

MAD MARCH 2023

PROJECT ID: 6992-00-75

COUNTY: DANE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile (Incl. Erosion Control Plans)
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plaques
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 48



09

DESIGN DESIGNATION 6992-00-75

A.A.D.T. (2023)	=	4010
A.A.D.T. (2043)	=	4430
D.H.V.	=	
D.D.	=	
T.	=	2.0%
DESIGN SPEED	=	25 MPH
ESALS	=	

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

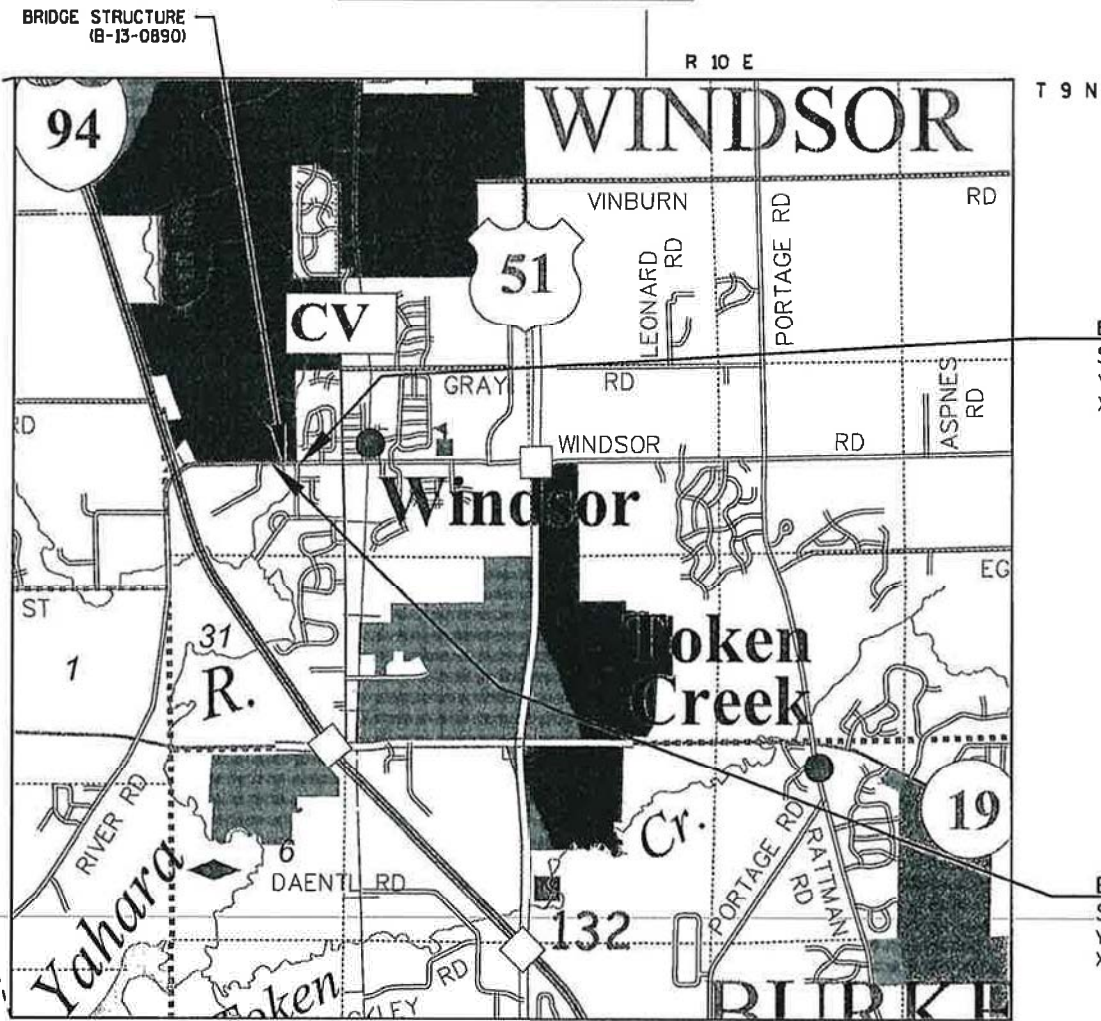
PLAN OF PROPOSED IMPROVEMENT

VILLAGE OF WINDSOR, WINDSOR ROAD

Yahara River Bridge B-13-0890

LOCAL STREET DANE COUNTY

STATE PROJECT NUMBER 6992-00-75



END PROJECT 6992-00-75 STA. 100+73.00 Y = 534,478.06 X = 830,437.76

BEGIN PROJECT 6992-00-75 STA. 99+48.00 Y = 534,477.11 X = 830,312.79



TOTAL NET LENGTH OF CENTERLINE = 0.024 MILES

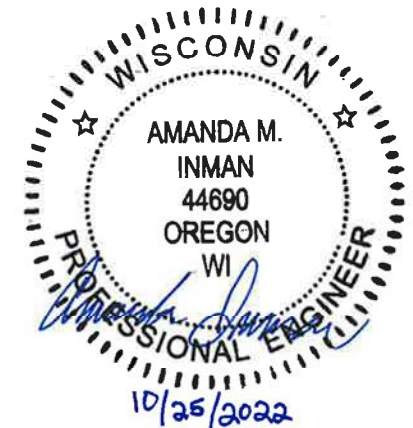
HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6992-00-75	WISC 2023276	1

ACCEPTED FOR VILLAGE OF WINDSOR

Signature of Director of Public Works

ORIGINAL PLANS PREPARED BY



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

Prepared by	AYRES ASSOCIATES
Designer	AYRES ASSOCIATES
Project Manager	LORRAINE BETZEL
Regional Examiner	
Regional Supervisor	KYLE HEAR

APPROVED FOR THE DEPARTMENT DATE: 1/5/23 Signature: Lorraine Betzel

GENERAL NOTES

NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LOCATION THAT ARE NOT SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING ALL UTILITIES.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

EXACT TRAFFIC CONTROL LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

NO TREES OR SHRUBS SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL BY THE ENGINEER.

PROTECT FROM DAMAGE AND COMPLETE SHOULDER WORK AROUND ANY EXISTING SIGNS OR MAILBOXES THAT ARE TO REMAIN IN PLACE.

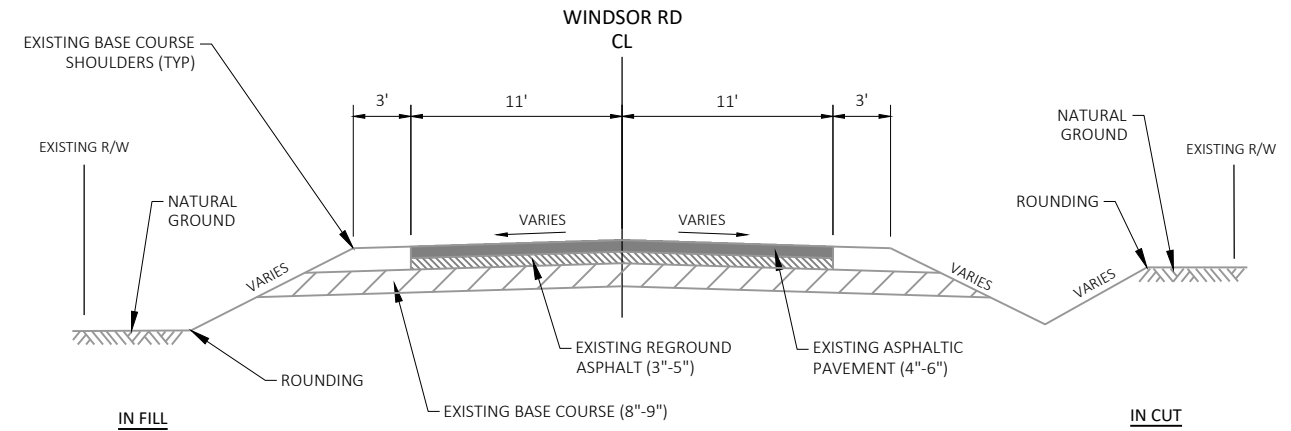
RESTORATION OF EXPOSED SLOPES AND DITCHES SHALL TAKE PLACE WITHIN 7 CALENDAR DAYS AFTER FINISHED GRADING IS COMPLETE.

WETLANDS ARE PRESENT IN THE PROJECT AREA. DO NOT DISTURB WETLANDS OUTSIDE THE PROPOSED SLOPE INTERCEPTS

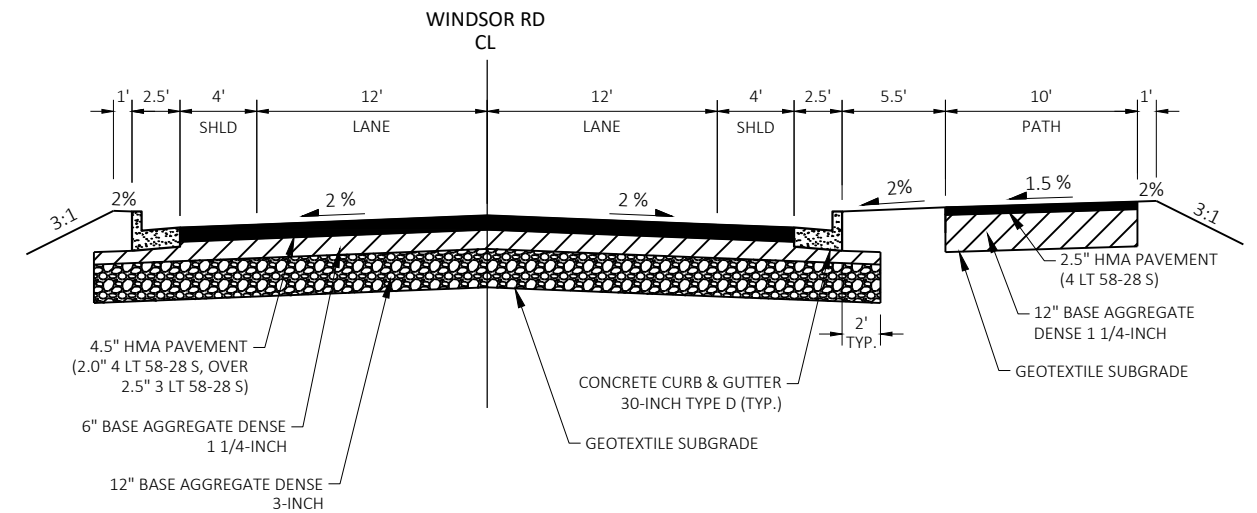
IF AN EXISTING SIGN IS TO BE REMOVED AND REPLACED WITH A NEW SIGN, DO NOT REMOVE THE EXISTING SIGN PRIOR TO INSTALLATION OF THE NEW SIGN.

THE LOCATIONS OF EROSION CONTROL ITEMS SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

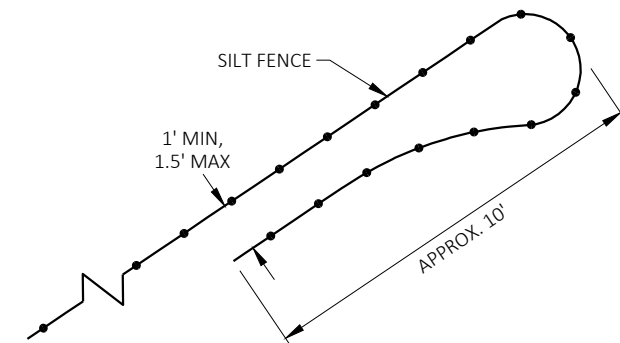


TYPICAL EXISTING SECTION



FINISHED TYPICAL SECTION

STA. 99+48 TO STA. 99+73
STA. 100+26 TO STA. 100+73



SILT FENCE END DETAIL

TURNAROUNDS - TO REDIRECT AMPHIBIANS AND REPTILES AWAY FROM THE CONSTRUCTION ZONE (SEE PLAN AND PROFILE SHEET FOR LOCATIONS). SILT FENCE END DETAIL INCIDENTAL TO BID ITEM 628.1520 SILT FENCE

ABBREVIATIONS

A.D.T.	AVERAGE DAILY TRAFFIC
ATMS	ARTERIAL TRAFFIC MANAGEMENT SYSTEM
BM	BENCHMARK
BOC	BACK OF CURB
BTWN	BETWEEN
C&G	CURB AND GUTTER
C.E.	COMMERCIAL ENTRANCE
CONST	CONSTRUCTION
CP	CONTROL POINT
CTR.	CENTER
D.D.	DIRECTIONAL DISTRIBUTION
D.H.T.	DESIGN HOURLY VOLUME
DMS	DYNAMIC MESSAGE SIGN
EB	EASTBOUND
EXIST	EXISTING
GALV.	GALVANIZED
HMA	HOT MIX ASPHALT
H.S.	HIGH STRENGTH
ITS	INTELLIGENT TRAFFIC SYSTEM
MAX	MAXIMUM
MIN	MINIMUM
NB	NORTHBOUND
NOR	NORMAL
PC	POINT OF CURVATURE
PCC	POINT OF COMMON CURVATURE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVT	PAVEMENT
R/L	REFERENCE LINE
REQ'D	REQUIRED
SB	SOUTHBOUND
SYM	SYMMETRICAL
T.	PERCENT TRUCKS
TCC	TRAFFIC CONDITION CAMERA
TYP	TYPICAL
VAR	VARIABLE
WB	WESTBOUND
WT.	WEIGHT
X-WALK	CROSS WALK

PROJECT CONTACTS

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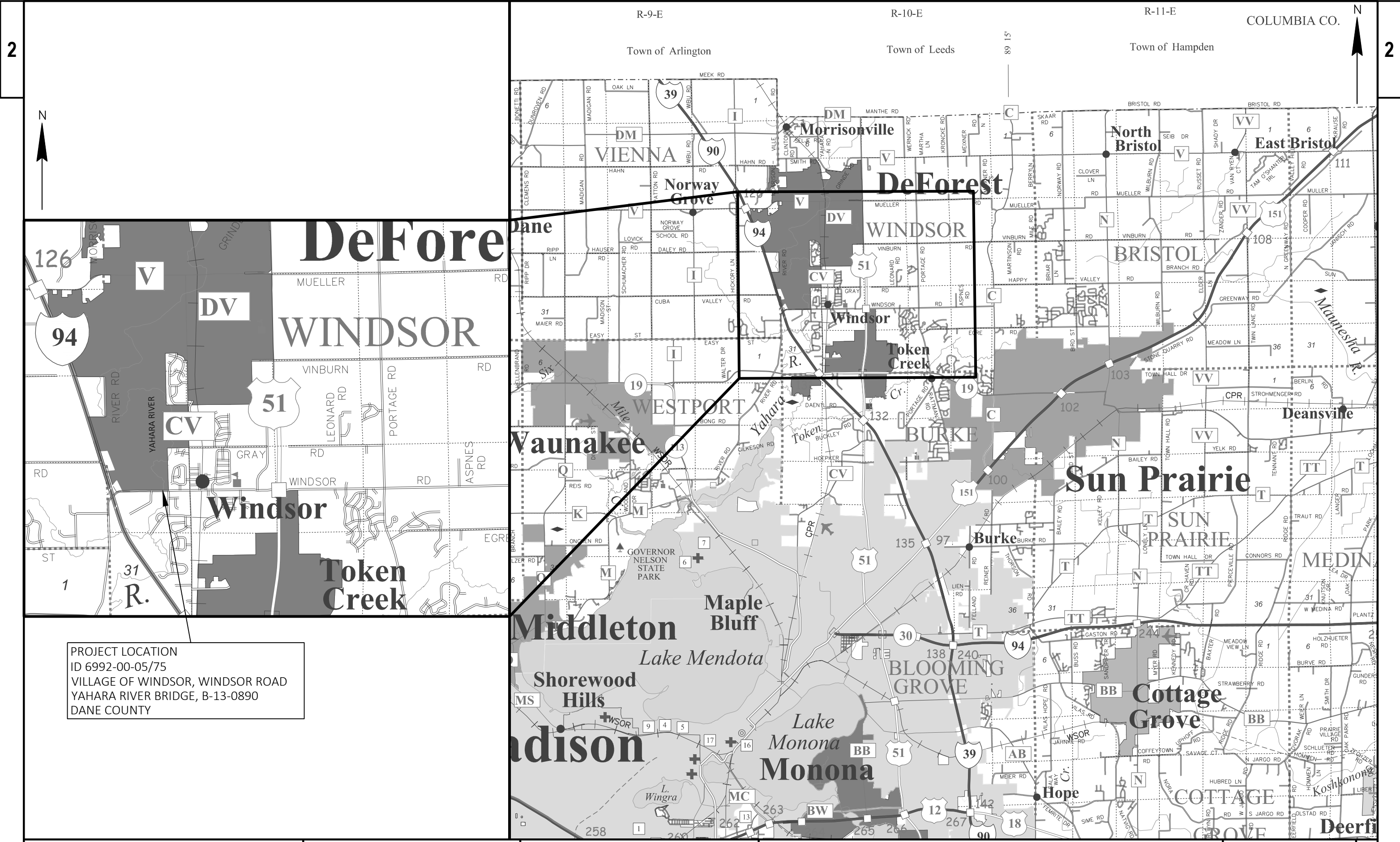
SEWER/WATER
WINDSOR UTILITY DISTRICT
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2005 WEST BELTLINE HIGHWAY
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P: (815) 444-3206
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** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS



Dial 811 or (800)242-8511

www.DiggersHotline.com



PROJECT LOCATION
 ID 6992-00-05/75
 VILLAGE OF WINDSOR, WINDSOR ROAD
 YAHARA RIVER BRIDGE, B-13-0890
 DANE COUNTY

PROJECT NO: 6992-00-75	HWY: WINDSOR ROAD	COUNTY: DANE	PROJECT OVERVIEW	SHEET	E
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Estimate Of Quantities

6992-00-75

Line	Item	Item Description	Unit	Total	Qty
0002	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. B-13-0234	EACH	1.000	1.000
0004	204.0170	Removing Fence	LF	20.000	20.000
0006	205.0100	Excavation Common	CY	198.000	198.000
0008	206.1001	Excavation for Structures Bridges (structure) 01. B-13-0890	EACH	1.000	1.000
0010	206.5001	Cofferdams (structure) 01. B-13-0890	EACH	1.000	1.000
0012	208.0100	Borrow	CY	220.000	220.000
0014	210.1500	Backfill Structure Type A	TON	450.000	450.000
0016	213.0100	Finishing Roadway (project) 01. 6992-00-75	EACH	1.000	1.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	165.000	165.000
0020	305.0130	Base Aggregate Dense 3-Inch	TON	240.000	240.000
0022	455.0605	Tack Coat	GAL	25.000	25.000
0024	460.2000	Incentive Density HMA Pavement	DOL	60.000	60.000
0026	460.5223	HMA Pavement 3 LT 58-28 S	TON	40.000	40.000
0028	460.5224	HMA Pavement 4 LT 58-28 S	TON	45.000	45.000
0030	502.0100	Concrete Masonry Bridges	CY	396.000	396.000
0032	502.3200	Protective Surface Treatment	SY	310.000	310.000
0034	502.3210	Pigmented Surface Sealer	SY	75.000	75.000
0036	505.0400	Bar Steel Reinforcement HS Structures	LB	6,930.000	6,930.000
0038	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	50,160.000	50,160.000
0040	513.7016	Railing Steel Type C3	LF	153.600	153.600
0042	516.0500	Rubberized Membrane Waterproofing	SY	31.000	31.000
0044	517.1015.S	Concrete Staining Multi-Color (structure) 01. B-13-0890	SF	1,445.000	1,445.000
0046	517.1050.S	Architectural Surface Treatment (structure) 01. B-13-0890	SF	970.000	970.000
0048	550.0500	Pile Points	EACH	17.000	17.000
0050	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	595.000	595.000
0052	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	146.000	146.000
0054	606.0300	Riprap Heavy	CY	260.000	260.000
0056	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	205.000	205.000
0058	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6992-00-75	EACH	1.000	1.000
0060	619.1000	Mobilization	EACH	1.000	1.000
0062	623.0200	Dust Control Surface Treatment	SY	330.000	330.000
0064	624.0100	Water	MGAL	7.000	7.000
0066	625.0500	Salvaged Topsoil	SY	240.000	240.000
0068	628.1504	Silt Fence	LF	280.000	280.000
0070	628.1520	Silt Fence Maintenance	LF	560.000	560.000
0072	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0074	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0076	628.2008	Erosion Mat Urban Class I Type B	SY	265.000	265.000
0078	629.0210	Fertilizer Type B	CWT	0.500	0.500
0080	630.0171	Seeding Mixture No. 70A	LB	3.000	3.000
0082	630.0200	Seeding Temporary	LB	10.000	10.000
0084	630.0300	Seeding Borrow Pit	LB	1.000	1.000
0086	630.0500	Seed Water	MGAL	6.400	6.400
0088	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	4.000	4.000
0090	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0092	638.2602	Removing Signs Type II	EACH	5.000	5.000
0094	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0096	642.5001	Field Office Type B	EACH	1.000	1.000
0098	643.0420	Traffic Control Barricades Type III	DAY	1,404.000	1,404.000

Estimate Of Quantities

6992-00-75

Line	Item	Item Description	Unit	Total	Qty
0100	643.0705	Traffic Control Warning Lights Type A	DAY	1,872.000	1,872.000
0102	643.0900	Traffic Control Signs	DAY	1,092.000	1,092.000
0104	643.5000	Traffic Control	EACH	1.000	1.000
0106	645.0111	Geotextile Type DF Schedule A	SY	145.000	145.000
0108	645.0120	Geotextile Type HR	SY	490.000	490.000
0110	646.1020	Marking Line Epoxy 4-Inch	LF	500.000	500.000
0112	650.4500	Construction Staking Subgrade	LF	73.000	73.000
0114	650.5000	Construction Staking Base	LF	73.000	73.000
0116	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	146.000	146.000
0118	650.6501	Construction Staking Structure Layout (structure) 01. B-13-0890	EACH	1.000	1.000
0120	650.9911	Construction Staking Supplemental Control (project) 01. 6992-00-75	EACH	1.000	1.000
0122	650.9920	Construction Staking Slope Stakes	LF	73.000	73.000
0124	690.0150	Sawing Asphalt	LF	46.000	46.000
0126	715.0502	Incentive Strength Concrete Structures	DOL	2,160.000	2,160.000
0128	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	325.000	325.000
0130	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	250.000	250.000
0132	SPV.0180	Special 01. Geotextile Subgrade	SY	410.000	410.000

3

WINDSOR ROAD EARTHWORK SUMMARY

From/To Station	Location	Common Excavation (1)		Unexpanded Fill	Expanded Fill (2) Factor 1.30	Mass Ordinate +/- (3)	Waste	Borrow (Item 208.0100)	Comment:
		Cut	Unusable						
99+48 to 99+74	WEST APPROACH	75	16	125	162	-103		103	
100+26 to 100+73	EAST APPROACH	123	28	163	212	-117		117	
TOTAL		198			374			220	

- 1) Common Excavation is the Cut. Unusable excavation is existing pavement (Included in Cut volume). Item number 205.0100.
- 2) Expanded Fill. Factor = 1.30; Expanded Fill = Unexpanded Fill * Fill Factor
- 3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material on the project.
- 4) All quantities shown in CY.

BASE AGGREGATE AND GEOTEXTILE

CATEGORY	STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4- INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON	624.0100 WATER MGAL	SPV.0180.01 SPECIAL (01. GEOTEXTILE SUBGRADE) SY	REMARKS
0010	99+48	-	99+74	MAINLINE	40	85	2	115	WEST APPROACH
	99+48	-	99+74	PATH	20	-	1	30	WEST APPROACH
	100+26	-	100+73	MAINLINE	70	155	3	210	EAST APPROACH
	100+26	-	100+73	PATH	35	-	1	55	EAST APPROACH
TOTAL 0010					165	240	7	410	

3

REMOVING FENCE

CATEGORY	STATION	TO	STATION	LOCATION	204.0170 REMOVING FENCE LF	REMARKS
0010	100+25	-	100+45	RT	20	
TOTAL 0010					20	

CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	REMARKS
0010	99+48	-	99+74	LT	26	WEST APPROACH
	99+48	-	99+74	RT	26	WEST APPROACH
	100+26	-	100+73	LT	47	EAST APPROACH
	100+26	-	100+73	RT	47	EAST APPROACH
TOTAL 0010					146	

ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	REMARKS
0010	99+48	-	99+74	MAINLINE	7	15	12	WEST APPROACH
	99+48	-	99+74	PATH	2	-	5	WEST APPROACH
	100+26	-	100+73	MAINLINE	12	25	20	EAST APPROACH
	100+26	-	100+73	PATH	4	-	8	EAST APPROACH
TOTAL 0010					25	40	45	

EROSION CONTROL AND FINISHING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0171 SEEDING MIXTURE NO. 70A LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	630.0500 SEED WATER MGAL
0010	99+48	-	99+74	LT	0	60	120	0	0	0	0	-	0.0
	99+48	-	99+74	RT	50	45	90	55	0.1	1	2	-	1.3
	100+26	-	100+73	LT	40	85	170	40	0.1	1	2	-	0.9
	100+26	-	100+73	RT	150	65	130	145	0.1	0	5	-	3.2
	UNDISTRIBUTED				-	25	50	25	0.2	1	1	1	1.0
TOTAL 0010					240	280	560	265	0.5	3	10	1	6.4

NOTES:

- * TACK COAT APPLICATION RATE = 0.07 GAL/SY
- ** ASSUMED ASPHALT AT 112 LBS/SY/IN

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

CONVENTIONAL SYMBOLS

SECTION LINE	--- --	PARCEL NUMBER 25	UTILITY NUMBER 40
QUARTER LINE	--- --	PRW POINT NUMBER 100	TILE POINT NUMBER T100
SIXTEENTH LINE	--- --	SECTION CORNER	R/W MONUMENT
NEW REFERENCE LINE	--- --	NOTATION FOR COMBUSTIBLE FLUIDS	NON-MONUMENTED R/W POINT
NEW R/W LINE	--- --	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES	FOUND IRON PIN
EXISTING R/W LINE	--- --	ACCESS CONTROLLED BY ACQUISITION	VALVE (GAS, WATER, ETC.)
PROPERTY LINE	--- --	NO ACCESS (BY STATUTORY AUTHORITY)	SIGN
LOT, TIE, AND OTHER MINOR LINES	--- --	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)	OFF-PREMISE SIGN
SLOPE INTERCEPT	--- --	NO ACCESS (NEW HIGHWAY)	
CORPORATE LIMITS	--- --	NATIONAL GEODETIC SURVEY MONUMENT	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	--- --	SIXTEENTH CORNER MONUMENT	
FEE ACQUISITION AREA (MATCHING VARIES BY OWNER)	--- --	PARALLEL OFFSETS	
TEMP. LIMITED EASEMENT AREA	--- --		
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)	--- --		
TRANSMISSION STRUCTURES	--- --		
BUILDING	--- --		
BUILDING (TO BE REMOVED)	--- --		
BRIDGE	--- --		

CONVENTIONAL UTILITY SYMBOLS

WATER	--- --	NON-COMPENSABLE	--- --
GAS	--- --	COMPENSABLE	--- --
TELEPHONE	--- --		
OVER-HEAD TRANSMISSION LINES	--- --		
ELECTRIC	--- --		
CABLE TELEVISION	--- --		
FIBER OPTIC	--- --		
SANITARY SEWER	--- --		
STORM SEWER	--- --		
ELECTRIC TOWER	--- --		
POWER POLE	--- --		
TELEPHONE POLE	--- --		
TELEPHONE PEDESTAL	--- --		

COURSE	BEARING	DISTANCE
100-101	N00° 25' 11"W	2.04'
101-102	N00° 25' 11"W	30.96'
102-103	N00° 32' 00"W	14.00'
103-104	N89° 34' 49"E	55.00'
104-105	S00° 32' 00"E	14.00'
105-106	S00° 32' 00"E	30.85'
106-107	S00° 25' 11"E	2.15'

COURSE	BEARING	DISTANCE
107-108	N89° 34' 49"E	74.93'
108-109	S00° 25' 11"E	33.00'
109-110	S00° 17' 56"E	30.00'
110-111	S89° 34' 49"W	129.73'
111-112	N00° 31' 59"W	30.00'
112-100	N00° 38' 51"W	33.00'

R/W PROJECT NUMBER 6992-00-05	SHEET NUMBER 4.01	TOTAL SHEETS 1
CONSTRUCTION PROJECT NUMBER 6992-00-05		
PLAT OF RIGHT OF WAY REQUIRED FOR WINDSOR ROAD		
WINDSOR ROAD	DANE COUNTY	

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS REMAINING	ROR
ACCESS RIGHTS	AR	RIGHT-OF-WAY	R/W
ACRES	AC	SECTION	SEC.
AND OTHERS	ET AL	STATION	STA.
CENTERLINE	CL	TEMPORARY LIMITED EASEMENT	TLE
CERTIFIED SURVEY MAP CORNER	CSM	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	[100']		
REFERENCE LINE	RL		

NOTES:

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

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (3/4"x24" CAPPED IRON REBAR WEIGHING 1.50 LBS LIN. FT.) AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

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.

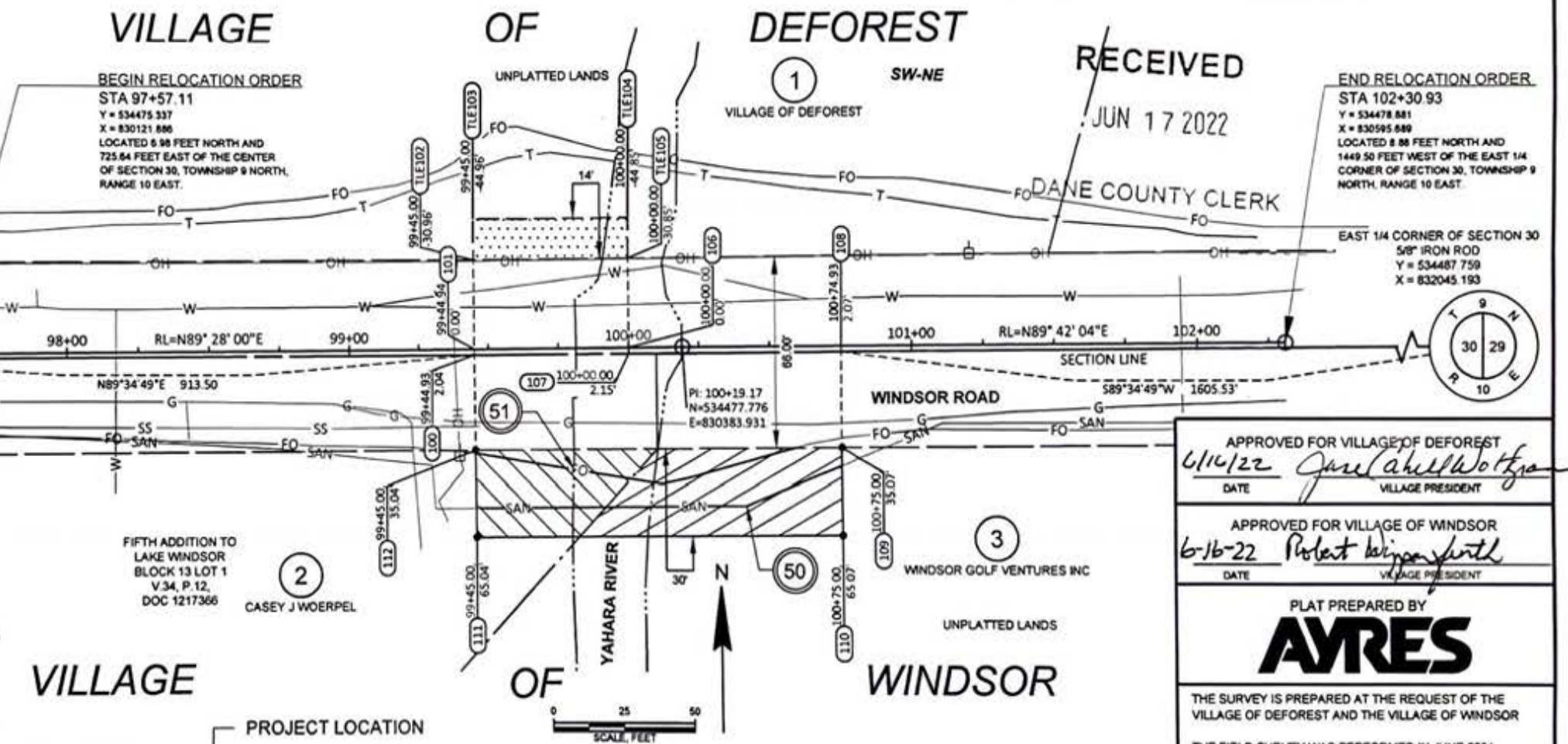
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR ROAD NAME SHOWN HEREIN IS BASED ON CSM 13006, CSM 15366, AND FIFTH ADDITION TO LAKE WINDSOR. THE WIDTH HAS BEEN ESTABLISHED AT 4 RODS (66 FEET).

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.



SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST REQUIRED	R/W (SQ FT)			
			FEE	EXISTING	TOTAL	TLE
1	VILLAGE OF DEFOREST	TLE	0.00	0.00	0.00	770
2	CASEY J WOERPEL	FEE	1523	0.00	1523	0.00
3	WINDSOR GOLF VENTURES INC	FEE	2371	2145	4516	0.00

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

UTILITY INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST REQUIRED
50	VILLAGE OF WINDSOR	RELEASE OF RIGHTS
51	EVERSTREAM	RELEASE OF RIGHTS

APPROVED FOR VILLAGE OF DEFOREST
6/16/22 *Jane Cahill Wotko*
DATE VILLAGE PRESIDENT

APPROVED FOR VILLAGE OF WINDSOR
6-16-22 *Robert Kasper*
DATE VILLAGE PRESIDENT

PLAT PREPARED BY
AVRES

THE SURVEY IS PREPARED AT THE REQUEST OF THE VILLAGE OF DEFOREST AND THE VILLAGE OF WINDSOR.

