

STATE	PROJECT NO.	SHEET NO.
MISS.	BR-0015-01(120)	1

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

REQUEST FOR QUALIFICATIONS PLAN NOTES

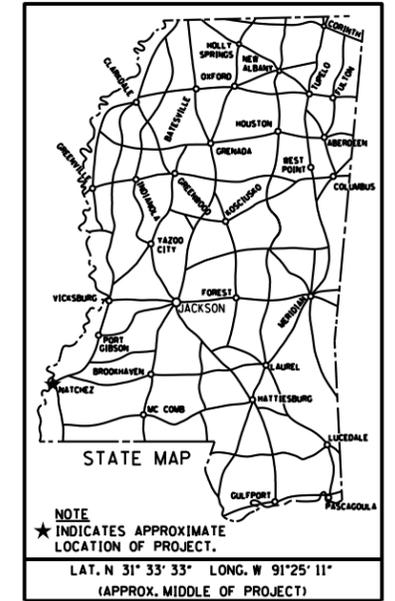
The Following Set Of Plans Are Conceptual And Are Intended For The Request For Qualifications. These Plans Are Not Intended For Construction. Detailed Contract Plans Will Be Provided To Shortlisted Responders. Scope Of Work And Plan Details Shown In The Conceptual Plans May Change Or Be Modified For Contract Plans Provided To Shortlisted Responders.

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

FEDERAL AID PROJECT NO. BR-0015-01(120)

U29 AND U49 PIN AND LINK REPLACEMENTS
 U.S. HIGHWAY 84 WESTBOUND MISSISSIPPI RIVER BRIDGE
 ADAMS COUNTY, MISSISSIPPI CONCORDIA PARISH, LOUISIANA

FMS-106487/30100



BRIDGE STRUCTURES REQ'D.

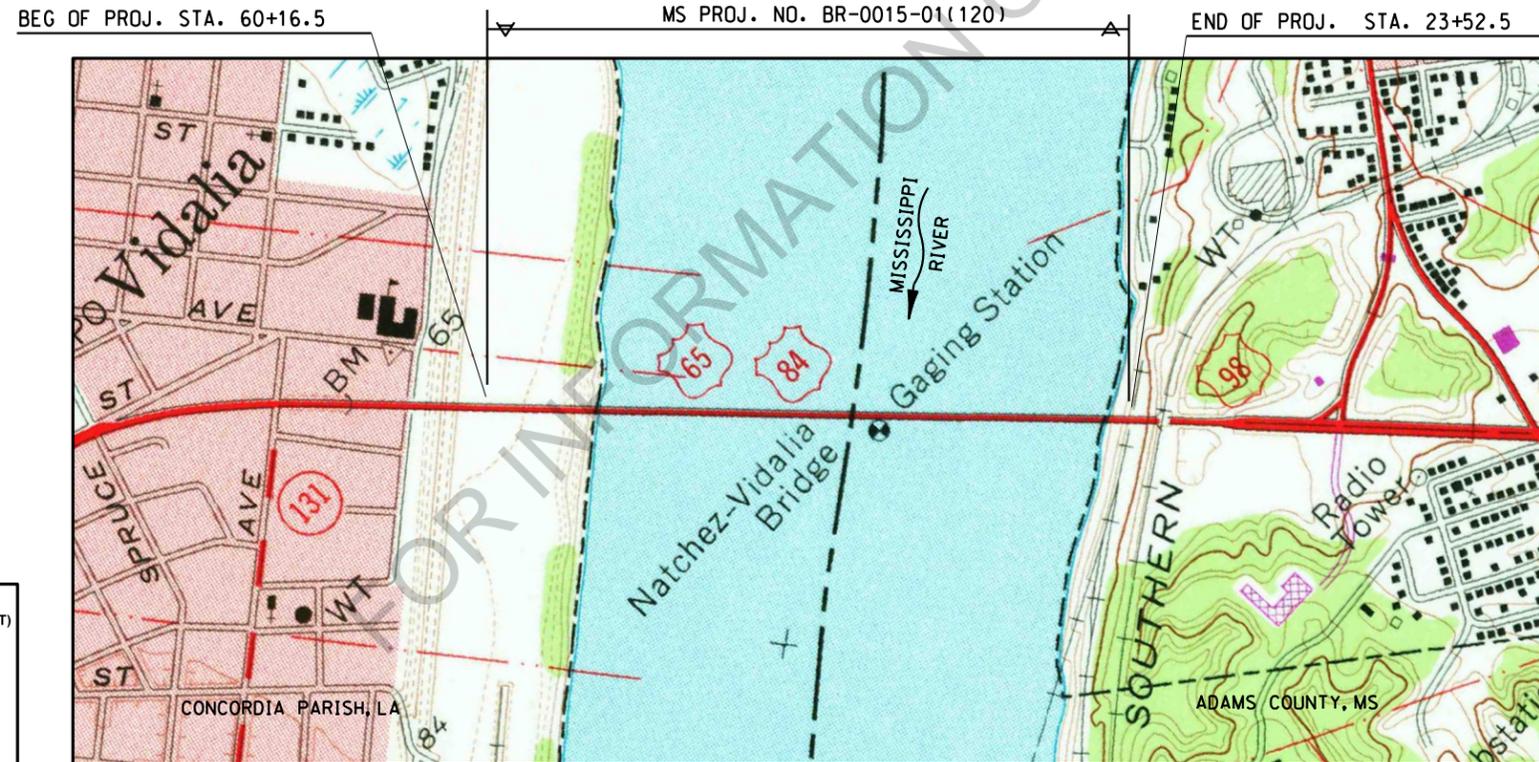
NONE

SCALES

PLAN	N/A
PROFILE {	
HOR.	N/A
VERT.	N/A
LAYOUT	N/A

BOX BRIDGES REQ'D.

NONE



DESIGN CONTROL	
N/A	MPH = V (SPEED DESIGN)
ADT () = :	ADT () = :
DHV = :	D = % T = %
PERMITS ACQUIRED BY MDOT	
WETLANDS AND WATERS PERMITS (NECESSARY FOR ULTIMATE IMPROVEMENTS ONLY):	
	WATERS WETLANDS
NATIONWIDE #14	<input type="checkbox"/> <input type="checkbox"/>
NATIONWIDE (OTHER)*	<input type="checkbox"/> <input type="checkbox"/>
GENERAL*	<input type="checkbox"/> <input type="checkbox"/>
INDIVIDUAL (404)*	<input type="checkbox"/> <input type="checkbox"/>
* ACQUISITION OF PERMITS FOR TEMPORARY IMPACTS DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR	
STORMWATER PERMIT <input type="checkbox"/>	
Y	REQUIRED, CNOI SUBMITTED BY MDOT (DISTURBED AREA = 5 ACRES)
S	REQUIRED, SIGN TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)
APPROVED BY:	DATE:

GPS CONTROL NOTES

HORIZONTAL DATUM: NAD MS ZONE (US SURVEY FEET)
 HORIZONTAL MONUMENT NORTH EAST

VERTICAL DATUM: NAVD (US SURVEY FEET)
 VERTICAL MONUMENT ELEVATION

ALL AZIMUTHS AND DISTANCES ARE GRID VALUES, US SURVEY FEET

CONVERSION VALUES PROJECT AVERAGE

GROUND TO GRID (COMBINED) FACTOR
 GRID TO GEODETIC AZIMUTH

EQUATIONS

LENGTH DATA

LENGTH OF ROADWAY
 LENGTH OF BRIDGES
 LENGTH OF PROJECT (NET)
 LENGTH OF EXCEPTIONS
 LENGTH OF PROJECT (GROSS)

TOTAL	Ft
_____	Ft

EXCEPTIONS

PRELIMINARY NOT FOR CONSTRUCTION	APPROVED:
	CHIEF ENGINEER _____ DATE _____
	EXECUTIVE DIRECTOR _____ DATE _____
	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
APPROVED:	
DIVISION ADMINISTRATOR _____ DATE _____	
FEDERAL HIGHWAY ADMINISTRATION DEPARTMENT OF TRANSPORTATION	

HNTB

TITLE: 01/15/15 MISSISSIPPI DEPARTMENT OF TRANSPORTATION 021.00 ANPM DCNFI L ENAME MADDY

WORKING NUMBER	SHEET NUMBER	DESCRIPTION OF SHEET
A01	1	TITLE SHEET
A02	2	DETAILED INDEX
A03	3	GENERAL NOTES & QUANTITIES
A04	4	GENERAL PLAN & ELEVATION WESTBOUND BRIDGE
A05	5	U29 DOWNSTREAM TRUSS EXISTING CONDITION
A06	6	U49 UPSTREAM TRUSS EXISTING CONDITION
A07	7	SUGGESTED SEQUENCE OF CONSTRUCTION
A08	8	U49 TEMPORARY RESTRAINTS
A09	9	U29 DOWNSTREAM TRUSS LOWER PIN REPLACEMENT
A10	10	U49 UPSTREAM TRUSS LOWER PIN REPLACEMENT
A11	11	U49 UPSTREAM TRUSS LINK REPLACEMENT
A12	12	U29 & U49 LINK INFLUENCE LINES
A13	13	DAILY MAXIMUM AND MINIMUM TEMPERATURES
A14	14	DAILY MEAN WIND SPEEDS
A15	15	DAILY MAXIMUM SUSTAINED WIND SPEEDS
A16	16	TRAFFIC CONTROL NOTES
A17	17	TRAFFIC CONTROL PLAN
A18	18	TRAFFIC CONTROL PLAN
	19-45	AS-BUILT PLANS - 1939 SUPERSTRUCTURE CONTRACT PLANS
	46-57	AS-BUILT PLANS - 1939 ERECTION DRAWINGS AND SHOP DRAWING GENERAL NOTES
	58-60	AS-BUILT PLANS - 1939 SHOP DRAWING TOP CHORD JOINT U29
	61-63	AS-BUILT PLANS - 1939 SHOP DRAWING TOP CHORD JOINT U49
	64-66	AS-BUILT PLANS - 1939 SHOP DRAWING BOTTOM CHORD JOINT L28 & L29
	67-69	AS-BUILT PLANS - 1939 SHOP DRAWING BOTTOM CHORD JOINT L48 & L49
	70	AS-BUILT PLANS - 1939 SHOP DRAWING PIN AND LINK
	71-75	AS-BUILT PLANS - 1939 SHOP DRAWING TOP LATERALS, TOP WIND LINK, AND BOTTOM WIND LINK
	76-97	AS-BUILT PLANS - 2003 CONTRACT PLANS

FOR INFORMATION

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SEAL: PRELIMINARY NOT FOR CONSTRUCTION	REVISIONS DATE	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE DETAILED INDEX PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY	WORKING NUMBER <i>A02</i>
HNTB	DESIGNED <i>J.Gregg</i> DETAILED <i>B.Gautreau</i> TRACED _____ CHECKED <i>J.Bernard</i> ISSUED <i>J.Gregg</i> DATE _____			SHEET NUMBER 2

GENERAL NOTES

SPECIFICATIONS:

Construction Specifications: Mississippi Standard Specifications For Road and Bridge Construction, 2004.
 AASHTO LRFD Bridge Construction Specifications, 3rd Ed. With Interim Revisions.
 Design Specifications: AASHTO Standard Specifications For Highway Bridges, 17th Ed, 2002.
 AISC Manual Of Steel Construction, 9th Ed, 1989 (Temporary Structures)

DIMENSIONS:

All Dimensions Are Horizontal Unless Noted Otherwise On The Plans At A Normal Temperature Of 80 Fahrenheit.
 The Dimensions Shown Are Based On The Existing Bridge Plans And Shop Drawings.
 It Is The Contractors Responsibility To Field Verify All Dimensions Before Beginning Construction Or Fabrication Of Temporary Assemblies.

DESIGN CRITERIA:

All Temporary Restraints Have Been Designed By The Service Load Method.

STRUCTURAL STEEL:

All New And Temporary Structural Steel Shall Conform To A709 (Grade 50) Unless Otherwise Noted On The Plans.
 All Temporary Thread Post-Tensioning Bars Shall Conform To ASTM A722, Type II (Grade 150) Unless Otherwise Noted On The Plans.
 All Temporary Post-Tensioning Bars Shall Not Be Reused.
 All New Pin Steel Shall Conform To ASTM A668, Class G. Max Carbon Content Shall Be Limited To 0.35 Max %.
 All New Link Steel Shall Be ASTM A709 (Grade 50W) F3.
 U29 And U49 New Pins And Links Are Designated Fracture Critical Members (FCM).
 All Temporary And Replacement Bolts Shall Be ASTM A490.
 Unless Noted Otherwise, Structural Steel Removed From The Bridge And All Temporary Structural Steel Shall Become The Property Of The Contractor And Its Removal From The Job Site Shall Be Included In The Bid Prices.
 All Open Holes Shall Be Filled With A490 Bolts.
 U29 And U49 Existing Pins And Links Shall Become Property Of MDOT After Removal.

WELDING NOTES:

All Welds Shall Conform To ANSI/AASHTO/AWS D1.5 Bridge Welding Code.
 All Welding Shall Be Done By The Electric Arc Process. Welding Shall Be Done With Approved Electrodes And By Certified Welders.
 All Welds That Are To Be Made On Any Structural Steel Shall Be Shown In The Structural Steel Shop Drawings And Matching Weld Metal Shall Be Used. All Welds Are Subject To Approval Of The Director Of Structures, State Bridge Engineer.

SHOP DRAWINGS:

Contractor Shall Submit Shop Drawings For All Structural Steel And Temporary Structures To The Director Of Structures, State Bridge Engineer For Approval Prior To Fabrication.

PIN AND LINK REMOVAL PLAN:

Contractor Shall Submit Detailed Procedures Outlining Means And Methods For Removing Lower Pins At U29 And U49 To The Director Of Structure, State Bridge Engineer For Approval. Submittal Shall Include Use Of Temporary Restraints, Equipment, Schedule, Sequence Of Construction, Etc.
 Contractor Shall Be Permitted To Use Destructive Measures On The Existing Pins And Links To Be Removed.

