

WIS

PROJECT ID:
WITH: N/A

6350-01-63

COUNTY:

PORTAGE

MAY 2019

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
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 = 36



DESIGN DESIGNATION

A.A.D.T.	2018	=	3440
A.A.D.T.	2038	=	N/A
D.H.V.		=	N/A
D.D.		=	N/A
T.		=	17.7%
DESIGN SPEED		=	70 MPH
ESALS		=	N/A

CONVENTIONAL SYMBOLS

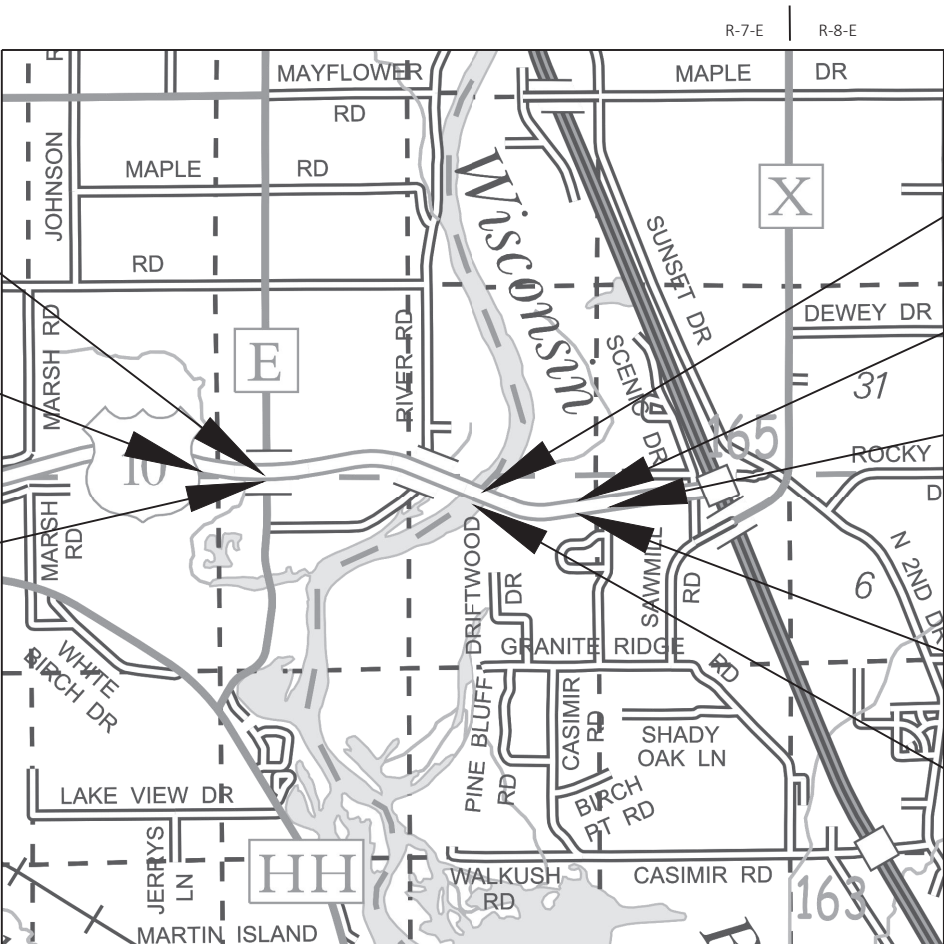
PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

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	

BEGIN PROJECT
STA 762+04

B-49-0160
X= 141982.08
Y= 230392.24

B-49-0161
X= 141916.12
Y= 230735.28



LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = N/A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MARSHFIELD TO STEVENS POINT

USH 10 BRIDGE POLYMER OVERLAYS

USH 10
PORTAGE COUNTY

STATE PROJECT NUMBER
6350-01-63

B-49-0142
X= 147714.29
Y= 230370.09

B-49-0144
X= 150680.02
Y= 229644.19

END PROJECT
STA 862+07

B-49-0143
X= 150734.78
Y= 229300.40

B-49-0141
X= 147585.20
Y= 230051.93

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6350-01-63	WISC 2019309	1

ORIGINAL PLANS PREPARED BY



DATE: 01/31/19 *Teresa Schopp*

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	N/A
Designer	DAAR ENGINEERING
Project Manager	WENDY ARNESON, P.E.
Regional Examiner	CHERYL SIMON, P.E.
Regional Supervisor	MICHAEL KRETSCHMER, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 3/1/2019 *Wendy Arneson*
(Signature)

E

GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

WDNR CONTACTS

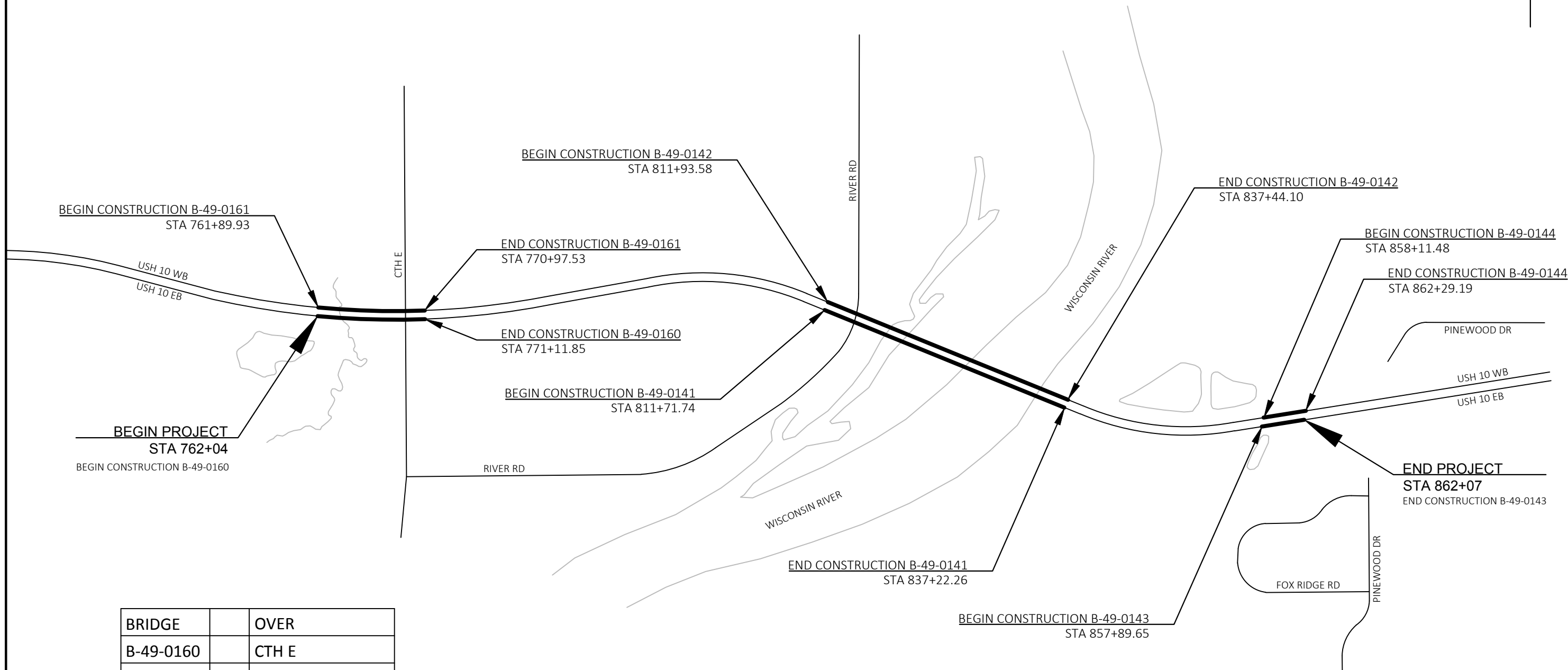
WISDNR LIAISON
NORTH CENTRAL REGION
CASEY JONES (PORTAGE COUNTY)
DNR WISCONSIN RAPIDS SERVICE CENTER
473 GRIFFITH DR
WISCONSIN RAPIDS, WI 54494
PHONE (715) 421-7867

ORDER OF DETAIL SHEETS

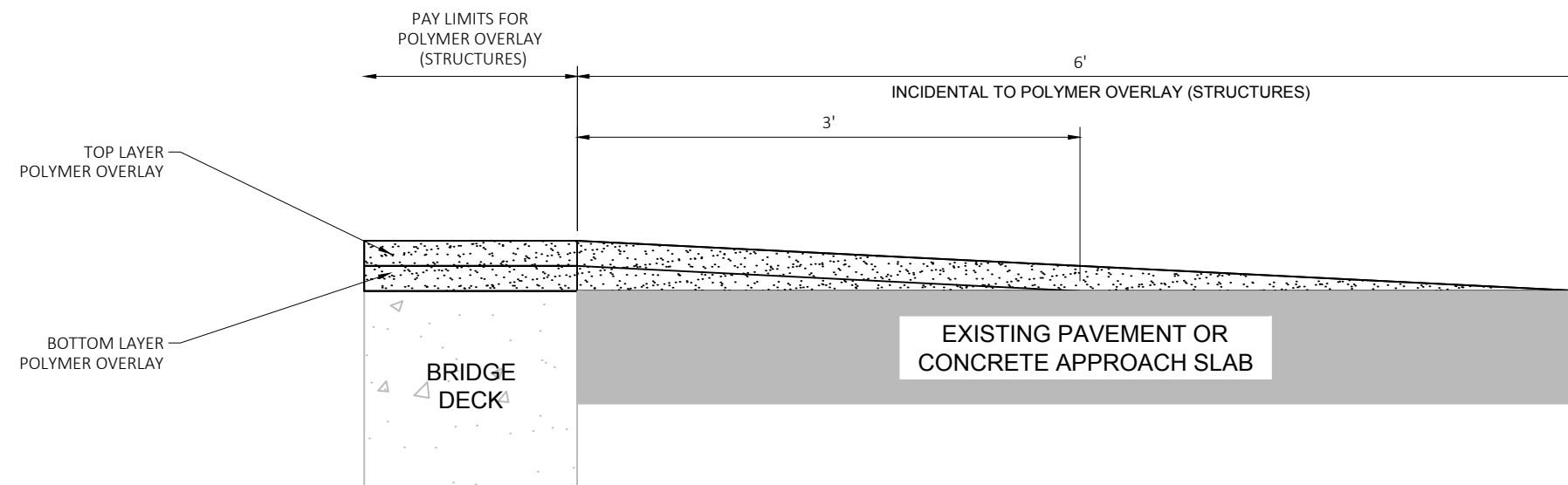
GENERAL NOTES
PROJECT OVERVIEW
STAGING TYPICAL SECTIONS
TRAFFIC CONTROL/STAGING



PROJECT NO: 6350-01-63	HWY: USH 10	COUNTY: PORTAGE	GENERAL NOTES	SHEET	E
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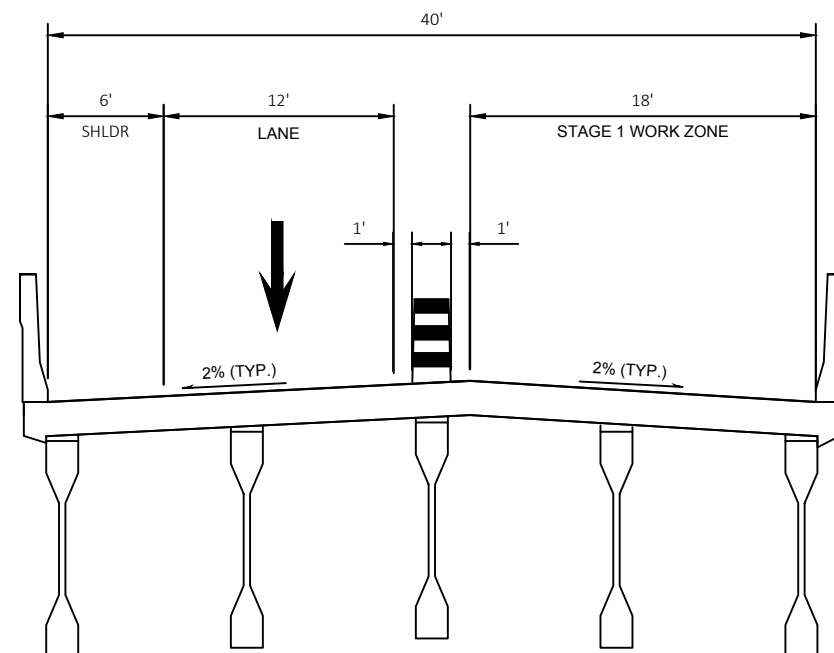
BRIDGE		OVER
B-49-0160		CTH E
B-49-0161		CTH E
B-49-0141		WISCONSIN RIVER
B-49-0142		WISCONSIN RIVER
B-49-0143		WETLANDS
B-49-0144		WETLANDS



POLYMER OVERLAY TRANSITIONAL AREA

NOTES:

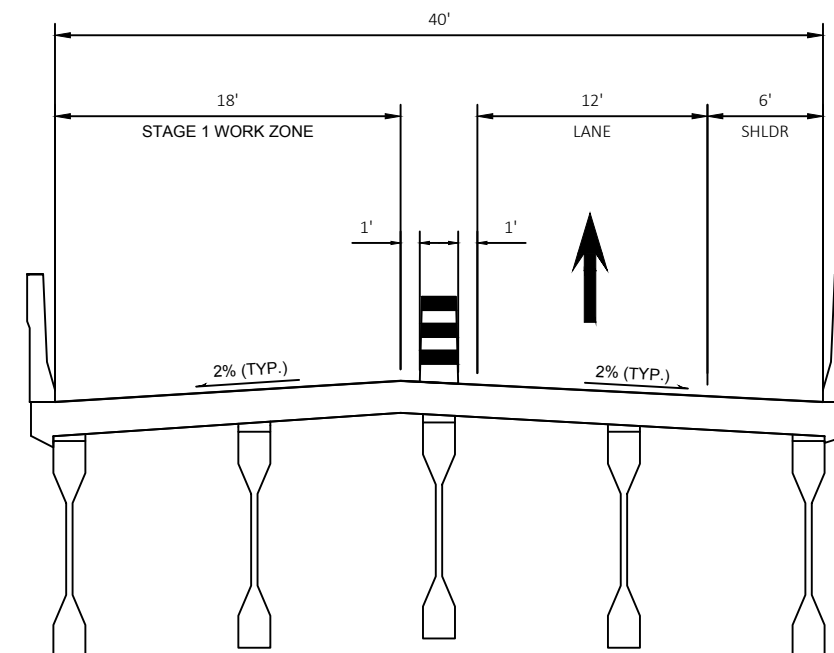
- 1) POLYMER OVERLAY TO BE PLACED FULL WIDTH COVERING PAVEMENT AND SHOULDERS.
- 2) MASK OFF EXISTING END JOINT AS DIRECTED BY THE ENGINEER.