THE FIELD SURVEY WAS PERFORMED IN JUNE 2021.

THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

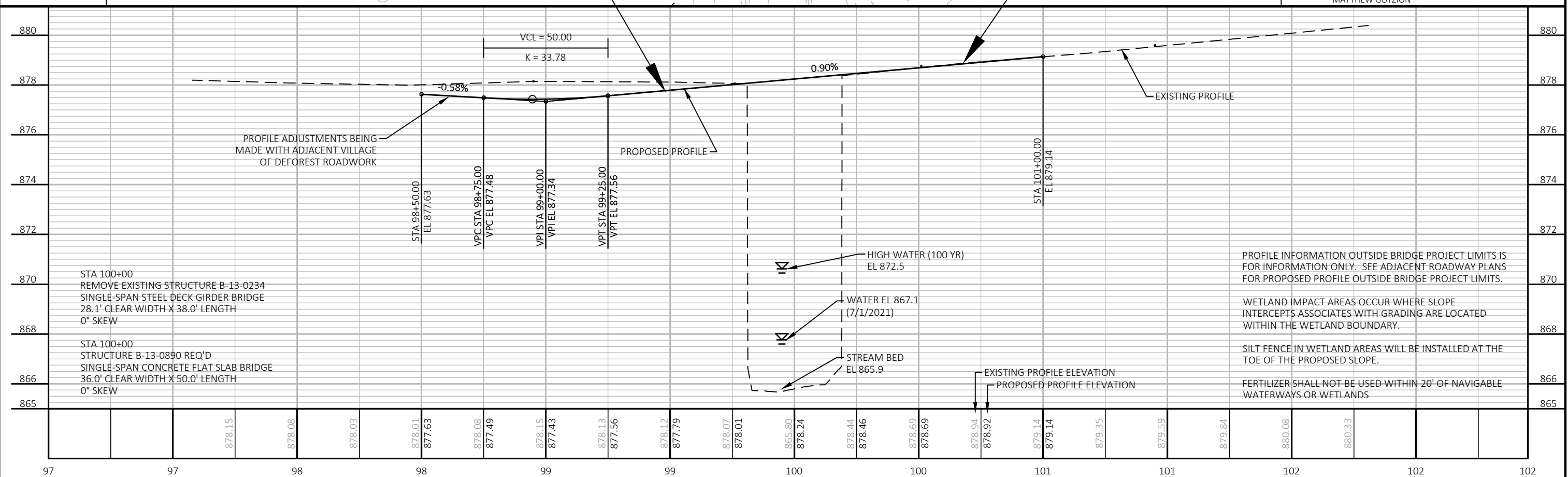
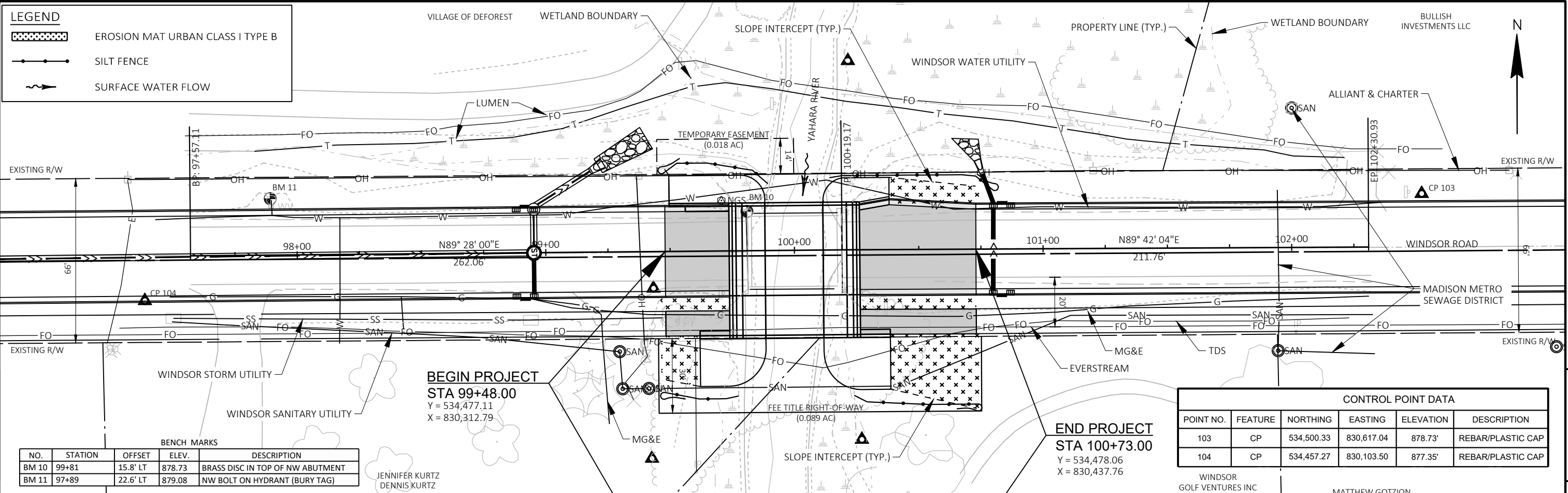


Benjamin J. Larson
BENJAMIN J LARSON,
P.L.S. S-3006
April 07, 2022
DATE

Relocation Order # 762

LEGEND

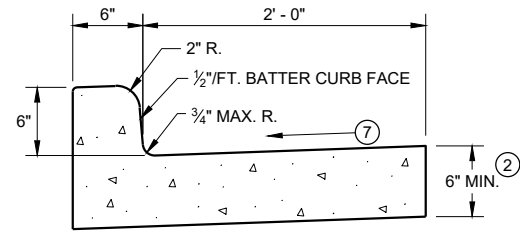
	EROSION MAT URBAN CLASS I TYPE B
	SILT FENCE
	SURFACE WATER FLOW



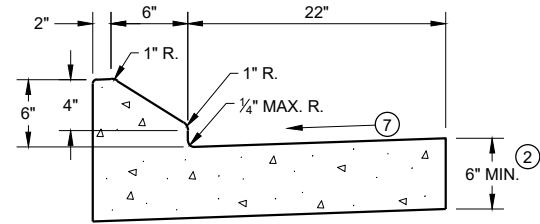
PROJECT NO: 6992-00-75	HWY: WINDSOR ROAD	COUNTY: DANE	PLAN AND PROFILE: WINDSOR ROAD	SHEET	E
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Standard Detail Drawing List

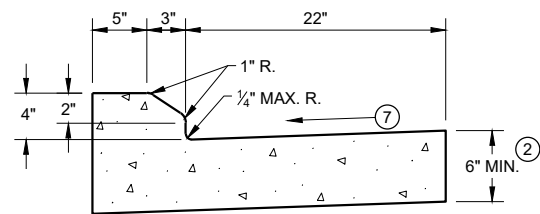
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08E09-06	SILT FENCE
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-10	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



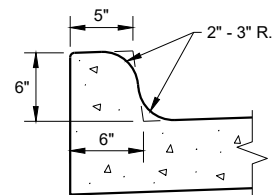
TYPES A^① & D



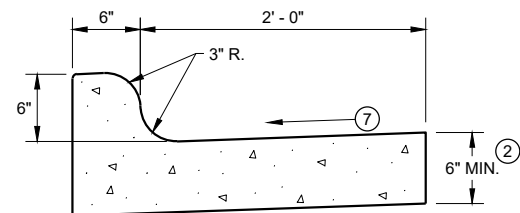
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

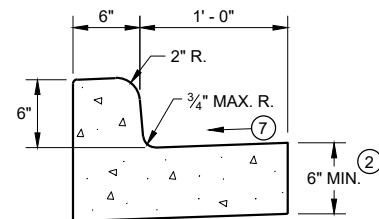


TYPES K^① & L
(OPTIONAL CURB SHAPE)



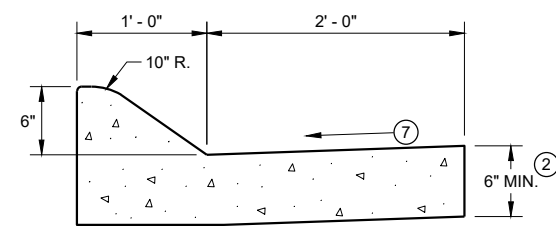
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

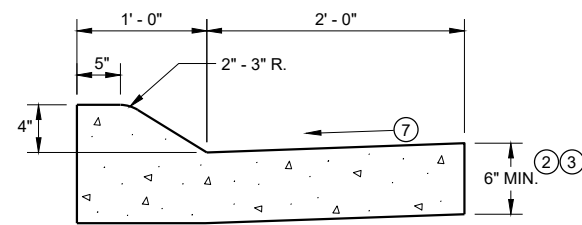


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

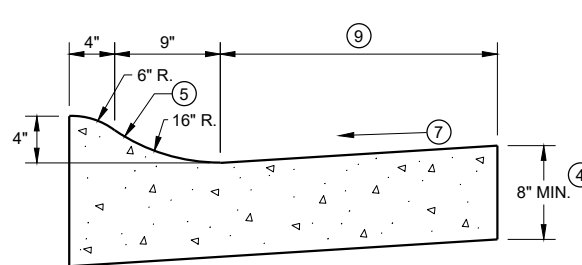


6" SLOPED CURB TYPES A^① & D



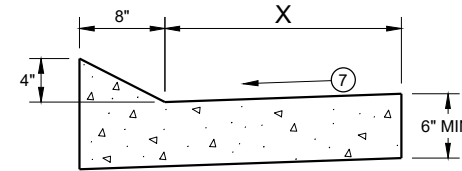
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

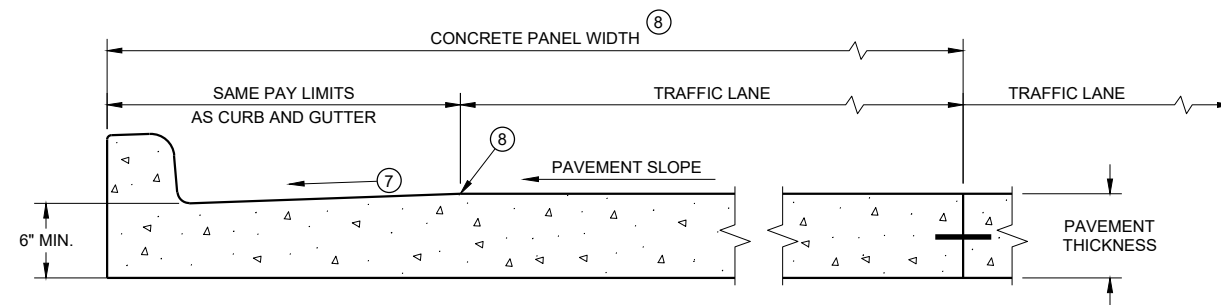


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

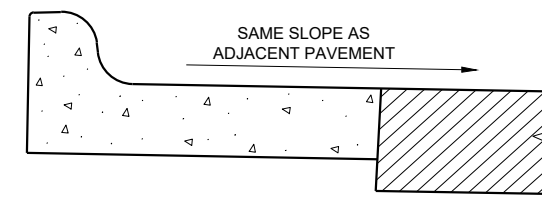
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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)

GENERAL NOTES

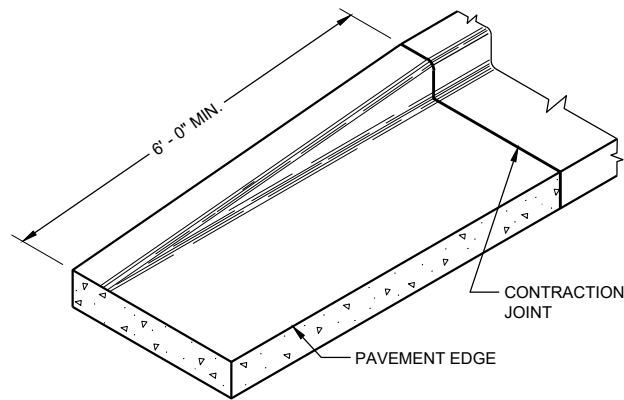
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

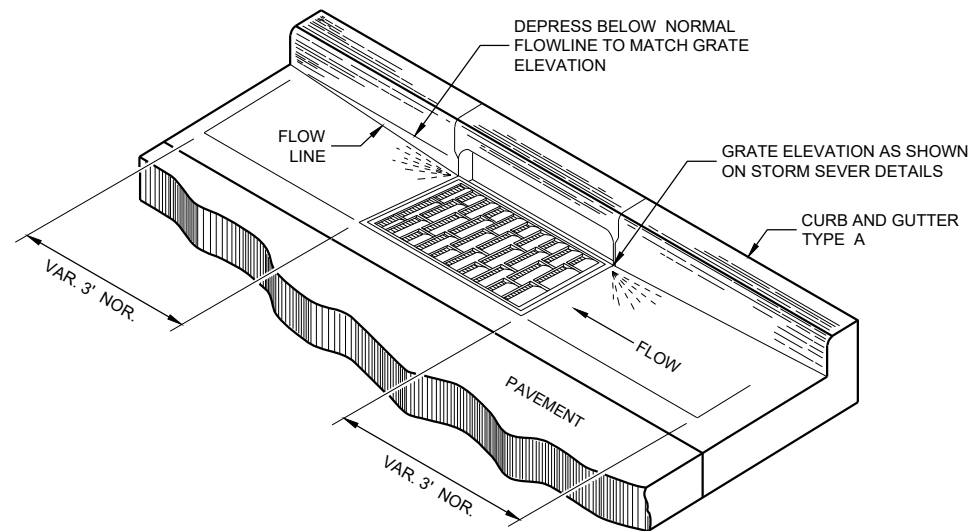
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

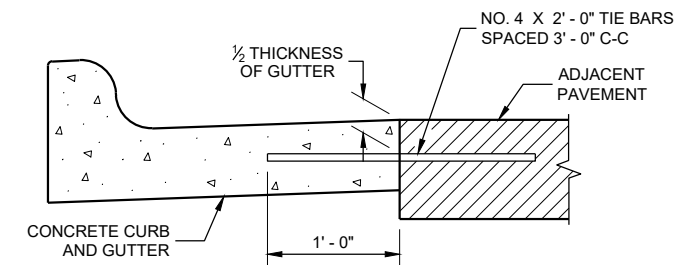
GENERAL NOTES

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

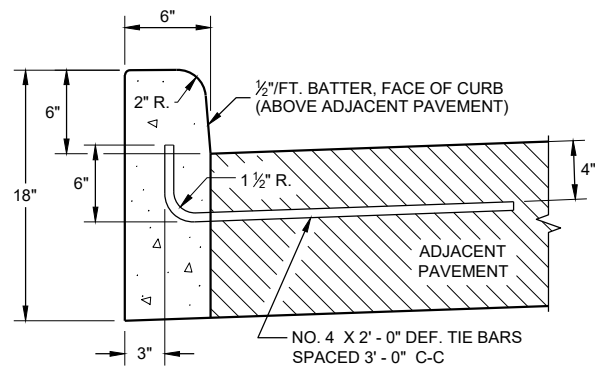
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

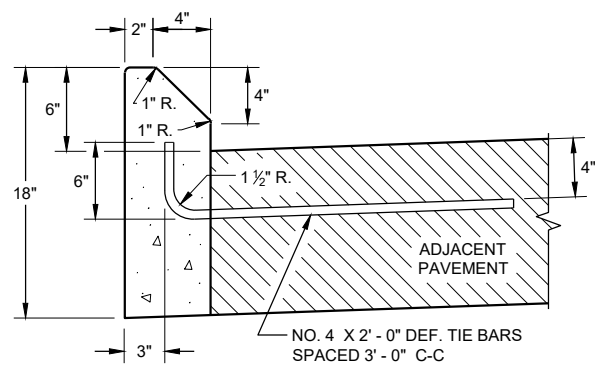
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑨ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION ①

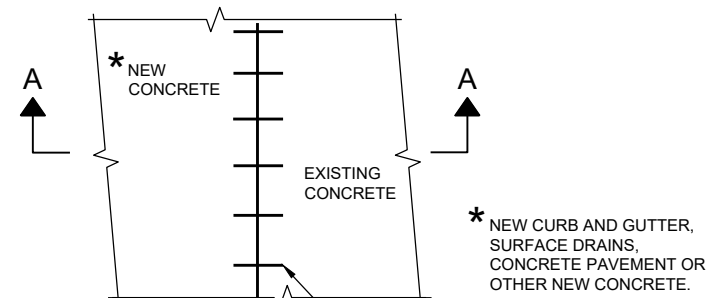


TYPES A ① & D

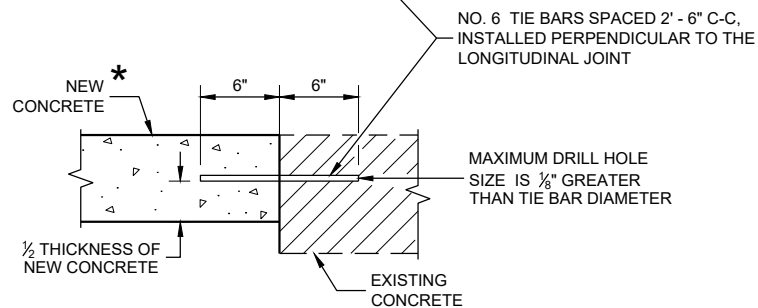


TYPES G ① & J

CONCRETE CURB

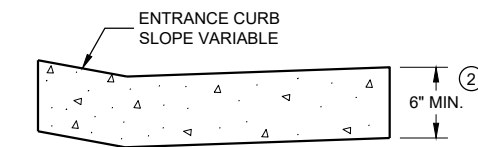


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



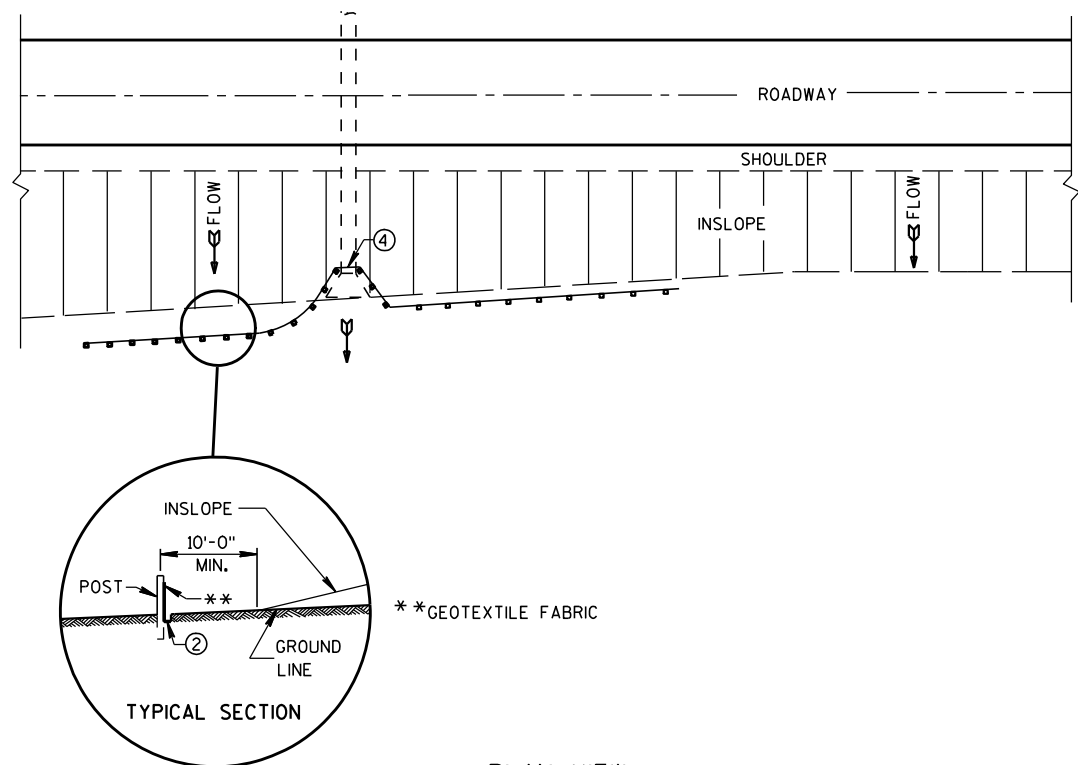
DRIVEWAY ENTRANCE CURB ⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

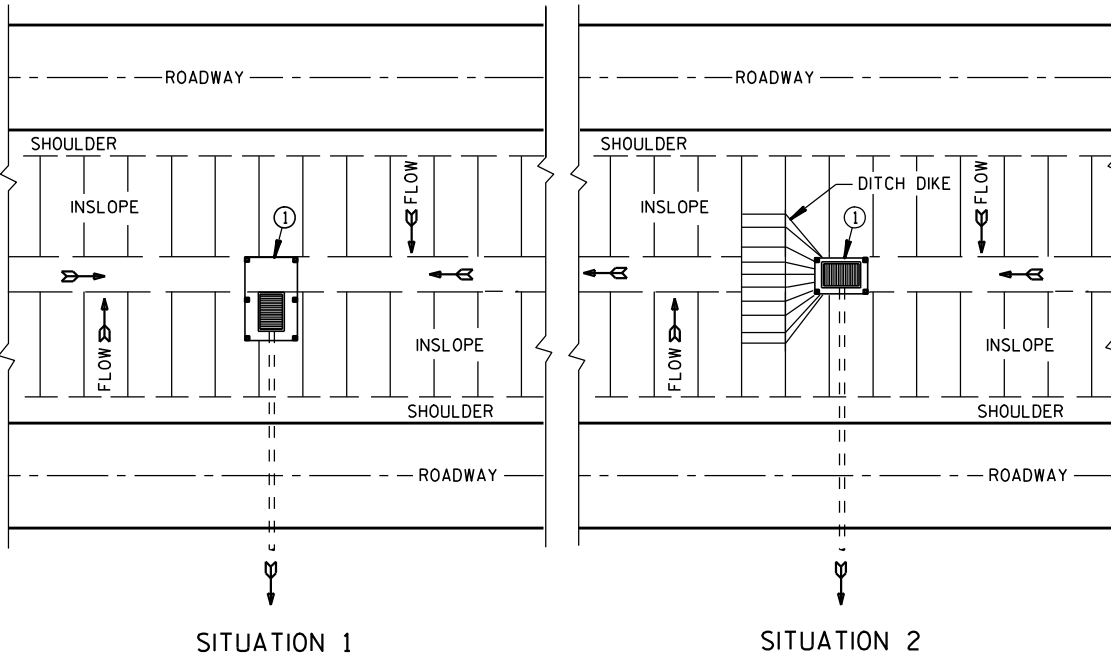
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

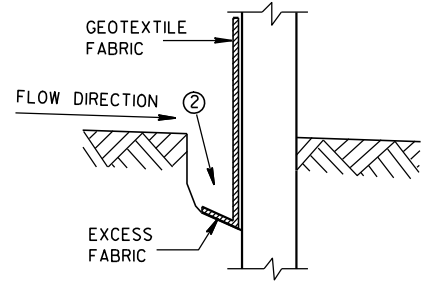


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

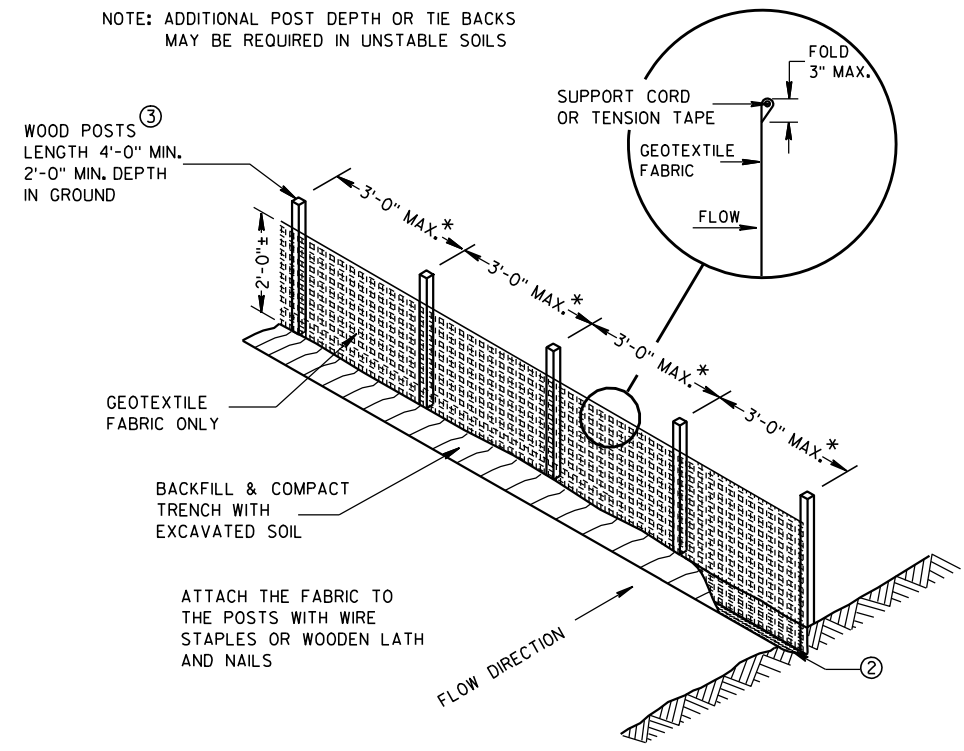
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- 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 1 1/8" X 1 1/8" 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.



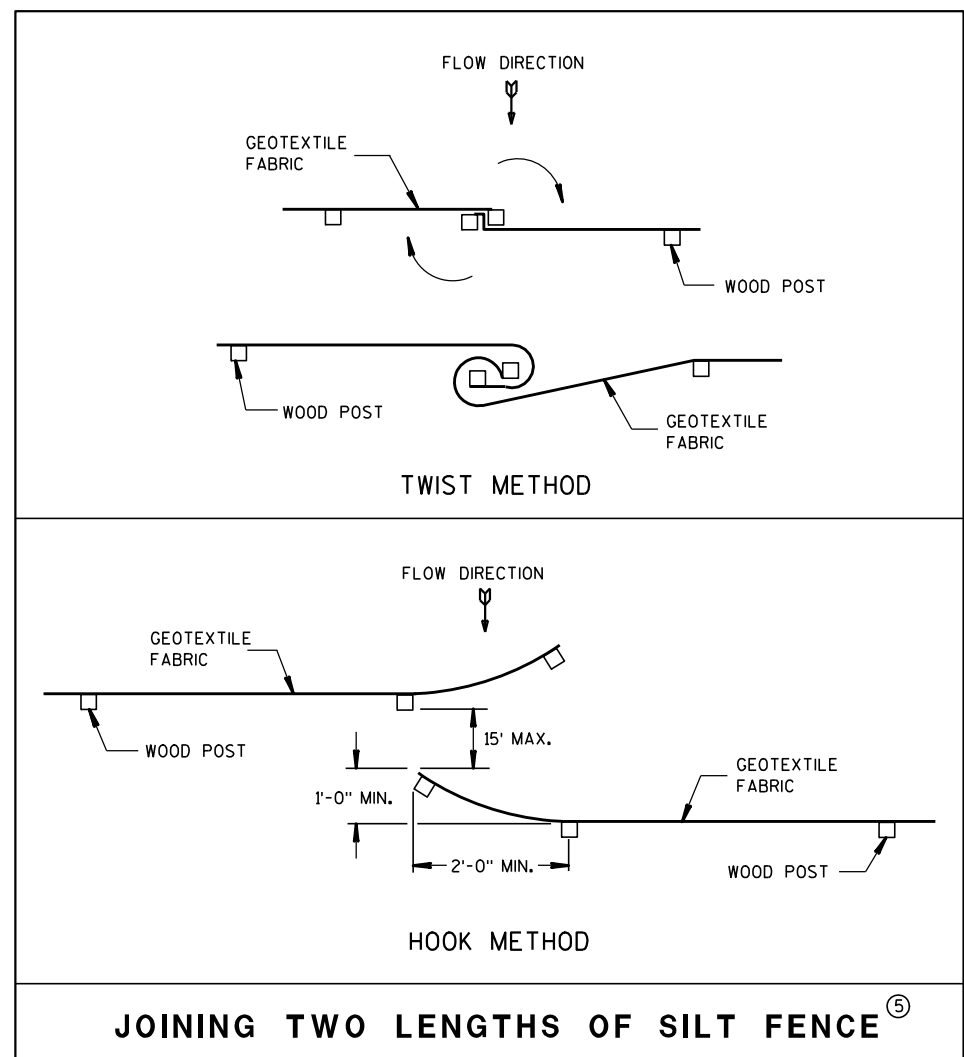
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

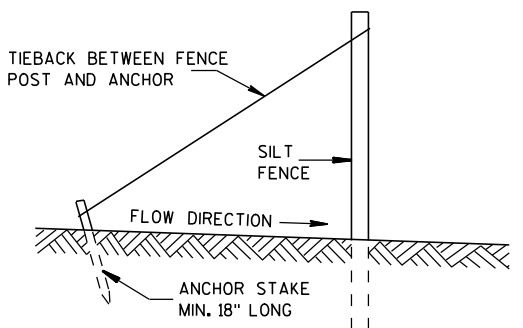


SILT FENCE

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

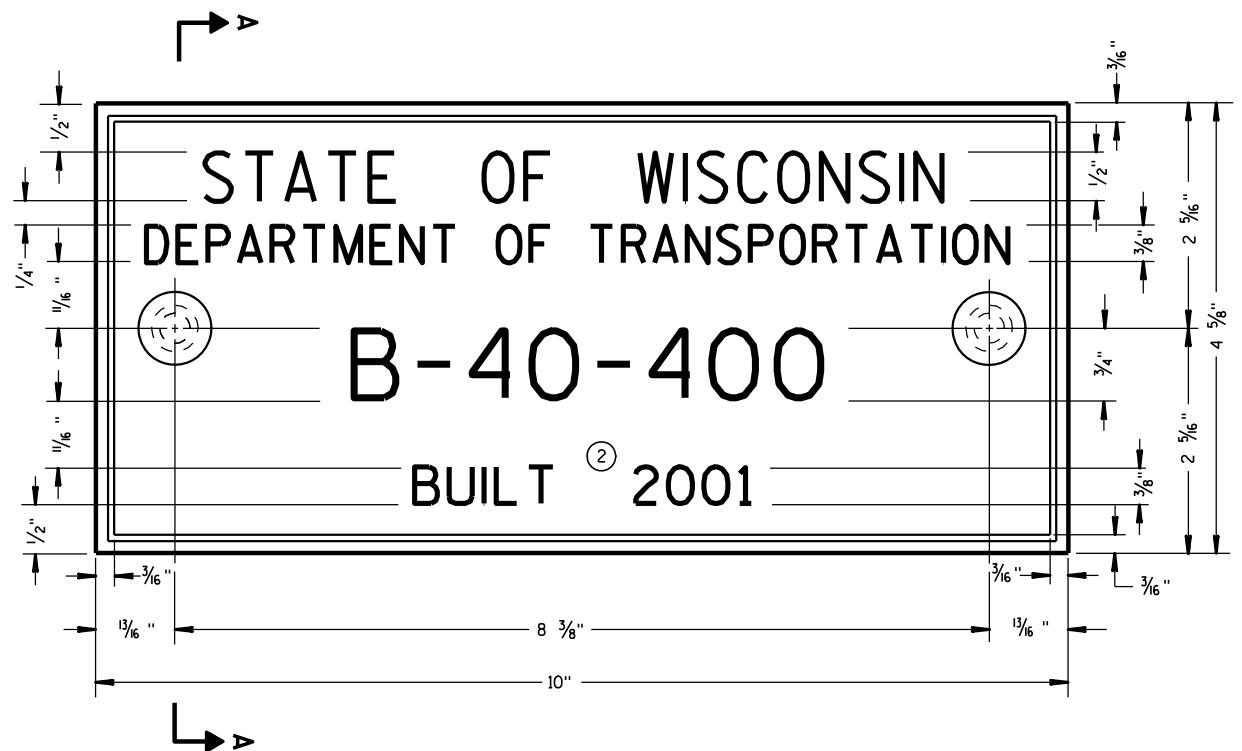


JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Canestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



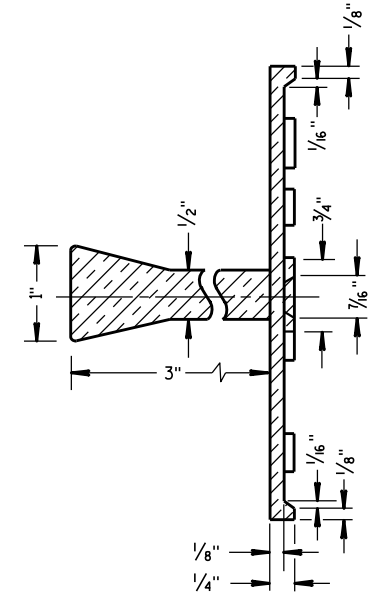
TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

GENERAL NOTES

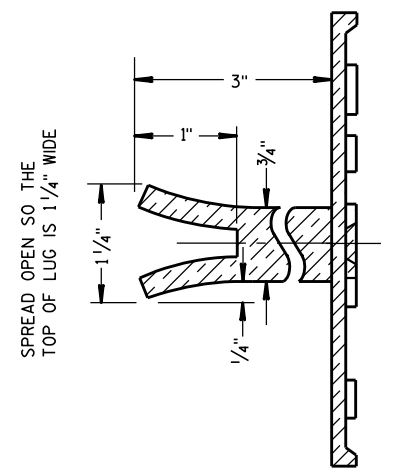
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.