ERECTION AND JACKING:

For Suggested Sequence Of Construction For Removing U29 Downstream And U49 Upstream Truss Pins And Link, See Sheet 7.
 Contractor Shall Remove And Replace Only One Location (U29 Or U49) Pins And Link Prior To Replacing The Opposite Location Pins And Links.
 Contractor Shall Only Be Permitted To Install Temporary Restraints For One Joint Location At A Time.
 Any Variation To The Suggested Sequence Of Construction Shown On These Plans Is Not Allowed Without Approval From The Director Of Structures, State Bridge Engineer.

PAINTING NOTES:

Any Existing Paint Removed Or Damaged During Construction Shall Be Re-Painted In Accordance With Mississippi Standard Specifications.
 All Temporary Steel Shall Be Shop Painted.
 All Steel To Remain Shall Be Painted In Accordance With The Mississippi Standard Specifications.

LIGHTING:

Contractor Shall Be Responsible For Maintaining All Navigational And Aerial Lighting.
 Contractor May Disconnect Aesthetic Lighting With Approval From The Project Engineer.

ACCESS PLATFORMS:

U29 Downstream Truss And U49 Upstream Truss Access Platforms Shall Be Temporarily Removed Or Modified. If Removed, Contractor Shall Reinstall Platforms In-Kind. If Modified, Contractor Shall Submit Plans And Calculations For Review And Approval By The Director Of Structures, State Bridge Engineer.

NEW GUSSET PLATES:

Contractor Shall Be Responsible For Either Re-Using The Temporary Splice Plate Or Providing A New Gusset Plate In The Event Excessive Pack Rust Is Found In The Existing Gussets During Pin Removal. If A New Gusset Is Required, Both Faces Shall Receive New Gusset Plates.

PAYMENT OF WORK:

All Labor And Materials (Including Temporary Restraints) Required To Remove And Replace The Upper And Lower Pins And Link Shall Be Paid For Under 907-810-A1 "Structural Steel (Pin And Link Removal And Replacement)".
 All Labor And Materials Associated With Installing New Gusset Plates Shall Be Paid For Under 907-810-A2 "Structural Steel (Install New Gusset Plate)".
 All Labor And Materials Associated With Temporarily Removing The Top Lateral And Cover Plates Shall Be Paid For Under 907-810-A3 "Structural Steel (Temporarily Remove Plates)".
 All Work For Which No Pay Items Are Required In The Proposal Will Not Be Paid For Directly And Compensations Therefore Will Be Considered Included In The Prices And Payment For Other Items.

PLAN CHANGES BY CONTRACTOR:

No Changes Of The Plans Will Be Permitted Except By Written Authority Of The Director Of Structures, State Bridge Engineer.
 Minor Changes In Details Of Design Or Construction May Be Authorized In Writing By The Director Of Structures State Bridge Engineer, Provided Such Changes Are Not Justifiable Reasons For Contract Price Adjustments.
 Alternative Temporary Jack Assembly And Procedures For Removing The U29 And U49 Pins And Links, Are Allowed, But Will Be Considered A Re-Design And Must Be Signed And Sealed By The Contractor's Construction Engineer. Contractor's Construction Engineer Is As Defined In The Request For Qualifications (RFQ). The Contractor's Construction Engineer Shall Be A Professional Engineer Registered In The State Of Mississippi With Experience In Rehabilitating Truss Bridges. MDOT Will Only Review The Contractors Re-Design For General Conformance With The Plans.

TEMPERATURE:

Contractor Shall Be Responsible For Monitoring And Recording The Fluctuations In Daily Temperatures.
 Contractor Shall Not Be Permitted To Engage Any Restraints Nor Remove The Pins And Link When The 10 Day Daily Forecasted Low Temperature Is Expected To Be Lower Than 40 Degrees Fahrenheit.
 Contractor Shall Engage Longitudinal Restraints At Daily Low Temperature.
 For The Last Three (3) Year Maximum And Minimum Temperatures, See Sheet 13.

WIND SPEED:

Contractor Shall Be Responsible For Monitoring The Wind Speeds As Reported From The Natchez-Adams County Airport.
 Contractor Shall Not Remove Pins And Link When The Average Wind Speed Exceeds 30 Miles Per Hour.
 Contractor Shall Not Proceed With Pin Removal When A Tropical Storm Or Hurricane Is In The Gulf Of Mexico And Expected To Make Landfall Near Louisiana, Mississippi, Or Alabama.
 For Three (3) Year Daily Maximum And Average Wind Speeds, See Sheet 14 And 15.

ELECTRICAL CONDUITS:

Contractor Shall Remove, Maintain And Replace Existing Bridge Electrical Conduits, Hardware And Wiring As Required To Make Bridge Repairs.
 Electrical Conduit Systems Damaged Or Requiring Modification Shall Be Replaced In Accordance With The Standard Specifications And National Electrical Code.
 Conduit Shall Be Rigid Aluminum With Stainless Steel Hardware, Conduit And Wiring Shall Be Size And Type Compatible With Existing Electrical Conduit And The Components To Be Connected.
 This Item Will Not Be Paid For Directly, And Compensation Therefore Will Be Considered Included In The Price And Payment Of Other Bid Items.

TOP LATERAL AND COVER PLATES:

Contractor Shall Temporarily Remove Top Lateral And Cover Plates And Allow MDOT To Inspect The Remaining Links.
 Contractor Shall Replace Rivets With Bolts.
 Contractor Shall Reuse Existing Top Lateral And Cover Plate.
 For Location Of Top Lateral And Cover Plates, See Sheets 5 And 6.

MAINTENANCE OF TRAFFIC:

Contractor Shall Be Permitted To Close The Westbound Bridge To Traffic During Installation Of Temporary Restraints And Removal And Replacement Of Pins And Link.
 Contractor Shall Redirect Westbound Traffic To The Eastbound Bridge As Outlined On Sheets 16 Thru 18.
 Contractor Shall Not Be Permitted To Close The Westbound Bridge To Traffic More Than 7 Weeks Without Written Permission From The Project Engineer.
 The Contractor May Be Required To Re-Open The Westbound Bridge In The Event Of An Emergency Except For When The Existing Pins Have Been Removed And New Pins And Links Not Installed.
 Westbound Bridge Closure Date And Time Shall Be Approved By MDOT.
 Contractor Shall Limit Equipment On The Westbound Bridge When Replacing U29 And U49 Pins And Link And Shall Not Be Permitted To Place Any Equipment On Areas That Influence The Load On The Pins And Link Being Replaced. See Sheet 12 For U29 And U49 Link Influence Lines.
 Contractor Shall Maintain And Not Interfere With Marine Traffic.
 Contractor Shall Be Permitted To Close One Lane Of Traffic On The Westbound Bridge From 7:00 Am To 4:00 Pm Monday Thru Friday And From 7:00 Am To 6:00 Pm Saturday And Sunday, Except For Days Which Include Events, In Orders To Take Field's Measurements.

REQUEST FOR QUALIFICATIONS PLAN NOTES

The Following Set Of Plans Are Conceptual And Are Intended For The Request For Qualifications. These Plans Are Not Intended For Construction.
 Detailed Contract Plans Will Be Provided To Shortlisted Responders.
 Scope Of Work And Plan Details Shown In The Conceptual Plans May Change Or Be Modified For Contract Plans Provided To Shortlisted Responders.

SCOPE OF WORK

In General, The Scope Of Work Shall Consist Of Replacing U29 Downstream And U49 Upstream Lower And Upper Pins And Links. The Following Is An Overview Of The Scope Of Work Required To Replace The Lower Pins And Links:

U29 Downstream Truss

Install Temporary Longitudinal Restraint On U29 And L29 Upstream And Downstream Trusses.
 Install Temporary Bypass On U29 Downstream Truss.
 Install New Splice Over Existing U29 Gusset.
 Remove Existing 10 1/2" Diameter Lower And Upper Pins At U29 Downstream Truss.
 Remove Existing 10" x 16" x 7-6" Link At U29 Downstream Truss.
 Bore New 10 1/2" Diameter Holes Through Existing Gussets At Upper And Lower Pin Locations.
 Fabricate And Replace U29 Downstream Truss Links.
 Fabricate And Replace U29 Downstream Truss Lower And Upper Pin With New 10 1/2" Diameter Pins.
 Install New Gusset Plate At U29 Lower Pin As Directed By MDOT.
 Provide And Maintain Traffic Control In Accordance With These Plans And Mississippi Standard Specifications.

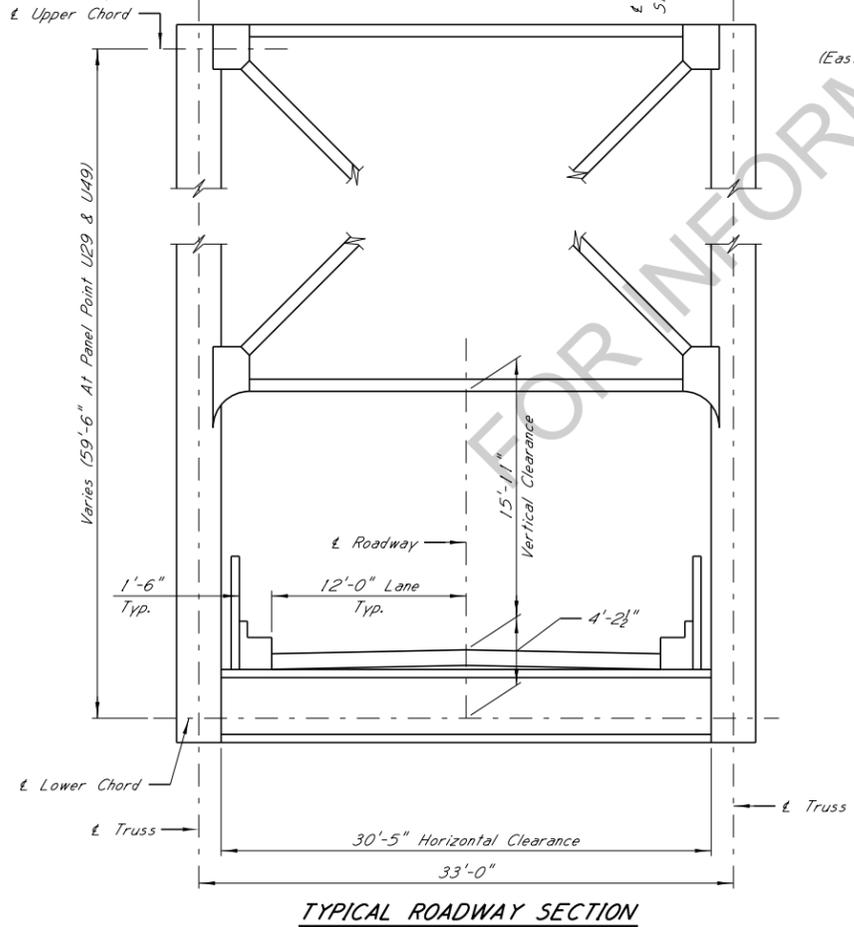
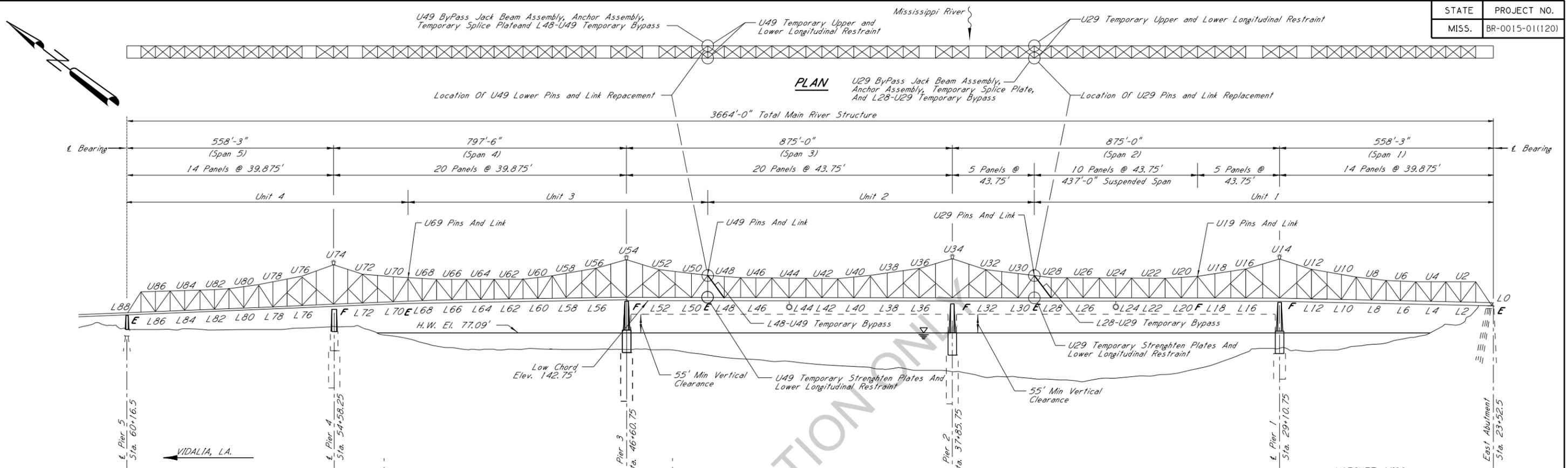
U49 Upstream Truss

Install Temporary Longitudinal Restraint On U49 And L49 Upstream And Downstream Trusses.
 Install Temporary Bypass On U49 Upstream Truss.
 Install New Splice Plate Over Existing U49 Gusset.
 Remove Existing 10 1/2" Diameter Lower And Upper Pins At U49 Upstream Truss.
 Remove Existing 10" x 16" x 7-6" Link At U49 Upstream Truss.
 Bore New 10 1/2" Diameter Holes Through Existing Gussets At Upper And Lower Pin Locations.
 Fabricate And Replace U49 Upstream Truss Links.
 Fabricate And Replace U49 Upstream Truss Lower And Upper Pins With New 10 1/2" Diameter Pins.
 Install New Gusset Plate At U49 Lower Pin As Directed By MDOT.
 Provide And Maintain Traffic Control In Accordance With These Plans And Mississippi Standard Specifications.

