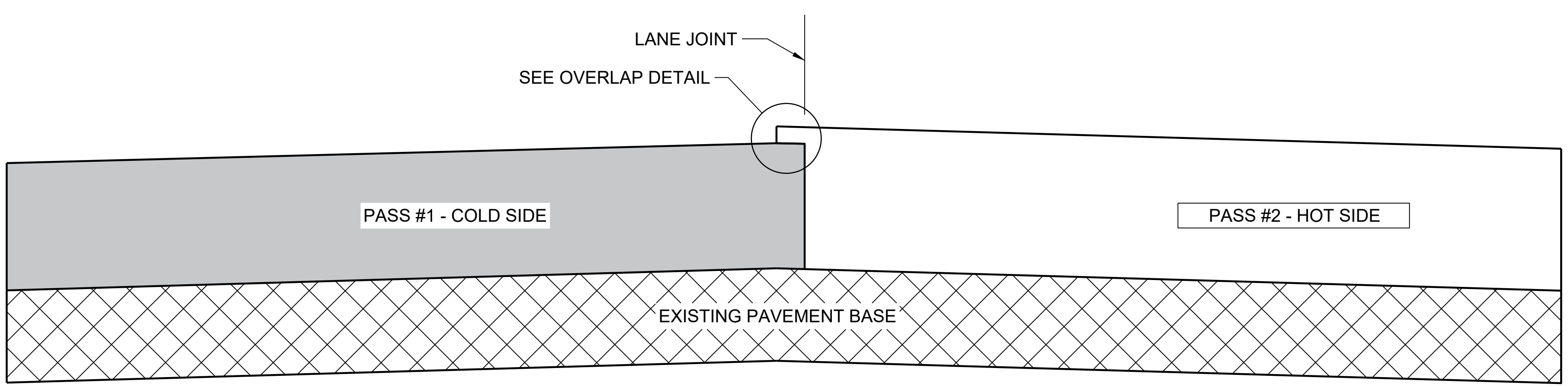
USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



OVERLAP DETAIL (TYPICAL)



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN
FHWA

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SDD 13C19 - 03

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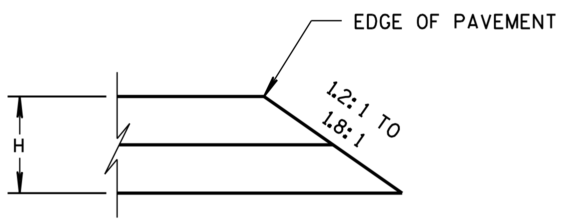
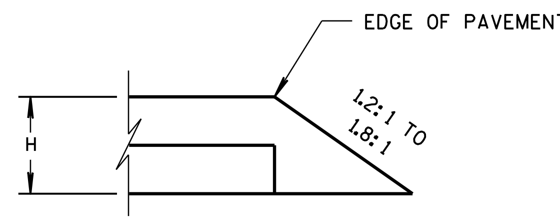


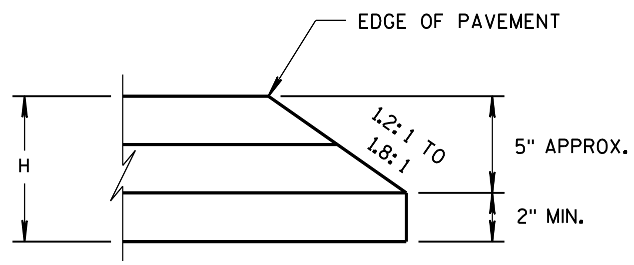
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



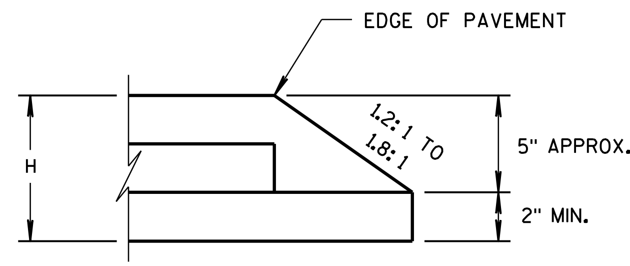
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

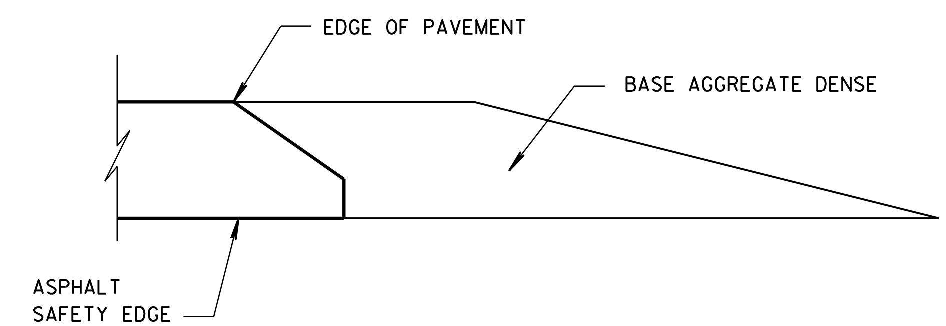
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

S.D.D. 14 B 29-1

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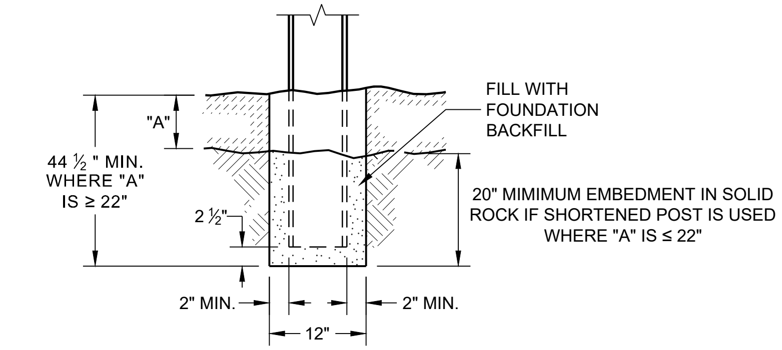
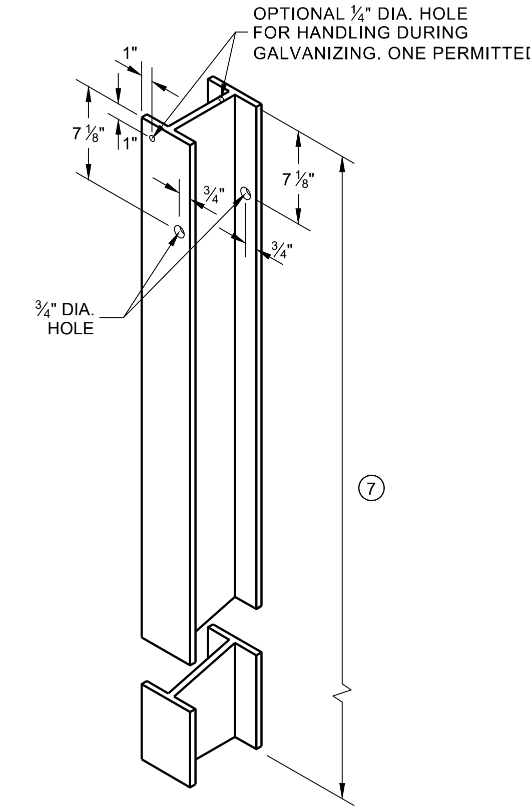
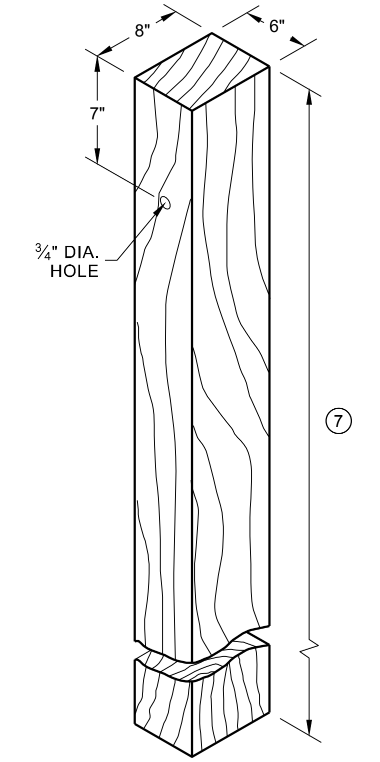
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".
6. WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
7. TOTAL POST LENGTH FOR TYPE K IS 7' - 0". TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



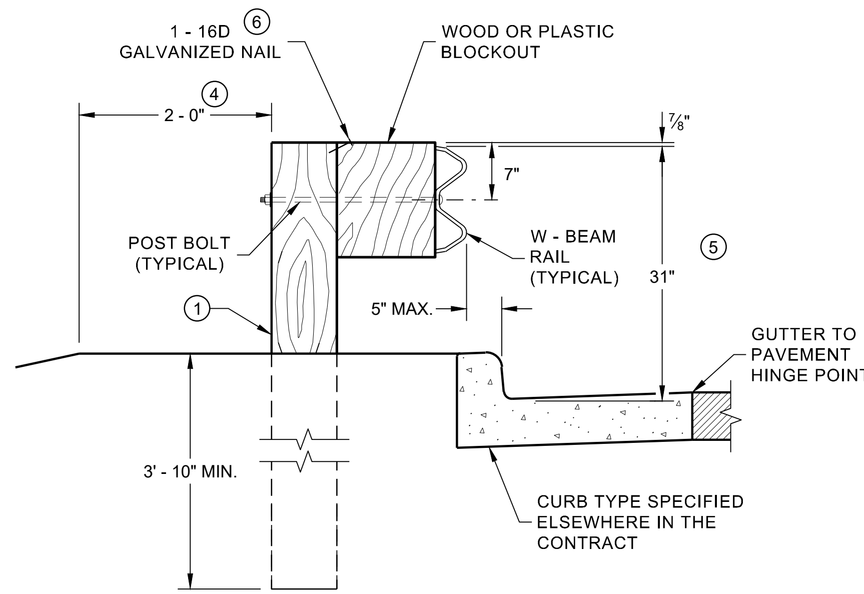
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



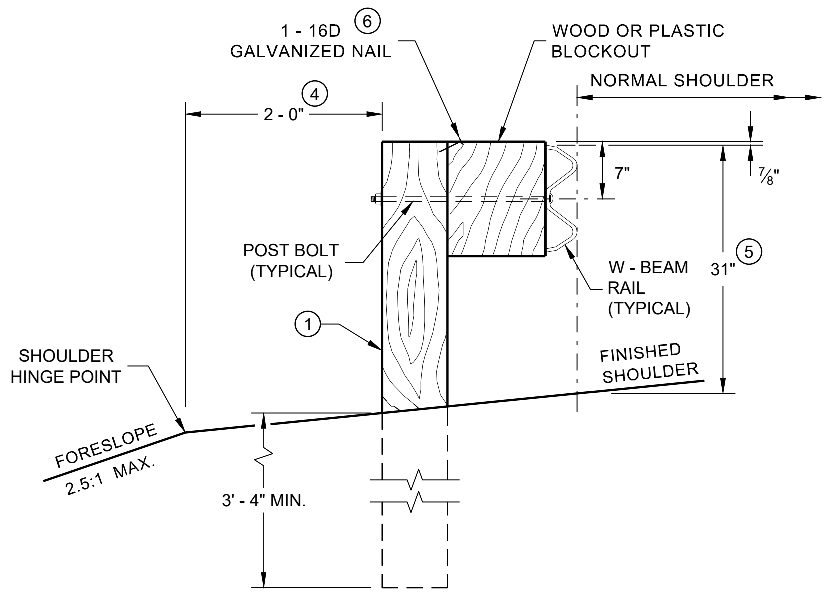
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) ①



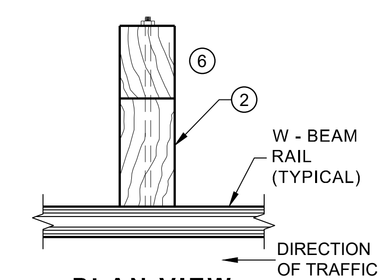
WOOD POST (6" X 8") NOMINAL ①



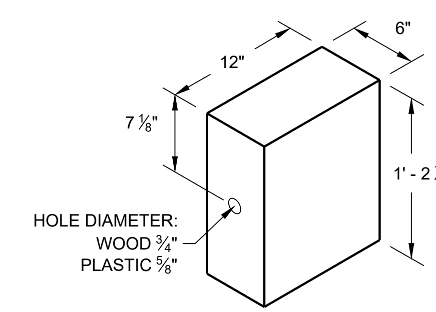
END VIEW
LOCATED ALONG A CURBED ROADWAY



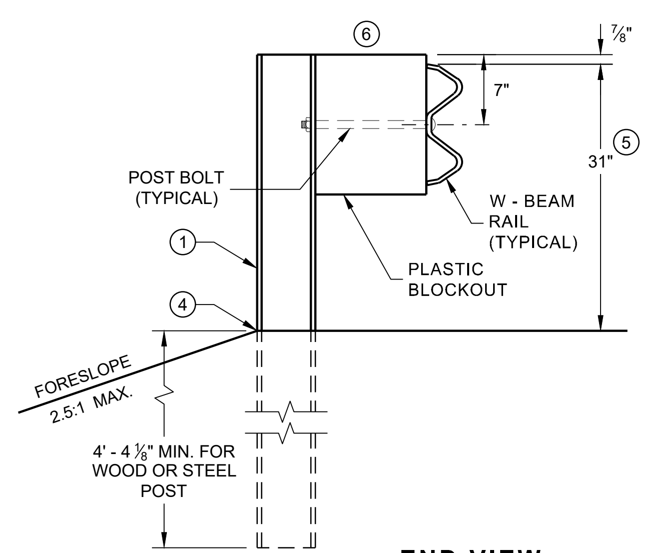
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



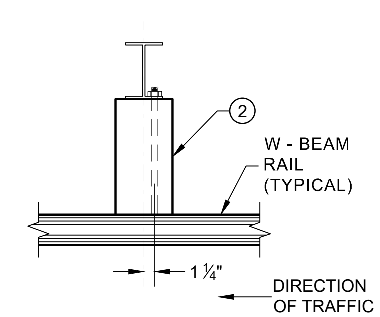
PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT ②



END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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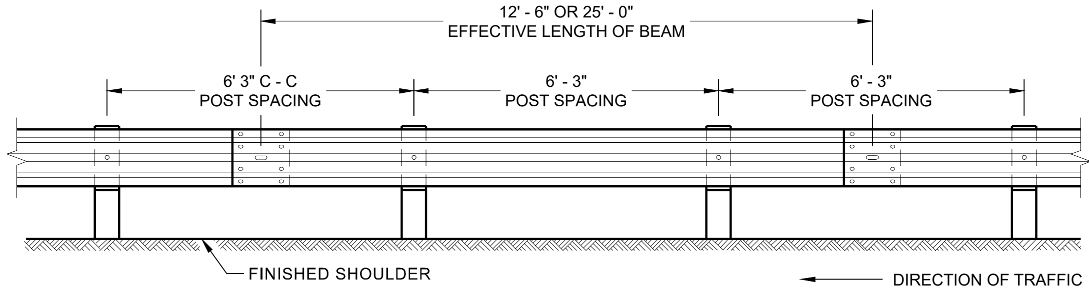
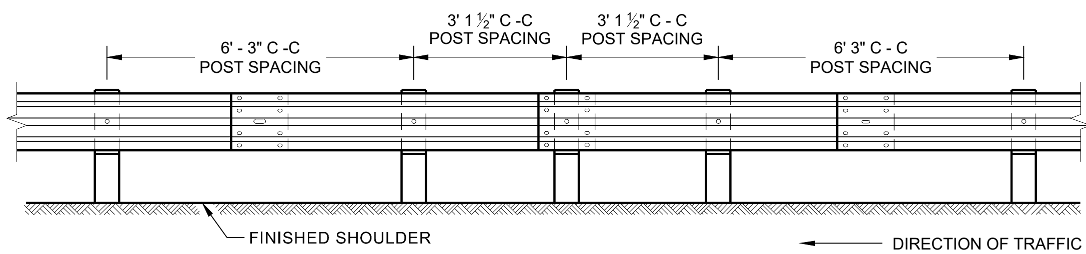
SDD 14B42 - 07a

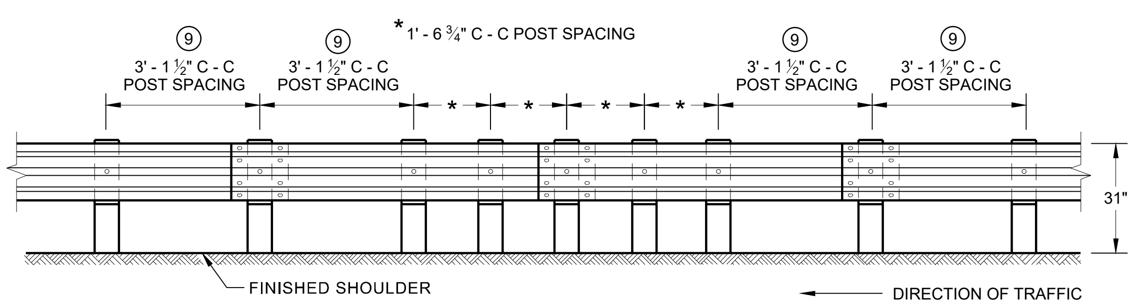
SDD 14B42 - 07a



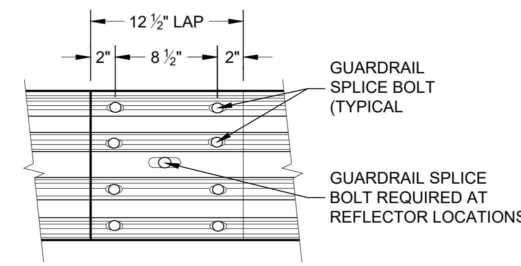
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

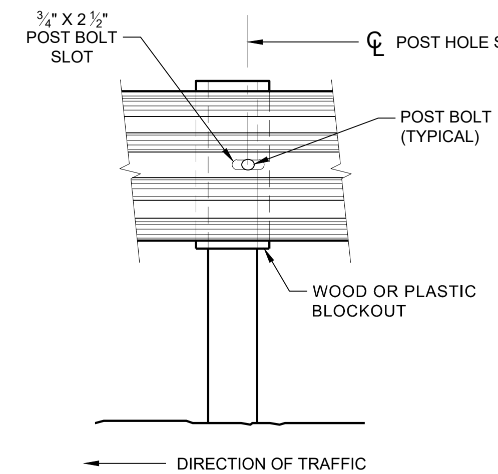
GENERAL NOTES

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

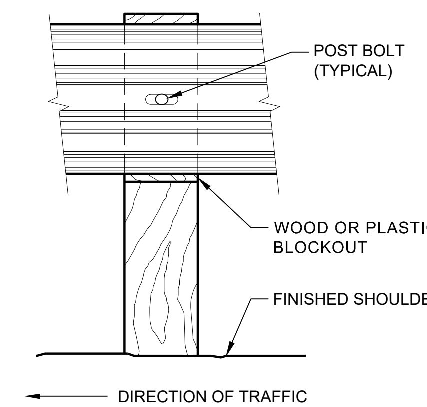
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

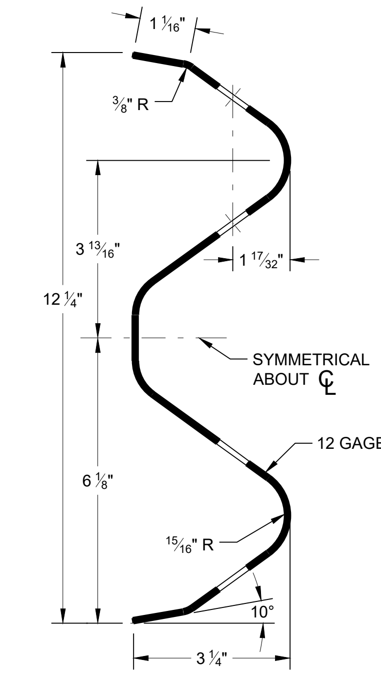
GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



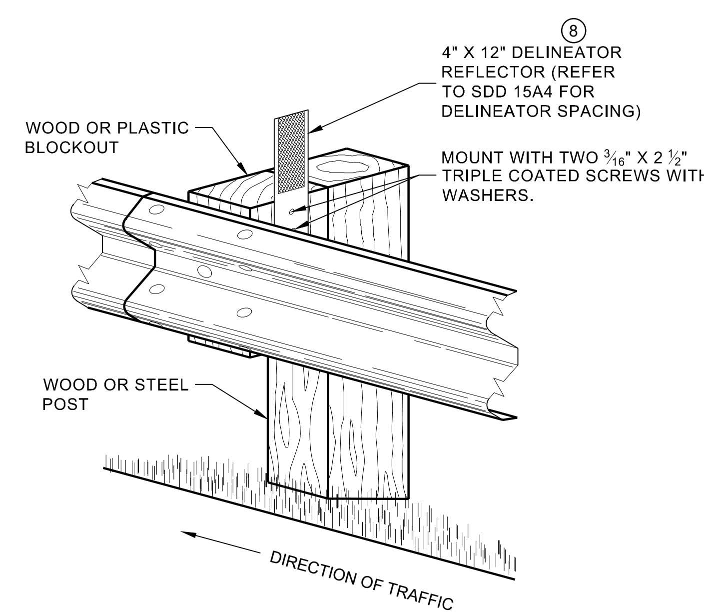
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



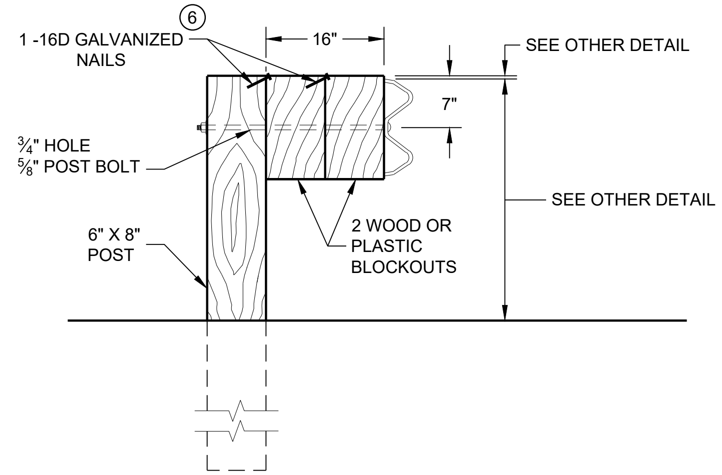
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B42 - 07b

6

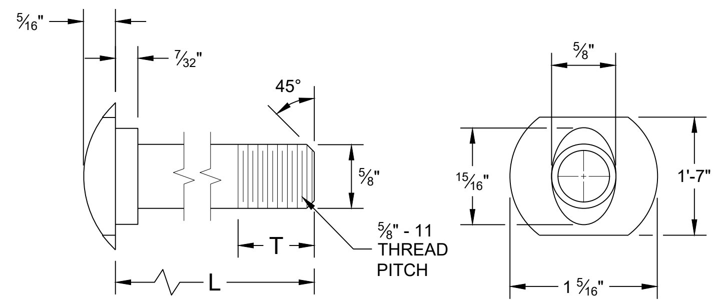


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

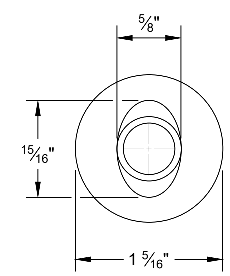
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

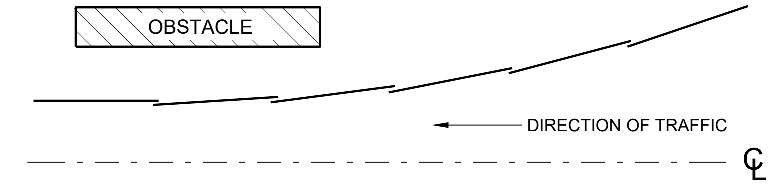


POST BOLT TABLE

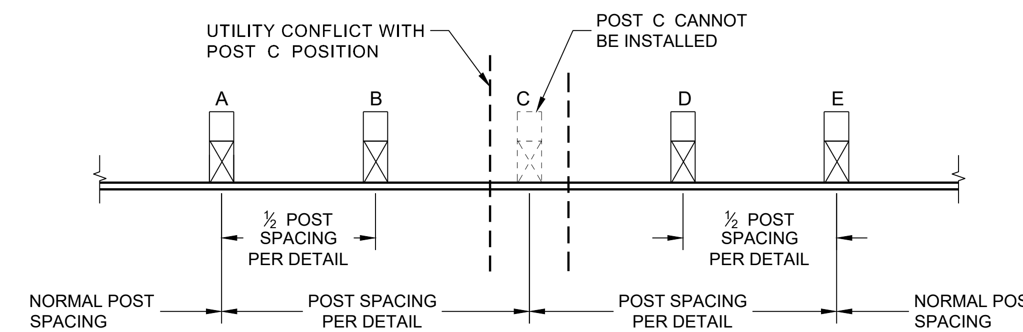
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



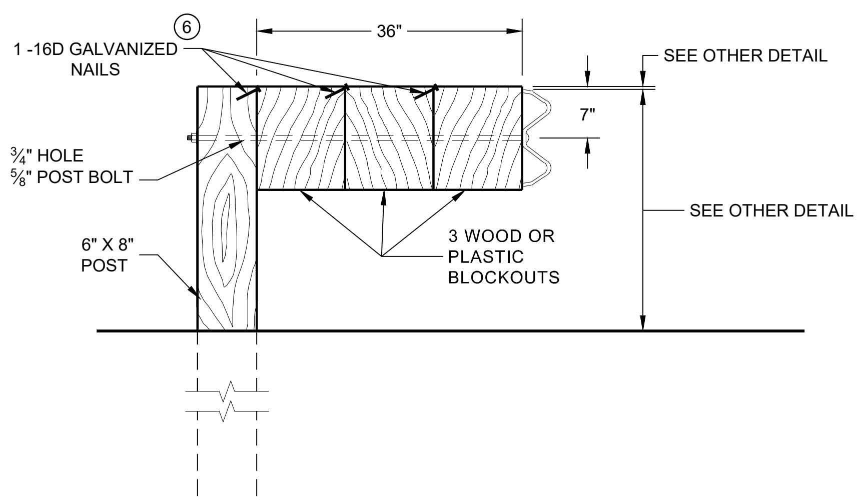
ALTERNATE BOLT HEAD



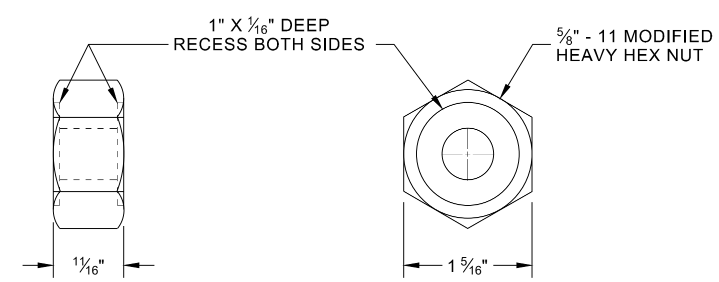
PLAN VIEW
BEAM LAPPING DETAIL



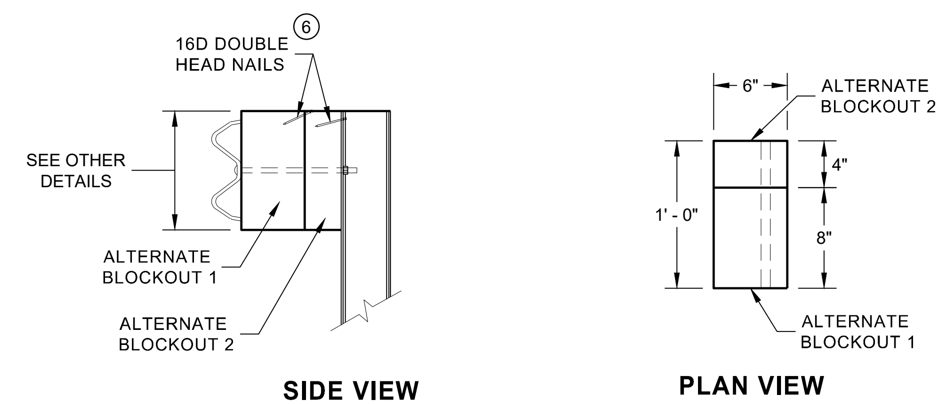
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



ALTERNATE WOOD BLOCKOUT DETAIL

6

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

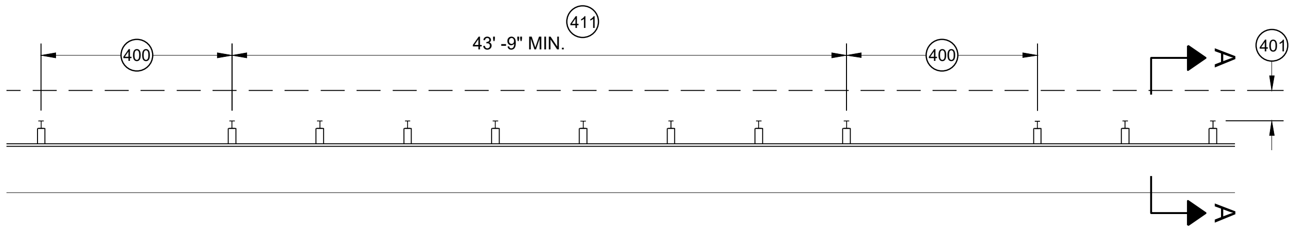
6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

SDD 14B42 - 07c

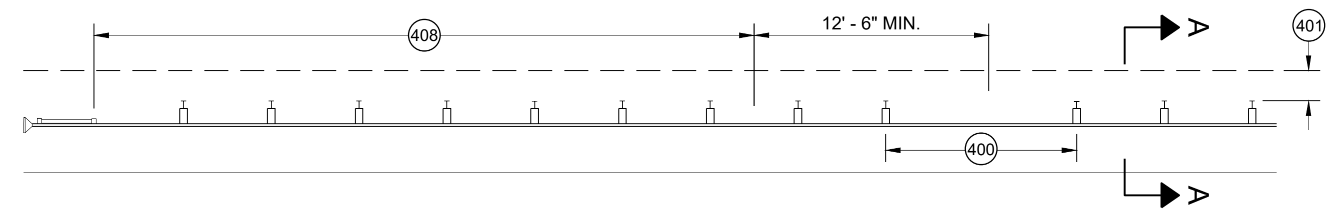
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATI

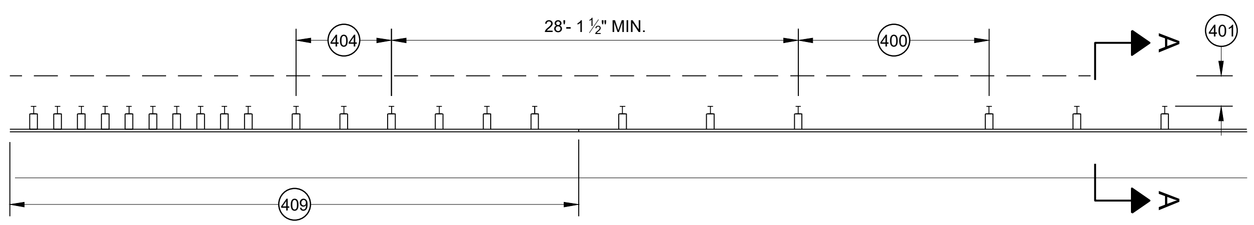
SDD 14B42 - 07c



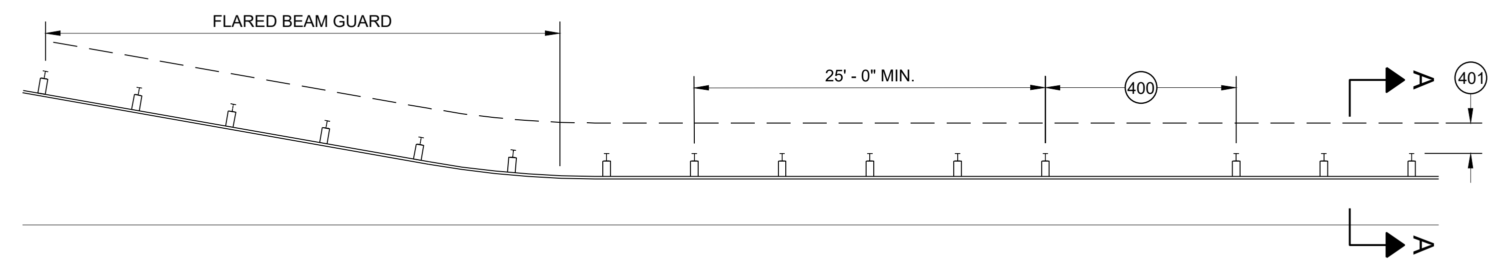
MISSING POST IN MGS GUARDRAIL



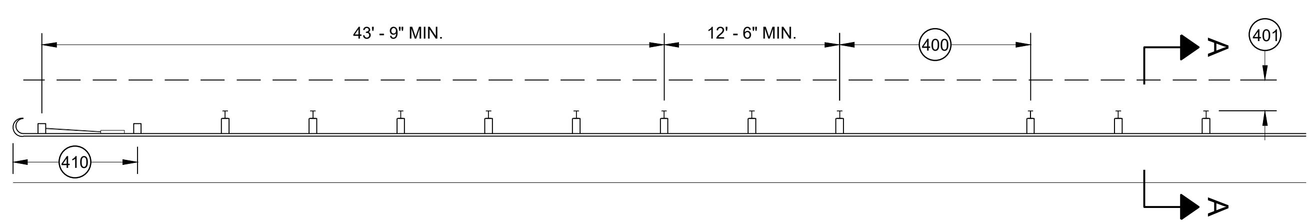
MISSING POST IN MGS GUARDRAIL NEAR EAT



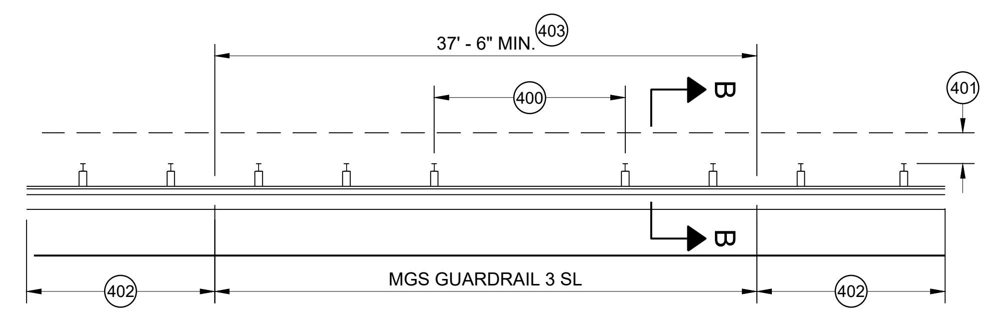
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

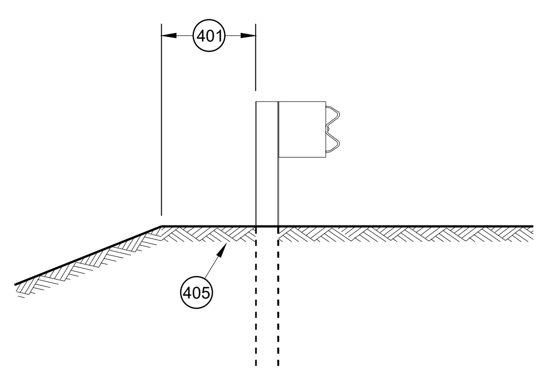


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

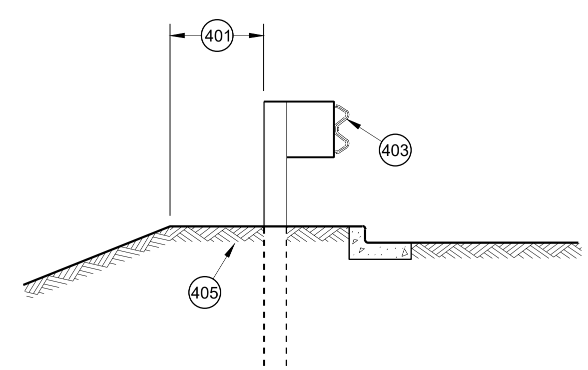


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) (407)

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A (406)



SECTION B - B (406)

6

6

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

SDD 14B42 - 07d

SDD 14B42 - 07d

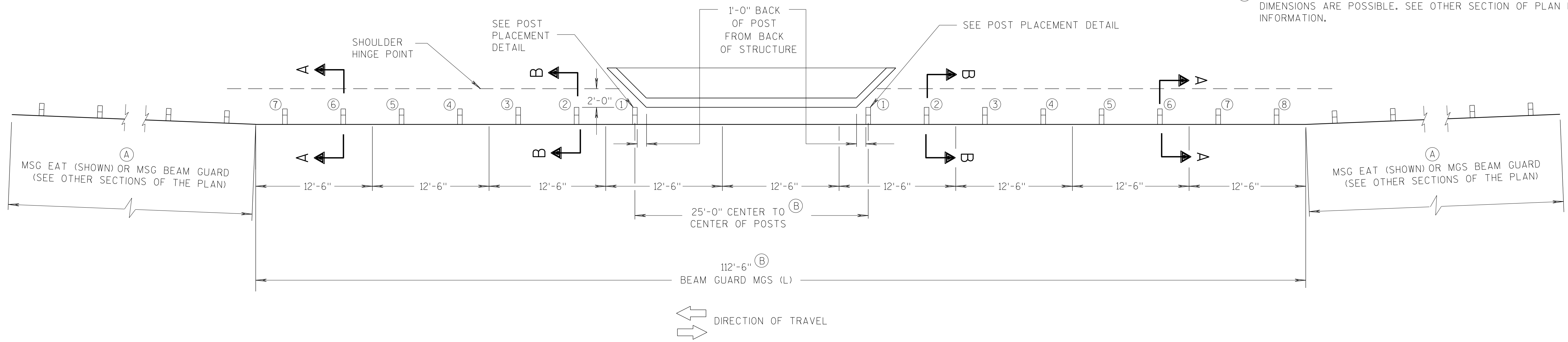
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

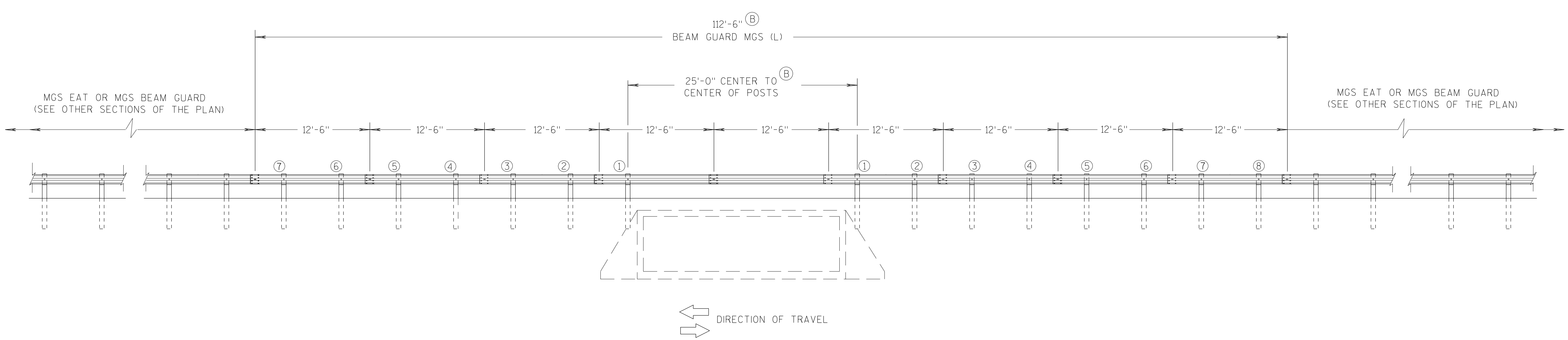
SEE SDD 14 B 42 FOR MORE DETAILS.

Ⓐ FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

Ⓑ VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

6

6

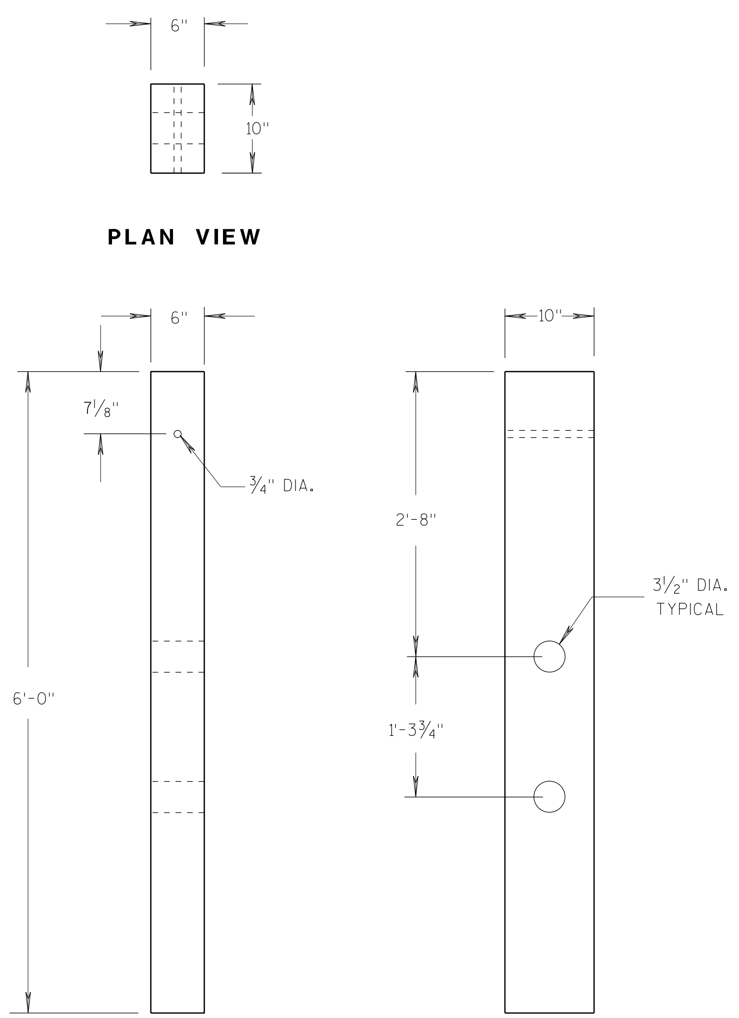
S.D.D. 14 B 43-4a

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
STATE OF WISCONSIN DEPARTMENT OF TRANSPOR...

S.D.D. 14 B 43-4a

GENERAL NOTES

Ⓒ TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

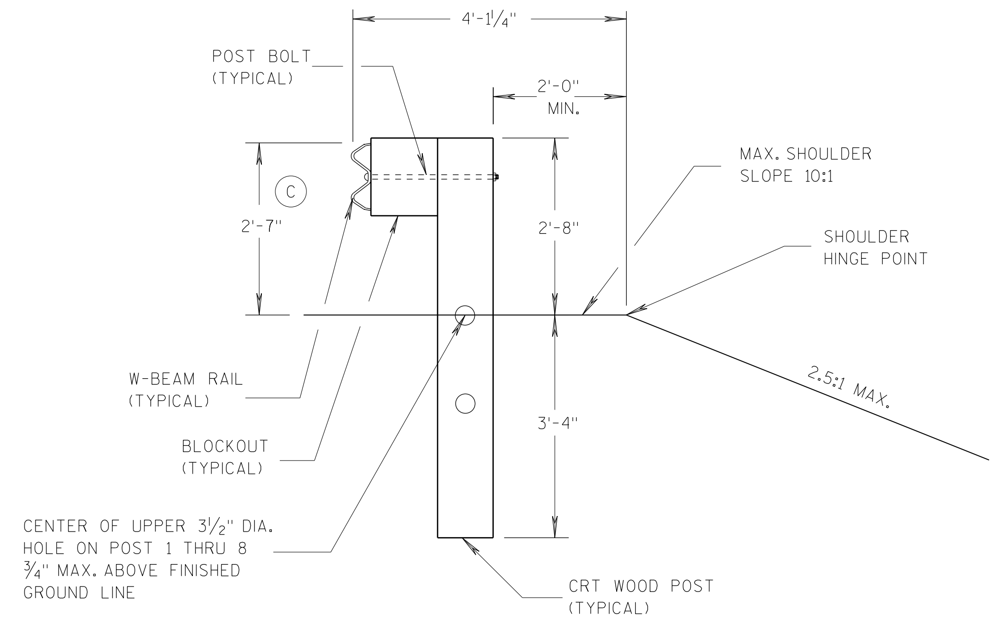


PLAN VIEW

FRONT VIEW

SIDE VIEW

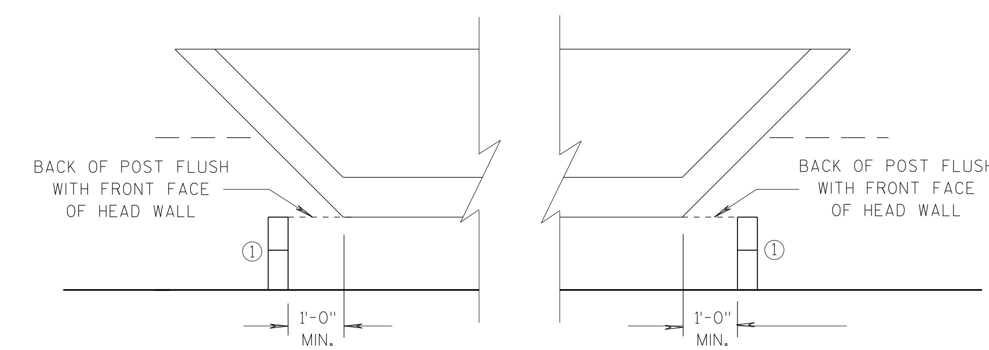
CRT WOOD POST



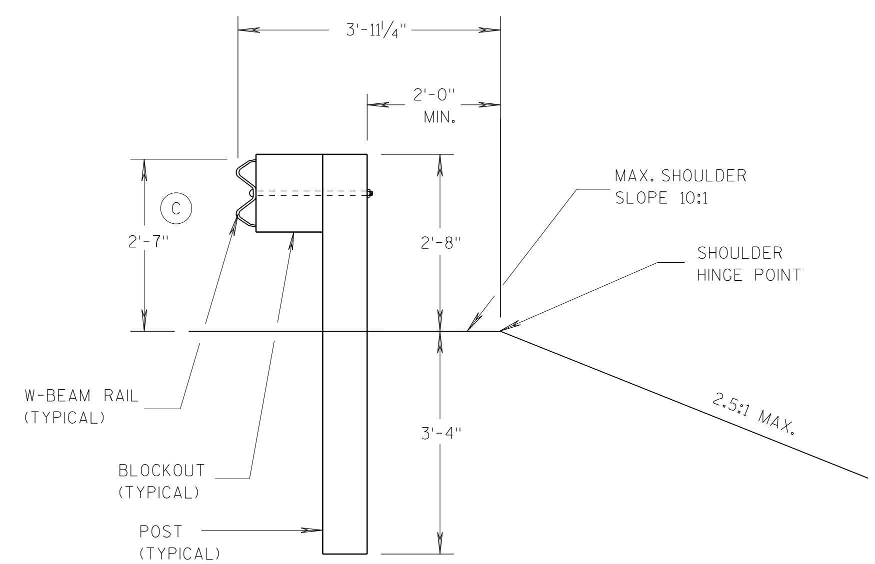
SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



POST PLACEMENT DETAIL



SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

6

6

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 07/2018 DATE /S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER FHWA

S.D.D. 14 B 43-4c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

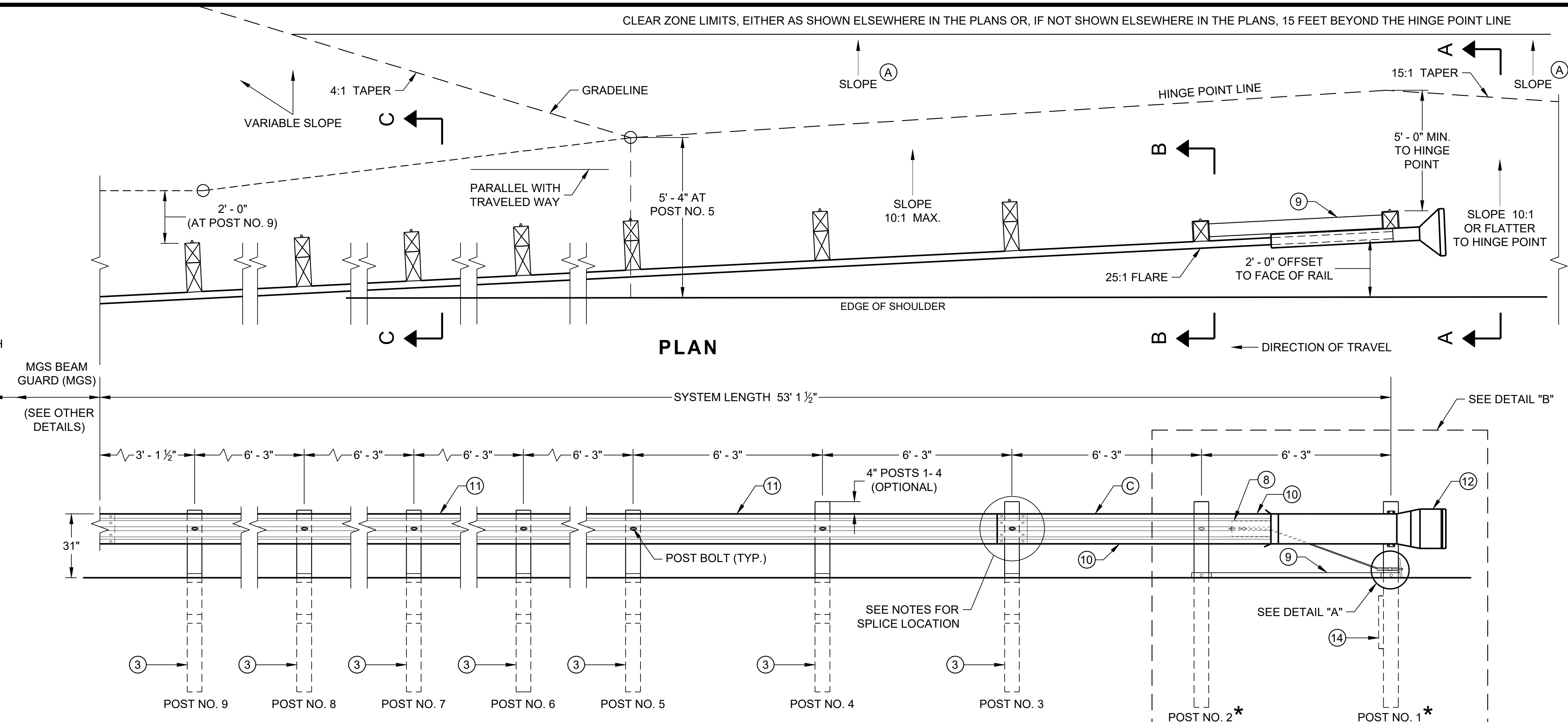
SEE SDD 14B42 FOR MORE INFORMATION.

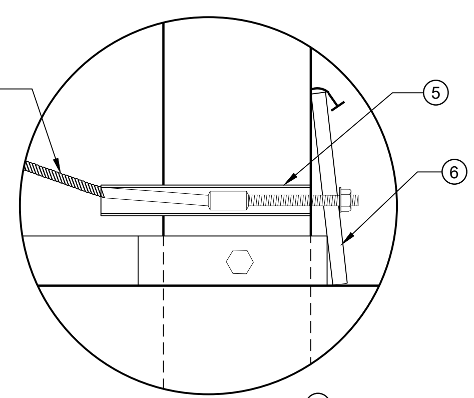
* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

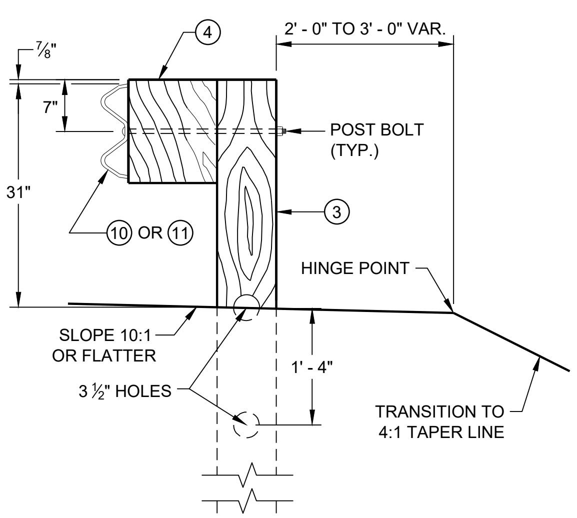
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

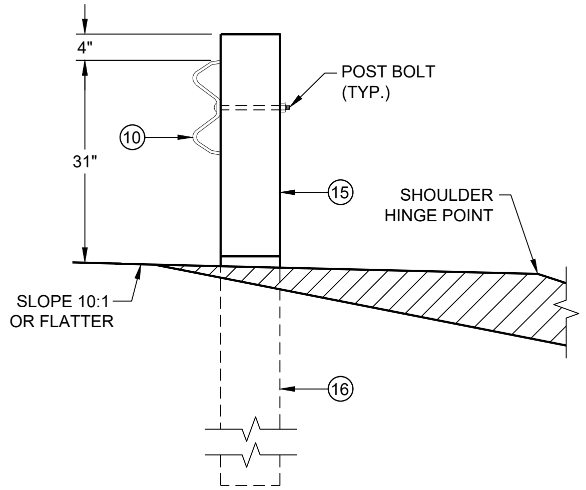




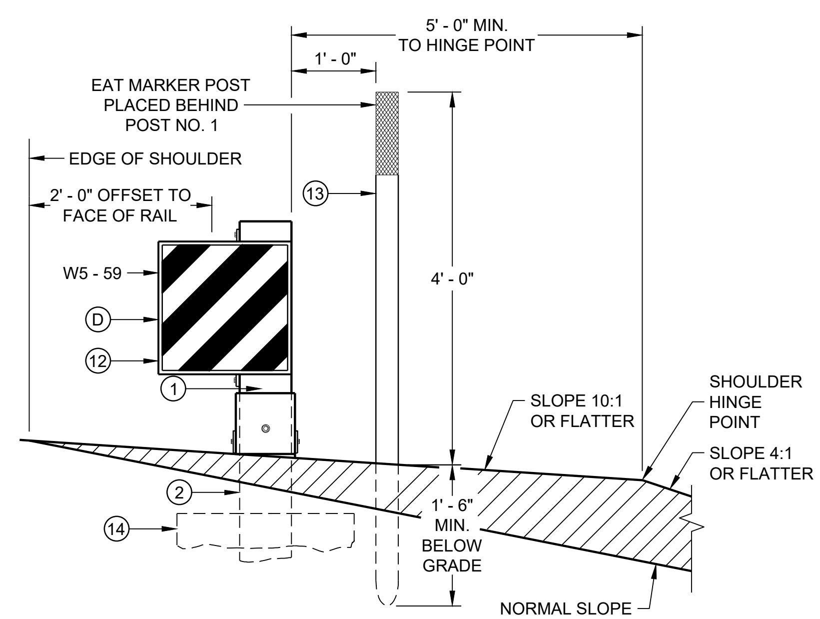
DETAIL "A" (E)



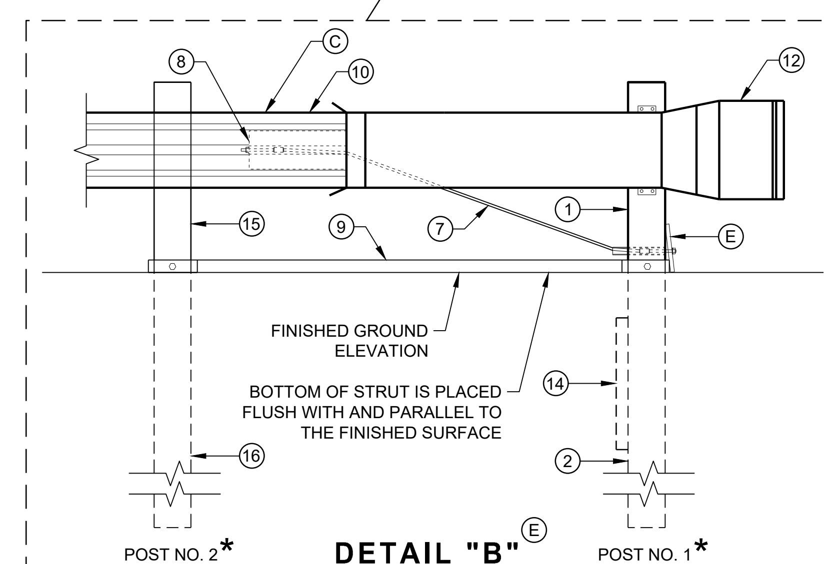
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

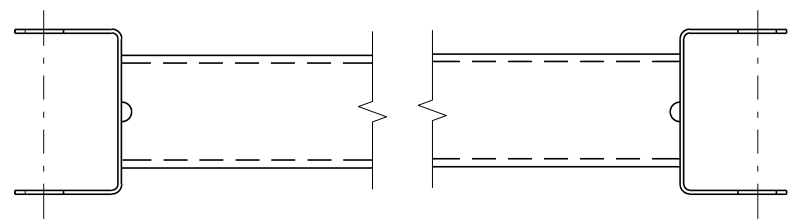
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

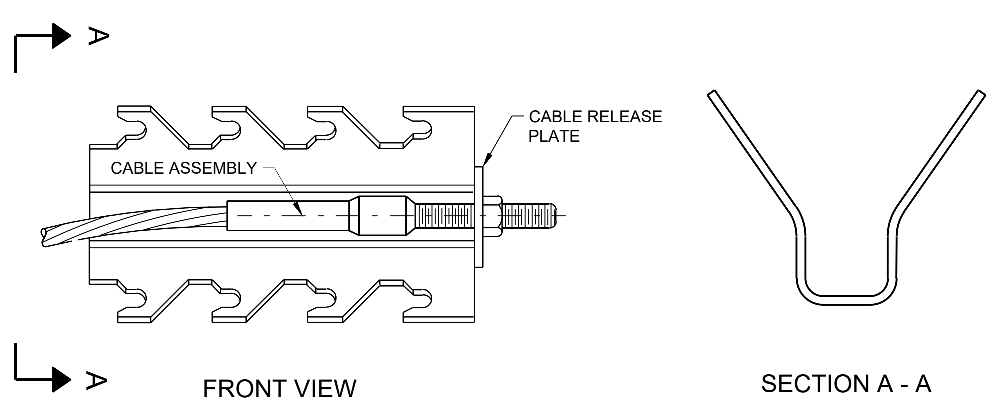
SDD 14B44 - 04a

BILL OF MATERIALS

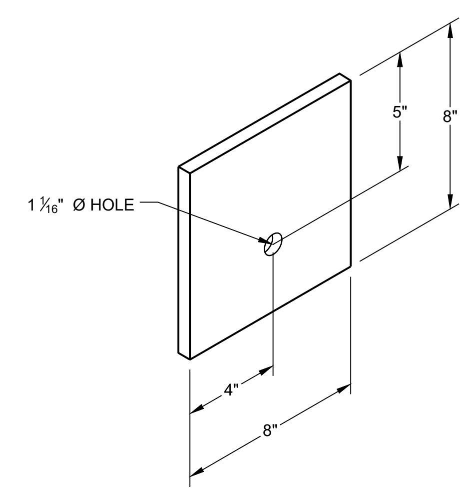
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
1	UPPER POST NO. 1 6" X 6" TUBE
2	LOWER POST NO. 1
3	WOOD CRT
4	WOOD BLOCKOUT
5	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND STRUT
10	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
11	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
12	IMPACT HEAD
13	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
14	SOIL PLATE
15	UPPER POST NO. 2
16	LOWER POST NO. 2



GENERIC GROUND STRUT 9 E



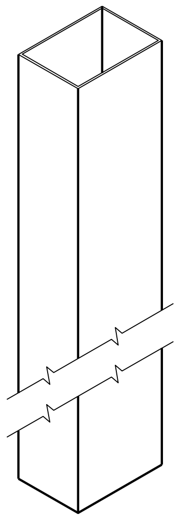
GENERIC ANCHOR CABLE BOX 9 E



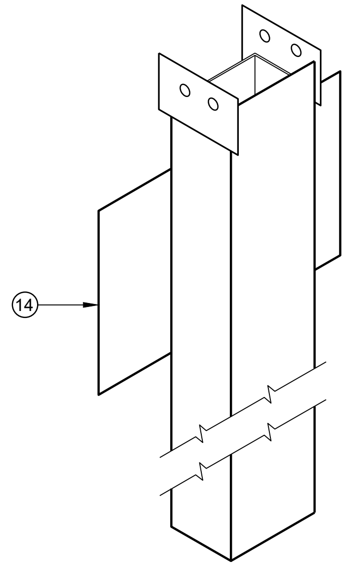
BEARING PLATE 6 E

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

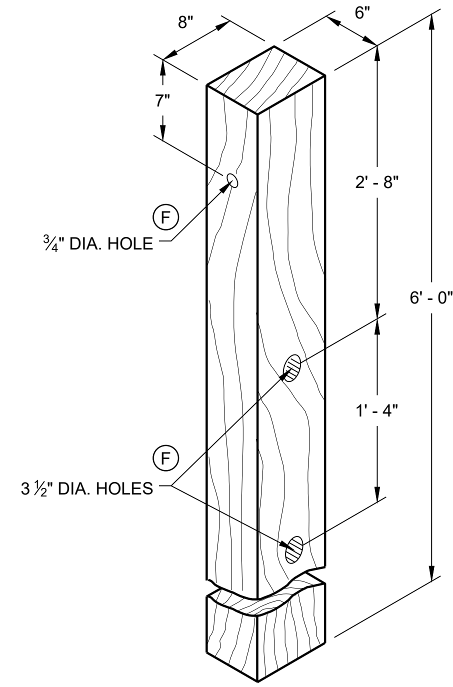
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



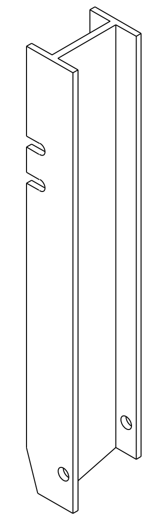
UPPER POST NO. 1 ① Ⓔ



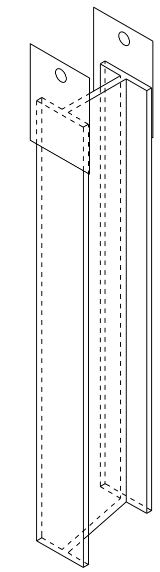
LOWER POST NO. 1 ② Ⓔ



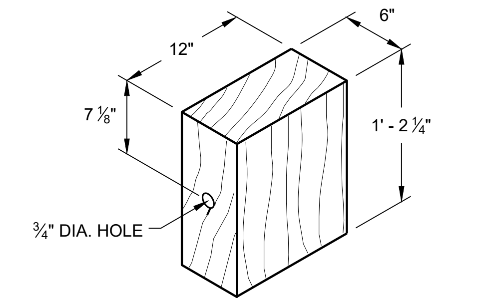
WOOD CRT POST ③ Ⓔ
POSTS NUMBER 3-9



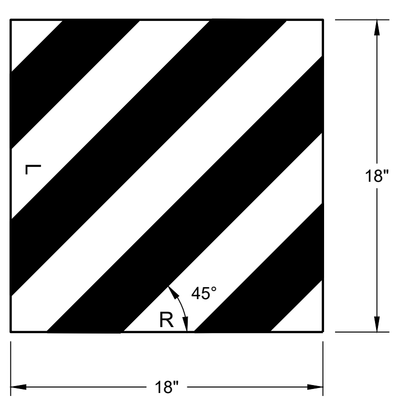
UPPER POST NO. 2 ⑮ Ⓔ



LOWER POST NO. 2 ⑯ Ⓔ

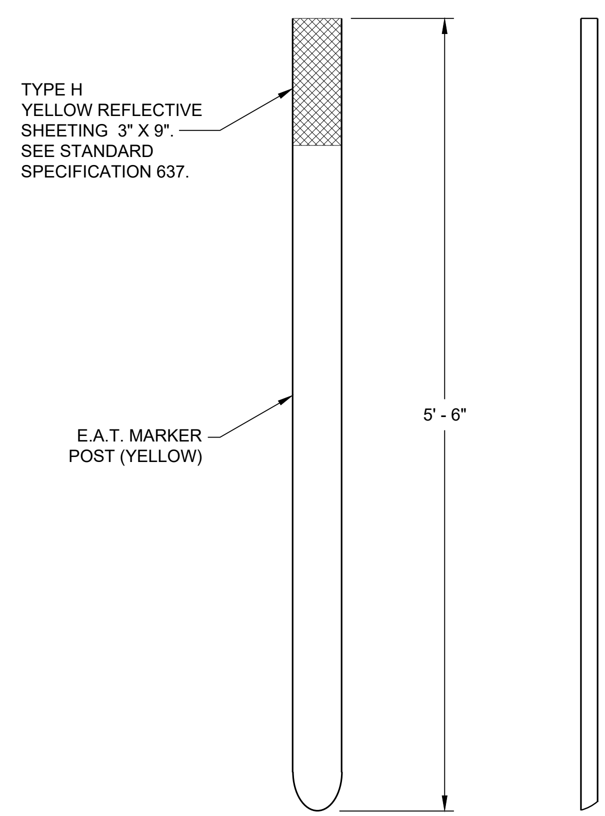


WOOD BLOCKOUT ④
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



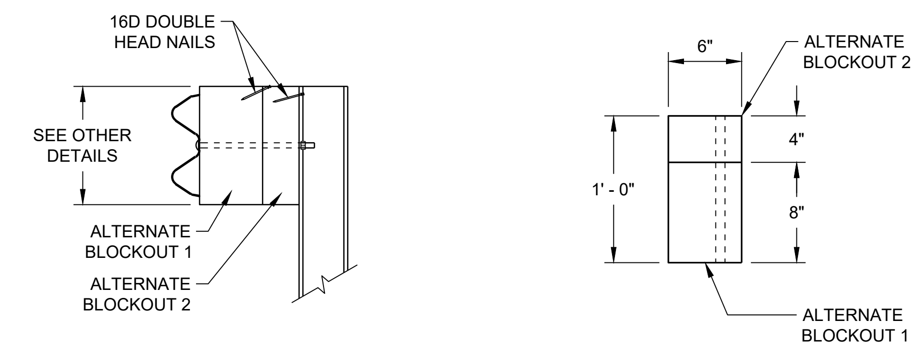
W5 - 59

REFLECTIVE SHEETING DETAIL Ⓔ



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST ⑬



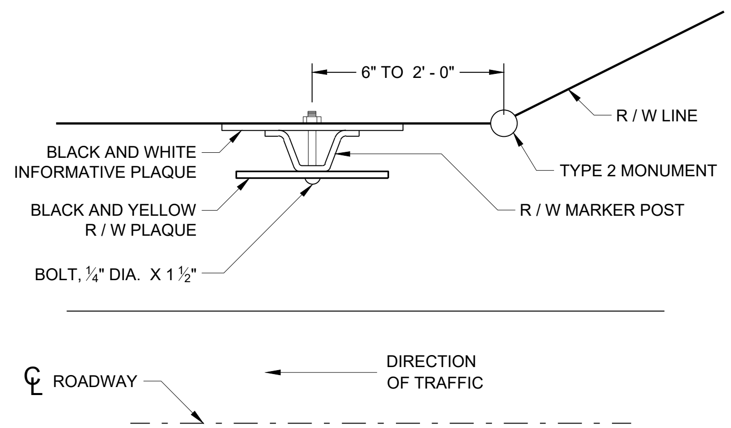
SIDE VIEW TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

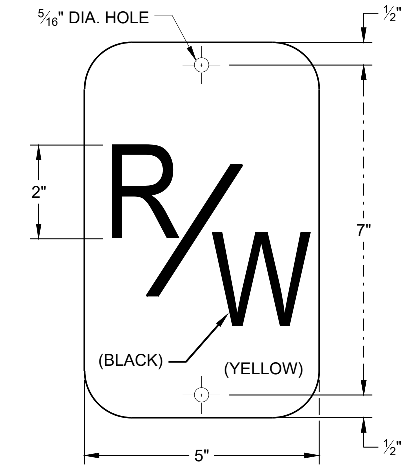
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

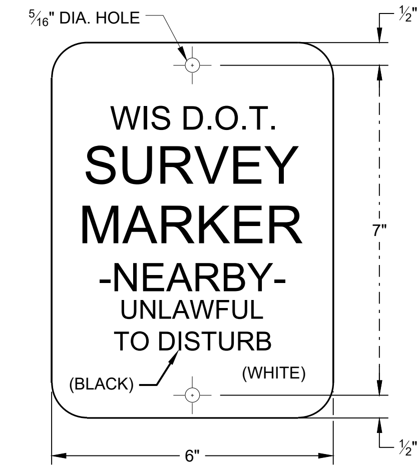


PLAN VIEW
STEEL MARKER POST



R / W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

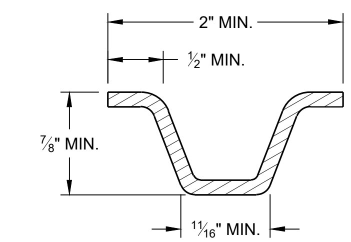
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFROMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

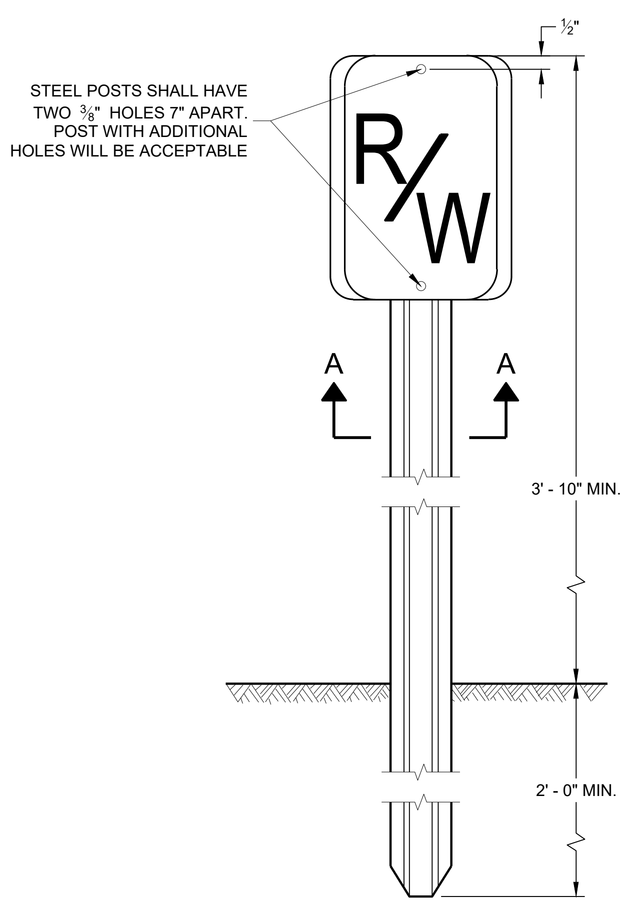
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.

