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	**9/17/2018**	ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	

Number	Description
1	Revised Table of Contents; Revised NTB No. 1098; Added NTB No. 1099; Added SP 907-619-5; Revised Bid Items; Revised Progress Schedule; 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-0054-01(056)/ 107817302000
Copiah County(ies)

Revised 01/26/2016

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
TABLE OF CONTENTS

PROJECT: BR-0054-01(056)/107817302 - Copiah

PROJECT: BR-0054-01(056)/107817302 - Copiah

(REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET
OF SECTION 905 AS ADDENDA)

09/17/2018 11:27 AM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 -NOTICE TO BIDDERS NO. 1098 **CODE: (SP)**

DATE: 08/02/2018

SUBJECT: Scope of Work

PROJECT: BR-0054-01(056) / 107817302 -- Copiah 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.

Work on the project shall consist of cleaning caps, removing all of the existing paint on the superstructure, cleaning the exposed structural steel, and painting all of the existing structural steel on the following bridge:

107817-302000 – Copiah County:
SR-27 over Copiah Creek, 6.8 miles North of Lawrence County Line
Bridge# 65.8
Bridge ID # 10829
Approximate Area - 5,899 square feet

Note: All of the structural steel girders and bridge components on these bridges shall be abrasive blasted, as referenced in 907-845.03.7.6, and repainted.

The above square footage is for information purposes only and is approximate and will not be measured for payment. Actual square footage may be more or less than given above but shall not be a basis for additional compensation. Payment shall be made by the lump sum regardless of over-run or under-run of the above approximate square footage.

A containment system shall be required for this project. The Contractor shall design, install and maintain a containment system in accordance with Special Provision 907-845 to assure that the traveling public, including waterway traffic, will not be exposed to construction debris and materials during the cleaning and painting process. The Contractor will be required to properly dispose of all debris at an approved landfill.

Joint Repair & Sealing:
The joint repair shall include removal of all 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 at bridge ends shall be sealed. Removal of all material associated with expansion joints shall be paid under Pay Item No. 202-B: 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-B: 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-A: 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.

Cap Cleaning:

Cap cleaning should be performed by removing all large debris by hand. All other debris (dirt and 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. This work will be paid for under Pay Item No. 907-824-PP: Bridge Repair, Cap Cleaning.

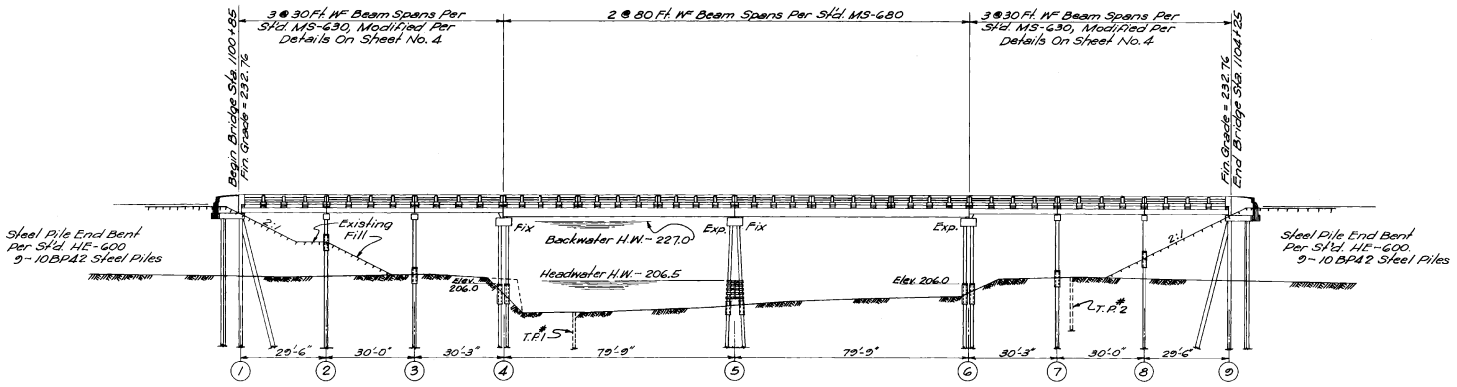
Incidental work such as project clean up, debris disposal, and other incidental work necessary to complete the project will not be measured for separate payment and will be considered absorbed items.

Traffic Control:

The Contractor shall erect and maintain construction signing and provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas in accordance with the Traffic Control Plan. Payment shall be included in the price bid for Pay Item No. 618-A: Maintenance of Traffic. Special signing is required for the waterway as per the attached drawing.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	[illegible]	F-054-1(4)	19	IV	IV

Total Length Of Bridge = 340'-0"
0.00 % Grade



ELEVATION - WITH PROFILE ON ℄ ROADWAY
Scale : 1"= 20'-0"

MINIMUM PILE BEARING CAPACITY:

End Bents 1	25 Tons
Int. Bents 2, 3, 7 & 8	30 Tons
Int. Bent 5	43 Tons
Int. Bents ~~4 & 6~~	~~40~~ Tons
4 & 6	30

GENERAL NOTES:
Specifications - Mississippi State Highway Department.
No Unauthorized Change Of Plans Will Be Permitted.
Expansion Joint Material Shall Be Either Cork, Rubber Or Bituminous Fiber Type.
Test Piles Which Have Been Previously Driven In Locations Unsuitable For Permanent Piles Will Be Paid For As Test Piles And Shall Be Cut Off At Ground Line.
Recommended Pile Lengths Based On Test Pile Data Shall Be Submitted To The Bridge Engineer For Approval.
All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefor Will Be Considered Included In The Prices And Payments For Bid Items.

DESIGN DATA
Specifications: A.A.S.H.O. 1949
Loading: H15-S12-44

NOTE: THIS SHEET REPLACES SHEET No. 3 OF ORIGINAL PLANS.

Standard Plans Required: MS-630, MS-680, HB-600, HE-600

ESTIMATED QUANTITIES

Item / Location	Class "B" Bridge Conc. Cu. Yds.	Reinforcing Steel Lbs.	Structural Steel Lbs.	Railing Lin. Ft.	10BP42 Steel Piling Lin. Ft.	12BP53 Steel Piling Lin. Ft.	Test Piles Units	Loading Tests Units
Spans	277.40	42,440	266,270	680				
End Bents	52.50	3,590			1,125			
Int. Bents	39.7	5,130	18,550		2,181	640		
Totals	370 -	51,160	284,820	680	3,306	640*	2	2
Suppl. Agree. Price			Spans 182,755					
Purchase Price			11,485					
Final Estimate	372.13	51,221	172,745	677.5	3,273.8	637.9	2	1

* 16 Pieces Of 12BP53 x 40 Ft. Will Be Furnished And Loaded On The Contractor's Truck At Jackson. Payment For Driving 12BP53 Steel Piles Will Include Hauling, Handling, Driving, Welding, Paint Etc.

