

LAX  
PROJECT ID: 1009-10-76  
WITH:

COUNTY: JUNEAU

SEPTEMBER 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
<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>
Section No. 8	Structure Plans
<del>Section No. 9</del>	<del>Computer Earthwork Data</del>
<del>Section No. 9</del>	<del>Gross Sections</del>

TOTAL SHEETS = 10



DESIGN DESIGNATION

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

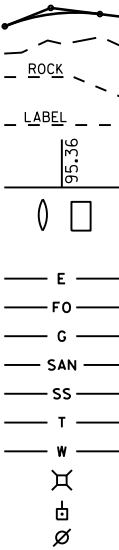
CONVENTIONAL SYMBOLS

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	



E	— E —
FO	— FO —
G	— G —
SAN	— SAN —
SS	— SS —
T	— T —
W	— W —
Utility Pedestal	
Power Pole	
Telephone Pole	



TOTAL NET LENGTH OF CENTERLINE = 0.00 MI.

HORIZONTAL POSITIONS SHOWN ARE WISCONSIN COUNTY COORDINATES, JUNEAU COUNTY.

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

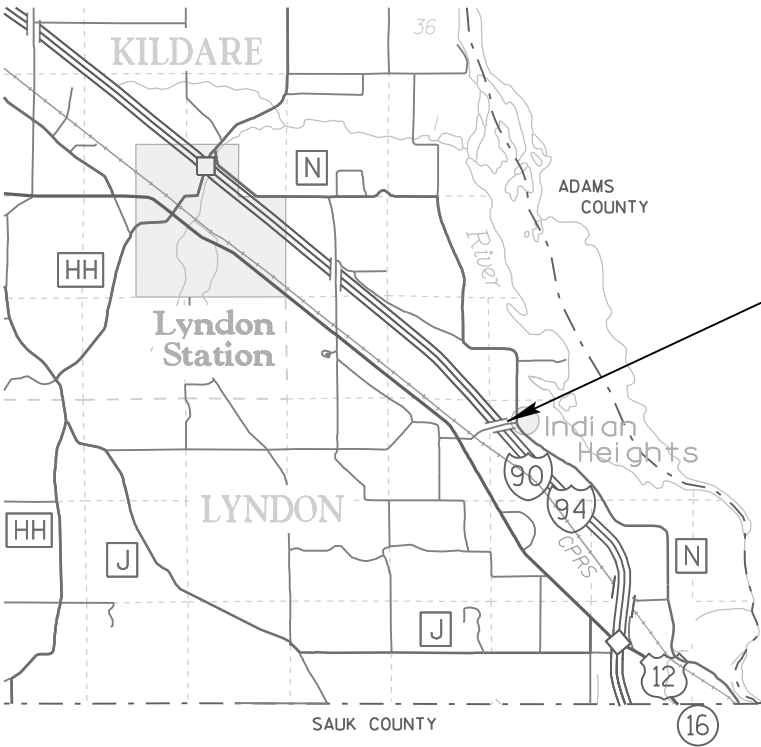
MAUSTON - WISCONSIN DELLS

63RD ST BRIDGE B-29-20

IH 90

JUNEAU COUNTY

STATE PROJECT NUMBER
1009-10-76



PROJECT 1009-10-76  
B-29-20 X=526315 Y=114570

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	BRANDYN MECUM
Project Manager	BRIAN MEYER
Regional Examiner	MICHAEL RUD
Regional Supervisor	JAMES SAVOLDELLI
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 08-10-2017

E

GENERAL NOTES

- THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS 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.
- CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

DESIGN CONTACTS

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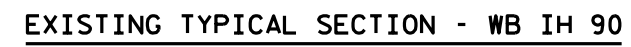
DNR LIAISON

KAREN KALVELAGE  
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST  
WISCONSIN DEPT. OF NATURAL RESOURCES  
WEST CENTRAL REGION  
3550 MORMON COULEE ROAD  
LA CROSSE, WI 54601  
608-785-9115



