

**SECTION 905 -- PROPOSAL (CONTINUED)**

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.   1   DATED   6/21/2017   ADDENDUM NO.        DATED         
 ADDENDUM NO.        DATED        ADDENDUM NO.        DATED       

Number	Description
1	Revised NTB Nos. 189, & 190; Revised Bid Items; Amendment EBS Download Required.

TOTAL ADDENDA:   1    
 (Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE \_\_\_\_\_

\_\_\_\_\_  
 Contractor

BY \_\_\_\_\_  
 Signature

TITLE \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

PHONE \_\_\_\_\_

FAX \_\_\_\_\_

E-MAIL \_\_\_\_\_

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of \_\_\_\_\_ and the names, titles and business addresses of the executives are as follows:

\_\_\_\_\_  
 President Address

\_\_\_\_\_  
 Secretary Address

\_\_\_\_\_  
 Treasurer Address

The following is my (our) itemized proposal.

BR-0059-03(096)/ 107401301000

Lauderdale County(ies)

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SECTION 904 -NOTICE TO BIDDERS NO. 189**

**CODE: (SP)**

**DATE: 05/30/2017**

**SUBJECT: Scope of Work**

**PROJECT: BR-0059-03(096) / 107401301 -- Lauderdale County**

The contract documents do not include an official set of construction plans but may, by reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings". All other references to plans in the contract documents and Standard Specifications for Road and Bridge Construction are to be disregarded.

Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment. Work for which no pay item is provided will not be paid for directly and shall therefore be considered an absorbed item of work.

It shall be the responsibility of the Contractor to protect existing structures from damage which might occur during construction. The Contractor shall replace or repair, as directed by the Engineer, any structures damaged during the life of the contract. No payment will be made for replacement or repair of damaged items.

All details are based on the dimensions shown on the original plans for the existing structure. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure. The Contractor shall verify all dimensions of the existing structure prior to beginning work.

During construction, care shall be exercised to ensure that no debris falls into the roadway crossing below the structure. All debris, including any material that has accumulated on the bridge caps, shall become the property of the Contractor and shall be removed from the construction site.

Work on the project shall consist of the following:

1. Joint Repair and Sealing
2. Headwall Repair and Bridge Deck Repair
3. Cap Cleaning
4. Epoxy Repair
5. Bearing Replacement

**Joint Repair & Sealing:**

The joint repair shall be done only to End Bents of Bridge No. 131.5B, 147.9A, and Bent No. 6 of Bridge No. 147.8. Joint repair shall include removal of existing joint material, joint

preparation, saw cutting, installation of the preformed joint seal and other necessary work per the included standard drawings or as directed by the Engineer. All concrete approach slab joints shall be sealed. If the bridge has an asphalt approach, the joint between the asphalt and concrete shall not be disturbed. Removal of all material associated with armor, sliding plate, or neoprene expansion joints shall be paid under Pay Item No. 202-B169, Removal of Joint Material. Removal of material from all other joint types will not be paid directly and shall be considered an absorbed item of work.

After the existing joint material has been removed, the joints shall then be saw cut as per the Joint Repair Standard Drawings. Saw cuts will be paid for under Pay Item No. 907-823- B001, Saw Cut, Type I. The joints are then to be repaired, if necessary, with epoxy mortar or an approved equivalent. This work will be paid for under Pay Item No. 808-A001, Joint Preparation.

The joint shall then be sealed by one of the three approved manufacturers listed in Special Provision 907-823 and installed according to the Manufacturer's specifications.

#### **Headwall Repair and Bridge Deck Repair**

The headwall and bridge deck shall be repaired in accordance with the Headwall Repair Details provided for Bridge 147.8 at End Bent 6. Refer to Joint Details provided for joint repair associated with headwall repair.

Headwall and bridge deck repair will be paid for under Pay Item No. 907-824-PP008, Bridge Repair, Endwall Repair, Pay Item No. 202-B026, Removal of Bridge Deck, and Pay Item No. 804-A001, Bridge Concrete, Class AA.

#### **Cap Cleaning:**

Cleaning all bent caps shall be performed by removing all large debris by hand. All other debris (dirt & rust) shall be removed by pressure washing the bent caps to the satisfaction of the project engineer. The pressure washer shall be able to maintain 3,500 psi of pressure. The surface of all caps shall be cleaned to the satisfaction of the Engineer and paid for under Pay Item No. 907-824-PP001 Bridge Repair, Cap Cleaning.

#### **Epoxy Repair:**

##### **Bridge No. 131.5B**

Repair the damaged bearing areas of the box girders at the end bents with epoxy mortar subsequent to the removal of the existing neoprene bearings. Repair spalled area on cap at bent No. 4 with epoxy mortar or approved equivalent.

##### **Bridge No. 147.8**

Repair the damaged bearing areas of the box girder at End Bent No. 1 with epoxy mortar subsequent to the removal of the existing bearing assemblies. Repair spalled areas in box girder with epoxy mortar or approved equivalent as directed by the Project Engineer.

**Bridge No. 147.9A**

Repair the damaged bearing areas of the box girder at End Bent No. 8 with epoxy mortar subsequent to the removal of the existing bearing assemblies. Repair spalled areas in box girder with epoxy mortar or approved equivalent as directed by the Project Engineer. Repair spalled area of cap at End Bent No. 8 with epoxy mortar or approved equivalent as directed by the Project Engineer.

The Contractor shall repair box girder ends to the original bridge plan dimensions. Repair concrete spalled or unsound areas on the bridge as directed by the Project Engineer using epoxy mortar. Spalled areas where pack rust has developed around or on reinforcement shall be removed by small hand tools or pressure washing using 3500 psi pressure. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions and details on the information plans.

1. Epoxy Resin: Resin shall be selected from the MDOT Approved Products List.
2. Silica Sand: The materials shall be bagged general purpose cleaning sand.
3. Epoxy Mortar Mix: The epoxy mortar mix shall consist of part liquid epoxy and part clean dry sand mixed in the ratio recommended by the manufacturer.
4. General:
  - A. A Representative of the epoxy manufacturer must be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material.
  - B. Prior to placement of the mortar mix, the prepared surface shall be lightly primed with neat epoxy.
  - C. Acetone alcohol may be used to clean and lubricate trowels.
  - D. Curing time shall be in accordance with the manufacturer's recommendations.
5. All items of work related to epoxy repair shall be paid for under pay item 907-824-PP005, Bridge Repair, Epoxy Repair.

**Bearing Replacements:**

**Bridge No. 131.5B**

Remove and replace bearings at end bents according to Neoprene Pad Bearing Details provided. Existing anchor bolts shall be ground to ¼" below the concrete surface and grouted with epoxy mortar.

The Contractor shall provide adequate bracing and jacking arrangements as required to replace the existing bearings. The box girder end shall only be raised to ¼" from its original position. Traffic shall be maintained on the bridge during the duration of the repair.

The Contractor shall employ the service of a Mississippi Registered Professional Engineer who is knowledgeable in the field of Bridge Design. A complete set of bracing and jacking arrangement plans along with design calculations shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the Design Engineer's seal.

Jacks shall be coupled to a common manifold. Jacking point shall be under the webs of the box girder span at the bent and no jacking points will be allowed under any diaphragm or bay. After the box girder is raised into position, temporary blocking shall be provided to secure the box girder span in this position while the repair work is being performed. Temporary blocking points shall be under the webs of the box girder spans at the bent and no temporary blocking will be allowed under any diaphragm or bay.

Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

Payment for this work shall be made under Pay Item No. 907-824-PP001, Bridge Repair, Bearing Assembly Replacement.

**Bridge No. 147.8**

Remove and replace bearings, and install plates at end bents according to Laminated Pad Bearing Assembly Details provided. All structural steel shall conform to ASTM A709 Grade 50. All steel shall be new. Extreme care shall be exercised in removing the existing bearing plates that are welded to the 3/4-inch anchor plates embedded in the box girder. Existing anchor bolts shall be ground to 1/4" below the concrete surface and grouted with epoxy mortar.

The bottom of the existing anchor plates shall be finished smooth to accommodate the new steel plates and painted with approved encapsulating paint. All pack rust and scale within the designated areas shall be removed by using small hand tools, mechanical process, or needle gun. All areas required to be painted containing grease films after the initial cleaning shall be cleaned with a biodegradable solvent. All debris removed from the existing structure shall become property of the Contractor and shall be disposed of properly. The Contractor shall provide technical data for the proposed encapsulating paint to be used on this project to the Director of Structures, State Bridge Engineer for approval. New paint shall be applied by hand, with either a brush or roller.

After the pads are vulcanized to the new steel plate, the new steel plate shall be cleaned and then painted with one shop coat of inorganic zinc, one field intermediate coat of acrylic latex, and one field top coat of acrylic latex per Section 814 of the Specifications. Painting will not be paid for directly and shall be considered an absorbed item.

The Contractor shall verify all dimensions of the existing structure prior to beginning work. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure.

The Contractor shall provide adequate bracing and jacking arrangements as required to replace the existing bearings. The box girder span shall only be raised to 1/4" from its original position. Traffic shall be maintained on the bridge during the duration of the repair.

The Contractor shall employ the service of a Mississippi Registered Professional Engineer who is knowledgeable in the field of Bridge Design. A complete set of bracing and jacking arrangement plans along with design calculations shall be submitted to the Director of Structures,

State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the Design Engineer's seal.

Jacks at each bent shall be coupled to a common manifold and the box girder span raised uniformly. Jacking points shall be under the webs of the box girder span at each bent and no jacking points will be allowed under any diaphragms or the bays. After the box girder span is raised into position, temporary blocking shall be provided to secure the box girder span in this position while the repair work is being performed. Temporary blocking points shall be under the webs of the box girder span at each bent and no temporary blocking will be allowed under any diaphragms or the bays.

Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

Payment for this work shall be made under Pay Item No. 907-824-PP001, Bridge Repair, Bearing Assembly Replacement, and Pay Item No. 907-824-PP001, Bridge Repair, Plate and Anchor Assemblies.

**Bridge No. 147.9A**

Remove and replace bearings at end bents according to Neoprene Pad Bearing Details provided. Existing anchor bolts shall be ground to 1/4" below the concrete surface and grouted with epoxy mortar.

The Contractor shall provide adequate bracing and jacking arrangements as required to replace the existing bearings. The box girder span shall only be raised to 1/4" from its original position. Traffic shall be maintained on the bridge during the duration of the repair.

The Contractor shall employ the service of a Mississippi Registered Professional Engineer who is knowledgeable in the field of Bridge Design. A complete set of bracing and jacking arrangement plans along with design calculations shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the Design Engineer's seal.