MISSISSIPPI STATE HIGHWAY DEPARTMENT
BRIDGE STA. 1100 + 85
ACROSS COPIAH CREEK
PROJECT F-054-1(4)
COPIAH COUNTY
SUBMITTED BY _____ BRIDGE ENGINEER

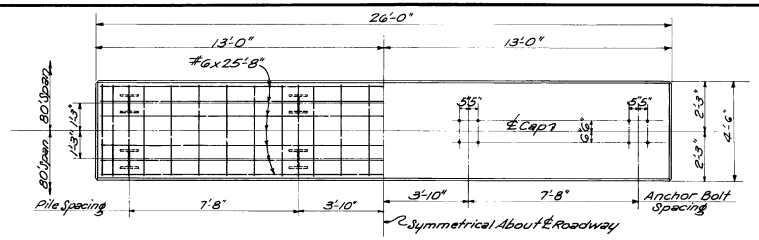
BY	REVISIONS	DATE

DETAILED J.R.R. CHECKED L.
TRACED J.R.R. DATE 8-14-53
ISSUED [illegible] DATE 10-19-53
SHEET NUMBER 2 OF 4

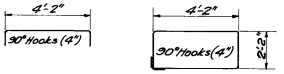
10829

DIETZGEN N. O. 188 "IMPERIAL"

FED. ROAD DIST. No.	STATE	PROJ. NO.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
8	MISS	F-054-1(4)	18	III	IV



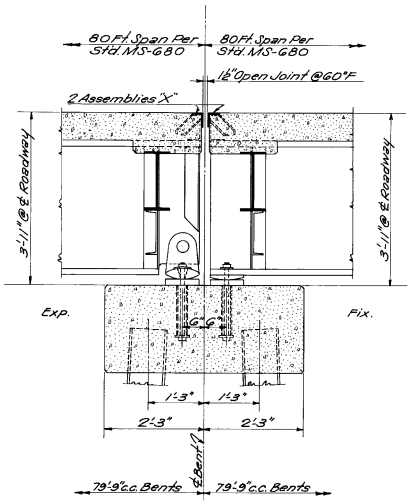
PLAN OF CAP



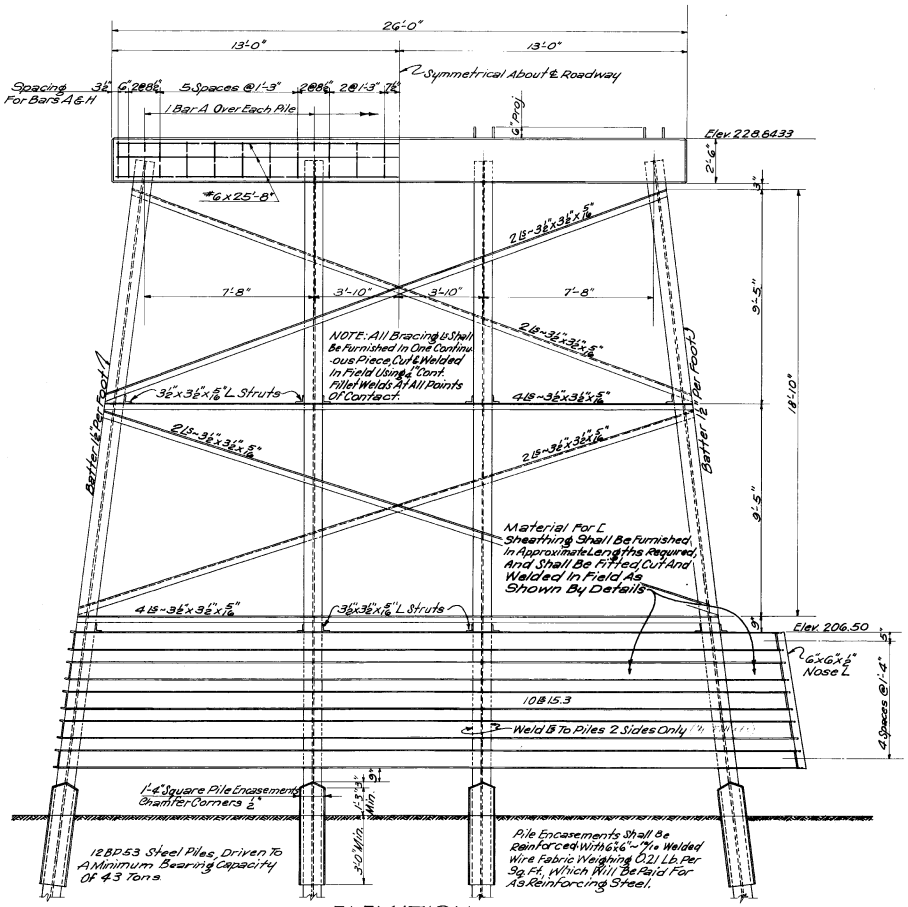
BARS A~#5 BARS H~#5

NOTE: All Reinforcing Steel Details Shall Be In Accordance With "Detailing Manual For Reinforced Concrete Highway Structures"

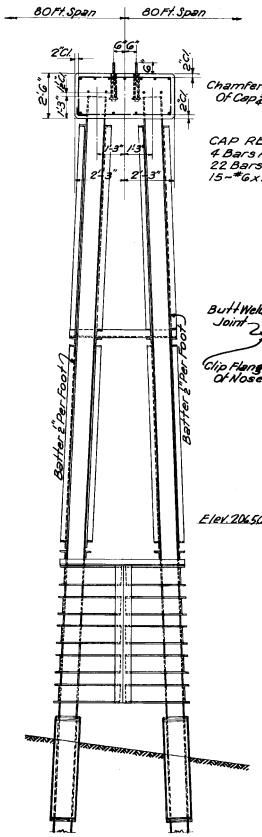
BAR BENDING DETAILS
Dimensions Are Out To Out.



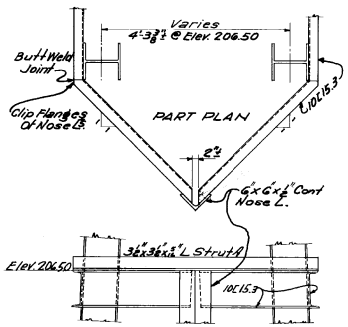
SPAN CONNECTION DETAILS~BENT #5



ELEVATION



UPSTREAM END ELEVATION



PART ELEVATION

Joint At Pile Where Nose & Join Side & Shall Be Butt Welded. All Other & Strut Bracing & Nose & Shall Be ¼" Cont. Fillet Welded At All Points Of Contact, Except As Noted On The Elevation.

NOSE DETAILS
UPSTREAM END~BENT #5

GENERAL NOTES:
All Concrete Shall Be Class "B".
All Exposed Concrete Surfaces Shall Be Given A Uniform Rubbed Finish.
Where Practicable All Piles Shall Be Driven Full Length, And Shall Not Be Spliced Except By Authority Of The Bridge Engineer (Below Top Of Pile Encasement.)
For Detail Of PILE SPLICE See Std. HB-600
All Welding Shall Be Done By The Electric Arc Process.
The Surface Of Piles To Be Encased In Concrete Shall Be Given One Coat Of Red Lead Per Special Provision 362 Prior To Driving.
All Piling, Sheathing & Bracing Shall Be Shipped Unpainted, But After Erection Shall Be Given Three Field Coats Of Paint As Follows: First Coat Red Lead Per Special Provision 362, Second & Third Coats Black Graphite Per Code MB. All Coats To Be Applied Above The Concrete Encasement.
Steel Sheathing & Bracing Will Be Paid For As Structural Steel, And No Additional Payment Will Be Allowed For Welding And Painting.
Steel Piles Will Be Paid For At The Contract Price Per Linear Foot Complete In Place And No Additional Payment Will Be Allowed For Painting, Welding, Splices (Where Permitted), Excavation And Dewatering Incidental To Installation Of Pile Encasements.

