

EAU

PROJECT ID:

1022-03-83

COUNTY:

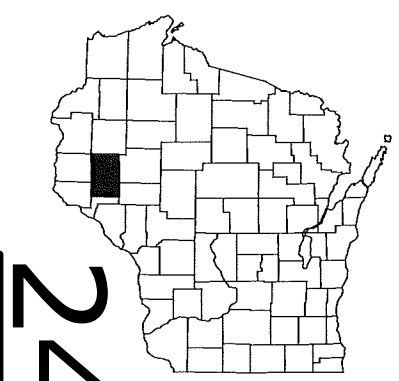
DUNN

DECEMBER 2017

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 = 14



DESIGN DESIGNATION 1022-03-03

A.A.D.T.	2013	=	27,900
A.A.D.T.	2037	=	39,000
D.H.V.		=	5,033
D.D.		=	57.43
T.		=	28.4%
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
- OVERHEAD UTILITY
- FIBER OPTIC
- GAS
- SANITARY SEWER
- STORM SEWER
- TELEPHONE
- WATER
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

- ROCK
- LABEL
- 95.36
- E
- OH
- FO
- G
- SAN
- SS
- T
- W
- Ø

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MENOMONIE - EAU CLAIRE

490TH AV BRIDG WEST BOUND B-17-0199

IH 94

DUNN COUNTY

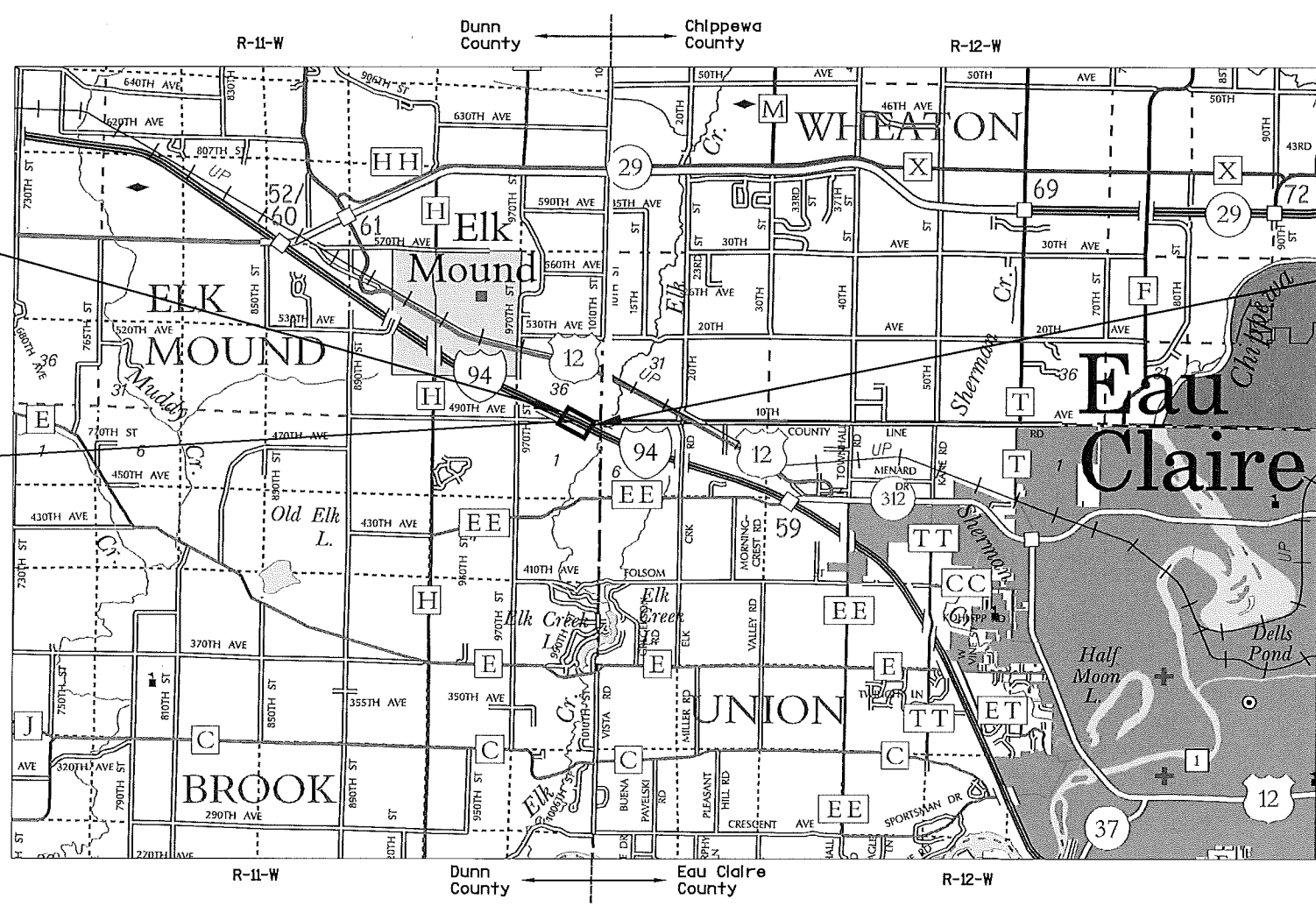
STATE PROJECT NUMBER
1022-03-83

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1022-03-83	WISC 2018023	1

BEGIN PROJECT
STA 829+30.61
X: 165981.01
Y: 231441.63

END PROJECT
STA 830+95.15
X: 166131.541
Y: 231375.19

Structure B-17-0199



LAYOUT
SCALE 0 2 MILES
TOTAL NET LENGTH OF CENTERLINE = 0.031 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DUNN COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	William Holme
Designer	Kou Thao
Project Manager	Matthew Thorsen
Regional Examiner	Jennifer Oldenburg
Regional Supervisor	Tara Weiss
APPROVED FOR THE DEPARTMENT	
DATE: 9/6/17	(Signature)

