

NOTES

ASSUMED LIVE LOAD = HL 93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK. SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 35 FEET EACH SIDE F CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. HIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM RICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE ECTION 412 OF THE STANDARD SPECIFICATIONS.

THE EXISTING STRUCTURE CONSISTING OF 3 SPANS OF PRESTRESSED CONCRETE CHANNELS (1 @ 20'-6",1 @ 20'-0" & 1 @ 20'-6") WITH A CLEAR ROADWAY WIDTH OF 28'-11") ON END BENTS & INTERIOR BENTS CONSISTING OF PRESTRESSED CONCRETE CAPS ON TIMBER PILES LOCATED AT THE SITE OF THE PROPOSED BRIDGE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, THE LOAD LIMIT MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTAION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED IN A MANNER THAT PREVENTS DEBRIS FROM FALLING INTO THE WATER. THE CONTRACTOR SHALL SUBMIT DEMOLITION PLANS FOR REVIEW AND REMOVE THE BRIDGE IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18, EVALUATING SCOUR AT BRIDGES".

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

FOR 18"GALVANIZED STEEL SHEET PILES, SEE SPECIAL PROVISIONS.

| HYDRAULIC DATA | |
|-----------------------------|---------------|
| DESIGN DISCHARGE | 860 CFS. |
| FREQUENCY OF DESIGN FLOOD | 50 YRS. |
| DESIGN HIGH WATER ELEVATION | 35 . 2 |
| DRAINAGE AREA | 5.5 SQ. MI. |
| BASE DISCHARGE (Q100) | 1050 CFS. |

OVERTOPPING FLOOD DATA

35.6

BASE HIGH WATER ELEVATION

AT STA. 21+68.80 -L-

OVERTOPPING DISCHARGE 2600 CFS.

FREQUENCY OF OVERTOPPING FLOOD +500 YRS.

OVERTOPPING FLOOD ELEVATION 38.7

OVERTOPPING IS AT THE © OF ROADWAY

| | TOTAL BILL OF MATERIAL | | | | | | | | | | | | | | | | | | |
|----------------|-------------------------------------|------------------------|----------------|---|---------------------|-----------------------------|----------------------|---|-----|---------------------|-------------------------|------------------|---|-------------------------------------|-------------------------------|-------------------------|-----------------------|---|---------------------------------------|
| | REMOVAL OF EXISTING STRUCTURE | ASBESTOS ASSESSMENT | PDA TESTING | UNCLASSIFIED STRUCTURE EXCAVATION | CLASS A CONCRETE | BRIDGE APPROACH SLABS | REINFORCING STEEL | PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES | | 12 X 53 EL PILES | STEEL PILE POINTS | PILE REDRIVES | VERTICAL CONCRETE BARRIER RAIL | RIP RAP CLASS II (2'-0"THICK) | GEOTEXTILE FOR DRAINAGE | ELASTOMERIC BEARINGS | 3'-0 PRES CONCR | O"X 2'-O" STRESSED ETE CORED SLABS | 18"GALVANIZED STEEL SHEET PILES |
| | LUMP SUM | LUMP SUM | EACH | LUMP SUM | CU. YDS. | LUMP SUM | LBS. | EACH | NO. | LIN.FT. | EACH | EACH | LIN.FT. | TONS | SQ. YDS | LUMP SUM | NO. | LIN.FT. | SQ.FT. |
| SUPERSTRUCTURE | LUMP SUM | LUMP SUM | | | | LUMP SUM | | | | | | | 140.00 | | | LUMP SUM | 14 | 980 | |
| END BENT 1 | | | | LUMP SUM | 22.0 | | 2,646 | 7 | 7 | 350 | 7 | 4 | | 65 | 75 | | | | 1,805 |
| END BENT 2 | | | | LUMP SUM | 22.0 | | 2,646 | 7 | 7 | 420 | 7 | 4 | | 55 | 60 | | | | 1,787 |
| TOTAL | LUMP SUM | LUMP SUM | 1 | LUMP SUM | 44.0 | LUMP SUM | 5,292 | 14 | 14 | 770 | 14 | 8 | 140.00 | 120 | 135 | LUMP SUM | 14 | 980 | 3,592 |

PROJECT NO. B-5642

BRUNSWICK COUNTY

STATION: 18+30.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

GENERAL DRAWING
FOR BRIDGE OVER
BATARORA BRANCH
ON NC 87 BETWEEN
SR 1736 & SR 1752

| 411 2300 143 10407 | | | | | | | |
|-----------------------|-----|-----------|-------|-----|-----|-------|-----------------|
| 5/10/2021 | | SHEET NO. | | | | | |
| CUMENT NOT CONSIDERED | NO. | BY: | DATE: | NO. | BY: | DATE: | S-3 |
| FINAL UNLESS ALL | 1 | | | 3 | | | TOTAL SHEETS |
| IGNATURES COMPLETED | 2 | | | 4 | | | 14 |
| | | | | | | • | |

DRAWN BY: ______M.K. BEARD DATE: 04/2020
CHECKED BY: _____D. SHACKELFORD DATE: 04/2020
DESIGN ENGINEER OF RECORD: _____W. SMITH DATE: 4/22/21