MISSISSIPPI STATE HIGHWAY DEPARTMENT
BRIDGE STA. 1100+85

DETAIL OF BENT NO. 5

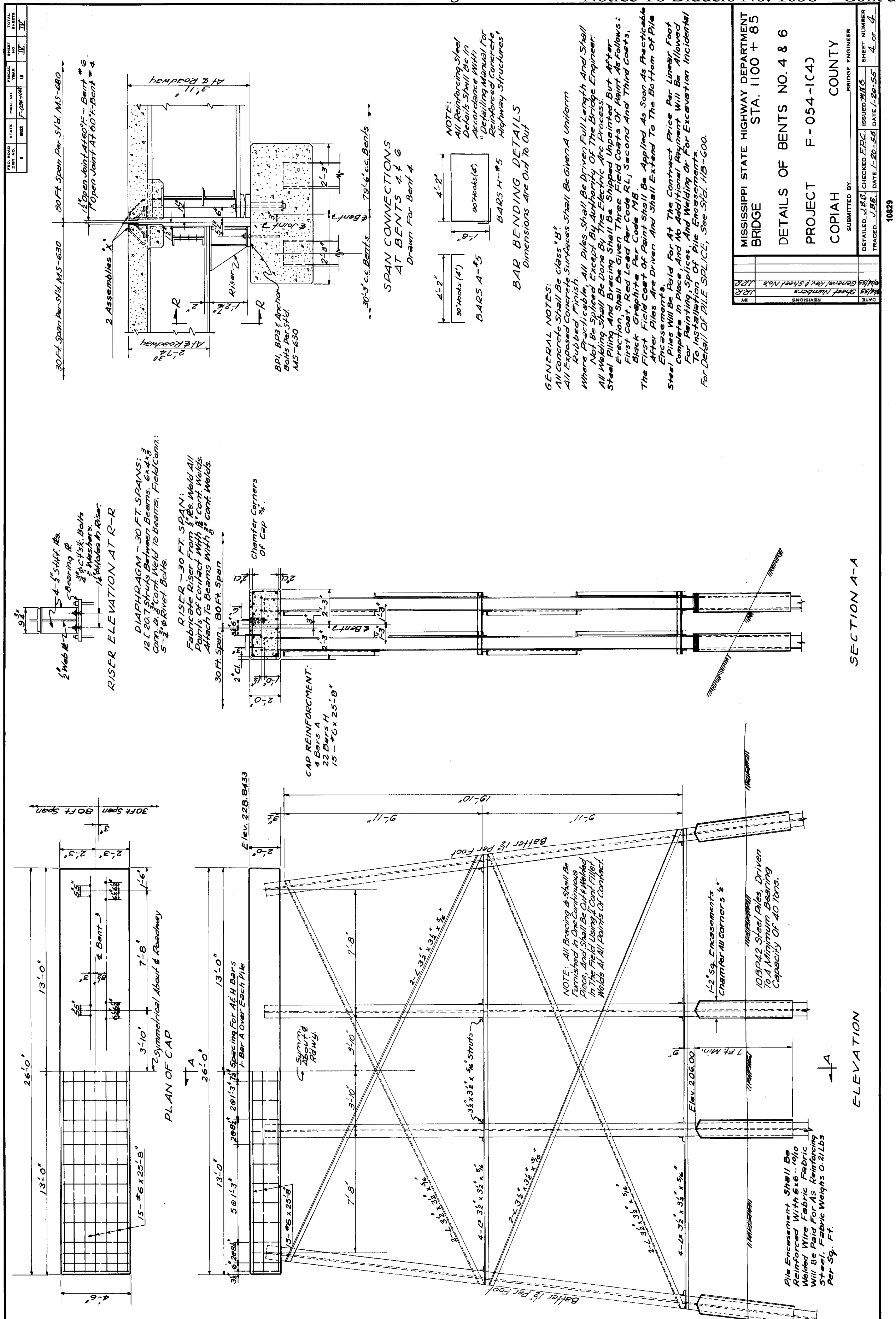
PROJECT F-054-1(4)

COPIAH COUNTY
SUBMITTED BY _____ BRIDGE ENGINEER

BY	REVISIONS	DATE

DETAILED J.R.R.	CHECKED L.	ISSUED 11-8	SHEET NUMBER
TRACED J.D.C.	DATE 10/4/71	DATE 10/4/71	3 OF 4

10829


MISSISSIPPI STATE HIGHWAY DEPARTMENT
BRIDGE STA. 1100 + 85
DETAILS OF BENTS NO. 4 & 6
PROJECT F-054-1(4)
COPIAH COUNTY
ELEVATION
SECTION A-A
PLAN OF CAP
RISER ELEVATION AT R-R
SPAN CONNECTIONS AT BENTS 4 & 6
Drawn For Bent 4
BAR BENDING DETAILS
Dimensions Are Out To Out
GENERAL NOTES:
CAP REINFORCEMENT:
10829

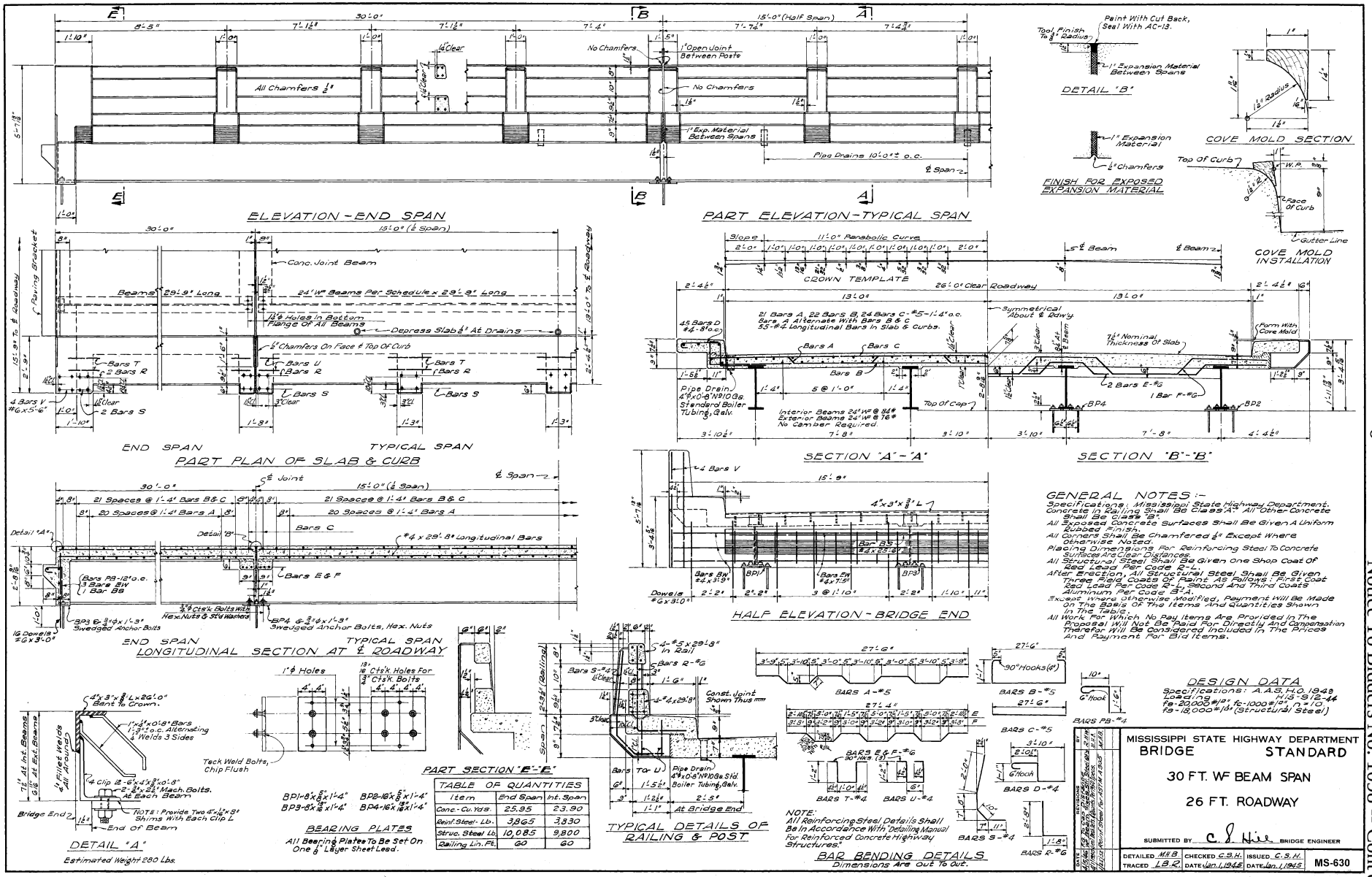


TABLE OF QUANTITIES		
Item	End Span	Int. Span
Conc.-Cu. Yds.	25.95	23.90
Reinf. Steel-Lb.	3,865	3,830
Struc. Steel Lb.	10,085	9,800
Railing Lin. Ft.	60	60

BP1-8"x 3/8"x1'-4" BP2-16"x 3/8"x1'-4"
BP3-8"x 7/16"x1'-4" BP4-16"x 7/16"x1'-4"

All Bearing Plates To Be Set On One 1/8" Layer Sheet Lead.