STAGE 1 CONSTRUCTION

(LOOKING EAST)

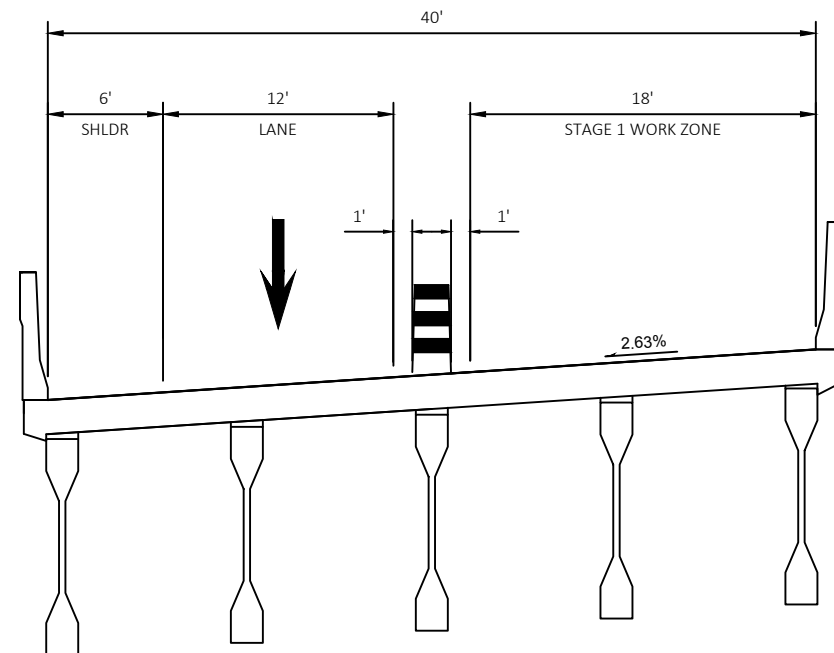
USH 10 WESTBOUND OVER WISCONSIN RIVER (B-49-0142)
USH 10 WESTBOUND OVER WETLANDS (B-49-0144)



STAGE 1 CONSTRUCTION

(LOOKING EAST)

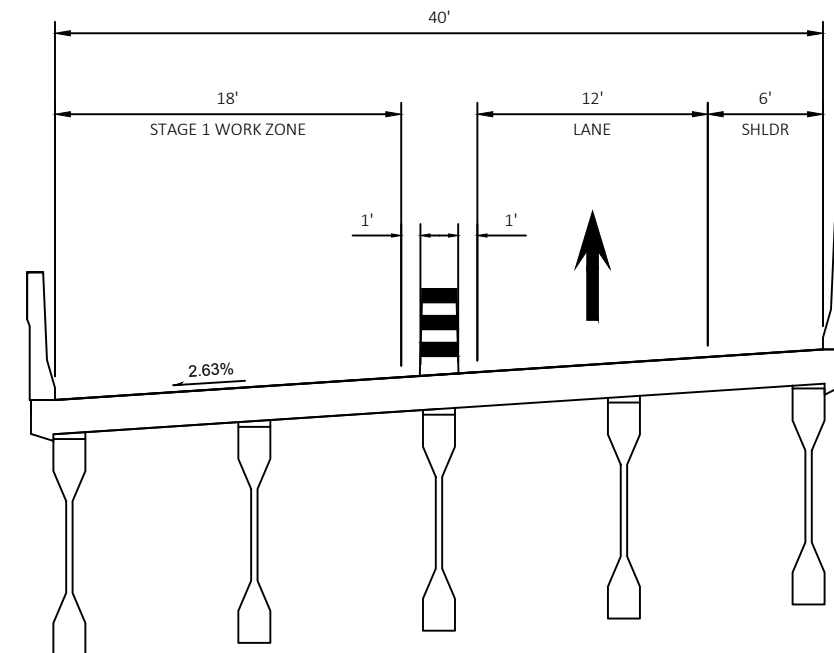
USH 10 EASTBOUND OVER WISCONSIN RIVER (B-49-0141)
USH 10 EASTBOUND OVER WETLANDS (B-49-0143)



STAGE 1 CONSTRUCTION

(LOOKING EAST)

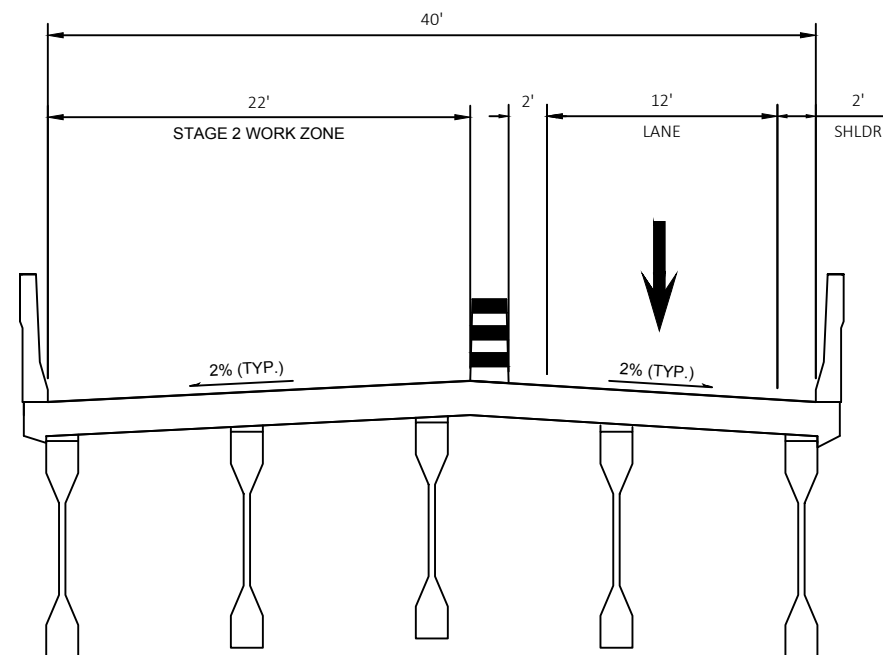
USH 10 WESTBOUND OVER CTH E (B-49-0161)



STAGE 1 CONSTRUCTION

(LOOKING EAST)

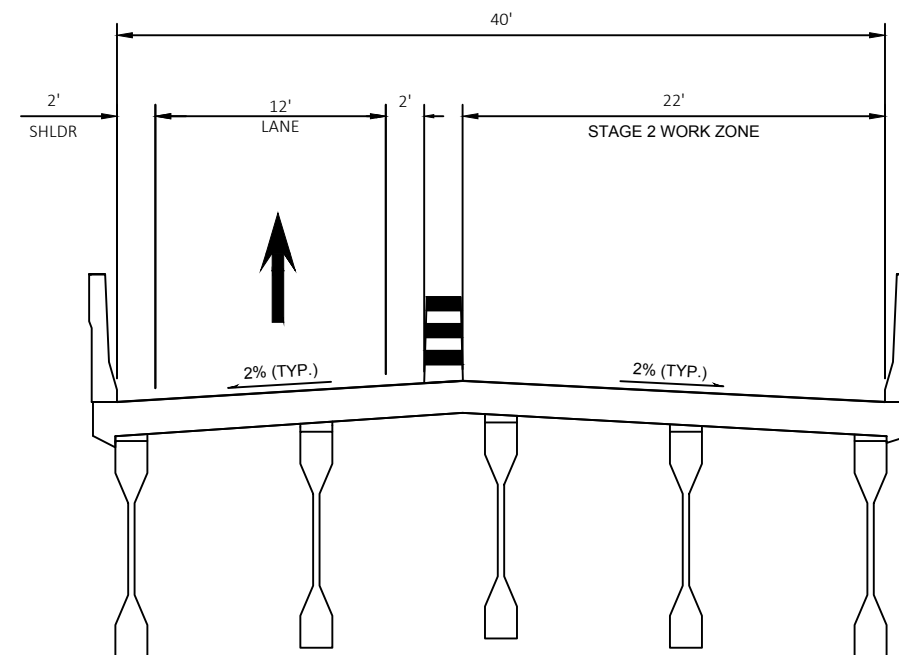
USH 10 EASTBOUND OVER CTH E (B-49-0160)



STAGE 2 CONSTRUCTION

(LOOKING EAST)

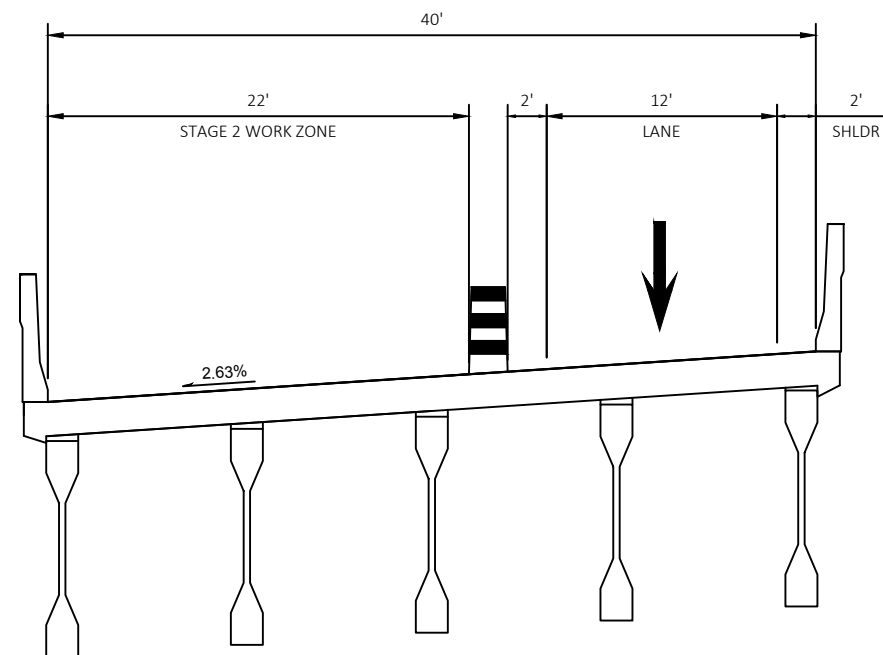
USH 10 WESTBOUND OVER WISCONSIN RIVER (B-49-0142)
USH 10 WESTBOUND OVER WETLANDS (B-49-0144)



STAGE 2 CONSTRUCTION

(LOOKING EAST)

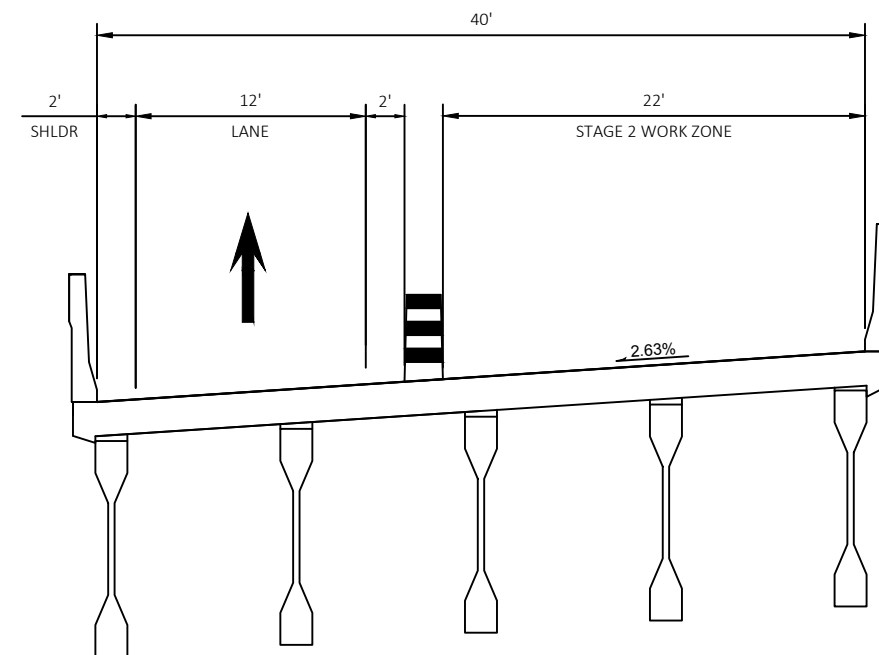
USH 10 EASTBOUND OVER WISCONSIN RIVER (B-49-0141)
USH 10 EASTBOUND OVER WETLANDS (B-49-0143)



STAGE 2 CONSTRUCTION

(LOOKING EAST)

USH 10 WESTBOUND OVER CTH E (B-49-0161)



STAGE 2 CONSTRUCTION

(LOOKING EAST)

USH 10 EASTBOUND OVER CTH E (B-49-0160)

GENERAL NOTES FOR TRAFFIC CONTROL

ADJUST SIGN SPACING TO AVOID CONFLICT WITH AND TO PROVIDE A SPACING OF 500 FEET (200 MINIMUM) TO EXISTING SIGNS.

UNLESS NOTED, ALL WARNING SIGNS ARE 48" X 48".

ALL TRAFFIC CONTROL SIGNING WILL CONFORM TO THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD), DATED MARCH 21, 2017.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

IF LANE CLOSURES ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

INSTALL THE LANE CLOSURE SERIES AS A COMPLETE UNIT THAT INCLUDES ALL ADVANCED WARNING SIGNING, DRUMS, AND ARROW BOARDS.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGN OR BARRICADES.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

REMOVE OR COVER WITH BLACK REMOVABLE TAPE ALL EXISTING PAVEMENT MARKINGS CONFLICTING WITH THE TRAFFIC CONTROL OR NOT APPROPRIATE TO THE TRAVEL PATH.

PLACE G20-57 SIGNS 7-DAYS PRIOR TO STAGE 1 CONSTRUCTION AND REMOVE ONCE CONSTRUCTION BEGINS. PLACE SIGNS 1000' IN ADVANCE OF WORK ZONE OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

TRAFFIC CONTROL DRUMS ARE TO BE SHIFTED TO THE OPPOSITE SIDE OF THE CENTERLINE IN ACCORDANCE WITH TRANSITIONS DETAILED IN S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION (WITH A SPEED REDUCTION TO 55 MPH)" BETWEEN STRUCTURES. SEE TYPICAL SECTION ON THIS SHEET.

CONSTRUCTION:

MAINTAIN 1 LANE OF TRAVEL IN EACH DIRECTION AT ALL TIMES.