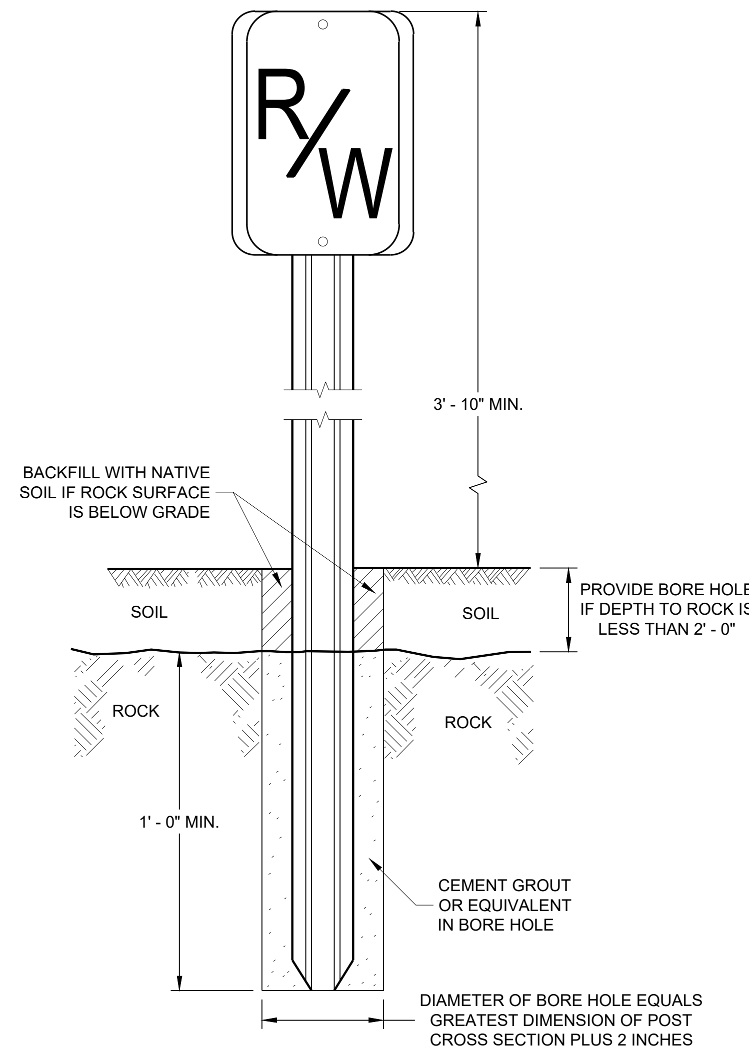


MIN. WEIGHT 1.12 LB./FT.
SECTION A - A

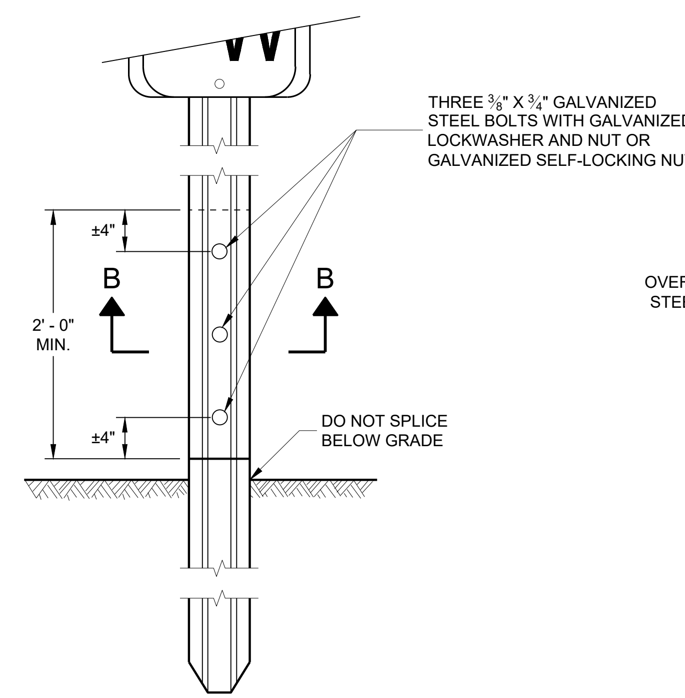
6



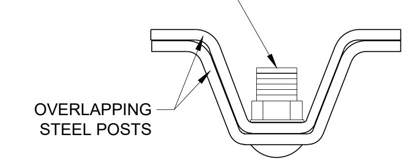
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)



FRONT VIEW
SPLICE DETAIL



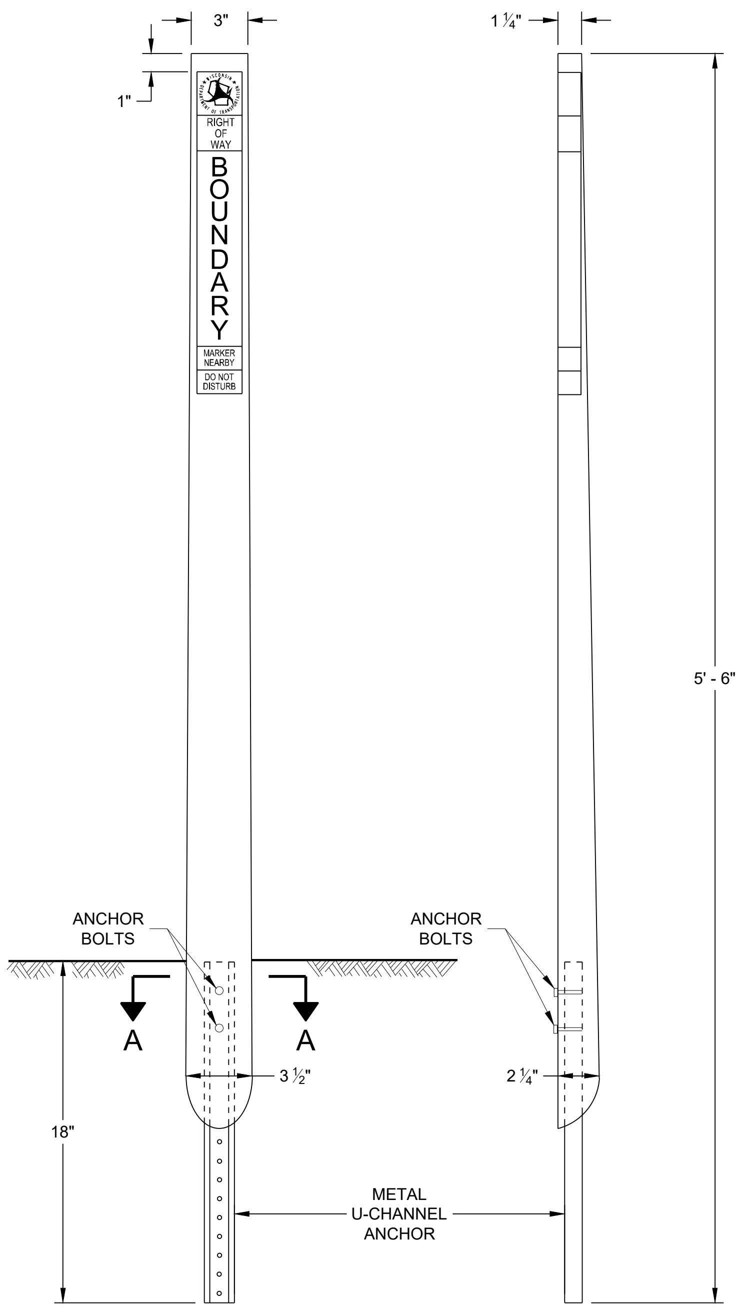
SECTION B - B

6

MARKER POST FOR RIGHT - OF - WAY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 2/18/2016 DATE — /S/ Ray Kumapayi CHIEF SURVEYING AND M/ ENGINEER
FHWA

SDD 15A01 - 13a

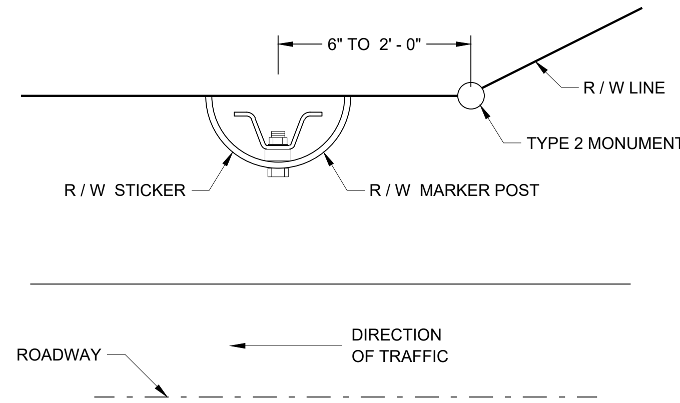
SDD 15A01 - 13a



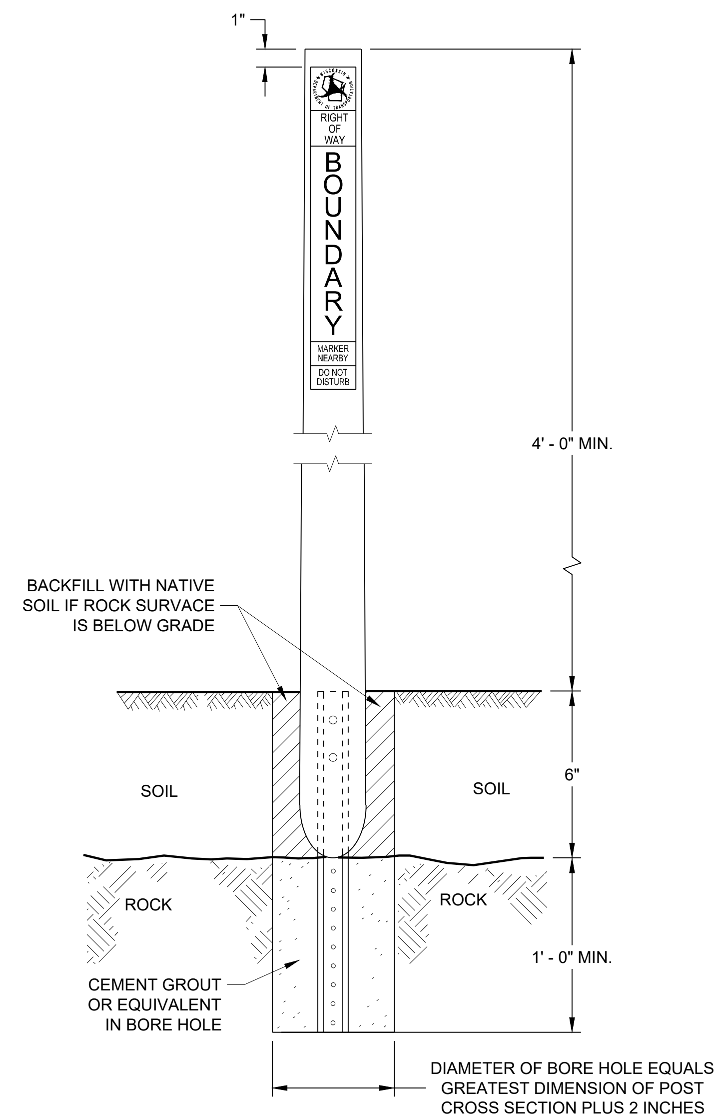
FRONT VIEW

SIDE VIEW

FLEXIBLE MARKER POST FOR RIGHT-OF-WAY ①



PLAN VIEW



FRONT VIEW ROCK INSTALLATION ① ②

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A FLEXIBLE MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

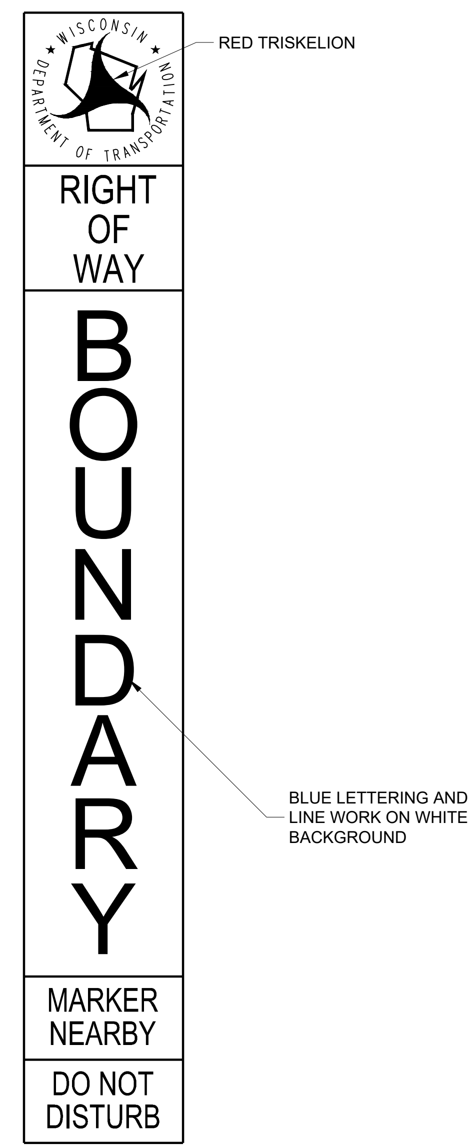
THE RIGHT-OF-WAY STICKER DIMENSIONS SHALL BE 2 ¼" X 17" AND THE STICKER SHALL BE MADE OF A NON-RELECTIVE VINYL MATERIAL. THE RIGHT-OF-WAY STICKER SHALL FACE THE ROADWAY.

INSTALL PER DEPTH OF MANUFACTURER'S RECOMMENDATION BUT NOT LESS THAN 18 INCHES BELOW GRADE FROM THE BOTTOM OF THE METAL U-CHANNEL ANCHOR.

① FLEXIBLE MARKER POSTS SHALL BE INCLUDED IN THE APPROVED PRODUCTS LIST FOR MARKER POSTS AND SHALL BE FEDERAL YELLOW IN COLOR.

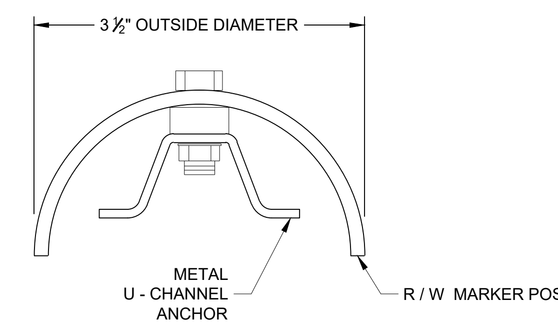
② IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 4' - 0" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



RIGHT-OF-WAY STICKER

THE RIGHT-OF-WAY STICKER SHALL BE ATTACHED 1" FROM THE TOP OF THE RIGHT-OF-WAY POST PRIOR TO DELIVERY.



SECTION A - A

FLEXIBLE MARKER POST FOR RIGHT - OF - WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

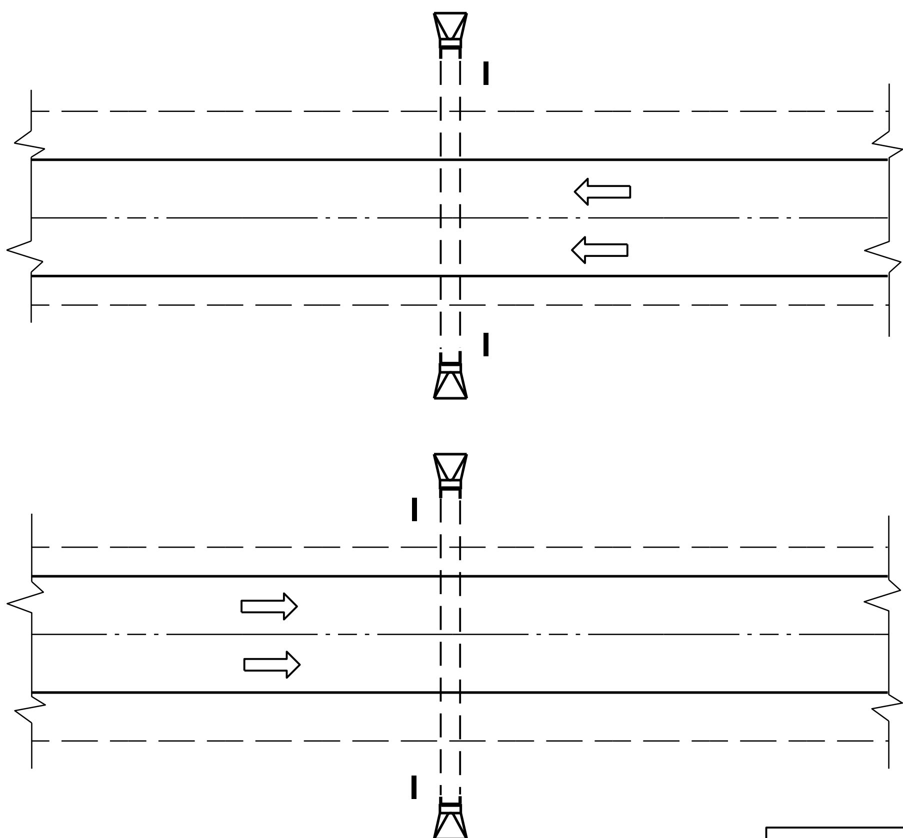
APPROVED
2/16/2016 — DATE
/S/ Ray Kumapayii — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

SDD 15A01 - 13b

6

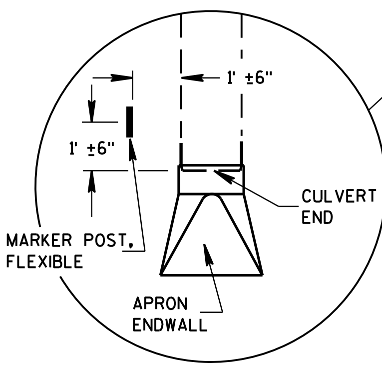
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

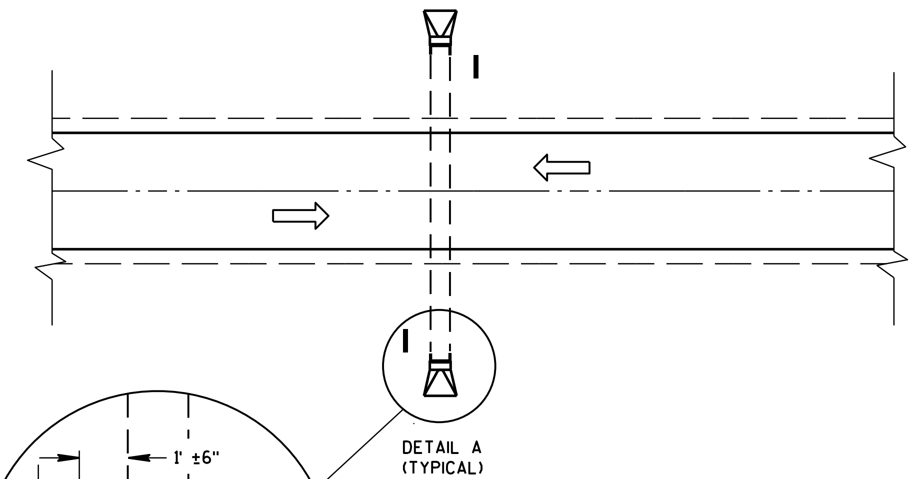


PLAN VIEW

DIVIDED HIGHWAY



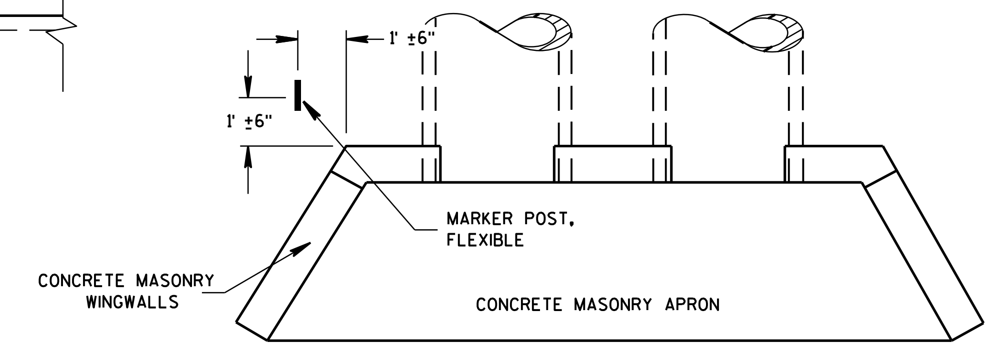
DETAIL A
(TYPICAL)



PLAN VIEW

UNDIVIDED HIGHWAY

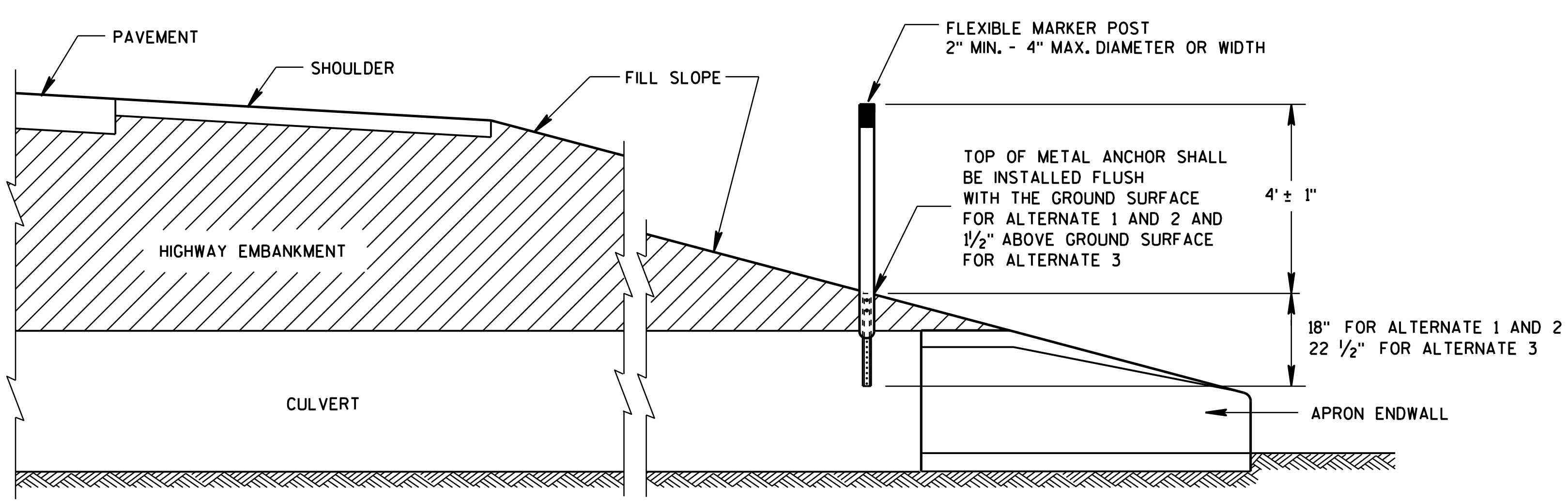
I	MARKER POST, FLEXIBLE
⇨	DIRECTION OF TRAFFIC FLOW



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

6

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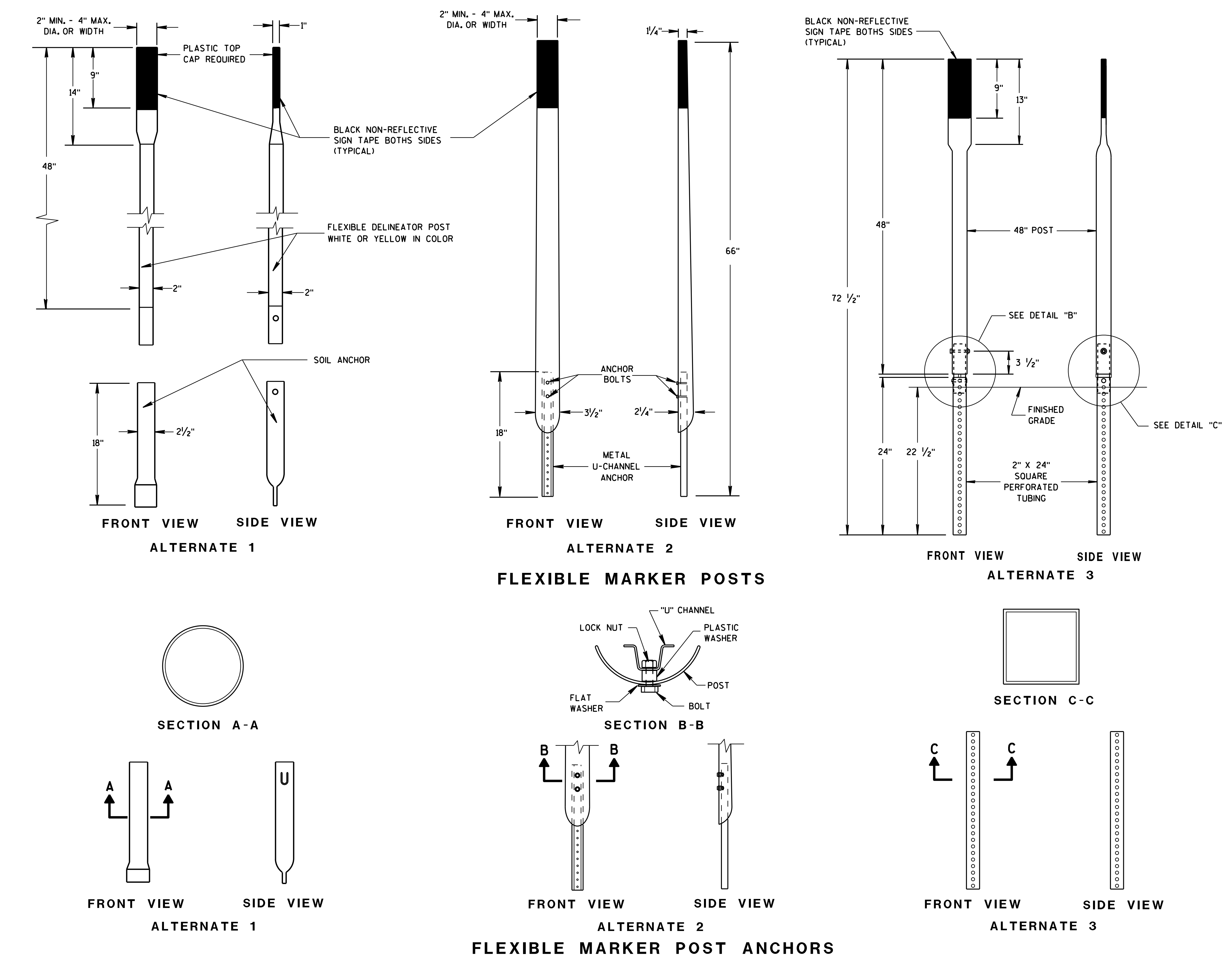
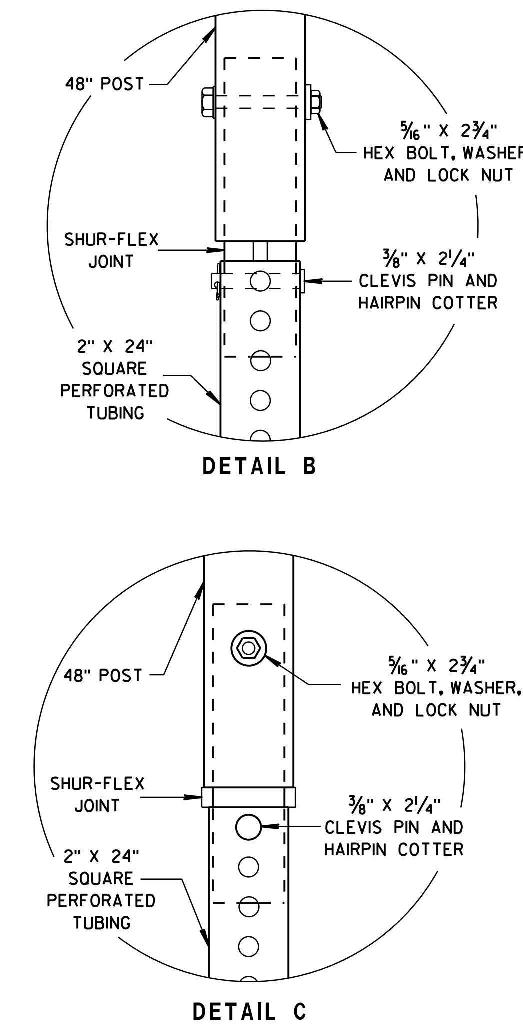
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 15 A 3-2a

S.D.D. 15 A 3-2a





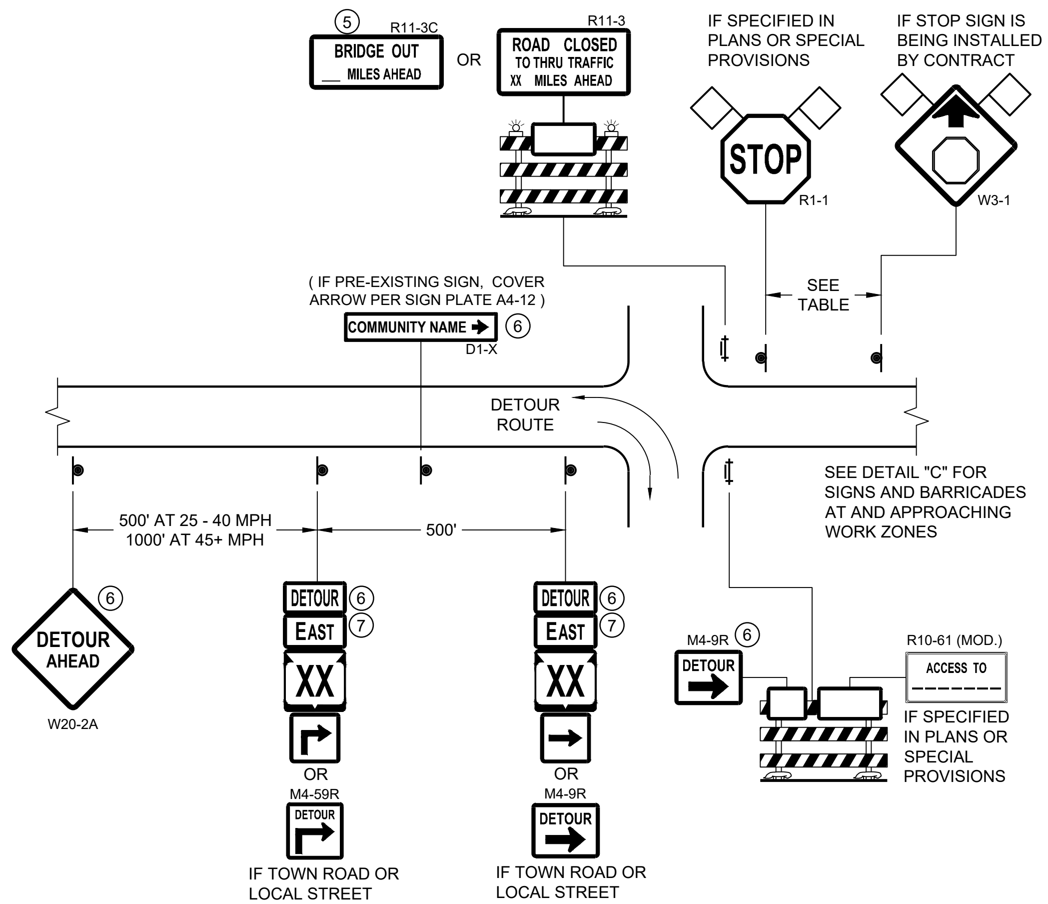
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/2012	/S/ Travis Feltes
DATE	STATE TRAFFIC ENGINEER

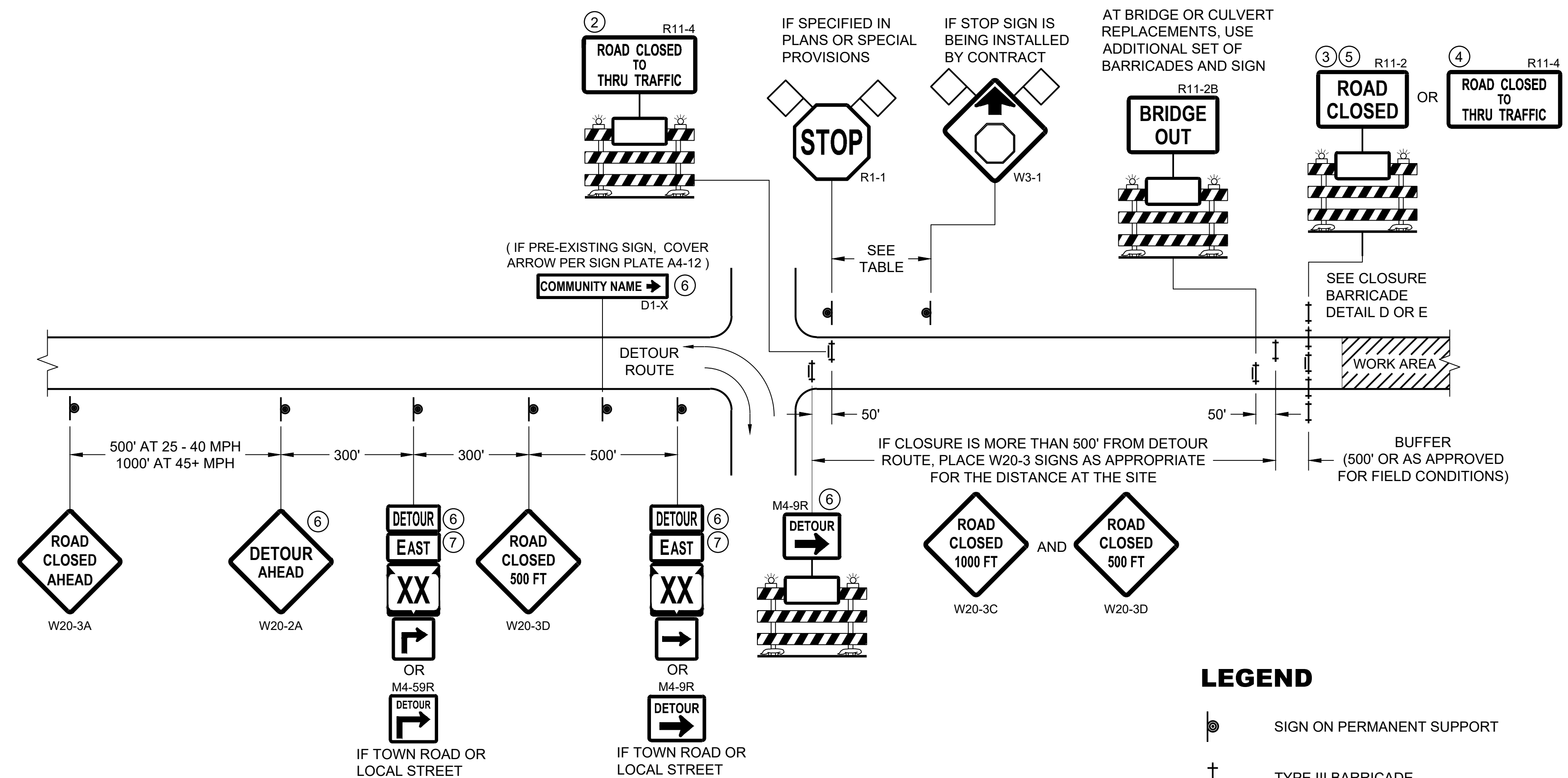
FHWA



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

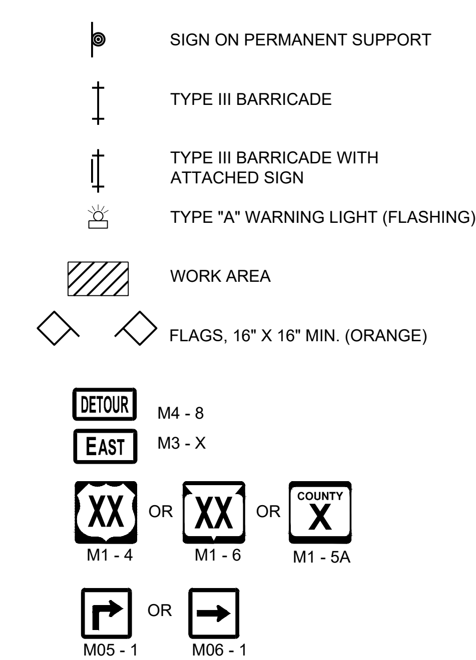


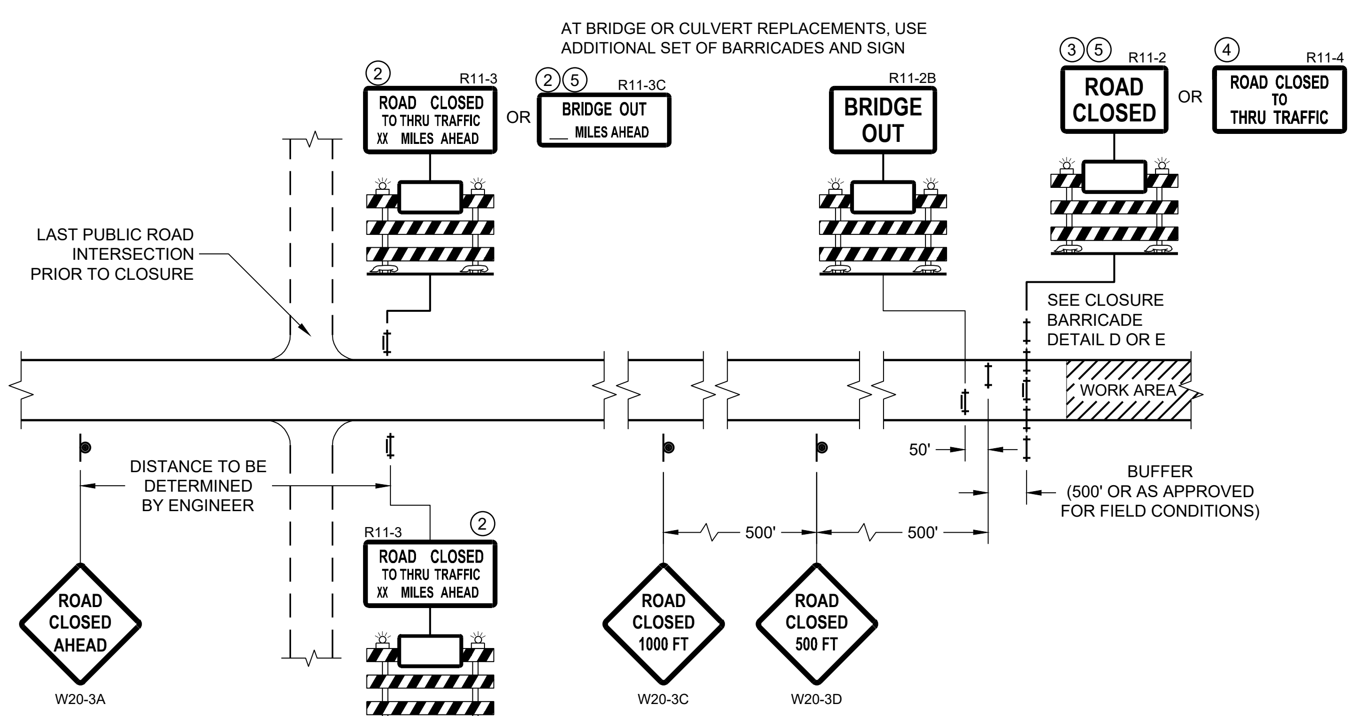
DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND





DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b" FOR GENERAL NOTES AND FOOTNOTES 1 THROUGH 7

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

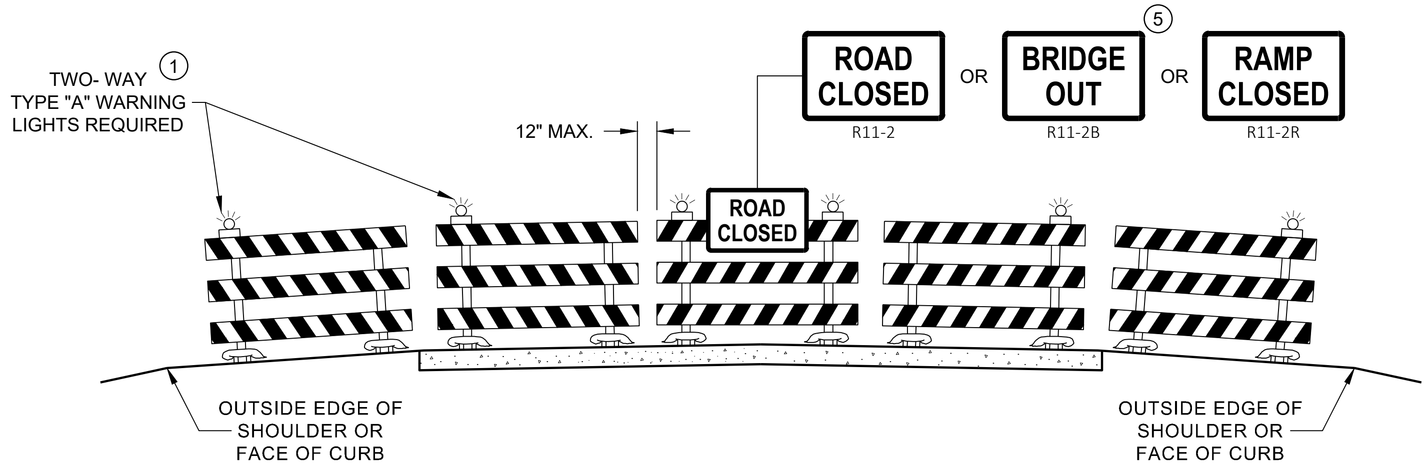
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

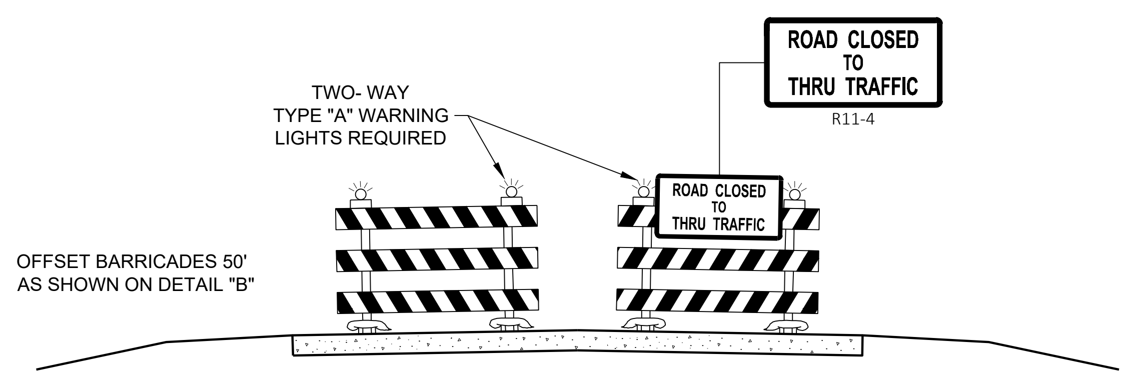
May 2023 — DATE

/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

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SDD 15C02 - 09b

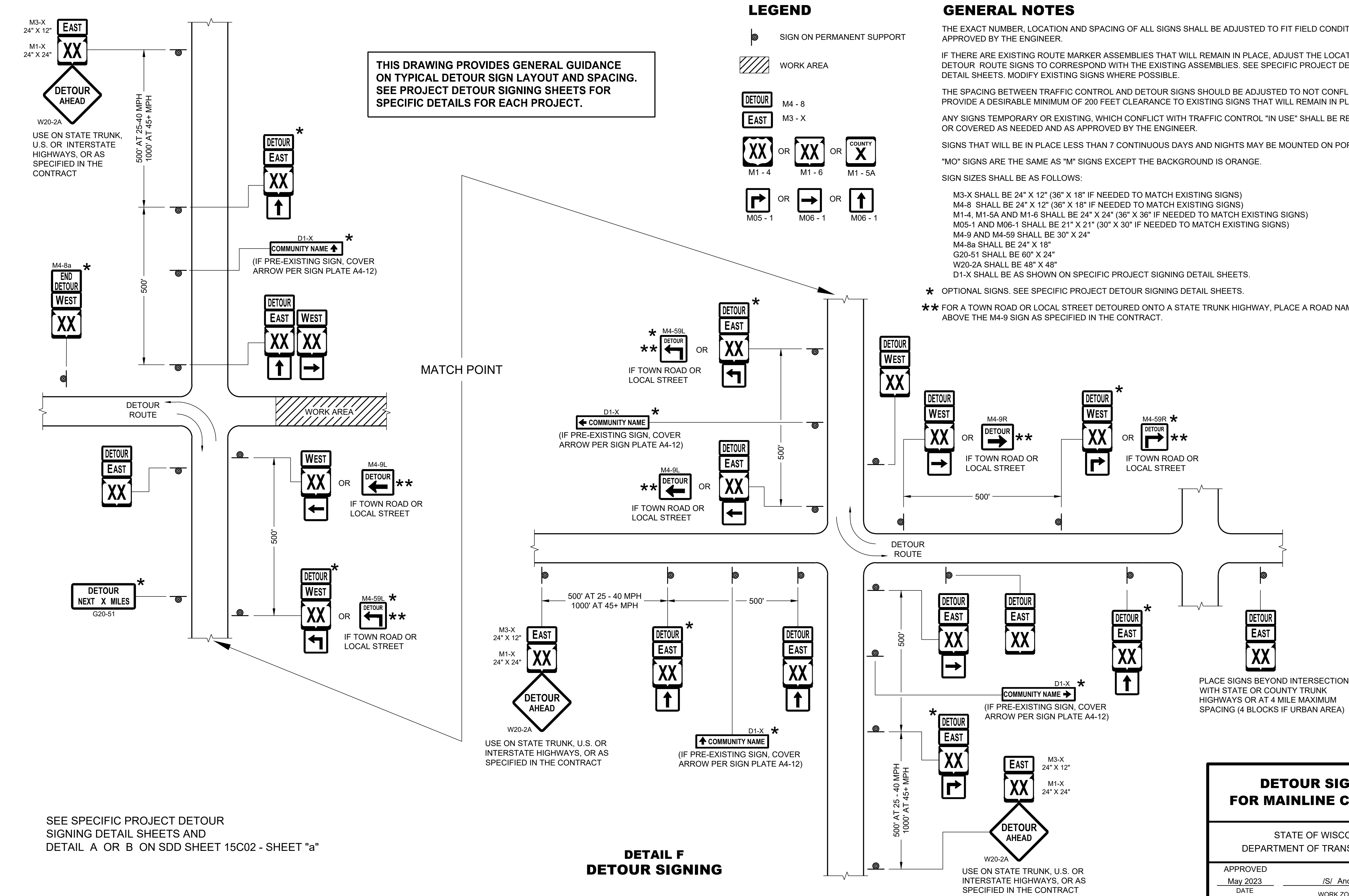
SDD 15C02 - 09b

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA



GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

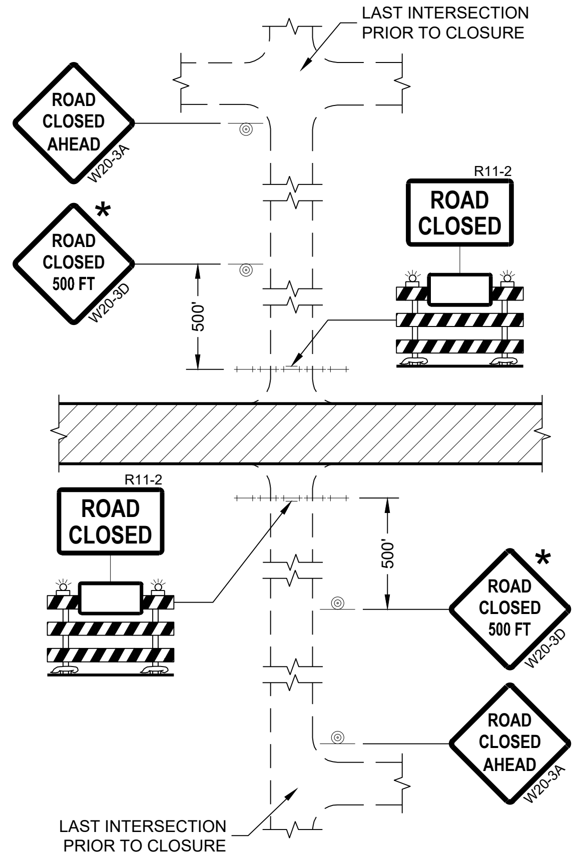
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

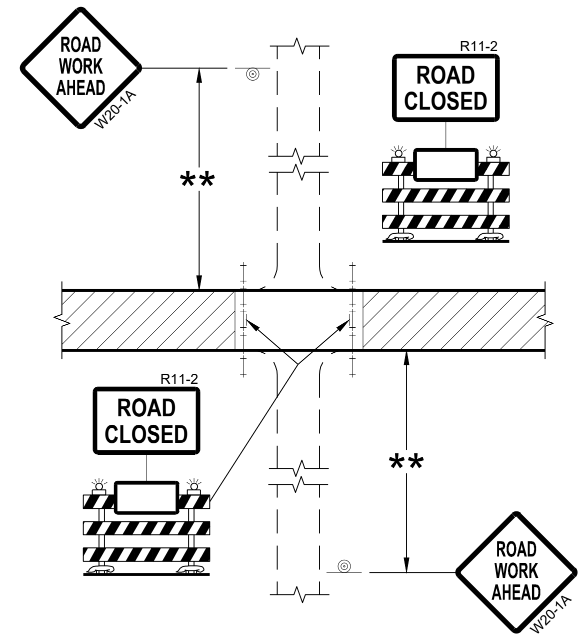
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

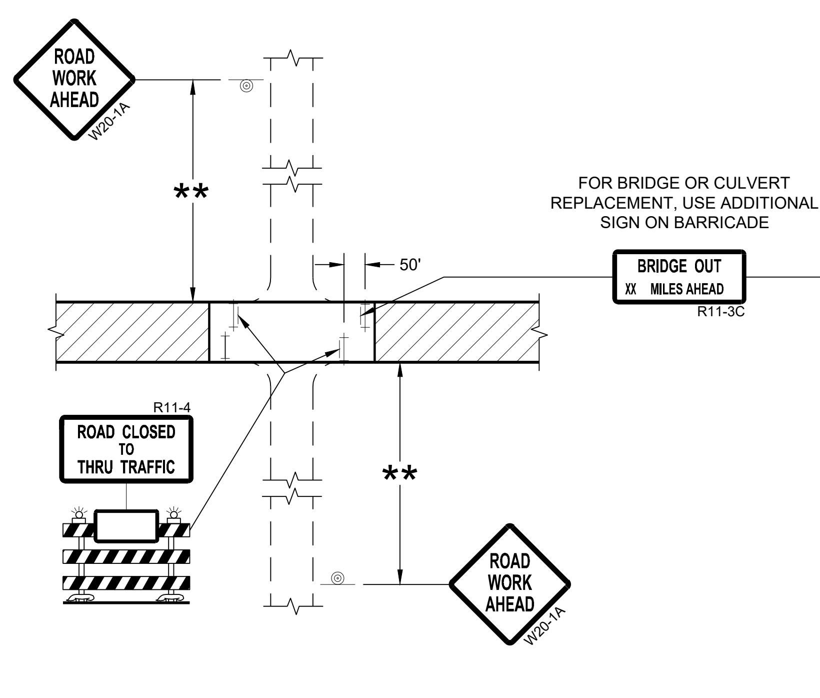
APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



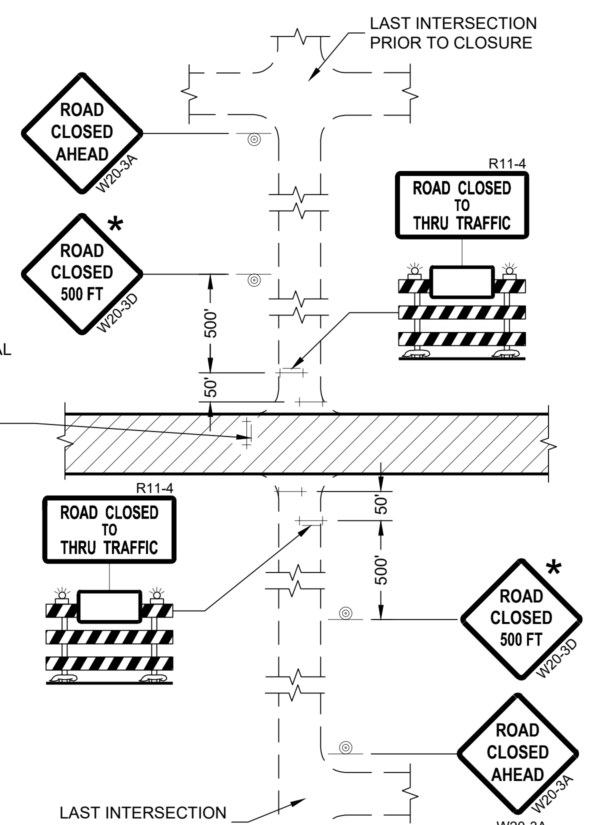
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

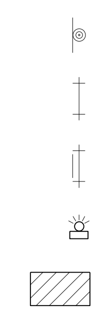
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND



- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

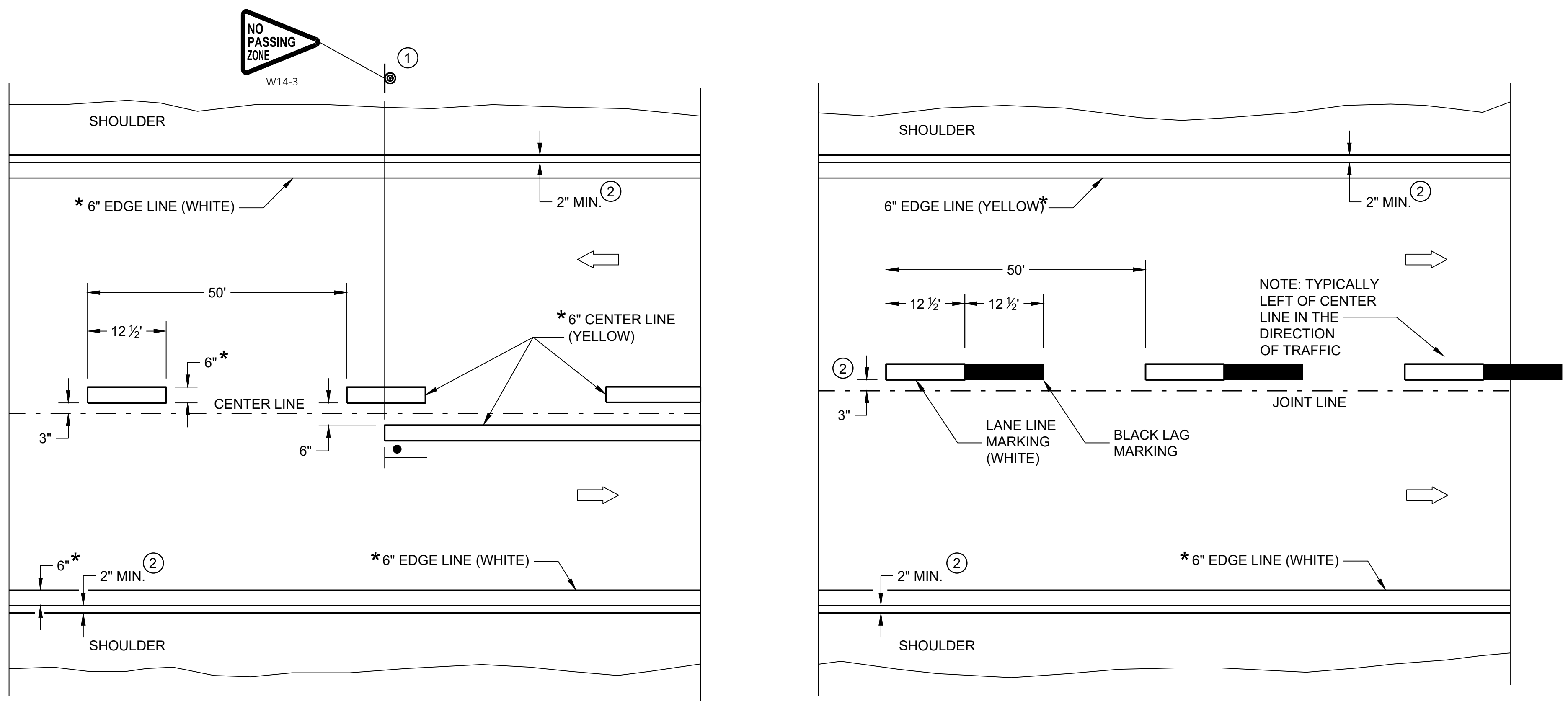
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023 — DATE

/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

6

SDD 15C08-23a

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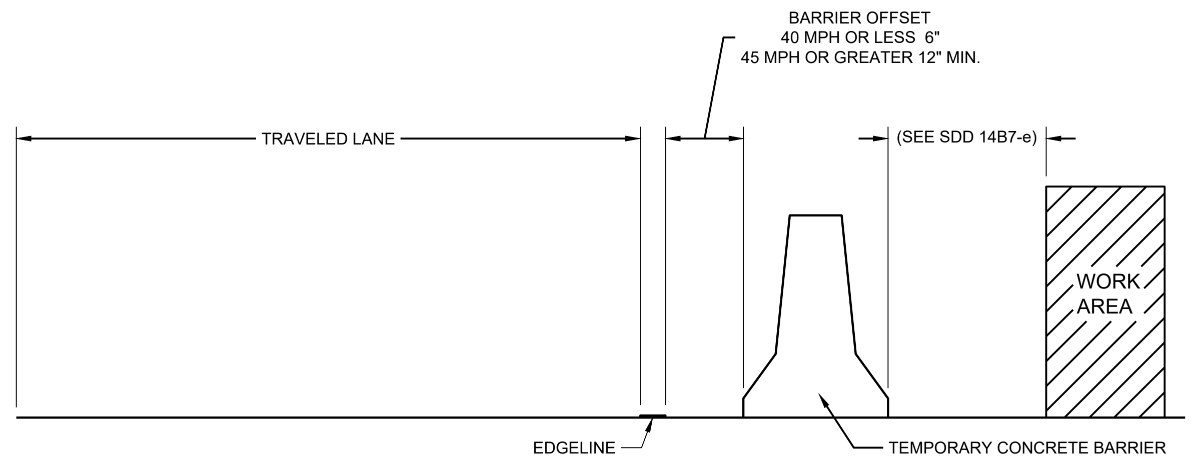


TEMPORARY BARRIER OFFSET FROM EDGELINE

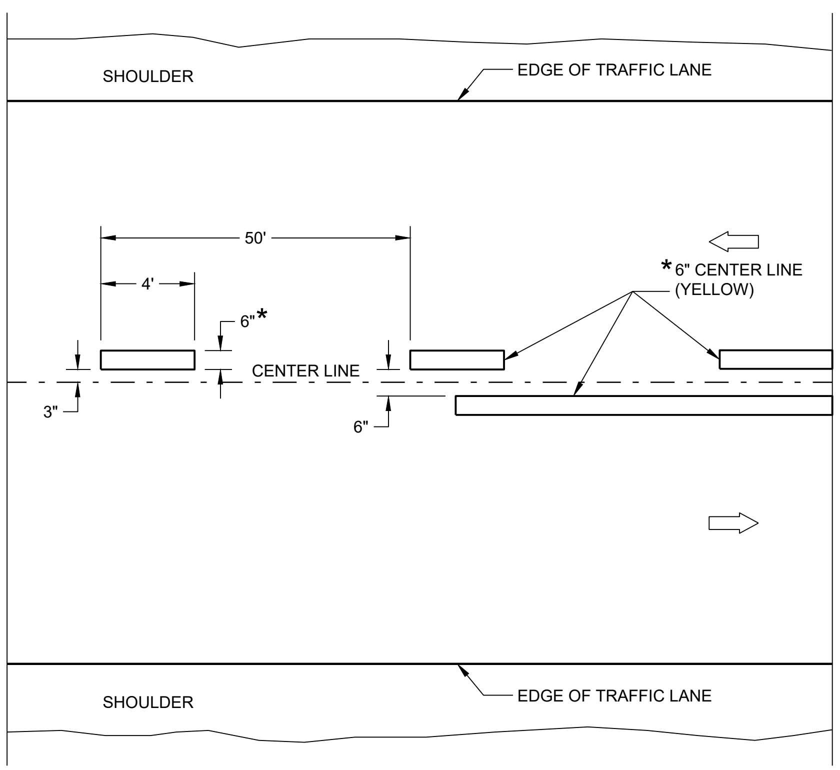
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