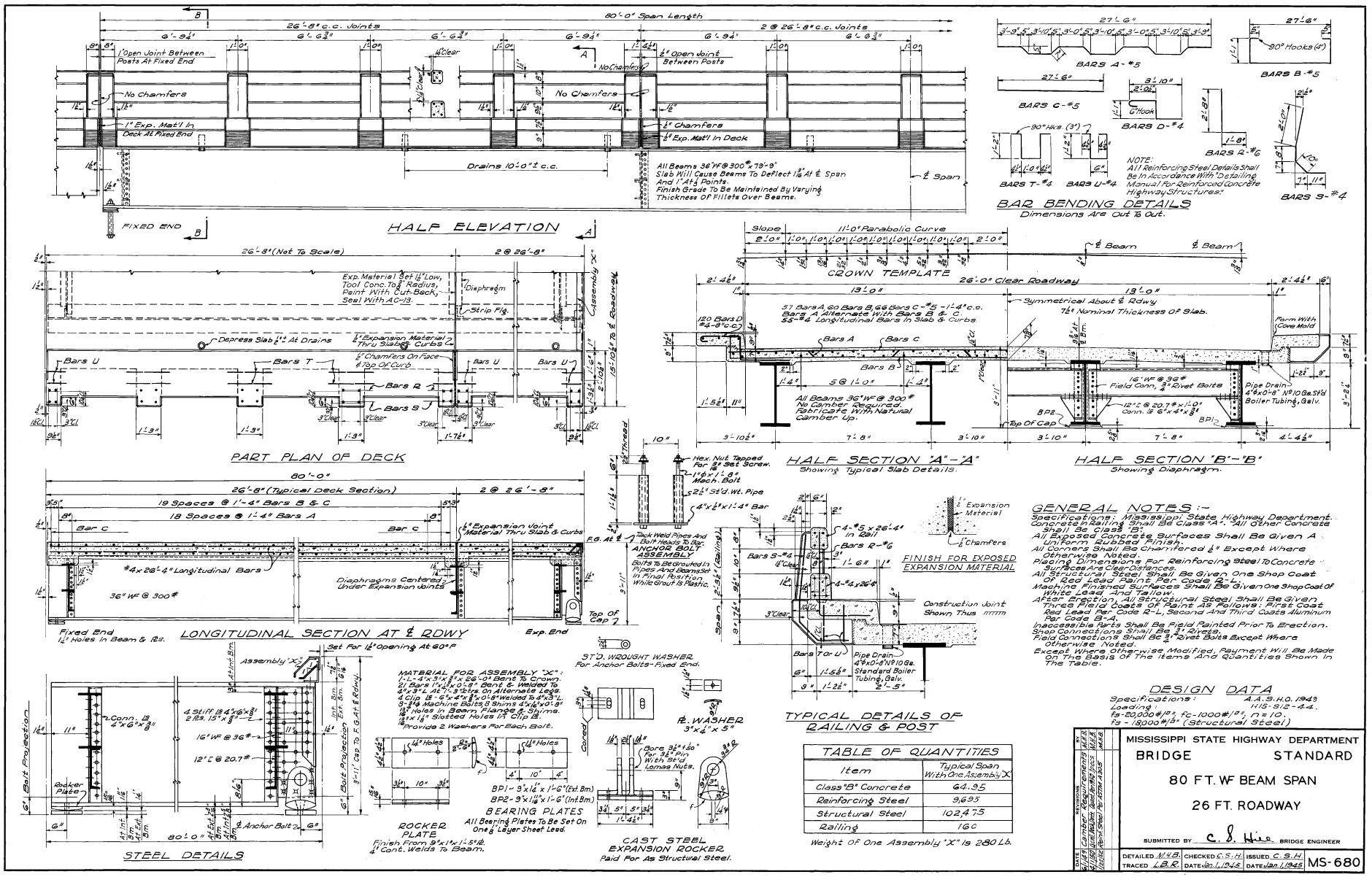
NOTE: All Reinforcing Steel Details Shall Be In Accordance With Detailing Manual For Reinforced Concrete Highway Structures.

Estimated Weight 280 Lbs.

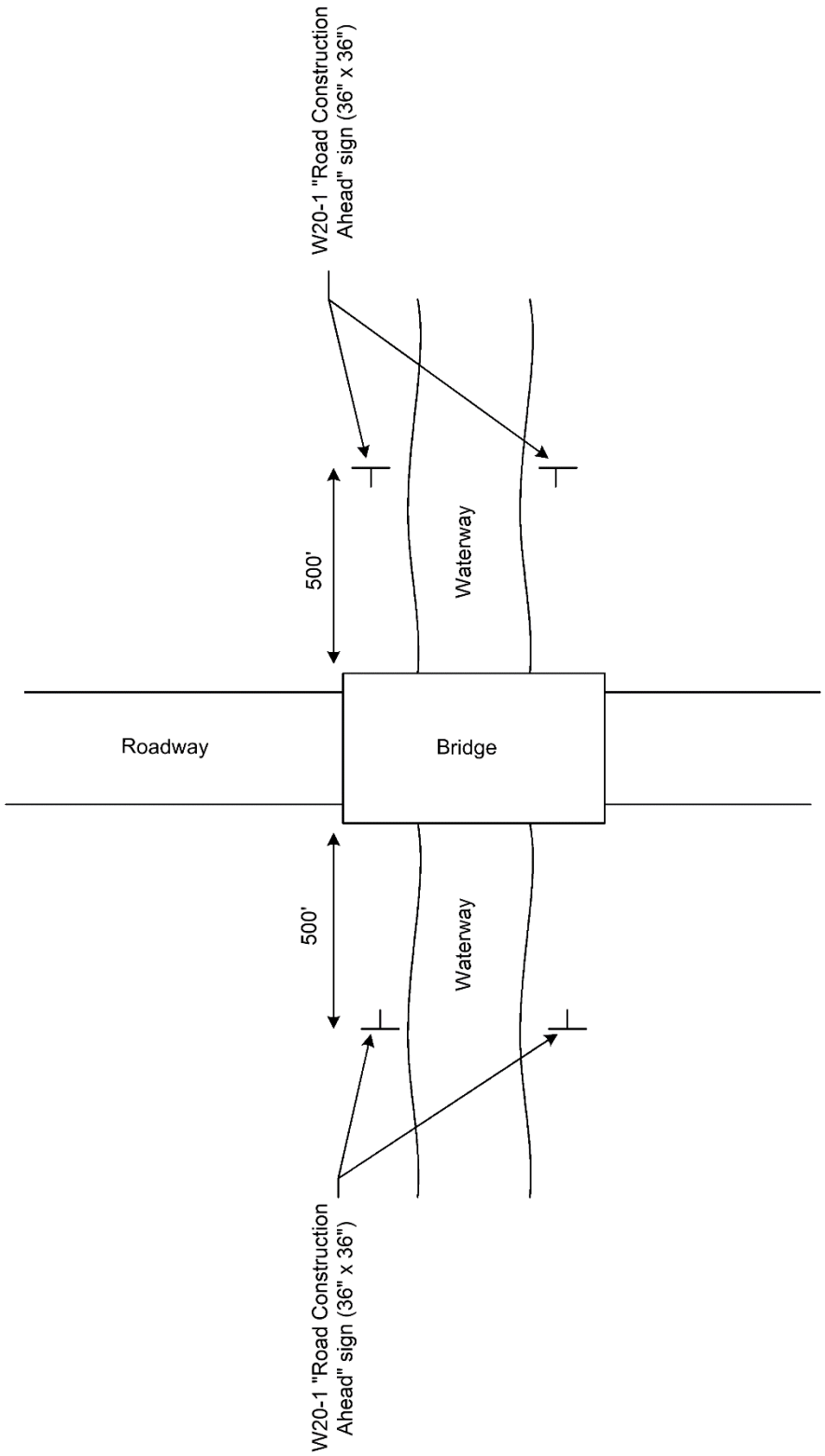
MISSISSIPPI STATE HIGHWAY DEPARTMENT
BRIDGE STANDARD
30 FT. WF BEAM SPAN
26 FT. ROADWAY
SUBMITTED BY C. S. Hill BRIDGE ENGINEER
DETAILED M.R.B. CHECKED C.S.H. ISSUED C.S.H.
TRACED L.B.R. DATE Jan. 1, 1945 DATE Jan. 1, 1945
MS-630

- 6 -

Notice To Bidders No. 1098 -- Cont'd.