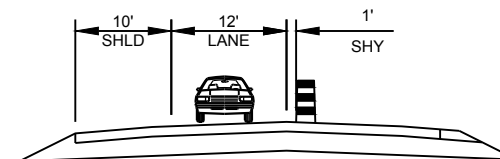
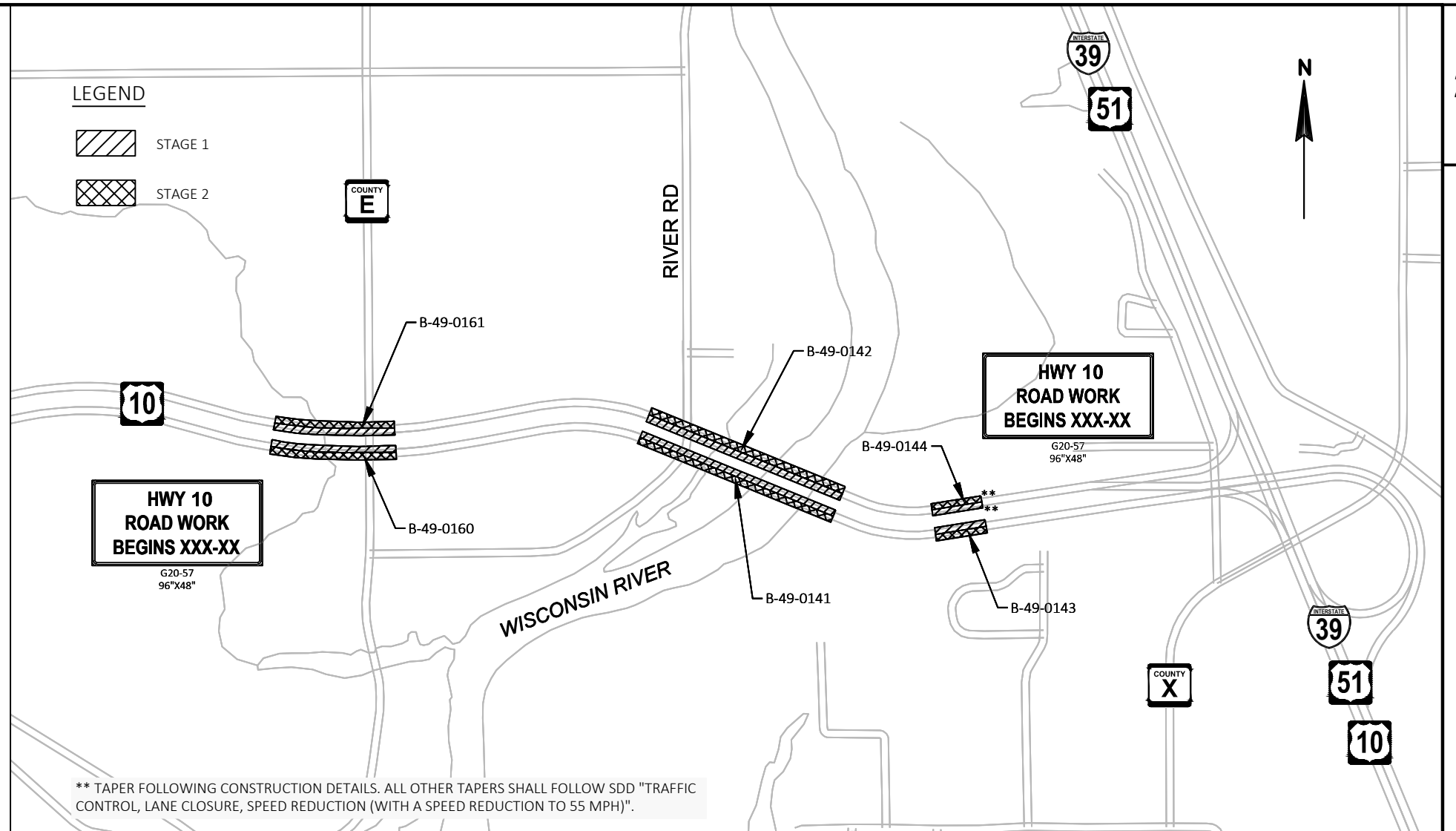
SEE S.D.D., TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION (WITH A SPEED REDUCTION TO 55 MPH). ADVANCE WARNING SIGNS ARE REQUIRED ON USH 10 WESTBOUND AND ON IH 39/USH 51 SB OFF RAMP TO USH 10 WESTBOUND.

IT IS INTENDED THAT TRAFFIC TRAVEL ON OR NEAR THE EXISTING EDGELINES WHILE TRAVERSING THE BRIDGES.

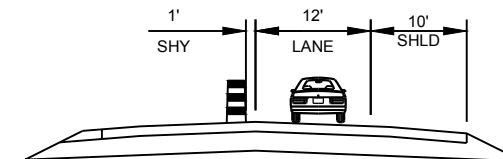
STAGE 1: CLOSE THE INSIDE MEDIAN LANE ON USH 10 EASTBOUND FROM B-49-0160 THROUGH B-49-0143 SHIFTING TRAFFIC TO THE OUTSIDE LANE. CLOSE THE INSIDE MEDIAN LANE ON USH 10 WESTBOUND FROM B-49-0144 THROUGH B-49-0161 SHIFTING TRAFFIC TO THE OUTSIDE LANE.

STAGE 2: CLOSE THE OUTSIDE LANE ON USH 10 EASTBOUND FROM B-49-0160 THROUGH B-49-0143 SHIFTING TRAFFIC TO THE INSIDE MEDIAN LANE. CLOSE THE OUTSIDE LANE ON USH 10 WESTBOUND FROM B-49-0144 THROUGH B-49-0161 SHIFTING TRAFFIC TO THE INSIDE MEDIAN LANE.

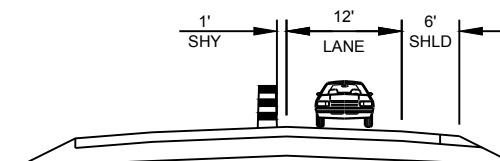
LEGEND



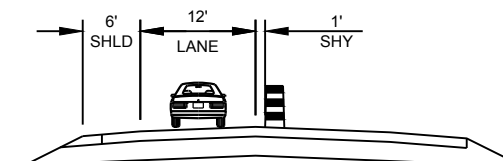
TYPICAL SECTION WB STAGE 1



TYPICAL SECTION EB STAGE 1

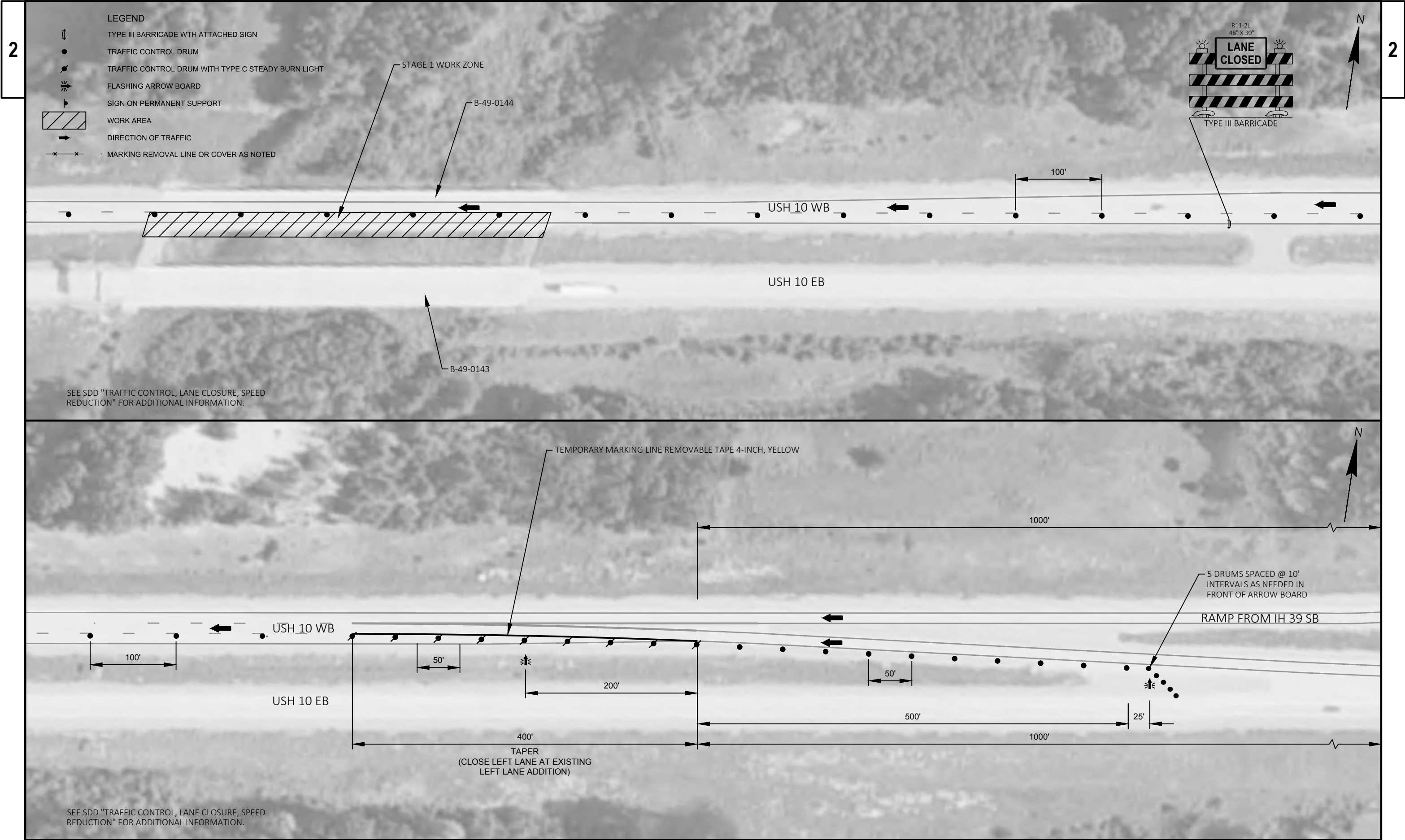


TYPICAL SECTION WB STAGE 2

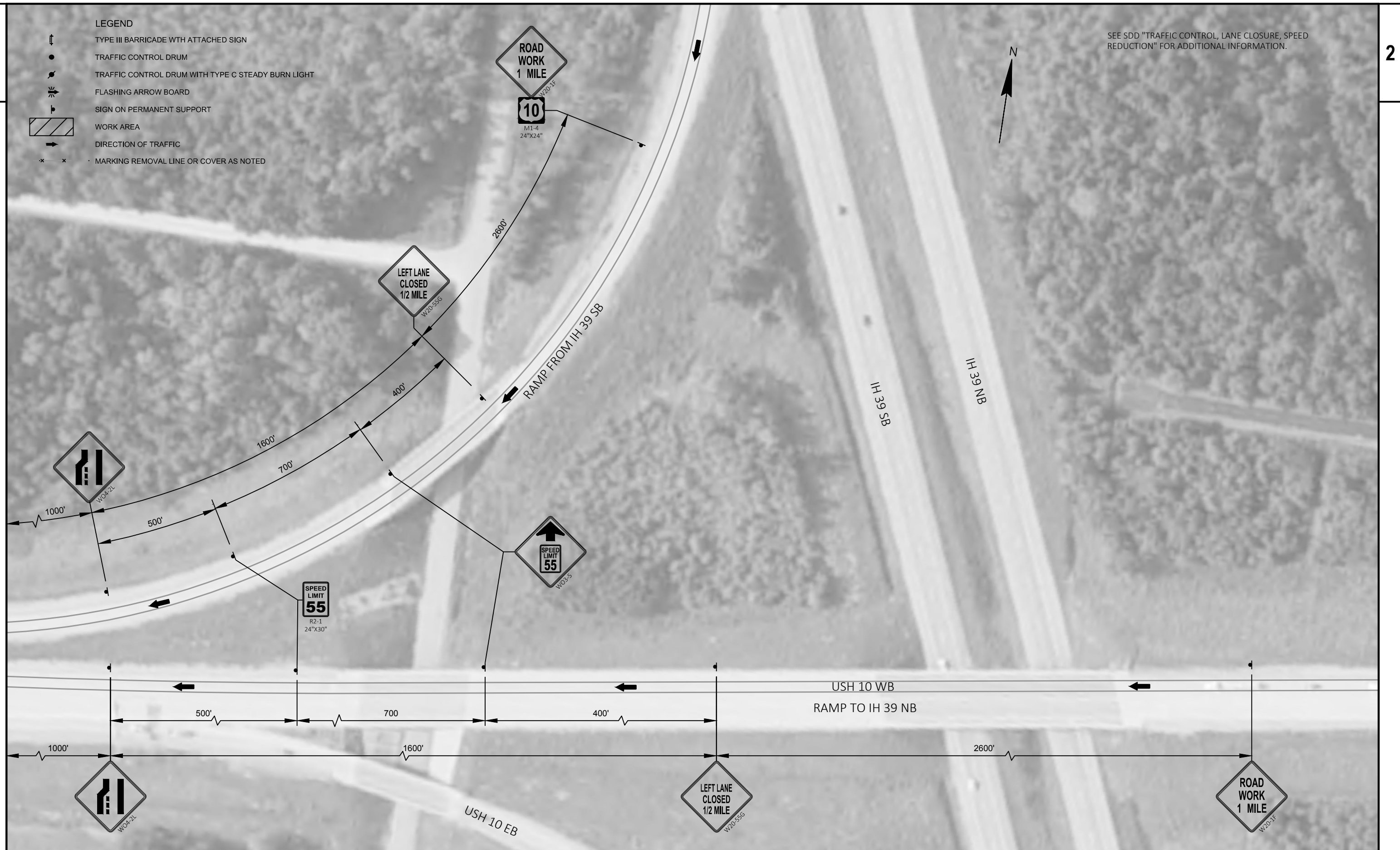


TYPICAL SECTION EB STAGE 2

STAGING TYPICAL SECTIONS
(BETWEEN STRUCTURES)



PROJECT NO: 6350-01-63	HWY: USH 10	COUNTY: PORTAGE	TRAFFIC CONTROL - B-49-0144 STAGE 1	SHEET	E
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PROJECT NO: 6350-01-63

