# BRIDGE REPAIR CONSISTS OF

EXPANSION JOINT REPLACEMENT & HEADER REPAIR	SPECIAL	DESIG
BEARING RETROFIT & REPAIRS	SPECIAL	DESIG
PILE STRUCTURAL REPAIR	SPECIAL	DESIG

#### TRAFFIC DATA

TRAFFIC	- ADT	_ =	79,670	(20	16)	
	ADT	= I	19,505	(20	36)	
DESIGN SPEED				65	MPH	l
TRUCKS					۱ %	,
DIRECTIONAL		. <b>_</b>		- 5	0 %	,

## <u>Existing utilities</u>

4 -	4"	Ø	MULTI-CELL	CONDUIT	SYSTEM	 UNKNOWN
۱ -	2"	Ø	SINGLE-CELL	_ CONDUIT	Γ	 UNKNOWN

# CONSTRUCTION SEQUENCE

#### STAGE I

- I. INSTALL SHORING AS REQUIRED AND JACK BRIDGE VERTICALLY ( 1/2" MAX.) AT EXPANSION JOINT I TO REMOVE ALL LOAD FROM BEARINGS. NO JACKING LOADS SHALL BE APPLIED TO CURTAIN WALL.
- 2. CLEAN, REPAIR AND RESET EXISTING BEARINGS (AS DETAILED ON DRAWING NO. 35.1-0004).
- 3. LOWER BRIDGE ONTO BEARINGS AND REMOVE SHORING.
- 4. REPEAT STEPS | THROUGH 3 FOR EXPANSION JOINT 2.
- 5. COMPLETE PILE STRUCTURAL REPAIR (AS DETAILED ON DRAWING NO. 35.1-0005).

### STAGE 2

- I. SHIFT TRAFFIC ACCORDING TO ROADWAY CONSTRUCTION STAGING PLANS AND 35.1-0003 FOR STAGE 2 CONSTRUCTION.
- 2. REMOVE ALL EXISTING JOINT SEALS AND EXPANSION JOINTS.
- 3. REMOVE AND RECONSTRUCT EDGE OF DECK AT EXPANSION JOINT I (AS DETAILED ON DRAWING NO. 35.1-0006).
- 4. PERFORM DECK SURFACE PREPARATION AND APPLY POLYMER OVERLAY.
- 5. REPLACE EXPANSION JOINTS, INCLUDING THOSE AT B.F.P.R. (AS DETAILED ON DRAWING NO. 35.1-0006).

## STAGE 3

- I. SHIFT TRAFFIC ACCORDING TO ROADWAY CONSTRUCTION STAGING PLANS AND 35.1-0003 FOR STAGE 3 CONSTRUCTION.
- 2. REPEAT STEPS 2 THROUGH 5 AS LISTED IN STAGE 2.
- 3. REMOVE TRAFFIC CONTROL FOR STAGE 3, RETURN BRIDGE TO TRAFFIC.

#### STAGE 4

- I. REPLACE BRIDGE STRIPING AND RAISED PAVEMENT MARKERS TO MATCH EXISTING.
- 2. COMPLETE REMAINING REPAIRS (AS DETAILED ON DRAWING NO. 35.1-0006).
- 3. CLEAN AND PAINT REQUIRED AREAS OF EXISTING BRIDGE AS DIRECTED IN PAINTING NOTES, THIS SHEET.

## GENERAL NOTES

- SPECIFICATIONS GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, AS MODIFIED BY CONTRACT DOCUMENTS.
- REINFORCING STEEL PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.
- CHAMFER CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.
- TRAFFIC CONTROLS SEE ROADWAY PLANS FOR TRAFFIC CONTROL PAYMENT.
- SHOP DRAWINGS SUBMIT ALL SHOP DRAWINGS TO THE GDOT BRIDGE MAINTENANCE UNIT.
- EXISTING BRIDGE PLANS ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY SUBMITTING A REQUEST ON THE GEORGIA DOT WEBSITE AT:
  HTTP://www.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX
  THE ORIGINAL BRIDGE / ROADWAY WAS BUILT UNDER PROJECT NO. I-IR-285-I(135)86
  AND WAS WIDENED UNDER PROJECT NUMBER CSNHS-0008-001(256).
- DIMENSIONS AND ELEVATIONS VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO ORDERING MATERIALS OR BUILDING FORMS. LIGHT LINES INDICATE THE EXISTING STRUCTURE AND HEAVY LINES INDICATE THE NEW STRUCTURE.
- EPOXY RESIN ADHESIVE APPLY EPOXY RESIN ADHESIVE TYPE II TO ALL HARDENED CONCRETE SURFACES JUST PRIOR TO POURING THE CONCRETE FOR THE NEXT STAGE OF CONSTRUCTION, SEE SECTION 886 OF THE GEORGIA DOT SPECIFICATIONS. INCLUDE THE COST OF EPOXY ADHESIVE AND ITS APPLICATION IN THE OVERALL BID SUBMITTED.
- EXISTING REINFORCEMENT BEND EXISTING REINFORCEMENT TO BE UTILIZED IN NEW CONSTRUCTION IN A MANNER TO PROVIDE THE MAXIMUM LAP POSSIBLE OR AS SHOWN ON THE PLANS. THOROUGHLY CLEAN EXISTING REINFORCEMENT OF CONCRETE SCALE AND RUST BEFORE BONDING INTO NEW CONSTRUCTION.
- EXISTING SLOPE PAVING TAKE CARE TO PREVENT DAMAGING THE EXISTING SLOPE PAVING. REPAIR ANY DAMAGE THAT OCCURS TO THE SLOPE PAVING, OTHER THAN THAT REQUIRED TO BE REMOVED FOR SUBSTRUCTURE EXCAVATION AND TO TIE NEW SLOPE PAVING INTO EXISTING SLOPE PAVING. MATCH THE NEW SLOPE PAVING TO EXISTING SLOPE PAVING. INCLUDE THE COST FOR REMOVAL OF SLOPE PAVING IN PRICE BID FOR "LUMP REMOVAL OF PARTS OF EXISTING BR".
- WELDING ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS AND TESTING. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.
- EXISTING BRIDGE JOINTS CLEAN EXISTING BRIDGE CONSTRUCTION AND DUMMY JOINTS OF ALL DIRT, REFUSE, AND EXISTING SEALANT AS PER SUB-SECTIONS 461.3.05.A OF THE GEORGIA DOT SPECIFICATIONS. SEAL JOINTS USING SILICONE SEALANT (TYPE D) AS PER SUB-SECTIONS 461.3.05.C AND 833.2.06 OF THE GEORGIA DOT SPECIFICATIONS.
- PAINT CLEAN AND PAINT ALL NEW STRUCTURAL STEEL AND SPOT CLEAN AND PAINT EXISTING STRUCTURAL STEEL AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. USE PAINT SYSTEM VII FOR NEW STRUCTURAL STEEL AND SYSTEM VII FOR EXISTING STRUCTURAL STEEL.
- SALVAGE MATERIAL NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.
- INCIDENTAL ITEMS INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF CLEANING AND BENDING OF EXISTING REINFORCEMENT, SAWCUTS, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