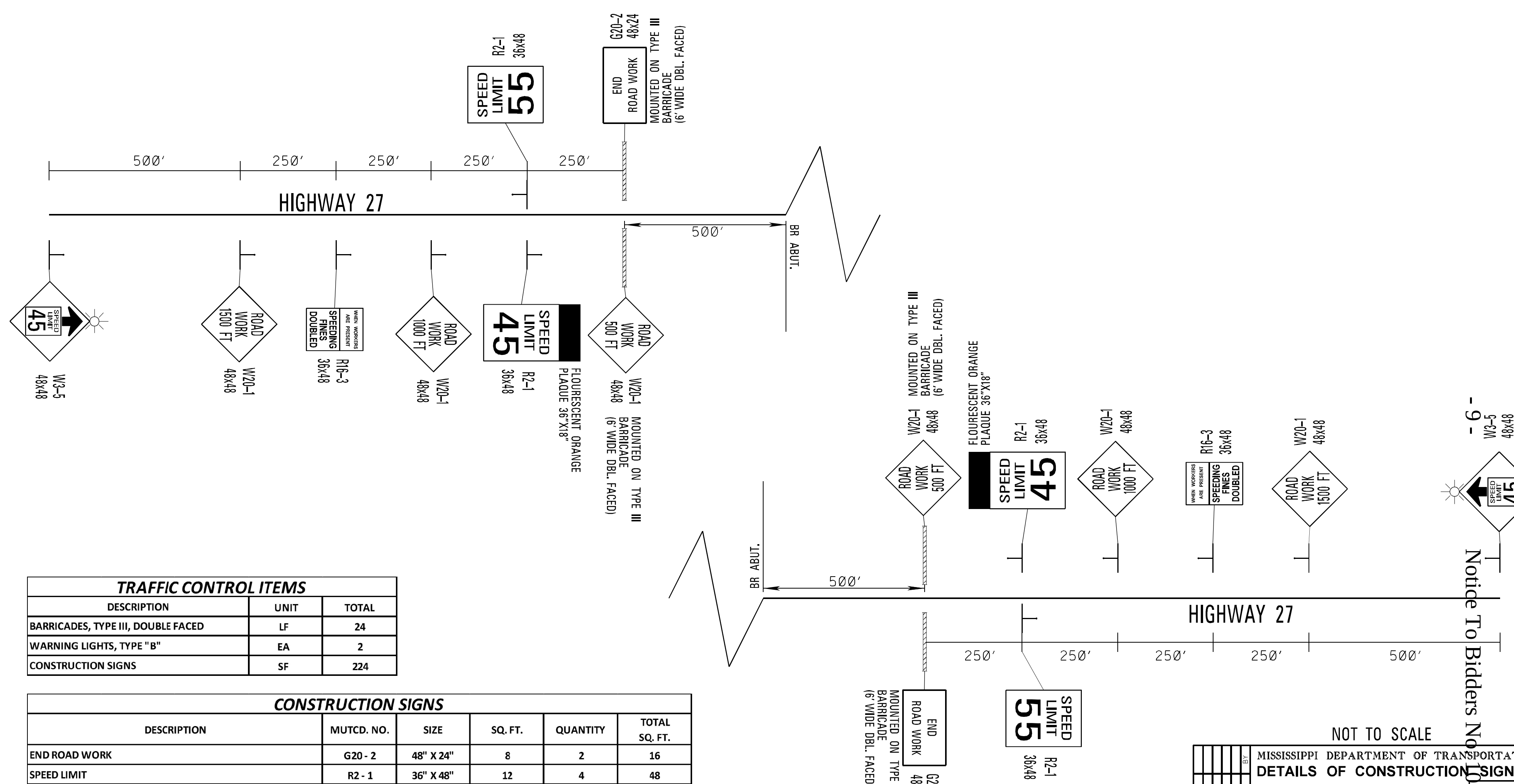
Notice To Bidders No. 1098 --Cont'd.



Detail of Waterway Signing

FMS CON:107817/302000

STATE	PROJECT NO.
MISS.	BR-0054-01(056)



TRAFFIC CONTROL ITEMS

DESCRIPTION	UNIT	TOTAL
BARRICADES, TYPE III, DOUBLE FACED	LF	24
WARNING LIGHTS, TYPE "B"	EA	2
CONSTRUCTION SIGNS	SF	224

CONSTRUCTION SIGNS

DESCRIPTION	MUTCD. NO.	SIZE	SQ. FT.	QUANTITY	TOTAL SQ. FT.
END ROAD WORK	G20 - 2	48" X 24"	8	2	16
SPEED LIMIT	R2 - 1	36" X 48"	12	4	48
SPEEDING FINES DOUBLED	R16 - 3	36" X 48"	12	2	24
SPEED REDUCTION SIGN	W3 - 5	48" X 48"	16	2	32
ADVANCE ROAD WORK	W20 - 1	48" X 48"	16	6	96
ORANGE PLAQUE	ORANGE PLAQU	36"x16"	4	2	8
			TOTAL	18	224

NOT TO SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
DETAILS OF CONSTRUCTION SIGNING

SR 27

COUNTY: COPIAH
PROJ. NUM.: BR-0054-01(056)
FILENAME: DCS-1.DGN
DESIGN TEAM ____ CHECKED ____ DATE ____

BY | REVISION | DATE

WORKING NUMBER: DCS-1
SHEET NUMBER: 2

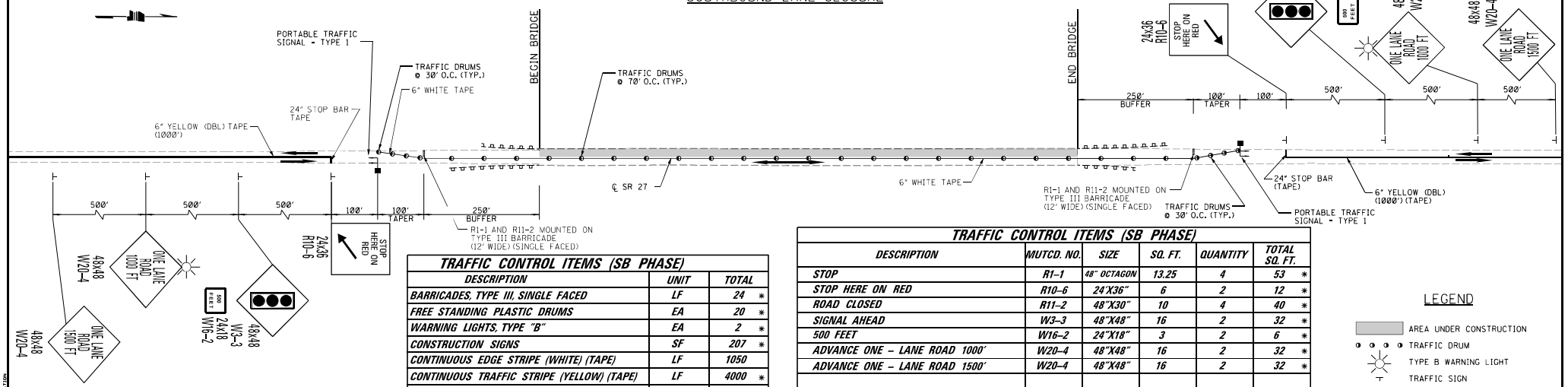
9/17/2018 8:42 AM DCS-1.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
PLAN