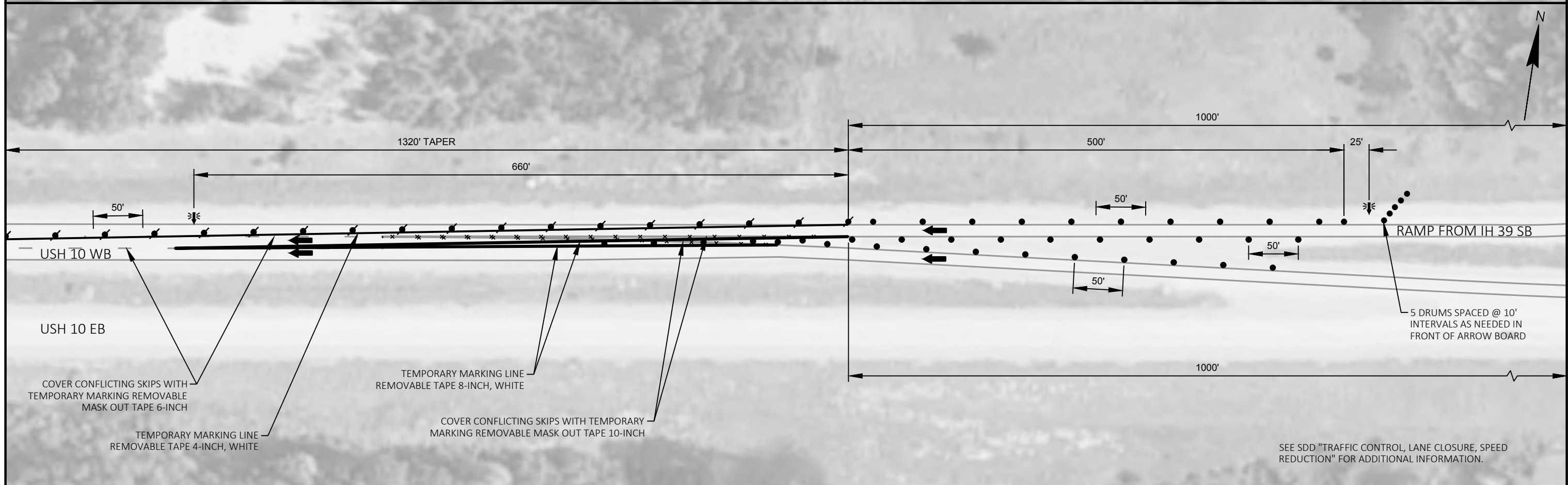
HWY: USH 10

COUNTY: PORTAGE

TRAFFIC CONTROL - B-49-0144 STAGE 1

SHEET

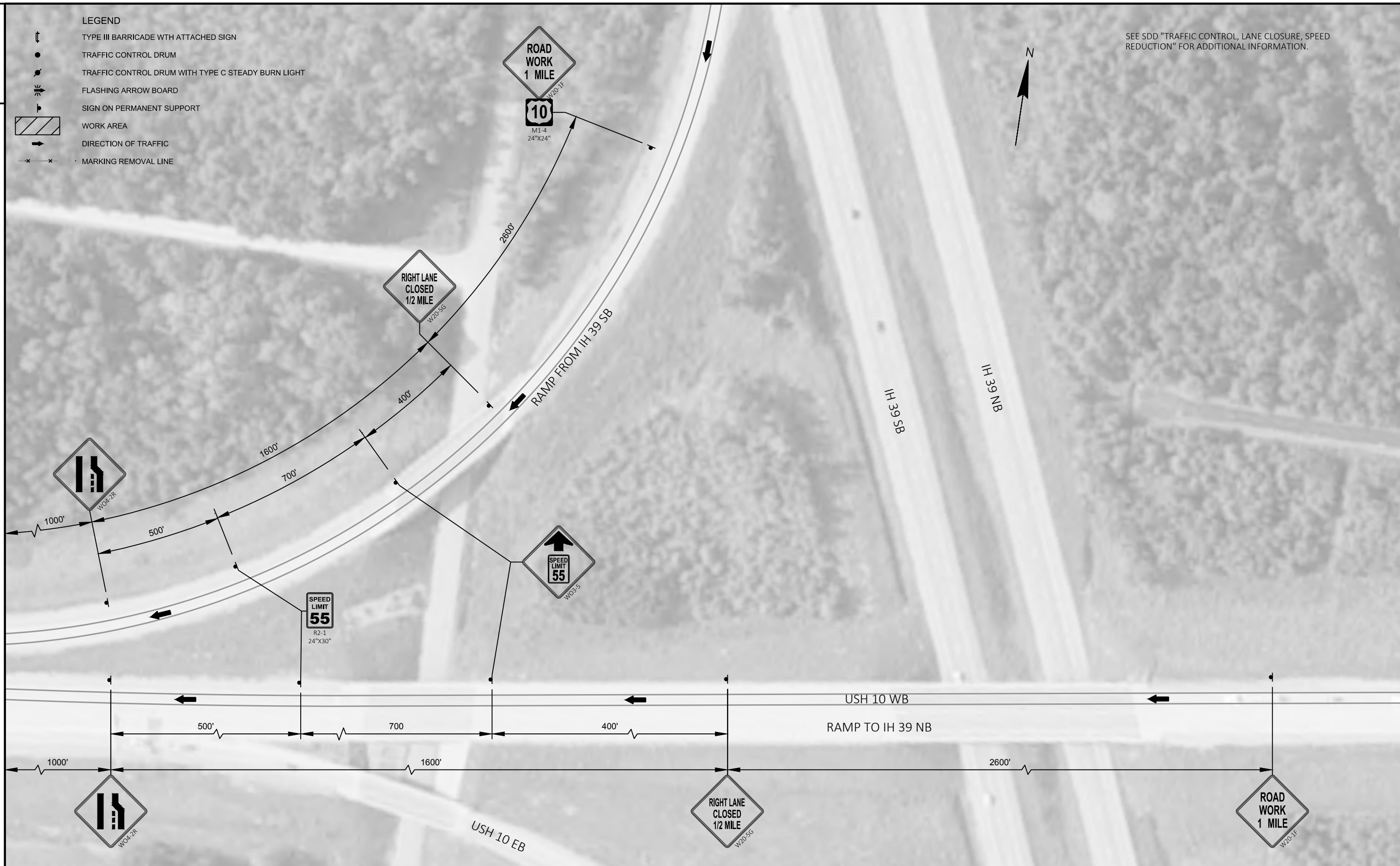
E



LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MARKING REMOVAL LINE

SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" FOR ADDITIONAL INFORMATION.



PROJECT NO: 6350-01-63

HWY: USH 10

COUNTY: PORTAGE

TRAFFIC CONTROL - B-49-0144 STAGE 2

SHEET

E

Estimate Of Quantities

6350-01-63					
Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 6350-01-63	EACH	1.000	1.000
0004	509.5100.S	Polymer Overlay	SY	34,354.000	34,354.000
0006	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6350-01-63	EACH	1.000	1.000
0008	619.1000	Mobilization	EACH	1.000	1.000
0010	628.7010	Inlet Protection Type B	EACH	131.000	131.000
0012	642.5001	Field Office Type B	EACH	1.000	1.000
0014	643.0300	Traffic Control Drums	DAY	26,780.000	26,780.000
0016	643.0420	Traffic Control Barricades Type III	DAY	1,430.000	1,430.000
0018	643.0705	Traffic Control Warning Lights Type A	DAY	2,860.000	2,860.000
0020	643.0715	Traffic Control Warning Lights Type C	DAY	4,220.000	4,220.000
0022	643.0800	Traffic Control Arrow Boards	DAY	360.000	360.000
0024	643.0900	Traffic Control Signs	DAY	3,475.000	3,475.000
0026	643.5000	Traffic Control	EACH	1.000	1.000
0028	646.1020	Marking Line Epoxy 4-Inch	LF	22,880.000	22,880.000
0030	646.9000	Marking Removal Line 4-Inch	LF	11,440.000	11,440.000
0032	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	43,300.000	43,300.000
0034	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	1,420.000	1,420.000
0036	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	285.000	285.000
0038	649.0970	Temporary Marking Removable Mask Out Tape 10-Inch	LF	920.000	920.000
0040	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0042	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

FINISHING ROADWAY	
	213.0100
LOCATION	EACH
PROJECT	1
TOTAL	1

MAINTENANCE AND REPAIR OF HAUL ROADS	
	618.0100
LOCATION	EACH
PROJECT	1
TOTAL	1

MOBILIZATION	
	619.1000
LOCATION	EACH
PROJECT	1
TOTAL	1

EROSION CONTROL	
	628.7010
	INLET
	PROTECTION
	TYPE B
STRUCTURE	EACH
B-49-0141	52
B-49-0142	52
B-49-0143	8
B-49-0144	8
B-49-0160	6
B-49-0161	5
TOTAL	131

TRAFFIC CONTROL ITEMS

LOCATION	DURATION (DAYS)	643.0300		643.0420		643.0705		643.0715		643.0800		643.0900		
		TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL WARNING LIGHTS TYPE C		TRAFFIC CONTROL ARROW BOARDS		TRAFFIC CONTROL SIGNS		
		EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	
STAGE 1														
EASTBOUND	39	145	5,655	8	312	16	624	21	819	2	78	20	780	
WESTBOUND	39	140	5,460	8	312	16	624	17	663	2	78	19	741	
STAGE 1 SUBTOTAL			11,115		624		1,248		1,482		156		1,521	
STAGE 2														
EASTBOUND	42	145	6,090	8	336	16	672	21	882	2	84	20	840	
WESTBOUND	42	170	7,140	8	336	16	672	35	1,470	2	84	19	798	
STAGE 2 SUBTOTAL			13,230		672		1,344		2,352		168		1,638	
UNDISTRIBUTED														
			2,435		134		268		386		36		316	
TOTAL		26,780		1,430		2,860		4,220		360		3,475		

** INFORMATION ONLY

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

FIELD OFFICE TYPE B

	642.5001
LOCATION	EACH
PROJECT	1
TOTAL	1

TRAFFIC CONTROL

	643.5000
LOCATION	EACH
PROJECT	1
TOTAL	1

PAVEMENT MARKING ITEMS

	646.1020		646.9000		649.0150		649.0250		649.0960		649.0970
							TEMPORARY MARKING LINE		TEMPORARY MARKING REMOVABLE MASK OUT TAPE		TEMPORARY MARKING REMOVABLE MASK OUT TAPE
							4-INCH		8-INCH		10-INCH
							WHITE		WHITE		WHITE
LOCATION	MARKING LINE EPOXY 4-INCH YELLOW	MARKING LINE EPOXY 4-INCH WHITE	MARKING REMOVAL LINE 4-INCH	TEMPORARY MARKING REMOVABLE TAPE 4-INCH WHITE	TEMPORARY MARKING REMOVABLE TAPE 4-INCH YELLOW		TEMPORARY MARKING REMOVABLE TAPE 8-INCH WHITE		TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH		TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH
	LF	LF	LF	LF	LF		LF		LF		LF
STAGE 1											
USH 10 EB	--	--	4,540	4,540	5,200		--		--		--
USH 10 WB	--	--	4,540	4,540	4,940		--		--		--
STAGE 1 SUBTOTAL	0	0	9,080	9,080	10,140		0		0		0
STAGE 2											
USH 10 EB	5,200	5,200	660	5,200	4,540		--		--		--
USH 10 WB	5,200	5,200	660	5,860	4,540		1,290		210		870
STAGE 2 SUBTOTAL	10,400	10,400	1,320	11,060	9,080		1,290		210		870
UNDISTRIBUTED											
	1,040	1,040	1,040	2,015	1,925		130		75		50
TOTAL	22,880		11,440	43,300			1,420		285		920

PROJECT NO: 6350-01-63

HWY: USH 10

COUNTY: PORTAGE

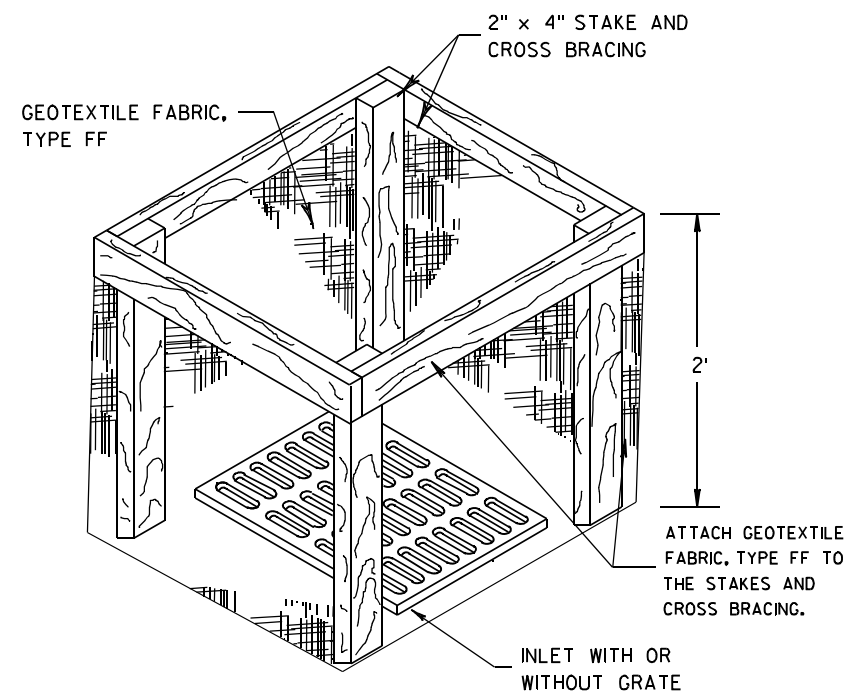
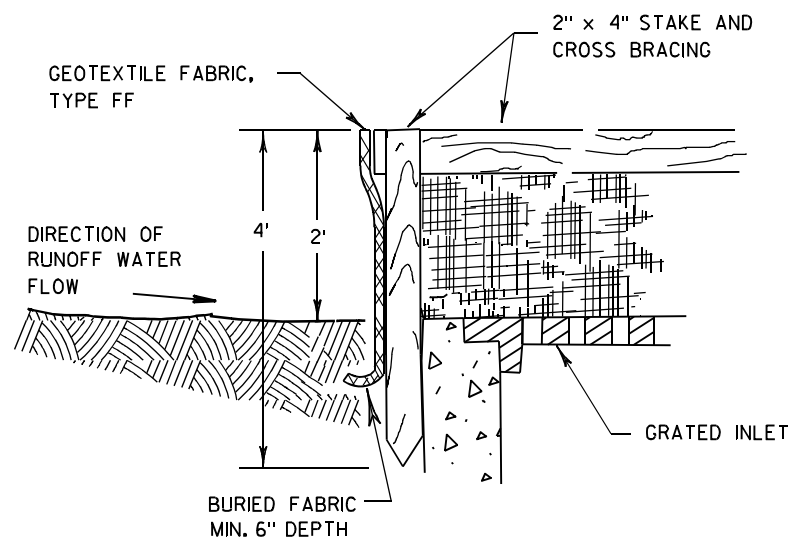
MISCELLANEOUS QUANTITIES

SHEET

E

Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C31-03C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D12-07B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



INLET PROTECTION, TYPE A

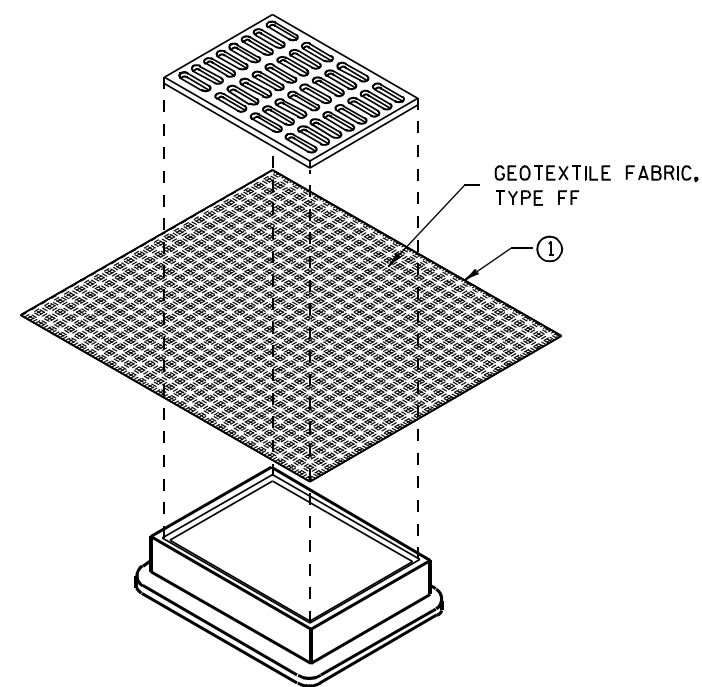
GENERAL NOTES

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.