SUMMARY OF QUANTITIES			
NUMBER	ITEM	UNIT	QUANTITY
618-A	MAINTENANCE OF TRAFFIC	LUMP SUM	1
620-A	MOBILIZATION	LUMP SUM	1
STRUCTURAL			
907-810-A1	STRUCTURAL STEEL (PIN AND LINK REMOVAL AND REPLACEMENT)	EA	2
907-810-A2	STRUCTURAL STEEL (INSTALL NEW GUSSET PLATE)	EA	4
907-810-A3	STRUCTURAL STEEL (TEMPORARILY REMOVE EXISTING PLATES)	EA	12

SEAL:	PRELIMINARY NOT FOR CONSTRUCTION	BY	REVISIONS	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE	
				GENERAL NOTES & QUANTITIES	
HNTB	DATE	DESIGNED <u>J.Grege</u>	CHECKED <u>J.Bernard</u>	DETAILED <u>L.Evans</u>	TRACED _____
					WORKING NUMBER A03
					SHEET NUMBER 3

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NOTES

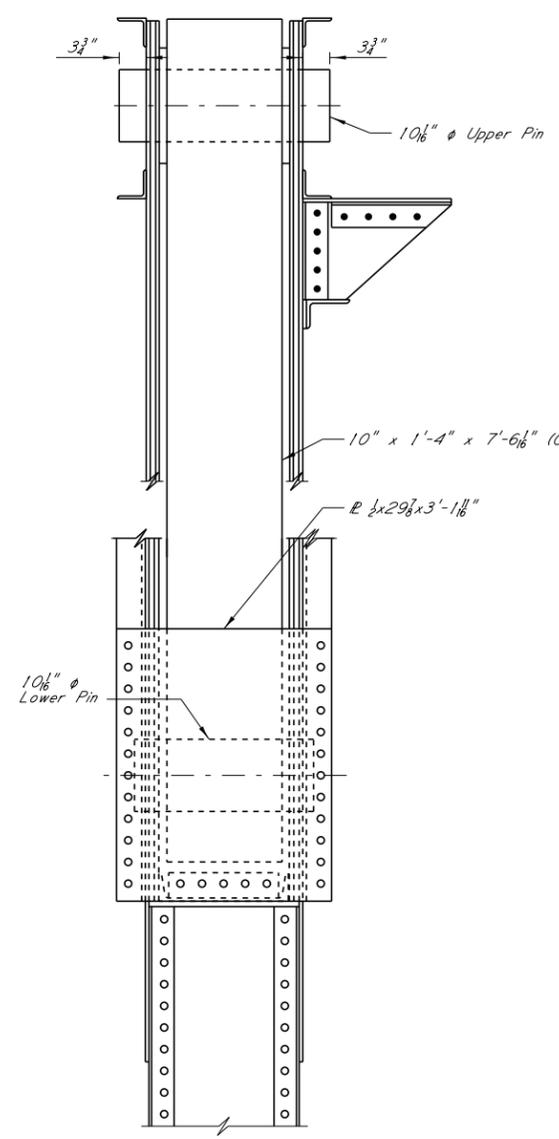
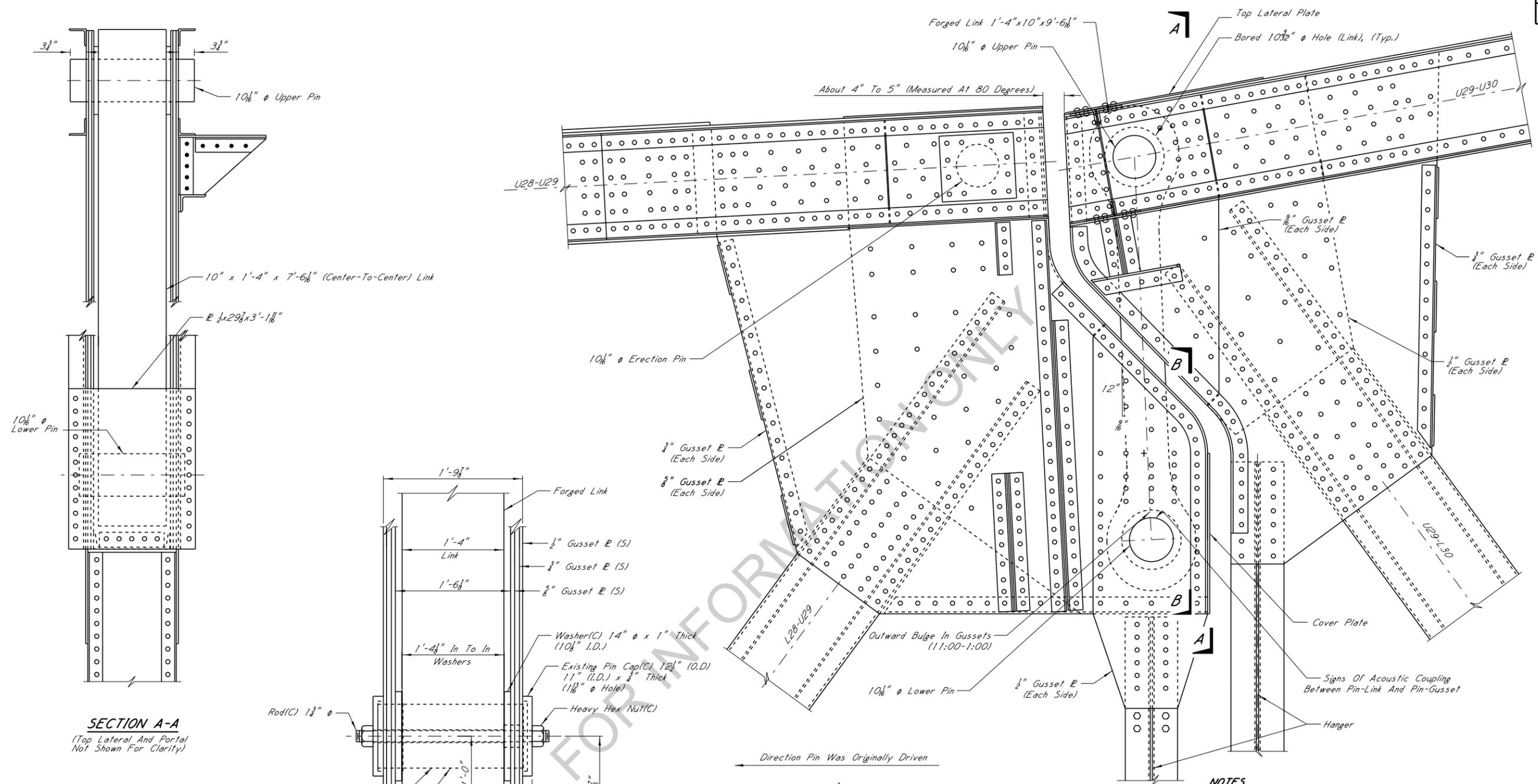
For Suggested Sequence of Construction, See Sheet 7.

For General Notes, See Sheet 3.

SEAL:	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION		WORKING NUMBER A04
		U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE		
PRELIMINARY NOT FOR CONSTRUCTION	REVISIONS	GENERAL PLAN & ELEVATION WESTBOUND BRIDGE		SHEET NUMBER 4
		PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY		
HNTB	DATE	DESIGNED <u>M.Xin</u>	DETAILED <u>L.Kalita</u>	TRACED _____
		CHECKED <u>J.Gregg</u>	ISSUED _____	

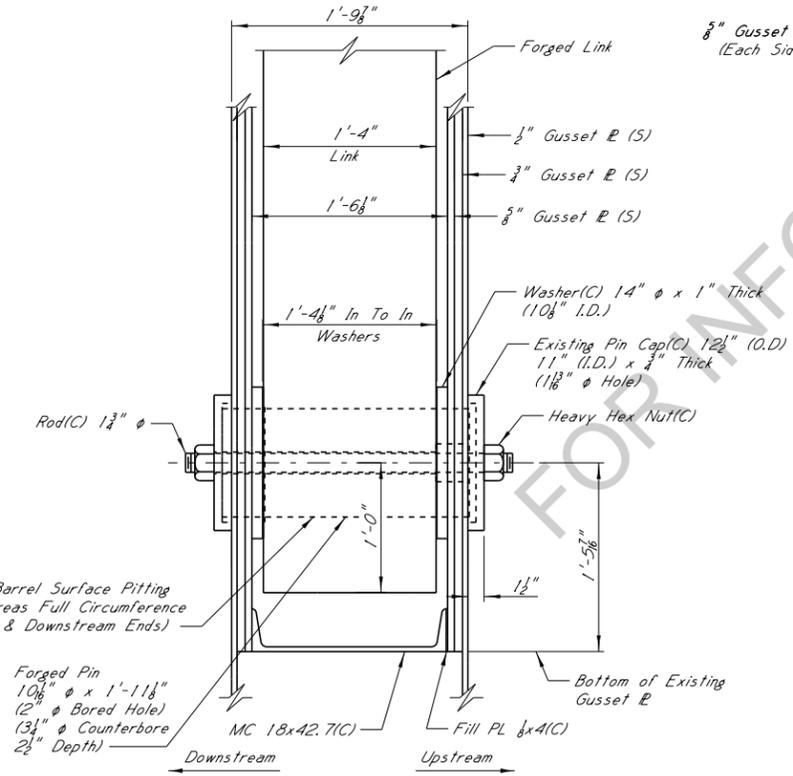
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SECTION A-A
(Top Lateral And Portal Not Shown For Clarity)

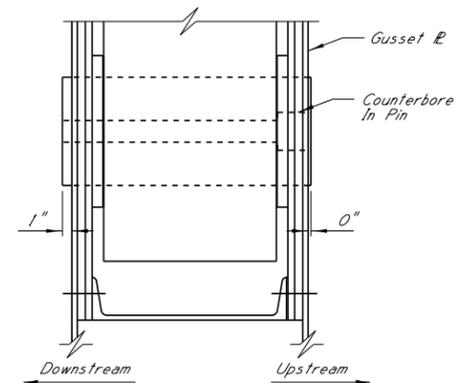
*Signs Of Barrel Surface Pitting Various Areas Full Circumference (Upstream & Downstream Ends)



SECTION B-B
(U29 LOWER PIN DETAILS)
(Existing)

* 2010 Ultrasonic Test Of Pin
(S) Silicon Steel
(C) Carbon Steel

Direction Pin Was Originally Driven

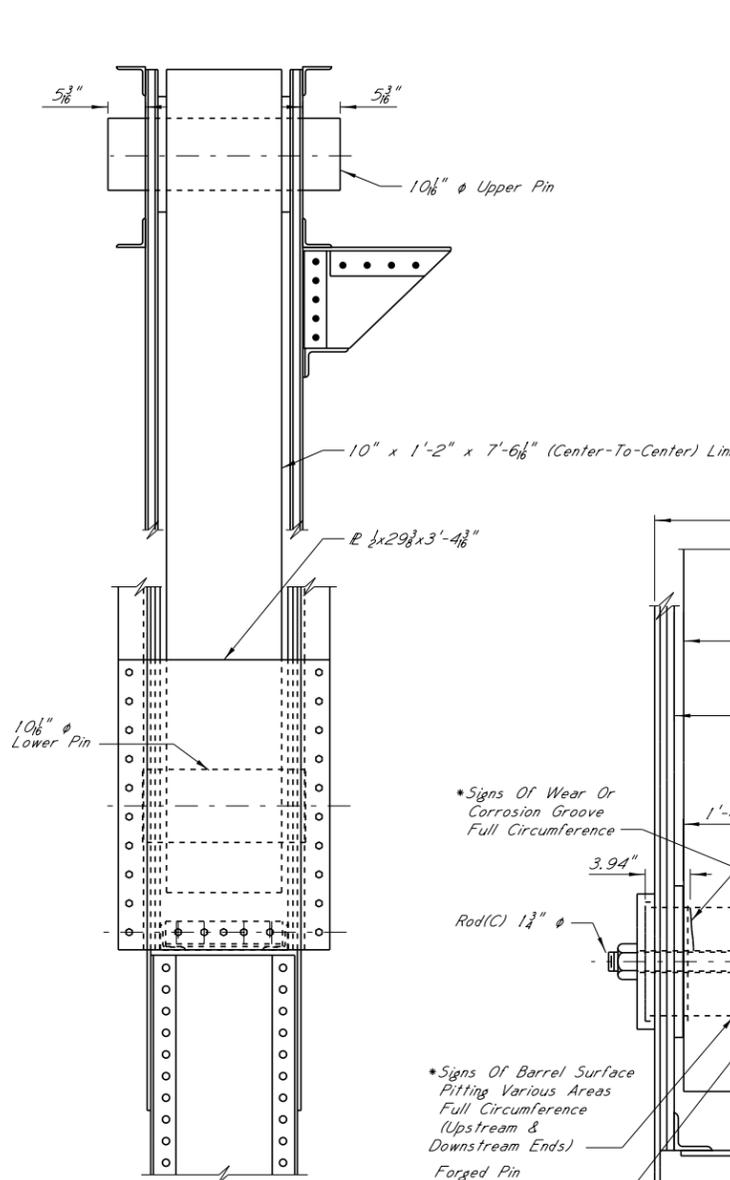


U29 LOWER PIN MEASUREMENT
(Sept. 2012)

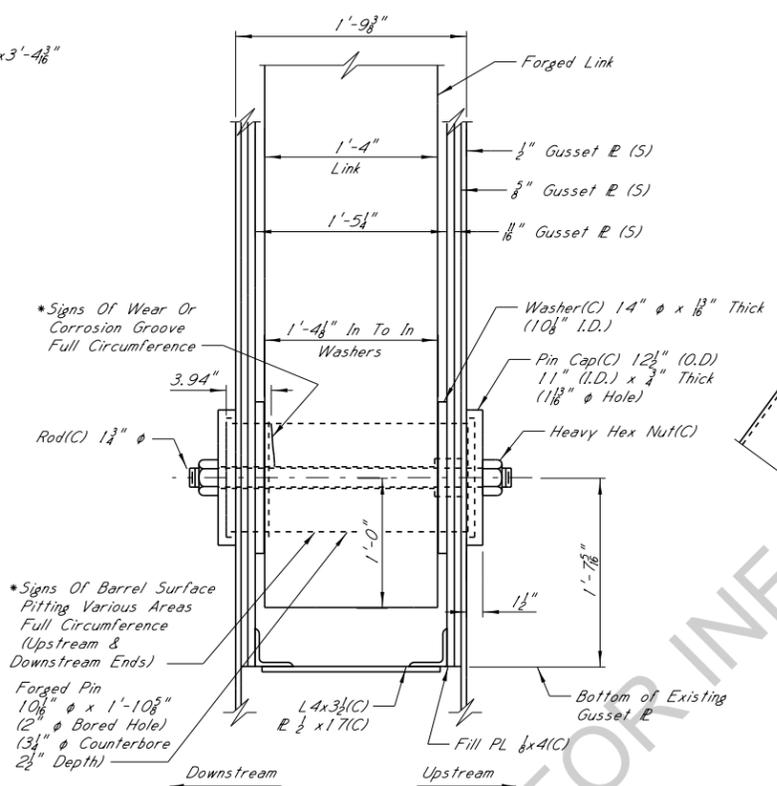
U29 DOWNSTREAM TRUSS ELEVATION
(Looking Downstream)
(Access Platform Not Shown For Clarity)

NOTES
 U29 Downstream Truss Existing Condition Is Based On The 2010 In-Depth Inspection And The 2012 Routine Inspection Of The Bridge.
 Ultrasonic Testing Was Performed On The Lower Pins As Part Of The 2012 And 2013 Inspection.
 Acoustic Coupling Indicates Contact Area With High Contact Pressure. For Additional Details Refer To Construction Shop Drawings.