FMS CON:107817/302000

STATE	PROJECT NO.
MISS.	BR-0054-01(056)

SOUTHBOUND LANE CLOSURE



TRAFFIC CONTROL ITEMS (SB PHASE)

DESCRIPTION	UNIT	TOTAL
BARRICADES, TYPE III, SINGLE FACED	LF	24 *
FREE STANDING PLASTIC DRUMS	EA	20 *
WARNING LIGHTS, TYPE "B"	EA	2 *
CONSTRUCTION SIGNS	SF	207 *
CONTINUOUS EDGE STRIPE (WHITE) (TAPE)	LF	1050
CONTINUOUS TRAFFIC STRIPE (YELLOW) (TAPE)	LF	4000 *
LEGEND (WHITE) (TAPE)	LF	96 *
PORTABLE TRAFFIC SIGNAL, TYPE 1	EA	2 *

*QUANTITY TO BE REUSED FOR NB PHASE

TRAFFIC CONTROL ITEMS (SB PHASE)

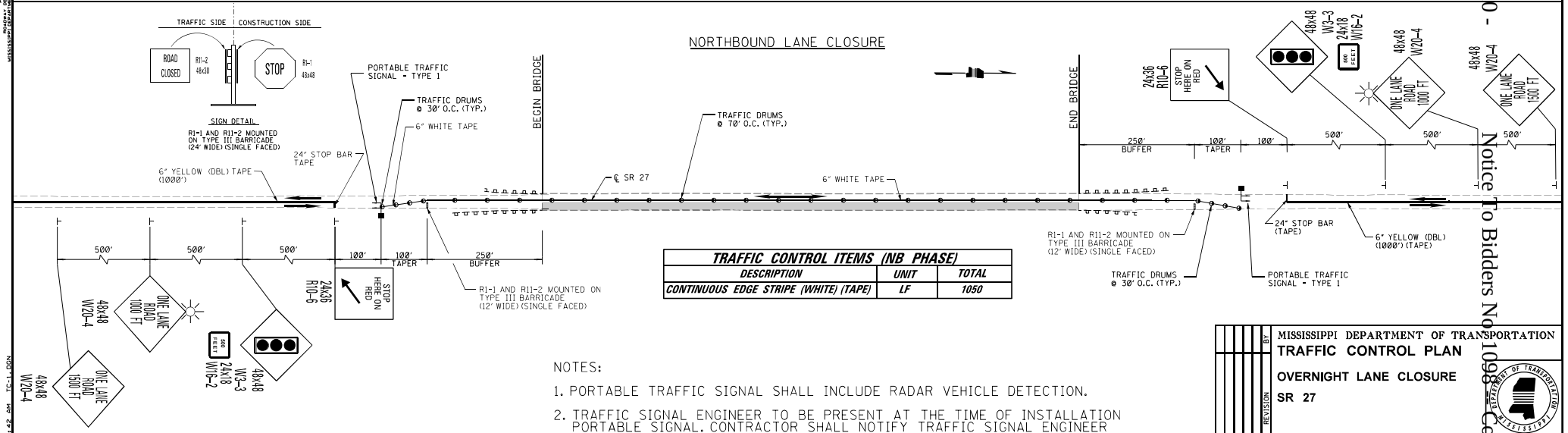
DESCRIPTION	MUTCD. NO.	SIZE	SQ. FT.	QUANTITY	TOTAL SQ. FT.
STOP	R1-1	48" OCTAGON	13.25	4	53 *
STOP HERE ON RED	R10-6	24"X36"	6	2	12 *
ROAD CLOSED	R11-2	48"X30"	10	4	40 *
SIGNAL AHEAD	W3-3	48"X48"	16	2	32 *
500 FEET	W16-2	24"X18"	3	2	6 *
ADVANCE ONE - LANE ROAD 1000'	W20-4	48"X48"	16	2	32 *
ADVANCE ONE - LANE ROAD 1500'	W20-4	48"X48"	16	2	32 *
			TOTAL	18	207

*QUANTITY TO BE REUSED FOR NB PHASE

LEGEND

- AREA UNDER CONSTRUCTION
- TRAFFIC DRUM
- TYPE B WARNING LIGHT
- TRAFFIC SIGN
- DIRECTION OF TRAFFIC
- PORTABLE TRAFFIC SIGNAL
- TYPE III BARRICADE

NORTHBOUND LANE CLOSURE



TRAFFIC CONTROL ITEMS (NB PHASE)

DESCRIPTION	UNIT	TOTAL
CONTINUOUS EDGE STRIPE (WHITE) (TAPE)	LF	1050

NOTES:

1. PORTABLE TRAFFIC SIGNAL SHALL INCLUDE RADAR VEHICLE DETECTION.
2. TRAFFIC SIGNAL ENGINEER TO BE PRESENT AT THE TIME OF INSTALLATION PORTABLE SIGNAL. CONTRACTOR SHALL NOTIFY TRAFFIC SIGNAL ENGINEER TWO WEEKS PRIOR TO INSTALLATION. CONTACT AMRIK SINGH AT 601-359-1454.

REVISION | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN

OVERNIGHT LANE CLOSURE

SR 27

COUNTY: COPIAH

PROJ. NUM.: BR-0054-01(056)

FILENAME: TC-1.DGN

DESIGN TEAM TAYLOR CHECKED DATE

WORKING NUMBER TC-1

SHEET NUMBER 3

PLAN REVIEW DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

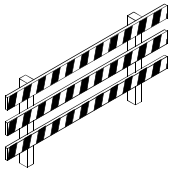
9/17/2018 8:42 AM TC-1.DGN

Notice To Bidders No. 1098 - Cont'd.

STATE	PROJECT NO.
MISS.	BR-0054-01(056)

TYPE I

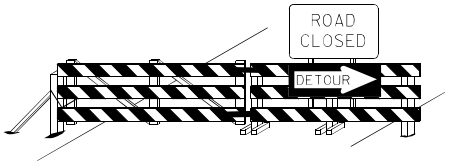
TYPE II



TYPE III

STANDARD BARRICADES

1. A TYPE I BARRICADE CONSISTS OF ONE (1) HORIZONTAL RAIL SUPPORTED BY A DEMOUNTABLE FRAME OR A LIGHT "A" FRAME. A TYPE I BARRICADE NORMALLY WOULD BE USED ON CONVENTIONAL ROADS OR URBAN STREETS AND ARTERIALS.
2. A TYPE II BARRICADE CONSISTS OF TWO (2) HORIZONTAL RAILS ON A LIGHT "A" FRAME. TYPE II BARRICADES ARE INTENDED FOR USE ON EXPRESSWAYS AND FREEWAYS AND OTHER HIGH-SPEED ROADWAYS.
3. TYPE I AND TYPE II BARRICADES ARE INTENDED FOR USE WHERE THE HAZARD IS RELATIVELY SMALL AS, FOR EXAMPLE, ON CITY STREETS, OR FOR THE MORE OR LESS CONTINUOUS DELIMITING OF A RESTRICTED ROADWAY, OR FOR TEMPORARY DAYTIME USE.
4. A TYPE III BARRICADE CONSISTS OF THREE (3) HORIZONTAL RAILS SUPPORTED BY FIXED POSTS, A RIGID SKID, A HEAVY DEMOUNTABLE FRAME OR A HEAVY, HINGED "A" FRAME.
5. TYPE III BARRICADES ARE INTENDED FOR USE ON CONSTRUCTION AND MAINTENANCE PROJECTS AS WING BARRICADES AND AT ROAD CLOSURES, WHERE THEY MUST REMAIN IN PLACE FOR EXTENDED PERIODS.
6. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
7. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
8. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
9. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://safety.fhwa.dot.gov/roadway_dept/policy_gulde/road_hardware/cat2.cfm



BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

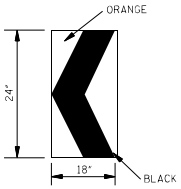
	I	II	III
WIDTH OF RAIL ∗∗	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL ∗∗	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE ∗	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS
TYPE OF FRAME	LIGHT	LIGHT "A" FRAME	POST OR SKID

∗ 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

∗∗ 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in^2 OF REFLECTIVE AREA FACING TRAFFIC.