STANDARD ABBREVIATIONS

AC	ACRE	LC.	LONG CHORD
AGG	AGGREGATE	LS	LUMP SUM
<	ANGLE	M.P.	MARKER POST
A.E., AEW	APRON ENDWALL	MGAL	1000 GALLONS
ASPH.	ASPHALTIC	N.C.	NORMAL CROWN
A.D.T.	AVERAGE DAILY TRAFFIC	N	NORTH
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	NB	NORTHBOUND
B.F.	BACK FACE	NOR	NORMAL
BM	BENCHMARK	NO.	NUMBER
BTWN	BETWEEN	PAV'T	PAVEMENT
CTR.	CENTER	P.L.E.	PERMANENT LIMITED EASEMENT
C/L	CENTER LINE	P.C.	POINT OF CURVATURE
Δ	CENTRAL ANGLE OR DELTA	P.I.	POINT OF INTERSECTION
C.E.	COMMERCIAL ENTRANCE	P.T.	POINT OF TANGENCY
CONST.	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CMCP	CORRUGATED METAL CULVERT PIPE	P.E.	PRIVATE ENTRANCE
CMP	CORRUGATED METAL PIPE	PGL	PROFILE GRADE LINE
CO.	COUNTY	P.L.	PROPERTY LINE
CTH	COUNTY TRUNK HIGHWAY	R	RADIUS OR RANGE
CR.	CREEK	R/L	REFERENCE LINE
CABC	CRUSHED AGGREGATE BASE COURSE	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
CY	CUBIC YARD	REQ'D	REQUIRED
CP	CONTROL POINT OR CULVERT PIPE	RT	RIGHT
C&G	CURB AND GUTTER	R.H.F.	RIGHT HAND FORWARD
D	DEGREE OF CURVE	R/W	RIGHT OF WAY
D.H.V.	DESIGN HOURLY VOLUME	RD.	ROAD
DIA.	DIAMETER	SHLD.	SHOULDER(S)
D.D.	DIRECTIONAL DISTRIBUTION	SHR.	SHRINKAGE
DISCH.	DISCHARGE	S	SOUTH
DMS	DYNAMIC MESSAGE SIGN	SB	SOUTHBOUND
EA	EACH	S.F.	SQUARE FOOT (FEET)
E	EAST	SDD	STANDARD DETAIL DRAWING(S)
EB	EASTBOUND	STH	STATE TRUNK HIGHWAY
ELEC.	ELECTRIC(AL), ELEC. CABLE	STA.	STATION
EL., ELEV.	ELEVATION	S.E.	SUPERELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	S/L	SURVEY LINE
EXC.	EXCAVATION	SYM	SYMMETRICAL
EXIST	EXISTING	T.	PERCENT TRUCKS
F.F.	FACE TO FACE	TEL.	TELEPHONE
FERT.	FERTILIZER	TEMP.	TEMPORARY
F.E.	FIELD ENTRANCE	T.L.E.	TEMPORARY LIMITED EASEMENT
F/L, F.L.	FLOW LINE	T.O.C.	TOP OF CURB
GALV.	GALVANIZE	TYP	TYPICAL
H.S.	HIGH STRENGTH	UNCL.	UNCLASSIFIED
CWT	HUNDRED WEIGHT	U.G.	UNDERGROUND (CABLE)
INL	INLET	VAR	VARIABLE
INTER.	INTERSECTION	V.C.	VERTICAL CURVE
IH	INTERSTATE HIGHWAY	V.P.C.	VERTICAL POINT OF CURVATURE
JT.	JOINT	V.P.I.	VERTICAL POINT OF INTERSECTION
LT	LEFT	V.P.T.	VERTICAL POINT OF TANGENCY
L.H.F.	LEFT HAND FORWARD	Wt.	WEIGHT
L.	LENGTH OF CURVE	W	WEST
L.F.	LINEAR FOOT(FEET)	WB	WESTBOUND



Estimate Of Quantities

1009-10-76					
Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 1009-10-76	EACH	1.000	1.000
0004	506.0105	Structural Steel Carbon	LB	461.000	461.000
0006	517.3000.S	Structure Overcoating Cleaning and Priming (structure) 01. B-29-20	LS	1.000	1.000
0008	517.4000.S	Containment and Collection of Waste Materials (structure) 01. B-29-20	LS	1.000	1.000
0010	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1009-10-76	EACH	1.000	1.000
0012	619.1000	Mobilization	EACH	1.000	1.000
0014	643.0100	Traffic Control (project) 01. 1009-10-76	EACH	1.000	1.000
0016	643.0300	Traffic Control Drums	DAY	660.000	660.000
0018	643.0420	Traffic Control Barricades Type III	DAY	15.000	15.000
0020	643.0705	Traffic Control Warning Lights Type A	DAY	30.000	30.000
0022	643.0715	Traffic Control Warning Lights Type C	DAY	255.000	255.000
0024	643.0800	Traffic Control Arrow Boards	DAY	30.000	30.000
0026	643.0900	Traffic Control Signs	DAY	150.000	150.000
0028	SPV.0090	Special 01. EPOXY INJECTION REPAIR B-29-20	LF	27.000	27.000
0030	SPV.0105	Special 01. HEAT STRAIGHTENING OF DAMAGED GIRDERS B-29-20	LS	1.000	1.000