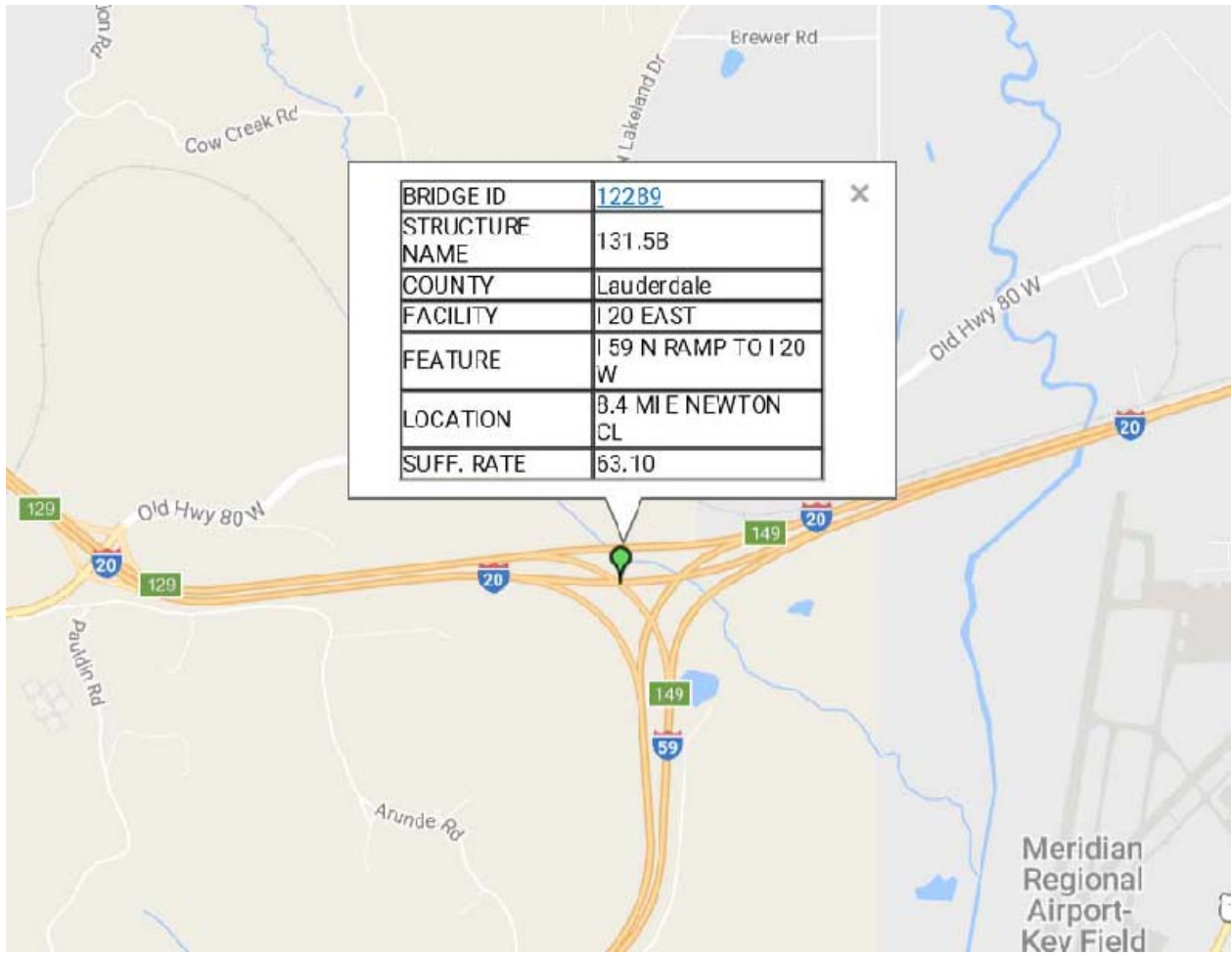
Jacks shall be coupled to a common manifold. Jacking point shall be under the webs of the box girder span at the bent and no jacking points will be allowed under any diaphragm or bay. After the box girder span is raised into position, temporary blocking shall be provided to secure the box girder span in this position while work is being performed. Temporary blocking points shall be under the webs of the box girder span at the bent and no temporary blocking will be allowed under any diaphragm or bay.

Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

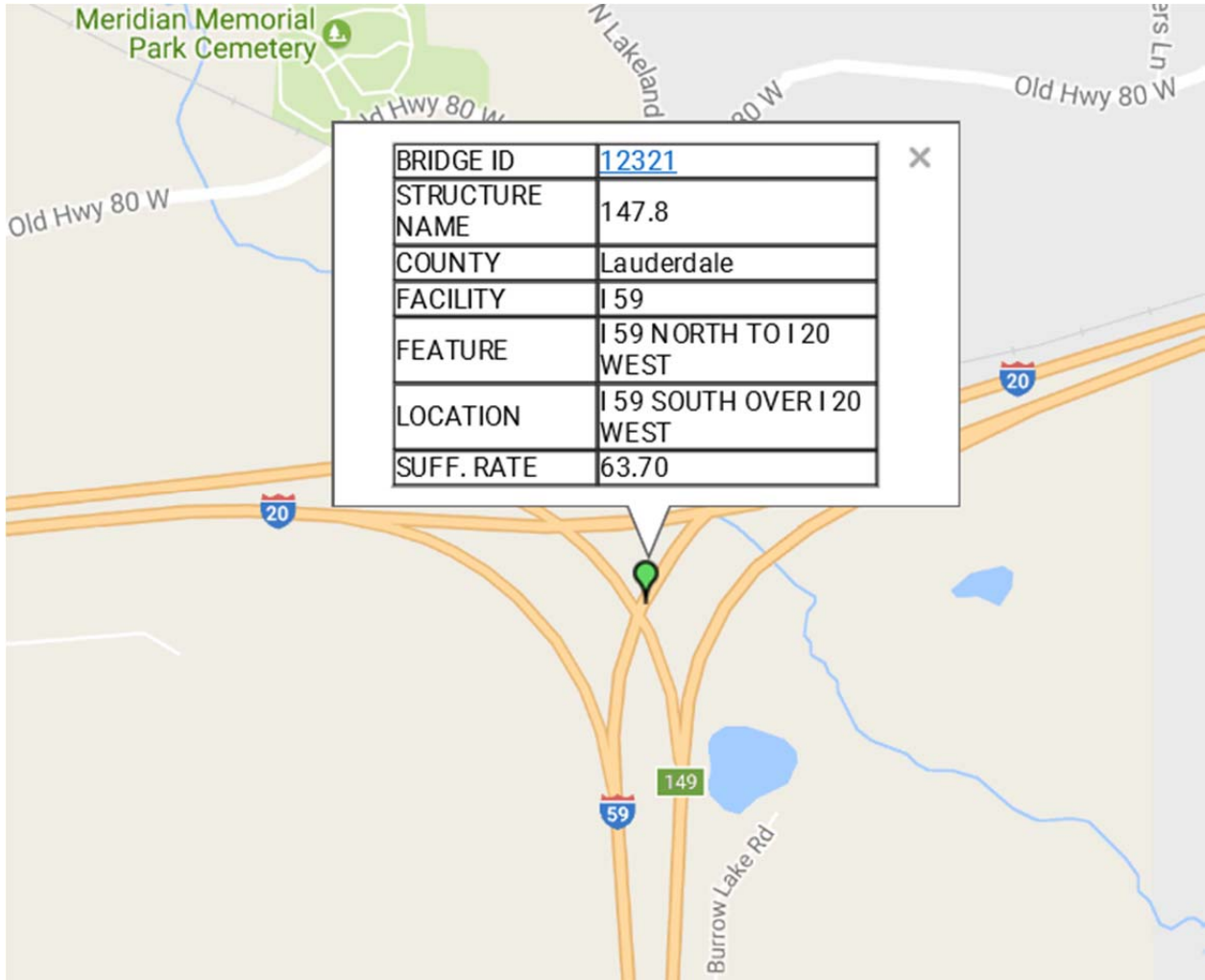
Payment for this work shall be made under Pay Item No. 907-824-PP001, Bridge Repair, Bearing Assembly Replacement.

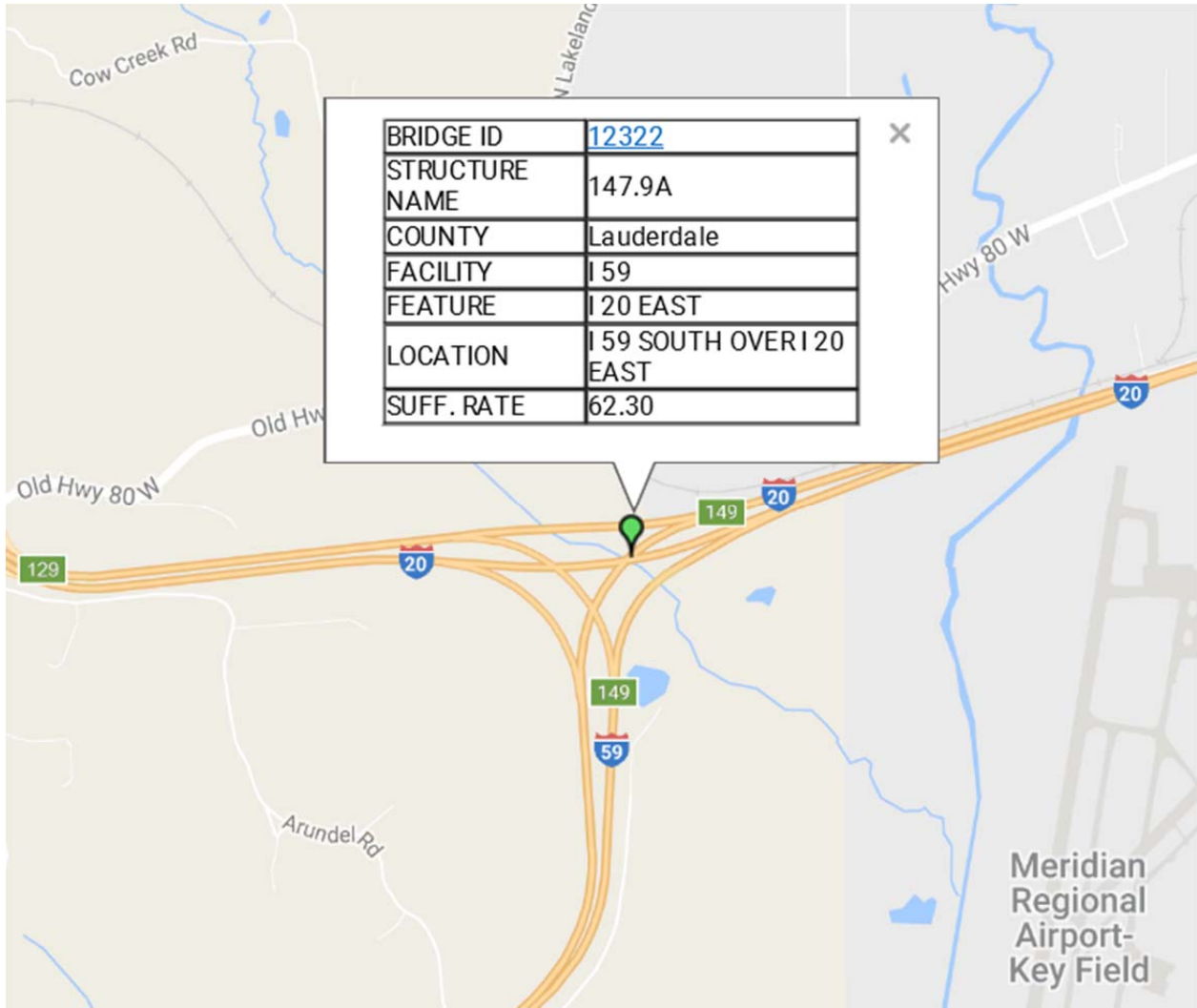
**Traffic Control Plan**

The Contractor shall erect and maintain construction signing and provide all signs and traffic control devices necessary to safely maintain traffic around and through the work areas in accordance with the Traffic Control Plan and the MUTCD. The cost is to be included in the price bid for pay item 618-A, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except those designated in the plans to be black legend and border on white background. Standard roadside construction signs and barricades will be paid for using the appropriate pay items. Roadside construction signs, barrels, etc. shall be placed in accordance with the attached drawings or as directed by the Engineer