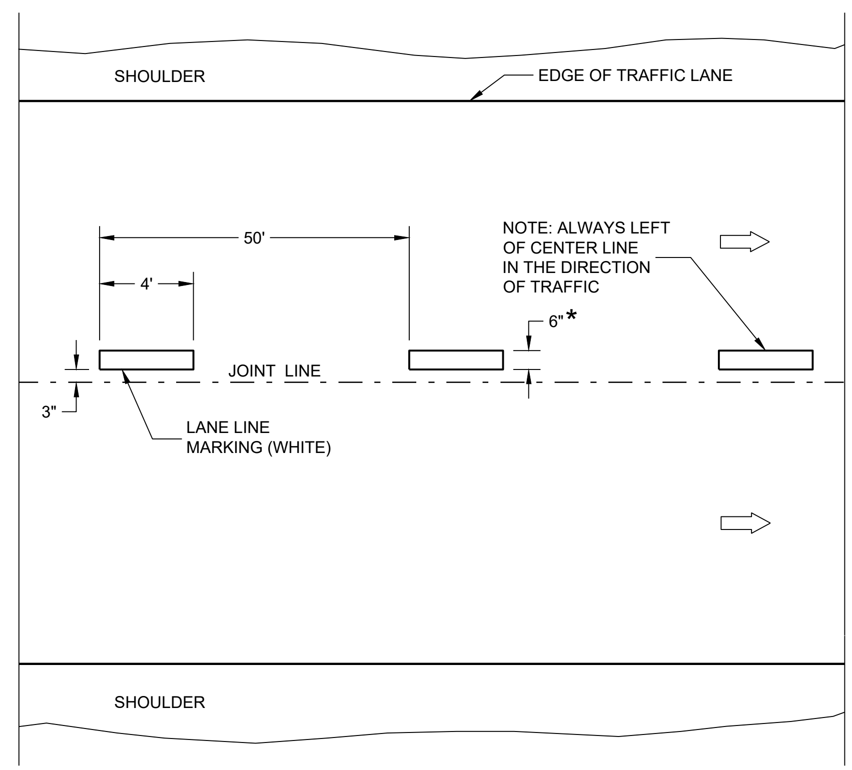
LEGEND

⇨ DIRECTION OF TRAFFIC

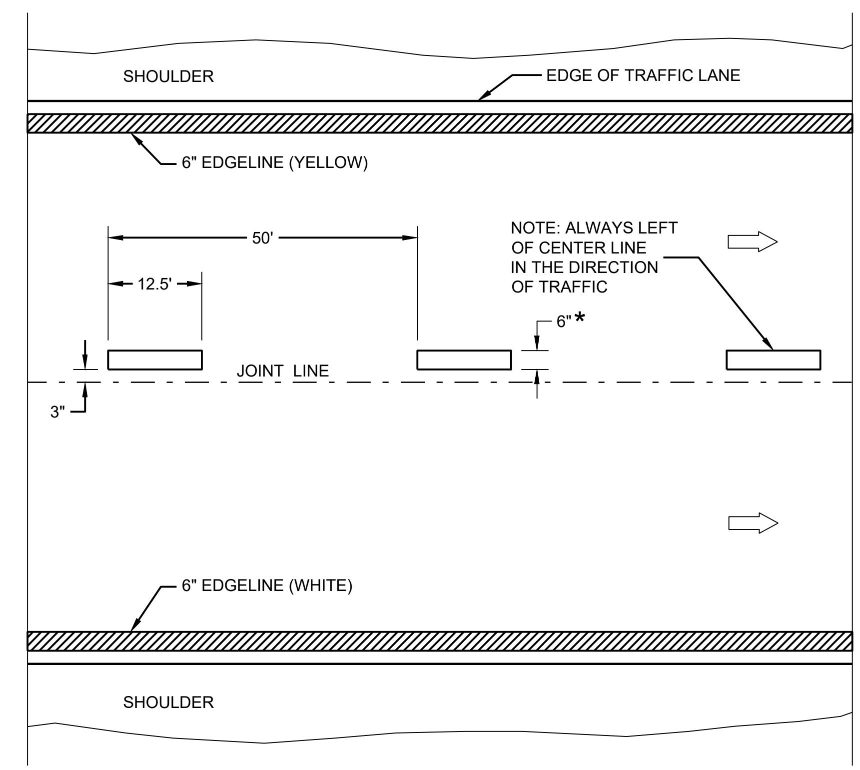
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

6

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M ENGINEER

FHWA

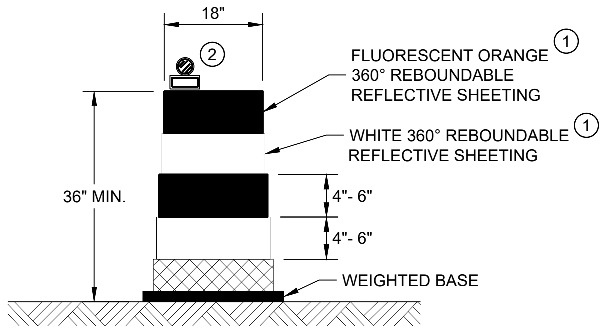
SDD 15C08-23b

SDD 15C08-23b

GENERAL NOTES

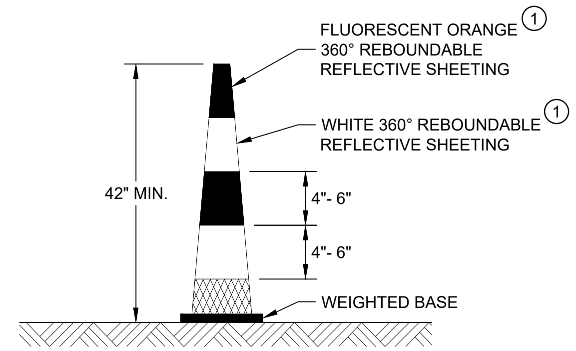
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

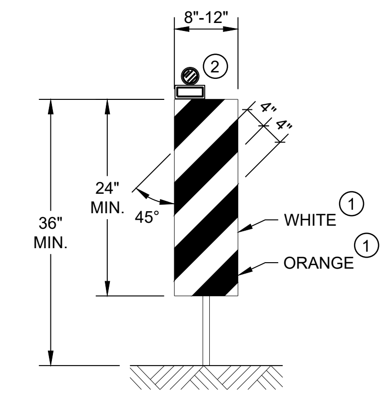
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

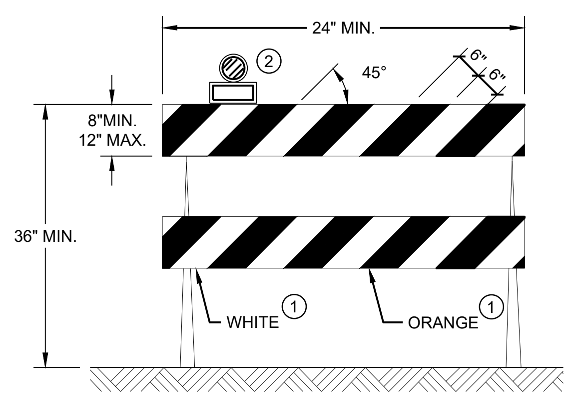
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



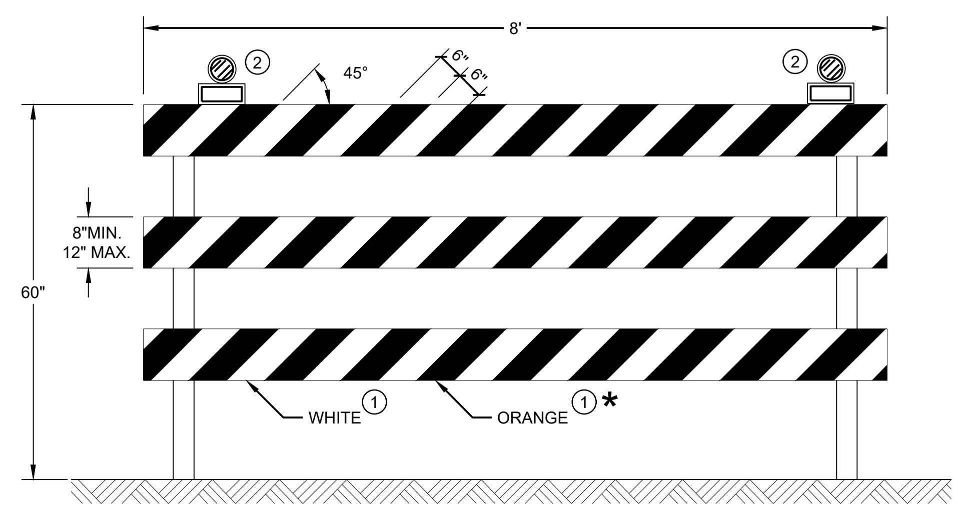
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

6

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**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

SDD 15C11 - 10b

LEGEND

- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

1 FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

2 SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

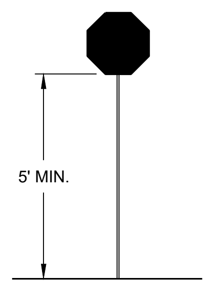
3 EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

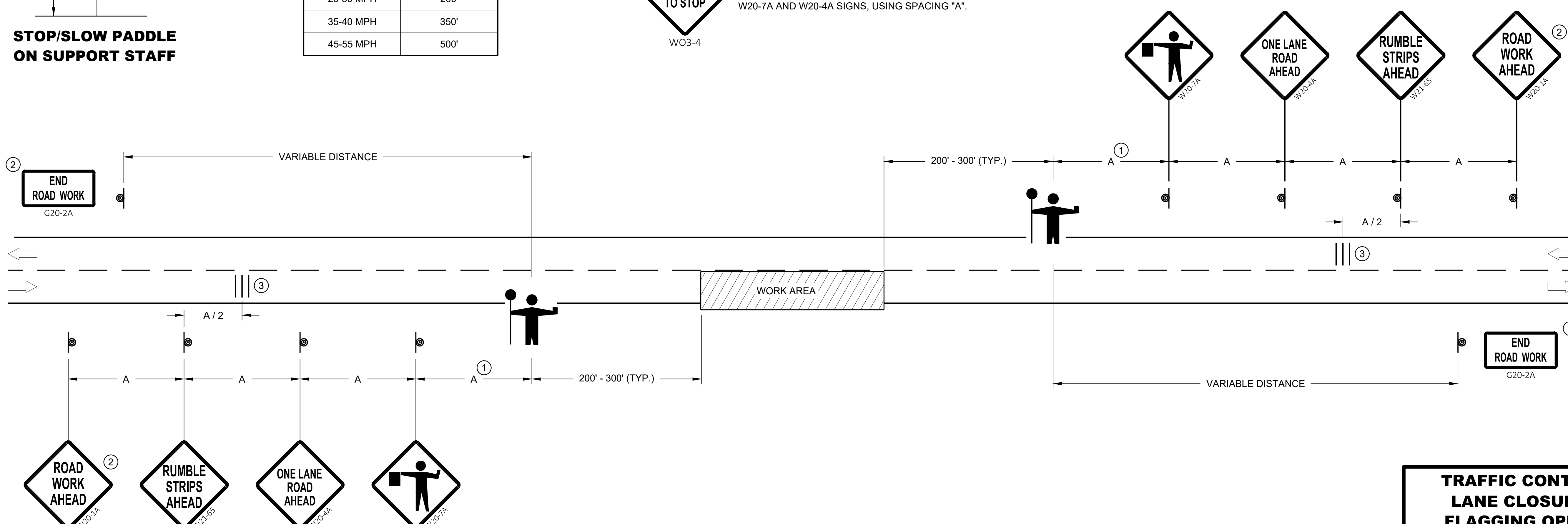


STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6
SDD 15C12 - 09a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

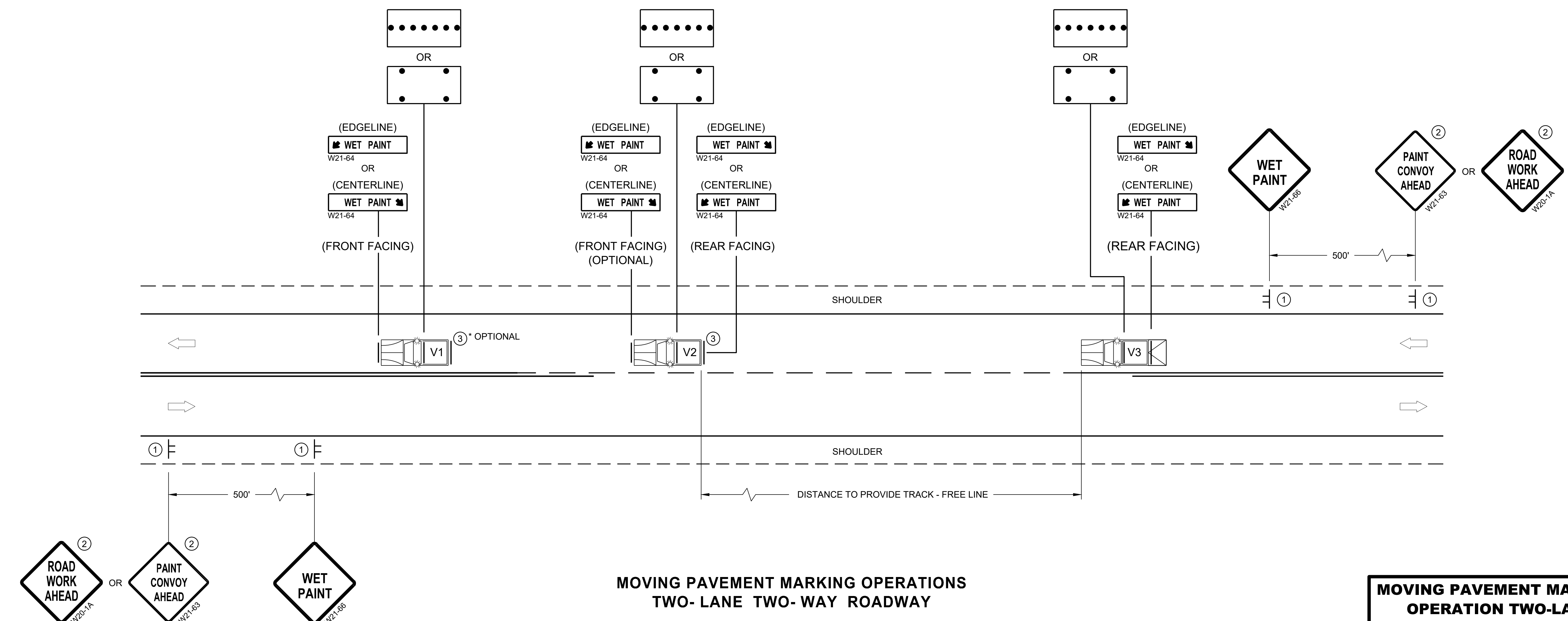
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

1 SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

2 IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

3 V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

6

SDD 15C19-08a

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

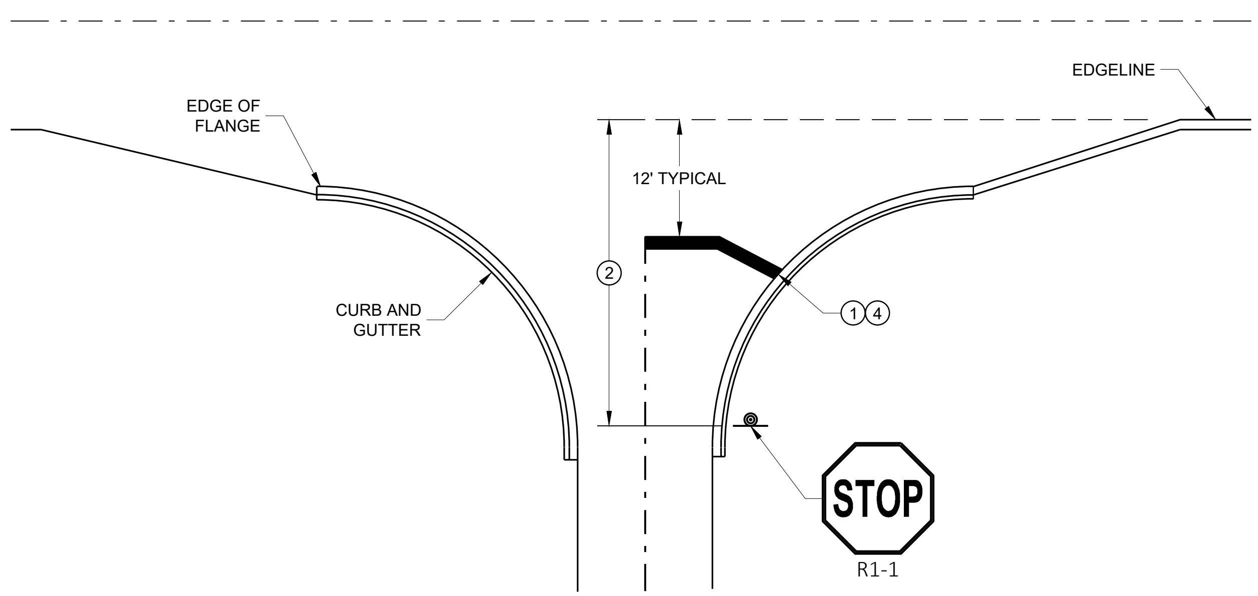
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Andrew
WORK ZONE EN
FHWA

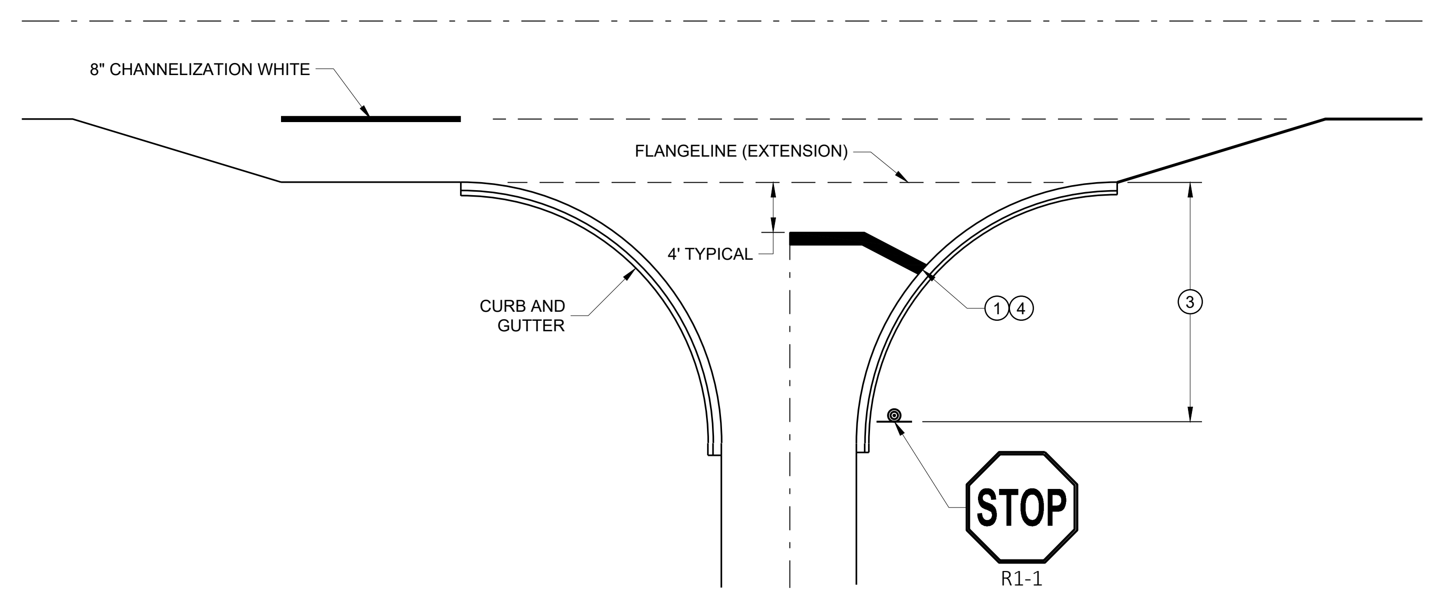
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

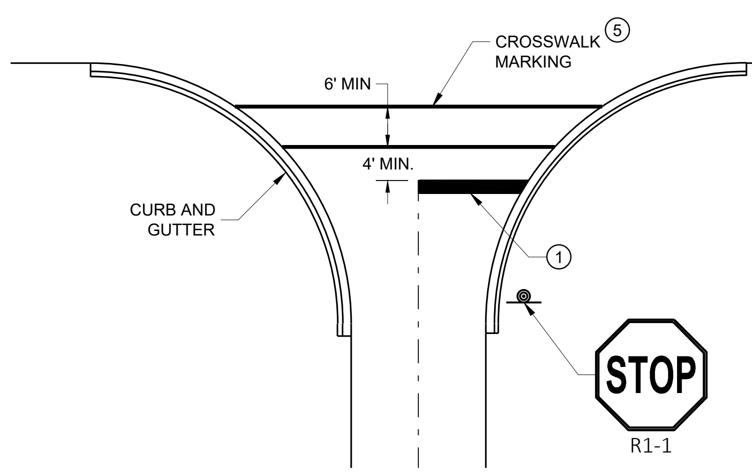
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



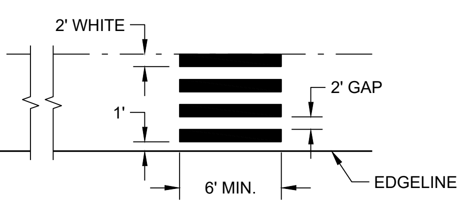
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



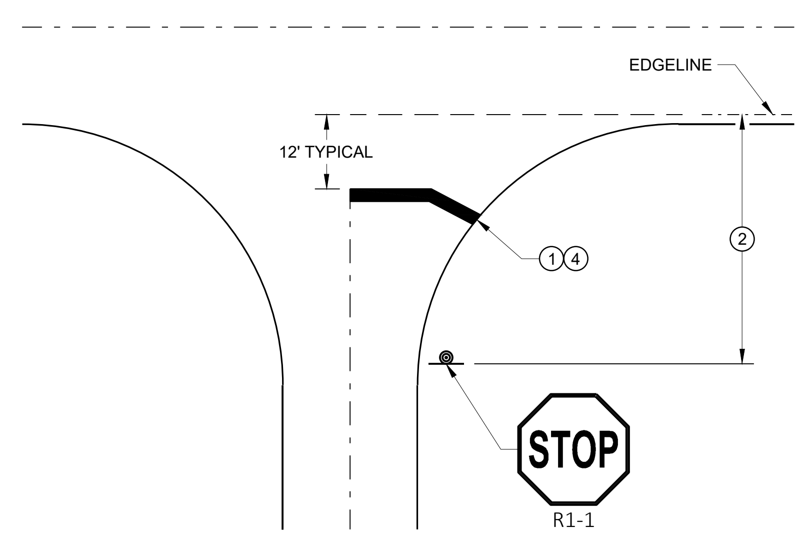
TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL PAVEMENT MARKING 5 FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C33 - 04

GENERAL NOTES

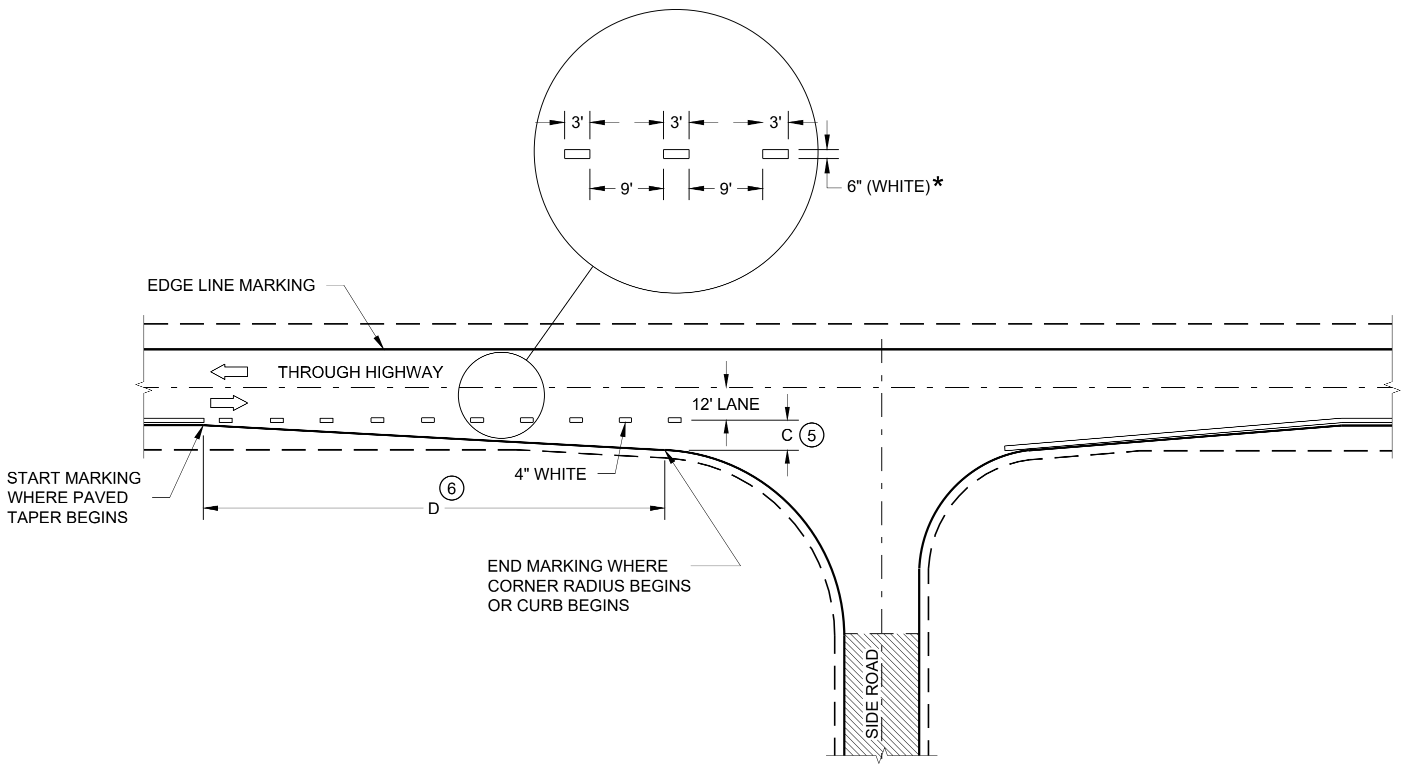
OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

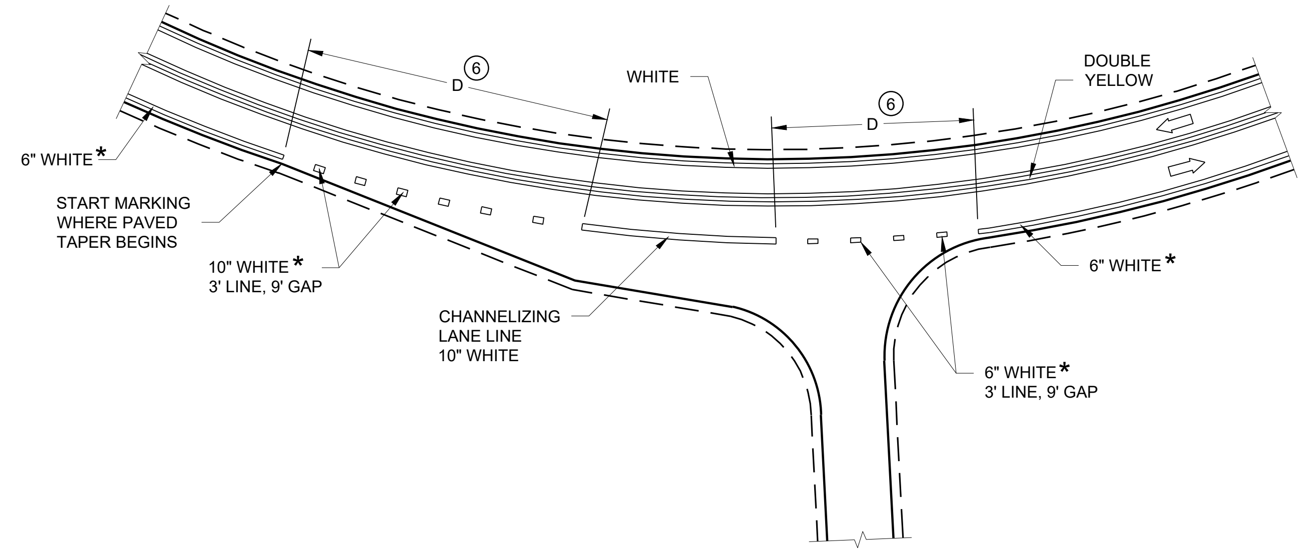
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

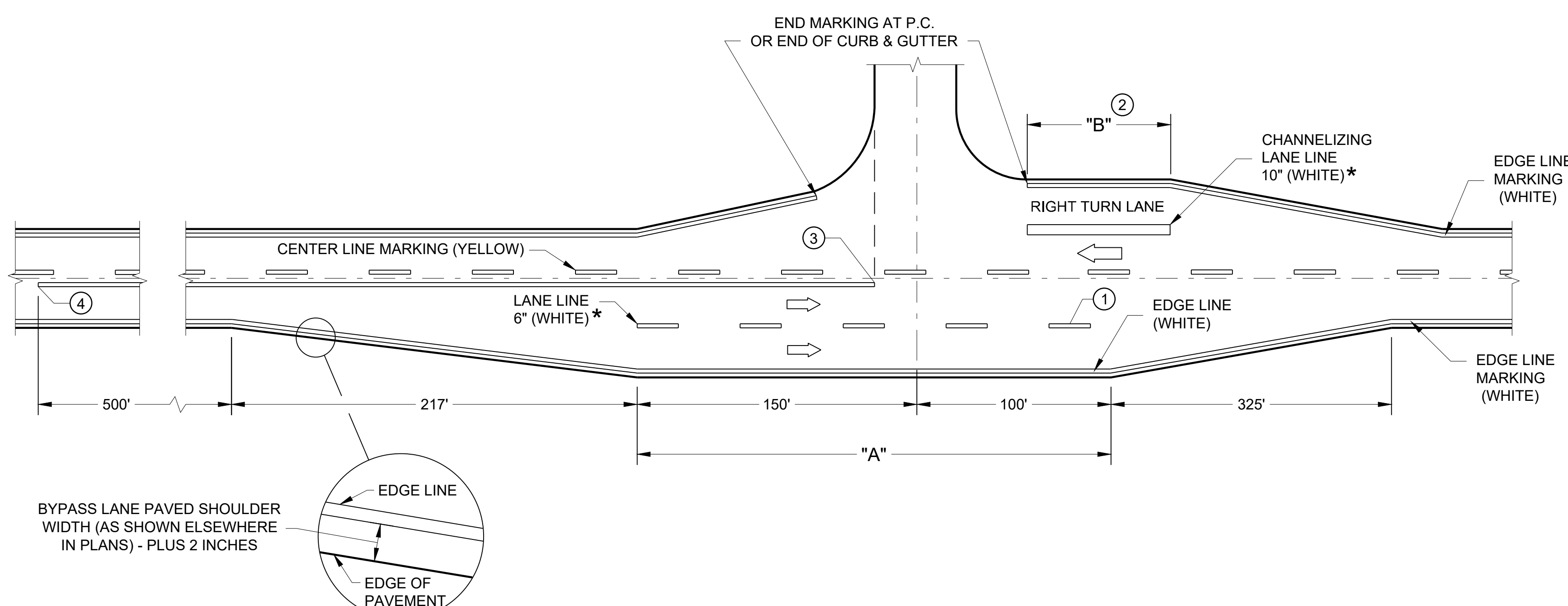
DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

6

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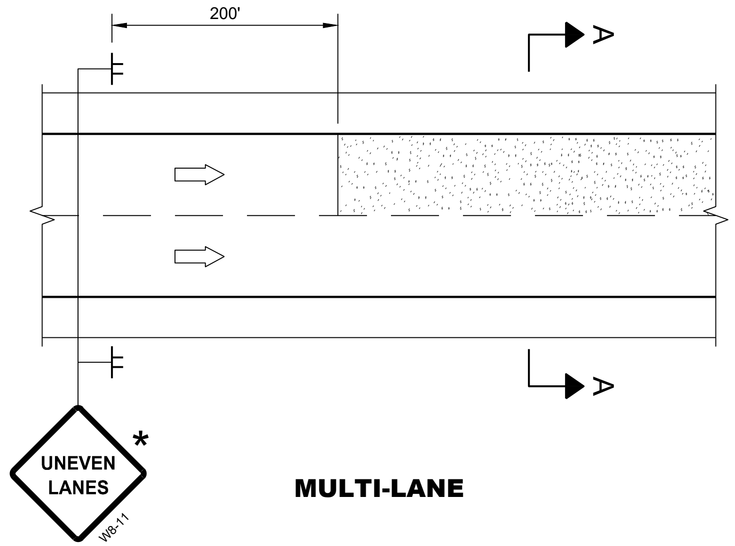
SDD 15C35-06a

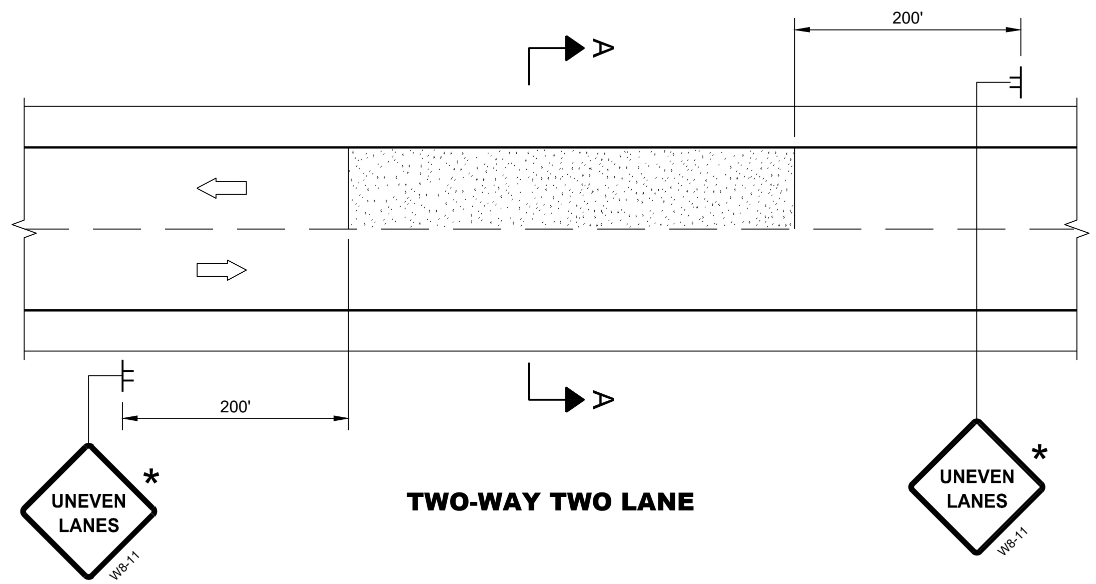
SDD 15C35-06a

PAVEMENT MARKING (INTERSECTIONS)

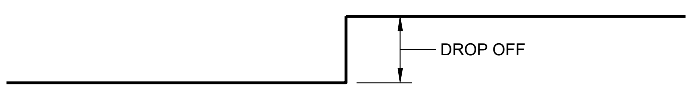
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT



MULTI-LANE

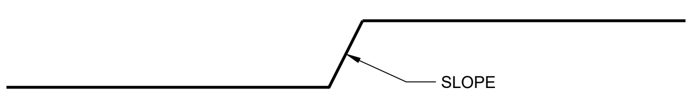


TWO-WAY TWO LANE

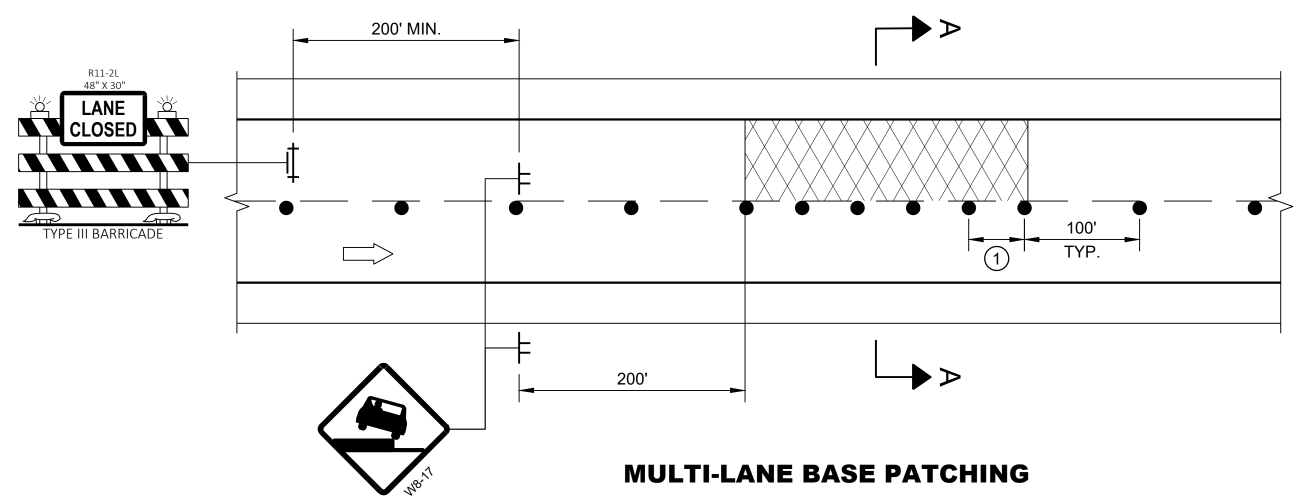


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

1 USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

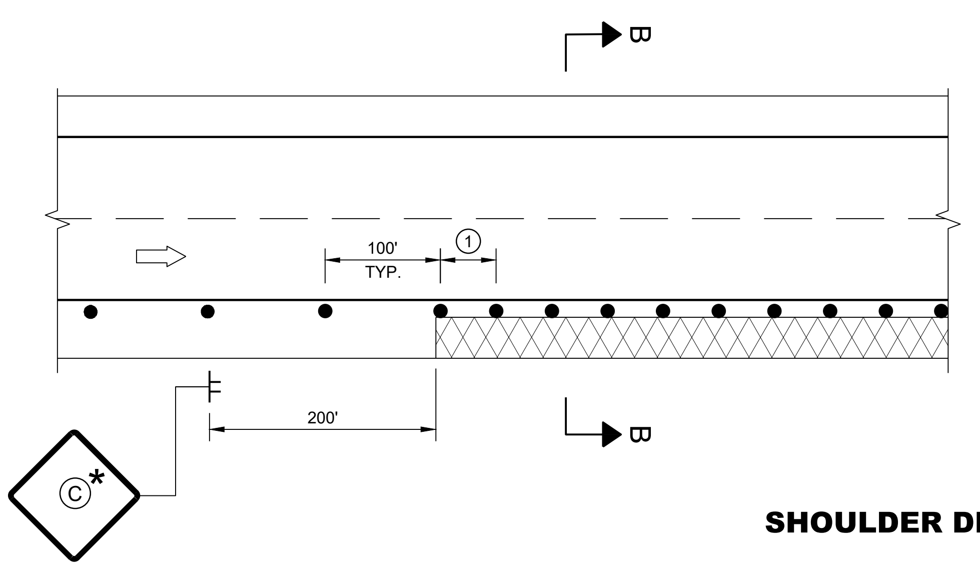
TYPE III BARRICADE WITH ATTACHED SIGN

TYPE "A" WARNING LIGHT (FLASHING)

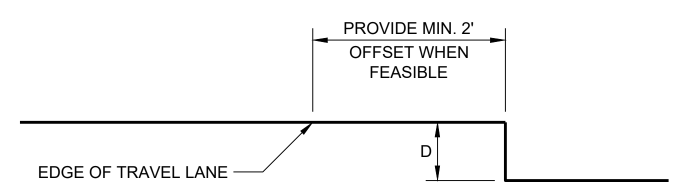
DIRECTION OF TRAFFIC

WORK AREA WITH DROP-OFF

MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN C
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

6

SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

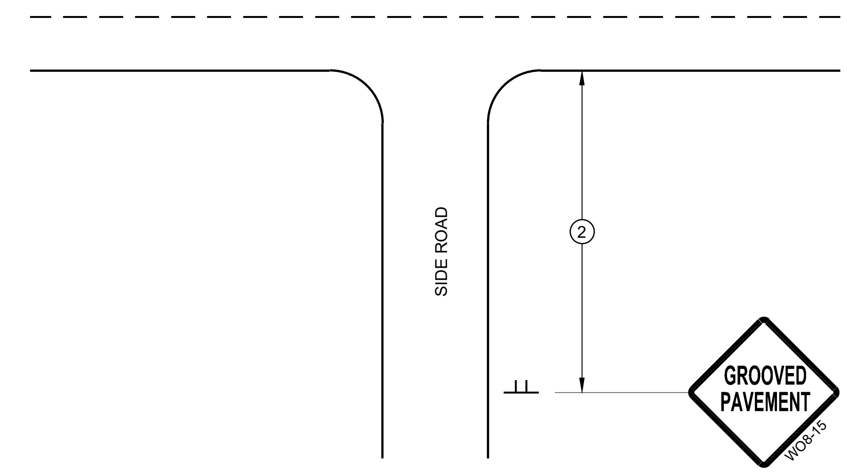
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

1. PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
2. PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

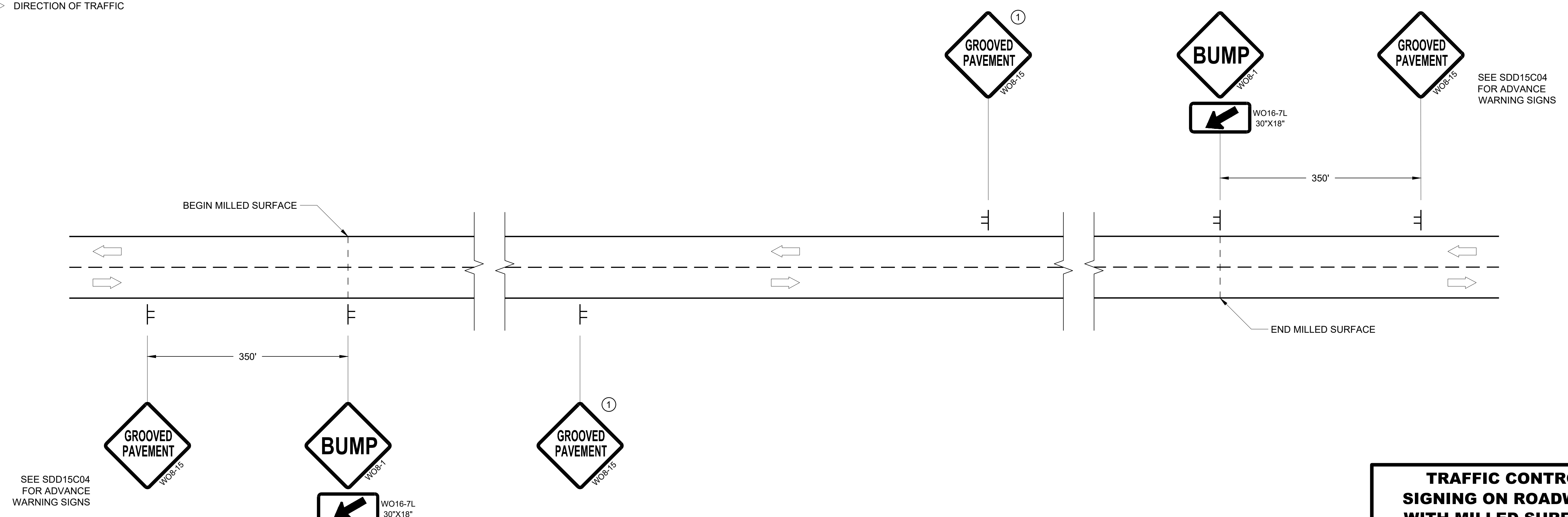


TYPICAL SIDE ROAD APPROACH SIGN DETAIL

LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



DETAIL FOR SIGNING ON MILLED SURFACES

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TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

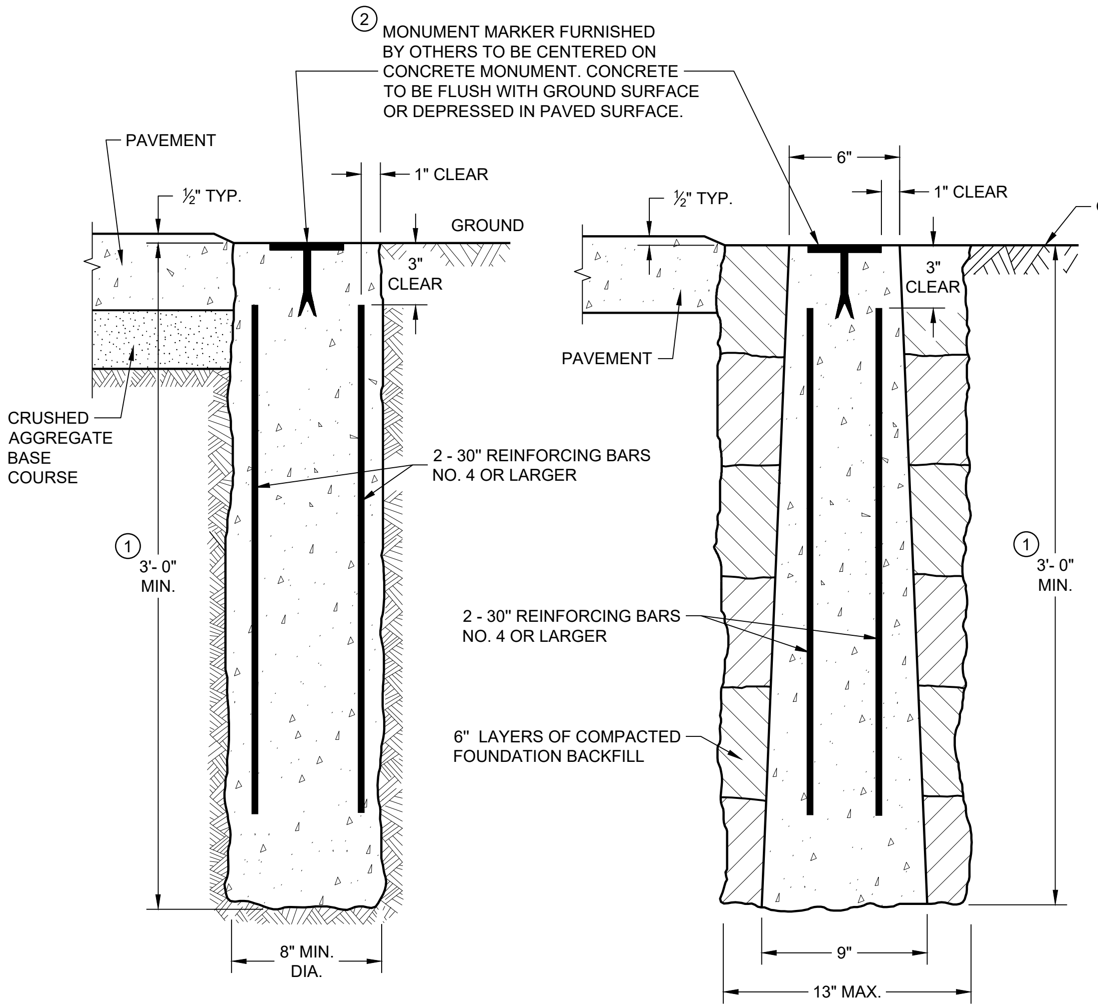
MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

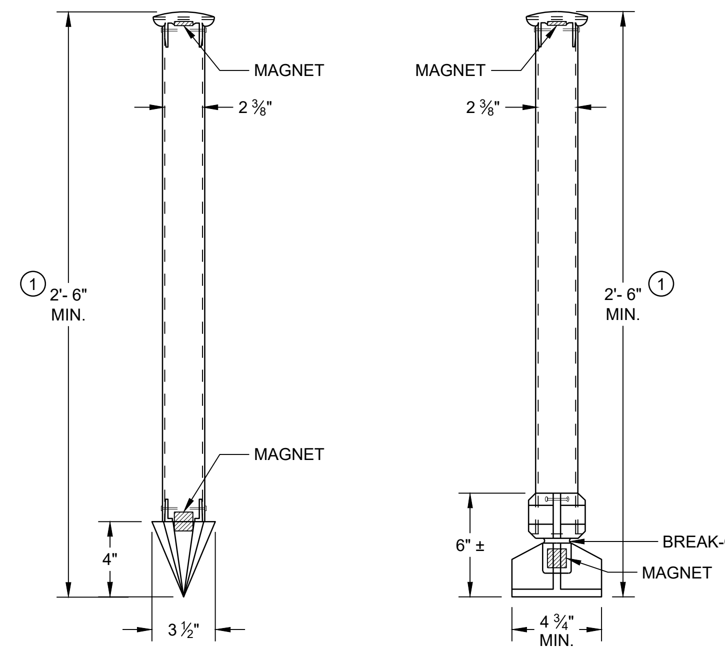
1. MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.
2. AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



CAST-IN-PLACE

PRECAST

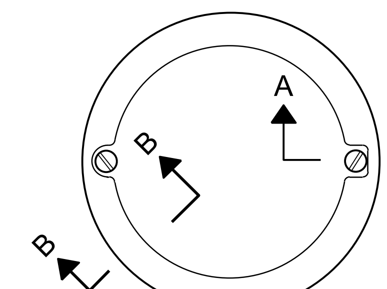
CONCRETE MONUMENTS
TYPE A



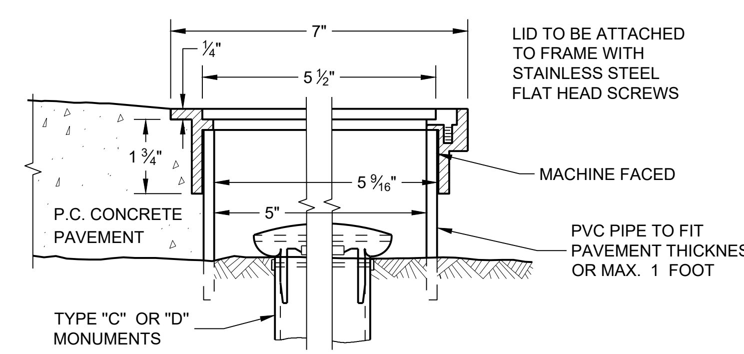
TYPE C
DRIVEN MONUMENT

TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)

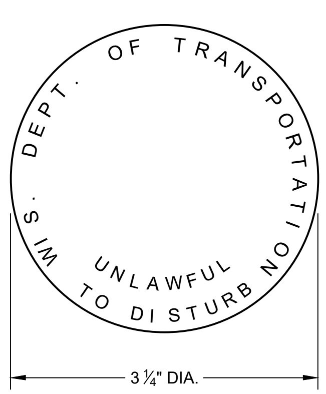


TOP VIEW

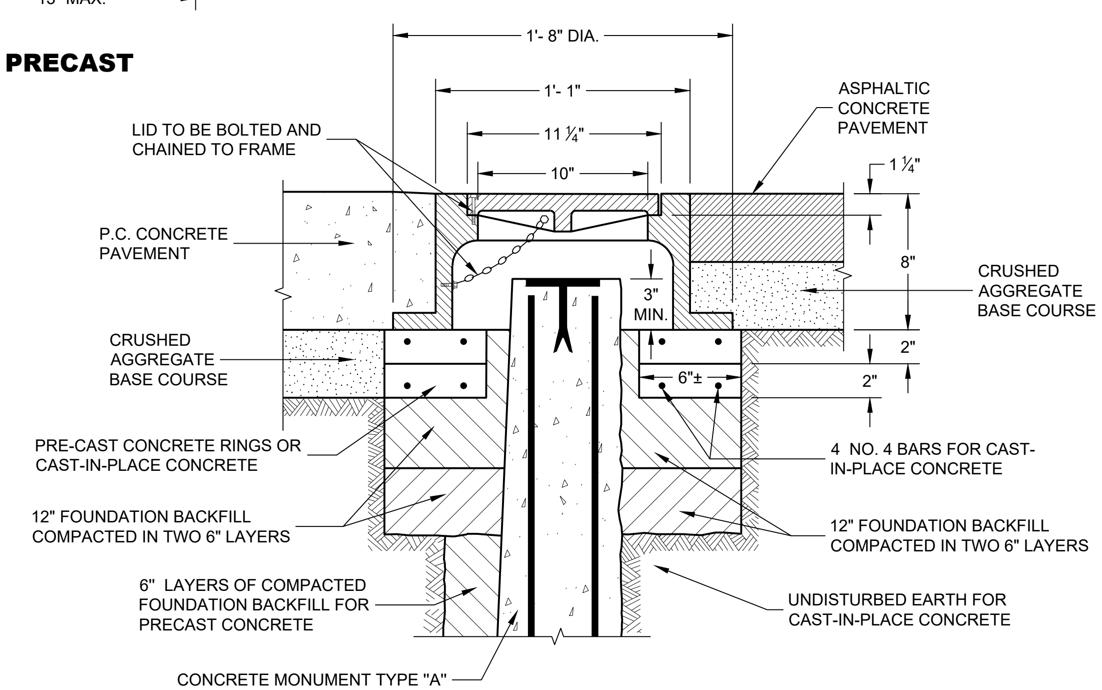


SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)



2 WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

LANDMARK REFERENCE MONUMENTS AND COVERS

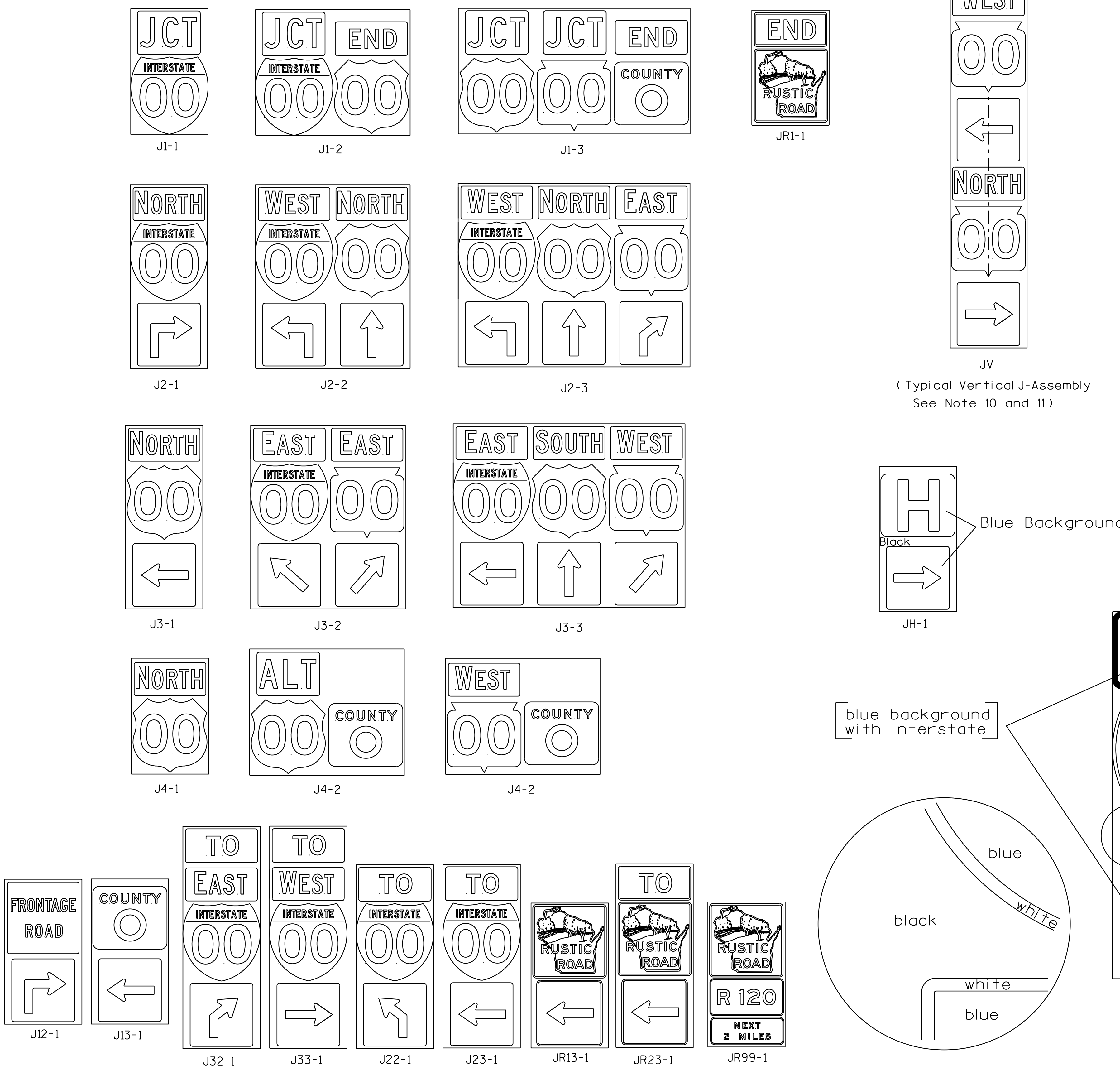
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	
March 2018	/S/ Raymond A. Kumapayi
DATE	CHIEF SURVEYING AND MAPPING ENGINEER

FHWA

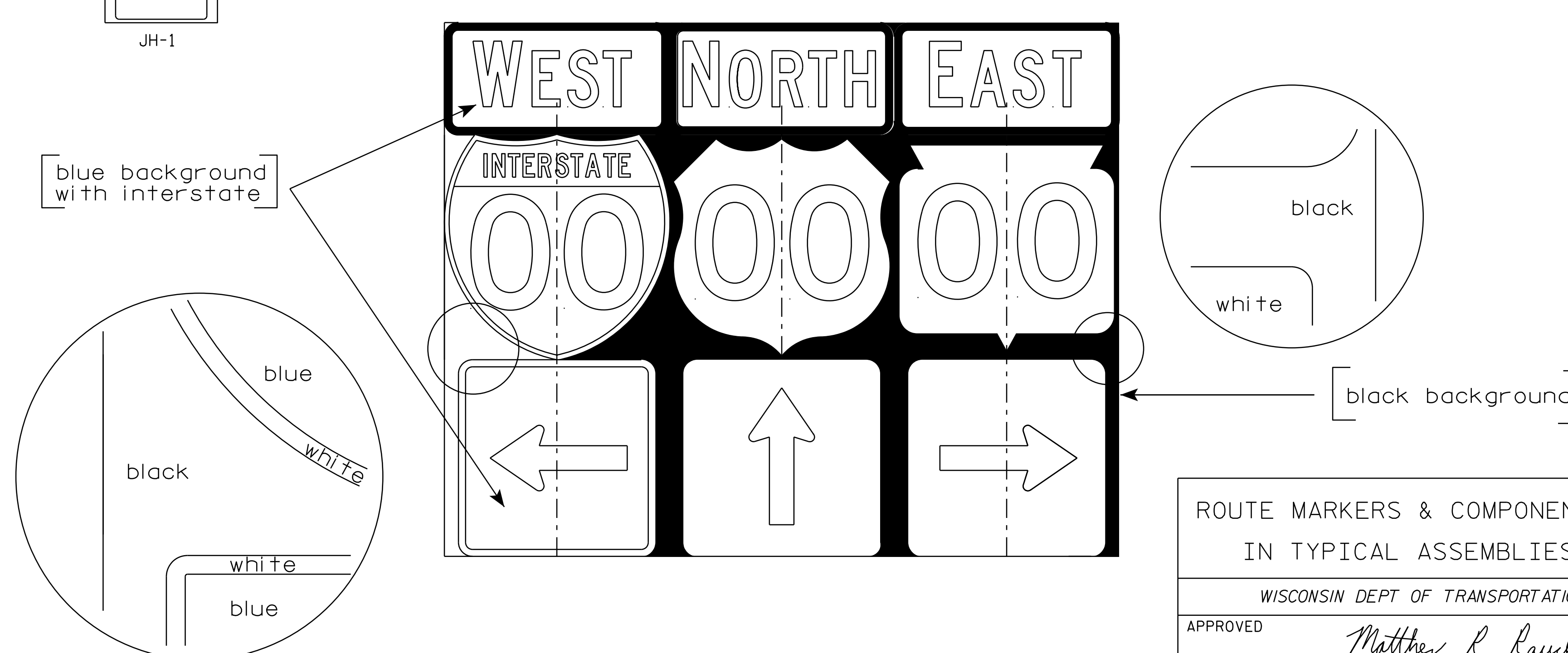
SDD 16A01 - 07
6

TYPICAL ASSEMBLIES



NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

7

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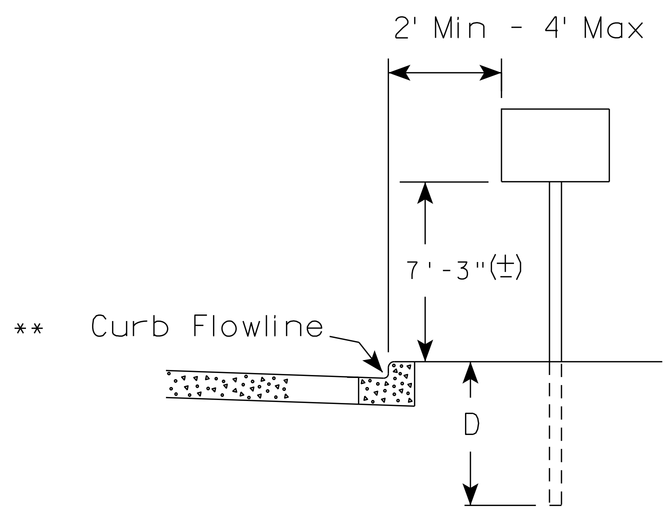
PROJECT NO:

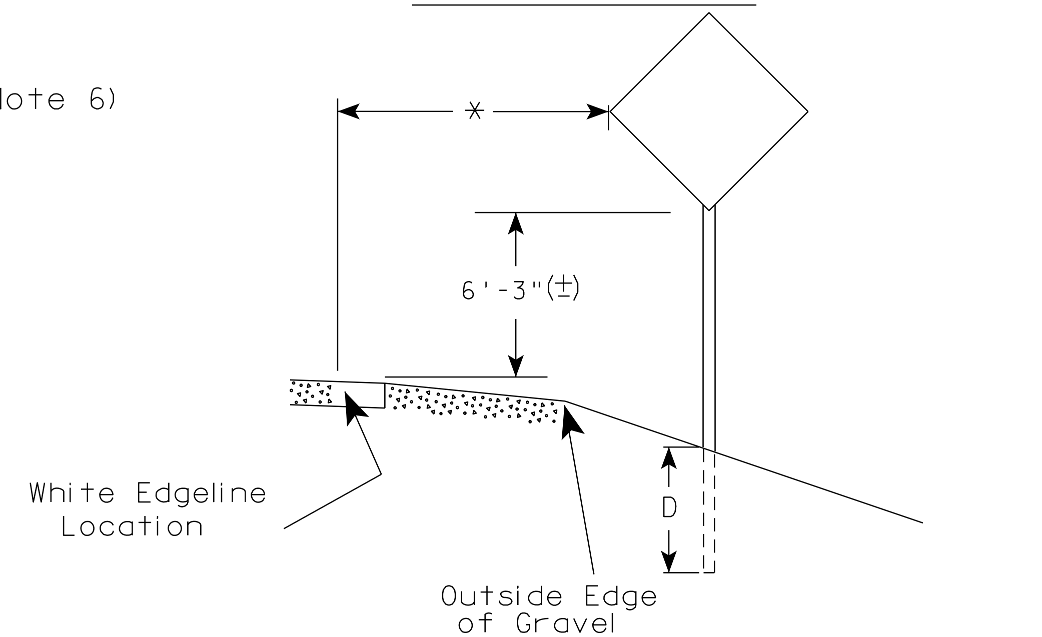
SHEET NO: 108 E

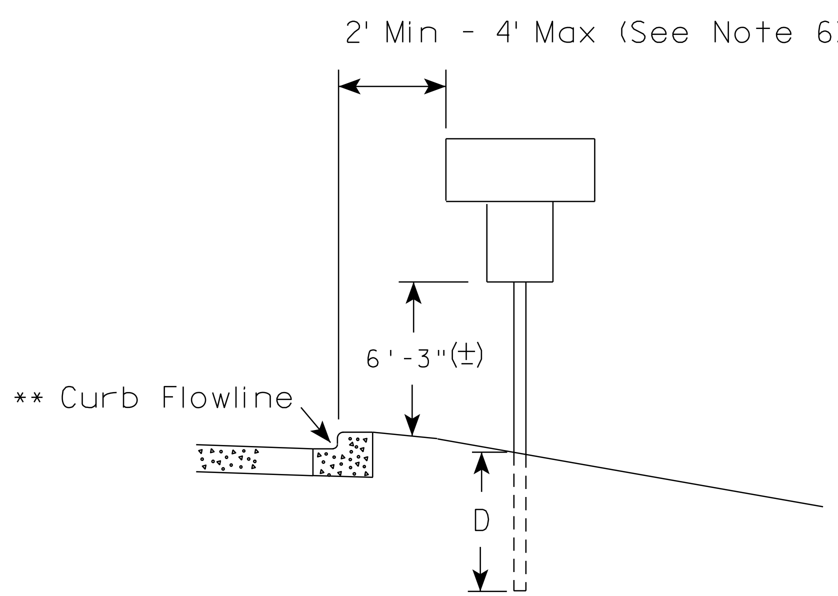
FILE NAME : C:\CAEfiles\Projects\tr_stdplate_A21S.dgn PLOT DATE : 18-MAR 2021 1:37 PLOT BY : mscj9h PLOT NAME :