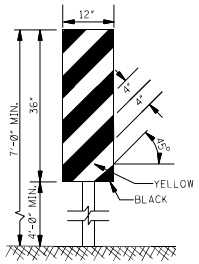
WING BARRICADES

1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
   A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
   B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.



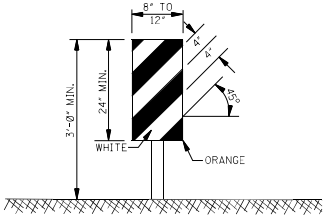
CHEVRON SIGN DETAIL

1. A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
2. THE CHEVRON SIGN SHALL BE MOUNTED ON FIXED POST OR RIGID SKID.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHALL BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.



TYPE 3 OBJECT MARKER (OM-3R)

1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM-3R IS SHOWN. THE OM-3L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.

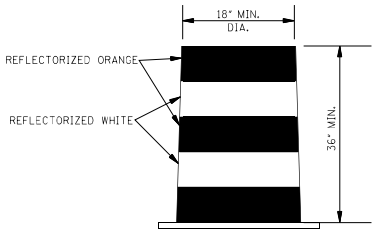


VERTICAL PANEL

1. VERTICAL PANELS CONSIST OF AT LEAST ONE PANEL 8" TO 12" IN WIDTH AND A MINIMUM OF 24" IN HEIGHT.
2. THE DIAGONAL STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION THAT TRAFFIC IS TO PASS THE PANEL. THE PANELS SHALL BE MOUNTED WITH THE TOP A MINIMUM OF 36" ABOVE THE ROADWAY ON A SINGLE LIGHTMASS POST.
3. VERTICAL PANELS USED ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH-SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 in^2 OF RETROREFLECTIVE AREA FACING TRAFFIC.
4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

GENERAL NOTES:

1. MARKINGS ON ALL DEVICES SHOWN ON THIS SHEET SHALL BE HIGH INTENSITY REFLECTIVE SHEETING.
2. THE TRAFFIC CONTROL PLAN WILL LIST THE VARIOUS TRAFFIC CONTROL DEVICES REQUIRED FOR EACH PROJECT.



PLASTIC DRUM STRIPING DETAIL

1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) REFLECTORIZED, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHALL BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

Notice to Bidders No. 1098 -- Contd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

COUNTY: COPIAH
PROJ. NUM.: BR-0054-01(056)
ISSUE DATE: 10-04-2011

WORKING NUMBER SDTCP-10
SHEET NUMBER 4

DATE | REVISION | BY

9/17/2010 8:42 AM TCP-10.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1099

DATE: 09/17/2018

SUBJECT: Specialty Items

PROJECT: BR-0054-01(056)/107817302 - COPIAH

Pursuant to the provisions of Section 108, the following work items are hereby designated as "Specialty Items" for this contract. Bidders are reminded that these items must be subcontracted in order to be considered as specialty items.

CATEGORY: TRAFFIC CONTROL - TEMPORARY

Line No	Pay Item	Description
0021	619-A1005	Temporary Traffic Stripe, Continuous White, Type 1 Tape
0022	619-A2006	Temporary Traffic Stripe, Continuous Yellow, Type 1 Tape
0023	619-A6005	Temporary Traffic Stripe, Legend, Type 1 Tape
0024	619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet
0025	619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More
0026	619-G4001	Barricades, Type III, Double Faced
0027	619-G4005	Barricades, Type III, Single Faced
0028	619-G5001	Free Standing Plastic Drums
0029	619-G7001	Warning Lights, Type "B"
0032	907-619-H2001	Traffic Signal, Portable, Type 1

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-5 **CODE: (IS)**

DATE: 01/17/2018

SUBJECT: Traffic Control for Construction Zones

Section 619, Traffic Control for Construction Zones, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-619.02--Materials.

907-619.02.8--Traffic Signals and Flashers. Delete Subsection 619.02.8.1 on pages 452 thru 455, and substitute the following.

907-619.02.8.1-Portable Traffic Signals. Portable traffic signals shall be trailer or pedestal mounted units that provide for easy, legal transportation and quick setup and deployment. Each unit shall be self-contained. The types of portable traffic signals are as follows.

- Type 1 portable traffic signal shall include two signal heads per trailer with one signal head mounted on an overhead mast arm that can be extended over the travel lane, and the other signal head shall be mounted on the vertical upright of the trailer.

- Type 2 portable traffic signal shall include one signal head that is mounted on the vertical upright of the pedestal/cart or trailer. Pedestal/Cart mounted shall be designated as Type 2A and Trailer mounted shall be designated as Type 2B. Type 2 portable traffic signals shall be tested to MASH Standards or NCHRP Test Level 3 crash testing requirements by an accredited independent test facility, with supporting documentation available upon request.

- Type 3 portable traffic signal shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned in each applicable section below.

The portable traffic signals shall be MUTCD Compliant and utilize standard ITE signal heads, and adhere to the ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement. The units shall be battery powered with a solar charging system, and be equipped with an onboard battery charger capable of being used with a 120V AC power source. Portable traffic signals shall be able to communicate with other portable signals via 900 MHz or other accepted wireless communications. If wireless connectivity is not feasible, hardwired connectivity shall be an acceptable alternative, as approved by the Engineer. Portable Traffic Signals shall include all the major components listed below or be able to perform the functions of these components. The major components of the unit shall include, but are not limited to, the trailer or pedestal/cart, telescoping mast arm (on Type 1 and 3), signal head(s) and back plates, traffic signal controller with operating software, solar charging system with batteries, input and output devices, vehicle detection, flasher units, conflict monitor, relays,

communications system and other equipment required for the safe operation and installation of the unit.

907-619.02.8.1.1--Signal Heads. The signal heads and all applicable components of the portable traffic signal shall meet the physical display and operational requirements of conventional traffic signals as specific in the Manual on Uniform Traffic Control Devices (MUTCD). The signal heads shall be cast aluminum or polycarbonate and shall meet the requirements laid out in the Mississippi Standard Specification for traffic signal heads and associated MDOT material specifications for traffic signal heads. The signal heads shall accommodate standard 12-inch LED indications meeting the ITE Specification "Vehicle Traffic Control Signal Heads" and ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement.

For Type 1, Type 2 and Type 3 portable traffic signals, the signal heads shall have the ability to be rotated 180 degrees to face in the opposite direction and shall have the ability to rotate and lock in approximately 10 degree increments to position the signal head for the optimum visibility to motorists.

For Type 1 portable traffic signals, each unit shall contain two signal heads with one signal head mounted on an overhead mast arm that can be extended over the travel lane with a minimum clearance of 17 feet measured from the bottom of the signal head unit to the road surface. The lower signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 2 portable traffic signals, the signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 3 portable traffic signals, each unit shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned below.

907-619.02.8.1.2--Controller and Operating Requirements. The portable traffic signal (Types 1, 2, and 3) shall include a solid state Controller Unit (CU) that is in compliance with NEMA TS 5 Performance Standard. The CU shall have an easy to read front panel backlit display for viewing and programming the configuration settings and CU status. The CU shall be capable of operating the portable traffic signal system in a fixed time, traffic actuated or manual control mode. Multiple portable traffic signals shall have the capability to be interconnected to form a portable traffic signal system. Each portable traffic signal within a connected system shall have the capability to serve as either the master or remote signal. Each portable traffic signal shall include a Conflict Monitor Unit (CMU), or Malfunction Management Unit (MMU) to ensure phase conflicts do not exist during operation.

