

STATE HIGHWAY REHABILITATION - MAINTENANCE PROJECT

**BRIDGE DECK SEALING (VARIOUS BRDGS)**

STATE PROJECT NUMBER  
**1190-10-82**

### BRIDGE DECK SEALING (VARIOUS BRDGS)

STATE PROJECT NUMBER  
**1190-10-83**

### BRIDGE DECK SEALING (VARIOUS BRDGS)

## BARRON, DOUGLAS & WASHBURN COUNTY

STATE PROJECT NUMBER  
**1190-10-84**

END PROJECT ID 1190-10-82

END PROJECT ID 1190-10-83

BEGIN PROJECT ID 1190-10-83

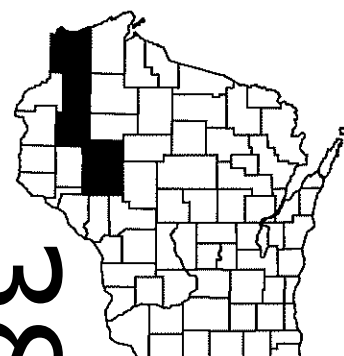
LAYOUT

SCALE 0 20.0 MI.

### 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
<del>Section No. 4</del>	<del>Right of Way Plan</del>
<del>Section No. 5</del>	<del>Plan and Profile</del>
Section No. 6	Standard Detail Drawings
<del>Section No. 7</del>	<del>Sign Plates</del>
<del>Section No. 8</del>	<del>Structure Plans</del>
<del>Section No. 9</del>	<del>Computer Earthwork Data</del>
<del>Section No. 9</del>	<del>Cross Sections</del>

TOTAL SHEETS = 24






DESIGN DESIGNATION

A.A.D.T.	=	N/A
A.A.D.T.	=	N/A
D.H.V.	=	N/A
D.D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	N/A
ESALS	=	N/A

### CONVENTIONAL SYMBOLS

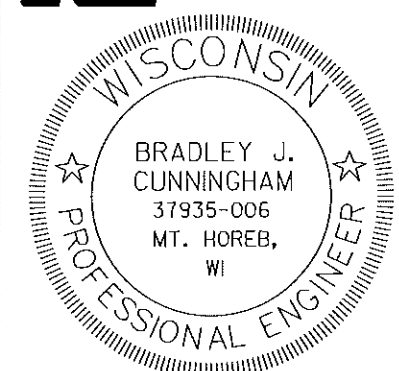
PLAN  
CORPORATE LIMITS  
REFERENCE LINE

## COMBUSTIBLE FLUIDS

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

ORIGINAL PLANS PREPARED BY

**KL Engineering**  
[A] Better Experience



12-14-2016 Bradley Wright  
(Date) (Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY	N/A
Surveyor	KL ENGINEERING / WISDOT
Designer	MOHAMAD HAYEK
Project Manager	TOU YANG
Regional Examiner	MARK FLOEDERER
Regional Supervisor	

APPROVED FOR THE DEPARTMENT  
DATE: 12/14/16 *[Signature]*  
(Signature)

**E**

AREA CONTACTS

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WCL (CN) CALL BEFORE YOU DIG 1-734-783-4533

UP CALL BEFORE YOU DIG 1-800-336-9193

GENERAL NOTES

- 1) WORK CONSISTS OF PREPARATION OF UPPER SIDE OF CONCRETE DECK, PARAPET SURFACE, AND PIER COLUMNS AND APPLICATION OF CONCRETE PROTECTIVE SURFACE TREATMENT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- 2) THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR WILL COORDINATE 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.
- 3) USH 53 WILL BE KEPT OPEN TO A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.
- 4) LANE CLOSURES WILL ONLY BE ALLOWED DURING TIMES SPECIFIED IN THE SPECIAL PROVISIONS.
- 5) SIGNS AND DEVICES WILL BE IN CONFORMANCE WITH THE WI MANUAL OF TRAFFIC CONTROL DEVICES (WMUTCD).
- 6) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES WILL BE ADJUSTED TO FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

RAILROAD NOTES

RAILROAD INSURANCE AND COORDINATION REQUIRED FOR ANY AND ALL WORK ON STRUCTURES THAT SPAN PROPERTY OWNED BY RAILROAD COMPANIES. WORK UNDER THIS CONTRACT INVOLVES WORK ON THE UPPER SIDE OF STRUCTURES THAT SPAN PROPERTY OWNED BY THE FOLLOWING RAILROAD COMPANIES. SEE SPECIAL PROVISIONS FOR CONTRACT INFORMATION.

- UNION PACIFIC RAILROAD COMPANY
- WISCONSIN CENTRAL LTD

DECK NOTES

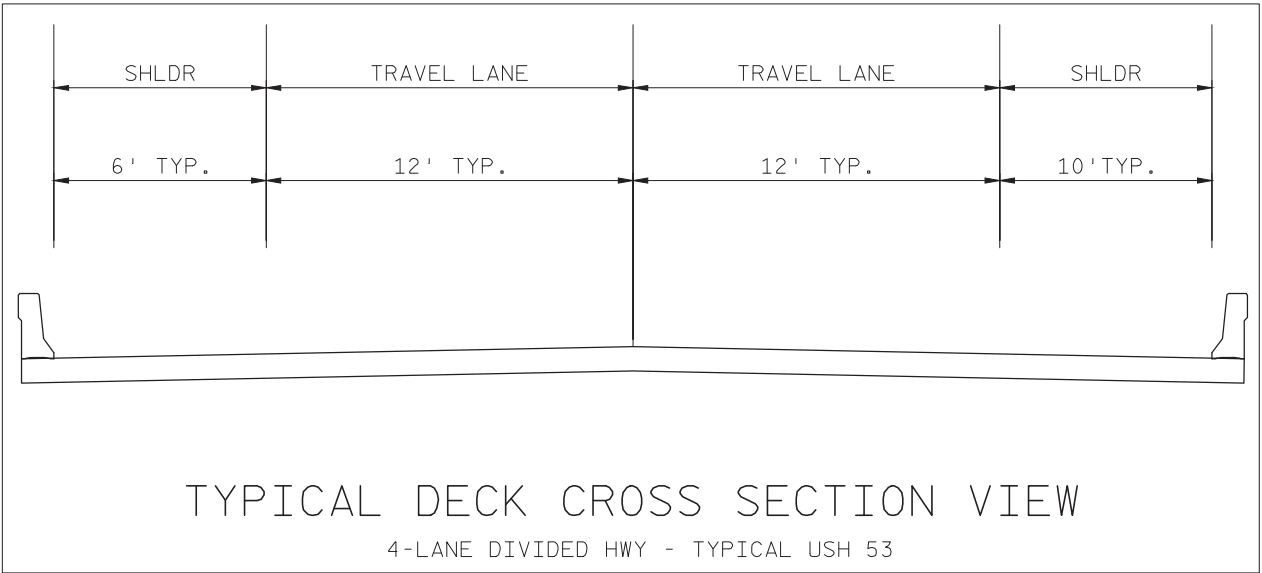
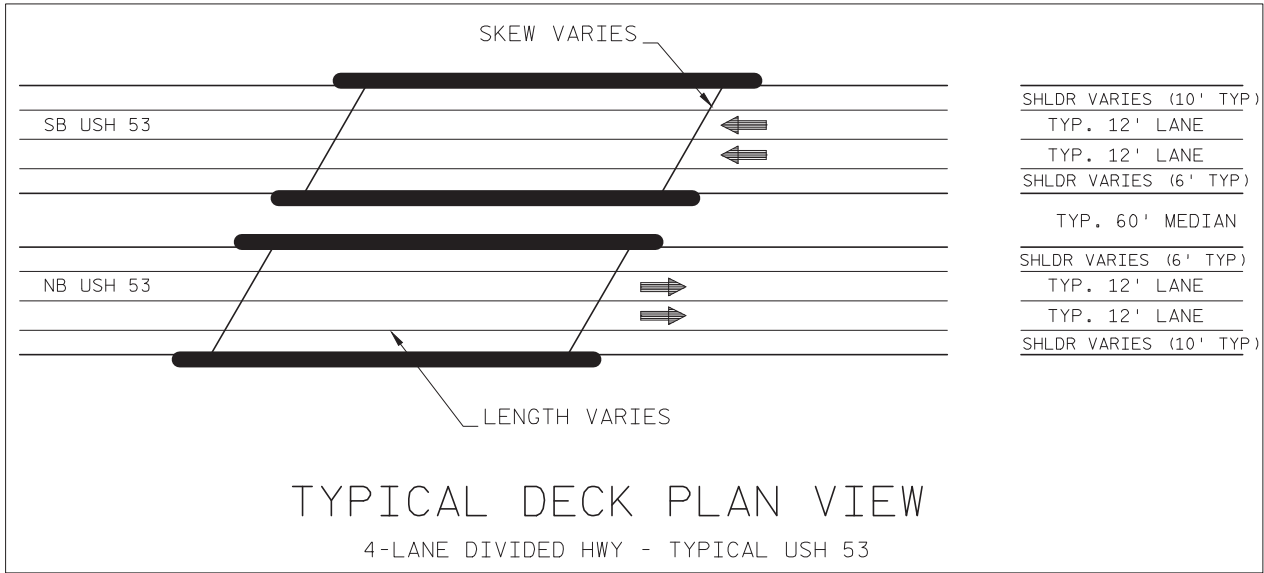
- ENTIRE DECK SURFACE TO BE CLEANED AND SEALED.
- INLET PROTECTION REQUIRED DURING CLEANING AND SEALING WORK ON THE STRUCTURES WITH FLOOR DRAINS.
- USE TYPE FF FABRIC DURING CLEANING ACTIVITIES.
- USE IMPERVIOUS FABRIC DURING SEALING ACTIVITIES.

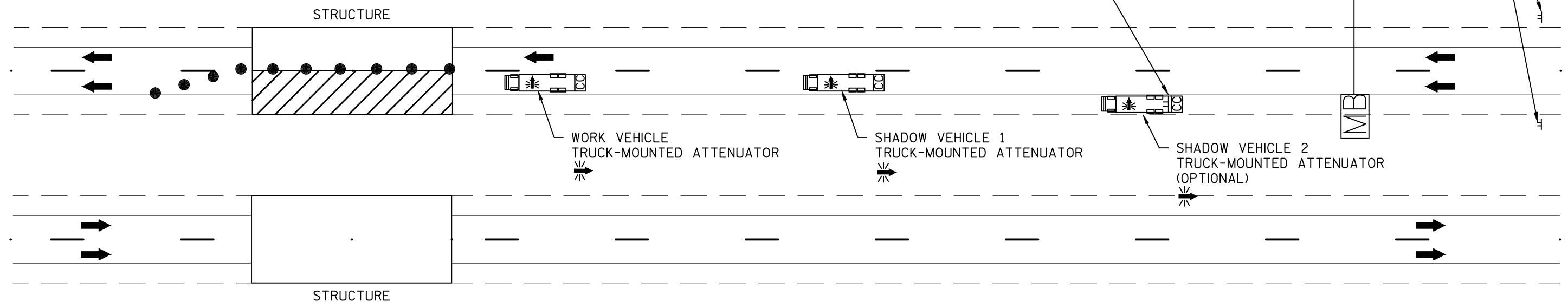
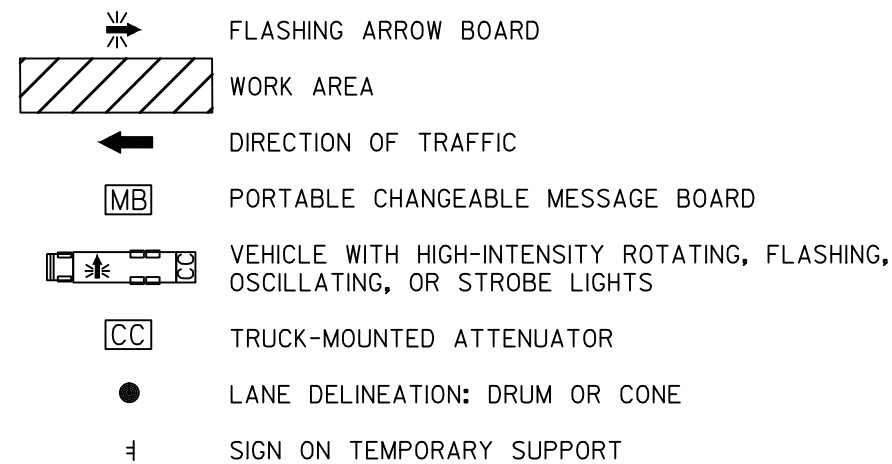
PIER COLUMN NOTES

- PIER COLUMN SEALING ESTIMATED QUANTITY IS BASED ON A 10-FT COLUMN HEIGHT FOR EACH COLUMN ON EACH PIER.

