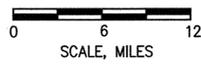
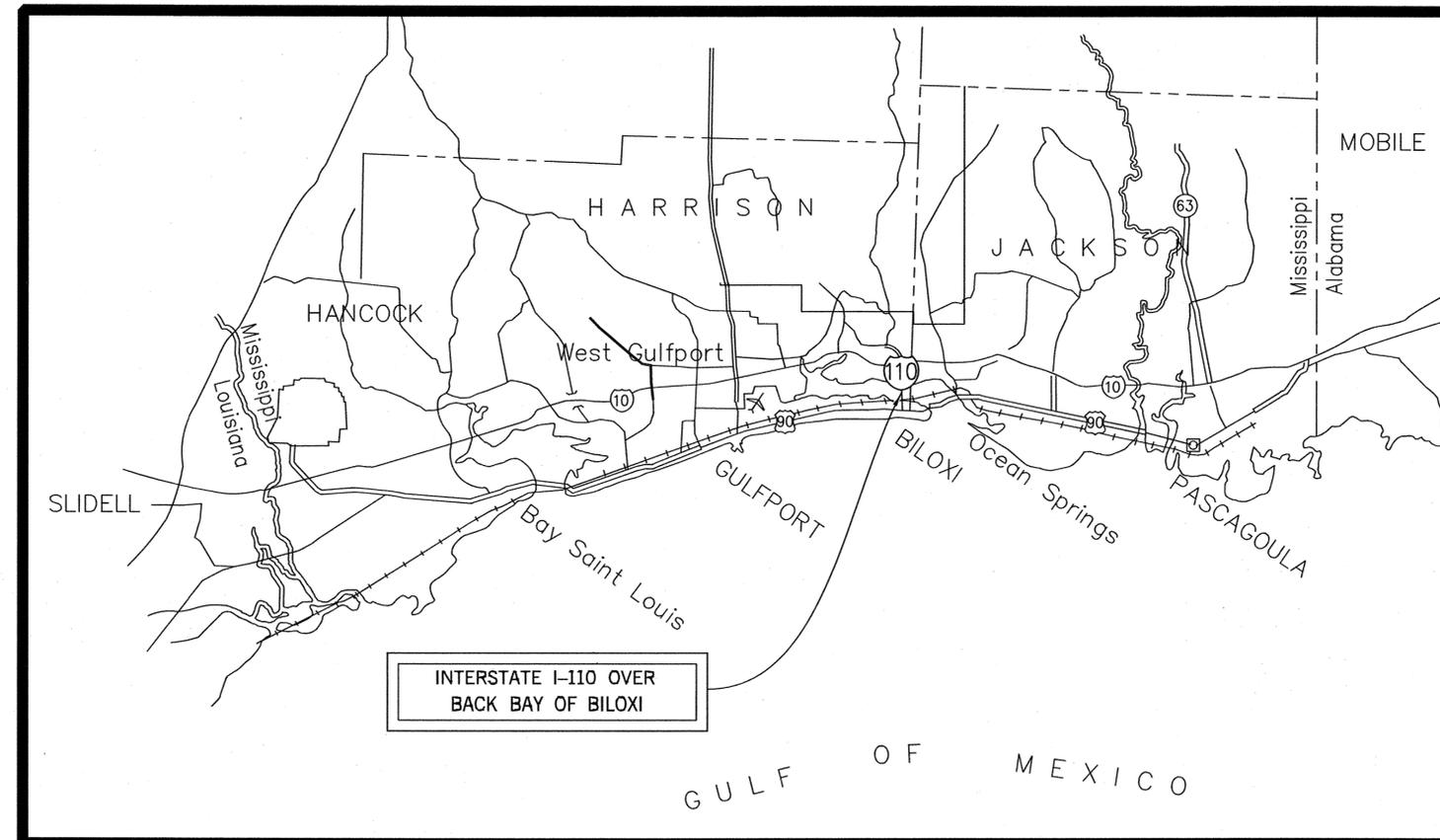
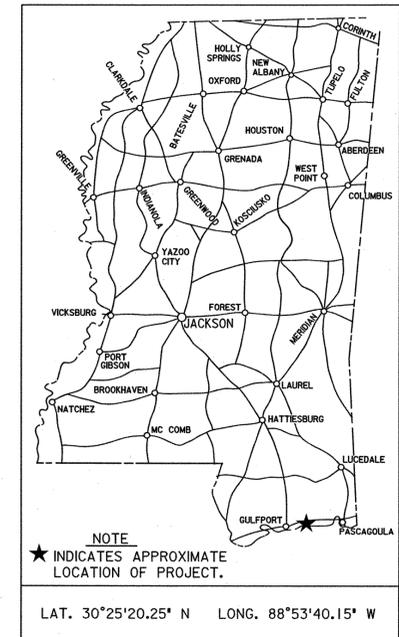