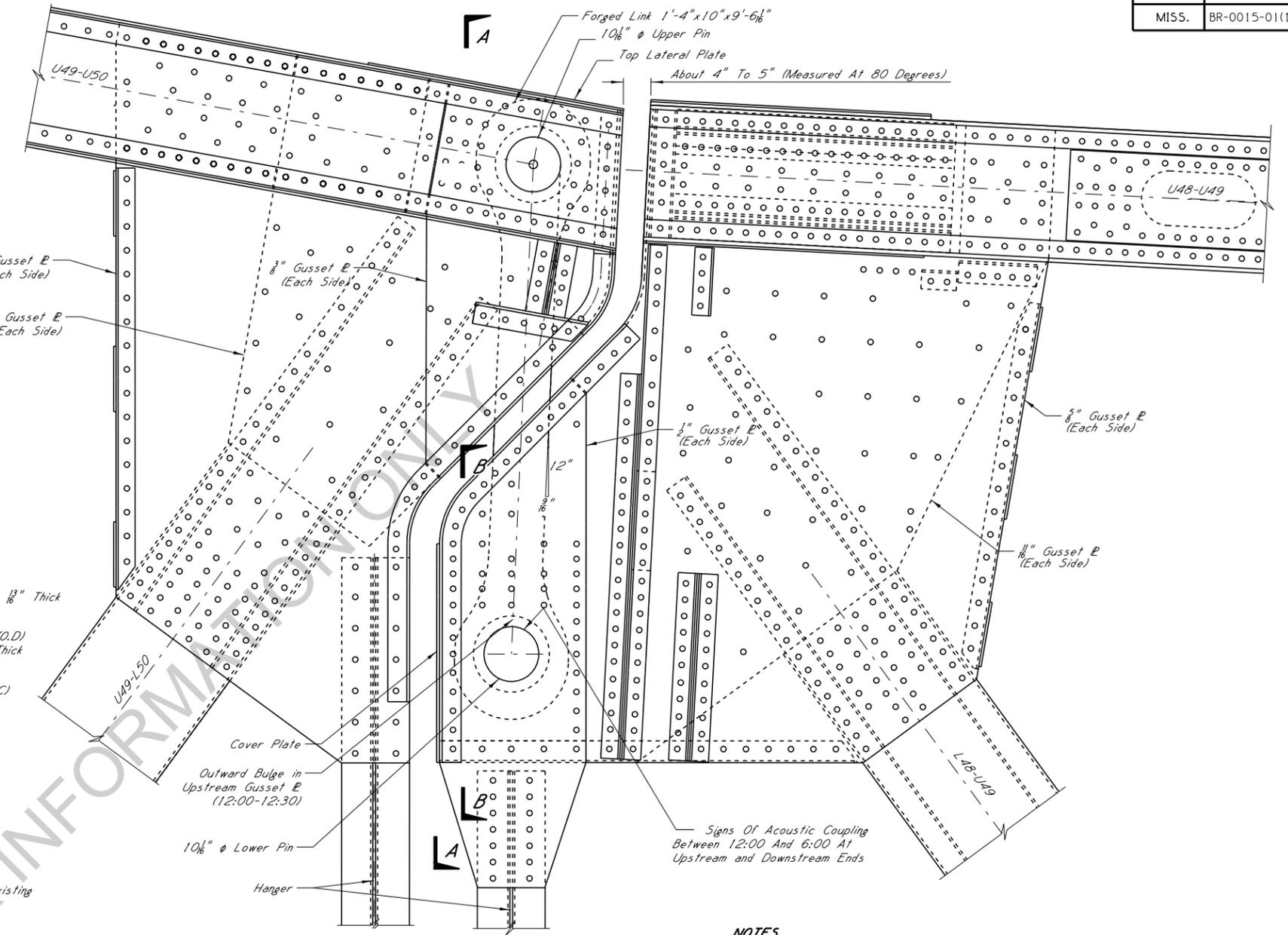
SEAL: PRELIMINARY NOT FOR CONSTRUCTION	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE	
	U29 DOWNSTREAM TRUSS EXISTING CONDITION PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY	
HNTB	DESIGNED <u>J. Grege</u> DETAILED <u>L. Evans</u> TRACED _____ CHECKED <u>J. Bernard</u> ISSUED _____ DATE _____	WORKING NUMBER A05 SHEET NUMBER 5



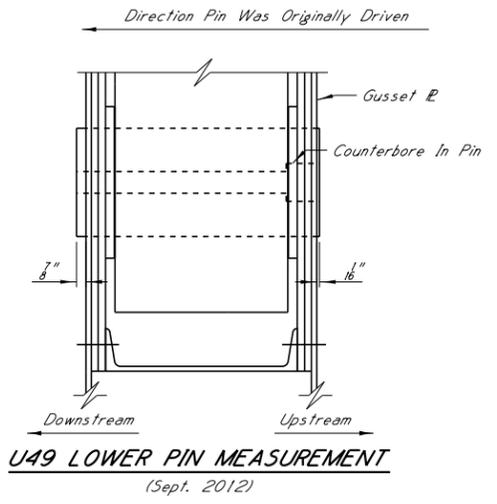
SECTION A-A
(Top Lateral and Portal Not Shown For Clarity)



SECTION B-B
(U49 LOWER PIN DETAILS)
(Existing)



U49 UPSTREAM TRUSS ELEVATION
(Looking Upstream)
(Inspection Platform Not Shown For Clarity)



U49 LOWER PIN MEASUREMENT
(Sept. 2012)

*Signs Of Wear Or Corrosion Groove Full Circumference (Upstream & Downstream Ends)

*Signs Of Barrel Surface Pitting Various Areas Full Circumference (Upstream & Downstream Ends)

Signs Of Acoustic Coupling Between 12:00 And 6:00 At Upstream and Downstream Ends

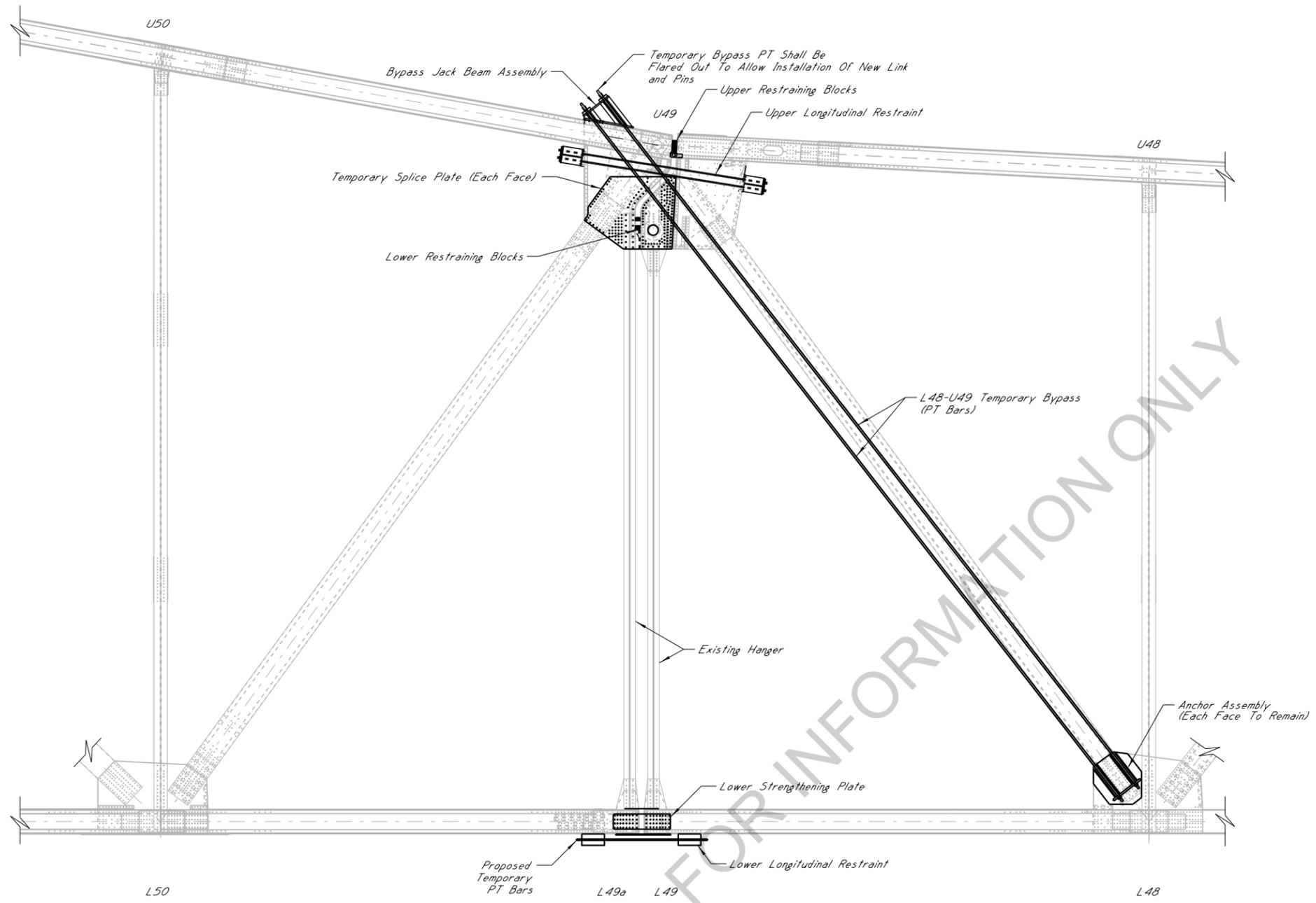
NOTES

U49 Upstream Truss Existing Condition Is Based On The 2010 In-Depth Inspection And The 2012 Routine Inspection Of The Bridge. Ultrasonic Testing Was Performed On The Lower Pins As Part Of The 2012 And 2013 Inspection. Acoustic Coupling Indicates Contact Area With High Contact Pressure. For Additional Details Refer To Construction Shop Drawings

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* 2010 Ultrasonic Test Of Pin
(S) Silicon Steel
(C) Carbon Steel

SEAL:		BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE	
PRELIMINARY NOT FOR CONSTRUCTION		REVISIONS		U49 UPSTREAM TRUSS EXISTING CONDITION	
		DATE		PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY	
HNTB		DESIGNED <u>J.Gregg</u> DETAILED <u>L.Evans</u> TRACED _____		WORKING NUMBER U06	
		CHECKED <u>J.Bernard</u> ISSUED _____ DATE _____		SHEET NUMBER 6	