PARAPET NOTES

- INSIDE FACE AND TOP TO BE CLEANED AND SEALED.
- TOP SURFACE TO BE ROLLER OR BRUSHED.
- PARAPET TYPE AND HEIGHT VARIES.
- SURFACE AREA INCLUDED IN QUANTITY SUMMARY.
- AVG 2'-6" HEIGHT USED FOR QUANTITY ESTIMATE.





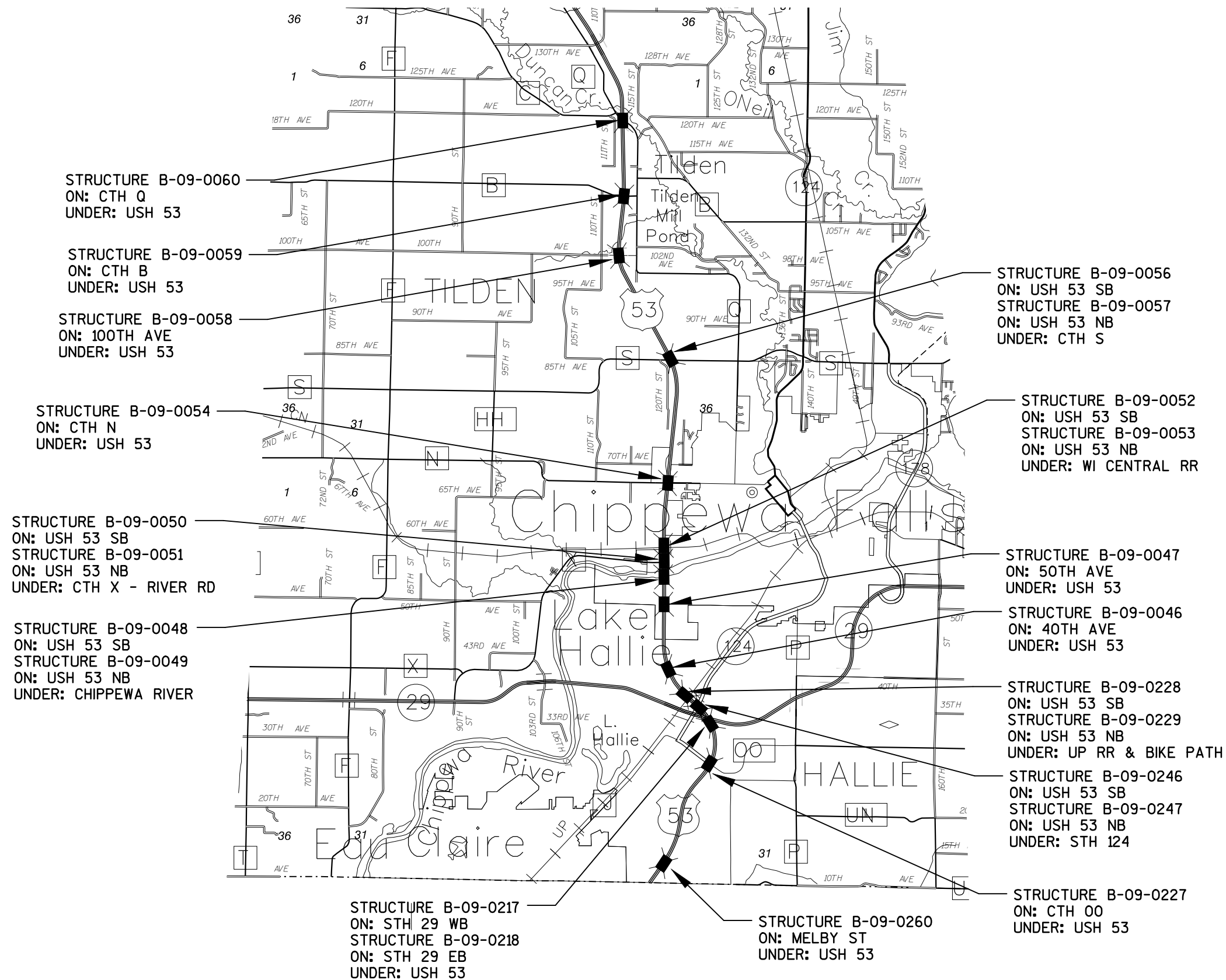
\*NOTE:  
MB SHALL BE ON SAME SIDE  
AS THE LANE CLOSURE.

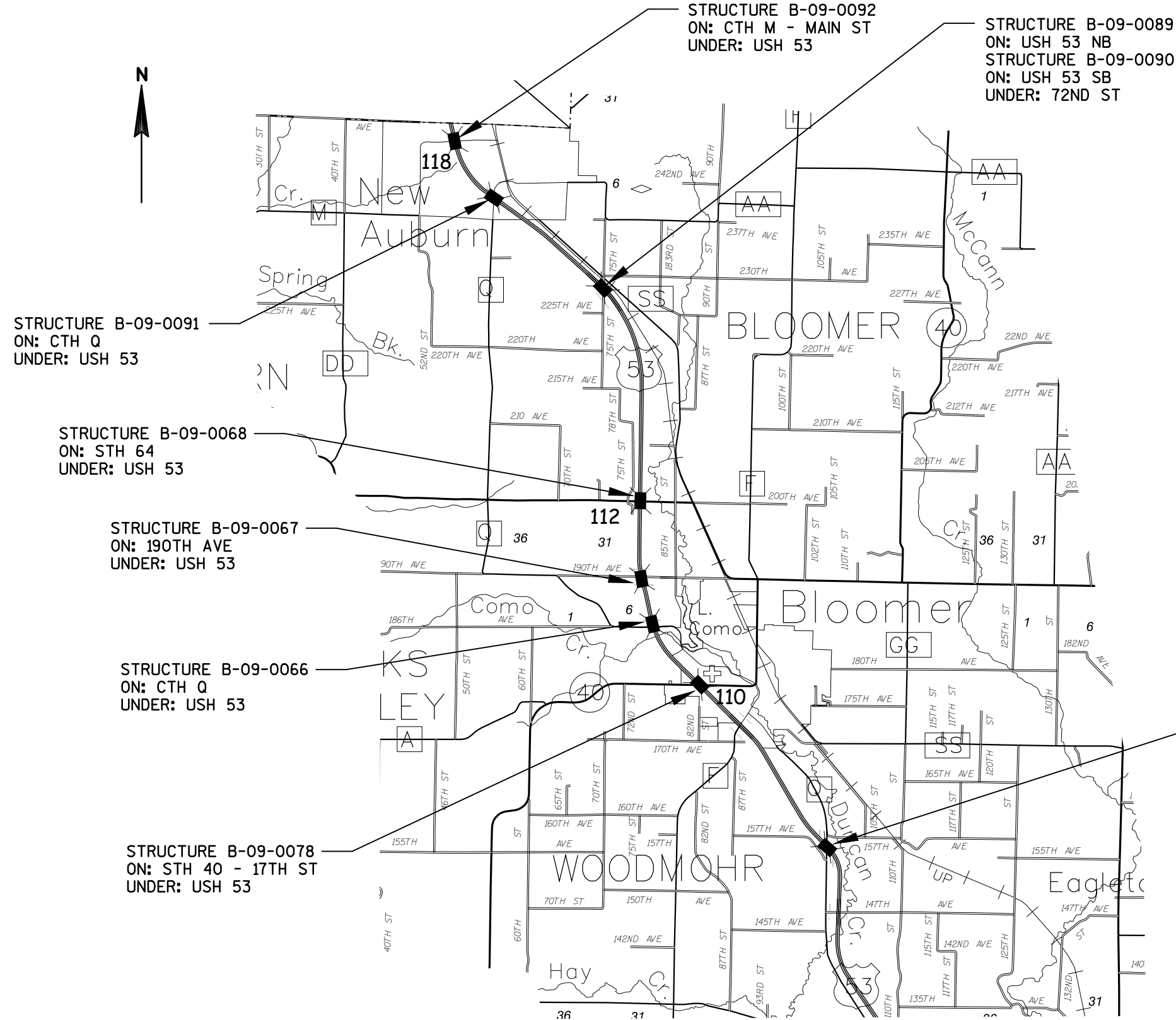
#### STANDARD NOTES:

- ARROW BOARDS SHALL, AS A MINIMUM BE TYPE B, WITH A SIZE OF 60 X 30 INCHES.
- VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED IN A MANNER SUCH THAT THEY ARE NOT OBSTRUCTED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS ON VEHICLE-MOUNTED SIGNS SHALL BE COVERED OR TURNED FROM VEHICLE WHEN WORK IS NOT IN PROGRESS.
- SHADOW AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.
- AN ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE FREEWAY LANE IS CLOSED, A SEPARATE ARROW BOARD SHALL BE USED FOR EACH LANE CLOSED.

#### 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 LANE CLOSURE IS TYPICAL FOR CLOSING LEFT LANE - REVERSE FOR CLOSING THE RIGHT LANE.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE VEHICLES FOR A MINIMUM 1500 FEET IN FRONT OF SHADOW VEHICLE 1.
- MULTIPLE PCMS MAY BE NECESSARY BASED ON ROADWAY GEOMETRICS AND LOCATION OF ENTRANCE RAMP OR SIDE ROADS.
- SHORT-TERM STATIONARY WORK ONLY. FOLLOW SDD 15D12 IF LANE CLOSURE IS IN PLACE LONG-TERM.