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

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

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

UTILITY CONTACTS

COMMUNICATION LINE

AT&T LEGACY
BRAD KEMPH
715-254-5238
COPY ALL CORRESPONDENCE TO:
BILL KOENIG
JMC ENGINEERS & ASSOCIATES
128 W SUNSET AVENUE
APPLETON, WI 54911
608-628-0575 (MOBILE)
wekoenig@att.net

CENTURYLINK COMMUNICATIONS
BOB SAMPSON
1310 E. MARY STREET
OTTUMWA, IA 52501
641-684-4106 (OFFICE)
636-887-5367 (MOBILE)
Robert.Sampson@Centurylink.com

WEST WISCONSIN TELCOM COOPERATIVE
BRAD SCHMIDTKNECHT
5808 OLD MILL PLAZA
EAU CLAIRE, WI 54703
715-231-0504 (OFFICE)
715-308-1914 (MOBILE)
brads@wwt.net

DNR LIAISON

CHRIS WILLGER
WISCONSIN DEPT. OF NATURAL RESOURCES
DNR WEST CENTRAL REGION HQ
1300 W. CLAIREMONT STREET
EAU CLAIRE, WI 54702
715-839-1609
christopherj.willger@wisconsin.gov

ELECTRICITY - DISTRIBUTION

XCEL ENERGY
MIKE JOHNSEN
320 HELLER ROAD
MENOMONIE, WI 54751
715-232-7415 (OFFICE)
715 577-7428 (MOBILE)
Michael.A.Johnsen@xcelenergy.com
COPY ALL CORRESPONDENCE TO:
DAWN SCHULTZ
1414 W HAMILTON AVE
PO BOX 8
EAU CLAIRE, WI 54702-0008
715-737-2482 (OFFICE)
dawn.schultz@xcelenergy.com