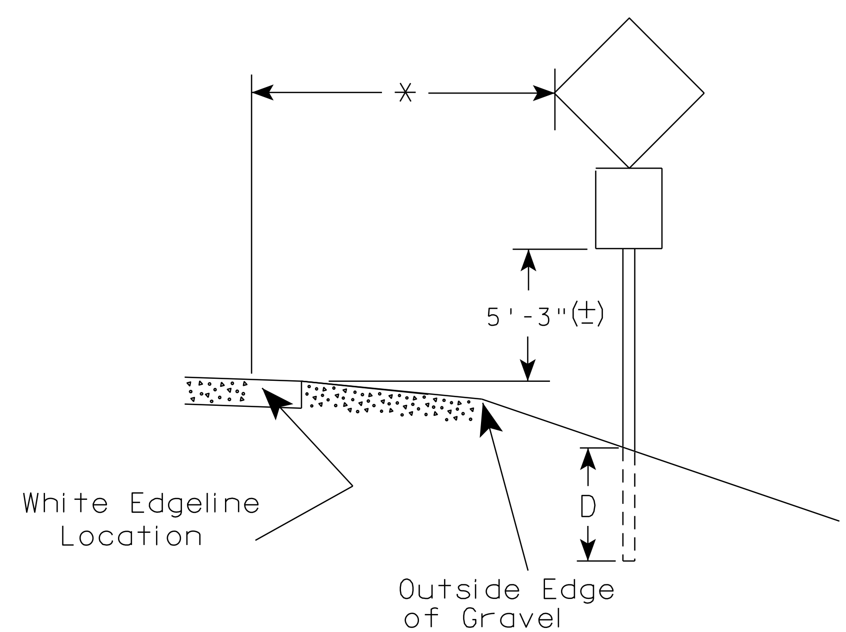
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

7

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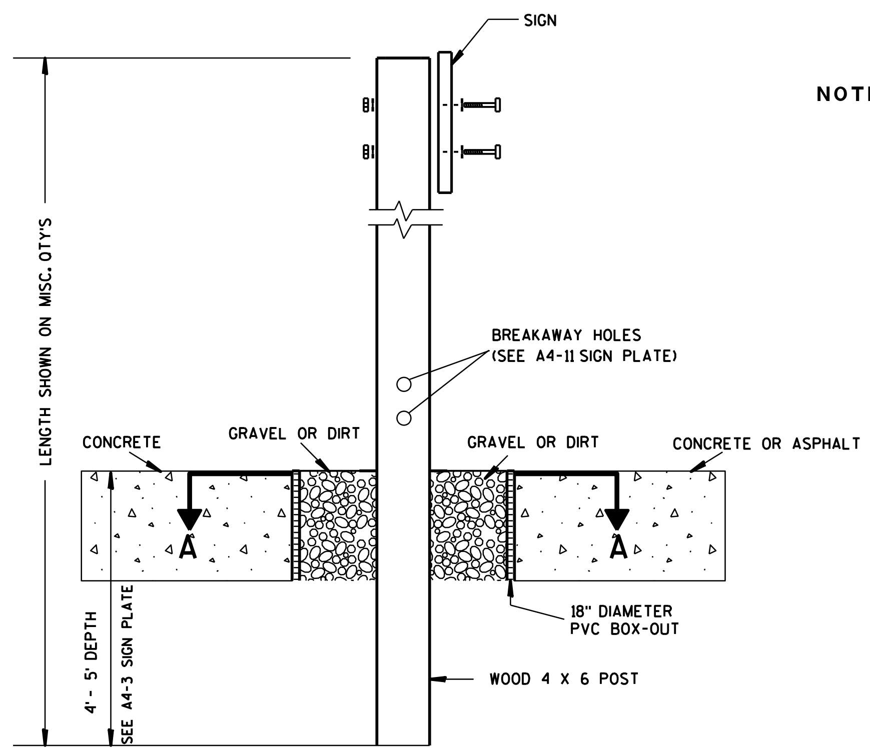
NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION

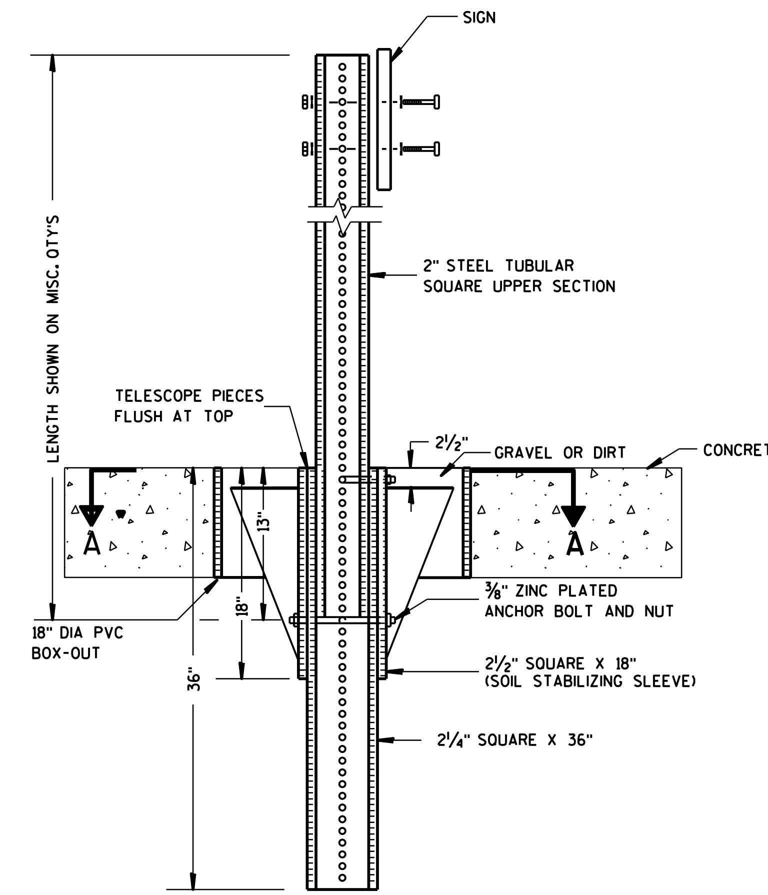
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS

3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



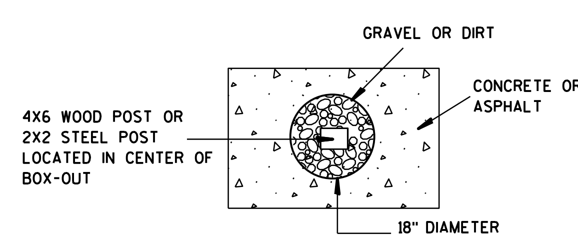
ELEVATION VIEW

DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

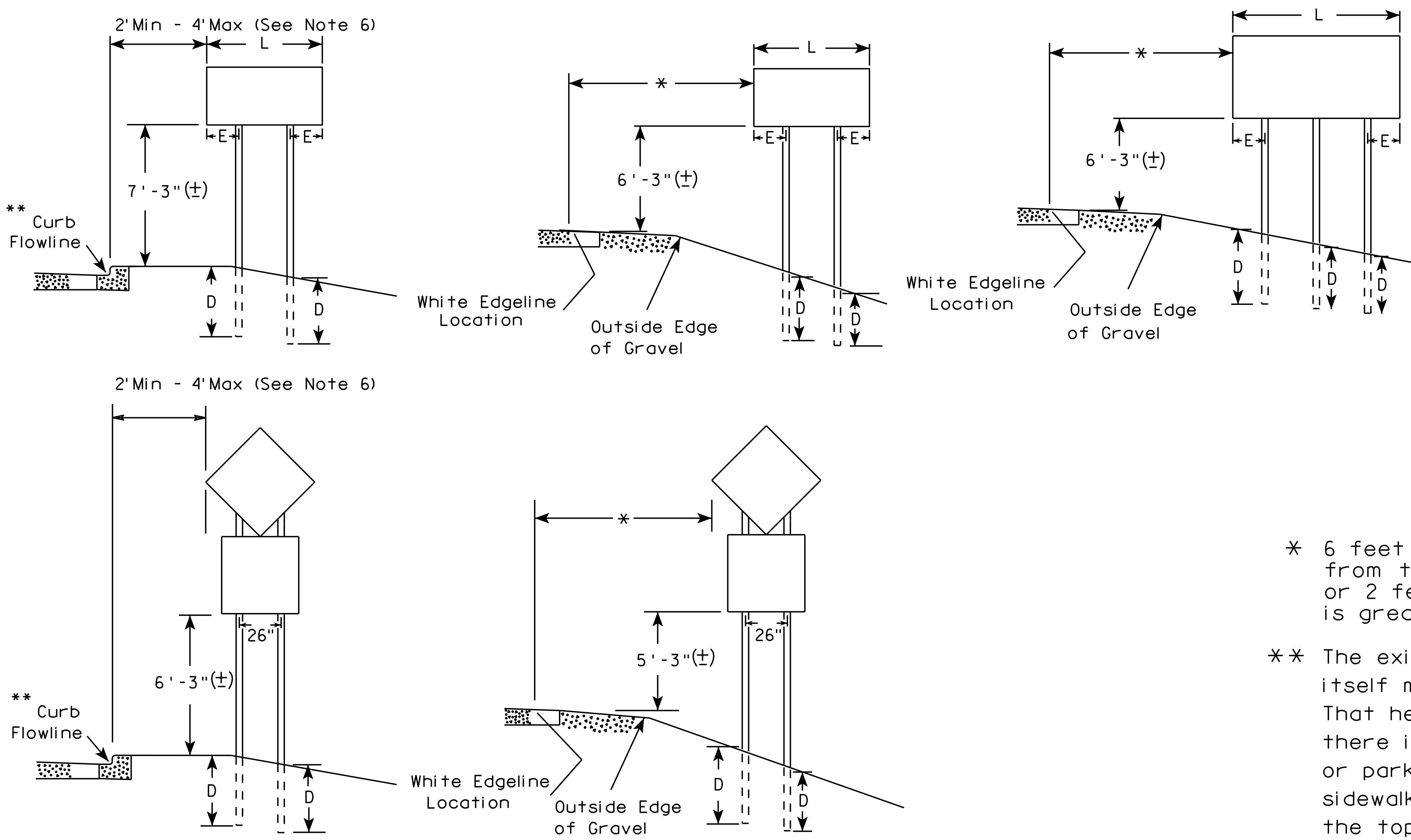
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

URBAN AREA

RURAL AREA (See Note 3)



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)

	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)

L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

7

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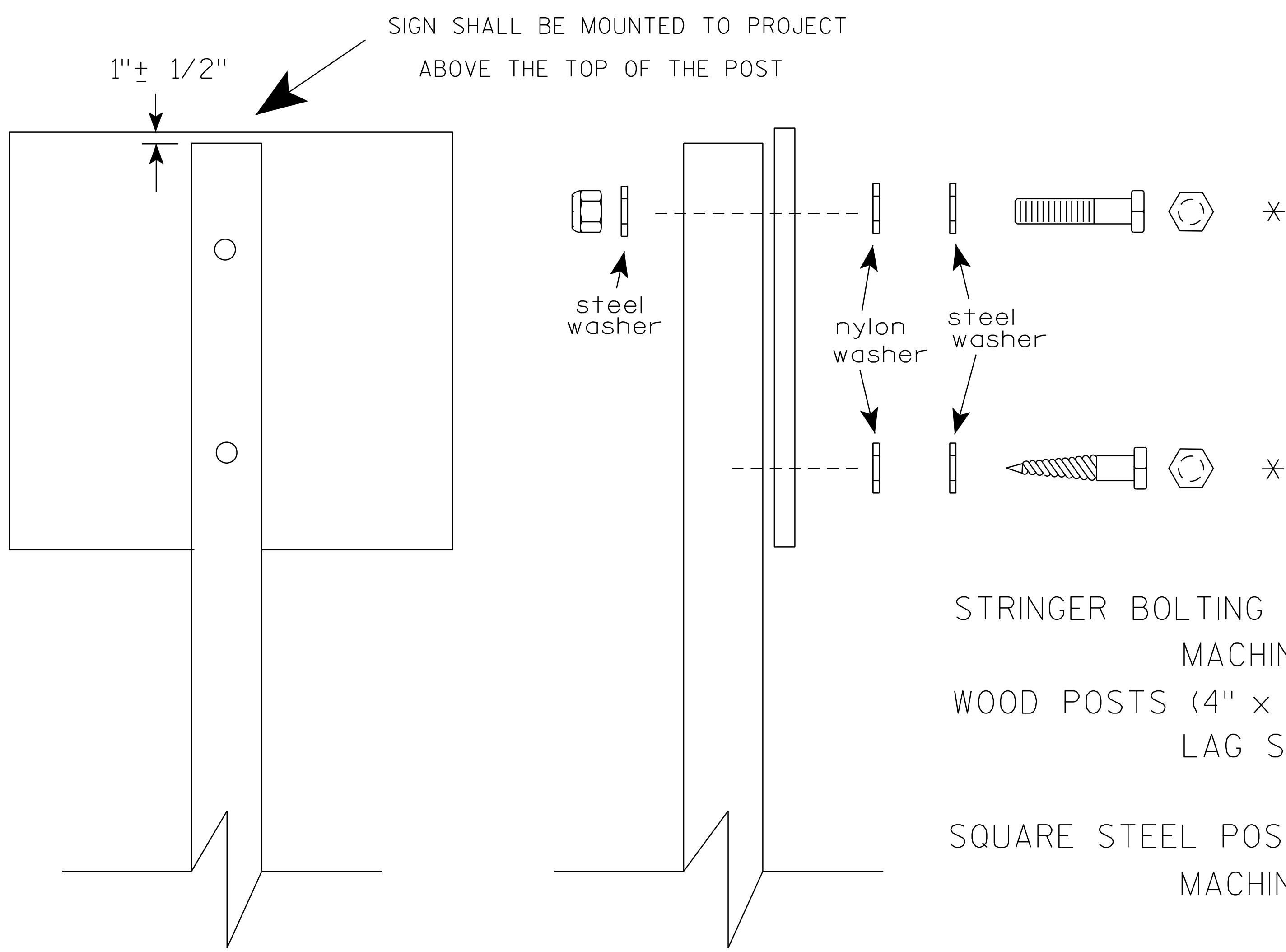

Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16 " STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

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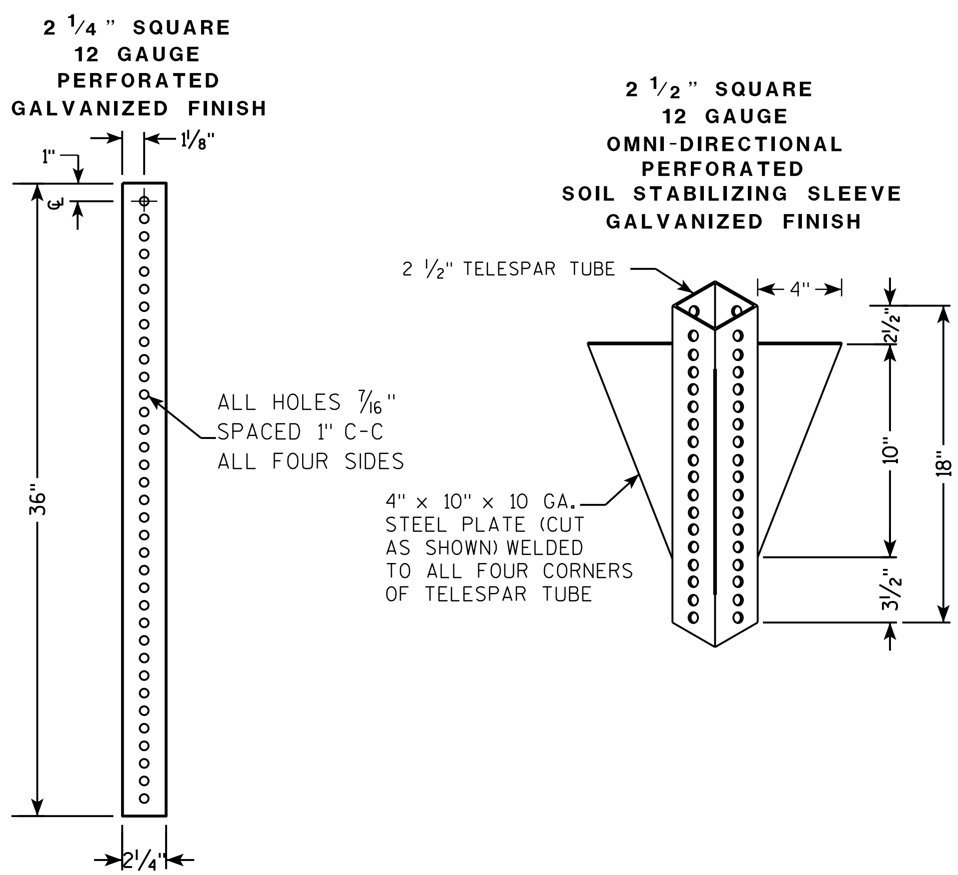
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

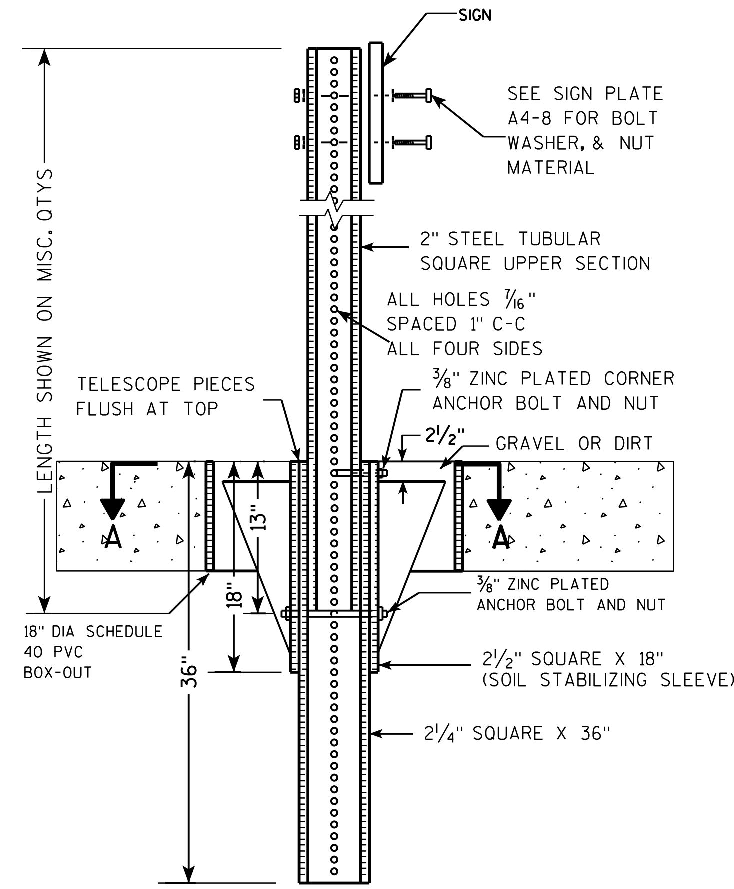
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS TWO PIECE SYSTEM



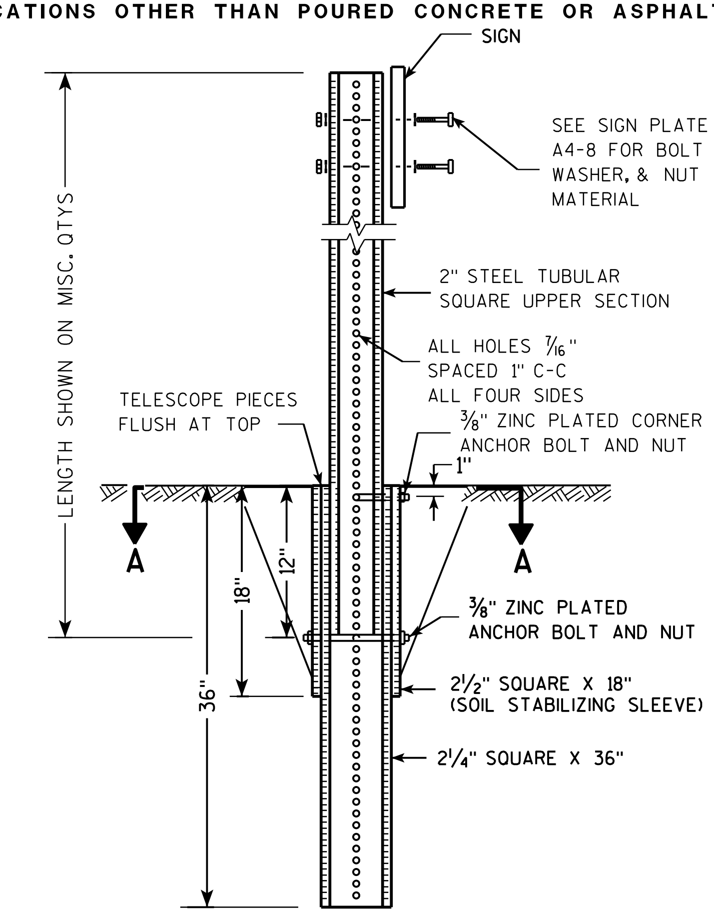
DETAIL OF TUBULAR STEEL SIGN POST

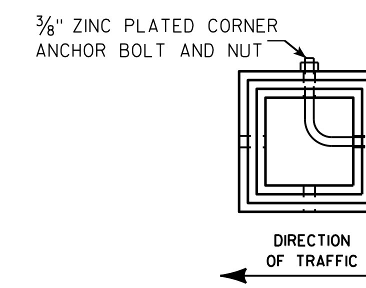
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST

(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL SIGN POST A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

7

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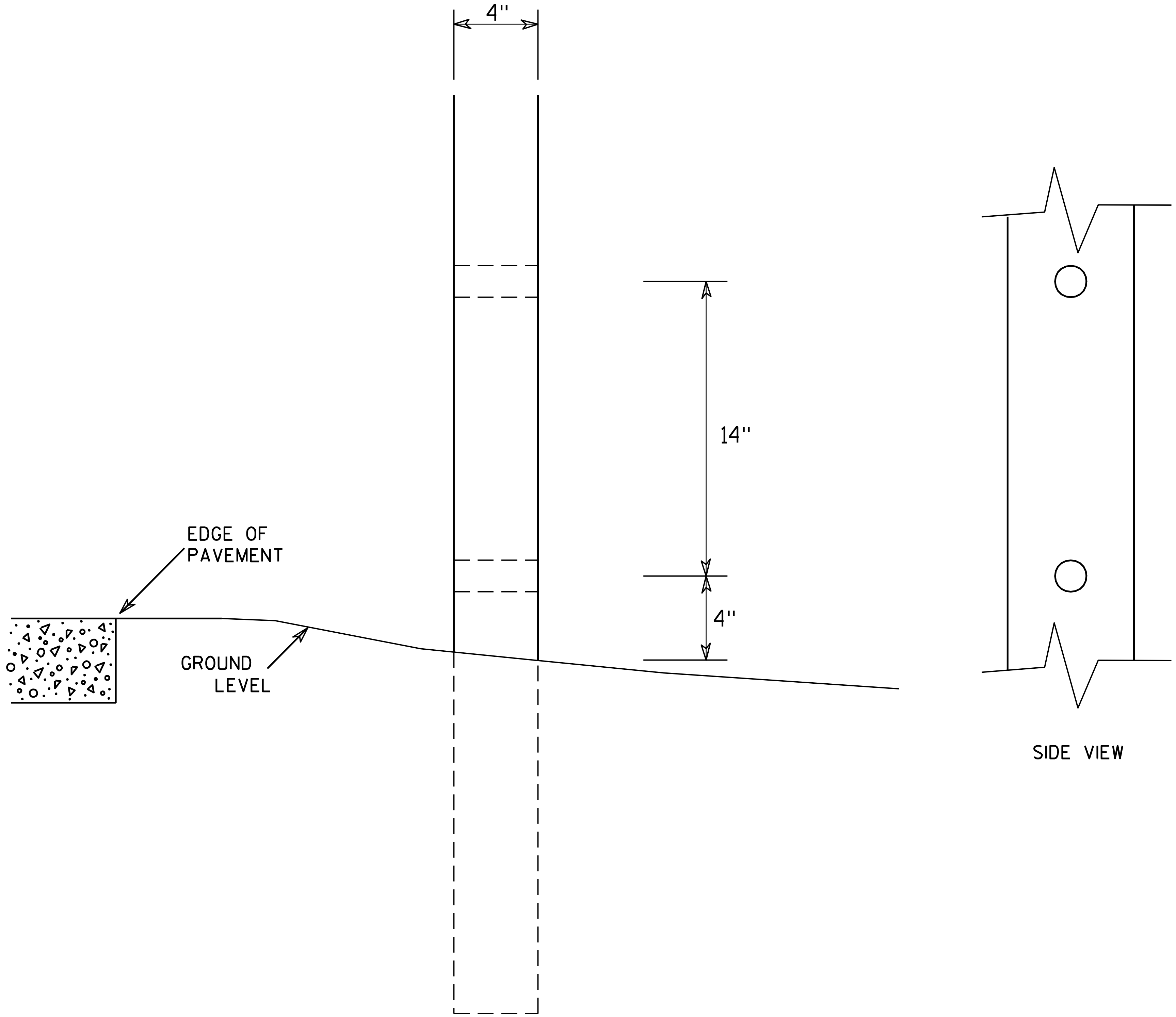
PROJECT NO: | HWY: | COUNTY: | SHEET NO: | E



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two $1\frac{1}{2}$" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

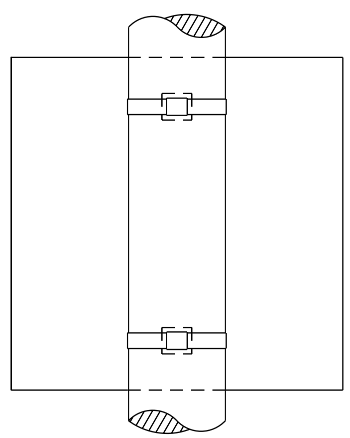
WISCONSIN DEPT OF TRANSPORTATION

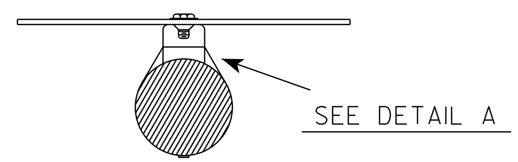
APPROVED Chester J Spang for State Traffic Engineer

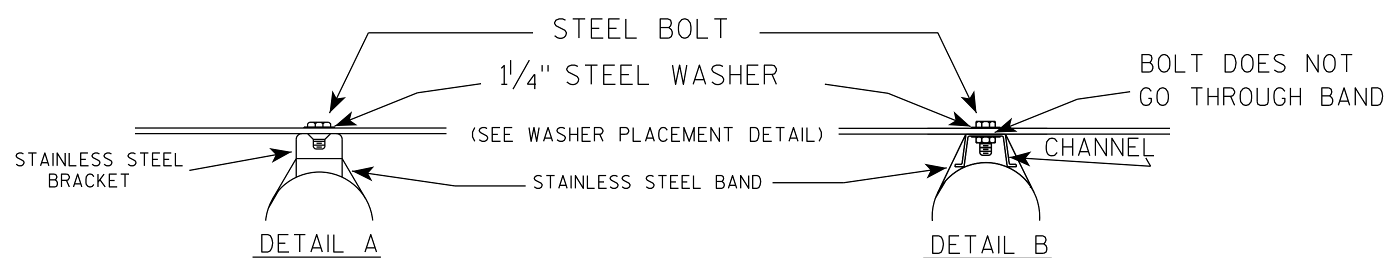
DATE 3/27/97 PLATE NO. A4-11.2

BANDING

SINGLE SIGN



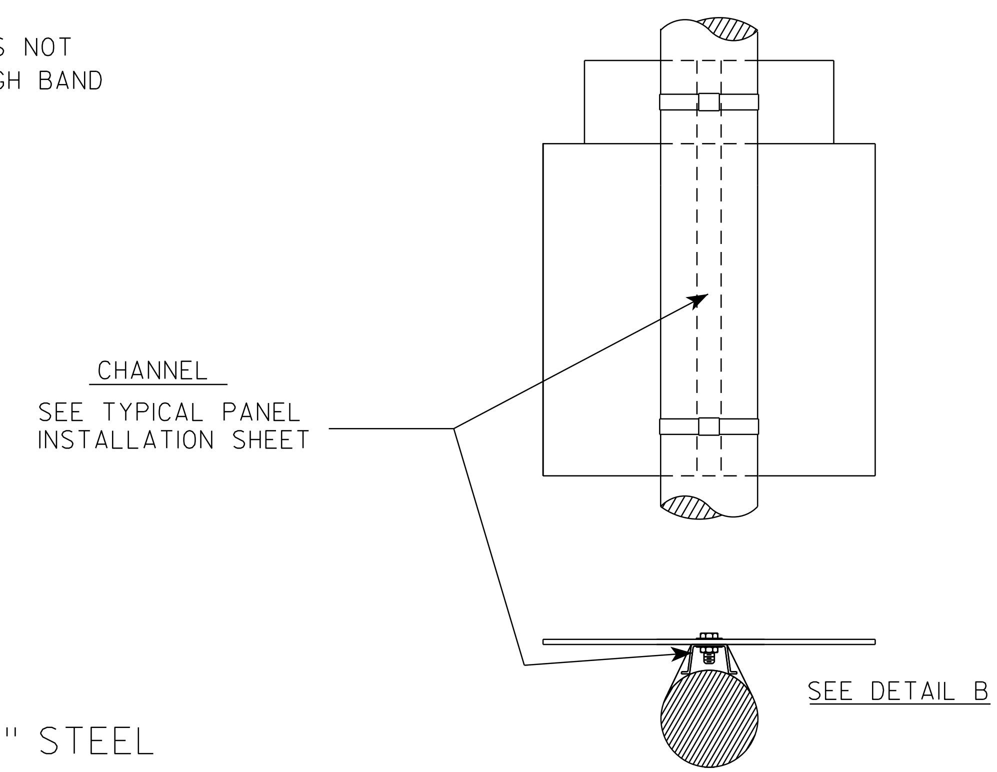




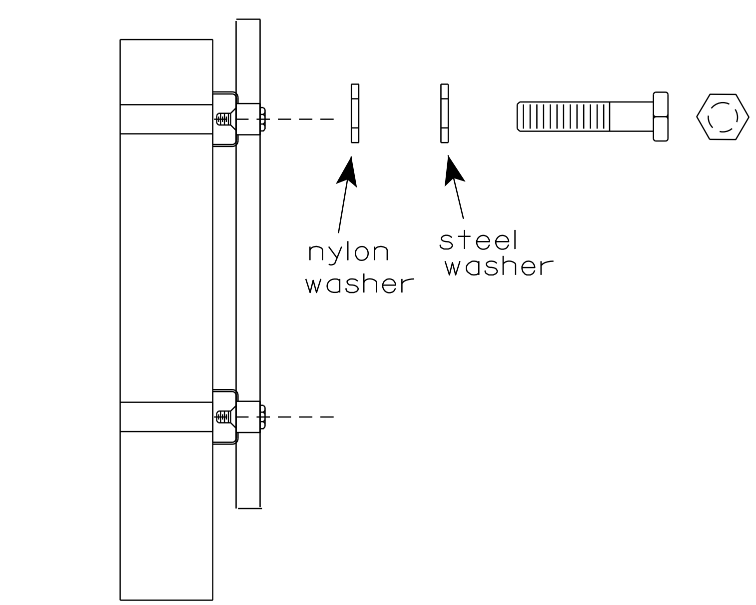
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X⅜" I.D. X$^1/_{16}$" STEEL
1-1/4" O.D. X⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN SIGN BANDING DETAILS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED *Matthew R Rauch* for State Traffic Engineer	
DATE 6/10/19	PLATE NO. A5-9.4

7

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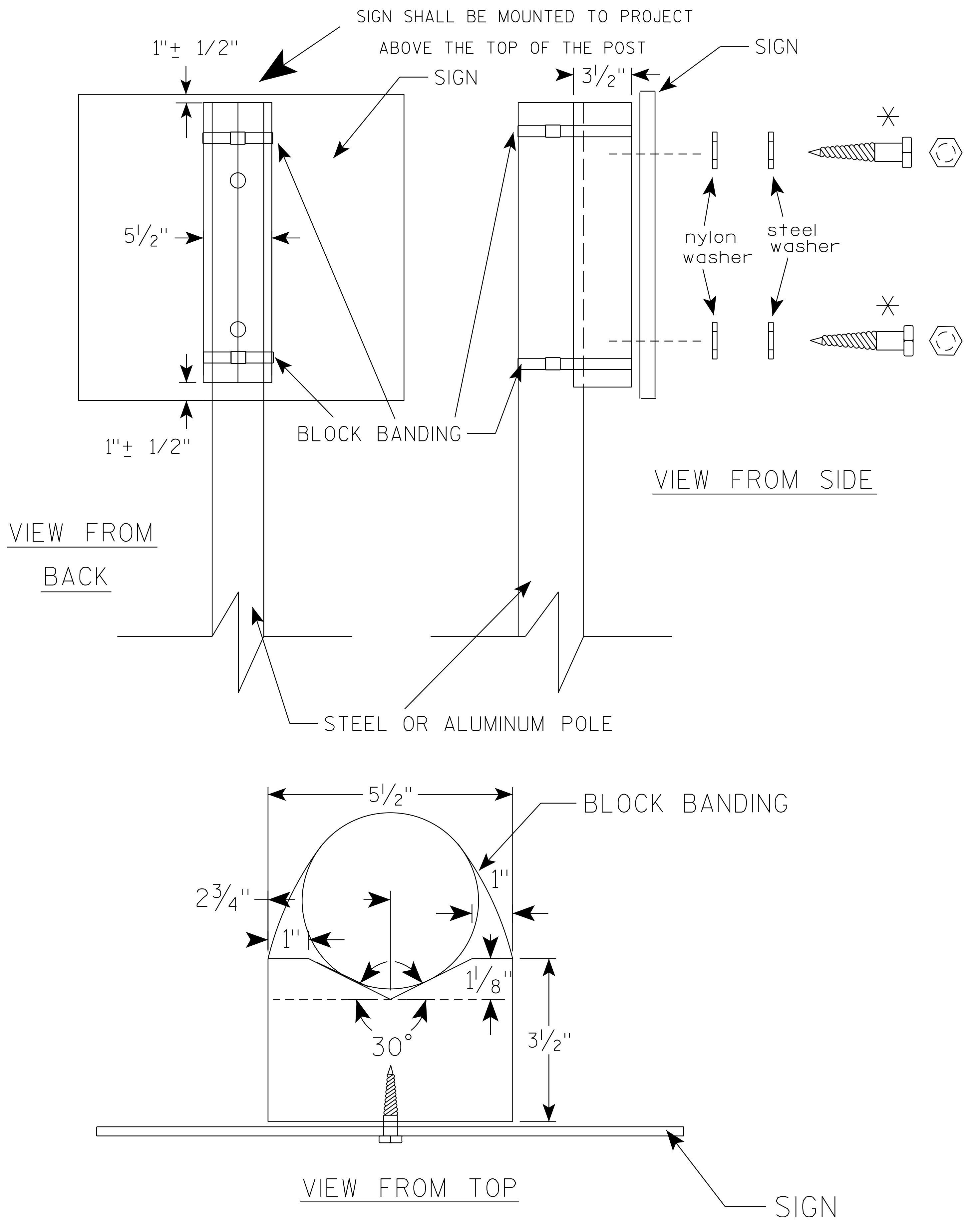
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 115	E



GENERAL NOTES

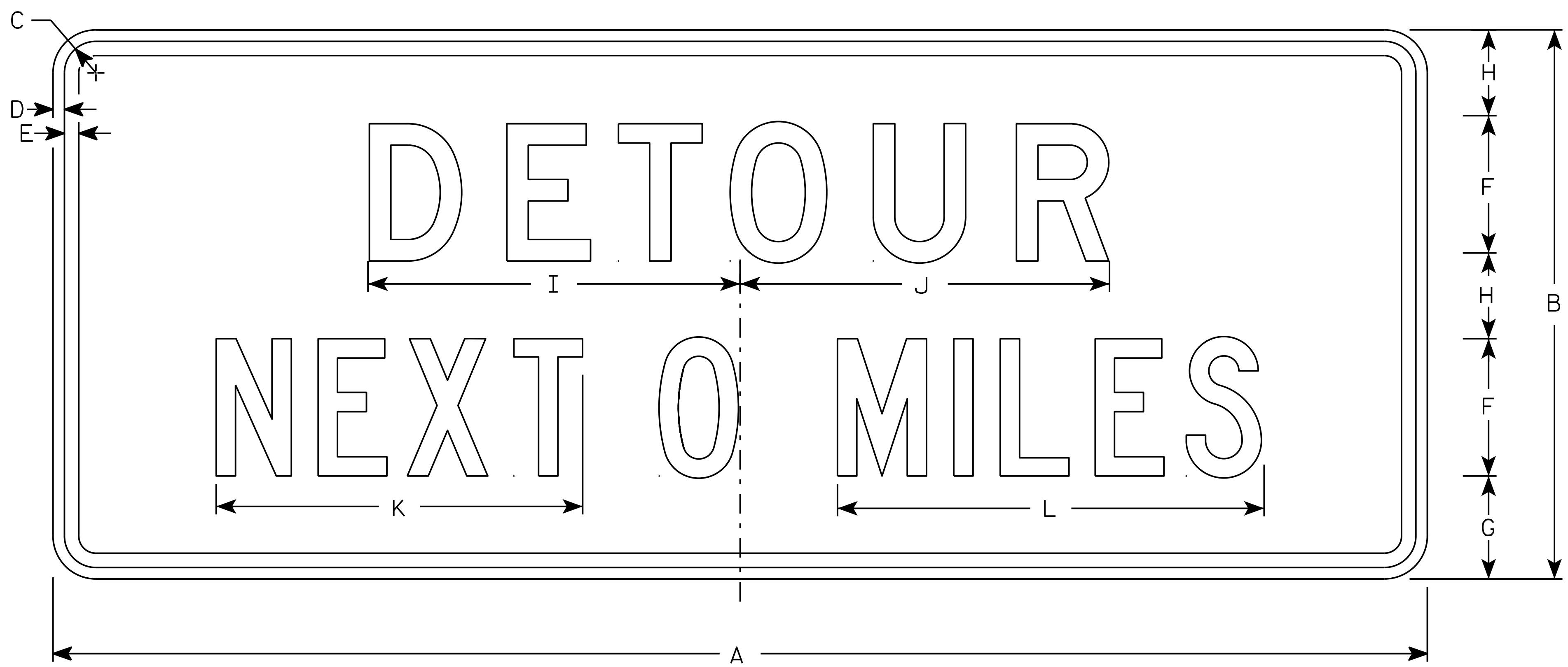
1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, 3/4" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

* LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL (V-BLOCK OPTION)
WISCONSIN DEPT OF TRANSPORTATION
APPROVED Matthew R Rauch for State Traffic Engineer
DATE 4/19/2022 PLATE NO. A5-10.3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - Line 1 is D and Line 2 is C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance



G20-51

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
5																											

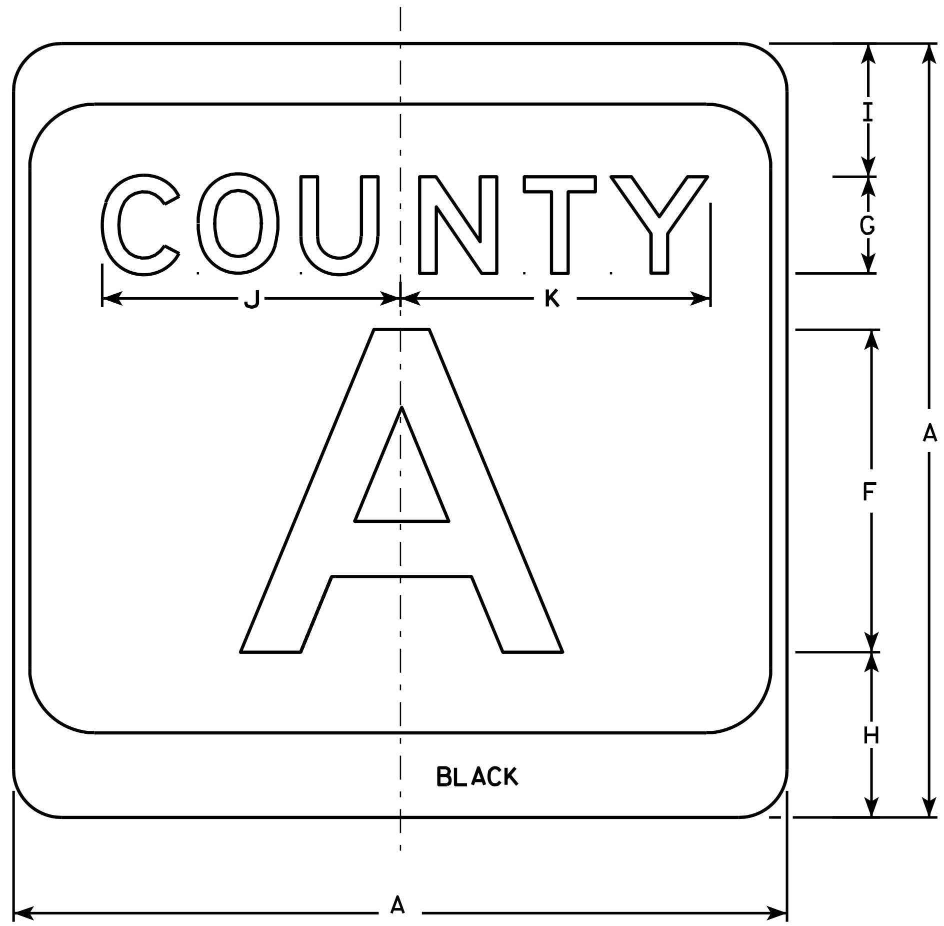
STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

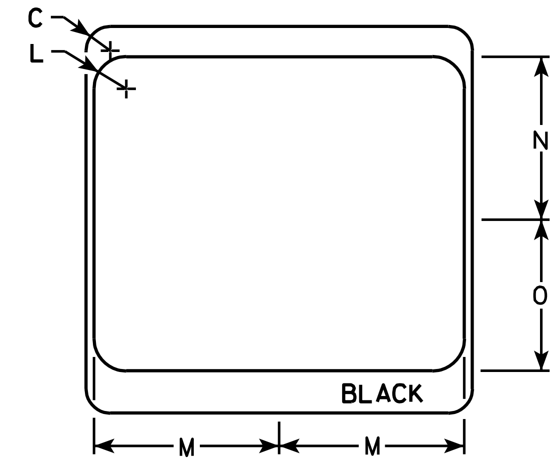
APPROVED Matthew R Rauch
for State Traffic Engineer

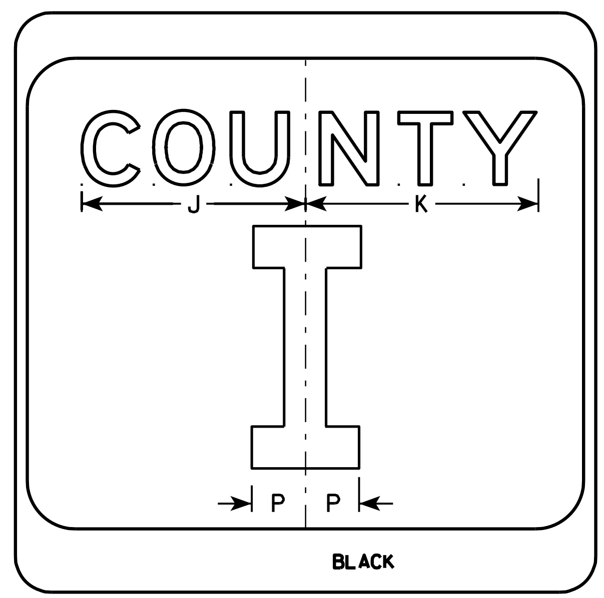
DATE 3/14/17 PLATE NO. G20-51.2

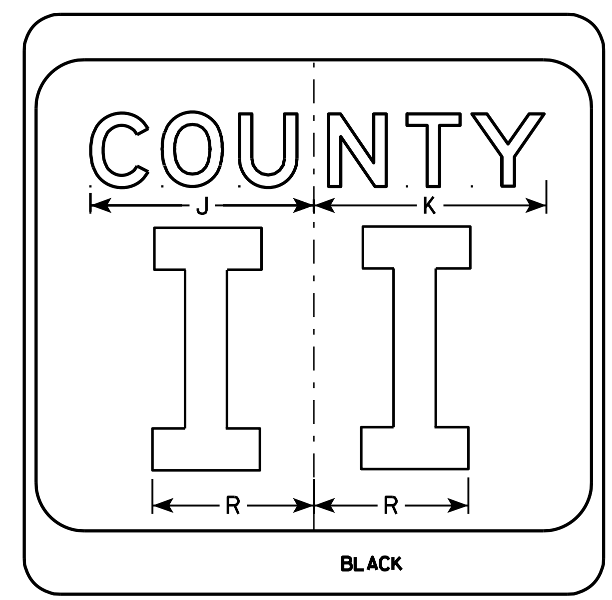
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 117 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 118 | E

7

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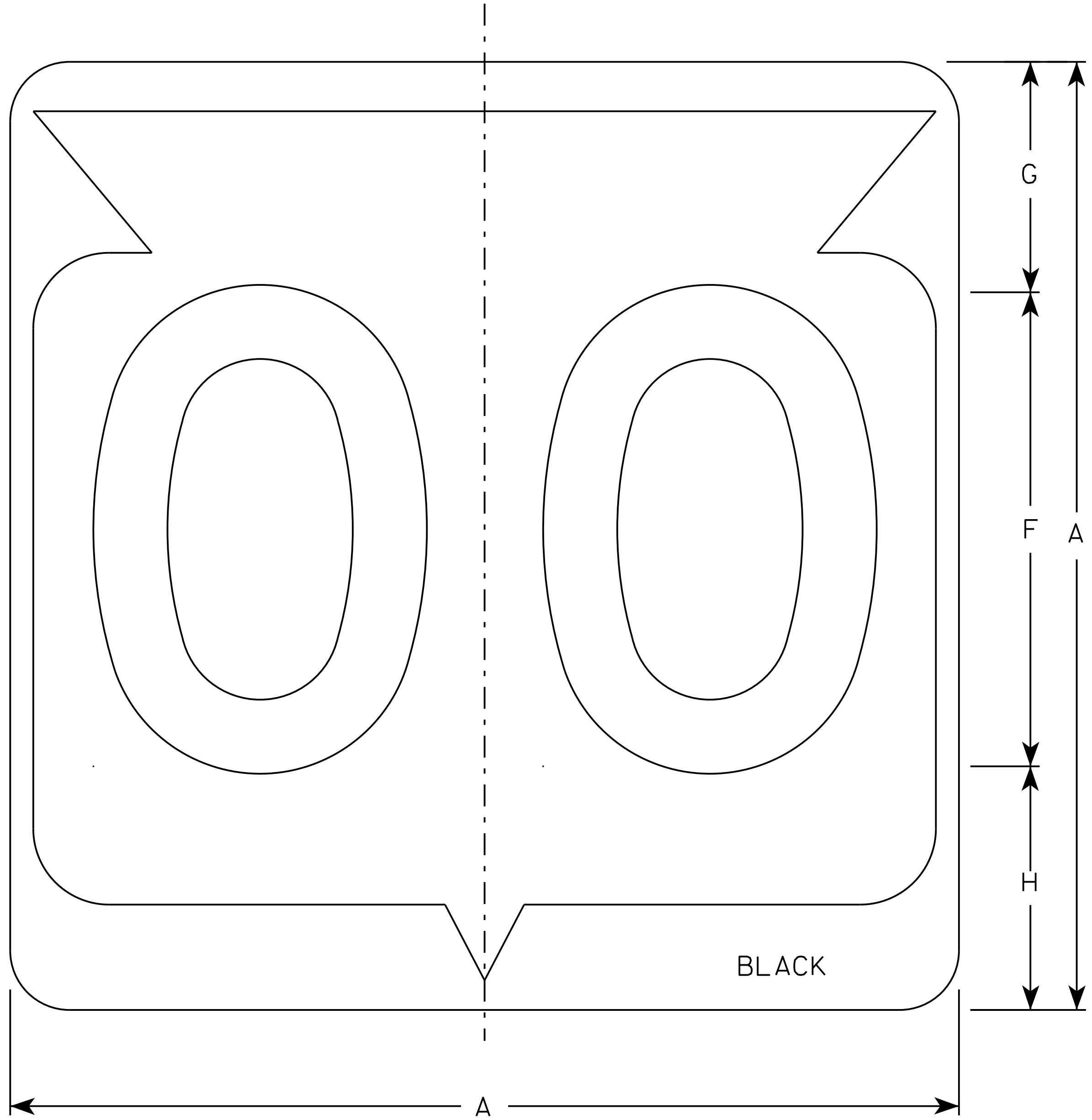
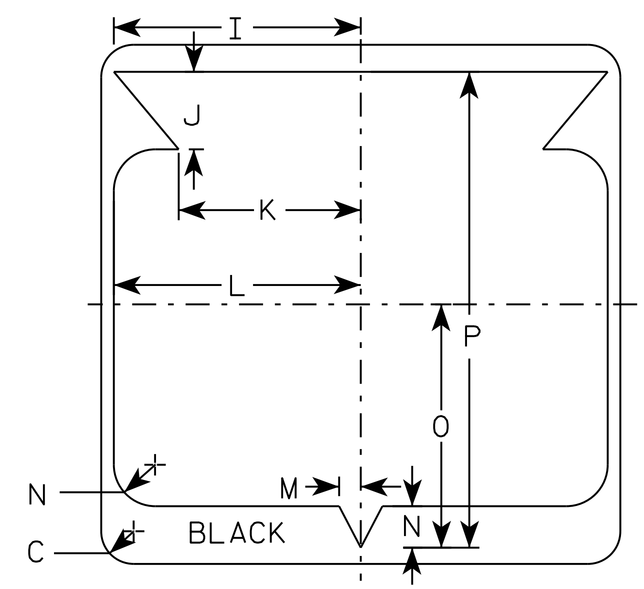


M1-6



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

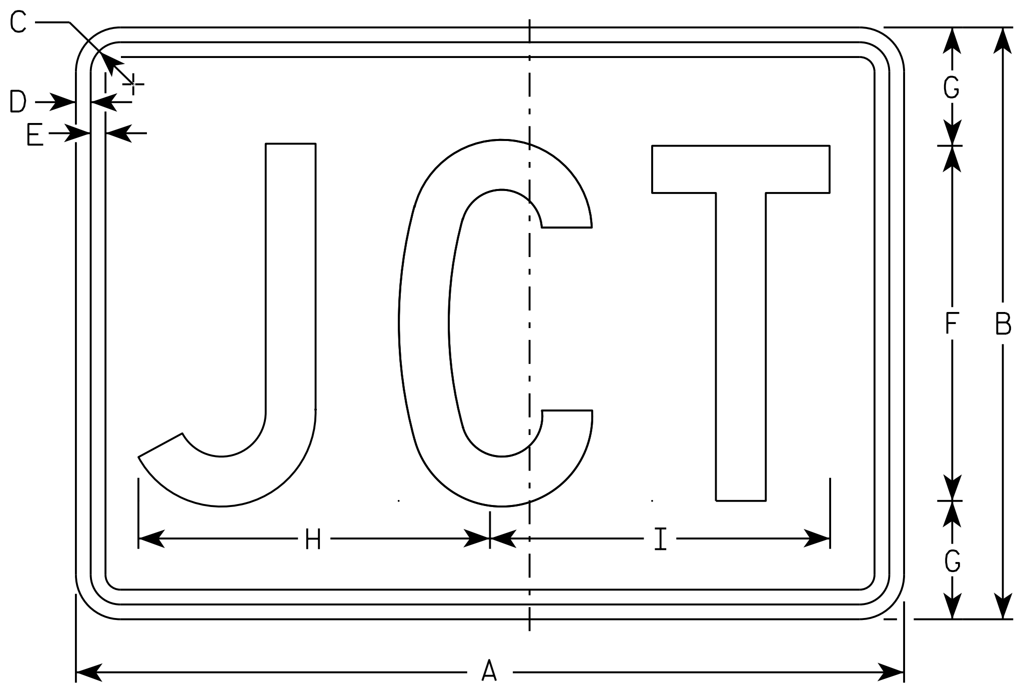
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

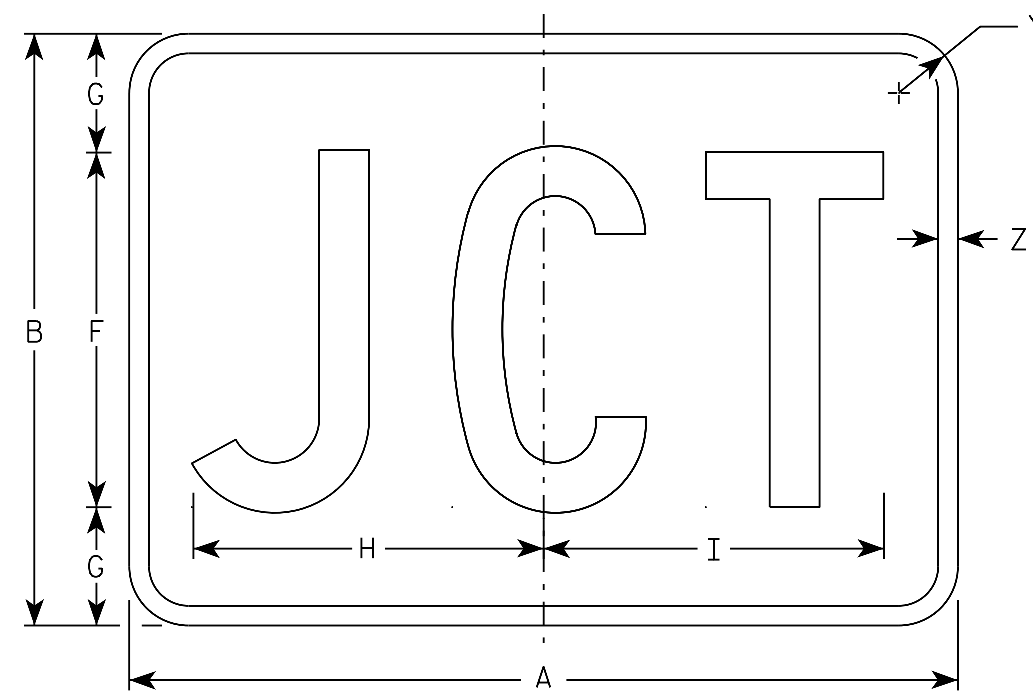
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

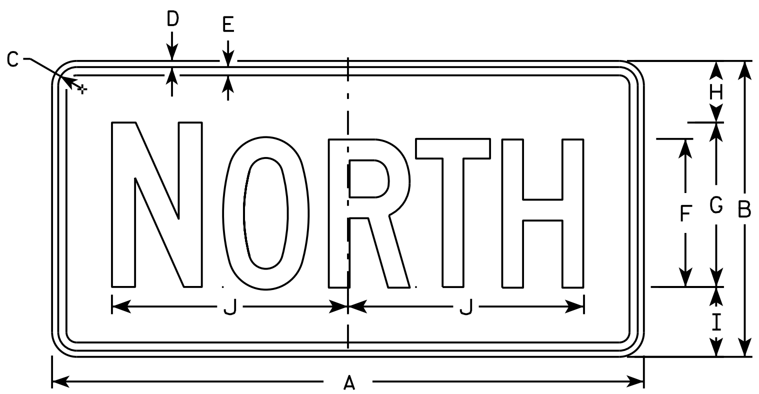
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

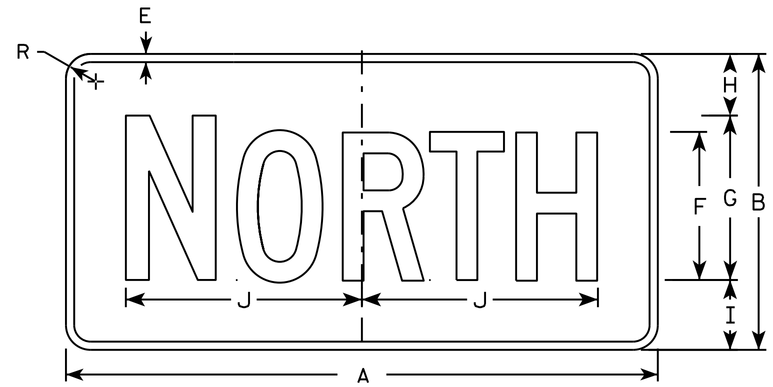
DATE 10/15/15 PLATE M2-1.12

PROJECT NO: HWY: COUNTY: SHEET NO: E

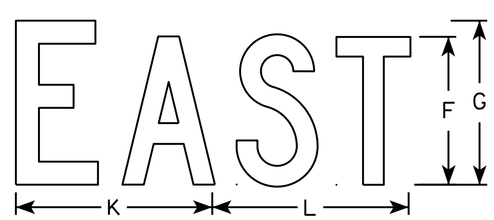
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



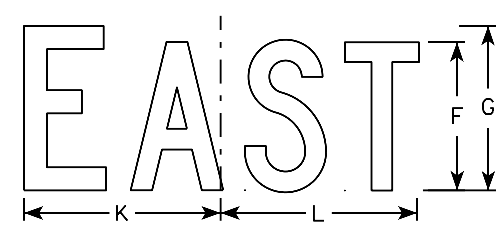
M3-1
MM3-1
MP3-1



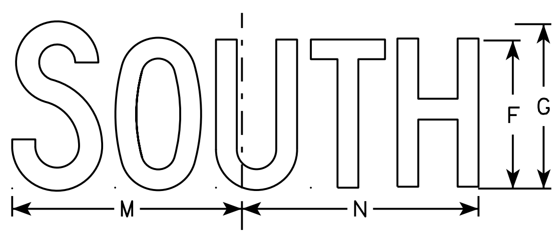
MB3-1
MK3-1
MN3-1



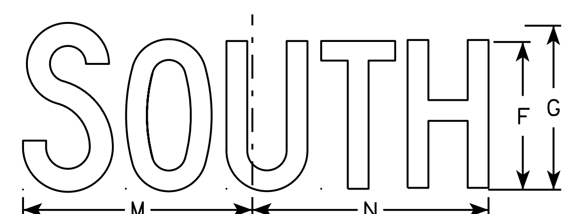
M3-2
MM3-2
MP3-2



MB3-2
MK3-2
MN3-2

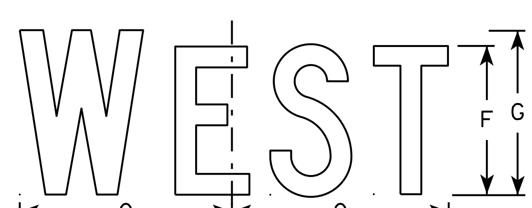


M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3

M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

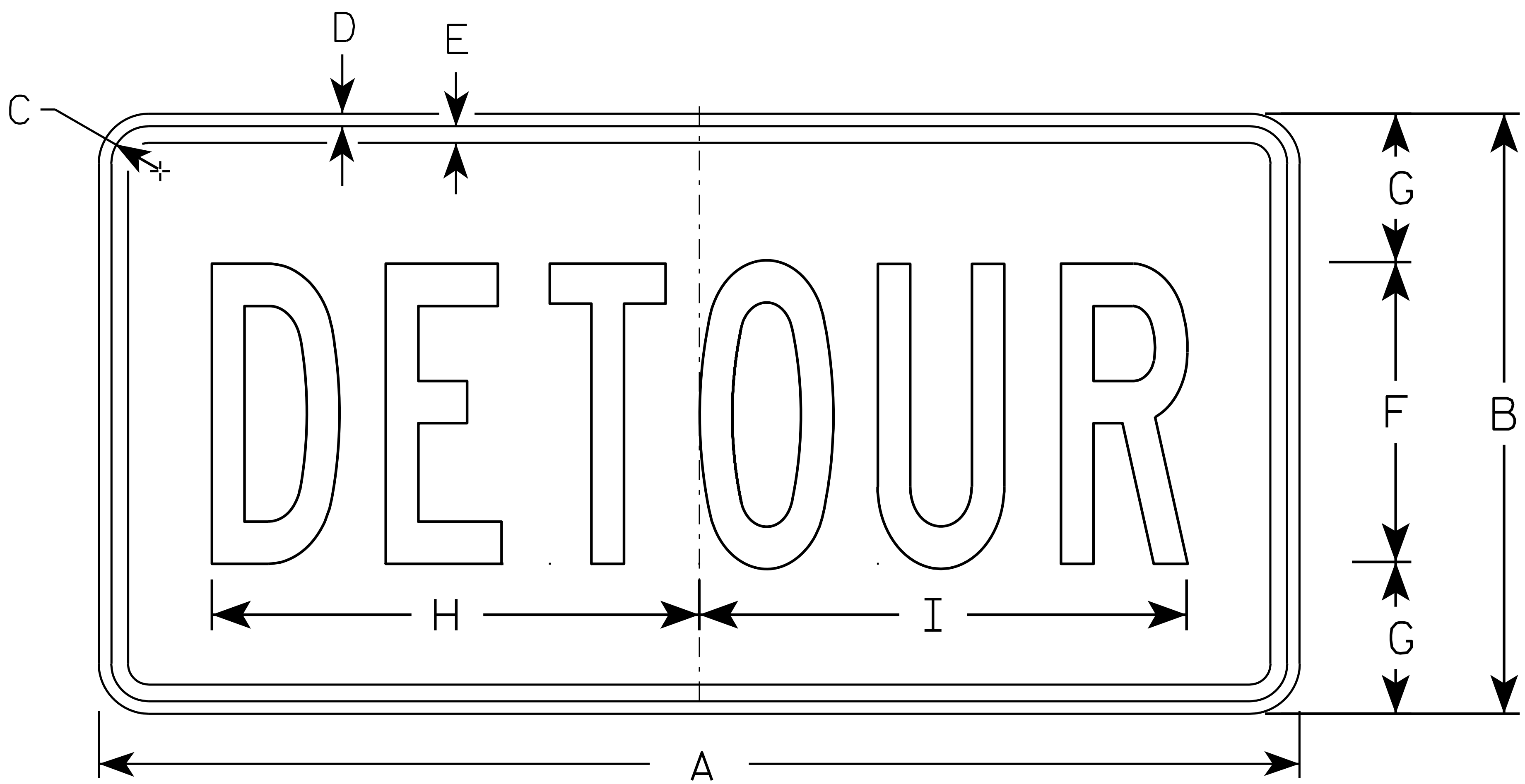
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14

PROJECT NO: HWY: COUNTY: SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

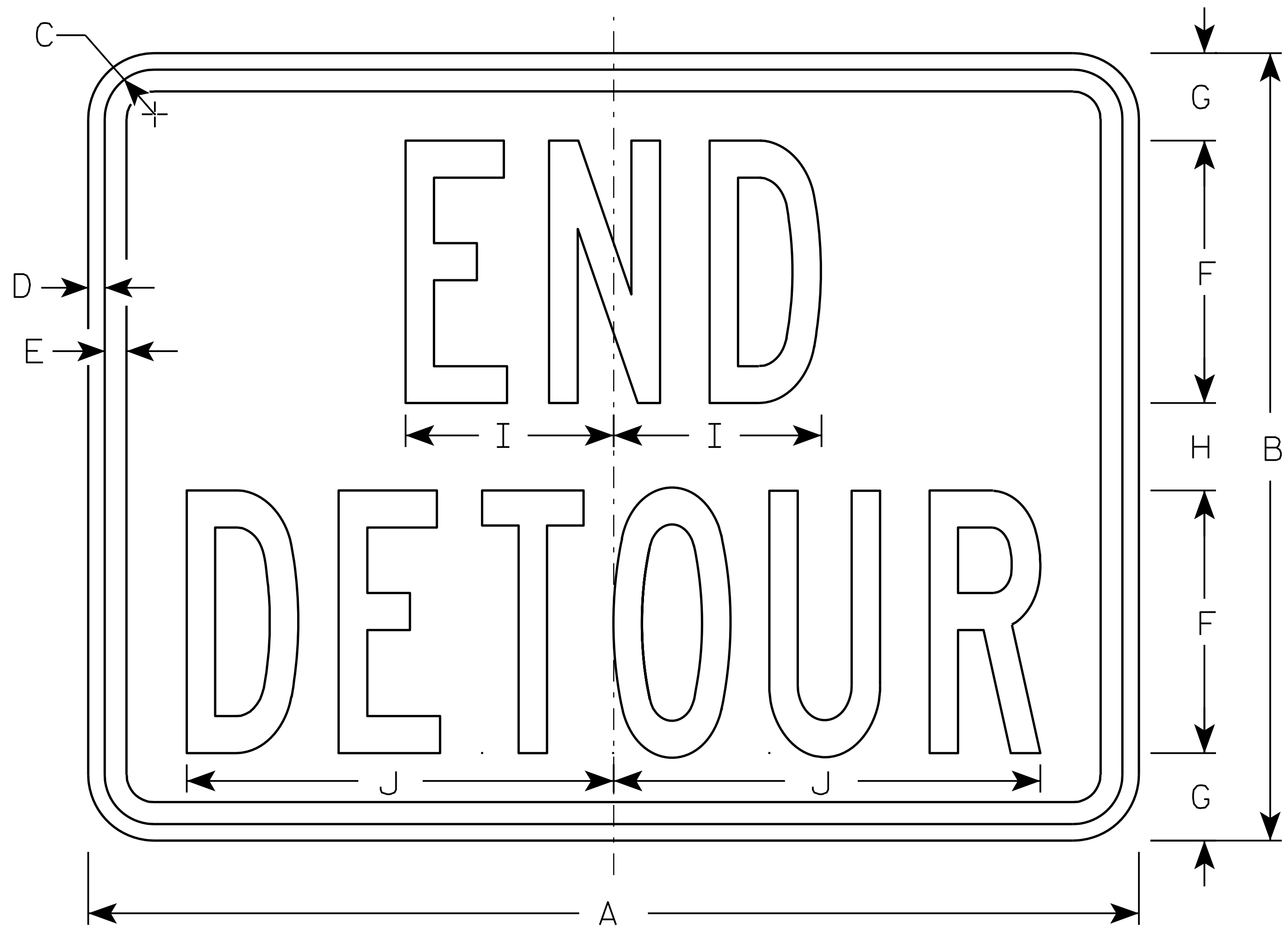
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 122 | E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