PROJECT 1190-10-82 - CHIPPEWA COUNTY STRUCTURE SUMMARY						
STRUCTURE ID	COUNTY	MUNICIPALITY	HIGHWAY ON	FEATURE UNDER	SURFACE TYPE	SURFACE AREA (SF)
B-09-0046	CHIPPEWA	T-HALLIE	40TH AVE.	USH 53	BRIDGE COLUMN	282.60
B-09-0047	CHIPPEWA	T-HALLIE	50TH AVE.	USH 53	BRIDGE COLUMN	282.60
B-09-0048	CHIPPEWA	C-CHIPPEWA FALLS	USH 53 SB	CHIPPEWA RIVER	BRIDGE DECK	25,843.00
B-09-0049	CHIPPEWA	C-CHIPPEWA FALLS	USH 53 NB	CHIPPEWA RIVER	BRIDGE DECK	22,971.00
B-09-0050	CHIPPEWA	C-CHIPPEWA FALLS	USH 53 SB	OLD STH 29-RIVER RD	BRIDGE DECK	9,343.00
B-09-0051	CHIPPEWA	C-CHIPPEWA FALLS	USH 53 NB	CTH X-RIVER RD	BRIDGE DECK	8,374.00
B-09-0052	CHIPPEWA	C-CHIPPEWA FALLS	USH 53 SB	WI CENTRAL RR	BRIDGE DECK	12,574.00
B-09-0053	CHIPPEWA	C-CHIPPEWA FALLS	USH 53 NB	WI CENTRAL RR	BRIDGE DECK	14,155.00
B-09-0054	CHIPPEWA	T-WHEATON	CTH N	USH 53	BRIDGE COLUMN	282.60
B-09-0056	CHIPPEWA	T-TILDEN	USH 53 SB	CTH S	BRIDGE DECK	7,776.00
B-09-0057	CHIPPEWA	T-TILDEN	USH 53 NB	CTH S	BRIDGE DECK	7,776.00
B-09-0058	CHIPPEWA	T-TILDEN	100TH AVE.	USH 53	BRIDGE COLUMN	188.40
B-09-0059	CHIPPEWA	T-TILDEN	CTH B	USH 53	BRIDGE COLUMN	282.60
B-09-0060	CHIPPEWA	T-TILDEN	CTH Q	USH 53	BRIDGE COLUMN	282.60
B-09-0063	CHIPPEWA	T-WOODMOHR	CTH Q	USH 53	BRIDGE COLUMN	282.60
B-09-0066	CHIPPEWA	T-WOODMOHR	CTH Q	USH 53	BRIDGE COLUMN	282.60
B-09-0067	CHIPPEWA	T-WOODMOHR	190TH AVE.	USH 53	BRIDGE COLUMN	188.40
B-09-0068	CHIPPEWA	T-BLOOMER	STH 64	USH 53	BRIDGE COLUMN	282.60
B-09-0078	CHIPPEWA	C-BLOOMER	STH 40-17TH ST	USH 53	BRIDGE COLUMN	282.60
B-09-0089	CHIPPEWA	T-BLOOMER	USH 53 NB	72ND ST.	BRIDGE DECK	7,717.00
B-09-0090	CHIPPEWA	T-BLOOMER	USH 53 SB	72ND ST.	BRIDGE DECK	7,901.00
B-09-0091	CHIPPEWA	V-NEW AUBURN	CTH Q	USH 53	BRIDGE COLUMN	282.60
B-09-0092	CHIPPEWA	V-NEW AUBURN	CTH M - MAIN ST	USH 53	BRIDGE COLUMN	376.80
B-09-0217	CHIPPEWA	T-HALLIE	STH 29 WB	USH 53 NB	BRIDGE COLUMN	471.00
B-09-0218	CHIPPEWA	T-HALLIE	STH 29 EB	USH 53	BRIDGE COLUMN	376.80
B-09-0227	CHIPPEWA	T-HALLIE	CTH OO	USH 53	BRIDGE COLUMN	565.20
B-09-0228	CHIPPEWA	T-HALLIE	USH 53 SB	UP RR & BIKE PATH	BRIDGE DECK	10,162.00
B-09-0229	CHIPPEWA	T-HALLIE	USH 53 NB	UP RR & BIKE PATH	BRIDGE DECK	9,445.00
B-09-0246	CHIPPEWA	T-HALLIE	USH 53 SB	STH 124 NB	BRIDGE DECK	10,223.00
B-09-0247	CHIPPEWA	T-HALLIE	USH 53 NB	STH 124	BRIDGE DECK	12,287.00
B-09-0262	CHIPPEWA	T-HALLIE	MELBY STREET	USH 53	BRIDGE COLUMN	188.40



STRUCTURE B-18-0163  
ON: USH 53 NB  
STRUCTURE B-18-0164  
ON: USH 53 SB  
UNDER: UP RR

STRUCTURE B-18-0188  
ON: NORTH CROSSINGS(312E)  
UNDER: USH 53

STRUCTURE B-18-0187  
ON: TOWER DR  
UNDER: USH 53

STRUCTURE B-18-0190  
ON: LASALLE ST  
UNDER: USH 53

STRUCTURE B-18-0186  
ON: CTH QQ  
UNDER: USH 53

STRUCTURE B-18-0168  
ON: USH 53 SB  
UNDER: EAU CLAIRE RIVER

STRUCTURE B-18-0165  
ON: RIVER PRAIRIE DR  
UNDER: USH 53

STRUCTURE B-18-0162  
ON: USH 53 SB  
UNDER: OTTER CREEK

STRUCTURE B-18-0178  
ON: USH 53 SB  
STRUCTURE B-18-0182  
ON: USH 53 NB  
UNDER: HASTINGS WAY

STRUCTURE B-18-0183  
ON: USH 53 NB HASTINGS WAY  
STRUCTURE B-18-0184  
ON: USH 53 SB HASTINGS WAY  
UNDER: CYPRESS RD

STRUCTURE B-18-0159  
ON: SPOONER AVE  
UNDER: USH 53

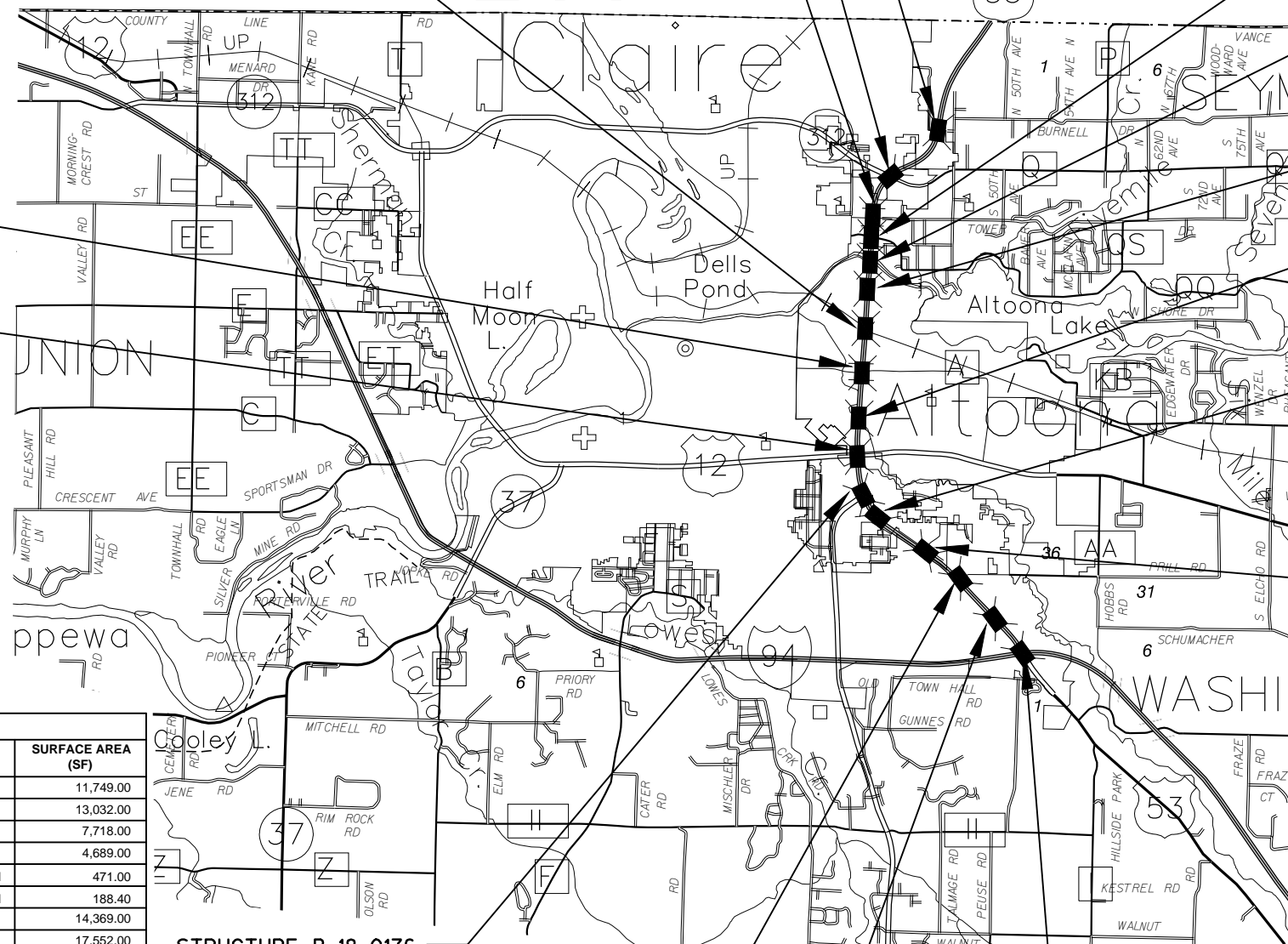
STRUCTURE B-18-0173  
ON: USH 12  
UNDER: USH 53

STRUCTURE B-18-0176  
ON: RAMP STH 93  
UNDER: USH 53

STRUCTURE B-18-0099  
ON: CTH AA  
UNDER: USH 53

STRUCTURE B-18-0037  
ON: USH 53 SB  
STRUCTURE B-18-0038  
ON: USH 53 NB  
UNDER: TOWN RD

STRUCTURE B-18-0035  
ON: USH 53 SB  
STRUCTURE B-18-0036  
ON: USH 53 NB  
UNDER: IH 94



#### PROJECT 1190-10-83 - EAU CLAIRE COUNTY STRUCTURE SUMMARY

STRUCTURE ID	COUNTY	MUNICIPALITY	HIGHWAY ON	FEATURE UNDER	SURFACE TYPE	SURFACE AREA (SF)
B-18-0035	EAU CLAIRE	T-WASHINGTON	USH 53 SB	IH 94	BRIDGE DECK	11,749.00
B-18-0036	EAU CLAIRE	T-WASHINGTON	USH 53 NB	IH 94	BRIDGE DECK	13,032.00
B-18-0037	EAU CLAIRE	T-WASHINGTON	USH 53 SB	TOWN RD	BRIDGE DECK	7,718.00
B-18-0038	EAU CLAIRE	T-WASHINGTON	USH 53 NB	TOWN RD	BRIDGE DECK	4,689.00
B-18-0099	EAU CLAIRE	C-EAU CLAIRE	CTH AA	USH 53	BRIDGE COLUMN	471.00
B-18-0159	EAU CLAIRE	C-ALTOONA	SPOONER AVE	USH 53	BRIDGE COLUMN	188.40
B-18-0162	EAU CLAIRE	C-ALTOONA	USH 53 SB	OTTER CR	BRIDGE DECK	14,369.00
B-18-0163	EAU CLAIRE	C-ALTOONA	USH 53 NB	UP RR	BRIDGE DECK	17,552.00
B-18-0164	EAU CLAIRE	C-ALTOONA	USH 53 SB	UP RR	BRIDGE DECK	18,295.00
B-18-0165	EAU CLAIRE	C-ALTOONA	RIVER PRAIRIE DR	USH 53	BRIDGE COLUMN	359.42
B-18-0168	EAU CLAIRE	C-ALTOONA	USH 53 SB	EAU CLAIRE RIVER	BRIDGE DECK	43,938.00
B-18-0173	EAU CLAIRE	C-ALTOONA	USH 12	USH 53	BRIDGE COLUMN	659.40
B-18-0176	EAU CLAIRE	C-EAU CLAIRE	RAMP STH 93	USH 53	BRIDGE COLUMN	109.42
B-18-0178	EAU CLAIRE	C-EAU CLAIRE	USH 53 SB	HASTINGS WAY	BRIDGE DECK	6,737.00
B-18-0182	EAU CLAIRE	C-EAU CLAIRE	USH 53 NB	HASTINGS WAY	BRIDGE DECK	9,096.00
B-18-0183	EAU CLAIRE	C-EAU CLAIRE	USH 53 NB HASTINGS WAY	CYPRESS RD	BRIDGE DECK	8,803.00
B-18-0184	EAU CLAIRE	C-EAU CLAIRE	USH 53 SB HASTINGS WAY	CYPRESS RD	BRIDGE DECK	6,698.00
B-18-0186	EAU CLAIRE	T-SEYMOUR	CTH QQ	USH 53	BRIDGE COLUMN	376.80
B-18-0187	EAU CLAIRE	T-SEYMOUR	TOWER DRIVE	USH 53	BRIDGE COLUMN	282.60
B-18-0188	EAU CLAIRE	T-SEYMOUR	NORTH CROSSINGS(312E)	USH 53	BRIDGE COLUMN	659.40
B-18-0190	EAU CLAIRE	T-SEYMOUR	LASALLE ST	USH 53	BRIDGE COLUMN	282.60