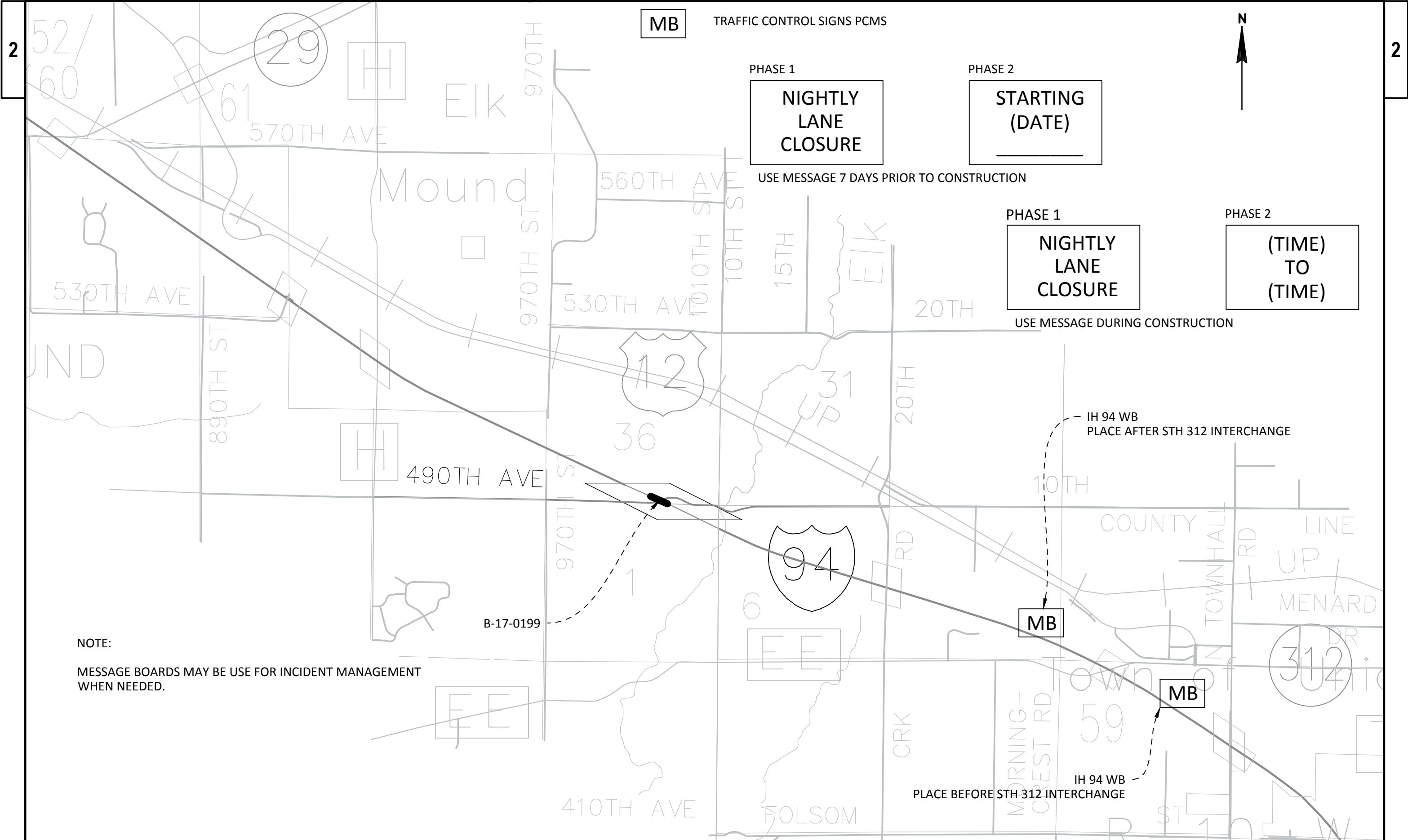


Dial 811 or (800)242-8511

www.DiggersHotline.com

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM W/TYPE C LIGHT
- ➔ TRAFFIC FLOW
- ▨ WORK AREA

TRAFFIC CONTROL LANE CLOSURE:

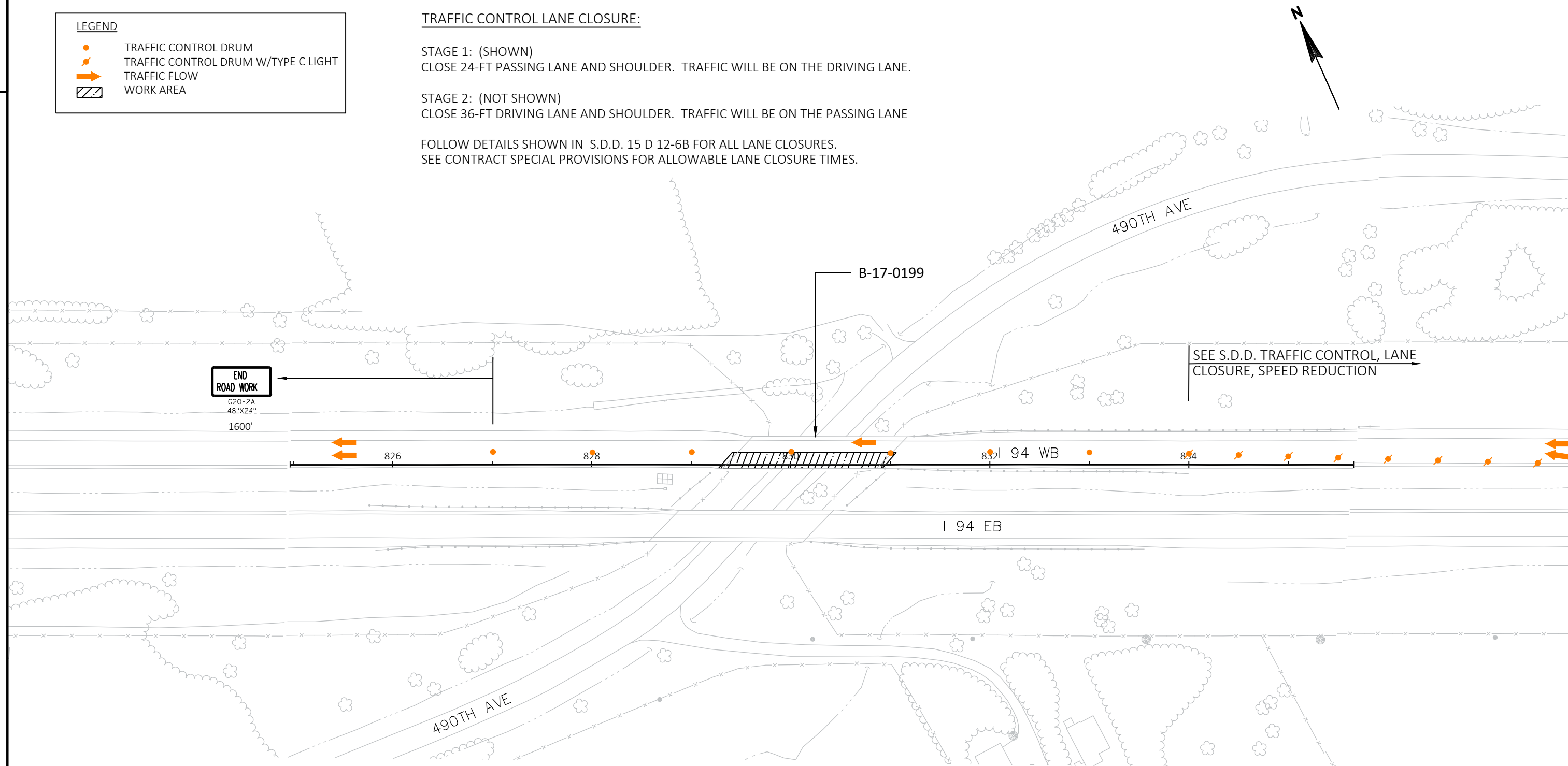
STAGE 1: (SHOWN)

CLOSE 24-FT PASSING LANE AND SHOULDER. TRAFFIC WILL BE ON THE DRIVING LANE.

STAGE 2: (NOT SHOWN)

CLOSE 36-FT DRIVING LANE AND SHOULDER. TRAFFIC WILL BE ON THE PASSING LANE

FOLLOW DETAILS SHOWN IN S.D.D. 15 D 12-6B FOR ALL LANE CLOSURES.
SEE CONTRACT SPECIAL PROVISIONS FOR ALLOWABLE LANE CLOSURE TIMES.