STATE OF MISSISSIPPI  
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**PLANS FOR REHABILITATION OF  
 INTERSTATE I-110 BASCULE BRIDGE  
 PROJECT NO. BR-0110-01(027)**

INTERSTATE I-110 OVER BACK BAY OF BILOXI      FMS# 105550/301000  
 HARRISON COUNTY  
 BASCULE BRIDGE DECK REPLACEMENT

FED. REG.	ROAD NO.	STATE PROJECT NO.	SHEET NO.
4	MISS.	BR-0110-01(027)	1



PERMITS ACQUIRED BY MDOT		
WETLANDS AND WATERS PERMITS (NECESSARY FOR ULTIMATE IMPROVEMENTS ONLY):		
	WATERS	WETLANDS
NATIONWIDE #14	<input type="checkbox"/> N	<input type="checkbox"/> N
NATIONWIDE (OTHER)*	<input type="checkbox"/> N	<input type="checkbox"/> N
GENERAL*	<input type="checkbox"/> N	<input type="checkbox"/> N
INDIVIDUAL (404)*	<input type="checkbox"/> N	<input type="checkbox"/> N
* ACQUISITION OF PERMITS FOR TEMPORARY IMPACTS DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR		
STORMWATER PERMIT	<input checked="" type="checkbox"/> N	
Y	REQUIRED, CNOI SUBMITTED BY MDOT (DISTRIBUTED AREA=5 ACRES+(NTB 6484))	
S	REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)(NTB 6483)	
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)	
APPROVED BY:	JCT	DATE: 05/11/2010



APPROVED:	<i>[Signature]</i>	5/12/10
DATE	CHIEF ENGINEER	DATE
APPROVED:	<i>[Signature]</i>	05-12-10
DATE	EXECUTIVE DIRECTOR	DATE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION		
APPROVED:		
DATE	DIVISION ADMINISTRATOR	DATE
FEDERAL HIGHWAY ADMINISTRATION DEPARTMENT OF TRANSPORTATION		

1st O. REV.

STATE	PROJECT NO.
MI SS.	BR-0110-01(027)

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REVISIONS		
DATE	SHEET NO.	BY
06/11/10	4, 5, 9, 10, 11, 12, 477	EJH/RR
06/21/10	4	JCR
06/23/10	4 & 469	JCR

URS  
100 S. Wacker Drive, Suite 500  
Chicago, IL 60606

REVISIONS	MISSISSIPPI DEPART. OF TRANSPORTATION I-110 BASCULE BRIDGE OVER THE BACK BAY OF BILOXI		
	DETAILED INDEX		
DATE	PROJECT BR-0110-01(027) 105550/301000		WORKING NUMBER DI-1
	HARRISON COUNTY		SHEET NUMBER 2
DESIGNED_DAD	DETAILED_DAD	TRACED	
CHECKED_DEM	ISSUED_MKC	DATE_05/11/10	

**SCOPE OF GRID REPLACEMENT WORK**

**Phase I:**  
This Portion Of The Project Involves Removal Of Portions Of The Existing Concrete Median Barrier To Accommodate Maintenance Of Traffic On The Bridge During The Deck Replacement Work.

**Phase II:**  
This Portion Of The Project Involves Removal And Replacement Of The Open Steel Grid Deck, Supporting Stringers And Center Breaks On The Northbound Lanes Of The Bridge. Balancing The Northbound Bridge Leaves And Providing Concrete Balance Blocks Is Also Included In This Work.

**Phase III:**  
This Portion Of The Project Involves Removal And Replacement Of The Open Steel Grid Deck, Supporting Stringers And Center Breaks On The Southbound Lanes Of The Bridge. Balancing The Southbound Bridge Leaves And Providing Concrete Balance Blocks Is Also Included In This Work.