TRAFFIC CONTROL SUMMARY

		643.0300		643.0420		643.0705		643.0715		643.0800		643.0900			
		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL			
		DRUMS		BARRICADES		LIGHTS		LIGHTS		ARROW		SIGNS			
CAT.	LOCATION	Days	EACH	DAY	TYPE III	TYPE III	TYPE A	TYPE A	TYPE C	TYPE C	BOARDS	BOARDS	SIGNS	SIGNS	REMARKS
0010	IH 90/94 WB	15	44	660	1	15	2	30	17	255	2	30	10	150	
TOTAL 0010				660		15		30		255		30		150	

Standard Detail Drawing List

15D12-06A      TRAFFIC CONTROL, LANE CLOSURE

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.

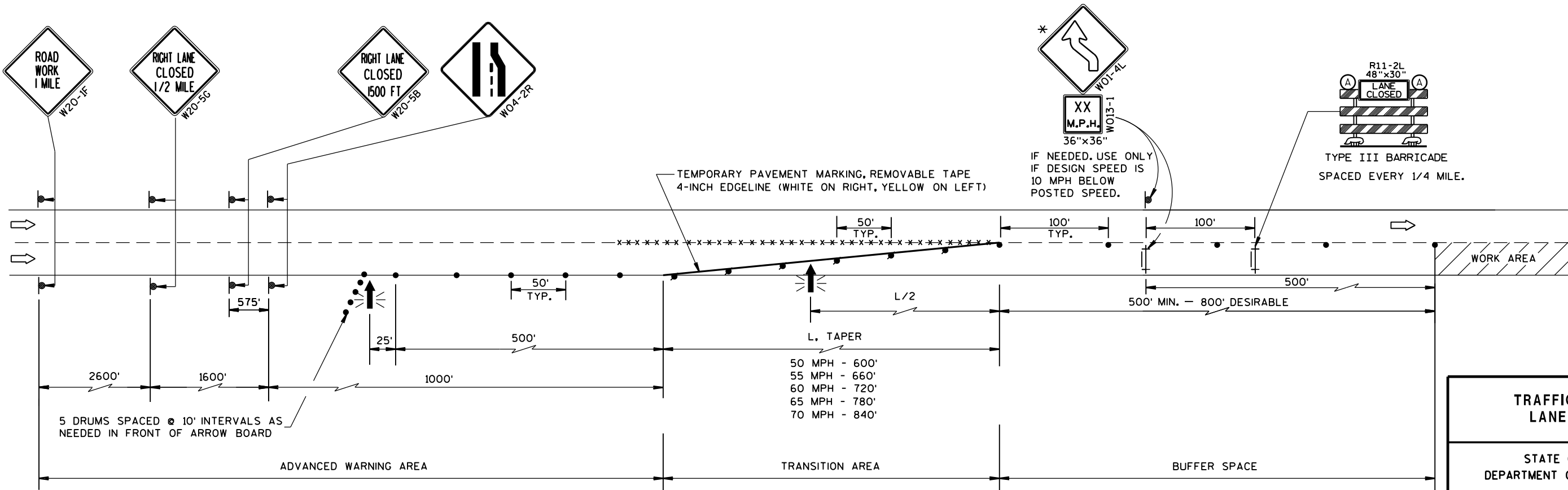
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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	

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.

THE COLOR OF THE FINISH EPOXY TOP COAT SHALL BE GRAY (FEDERAL STANDARD COLOR NO. 26293).

NEW STEEL CONNECTION TEES AND DIAPHRAGM CHANNELS SHALL RECEIVE A SHOP BLAST CLEANING CONFORMING TO SSPC-SP 10 AND BE PAINTED WITH ONE COAT OF ZINC-RICH PRIMER COMPATIBLE WITH THE FIELD APPLIED TOP COATS. SHOP PAINTING AND PRIMING SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "STRUCTURAL STEEL CARBON."