PROJECT NO: 1022-03-83

HWY: IH 94

COUNTY: DUNN

TRAFFIC CONTROL PLAN: B-17-0199 (IH 94 WB)

SHEET

E

Estimate Of Quantities

1022-03-83					
Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 1022-03-83	EACH	1.000	1.000
0004	509.0301	Preparation Decks Type 1	SY	5.000	5.000
0006	509.5100.S	Polymer Overlay	SY	1,097.000	1,097.000
0008	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1022-03-83	EACH	1.000	1.000
0010	619.1000	Mobilization	EACH	1.000	1.000
0012	643.0300	Traffic Control Drums	DAY	400.000	400.000
0014	643.0420	Traffic Control Barricades Type III	DAY	16.000	16.000
0016	643.0705	Traffic Control Warning Lights Type A	DAY	32.000	32.000
0018	643.0715	Traffic Control Warning Lights Type C	DAY	112.000	112.000
0020	643.0800	Traffic Control Arrow Boards	DAY	16.000	16.000
0022	643.0900	Traffic Control Signs	DAY	136.000	136.000
0024	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	30.000	30.000
0026	643.5000	Traffic Control	EACH	1.000	1.000
0028	646.1020	Marking Line Epoxy 4-Inch	LF	780.000	780.000
0030	646.9000	Marking Removal Line 4-Inch	LF	780.000	780.000
0032	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	1,700.000	1,700.000
0034	SPV.0090	Special 01. Sawing Pavement Deck Preparation Areas	LF	50.000	50.000
0036	SPV.0180	Special 01. Fast Set Deck Patching	SY	5.000	5.000