SECTION A-A



SPREAD OPEN SO THE TOP OF LUG IS 1 1/4" WIDE

ALTERNATE LUG

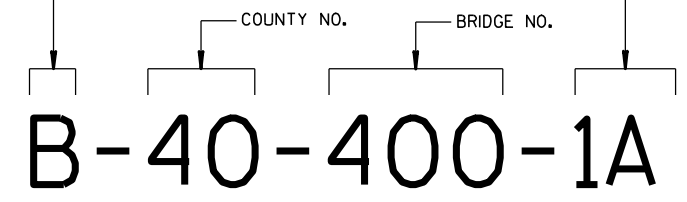
6

6

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

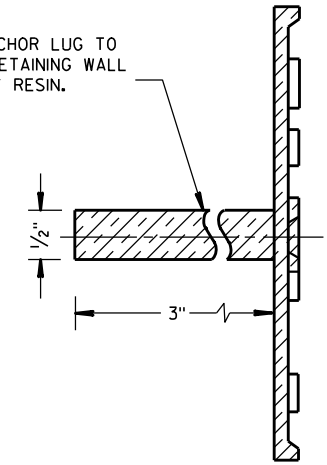
B = BRIDGE
C = CULVERT
R = RETAINING WALL

UNIT NO. FOR MULTIPLE
UNIT BRIDGE



**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.

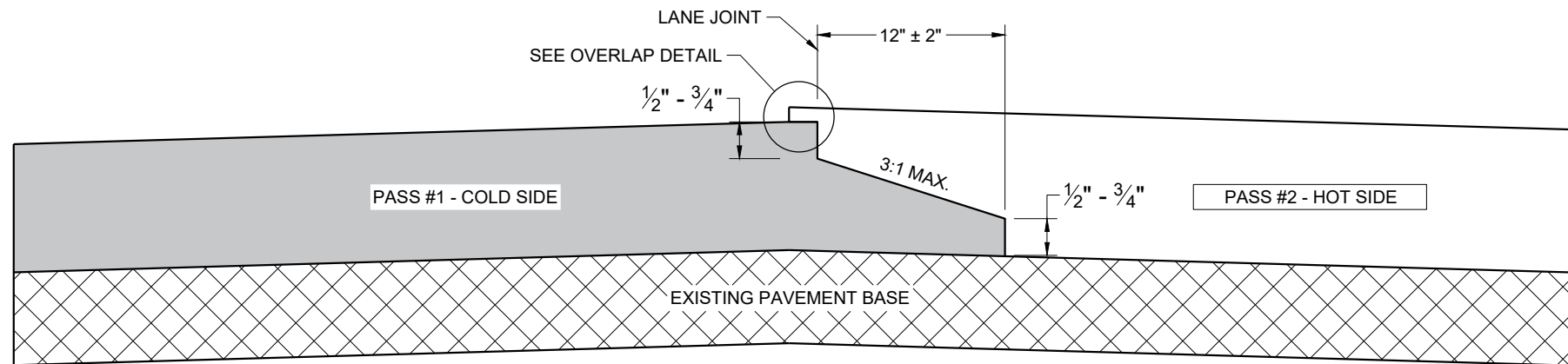


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

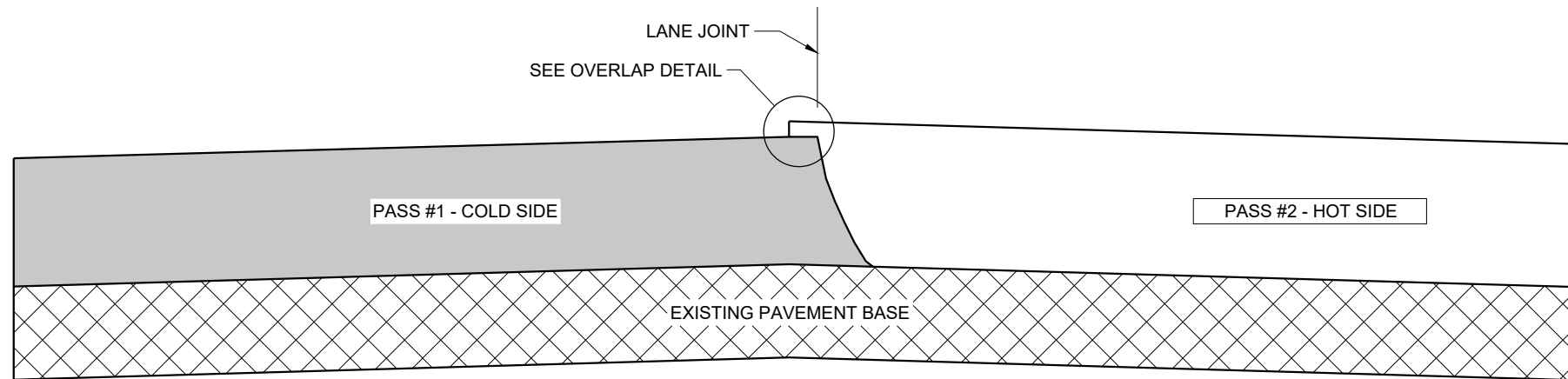
S.D.D. 12 A 3-10

S.D.D. 12 A 3-10

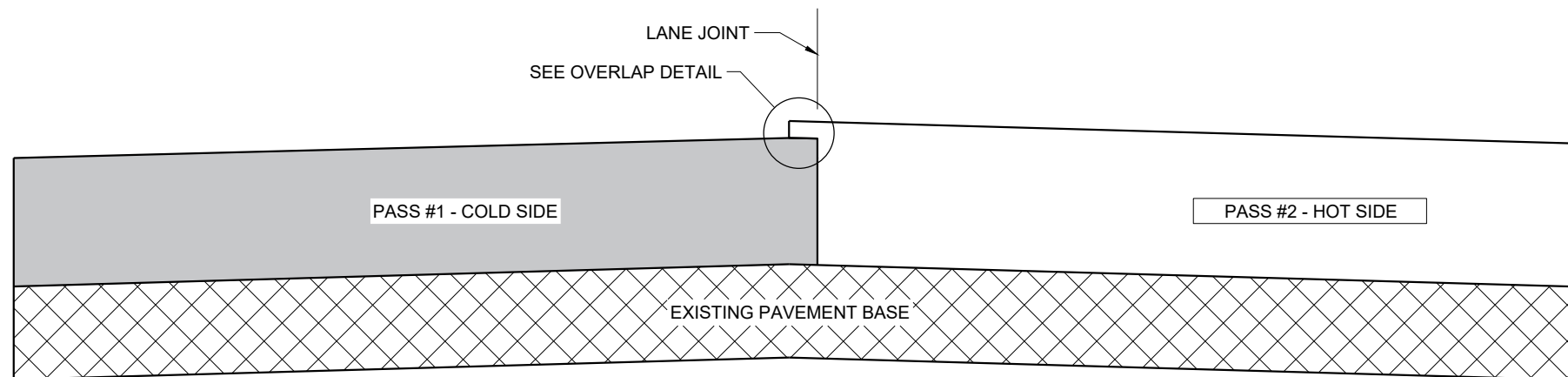
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 3/26/10	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

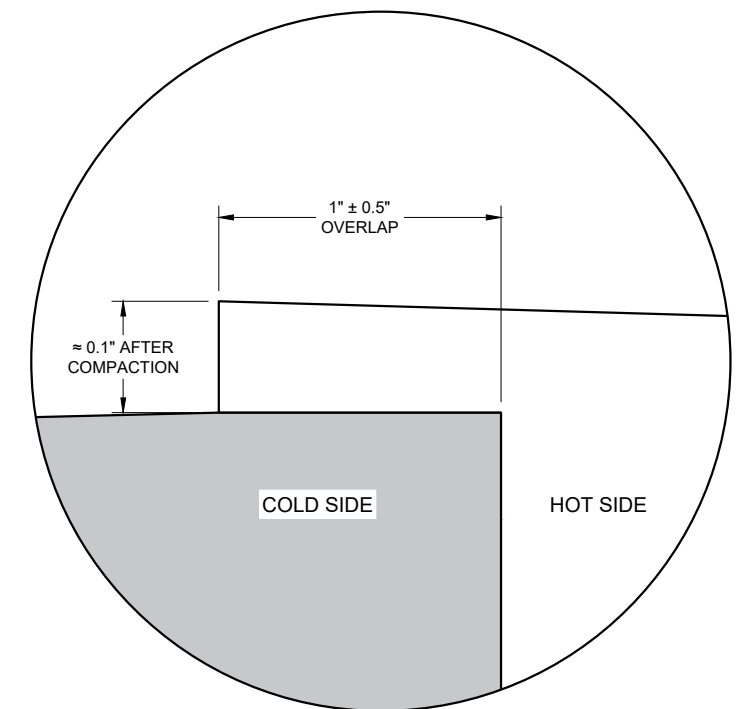
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ 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.



OVERLAP DETAIL (TYPICAL)

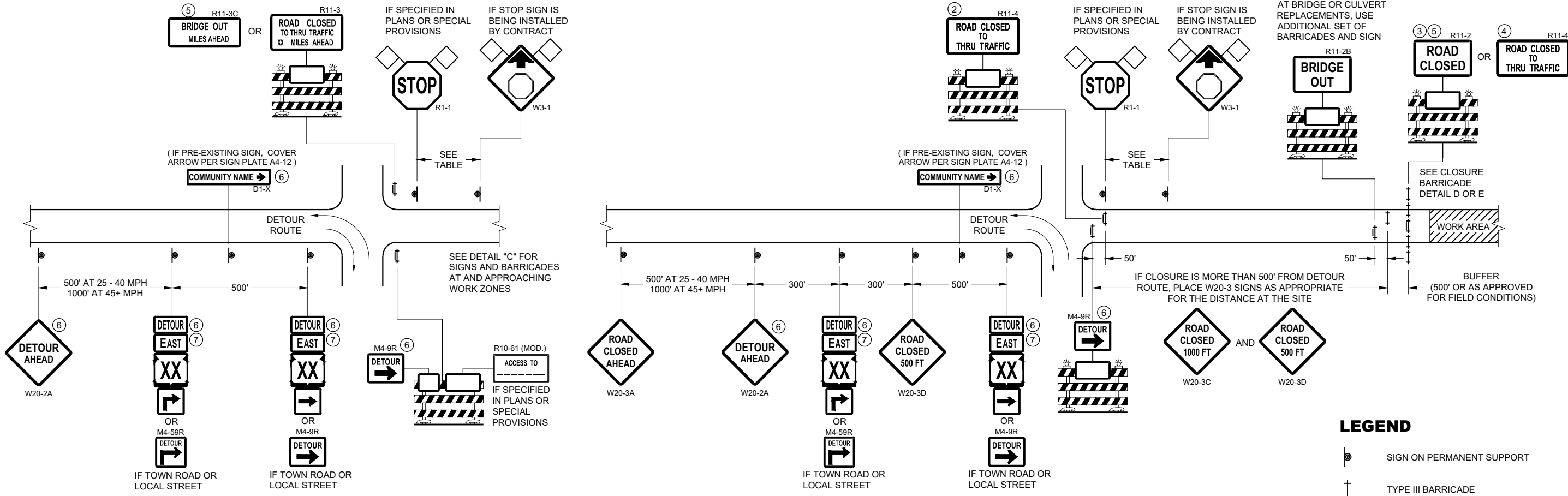
6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGINEER
FHWA	



**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

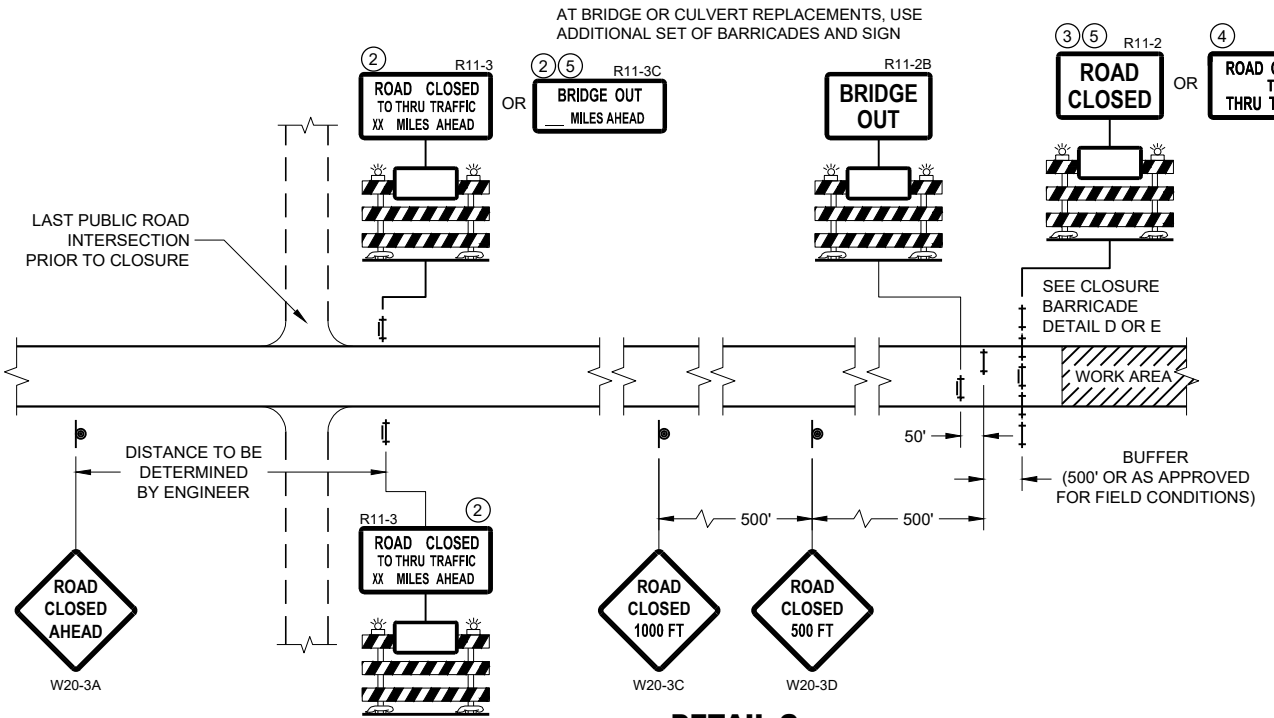
WORK ZONE LESS THAN 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

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

- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1



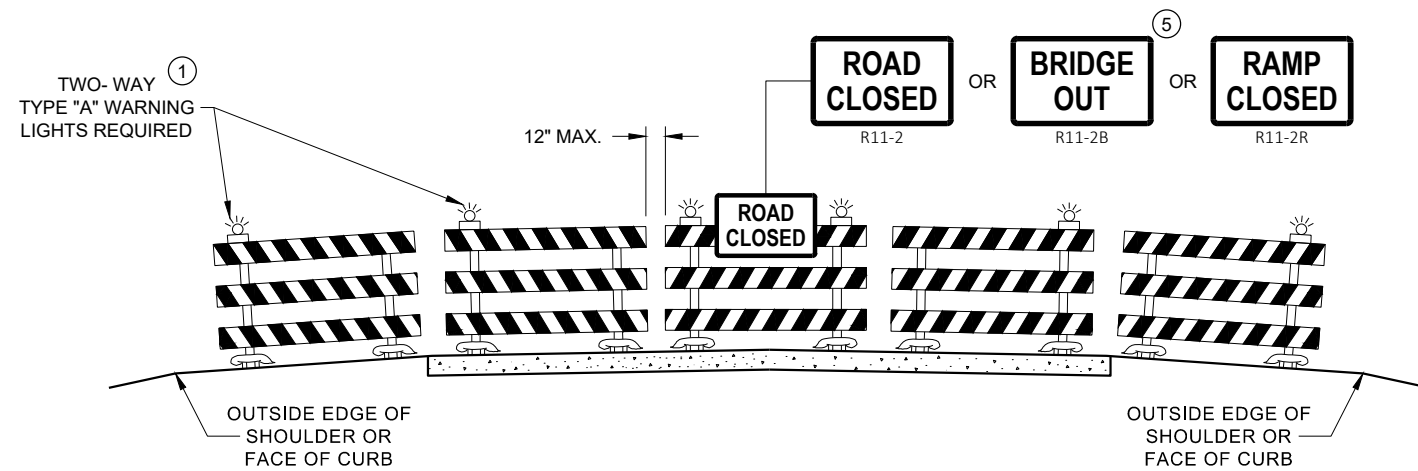
**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

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

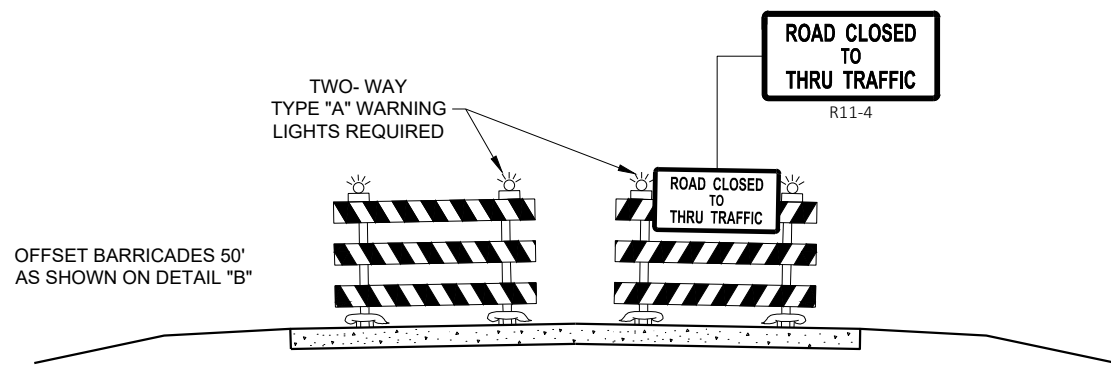
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



**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"

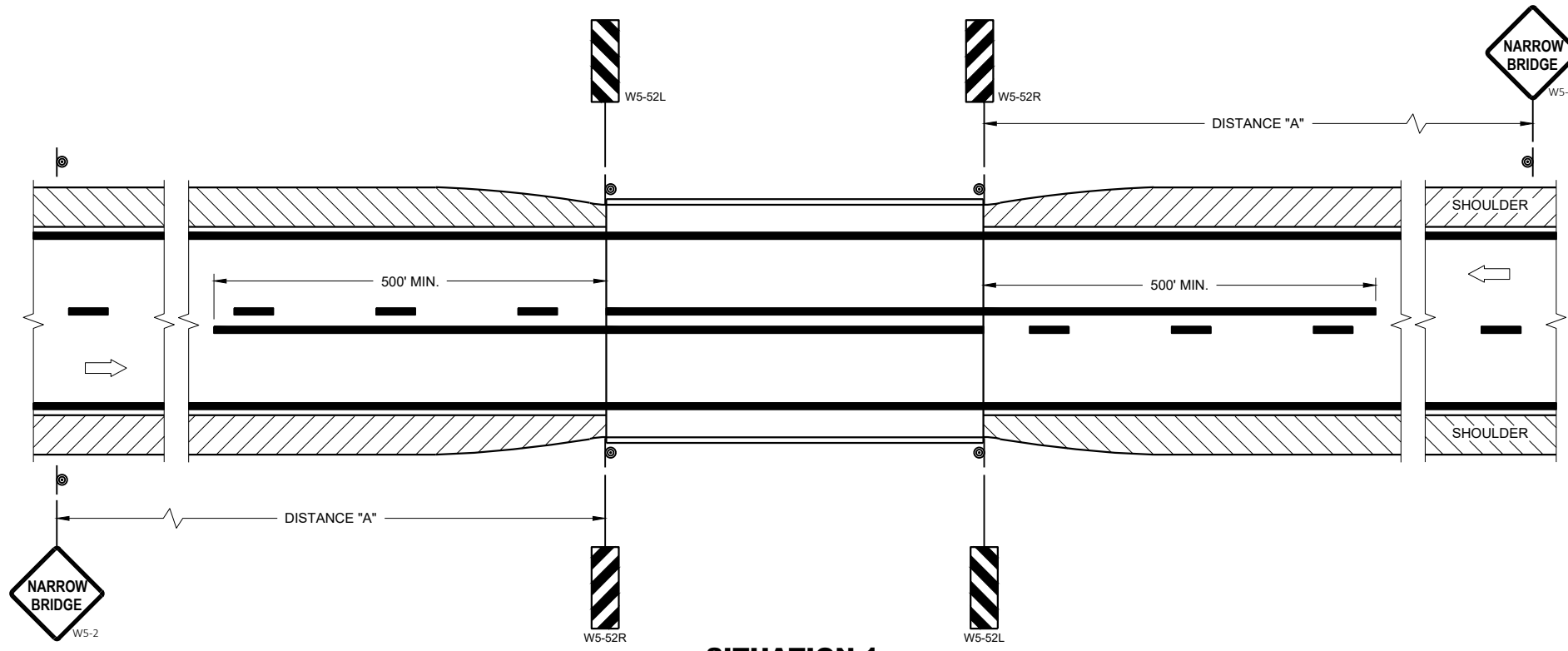
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS 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.

**BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES**

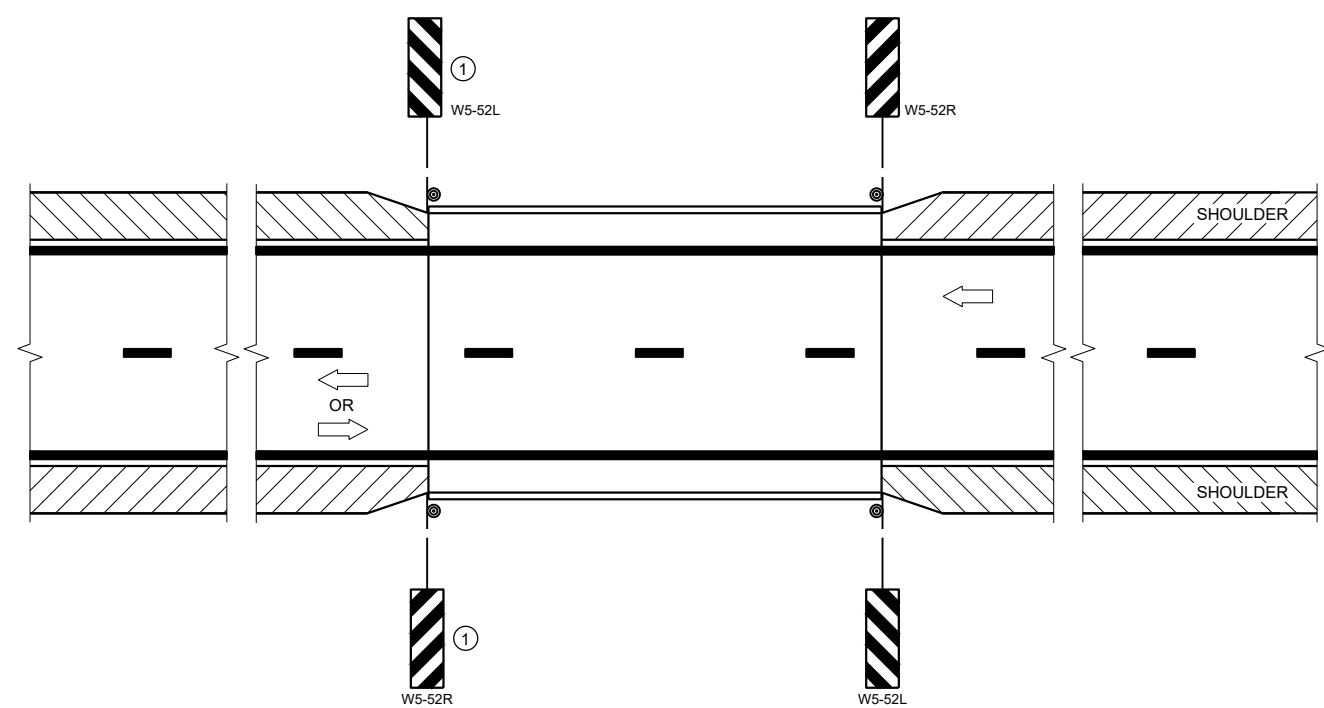
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



SITUATION 1
 WARRANTING CRITERIA:
 BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



SITUATION 2
 WARRANTING CRITERIA:
 1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
 2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

GENERAL NOTES

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

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

① OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 May 2022 /S/ Jeannie Silver
 DATE STATE SIGNING AND MARKING ENGINEER




FHWA

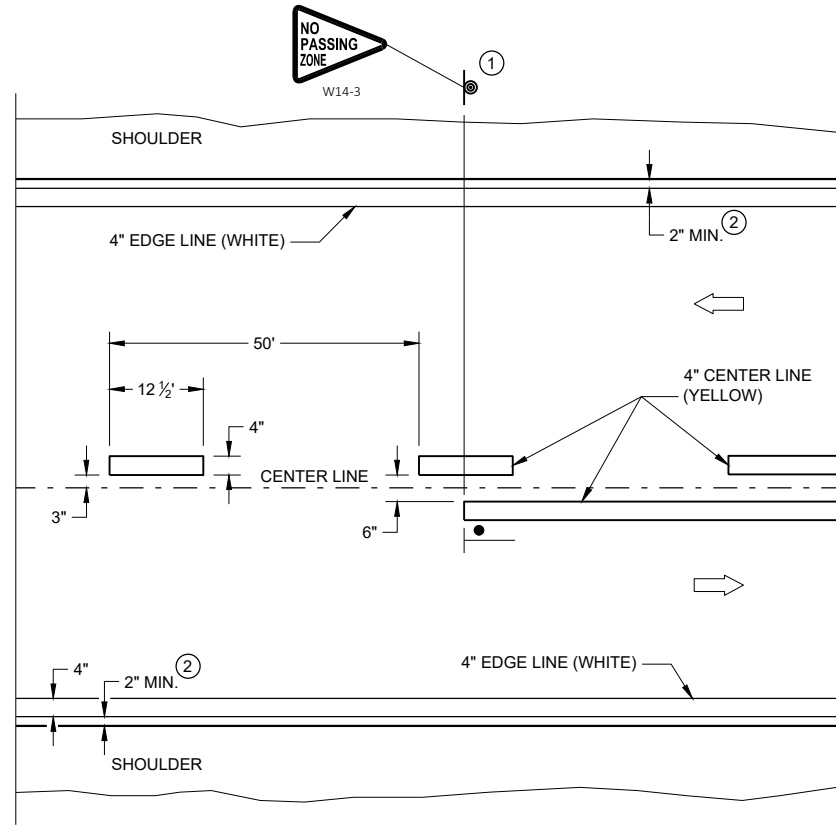
GENERAL NOTES

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

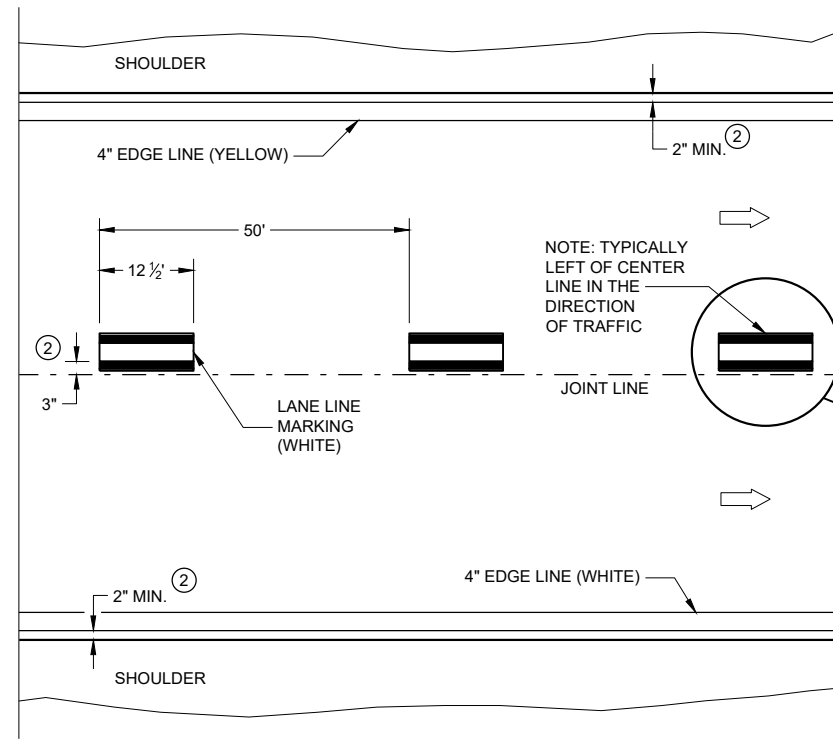
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

-  "T" MARKING
-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC

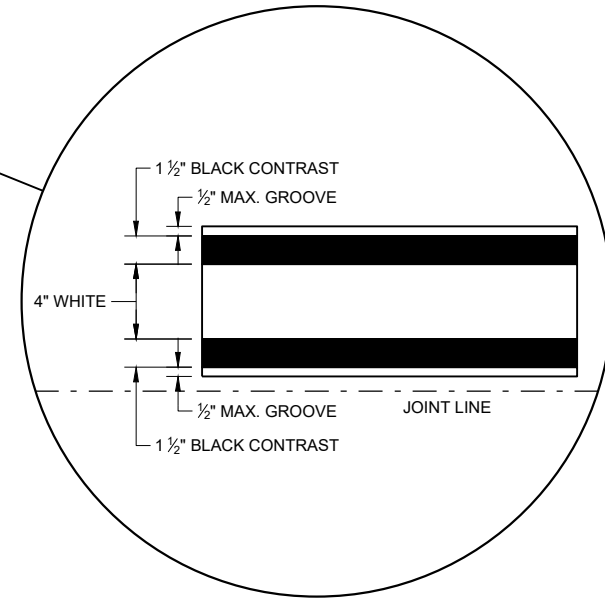


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



6

6

SDD 15C08 - 22a

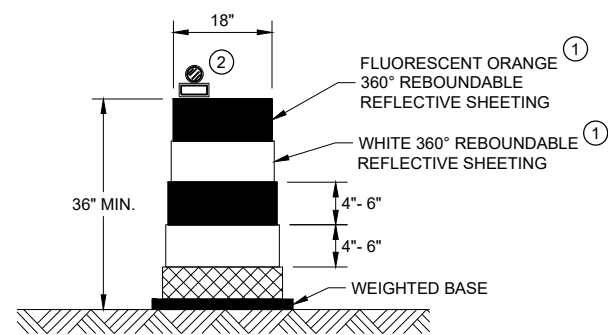
SDD 15C08 - 22a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

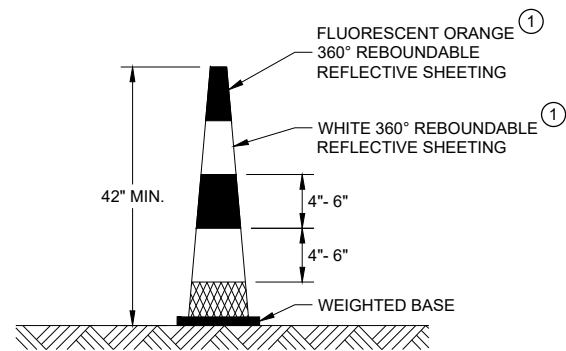
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: May 2022 /S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING ENGINEER

FHWA

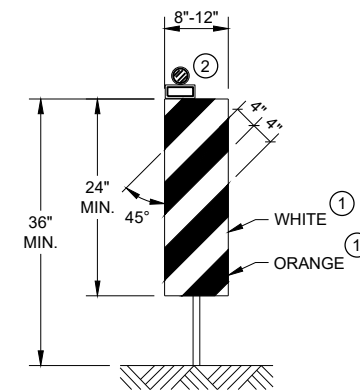


DRUM



42" CONE

DO NOT USE IN TAPERS
 1/2 SPACING OF DRUMS

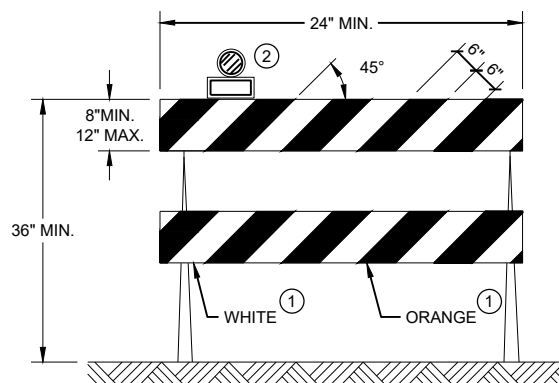


VERTICAL PANEL

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

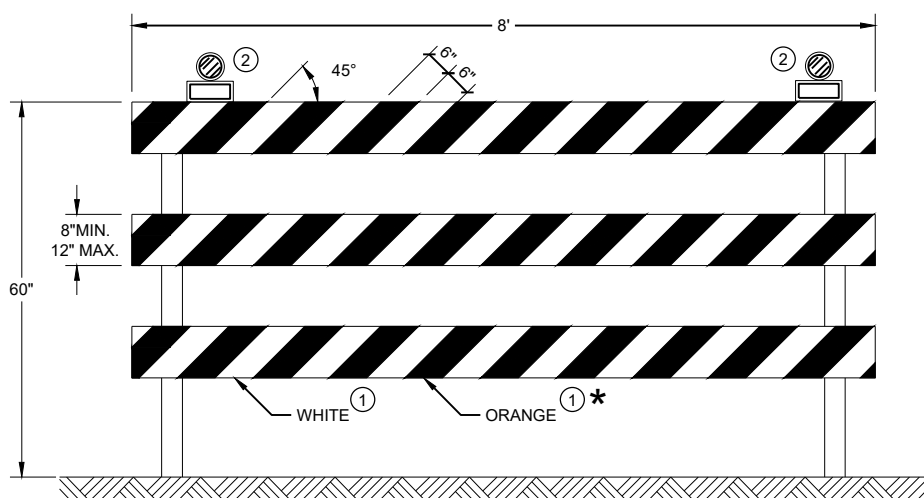
GENERAL NOTES

- 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.