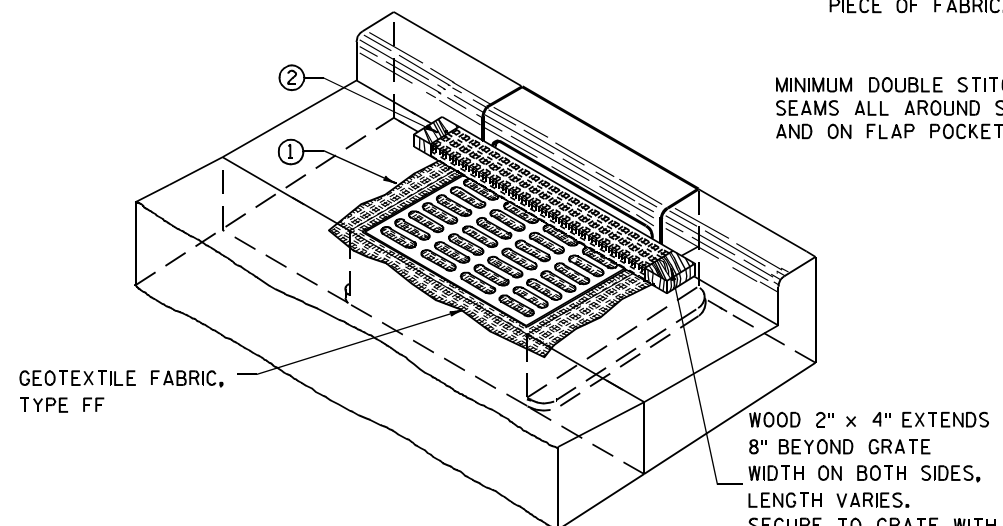
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

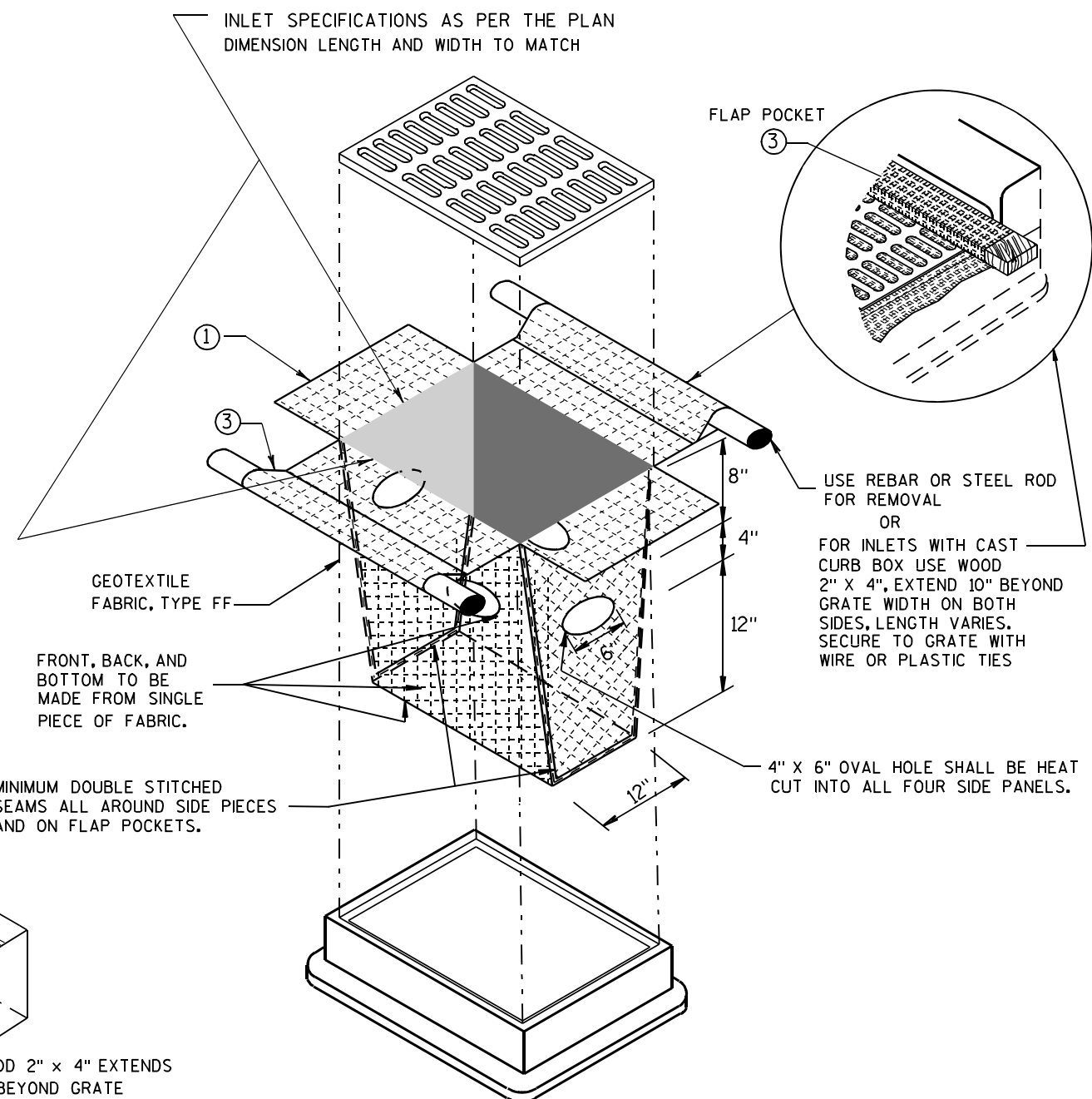
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



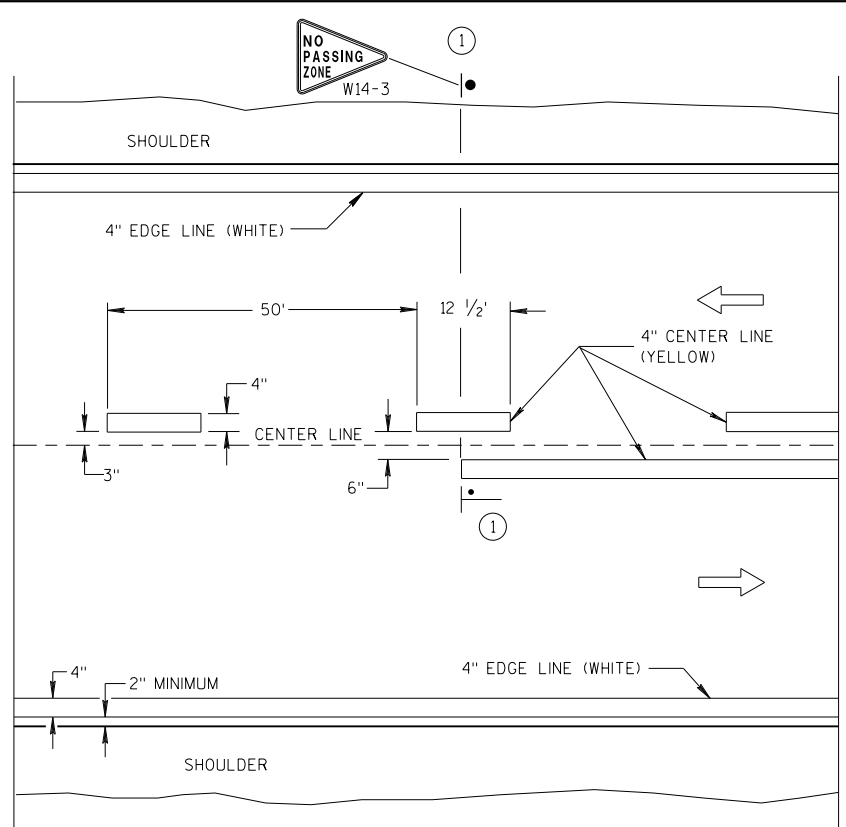
INLET PROTECTION, TYPE D

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

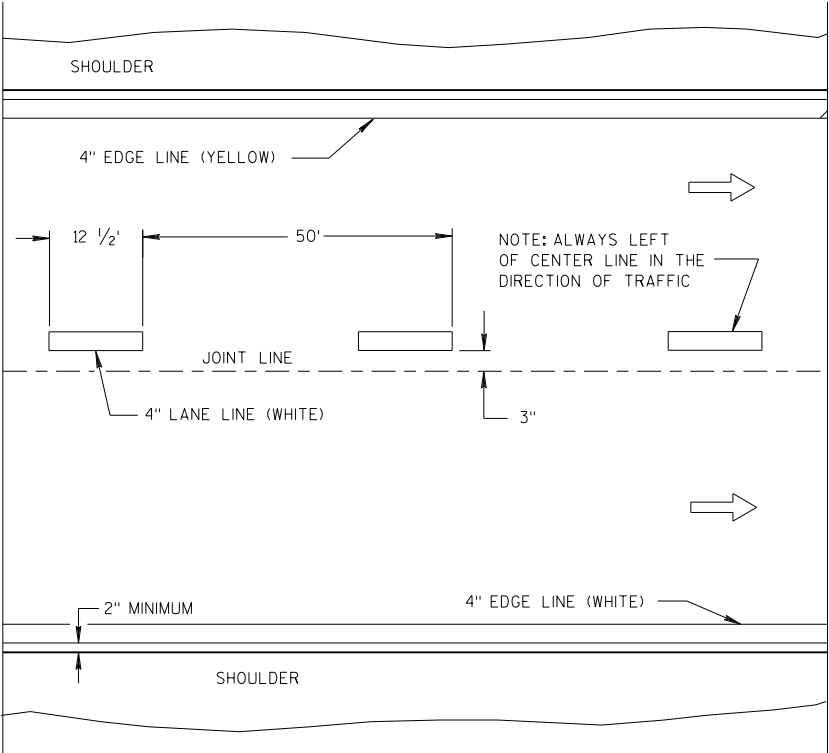
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

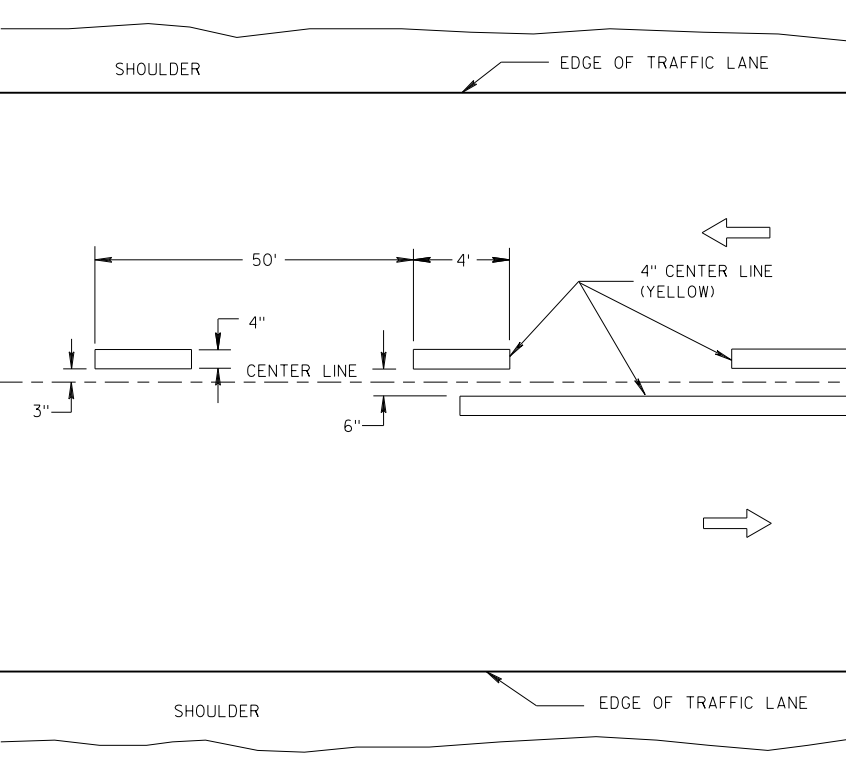


TWO WAY TRAFFIC

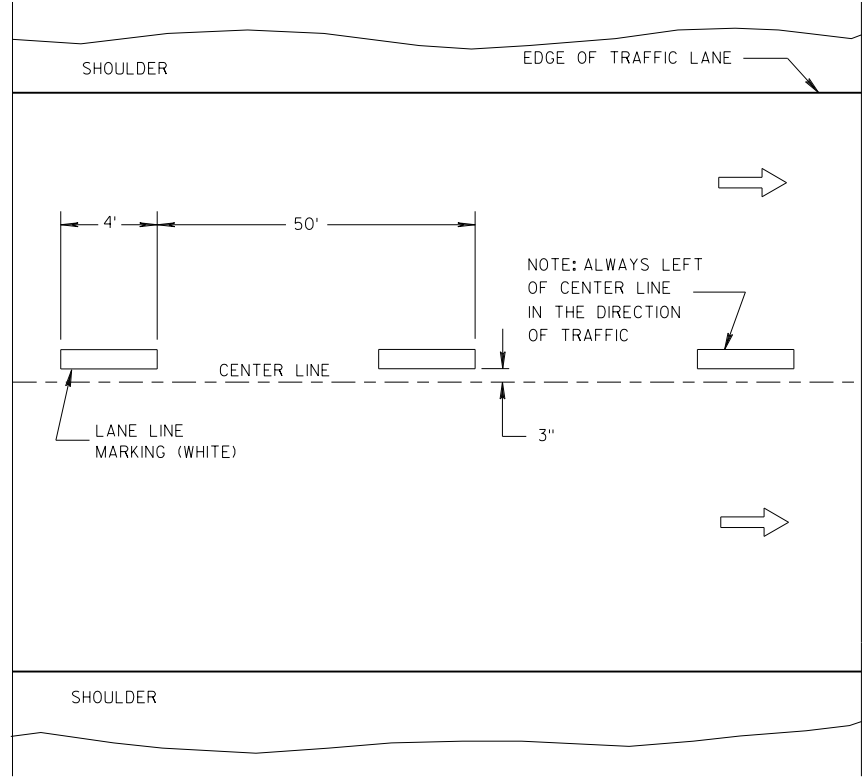


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

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.