FINISHING ROADWAY (PROJECT) 1022-03-83

CATEGORY	STATION	LOCATION	213.0100 EACH	REMARKS
0010	PROJECT	IH 94 WB	1	
TOTAL 0010			1	

MOBILIZATION

CATEGORY	STATION	LOCATION	619.1000 EACH	REMARKS
0010	PROJECT	IH 94 WB	1	
TOTAL 0010			1	

MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 1022-03-83

CATEGORY	STATION	LOCATION	618.0100 EACH	REMARKS
0010	PROJECT	IH 94 WB	1	
TOTAL 0010			1	

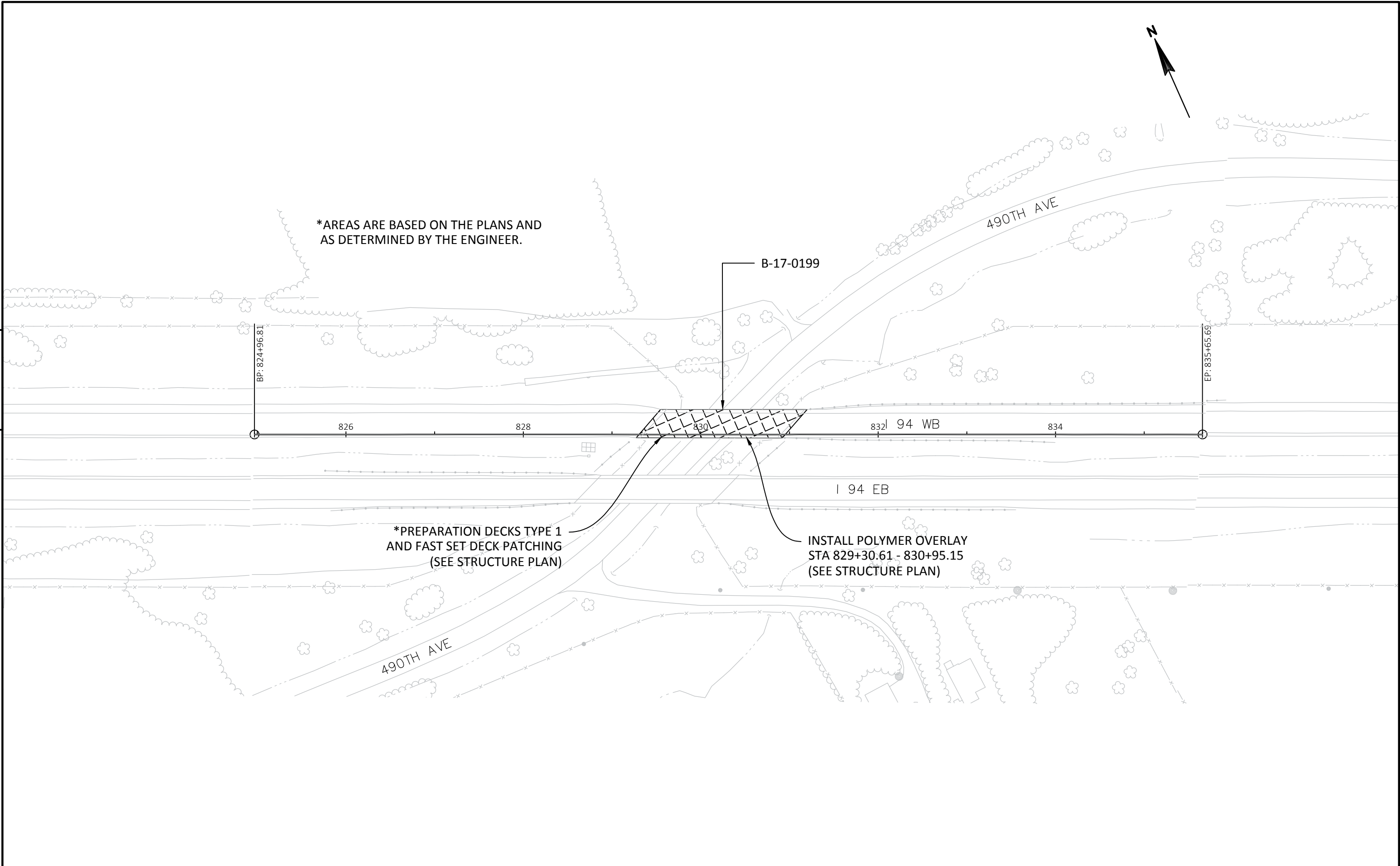
TRAFFIC CONTROL

CATEGORY	STATION	LOCATION	643.5000 EACH	REMARKS
0010	PROJECT	IH 94 WB	1	
TOTAL 0010			1	

TRAFFIC CONTROL DEVICES

CATEGORY	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705 DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 DAY	TRAFFIC CONTROL ARROW BOARDS 643.0800 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS 643.1051 DAY	REMARKS
0010	PROJECT	IH 94 WB	400	16	32	112	16	136	30	LANE CLOSURE
TOTAL 0010			400	16	32	112	16	136	30	

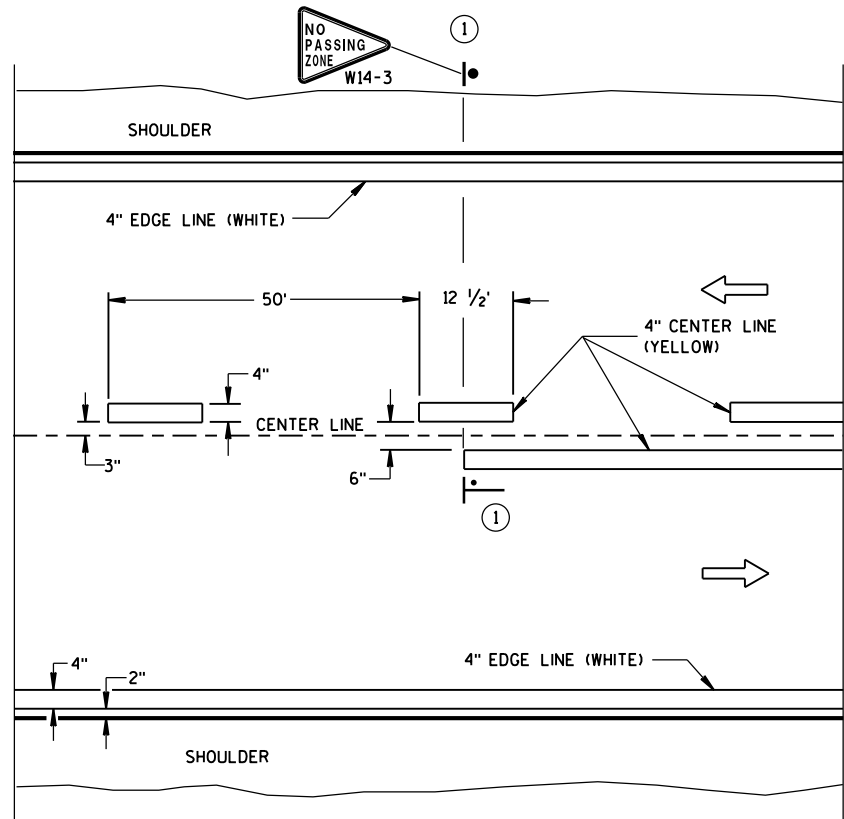
PAVEMENT MARKING					TEMPORAY MARKING			
CATEGORY	STATION	TO	STATION	LOCATION	MARKING	MARKING	LINE	REMARKS
					LINE	REMOVAL	REMOVABLE	
					EPOXY	LINE	TAPE	
					4-INCH	4-INCH	4-INCH	
					646.1020	646.9000	649.0150	
					LF	LF	LF	
0010	829+30	-	830+95	B-17-0199	380	380	380	EDGE LINE & LANE LINES
0010			PROJECT	IH 94 WB	200	200	660	STAGE 1 LANE CLOSURE
0010			PROJECT	IH 94 WB	200	200	660	STAGE 2 LANE CLOSURE
TOTAL 0010					780	780	1700	



