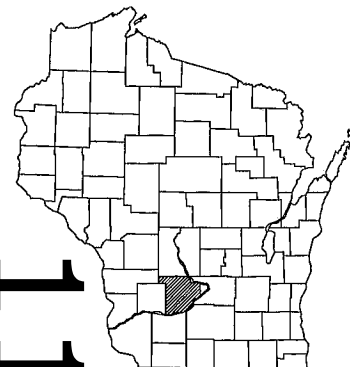


ORDER OF SHEETS

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

TOTAL SHEETS = 26



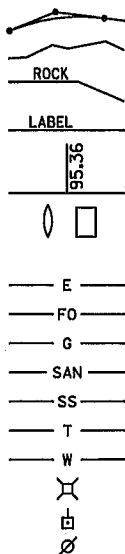
DESIGN DESIGNATION

A.A.D.T. 2017	=	2,000
A.A.D.T. 2037	=	2,200
D.H.V. 2037	=	181
D.D.	=	59/41
T.	=	2.9%
DESIGN SPEED	=	30 MPH
ESALS	=	73,000

CONVENTIONAL SYMBOLS

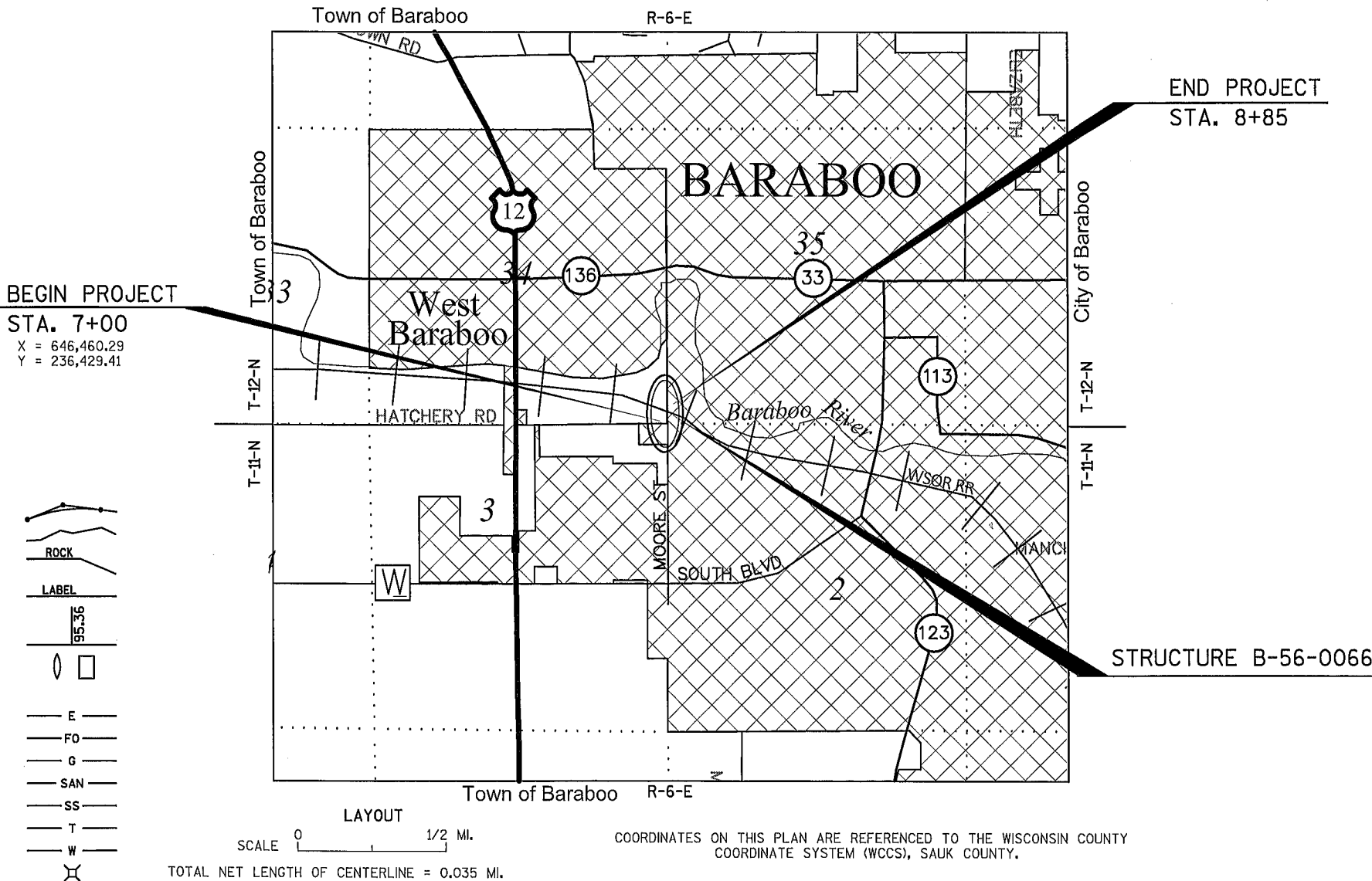
- PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS
- MARSH AREA
- WOODED OR SHRUB AREA

- PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such)
- SPECIAL DITCH
- GRADE ELEVATION
- CULVERT (Profile View)
- UTILITIES
- ELECTRIC
- FIBER OPTIC
- GAS
- SANITARY SEWER
- STORM SEWER
- TELEPHONE
- WATER
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
CITY OF BARABOO, MOORE STREET
(WSOR RAILROAD BRIDGE B-56-0066)
LOCAL STREET
SAUK COUNTY

STATE PROJECT NUMBER
5678-00-72



END PROJECT
STA. 8+85

STRUCTURE B-56-0066

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), SAUK COUNTY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5678-00-72		

ACCEPTED FOR
CITY of BARABOO
10/25/16 (Date)
JEWELL associates engineers, inc.
Engineers - Surveyors - Architects



10/21/16 E.S.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PREPARED BY
Surveyor JEWELL ASSOCIATES ENGINEERS, INC.
Designer JEWELL ASSOCIATES ENGINEERS, INC.
Management Consultant KL ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT
DATE: 10/27/16
Management Consultant Signature

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment	LHF	Left-Hand Forward	SEC	Section
ADT	Average Daily Traffic	L	Length of Curve	SHLDR	Shoulder
AADT	Average Annual Daily Traffic	LF	Linear Foot	SW	Sidewalk
BAD	Base Aggregate Dense	MH	Manhole	S	South
BK	Back	MB	Mailbox	SF or SQ FT	Square Feet
BF	Back Face	ML or M/L	Match Line	SY or SQ YD	Square Yard
BM	Bench Mark	N	North	STD	Standard
C	Chord Length	Y	North Grid Coordinate	SDD	Standard Detail Drawings
C/L	Center Line	PLE	Permanent Limited Easement	STH	State Trunk Highways
CC	Center to Center	PT	Point	STA	Station
CTH	County Trunk Highway	PC	Point of Curvature	SS	Storm Sewer
CY	Cubic Yard	PI	Point of Intersection	SG	Subgrade
CP	Culvert Pipe	PRC	Point of Reverse Curvature	SE	Superelevation
C & G	Curb and Gutter			TEL	Telephone
Δ	Delta	PT	Point of Tangency	TEMP	Temporary
DA	Degree of Arc	POC	Point On Curve	TI	Temporary Interest
DD	Directional Distribution	POT	Point on Tangent	TLE	Temporary Limited Easement
DHV	Design Hourly Volume	PVC	Polyvinyl Chloride	T	Tangent Length
DIA	Diameter	PCC	Portland Cement Concrete	T or TN	Town
E	East		Pound	TRANS	Transition
X	East Grid Coordinate	LB	Pounds Per Square Inch	TL or T/L	Transit Line
EL or ELEV	Elevation	PSI	Private Entrance	T	Trucks (percent of)
ESALS	Equivalent Single Axle Loads	PE	Radius	TYP	Typical
EBS	Excavation Below Subgrade	RR	Railroad	UG	Underground Cable
		R	Range	USH	United States Highway
FF	Face to Face	R/L	Reference Line	VAR	Variable
FE	Field Entrance	RP	Reference Point	V	Velocity or Design Speed
FG	Finished Grade	RCCP	Reinforced Concrete	VERT	Vertical
FT	Foot		Culvert Pipe	VC	Vertical Curve
GN	Grid North	REQD	Required	WM	Water Main
CWT	Hundredweight	RES	Residence or Residential	WV	Water Valve
HYD	Hydrant	RT	Right	W	West
INL	Inlet	RHF	Right-Hand Forward	WB	Westbound
ID	Inside Diameter	R/W	Right-of-Way		
INV	Invert	RD	Road		
IP	Iron Pipe or Pin	SAN S	Salvaged Sanitary Sewer		
IRS	Iron Rod Set				
JCT	Junction				

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

TOTAL PROJECT AREA= 0.33 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.17 ACRES

CONTACTS

DESIGN CONSULTANT:

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560 SUNRISE DR.
SPRING GREEN, WI 53588
ATTN: ELLERY SCHAFFER, P.E.
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FAX: (608) 588-9322
E-MAIL: ellery.schaffer@jewellassoc.com

CITY OF BARABOO:

CITY OF BARABOO
135 FOURTH STREET
BARABOO, WI 53913
ATTN: THOMAS PINION, P.E. - DIRECTOR OF PUBLIC WORKS/CITY ENGINEER
PH: (608) 355-2730
CELL: (608) 393-9945
E-MAIL: tpinion@cityofbaraboo.com

DNR LIAISON:

STATE OF WISCONSIN
DNR SOUTH CENTRAL REGION HQ
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
ATTN: ANDY BARTA
PH: (608) 275-3308
E-MAIL: andy.barta@wisconsin.gov

WISCONSIN & SOUTHERN RAILROAD (WSOR):

WISCONSIN & SOUTHERN RAILROAD (WSOR)
1890 EAST JOHNSON STREET
MADISON, WI 53704
ATTN: STACEY HURDA
CELL: (414) 507-0240
E-MAIL: shurda@watcocompanies.com

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

COORDINATES AND BEARINGS ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), SAUK COUNTY.

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

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE, AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER.

DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 40), AND MULCHED AS DIRECTED BY THE ENGINEER.

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

MULCH ALL DRAINING SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD.

FILL EXPANSION IS VARIABLE AND IS ESTIMATED AT 25%.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

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

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 115 LB/SY/IN. 4-INCHES OF ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 2 1/4-INCH LOWER LAYER AND A 1 3/4-INCH UPPER LAYER.

CURB & GUTTER ELEVATIONS ARE GIVEN TO THE FLOW LINE, UNLESS OTHERWISE NOTED.

TRANSVERSE JOINTS IN CONCRETE SIDEWALK SHALL BE CONSTRUCTED AT INTERVALS EQUAL TO THE WIDTH OF THE CONCRETE SIDEWALK, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

UTILITIES

GAS:

ALLIANT ENERGY
ATTN: NEAL GOODCHILD
520 COMMERCE AVENUE
BARABOO, WI 53913
PH: (608) 356-0643
CELL: (608) 575-8860
E-MAIL: nealgoodchild@alliantenergy.com

COMMUNICATION LINE:

CHARTER COMMUNICATIONS
ATTN: HARLOW JARVIS
E10704 STATE HWY. 33
BARABOO, WI 53913
CELL: (608) 235-1911
E-MAIL: harlow.jarvis@chartercom.com

ELECTRIC (DISTRIBUTION):

ALLIANT ENERGY
ATTN: NEAL GOODCHILD
520 COMMERCE AVENUE
BARABOO, WI 53913
PH: (608) 356-0643
CELL: (608) 575-8860
E-MAIL: nealgoodchild@alliantenergy.com

COMMUNICATION LINE:

CENTURYLINK
ATTN: STEVE BISHOP
130 4TH STREET
BARABOO, WI 53913
PH: (608) 355-7501
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E-MAIL: steven.bishop@centurylink.com

COMMUNICATION LINE:

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ATTN: GERRY CRAIN
5600 N. RIVER ROAD, SUITE 200
ROSEMONT, IL 60018
CELL: (847) 445-1869
E-MAIL: Gerry.A.Crain@sprint.com

COMMUNICATION LINE:

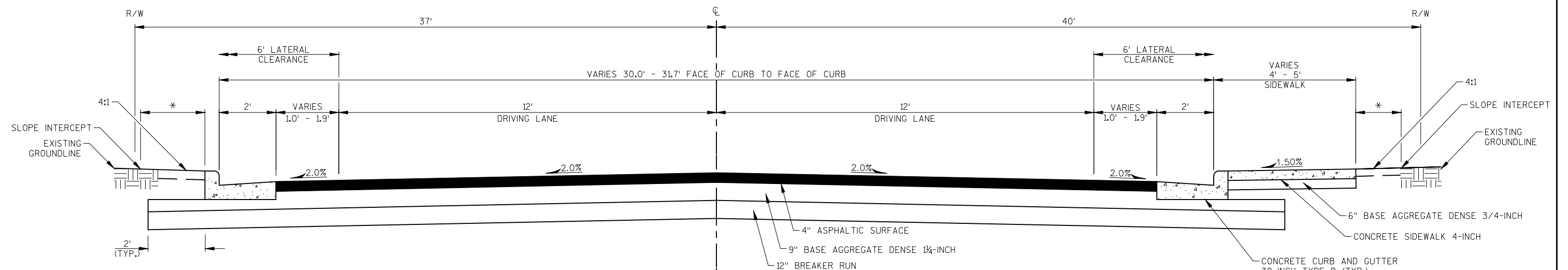
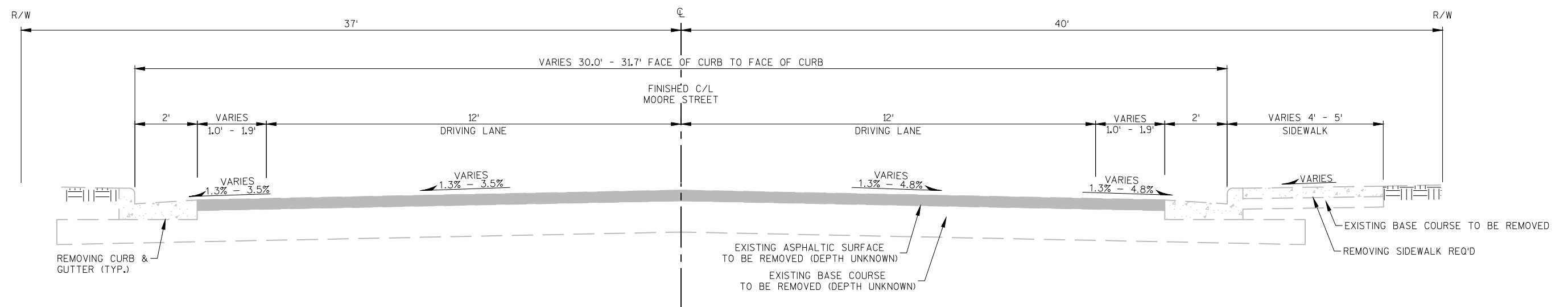
MCI
ATTN: BRIAN ZEICHERT
2410 PACKERS AVENUE
MADISON, WI 53704
PH: (608) 242-0588
CELL: (608) 287-6235
E-MAIL: brian.zeichert@verizon.com

WATER/SANITARY SEWER:

CITY OF BARABOO
ATTN: THOMAS PINION, P.E. - DIRECTOR OF PUBLIC WORKS/CITY ENGINEER
135 FOURTH STREET
BARABOO, WI 53913
PH: (608) 355-2730
CELL: (608) 393-9945
E-MAIL: tpinion@cityofbaraboo.com



* DENOTES UTILITY IS NOT A MEMBER OF DIGGERS HOTLINE



* LIMITS OF FERTILIZER TYPE B, SEEDING MIXTURE NO. 40,
SEEDING TEMPORARY, MULCHING, AND TOPSOIL
(AS DIRECTED BY ENGINEER)

Table with 4 columns: NO., STA., DESCRIPTION, ELEV. It lists 4 bench marks: 1. 5+48, 3/4" IRON ROD SET, 19.2' RT., 899.89; 2. 7+08, DISK IN BRIDGE, 20.8' RT., 899.76; 4. 10+21, 3/4" IRON ROD SET, 19.1' LT., 891.78.