PROJECT NO: 1190-10-83

HWY: USH 53

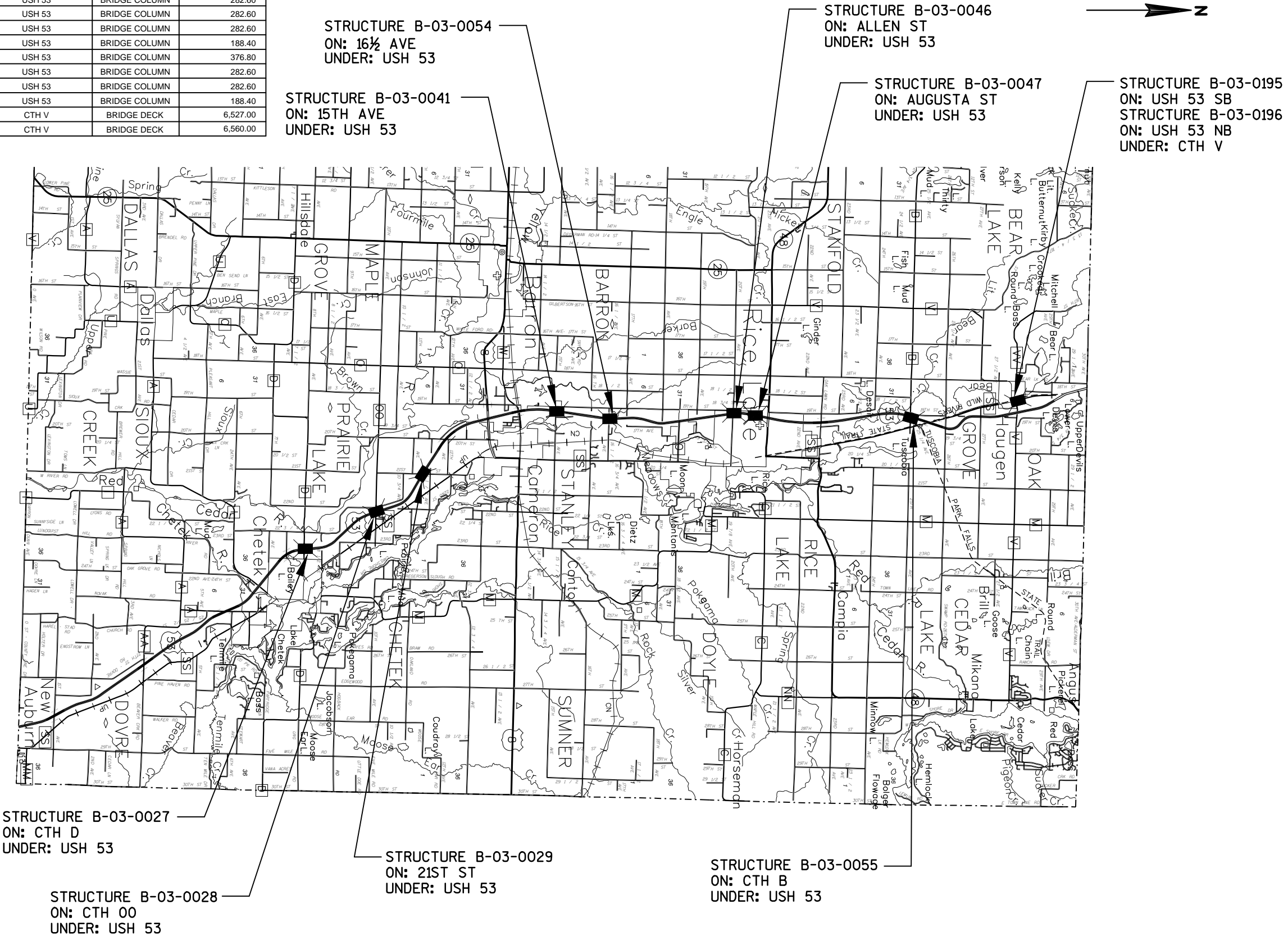
COUNTY: EAU CLAIRE

STRUCTURE LOCATION MAP - EAU CLAIRE COUNTY

SHEET

E

PROJECT 1190-10-84 - BARRON COUNTY STRUCTURE SUMMARY						
STRUCTURE ID	COUNTY	MUNICIPALITY	HIGHWAY ON	FEATURE UNDER	SURFACE TYPE	SURFACE AREA (SF)
B-03-0027	BARRON	T-PRAIRIE LAKE	CTH D	USH 53	BRIDGE COLUMN	282.60
B-03-0028	BARRON	T-PRAIRIE LAKE	CTH OO	USH 53	BRIDGE COLUMN	282.60
B-03-0029	BARRON	T-PRAIRIE LAKE	21ST ST	USH 53	BRIDGE COLUMN	282.60
B-03-0041	BARRON	T-STANLEY	15TH AVE	USH 53	BRIDGE COLUMN	188.40
B-03-0046	BARRON	C-RICE LAKE	ALLEN ST	USH 53	BRIDGE COLUMN	376.80
B-03-0047	BARRON	C-RICE LAKE	AUGUSTA ST	USH 53	BRIDGE COLUMN	282.60
B-03-0054	BARRON	T-STANLEY	16 1/2 AVE	USH 53	BRIDGE COLUMN	282.60
B-03-0055	BARRON	T-OAK GROVE	CTH B	USH 53	BRIDGE COLUMN	188.40
B-03-0195	BARRON	T-OAK GROVE	USH 53 SB	CTH V	BRIDGE DECK	6,527.00
B-03-0196	BARRON	T-OAK GROVE	USH 53 NB	CTH V	BRIDGE DECK	6,560.00

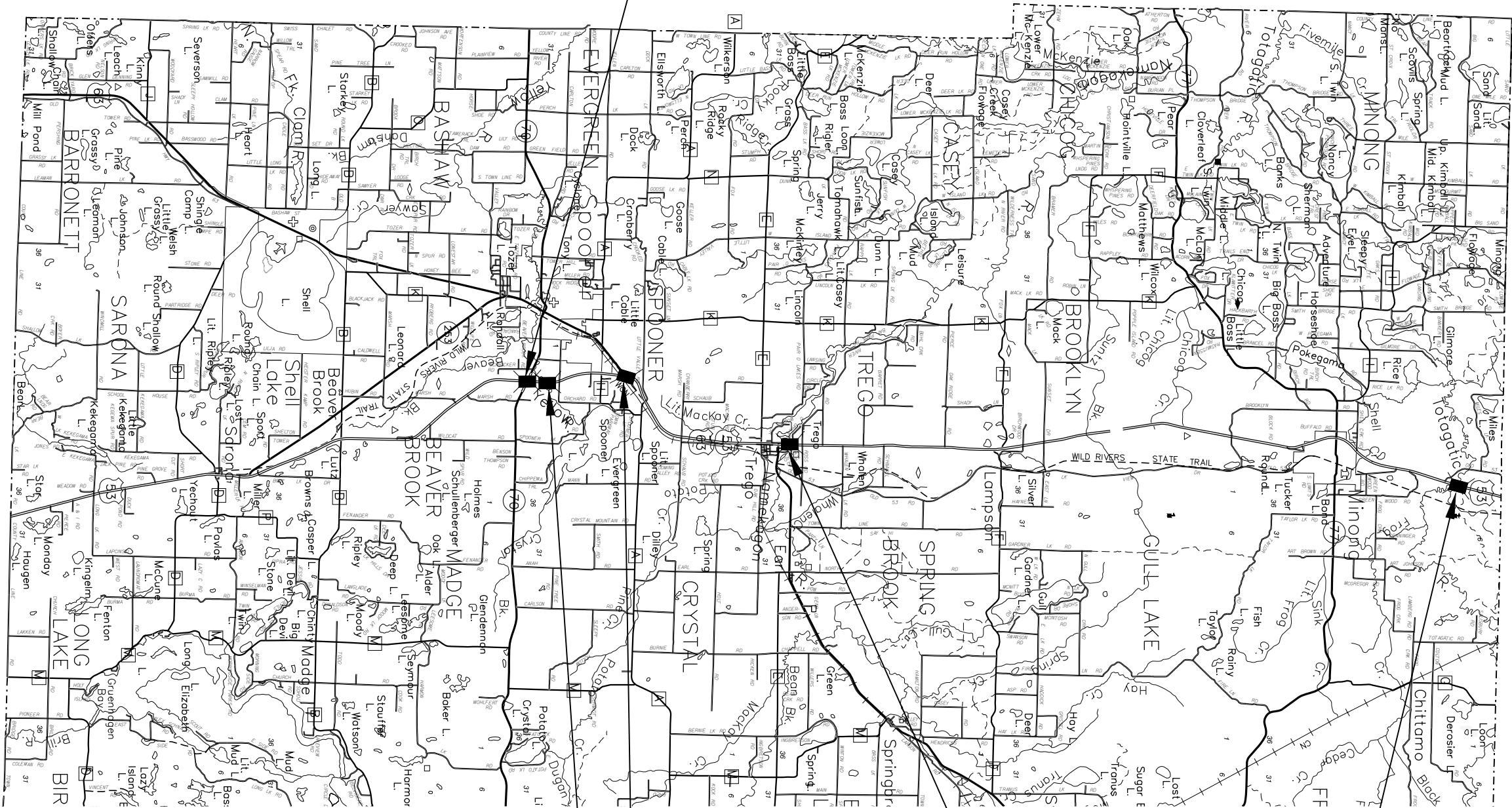




PROJECT 1190-10-84 - WASHBURN COUNTY STRUCTURE SUMMARY						
STRUCTURE ID	COUNTY	MUNICIPALITY	HIGHWAY ON	FEATURE UNDER	SURFACE TYPE	SURFACE AREA (SF)
B-65-0022	WASHBURN	T-SPOONER	USH 53 SB	YELLOW RIVER	BRIDGE DECK	3,067.00
B-65-0023	WASHBURN	T-SPOONER	USH 53 NB	YELLOW RIVER	BRIDGE DECK	3,072.00
B-65-0024	WASHBURN	T-SPOONER	USH 53 NB	USH 63	BRIDGE DECK	14,048.00
B-65-0025	WASHBURN	T-SPOONER	USH 53 SB	USH 63	BRIDGE DECK	14,048.00
B-65-0026	WASHBURN	T-TREGO	USH 53 SB	NAMEKAGON RIVER	BRIDGE DECK	4,588.00
B-65-0028	WASHBURN	T-MINONG	USH 53 NB	TOTOGATIC RIVER	BRIDGE DECK	11,571.00
B-65-0030	WASHBURN	T-SPOONER	STH 70	USH 53	BRIDGE COLUMN	376.80
B-65-0031	WASHBURN	T-TREGO	USH 53 NB	NAMEKAGON RIVER	BRIDGE DECK	4,502.00
B-65-0038	WASHBURN	T-MINONG	USH 53 SB	TOTOGATIC RIVER	BRIDGE DECK	14,555.00