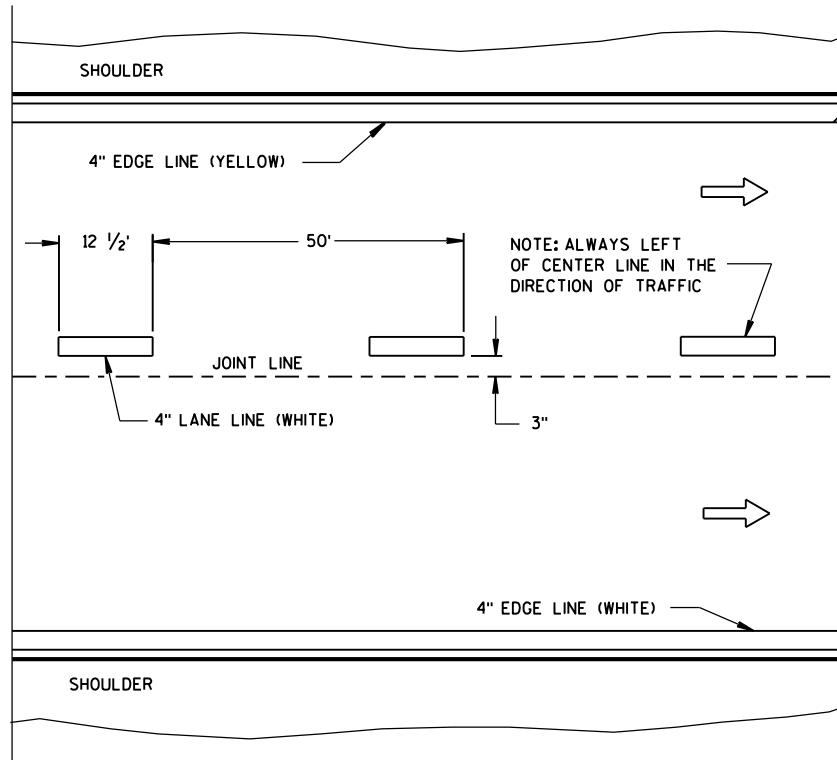
PROJECT NO: 1022-03-83	HWY: IH 94	COUNTY: DUNN	PLAN: B-17-0199 (IH 94 WB)	SHEET	E
------------------------	------------	--------------	----------------------------	-------	---

Standard Detail Drawing List

15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

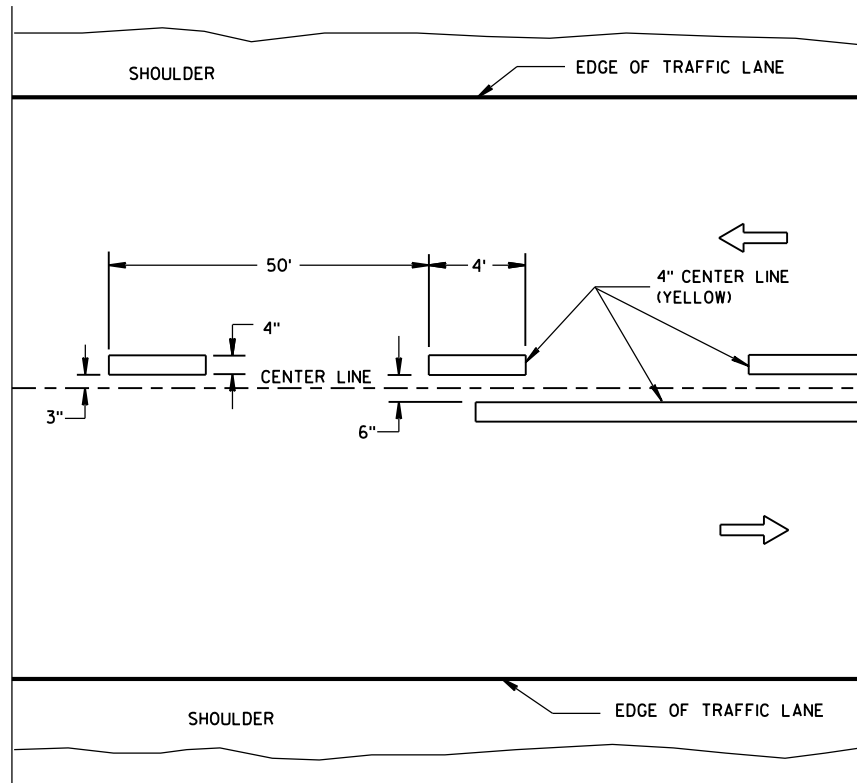


TWO WAY TRAFFIC

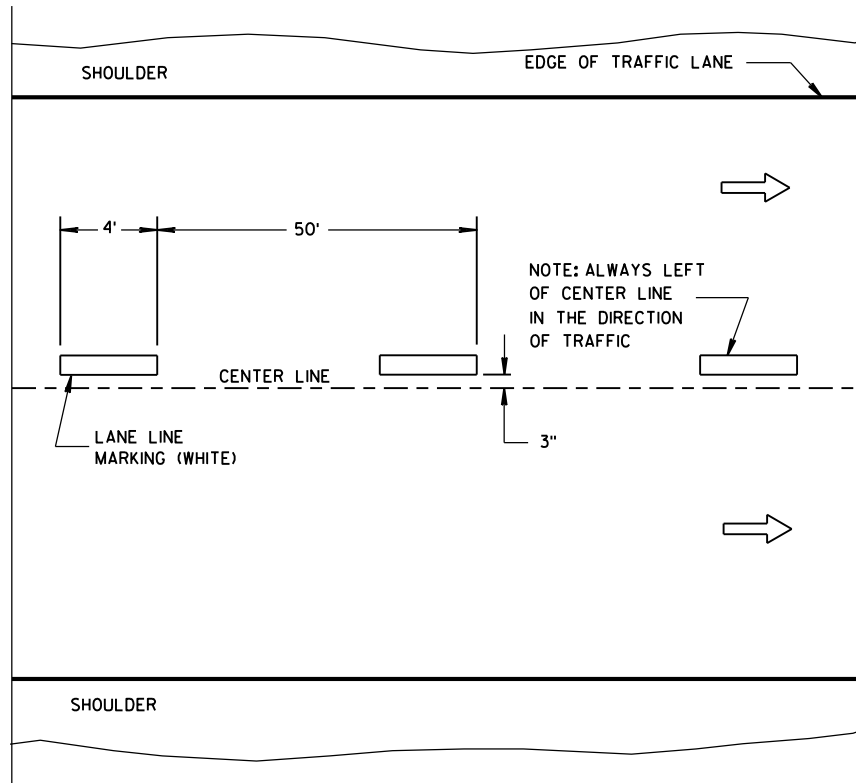


ONE WAY TRAFFIC

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 NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED 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
Sept., 2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING 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.