STANDARD SIGN
M4-8A

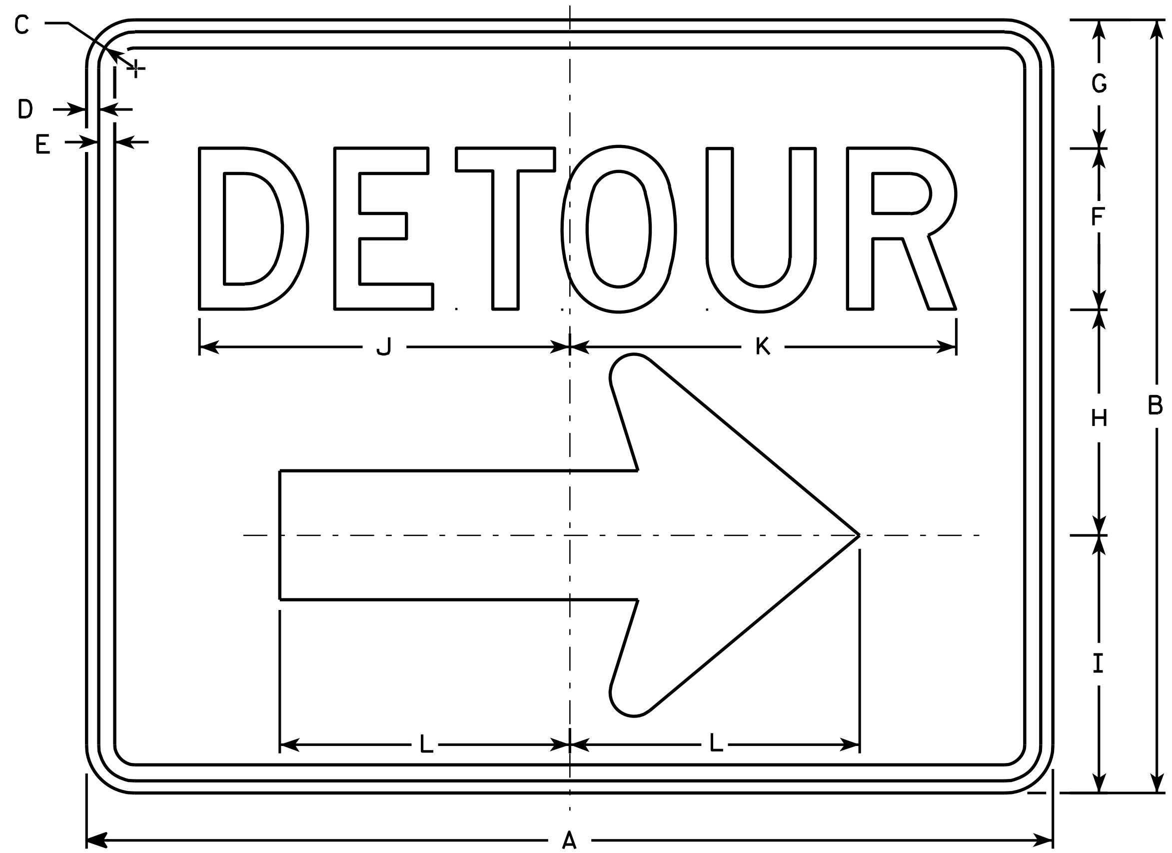
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

7

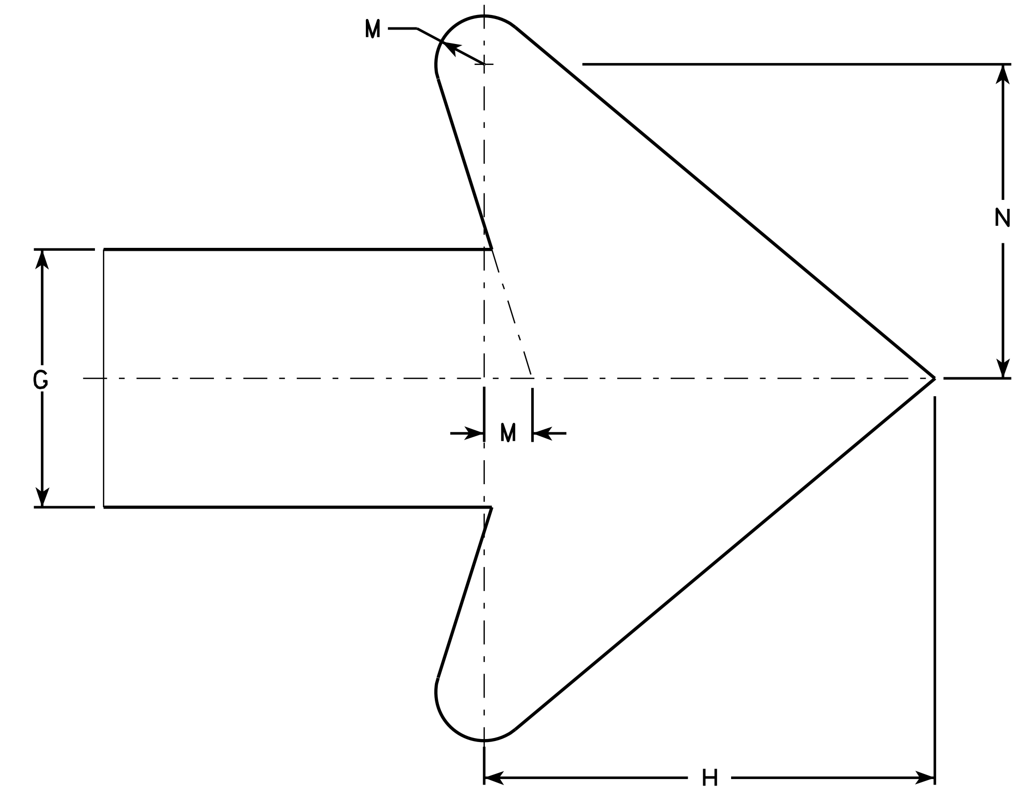
7



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

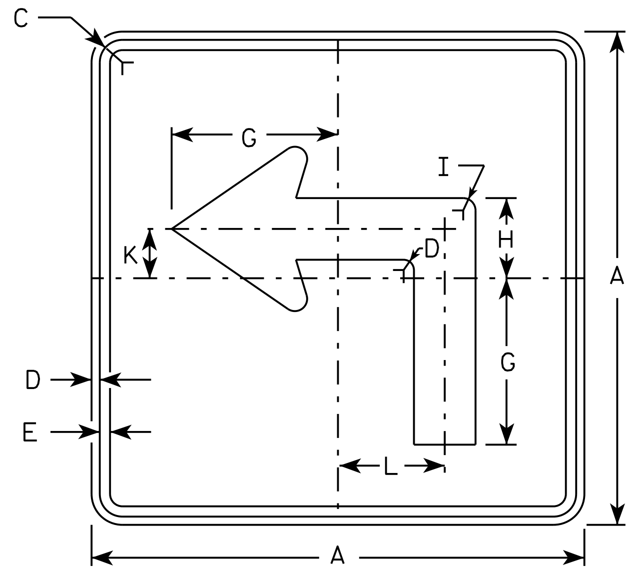
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

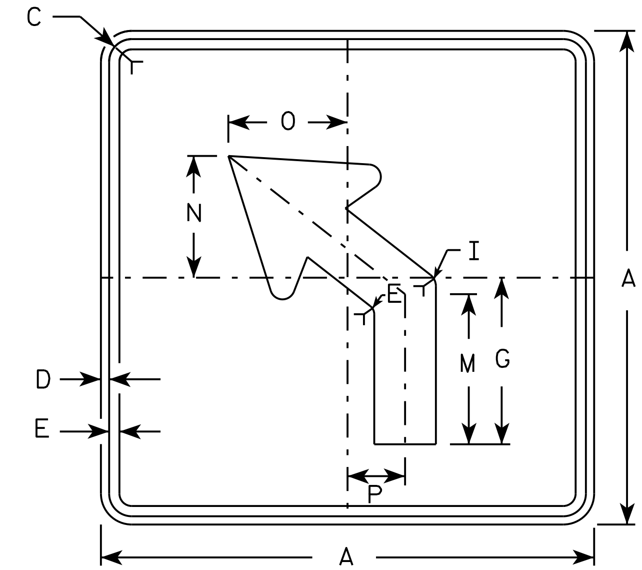
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 124 | E

7

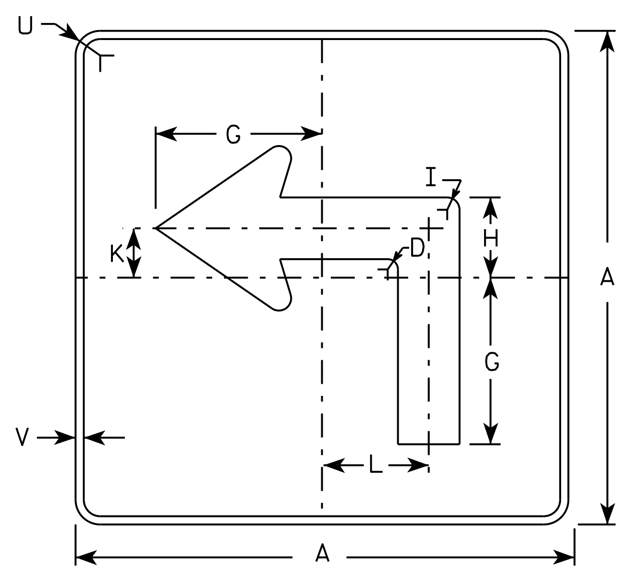
7



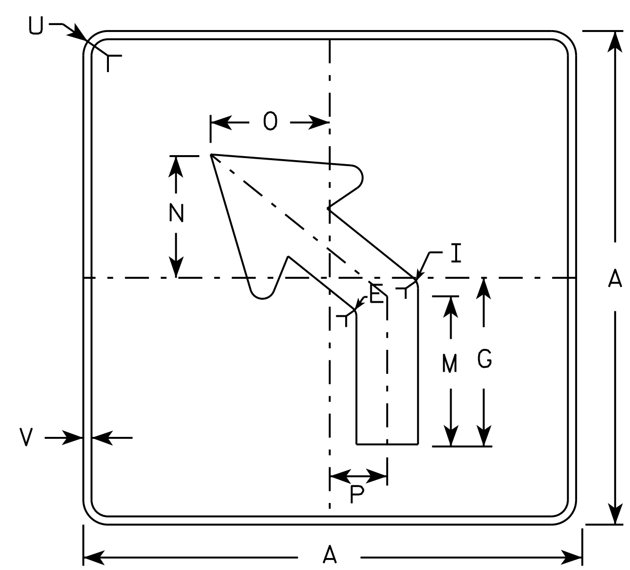
M5-1L
MM5-1L
MO5-1L
MP5-1L



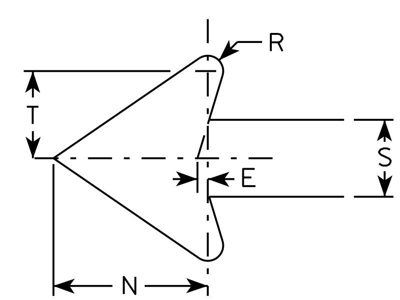
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

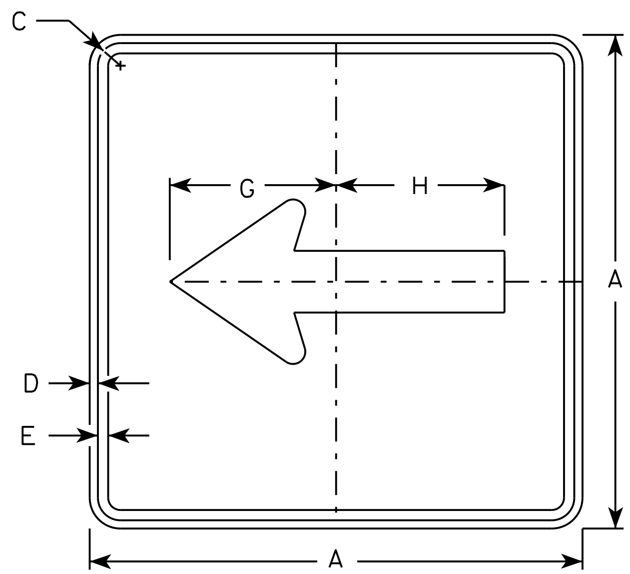
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

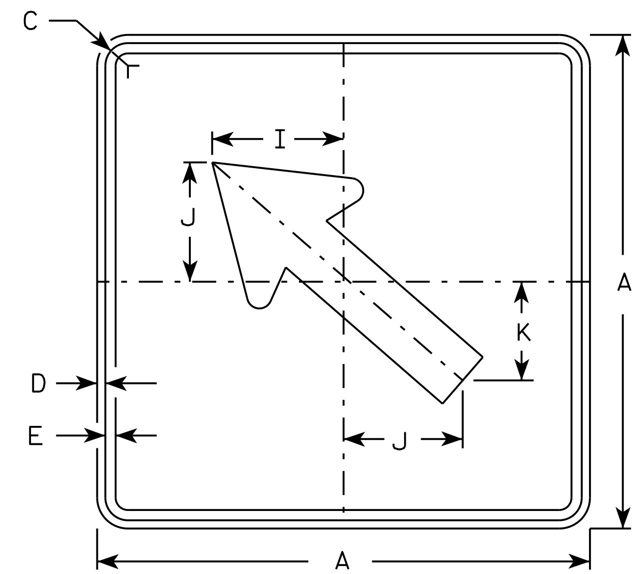
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E

7



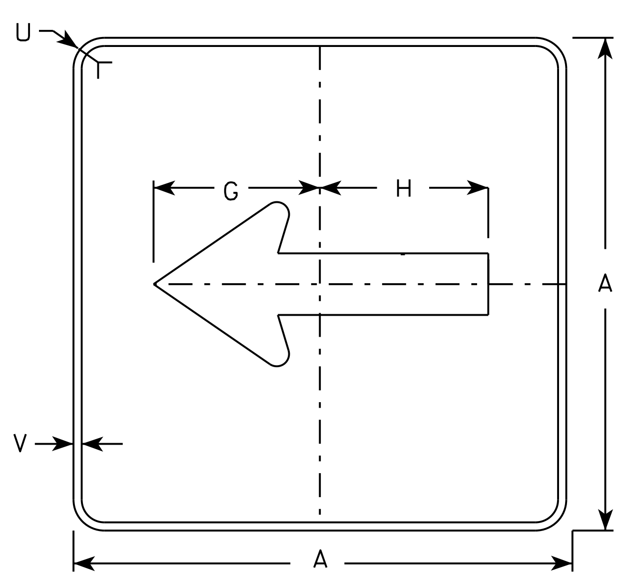
M6-1
MM6-1
MO6-1
MP6-1



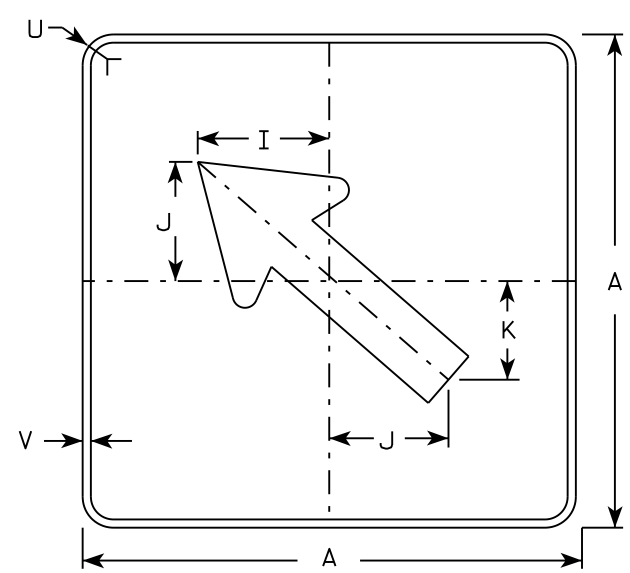
M6-2
MM6-2
MO6-2
MP6-2

NOTES

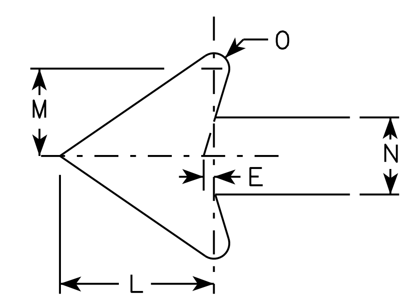
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

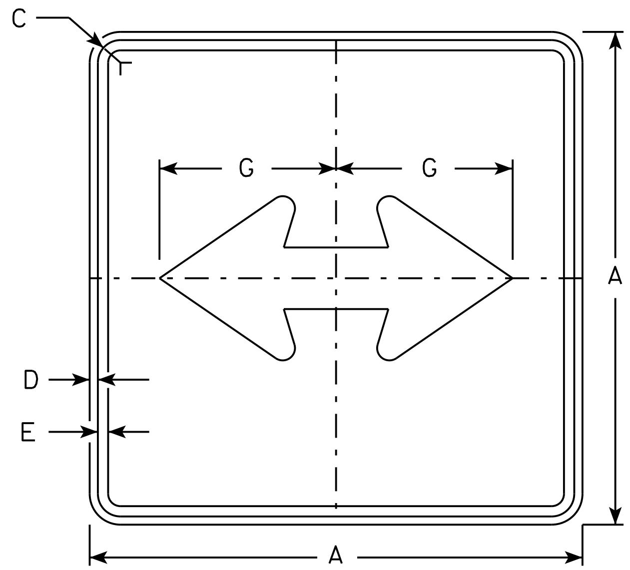
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

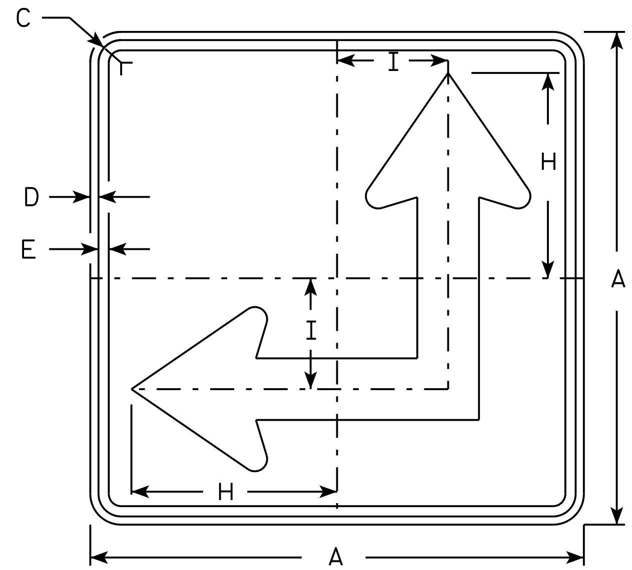
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 126 M6-1.15

PROJECT NO: HWY: COUNTY: SHEET NO: E



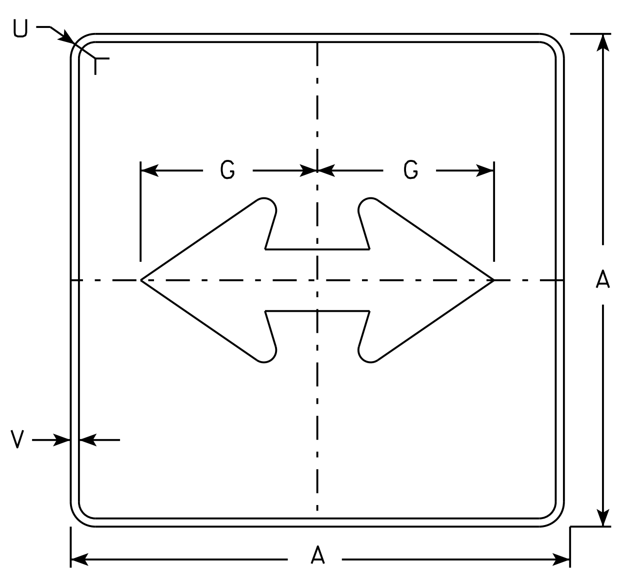
M6 - 4
MM6 - 4
MO6 - 4
MP6 - 4



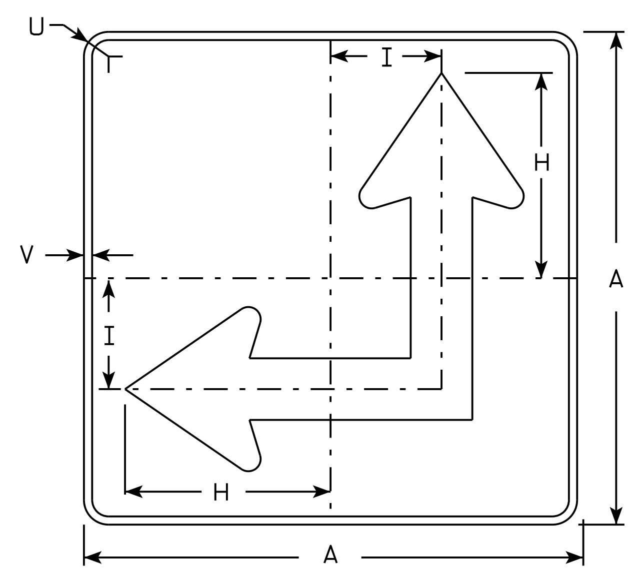
M6 - 6
MM6 - 6
MO6 - 6
MP6 - 6

NOTES

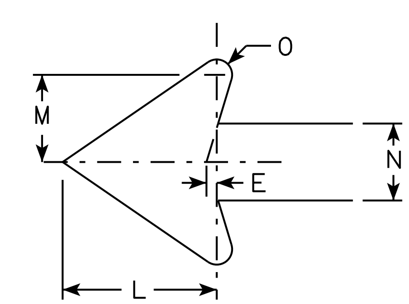
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6 - 4
MK6 - 4
MN6 - 4
MR6 - 4



MB6 - 6
MK6 - 6
MN6 - 6
MR6 - 6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN M6 - 4 & M6 - 6 SERIES

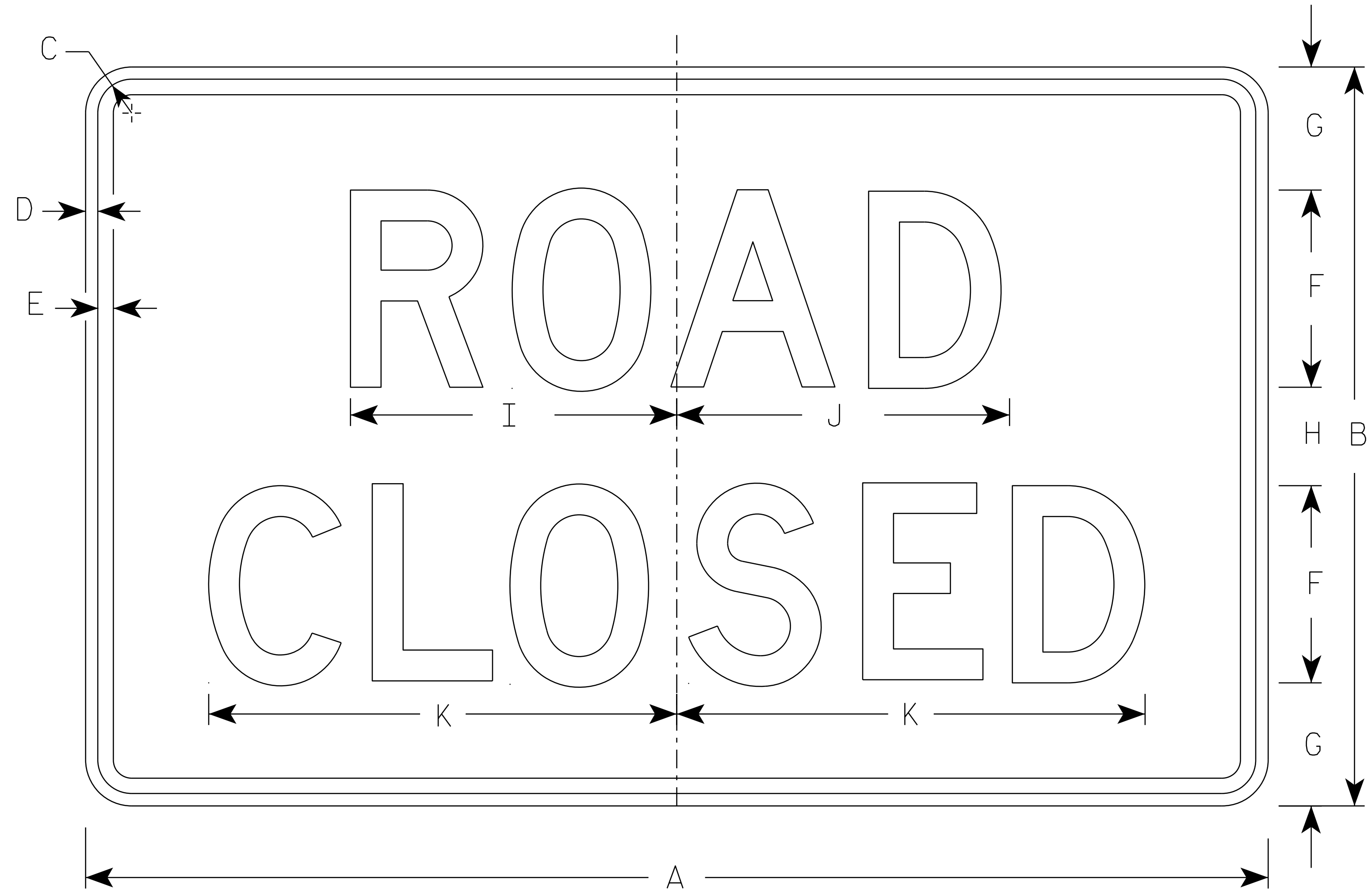
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE M6-4.10

PROJECT NO: HWY: COUNTY: SHEET NO: E

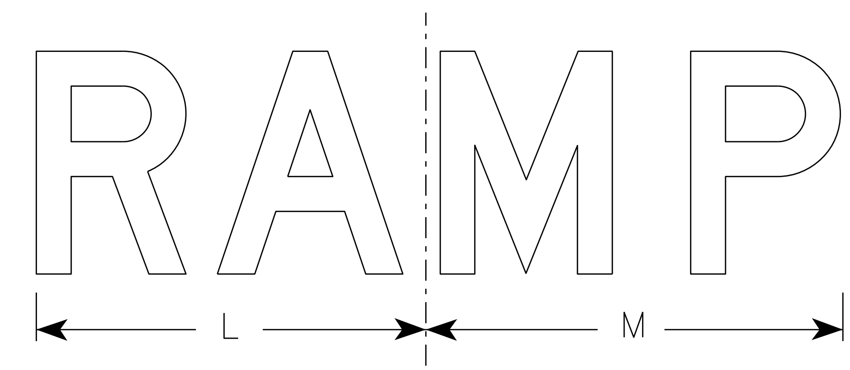
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



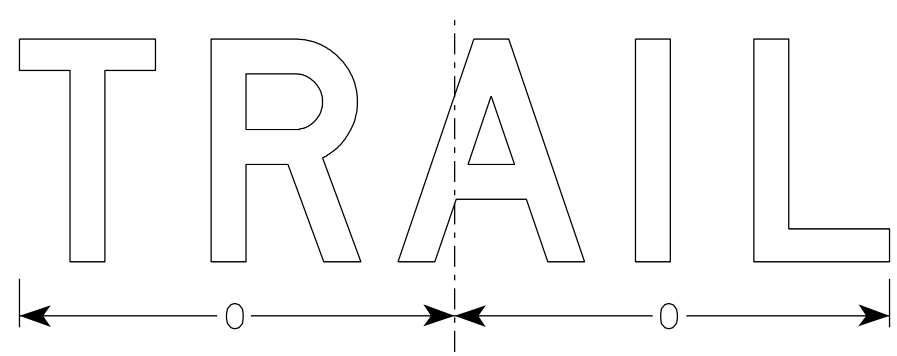
R11-2

NOTES

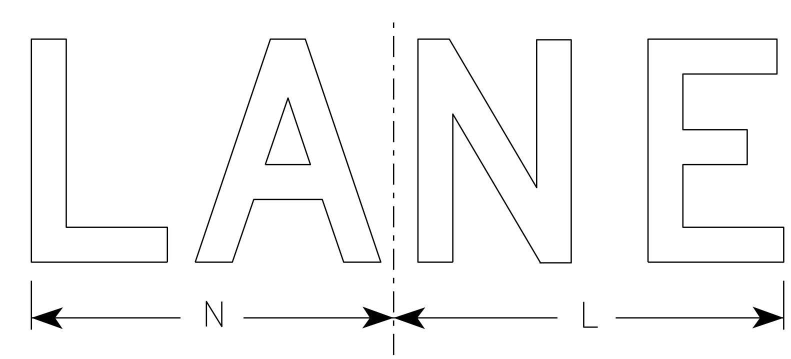
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

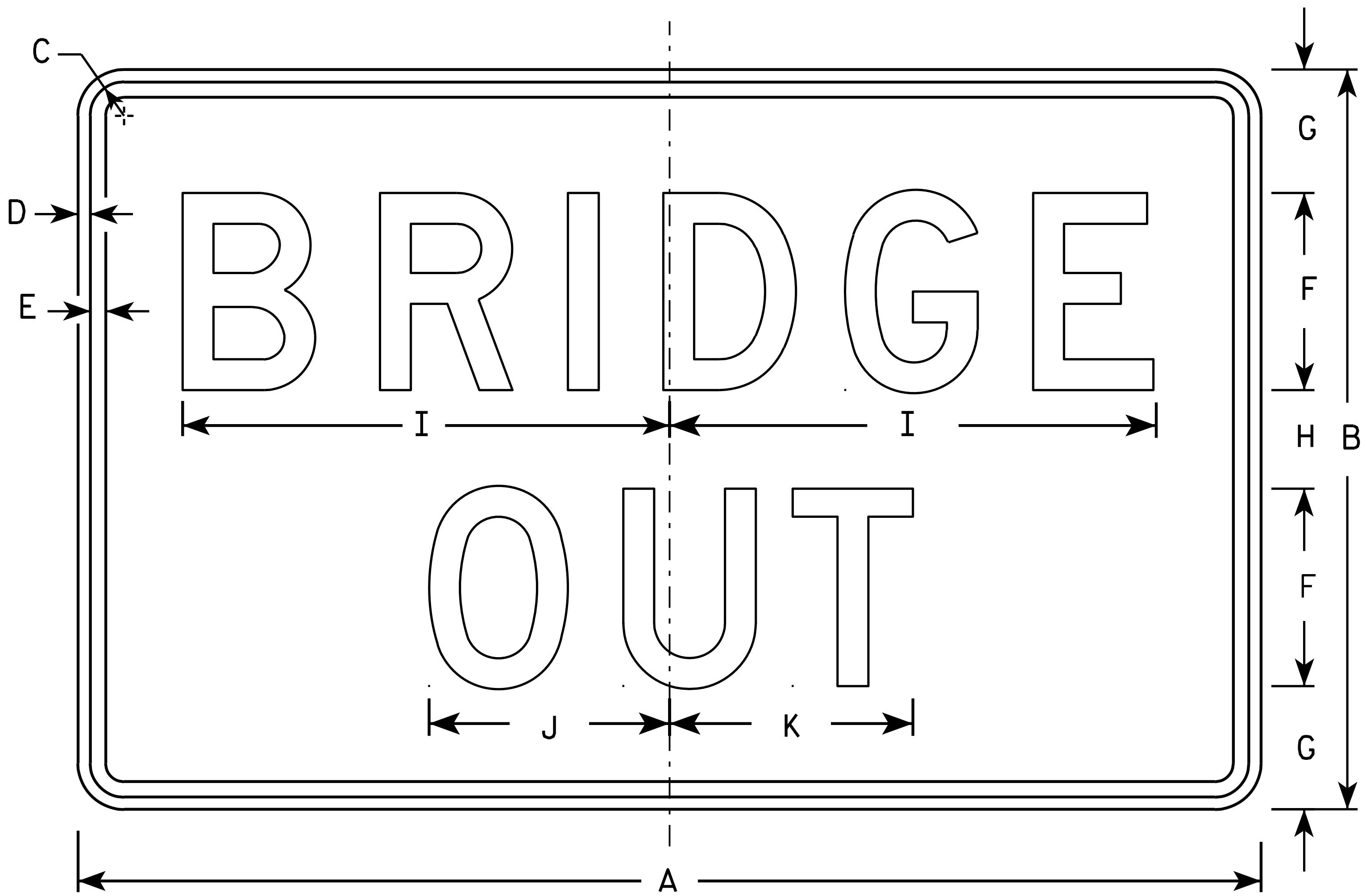
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11



R11-2B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2

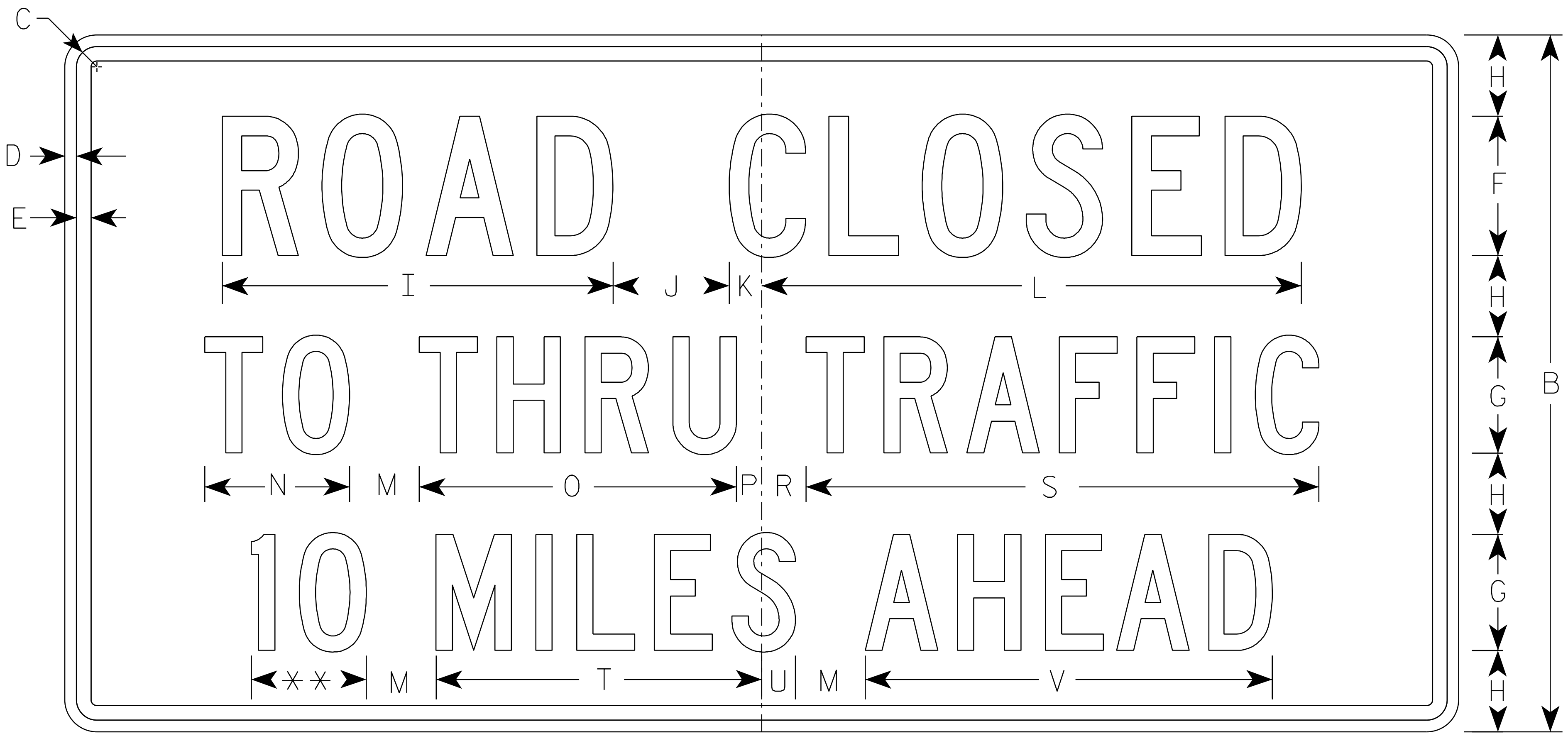
PROJECT NO:

SHEET NO: 129 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112B.DGN PLOT DATE : 01-APR-2011 14:23 PLOT BY : mscj9h

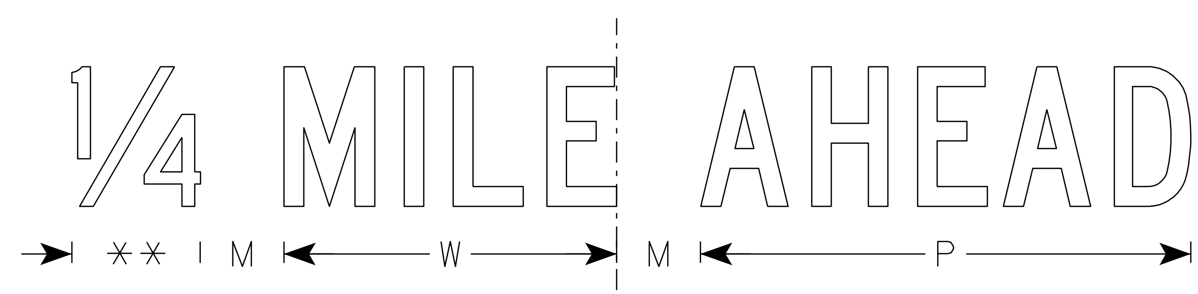
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 130 | E

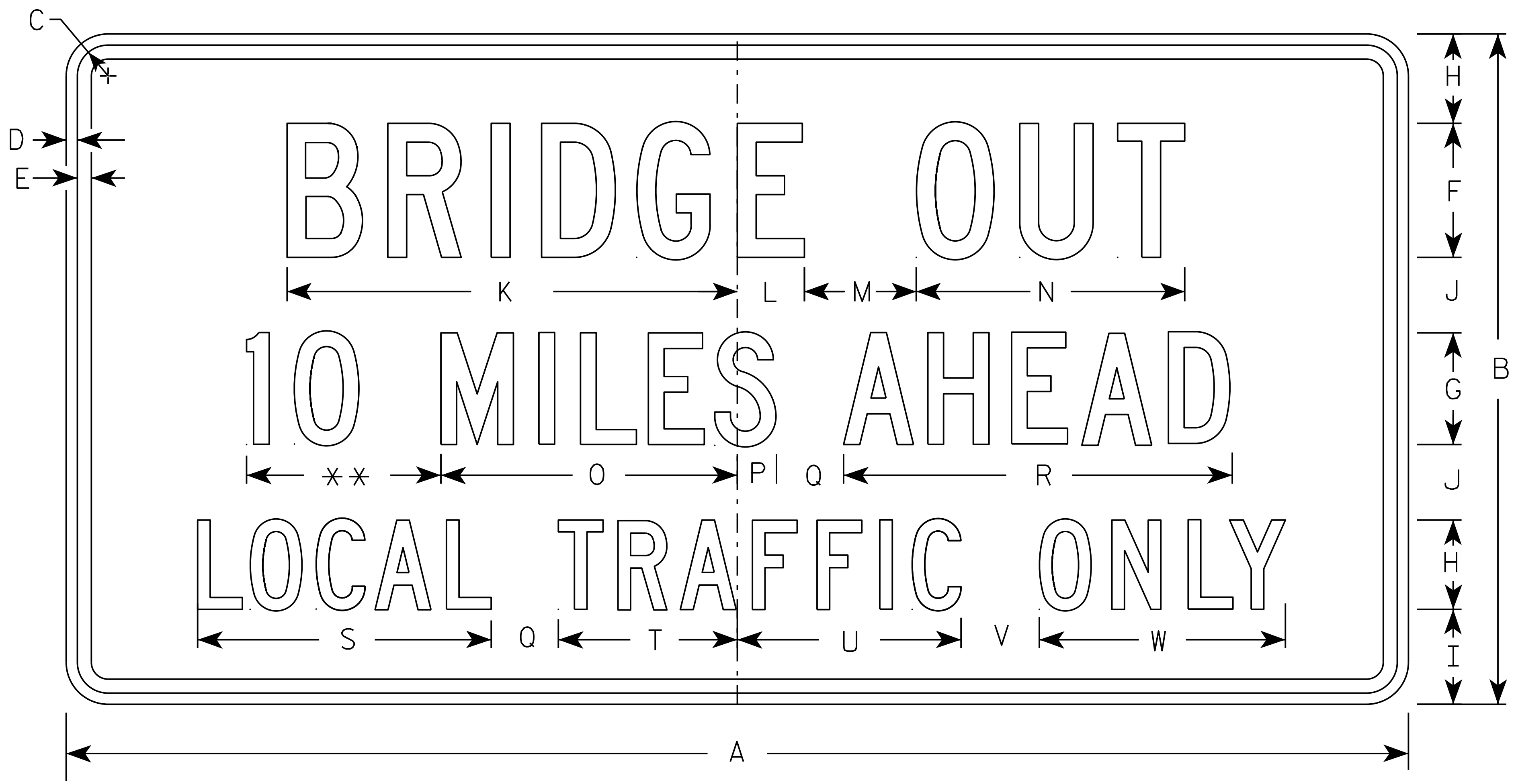
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R113.DGN PLOT DATE : 14-JUNE 2021 10:04 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7

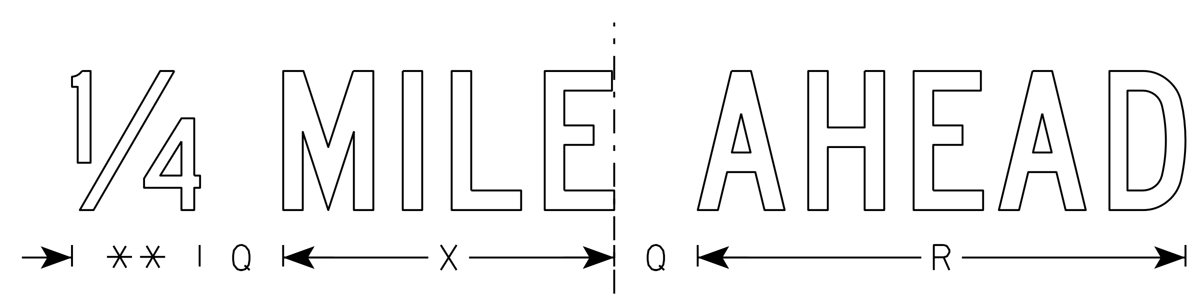
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3B

** See Note 5



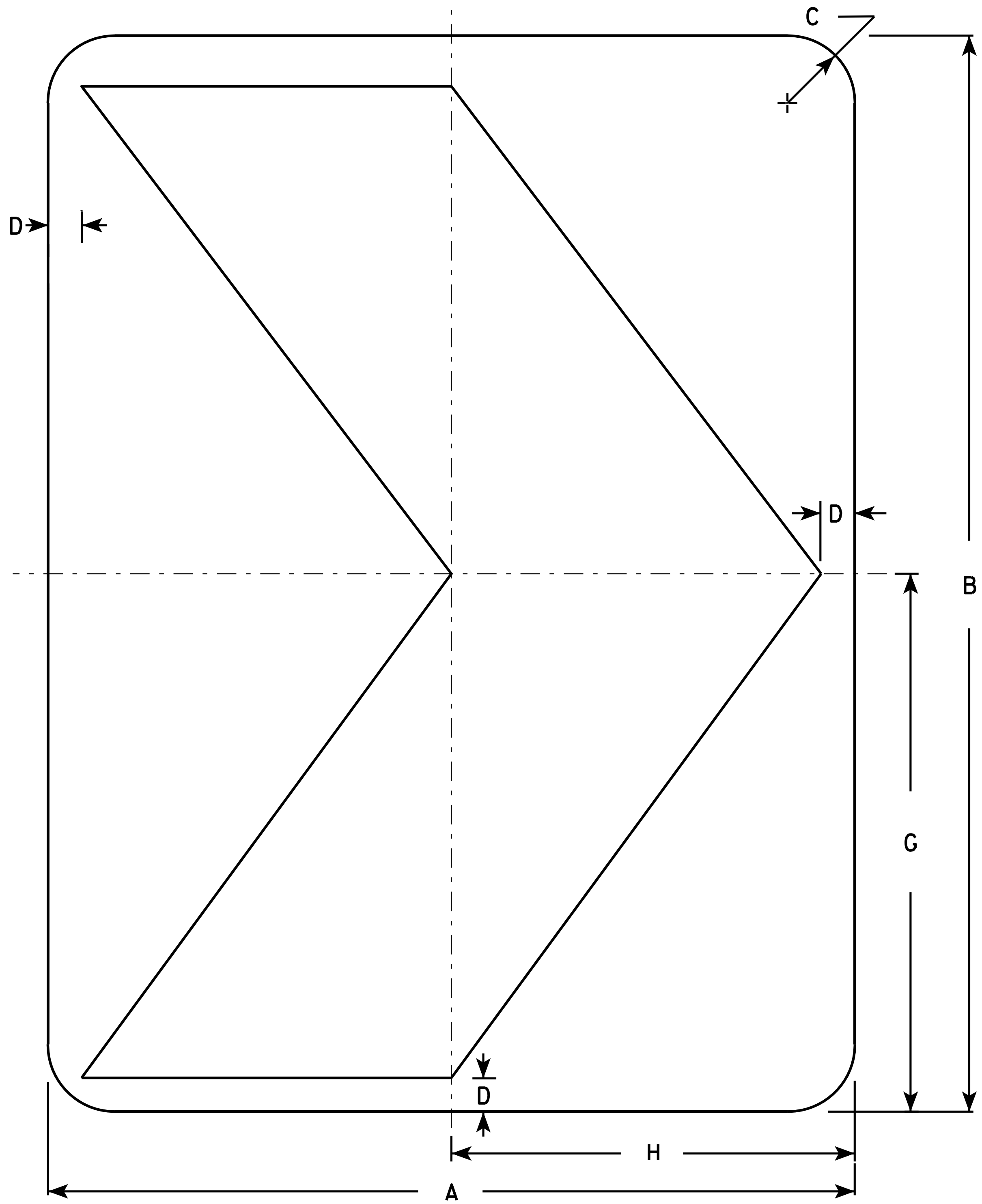
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. R11-3B.3



W1-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 ½	½			9	6																			1.5
2S	18	24	1 ½	¾			12	9																			3.0
2M	18	24	1 ½	¾			12	9																			3.0
3	24	30	1 ½	1			15	12																			5.0
4	30	36	1 ⅞	1 ¼			18	15																			7.5
5	36	48	2 ¼	1 ½			24	18																			12.0

STANDARD SIGN
W1-8

WISCONSIN DEPT OF TRANSPORTATION

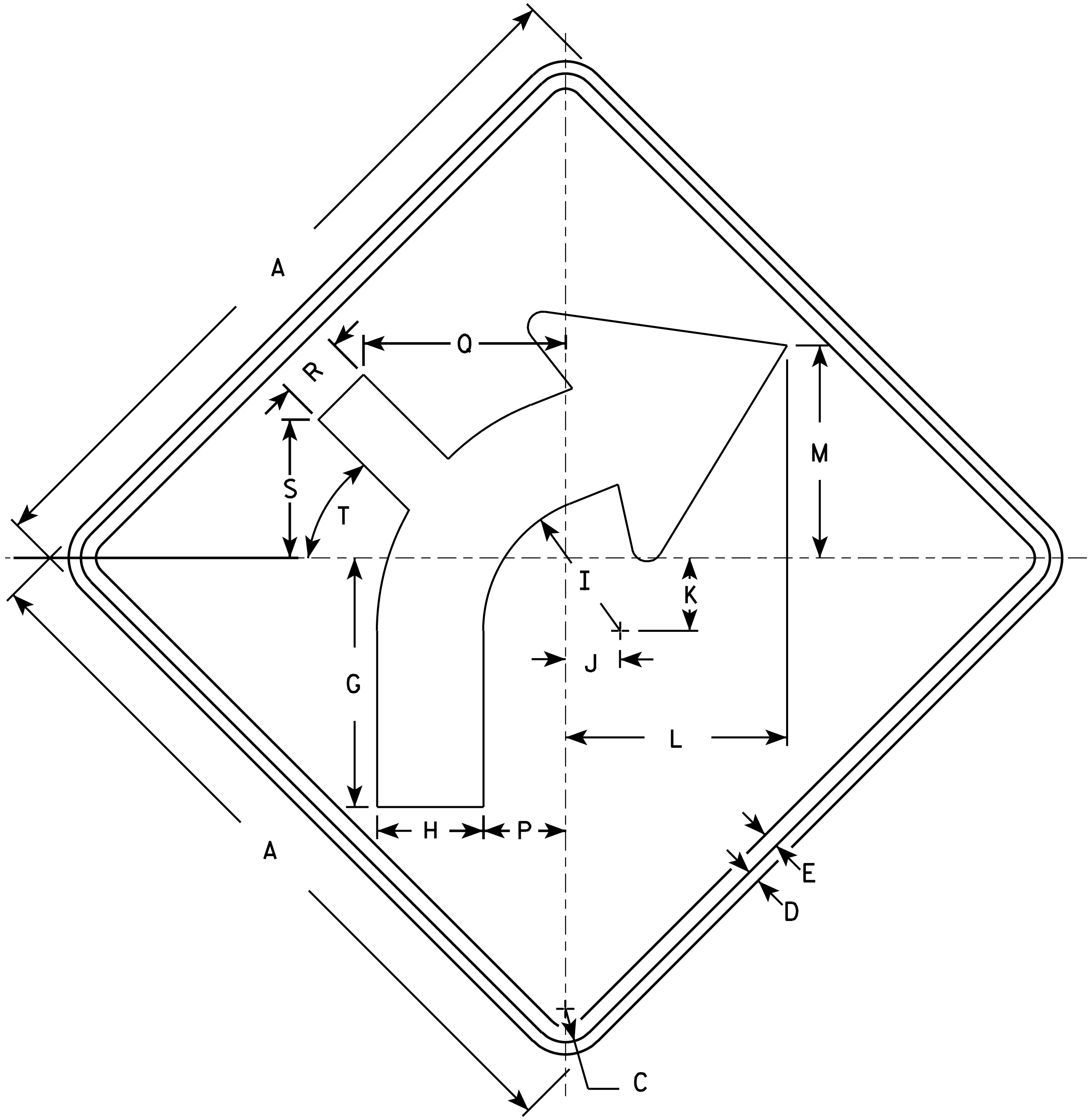
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

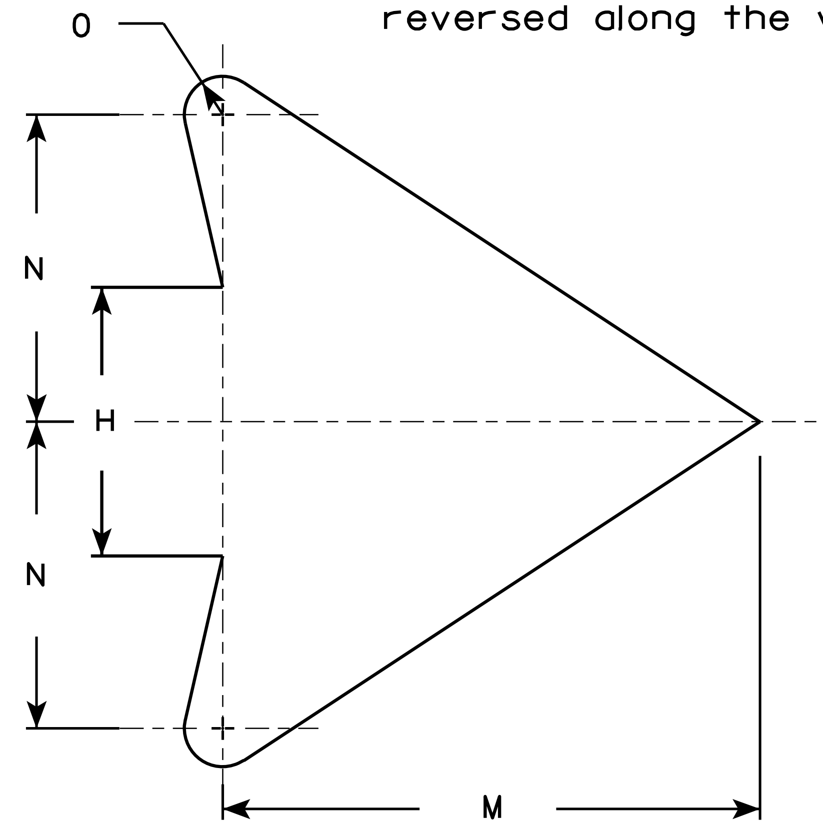
7 7

PROJECT NO:

SHEET NO: 132 E



W1-10R



ARROW DETAIL

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-10L is the same as W1-10R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2	2 5/8	6 5/8	2 1/8	4 1/2	45°							4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8	3 3/8	8 3/8	2 5/8	5 3/4	45°							6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1	5 3/8	13 1/4	4 1/4	9 1/8	45°							16.0

STANDARD SIGN
W1-10

WISCONSIN DEPT OF TRANSPORTATION

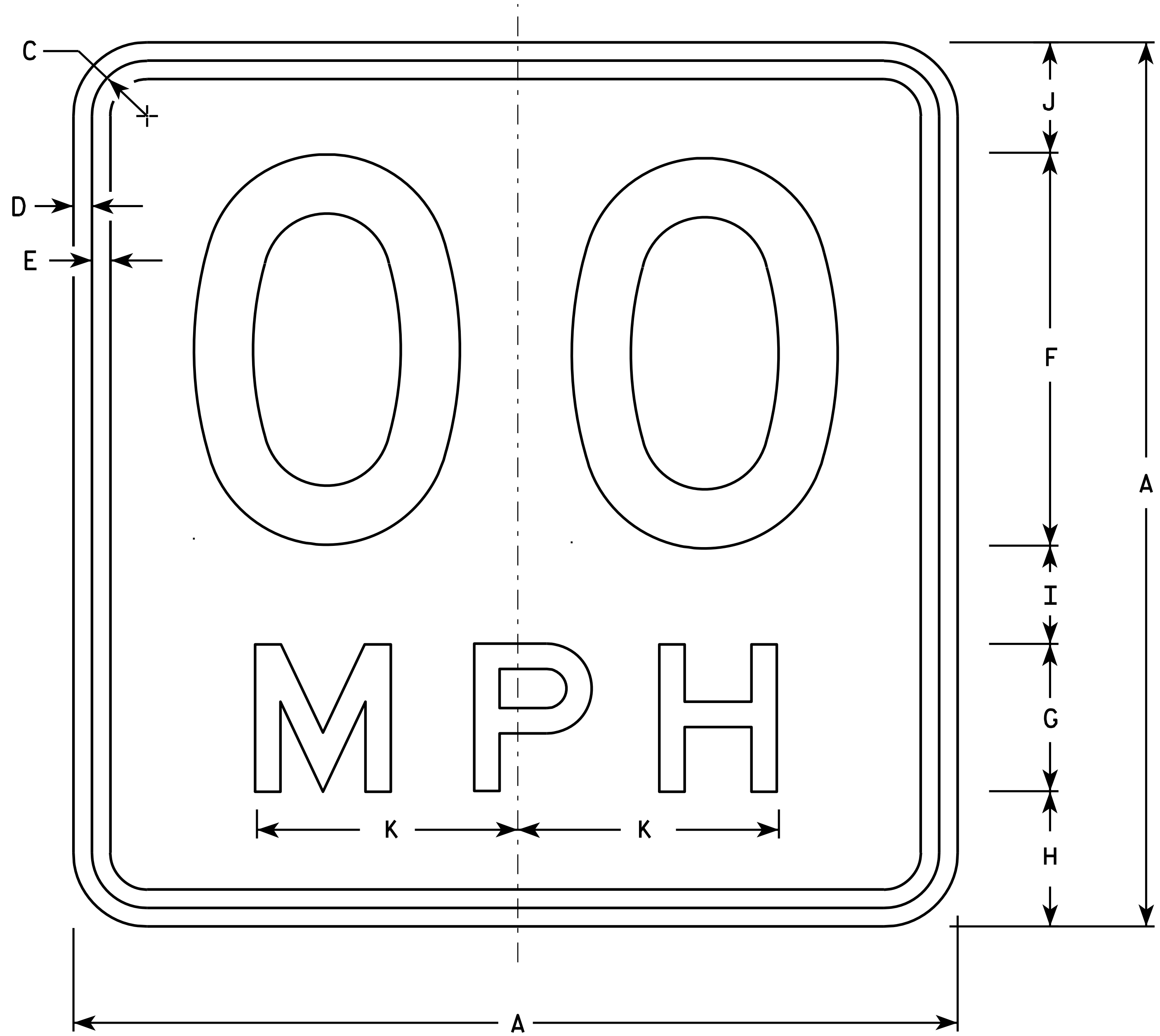
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-10.3

7

7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 133 | E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

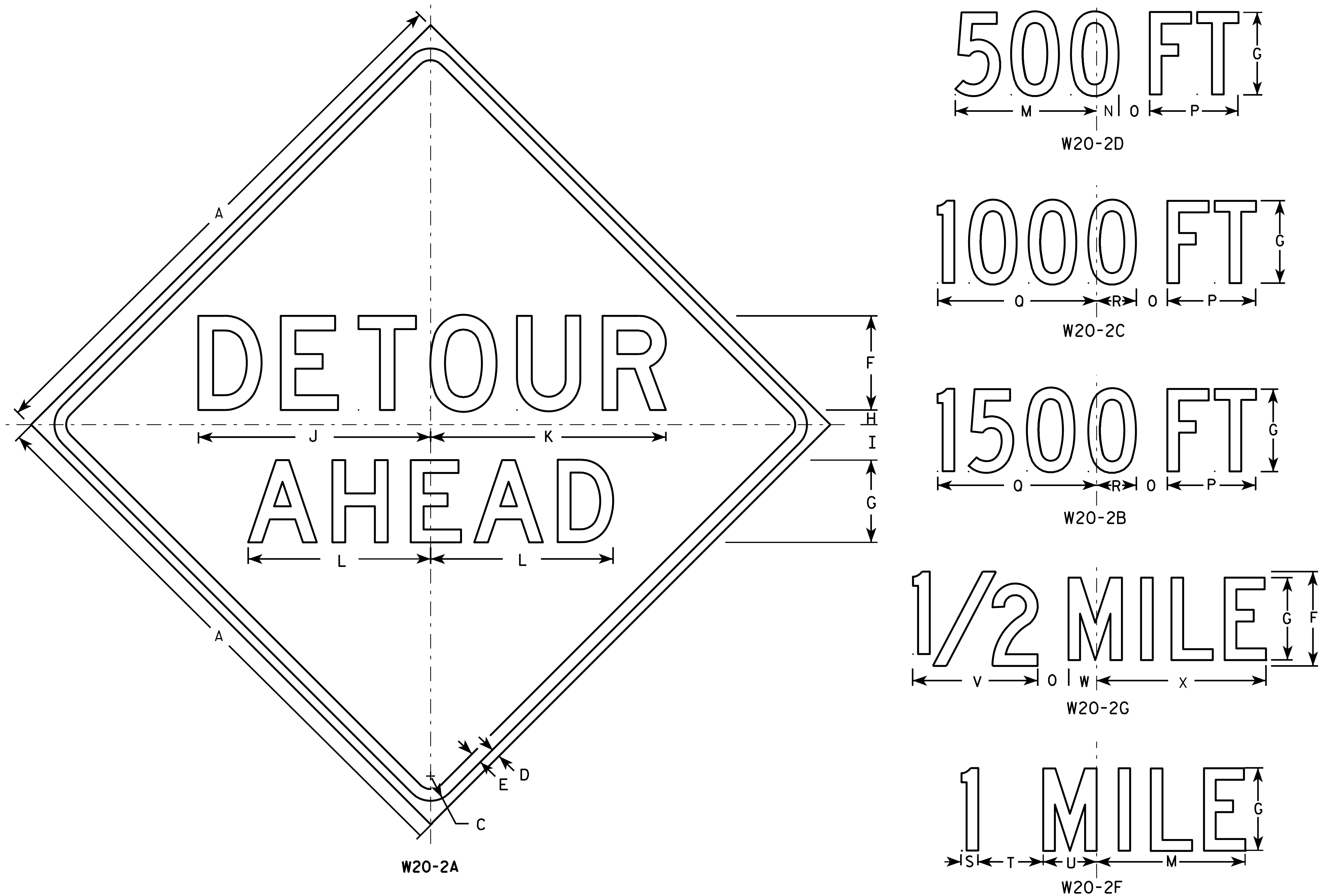
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 134 | E

7

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

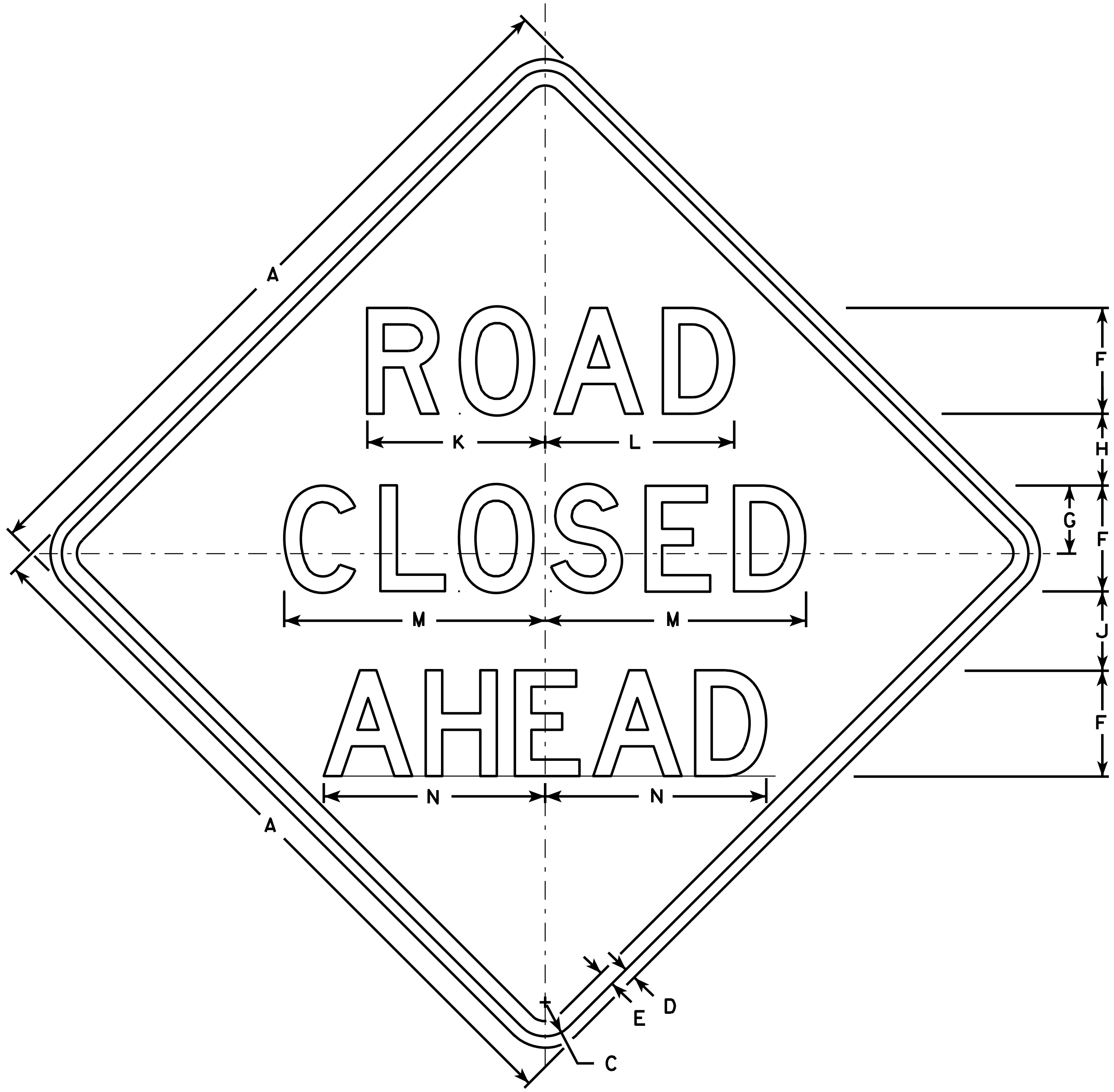
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

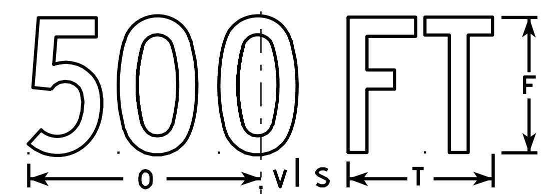
7

7

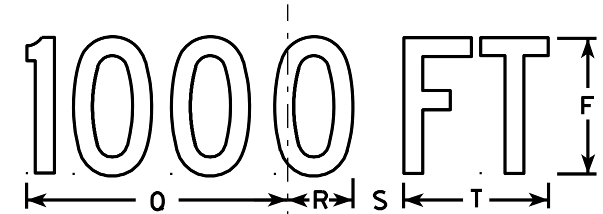
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 135 | E



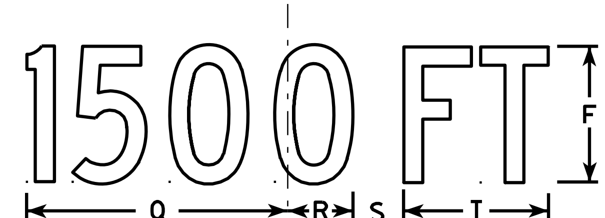
W20-3A



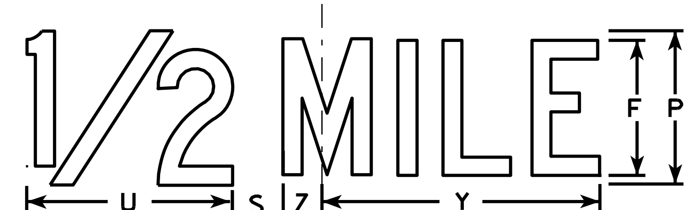
W20-3D



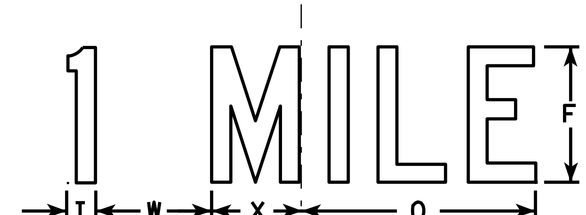
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

7

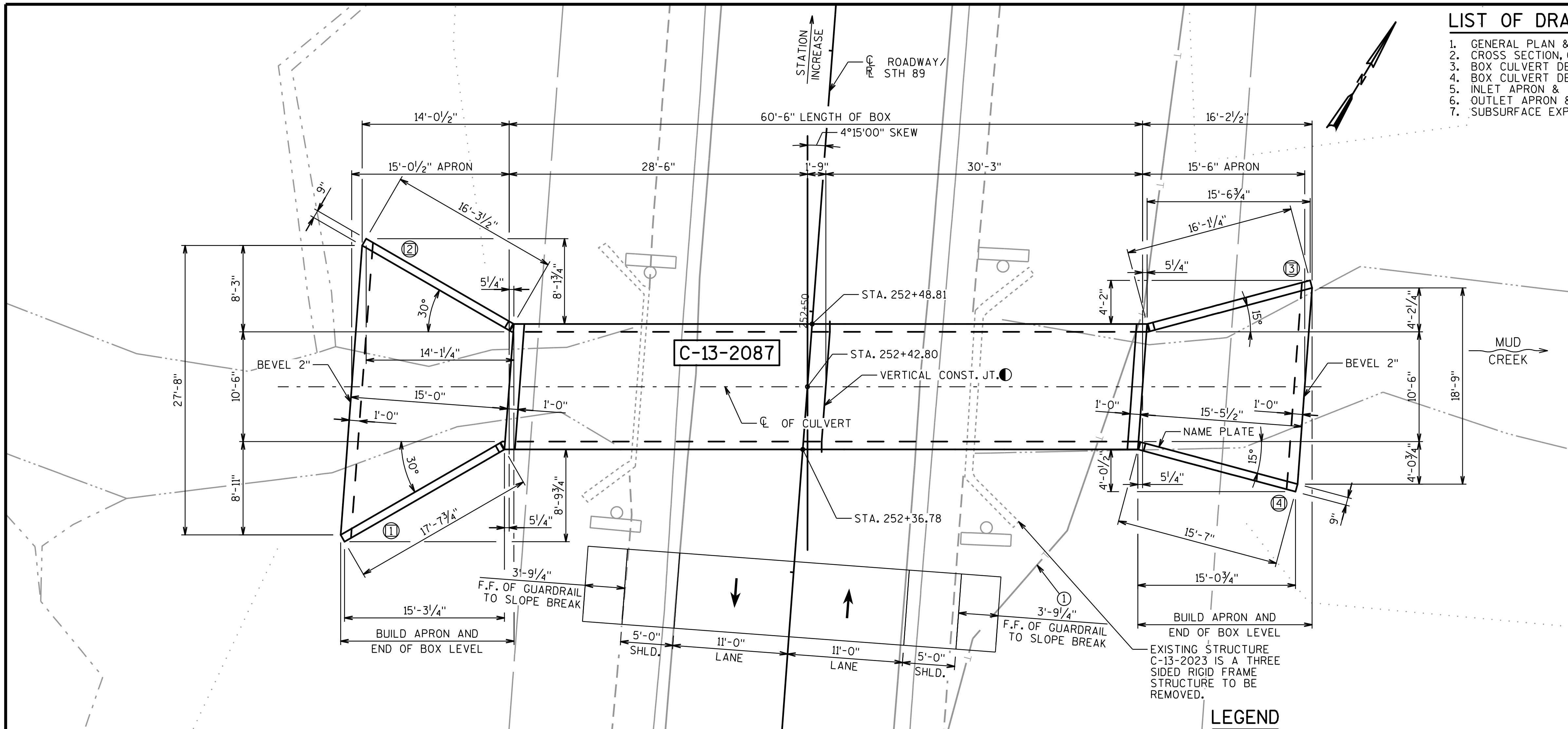
7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 136 | E

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS SECTION, QUANTITIES & NOTES
3. BOX CULVERT DETAILS (1 OF 2)
4. BOX CULVERT DETAILS (2 OF 2)
5. INLET APRON & WING DETAILS
6. OUTLET APRON & WING DETAILS
7. SUBSURFACE EXPLORATION

STATE PROJECT NUMBER
3670-00-74



PLAN

SINGLE CELL CONCRETE BOX CULVERT

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.15
OPERATING RATING FACTOR: RF = 1.49
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

EARTH LOAD:

DESIGNED FOR FILL HEIGHT RANGE OF 3 TO 4 FEET.