STRUCTURE B-65-0030  
ON: STH 70  
UNDER: USH 53



STRUCTURE B-65-0022  
ON: USH 53 SB  
STRUCTURE B-65-0023  
ON: USH 53 NB  
UNDER: YELLOW RIVER

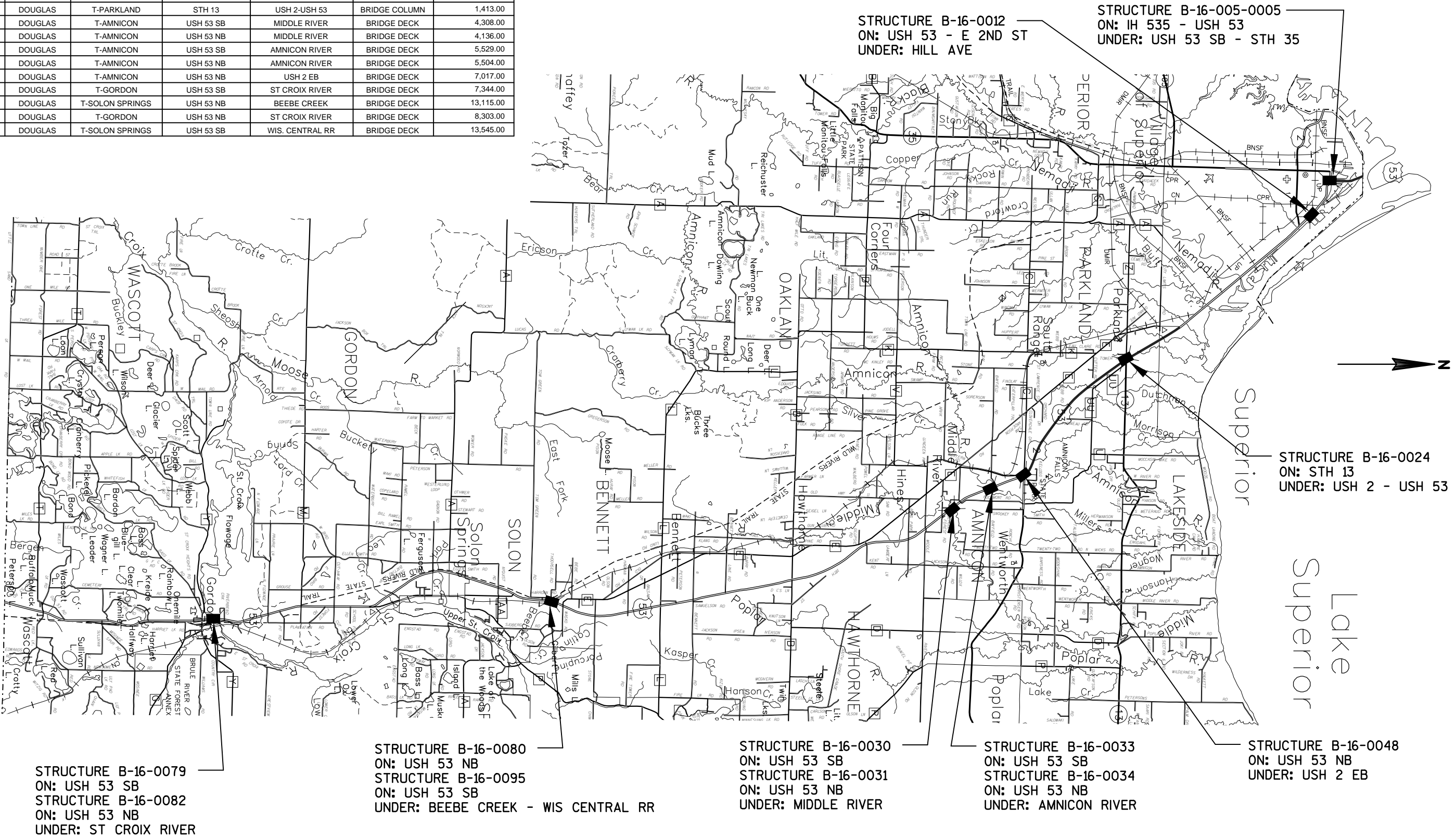
STRUCTURE B-65-0024  
ON: USH 53 NB  
STRUCTURE B-65-0025  
ON: USH 53 SB  
UNDER: USH 63

STRUCTURE B-65-0026  
ON: USH 53 SB  
STRUCTURE B-65-0031  
ON: USH 53 NB  
UNDER: NAMEKAGON RIVER

STRUCTURE B-65-0028  
ON: USH 53  
STRUCTURE B-65-0038  
ON: USH 53  
UNDER: TOTOGATIC RIVER



PROJECT 1190-10-84 - DOUGLAS COUNTY STRUCTURE SUMMARY						
STRUCTURE ID	COUNTY	MUNICIPALITY	HIGHWAY ON	FEATURE UNDER	SURFACE TYPE	SURFACE AREA (SF)
B-16-005-0005	DOUGLAS	C-SUPERIOR	IH 535-USH 53	USH 53 SB-STH 35	BRIDGE COLUMN	3,579.60
B-16-0012	DOUGLAS	C-SUPERIOR	USH 53-E 2ND ST	HILL AVE	BRIDGE DECK	42,308.00
B-16-0024	DOUGLAS	T-PARKLAND	STH 13	USH 2-USH 53	BRIDGE COLUMN	1,413.00
B-16-0030	DOUGLAS	T-AMNICON	USH 53 SB	MIDDLE RIVER	BRIDGE DECK	4,308.00
B-16-0031	DOUGLAS	T-AMNICON	USH 53 NB	MIDDLE RIVER	BRIDGE DECK	4,136.00
B-16-0033	DOUGLAS	T-AMNICON	USH 53 SB	AMNICON RIVER	BRIDGE DECK	5,529.00
B-16-0034	DOUGLAS	T-AMNICON	USH 53 NB	AMNICON RIVER	BRIDGE DECK	5,504.00
B-16-0048	DOUGLAS	T-AMNICON	USH 53 NB	USH 2 EB	BRIDGE DECK	7,017.00
B-16-0079	DOUGLAS	T-GORDON	USH 53 SB	ST CROIX RIVER	BRIDGE DECK	7,344.00
B-16-0080	DOUGLAS	T-SOLON SPRINGS	USH 53 NB	BEEBE CREEK	BRIDGE DECK	13,115.00
B-16-0082	DOUGLAS	T-GORDON	USH 53 NB	ST CROIX RIVER	BRIDGE DECK	8,303.00
B-16-0095	DOUGLAS	T-SOLON SPRINGS	USH 53 SB	WIS. CENTRAL RR	BRIDGE DECK	13,545.00



Estimate Of Quantities

					1190-10-82	1190-10-83	1190-10-84		
Line	Item	Item Description	Unit	Total	Qty	Qty	Qty		
0010	213.0100	Finishing Roadway (project) 01. 1190-10-82	EACH	1.000	1.000				
0020	213.0100	Finishing Roadway (project) 02. 1190-10-83	EACH	1.000		1.000			
0030	213.0100	Finishing Roadway (project) 03. 1190-10-84	EACH	1.000			1.000		
0040	502.3215.S	Protective Surface Treatment Reseal	SY	59,886.230	19,080.860	18,451.690	22,353.680		
0050	619.1000	Mobilization	EACH	1.000	0.300	0.300	0.400		
0060	628.7010	Inlet Protection Type B	EACH	85.000	20.000	15.000	50.000		
0070	643.0100	Traffic Control (project) 01. 1190-10-82	EACH	1.000	1.000				
0080	643.0100	Traffic Control (project) 02. 1190-10-83	EACH	1.000		1.000			
0090	643.0100	Traffic Control (project) 03. 1190-10-84	EACH	1.000			1.000		
0100	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	60.000	20.000	20.000	20.000		

3

FINISHING ROADWAY

CATEGORY	PROJECT	LOCATION	213.0100 EACH
0010	1190-10-82	USH 53	1
TOTAL			1

INLET PROTECTION

CATEGORY	STRUCTURE	ROADWAY	LOCATION	628.7010 TYPE B EACH
0010	B-09-0048	USH 53 SB	CHIPPEWA RIVER	4
0010	B-09-0049	USH 53 NB	CHIPPEWA RIVER	6
0010	B-09-0052	USH 53 SB	WI CENTRAL RR	2
0010	B-09-0053	USH 53 NB	WI CENTRAL RR	2
0010	B-09-0056	USH 53 SB	CTH S	1
0010	B-09-0057	USH 53 NB	CTH S	1
0010	B-09-0089	USH 53 NB	72ND ST.	1
0010	B-09-0090	USH 53 SB	72ND ST.	1
			UNDISTRIBUTED	2
TOTAL				20

NOTE: INLET PROTECTION INCLUDES TWO INSTALLATIONS PER INLET. FIRST INSTALLATION IS WITH TYPE FF FABRIC DURING DECK PREPARATION AND CLEANING ACTIVITIES. SECOND INSTALLATION IS WITH IMPERVIOUS FABRIC DURING THE SEALING OPERATION.

TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS

CATEGORY	PROJECT	LOCATION	APPROX. SERVICE PERIOD DAYS	NO. IN SERVICE	643.1051 SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAYS
0010	1190-10-82	USH 53	10	2	20
TOTALS			10	2	20

3

PROTECTIVE SURFACE TREATMENT RESEAL

CATEGORY	STRUCTURE ID	HWY ON	FEATURE UNDER	TYPE	502.3215.S SY
0020	B-09-0046	40TH AVE.	USH 53	BRIDGE COLUMN	31.40
0030	B-09-0047	50TH AVE.	USH 53	BRIDGE COLUMN	31.40
0040	B-09-0048	USH 53 SB	CHIPPEWA RIVER	BRIDGE DECK	2,871.44
0050	B-09-0049	USH 53 NB	CHIPPEWA RIVER	BRIDGE DECK	2,552.33
0060	B-09-0050	USH 53 SB	OLD STH 29-RIVER RD	BRIDGE DECK	1,038.11
0070	B-09-0051	USH 53 NB	CTH X-RIVER RD	BRIDGE DECK	930.44
0080	B-09-0052	USH 53 SB	WI CENTRAL RR	BRIDGE DECK	1,397.11
0090	B-09-0053	USH 53 NB	WI CENTRAL RR	BRIDGE DECK	1,572.78
0100	B-09-0054	CTH N	USH 53	BRIDGE COLUMN	31.40
0110	B-09-0056	USH 53 SB	CTH S	BRIDGE DECK	864.00
0120	B-09-0057	USH 53 NB	CTH S	BRIDGE DECK	864.00
0130	B-09-0058	100TH AVE.	USH 53	BRIDGE COLUMN	20.93
0140	B-09-0059	CTH B	USH 53	BRIDGE COLUMN	31.40
0150	B-09-0060	CTH Q	USH 53	BRIDGE COLUMN	31.40
0160	B-09-0063	CTH Q	USH 53	BRIDGE COLUMN	31.40
0170	B-09-0066	CTH Q	USH 53	BRIDGE COLUMN	31.40
0180	B-09-0067	190TH AVE.	USH 53	BRIDGE COLUMN	20.93
0190	B-09-0068	STH 64	USH 53	BRIDGE COLUMN	31.40
0200	B-09-0078	STH 40-17TH ST	USH 53	BRIDGE COLUMN	31.40
0210	B-09-0089	USH 53 NB	72ND ST.	BRIDGE DECK	857.44
0220	B-09-0090	USH 53 SB	72ND ST.	BRIDGE DECK	877.89
0230	B-09-0091	CTH Q	USH 53	BRIDGE COLUMN	31.40
0240	B-09-0092	CTH M MAIN ST	USH 53	BRIDGE COLUMN	41.87
0250	B-09-0217	STH 29 WB	USH 53 NB	BRIDGE COLUMN	52.33
0260	B-09-0218	STH 29 EB	USH 53	BRIDGE COLUMN	41.87
0270	B-09-0227	CTH OO	USH 53	BRIDGE COLUMN	62.80
0280	B-09-0228	USH 53 SB	UP RR & BIKE PATH	BRIDGE DECK	1,129.11
0290	B-09-0229	USH 53 NB	UP RR & BIKE PATH	BRIDGE DECK	1,049.44
0300	B-09-0246	USH 53 SB	STH 124 NB	BRIDGE DECK	1,135.89
0310	B-09-0247	USH 53 NB	STH 124	BRIDGE DECK	1,365.22
0320	B-09-0262	MELBY STREET	USH 53	BRIDGE COLUMN	20.93
TOTAL					19,080.86

3

FINISHING ROADWAY

CATEGORY	PROJECT	LOCATION	213.0100
			EACH
0010	1190-10-83	USH 53	1
TOTAL			1

INLET PROTECTION

CATEGORY	STRUCTURE	ROADWAY	LOCATION	628.7010
				TYPE B EACH
0010	B-18-0035	USH 53 SB	IH 94	1
0010	B-18-0036	USH 53 NB	IH 94	1
0010	B-18-0162	USH 53 SB LANE	OTTER CR	2
0010	B-18-0163	USH 53 NB	UP RR	1
0010	B-18-0164	USH 53 SB	UP RR	2
0010	B-18-0168	USH 53 SB	EAU CLAIRE RIVER	5
			UNDISTRIBUTED	3
TOTAL				15

NOTE: INLET PROTECTION INCLUDES TWO INSTALLATIONS PER INLET. FIRST INSTALLATION IS WITH TYPE FF FABRIC DURING DECK PREPARATION AND CLEANING ACTIVITIES. SECOND INSTALLATION IS WITH IMPERVIOUS FABRIC DURING THE SEALING OPERATION.

3

PROTECTIVE SURFACE TREATMENT RESEAL

STRUCTURE		HWY ON	FEATURE UNDER	TYPE	502.3215.S
CATEGORY	ID				SY
0020	B-18-0035	USH 53 SB	IH 94	BRIDGE DECK	1,305.44
0030	B-18-0036	USH 53 NB	IH 94	BRIDGE DECK	1,448.00
0040	B-18-0037	USH 53 SB	TOWN RD	BRIDGE DECK	857.56
0050	B-18-0038	USH 53 NB	TOWN RD	BRIDGE DECK	521.00
0060	B-18-0099	CTH AA	USH 53	BRIDGE COLUMN	52.33
0070	B-18-0159	SPOONER AVE	USH 53	BRIDGE COLUMN	20.93
0080	B-18-0162	USH 53 SB	OTTER CREEK	BRIDGE DECK	1,596.56
0090	B-18-0163	USH 53 NB	UP RR	BRIDGE DECK	1,950.22
0100	B-18-0164	USH 53 SB	UP RR	BRIDGE DECK	2,032.78
0110	B-18-0165	RIVER PRAIRIE DR	USH 53	BRIDGE COLUMN	39.94
0120	B-18-0168	USH 53 SB	EAU CLAIRE RIVER	BRIDGE DECK	4,882.00
0130	B-18-0173	USH 12	USH 53	BRIDGE COLUMN	73.27
0140	B-18-0176	RAMP STH 93	USH 53	BRIDGE COLUMN	12.16
0150	B-18-0178	USH 53 SB	HASTINGS WAY	BRIDGE DECK	748.56
0160	B-18-0182	USH 53 NB	HASTINGS WAY	BRIDGE DECK	1,010.67
0170	B-18-0183	USH 53 NB HASTINGS WAY	CYPRESS RD	BRIDGE DECK	978.11
0180	B-18-0184	USH 53 SB HASTINGS WAY	CYPRESS RD	BRIDGE DECK	744.22
0190	B-18-0186	CTH QQ	USH 53	BRIDGE COLUMN	41.87
0200	B-18-0187	TOWER DRIVE	USH 53	BRIDGE COLUMN	31.40
0210	B-18-0188	NORTH CROSSINGS (312E)	USH 53	BRIDGE COLUMN	73.27
0220	B-18-0190	LASALLE ST	USH 53	BRIDGE COLUMN	31.40
TOTAL					18,451.69

TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS

CATEGORY	PROJECT	LOCATION	APPROX. SERVICE PERIOD DAYS	NO. IN SERVICE	643.1051
					SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAYS
0010	1190-10-83	USH 53	10	2	20
TOTALS			10	2	20

3

FINISHING ROADWAY			
CATEGORY	PROJECT	LOCATION	213.0100 EACH
0010	1190-10-84	USH 53	1
TOTAL			1

INLET PROTECTION				
CATEGORY	STRUCTURE	ROADWAY	LOCATION	628.7010 TYPE B EACH
0010	B-16-0012	USH 53-E 2ND ST	HILL AVE	8
0010	B-16-0030	USH 53 SB	MIDDLE RIVER	2
0010	B-16-0031	USH 53 NB	MIDDLE RIVER	2
0010	B-16-0033	USH 53 SB	AMNICON RIVER	2
0010	B-16-0034	USH 53 NB	AMNICON RIVER	2
0010	B-16-0048	USH 53 NB	USH 2 EB	2
0010	B-16-0079	USH 53 SB	ST CROIX RIVER	2
0010	B-16-0080	USH 53 NB	BEEBE CREEK	2
0010	B-16-0082	USH 53 NB	ST CROIX RIVER	2
0010	B-16-0095	USH 53 SB	WIS. CENTRAL RR	2
0010	B-65-0022	USH 53 SB	YELLOW RIVER	2
0010	B-65-0023	USH 53 NB	YELLOW RIVER	2
0010	B-65-0024	USH 53 NB	USH 63	2
0010	B-65-0025	USH 53 SB	USH 63	2
0010	B-65-0026	USH 53 SB	NAMEKAGON RIVER	2
0010	B-65-0028	USH 53 NB	TOTOGATIC RIVER	2
0010	B-65-0031	USH 53 NB	NAMEKAGON RIVER	2
0010	B-65-0038	USH 53 SB	TOTOGATIC RIVER	2
			UNDISTRIBUTED	8
TOTAL				50

NOTE: INLET PROTECTION INCLUDES TWO INSTALLATIONS PER  
INLET. FIRST INSTALLATION IS WITH TYPE FF FABRIC DURING DECK  
PREPARATION AND CLEANING ACTIVITIES. SECOND INSTALLATION  
IS WITH IMPERVIOUS FABRIC DURING THE SEALING OPERATION.

TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS					
CATEGORY	PROJECT	LOCATION	APPROX. SERVICE PERIOD DAYS	NO. IN SERVICE	643.1051 SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAYS
0010	1190-10-84	USH 53	10	2	20
TOTALS			10	2	20

PROTECTIVE SURFACE TREATMENT RESEAL					
STRUCTURE					502.3215.S
CATEGORY	ID	HWY ON	FEATURE UNDER	TYPE	SY
0020	B-16-005-0005	IH 535-USH 53	USH 53 SB-STH 35	BRIDGE COLUMN	397.73
0030	B-16-0012	USH 53-E 2ND ST	HILL AVE	BRIDGE DECK	4,700.89
0040	B-16-0024	STH 13	USH 2-USH 53	BRIDGE COLUMN	157.00
0050	B-16-0030	USH 53 SB	MIDDLE RIVER	BRIDGE DECK	478.67
0060	B-16-0031	USH 53 NB	MIDDLE RIVER	BRIDGE DECK	459.56
0070	B-16-0033	USH 53 SB	AMNICON RIVER	BRIDGE DECK	614.33
0080	B-16-0034	USH 53 NB	AMNICON RIVER	BRIDGE DECK	611.56
0090	B-16-0048	USH 53 NB	USH 2 EB	BRIDGE DECK	779.67
0100	B-16-0079	USH 53 SB	ST CROIX RIVER	BRIDGE DECK	816.00
0110	B-16-0080	USH 53 NB	BEEBE CREEK	BRIDGE DECK	1,457.22
0120	B-16-0082	USH 53 NB	ST CROIX RIVER	BRIDGE DECK	922.56
0130	B-16-0095	USH 53 SB	WIS. CENTRAL RR	BRIDGE DECK	1,505.00
0140	B-65-0022	USH 53 SB	YELLOW RIVER	BRIDGE DECK	340.78
0150	B-65-0023	USH 53 NB	YELLOW RIVER	BRIDGE DECK	341.33
0160	B-65-0024	USH 53 NB	USH 63	BRIDGE DECK	1,560.89
0170	B-65-0025	USH 53 SB	USH 63	BRIDGE DECK	1,560.89
0180	B-65-0026	USH 53 SB	NAMEKAGON RIVER	BRIDGE DECK	509.78
0190	B-65-0028	USH 53 NB	TOTOGATIC RIVER	BRIDGE DECK	1,285.67
0200	B-65-0030	STH 70	USH 53	BRIDGE COLUMN	41.87
0210	B-65-0031	USH 53 NB	NAMEKAGON RIVER	BRIDGE DECK	500.22
0220	B-65-0038	USH 53 SB	TOTOGATIC RIVER	BRIDGE DECK	1,617.22
0230	B-03-0027	CTH D	USH 53	BRIDGE COLUMN	31.40
0240	B-03-0028	CTH OO	USH 53	BRIDGE COLUMN	31.40
0250	B-03-0029	21ST ST	USH 53	BRIDGE COLUMN	31.40
0260	B-03-0041	15TH AVE	USH 53	BRIDGE COLUMN	20.93
0270	B-03-0046	ALLEN ST	USH 53	BRIDGE COLUMN	41.87
0280	B-03-0047	AUGUSTA ST	USH 53	BRIDGE COLUMN	31.40
0290	B-03-0054	16 1/2 AVE	USH 53	BRIDGE COLUMN	31.40
0300	B-03-0055	CTH B	USH 53	BRIDGE COLUMN	20.93
0310	B-03-0195	USH 53 SB	CTH V	BRIDGE DECK	725.22
0320	B-03-0196	USH 53 NB	CTH V	BRIDGE DECK	728.89
TOTAL					22,353.68