"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 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.

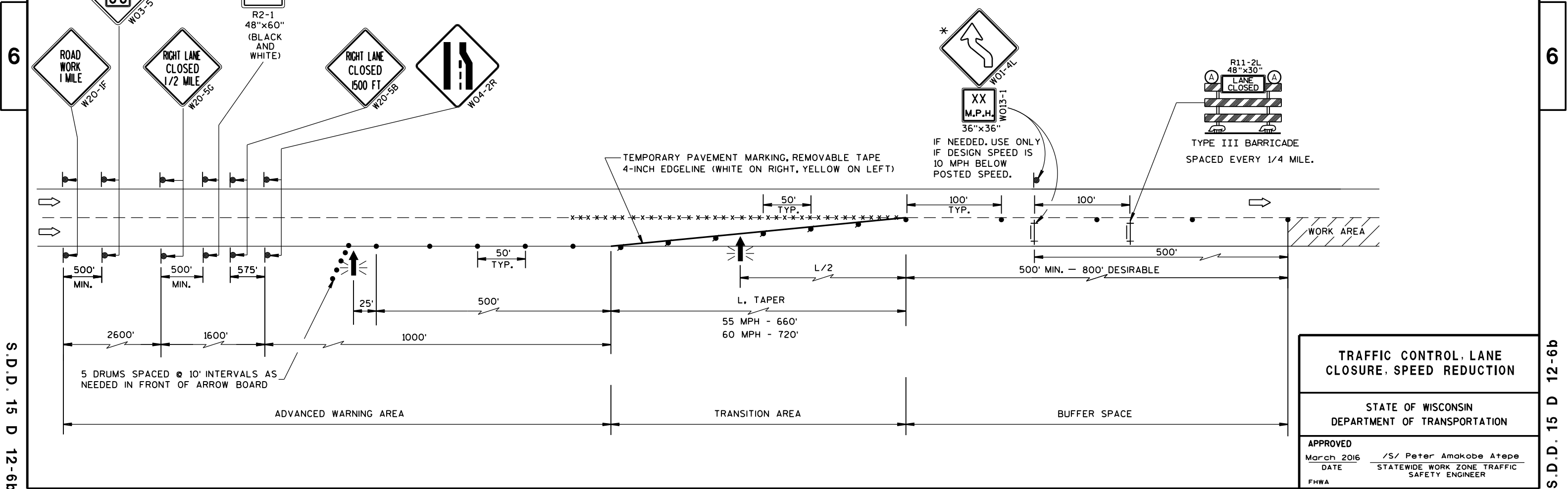
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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	

DESIGN DATA

LIVE LOAD:

INVENTORY RATING: HS-20
OPERATING RATING: HS-34
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY - DECK REPAIR - f'_c = 4,000 P.S.I.

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".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

"PREPARATION DECKS TYPE 1" AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION REPAIRS SHALL BE FILLED WITH "FAST SET DECK PATCHING".

TRAFFIC VOLUME

IH 94 WB

ADT = 28,500 (2026)
R.D.S. = 70 M.P.H.

490TH AVE.

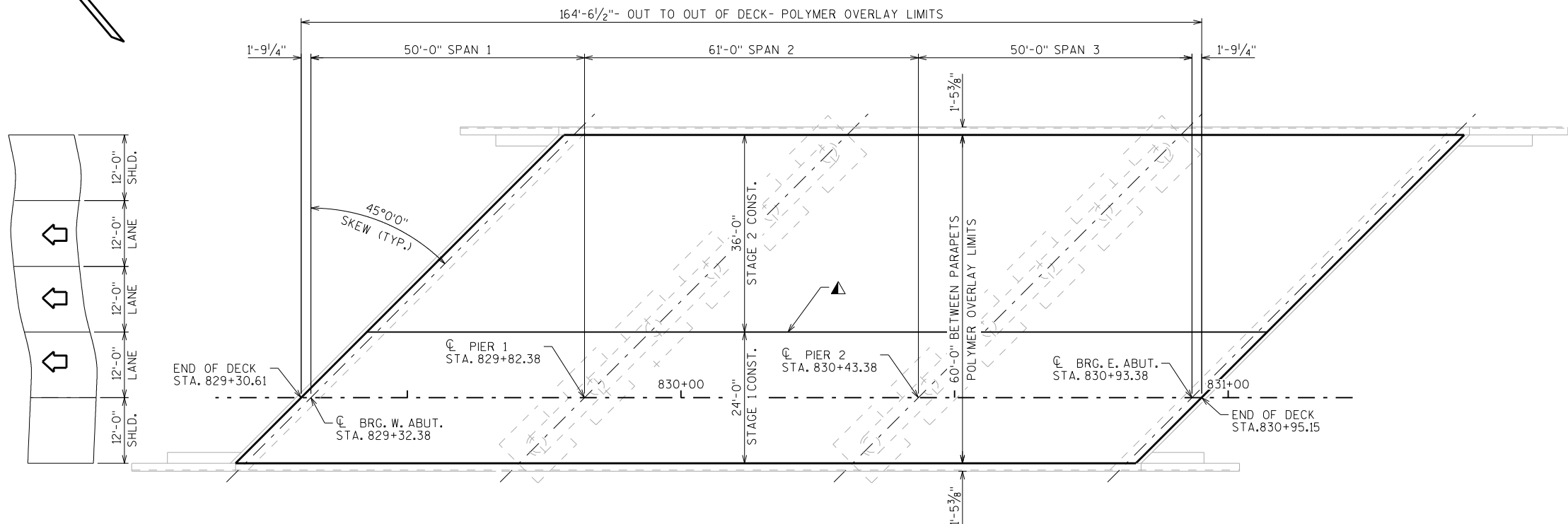
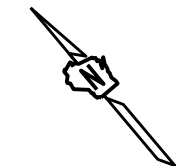
ADT = 139 (2026)
R.D.S. = 45 M.P.H.