WISCONSIN DEPARTMENT OF TRANSPORTATION

EXISTING RR TRACK TO REMAIN (OWNED BY WISDOT) (MAINTAINED AND OPERATED BY WSOR)

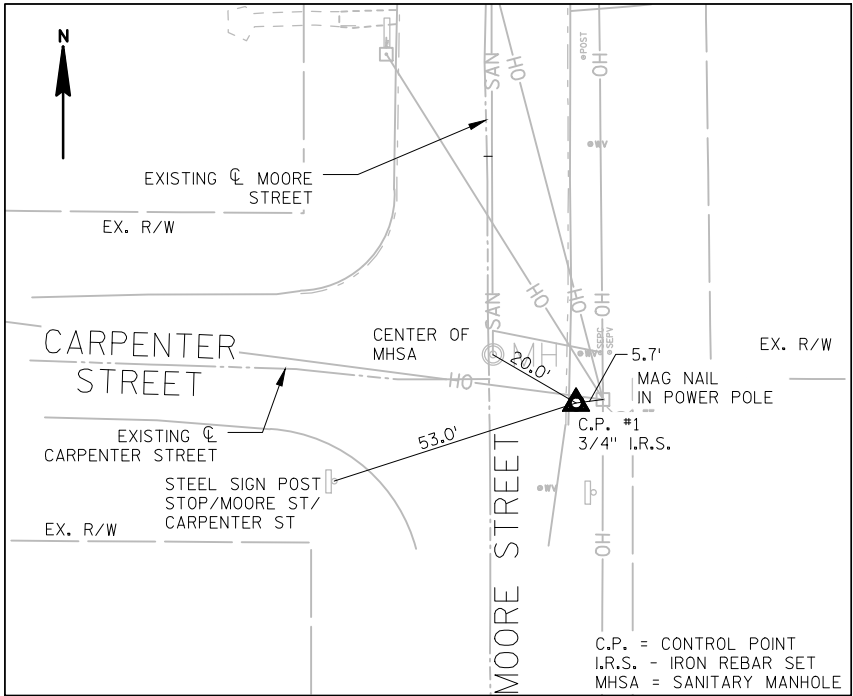
PATRICIA A. JOHNSON

BEGIN PROJECT STA. 7+00 X = 646,460.29 Y = 236,429.41

END PROJECT STA. 8+85 X = 646,460.29 Y = 236,614.41

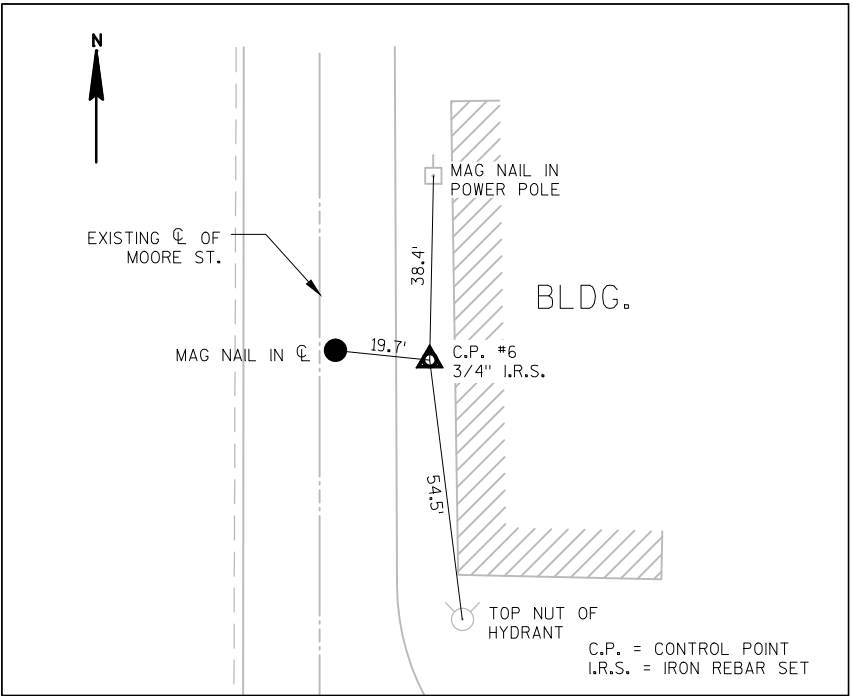
Table with 2 columns: EARTHWORK SUMMARY, TOTALS. It lists excavation, fill, and waste volumes in cubic yards.

LEGEND section containing symbols for SAWING CONCRETE/SAWING ASPHALT, DIRECTION OF TRAVEL, DIRECTION OF FLOW, EXISTING SIGN TO REMAIN, SILT FENCE, and TYPE A INLET PROTECTION.



TIES TO C.P.#1

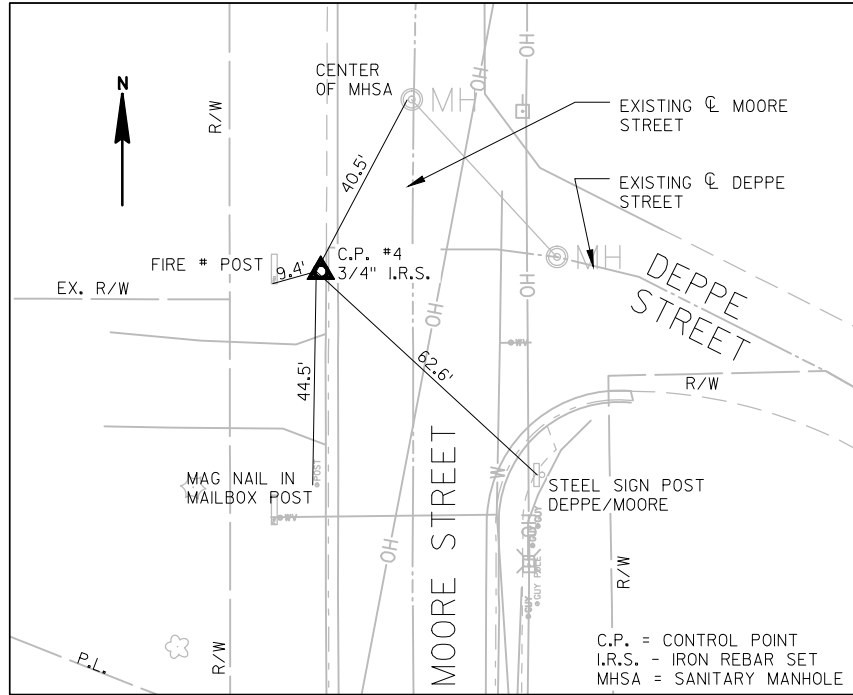
STA. 5+48; 19.2' RT.
Y = 236,278.01
X = 646,479.47



TIES TO C.P.#6

STA. 12+44; 23.3' RT.
Y = 236,973.74
X = 646,483.63

NOTE: CP#6 IS LOCATED APPROXIMATELY 240'± NORTH OF MOORE STREET/DEPPE STREET INTERSECTION.

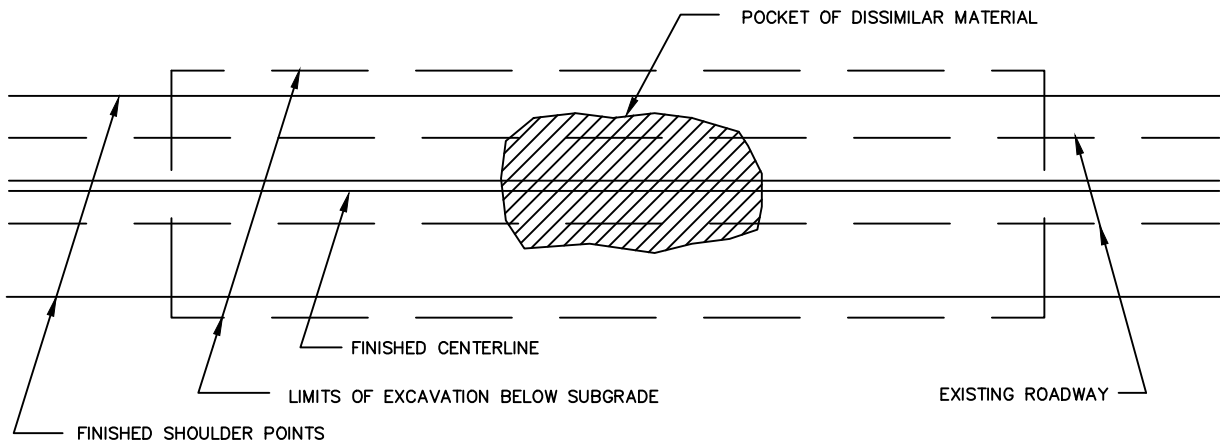


TIES TO C.P.#4

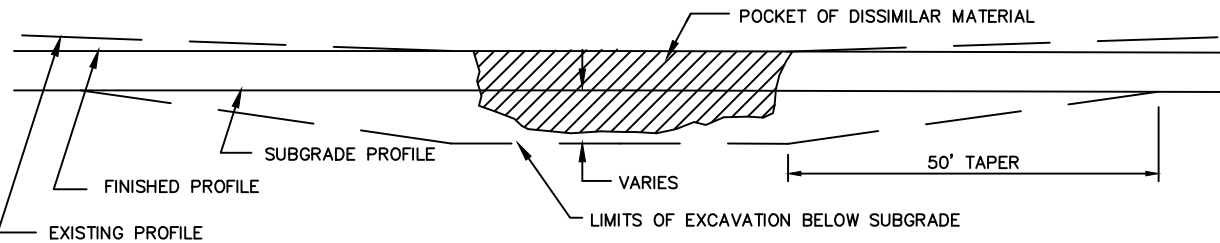
STA. 10+21; 19.1' LT.
Y = 236,751.30
X = 646,441.20

▲ CONTROL POINTS

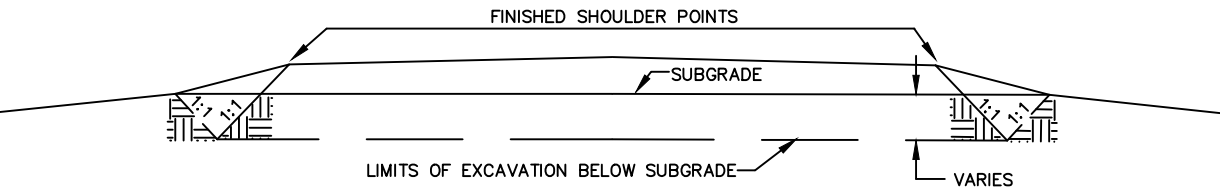
No.	STATION	DESCRIPTION	Y	X
1	5+48	¾" IRON ROD SET, 19.2' RT.	236,278.01	646,479.47
4	10+21	¾" IRON ROD SET, 19.1' LT.	236,751.30	646,441.20
6	12+44	¾" IRON ROD SET, 23.3' RT.	236,973.74	646,483.63



PLAN VIEW



PROFILE VIEW



CROSS SECTION VIEW

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

EXCAVATION BELOW SUBGRADE (E.B.S.)

Estimate Of Quantities

5678-00-72

Line	Item	Item Description	Unit	Total	Qty
0010	203.0225.S	Debris Containment (structure) 01. B-56-0066	LS	1.000	1.000
0020	204.0150	Removing Curb & Gutter	LF	100.000	100.000
0030	204.0155	Removing Concrete Sidewalk	SY	26.000	26.000
0040	205.0100	Excavation Common **P**	CY	140.000	140.000
0050	213.0100	Finishing Roadway (project) 01. 5678-00-72	EACH	1.000	1.000
0060	305.0110	Base Aggregate Dense 3/4-Inch	TON	10.000	10.000
0070	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	110.000	110.000
0080	311.0110	Breaker Run	TON	130.000	130.000
0090	455.0605	Tack Coat	GAL	9.000	9.000
0100	465.0105	Asphaltic Surface	TON	35.000	35.000
0110	502.0717.S	Crack Sealing Epoxy	LF	150.000	150.000
0120	502.3200	Protective Surface Treatment	SY	580.000	580.000
0130	502.4204	Adhesive Anchors No. 4 Bar	EACH	262.000	262.000
0140	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	1,000.000	1,000.000
0150	509.0301	Preparation Decks Type 1	SY	155.000	155.000
0160	509.0302	Preparation Decks Type 2	SY	65.000	65.000
0170	509.0500	Cleaning Decks	SY	455.000	455.000
0180	509.1200	Curb Repair	LF	136.000	136.000
0190	509.1500	Concrete Surface Repair	SF	970.000	970.000
0200	509.2000	Full-Depth Deck Repair	SY	10.000	10.000
0210	509.2500	Concrete Masonry Overlay Decks	CY	48.000	48.000
0220	517.3000.S	Structure Overcoating Cleaning and Priming (structure) 01. B-56-0066	LS	1.000	1.000
0230	517.4000.S	Containment and Collection of Waste Materials (structure) 01. B-56-0066	LS	1.000	1.000
0240	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	100.000	100.000
0250	602.0405	Concrete Sidewalk 4-Inch	SF	230.000	230.000
0260	604.9010.S	Slope Paving Repair Crushed Aggregate	CY	5.000	5.000
0270	604.9015.S	Reseal Crushed Aggregate Slope Paving	SY	390.000	390.000
0280	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000
0290	619.1000	Mobilization	EACH	1.000	1.000
0300	624.0100	Water	MGAL	2.500	2.500
0310	625.0100	Topsoil	SY	50.000	50.000
0320	627.0200	Mulching	SY	50.000	50.000
0330	628.1504	Silt Fence	LF	90.000	90.000
0340	628.1520	Silt Fence Maintenance	LF	90.000	90.000
0350	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0360	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0370	628.7005	Inlet Protection Type A	EACH	1.000	1.000
0380	628.7015	Inlet Protection Type C	EACH	2.000	2.000

Estimate Of Quantities

5678-00-72

Line	Item	Item Description	Unit	Total	Qty
0390	629.0210	Fertilizer Type B	CWT	1.000	1.000
0400	630.0140	Seeding Mixture No. 40	LB	1.000	1.000
0410	630.0200	Seeding Temporary	LB	1.000	1.000
0420	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0430	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0440	638.2602	Removing Signs Type II	EACH	4.000	4.000
0450	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0460	642.5001	Field Office Type B	EACH	1.000	1.000
0470	643.0100	Traffic Control (project) 01. 5678-00-72	EACH	1.000	1.000
0480	650.4500	Construction Staking Subgrade	LF	50.000	50.000
0490	650.5000	Construction Staking Base	LF	50.000	50.000
0500	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	100.000	100.000
0510	650.9910	Construction Staking Supplemental Control (project) 01. 5678-00-72	LS	1.000	1.000
0520	650.9920	Construction Staking Slope Stakes	LF	50.000	50.000
0530	690.0150	Sawing Asphalt	LF	55.000	55.000
0540	690.0250	Sawing Concrete	LF	20.000	20.000
0550	SPV.0060	Special 01. Embedded Galvanic Anodes	EACH	176.000	176.000

EARTHWORK SUMMARY

STATION - STATION	LOCATION	**P** (1) 205.0100 COMMON EXCAVATION CUT (2)	AVAILABLE MATERIAL (CY) (2)	MASS ORDINATE +/- (CY) (3)	WASTE (CY)
		(CY)			
7+00 -7+21	MAINLINE	60	60	60	60
8+56 - 8+85	MAINLINE	80	80	80	80
TOTALS =		140	140		140