FMS COM:107401/301000

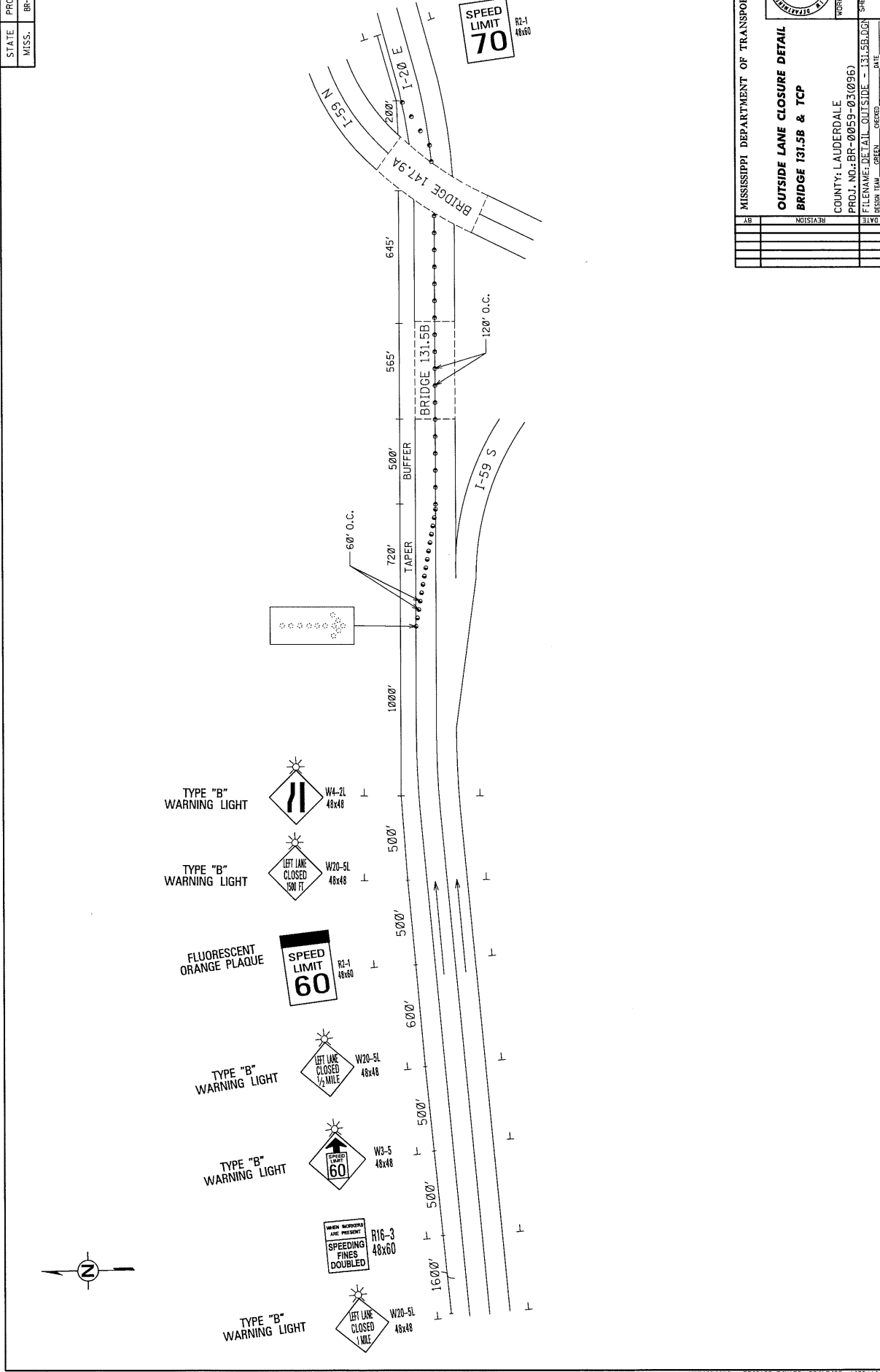
STATE	PROJECT NO.
MISS.	BR-0059-03(096)

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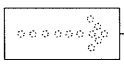
Notice To Bidders No. \_\_\_\_\_



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
<b>OUTSIDE LANE CLOSURE DETAIL</b>	
<b>BRIDGE 131.5B &amp; TCP</b>	
COUNTY: LAUDERDALE	WORKING NUMBER
PROJ. NO.: BR-0059-03(096)	SHEET NUMBER
FILE NAME: DETAIL OUTSIDE - 131.5B.DWG	\$
DESIGN TEAM: GREEN	CHECKED: _____ DATE: _____



**SPEED LIMIT**  
70  
R2-1  
48x60



TYPE "B" WARNING LIGHT



W4-2L  
48x48

TYPE "B" WARNING LIGHT



W20-5L  
48x48

FLUORESCENT ORANGE PLAQUE



R2-1  
48x60

TYPE "B" WARNING LIGHT

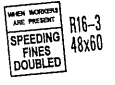


W20-5L  
48x48

TYPE "B" WARNING LIGHT



W3-5  
48x48

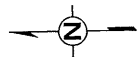


R16-3  
48x60

TYPE "B" WARNING LIGHT

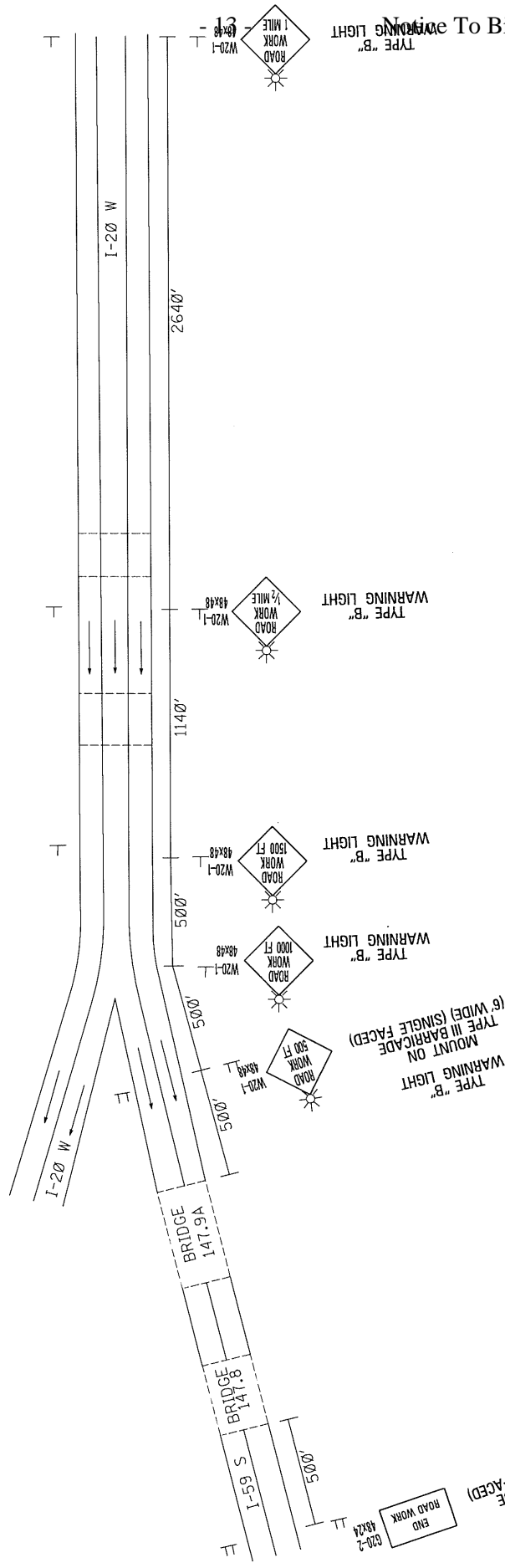
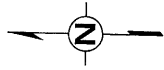


W20-5L  
48x48



FMS COM: 107101/3101000

STATE	PROJECT NO.
MISS.	BR-005-010961

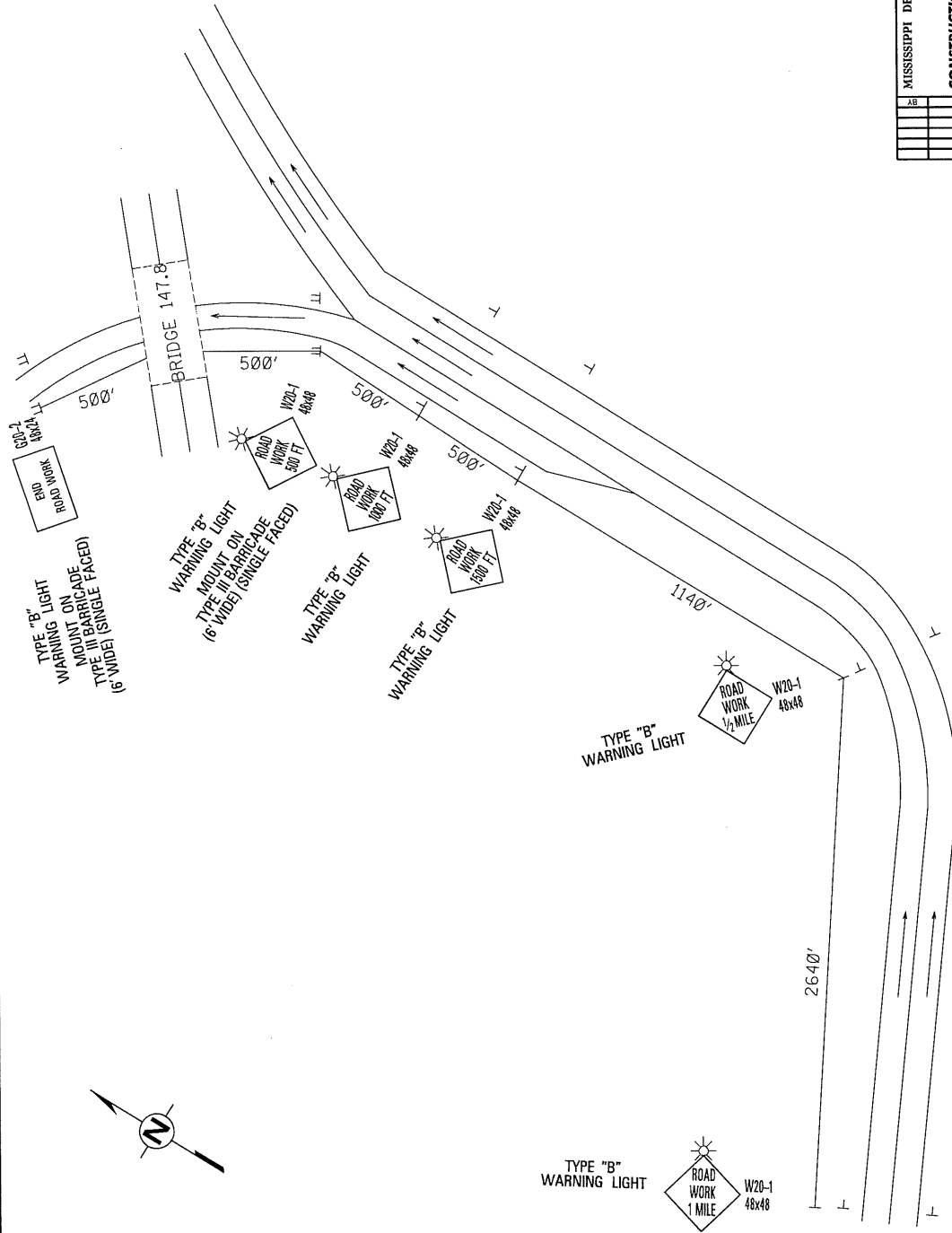


Notice To Bidders No. 13  
 TYPE "B" WARNING LIGHT

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
<b>CONSTRUCTION SIGNING</b>	
<b>BRIDGES 147.8 &amp; 147.9A</b>	
COUNTY: LAUDERDALE	WORKSHEET NUMBER
PROJ. NO.: BR-0059-0310961	SHEET NUMBER
FILENAME: DCS - 147.8 147.9A.DGN	\$4.00
ESTIM. TEAM: SHERI	DATE:
REVISION	DATE