NOTE

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

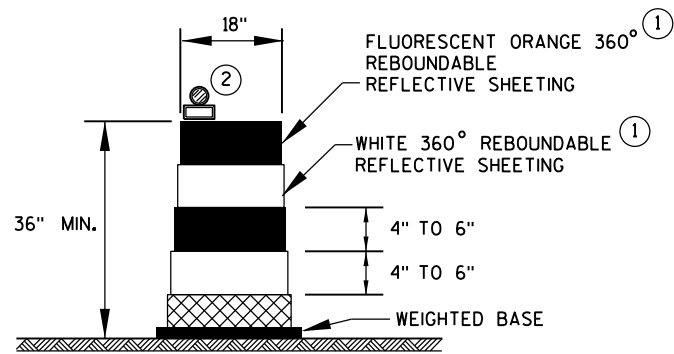
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

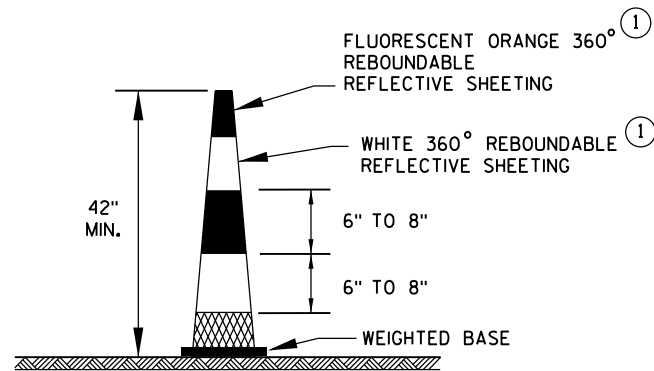
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA



DRUM

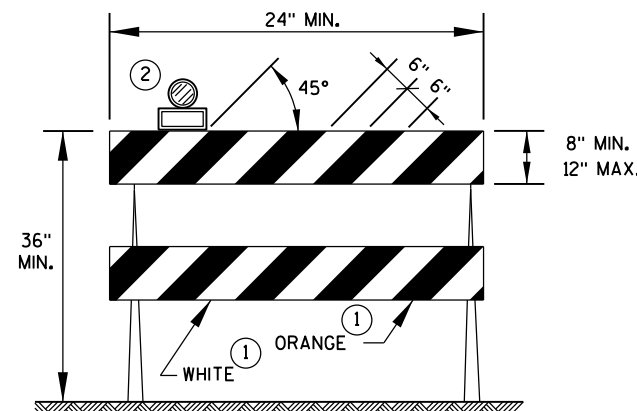


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

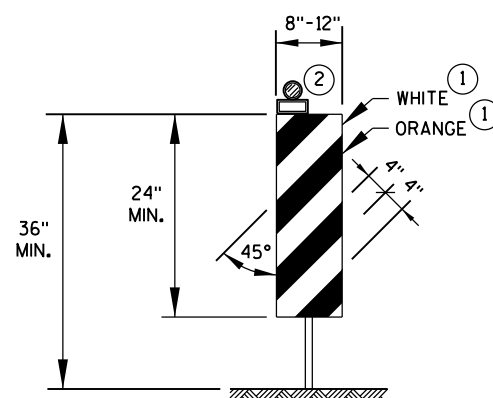
GENERAL NOTES

- 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.



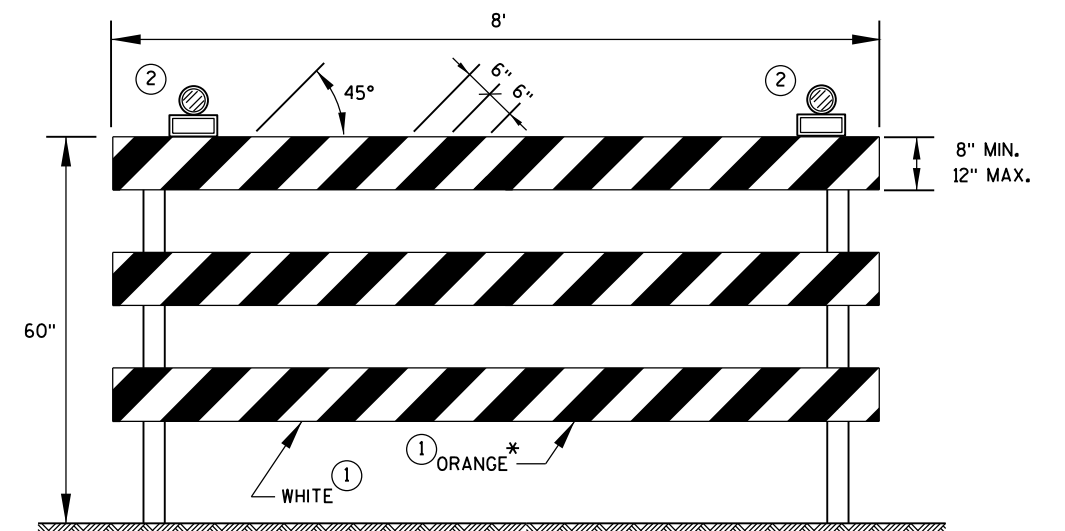
TYPE 2 BARRICADE

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



VERTICAL PANEL

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



TYPE 3 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

June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

① 1/2 LENGTH OF FULL WIDTH ACCELERATION LANE.

PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

➡ DIRECTION OF TRAVEL

SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

**PAVEMENT MARKING FOR
PARALLEL ON-RAMP AND
PARALLEL OFF-RAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

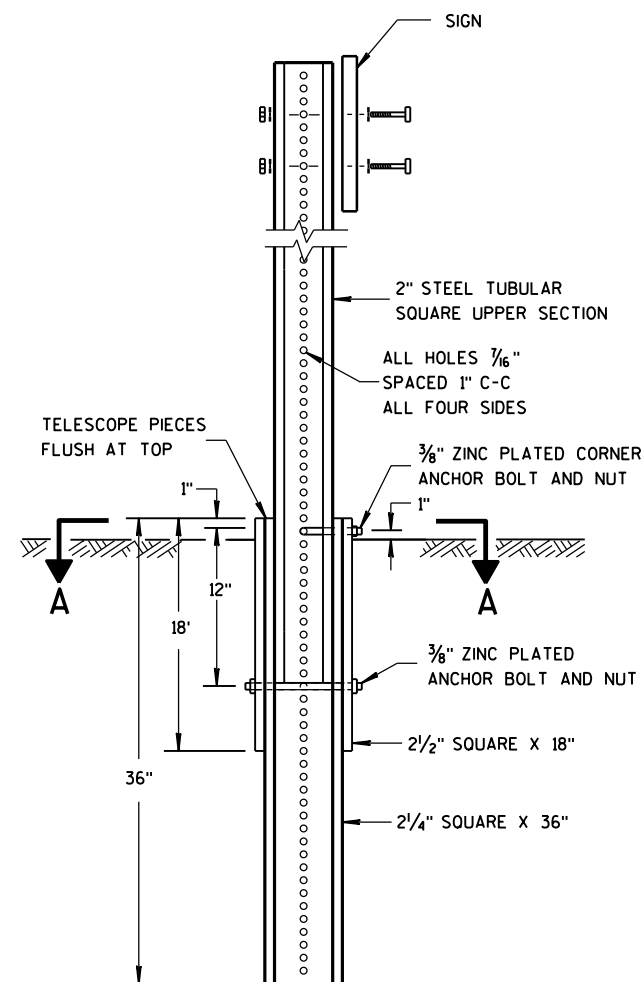
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD

TRAFFIC CONTROL,
LANE CLOSURE,
SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

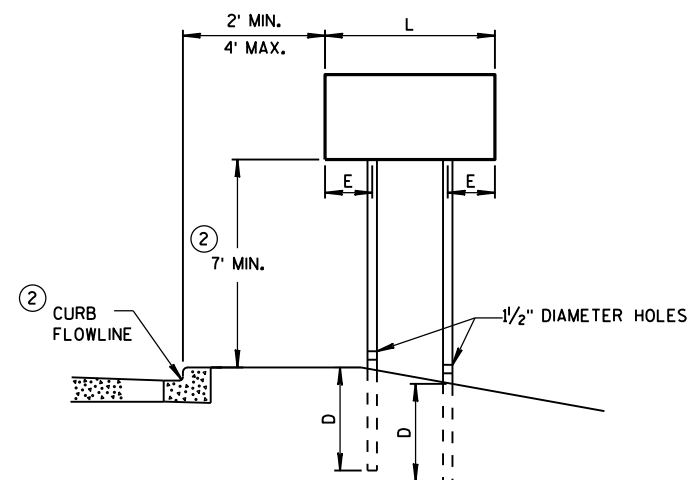
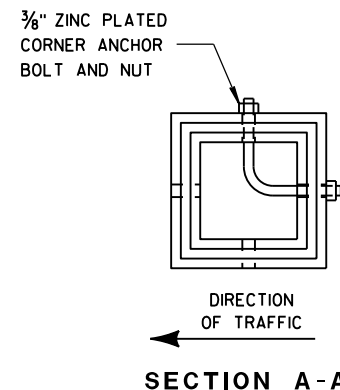


DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

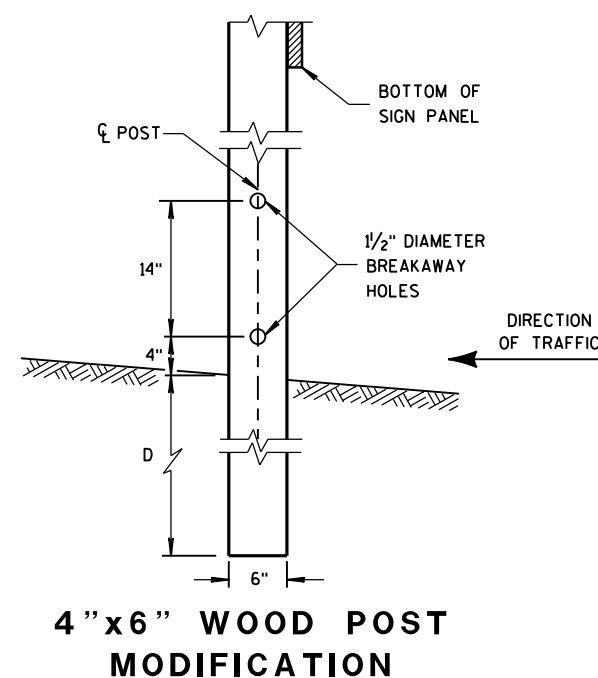
SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL
BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED
ON TUBULAR STEEL POSTS.



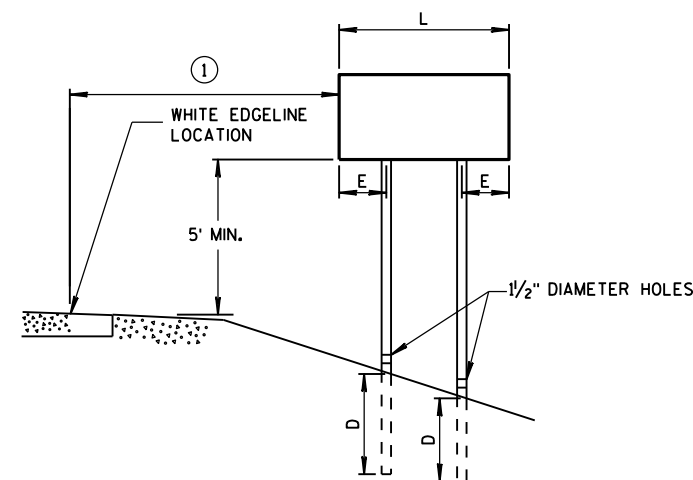
URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH	
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4 "x6 " WOOD POST
MODIFICATION



RURAL AREA

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

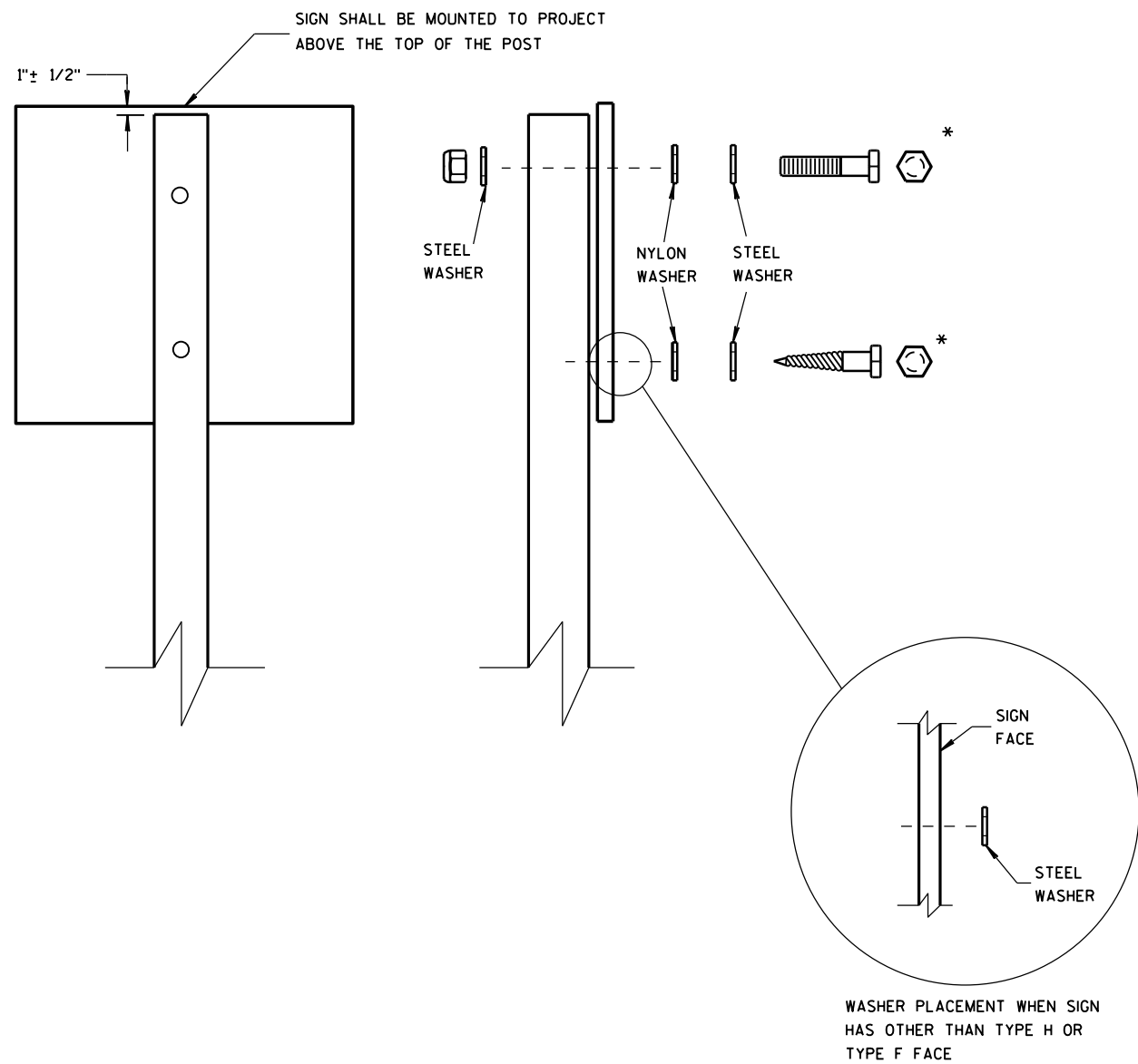
SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② 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. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGINEER
FHWA	