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

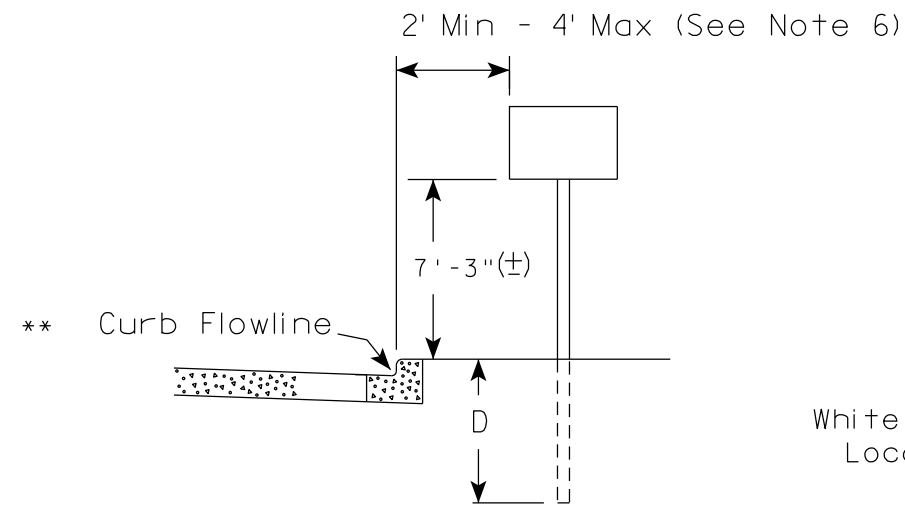
IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

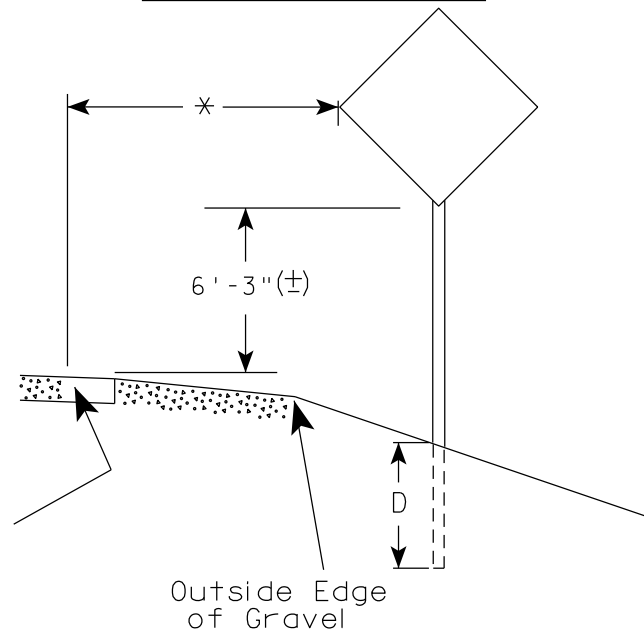
CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2021 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	

URBAN AREA

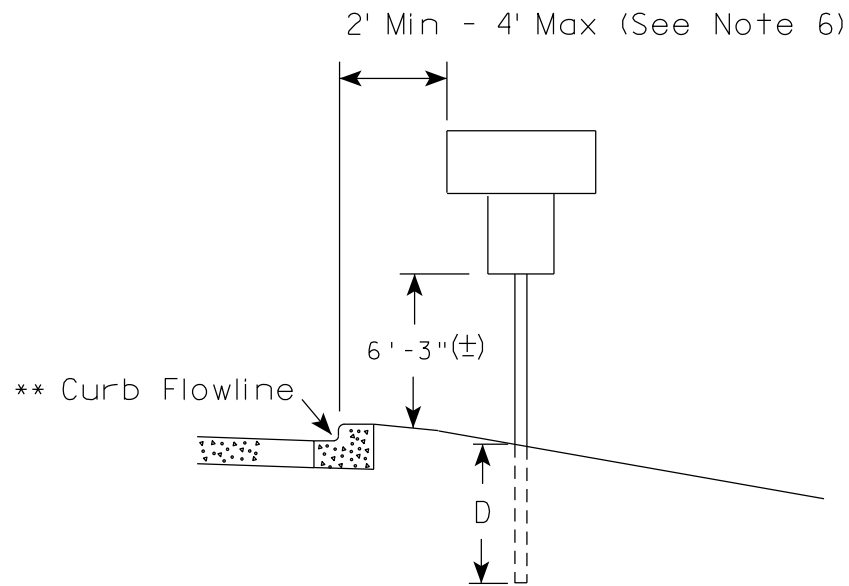
RURAL AREA (See Note 2)



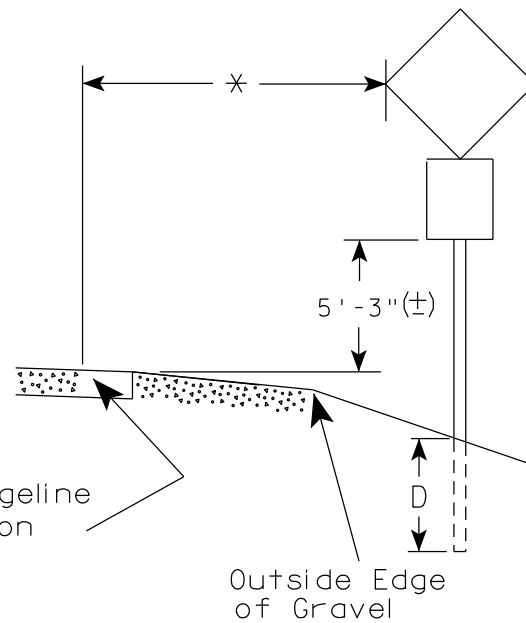
White Edgeline Location



Outside Edge of Gravel



White Edgeline Location



Outside Edge of Gravel

POST EMBEDMENT DEPTH

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

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 directed by the 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.

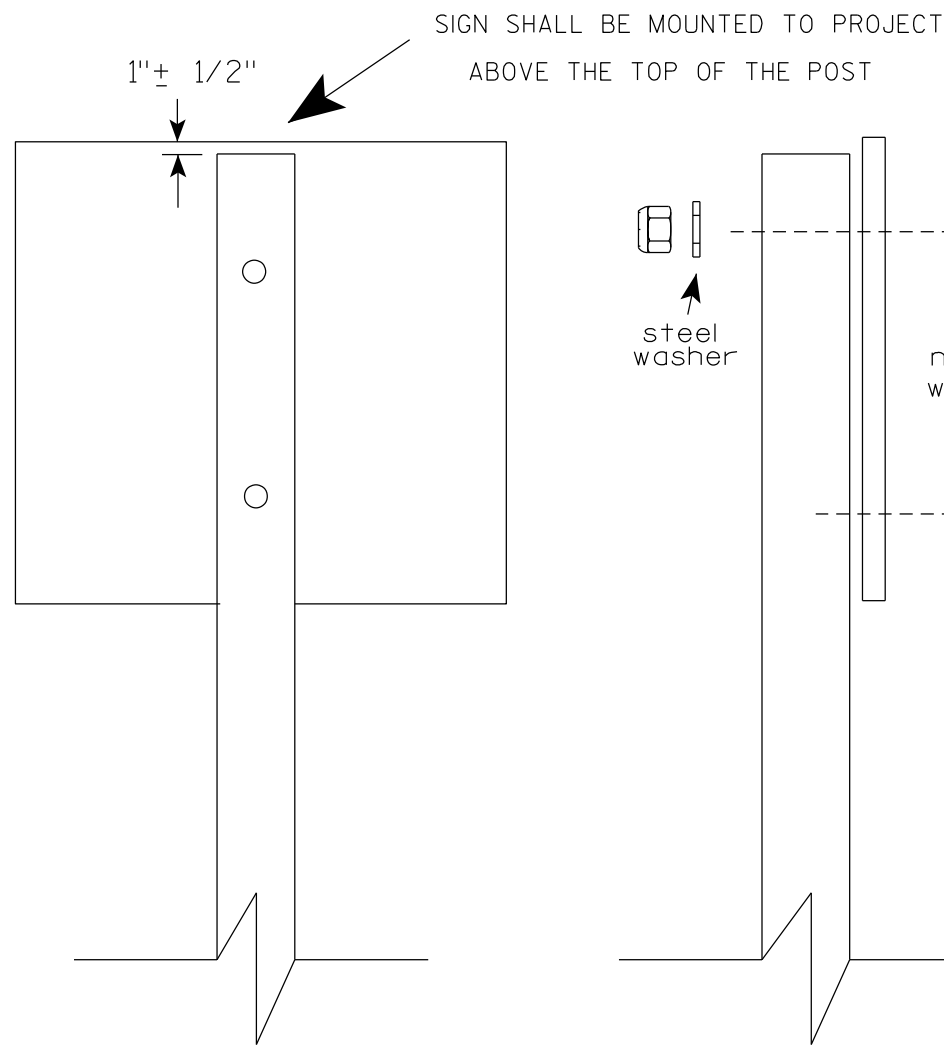
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

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



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

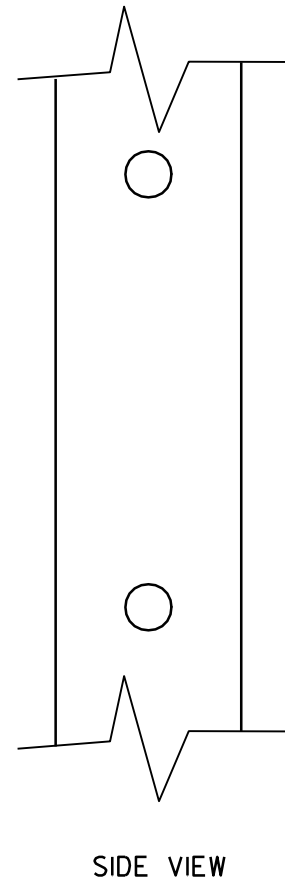
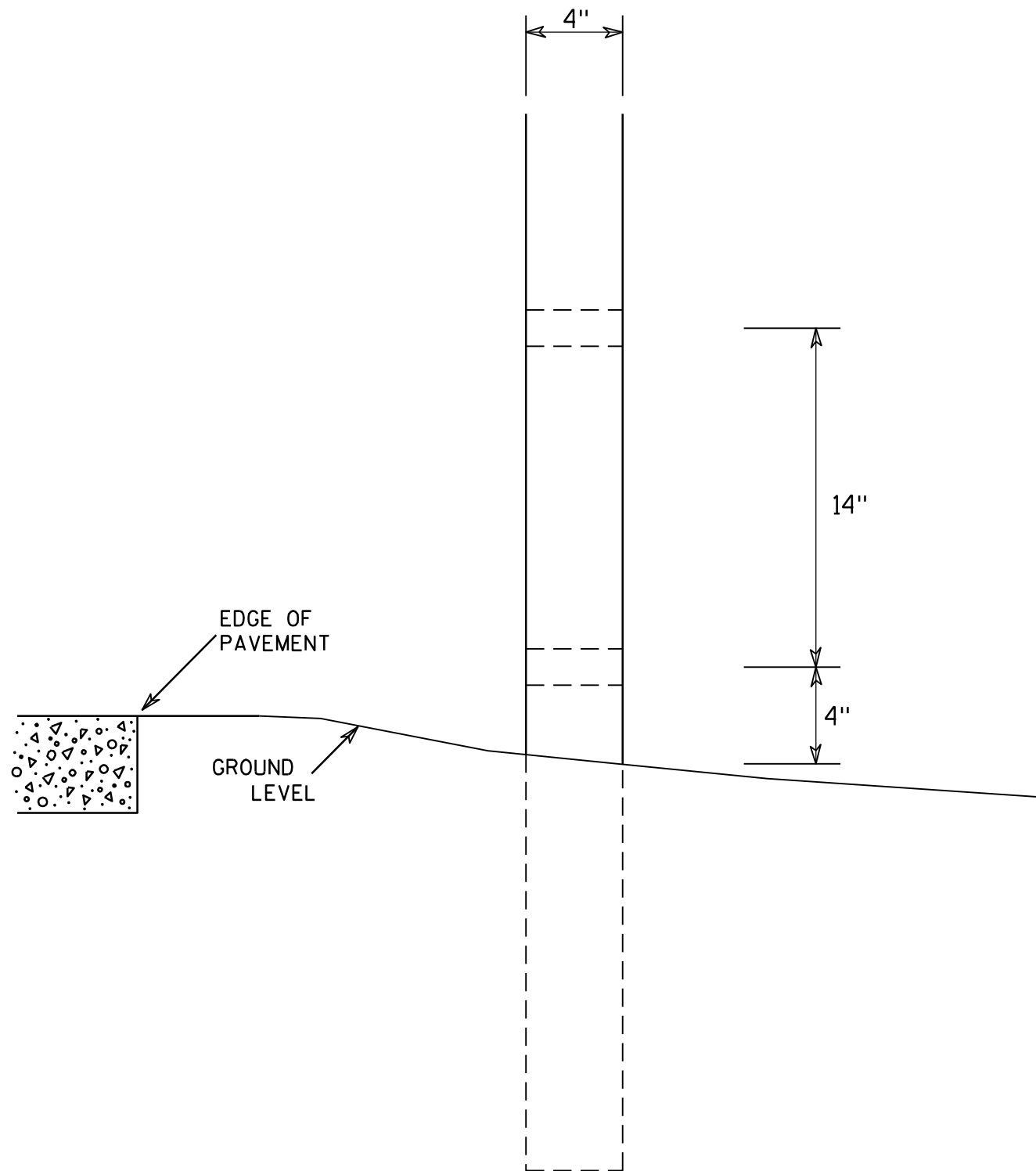
- Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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 - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
- 1-1/4" O.D. X $\frac{3}{8}$ " 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.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9



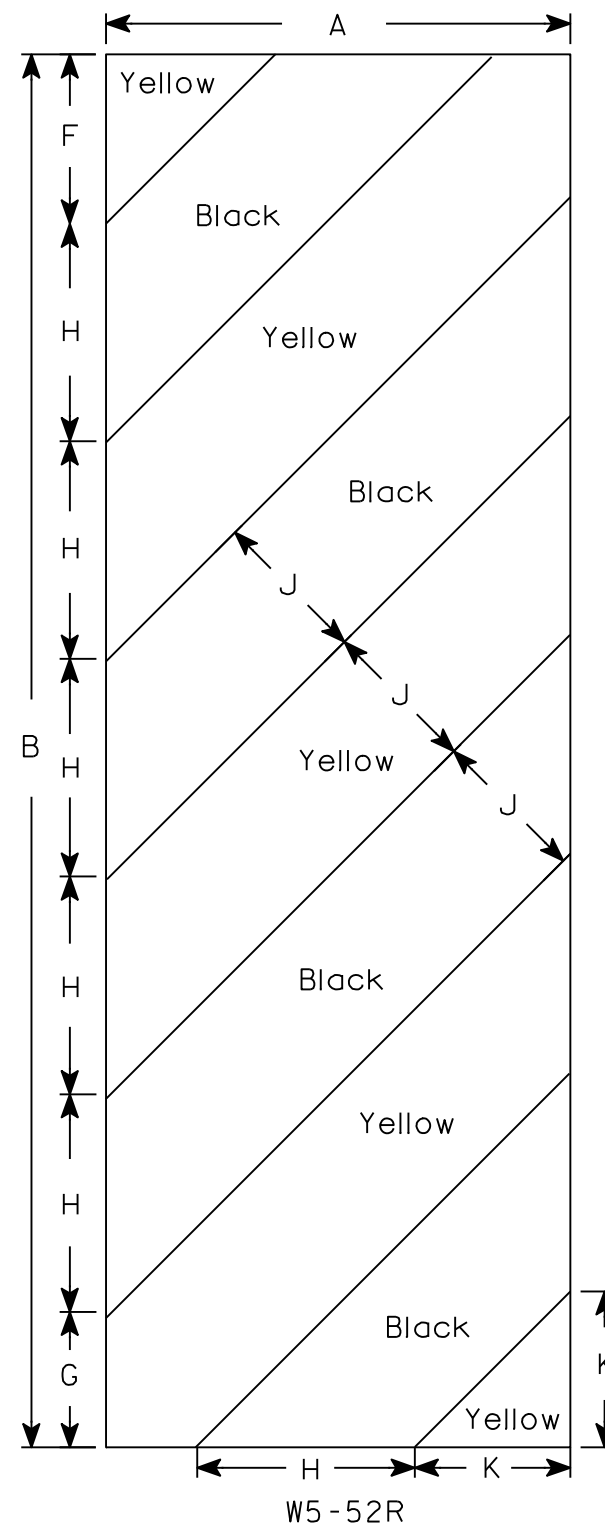
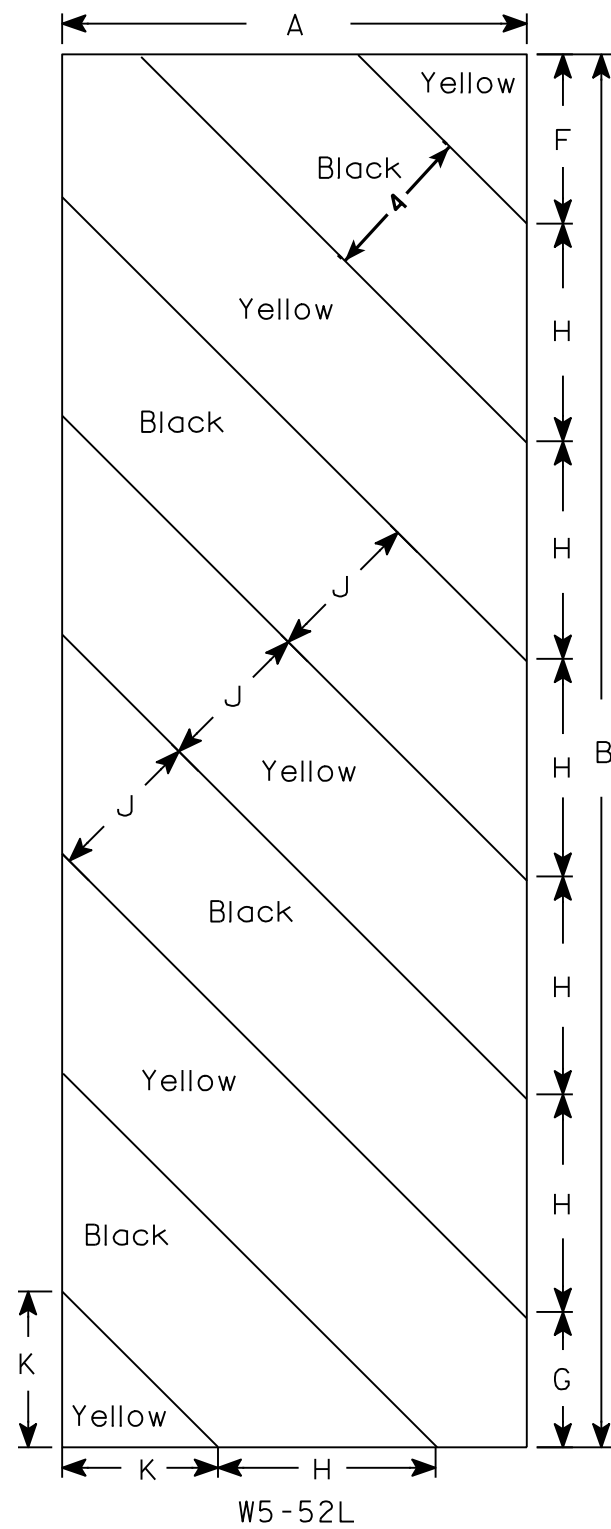
GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Chester J. Spang</i> for State Traffic Engineer
DATE 3/27/97	PLATE NO. A4-11.2



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. Alternate colors of stripes as shown.

7

7

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	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN
W5-52L & W5-52R

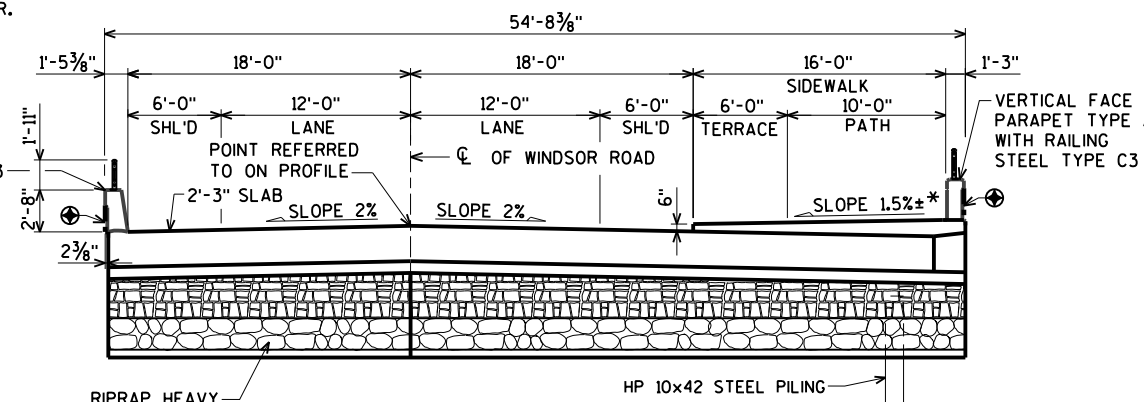
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

ARCHITECTURAL SURFACE TREATMENT



TYPICAL SECTION THRU BRIDGE (LOOKING EAST)

* ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.13
OPERATING RATING FACTOR: 1.46
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 "/S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY SUPERSTRUCTURE f'c = 4,000 p.s.i.
ALL OTHER f'c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) fy = 60,000 p.s.i.

HYDRAULIC DATA:

100 YEAR FREQUENCY
O100 = 1,773 c.f.s.
VEL. = 8.4 f.p.s.
HW100 = EL. 872.51
2 YEAR FREQUENCY
O2 = 710 c.f.s.
VEL. = 4.5 f.p.s.
HW2 = EL. 870.94

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 10 x 42 STEEL PILING (WITH PILE POINTS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ± PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED LENGTH 35'-0".

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC DATA:

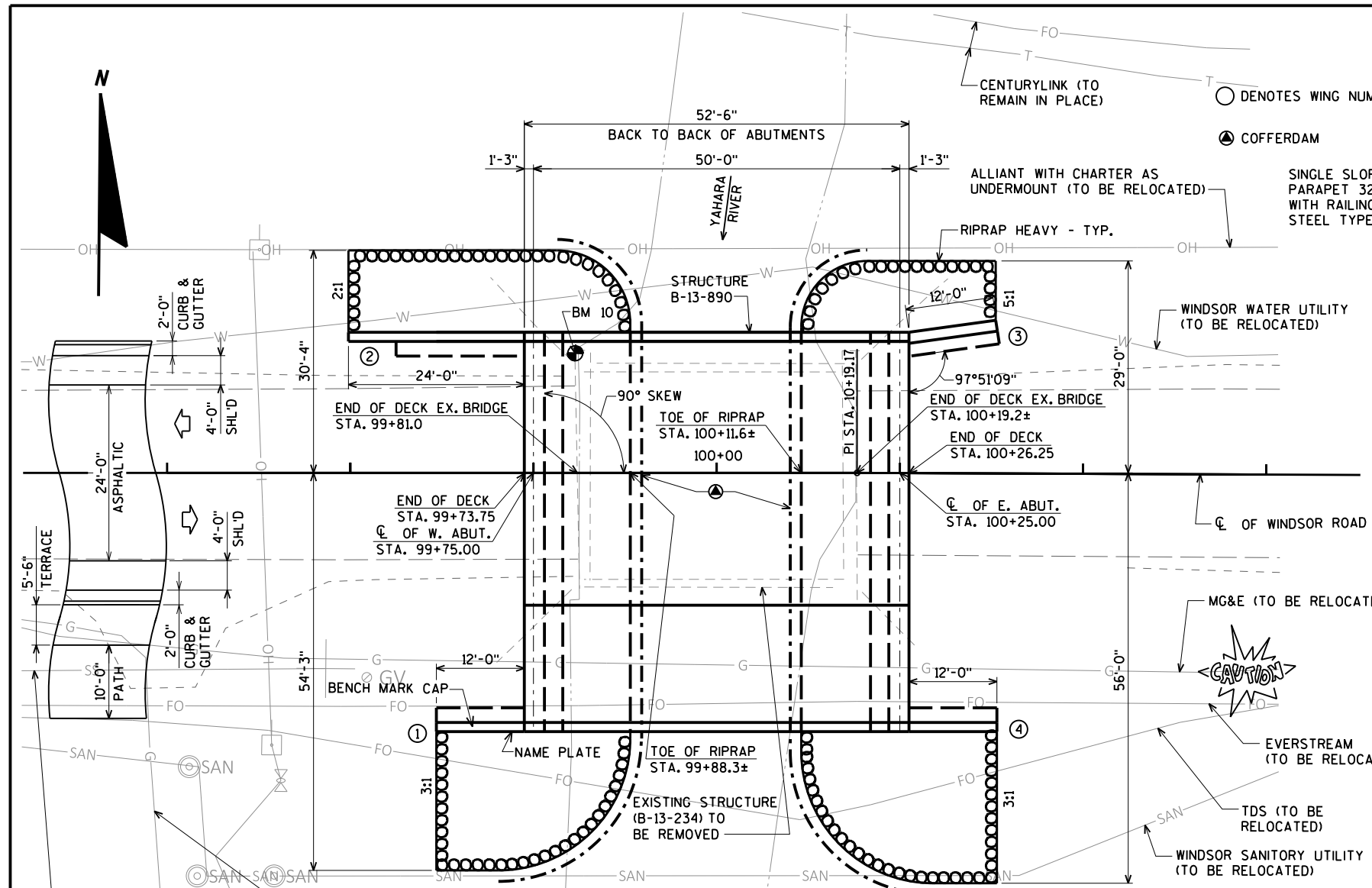
A.A.D.T. = 1,875 (2023)
A.A.D.T. = 2,070 (2043)
R.D.S. = 25 M.P.H.

1/5/2023
PENTABLE:Breau_shd_util.tbi

DATE:
DATE:
CHECKED BY:
CORRECTED BY:

8

8

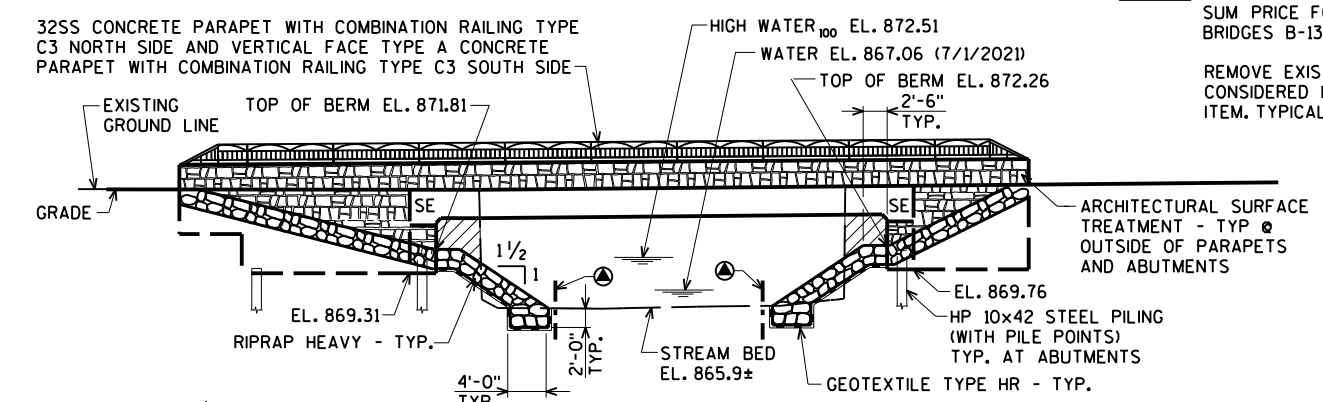


PLAN

SINGLE SPAN CONCRETE FLAT SLAB BRIDGE

COST OF EXCAVATION OR FILL IN THE HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-13-890".

REMOVE EXISTING SUBSTRUCTURE AS NEEDED. COST CONSIDERED INCIDENTAL TO "REMOVING STRUCTURE" ITEM. TYPICAL AT ALL SUBSTRUCTURES.



ELEVATION

PROFILE GRADE LINE (WINDSOR ROAD)

BENCH MARK:
BM 10
BRASS DISC IN TOP OF NW ABUT.
STA. 99+81.15.8' L.T.
EL. 878.73

LIST OF DRAWINGS

- 1. GENERAL PLAN
2. QUANTITIES AND NOTES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT PILE LAYOUT
6. WEST ABUTMENT WING 1 DETAILS
7. WEST ABUTMENT WING 2 DETAILS
8. WEST ABUTMENT DETAILS & BILL OF BARS
9. EAST ABUTMENT
10. EAST ABUTMENT PILE LAYOUT
11. EAST ABUTMENT WING 3 DETAILS
12. EAST ABUTMENT WING 4 DETAILS
13. EAST ABUTMENT DETAILS & BILL OF BARS
14. ALTERNATE CONSTRUCTION JOINT
15. SUPERSTRUCTURE
16. SUPERSTRUCTURE PLAN
17. SUPERSTRUCTURE DETAILS
18. COMBINATION RAIL TYPE "C3" & PARAPET DETAILS
19. COMBINATION RAIL TYPE "C3" DETAILS
20. SINGLE SLOPE PARAPET 32SS



01/06/2023

BRIDGE OFFICE CONTACT:
AARON BONK
(608)-261-0261

CONSULTANT CONTACT:
ARLEN BEAUDETTE
(715)-834-3161

Table with columns for NO., DATE, REVISION, and BY. Includes project details like 'STRUCTURE B-13-890' and 'WINDSOR ROAD OVER YAHARA RIVER'.

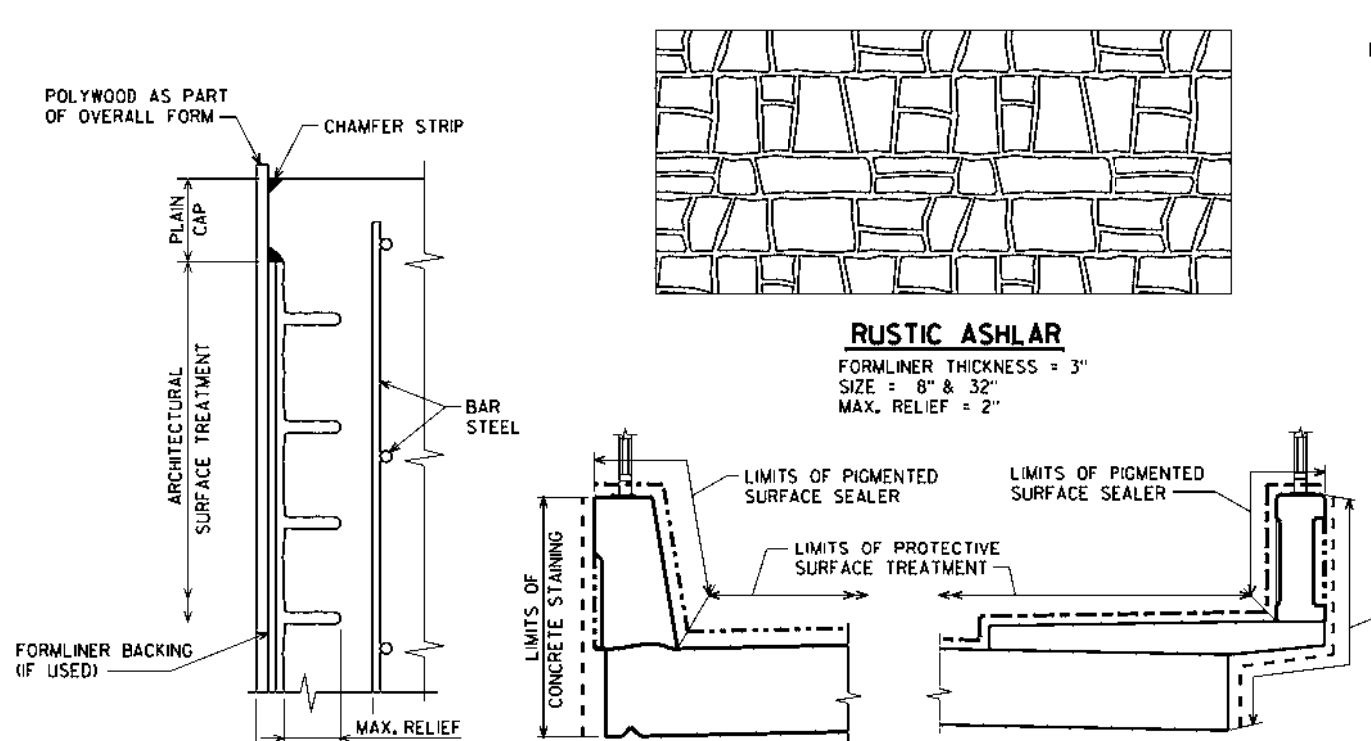
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	W. ABUT.	E. ABUT.	SUPER.	CAT. 20	CAT. 30	TOTAL
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-13-234	EACH	-----	-----	-----	1	-----	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-13-890	EACH	-----	-----	-----	1	-----	1
206.5001	COFFERDAMS B-13-890	EACH	-----	-----	-----	1	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	225	225	-----	450	-----	450
502.0100	CONCRETE MASONRY BRIDGES	CY	62.4	54.0	279.6	376	20	396
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	310	310	-----	310
502.3210	PIGMENTED SURFACE SEALER	SY	15	15	45	75	-----	75
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	3,570	3,360	-----	6,700	230	6,930
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3,440	2,310	44,410	47,590	2,570	50,160
513.7016	RAILING STEEL TYPE C3	LF	-----	-----	153.6	153.6	-----	153.6
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	16	15	-----	31	-----	31
517.1015.S	CONCRETE STAINING MULTI-COLOR B-13-890	SF	560	460	425	-----	1,445	1,445
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-13-890	SF	420	320	230	-----	970	970
550.0500	PILE POINTS	EACH	9	8	-----	17	-----	17
550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	315	280	-----	595	-----	595
606.0300	RIPRAP HEAVY	CY	140	120	-----	260	-----	260
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	105	100	-----	205	-----	205
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	75	70	-----	145	-----	145
645.0120	GEOTEXTILE TYPE HR	SY	260	230	-----	490	-----	490
NON-BID ITEMS								
	FILLER	SIZE	-----	-----	-----	-----	-----	1/2" & 3/4"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
 THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE. JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.
 THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENT DETAILS.
 SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.
 THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-13-890" SHALL BE THE EXISTING GROUNDLINE.
 THE EXISTING STRUCTURE, B-13-234, TO BE REMOVED, IS A 37.5 -FT. LONG SINGLE-SPAN STEEL DECK GIRDER BRIDGE ON TIMBER ABUTMENTS WITH CONCRETE CAP AND STEEL PILING WITH A 28.0-FT. CLEAR ROADWAY WIDTH BETWEEN CONCRETE CURBS.
 THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENTS WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER ARE TO BE APPLIED AS SHOWN IN DETAIL ON THIS SHEET.
 BEVEL EXPOSED EDGES OF CONCRETE 1/4" UNLESS NOTED OTHERWISE.
 EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.
 EXTENT OF BELOW GRADE SUBSTRUCTURES ARE NOT KNOWN. REMOVE EXISTING SUBSTRUCTURES AS NEEDED TO BUILD NEW SUBSTRUCTURES. COST OF SUBSTRUCTURE REMOVAL IS CONSIDERED INCIDENTAL TO "REMOVING STRUCTURE" BID ITEM.