MATERIAL PROPERTIES:

CONCRETE MASONRY ____ f'c = 3.5 KSI
BAR STEEL REINFORCEMENT ____ fy = 60 KSI

TRAFFIC DATA

STH 89

EXISTING ADT = 1,960 (2022)
FUTURE ADT = 1,960 (2042)
RDS = 60 MPH

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 190 C.F.S.
VEL. = 5.2 F.P.S.
HW_{100} = EL. 855.91
WATERWAY AREA = 36.5 SQ.FT.
DRAINAGE AREA = 2.1 SQ.MI.
ROADWAY OVERTOPPING = N.A.
SCOUR CODE = 8

2 YEAR FREQUENCY

Q_2 = 60 C.F.S.
VEL. = 3.1 F.P.S.
HW_2 = EL. 853.96

ABBREVIATIONS LIST

Q = FLOW
VEL. = VELOCITY
HW = HIGH WATER
DES. = DESIGN

UTILITY NOTES

① EXISTING FRONTIER COMMUNICATION LINE TO BE RELOCATED

LEGEND

◐ PLACE 18" (MIN.) WIDE RUBBERIZED MEMBRANE WATERPROOFING ON TOP SLAB AND EXTEND DOWN WALLS TO 6" BELOW THE TOP OF THE BOTTOM SLAB AT VERTICAL CONSTRUCTION JOINTS.

◩ PLACE 18" (MIN.) WIDE RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZONTAL CONSTRUCTION JOINT IN THE WING.

△ UNDERCUT 1'-0". EXCAVATION FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE GEOTEXTILE TYPE 'C' AND BACKFILL WITH 'BREAKER RUN'. EXTEND 3'-0" BEYOND FOOTPRINT OF CULVERT AND WINGWALL APRONS ON EACH SIDE AND BETWEEN CUT OFF WALLS.

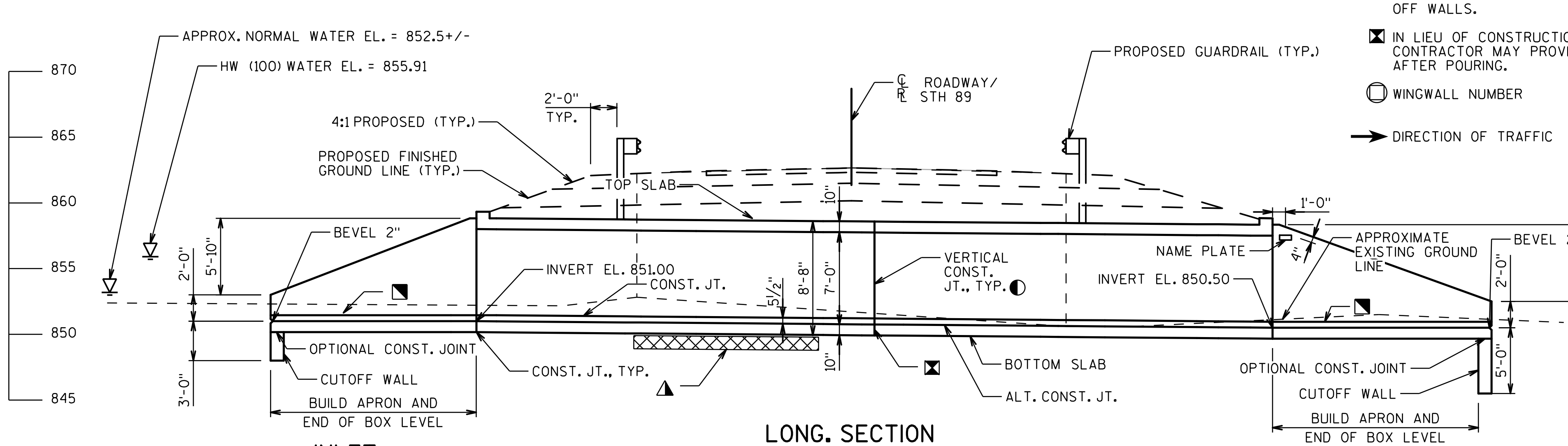
⊠ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY PROVIDE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING.

◯ WINGWALL NUMBER

→ DIRECTION OF TRAFFIC

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
MATT SCHROEDER (608) 294-5003



LONG. SECTION

(LOOKING NORTHWEST - NORMAL TO BOX AND ALONG SOUTH WINGWALL FACES)

WISCONSIN PROFESSIONAL ENGINEER MATTHEW S. SCHROEDER E-42428 JOHNSON CREEK, WI

6/1/2023

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

HNTB 250 E WISCONSIN AVE #2000 MILWAUKEE, WI 53202 (414) 359-2300

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/22/23

CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE C-13-2087

S.T.H. 89 OVER MUD CREEK

COUNTY	DANE	TOWN	YORK

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	JWO	DESIGN CK'D.	MSS	DRAWN BY	JWO	PLANS CK'D.	MSS

GENERAL PLAN & ELEVATION

SHEET 1 OF 7

8

FILE NAME : \\milw00\ingrproj\71734\Work Order 7\b1\C-13-2087\cds\C-13-2087_080101_gp.dgn PLOT DATE : 5/15/2023 7:52:14 AM PLOT BY : msschroeder PLOT NAME : $FILE$ PLOT SCALE : 12:1

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
203.0220.01	REMOVING STRUCTURE C-13-2023	EACH	1
206.2001.01	EXCAVATION FOR STRUCTURES CULVERTS C-13-2087	EACH	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	1,093
311.0110	BREAKER RUN	TON	120
504.0100	CONCRETE MASONRY CULVERTS	CY	100
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	10,710
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,690
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	21
645.0105	GEOTEXTILE TYPE C	SY	205
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	3/4"
	NAME PLATE	EACH	1

ALL ITEMS ARE CATEGORY 0020

GENERAL NOTES

DESIGN IS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9TH EDITION, 2020 WITH ALL INTERIM REVISIONS THROUGH 2016, UNLESS OTHERWISE NOTED.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE. ALL BAR STEEL REINFORCEMENT ARE ENGLISH DESIGNATION.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WisCRS), DANE COUNTY, NAD83 (2011). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD88 (2012).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. THE UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

NAME PLATE SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "CONCRETE MASONRY CULVERTS". REFER TO S.D.D. "NAME PLATE (STRUCTURES)" FOR NAME PLATE DETAILS.

THE PROPOSED CULVERT WILL REPLACE EXISTING STRUCTURE C-13-2023. EXISTING STRUCTURE C-13-2023 IS A THREE-SIDED RIGID FRAME STRUCTURE APPROXIMATELY 11'-0" WIDE x 33'-0" LONG.

CONSTRUCT C-13-2087 WHILE HWY 89 IS CLOSED. WATER WILL BE DIVERTED AROUND THE CULVERT DURING CONSTRUCTION. SEE ROADWAY PLANS FOR MORE INFORMATION.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND APRON WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

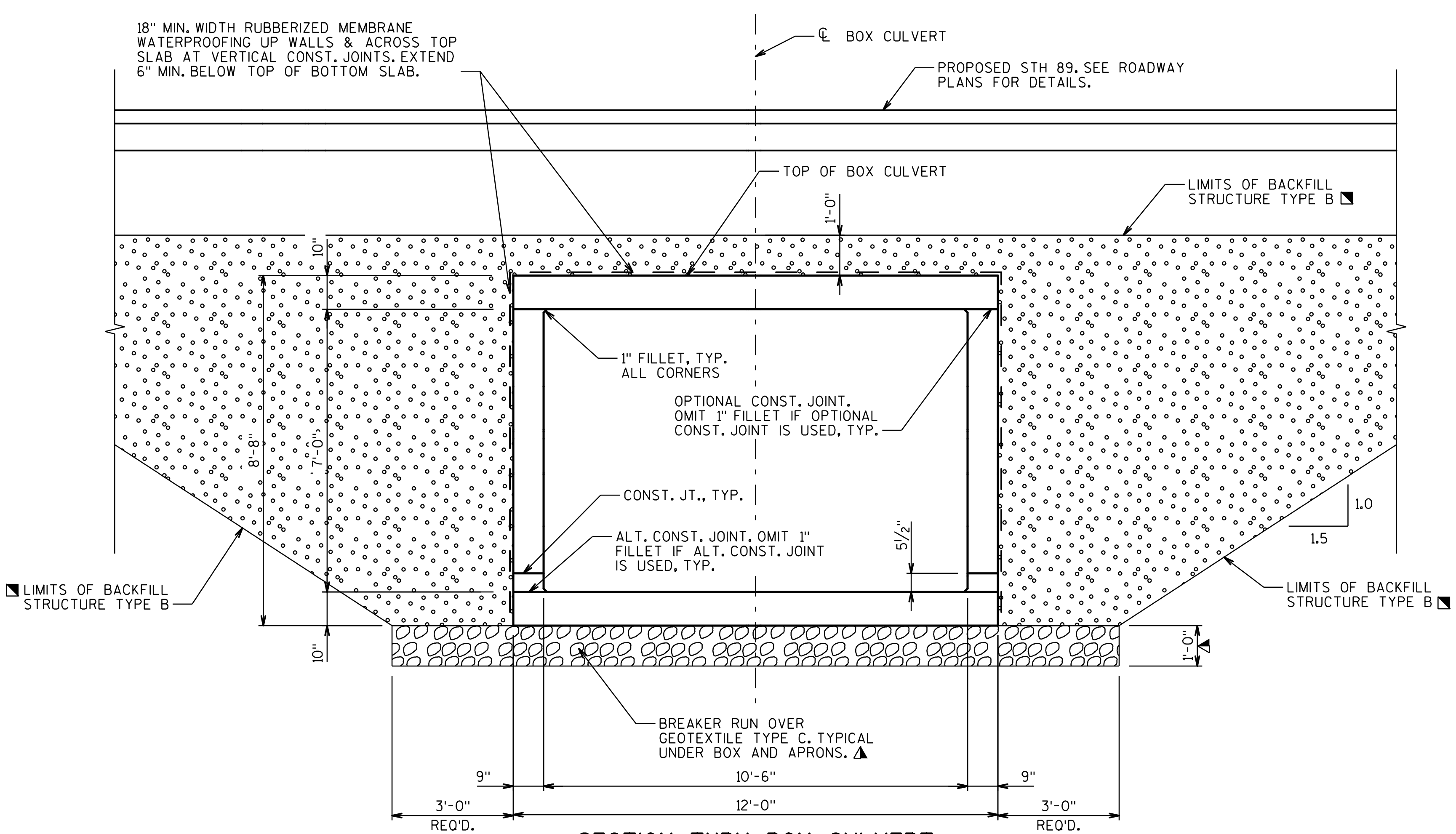
◪ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-13-2087" SHALL BE THE EXISTING GROUND LINE OR EXISTING STREAM BED.

▲ UNDERCUT 1'-0". EXCAVATION FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".

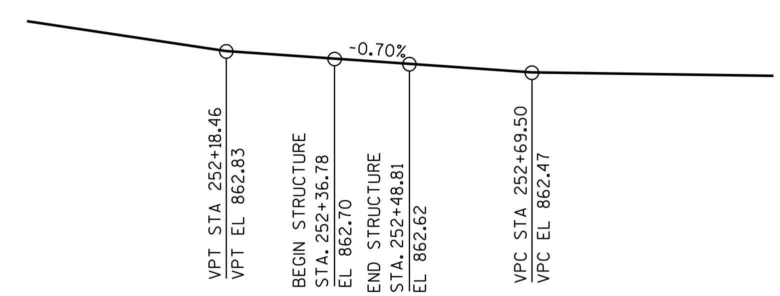
THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED. THE ALTERNATE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALL QUANTITIES AND BID PRICES.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL AND ITS CORRESPONDING STANDARDS. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".



SECTION THRU BOX CULVERT

NORMAL TO BOX ℄
(LOOKING EAST)



PROFILE GRADE LINE - ℞ STH 89

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-2087

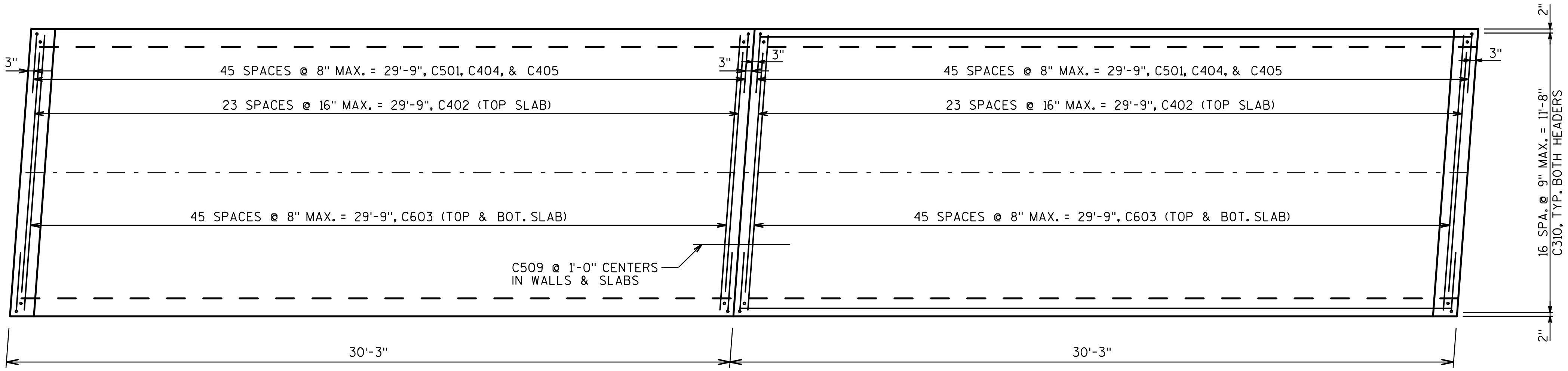
DRAWN BY: EAJ | PLANS CK'D.: MSS

CROSS SECTION, QUANTITIES & NOTES

SHEET 2 OF 7

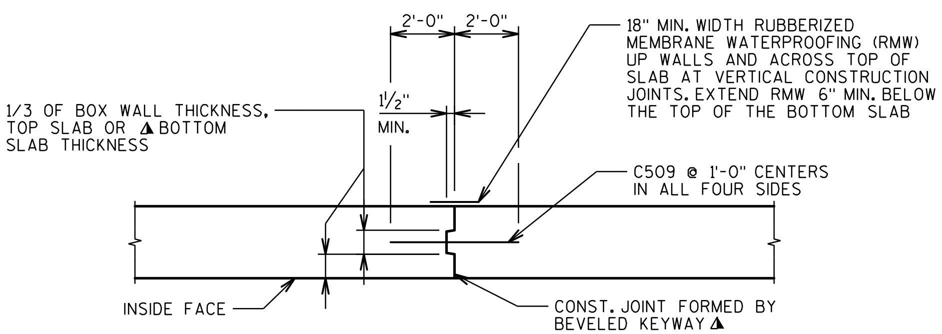
STATE PROJECT NUMBER

3670-00-74

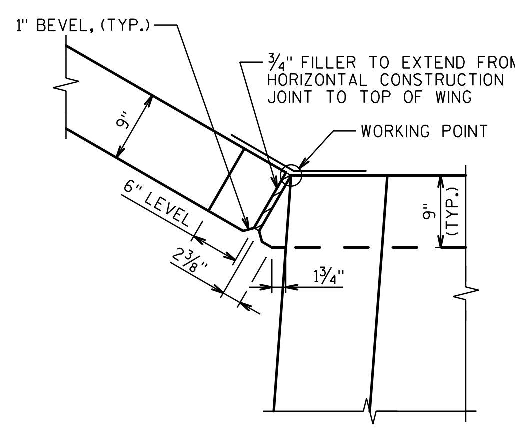


PLAN VIEW OF BOX

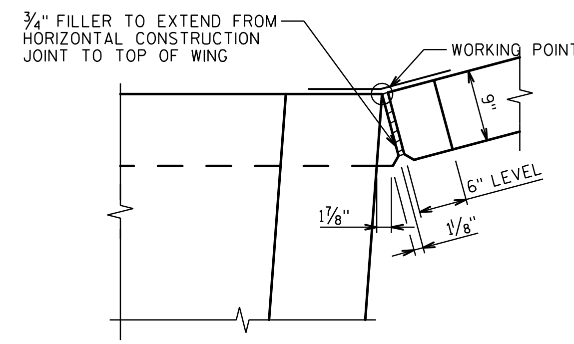
BOX SEGMENTS ARE SIMILAR



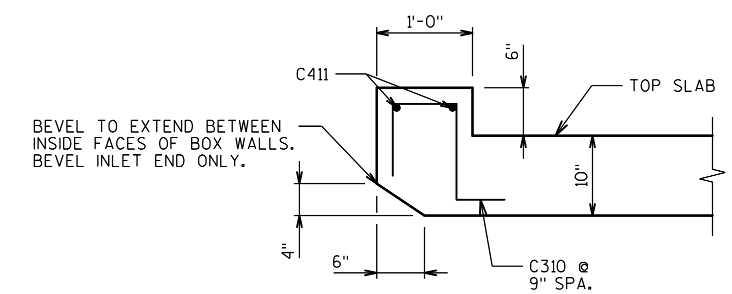
VERTICAL CONSTRUCTION JOINT



WING 2



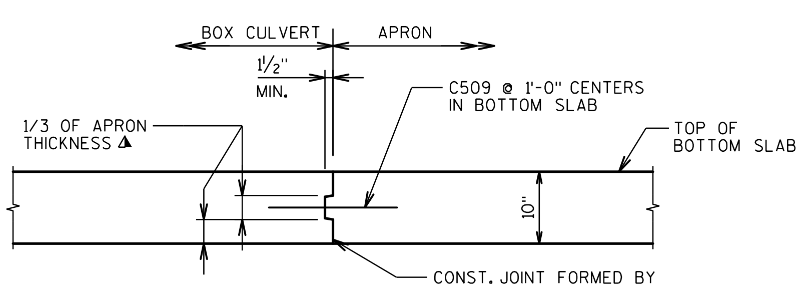
WING 3



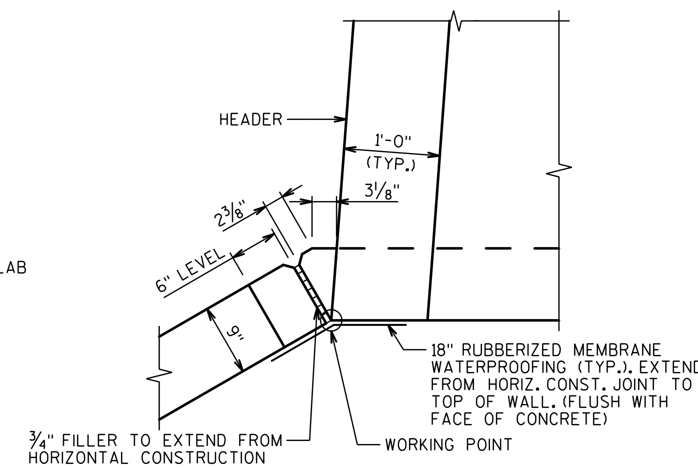
SECTION THRU TOP HEADER

LEGEND

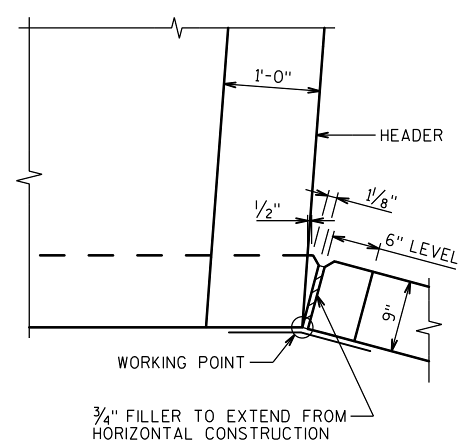
▲ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING.



APRON CONNECTION DETAIL



WING 1



WING 4

CORNER DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-2087

DRAWN BY JWO | PLANS CK'D. MSS

BOX CULVERT DETAILS (1 OF 2)

SHEET 3 OF 7

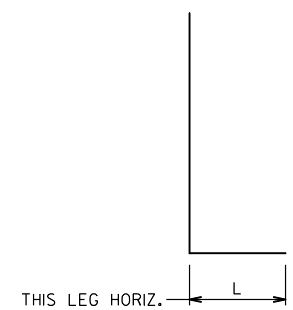
8

8

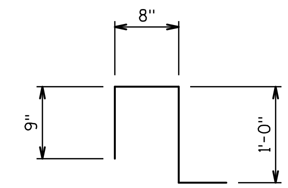
FILE NAME : \\milw00\ingrproj\71734\Work Order 7\b1\C-13-2087\cds\C-13-2087_080103_ts .dgn PLOT DATE : 5/15/2023 7:53:00 AM PLOT BY : msschroeder PLOT NAME : $FILE$ PLOT SCALE : 6:1

BILL OF BARS - CULVERT BARREL

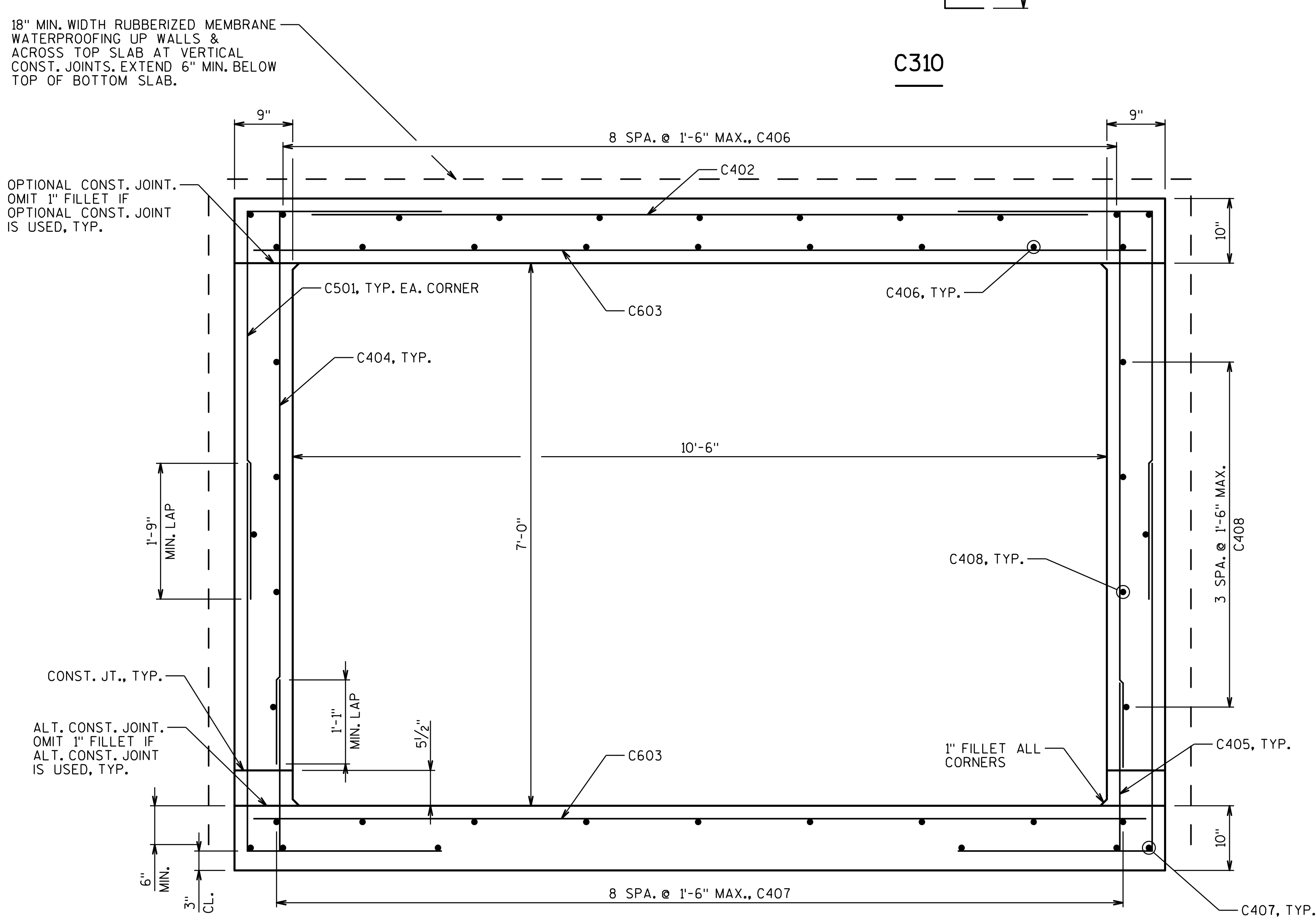
MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C501		368	7'- 5"	X		CORNERS - TOP & BOTTOM
C402		48	10'- 0"			EXT. TRANS. TOP SLAB
C603		184	11'- 6"			INT. TRANS. TOP & BOTTOM SLAB
C404		184	7'- 2"			WALL VERTICAL
C405		184	2'- 2"			WALL DOWEL
C406		40	29'- 11"			LONGIT. - 30'-3" PANELS, TOP SLAB
C407		30	29'- 11"			LONGIT. - 30'-3" PANELS , BOTTOM SLAB
C408		20	29'- 11"			LONGIT. - 30'-3" PANELS, WALL
C509		70	4'- 0"			CONST. JOINT DOWEL
C310		34	2'- 8"	X		HEADER - STIRRUP
C411		4	11'- 8"			HEADER



MARK	L
A402	1'- 1"
A409	3'- 8"
A510	5'- 2"
A512	6'- 9"
A419	3'- 8"
A520	5'- 2"
A522	6'- 9"
B402	1'- 1"
B409	3'- 8"
B510	5'- 2"
B512	6'- 9"
B419	3'- 8"
B520	5'- 2"
B522	6'- 9"
C501	2'- 6"



C310



SECTION THRU BOX CULVERT

BILL OF BARS - WINGWALL INLET "A"

MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		3	27'- 6"			CUTOFF WALL & EDGE OF APRON
A402		28	3'- 6"	X		CUTOFF WALL
A403		8	7'- 8"		X	APRON - LONG.
A404		12	14'- 6"			APRON - LONG.
A405		8	7'- 1"		X	APRON - LONG.
A406		14	19'- 10"		X	APRON - TRANS.
A407		3	17'- 1"			WING 1 - LONG.
A408		3	15'- 8"			WING 2 - LONG.
A409	X	6	6'- 11"	X	X	WING 1 - VERT. - B.F.
A510	X	12	8'- 8"	X		WING 1 - VERT. - B.F.
A511	X	24	4'- 5"		X	WING 1 - VERT. - B.F. & F.F.
A512	X	11	10'- 4"	X		WING 1 - VERT. - B.F.
A513	X	22	6'- 4"		X	WING 1 - VERT. - B.F. & F.F.
A414	X	6	3'- 4"		X	WING 1 - VERT. - F.F.
A515	X	23	3'- 8"			WING 1 - VERT. - B.F.
A416	X	2	17'- 1"			WING 1 - HORIZ. - B.F. & F.F.
A417	X	8	9'- 2"		X	WING 1 - HORIZ. - B.F. & F.F.
A518	X	2	18'- 0"			WING 1 - HORIZ. - TOP
A419	X	6	7'- 0"	X	X	WING 2 - VERT. - B.F.
A520	X	10	8'- 8"	X		WING 2 - VERT. - B.F.
A521	X	20	4'- 4"		X	WING 2 - VERT. - B.F. & F.F.
A522	X	11	10'- 4"	X		WING 2 - VERT. - B.F.
A523	X	22	6'- 4"		X	WING 2 - VERT. - B.F. & F.F.
A424	X	6	3'- 5"		X	WING 2 - VERT. - F.F.
A525	X	21	3'- 8"			WING 2 - VERT. - F.F.
A426	X	2	15'- 8"			WING 2 - HORIZ. - B.F. & F.F.
A427	X	8	8'- 6"		X	WING 2 - HORIZ. - B.F. & F.F.
A528	X	2	16'- 9"			WING 2 - HORIZ. - TOP

BILL OF BARS - WINGWALL OUTLET "B"

MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		5	18'- 8"			CUTOFF WALL & EDGE OF APRON
B402		19	5'- 6"	X		CUTOFF WALL
B403		4	8'- 10"		X	APRON - LONG.
B404		11	14'- 11"			APRON - LONG.
B405		4	8'- 6"		X	APRON - LONG.
B406		15	15'- 6"		X	APRON - TRANS.
B407		3	15'- 6"			WING 3 - LONG.
B408		3	15'- 1"			WING 4 - LONG.
B409	X	6	7'- 0"	X	X	WING 3 - VERT. - B.F.
B510	X	11	8'- 8"	X		WING 3 - VERT. - B.F.
B511	X	22	4'- 5"		X	WING 3 - VERT. - B.F. & F.F.
B512	X	10	10'- 4"	X		WING 3 - VERT. - B.F.
B513	X	20	6'- 4"		X	WING 3 - VERT. - B.F. & F.F.
B414	X	6	3'- 5"		X	WING 3 - VERT. - F.F.
B515	X	21	3'- 8"			WING 3 - VERT. - B.F.
B416	X	2	15'- 6"			WING 3 - HORIZ. - B.F. & F.F.
B417	X	8	8'- 5"		X	WING 3 - HORIZ. - B.F. & F.F.
B518	X	2	16'- 7"			WING 3 - HORIZ. - TOP
B419	X	6	7'- 0"	X	X	WING 4 - VERT. - B.F.
B520	X	10	8'- 8"	X		WING 4 - VERT. - B.F.
B521	X	20	4'- 5"		X	WING 4 - VERT. - B.F. & F.F.
B522	X	10	10'- 4"	X		WING 4 - VERT. - B.F.
B523	X	20	6'- 4"		X	WING 4 - VERT. - B.F. & F.F.
B424	X	6	3'- 6"		X	WING 4 - VERT. - F.F.
B525	X	20	3'- 8"			WING 4 - VERT. - F.F.
B426	X	2	15'- 1"			WING 4 - HORIZ. - B.F. & F.F.
B427	X	8	8'- 2"		X	WING 4 - HORIZ. - B.F. & F.F.
B528	X	2	16'- 1"			WING 4 - HORIZ. - TOP

STATE PROJECT NUMBER

3670-00-74

BAR SERIES TABLE - "A"

MARK	NO. REQUIRED	LENGTH
A403	1 SERIES OF 8	1'-5" TO 13'-11"
A405	1 SERIES OF 8	1'-3" TO 12'-10"
A406	1 SERIES OF 14	12'-3" TO 27'-5"
A409	1 SERIES OF 6	6'-1" TO 7'-9"
A511	2 SERIES OF 12	3'-6" TO 5'-4"
A513	2 SERIES OF 11	5'-6" TO 7'-2"
A414	1 SERIES OF 6	2'-6" TO 4'-2"
A417	2 SERIES OF 4	2'-7" TO 15'-10"
A419	1 SERIES OF 6	6'-1" TO 7'-11"
A521	2 SERIES OF 10	3'-6" TO 5'-2"
A523	2 SERIES OF 11	5'-5" TO 7'-2"
A424	1 SERIES OF 6	2'-6" TO 4'-4"
A427	2 SERIES OF 4	2'-5" TO 14'-7"

BAR SERIES TABLE - "B"

MARK	NO. REQUIRED	LENGTH
B403	1 SERIES OF 4	3'-1" TO 14'-6"
B405	1 SERIES OF 4	3'-0" TO 14'-0"
B406	1 SERIES OF 15	11'-8" TO 19'-3"
B409	1 SERIES OF 6	6'-1" TO 7'-11"
B511	2 SERIES OF 11	3'-6" TO 5'-4"
B513	2 SERIES OF 10	5'-7" TO 7'-2"
B414	1 SERIES OF 6	2'-6" TO 4'-4"
B417	2 SERIES OF 4	2'-5" TO 14'-5"
B419	1 SERIES OF 6	6'-1" TO 8'-0"
B521	2 SERIES OF 10	3'-7" TO 5'-3"
B523	2 SERIES OF 10	5'-6" TO 7'-2"
B424	1 SERIES OF 6	2'-6" TO 4'-5"
B427	2 SERIES OF 4	2'-4" TO 13'-11"

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-2087

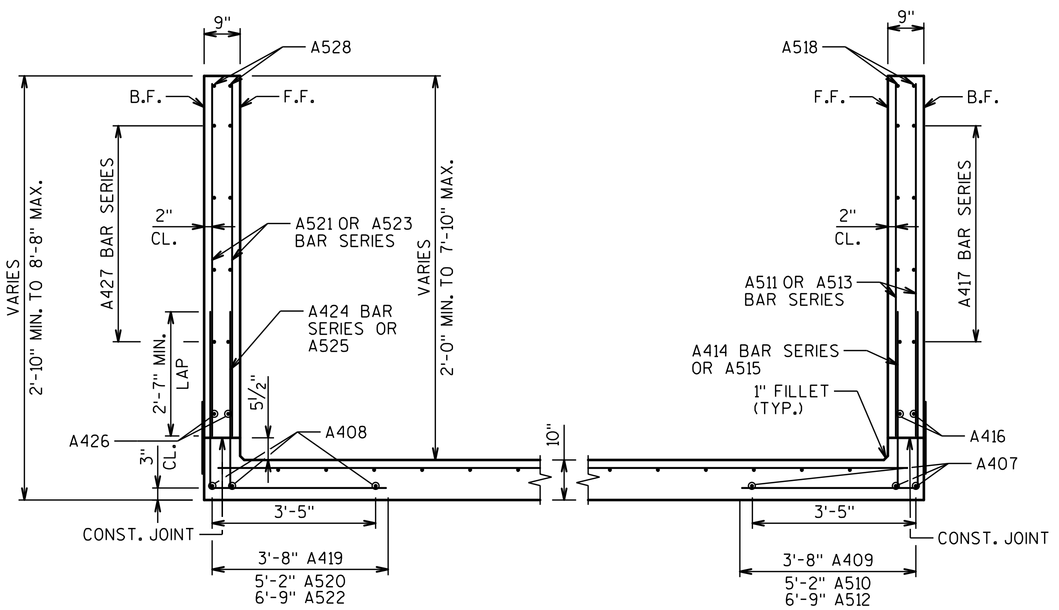
DRAWN BY JWO | PLANS CK'D. MSS

BOX CULVERT DETAILS (2 OF 2)

SHEET 4 OF 7

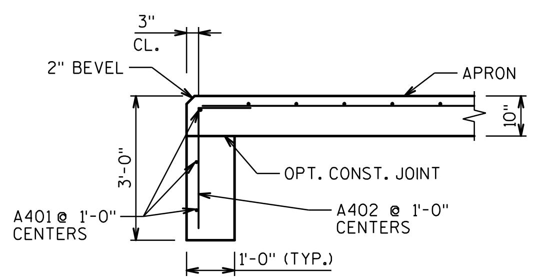
FILE NAME : \\milw00\ingrproj\71734\Work Order 7\b1\C-13-2087\cds\C-13-2087_080104_ts.dgn PLOT DATE : 5/15/2023 7:53:05 AM PLOT BY : msschroeder PLOT NAME : $FILE$ PLOT SCALE : 2:1

STATE PROJECT NUMBER
3670-00-74

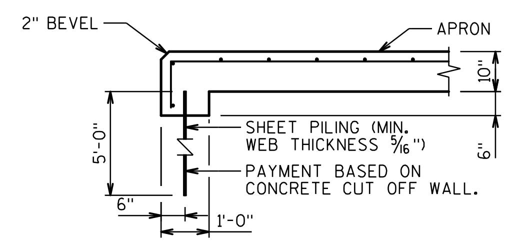


SECTION THRU WINGS

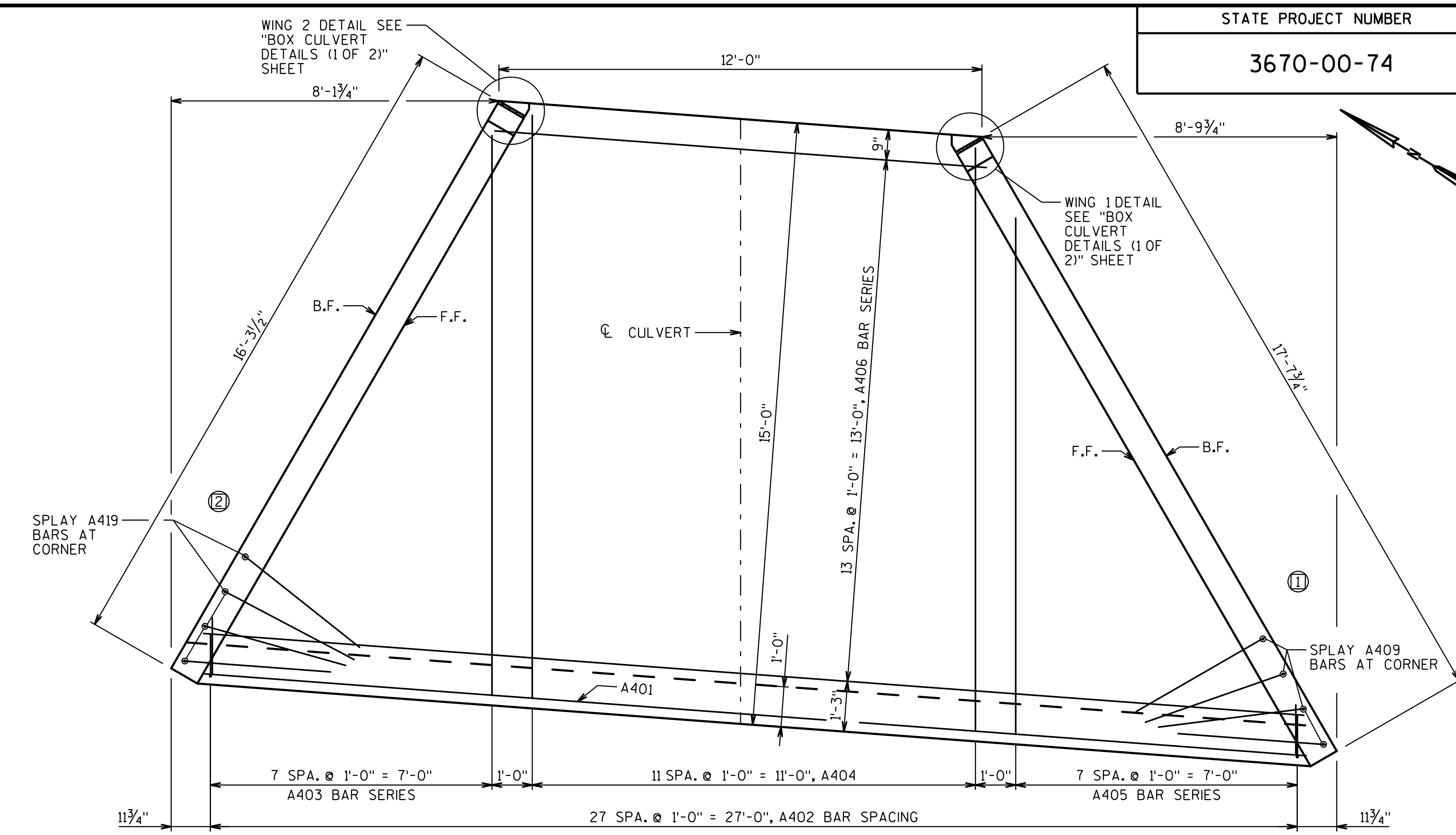
(NORMAL TO WING WALLS)



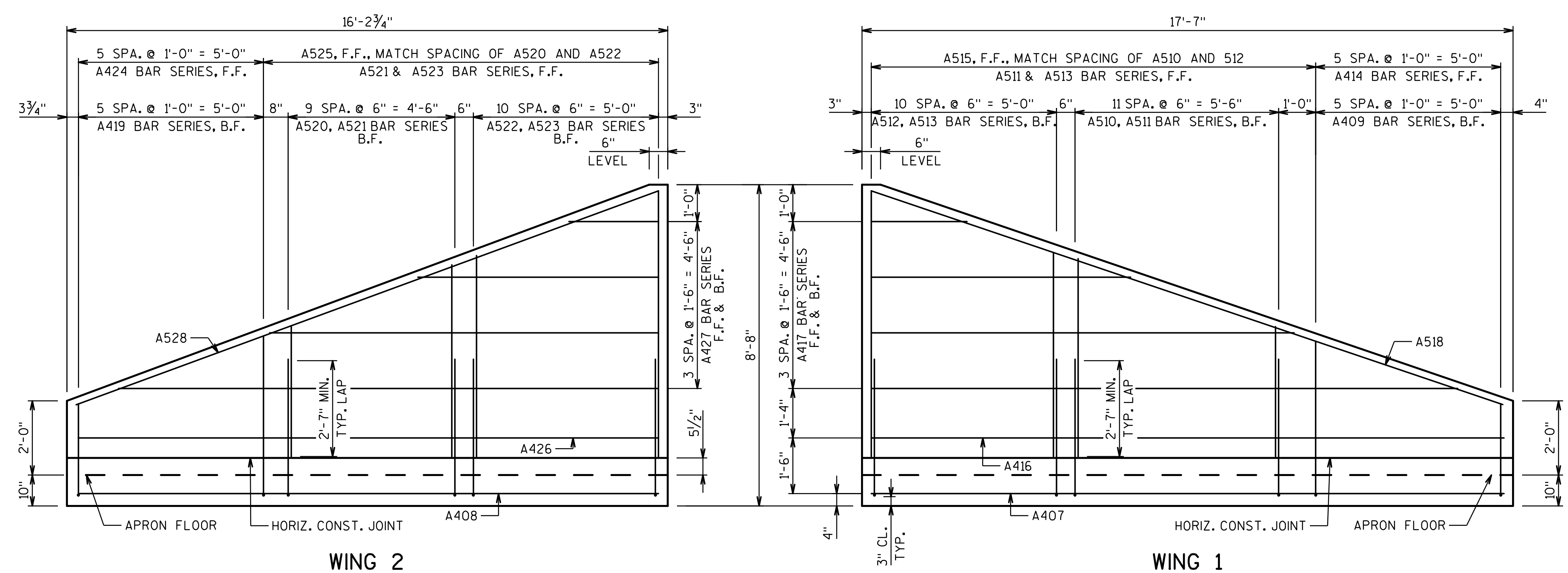
SECTION THRU INLET CUT-OFF WALL



ALTERNATE CUT-OFF WALL



INLET APRON PLAN



WING 2

WING 1

INLET WING ELEVATION

LEGEND

B.F. = BACK FACE

F.F. = FRONT FACE

◯ WING NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-2087

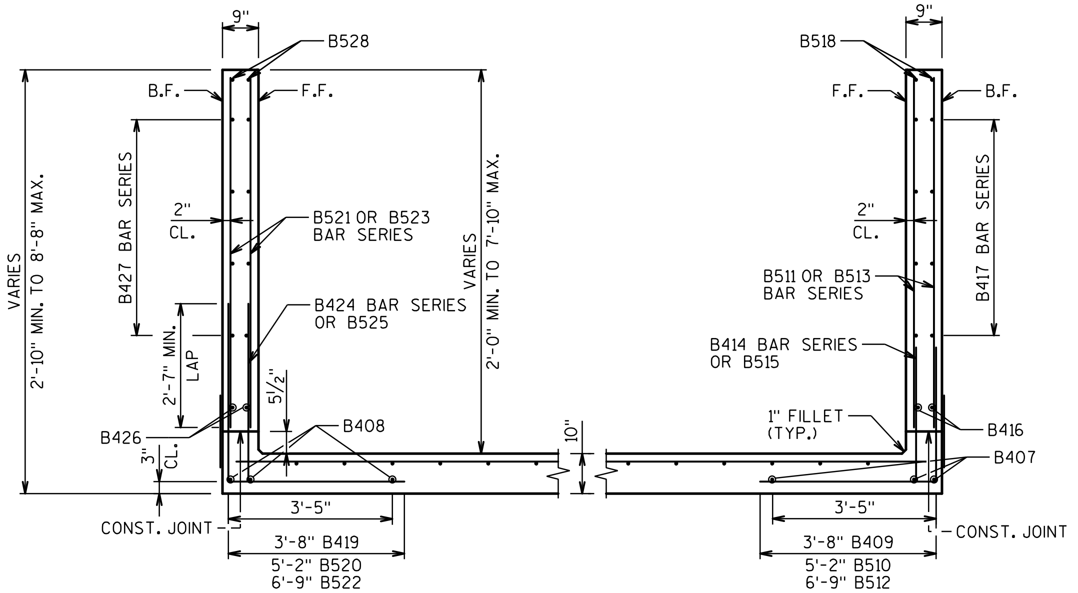
DRAWN BY JWO | PLANS CK'D. MSS

INLET APRON & WING DETAILS

SHEET 5 OF 7

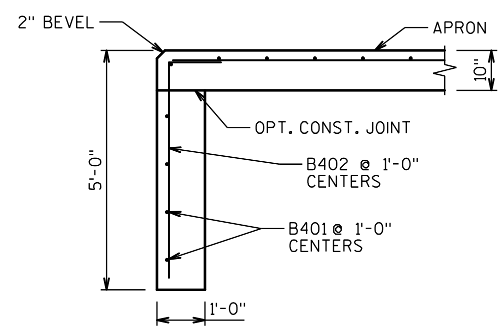
8

FILE NAME : \\milw00\ingrproj\71734\Work Order 7\b1\C-13-2087\cds\C-13-2087_080105_ww.dgn PLOT DATE : 5/15/2023 7:53:15 AM PLOT BY : msschroeder PLOT NAME : $FILE$ PLOT SCALE : 4:1

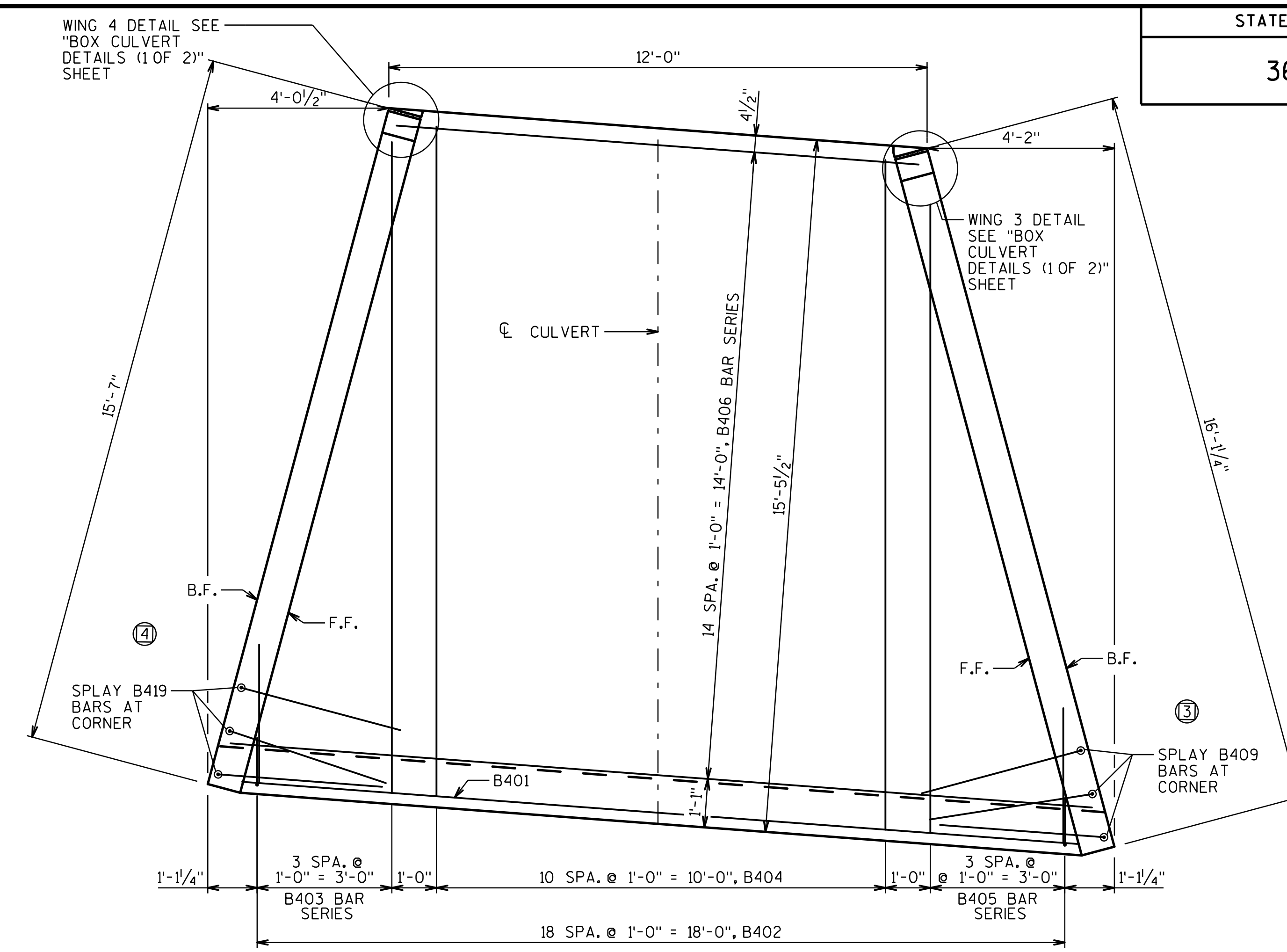


SECTION THRU WINGS

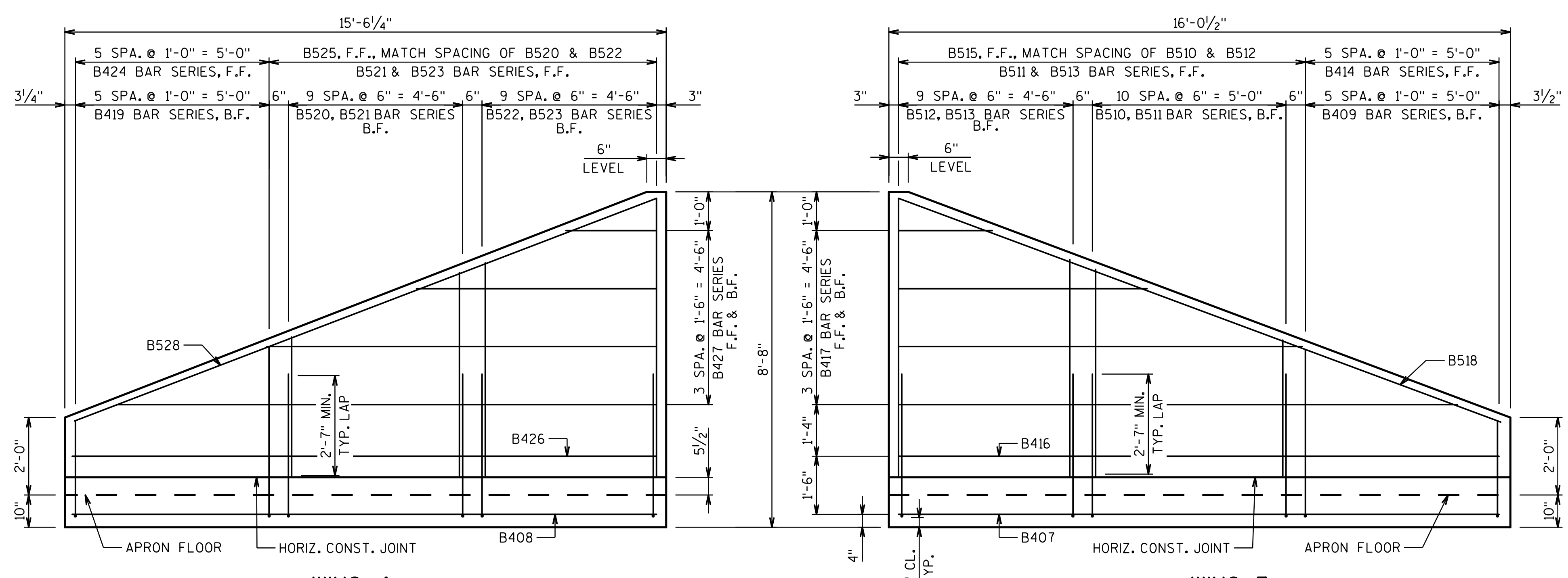
(NORMAL TO WING WALLS)



SECTION THRU OUTLET CUT-OFF WALL



OUTLET APRON PLAN



WING 4 WING 3

OUTLET WING ELEVATION

LEGEND

B.F. = BACK FACE

F.F. = FRONT FACE

○ WING NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-2087

DRAWN BY JWO PLANS CK'D. MSS

OUTLET APRON & WING DETAILS

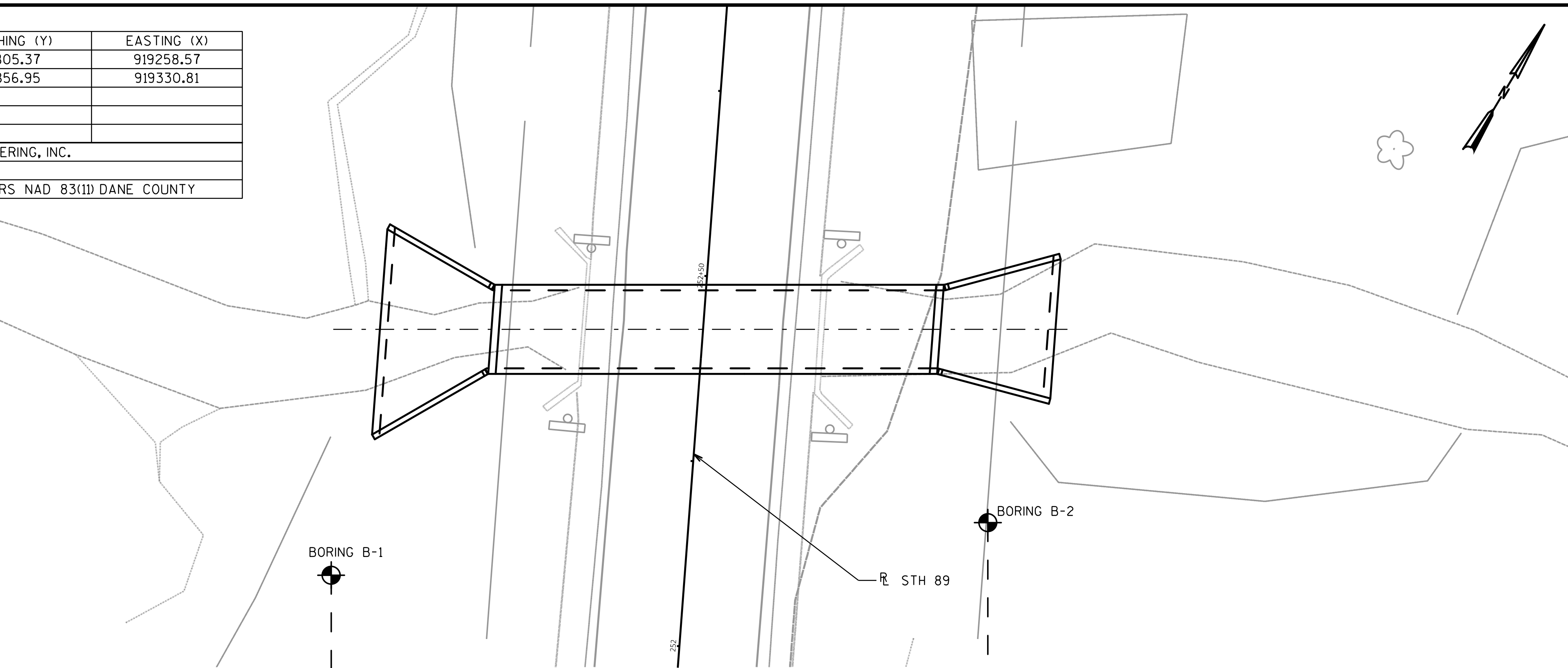
SHEET 6 OF 7

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	OCTOBER 14, 2020	541805.37	919258.57
B-2	OCTOBER 14, 2020	541856.95	919330.81

BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.
REPORT COMPLETED BY: HNTB CORP.
ALL COORDINATES REFERENCED TO WISCRS NAD 83(11) DANE COUNTY

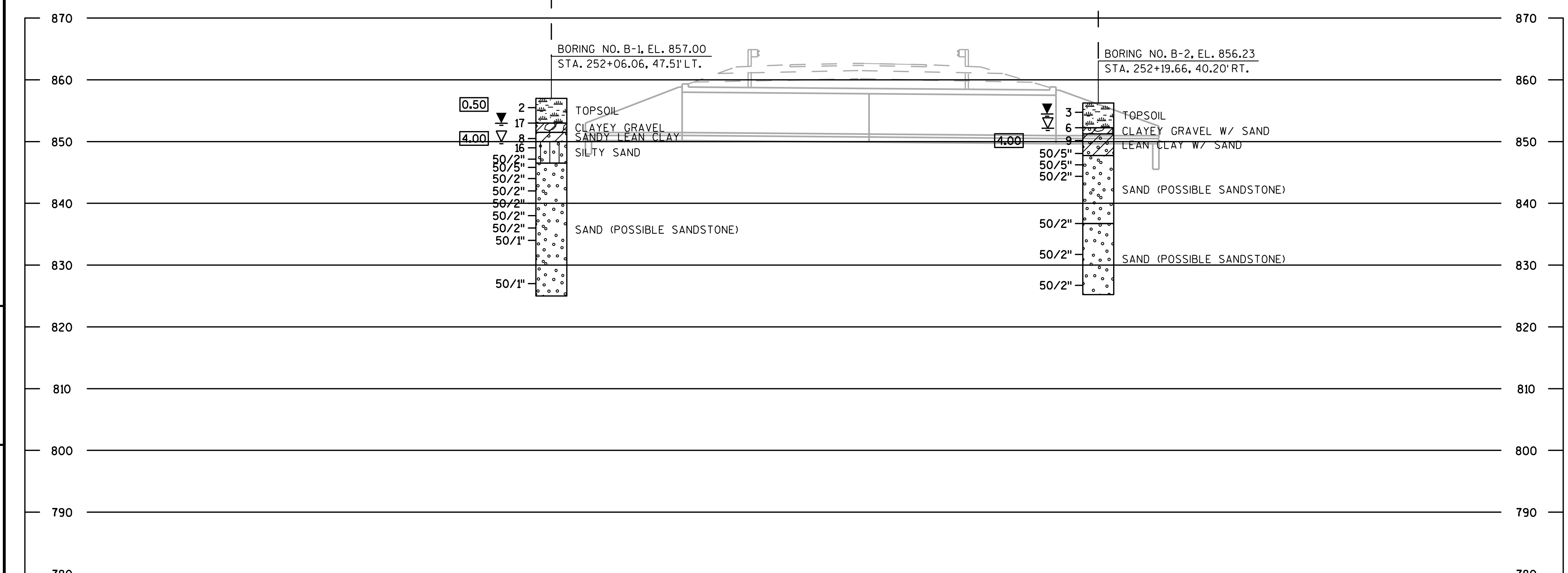
LEGEND:

DENOTES SOIL BORING LOCATION



PLAN

SINGLE CELL CONCRETE BOX CULVERT



ELEVATION

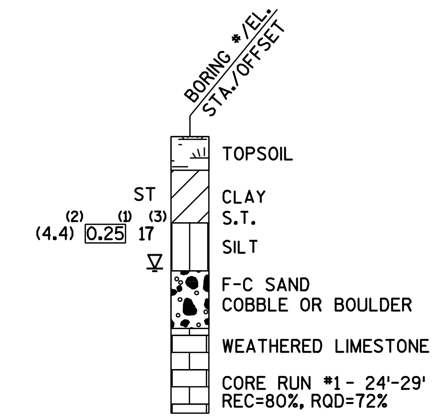
STATE PROJECT NUMBER

3670-00-74

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNCONFINED STRENGTH, AS DETERMINED BY UNCONFINED COMPRESSION TEST

(3) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE S.T.-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-2087