FILES CONT:07401/3910080

STATE	PROJECT NO.
MISS.	BR-085-03(056)

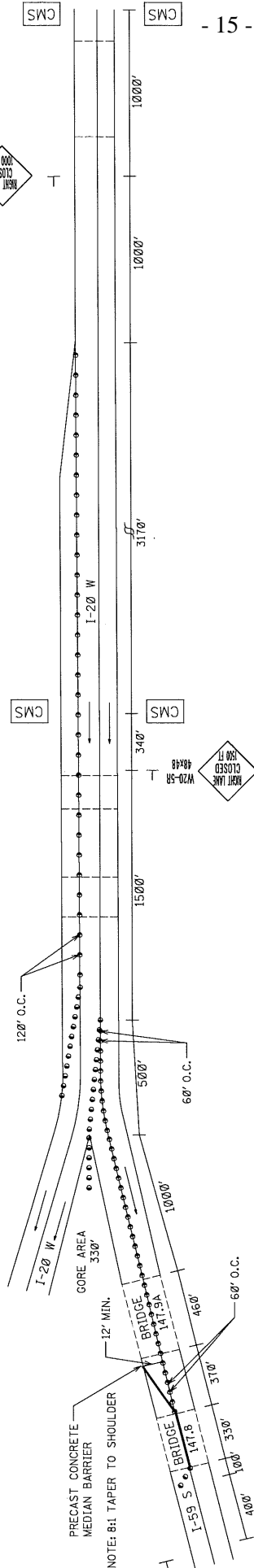
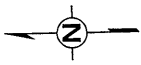


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
<b>CONSTRUCTION SIGNING</b> <b>UNDER BRIDGE 147.8</b>	
COUNTY: LAUDERDALE	
PROJ. NUM.: BR-0059-03(056)	
FILE NAME: DCS - 147.8 RAMP.DGN	SHEET NUMBER
DESIGN TEAM: GREEN	DESIGNER
DATE	DATE
BY	REVISION



FMS COM:107401/301000

STATE	PROJECT NO.
MISS.	BR-0059-03(096)

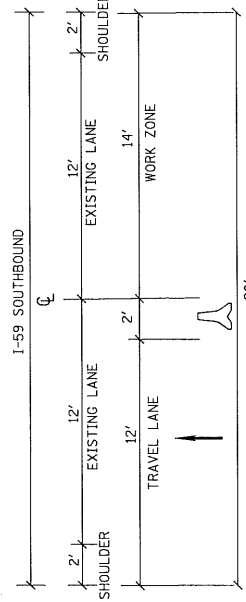


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Notice To Bidders No. \_\_\_\_\_


CMS\_BOARD\_DETAIL:

59 SOUTH LEFT LANE	59 WEST RIGHT LANE
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NOTE: REFER TO THE NOTICE TO BIDDERS FOR RESTRICTIONS ON CONCRETE MEDIAN BARRIER PLACEMENT.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION



**INSIDE LANE CLOSURE DETAIL**  
**BRIDGES 147.8 & 147.9A**  
**& TCP**

COUNTY: LAUDERDALE  
 PROJ. NO.: BR-0059-03(096)  
 WORKING NUMBER  
 FILE NAME: DETAIL INSIDE - 147.8 & 147.9A  
 SHEET NUMBER  
 \$100.00 PER SHEET  
 DATE

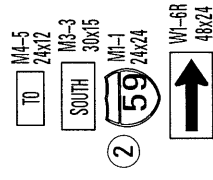
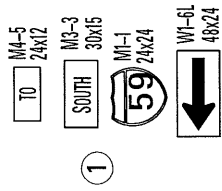
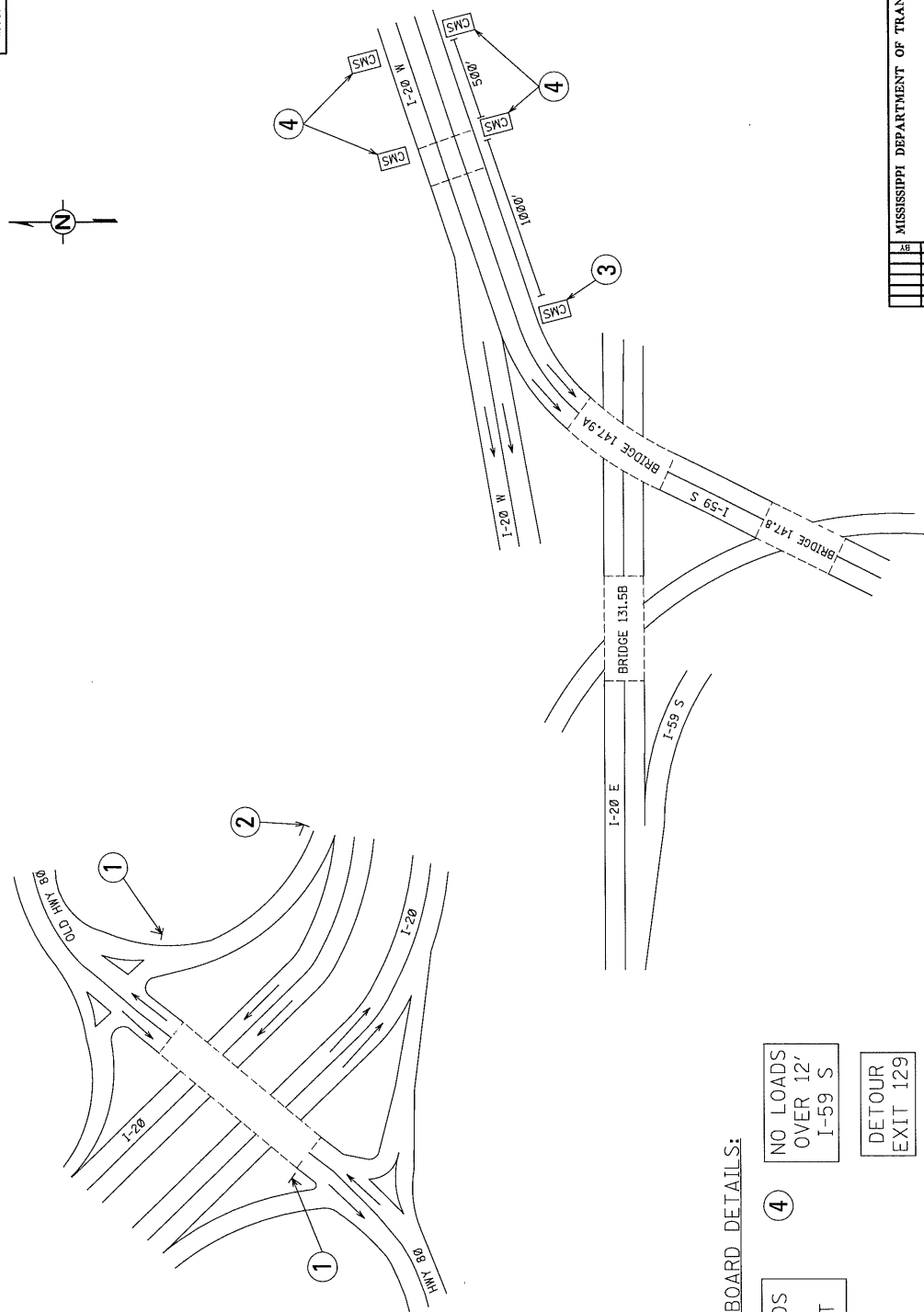
AB	REVISION





FMS CDR:107401/301000

STATE	PROJECT NO.
MISS.	BR-0059-010996



CMS BOARD DETAILS:

③ NO LOADS OVER 12 FEET

④ NO LOADS OVER 12' I-59 S

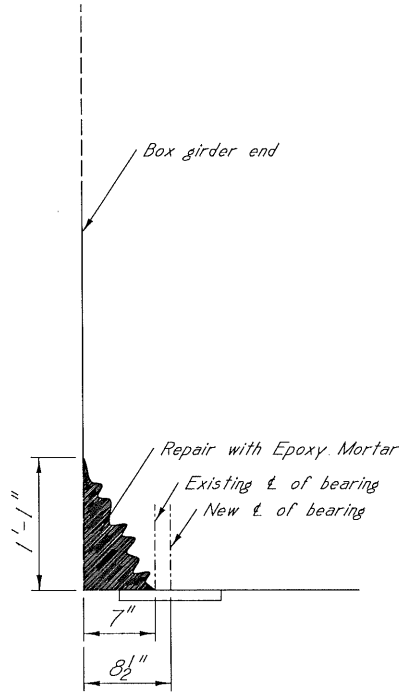
DETOUR EXIT 129

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
<b>I-59 DETOUR ROUTE</b>	
WORKING NUMBER	COUNTY: LAUDERDALE
SHEET NUMBER	PROJ. NUM.: BR-0059-03(096)
DATE	FILE NAME: DETOUR ROUTE.DGN
DESIGNER	CHECKED
DRAWN	DATE
REVISION	



02/2/01 7 894.91.35 DETOUR ROUTE.DGN

DRAWING DETAILS FOR BRIDGE NO. 131.5B



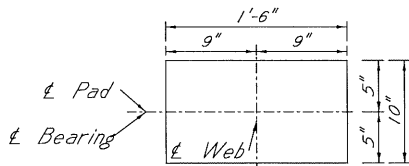
- Note:
1. Epoxy repair to be done only at bearing locations where shearing of the Box Girde ends has occurred at both end bents.
  2. Epoxy repair to box girder ends is to be completed before neoprene bearing pads are replaced.

ELEVATION OF BOX GIRDER

Showing epoxy repair at ends of box girders  
for Bridge No. 131.5B

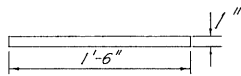
NEOPRENE PAD DETAILS

Showing Neoprene Pad Details for pads to be  
placed at End Bents No. 1 & 10



PLAN

(For Bearing Pad NP1)



ELEVATION

(For Bearing Pad NP1)

<u>NEOPRENE PAD DIMENSIONS</u>				
Mark	Thick.	Comp. Thickness	Count	
NP1	1"	15/16"	10	

NEOPRENE PAD (NP1) DETAILS

Neoprene pads shall not be field cut and Bearing area on top of the cap shall be smooth and true to grade. Elastomer for plain or non-reinforced bearings shall be 70-Durometer, adequate for 800 pounds per square inch design compression stress, and shall be tested to Level 1 as per Section 714.10 of 2004 Red Book.