10/21/2022 PENTABLE:BRQu-shd_util.tbl

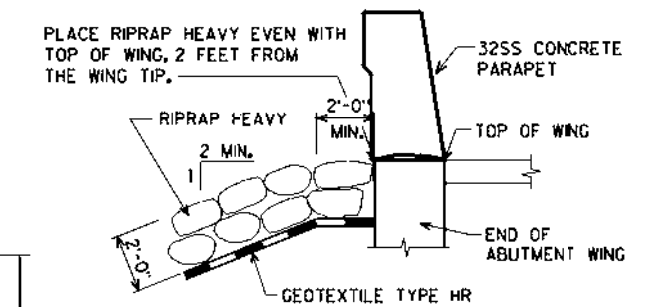


RUSTIC ASHLAR

FORMLINER THICKNESS = 3"
 SIZE = 8" & 32"
 MAX. RELIEF = 2"

BACKFILL STRUCTURE LIMITS THRU ABUTMENT

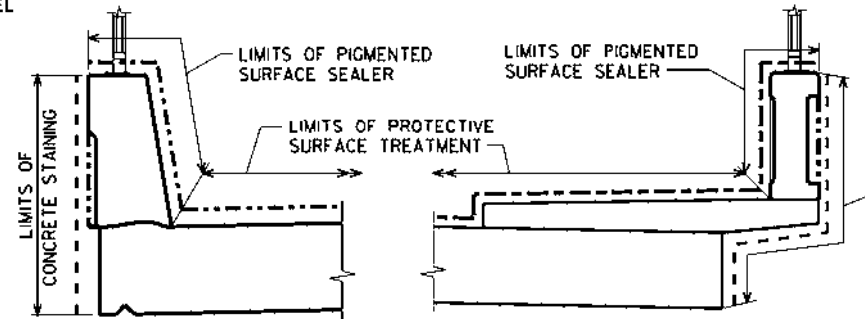
- BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 8.



TYPICAL FILL SECTION AT WING TIPS

NOTE: PLACE RIPRAP HEAVY AS SHOWN ON GENERAL PLAN SHEET

PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER DETAIL

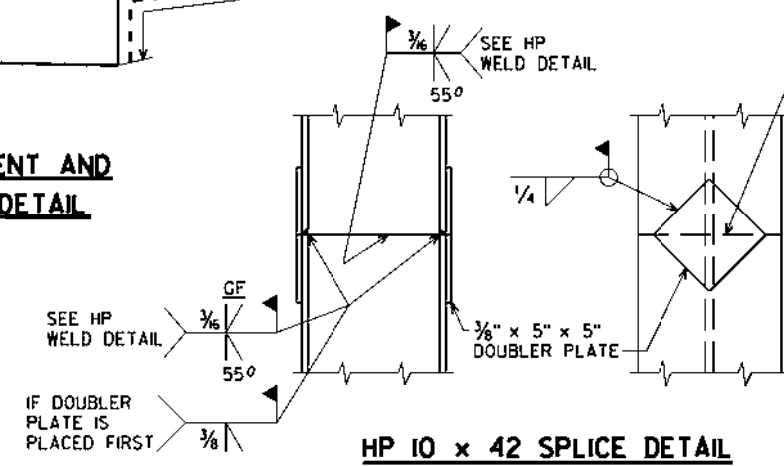


ABUTMENT NOTES

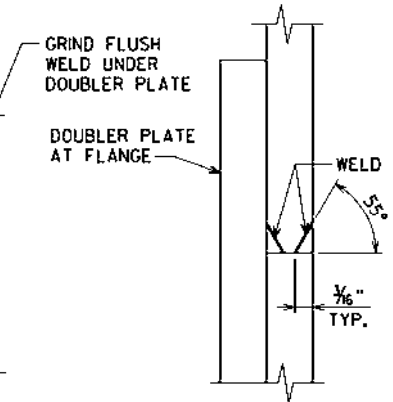
- THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.
- THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.
- FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.
- WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS.
- APPLY CONCRETE STAIN TO ALL EXPOSED ABUTMENT SURFACES.

PARAPET NOTES

- FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.



HP 10 x 42 SPLICE DETAIL



HP WELD DETAIL
 FLANGE SHOWN, WEB SIMILAR

8

8

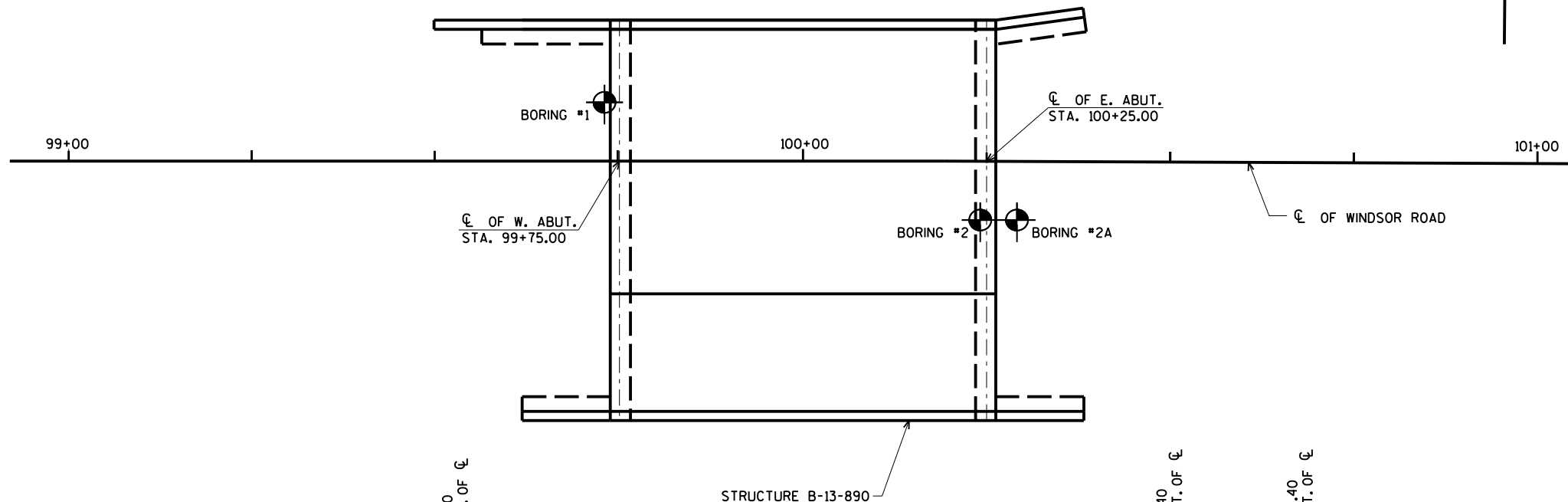
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY ZSS		PLANS CKD. AEB	
QUANTITIES AND NOTES			SHEET 2 OF 20

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BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	NOVEMBER 10, 2021	534485.34	830337.51
2	NOVEMBER 11, 2021	534469.82	830391.97
2A	NOVEMBER 11, 2021	534469.84	830396.98

BORINGS COMPLETED BY: ECS MIDWEST, LLC
 REPORT COMPLETED BY: ECS MIDWEST, LLC
 ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY

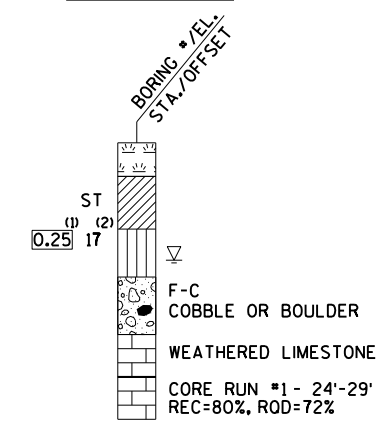
YAHARA RIVER



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) 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

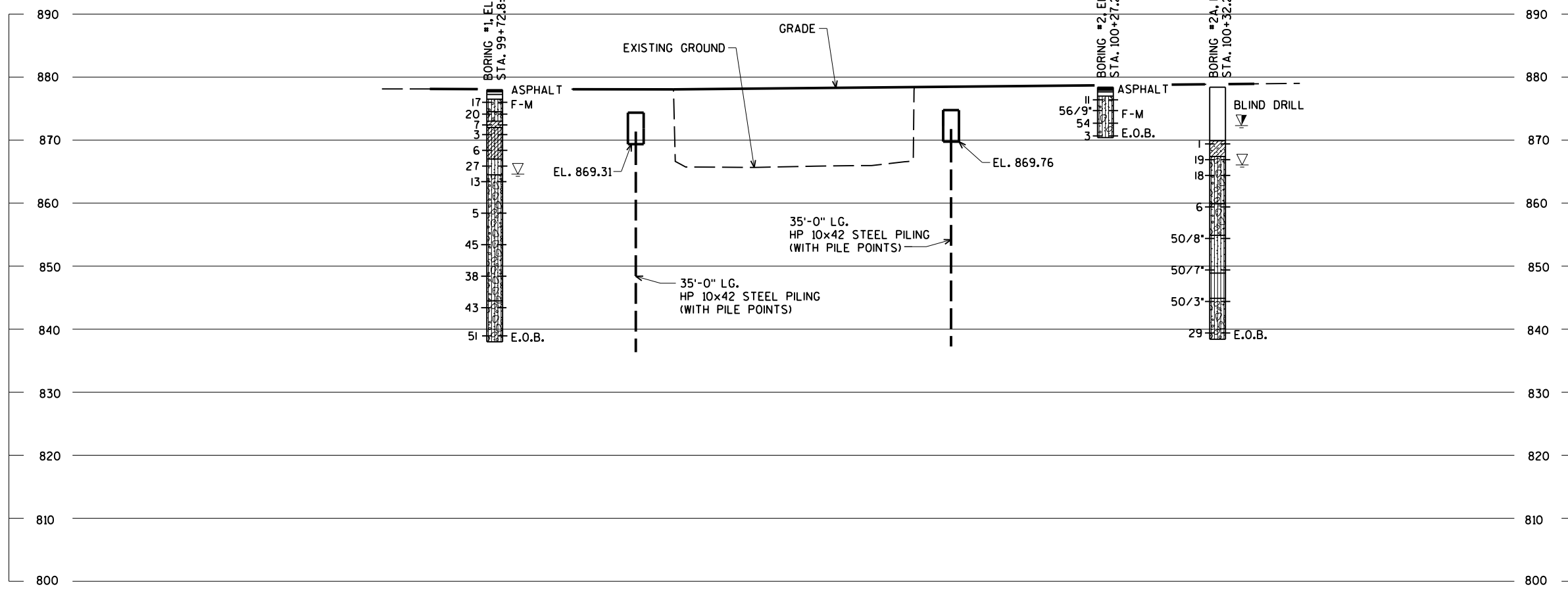
ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-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.

1/4/2023 PENTABLE:BRearu_shd_util.tbi

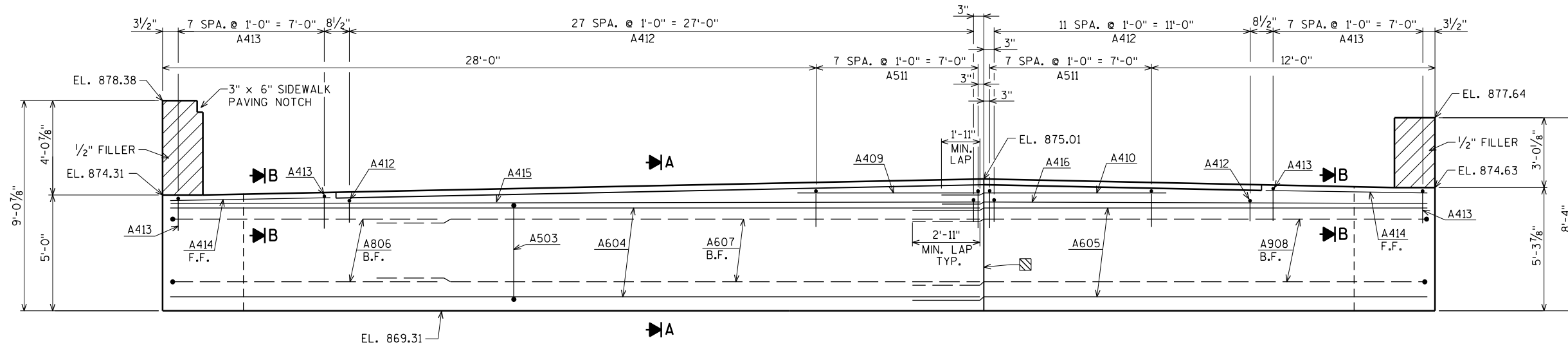


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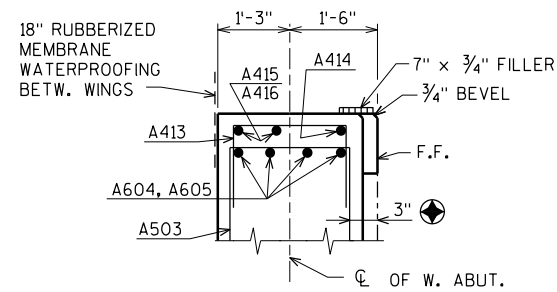
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		ZSS	PLANS AEB
BY			
SUBSURFACE EXPLORATION			SHEET 3 OF 20

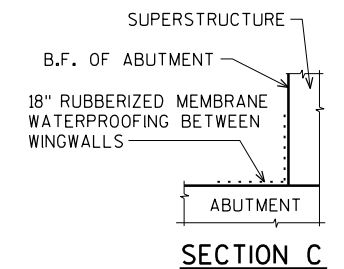
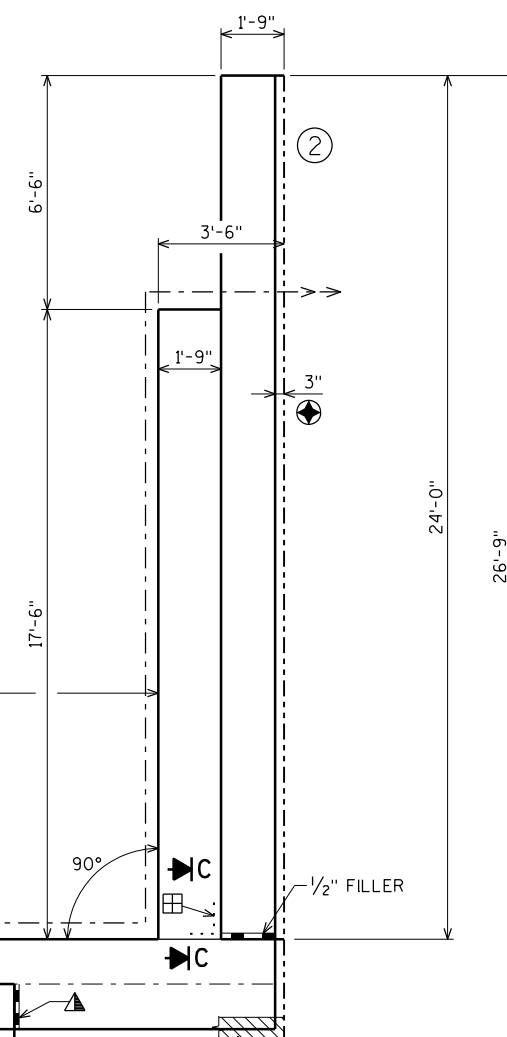
NOTE:
SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



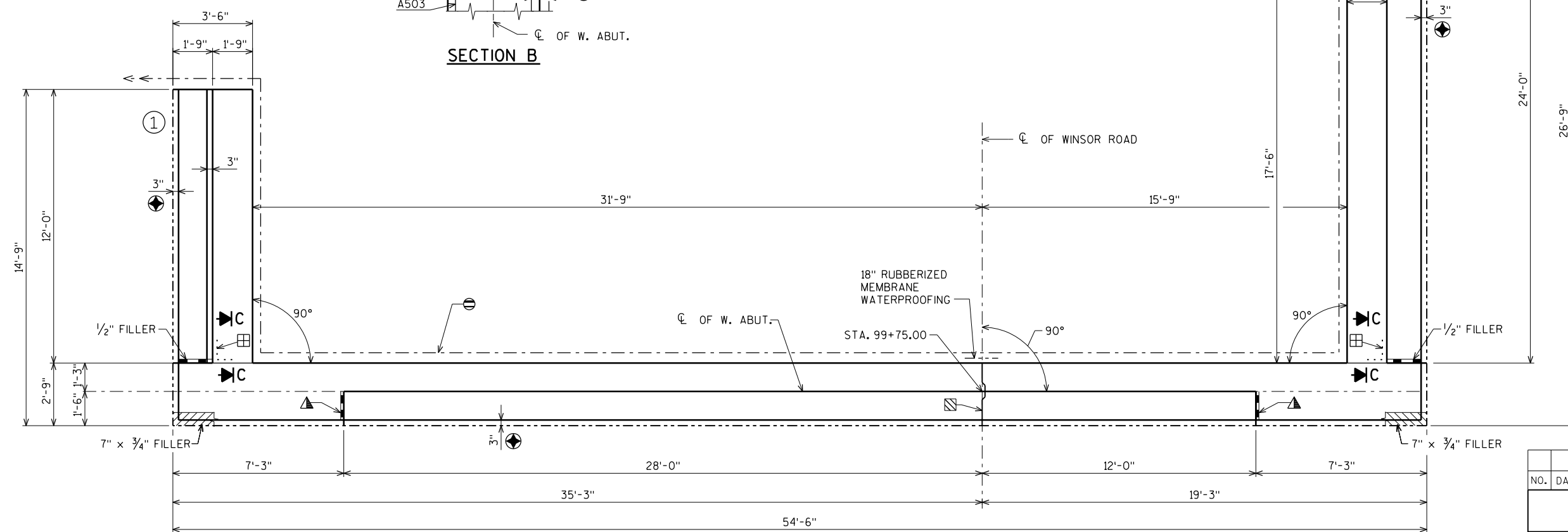
ELEVATION
(LOOKING WEST)
FOR SECTION A SEE SHEET 8.



SECTION B



SECTION C



PLAN

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 8. RODENT SHIELD TO BE INCIDENTAL TO BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

⊞ VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES 3/4". FOR ALTERNATE CONST. JT. DETAILS SEE SHEET 14. SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING

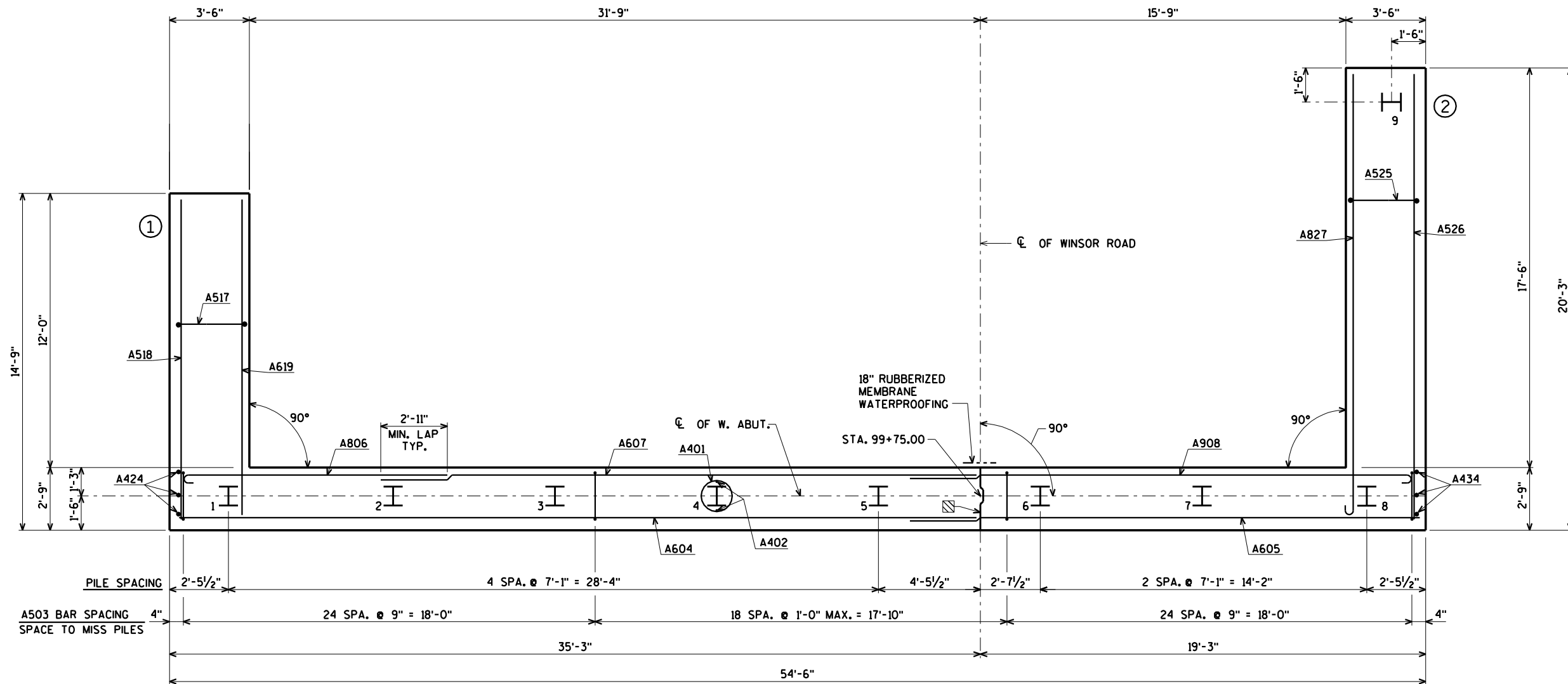
⊞ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WINGWALL.

⊙ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.

⚠ 3/4" CORK FILLER ON VERTICAL FACE ONLY.

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Eau Claire, WI 54701
www.AyresAssociates.com

NO.	DATE	REVISION	BY
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STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
WEST ABUTMENT			SHEET 4 OF 20



PILE LAYOUT

VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES 3/4". FOR ALTERNATE CONST. JT. DETAILS SEE SHEET 14. SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING

FOR PILE SPLICE DETAIL SEE SHEET 2.

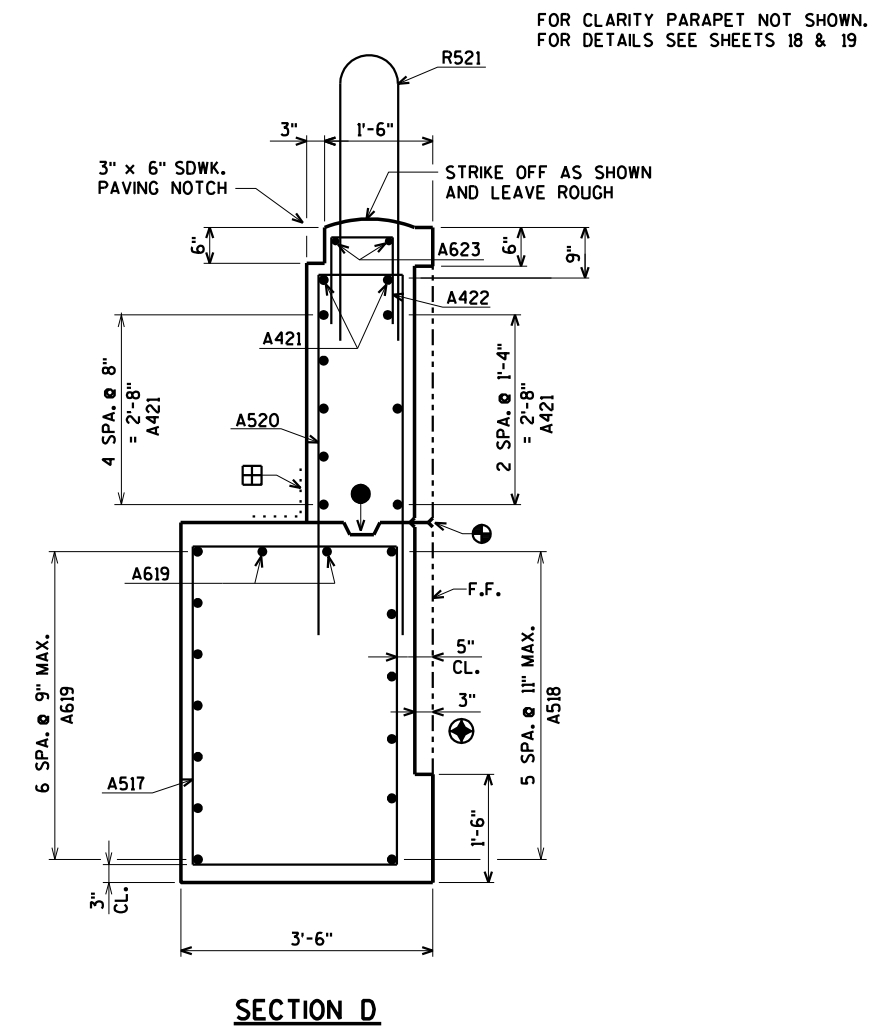
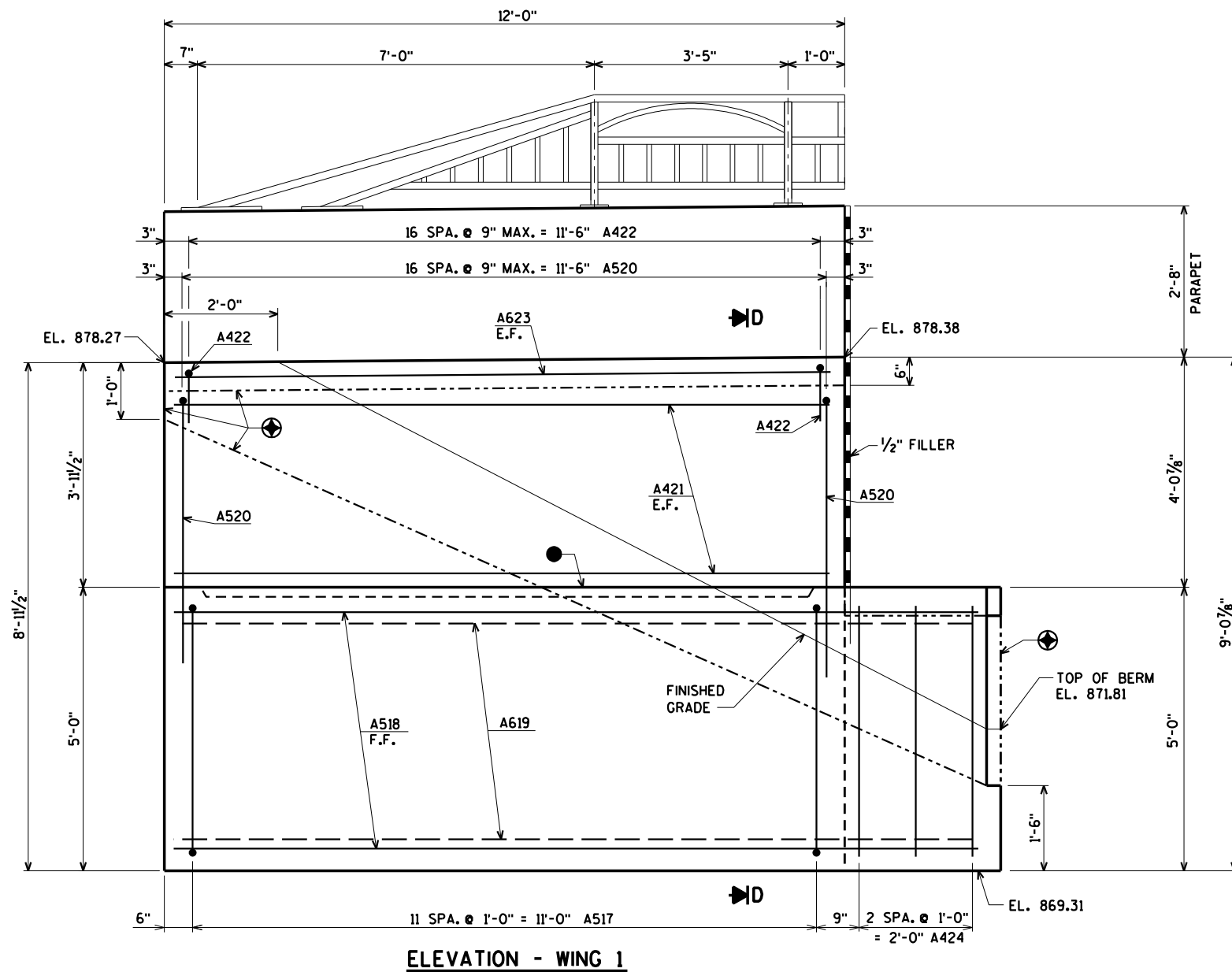
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
WEST ABUTMENT PILE LAYOUT			SHEET 5 OF 20

5/17/2022 PENTABLE:BRRedu_shd_util.tbl

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8



FOR CLARITY PARAPET NOT SHOWN.
FOR DETAILS SEE SHEETS 18 & 19

5/17/2022
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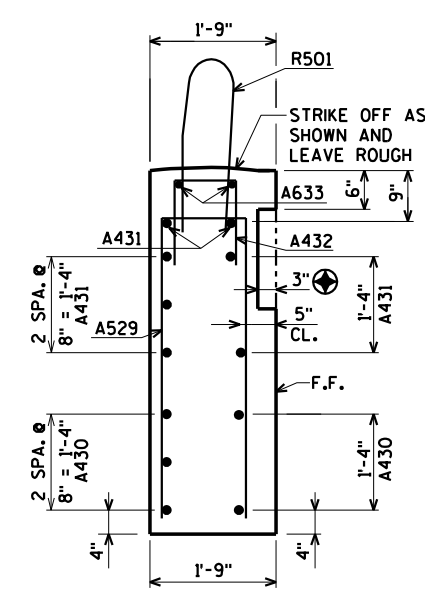
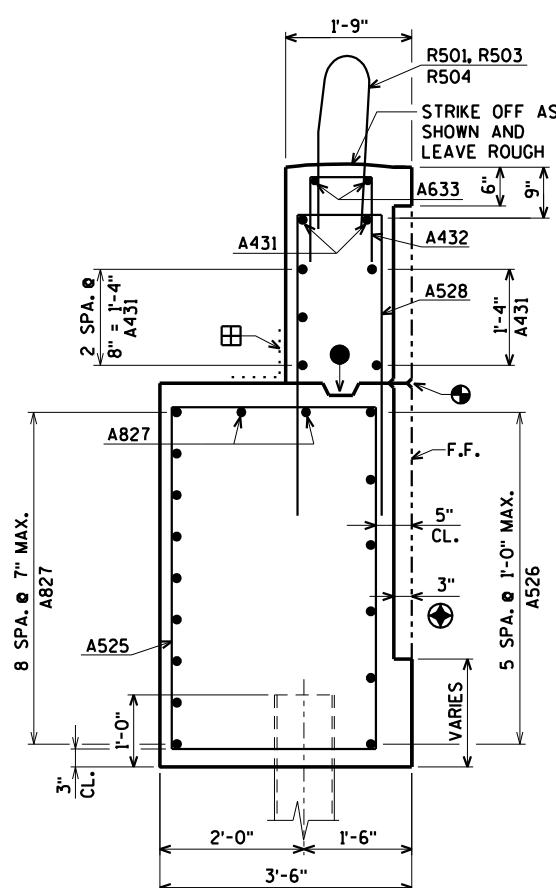
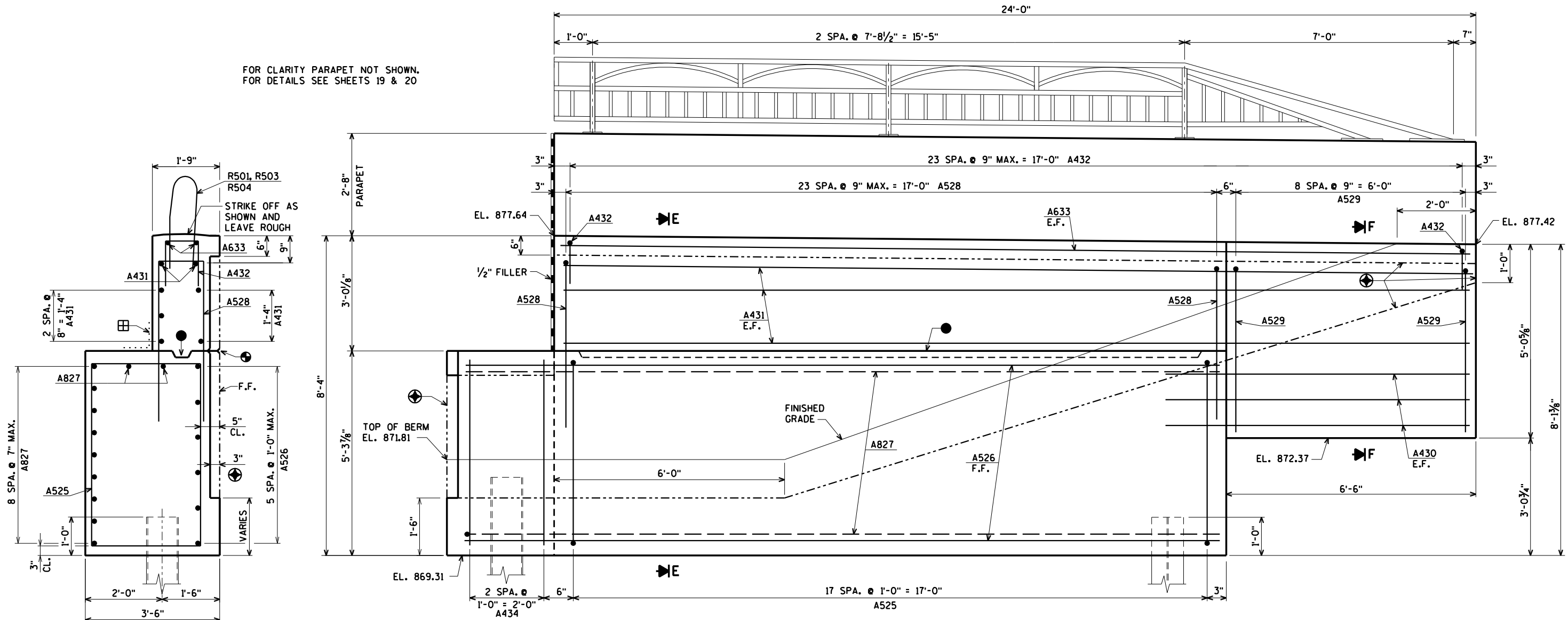
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- ⊕ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.
- ⊕ 3/4" "V" GROOVE ON FRONT FACE OF WINGWALL. ONLY REQUIRED IF OPTIONAL CONSTRUCTION JOINT IS USED.
- OPT. CONST. JOINT FORMED BY A BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ⊕ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HOIRZONTAL AND VERTICAL JOINTS ON BACKFACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
WEST ABUTMENT WING 1 DETAILS			SHEET 6 OF 20

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FOR CLARITY PARAPET NOT SHOWN.
FOR DETAILS SEE SHEETS 19 & 20



ELEVATION - WING 2

SECTION E

SECTION F

- ⊕ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.
- ⊕ 3/4" "V" GROOVE ON FRONT FACE OF WINGWALL. ONLY REQUIRED IF OPTIONAL CONSTRUCTION JOINT IS USED.
- OPT. CONST. JOINT FORMED BY A BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ⊕ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HOIRZONTAL AND VERTICAL JOINTS ON BACKFACE.