NOTES:
1.) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
2.) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
3.) THE MASS ORDINATE+ OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.
P PAY PLAN QUANTITY

REMOVING CONCRETE CURB & GUTTER & REMOVING CONCRETE SIDEWALK				BASE AGGREGATE DENSE					ASPHALTIC SURFACE				
STA. - STA.	LOCATION	204.0150 REMOVING CURB & GUTTER (LF)	204.0155 REMOVING CONCRETE SIDEWALK (SY)	STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	311.0110 BREAKER RUN (TON)	STATION-STATION	LOCATION	455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)	
7+00 - 7+28	MAINLINE, LT	28	-	7+00 - 7+21	MAINLINE	-	40	50	7+00 - 7+21	MAINLINE	3	14	
7+00 - 7+13	MAINLINE, RT	14	5	8+56 - 8+85	MAINLINE	-	60	70	8+56 - 8+85	MAINLINE	5	20	
8+63 - 8+85	MAINLINE, LT	22	-	7+00-8+85	MAINLINE, RT. (SIDEWALKS)	9	-	-	-	UNDISTRIBUTED	1	1	
8+49 - 8+85	MAINLINE, RT	36	21	-	UNDISTRIBUTED	1	10	10	-	UNDISTRIBUTED	1	1	
TOTAL =		100	26	TOTALS =		10	110	130	TOTALS =		9	35	

CONCRETE CURB & GUTTER			CONCRETE SIDEWALK 4-INCH			ADJUSTING INLET COVERS			WATER	
STATION-STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D (LF)	STATION - STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH (SF)	STATION-STATION	LOCATION	611.8115 ADJUSTING INLET COVERS (EACH)	PROJECT	624.0100 (MGAL)
7+00 - 7+28	MAINLINE, LT	28	7+00 - 7+13	MAINLINE, RT	45	7+10	MAINLINE, LT	1	5678-00-72	2.5
7+00 - 7+13	MAINLINE, RT	14	8+49 - 8+85	MAINLINE, RT	185					
8+63 - 8+85	MAINLINE, LT	22	TOTAL =		230	TOTAL =		1	TOTAL	2.5
8+49 - 8+85	MAINLINE, RT	36								
TOTALS =		100								

FINISHING ITEMS							SILT FENCE					
STATION - STATION	LOCATION	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0140 SEEDING MIXTURE NO. 40 (LB)	630.0200 SEEDING TEMPORARY (LB)	STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)		
7+00 - 7+21	MAINLINE	17	17	0.4	0.4	0.4	7+00 - 7+21	MAINLINE	30	30		
8+56 - 8+85	MAINLINE	24	24	0.5	0.5	0.5	8+56 - 8+85	MAINLINE	45	45		
-	UNDISTRIBUTED	9	9	0.1	0.1	0.1	-	UNDISTRIBUTED	15	15		
TOTALS =		50	50	1.0	1.0	1.0	TOTALS =		90	90		

PROJECT NO:5678-00-72			HWY: MOORE STREET		COUNTY:SAUK		MISCELLANEOUS QUANTITIES				SHEET		E
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3

3

ALL BID ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

MOBILIZATION EROSION CONTROL

	628.1905	628.1910
	MOBILIZATIONS	MOBILIZATIONS
	EROSION CONTROL	EMERGENCY EROSION
	(EACH)	CONTROL
PROJECT		
5678-00-72	3	1
TOTAL	3	1

INLET PROTECTION

		628.7005	628.7015
		INLET PROTECTION	INLET PROTECTION
		TYPE A	TYPE C
		(EACH)	(EACH)
STATION	LOCATION		
6+90	MAINLINE, RT.	-	1
7+10	MAINLINE, LT.	1	1
TOTAL		1	2

PERMANENT SIGNING

								634.0612	637.2230	638.2602	638.3000
								POSTS WOOD	SIGNS	REMOVING	REMOVING
								4x6-INCH	TYPE II	SIGNS	SMALL SIGN
								x12-FT	REFLECTIVE F	TYPE II	SUPPORTS
								(EACH)	(SF)	(EACH)	(EACH)
SIGN	APPROX.	LOCATION	POSITION	SIGN	SIGN	ORDER LINES	SIGN SIZE				
NUMBER	STATION			CODE	DESCRIPTION		IN X IN				
100R	7+21	Mainline	Left	--	Bridge Hash Marks	--	12x36	--	--	1	1
101	7+21	Mainline	Left	W5-52L	Bridge Hash Marks	--	12x36	1	3.00	--	--
102R	6+98	Mainline	Right	--	Bridge Hash Marks	--	12x36	--	--	1	1
103	6+98	Mainline	Right	W5-52R	Bridge Hash Marks	--	12x36	1	3.00	--	--
104R	8+75	Mainline	Left	--	Bridge Hash Marks	--	12x36	--	--	1	1
105	8+75	Mainline	Left	W5-52L	Bridge Hash Marks	--	12x36	1	3.00	--	--
106R	8+57	Mainline	Right	--	Bridge Hash Marks	--	12x36	--	--	1	1
107	8+57	Mainline	Right	W5-52R	Bridge Hash Marks	--	12x36	1	3.00	--	--
TOTAL								4	12.00	4	4

CONSTRUCTION STAKING

		650.4500	650.5000	650.5500	650.9910	650.9920
		SUBGRADE	BASE	CURB &	SUPPLEMENTAL	SLOPE
		(LF)	(LF)	GUTTER	CONTROL	STAKES
					(01. 5678-00-72)	
STATION - STATION	LOCATION				(LS)	(LF)
7+00 - 7+13	MAINLINE, RT.	-	-	14	-	-
7+00 - 7+20	MAINLINE	20	20	-	-	20
7+00 - 7+28	MAINLINE, LT.	-	-	28	-	-
8+49 - 8+85	MAINLINE, RT.	-	-	36	-	-
8+56 - 8+85	MAINLINE	30	30	-	-	30
8+63 - 8+85	MAINLINE, LT.	-	-	22	-	-
-	PROJECT	-	-	-	1	-
TOTALS =		50	50	100	1	50

SAWING ASPHALT & SAWING CONCRETE

		690.0150	690.0250
		SAWING	SAWING
		ASPHALT	CONCRETE
		(LF)	(LF)
STATION	LOCATION		
7+00	MAINLINE	27	10
8+85	MAINLINE	28	10
TOTAL =		55	20

PROJECT NO:5678-00-72

HWY: MOORE STREET

COUNTY: SAUK

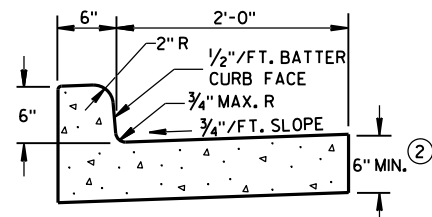
MISCELLANEOUS QUANTITIES

SHEET

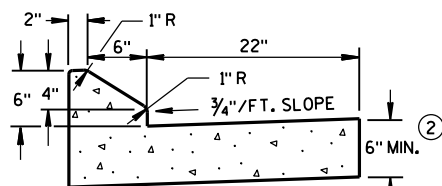
E

Standard Detail Drawing List

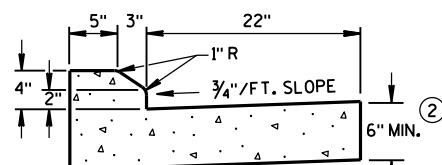
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-08	SIGNING & MARKING FOR TWO LANE BRIDGES



TYPES A & D ①

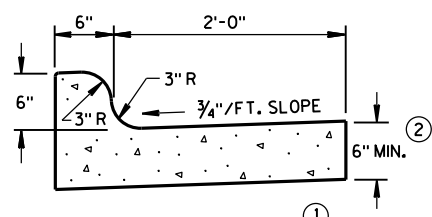


6" SLOPED CURB TYPES G & J ①



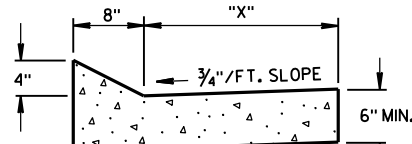
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



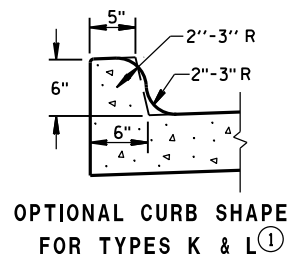
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

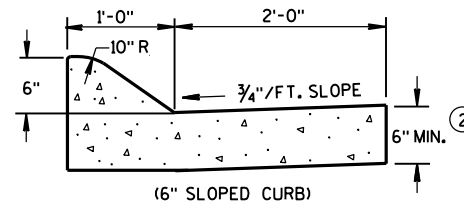


TYPES TBT & TBTT ①
CONCRETE CURB & GUTTER

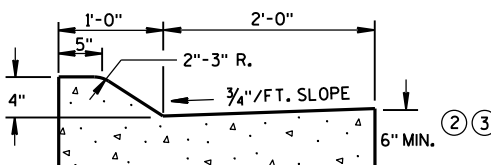
TBT & TBTT	"X"
30"	22"
36"	28"



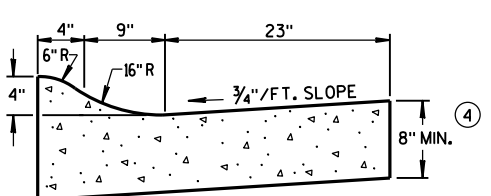
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)



(4" SLOPED CURB)
TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ⑤
CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

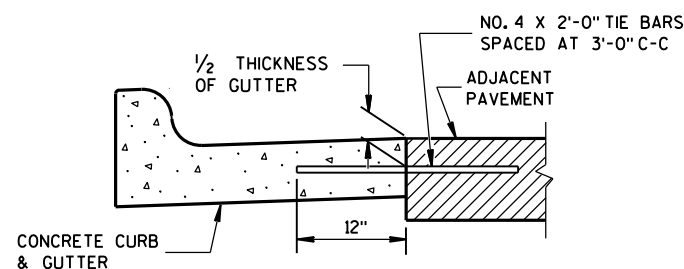
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

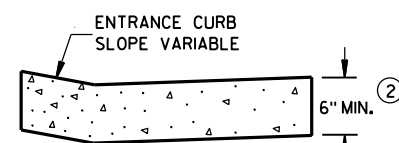
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

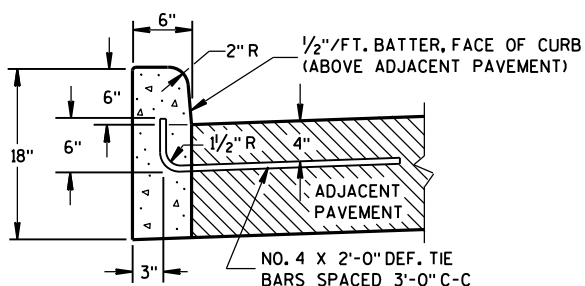
- TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- 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.
- THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



TYPICAL TIE BAR LOCATION ①

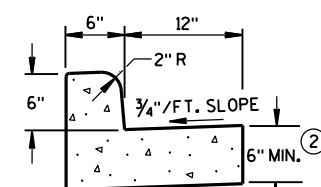


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

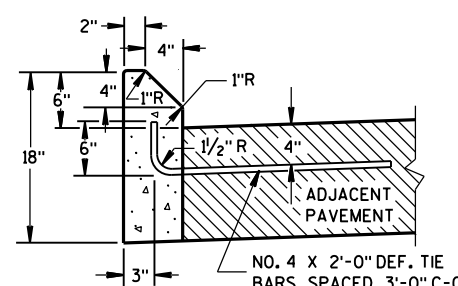


TYPES A & D ①

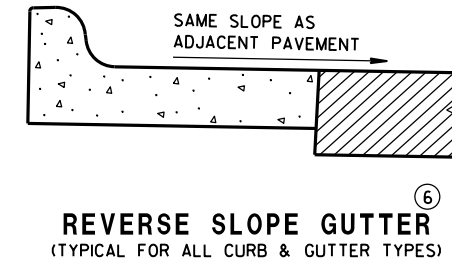
CONCRETE CURB



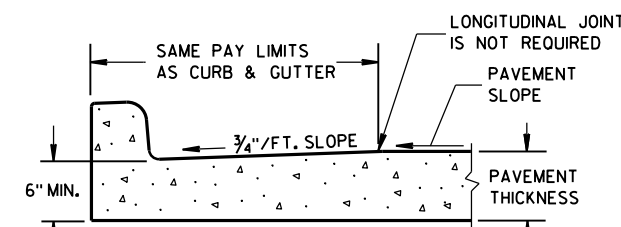
TYPES A & D
CONCRETE CURB & GUTTER 18"



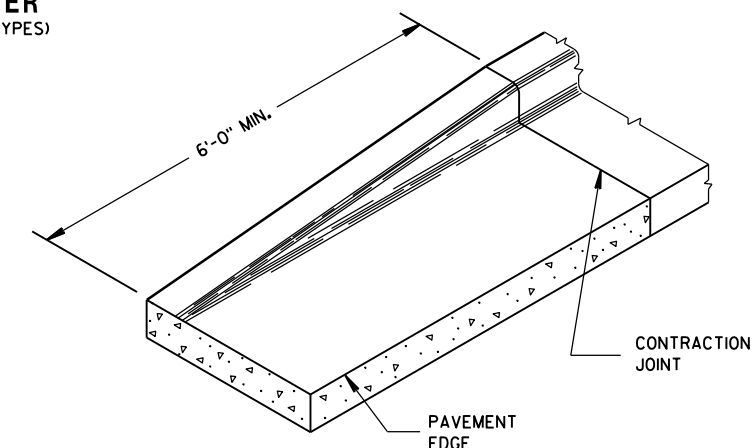
TYPES G & J ①



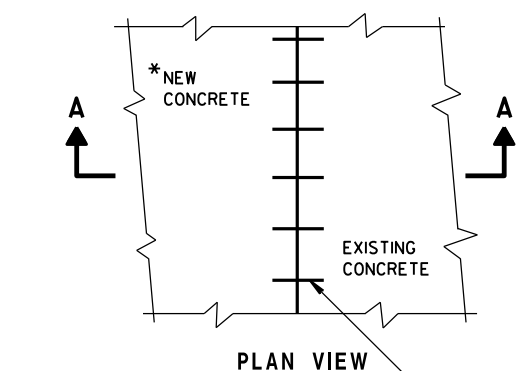
REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



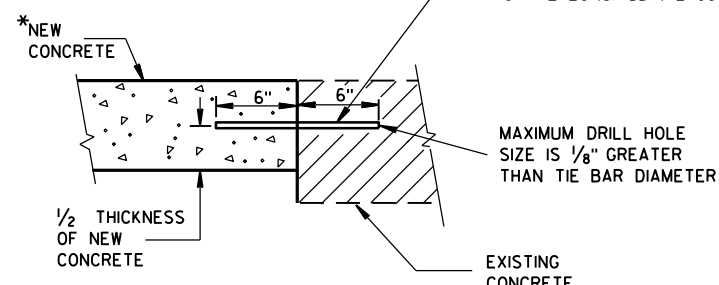
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER



PLAN VIEW



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

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

NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

EXISTING CONCRETE

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016
DATE
FHWA

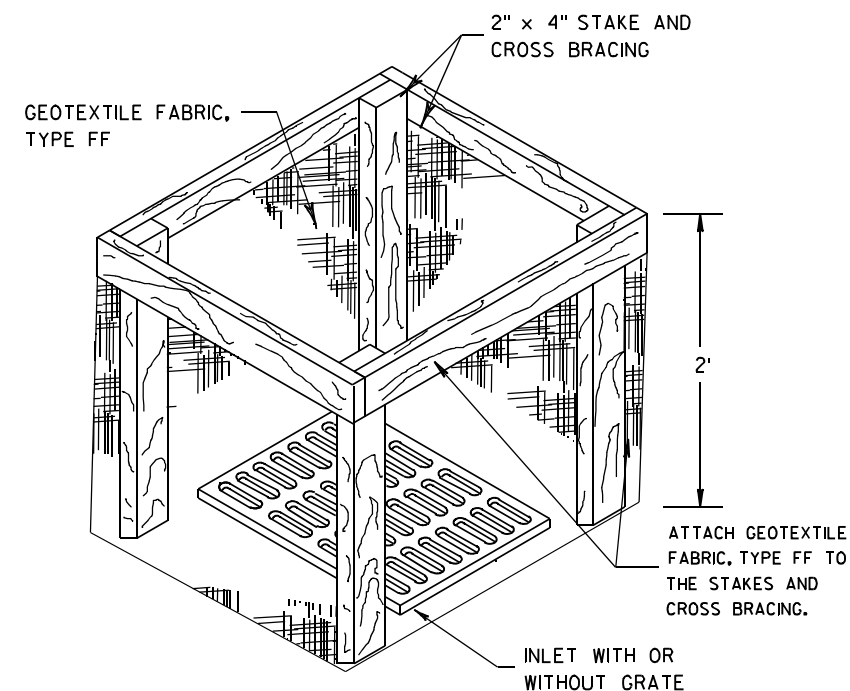
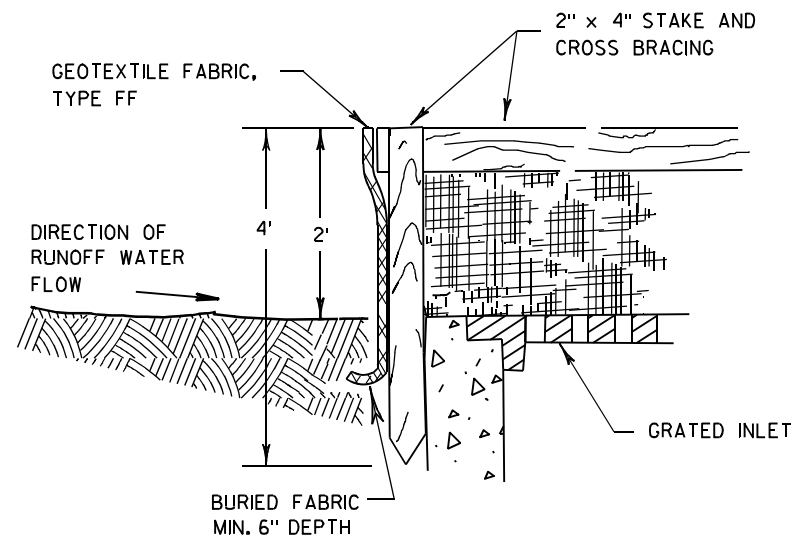
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



- 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 1½" X 1½" 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.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>4-29-05</u> DATE	<u>/S/ Beth Cannestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

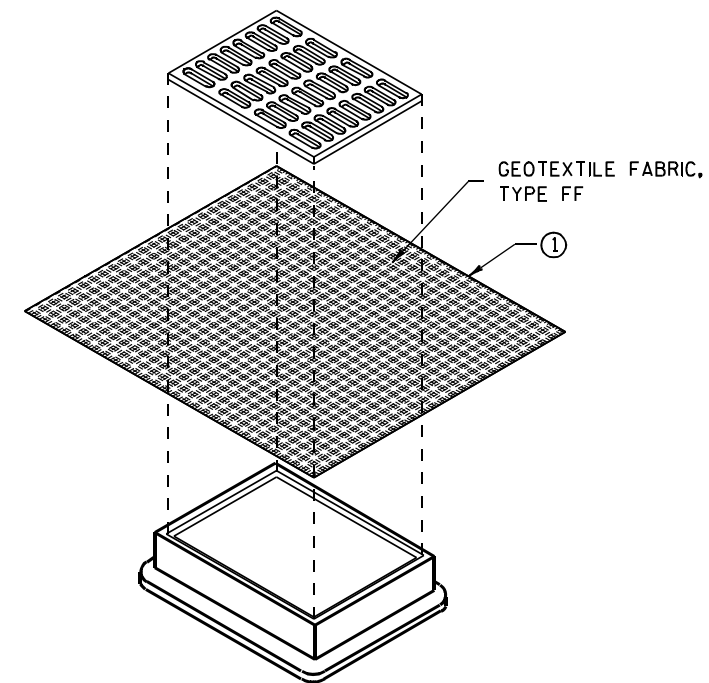
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE
DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE
SUBSTITUTED.

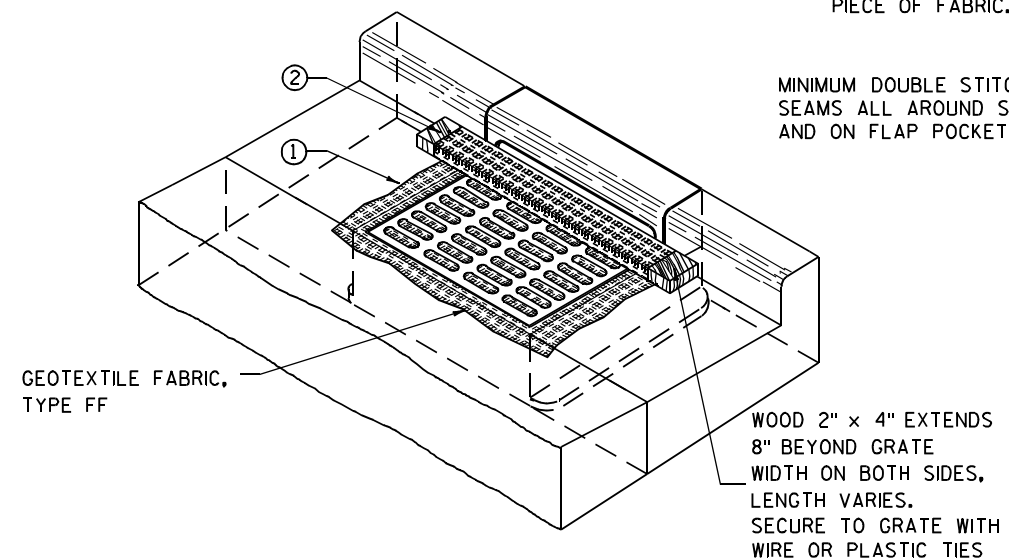
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

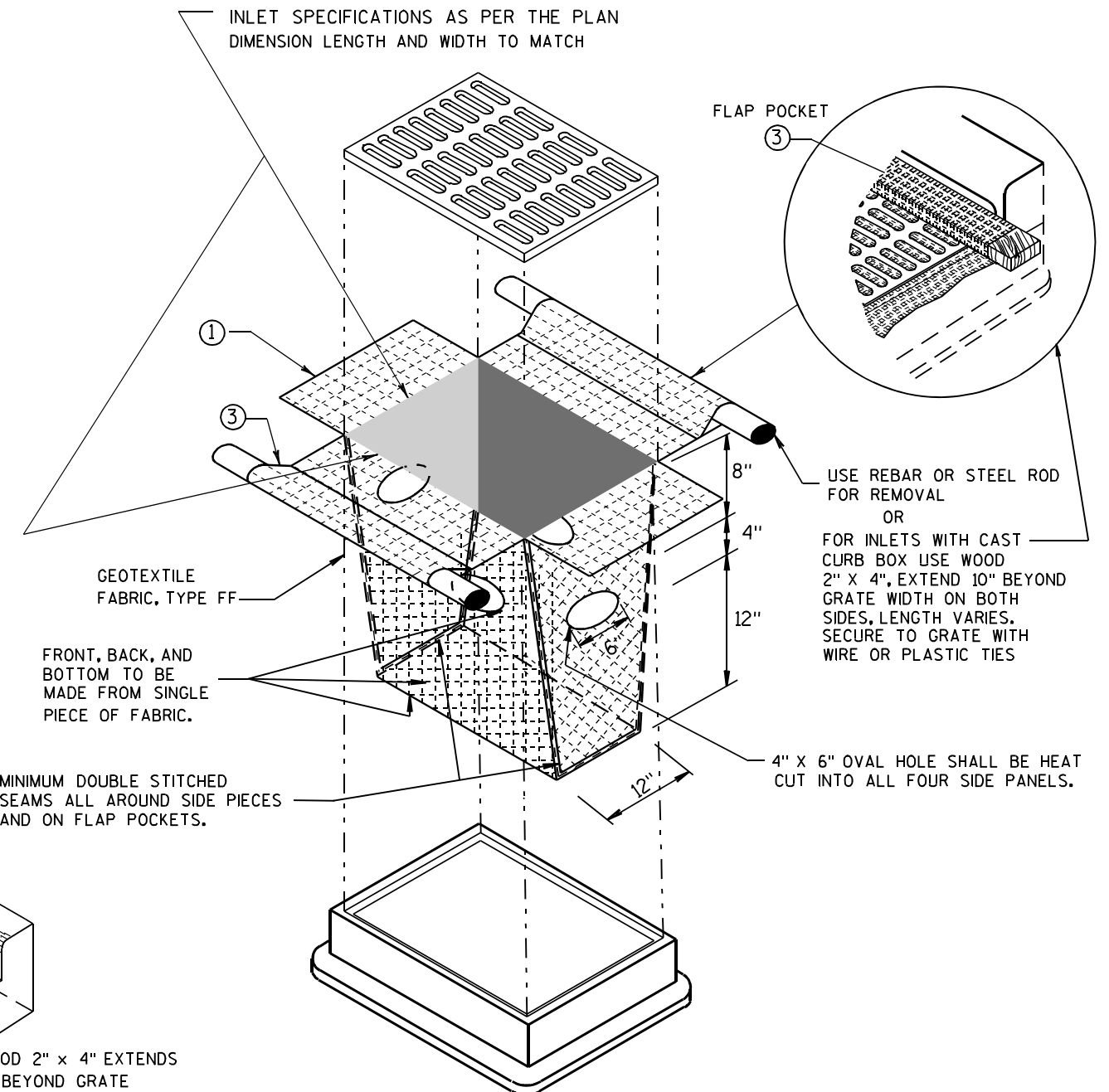
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE (2))

INLET PROTECTION TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

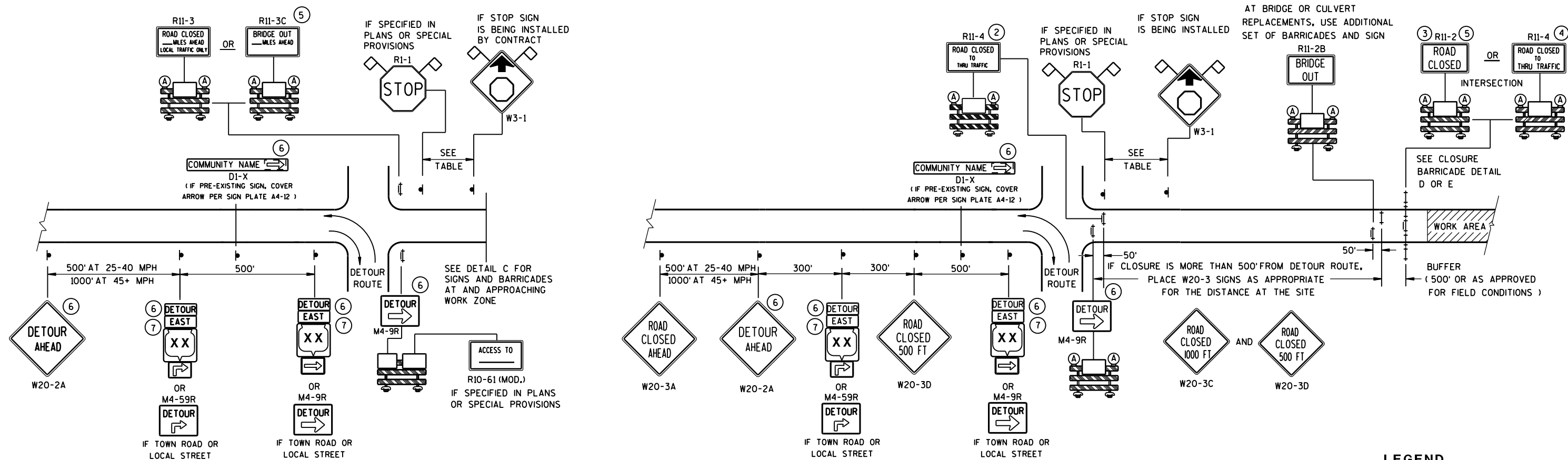
APPROVED

10/16/02
DATE

FHWA

/S/ Beth Cannestra

CHIEF ROADWAY DEVELOPMENT ENGINEER



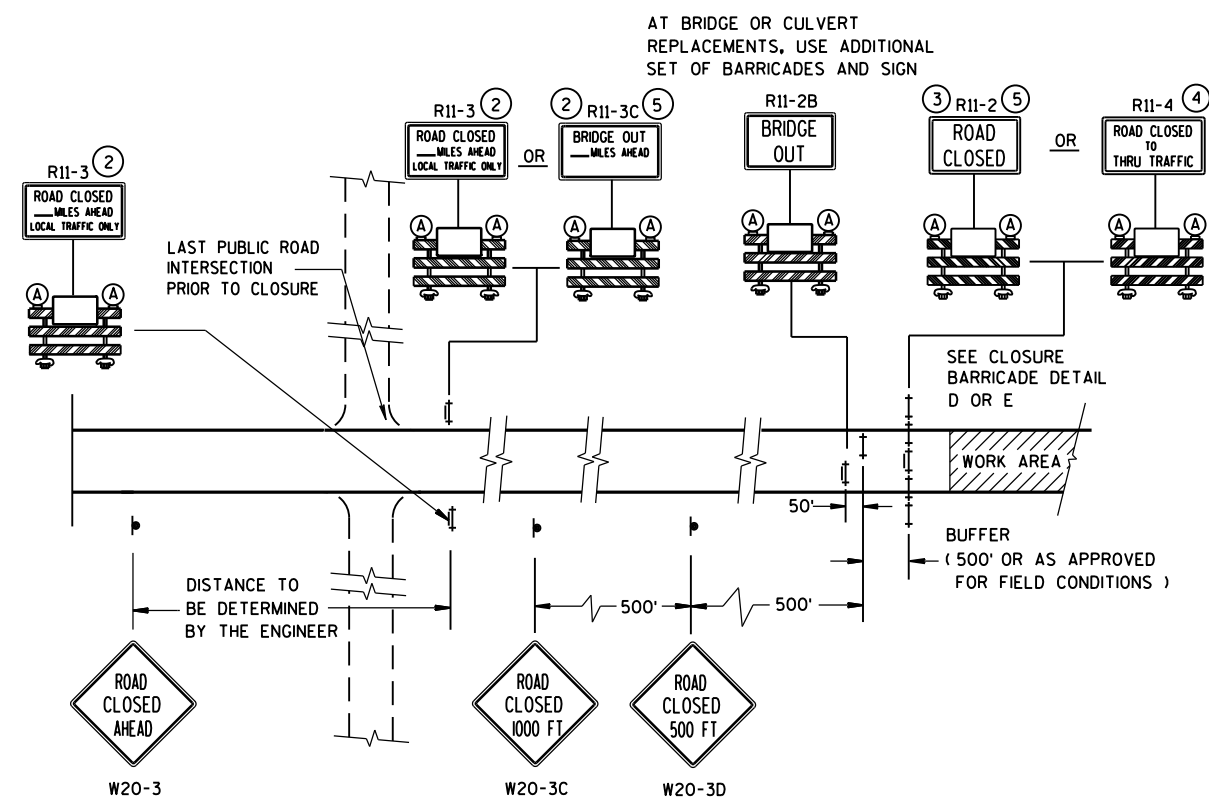
DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