U49 UPSTREAM TRUSS TEMPORARY RESTRAINTS
U29 Downstream Truss Similar

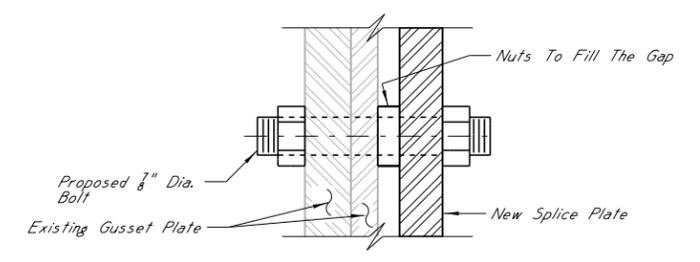
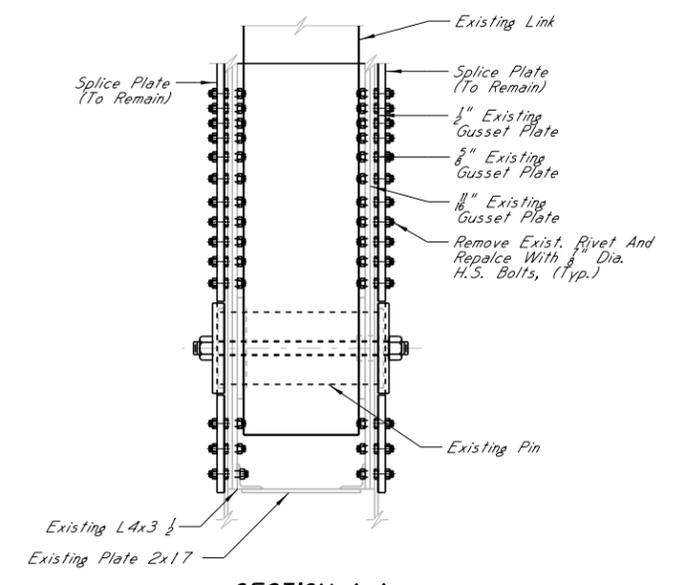
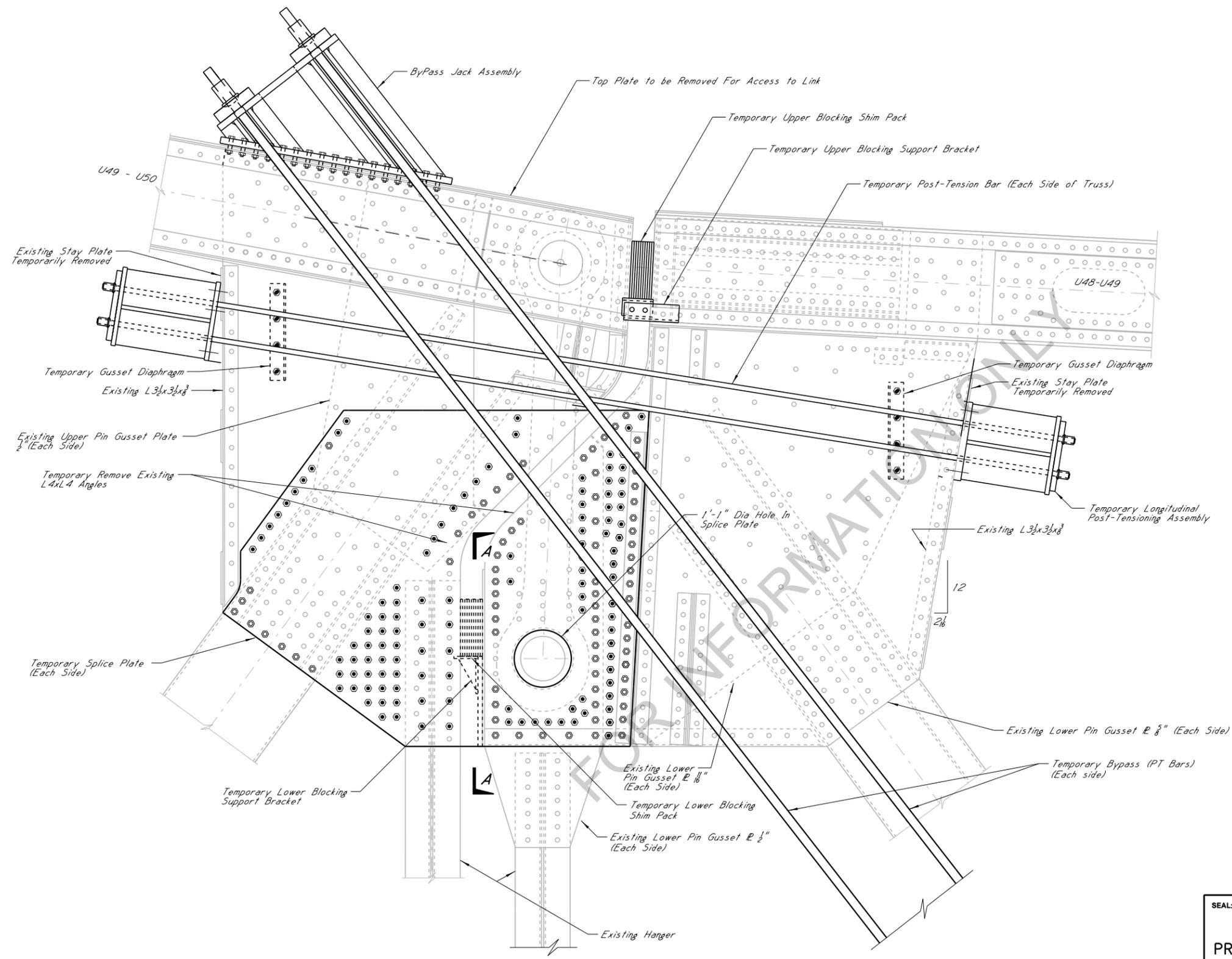
SUGGESTED SEQUENCE OF CONSTRUCTION

1. Install Upper And Lower Longitudinal Restraints (Do Not Tension Or Install Blocks). (Install On Upstream And Downstream Trusses).
2. Install L48-U49 Temporary Bypass, Jack Beam Assembly, And Anchor Bypass Assembly (Do Not Tension). May Require Temporarily Removing Existing Sway Frame And Panels Curb Supports & Handrail Post Near L48.
3. Remove Traffic From Bridge And Redirect To Eastbound Bridge
4. Install Upper And Lower Restraining Blocks, Lower Strengthening Plate, Post-Tension Upper And Lower Longitudinal Restraints. (Upstream And Downstream Trusses)
5. Post-Tension L48-U49 Temporary Bypass. Tension To Dead Load Force In Existing Truss Member L48-U49 (761 Kips +/-). Contractor Shall Post-Tension Bars Simultaneously.
6. Remove U49 Existing L4x4 Angles On Free Edge Of Gusset Near Link
7. Option A:
 Clean U49 Outside Gusset Contact Surface And Install New Gusset Plates
 a. Remove Existing Rivets As Shown In The Plan.
 b. Make Templates, And Filler Plates Which Include Holes Matching With Removed Rivet Holes In Step a), New 3/4" Diameter Bolt Pattern shown In The Plans, And Oversized Holes To Avoid Remaining Rivet Heads.
 c. Make New Splice Plates With 3/4" Diameter Holes For The 3/4" Diameter Bolts Replacing Removed Rivets And Newly Installed Bolts.
 d. Place Filler Plates And New Splice
 e. Install 3/4" Diameter Bolts In The New Splice Plate. (Optional: Templates Can Be Used To Drill The Holes For The Newly Placed Bolt On Installed Splice Plate, Instead Of Pre-Drilling)
 f. Repeat The Same Step On Opposite Face.
 Option B:
 Clean U49 Outside Gusset Contact Surface And Install New Splice Plates
 a. Remove Existing One Rivet At A Time Immediate Replace With A New 3/4" Diameter Bolt Thread On Both Sides.
 b. Repeat Step a) For All Existing Rivets Be Replaced As Shown In The Plan.
 c. Make New Splice Plates With 3/4" Diameter Holes For The 3/4" Diameter Bolts Replacing Removed Rivets and Newly installed Bolts.
 d. Place Filler Plates And New Splice
 e. Install 3/4" Diameter Bolts In The New Splice Plate. (Optional: Templates Can Be Used To Drill The Holes For The Newly Placed Bolt On Installed Splice Plate, Instead Of Pre-Drilling)
 f. Repeat The Same Step On Opposite Face.
8. Remove Top Plate Above Link On Member U49-U50
9. Cut Link From Top To Remove And Transfer Any Remaining Load In Link To Temporary Restraints
10. Cut Upper And Lower Pins Past Gusset
11. Remove Link And Pins From Top
12. Bore New 10 3/32" Diameter hole Through Existing Gusset At Upper And Lower Pin Locations
13. Install New Pin And Link
14. Remove U49 Splice Plate *
15. Install Angles On All Plate Free Edges Similar To Previous Angles Removed
16. Remove Temporary Restraints In Reverse Order

* At MDOT's Direction, Contractor May Be Required To Install A New Gusset Plate At Lower Pin After Removing Temporary Splice Plate.

SEAL: PRELIMINARY NOT FOR CONSTRUCTION	REVISIONS BY DATE	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE SUGGESTED SEQUENCE OF CONSTRUCTION PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY		WORKING NUMBER A07
	HNTB	DESIGNED <u>M. Xin</u> DETAILED <u>L. Kalita</u> TRACED _____ CHECKED <u>J. Greer</u> ISSUED _____ DATE _____	SHEET NUMBER 7	

jgregg PLOTTED: 05-MAY-2014 16:43 \\batw00\jobs\55932-BridgeDesignServicesMaster\CADD\bridge\TaskOrder_15\Final\A07.dgn

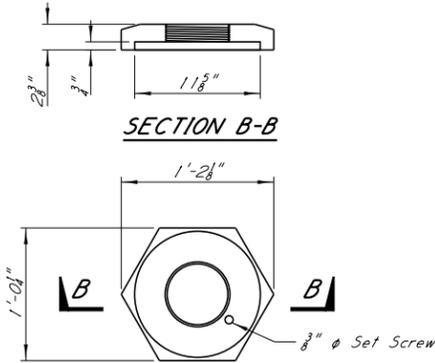


- LEGEND**
- Existing Rivet To Remain
 - Remove Existing Rivet For New 3/8" High Strength Bolt.
 - New 3/8" Bolt In 1/2" Hole To Be Field Drilled.

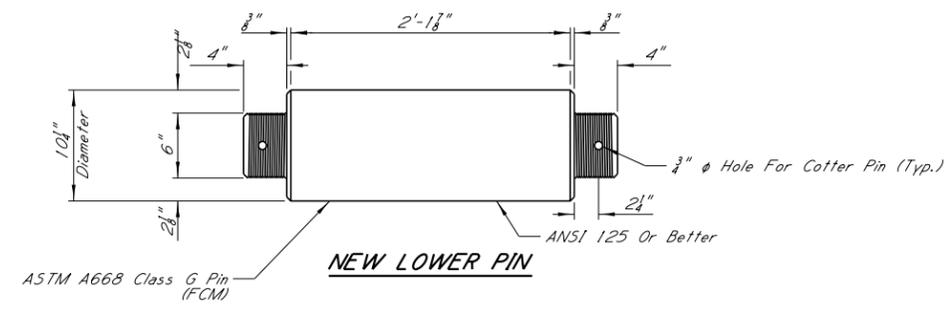
U49 SPLICE PLATE, TEMPORARY LONGITUDINAL RESTRAINT AND TEMPORARY BY-PASS
 Provide Longitudinal Restraint At Each Truss
 (Looking Upstream)

SEAL:	PRELIMINARY NOT FOR CONSTRUCTION	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE	
		U49 TEMPORARY RESTRAINTS	
PROJECT BR-0015-01(120) 106487/301000		ADAMS COUNTY	
DESIGNED <u>M.Xin</u> DETAILED <u>L.Kalita</u> TRACED _____		WORKING NUMBER A08	
CHECKED <u>J.Gregg</u> ISSUED _____ DATE _____		SHEET NUMBER 8	

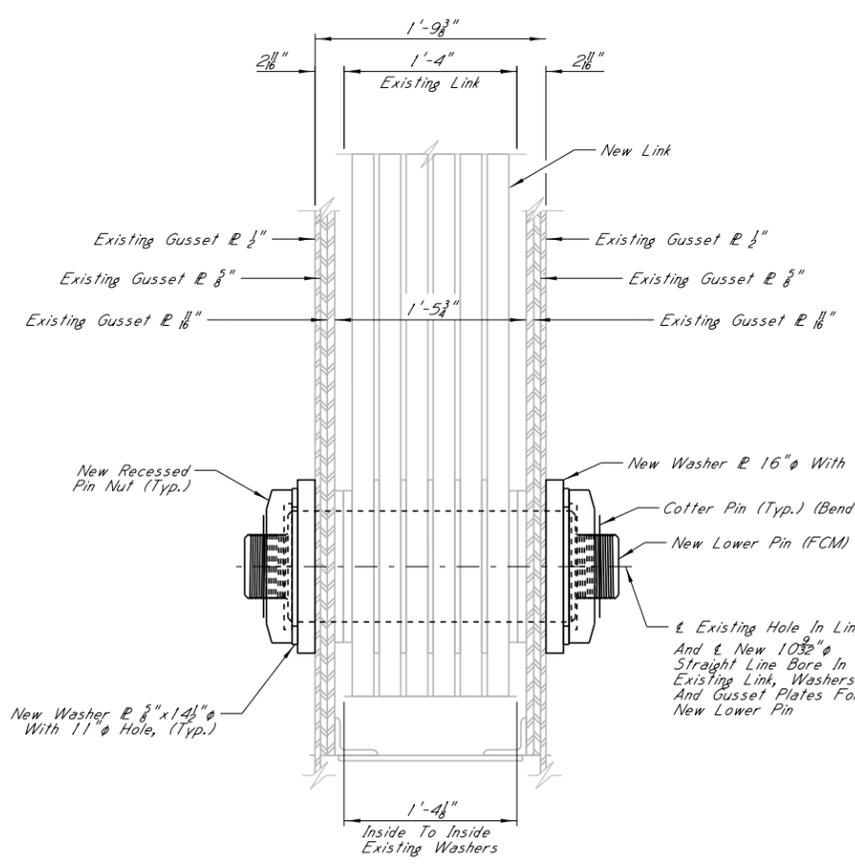
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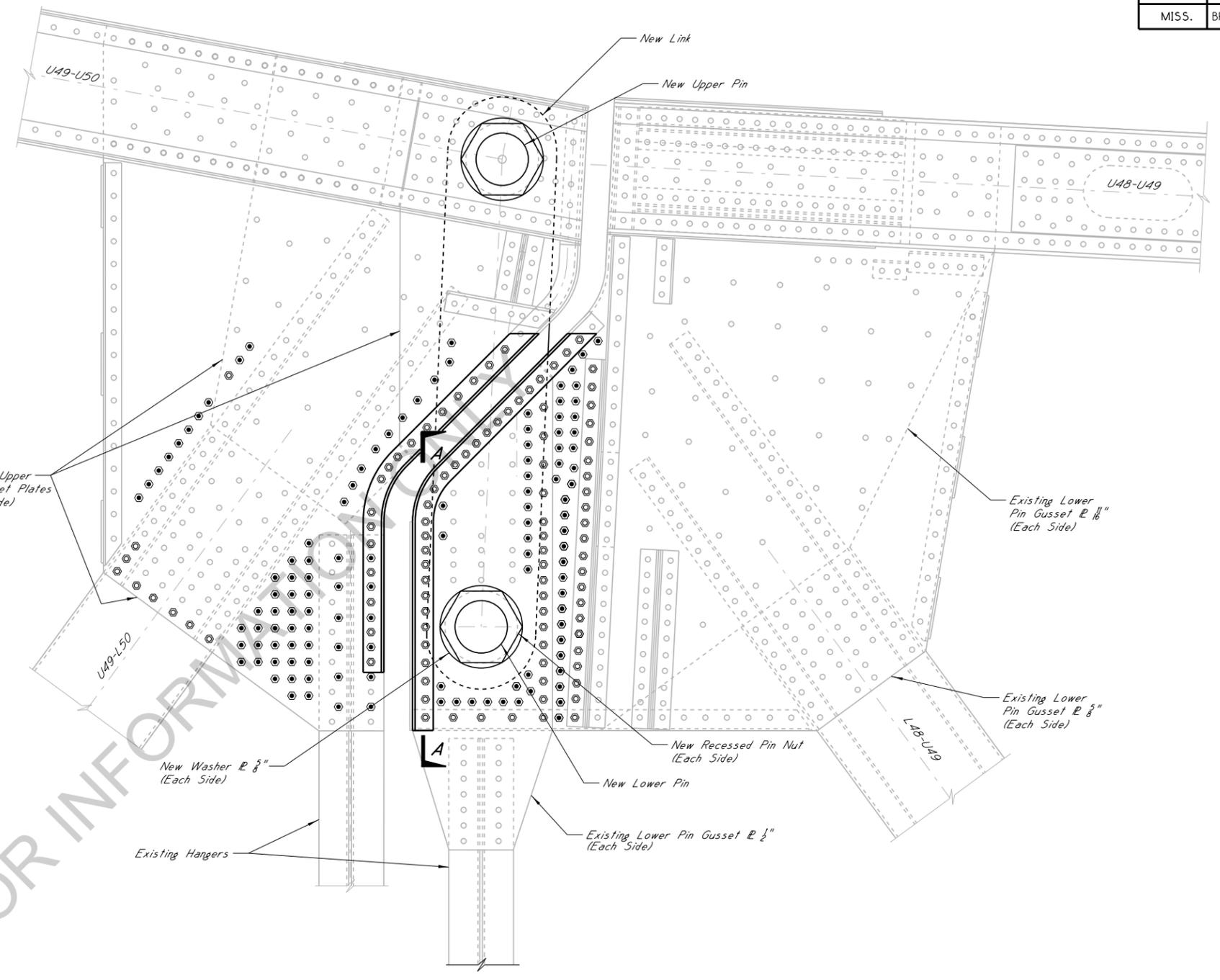
NEW RECESSED PIN NUT