FOR PILE SPLICE DETAIL SEE SHEET 2.

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STRUCTURE B-13-890			
DRAWN BY CLP		PLANS CK'D. AEB	
WEST ABUTMENT WING 2 DETAILS			SHEET 7 OF 20

5/17/2022 PENTABLE:BRRedu_shd_ufil.tbl

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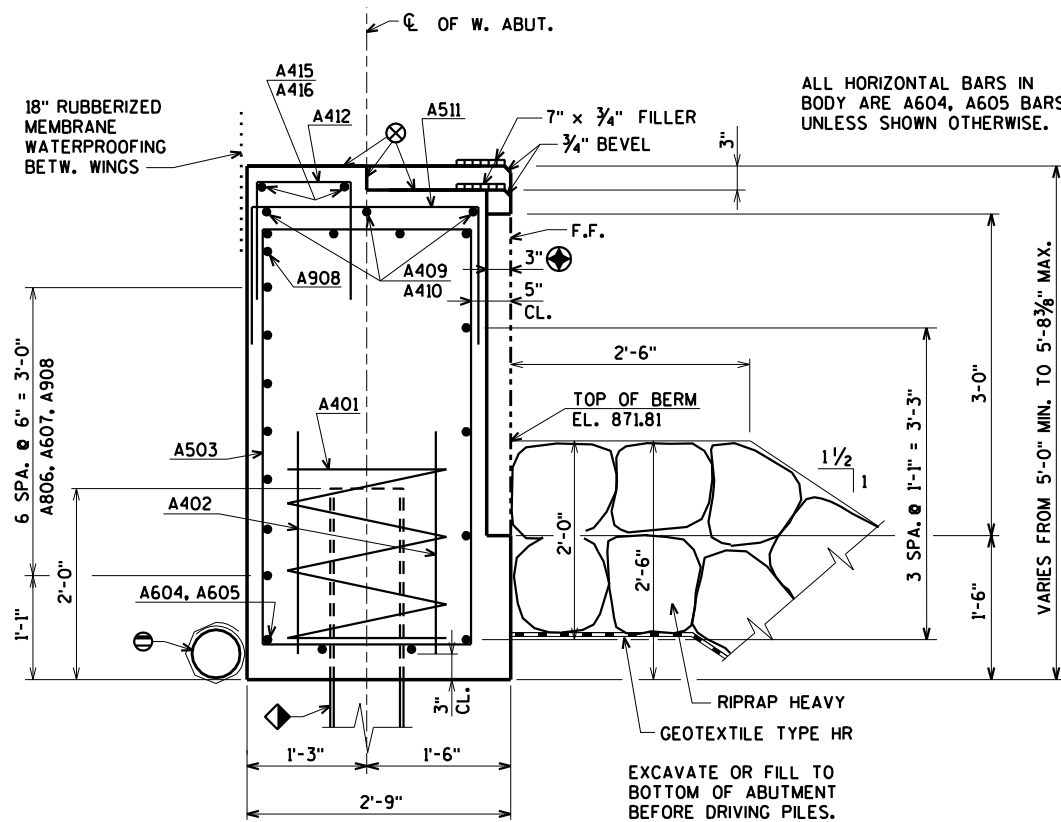
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BILL OF BARS

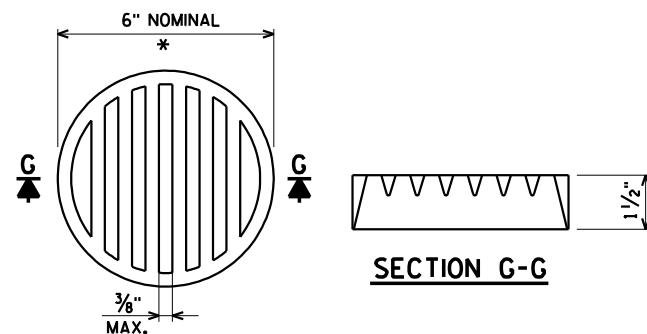
INCLUDES WEIGHT FROM PARAPETS

BAR NO.	COATED BAR	NO. REOD.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	WEIGHT		LOCATION
							3,460*	3,570*	
A401		8	28-0	X					BODY @ PILES
A402		16	2-3						BODY @ PILES
A503		67	14-2	X					BODY VERT.
A604		11	35-0						BODY HORIZ.
A605		11	21-11						BODY HORIZ.
A806		7	12-11	X					BODY HORIZ. B.F. @ WINGS
A607		7	25-1						BODY HORIZ. B.F. BTWN WINGS
A908		8	22-0	X					BODY HORIZ. B.F. BTWN WINGS
A409		3	7-11						BODY HORIZ.
A410		3	10-0						BODY HORIZ.
A511		16	5-1	X					BODY VERT.
A412		40	3-3	X					BODY VERT. TOP
A413		16	4-6	X					BODY VERT. TOP @ WINGS
A414		2	6-11						BODY HORIZ. TOP F.F. @ WINGS
A415		2	35-0						BODY HORIZ. TOP
A416		2	21-0						BODY HORIZ. TOP
A517	X	12	15-8	X					WING 1 VERT.
A518	X	6	14-2						WING 1 HORIZ. F.F.
A619	X	9	13-11						WING 1 HORIZ. B.F. & TOP
A520	X	17	11-2	X					WING 1 VERT.
A421	X	10	11-8						WING 1 HORIZ. E.F.
A422	X	17	5-1	X					WING 1 VERT. TOP
A623	X	2	11-8						WING 1 HORIZ. TOP E.F.
A424		3	4-7						BODY VERT. @ END @ WING 1
A525	X	18	16-2	X					WING 2 VERT.
A526	X	6	19-8						WING 2 HORIZ. F.F.
A827	X	11	21-0	X					WING 2 HORIZ. B.F. & TOP
A528	X	24	9-2	X					WING 2 VERT.
A529	X	9	8-9	X					WING 2 VERT.
A430	X	5	7-9						WING 2 HORIZ. E.F.
A431	X	7	23-8						WING 2 HORIZ. E.F.
A432	X	24	5-1	X					WING 2 VERT. TOP
A633	X	2	23-8						WING 2 HORIZ. TOP E.F.
A434		3	4-10						BODY VERT. @ END @ WING 2

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



◆ ABUTMENT TO BE SUPPORTED ON HP 10 x 42 STEEL PILING (WITH PILE POINTS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. ESTIMATED LENGTH 35'-0".



* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL

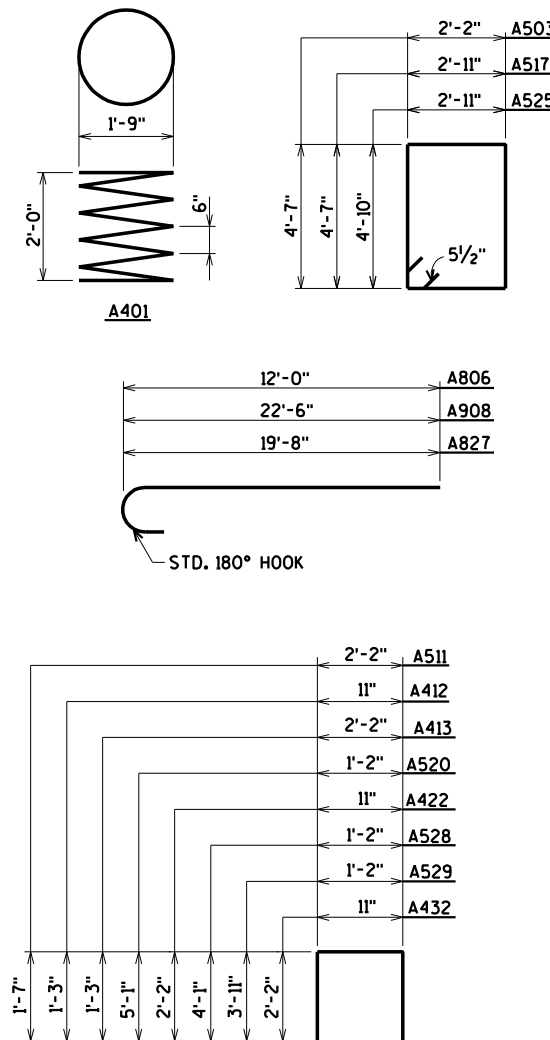
FOR LOCATION OF SECTION A SEE SHEET 4.

◆ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD TO BE INCIDENTAL TO BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

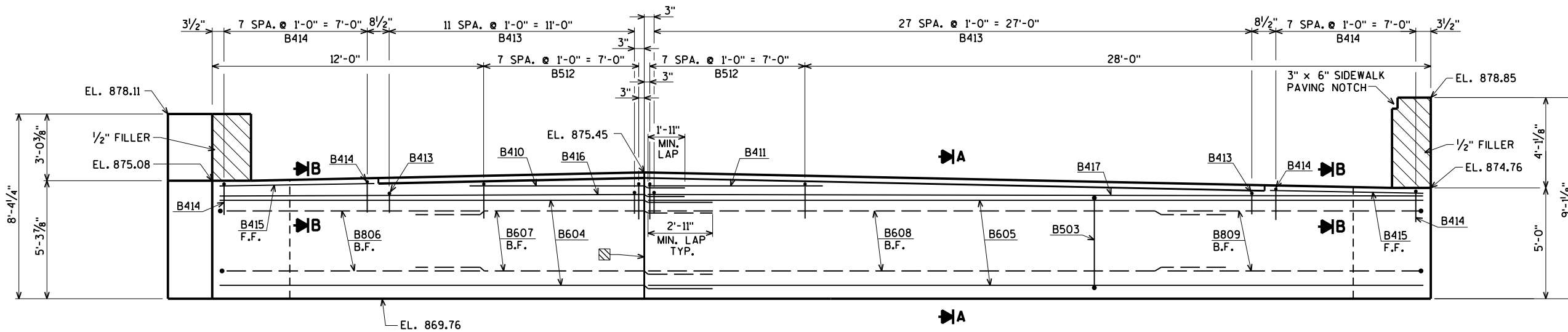
⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

FOR PILE SPLICE DETAIL SEE SHEET 2.

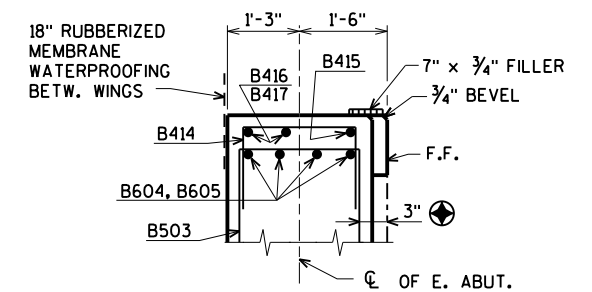


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
WEST ABUTMENT DETAILS & BILL OF BARS			SHEET 8 OF 20

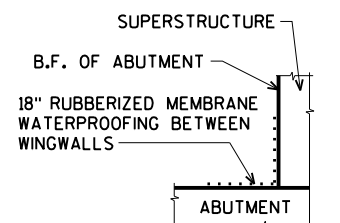
NOTE:
SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



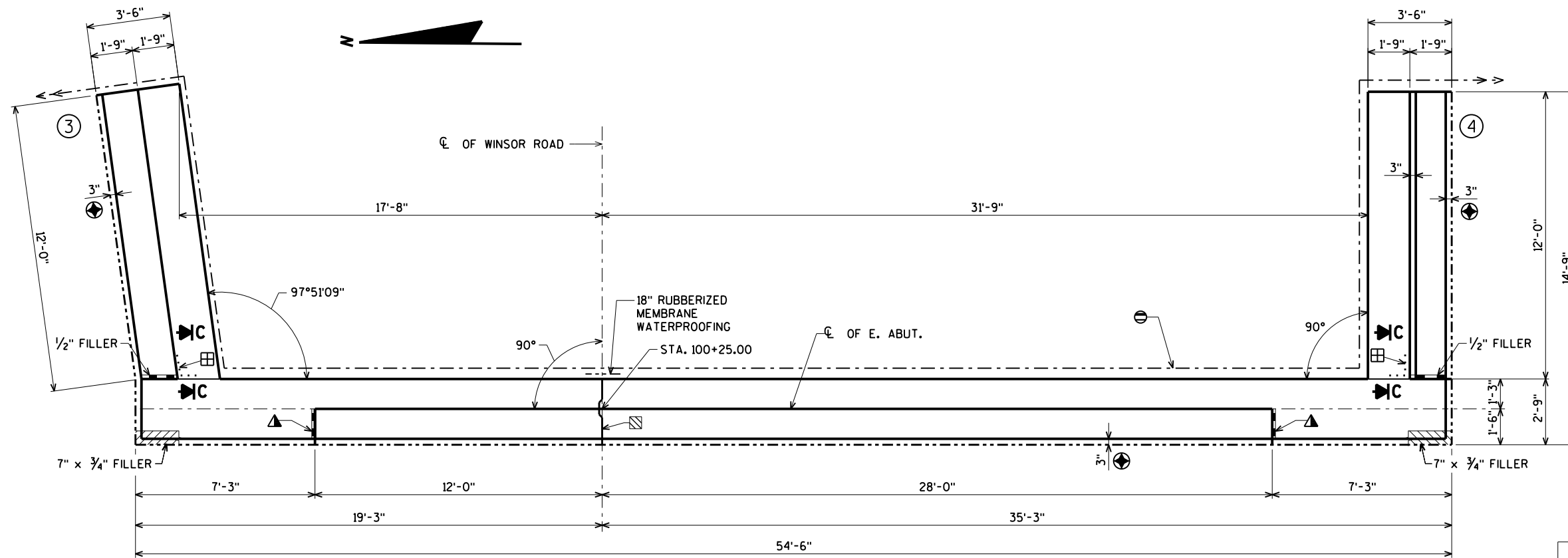
ELEVATION
(LOOKING EAST)
FOR SECTION A SEE SHEET 13.



SECTION B



SECTION C



PLAN

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 8. RODENT SHIELD TO BE INCIDENTAL TO BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

⊞ VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES 3/4". FOR ALTERNATE CONST. JT. DETAILS SEE SHEET 14. SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING

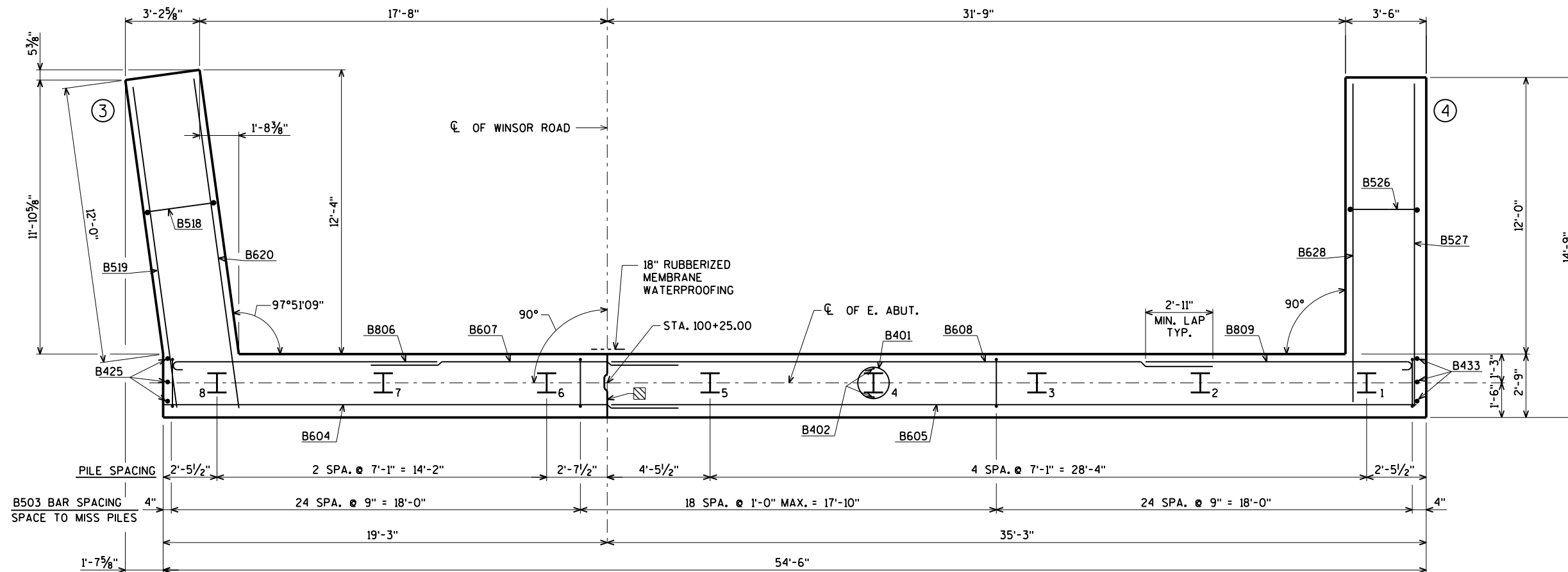
⊞ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WINGWALL.

⊕ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.

▲ 3/4" CORK FILLER ON VERTICAL FACE ONLY.

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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
EAST ABUTMENT			SHEET 9 OF 20



PILE LAYOUT

VERT. CONST. JT. - KEYWAY FORMED BY
 A SURFACED BEVELED 2" x 8". BEVEL EXPOSED
 EDGES 3/4". FOR ALTERNATE
 CONST. JT. DETAILS SEE SHEET 14.
 SEAL JOINT AT BACK FACE WITH 18"
 RUBBERIZED MEMBRANE WATERPROOFING

FOR PILE SPLICE DETAIL SEE SHEET 2.

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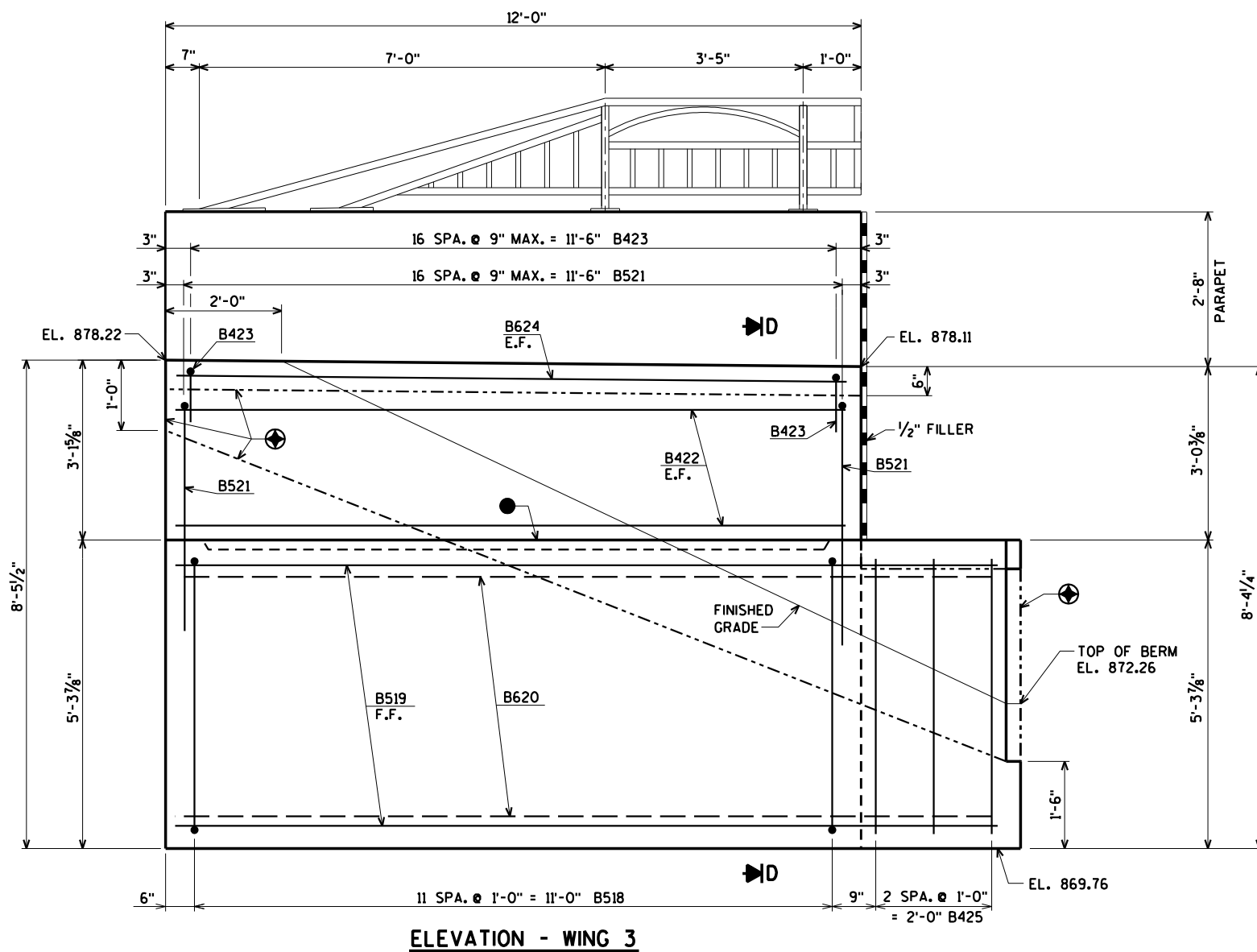
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
EAST ABUTMENT PILE LAYOUT			SHEET 10 OF 20

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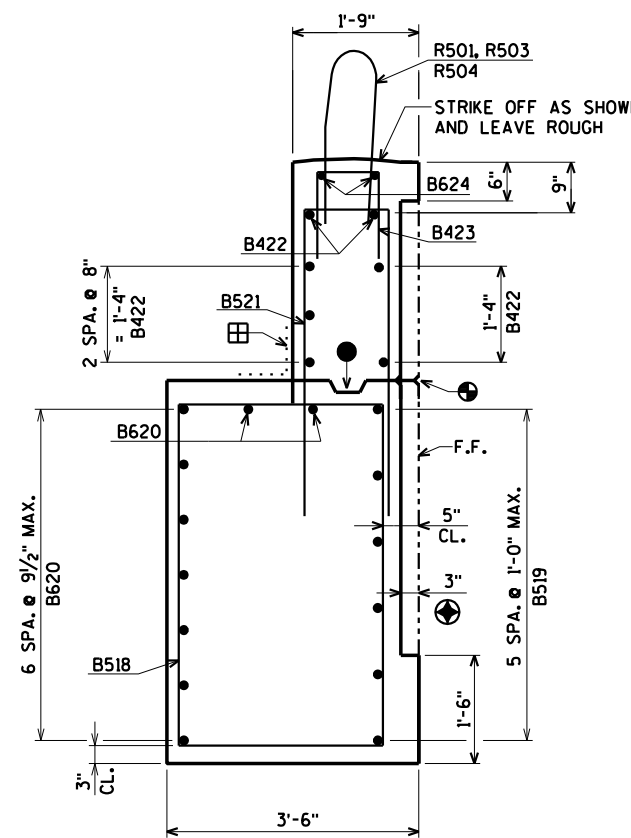
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5/17/2022
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ELEVATION - WING 3

FOR CLARITY PARAPET NOT SHOWN.
FOR DETAILS SEE SHEETS 19 & 20



SECTION D

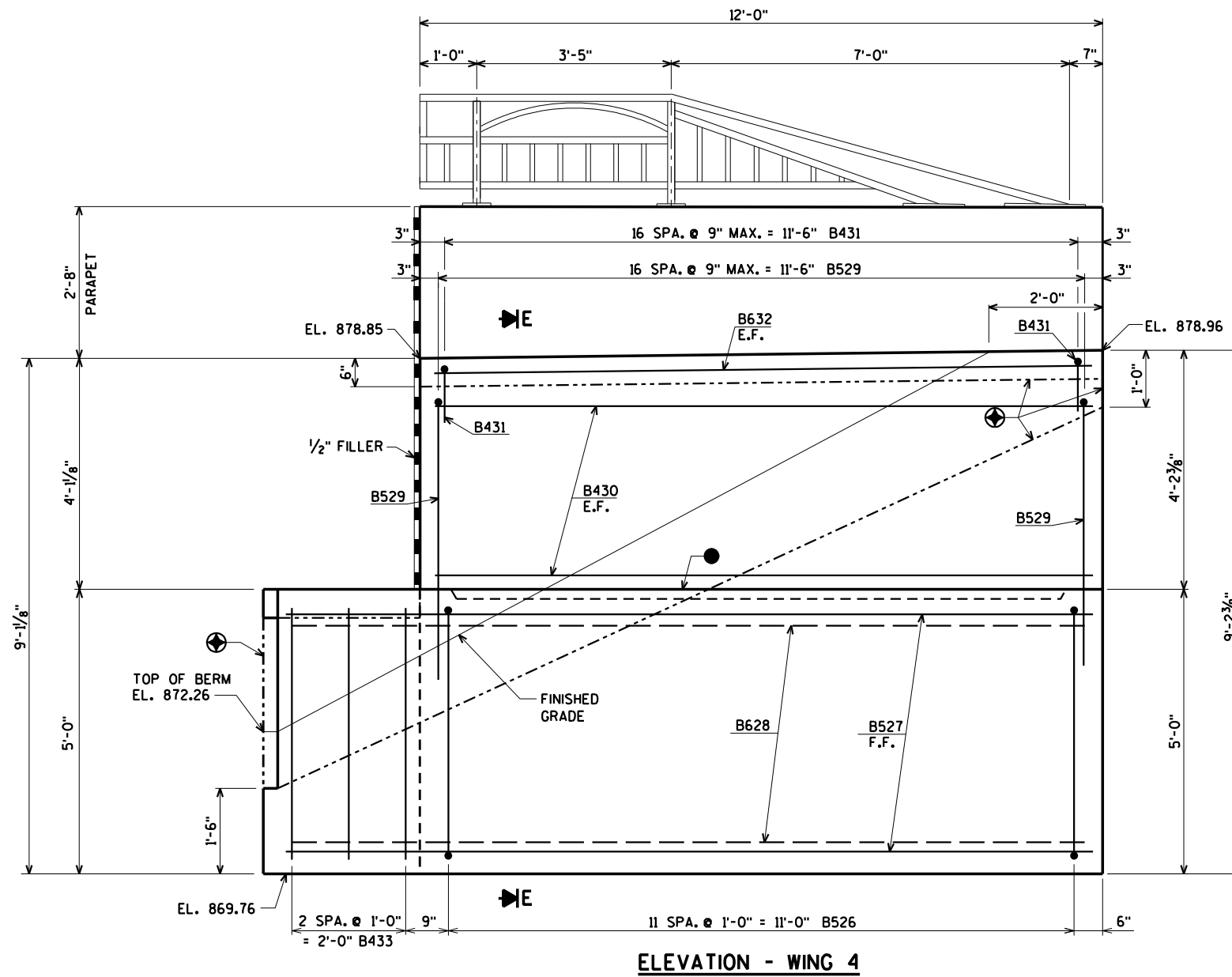
- ⊕ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.
- ⊕ 3/4" "V" GROOVE ON FRONT FACE OF WINGWALL. ONLY REQUIRED IF OPTIONAL CONSTRUCTION JOINT IS USED.
- OPT. CONST. JOINT FORMED BY A BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HOIRZONTAL AND VERTICAL JOINTS ON BACKFACE.

8

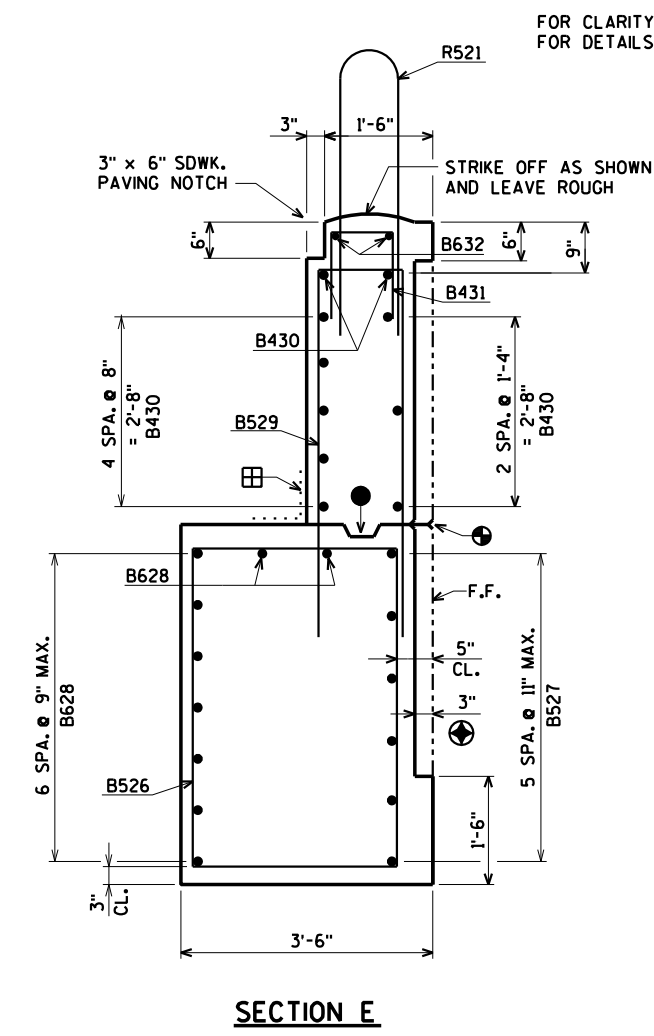
8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY CLP		PLANS CK'D. AEB	
EAST ABUTMENT WING 3 DETAILS			SHEET 11 OF 20

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ELEVATION - WING 4



SECTION E

FOR CLARITY PARAPET NOT SHOWN.
FOR DETAILS SEE SHEETS 18 & 19

- ⊕ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.
- ⊕ 3/4" "V" GROOVE ON FRONT FACE OF WINGWALL. ONLY REQUIRED IF OPTIONAL CONSTRUCTION JOINT IS USED.
- OPT. CONST. JOINT FORMED BY A BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- ⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HOIRZONTAL AND VERTICAL JOINTS ON BACKFACE.