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















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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

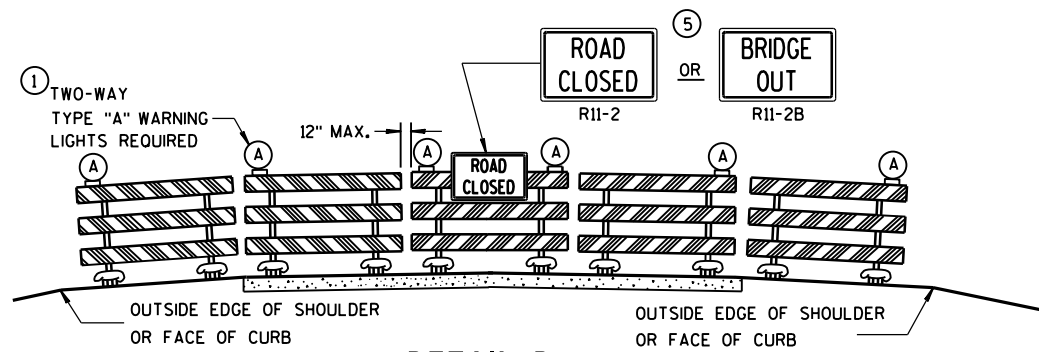
- # LEGEND
-  SIGN ON PERMANENT SUPPORT
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  WORK AREA
-  M4-8
-  M3-X
-  M1-4
-  M1-5A
-  M1-6
-  M05-1
-  M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

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

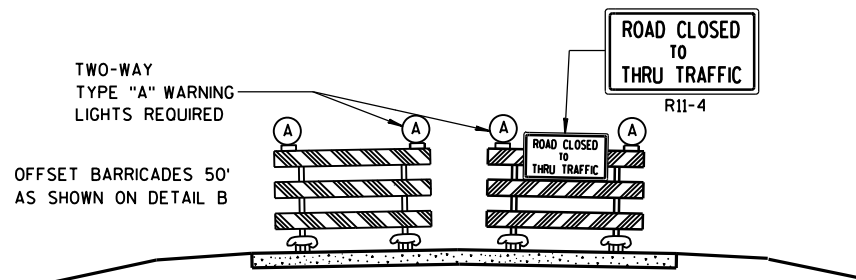
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015	/S/ Peter Amakobe Atepe
DATE	STATEWIDE WORK ZONE TRAFFIC
FHWA	SAFETY 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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE 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, 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". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

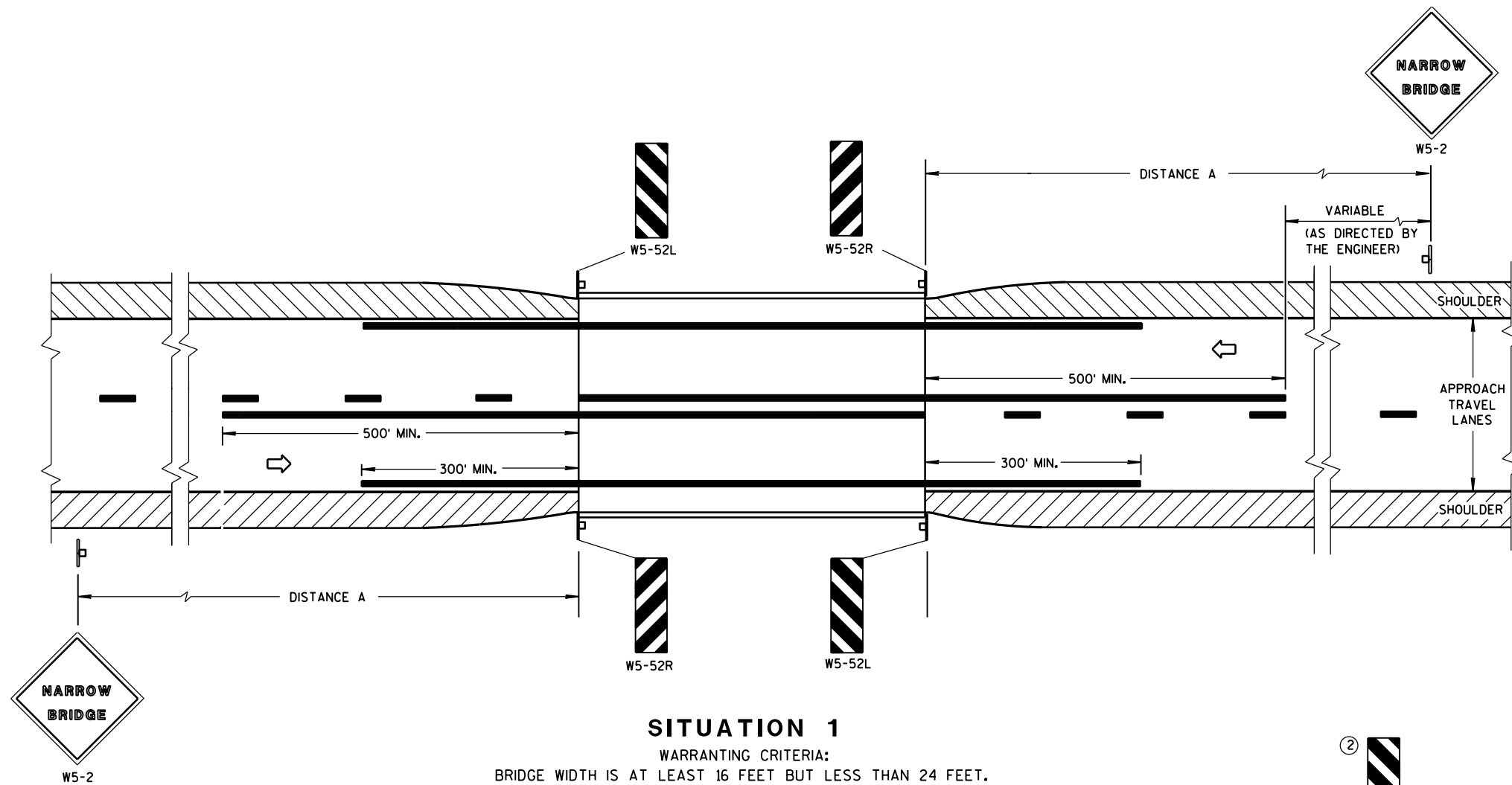
R1-1 SHALL BE 36" X 36".

- 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 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 LANE 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 MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER



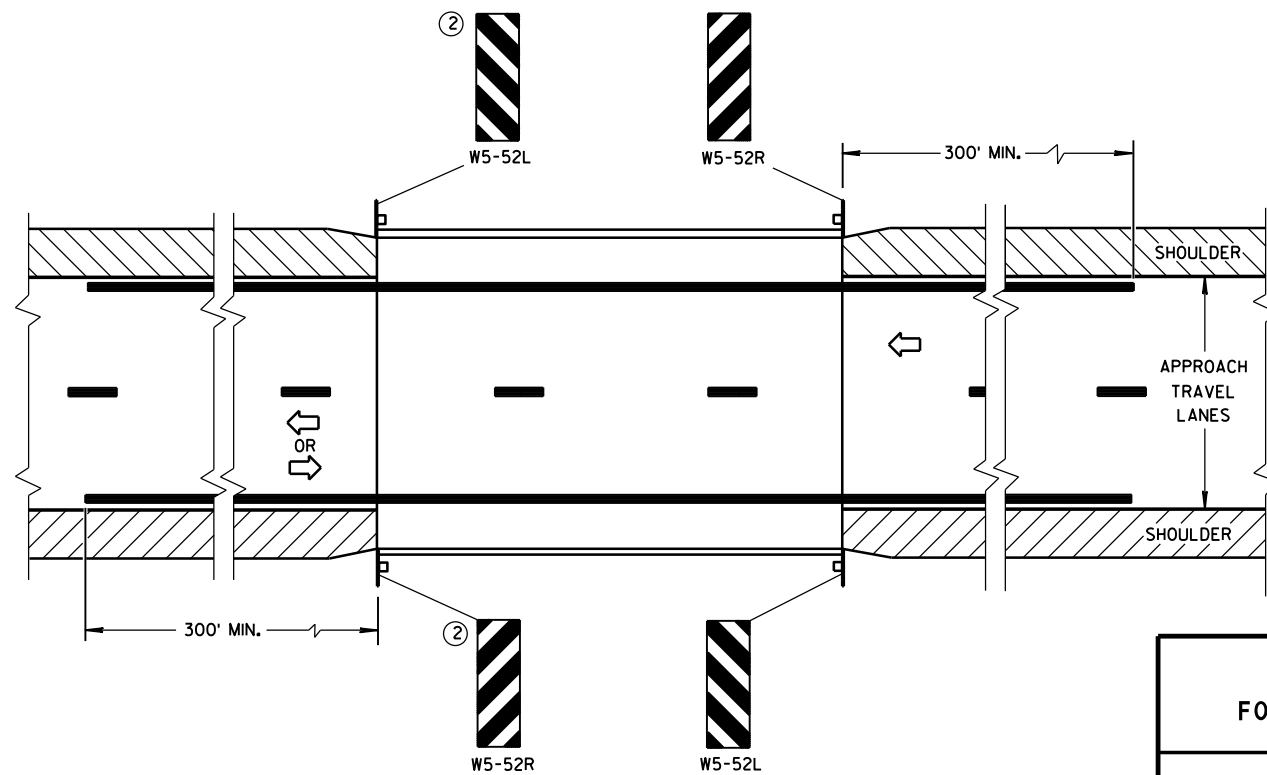
DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

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

- ① LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.
- ② OMIT ON ONE-WAY TRAVELLED WAYS.
- ③ EDGE OF W5-52 SIGN SHALL BE PLACED IN LINE WITH FACE OF CURB OR PARAPET.

SIGNING & MARKING
FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

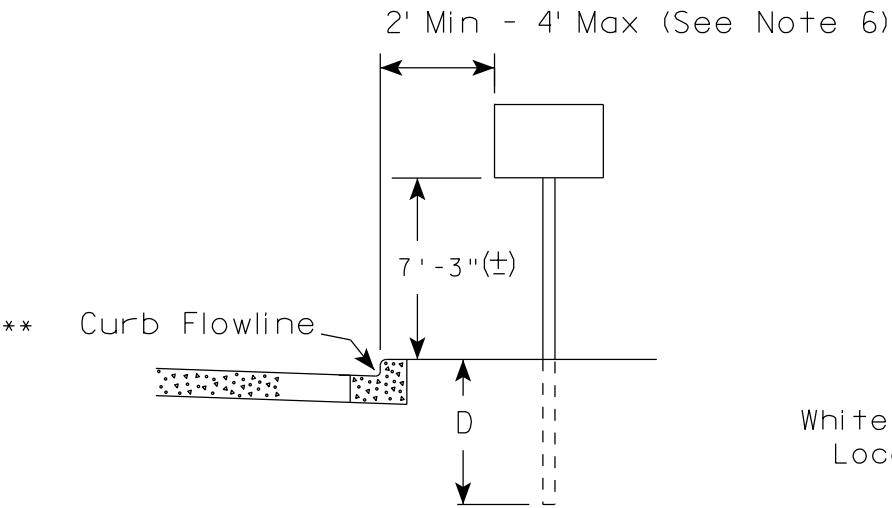
4-18-16

DATE

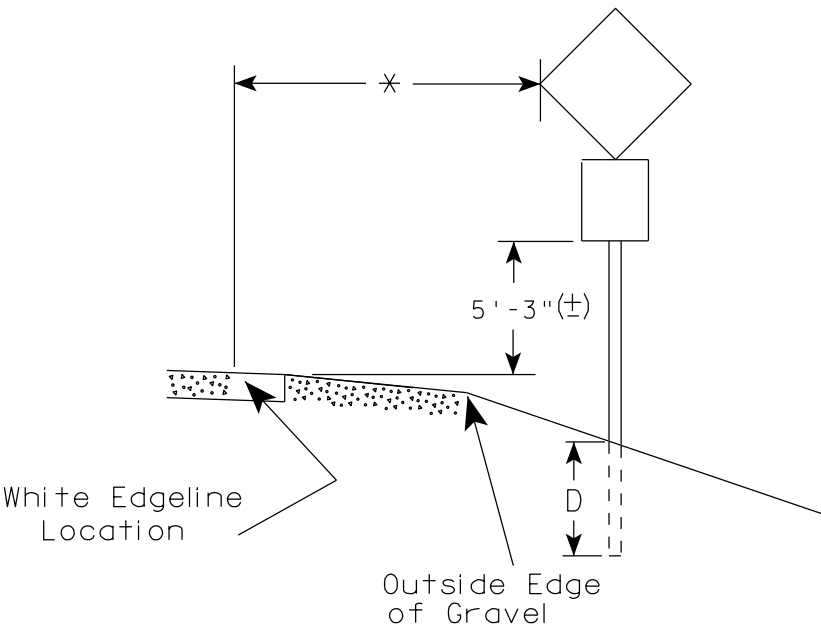
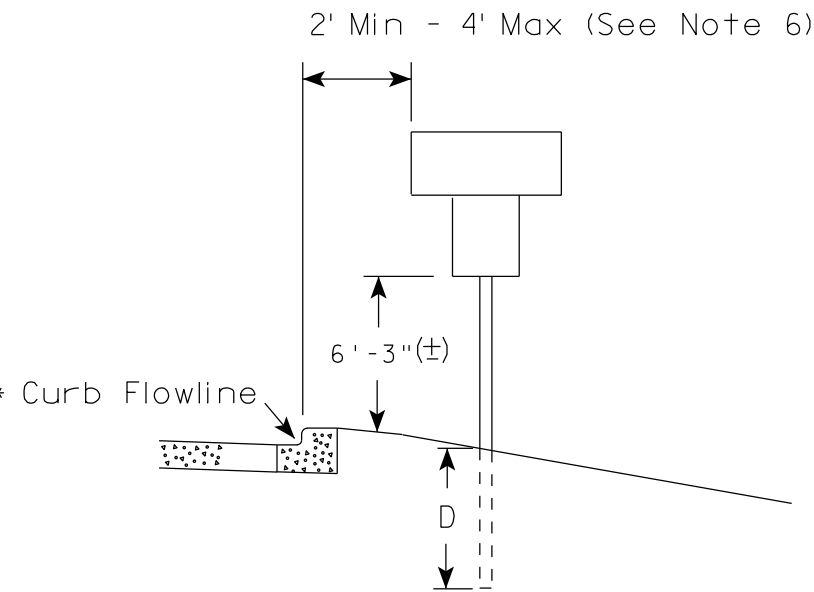
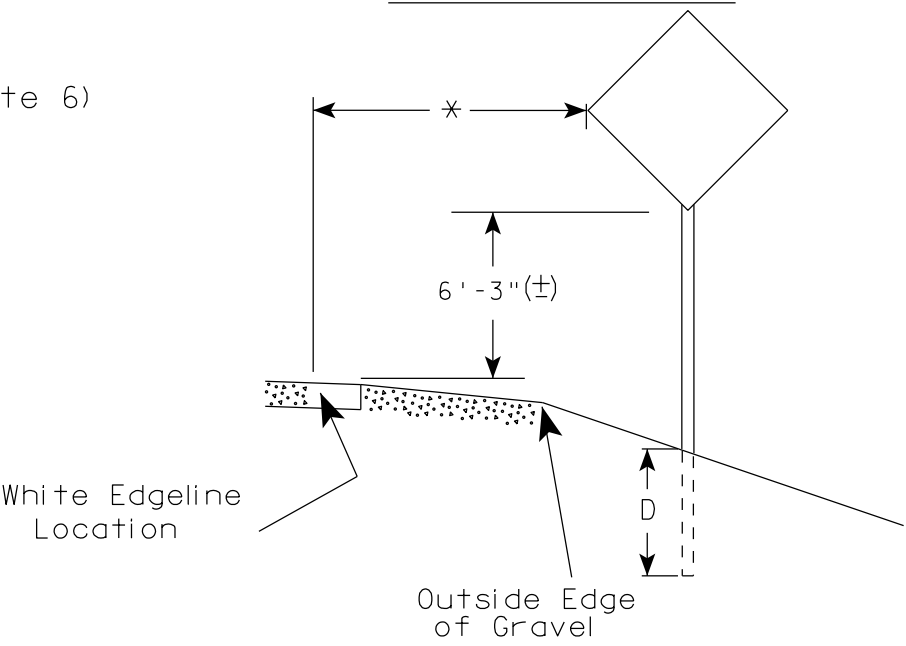
FHWA

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
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 J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), 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" (±).