STRUCTURE DESIGN CONTACTS:

DAN MONROE (608) 266-8490

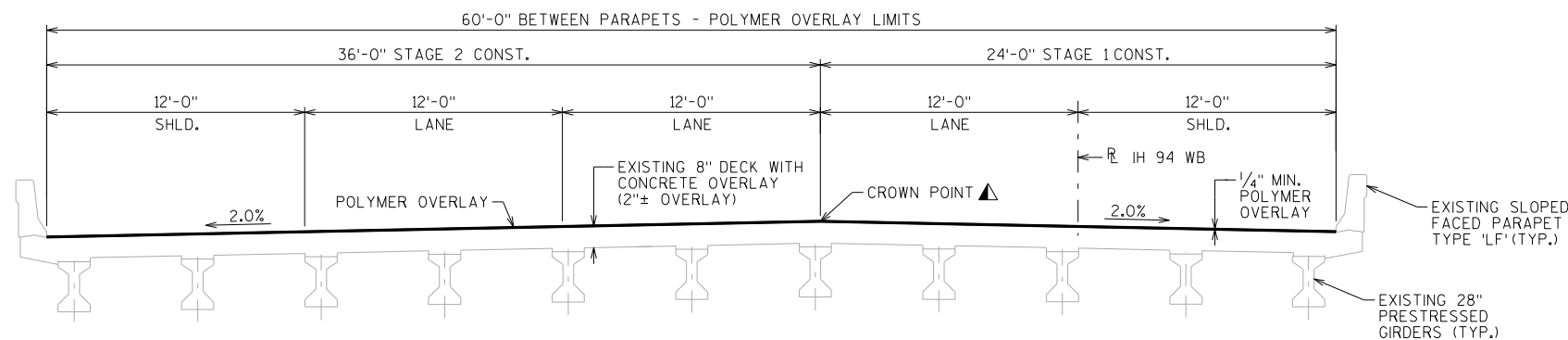
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY
 BUREAU OF STRUCTURES			
ACCEPTED <i>William C. Dierker</i> ^{LLS}		8/4/17	
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-17-199			
IH 94 WB OVER 490TH AVE.			
COUNTY	DUNN	TOWN/CITY/VILLAGE	ELK MOUND
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DLM	DESIGNED CK'D.	MJL
DRAWN BY	DLM	PLANS CK'D.	MJL
POLYMER OVERLAY			SHEET 1 OF 1



PLAN

3 SPAN 28" PRESTRESSED GIRDER BRIDGE



CROSS SECTION THRU ROADWAY

(LOOKING UPSTATION)

TOTAL ESTIMATED QUANTITIES

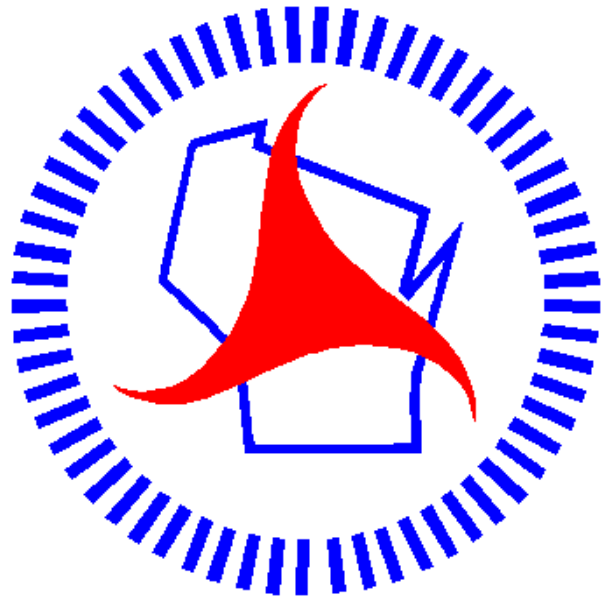
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.0301	PREPARATION DECKS TYPE 1	SY	5
509.5100.S	POLYMER OVERLAY	SY	1097
SPV.0090	SAWING PAVEMENT DECK PREPARATION AREAS	LF	50
SPV.0180	FAST SET DECK PATCHING	SY	5

▲ LONGITUDINAL CONSTRUCTION JOINT.

LIST OF DRAWINGS

1. POLYMER OVERLAY

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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