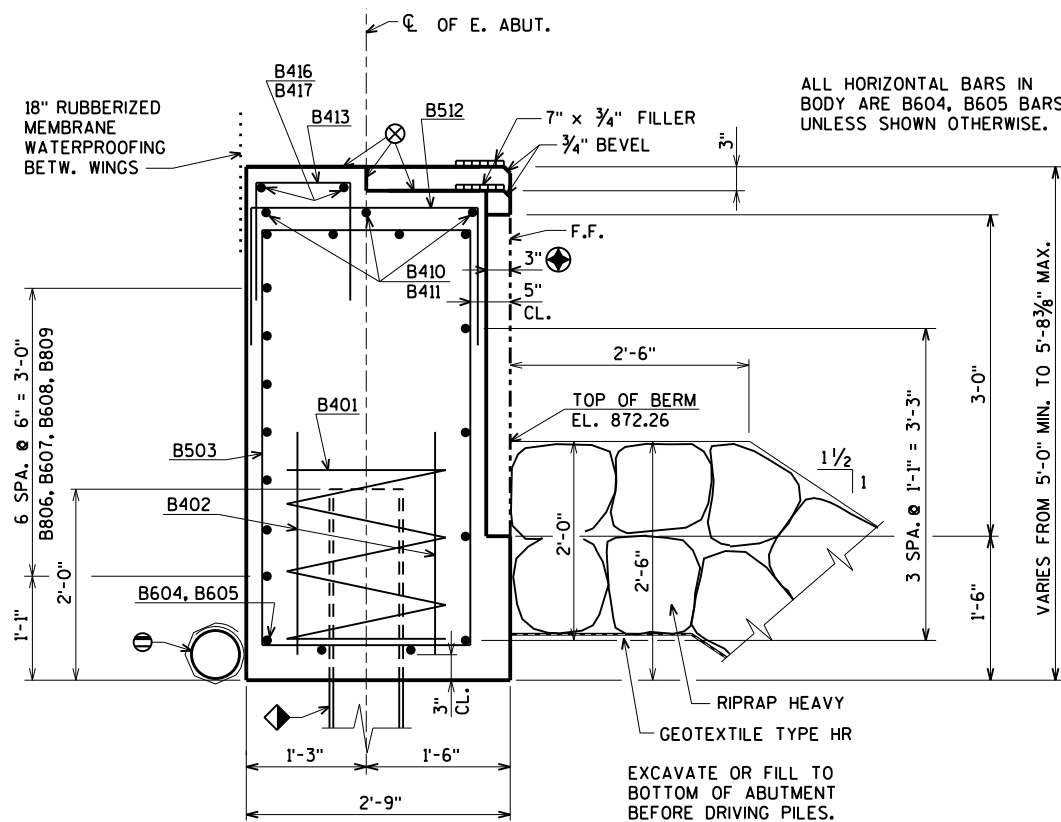
5/17/2022 PENTABLE:BRedu_shd_util.tbl

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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY CLP		PLANS CK'D. AEB	
EAST ABUTMENT WING 4 DETAILS			SHEET 12 OF 20

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◆ ABUTMENT TO BE SUPPORTED ON HP 10 x 42 STEEL PILING (WITH PILE POINTS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. ESTIMATED LENGTH 35'-0".

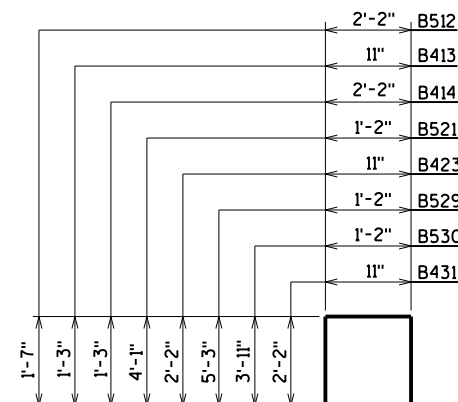
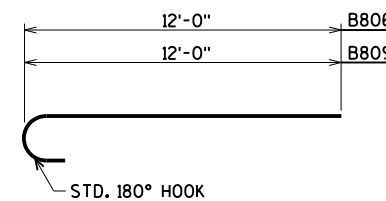
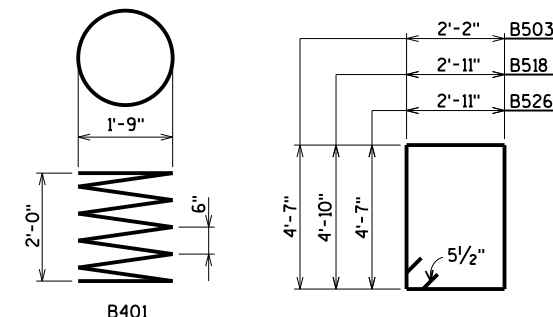
FOR LOCATION OF SECTION A SEE SHEET 9.

◆ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 8. RODENT SHIELD TO BE INCIDENTAL TO BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

FOR PILE SPLICE DETAIL SEE SHEET 2.



BILL OF BARS

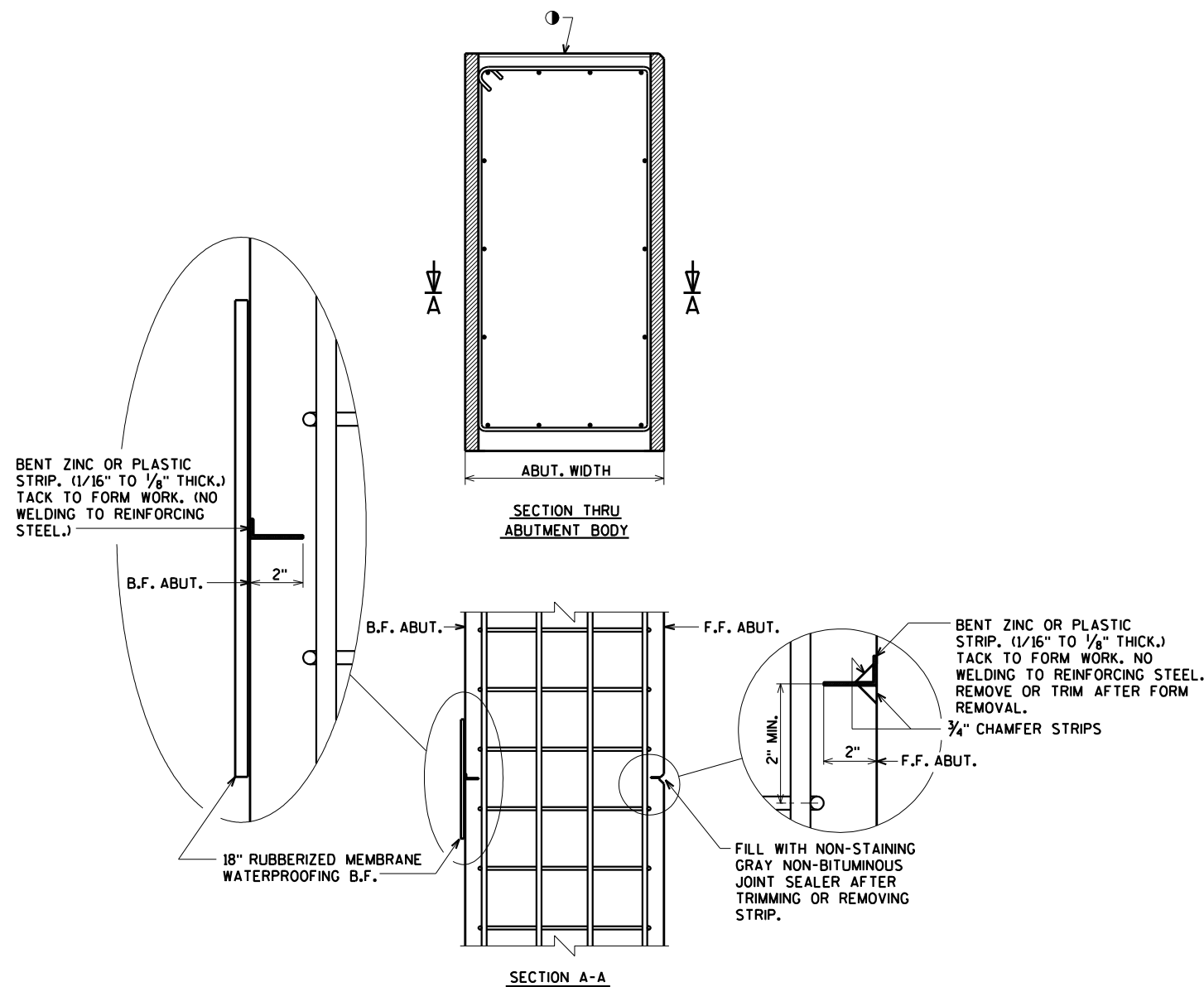
INCLUDES WEIGHT FROM PARAPETS

BAR NO.	COATED BAR	NO. REOD.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	LOCATION	
							2,310* COATED	3,360* UNCOATED
B401		8	28-0	X			BODY @ PILES	
B402		16	2-3				BODY @ PILES	
B503		67	14-2	X			BODY VERT.	
B604		11	21-11				BODY HORIZ.	
B605		11	35-0				BODY HORIZ.	
B806		7	12-11	X			BODY HORIZ. B.F. @ WING 3	
B607		7	13-4				BODY HORIZ. B.F. BTWN WINGS	
B608		7	25-9				BODY HORIZ. B.F. BTWN WINGS	
B809		7	12-11	X			BODY HORIZ. B.F. @ WING 4	
B410		3	10-0				BODY HORIZ.	
B411		3	7-11				BODY HORIZ.	
B512		16	5-1	X			BODY VERT.	
B413		40	3-3	X			BODY VERT. TOP	
B414		16	4-6	X			BODY VERT. TOP @ WINGS	
B415		2	6-11				BODY HORIZ. TOP F.F. @ WINGS	
B416		2	21-0				BODY HORIZ. TOP	
B417		2	35-0				BODY HORIZ. TOP	
B518	X	12	16-2	X			WING 3 VERT.	
B519	X	6	14-2				WING 3 HORIZ. F.F.	
B620	X	9	14-4				WING 3 HORIZ. B.F. & TOP	
B521	X	17	9-2	X			WING 3 VERT.	
B422	X	7	11-8				WING 3 HORIZ. E.F.	
B423	X	17	5-1	X			WING 3 VERT. TOP	
B624	X	2	11-8				WING 3 HORIZ. TOP E.F.	
B425		3	4-10				BODY VERT. @ END @ WING 3	
B526	X	12	15-8	X			WING 4 VERT.	
B527	X	6	14-2				WING 4 HORIZ. F.F.	
B628	X	9	13-11				WING 4 HORIZ. B.F. & TOP	
B529	X	17	11-6	X			WING 4 VERT.	
B430	X	10	11-8				WING 4 HORIZ. E.F.	
B431	X	17	5-1	X			WING 4 VERT. TOP	
B632	X	2	11-8				WING 4 HORIZ. TOP E.F.	
B433		3	4-7				BODY VERT. @ END @ WING 4	

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

1/4/2023
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
EAST ABUTMENT DETAILS & BILL OF BARS			SHEET 13 OF 20



ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

① USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

5/17/2022
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8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
ALTERNATE CONSTRUCTION JOINT			SHEET 14 OF 20

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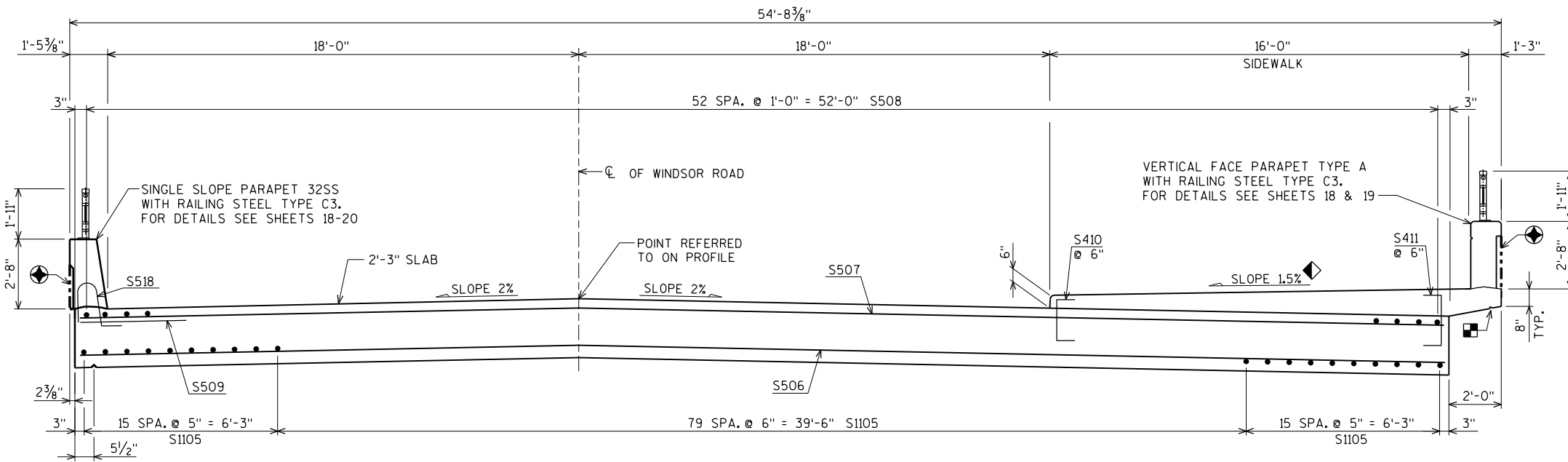
TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

BILL OF BARS

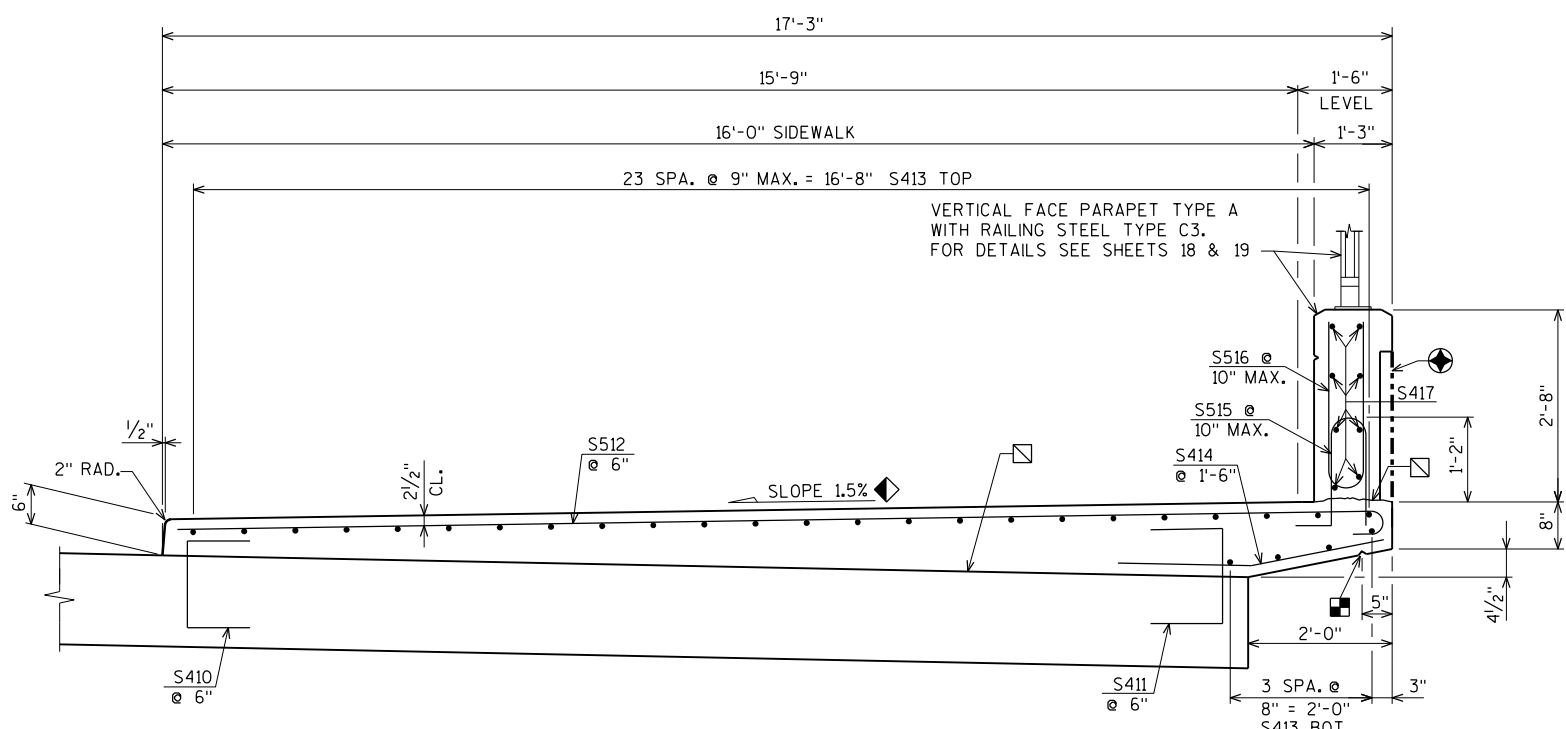
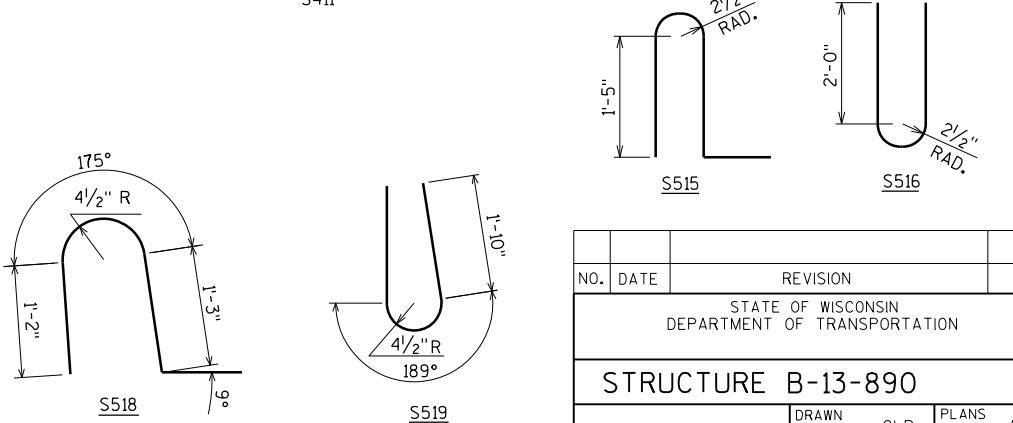
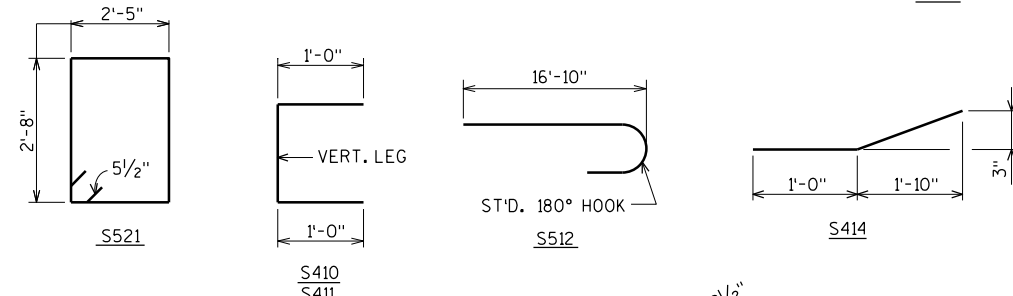
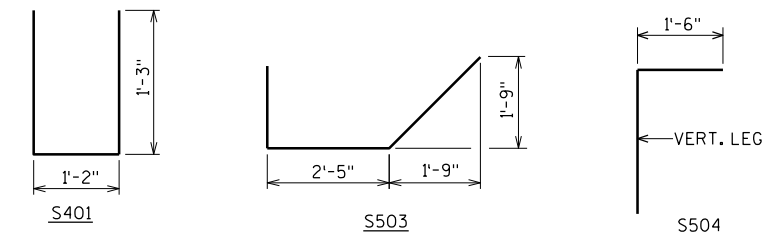
BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	44,410# COATED
							LOCATION
S401	X	82	3-6	X			SLAB @ ABUT. NOTCH
S402	X	4	39-8				SLAB @ ABUT. NOTCH
S503	X	106	6-6	X			SLAB @ ABUT.
S504	X	106	4-0	X			SLAB @ ABUT.
S1105	X	110	45-10				SLAB LONG. BOT.
S506	X	82	52-2				SLAB TRANS. BOT.
S507	X	53	52-2				SLAB TRANS. TOP
S508	X	53	52-2				SLAB LONG. TOP
S509	X	50	5-0				SLAB TRANS. TOP @ NORTH EDGE
S410	X	106	3-9	X			SLAB @ SDWK.
S411	X	106	4-0	X			SLAB @ SDWK.
S512	X	106	17-5	X			SDWK. TRANS. TOP
S413	X	56	26-11				SDWK. LONG. TOP & BOT.
S414	X	36	2-10	X			SDWK. TRANS. BOT.
S515	X	64	4-4	X			PARAPET VERT.
S516	X	64	4-9	X			PARAPET VERT.
S417	X	16	26-11				PARAPET HORIZ.
S518	X	79	4-5	X			PARAPET VERT.
S519	X	79	5-0	X			PARAPET VERT.
S520	X	12	27-5				PARAPET HORIZ.
S521	X	6	10-10	X			SDWK. @ ABUT.
S522	X	10	4-7				SDWK. @ ABUT.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



TYPICAL SECTION THRU BRIDGE
(LOOKING EAST)

- ◆ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.
- ◆ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 3/4" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENTS - TYP.
- ▣ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.



TYPICAL SECTION THRU SIDEWALK

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
SUPERSTRUCTURE			SHEET 15 OF 20

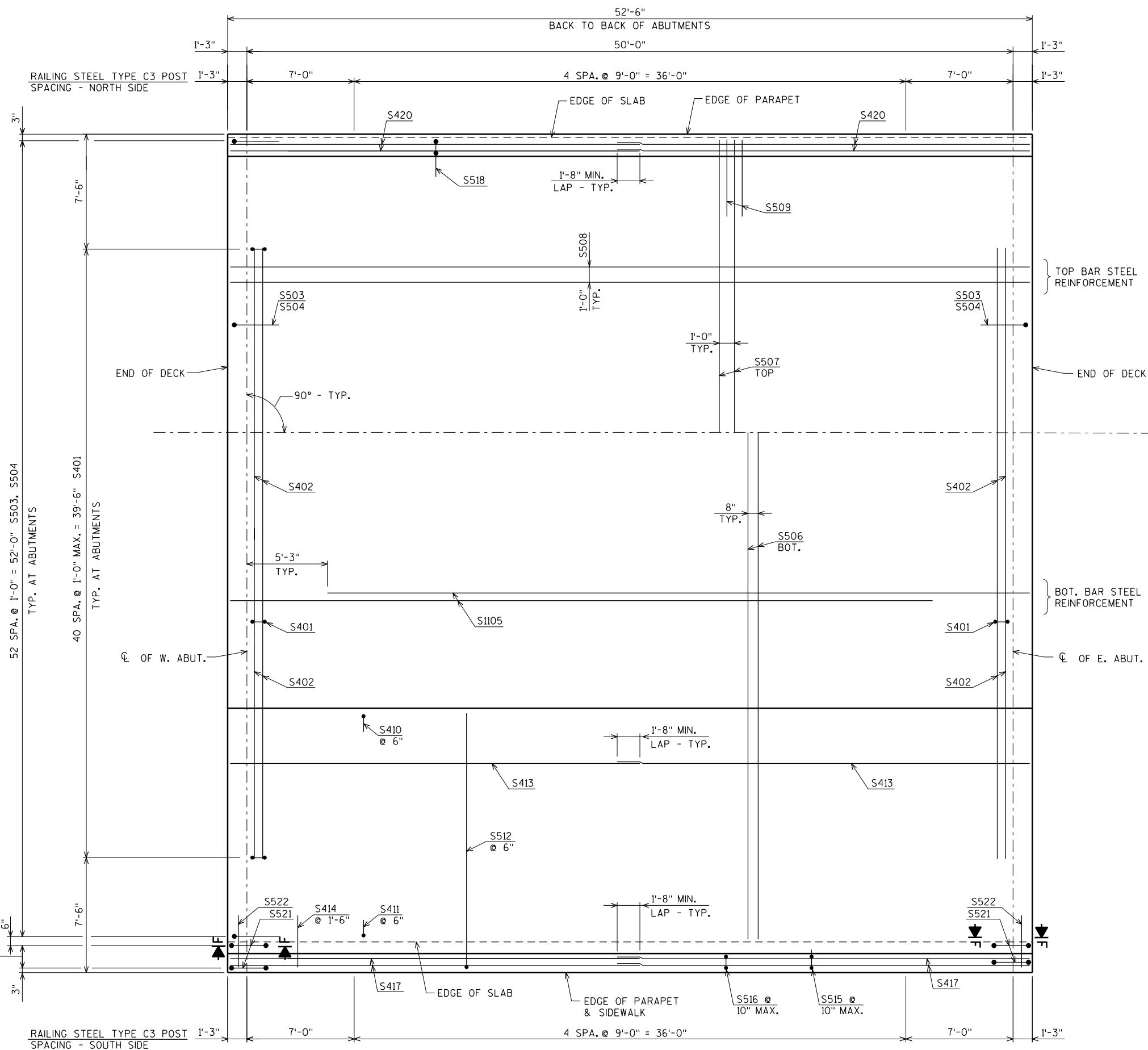
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8/31/2022 PENTABLE:BRReou_shd_utfl.tbl

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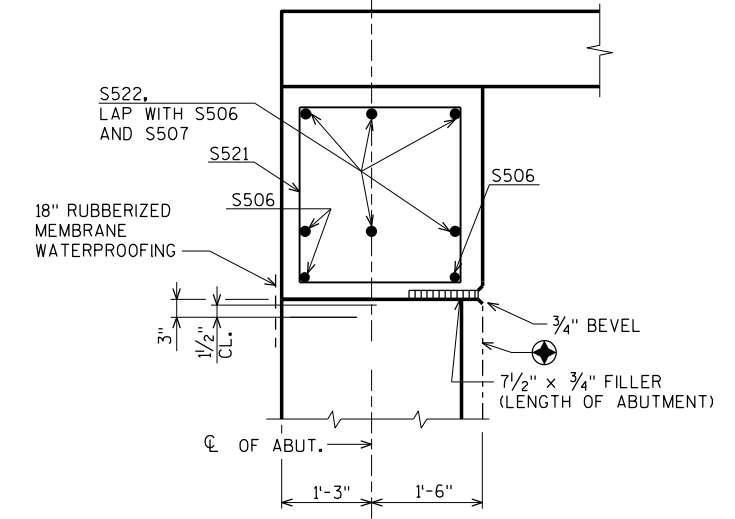
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8/31/2022
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TOP BAR STEEL REINFORCEMENT

BOT. BAR STEEL REINFORCEMENT

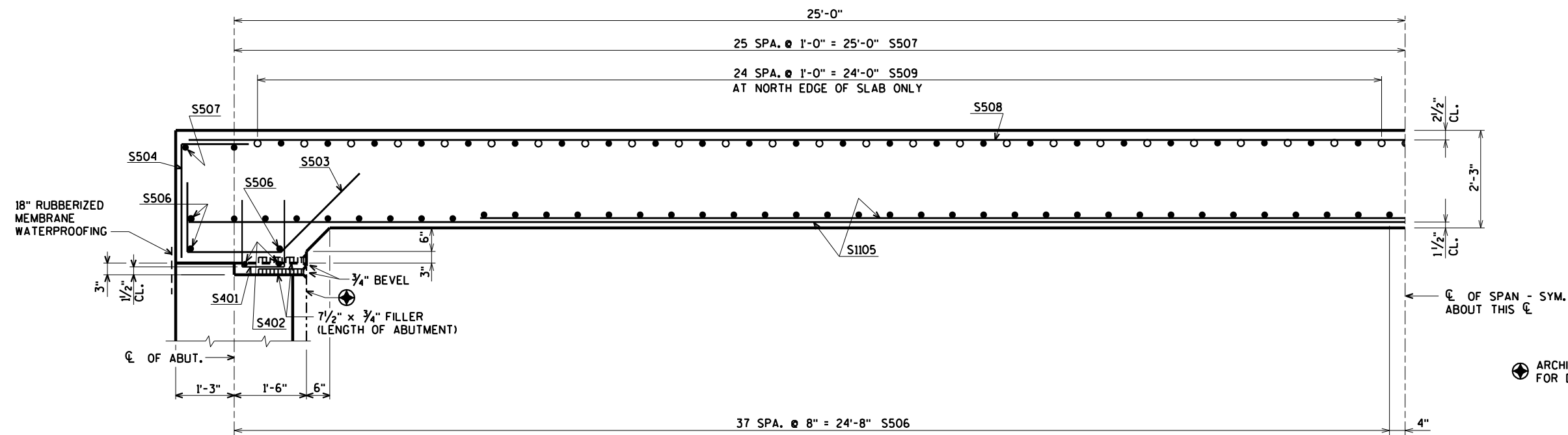


SECTION F

PLAN

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
SUPERSTRUCTURE PLAN			SHEET 16 OF 20

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PART LONGITUDINAL SECTION

TOP OF DECK ELEVATIONS

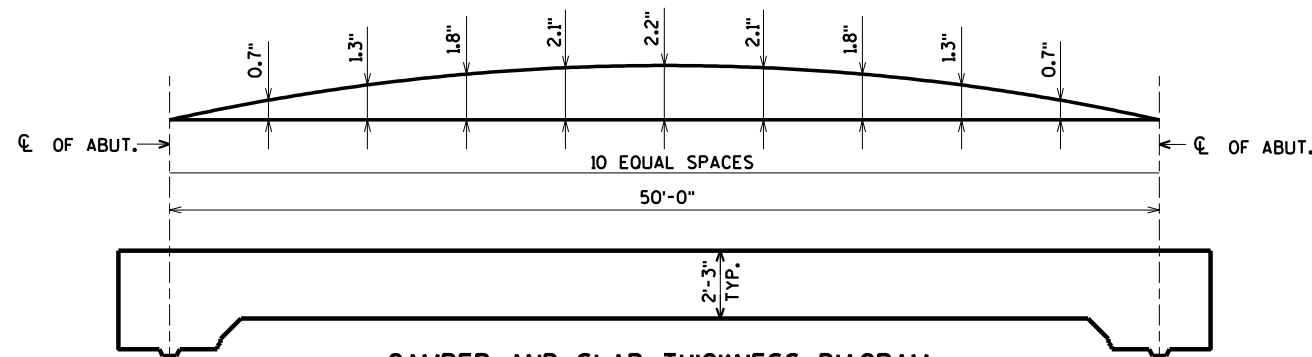
ELEVATIONS SHOWN ARE FINISHED DECK AND DO NOT INCLUDE ALLOWANCES OF DEAD LOAD DEFLECTION AND FUTURE CREEP.

LOCATION	CL OF BRG. W. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	CL OF BRG. E. ABUT.
LT. EDGE OF SLAB	877.65	877.70	877.74	877.79	877.83	877.88	877.92	877.97	878.01	878.06	878.10
LT. GUTTER	877.65	877.70	877.74	877.79	877.83	877.88	877.92	877.97	878.01	878.06	878.10
CROWN/CL	878.01	878.06	878.10	878.15	878.19	878.24	878.28	878.33	878.37	878.42	878.46
CURB	877.65	877.70	877.74	877.79	877.83	877.88	877.92	877.97	878.01	878.06	878.10
RT. EDGE OF SLAB	877.35	877.39	877.44	877.48	877.53	877.57	877.62	877.66	877.71	877.75	877.80

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	CL OF W. ABUT.	5/10 PT. SPAN 1	CL OF E. ABUT.
S. GUTTER			
CL OF STRUCTURE			
N. GUTTER			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE CL OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND CROWN OR CL. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.



CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTION.

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE, FOLLOW THIS PROCEDURE:

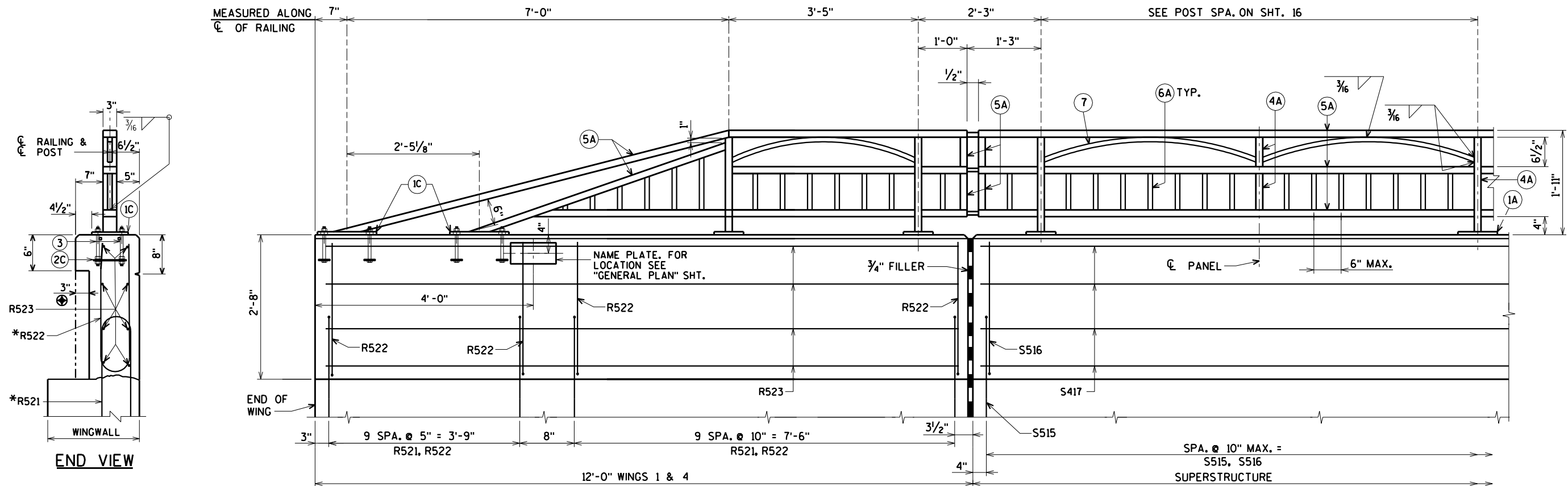
- TOP OF SLAB ELEVATION AT FINAL GRADE
- MINUS..... SLAB THICKNESS
- PLUS..... CAMBER
- PLUS..... FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
- EQUALS = TOP OF SLAB FALSEWORK ELEVATION

5/17/2022 PENTABLE:BRRedu_shd_util.tbl

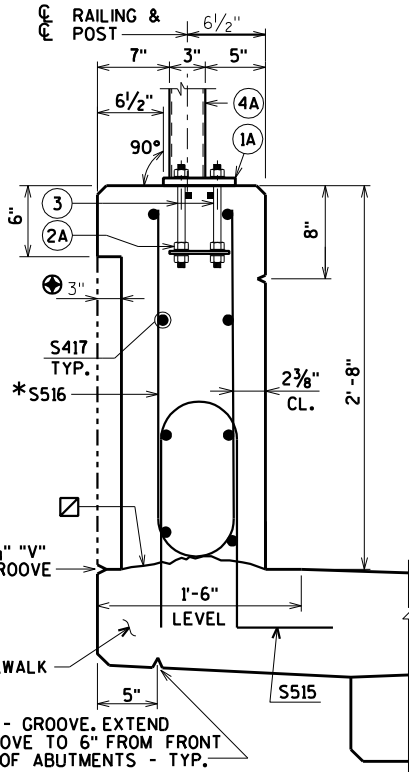
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CK'D. AEB
SUPERSTRUCTURE DETAILS			SHEET 17 OF 20

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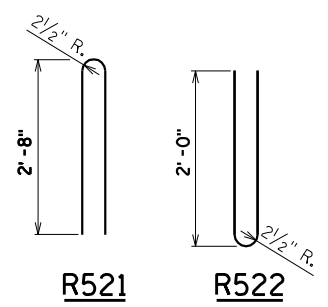
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ELEVATION OF PARAPET AT SUPERSTRUCTURE AND WINGS 1 & 4
 (SEE SHEETS 6 AND 12 FOR WING DETAILS)



SECTION THRU SOUTH PARAPET ON BRIDGE
 * ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING



BILL OF BARS *WEIGHT AT W. ABUT. = 320 LB
 *WEIGHT AT E. ABUT. = 320 LB

BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R521	X	20	20	6'-0"	X		PARAPET VERT.
R522	X	20	20	4'-9"	X		PARAPET VERT.
R523	X	8	8	11'-8"			PARAPET HORIZ.