POST EMBEDMENT DEPTH

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

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

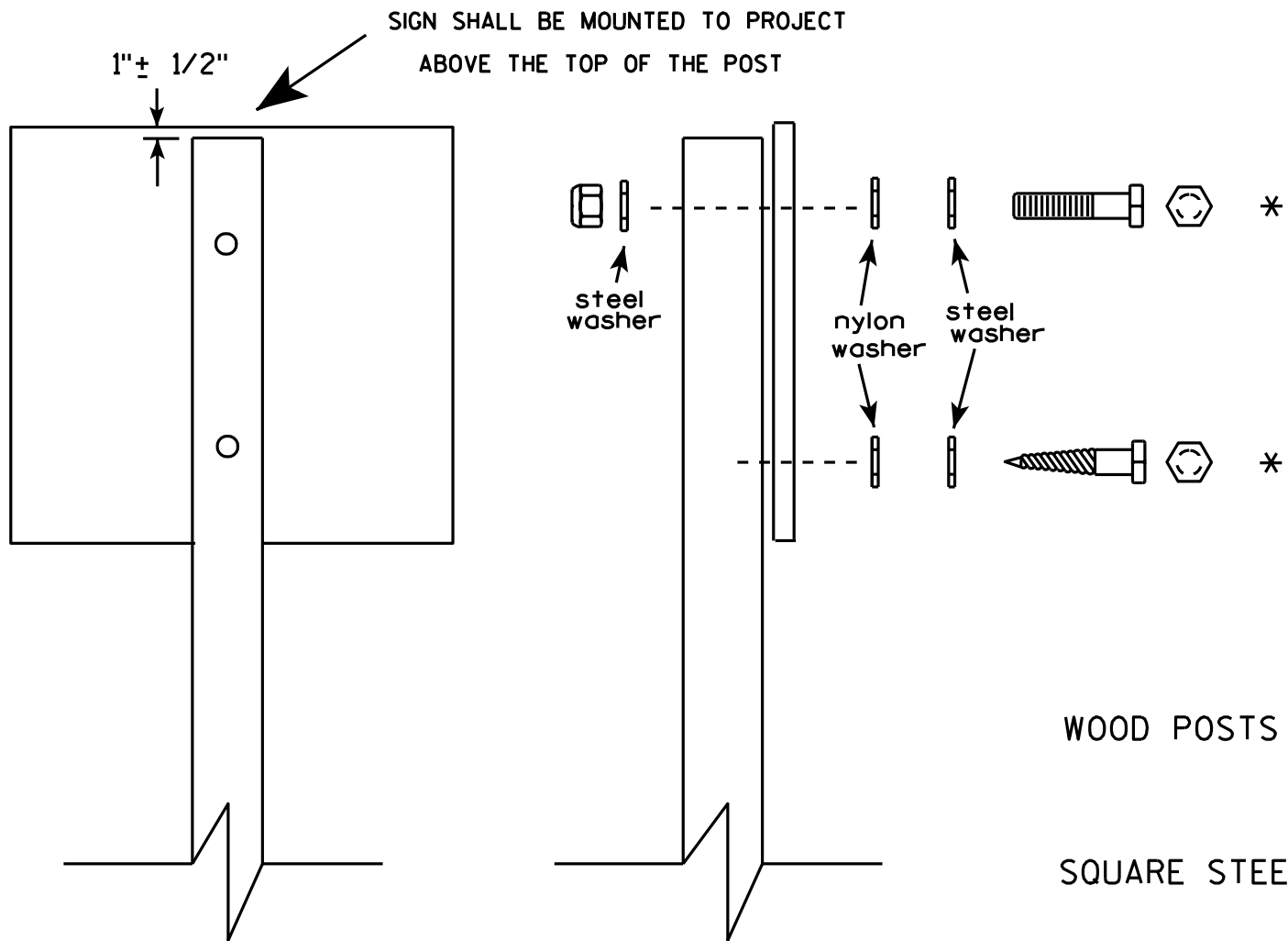
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

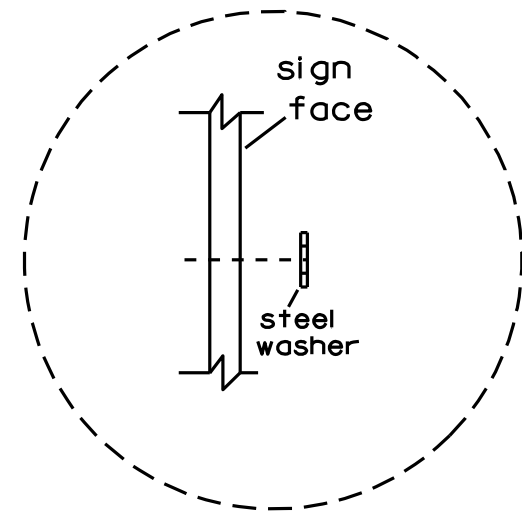


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

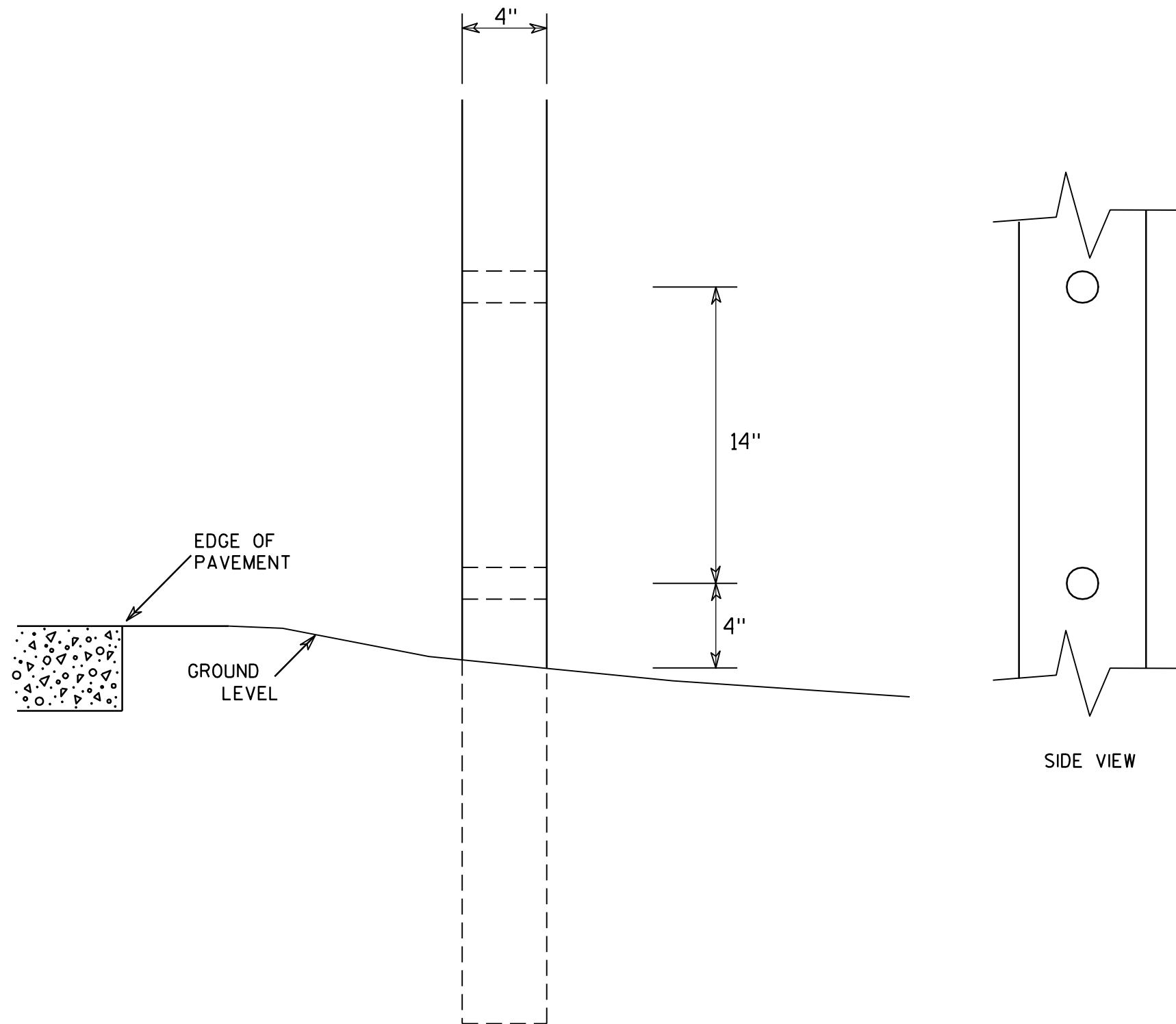


Washer Placement when Sign Has Other Than Type H or Type F Face

* 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 3/23/10	PLATE NO. A4-8.7

7



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

4 X 6 WOOD POST
MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

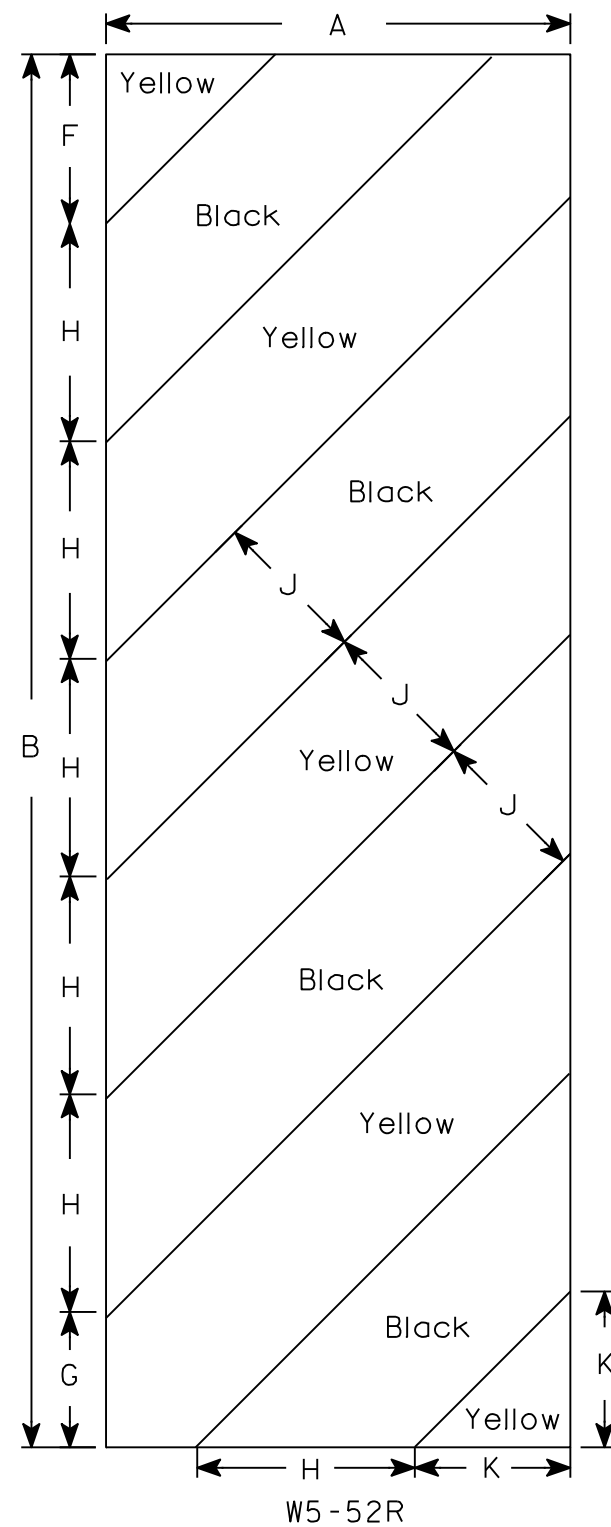
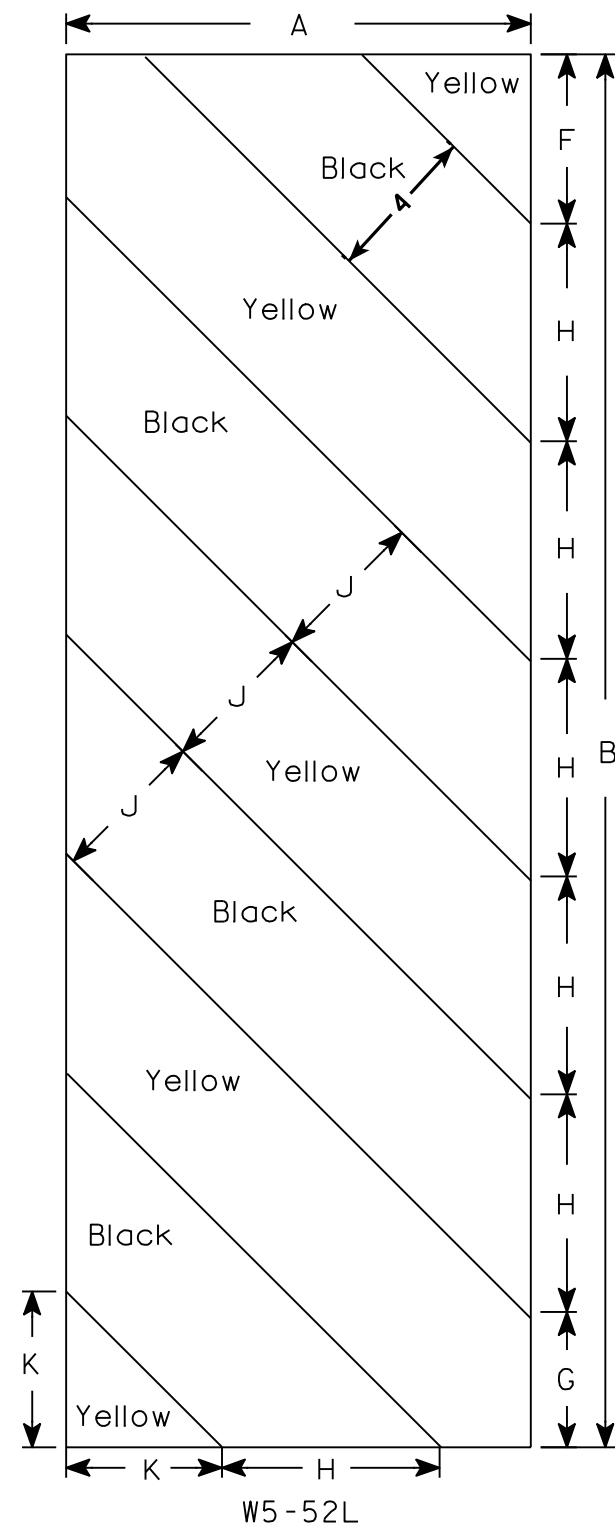
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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.