**Phase IV:**  
This Portion Of The Project Involves Replacement Of Portions Of The Existing Concrete Median Barrier That Were Removed During Phase I.

The Contractor Shall Furnish All Materials, Equipment, Personnel And Tools Required To Complete The Work.

Detailed Technical Specifications Are Included In The Project Special Provisions.

**WORK WITHIN NAVIGATION CHANNEL:**

The Bridge Spans A Navigable Waterway Controlled By The United States Coast Guard (USCG). The Bascule Span Will Be Required To Remain Operational On A Schedule During The Work. See Notice To Bidders For Information On Bridge Operation.

MDOT Personnel Will Operate The Bridge During The Construction Period. The Contractor And The Department Shall Develop And Institute A Procedure To Be Followed By The Workers During Bridge Openings. This Procedure Shall Outline How Work Will Be Suspended And What The Safe And Proper Standby Locations Will Be For Personnel During A Bridge Operation.

The Contractor Shall Assume Full Responsibility For Damage To Any Components Of The Bridge That May Occur As A Result Of The Contractor's Activities. The Contractor Shall Not Remove, Relocate Or Deactivate Any Component Of The Bridge Which Would Cause The Inability Of The Leaves To Be Raised Or Lowered Without The Consent Of MDOT. The Balance Of The Leaves Is Crucial And Must Be Maintained. If The Contractor's Methods Cause An Imbalanced Condition, It Must Be Accounted For Through Adjustment Of Weight As Often As Necessary To Assure That The Bridge Stays Properly And Safely Balanced At All Times.

Whenever The Contractor Leaves The Work Site, The Bridge Must Be Cleared Of Any Materials, Equipment Or Obstructions That May Be A Hazard To Highway Traffic Or The Navigation Utilizing The Waterway Below. Further, The Contractor Shall Secure The Bascule Leaves. The Contractor Shall Provide To The Department The Names And Telephone Numbers Of Supervisory Personnel That May Be Reached During The Off-Hours In The Event Of A Problem Caused By Their Work. The Contractor Shall Be Required To Dispatch Without Delay The Necessary Personnel At No Cost To The Department To Restore The Bridge To Its Proper Condition.

**BRIDGE FACILITIES:**

Electricity And Basic Lighting Is Available At The Bridge. There Is No Running Water Or Toilet Facilities On The Bridge.

**REFERENCE DRAWINGS:**

Selected Reference Drawings From The Original Bridge Construction Are Included For Informational Purposes. These Are Not Intended To Represent A Complete Set Of What May Be Needed To Complete The Work. Additional Original Design Plans And Shop Drawings Are Available From The Department.

**PAINTING:**

All New Structural Steel Surfaces Shall Be Cleaned And Then Painted With A Three Coat System As Specified In Section 814 Of The Standard Specifications. The Contractor Has The Option Of Applying All Coats In The Shop. For This Case, The Paying Surfaces Of Bolted Field Splices And Connections Shall Be Masked During Application Of The Intermediate And Top Coats. Bolt Holes Shall Be Cleaned And Then Painted With One Shop Coat Of Inorganic Zinc Per The Specifications.

**STRUCTURAL STEEL NOTES:**

Special Attention Is Called To Section 810 Of The Mississippi Standard Specifications Concerning Shop Drawings, Assembly And Erection Of Steel Structures.

Structural Steel Plates And Shapes Shall Conform To A.S.T.M. Designation A709, Grade 50, Unless Otherwise Noted.

Miscellaneous Steel Less Than 1/4 Inch Thick Shall Be Approved By The Bridge Engineer And Shall Be Identified On The Shop Drawings.

All Welding Shall Be Done By The Electric Arc Process And Shall Conform To The ANSIZ/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

Certification For All Welders To Be Used On This Project Shall Be Submitted To The Bridge Engineer.

Direct Tension Indicators (DTIs) Shall Be Used On All Bolts Unless Noted.

All Bolts, Nuts, Washers, DTIs, Etc. Removed Shall Be Replaced With New. High Strength Bolts Shall Be Placed With Threaded Ends Protected From The Weather, Where Feasible. See SPECIAL NOTES ON BOLTS, NUTS, WASHERS AND DIRECT TENSION INDICATORS.