NEW LOWER PIN



SECTION A-A



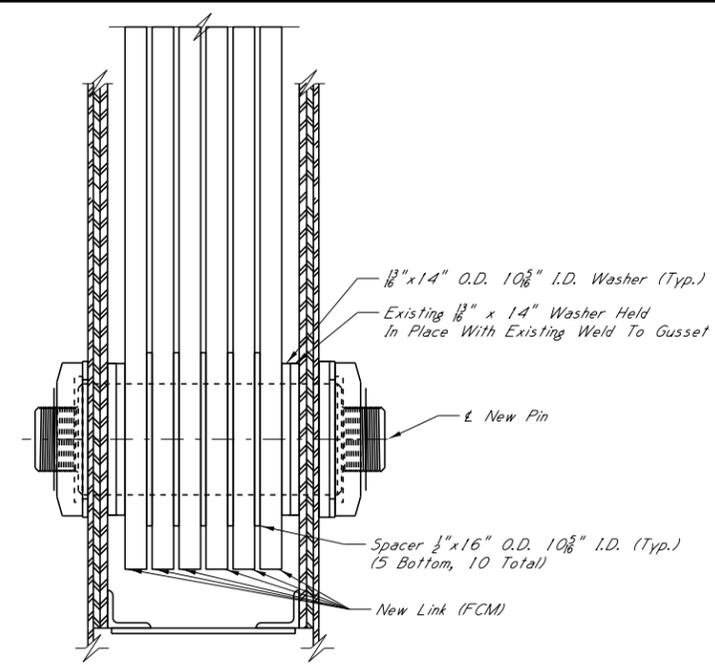
**U49 UPSTREAM TRUSS
LOWER PIN REPLACEMENT**

(Looking Upstream)
(Temporary Restraints Not Shown For Clarity)

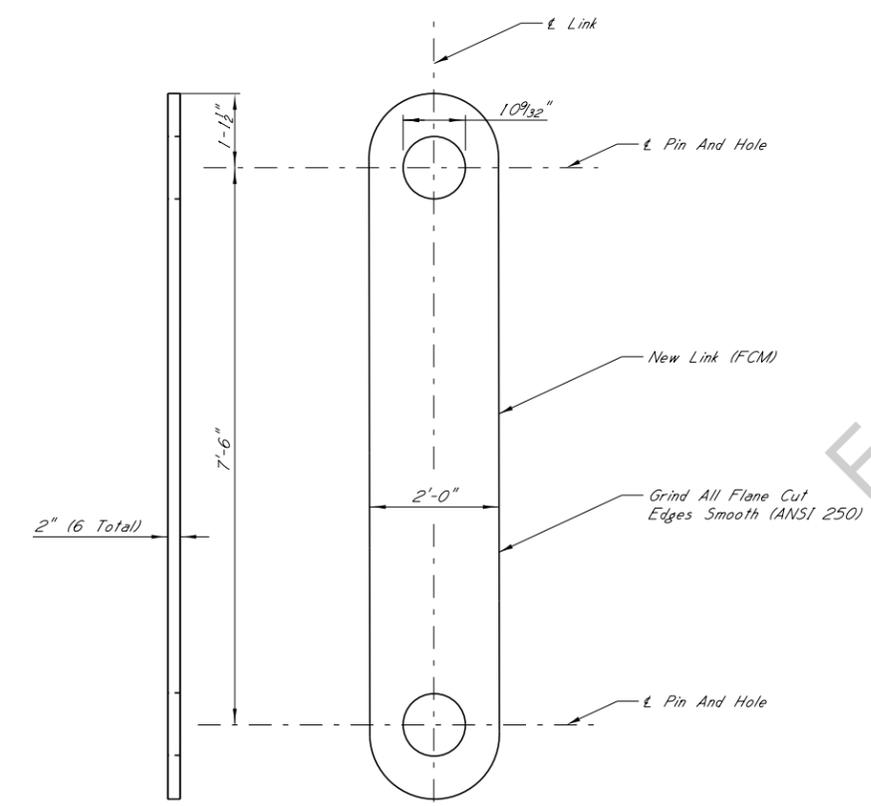
NOTES:

For General Notes, See Sheet 3.
For Suggested Sequence Of Construction, See Sheet 7.
Pin Steel Shall Conform To ASTM A668, Class G. Max Carbon Content Shall Be Limited To 0.35 Max %.
Provide Driving Nut And Pilot Nut To Protect The Pin Threads During Installation.
Pin Nuts Shall Be Secured By A Set Screw With A Cotter Pin Backup.
After Fabrication, Finished Surfaces Of Pins With The Exception Of The Bearing Areas, Shall Be Abrasive Blast Cleaned In Accordance With SSPC-10 Near White Blast Cleaning To Achieve A Surface Profile Depth Of 1.5 To 2.5 Mils.
Entire Pin Surface Shall Then Be Given A Coat Of An Approved Protective Coating. Immediately Prior To Erection, The Protective Coating Shall Be Thoroughly Removed From The Entire Pin, And Only The Bearing Surfaces Shall Then Be Coated With High Grade Lubricant Grease Having Non-Corrosive Properties. Immediately After Erection, Any Corrosion, Excess Grease, And Any Other Contaminants That Would Prevent Adherence Of Paint Shall Be Completely Removed. The Exposed Surfaces Of The Pin Shall Then Be Coated Per MDOT Standard Specifications.
For Cotter Pin Detail, See Sheet 9

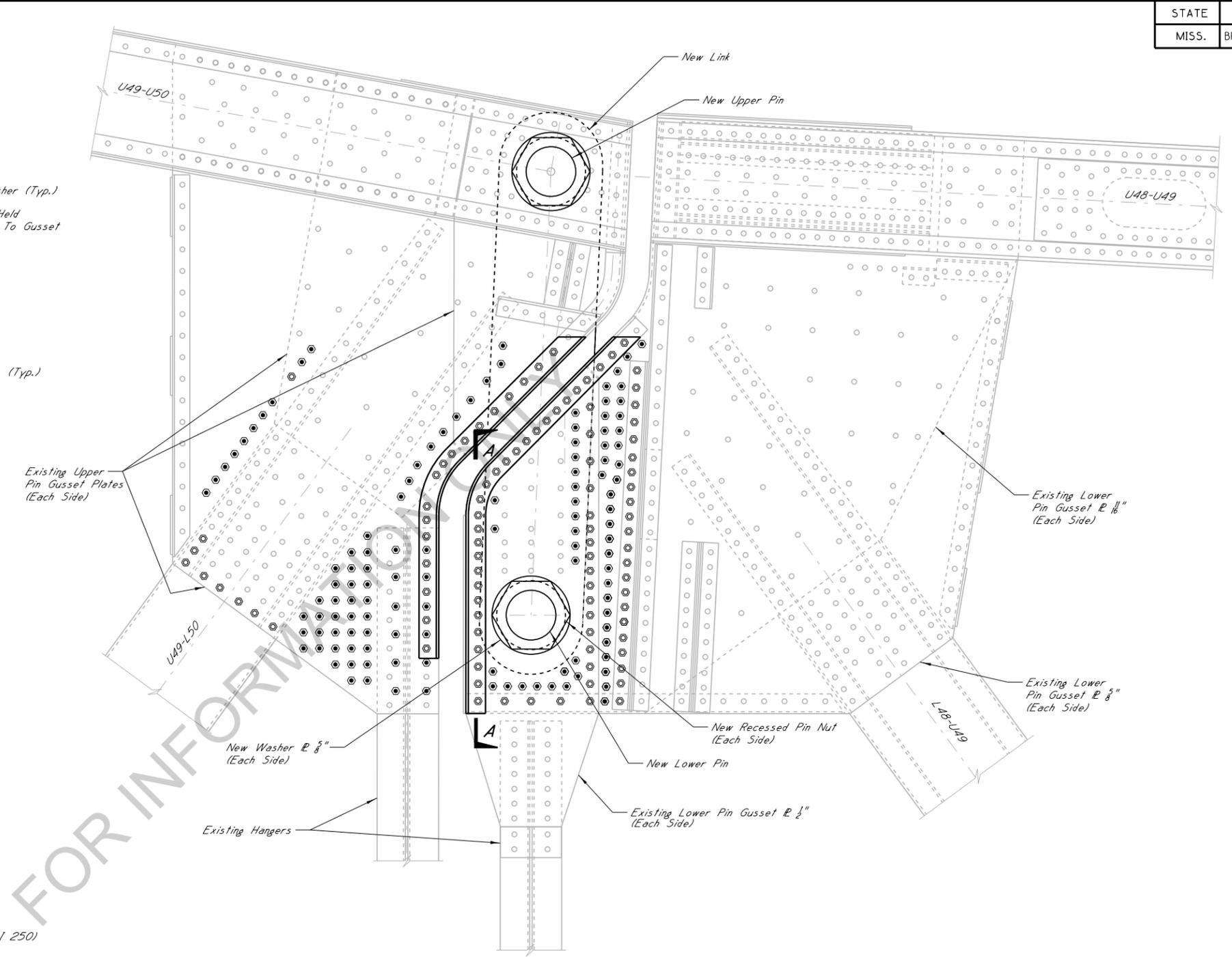
PRELIMINARY NOT FOR CONSTRUCTION	SEAL:	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE	
		U49 UPSTREAM LOWER PIN REPLACEMENT PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY	
HNTB	DESIGNED <u>J. Bernard</u>	DETAILED <u>S. Hebert</u>	TRACED _____
	CHECKED <u>J. Greig</u>	ISSUED _____	DATE _____
	WORKING NUMBER A10	SHEET NUMBER 10	



SECTION A-A



NEW VERTICAL LINK



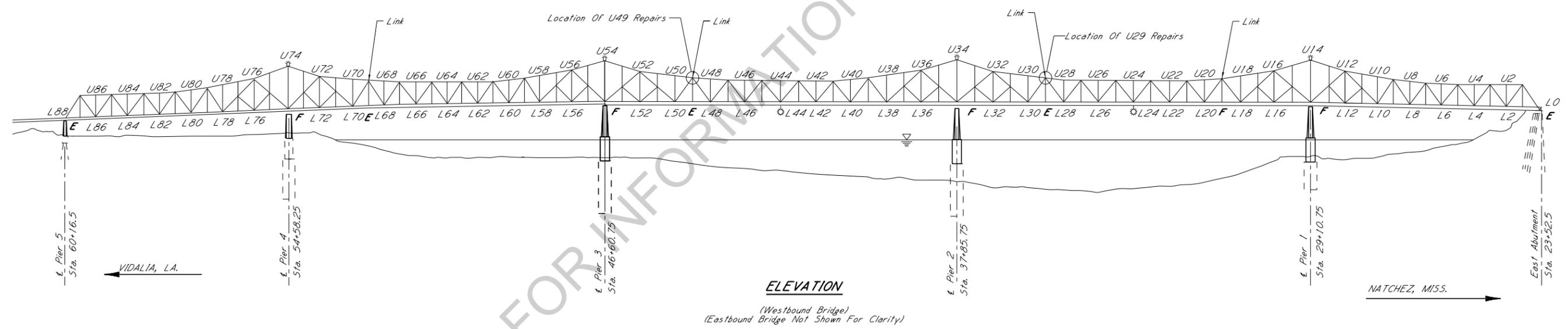
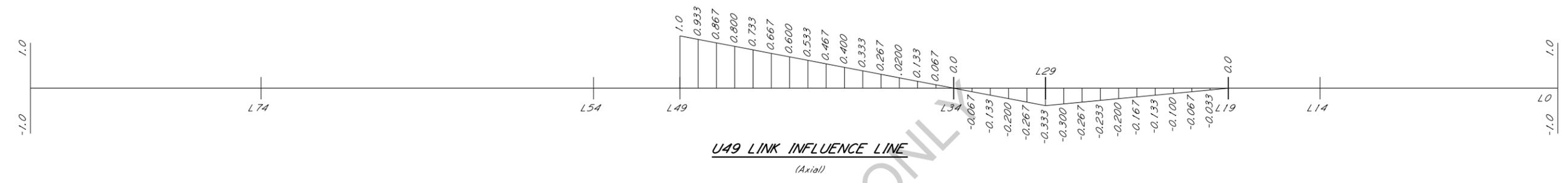
**U49 UPSTREAM TRUSS
LINK REPLACEMENT**