# PAINTING NOTES

- I. TOTAL ESTIMATED AREA OF STEEL TO BE PAINTED IS 36 SF. PRIOR TO BIDDING, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEASURE AND VERIFY THE AREA OF STEEL TO BE PAINTED.
- 2. REPAIR ANY DAMAGE TO THE STRUCTURAL STEEL CAUSED BY THE BLAST CLEANING OR ANY OTHER RELATED OPERATIONS, AT NO CHARGE TO THE DEPARTMENT. ALL REPAIRS ARE TO BE APPROVED BY THE ENGINEER.
- 3. THE COST OF PAINTING NEW AND EXISTING STRUCTURAL STEEL SHALL BE INCLUDED IN THE PRICE BID FOR PAY ITEM 535-1105 PAINT EXIST STEEL STRUCTURE.
- 4. CLEAN AND PAINT ALL STEEL BEARINGS AT EACH EXPANSION JOINT.

### DESIGN DATA

SPECIFICATIONS AASHTO 17TH EDITION, 2002 (DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)
TYPICAL HS20-44 AND/OR MILITARY LOADING IMPACT ALLOWED
FUTURE PAVING ALLOWANCE
CONCRETE: SUPERSTRUCTURE
REINFORCEMENT STEEL:

## SUMMARY OF QUANTITIES

PAY ITEM	1 QUANTITIES		
NUMBER_	BRIDGE	<u>UNIT</u>	PAY ITEM
207-0203	102	CY	FOUND BKFILL MATL, TP II
441-0004	204	SY	CONC SLOPE PAV, 4 IN
449-1350	267	LF	PREFORMED SILICONE JOINT SEAL, BR NO - I
449-3805	212	LF	PREFORMED, PRECOMPRESSED, SILICONE COATED, SELF EXPANDING SEALANT SYSTYEM, BR NO - I
461-2000	267	LF	RESEAL BRIDGE JOINTS, TP D
500-3101	20	CY	CLASS A CONCRETE
501-3000	70	LB	STR STEEL, BR NO - I
504-0600	10	CY	TWENTY-FOUR HOUR ACCELERATED STRENGTH CONCRETE
514-0500	3,468	LB	EPOXY COATED BAR REINFORCEMENT STEEL
514-1000	707	LB	EPOXY COATED SUPERSTR REINF STEEL, BR NO - I
518-1000	LUMP	LS	RAISE EXISTING BRIDGE, STA - 625+89.29
519-0515	2,706	SY	SURFACE PREPARATION
519-0530	2,706	SY	POLYMER OVERLAY
535-1105	LUMP	LS	PAINT EXIST STEEL STRUCTURE, BR ID - 067-0100-0
540-1202	LUMP	LS	REMOVAL OF PARTS OF EXISTING BRIDGE, BR NO - I
600-0001	10	CY	FLOWABLE FILL

BRIDGE NO. I

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

GEORGIA

DEPARTMENT OF TRANSPOR
ENGINEERING DIVISION-OFFICE OF BRIDGES AND S

		DATE		03-03-17		DEPARTMENT OF T ENGINEERING DIVISION-OFFICE OF	RANSPORTATION
NOTE INFO	: RMATION TAKEN	REVISIONS	COMMENT	T COMMENTS T COMMENTS		GENERAL I 1-285 OVER RAMP 1-285 BRIDGE REHAE	5 CCBL TO I-75 SB
	ORIGINAL PLANS.			- 1		COBB COUNTY	M005399
	DRAWING NO. 35.1-0002		PER	PER		NO SCALE	DECEMBER 2016
	BRIDGE SHEET	λ	RB	RB		DESIGNED GBL/JJY CHECKED TBS/M	

DRAWN DRB

I INCH WHEN PRINTED FULL SIZE

2 OF 6

J:\2013006\2013006.015\M005399\Bridge\067-0100-0\M005399\_035-1-0002.dgn

APPROVED WMD

DESIGN GROUP BMU