BRIDGE 1.3.1.5B JOINT DETAILS

NOTES ON ASSOCIATED ITEMS OF WORK:

**202-B298 REMOVAL OF EXISTING JOINT MATERIAL**  
 Description: Shall include the removal of material associated with existing joints in the bridge deck. The material to be removed shall be indicated on the Detail Drawings Provided. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer.  
 Basis Of Payment: Removal of Armor And Sliding Plate Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Material To Be Removed. The Material To Be Removed Shall Be Paid For As The Length Along The Centerline Of The Joint.

**808-A001 JOINT PREPARATION**  
 Description: Shall include the work necessary to repair joints in preparation for the placement of new expansion material. Preparation shall include the removal of existing material, cleaning and conditioning of the joint. The material to be removed shall also be indicated under this item of work. Removal of Existing Silicone Sealed, Compression And LC Sealed Joint Materials Will Not Be Paid For Separately And Shall Be Considered As Part Of The Work Under This Item. The Contractor Shall Be In Accordance With The Applicable Provisions Of Section 808 OF THE SPECIFICATIONS AND ANY OTHER SECTIONS Specified Therein.  
 Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

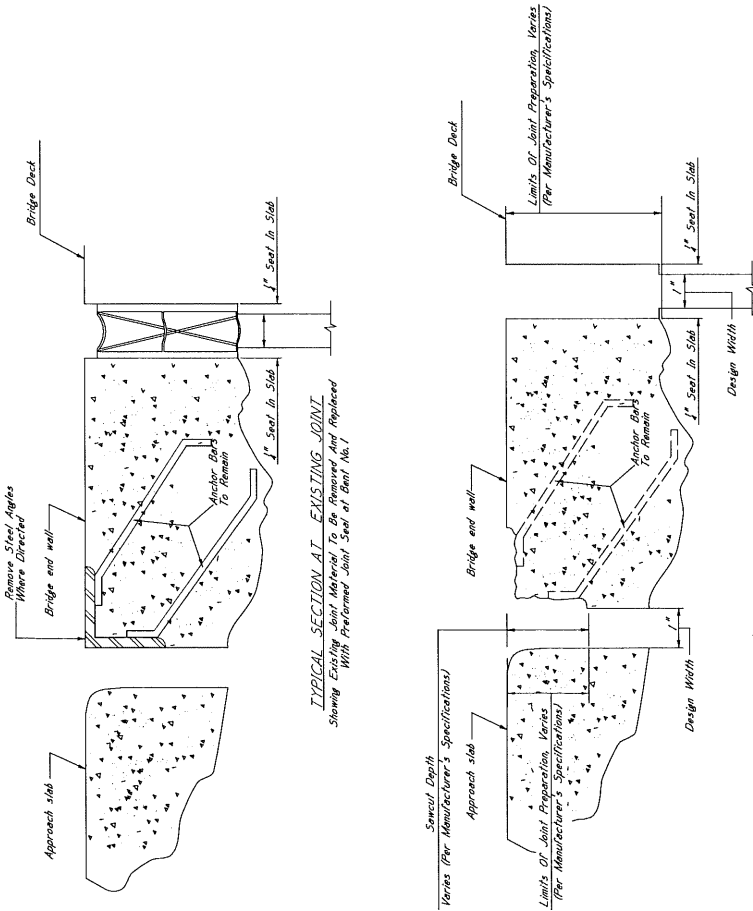
**EPOXY MORTAR AND POLYMER CONCRETE NOTES:**  
 Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines For Selection Of Materials Can Be Found In Section 808 OF THE SPECIFICATIONS.

**GENERAL NOTES:**

1. Specifications: Massachusetts Standard Specifications For Road And Bridge Construction, 2004.  
 No Change Of Plans Will Be Permitted Except By Written Approval Of The District Of Design Construction Engineer.  
 May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.  
 All Work Shall Be Done Promptly And Shall Therefore Be Considered An Accepted Item of Work.

**TYPICAL SECTION AT EXISTING JOINT**

Showing Existing Joint Material To Be Removed And Replaced With Preformed Joint Seal at Bent No. 1



**TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING MATERIAL**

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials at Bent No. 1

**ELEVATION AT END OF SPAN**

- Replace with preformed joint seal
1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:  
 A. Silastic Joint Sealing System, Manufactured By R.J. Watson, Inc. In Alden, NY www.rjwatson.com  
 B. Wabco SPS Joint System, Manufactured By Wabco Bowman Acme Corporation In Amherst, NY www.sasim.com  
 C. Sigapec 555 Silicone Strip Seal, Manufactured By Wabco Bowman Acme Corporation In Amherst, NY www.sasim.com
  2. For Estimating Purposes, The R.J. Watson Silicone Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Selected Material Meets All Performance, Aging, Time, And Any Other Attributes Between The Specifications Provided By The Manufacturer, And That The Contractor Is Properly Trained In Installation Of The Joint Material.
  3. Joints Shall Be Sealed At Their Design Widths Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. The Width Does Not Account For The Expansion Of The Sealant Material. The Preformed Joint Seal Type "A" Shall Be Used For Design Widths Less Than Equal To "A". With The Maximum Design Joint For Design Widths Greater Than Equal To "A".

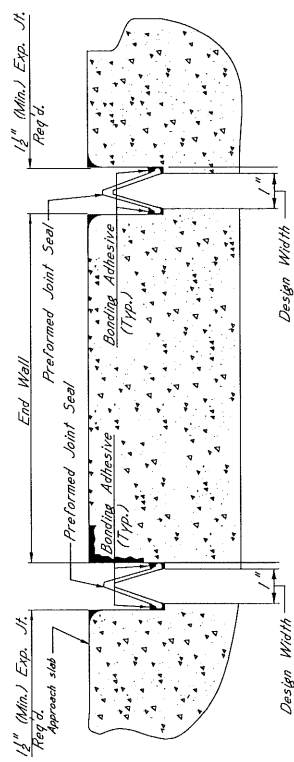
**907-B23-4001 PREFORMED JOINT SEAL, TYPE I**  
**907-B23-4002 PREFORMED JOINT SEAL, TYPE II**  
 Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

**907-B23-8001 SAW CUT, TYPE I & 907-B23-8002 SAW CUT, TYPE II**  
 Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.  
 Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck, On Each Side Of The Centerline Joint. It Is The Contractor's Responsibility To Ensure That The Contractor Is Properly Trained In Selection Of The Manufacturer's Recommendations.

**\* NOTES:**  
 1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:  
 A. Silastic Joint Sealing System, Manufactured By R.J. Watson, Inc. In Alden, NY www.rjwatson.com  
 B. Wabco SPS Joint System, Manufactured By Wabco Bowman Acme Corporation In Amherst, NY www.sasim.com  
 C. Sigapec 555 Silicone Strip Seal, Manufactured By Wabco Bowman Acme Corporation In Amherst, NY www.sasim.com

2. For Estimating Purposes, The R.J. Watson Silicone Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Selected Material Meets All Performance, Aging, Time, And Any Other Attributes Between The Specifications Provided By The Manufacturer, And That The Contractor Is Properly Trained In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. The Width Does Not Account For The Expansion Of The Sealant Material. The Preformed Joint Seal Type "A" Shall Be Used For Design Widths Less Than Equal To "A". With The Maximum Design Joint For Design Widths Greater Than Equal To "A".

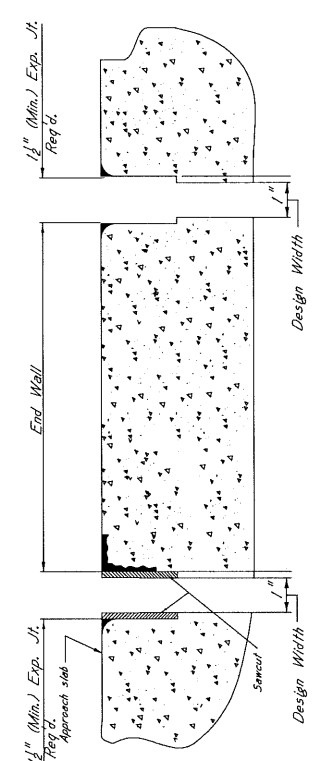


**TYPICAL SECTION AT SAWCUT & SEALED JOINT**

Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar or Bent No. 1

**TYPICAL SECTION AT SAWCUT & JOINT REPAIR**

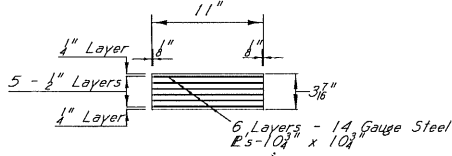
Showing Area Where Repairs Are Made After Sawcut With Epoxy Mortar Or Approved Equivalent



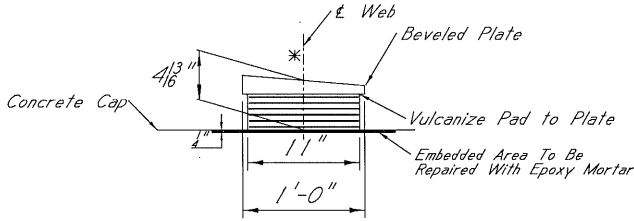
DRAWING DETAILS FOR BRIDGE NO. 147.8

NEOPRENE PAD BEARING ASSEMBLY DETAILS

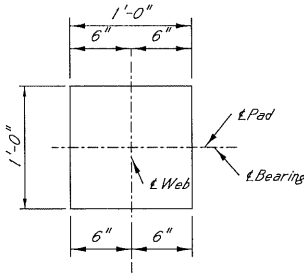
Showing bearing details for Bridge #147.8



ELEVATION

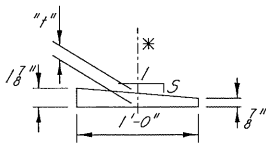


SIDE ELEVATION



PLAN OF BEARING PLATE

Showing dimensions of retainer plate (RP1)



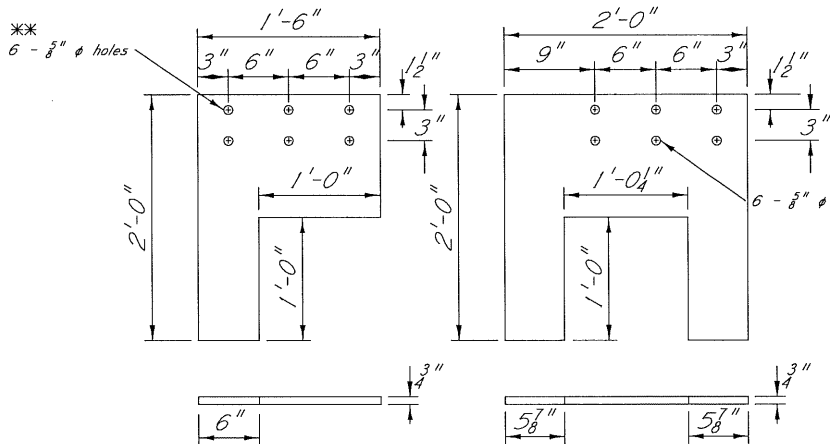
ELEVATION OF BEARING PLATE

LAMINATED PAD DIMENSIONS			
Mark	Thick.	Comp. Thickness	Count
LPI	3 7/16"	3 3/8"	10

BEARING PLATE DIMENSIONS			
Mark	"t"	"s"	Count
BPI	1 3/8"	1"	10

LAMINATED PAD (LPI) DETAILS

Testing procedures shall be in accordance with Section 714.10.6 of the specifications. Elastomer shall have a hardness of 60 durometer with a minimum shear modulus at 73°F of 0.120 ksi and a maximum shear modulus at 73°F of 0.155 ksi. Bearing area on top of cap shall be cast smooth and true to grade.