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 5⁄6																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

Ⓐ POINT OF CRITICAL VERTICAL CLEARANCE = 22.79'

LIVE LOAD:

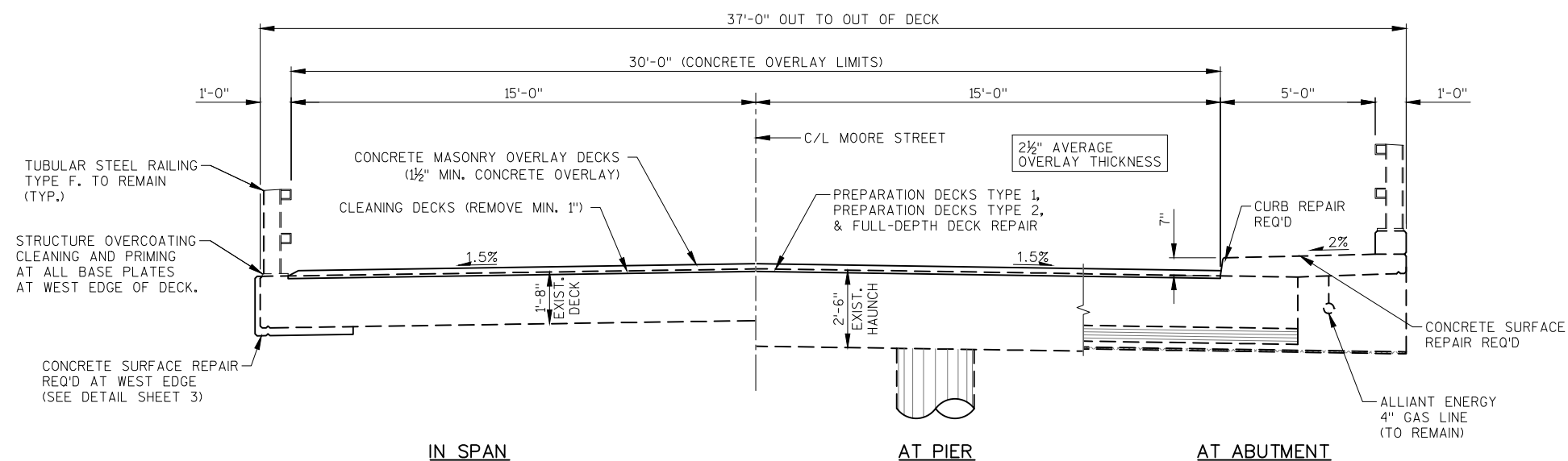
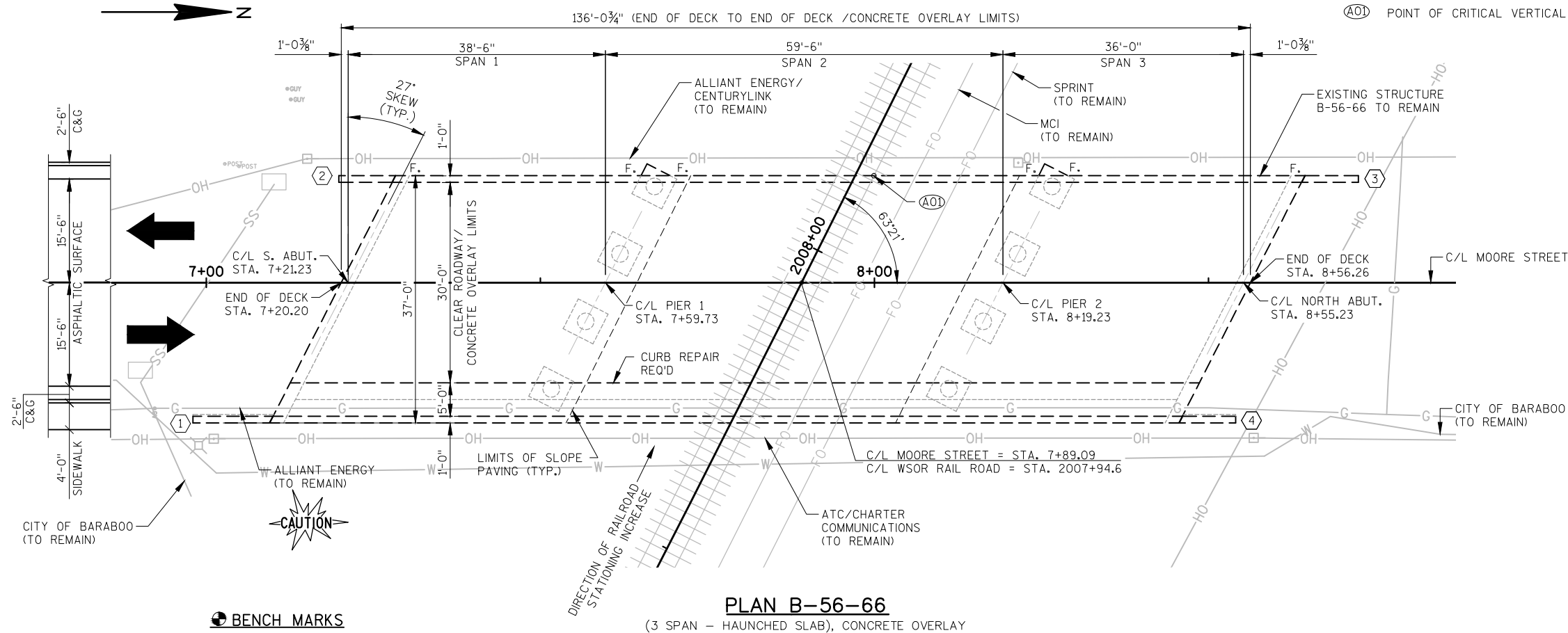
DESIGN LOADING _____	HS20
INVENTORY RATING _____	HS21
OPERATING RATING _____	HS36
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) _____	250 KIPS

CONCRETE MASONRY OVERLAY DECKS _____ f'c = 4,000 P.S.I.
HIGH-STRENGTH BAR STEEL
REINFORCEMENT, GRADE 60 _____ fy = 60,000 P.S.I.

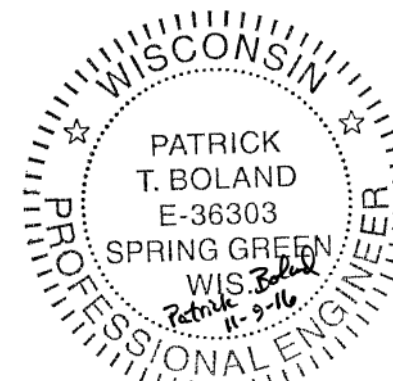
A.D.T. (2017)	2,000
A.D.T. (2037)	2,200
DESIGN SPEED	30 M.P.H.



GENERAL PLAN	1.
QUANTITIES AND REPAIR OUTLINE	2.
REPAIR DETAILS	3.
BAR LAYOUT	4.

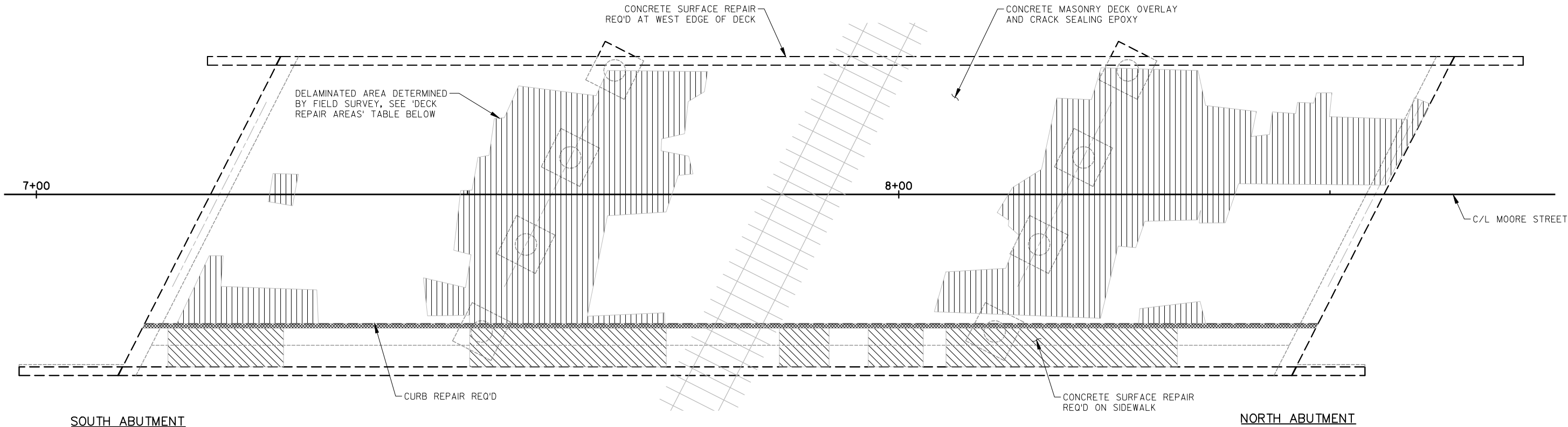
NO.	STA.	DESCRIPTION	ELEV.
1	5+49	¾" IRON ROD SET, 19.2' RT.	899.89
4	10+21	¾" IRON ROD SET, 19.1' LT.	891.78



CROSS SECTION THROUGH ROADWAY
(LOOKING NORTH)



NO.	DATE	REVISION		BY
		560 SUNRISE DRIVE SPRING GREEN, WI 53588 PHONE: (608) 588-7484 FAX: (608) 588-9322		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
ACCEPTED	 SDR CHIEF STRUCTURES DESIGN ENGINEER		11/18/16 DATE	
STRUCTURE B-56-66				
MOORE STREET OVER WSOR RAILROAD				
COUNTY	SAUK	TOWN/CITY/VILLAGE		BARABOO
DESIGN SPEC. REHABILITATION - N/A				
DESIGNED BY	PTB	DESIGN CK'D	RBH	DRAWN BY DJT
			PLANS CK'D	PTB
GENERAL PLAN			SHEET 1 OF 4	



GENERAL NOTES

MINIMUM TEMPORARY VERTICAL CONSTRUCTION CLEARANCE OF 21'-0" TO BE MAINTAINED THROUGHOUT DURATION OF WORK.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS, INSPECTION REPORTS AND FIELD SURVEY.

ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

AT "CURB REPAIR" EXPOSE EXISTING REINFORCEMENT A MINIMUM OF 1" CLEAR.

CLEAN AND FILL EXISTING LONGITUDINAL AND TRANSVERSE CRACKS WITH PENETRATING EPOXY AS DIRECTED BY THE ENGINEER IN THE FIELD.

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT ABUTMENTS IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

A MINIMUM OF 1" OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS".

PROFILE GRADE LINE SHALL BE DETERMINED BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE CONCRETE DECK SURFACE AFTER CLEANING. EXPECTED AVERAGE OVERLAY THICKNESS IS 2". IF THE EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

TOP OF EXISTING CONCRETE DECK ELEVATIONS SHALL BE DETERMINED FROM A FIELD SURVEY AT LOCATIONS DEEMED NECESSARY FOR ESTABLISHING OVERLAY THICKNESS FOR ACCURATE RATINGS AND POINT OF MINIMUM THICKNESS.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND FULL-DEPTH DECK REPAIR AREAS ARE BASED ON FIELD SURVEY, AND SHALL BE DETERMINED BY THE ENGINEER FOR ACTUAL REPAIR AREAS. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

CONCRETE SURFACE REPAIR ON WEST EDGE OF DECK INCLUDES REPAIR TO THE UNDERSIDE OF THE STRUCTURE AND IS TO FOLLOW THE DETAILS ON SHEETS 3 & 4. ALL CONCRETE SURFACE REPAIR AND CURB REPAIR SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS". UPON COMPLETION, APPLY "PROTECTIVE SURFACE TREATMENT" TO NEW CONCRETE.

ALL RAILING TO REMAIN IN PLACE THROUGHOUT DURATION OF WORK. STRUCTURE OVERCOATING, CLEANING AND PRIMING REQUIRED AT ALL BASE PLATES ALONG THE WEST EDGE OF DECK. (22 LOCATIONS TOTAL)

BRIDGE REPAIR OUTLINE

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTALS
203.0225.S	DEBRIS CONTAINMENT B-56-66	LS	1
502.0717.S	CRACK SEALING EPOXY	LF	150
502.3200	PROTECTIVE SURFACE TREATMENT	SY	580
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	262
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1000
509.0301	PREPARATION DECKS TYPE 1	SY	155
509.0302	PREPARATION DECKS TYPE 2	SY	65
509.0500	CLEANING DECKS	SY	455
509.1200	CURB REPAIR	LF	136
509.1500	CONCRETE SURFACE REPAIR	SF	970
509.2000	FULL-DEPTH DECK REPAIR	SY	10
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	48
517.3000.S	STRUCTURE OVERCOATING CLEANING AND PRIMING B-56-66	LS	1
517.4000.S	CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-56-66	LS	1
604.9010.S	SLOPE PAVING REPAIR CRUSHED AGGREGATE	CY	5
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	390
SPV.0060.01	EMBEDDED GALVANIC ANODES	EACH	176
NON-BID ITEMS			

■ AT EDGE OF DECK CONCRETE SURFACE REPAIR AREA, APPROXIMATELY 5.3 CY OF ADDITIONAL CONCRETE MASONRY IS REQUIRED BEYOND THE ORIGINAL FACE OF CONCRETE. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE SURFACE REPAIR". SEE SHEET 3 FOR DETAIL.