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

DESIGN DATA

LIVE LOAD:

INVENTORY RATING: HS-28

OPERATING RATING: HS-51

MAXIMUM STANDARD PERMIT VEHICLE LOAD: 250 KIPS

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	11,293

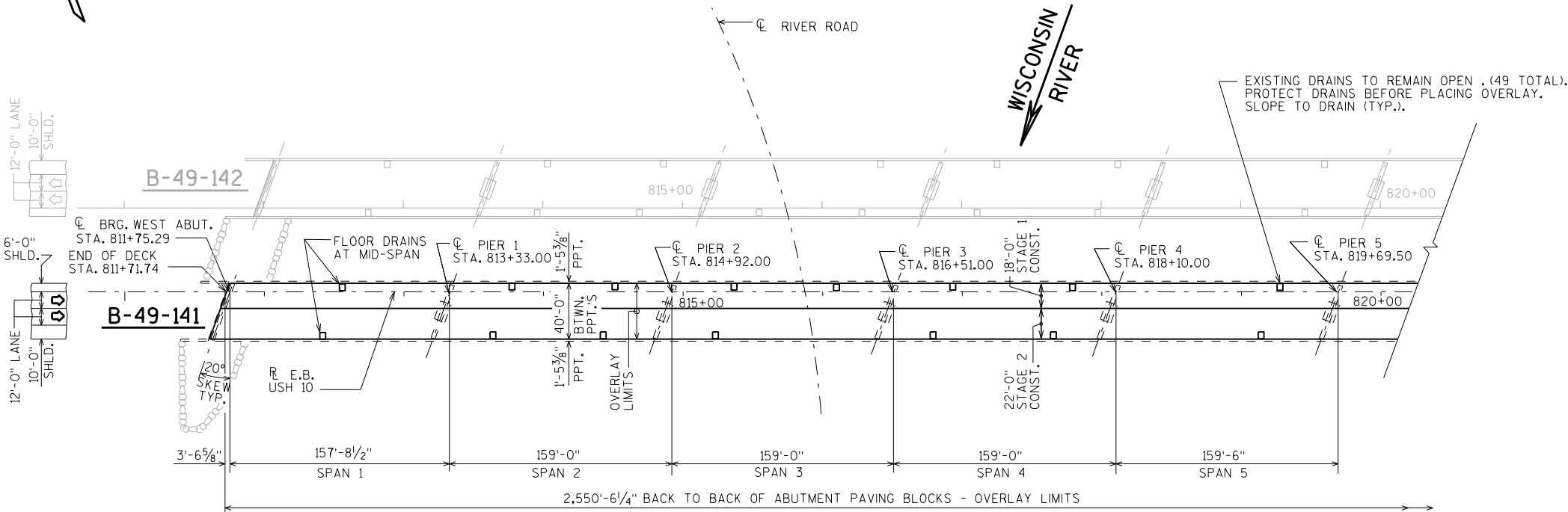
STRUCTURE DESIGN CONTACTS:

MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592

LIST OF DRAWINGS

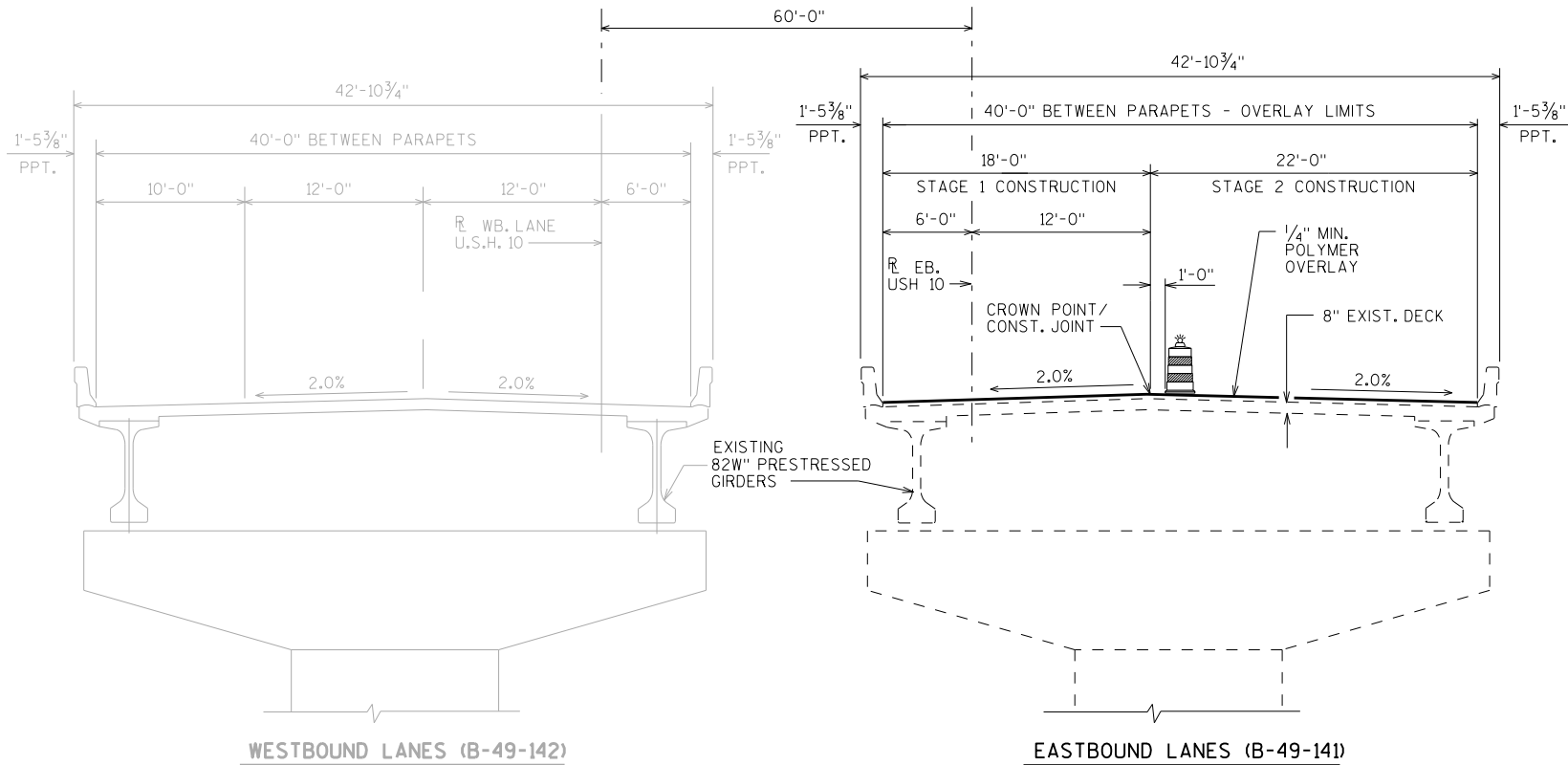
- POLYMER OVERLAY (SPANS 1 THRU 5)
- POLYMER OVERLAY (SPANS 6 THRU 11)
- POLYMER OVERLAY (SPANS 12 THRU 16)

NO.	DATE	REVISION	BY
 WISCONSIN DEPARTMENT OF TRANSPORTATION BUREAU OF STRUCTURES ACCEPTED <i>William C. Dreher</i> ^{LLS} 3/1/19 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-49-141			
USH 10 E.B. OVER WISCONSIN RIVER			
COUNTY	PORTAGE	TOWN/CITY/VILLAGE	EAU PLEINE
DESIGN SPEC. N/A REHABILITATION			
DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
MJL	JDM	WWR	MJL
POLYMER OVERLAY (SPANS 1 THRU 5)			SHEET 1 OF 3



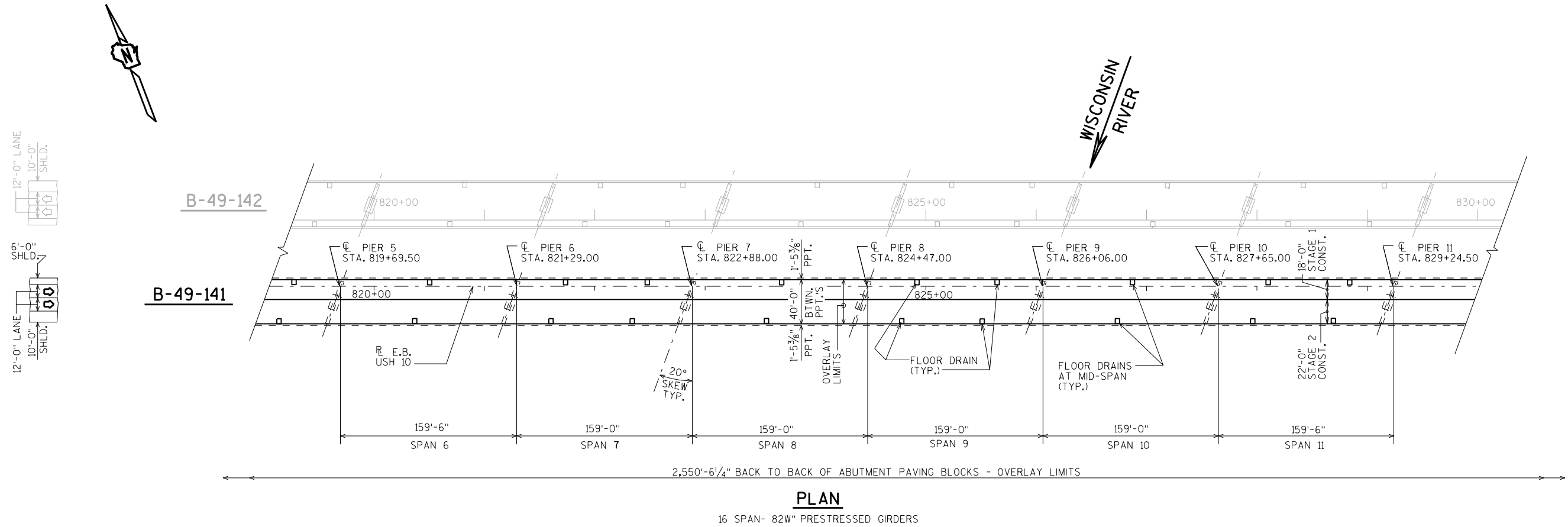
PLAN

16 SPAN- 82W" PRESTRESSED GIRDERS

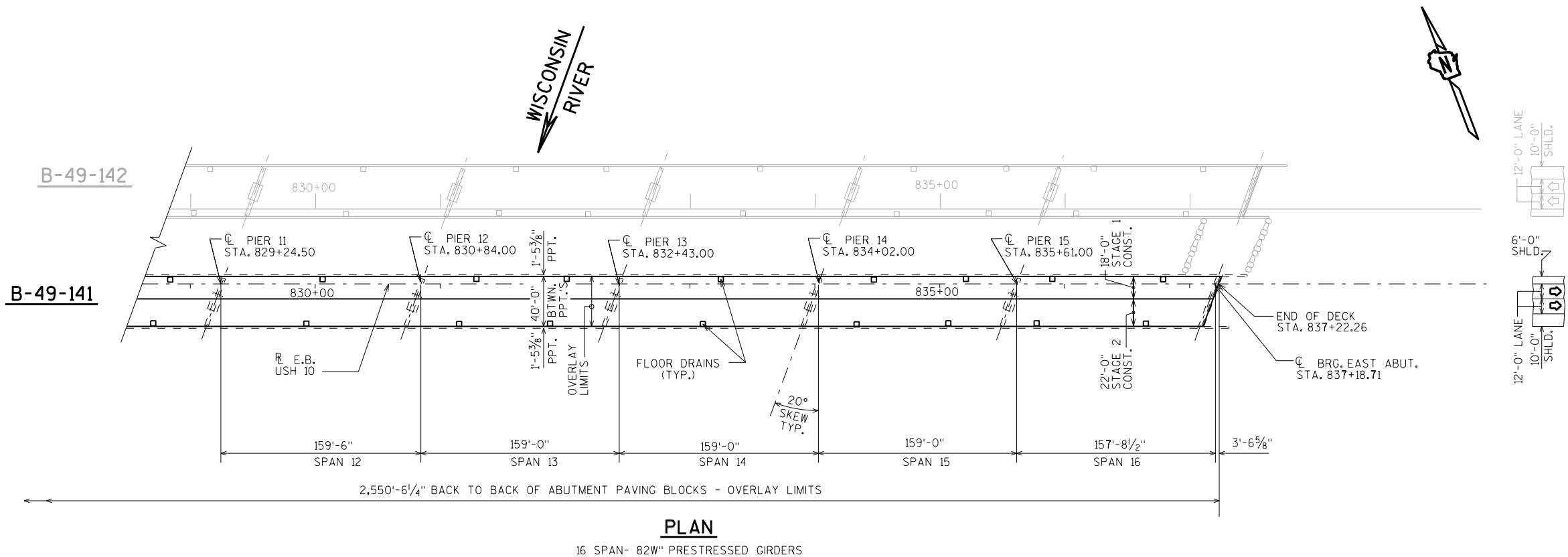


CROSS SECTION THRU BRIDGE LOOKING EAST

TRAFFIC CONTROL DRUM LOCATION SHOWN FOR STAGE 1 CONSTRUCTION.
(SIMILAR FOR STAGE 2 CONSTRUCTION)



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-49-141			
		DRAWN BY WWR	PLANS CK'D. MJL
POLYMER OVERLAY (SPANS 6 THRU 11)		SHEET 2	



PLAN

16 SPAN- 82W" PRESTRESSED GIRDERS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-49-141			
		DRAWN BY	WWR
		PLANS CK'D.	MJL
POLYMER OVERLAY (SPANS 12 THRU 16)		SHEET 3	