PL1

PL2

PLAN OF PLATES (PL1, PL2)

Showing details of plates (PL1, PL2). For location of bearing assemblies refer to following sheet.

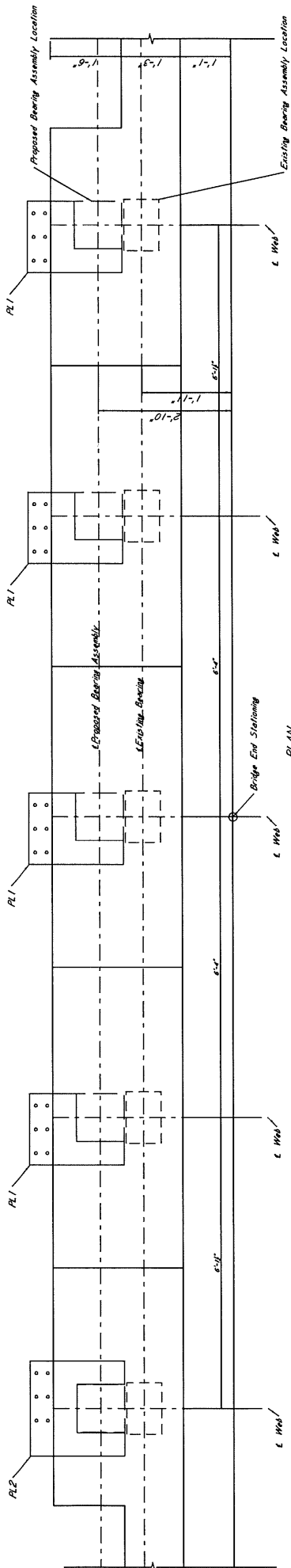
RETAINER PLATE DETAILS		
Mark	"thickness"	Count
PL1	3/4"	8
PL2	3/4"	2

\*Note:  
Bearing assemblies shall be installed where laminated pads bear flat on top of the bent cap.

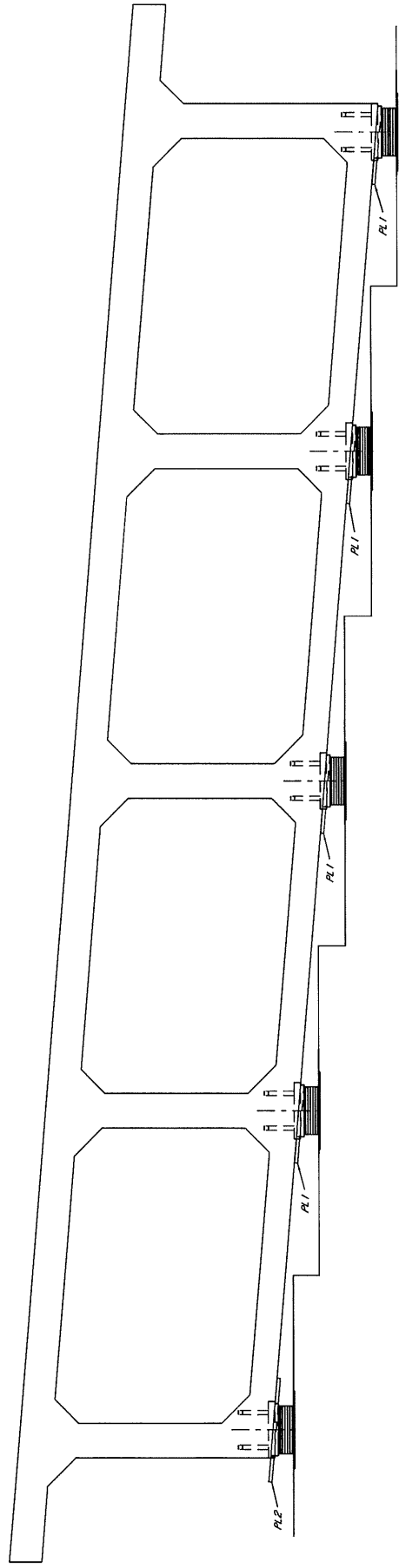
**\*\*MECHANICAL ANCHOR NOTE: (not a separate payitem)**

- Mechanical anchor shall be one of the following products:
  - KWIK Bolt 3" shall be as manufactured by Hilli, Inc. Tulsa, Oklahoma.
  - Torg-Cut" shall be as manufactured by Simpson Strong-Tie Company, Inc. Fenton, North Carolina.
  - Atomic + Undercut" shall be as manufactured by Powers Fastners Brewster, New York.
- All components of the mechanical anchoring system shall be installed in strict accordance with the manufactures directions.
- A representative of the Manufacturer must be present for sufficient time to assure that the Contractor is properly schooled in the installation of mechanical anchors.
- The Contractor shall furnish the Project Engineer with the latest product specifications and installation literature prior to beginning work.
- Mechanical anchoring specifications shown on this sheet are for "KWIK Bolt 3" as manufactured by Hilli, Inc. The Contractor may elect to use one of the other products listed above or approved equal. If the Contractor elects to use another product besides "KWIK Bolt 3", the Contractor shall employ the service of a Mississippi Registered Professional Engineer who is knowledgeable in the field of bridge design. A complete set of support plans and mechanical anchoring specifications along with design calculations shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the Design Engineer's seal.

*BEARING ASSEMBLY LOCATION*

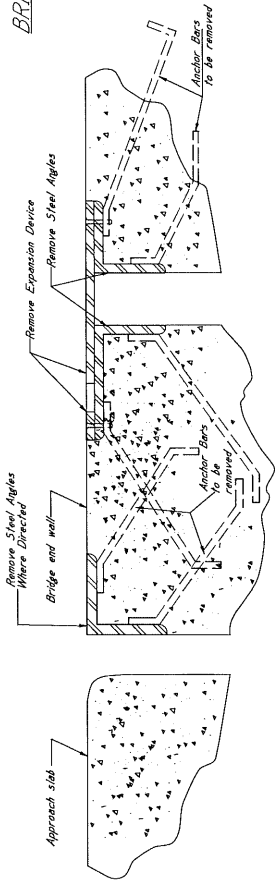


*PLAN*  
Showing plan view of bearing assembly locations at and below of Bridge #1478

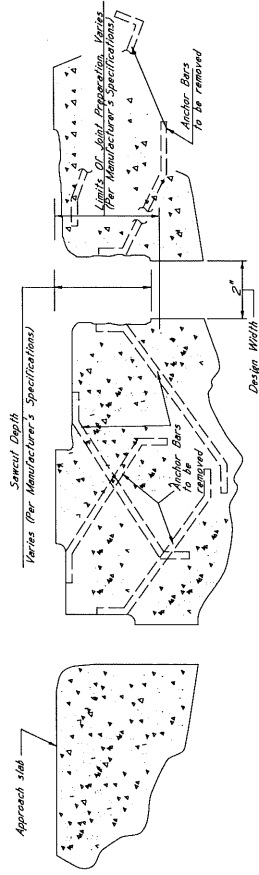


*ELEVATION*  
Showing elevation view of bearing assembly locations at end bents

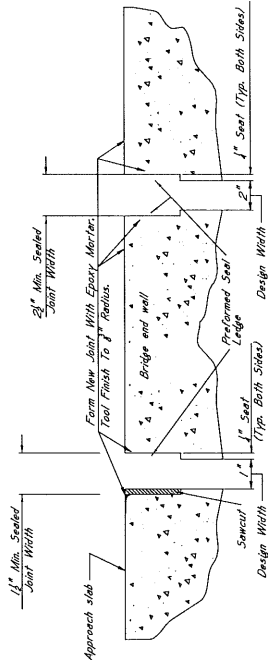
BRIDGE 147.8 JOINT DETAILS



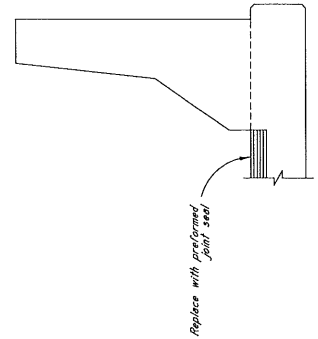
TYPICAL SECTION AT EXISTING JOINT  
Showing Existing Expansion Devices To Be Removed And Reinforced  
With Preformed Joint Seal of Bent No. 6



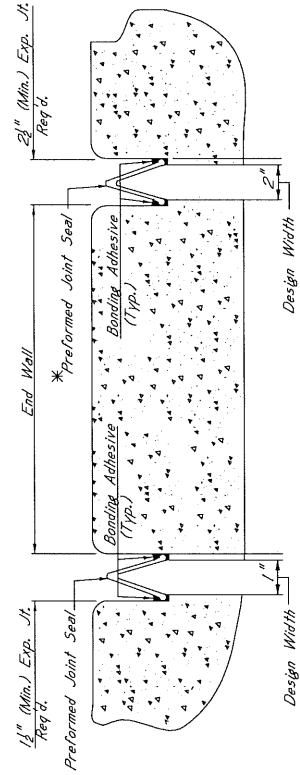
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL  
Showing Limits Of Joint Preparation For Application Of New Joint  
Seal Materials of Bent No. 6



TYPICAL SECTION AT SAWCUT & JOINT REPAIR  
Showing Where Epoxy Mortar Or Approved Equivalent of Bent No. 6  
With Epoxy Mortar Or Approved Equivalent of Bent No. 6



ELEVATION AT END OF SPAN



TYPICAL SECTION AT SAWCUT & SEALED JOINT  
Showing Sealed Joint After Sawcut And  
Repair With Epoxy Mortar of Bent No. 6

\*Note:  
For additional details on End Wall  
Repair see End Wall Repair Detail  
sheet included.

NOTES ON ASSOCIATED ITEMS OF WORK:  
808-A001 JOINT PREPARATION

Description:

Shall include the Work Necessary To Repair, Patch & Prepare For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Epoxy Mortar Shall Also Be Included Under This Item Of Work. Removal Of Existing Expansion Material From The Joint And The Joint Materials Will Not Be Paid For Directly, And Shall Be Considered As Absorbed Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 of the Specifications And Any Other Sections Specified Therein.

Basis Of Payment:

The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-8001 SAW CUT, TYPE I & 907-823-8002 SAW CUT, TYPE II

Description:

The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis Of Payment:

The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-A001 PREFORMED JOINT SEAL, TYPE I

907-823-A002 PREFORMED JOINT SEAL, TYPE II

Basis Of Payment:

The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

GENERAL NOTES:

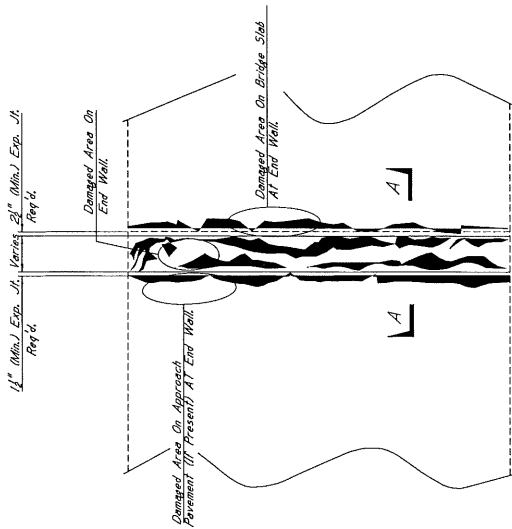
- Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2004.
- No Change Of The Director Of Structure, State Bridge Engineer, Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer, Provided Such Changes Will Not Affect The Contract Price. The Joint Seal Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item Of Work.