DRAWN BY EAJ PLANS CK'D. MSS

SUBSURFACE EXPLORATION

SHEET 7 OF 7

8

8

EARTHWORK - MAINLINE STA 156+70 - STA 177+00

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOLUME (CY) CUT NOTE 1	INCREMENTAL VOLUME (CY) FILL NOTE 2	INCREMENTAL VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) CUT 1.00 NOTE 1	CUMULATIVE VOLUME (CY) FILL NOTE 2	CUMULATIVE VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) MASS ORDINATE NOTE 4
156+70	0	0	0	0	0	0	0	0	0
157+00	185	0	103	0	0	103	0	0	103
157+50	105	0	269	0	0	372	0	0	372
158+00	77	19	169	18	23	541	18	23	518
158+50	83	18	148	34	43	689	52	66	623
159+00	63	14	135	30	38	824	82	104	720
159+50	48	58	103	67	84	927	149	188	739
160+00	54	123	94	168	210	1021	317	398	623
160+50	61	198	106	297	371	1127	614	769	358
161+00	0	77	56	255	319	1183	869	1088	95
161+50	0	70	0	136	170	1183	1005	1258	-75
162+00	204	21	189	84	105	1372	1089	1363	9
162+50	264	0	433	19	24	1805	1108	1387	418
163+00	272	0	496	0	0	2301	1108	1387	914
163+50	307	0	536	0	0	2837	1108	1387	1450
164+00	413	0	667	0	0	3504	1108	1387	2117
164+50	479	0	826	0	0	4330	1108	1387	2943
165+00	483	0	891	0	0	5221	1108	1387	3834
165+50	401	0	819	0	0	6040	1108	1387	4653
166+00	317	0	665	0	0	6705	1108	1387	5318
166+50	255	0	530	0	0	7235	1108	1387	5848
167+00	240	0	458	0	0	7693	1108	1387	6306
167+50	231	0	436	0	0	8129	1108	1387	6742
168+00	225	0	422	0	0	8551	1108	1387	7164
168+50	212	0	405	0	0	8956	1108	1387	7569
169+00	191	0	373	0	0	9329	1108	1387	7942
169+50	190	0	353	0	0	9682	1108	1387	8295
170+00	168	0	331	0	0	10013	1108	1387	8626
170+50	150	0	294	0	0	10307	1108	1387	8920
171+00	132	0	261	0	0	10568	1108	1387	9181
171+50/173+00.96	126	0	239	0	0	10807	1108	1387	9420
173+50	44	0	157	0	0	10964	1108	1387	9577
174+00	45	0	82	0	0	11046	1108	1387	9659
174+50	45	0	83	0	0	11129	1108	1387	9742
175+00	37	0	76	0	0	11205	1108	1387	9818
175+50	32	0	64	0	0	11269	1108	1387	9882
176+00	25	0	53	0	0	11322	1108	1387	9935
176+50	8	0	31	0	0	11353	1108	1387	9966
177+00	0	0	7	0	0	11360	1108	1387	9973
MAINLINE COLUMN SUBTOTALS =			11360	1108	1387	11360	1108	1387	9973

EARTHWORK - MAINLINE STA 249+71 - STA 254+77, RT

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOLUME (CY) CUT NOTE 1	INCREMENTAL VOLUME (CY) FILL NOTE 2	INCREMENTAL VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) CUT 1.00 NOTE 1	CUMULATIVE VOLUME (CY) FILL NOTE 2	CUMULATIVE VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) MASS ORDINATE NOTE 4
249+71	62	0	0	0	0	0	0	0	0
250+00	54	0	62	0	0	62	0	0	62
250+41	47	0	77	0	0	139	0	0	139
250+50	28	0	13	0	0	152	0	0	152
250+66	14	0	12	0	0	164	0	0	164
250+91	10	0	11	0	0	175	0	0	175
251+00	9	0	3	0	0	178	0	0	178
251+50	9	8	17	7	9	195	7	9	186
251+87	7	17	11	17	21	206	24	30	176
251+87	0	0	0	0	0	206	24	30	176
253+50	0	0	0	0	0	206	24	30	176
253+50	7	34	0	0	0	206	24	30	176
253+72	7	47	6	33	41	212	57	71	141
254+00	8	27	8	38	48	220	95	119	101
254+50	6	12	13	36	45	233	131	164	69
254+77	7	1	7	7	9	240	138	173	67
MAINLINE COLUMN SUBTOTALS =			240	138	173	240	138	173	67

EARTHWORK - MAINLINE STA 250+09 - STA 255+37, LT

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOLUME (CY) CUT NOTE 1	INCREMENTAL VOLUME (CY) FILL NOTE 2	INCREMENTAL VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) CUT 1.00 NOTE 1	CUMULATIVE VOLUME (CY) FILL NOTE 2	CUMULATIVE VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) MASS ORDINATE NOTE 4
250+09	12	0	0	0	0	0	0	0	0
250+50	13	0	19	0	0	19	0	0	19
251+00	9	0	20	0	0	39	0	0	39
251+14	13	0	6	0	0	45	0	0	45
251+39	15	0	13	0	0	58	0	0	58
251+50	14	0	6	0	0	64	0	0	64
251+64	14	0	7	0	0	71	0	0	71
251+87	17	0	13	0	0	84	0	0	84
251+87	0	0	0	0	0	84	0	0	84
251+87	0	0	0	0	0	84	0	0	84
253+50	0	0	0	0	0	84	0	0	84
253+50	9	2	0	0	0	84	0	0	84
253+82	12	0	12	1	1	96	1	1	95
254+00	11	2	8	1	1	104	2	2	102
254+07	11	3	3	1	1	107	3	3	104
254+32	10	4	10	3	4	117	6	7	110
255+37	7	2	43	12	15	150	15	18	132
MAINLINE COLUMN SUBTOTALS =			160	18	22	150	15	18	132

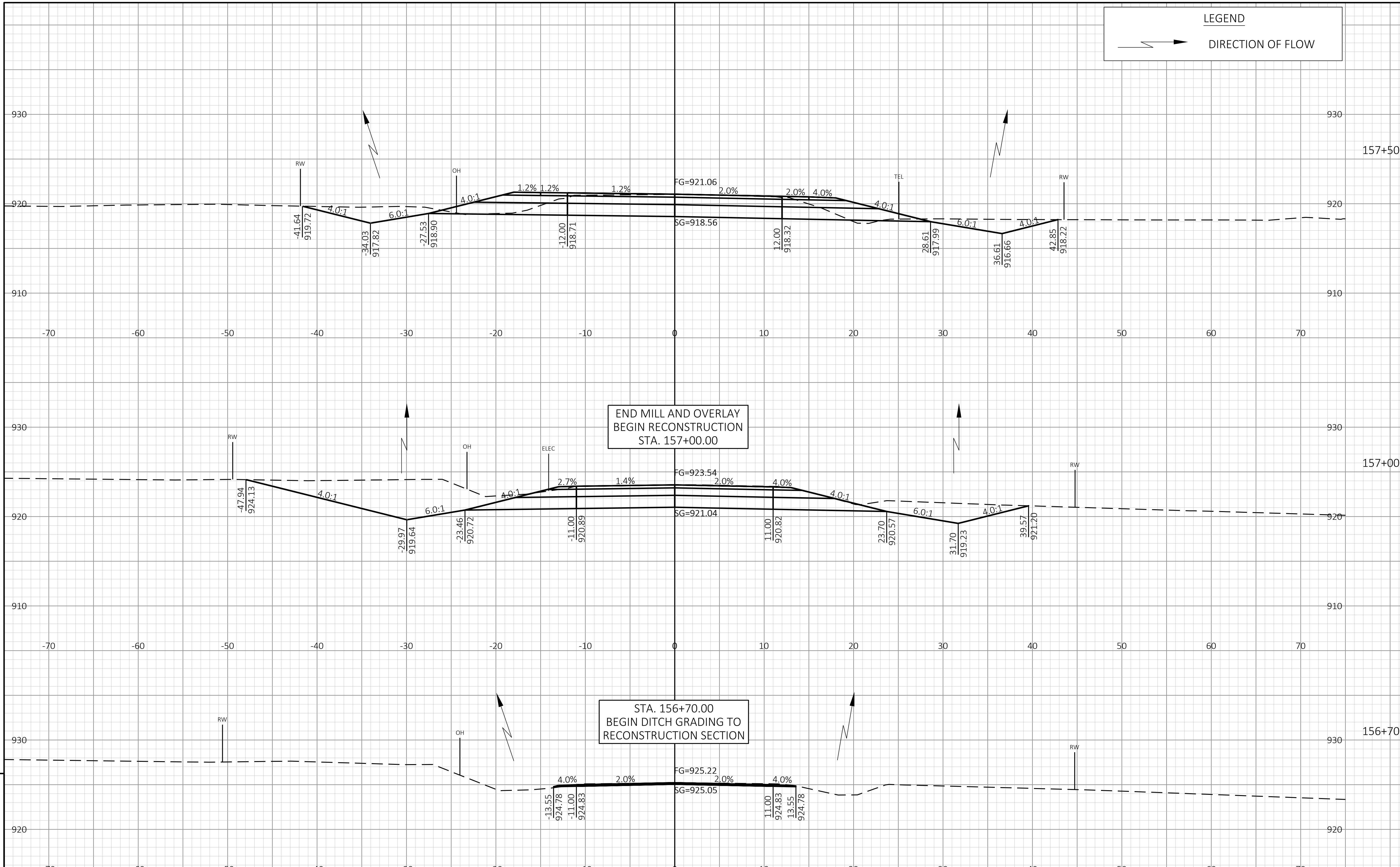
EARTHWORK - 'A'-LINE (CTH TV)

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOLUME (CY) CUT NOTE 1	INCREMENTAL VOLUME (CY) FILL NOTE 2	INCREMENTAL VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) CUT 1.00 NOTE 1	CUMULATIVE VOLUME (CY) FILL NOTE 2	CUMULATIVE VOLUME (CY) FILL (25%) NOTE 3	CUMULATIVE VOLUME (CY) MASS ORDINATE NOTE 4
10'A'+00	0	0	0	0	0	0	0	0	0
10'A'+50	111	0	119	0	0	119	0	0	119
11'A'+00	70	7	168	6	8	287	6	8	279
11'A'+50	40	23	102	28	35	389	34	43	346
12'A'+00	30	38	65	56	70	454	90	113	341
12'A'+50	206	14	219	50	63	673	140	176	497
13'A'+00	105	142	288	144	180	961	284	356	605
13'A'+50	39	304	133	413	516	1094	697	872	222
13'A'+85.54	0	340	26	430	538	1120	1127	1410	-290
13'A'+85.54	0	0	0	0	0	1120	1127	1410	-290
COLUMN SUBTOTALS =			1120	1127	1410	1120	1127	1410	-290

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
3 - FILL (25%)	(UNEXPANDED FILL)*1.25
4 - MASS ORDINATE	CUT - FILL (25%)

9

9

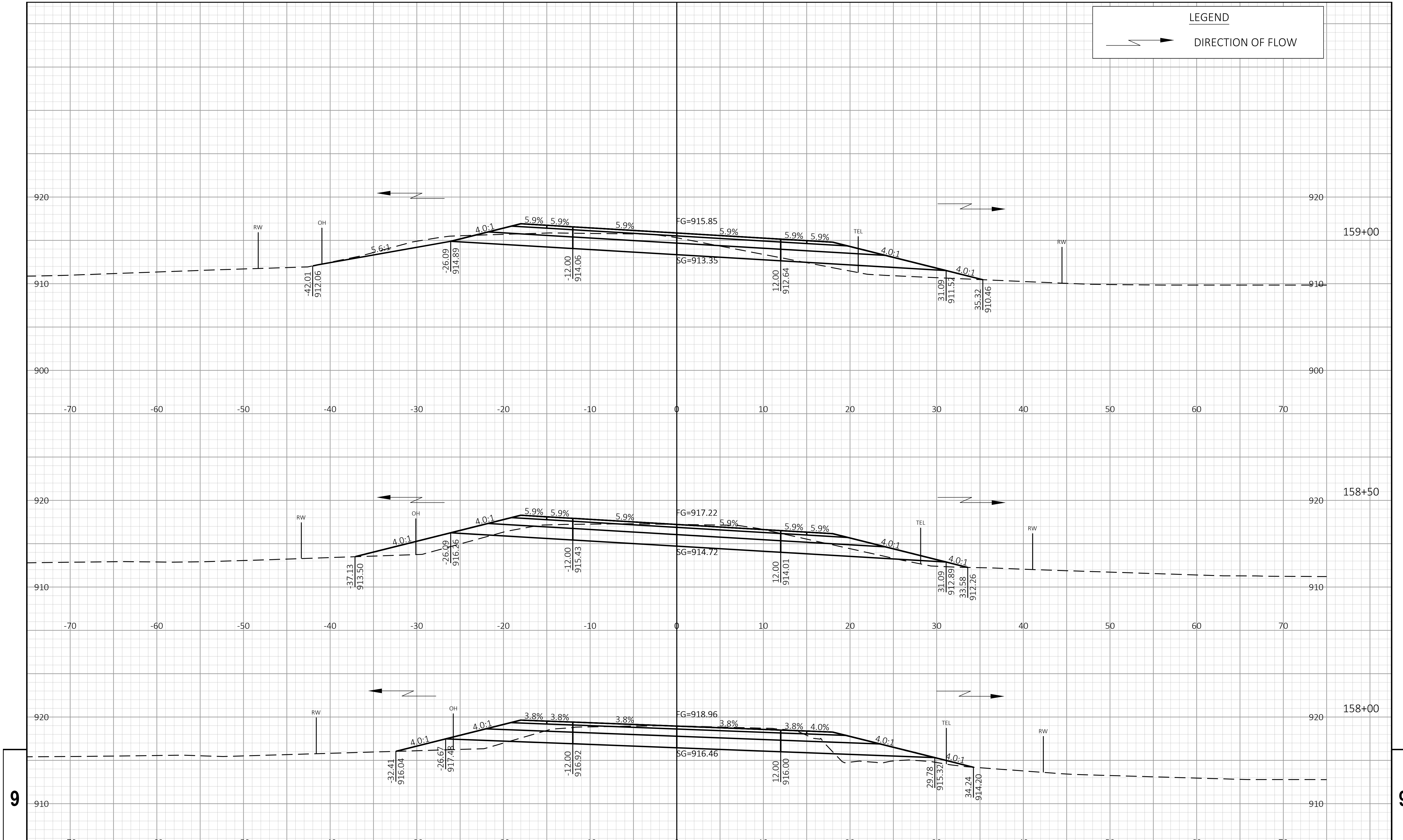


9

9

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET 145 E

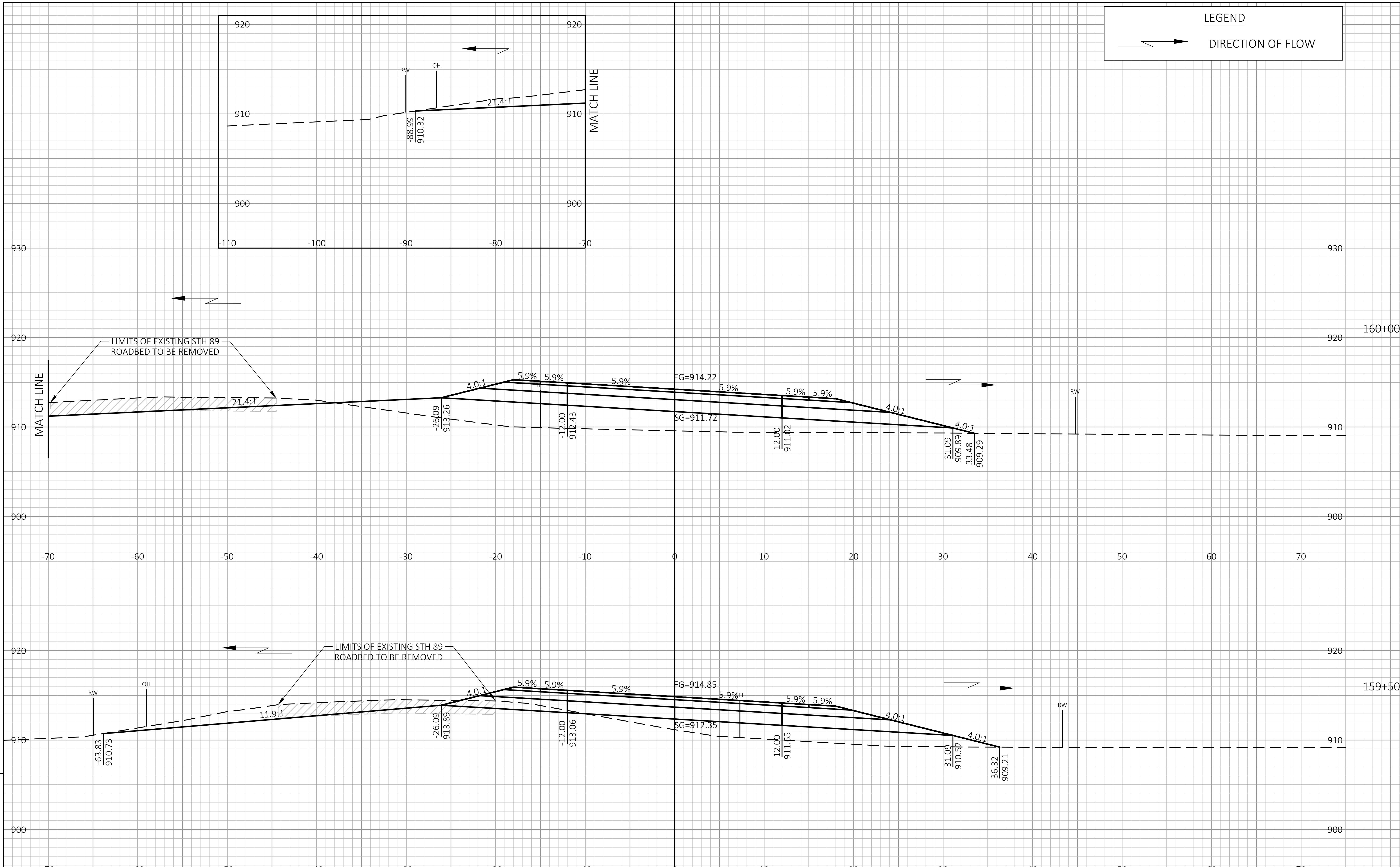
FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 10:07:12 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 01



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:24:39 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 02

9


LEGEND
DIRECTION OF FLOW
MATCH LINE
RW
OH
21.4:1
-88.99
910.32
920
910
900
-110
-100
-90
-80
-70
160+00
LIMITS OF EXISTING STH 89 ROADBED TO BE REMOVED
FG=914.22
SG=911.72
5.9%
4.0:1
-26.09
913.26
-12.00
912.43
12.00
911.02
31.09
909.89
33.48
909.29
159+50
FG=914.85
SG=912.35
11.9:1
-63.83
910.73
-26.09
913.89
-12.00
913.06
12.00
911.65
31.09
910.52
36.32
909.21
930
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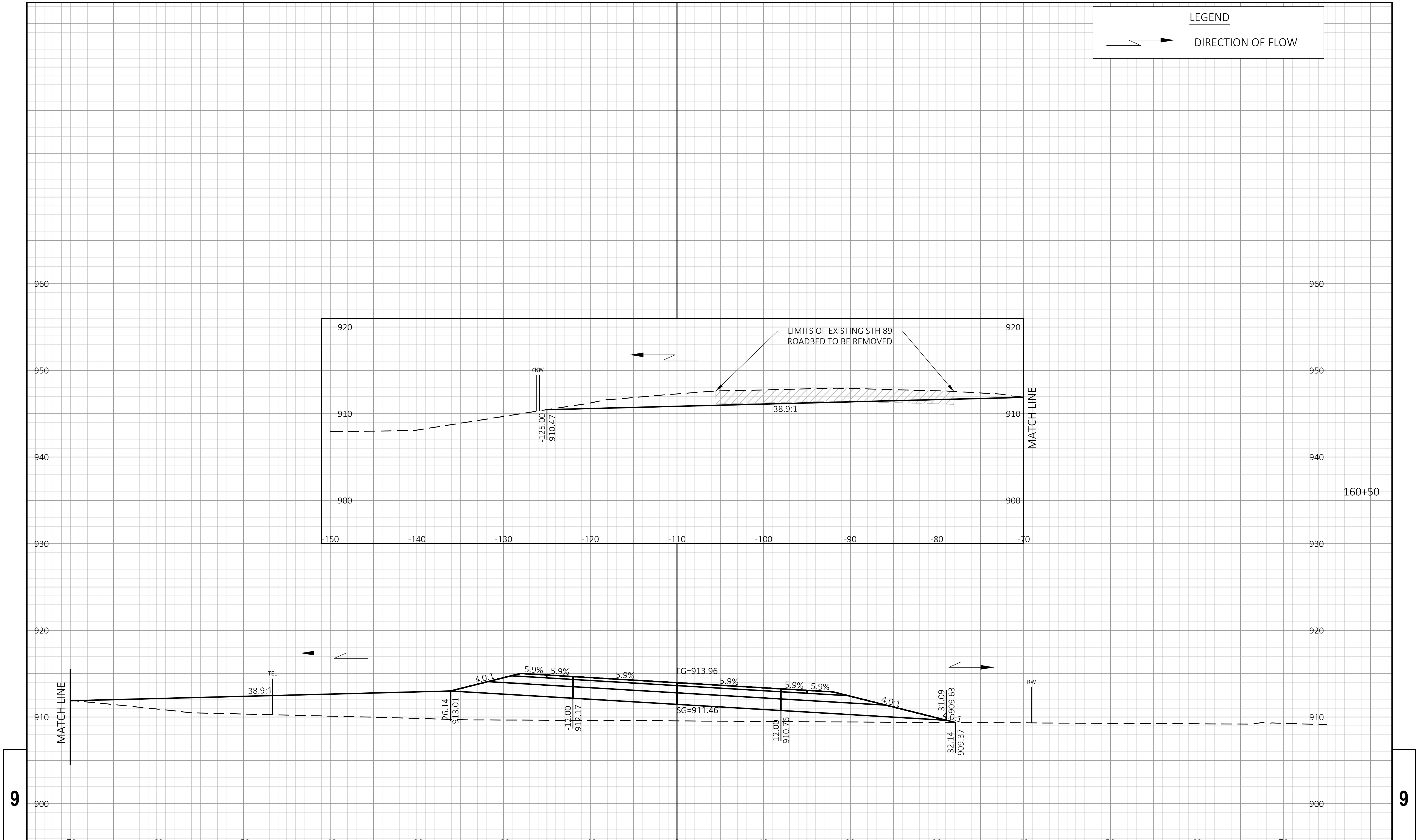
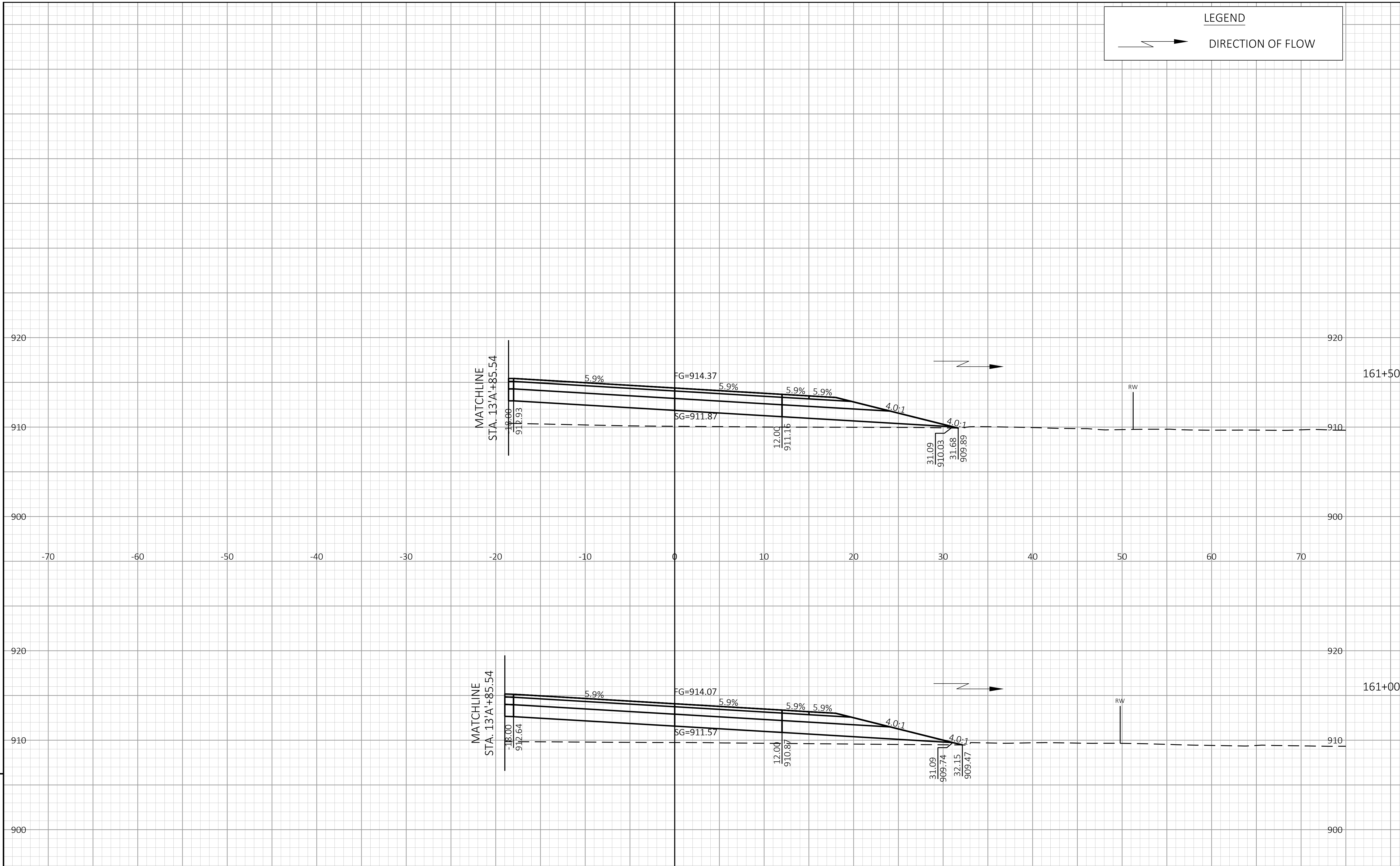
-50
-40
-30
-20
-10
0
10
20
30
40
50
60
70

9



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:24:59 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 04



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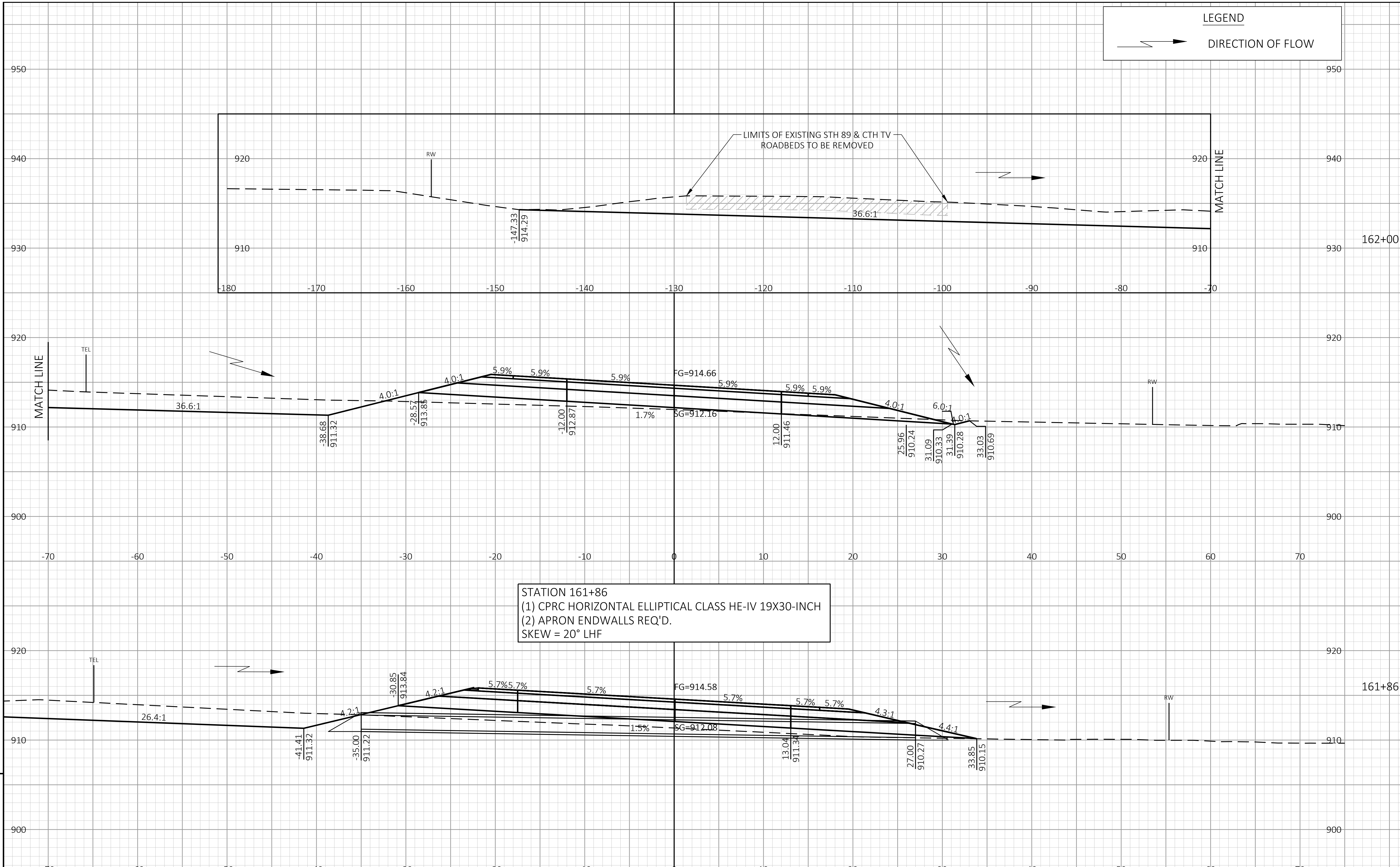
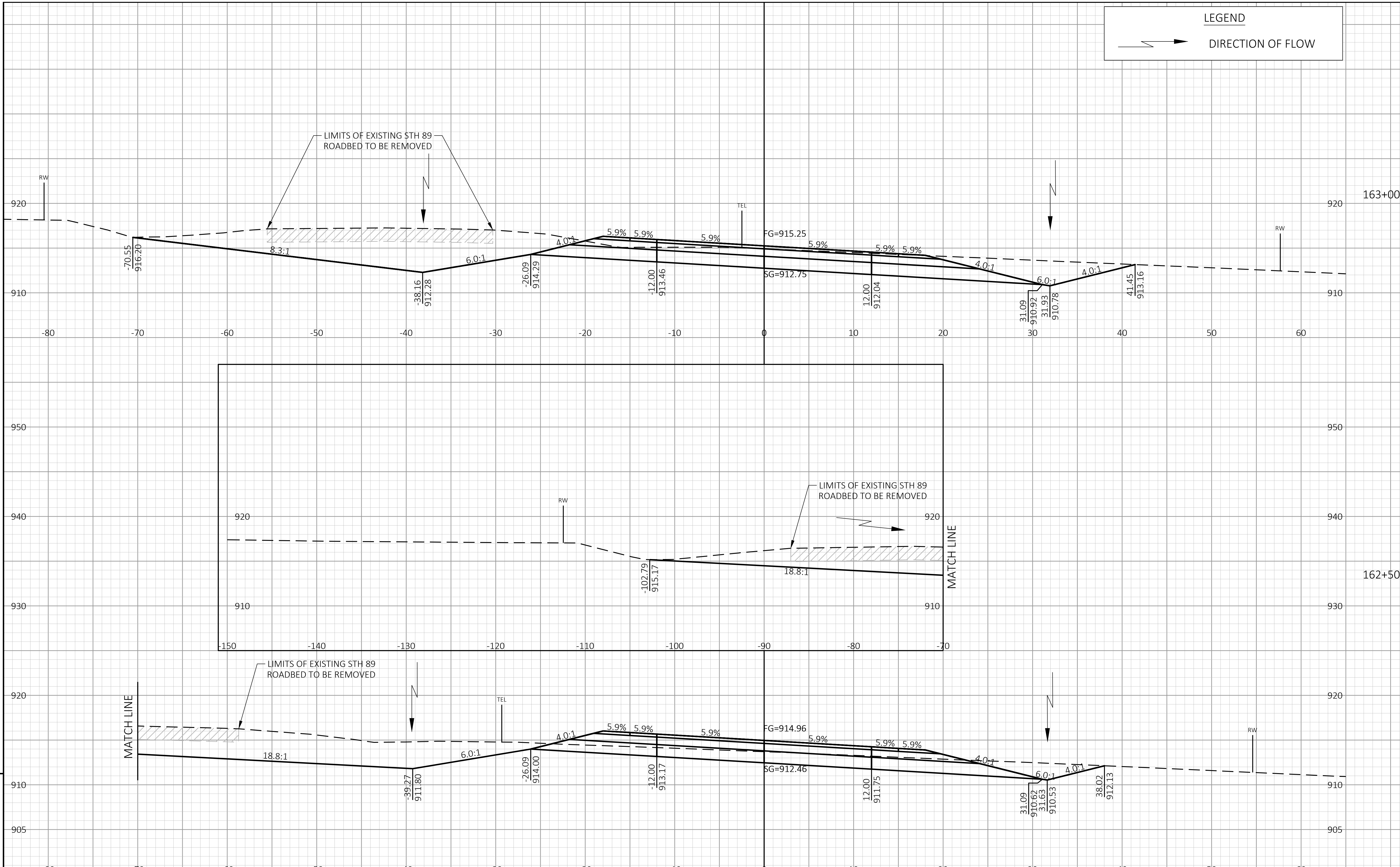
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:25:19 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 06



9

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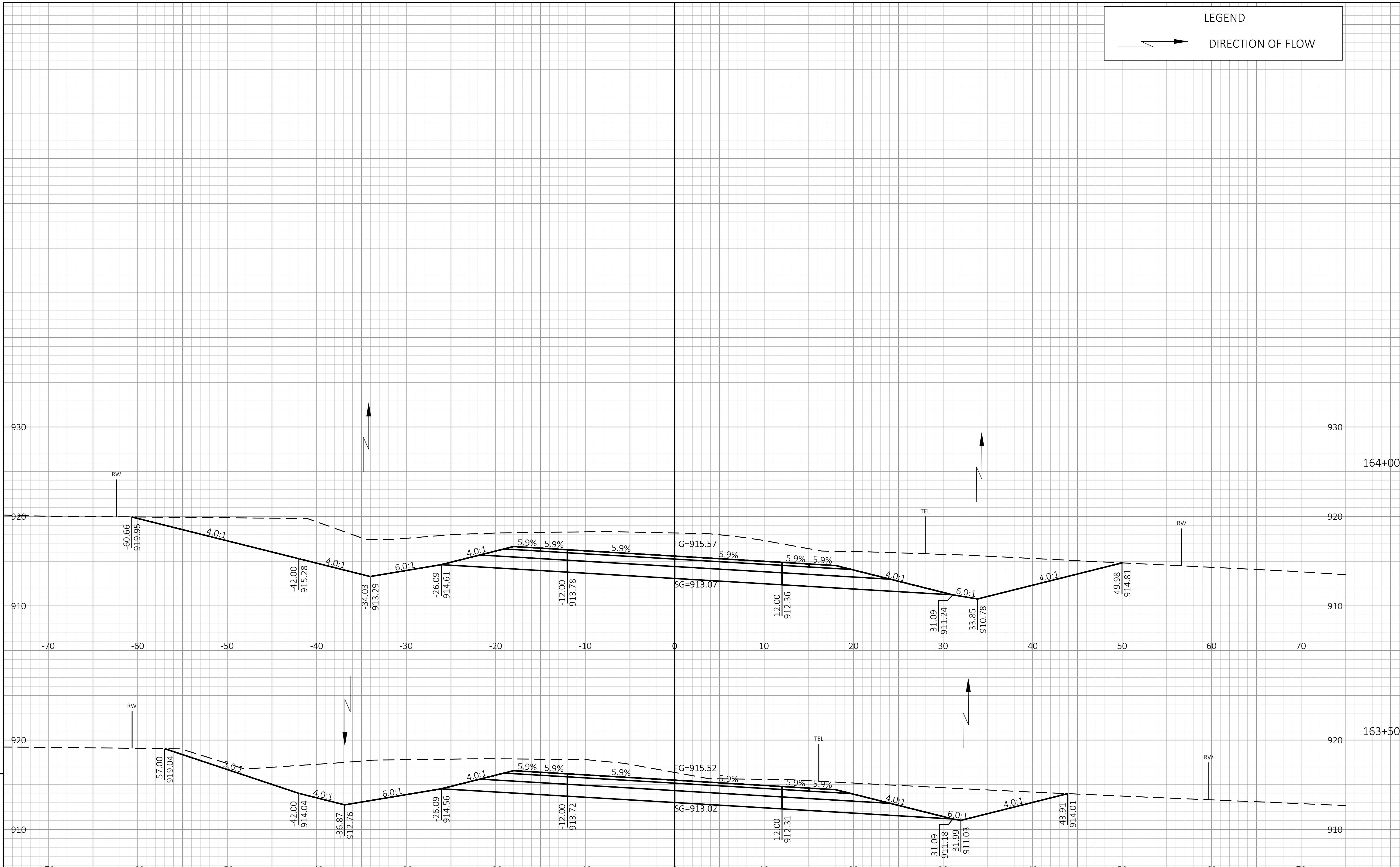
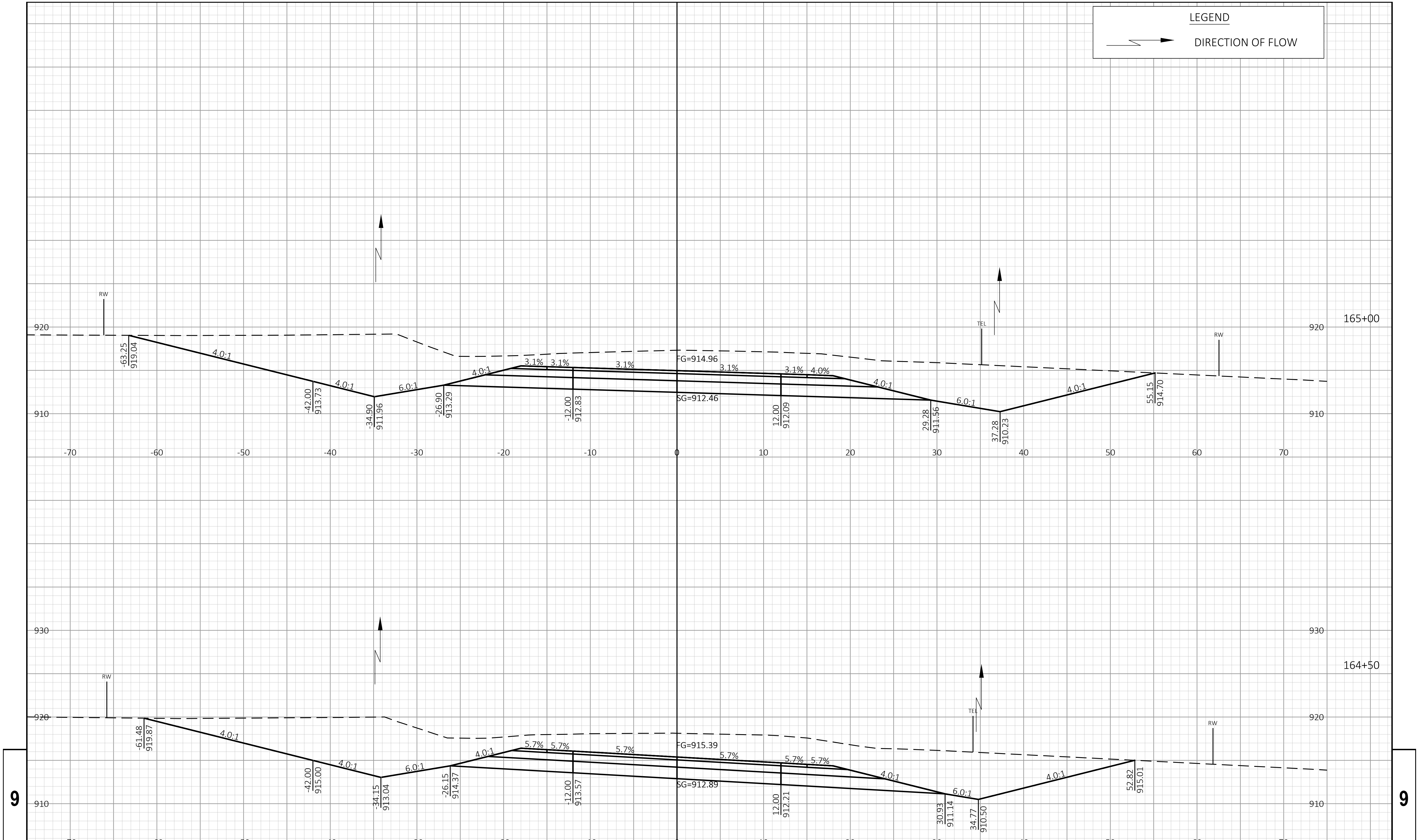
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:25:29 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 07



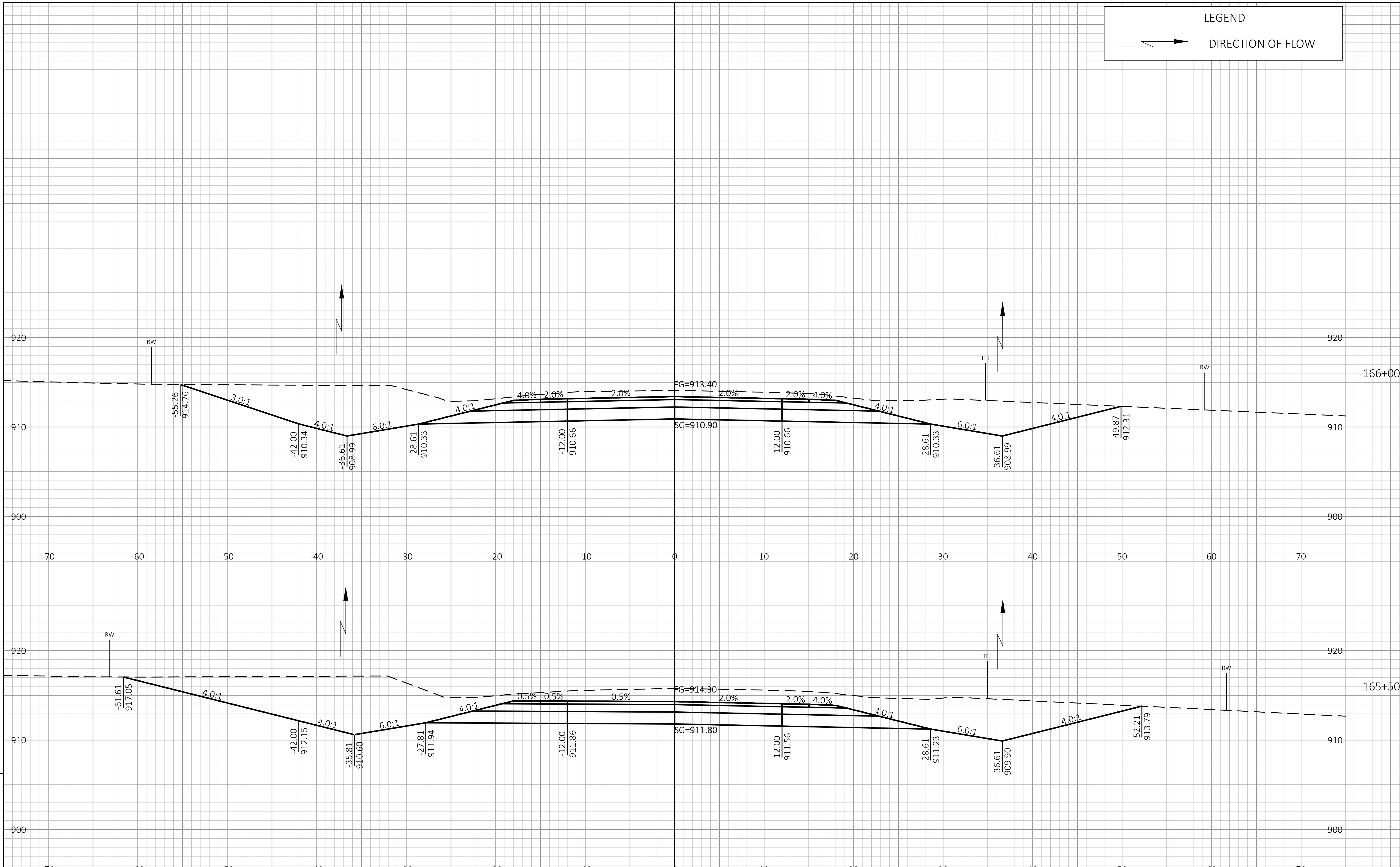
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

9



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

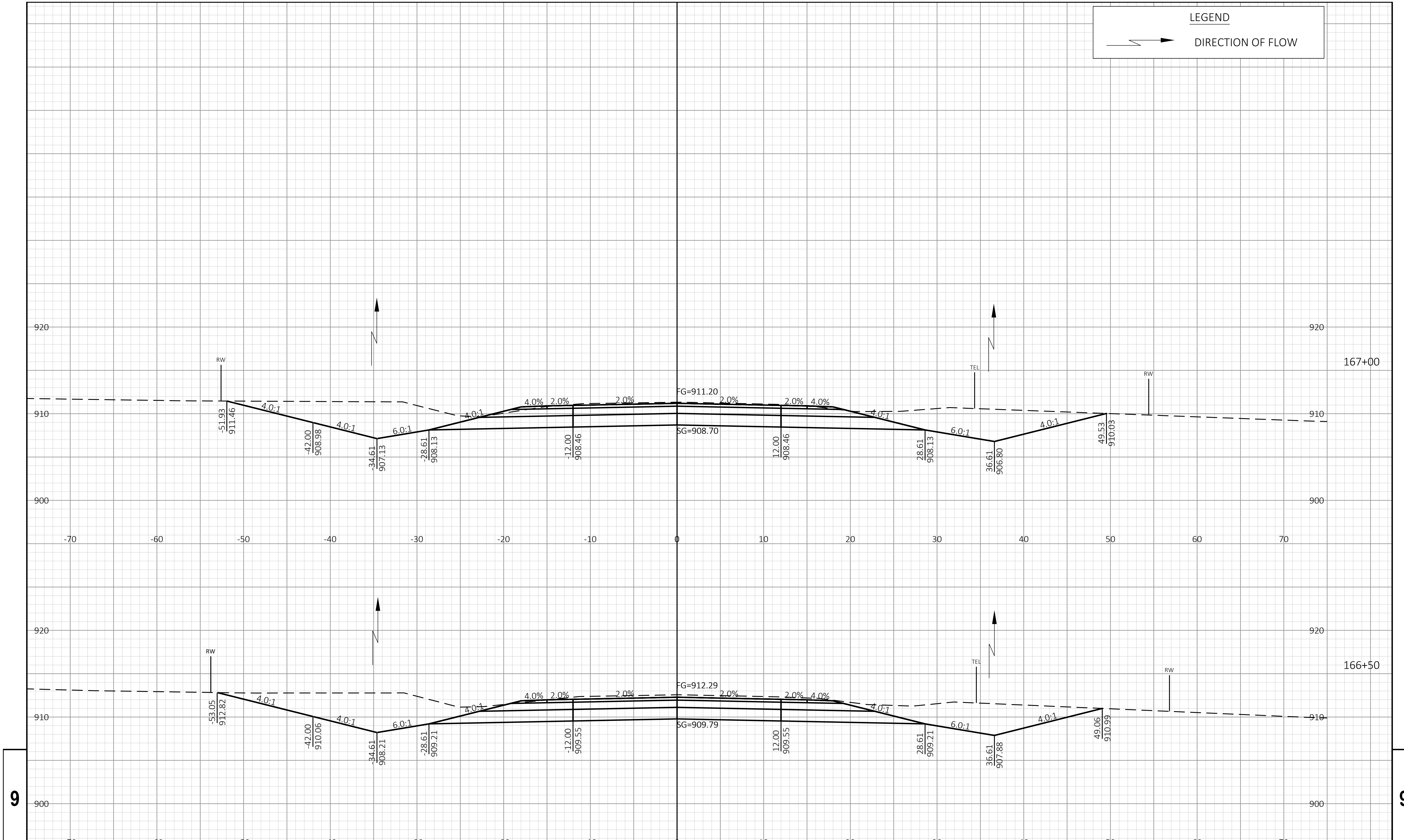
FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:25:49 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 09



9 9

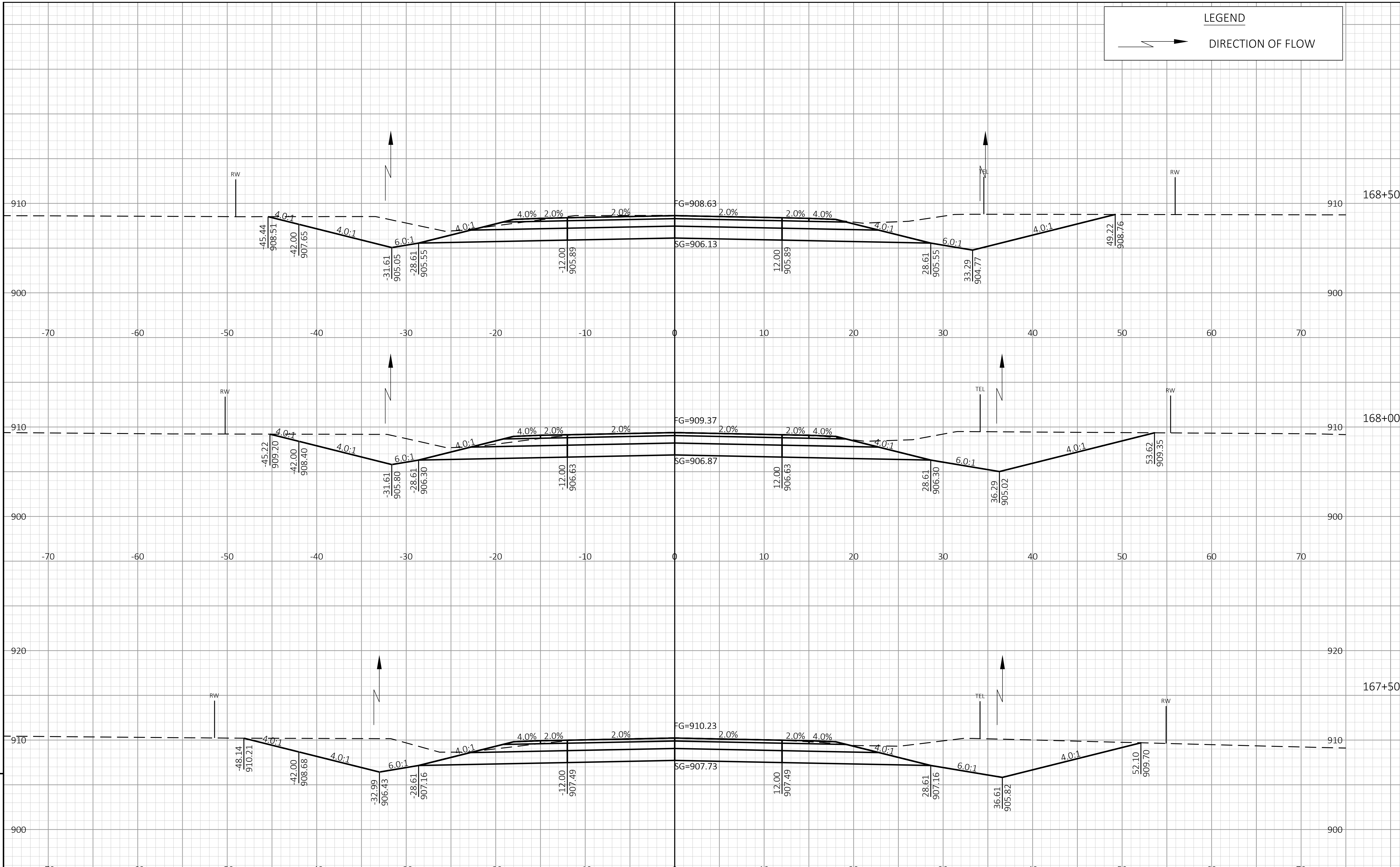
PROJECT NO: 3670-00-74 | HWY: STH 89 | COUNTY: DANE | CROSS SECTIONS: MAINLINE | SHEET 154 | E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:25:59 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 10



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:26:09 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 11



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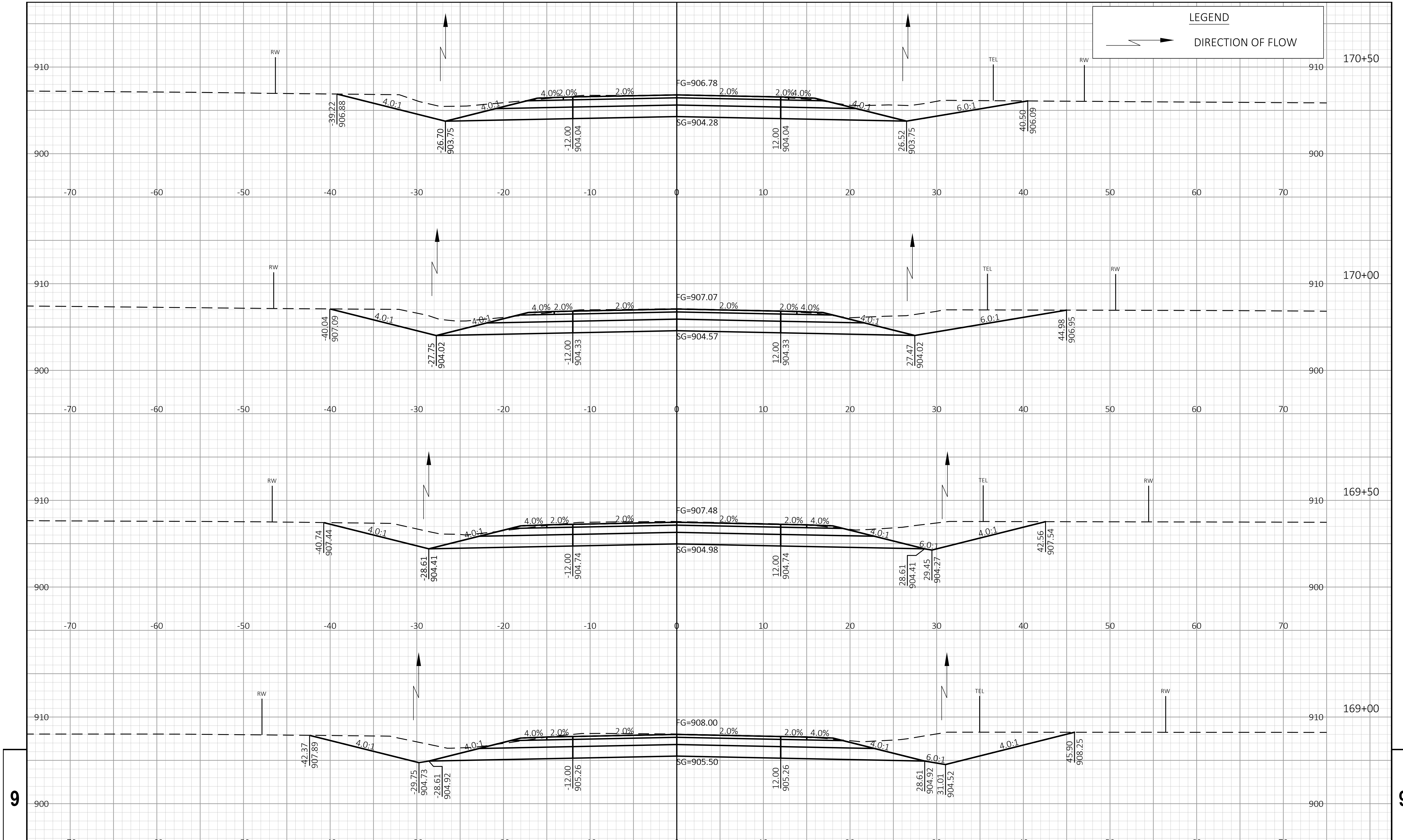
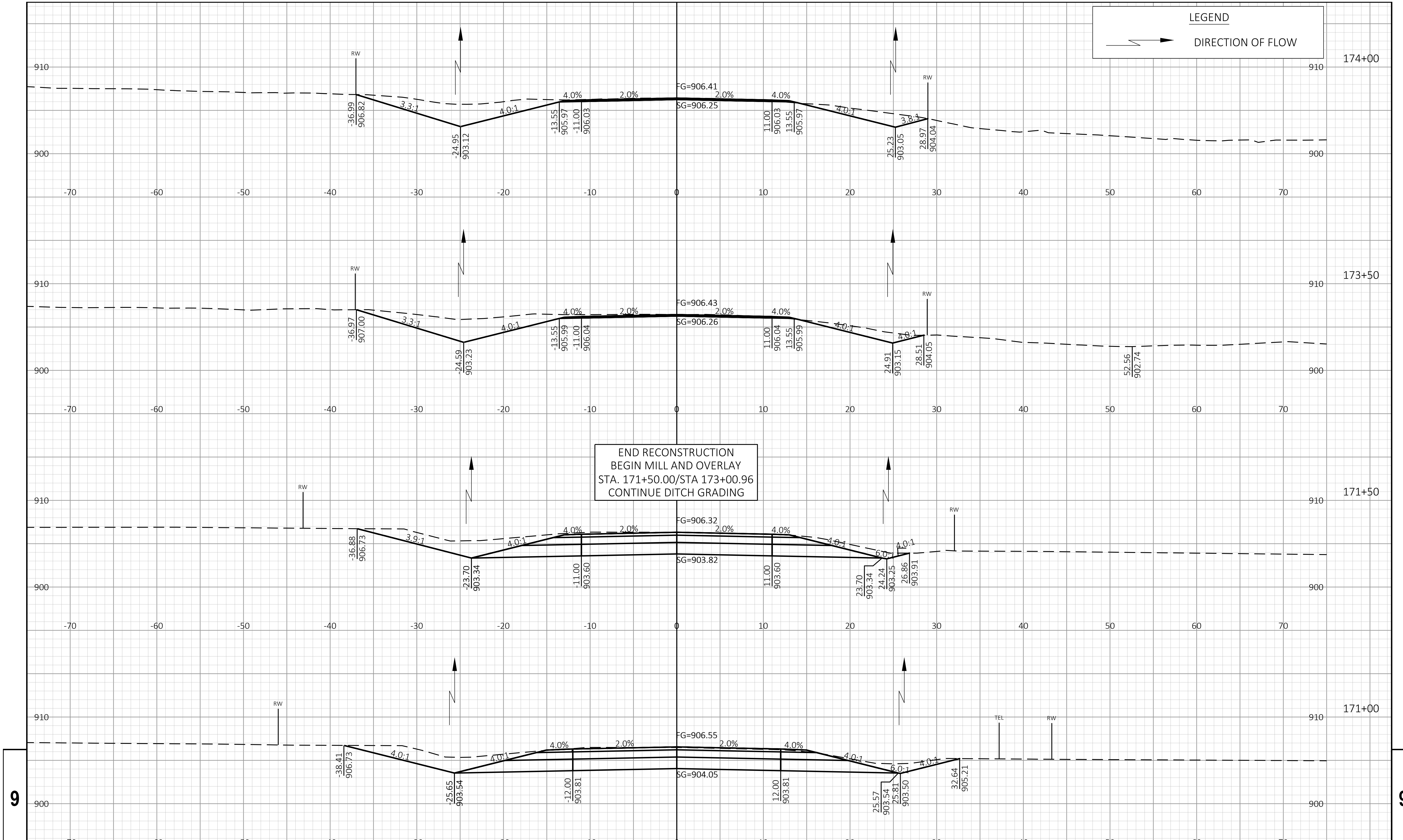
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:26:19 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 12



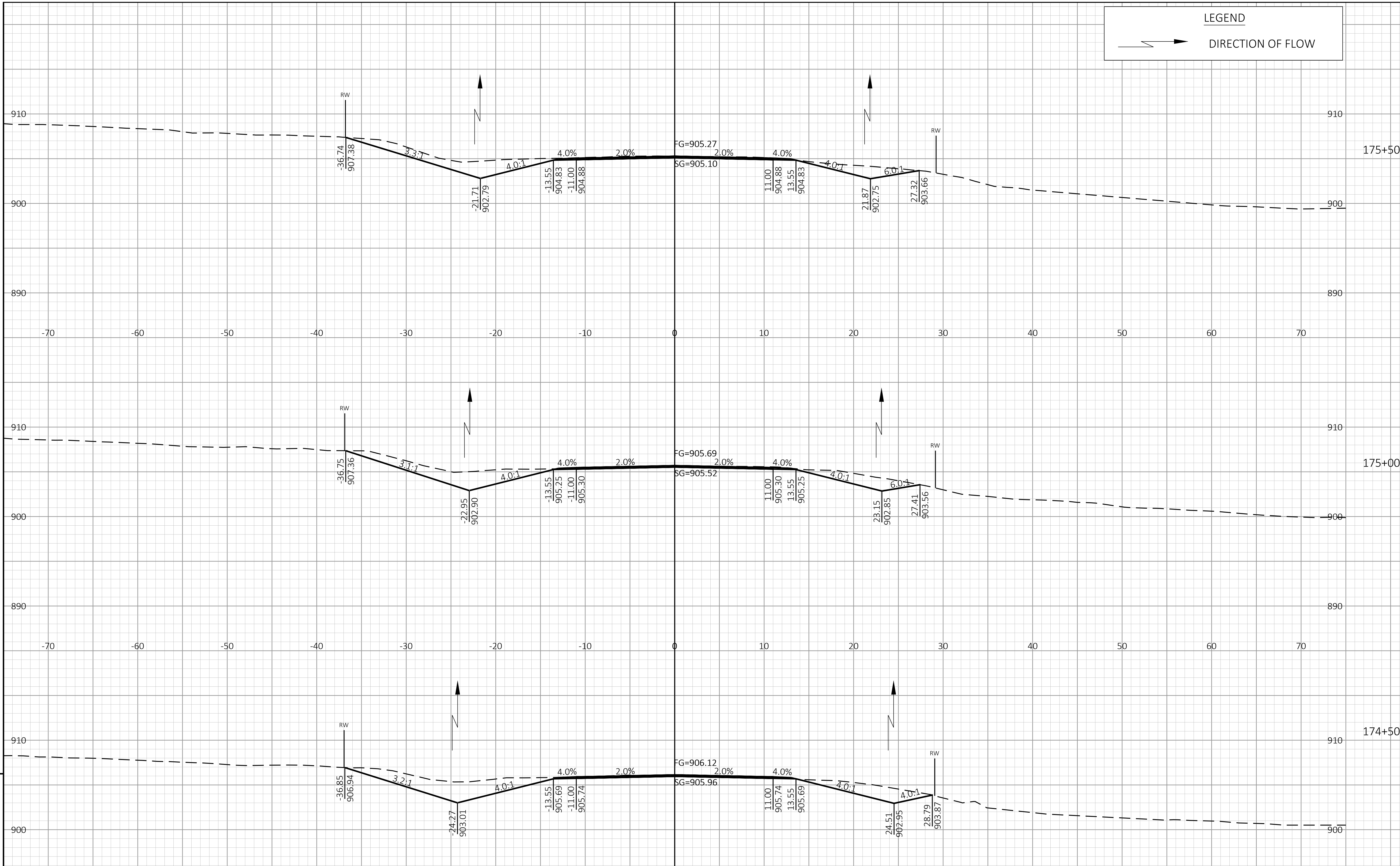
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:26:29 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 13



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:26:39 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 14