Each High Strength Bolt Shall Be Tightened To Provide, When All Bolts In The Joint Are Tight, At Least A Minimum Tension As Follows:

1" Dia. Bolts	--- 51 Kips (A325)
7/8" Dia. Bolts	--- 39 Kips (A325)
3/4" Dia. Bolts	--- 28 Kips (A325)
5/8" Dia. Bolts	--- 19 Kips (A325)

High Strength Bolts, Nuts, Washers And Direct Tension Indicators Shall Be Domestic Products And Shall Be Shipped To The Project Site In Sealed Metal Containers Or Approved Equal. Each Container Shall Be Permanently Marked With The Rotational Capacity Lot Number Such That Identification Will Be Possible At Any Stage Prior To Installation. They Shall Be Stored Out Of The Weather In A Location Approved By The Engineer. The Container Shall Remain Unopened Until The Contents Are Needed For Erection.

**PREFORMED JOINT SEALS**

Seals For Placement Along Barrier Faces Shall Be Prefomed And Manufactured From An Extruded Neoprene Compound Exhibiting The Physical Properties Called For In ASTM D3542 And AASHTO M297. They Shall Be Multi-Cellular With A Web Structure With Truss Like Features To Exert Continuous And Uniform Pressure Against The Joint Sidewalls. Install Utilizing The Manufacturer's Recommended Lubricant Adhesive.

**SPECIAL NOTES ON BOLTS, NUTS, WASHERS, AND DIRECT TENSION INDICATORS:**

High Strength Bolts Meeting The Requirements Of A.S.T.M. A325, Type 1, Shall Be Hot Dip Galvanized In Accordance With The Requirements Of A.S.T.M. A153, Class C Coating Or Galvanized By The Mechanical Process In Accordance With The Requirements Of A.S.T.M. B695, Class 50 Coating. Maximum Hardness For High Strength Bolts Shall Be 33 Rockwell C (Rc).

Nuts For A.S.T.M. A325 High Strength Bolts Shall Be Heavy Hex And Meet The Requirements Of A.S.T.M. A563, Grade DH Galvanized.

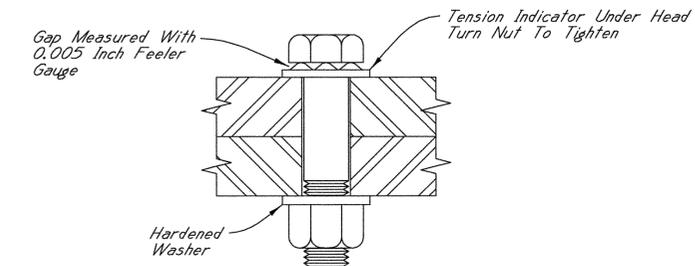
Hardened Steel Washers For A.S.T.M. A325 High Strength Bolts Shall Meet The Requirements Of A.S.T.M. F436, Galvanized.

All Direct Tension Indicators Shall Meet The Requirements Of A.S.T.M. F959. For A.S.T.M. A325 High Strength Bolts, Direct Tension Indicators Shall Be Galvanized By The Mechanical Process Meeting The Requirements Of A.S.T.M. B695, Class 50 Coating.

All Nuts For Galvanized High Strength Bolts Shall Be Tapped Oversize The Minimum Amount Required For Proper Assembly. For Galvanized Bolts, Nuts Shall Be Lubricated With A Lubricant Containing A Dye Of Any Color That Contrasts With The Color Of Galvanizing.

High Strength Bolts, Nuts, Or Direct Tension Indicators Shall Not Be Reused After Tightening.

Mill Test Reports, Certified Test Reports, And Certificates Of Compliance Are Required For High Strength Bolts, Nuts, Hardened Washers And Direct Tension Indicators.



**DIRECT TENSION INDICATOR INSTALLATION**

URS  
100 S. Wacker Drive, Suite 500  
Chicago, IL 60606

BY	MISSISSIPPI DEPART. OF TRANSPORTATION			
	I-110 BASCULE BRIDGE			
	OVER THE BACK BAY OF BILOXI			
	<b>GENERAL NOTES</b>			
	PROJECT	BR-0110-01(027)		
		105550/301000		
	HARRISON	COUNTY		WORKING NUMBER GN-1
DATE	DESIGNED	NPP	DETAILED	SOI
	CHECKED	DEM	ISSUED	MKC
			TRACED	DATE 05/11/10
				SHEET NUMBER 3