FIELD PAINTING OF STEEL SHALL BE PAID FOR UNDER BID ITEM "STRUCTURE OVERCOATING CLEANING AND PRIMING B-29-20". THIS INCLUDES PAINTING PORTIONS OF STRUCTURE IN HEAT STRAIGHTENED AREAS AND OTHER AREAS WHERE PAINT WAS REMOVED.

ALL FIELD CONNECTIONS SHALL BE MADE WITH A 3/4" DIAMETER A325 HIGH-TENSILE STRENGTH BOLTS WITH A325 NUT AND WASHER.

EXTENTS OF REPAIRS ARE ESTIMATED BASED ON FIELD OBSERVATIONS, EXTENTS AND AREAS SHALL BE DETERMINED BY FIELD ENGINEER. SEE SPECIAL PROVISIONS FOR REQUIREMENTS.

DESIGN DATA

ULTIMATE DESIGN STRESSES:

STRUCTURAL CARBON STEEL, ASTM A709 GRADE 36 — Fy = 36,000 P.S.I.

TOTAL ESTIMATED QUANTITIES

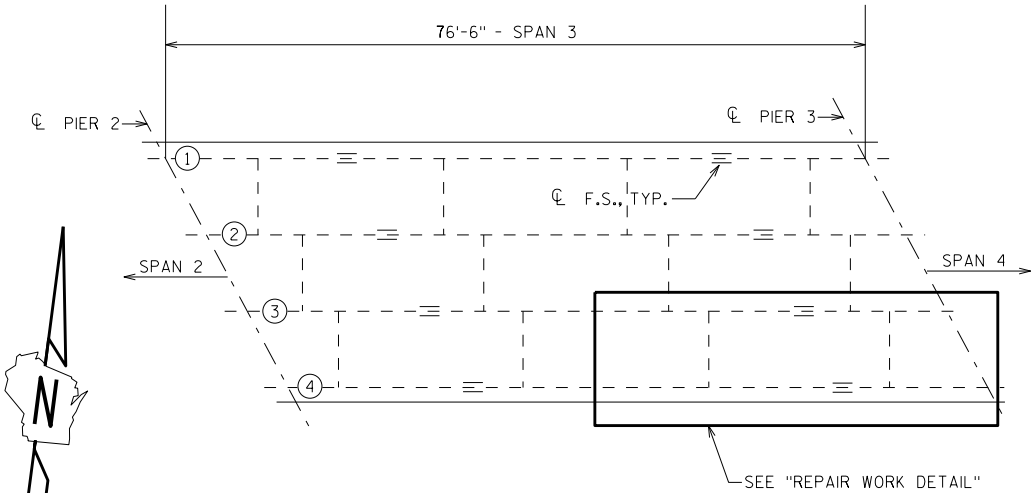
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
506.0105	STRUCTURAL STEEL CARBON	LB	461
517.3000.S	STRUCTURE OVERCOATING CLEANING AND PRIMING B-29-20	LS	1
517.4000.S	CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-29-20	LS	1
SPV.0090	EPOXY INJECTION REPAIR B-29-20	LF	27
SPV.0105	HEAT STRAIGHTENING OF DAMAGED GIRDERS B-29-20	LS	1

REGION BRIDGE MAINTENANCE CONTACT:  
DAVE BOHNSACK (608) 785-9781

BUREAU OF STRUCTURES CONTACT:  
ALEX PENCE (608) 267-6880  
LAURA SHADEWALD (608) 267-9592

WORK TO BE DONE

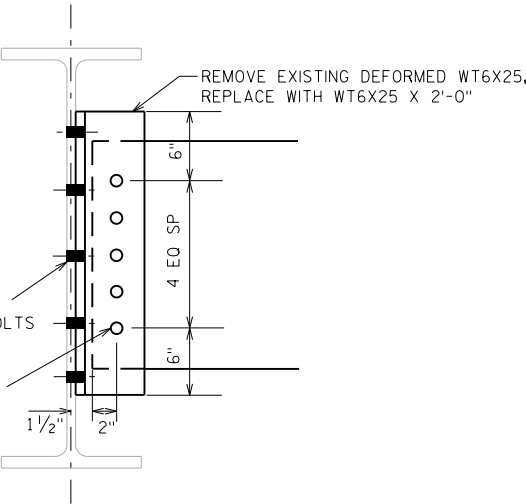
- (A) MISSING DIAPHRAGM TO BE REPLACED WITH NEW MC18X42.7
- (B) INJECT EPOXY WHERE GIRDER HAS SEPARATED FROM DECK, AND PROVIDE SURFACE SEAL MATERIAL ALONG EDGE OF JOINT TO CONFIN EPOXY. PAID FOR AS EPOXY INJECTION REPAIR
- (C) GOUGE IN BOTTOM FLANGE - TO BE GROUND TO A 10:1 FLARE. PAID FOR AS HEAT STRAIGHTENING OF DAMAGED GIRDERS
- (D) WRINKLE IN BOTTOM FLANGE - TO BE HEAT STRAIGHTENED
- (E) REPLACE DIAPHRAGM CONNECTION TEE. SEE "DIAPHRAGM REPLACEMENT DETAIL"
- (F) 3/4" OUT OF PLANE ROTATION OF TOP FLANGE, 5" OUT OF PLANE ROTATION OF BOTTOM FLANGE, AND GIRDER OUT OF PLUMB UP TO 12" AT CENTER OF AFFECTED LENGTH - TO BE HEAT STRAIGHTENED