*WEIGHT INCLUDED IN ABUTMENT SHEETS 8 & 13.

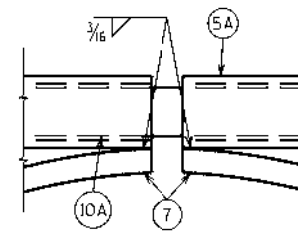
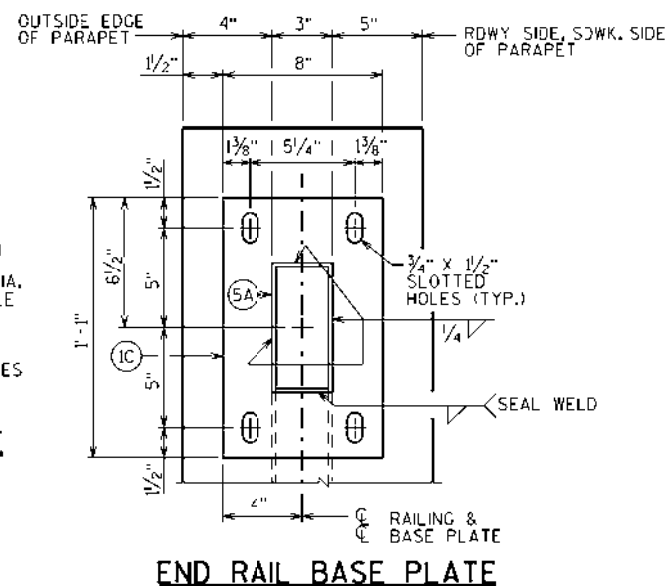
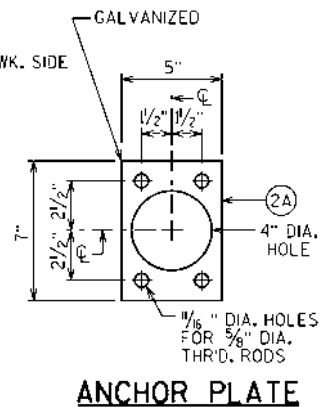
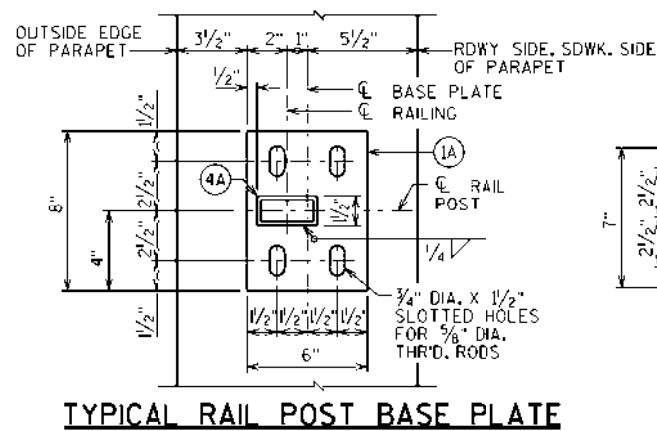
- HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY CLP		PLANS CK'D. AEB	
COMBINATION RAIL TYPE "C3" & PARAPET DETAILS			SHEET 18 OF 20

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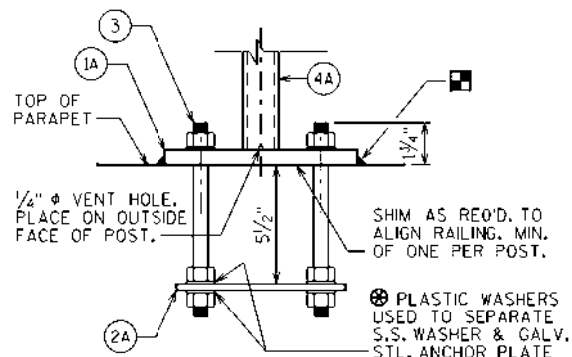
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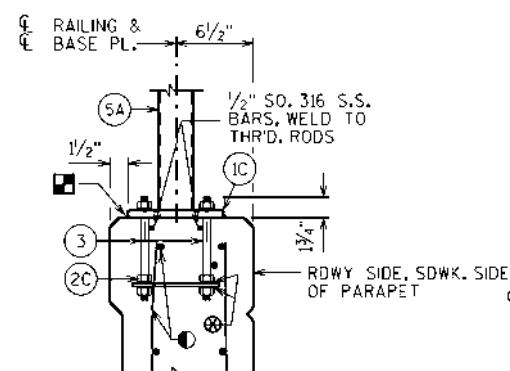
LEGEND

- (1A) PLATE 3/8" X 6" X 8" WITH 3/4" X 1/2" SLOTTED HOLES.
- (1C) PLATE 3/8" X 8" X 1'-1" WITH 3/4" X 1/2" SLOTTED HOLES.
- (2A) 1/4" X 5" X 7" ANCHOR PLATE WITH 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.
- (2C) 1/4" X 2 1/2" X 7 1/4" ANCHOR PLATE WITH 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.
- (3) 3/4" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 3/8"-INCH, EMBED 7" IN CONCRETE FOR RAIL POSTS, EMBED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.
- (4A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16". PLACE VERTICAL, WELD TO NO. 1 & 5.
- (5A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16" RAILS, WELD TO NO. 1 & NO. 4, INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.
- (5A) BAR 1" X 1" PICKETS, WELD TO NO. 5, PLACE VERTICAL.
- (7) BAR 1" X 1". BEND TO REQUIRED RADIUS, WELD TO NO. 4 & 5.
- (9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES, PROVIDE "SLIDING FIT".
- (10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES, (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)



ANCHORAGE FOR RAIL POSTS

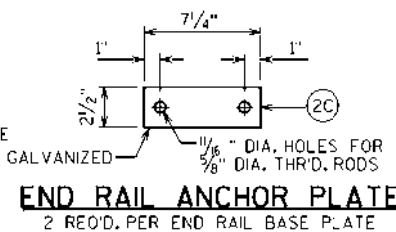
NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



ANCHORAGE FOR END RAIL

NOTE: ANCHOR PLATES NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.

- 1) WHEN ADHESIVE ANCHORS ARE USED, FIELD BEND AND/OR DISPLACE TO AVOID HITTING LONGITUDINAL BAR WHEN DRILLING FOR ADHESIVE ANCHORS.



2 REQ'D. PER END RAIL BASE PLATE

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C3", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36, ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

- 2) CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

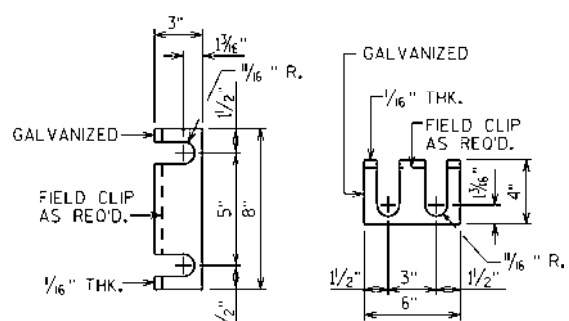
ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3 & 12) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED AMS STD. COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

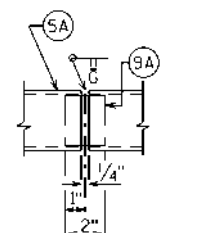
RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



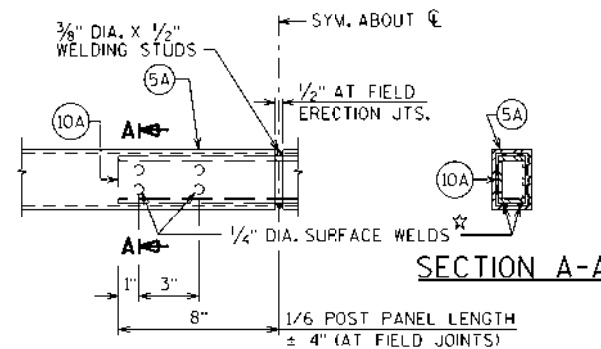
RAIL POST SHIM DETAIL

(2 SETS PER POST)



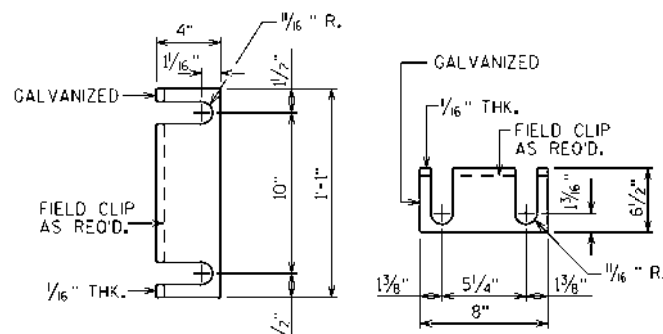
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

☆ MIN. 3/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



END RAIL SHIM DETAIL

(2 SETS PER POST)

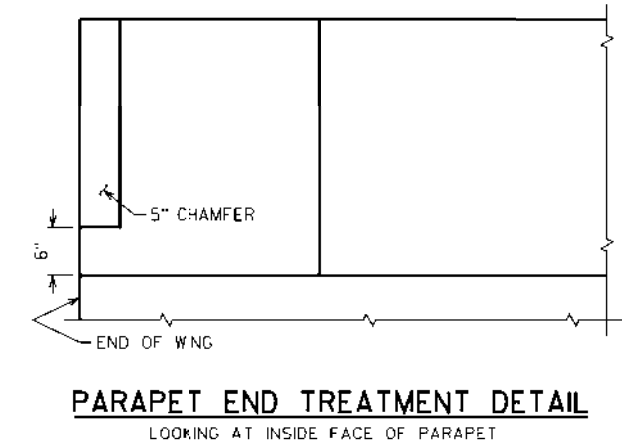
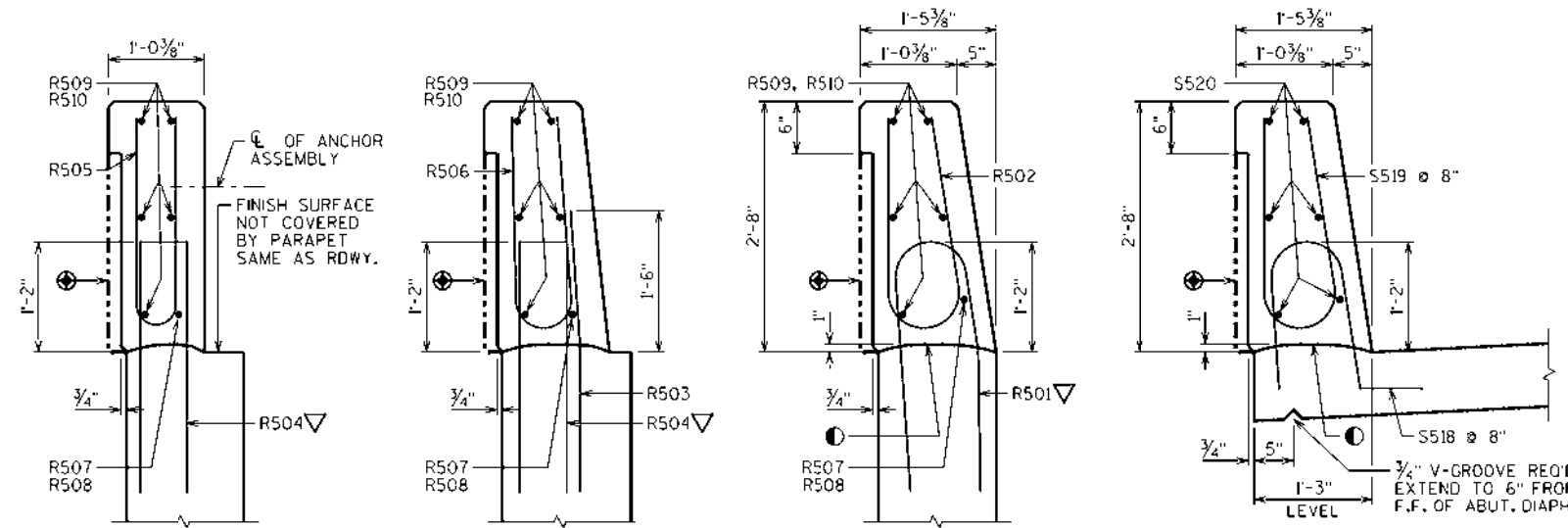
\$PRFNAME\$
I:47=470379 Windsor Yahara River Bridge Structures CADD Structure Final 470379 railcomb.dgn

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CKD. AEB
COMBINATION RAIL TYPE "C3" DETAILS			SHEET 19 OF 20

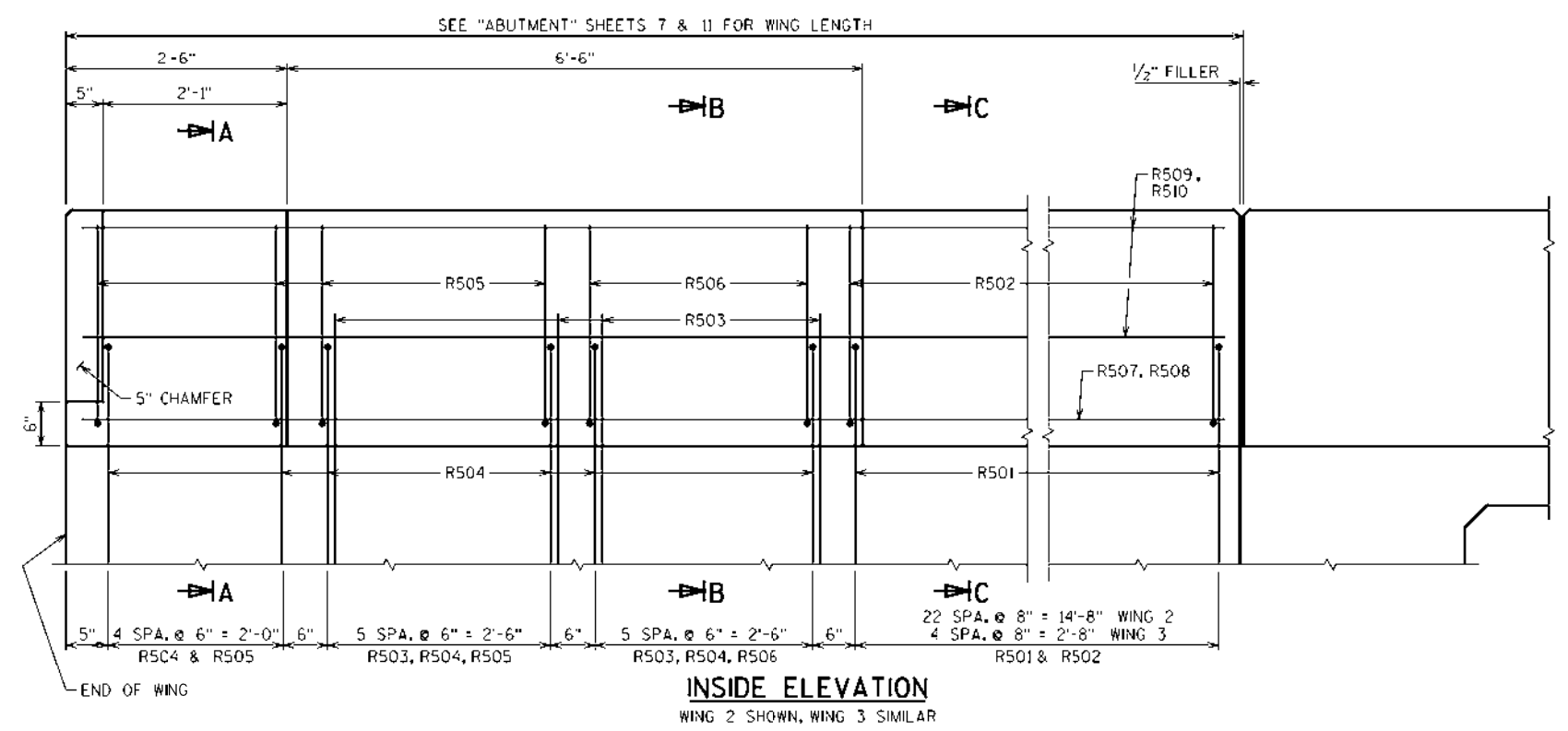
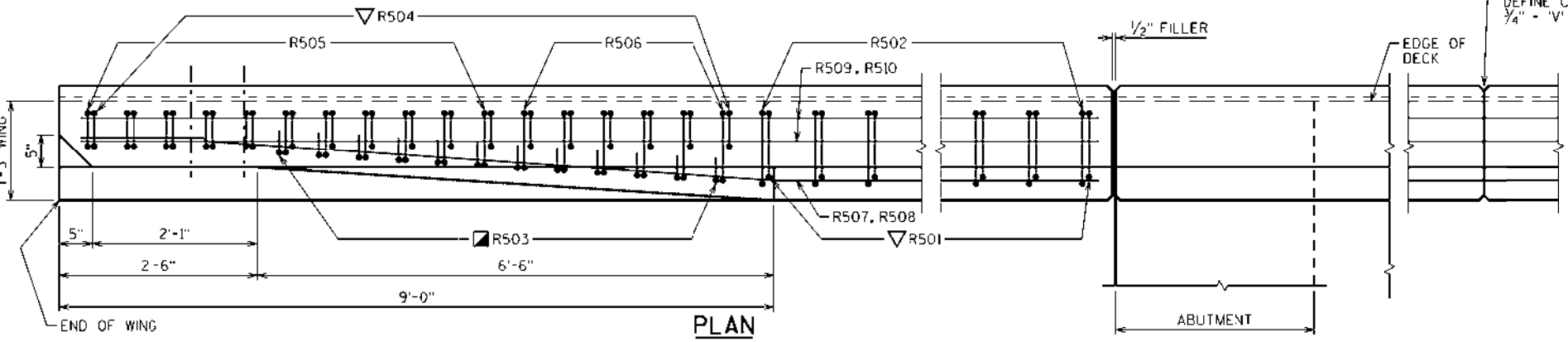
BILL OF BARS *WEIGHT @ W. ABUT. = 630 LB
FOR ABUTMENT PARAPETS *WEIGHT @ E. ABUT. = 350 LB

BAR MARK	CO. #	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	23	5	5'-10"	X		PARAPET VERT.
R502	X	23	5	5'-0"	X		PARAPET VERT.
R503	X	12	12	3'-0"	X		PARAPET VERT.
R504	X	17	17	5'-7"	X		PARAPET VERT.
R505	X	11	11	4'-9"	X		PARAPET VERT.
R506	X	6	6	4'-10"	X		PARAPET VERT.
R507	X	1	0	23'-8"	X		PARAPET HORIZ.
R508	X	0	1	11'-8"	X		PARAPET HORIZ.
R509	X	5	0	23'-8"			PARAPET HORIZ.
R510	X	0	5	11'-8"			PARAPET HORIZ.

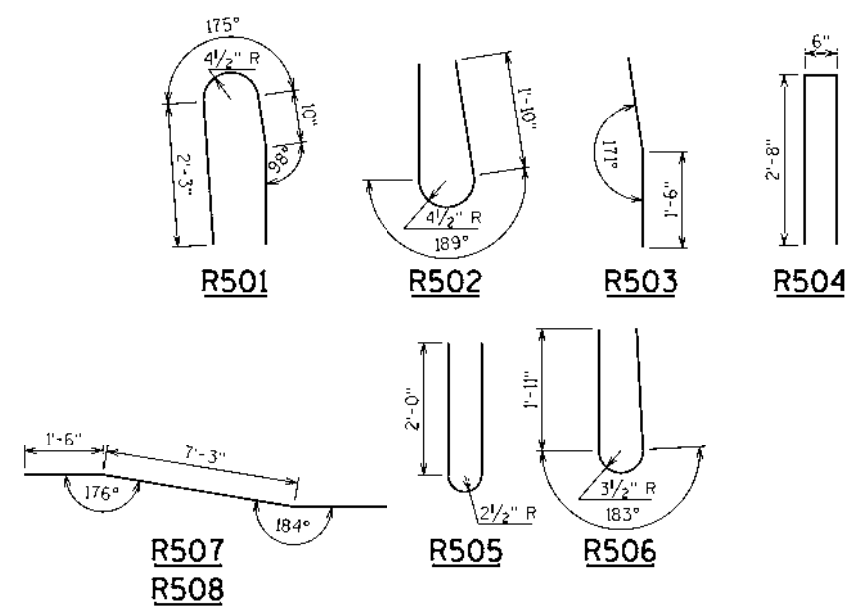
*WEIGHT INCLUDED IN ABUTMENT SHEETS 8 AND 13.



SECTION A-A SECTION B-B SECTION C-C SECTION THRU NORTH PARAPET ON DECK



OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. DEFINE CONST. JOINT WITH A 3/4" V-GROOVE.



FOR RAILING DETAILS SEE SHEET 19

- CONST. JOINT - STRIKE OFF AS SHOWN
- ▣ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.
- ⊕ ARCHITECTURAL SURFACE TREATMENT. FOR DETAILS SEE SHEET 2.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-890			
DRAWN BY		CLP	PLANS CKD. AEB
SINGLE SLOPE PARAPET 32SS			SHEET 20 OF 20

ORIGINAL PLANS PREPARED BY
AYRES 3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

8/29/2022 PENTABLE:BRQU_shd_util.tbi

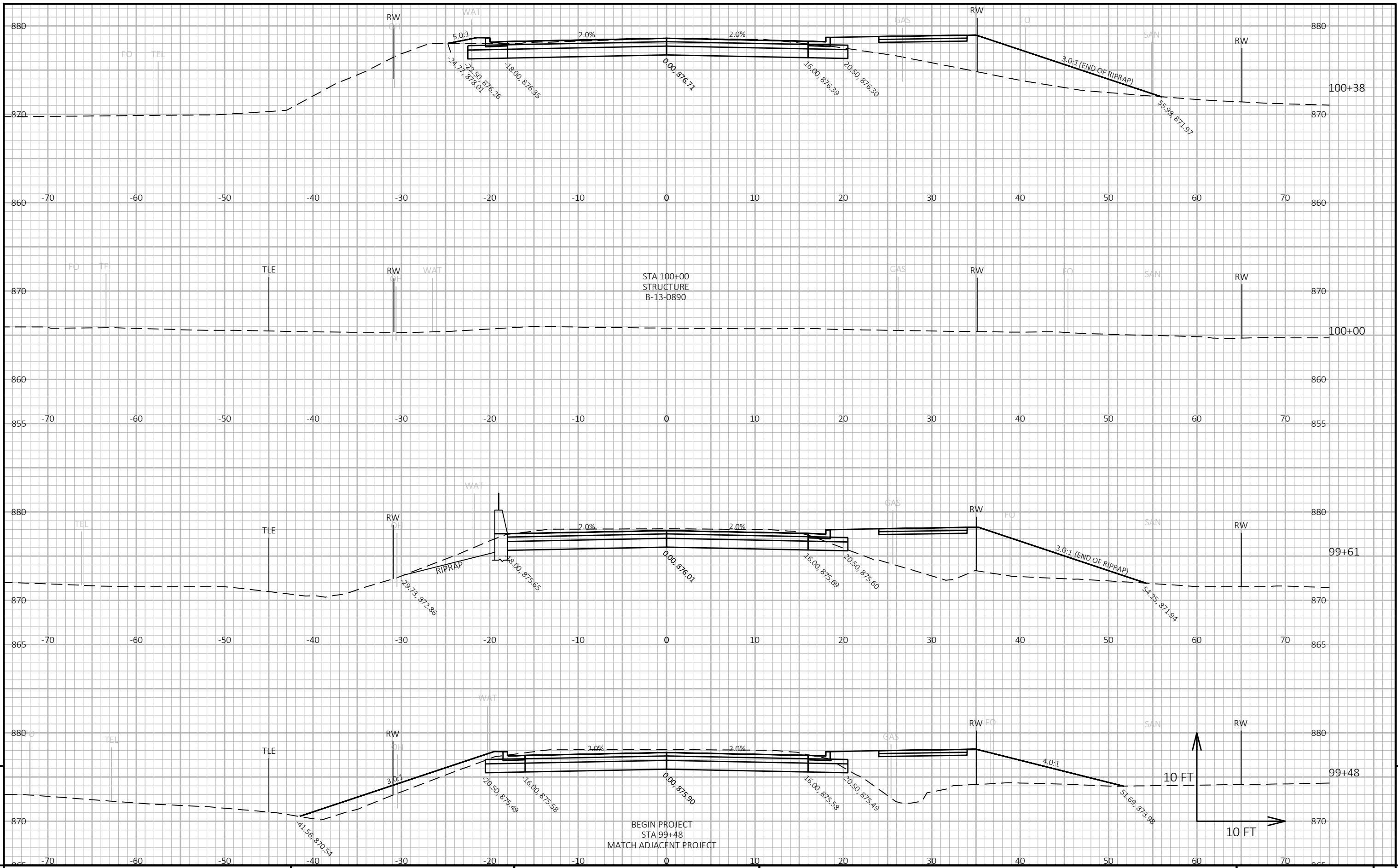
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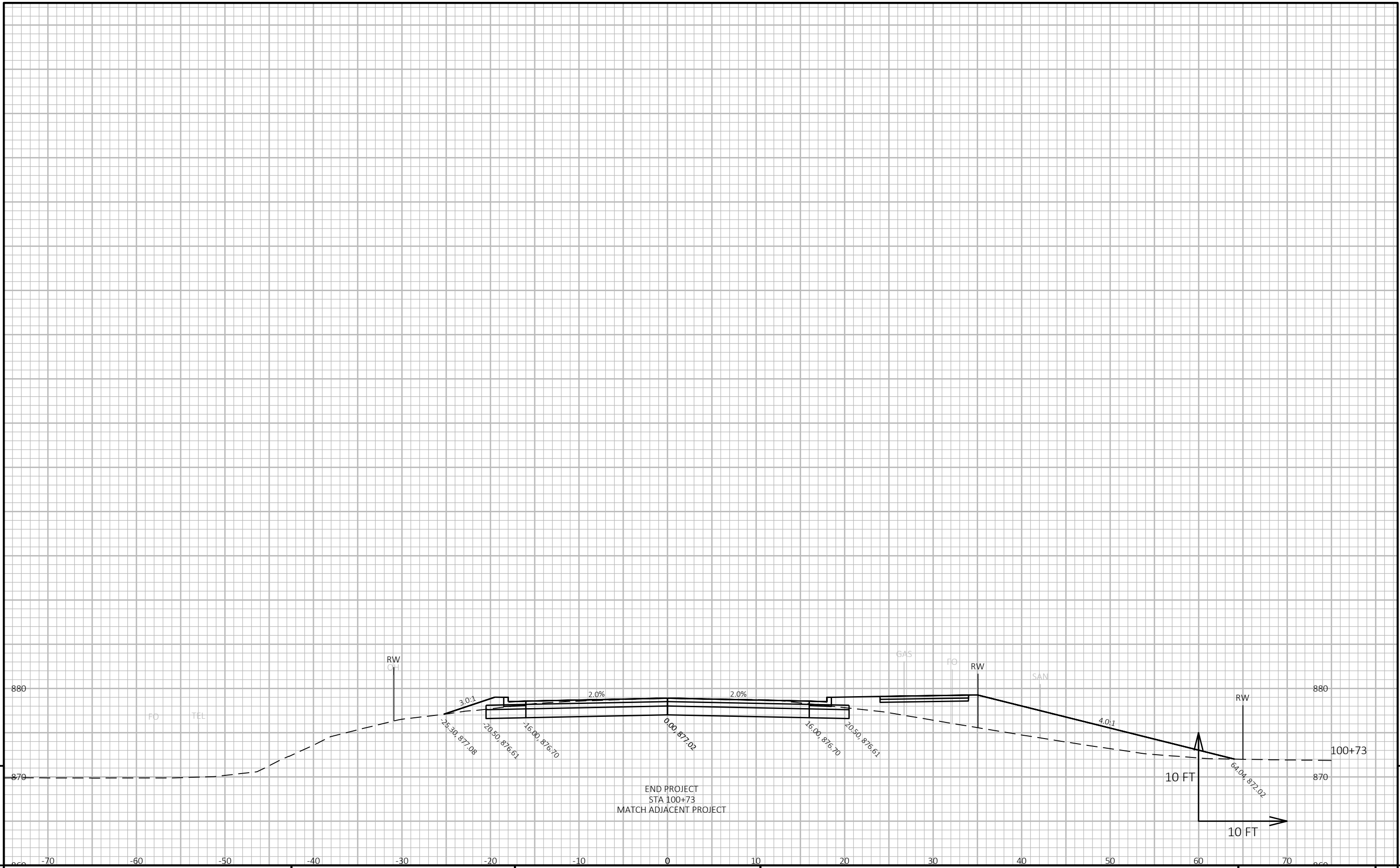
WINDSOR ROAD COMPUTER EARTHWORK

Station	Distance	Area (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Unusable Cut	Fill	Cut	Unusable Cut	Fill	Cut 1.00	Unusable Cut	Expanded Fill 1.30	
					Note 1	Note 2	Note 3	Note 1	Note 2	Note 3	
99+48	--	88.5	16.5	114.1	--	--	--				
99+61	13	76.8	16.5	111.3	40	8	54	40	8	70	-38
99+74	13	69.2	16.5	183.2	35	8	71	75	16	162	-103
NEW BRIDGE	--	--	--	--	--	--	--	--	--	--	--
100+26	--	66.6	16.5	113.7	--	--	--	--	--	--	--
100+38	12	72.1	16.5	85.0	31	7	44	106	23	219	-136
100+73	35	69.9	16.5	98.1	92	21	119	198	44	374	-220
					198	44	288				

Note 1 - Cut	Usable cut only
Note 2 - Unusable Cut	Existing concrete and asphalt pavement. Not to be used outside the 1:1 road core.
Note 3 - Expanded Fill	Volume needed to be filled = Fill * 1.30
Note 4 - Mass Ordinate	(Cut) - (Expanded Fill)



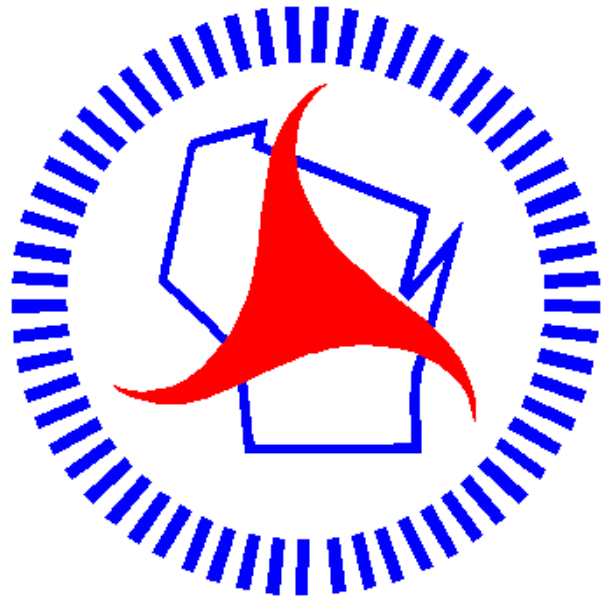
PROJECT NO: 6992-00-75	HWY: WINDSOR ROAD	COUNTY: DANE	CROSS SECTIONS: WINDSOR ROAD	SHEET	E
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END PROJECT
 STA 100+73
 MATCH ADJACENT PROJECT

9	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	9
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PROJECT NO: 6992-00-75	HWY: WINDSOR ROAD	COUNTY: DANE	CROSS SECTIONS: WINDSOR ROAD	SHEET	E
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Wisconsin Department of Transportation

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