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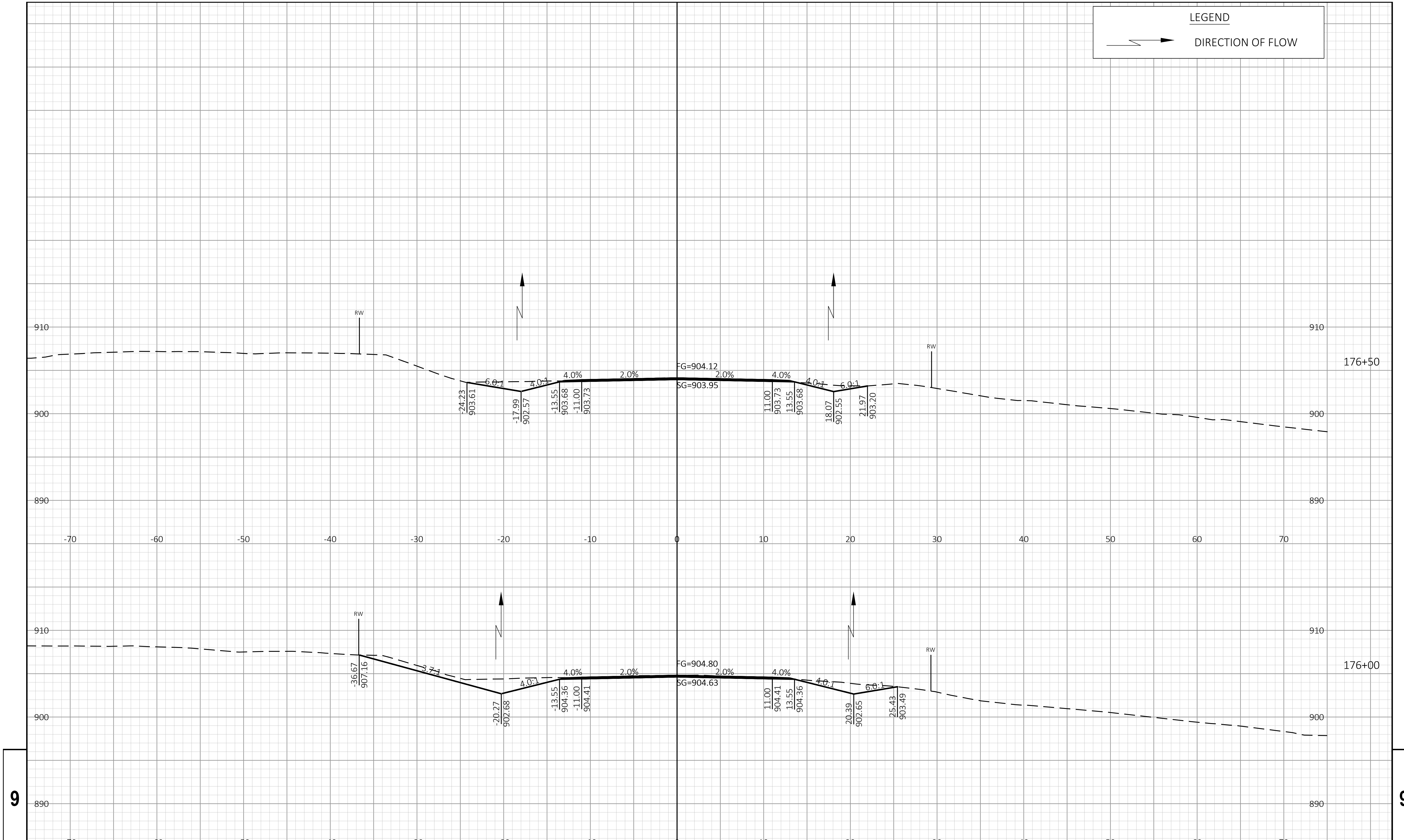
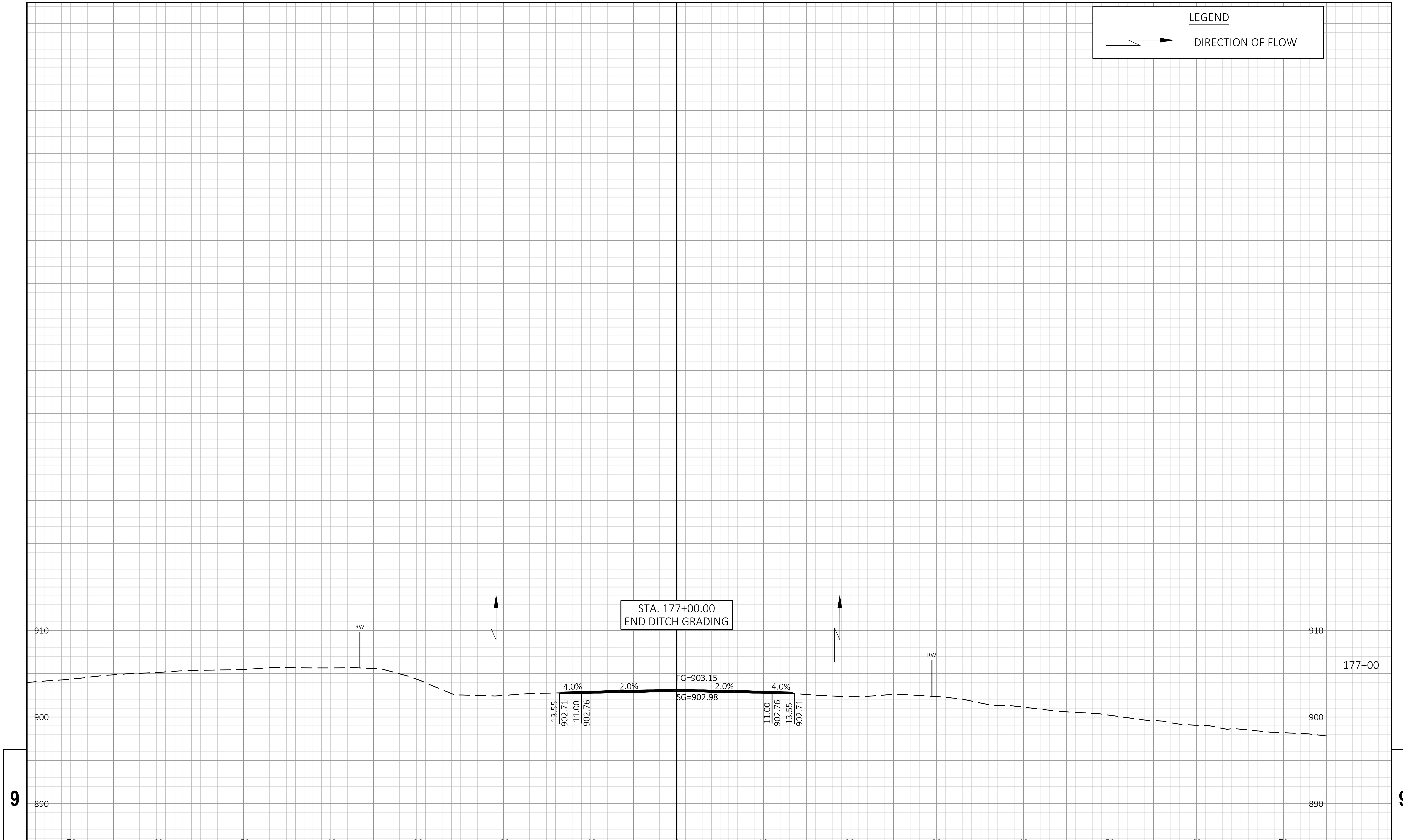
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:26:49 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 15



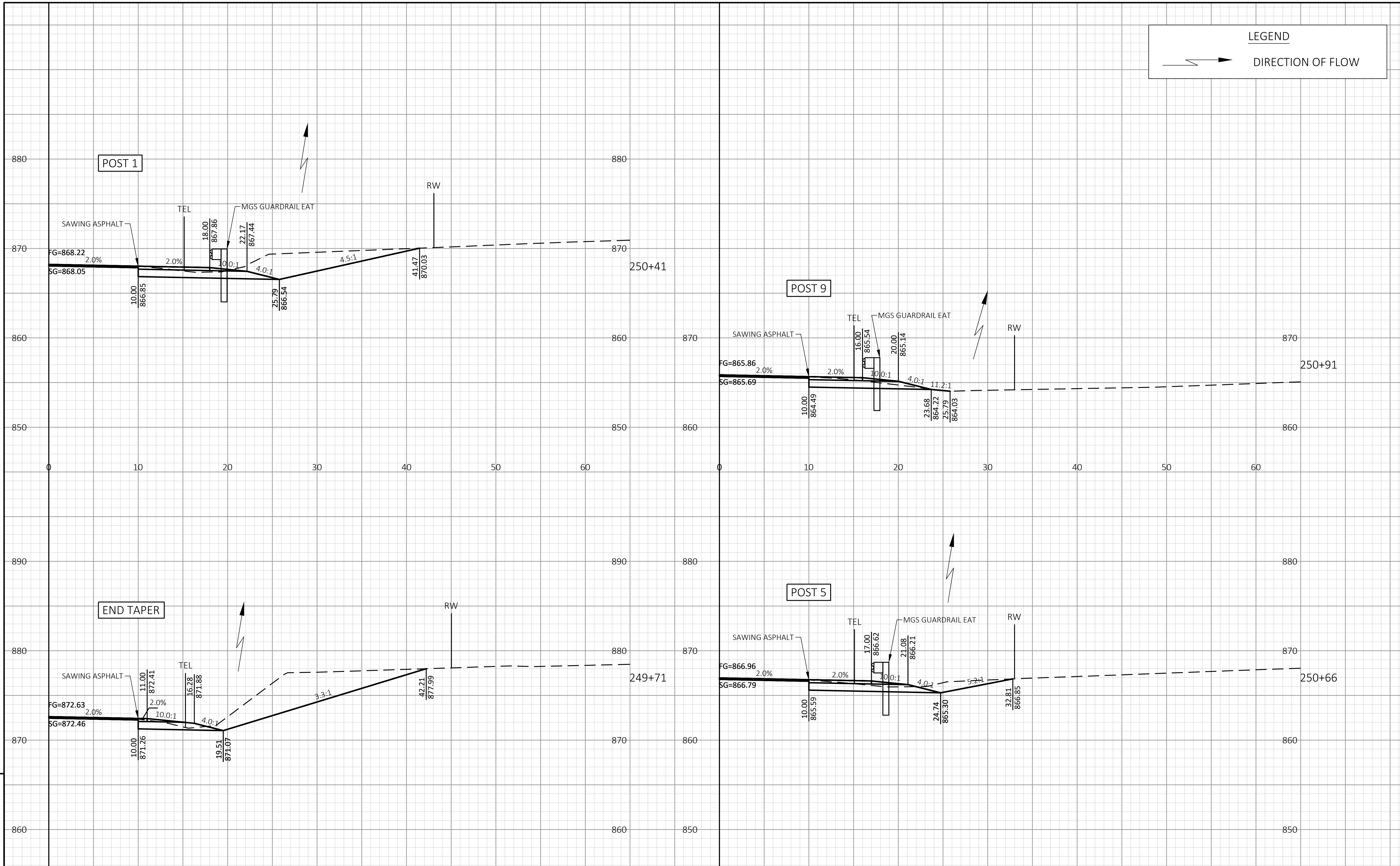
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:26:59 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 16



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:27:09 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 17



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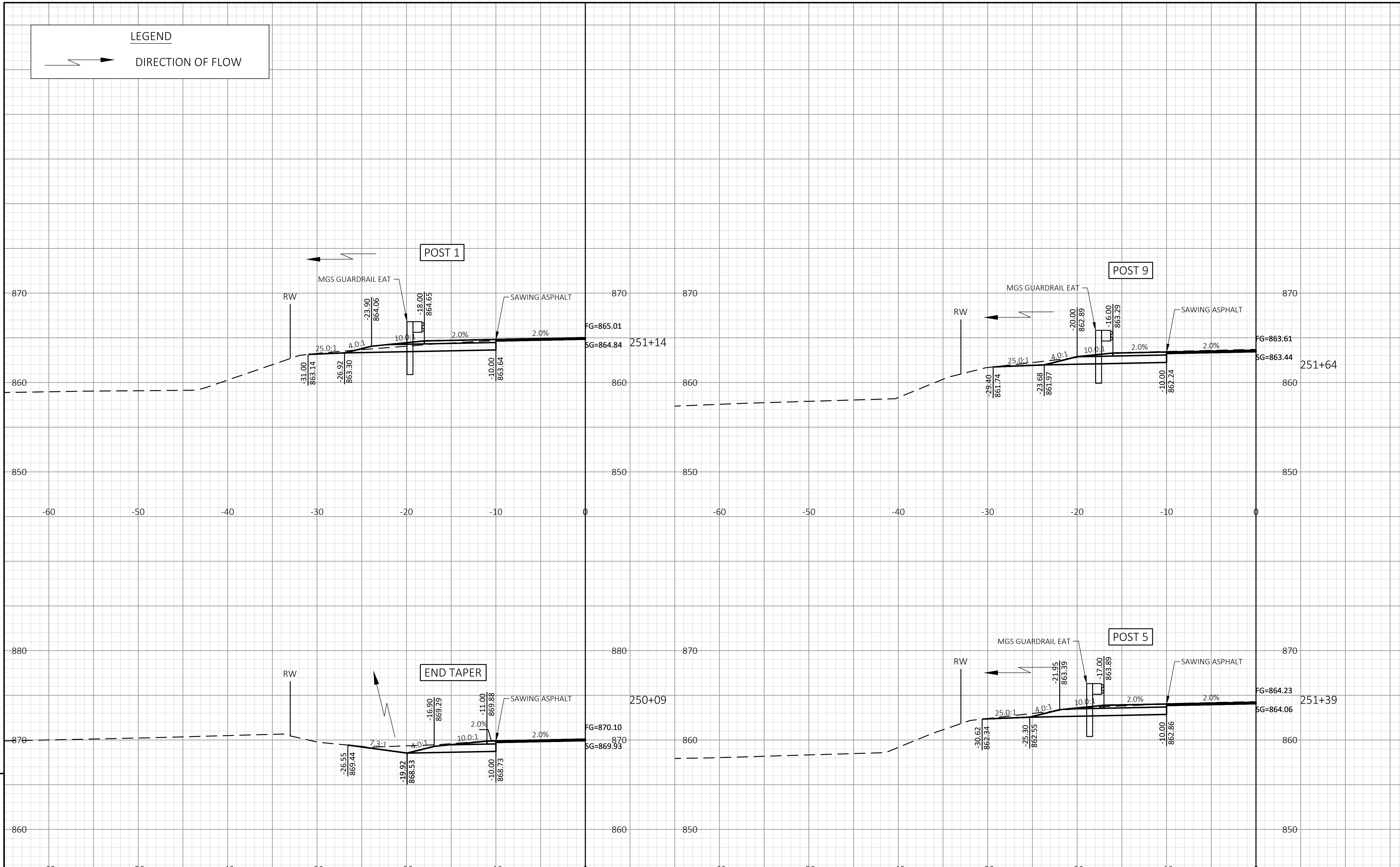
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 162	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:27:39 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : SE EAT



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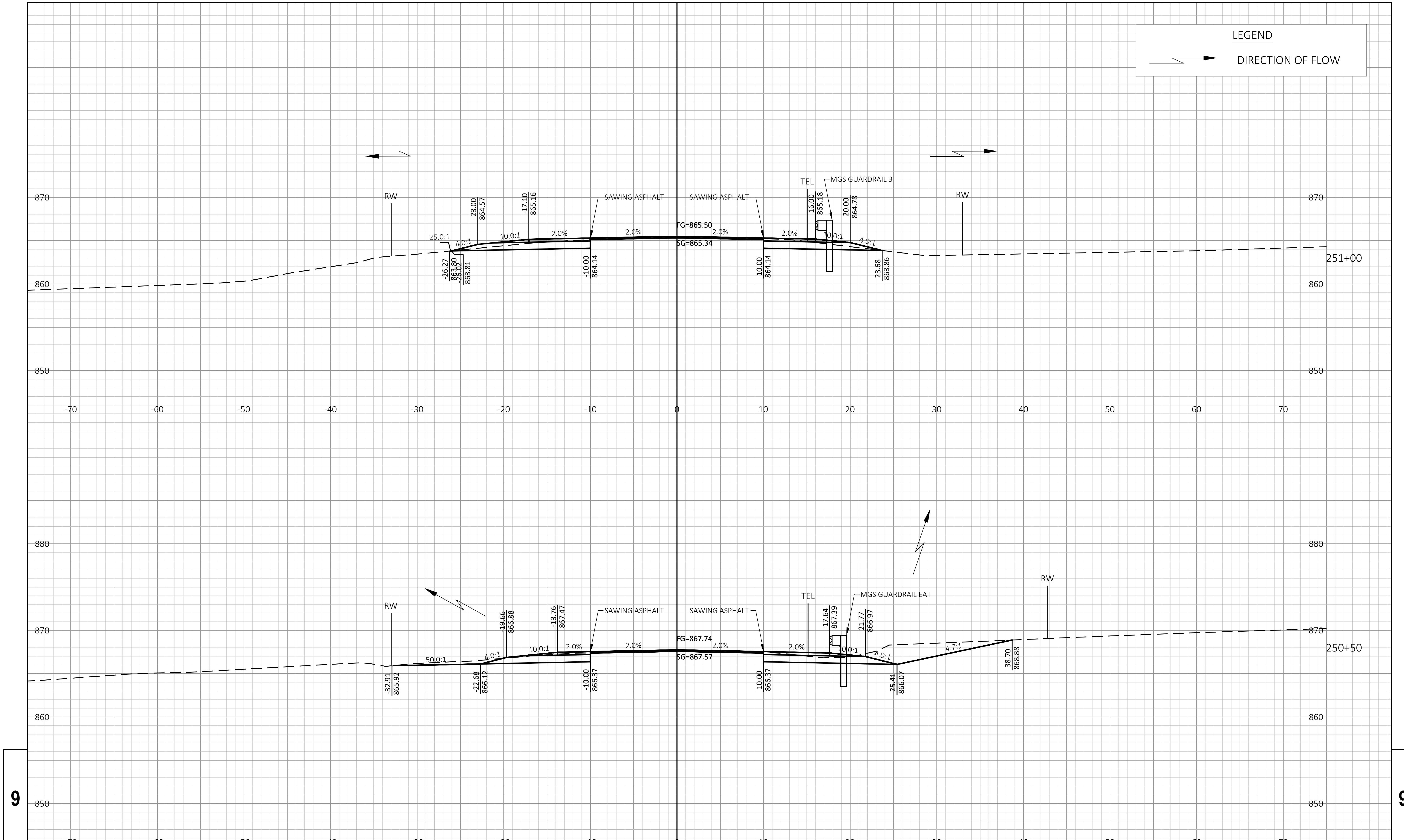
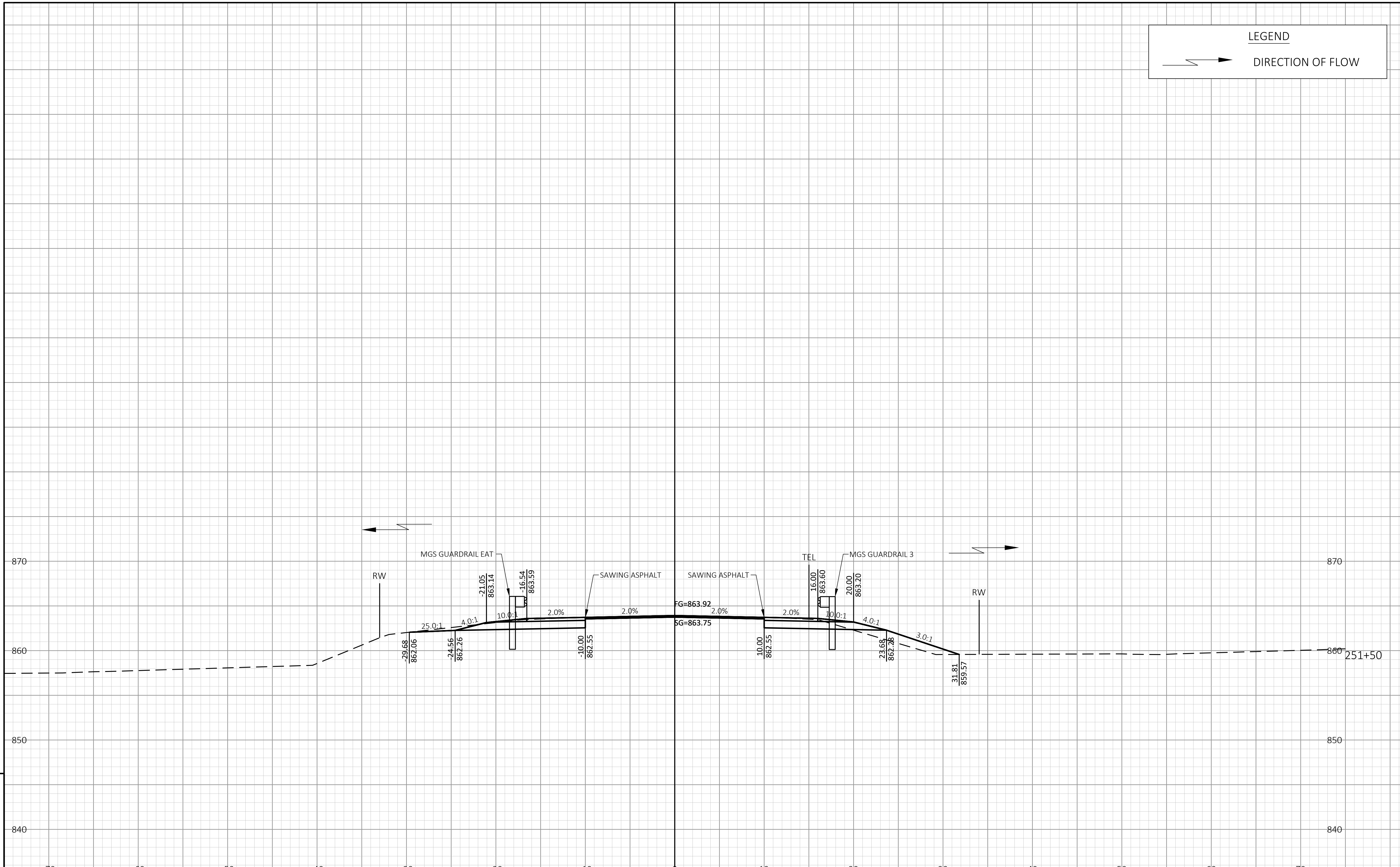
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 163	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:27:45 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : SW EAT



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 164	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:27:50 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : BG 01



9

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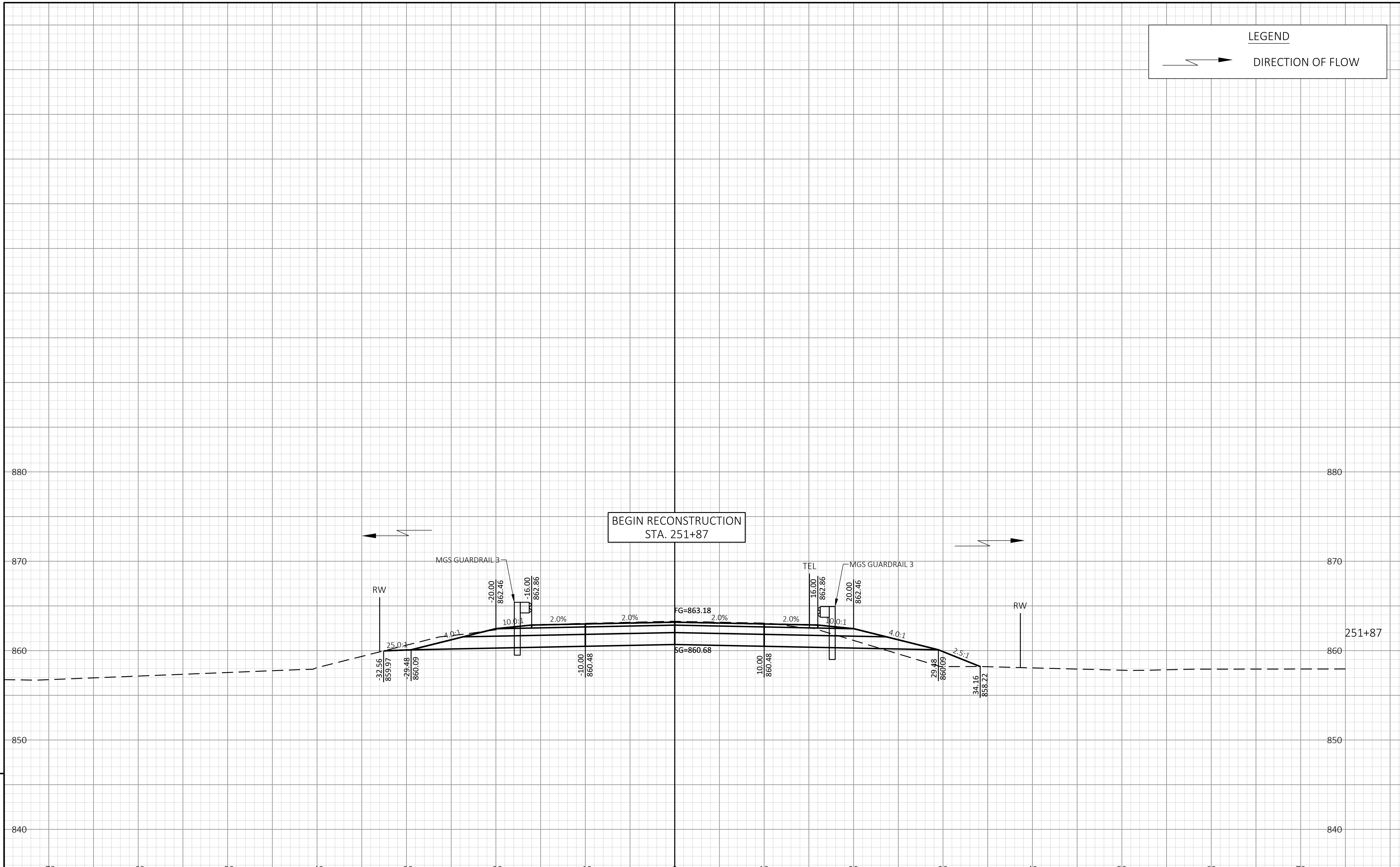
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 165	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:27:55 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : BG 02



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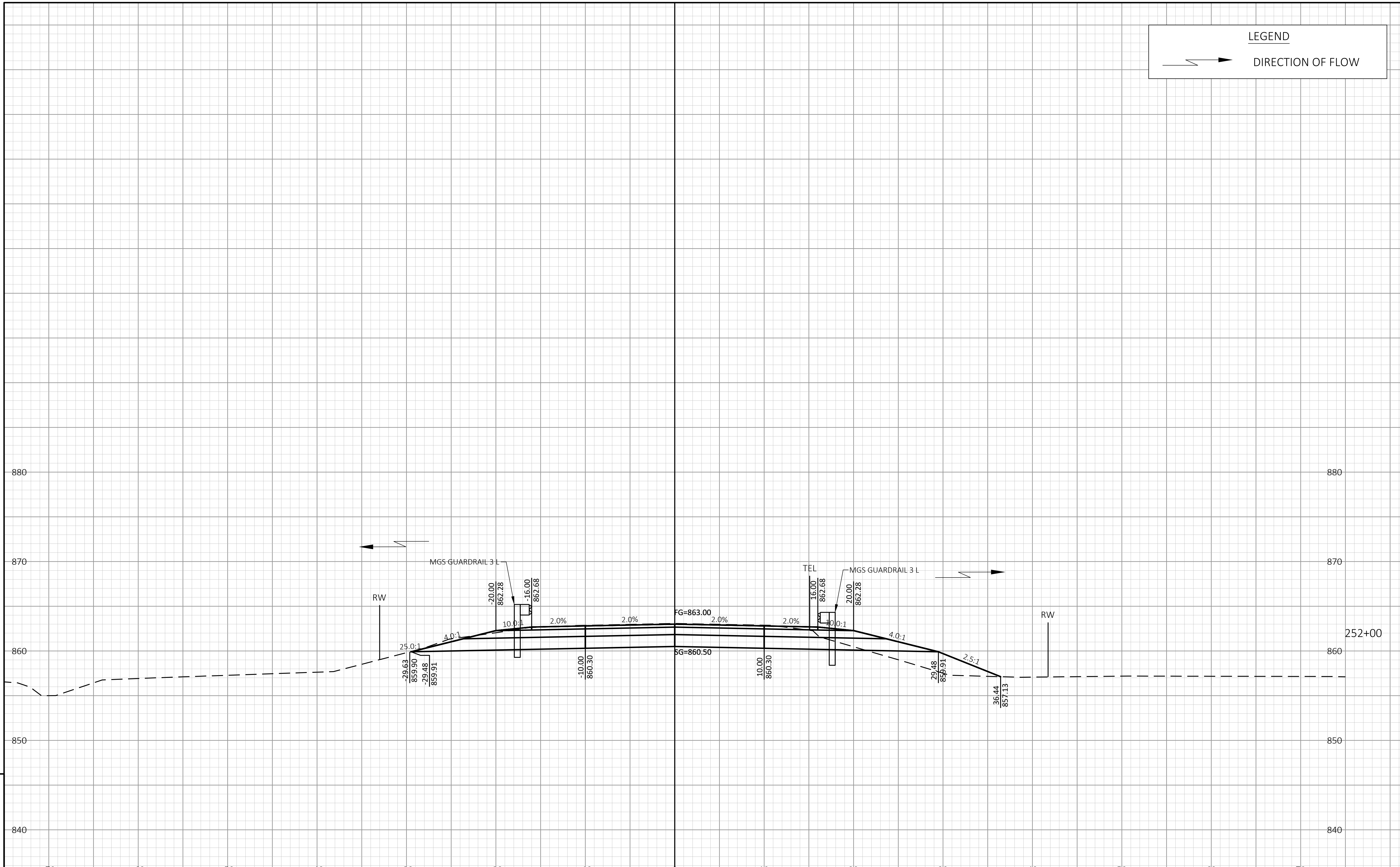
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:28:00 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : BG 03



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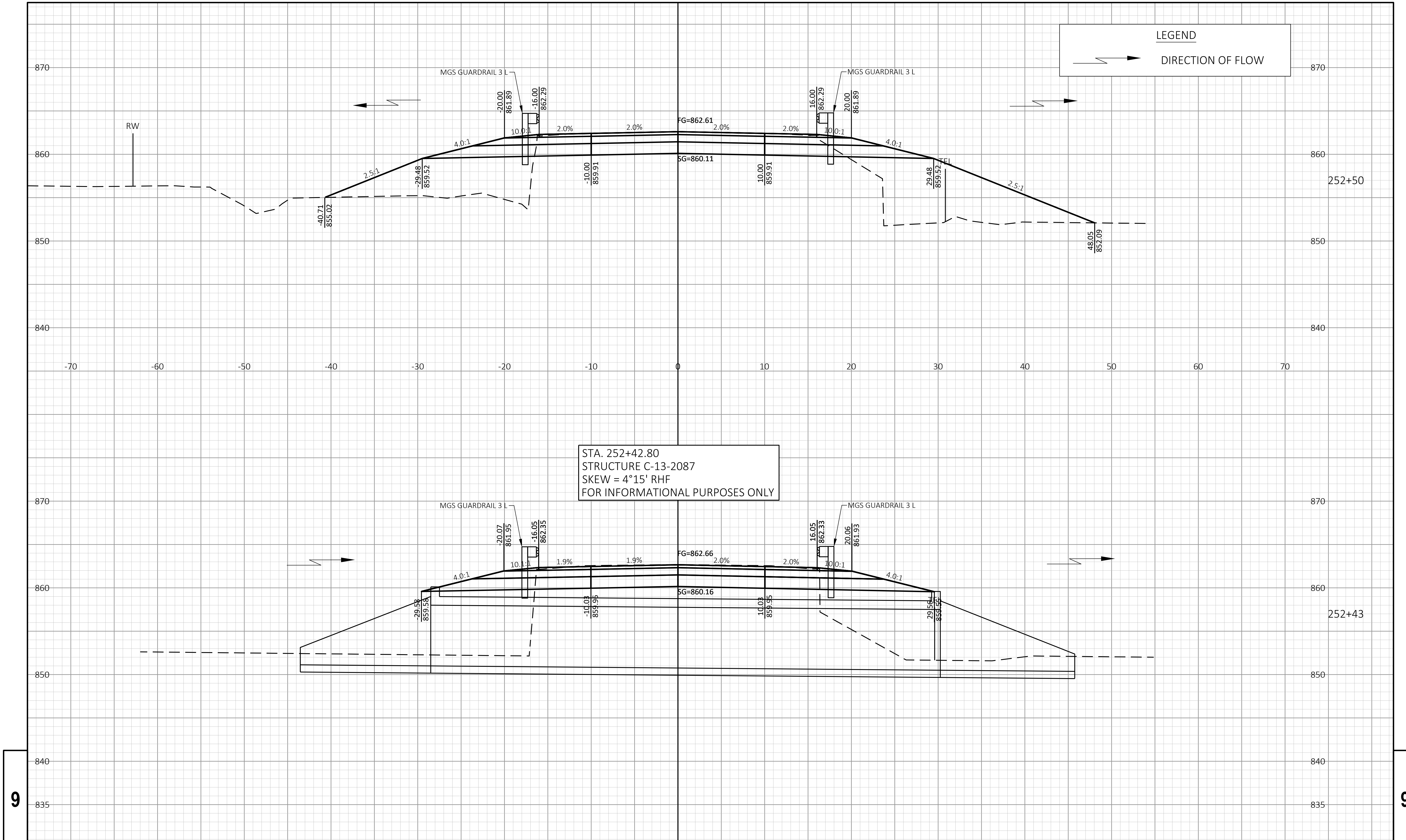
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 167	E

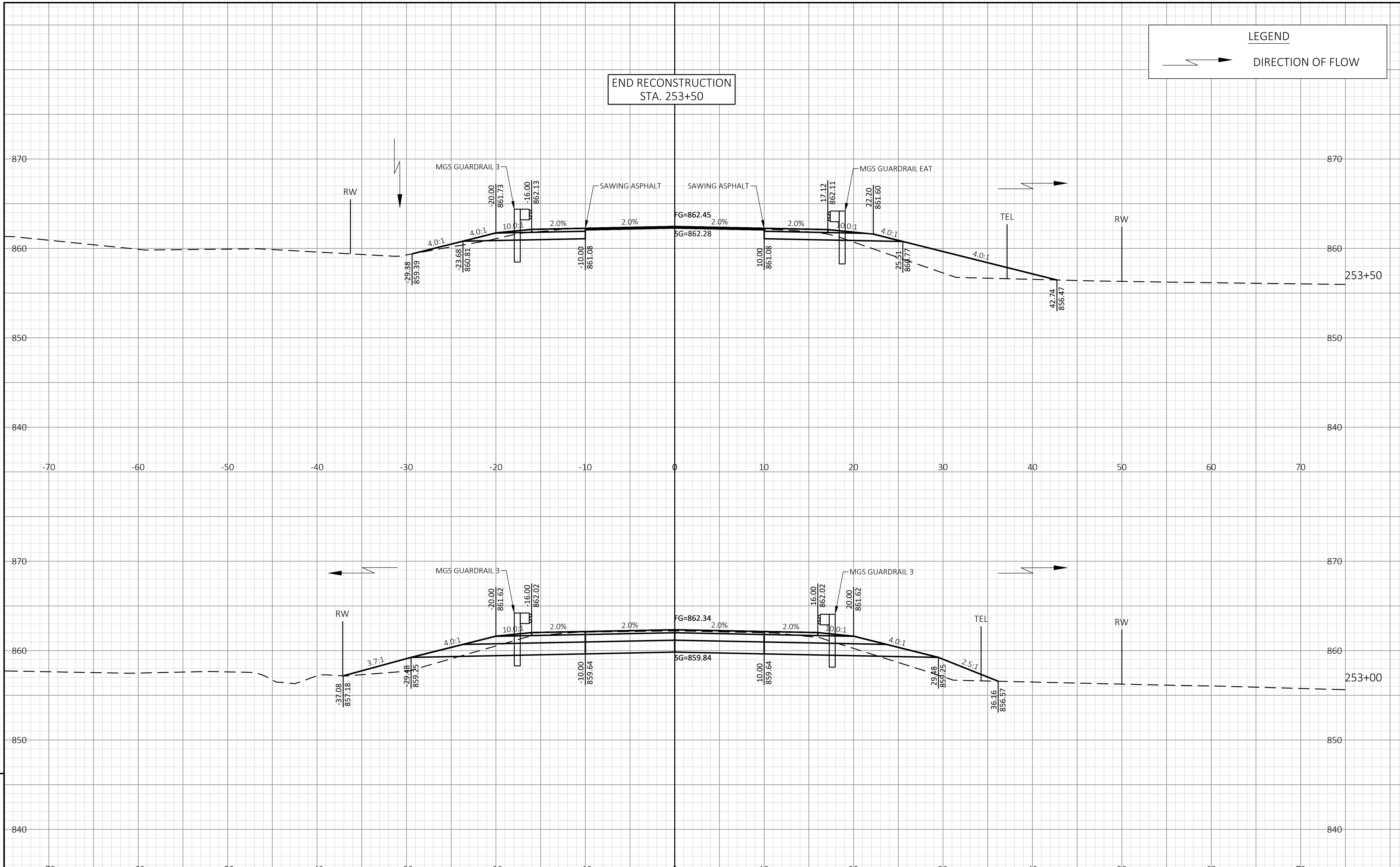
FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:28:05 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : BG 04



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 168	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:28:11 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : BG 05

9



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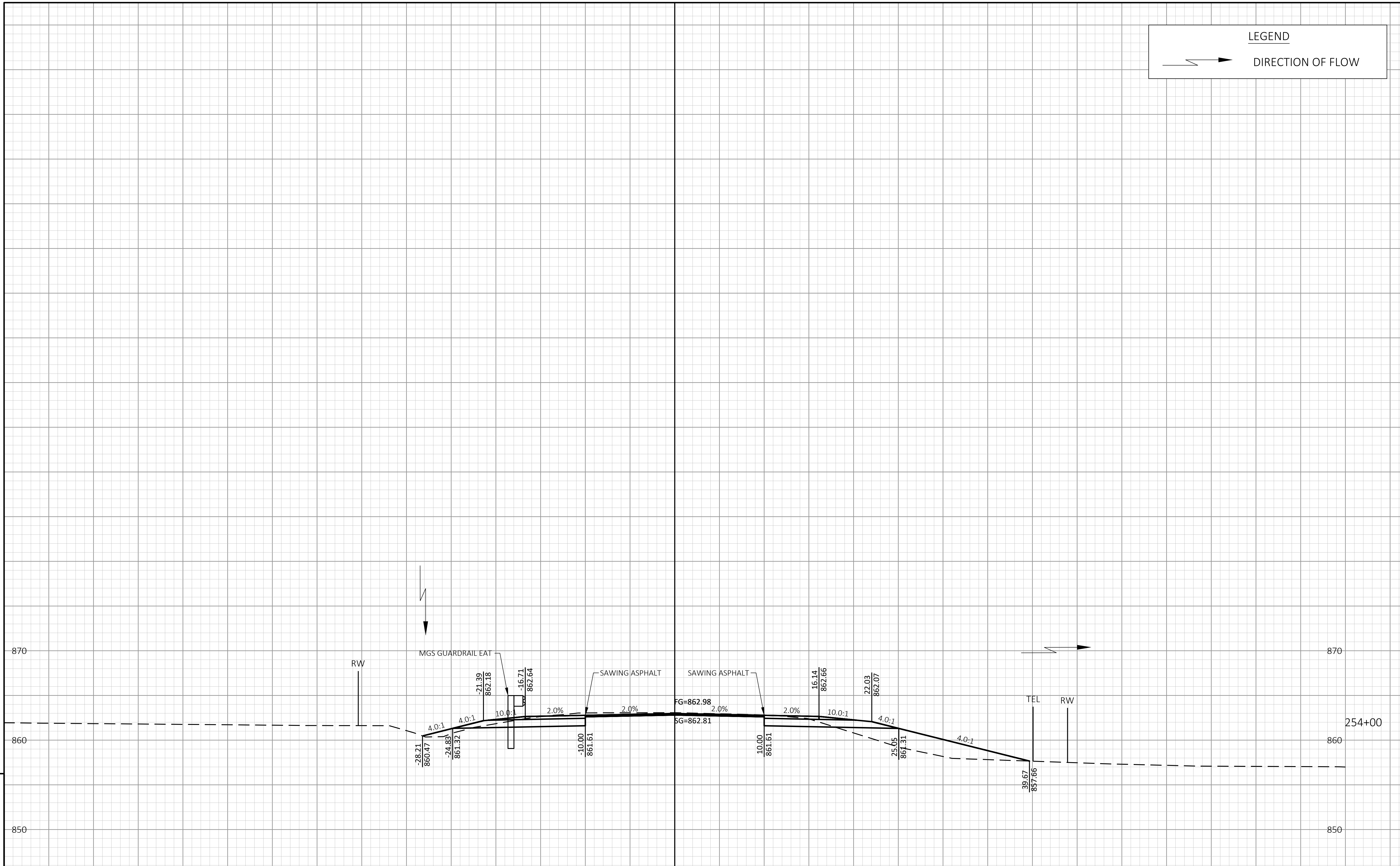
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:28:15 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : BG 06



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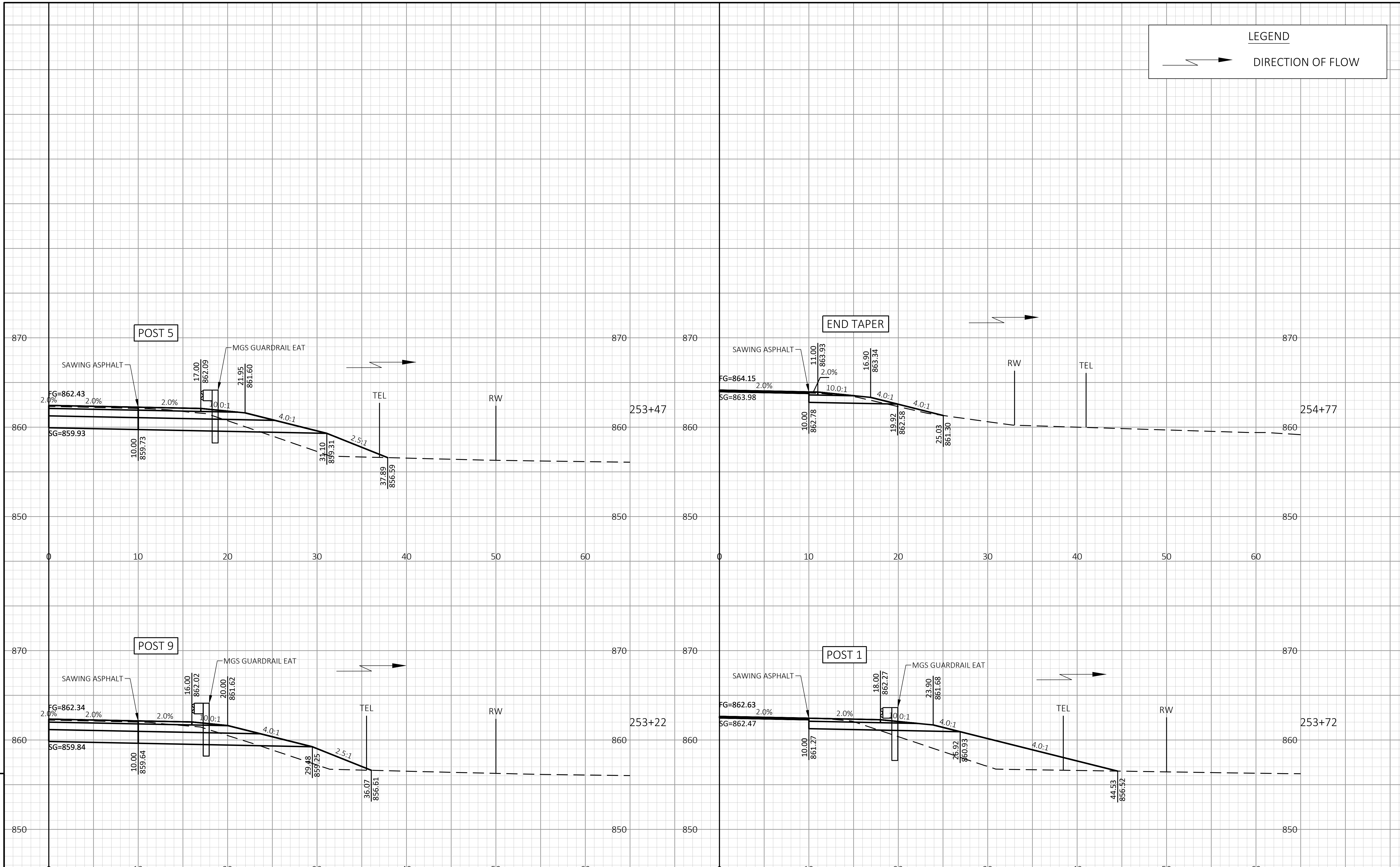
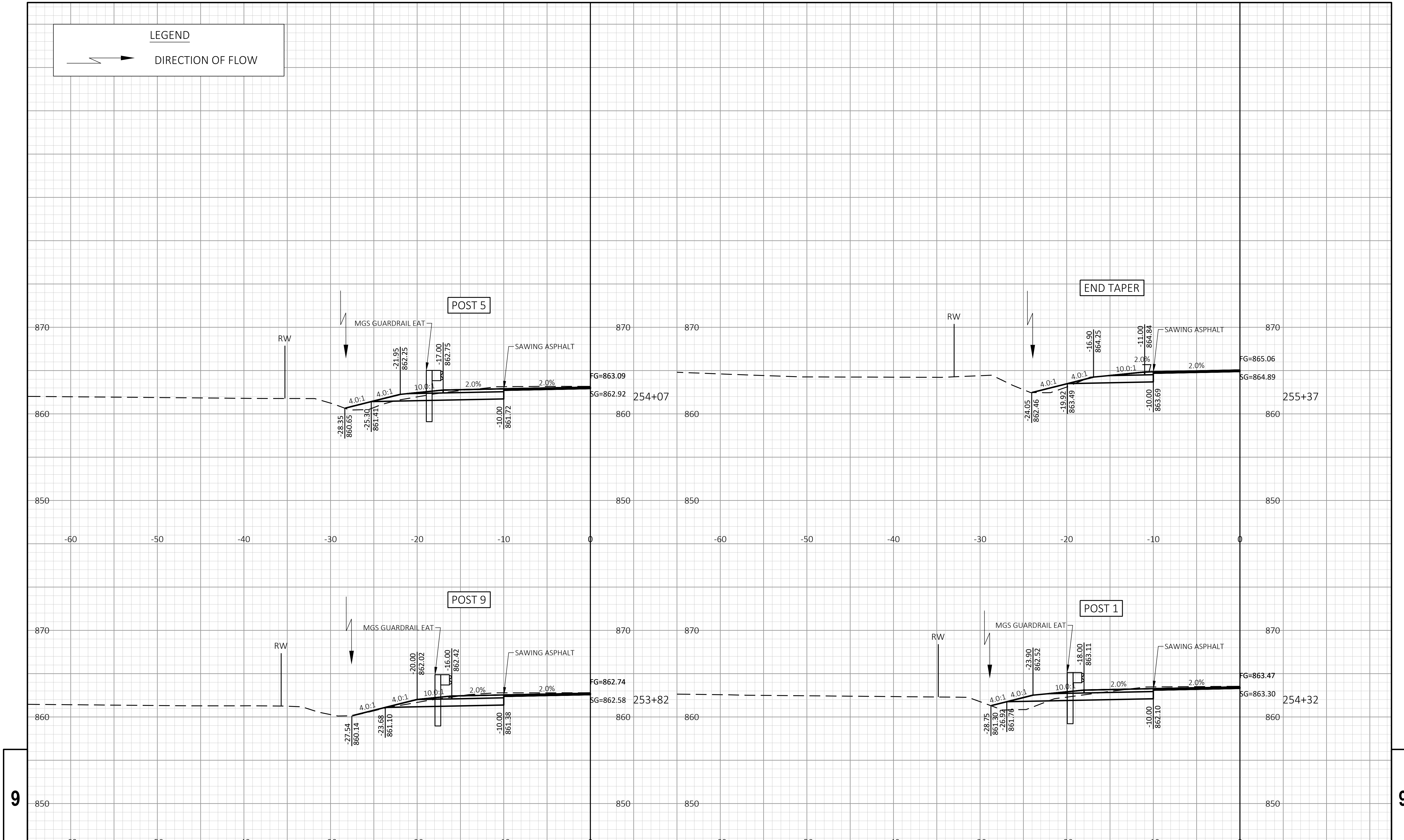
PROJECT NO: 3670-00-74 | HWY: STH 89 | COUNTY: DANE | CROSS SECTIONS: MAINLINE (MGS GUARDRAIL) | SHEET 170 | E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:28:20 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : BG 07



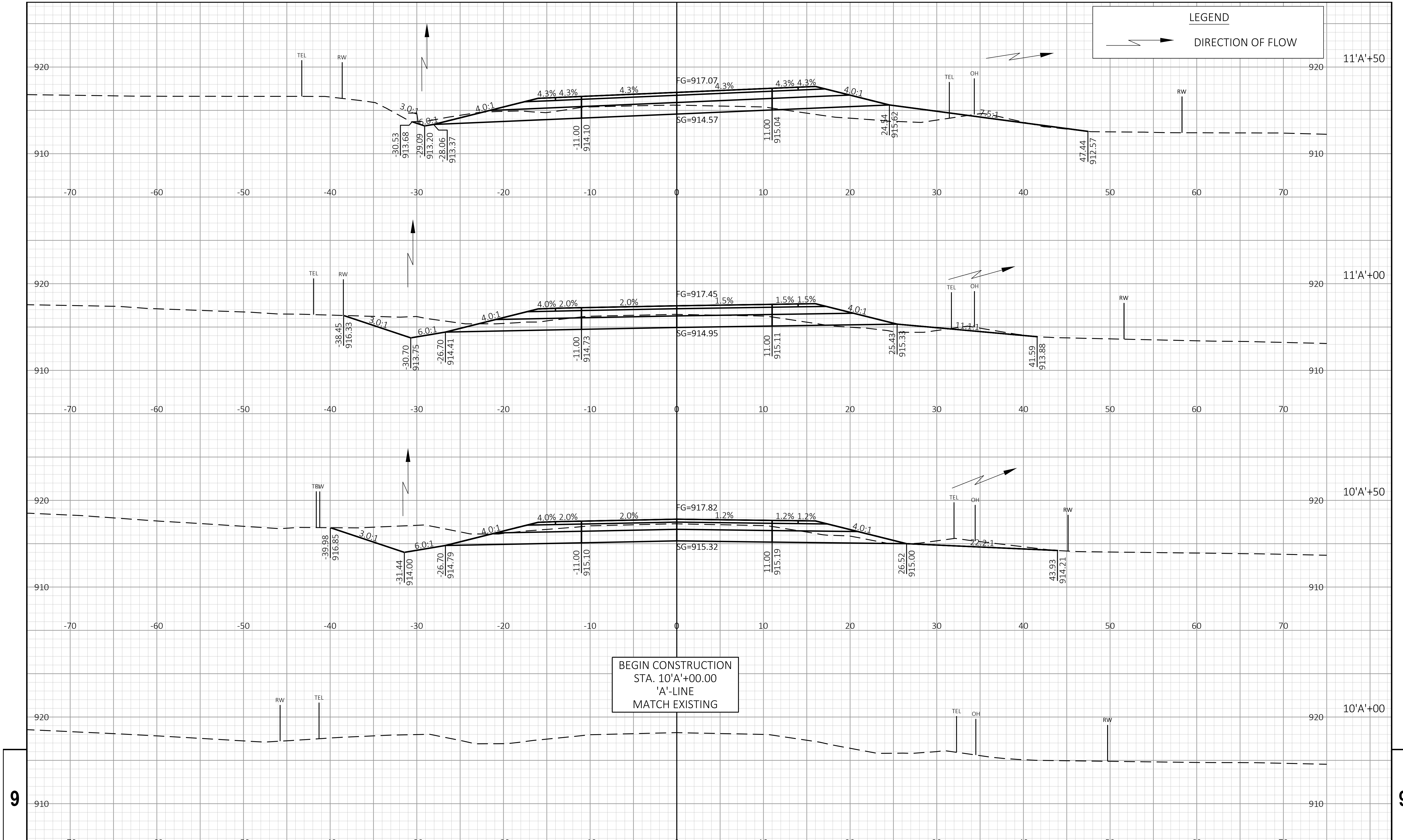
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 171	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:28:25 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : NE EAT



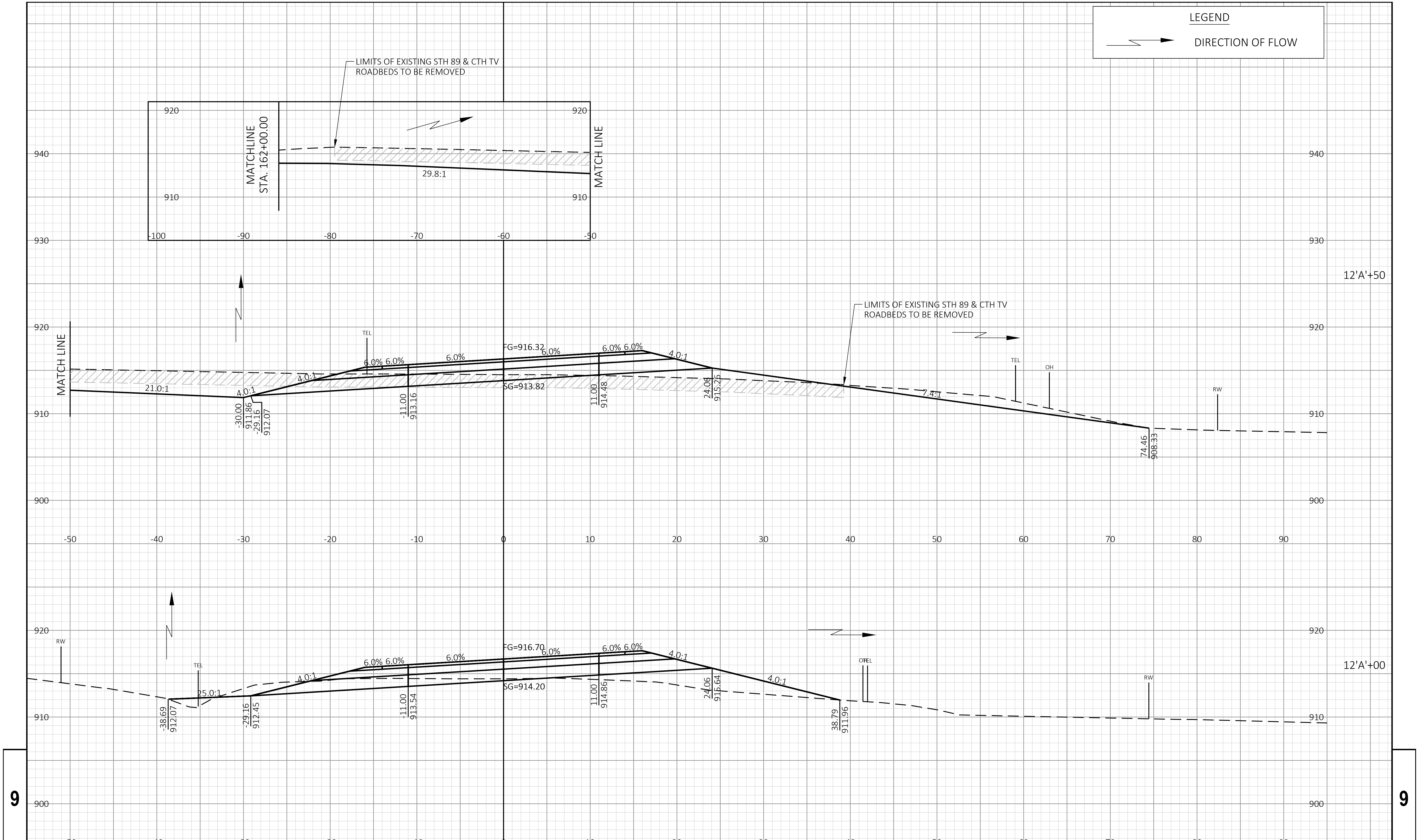
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: MAINLINE (MGS GUARDRAIL)	SHEET 172	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR (BEAMGUARD).DWG PLOT DATE : 5/30/2023 9:28:30 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : NW EAT



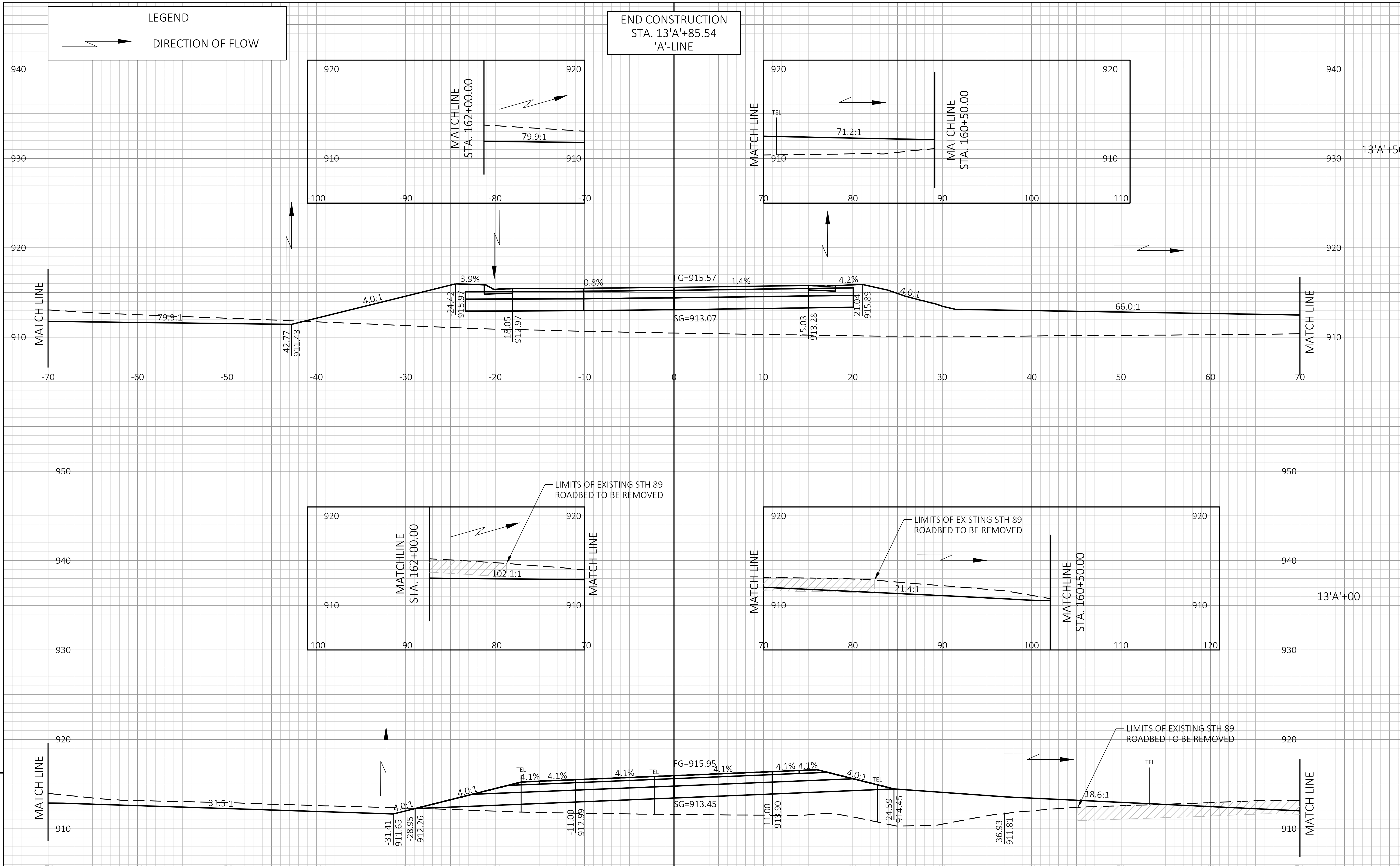
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: 'A'-LINE (CTH TV)	SHEET E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:29:09 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 'A'-LINE (CTH TV) 1



PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: 'A'-LINE (CTH TV)	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 9:29:19 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 'A'-LINE (CTH TV) 2



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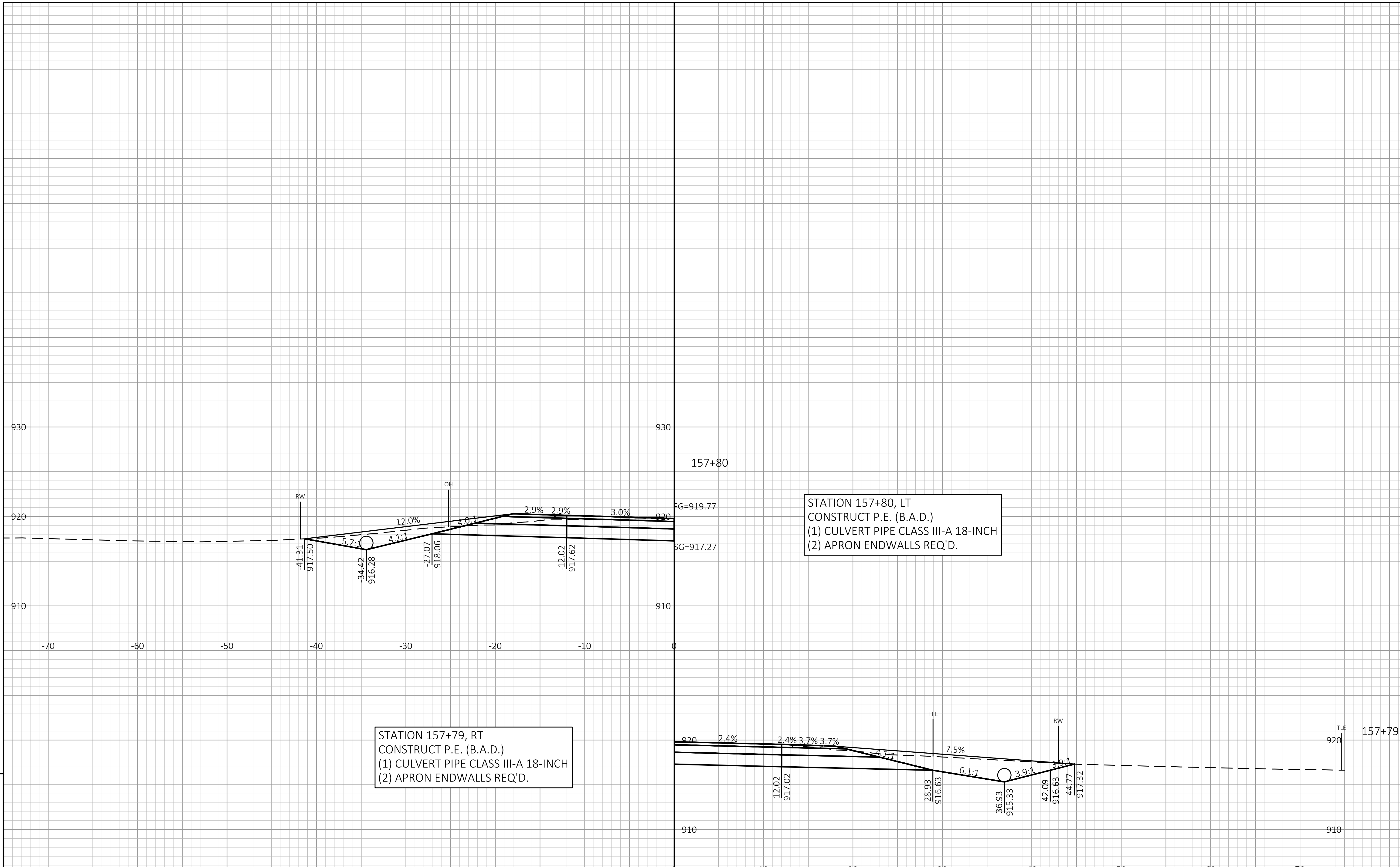
PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: 'A'-LINE (CTH TV)	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 10:04:15 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : 'A'-LINE (CTH TV) 3

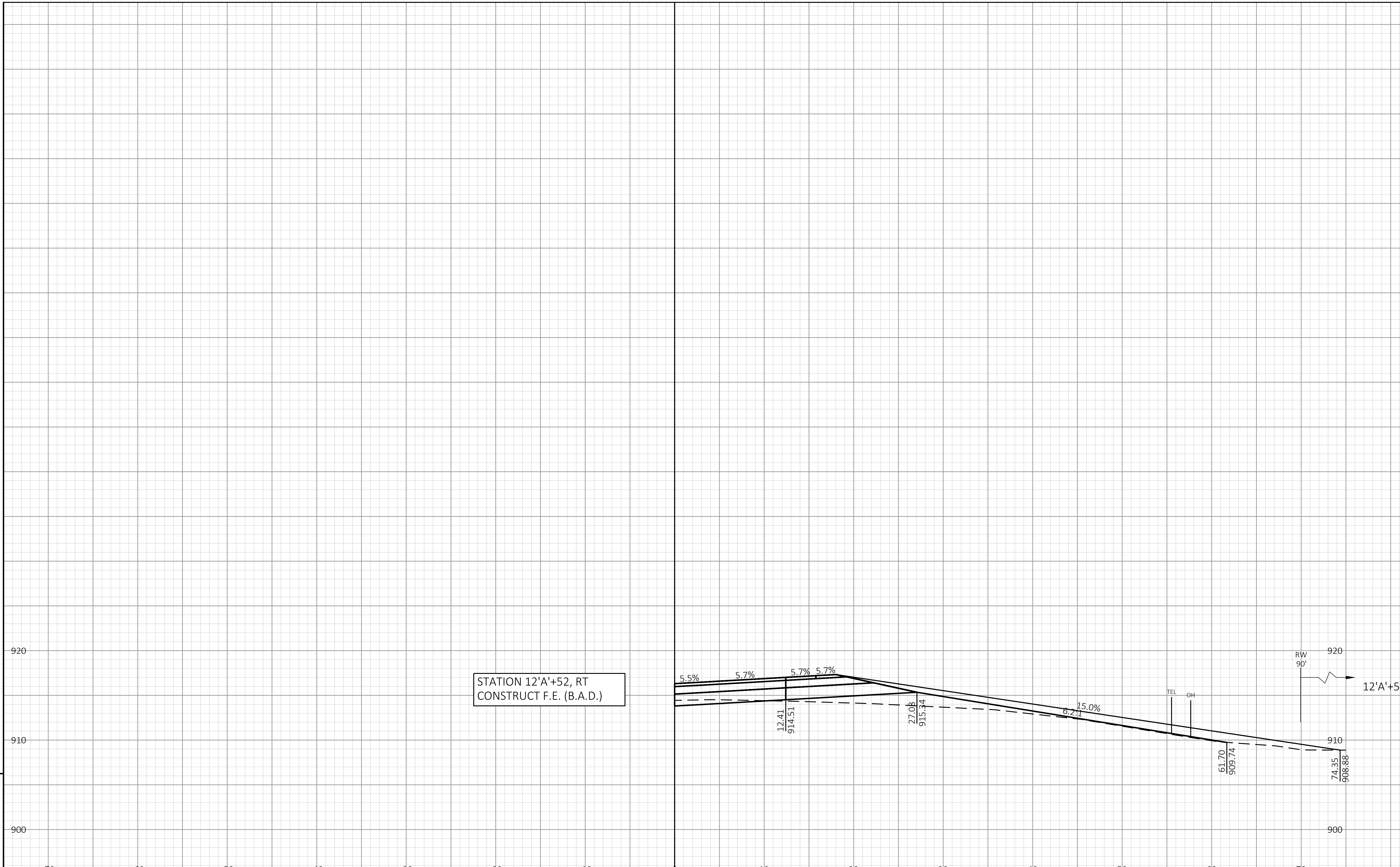
9



9

PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: DRIVEWAYS	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 10:02:22 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : DRIVEWAYS 1



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PROJECT NO: 3670-00-74	HWY: STH 89	COUNTY: DANE	CROSS SECTIONS: DRIVEWAYS	SHEET	E

FILE NAME : S:\PROJECTS\W11659 WISDOT - STH 89 DANE CO RESURFACING\DESIGN\CORRIDORS\W11659_CORRIDOR.DWG PLOT DATE : 5/30/2023 10:02:32 AM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : DRIVEWAYS 2

Wisconsin Department of Transportation

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