(Looking Upstream)
(Temporary Restraints Not Shown For Clarity)

NOTES:
Links Are Designated As Fracture Critical Members (FCM)
Links And Spacers Shall Be ASTM A709 (Grade 50W) F3

SEAL: PRELIMINARY NOT FOR CONSTRUCTION	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE	
	U49 UPSTREAM TRUSS LINK REPLACEMENT PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY	
HNTB	DESIGNED <u>J. Bernard</u> DETAILED <u>S. Hebert</u> TRACED _____ CHECKED <u>J. Gregg</u> ISSUED _____ DATE _____	WORKING NUMBER <i>A11</i> SHEET NUMBER <i>11</i>

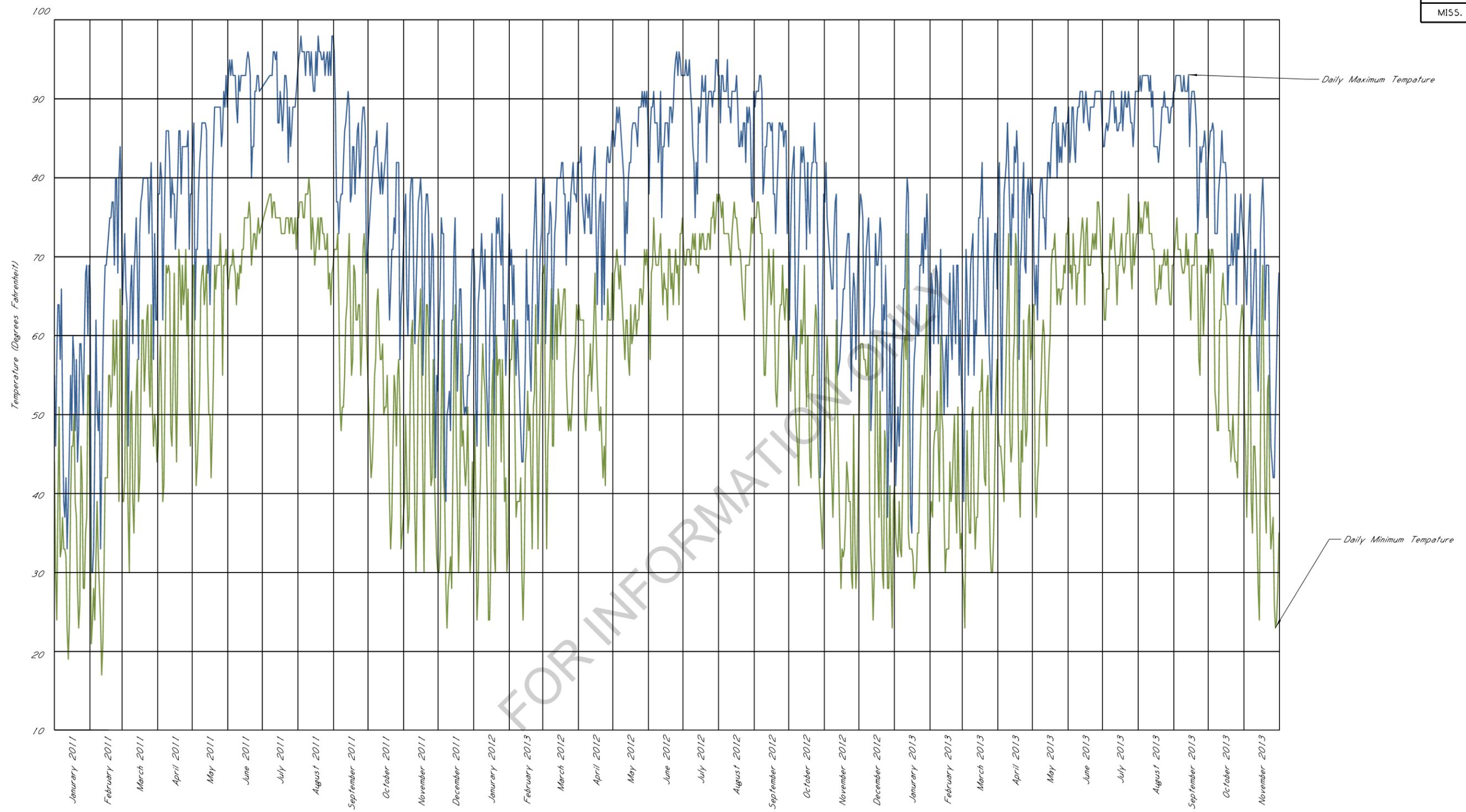
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FOR INFORMATION ONLY

NOTES
 Contractor Will Not Be Allowed To Place Any Equipment On Areas That Will Influence The Load On The Pin Being Removed When Vertical Restraints Are Engaged Unless Otherwise Directed By MDOT.

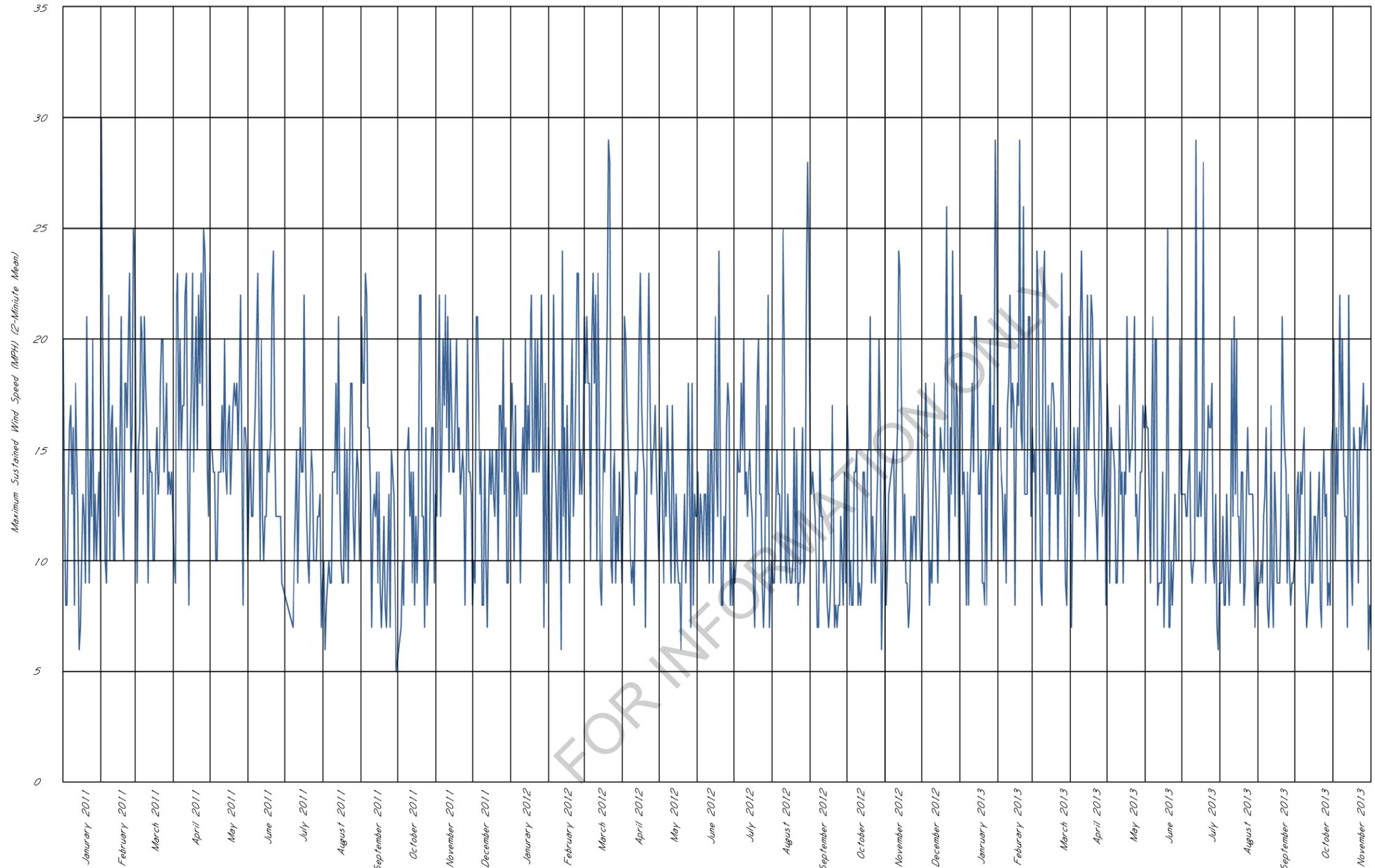
SEAL: PRELIMINARY NOT FOR CONSTRUCTION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE U29 AND U49 LINK INFLUENCE LINES	
	DATE	REVISIONS	PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY
HNTB	DESIGNED <i>J. Gregg</i>	DETAILED <i>B. Gautreau</i>	WORKING NUMBER <i>A12</i>
	CHECKED <i>J. Bernard</i>	ISSUED _____	SHEET NUMBER 12



NOTES:
 For General Notes, See Sheet 3.
 The Daily Maximum And Minimum Temperatures Are For Informational Purposes Only.
 Daily Maximum And Minimum Temperatures Were Obtained From WeatherUnderground Historical Weather Data.

DAILY MAXIMUM AND MINIMUM TEMPERATURES
 Natchez, MS

SEAL:	<p align="center">PRELIMINARY NOT FOR CONSTRUCTION</p>	<table border="1"> <tr> <th>DATE</th> <th>REVISIONS</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	DATE	REVISIONS	BY				<p align="center">MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE</p> <p align="center">DAILY MAXIMUM AND MINIMUM TEMPERATURES</p> <p align="center">PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY</p>	<table border="1"> <tr> <td>WORKING NUMBER</td> <td>A13</td> </tr> <tr> <td>SHEET NUMBER</td> <td>13</td> </tr> </table>	WORKING NUMBER	A13	SHEET NUMBER	13	
			DATE	REVISIONS	BY										
WORKING NUMBER	A13														
SHEET NUMBER	13														
<p align="center">HNTB</p>	<table border="1"> <tr> <td>DESIGNED</td> <td>J. Gregg</td> <td>DETAILED</td> <td>J. Gregg</td> <td>TRACED</td> <td> </td> </tr> <tr> <td>CHECKED</td> <td>J. Bernard</td> <td>ISSUED</td> <td> </td> <td>DATE</td> <td> </td> </tr> </table>	DESIGNED	J. Gregg	DETAILED	J. Gregg	TRACED		CHECKED	J. Bernard	ISSUED		DATE			
DESIGNED	J. Gregg	DETAILED	J. Gregg	TRACED											
CHECKED	J. Bernard	ISSUED		DATE											



FOR INFORMATION ONLY

NOTES:
 For General Notes, See Sheet 3.
 The Daily Maximum Wind Speeds Are For Informational Purposes Only.
 Maximum Sustained Wind Speeds Shown Are Based On A 2 Minute Mean
 3 Second To 2 Minute Conversion = $(V_3/V_{120}) = 1.29$
 Daily Maximum Wind Speeds Were Obtained From WeatherUnderground Historical Data.

DAILY MAXIMUM WIND SPEEDS
 Natchez, MS

SEAL: PRELIMINARY NOT FOR CONSTRUCTION HNTB	REVISIONS <table border="1" style="width: 100%; height: 100%;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>									MISSISSIPPI DEPARTMENT OF TRANSPORTATION U.S. HIGHWAY 84 MISSISSIPPI RIVER BRIDGE DAILY MAXIMUM SUSTAINED WIND SPEEDS PROJECT BR-0015-01(120) 106487/301000 ADAMS COUNTY	WORKING NUMBER <i>A15</i> SHEET NUMBER 15
DESIGNED <u>J. Gregg</u> DETAILED <u>J. Gregg</u> TRACED _____ CHECKED <u>J. Bernard</u> ISSUED _____ DATE _____											

STATE	PROJECT NO.
MISS.	BR-0015-01(120)

TEMPORARY TRAFFIC CONTROL NOTES

THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH LOCAL AND STATE LAW ENFORCEMENT AGENCIES, MISSISSIPPI DOT AND LOUISIANA DOT OFFICIALS, AND /OR ANY OTHER STATE, MUNICIPAL OR FEDERAL ENTITY AFFECTED BY LANE CLOSURES. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER 14 DAYS PRIOR TO ANY SCHEDULED CLOSURE.

ALL LANES SHALL BE MAINTAINED CONTINUOUSLY AT THOSE TIMES THAT CONSTRUCTION IS NOT IN PROGRESS.

CONTRACTOR SHALL PROVIDE ONE WEEK ADVANCE NOTICE TO THE PUBLIC THROUGH THE VARIOUS MEDIA OUTLETS AND DYNAMIC MESSAGE SIGNS. CONTRACTOR SHALL STRICTLY ADHERE TO THE PUBLICIZED DATES/HOURS OF CLOSURE.

REFER TO SPECIAL PROVISIONS REGARDING LANE CLOSURES ALLOWED DURING HOLIDAYS, INCLUDING THE FRIDAY BEFORE A HOLIDAY OR THE MONDAY AFTER A HOLIDAY, OR DURING TIMES OF EMERGENCY EVACUATION, AS DETERMINED BY THE PROJECT ENGINEER.

A MINIMUM OF TWO CHANGEABLE MESSAGE SIGNS PER DIRECTION SHALL BE PLACED IN ADVANCE OF THE LANE CLOSURE. LOCATIONS TO BE DETERMINED BY THE PROJECT ENGINEER. CHANGEABLE MESSAGE SIGNS PAID FOR UNDER ITEM 907-619-E3 "CHANGEABLE MESSAGE SIGN".