\*NOTES:

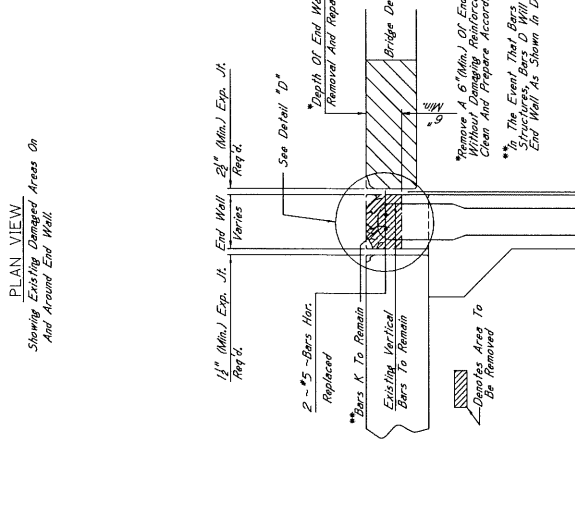
- The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:  
A. Silicoflex-Joint Sealing System Manufactured By R.J. Watson, Inc. In Aileen, NY [www.rjwatson.com](http://www.rjwatson.com)  
B. Mega SP5 Joint System Manufactured By Watson Bowman Acme Corporation In Amherst, NY [www.watson.com](http://www.watson.com)  
C. Silico-SSS Silicone Strip Seal Manufactured By Watson Bowman Acme Corporation In Amherst, NY [www.sst.com](http://www.sst.com)
- For Estimating Purposes, The R.J. Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Provide All Details, Dimensions, And Any Other Variations Between The Specifications Provided By The Manufacturer To Ensure That The Contractor Is Properly Sourced In Installation Of The Joint Material.
- Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Between The Edges Of The Preformed Joint Seal, Type II, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than 2". In Cases Where Design Widths Are Greater Than 2", The Contractor Shall Be Responsible For Ensuring That The Contractor Is Properly Sourced In Installation Of The Joint Material.

EPoxy MORTAR AND POLYMER CONCRETE NOTES:  
Either Epoxy Mortar Or Polymer Concrete May Be Used In Conformance With The Specifications Or Materials Can Be Found In Section 808 of the Specifications.

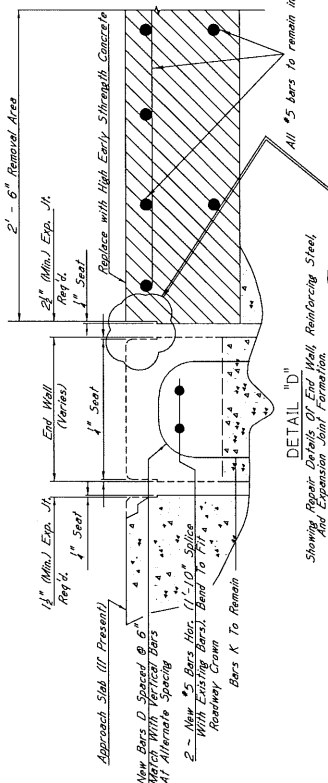
**END WALL REPAIR DETAILS**



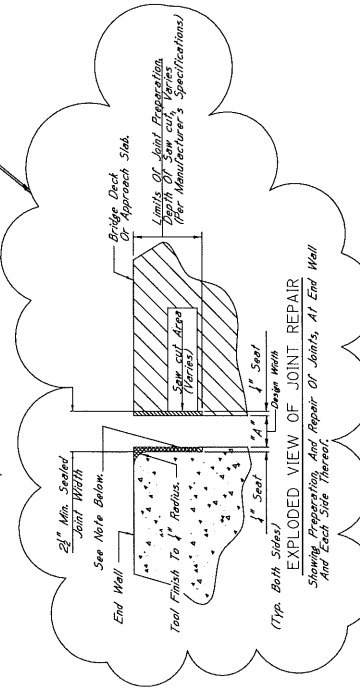
**PLAN VIEW**  
Showing Existing Damaged Areas On And Around End Wall.



**ELEVATION (SECTION A-A)**  
Showing Details Of Removal Of Damaged End Wall of Bant No. 6

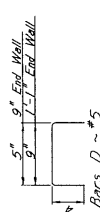


**DETAIL "D"**  
Showing Repair Details Of End Wall, Reinforcing Sheet, And Expansion Joint Formation.

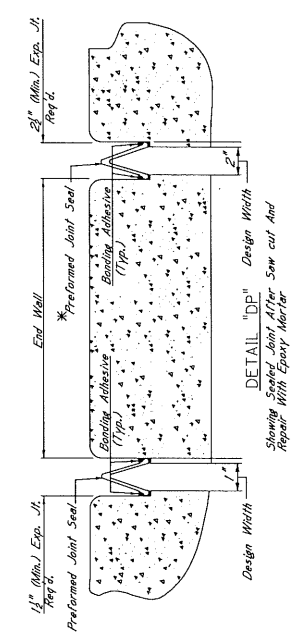


**EXPLODED VIEW OF JOINT REPAIR**  
Showing Expansion Joint Repair Of Joints, At End Wall And Each Side (Hereafter Refer To As Joints).

**NOTE:** Form Vertical Faces Of End Wall To Include 1" Seal For Manufacturer's Specification. See Detail 'D' On This Sheet.



Remove 1/2" (Min.) Of End Wall Steel, Clean And Prepare According To Specifications.  
 In The Event That Bars K Are Not Present, As In Older Structures, Bars D Will Be Added To Support End Wall As Shown In DETAIL 'D'.



**DETAIL "DP"**  
Showing Joint After Saw cut And Repair With Epoxy Mortar.

**NOTES ON ASSOCIATED ITEMS OF WORK:**

**907-924-4007 BRIDGE REPAIR, ENDWALL REPAIR**  
 Description: Shall include the Work Necessary To Remove And Replace The Damaged Endwall As Designated In The Detail Drawings Provided. Instead Of Limiting The Repair To The Damaged Sections, The Specified Depth Of Endwall Shall Be Removed Along The Entire Width Of The Bridge Deck.  
 Basis of Payment: The Accepted Quantities Will Be Paid For In Lines Foot At The Contract Unit Price Along The Width Of The Bridge Deck.  
 Damage Caused To Other Elements Of The Structure Or Retaining While Completing This Item Of Work Shall Be Repaired By The Contractor At No Cost To The Department.

Prior to Placing New Concrete, All Concrete Surfaces That Will Be In Contact With The New Concrete Shall Be Painted With An Approved Epoxy Primer Designed To Bond New Concrete To Old.  
 New Concrete Shall Be High Early Strength Bridge Concrete, As Follows:  
 The concrete mixture design shall be furnished by the Contractor for approval by the Materials Division. Mixture design parameters are as follows:  
 Required Strength: 2500 psi prior to releasing to traffic  
 Total Air Content: 3-6 %  
 Maximum Slump: 6 inches

Non-chloride based accelerator may be used if the ambient temperature is 50°F. or less, but shall not be used if the ambient temperature is greater than 50°F. Synthetic structural fibers shall be used. The Contractor shall select a manufacturer's recommendation for fiber type and the manufacturer's recommendations shall be followed for the dosage rate.

Curing is to be continuous until 2500 psi is attained. Traffic is to be allowed from the repair area until the curing is reached. The Contractor may use a curing compound for the purposes of releasing the repair area to traffic. However, final acceptance of the in-place concrete shall be determined using eight concrete test cylinders, which shall be cured in a container moist to the concrete placement. Two cylinders are to be tested at 13, 16, and 28 days. The remaining six cylinders shall be used to determine the 28-day compressive strength of the concrete.

The Removal Of Existing Expansion Material May Require Any Number Of The Pay Items Listed Below. Please Refer To Detail Sheet For Additional Details On The Associated Items Of Work.

- REMOVAL OF EXISTING JOINT MATERIAL**
- 907-923-4001 SAW CUT, TYPE I
  - 907-923-4002 SAW CUT, TYPE II
  - 907-923-4001 PREFORMED JOINT SEAL, TYPE I
  - 907-923-4002 PREFORMED JOINT SEAL, TYPE II

**GENERAL NOTES:**

1. Specifications: Manufacturer's Specifications For Road Sealant, 2001.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Major Changes To The Specifications Shall Be Determined By The Engineer Authorized By The Bridge Engineer. Proposed Such Changes Will Not Be Cause For Contract Price Adjustment. Work For Which No Pay Item Is Provided In The Proposal Will Be Considered An Assembled Item of Work.

**\*NOTES:**

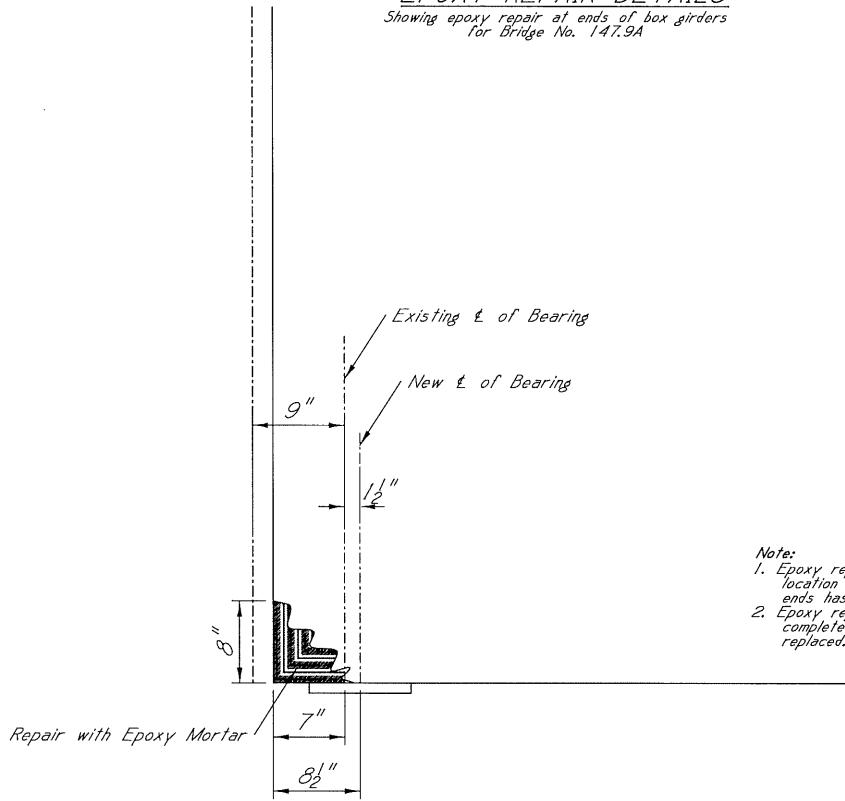
1. This Preformed Joint Seal Shall Be One Of The Following, Installed According To Manufacturer's Specifications:
  - A. Silcoflex Joint Sealing System Manufacturer: B. J. Watson, Inc. www.bjwatson.com
  - B. Waka SPS Joint System Manufacturer: By Watson Bowman Acme Corporation www.wbscorp.com
  - C. Slopec SSS Silicone Strip Seal Manufacturer: By SSI Commercial & Highway Construction Materials www.ssi.com
2. For Estimating Purposes, The R.J. Watson Silcoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed. Any Other Variances Between The Specifications Provided By The Manufacturer, A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins. The Contractor Is Properly Licensed In Installation Of The Joint Material.
3. Work Shall Be Scaled At Joint Details With Widths As Defined. The Actual Width Of The Joint Details With Does Not Account For The Seal Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design. Then Expanded Joint Seal, Type II, Shall Be Used Where Being 28" In Cases Where Design Widths Are Greater Than 28". Another Type Of Expansion Material Is Required As Directed By The Director Of Structures. The Contractor Shall Be Responsible For The Selection Of The Material To Be Selected Is Appropriate For The Width Of The Joint.