3

Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D14-03	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-02	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH





**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  
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER

LEGEND

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

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"W0" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

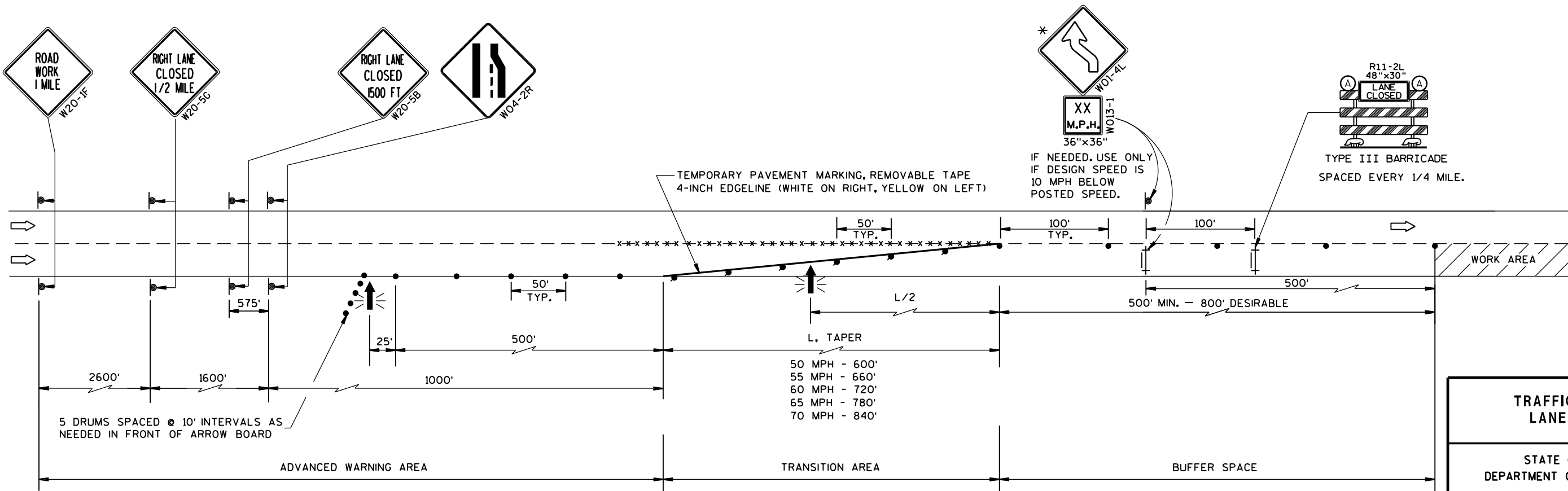
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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. THE LANE CLOSURE MUST 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 1/2 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.

\* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

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

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"W0" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF 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 FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

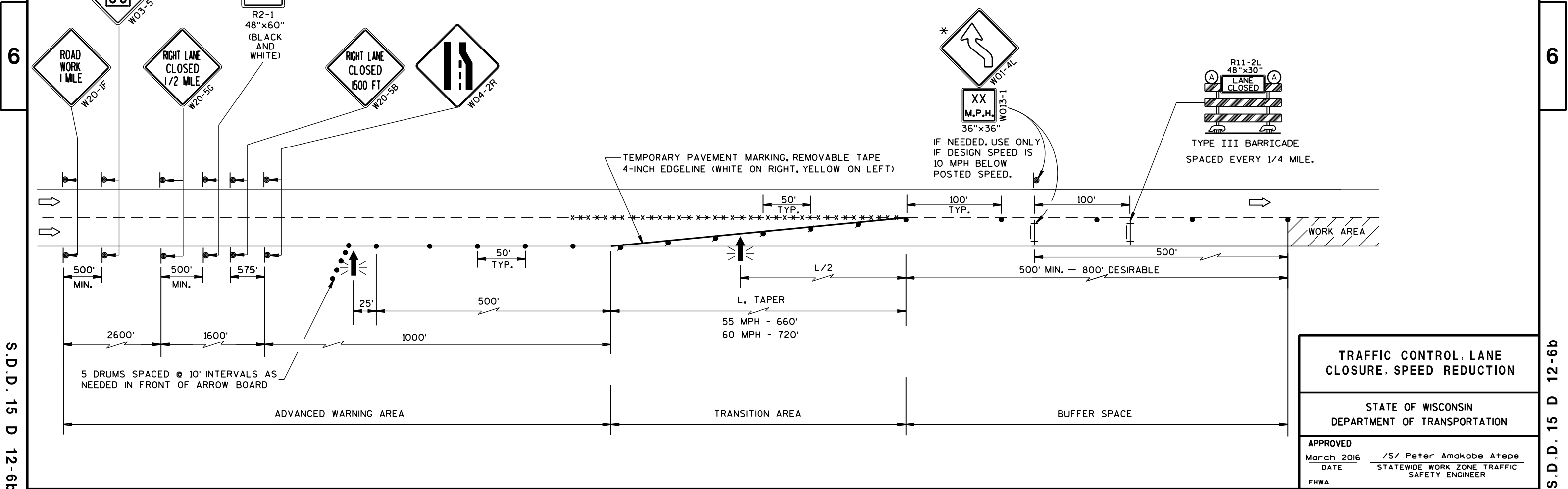
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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. THE LANE CLOSURE MUST 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 1/2 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.









\* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

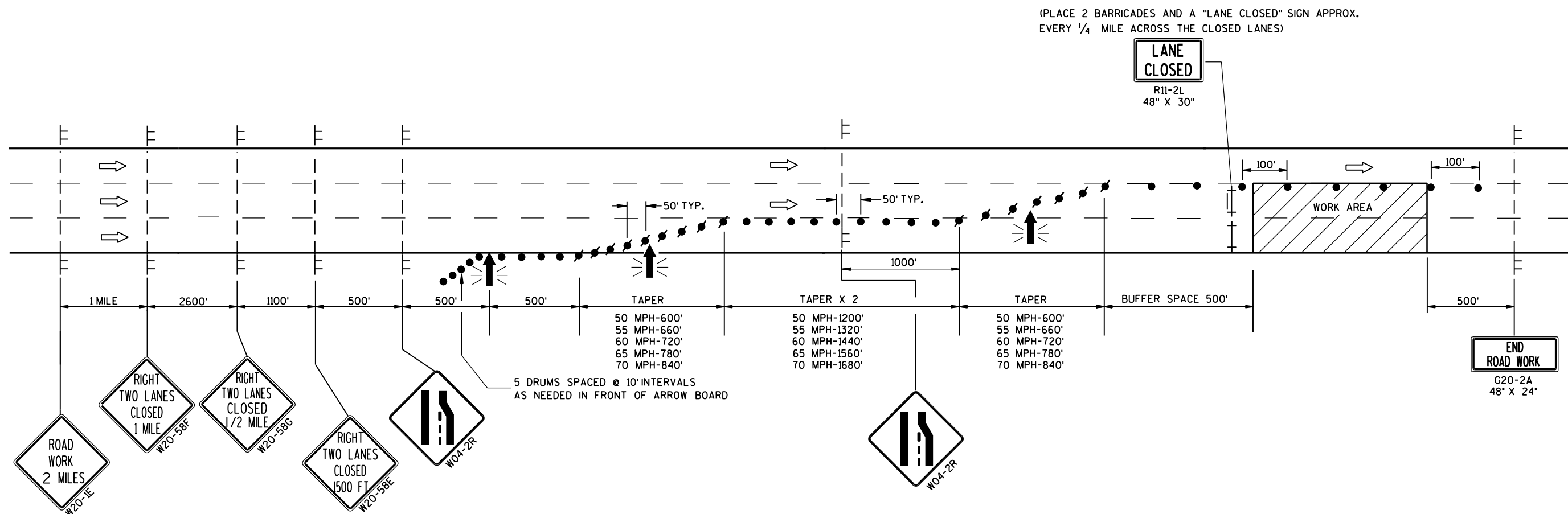
\*\* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

### LEGEND

-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  SIGN ON TEMPORARY SUPPORT
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TRAFFIC CONTROL DRUM
-  FLASHING ARROW BOARD
-  DIRECTION OF TRAFFIC
-  WORK AREA



### GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

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

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

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.

W20-1E AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

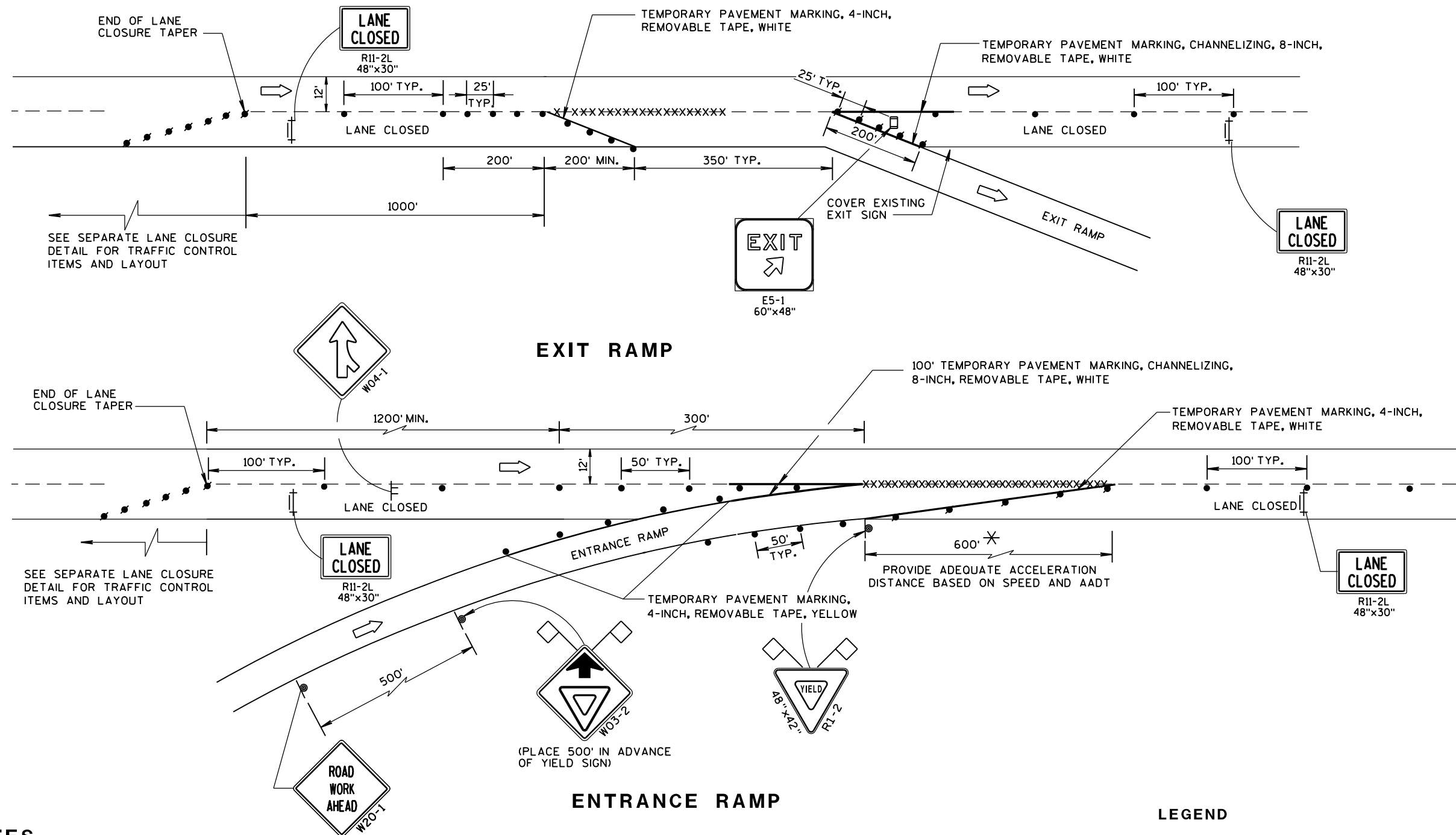
WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