DECK REPAIR AREAS

FIELD OBSERVATION SUMMARY	STRUCTURE NO. B-56-66			LEGEND
ITEM	UNIT	QUANTITY	%	DECK REPAIR AREAS (ESTIMATED BY FIELD SURVEY)
TOTAL AREA	SY	455	100	
DELAMINATED AREA	SY	155	34.1	
PREPARATION DECKS, TYPE 1	SY	155	34.1	CONCRETE SURFACE REPAIR AT SIDEWALK (338 SF EST.)
★ PREPARATION DECKS, TYPE 2	SY	65	14.3	
◇ FULL-DEPTH DECK REPAIR	SY	10	2.2	CURB REPAIR (136 LF)

NOTES:

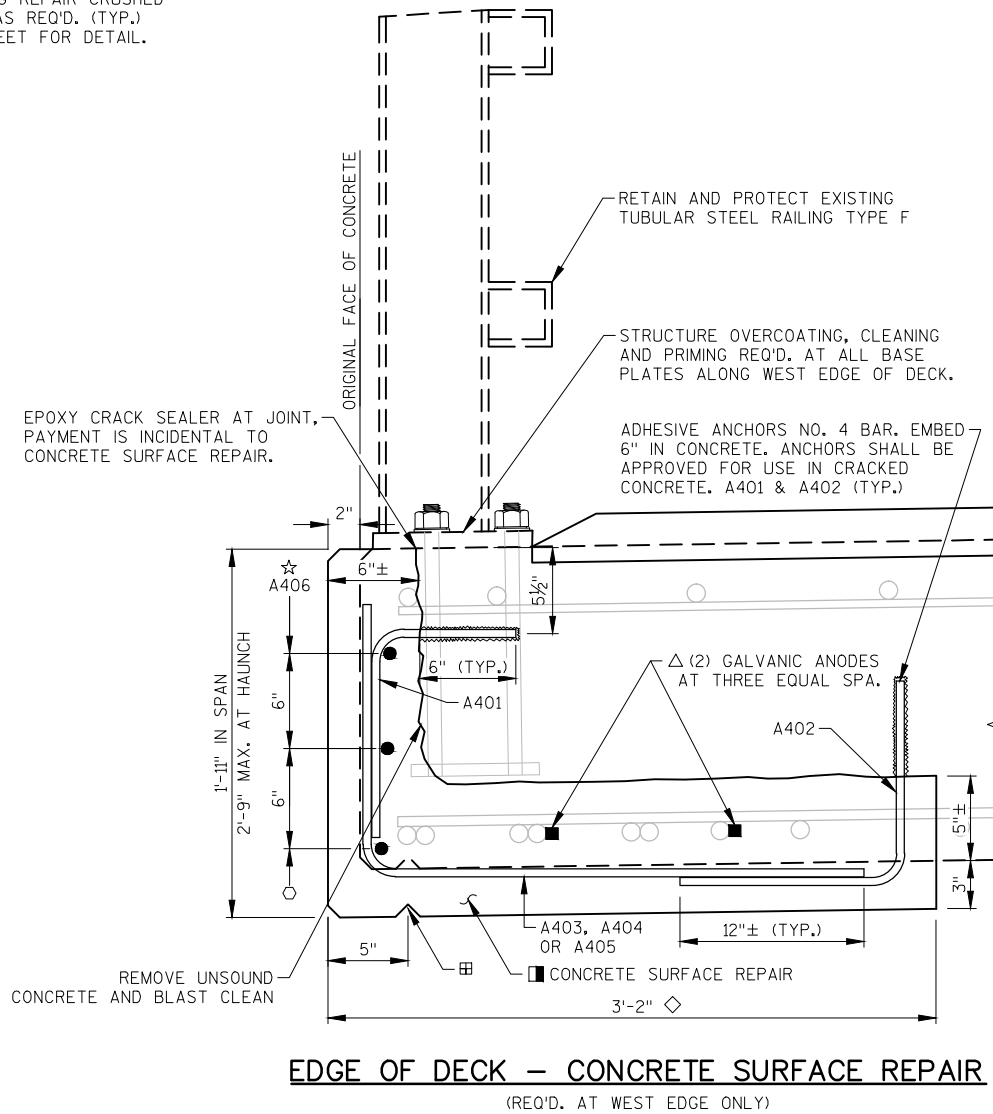
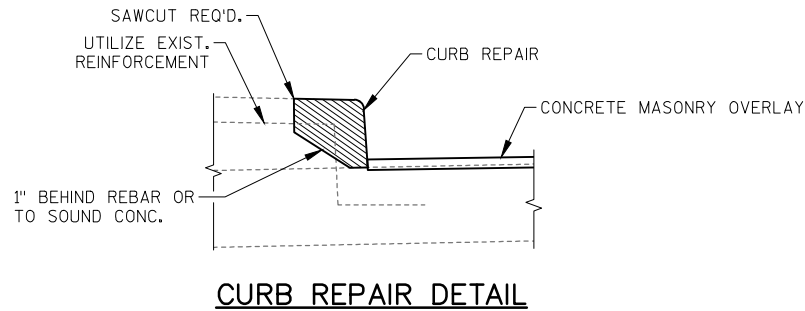
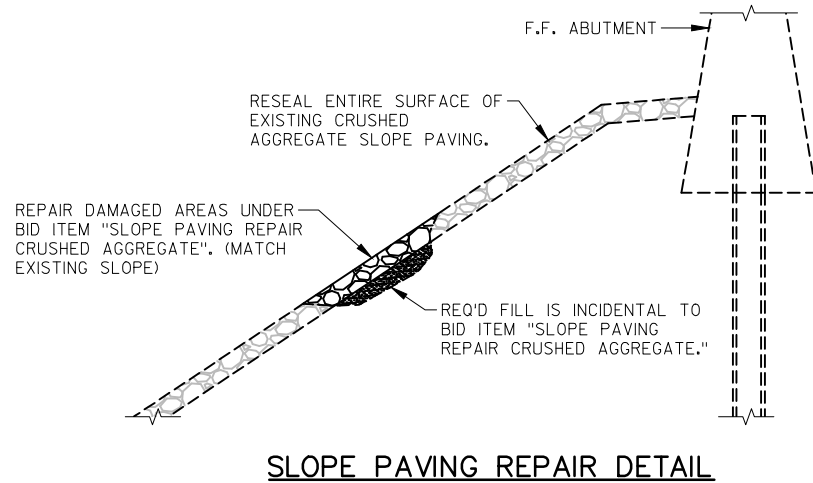
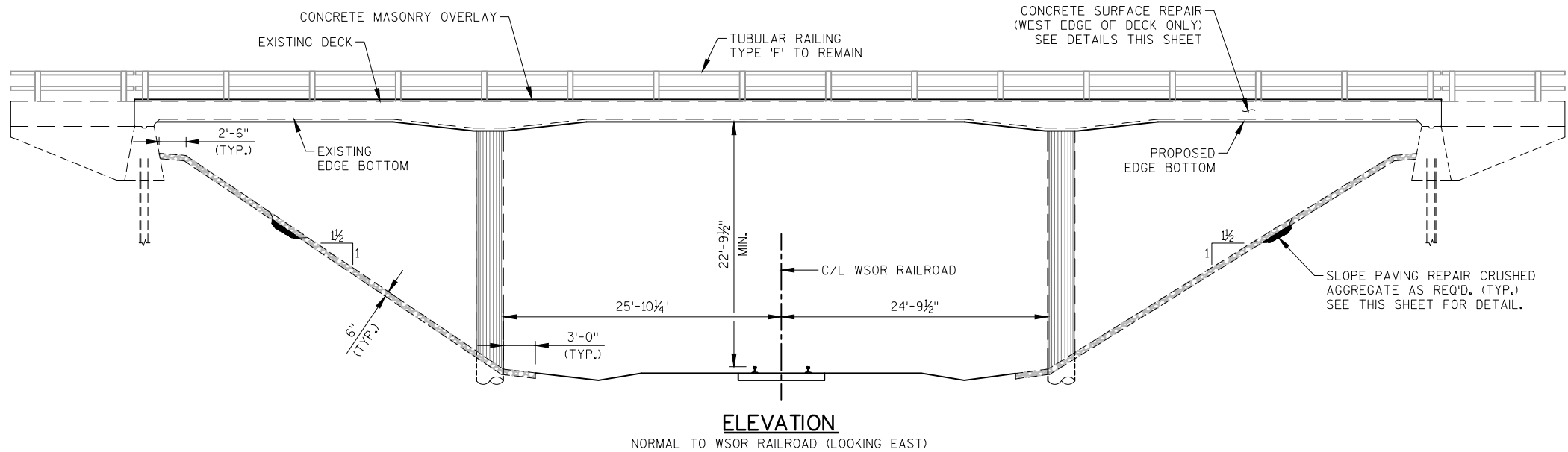
DECK INSPECTION AND DECK REPAIR AREA SHOWN ARE FOR REFERENCE ONLY. ENGINEER IN THE FIELD TO VERIFY REPAIR AREAS. DECK REPAIRS SHALL BE MADE ONLY AS DIRECTED BY THE ENGINEER IN THE FIELD.

★ ASSUMED TO BE 40% OF PREPARATION DECKS TYPE 1

◇ ASSUMED TO BE 6.5% OF PREPARATION DECKS TYPE 1

SEE SHEET 3 FOR SLOPE PAVING REPAIR DETAIL.

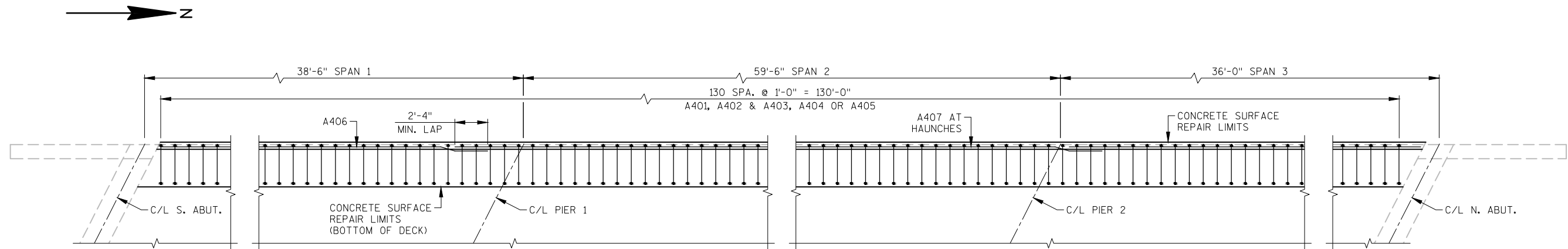
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-56-66			
DRAWN BY		DJT	PLANS CK'D. PTB
QUANTITIES AND REPAIR OUTLINE		SHEET 2 OF 4	



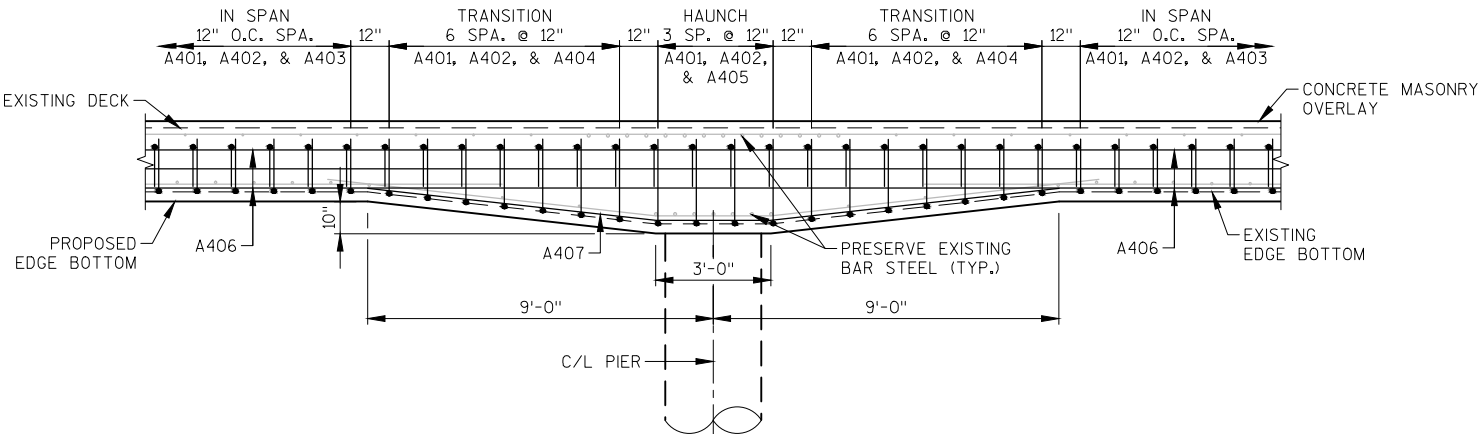
LEGEND

- APPROXIMATELY 5.3 CY OF ADDITIONAL CONCRETE MASONRY IS REQUIRED BEYOND THE ORIGINAL FACE OF CONCRETE. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE SURFACE REPAIR"
 - ◇ TO BE VERIFIED IN THE FIELD. USE CONSISTENT DIMENSION ENTIRE BRIDGE LENGTH AT EACH OVERHANG
 - △ EMBEDDED GALVANIC ANODES SPACED @ 1'-6" (TIE TO EXISTING DECK REINFORCEMENT.)
 - ☆ ADJUST SPACING AS NECESSARY TO AVOID EXISTING RAILING ANCHORAGES
 - ⊞ 3/4" V-GROOVE. TERMINATE 6" FROM SUBSTRUCTURE UNITS.
 - ADDITIONAL A407 BAR AT HAUNCHES. SEE HAUNCH DETAIL ON SHEET 4
- NOTE: APPLY PROTECTIVE SURFACE TREATMENT TO ALL EXPOSED FACES OF NEW CONCRETE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-56-66			
DRAWN BY		DJT	PLANS CK'D. PTB
REPAIR DETAILS			SHEET 3 OF 4



PLAN OF BAR LAYOUT FOR SURFACE REPAIR
(REQ'D. AT WEST EDGE ONLY)



BAR LAYOUT AT HAUNCH
(REQ'D. AT TWO PIER LOCATIONS, WEST EDGE ONLY)

BILL OF BARS 1,000 LB (COATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	BAR SERIES	LOCATION
A401	131	1-9	X	X		ANCHOR, DECK EDGE
A402	131	2-1	X	X		ANCHOR, DECK BOTTOM
A403	95	4-0	X	X		HORIZONTAL, DECK EDGE, MIDSPAN
A404	28	4-6	X	X	*	HORIZONTAL, DECK EDGE, HAUNCH
A405	8	4-10	X	X		HORIZONTAL, DECK EDGE, HAUNCH
A406	12	34-8		X		LONGITUDINAL, OUTSIDE EDGE
A407	2	18-0	X	X		LONGITUDINAL, OUTSIDE EDGE, HAUNCH

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

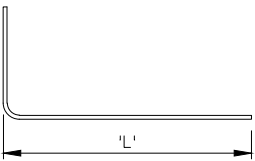
* LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

▽ ADHESIVE ANCHORS NO. 4 BAR REQ'D.

BAR SERIES TABLE

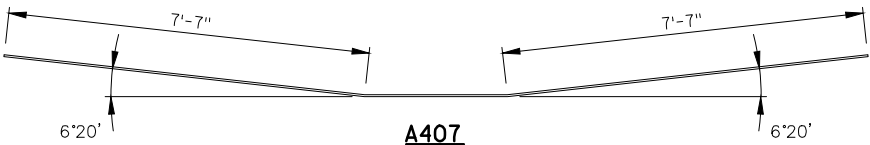
BAR MARK	NO. REQ'D.	LENGTH
A404	4 SERIES OF 7	4-3 TO 4-9

BUNDLE AND TAG EACH SERIES SEPARATELY.



A401, A402, A403,
A404, & A405

BAR MARK	'L'
A401	1-1
A402	1-2
A403	2-8
A404	2-8
A405	2-8



A407

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-56-66			
DRAWN BY		DJT	PLANS CK'D. PTB
BAR LAYOUT			SHEET 4 OF 4

EARTHWORK-MAINLINE (PROJECT # 5678-00-72)

AREA (SF)						INCREMENTAL VOL (CY)								CUMMULATIVE VOLUME (CY)								
STATION	CUT	SALVAGED/ UNUSABLE		FILL	ROCK EX	EBS	CUT	SALVAGED/ UNUSABLE	FILL	ROCK EX	EXPANDED ROCK (1.1)	FILL (25%)	SELECT CRUSHED MATERIAL	EBS	CUT 1.00	FILL	ROCK EX	EXPANDED ROCK (1.1)	FILL (25%)	SELECT CRUSHED MATERIAL	EBS	MASS ORDINATE
		PAV'T MATERIAL	PAV'T MATERIAL				NOTE 1	NOTE 2			NOTE 3		NOTE 4		(1.5)			NOTE 1		NOTE 4		NOTE 5
7+00	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7+20	81	0	0	0	0	0	60	0	0	0	0	0	0	0	60	0	0	0	0	0	0	60
7+20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	60
8+56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	60
8+56	75	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	60
8+85	75	0	0	0	0	0	80	0	0	0	0	0	0	0	140	0	0	0	0	0	0	140
COLUMN TOTAL						140	0	0	0	0	0	0	0	0								

EARTHWORK-MAINLINE (PROJECT # 5698-00-74)

MAINLINE	140	0	0	0	0	0	0	0	0	0	0	0	0	0	140	0	0	0	0	0	0	140
----------	-----	---	---	---	---	---	---	---	---	---	---	---	---	---	-----	---	---	---	---	---	---	-----

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED ROCK	EXPANDED ROCK THAT CAN BE USED IN FILL
5 - FILL (25%)	FILL 25%: (UNEXPANDED FILL)*1.25
6 - MASS ORDINATE	(CUT + EXPANDED ROCK(1.1) - FILL (25%))



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>