ALL LANE CLOSURES SHALL BE COORDINATED WITH THE PROJECT ENGINEER, THE MDOT AND LA DOTD PUBLIC INFORMATION SECTIONS.

CONTRACTOR SHALL NOTIFY EMERGENCY SERVICES AND MEDIA WITHIN 72 HOURS OF A CHANGE IN TRAFFIC PATTERNS. LIST TO BE PROVIDED BY THE PROJECT ENGINEER.

ALL TEMPORARY TRAFFIC CONTROL DEVICES TO BE IN ACCORDANCE WITH MDOT TEMPORARY TRAFFIC CONTROL SPECIAL DETAIL SHEETS (TCP SHEETS) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). MISLEADING DEVICES SHALL BE REMOVED, DISCONNECTED AND/OR COVERED WHEN NOT IN USE UNLESS OTHERWISE NOTED. ANY DEVICES WHICH ARE DAMAGED DUE TO CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

MINIMUM CONSTRUCTION SIGNING IS SHOWN IN THESE PLANS. ANY ADDITIONAL SIGNS OR DEVICES REQUIRED BY THE MUTCD, TCP SHEETS OR THE PROJECT ENGINEER WILL BE INSTALLED AND PAID FOR UNDER ITEM 618-A001 MAINTENANCE OF TRAFFIC AT NO ADDITIONAL COST.

THE SPEED LIMIT IN CONSTRUCTION ZONES SHOULD NOT BE REDUCED MORE THAN 10 M.P.H. BELOW THE POSTED SPEED LIMIT. CONTRACTOR MUST CONSULT WITH PROJECT ENGINEER IF CIRCUMSTANCES WARRANT OTHERWISE.

CONTRACTOR MUST MAINTAIN REFLECTIVE DEVICES AND STEADY BURN LIGHTS AND INSURE PROPER PLACEMENT AT ALL TIMES DURING LANE CLOSURE.

CONTRACTOR SHALL COORDINATE ALL TRAFFIC CONTROL WITH OTHER AFFECTED CONTRACTS.

ALL TEMPORARY TRAFFIC STRIPE, REFLECTIVE RAISED PAVEMENT MARKES, SIGNAGE, TEMPORARY PRECAST CONCRETE MEDIAN BARRIER, CHANEABLE MESSAGE SIGNS, IMPACT ATTENUATORS SHALL BE PAID FOR UNDER 618-A "MAINTENANCE OF TRAFFIC".

PLACEMENT AND REMOVAL OF TEMPORARY PRECAST CONCRETE MEDIAN BARRIERS SHALL BE INCLUDED IN ITEM 618-A "MAINTENANCE OF TRAFFIC". CONTRACTOR WILL BE REQUIRED TO REMOVE AND REPLACE TEMPORARY PRECAST CONCRETE MEDIAN BARRIERS BETWEEN REMOVAL OF FIRST AND SECOND PIN.

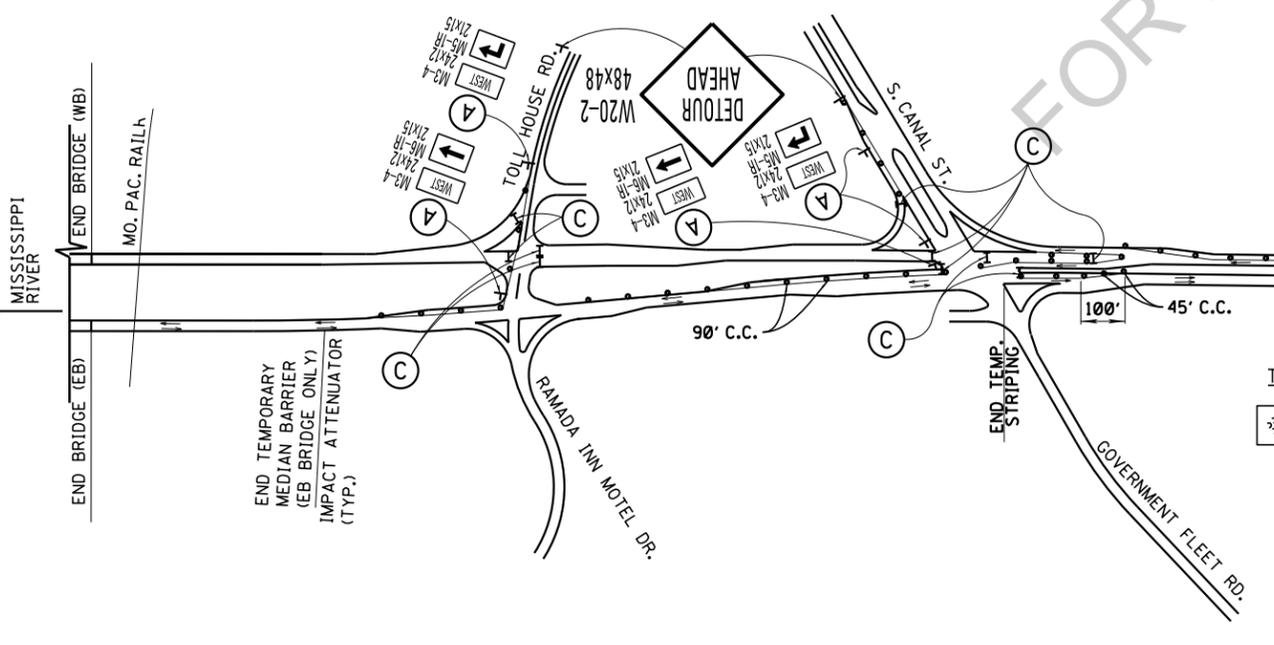
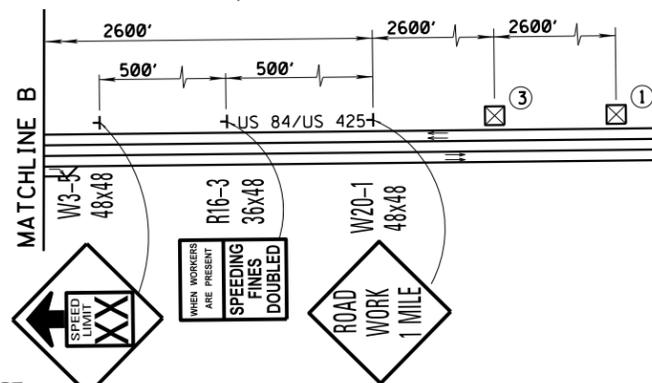
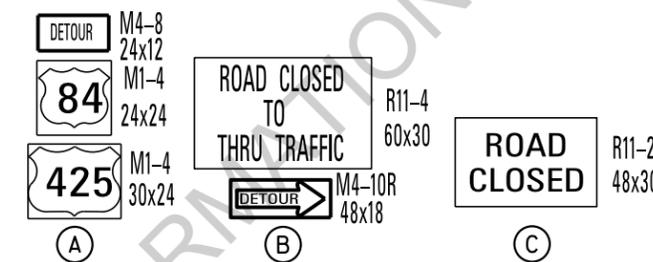
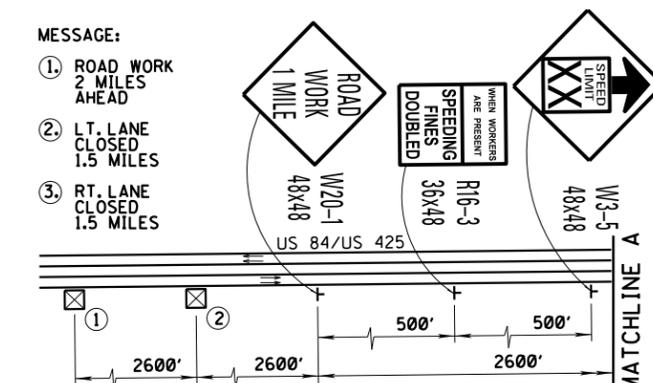
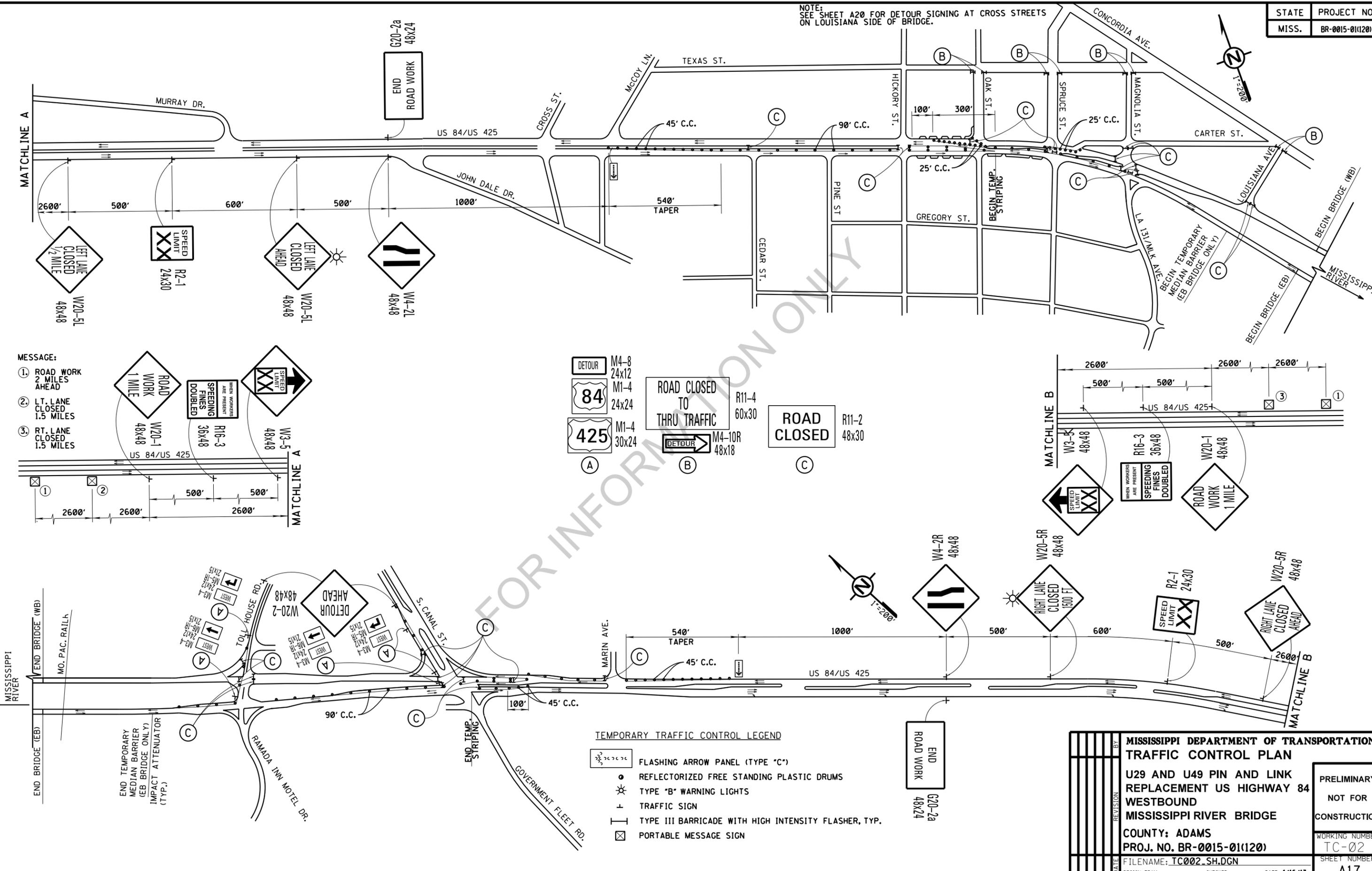
TEMPORARY PRECAST CONCRETE MEDIAN BARRIERS SHALL BE IN ACCORDINACE WITH SUB SECTION 619 AND 615 OF THE STANDARD SPECIFICATIONS AND THESE PLANS.

FOR INFORMATION ONLY

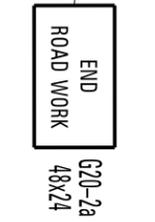
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 PLANNING AND DESIGN DIVISION
 001 00 ANPM DIGNI LLENANE
 MDDYY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL NOTES	
U29 AND U49 PIN AND LINK REPLACEMENT US HIGHWAY 84 WESTBOUND MISSISSIPPI RIVER BRIDGE	PRELIMINARY NOT FOR CONSTRUCTION
COUNTY: ADAMS	WORKING NUMBER TC-01
PROJ. NO. BR-0015-01(120)	SHEET NUMBER A16
FILENAME: TC001.SH.DGN	
DESIGN TEAM	CHECKED
DATE	DATE 04/16/13

NOTE:
SEE SHEET A20 FOR DETOUR SIGNING AT CROSS STREETS
ON LOUISIANA SIDE OF BRIDGE.



- TEMPORARY TRAFFIC CONTROL LEGEND
- FLASHING ARROW PANEL (TYPE "C")
 - REFLECTORIZED FREE STANDING PLASTIC DRUMS
 - TYPE "B" WARNING LIGHTS
 - TRAFFIC SIGN
 - TYPE III BARRICADE WITH HIGH INTENSITY FLASHER, TYP.
 - PORTABLE MESSAGE SIGN



MISSISSIPPI DEPARTMENT OF TRANSPORTATION		PRELIMINARY NOT FOR CONSTRUCTION
TRAFFIC CONTROL PLAN		
U29 AND U49 PIN AND LINK REPLACEMENT US HIGHWAY 84 WESTBOUND		WORKING NUMBER TC-02
MISSISSIPPI RIVER BRIDGE		SHEET NUMBER A17
COUNTY: ADAMS		
PROJ. NO. BR-0015-01(120)		
DATE	DESIGN TEAM	CHECKED
REVISION	BY	DATE
		4/16/13

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 MISSISSIPPI RIVER BRIDGE
 PROJECT NO. BR-0015-01(120)
 SHEET A17
 DATE 4/16/13