BARRICADES IN A CLOSED LANE 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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

<b>TRAFFIC CONTROL. TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY. SHORT TERM (LESS THAN 24 HOURS)</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



### GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

\* LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

### LEGEND

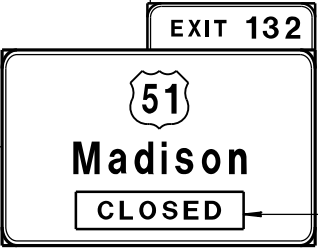
- ⊙ SIGN ON PERMANENT SUPPORT
- ├ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- XXXXX REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- || TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- ➡ DIRECTION OF TRAFFIC

<b>TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



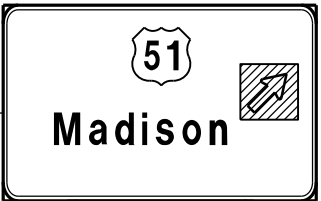
G20-60  
108"x24"

OR



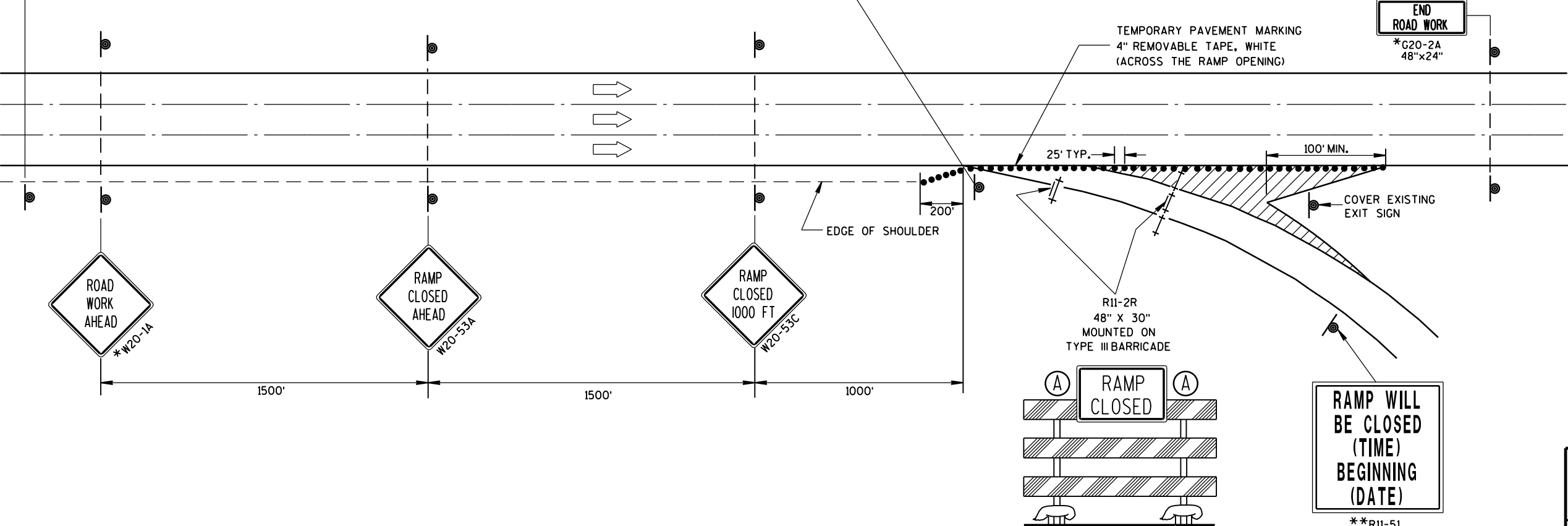
G20-60  
108"x24"

PLACE SIGN G20-60 OVER MILEAGE  
ON EXISTING E1-1A SIGN



COVER ARROW ON  
EXISTING E4-1A  
SIGN (COVERING  
SIGNS TYPE I)

G20-61  
120"x30"



## GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

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

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

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.

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

\* W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

\*\* PLACE "RAMP WILL BE CLOSED" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

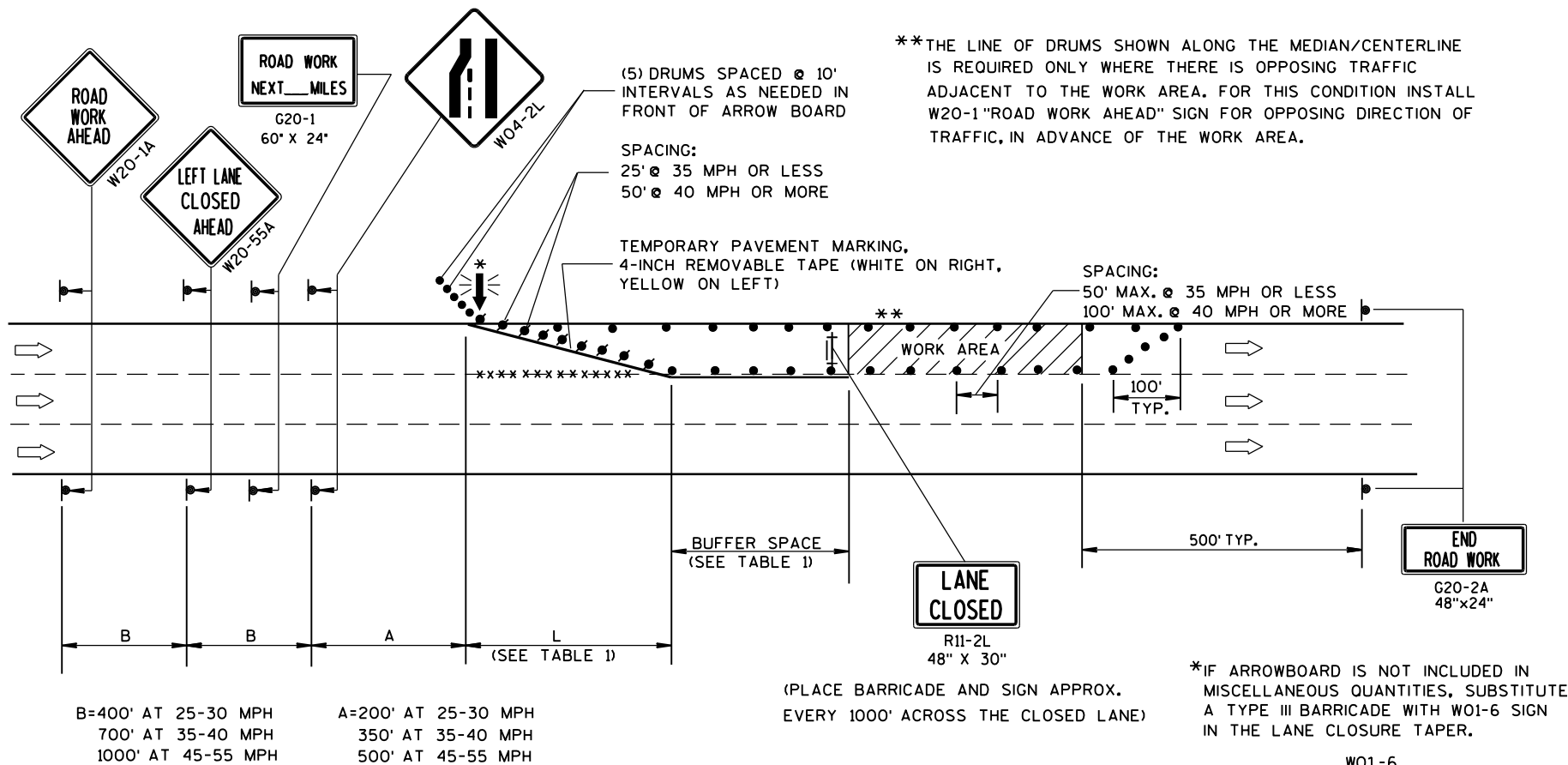
## TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
Sept. 2015  
DATE  
FHWA

/S/ Peter Amakobe Atepe  
STATEWIDE WORK ZONE TRAFFIC  
SAFETY ENGINEER





GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

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

TABLE 1  
TAPER AND BUFFER SPACE  
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$  AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

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

TRAFFIC CONTROL,  
SINGLE LANE CLOSURE,  
NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2016 /S/ Peter Amakobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
FHWA SAFETY ENGINEER

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

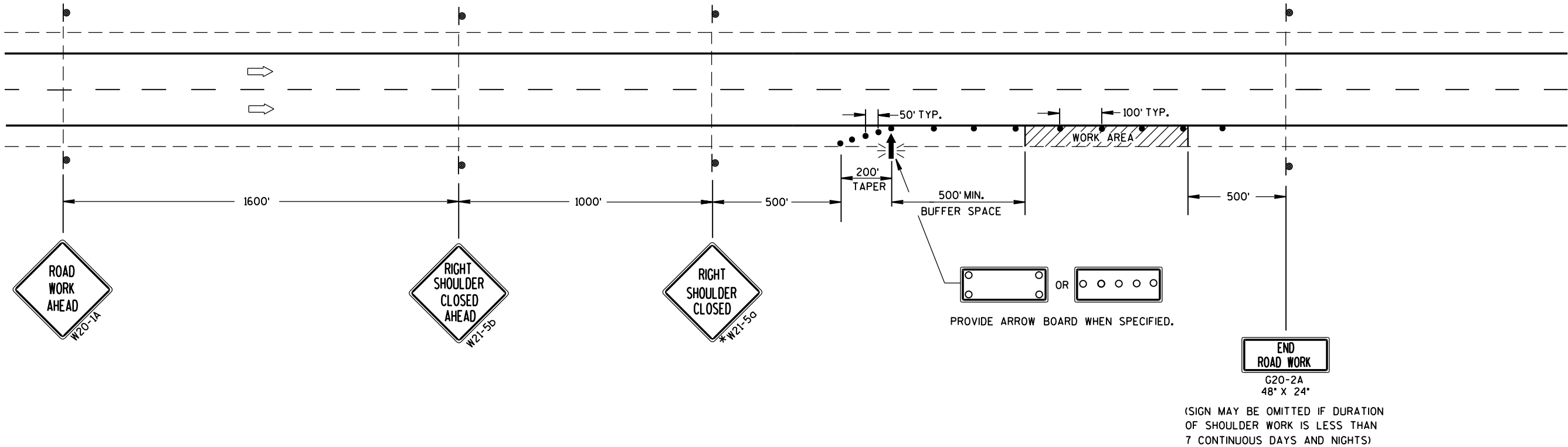
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

\*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL  
SHOULDER CLOSURE ON DIVIDED  
ROADWAY, SPEEDS GREATER  
THAN 40 MPH

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2016 /S/ Peter Amakobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
FHWA SAFETY ENGINEER

## Notes



## ***Wisconsin Department of Transportation***

Dedicated people creating transportation solutions  
through innovation and exceptional service.

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