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

DESIGN DATA

LIVE LOAD:
INVENTORY RATING: HS-28
OPERATING RATING: HS-51
MAXIMUM STANDARD PERMIT VEHICLE LOAD: 250 KIPS

TOTAL ESTIMATED QUANTITIES

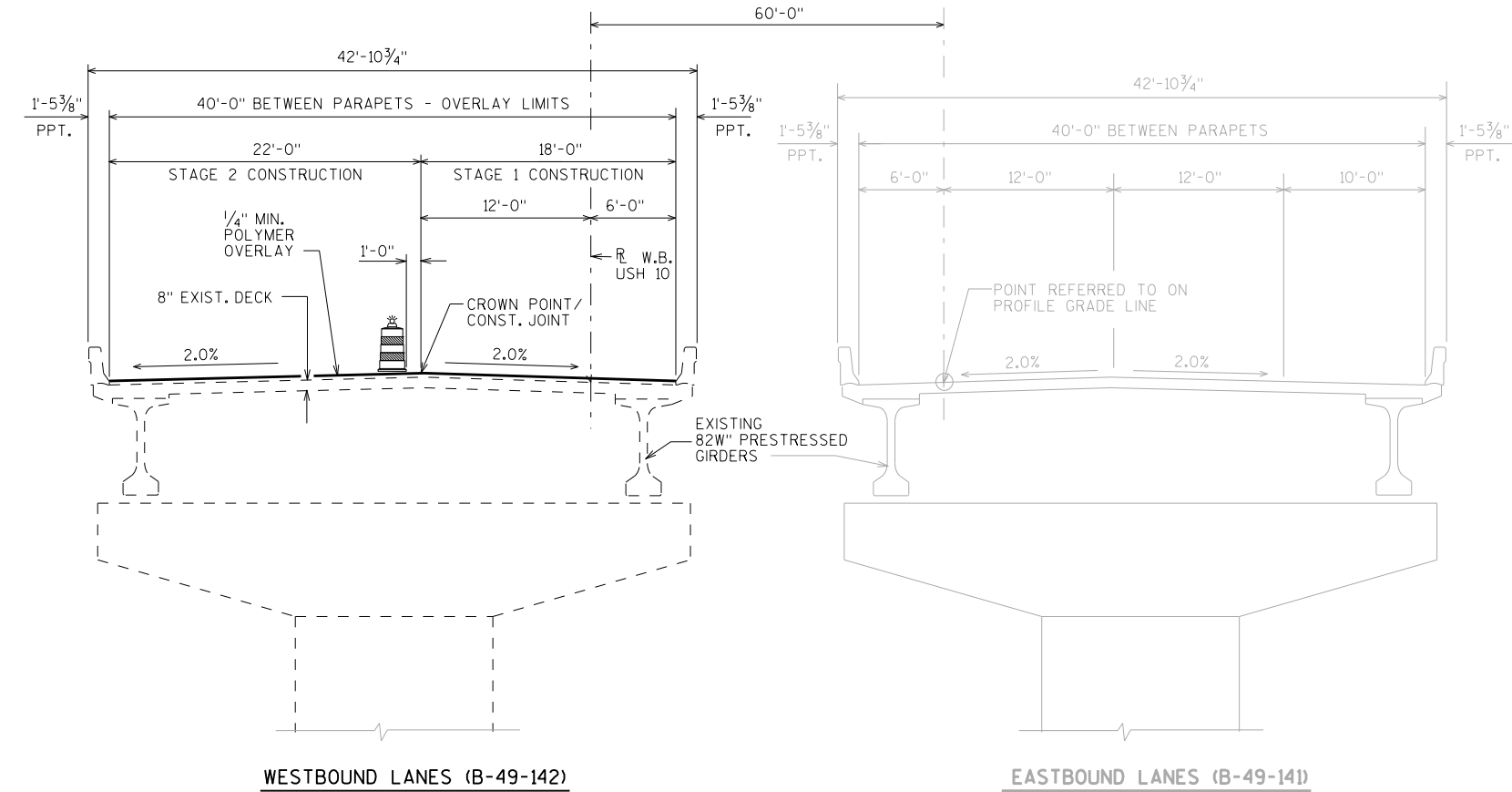
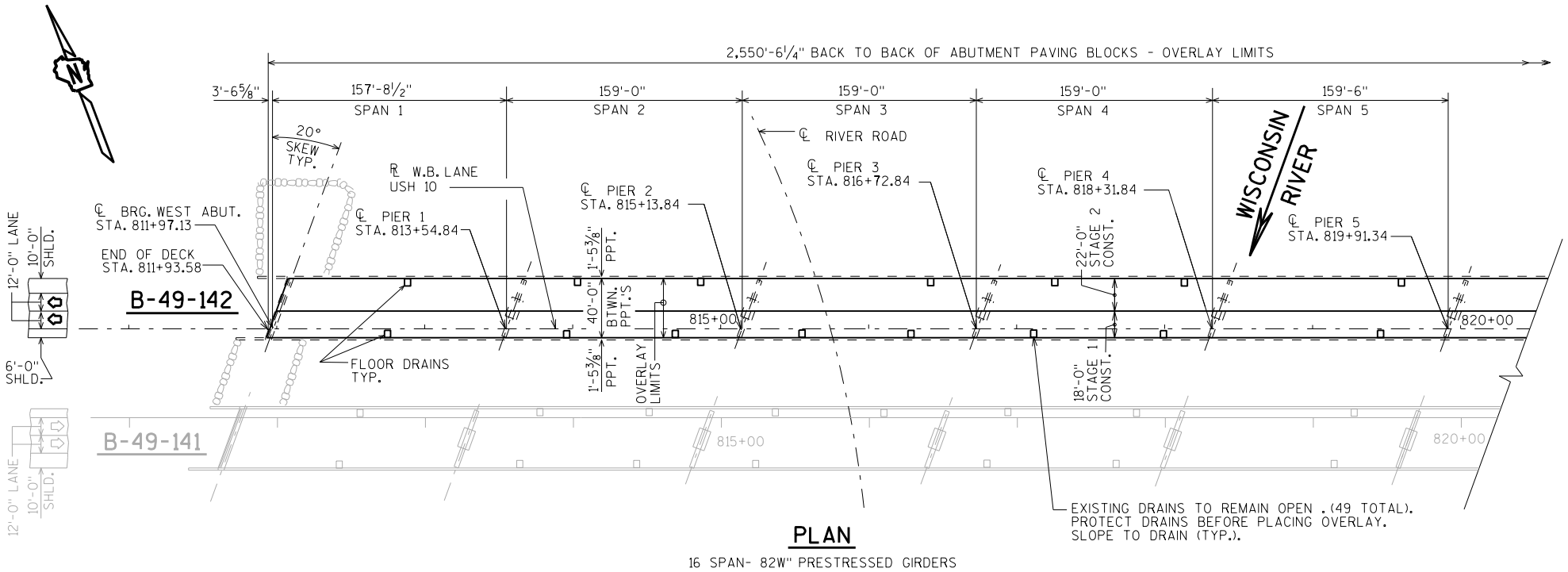
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509,5100.S	POLYMER OVERLAY	SY	11,293

STRUCTURE DESIGN CONTACTS:
MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592

LIST OF DRAWINGS

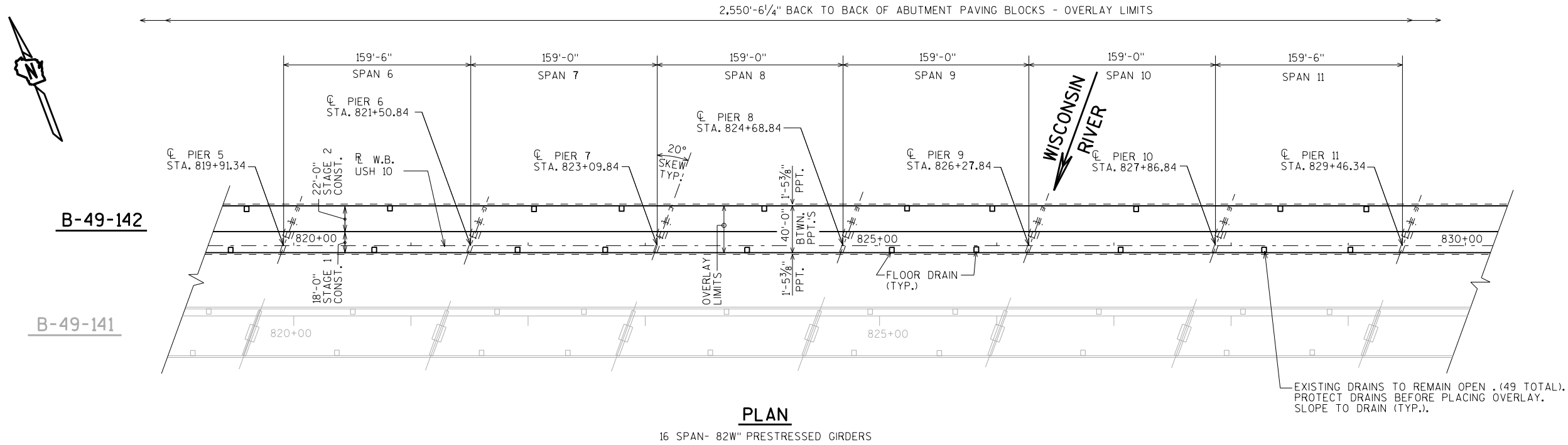
1. POLYMER OVERLAY (SPANS 1 THRU 5)
2. POLYMER OVERLAY (SPANS 6 THRU 11)
3. POLYMER OVERLAY (SPANS 12 THRU 16)

NO.	DATE	REVISION	BY
 WISCONSIN DEPARTMENT OF TRANSPORTATION BUREAU OF STRUCTURES ACCEPTED <i>William C. Diehn</i> LLS 3/1/19 CHIEF STRUCTURES DESIGN ENGINEER DATE STRUCTURE B-49-142 USH 10 W.B. OVER WISCONSIN RIVER COUNTY PORTAGE TOWN/CITY/VILLAGE EAU PLEINE DESIGN SPEC. N/A REHABILITATION DESIGNED BY MJL DESIGNED CK'D. JDM DRAWN BY WWR PLANS CK'D. MJL POLYMER OVERLAY (SPANS 1 THRU 5) SHEET 1 OF 3			

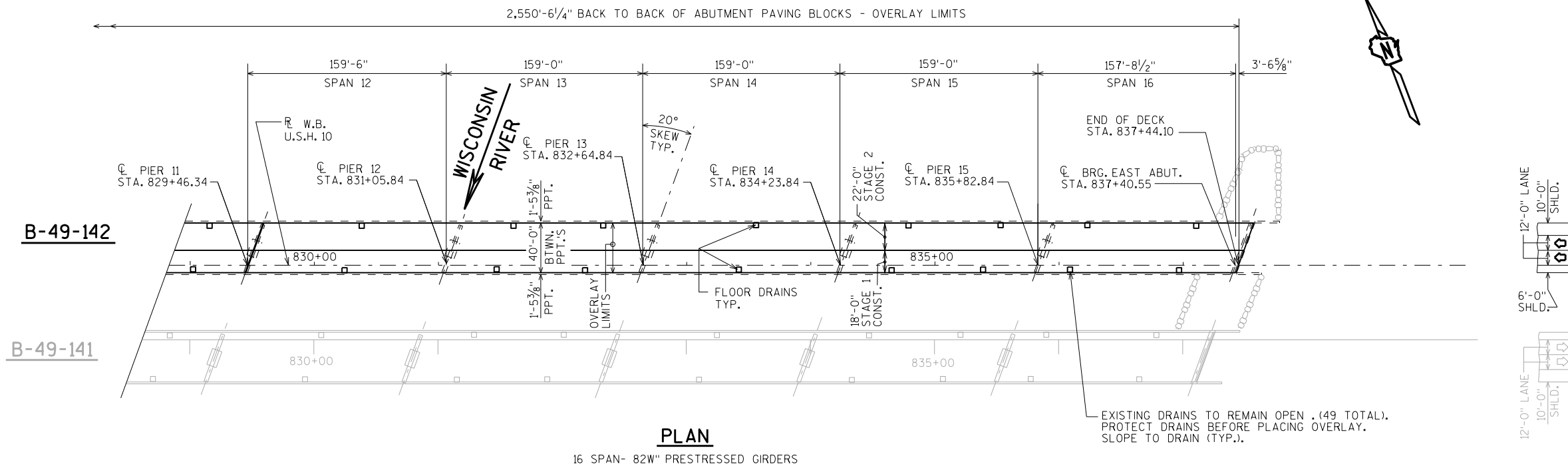


CROSS SECTION THRU BRIDGE LOOKING EAST

TRAFFIC CONTROL DRUM LOCATION SHOWN FOR STAGE 1 CONSTRUCTION.
(SIMILAR FOR STAGE 2 CONSTRUCTION)



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-49-142			
DRAWN BY WWR		PLANS CK'D. MJL	
POLYMER OVERLAY (SPANS 6 THRU 11)			SHEET 2



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-49-142			
DRAWN BY WWR		PLANS CK'D. MJL	
POLYMER OVERLAY (SPANS 12 THRU 16)		SHEET 3	

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

MAXIMUM STANDARD PERMIT VEHICLE LOAD: 250 KIPS



BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	1853



1. POLYMER OVERLAY

MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592

SCALE = 22.00

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



MAXIMUM STANDARD PERMIT VEHICLE LOAD: 250 KIPS

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	1853



1. POLYMER OVERLAY

MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION		BY
		BUREAU OF STRUCTURES		
ACCEPTED <i>William C. Diehn</i> ^{LS}		3/1/19		
CHIEF STRUCTURES DESIGN ENGINEER		DATE		
STRUCTURE B-49-144				
USH 10 W.B. OVER WETLANDS				
COUNTY	PORTAGE		TOWN/CITY/VILLAGE	HULL
DESIGN SPEC. N/A REHABILITATION				
DESIGNED BY	MJL	DESIGNED CK'D.	JDM	DRAWN BY
		WWR	PLANS CK'D.	MJL
POLYMER OVERLAY			SHEET 1 OF 1	

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



MAXIMUM STANDARD PERMIT VEHICLE LOAD: 250 KIPS

BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL
509.5100.S	POLYMER OVERLAY	SY	4031



1. POLYMER OVERLAY

MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592

[illegible]

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	4031

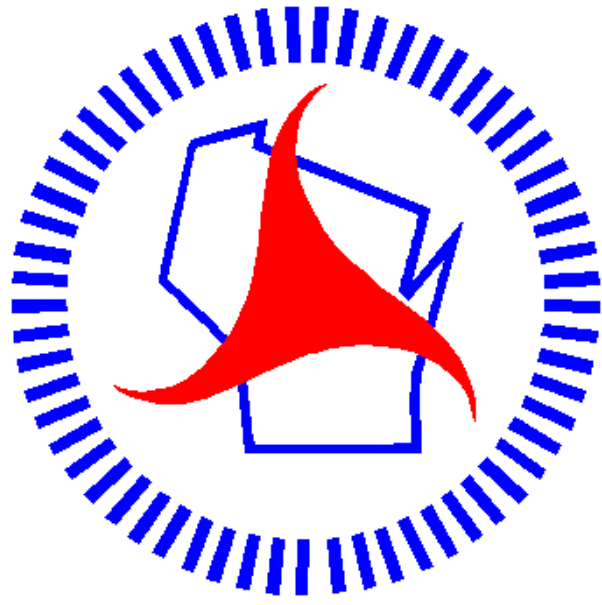


1. POLYMER OVERLAY

MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION						BY	
		BUREAU OF STRUCTURES							
ACCEPTED		<i>William C. Dreher</i> LL.S.						3/1/19	
		CHIEF STRUCTURES DESIGN ENGINEER						DATE	
STRUCTURE B-49-161									
USH 10 W.B. OVER CTH E AND UNNAMED TRIBUTARY									
COUNTY	PORTAGE				TOWN/CITY/VILLAGE		EAU PLEINE		
DESIGN SPEC. N/A REHABILITATION									
DESIGNED BY	MJL	DESIGNED CK'D.	JDM	DRAWN BY	WWR	PLANS CK'D.	MJL		
POLYMER OVERLAY						SHEET 1 OF 1			

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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