DRAWING DETAILS FOR BRIDGE NO. 147.9A

EPOXY REPAIR DETAILS

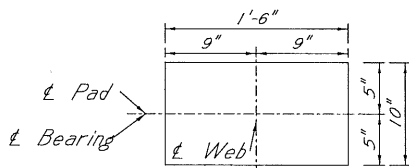
Showing epoxy repair at ends of box girders for Bridge No. 147.9A



- Note:
1. Epoxy repair to be done at each bearing location where shearing of the Box Girder ends has occurred at End Bents No. 8.
  2. Epoxy repair to box girder ends is to be completed before neoprene bearing pads are replaced.

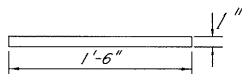
NEOPRENE PAD DETAILS

Showing new Neoprene pad details for end bents



PLAN

(For Bearing Pad NP1)



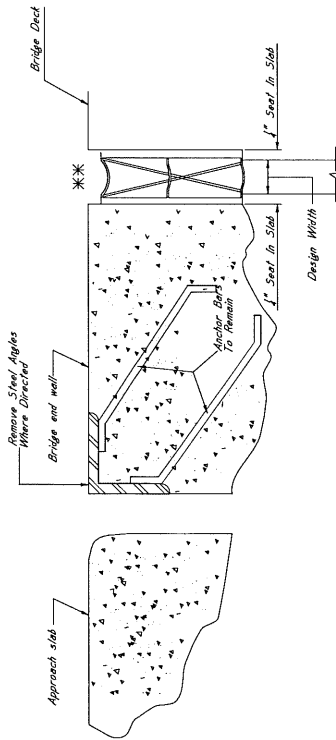
ELEVATION

(For Bearing Pad NP1)

<u>NEOPRENE PAD DIMENSIONS</u>			
Mark	Thick.	Comp. Thickness	Count
NP1	1"	15" 16"	10

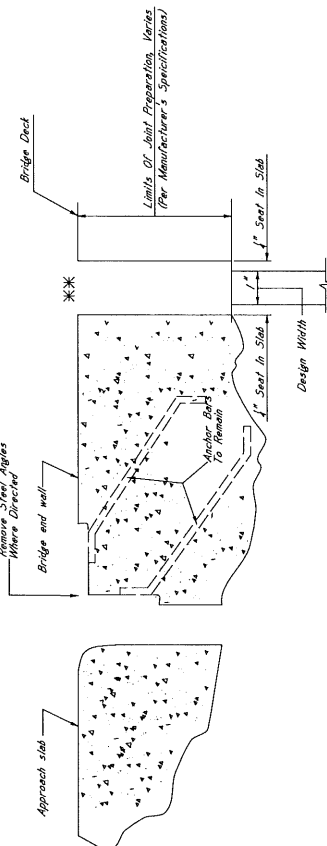
NEOPRENE PAD (NP1) DETAILS

Neoprene pads shall not be field cut and Bearing area on top of the cap shall be smooth and true to grade. Elastomer for plain or non-reinforced bearings shall be 70-Durometer, adequate for 800 pounds per square inch design compression stress, and shall be tested to Level I as per Section 714.10 of 2004 Red Book.

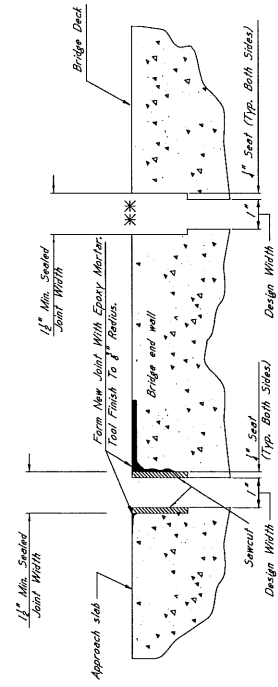


TYPICAL SECTION AT EXISTING JOINT  
Showing Existing Expansion Device To Be Removed And Replaced  
With Preformed Joint Seal of Bait No. 1 and 8

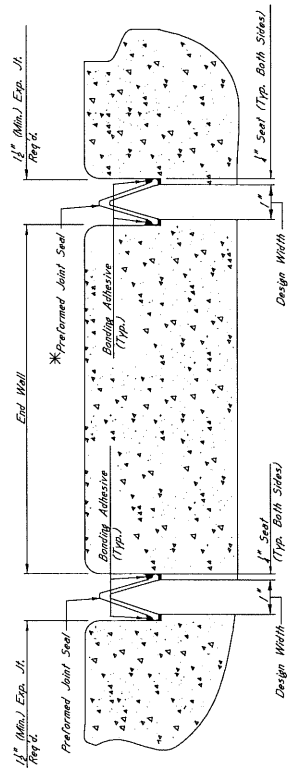
\*\* note: the work associated with replacing the existing joint seal between the approach and bridge deck shall be completed at Bait No. 8.



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL  
Showing Limits Of Joint Preparation For Application Of New Joint  
Seal Materials at Bait No. 1 and 8



TYPICAL SECTION AT JOINT REPAIR  
Showing Area Where Repairs Are Made After Sawcut  
With Epoxy Mortar Or Approved Equivalent of Bait No. 7 and 8



TYPICAL SECTION AT SAWCUT & SEALED JOINT  
Showing Sealed Joint After Sawcut And  
Repair With Epoxy Mortar

NOTES ON ASSOCIATED ITEMS OF WORK:

202-8238 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall include the removal of material associated with armor, sliding plate, and neoprene expansion joints, as designed in the approved drawings, including the removal of work unless otherwise directed by the Engineer.

Basis Of Payment: Removal of armor and sliding plates, joint material will be paid for in linear feet at the contract unit price on each side of the centerline joint, while removal of neoprene joint will be paid for as the length along the centerline of the joint.

808-A001 JOINT PREPARATION

Description: Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designed in the detail drawings provided. Epoxy mortar of existing silicone sealed, compression and IC sealed joint materials will not be paid for directly and shall be considered as absorbed under this item of work. All other requirements specified in Section 808 of the specifications and any other sections specified therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-8001 SAW CUT, TYPE I & 907-823-8002 SAW CUT, TYPE II

Description: The Saw Cut Depth Shall Be Equivalent To The Installed Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-4001 PREFORMED JOINT SEAL, TYPE I

Description: The Accepted Quantities Will Be Paid For In Linear Feet Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-4002 PREFORMED JOINT SEAL, TYPE II

Description: The Accepted Quantities Will Be Paid For In Linear Feet Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:  
Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines Or Specifications Can Be Found In Section 608 OF THE SPECIFICATIONS.

GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2004.
2. Approval: Approval Of The Director Of Structures, State Bridge Engineers. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Do Not Affect The Structural Integrity Of The Joint. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item Of Work.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SECTION 904 - NOTICE TO BIDDERS NO. 190**

**CODE: (SP)**

**DATE: 6/2/2017**

**SUBJECT: Lane Closure Restrictions**

**PROJECT: BR-0059-03(096) / 107401301 -- Lauderdale County**

Bidders are hereby advised that lane closure restrictions on the above captioned project shall be as follows:

**Monday through Friday:** -- I-20 Eastbound Lane Closures will NOT be allowed between the hours of 7:00 AM to 9:00 AM. I-59 Southbound Lane Closures will NOT be allowed between the hours of 4:00 PM to 6:00 PM.

**Exception:** -- For bridge end wall and deck repair operations where precast median barriers are required as shown in the Traffic Control Details a lane closure will be allowed to remain in place from 6:00 PM Friday to 7:00 AM Monday. The barriers shall not be in place outside of the specified times. MDOT Law enforcement will be present when the barriers are in place. The Contractor shall notify the Project Engineer a minimum of 72 hours prior to the scheduled closure in order to coordinate with Law Enforcement and Public Affairs.

No further exceptions to the above restrictions will be allowed unless specifically approved by the Project Engineer.

As per section 108.04.1 of the 2017 Mississippi Standard Specifications for Road and Bridge Construction, lane closures on the listed holidays will not be allowed.

If the lane closure restriction listed above is violated, the Contractor will be charged a fee of \$2,500.00 for each full or partial five minute period until the roadway is back in compliance with the lane closure restriction requirement.

For the purposes of this contract, official time shall be the announced time available at the Jackson area telephone number (601) 355-9311.

As per section 108.04.1 of the 2017 Mississippi Standard Specifications for Road and Bridge Construction, Sunday work will not be allowed, except for the work described in the above exception.

Bridge Joint Repair on I-20, I-59, and Ramp to I-20W, known as Federal Aid Project No. BR-0059-03(096) / 107401301 in Lauderdale County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
<b>Roadway Items</b>					
0010	615-B001	(S)	700	Linear Feet	Precast Concrete Median Barrier
0020	618-A001		1	Lump Sum	Maintenance of Traffic
0030	619-D1001		100	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0040	619-D2001		928	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0050	619-E1001		2	Each	Flashing Arrow Panel, Type C
0060	619-E3001		9	Each	Changeable Message Sign
0070	619-F2001		700	Linear Feet	Remove and Reset Concrete Median Barrier, Precast
0080	619-G4005		42	Linear Feet	Barricades, Type III, Single Faced
0090	619-G5001		145	Each	Free Standing Plastic Drums
0100	619-G7001		27	Each	Warning Lights, Type "B"
0110	620-A001		1	Lump Sum	Mobilization
<b>Bridge Items</b>					
0120	202-B026		70	Square Yard	Removal of Bridge Deck
0130	202-B169		40	Linear Feet	Removal of Joint Material
0140	804-A001	(S)	3	Cubic Yard	Bridge Concrete, Class AA
0150	808-A001	(S)	392	Linear Feet	Joint Preparation
0160	907-823-A001		168	Linear Feet	Preformed Joint Seal, Type I
0170	907-823-A002		28	Linear Feet	Preformed Joint Seal, Type II
0180	907-823-B001		168	Linear Feet	Saw Cut, Type I
0190	907-824-PP005		40	Cubic Feet	Bridge Repair, Epoxy Repair
0200	907-824-PP006		30	Each	Bridge Repair, Bearing Assembly Replacement
0210	907-824-PP006		6	Each	Bridge Repair, Cap Cleaning
0220	907-824-PP006		10	Each	Bridge Repair, Plates and Anchor Assemblies
0230	907-824-PP008		28	Linear Feet	Bridge Repair, Endwall Repair