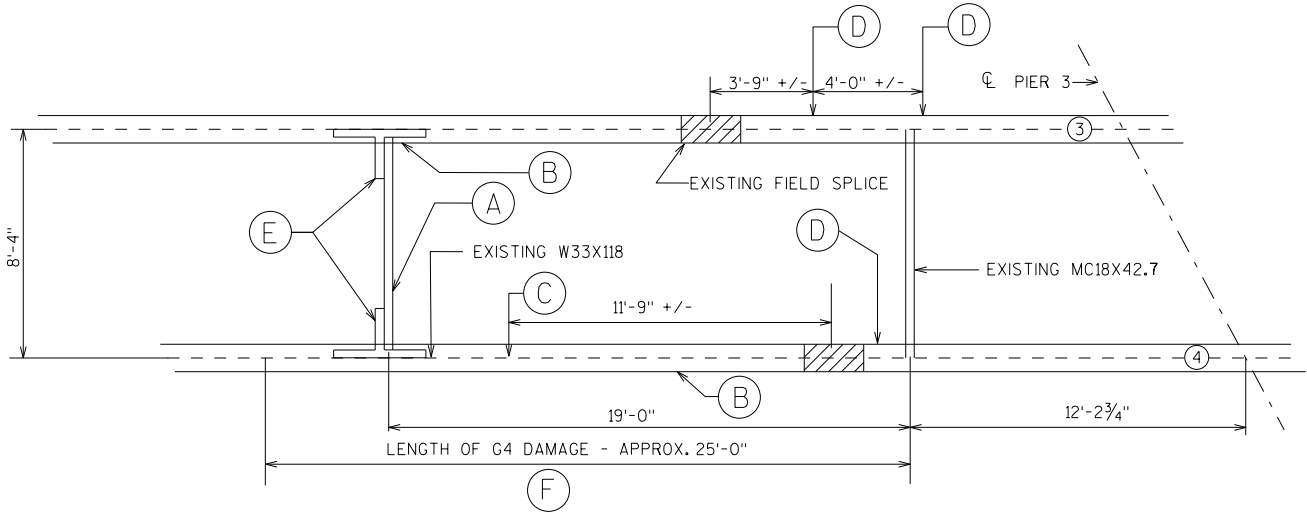
EXISTING STEEL FRAMING PLAN

MATCH DRILL NEW WT6X25 WITH EXISTING HOLES IN WEB, FILL WITH (10) NEW 3/4" DIA. BOLTS


(5) 3/4" DIA. BOLTS AND 13/16" DIA. HOLES. SHOP DRILL HOLES IN CONNECTION TEE. FIELD DRILL HOLES IN DIAPHRAGM.



DIAPHRAGM REPLACEMENT DETAIL



REPAIR WORK DETAIL

NO.	DATE	REVISION	BY
<div><div><div>Plans Prepared By <b>WISDOT</b> BUREAU OF STRUCTURES</div></div><div><div>ACCEPTED</div><div><i>William C. Diehl</i> CHIEF STRUCTURES DESIGN ENGINEER</div><div>8/7/17 DATE</div></div></div>			
STRUCTURE B-29-20			
63RD ST OVER IH 90-IH 94			
COUNTY	JUNEAU	TOWN/CITY/VILLAGE	LYNDON
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	AWP	CK'D. CAD BY	AWP
DAMAGE REPAIR			SHEET 1 OF 1



## Notes



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

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through innovation and exceptional service.

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