For Type 1 and Type 2 portable traffic signals, a minimum of five (5) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of four (4) traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have

the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

For Type 3 portable traffic signals, a minimum of ten (10) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of 16 traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

The system shall also have the ability to operate in vehicle actuation mode when vehicle detection components are used. The operating system shall have the capability to allow the Portable Traffic Signal to be connected to and controlled by a standard NEMA controller.

The system shall have the capability to be controlled remotely using a hardwired or wireless remote. The wireless radio remote shall be capable of communicating at a clear line of site distance up to ¼ mile from the master.

The CU shall have the capability of interfacing with a Remote Monitoring System (RMS) capable of reporting signal location, battery voltage, and system faults. The RMS shall include a password-protected web site, viewable via an internet connection. In the event of a system fault, the RMS shall provide specific information concerning the cause of the system fault (example: "red lamp on signal number 1 out"). The RMS shall immediately contact previously designated individuals via SMS text messaging or email, upon a fault event.

The active timing program operating the PTS system shall be available and viewable through the RMS website at all times. The RMS shall maintain a history of the operating system in each signal including total operating hours, alerts, and the location of the PTS trailer.

907-619.02.8.1.3--Wireless Communications. The portable traffic signals shall communicate with other portable traffic signals within the signal system via license-free wireless 900 MHZ radio link communications as specified in Subsection 662.02.2 of the radio Interconnect System specification. The radio units shall maintain communications at a minimum distance of one (1) mile. The radio system shall conform to the applicable Federal Communications Commission requirements and all applicable state and local requirements.

The portable traffic signals shall be in direct communication at all times either by wireless or hardwire connection to provide for the required conflict monitoring / malfunction management system.

907-619.02.8.1.4--Power Requirements. Each Portable Traffic Signal shall be equipped with a power source consisting of a solar collection array, solar controller and/or charging unit and batteries sufficient to operate the signal system. The number and size of batteries shall be sufficient to operate the Type 1 and Type 3 signals for a minimum of 30 days and Type 2A signals for

minimum of five (5) days, and Type 2B signals for minimum of 15 days without additional charging or assist from the solar array. An on-board battery charger shall be compatible with both the solar array and with a 120V AC power source.

For Type 1 signals, the solar panel array shall provide for a minimum of 440 watts of solar collection capability.

For Type 2A signals, the solar panel array shall provide for a minimum of 90 watts of solar collection capability.

For Type 2B signals, the solar panel array shall provide for a minimum of 110 watts of solar collection capability.

For Type 3 signals, the solar panel array shall provide for a minimum of 480 watts of solar collection capability and shall include a tilt and rotate system to optimally position the panels.

All instrumentation for the electrical system and battery compartment shall be contained in a lockable weatherproof enclosure. Solar panels shall be secured to the mounting brackets for theft prevention.

907-619.02.8.1.5--Trailer and Lift System. The trailer or pedestal/cart and all mounted components shall conform to the wind loading requirements as follows: 100 mph minimum for Type 1 portable traffic signals, 55 mph minimum for Type 2A portable traffic signals, 75 mph minimum for Type 2B portable traffic signals, and 90 mph minimum for Type 3 portable traffic signals as described in the AASHTO *Standard Specifications for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans including all interims and updates. At the request of the Engineer, proof of conformance to these wind load ratings shall be verified by a third-party. No additional loose ballast shall be used to meet these wind load requirements. The trailer shall be made of structural steel and shall include four (4) leveling/stabilizer jacks capable of lifting the trailer a minimum of six inches (6").

The trailer or pedestal shall be equipped with a mechanical, hydraulic or electric lift system sufficient for one person to be able to raise and lower the vertical upright and/or horizontal mast arm to and from the operating position.

For Type 1, 2B, and Type 3 signals, the trailer shall be equipped to provide legal and safe transport on the public highway system at speeds up to 55 mph.

All exterior metal surfaces, except signal heads and back plates, shall be powder-coat painted highway safety orange.

907-619.02.9--Impact Attenuators. Delete the sentence in the first paragraph of Subsection 619.02.9 on page 455, and substitute the following.

Impact attenuators must be listed on the Department's APL.

907-619.02.11--Snap-Back Delineators. Delete the sentence in the paragraph of Subsection 619.02.11 on page 456, and substitute the following.

Snap-back delineators shall be selected from the list of surface mounted flexible delineator posts as shown on the Department's APL.

907-619.02.14--Changeable Message Sign.

907-619.02.14.5--PCMS Controller and Storage Cabinets. Delete the fifth sentence in the first paragraph of Subsection 619.02.14.5 on pages 462 and 463, and substitute the following.

The controller cabinet shall be illuminated.

907-619.05--Basis of Payment. Add the following to the list of pay items ending on page 480.

907-619-E3: Changeable Message Sign ***** - per each

907-619-H2: Traffic Signal, Portable, Type ___ - per each

Bridge Painting on SR 27 at Copiah Creek (Bridge No. 65.8), known as Federal Aid Project No. BR-0054-01(056) / 107817302 in Copiah County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
			Roadway Items		
0010	202-B169		308	Linear Feet	Removal of Joint Material
0020	618-A001		1	Lump Sum	Maintenance of Traffic
0021	619-A1005		2,100	Linear Feet	Temporary Traffic Stripe, Continuous White, Type 1 Tape
0022	619-A2006		4,000	Linear Feet	Temporary Traffic Stripe, Continuous Yellow, Type 1 Tape
0023	619-A6005		96	Linear Feet	Temporary Traffic Stripe, Legend, Type 1 Tape
0024	619-D1001		42	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0025	619-D2001		389	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0026	619-G4001		24	Linear Feet	Barricades, Type III, Double Faced
0027	619-G4005		24	Linear Feet	Barricades, Type III, Single Faced
0028	619-G5001		20	Each	Free Standing Plastic Drums
0029	619-G7001		4	Each	Warning Lights, Type "B"
0030	620-A001		1	Lump Sum	Mobilization
0032	907-619-H2001		2	Each	Traffic Signal, Portable, Type 1
			Bridge Items		
0040	808-A001	(S)	616	Linear Feet	Joint Preparation
0050	907-823-A001		308	Linear Feet	Preformed Joint Seal, Type I
0060	907-823-B001		616	Linear Feet	Saw Cut, Type I
0070	907-824-PP006		9	Each	Bridge Repair, Cap Cleaning
0080	907-845-A001	(S)	1	Lump Sum	Coating Existing Structural Steel

FORM CSD-612
Rev. 1 / 2015

YEAR 2018 PROGRESS SCHEDULE YEAR 2019

PROJECT NUMBER BR-0054-01(056) / 107817302
COUNTY Copiah

WORK PHASE NO.	DESCRIPTION	LINE NUMBERS	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	
1	Miscellaneous	20-32											0														
2	Bridge	10; 40-80											5	8		26											
	LET:	9/25/2018																									
	NOA:	10/09/2018																									
	NTP/BCT:	11/08/2018																									
	W.D.:	66																									

MONTH	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	172 WORKING DAYS PER YEAR
ANTICIPATED WORKING DAYS PER MONTH	6	7	11	15	19	20	21	21	20	16	11	5	6	7	11	15	19	20	21	21	20	16	11	5	

NOTE: THE ANTICIPATED WORKING DAYS SHOWN ON THIS SCHEDULE ARE FOR INFORMATIONAL PURPOSES ONLY.
THE ACTUAL WORKING DAY TOTAL AS ASSESSED BY THE PROJECT ENGINEER ON FORM CSD-765 SHALL GOVERN.