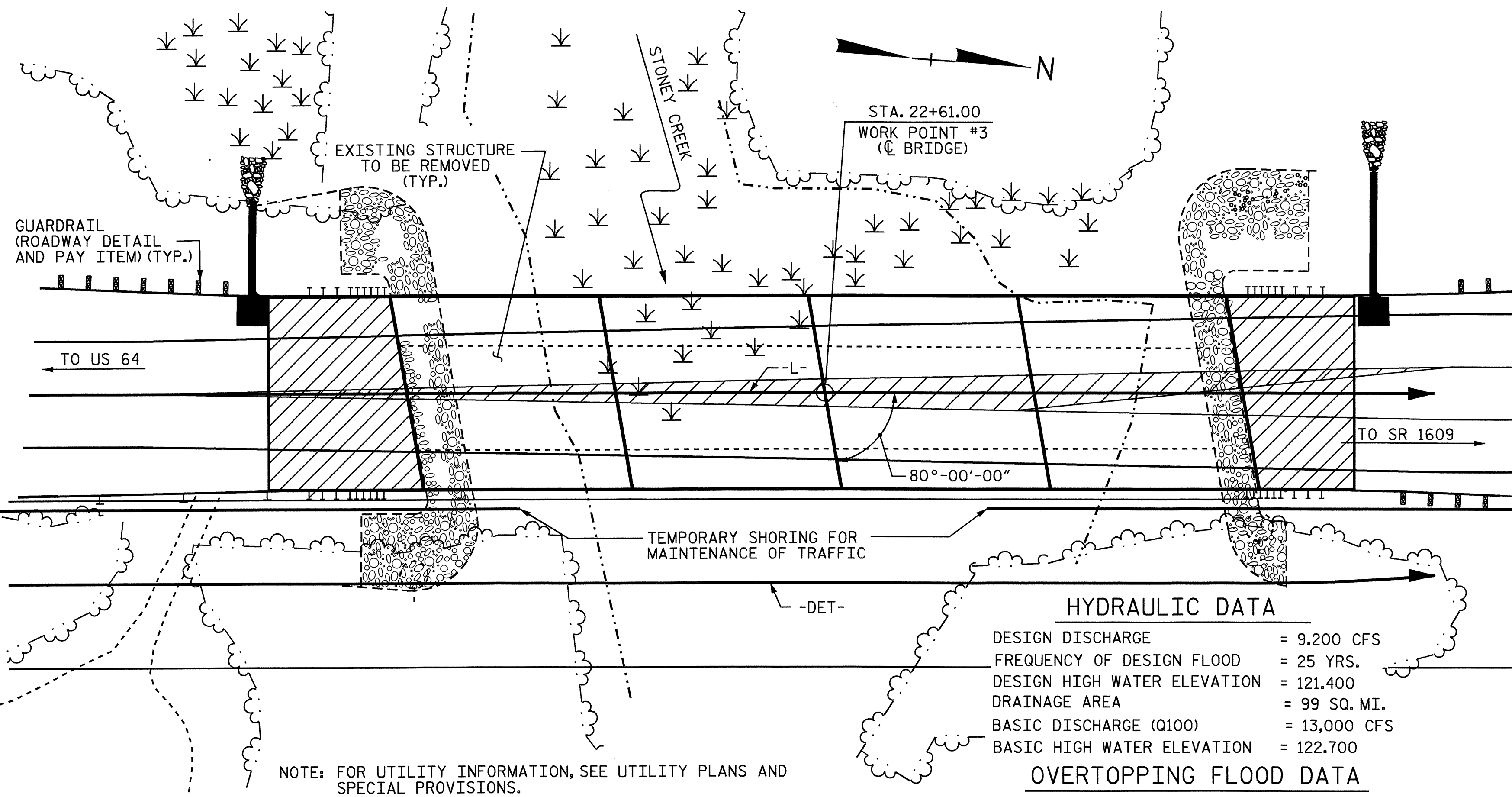


BENCH MARK #2: CHISELED "X" IN NORTH WEST CORNER OF WHEELGUARD AT STA. 23+51.92 -L-, 10.27' LT. EL. 123.530



NOTE: FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

LOCATION SKETCH

HYDRAULIC DATA

| | |
|-----------------------------|--------------|
| DESIGN DISCHARGE | = 9,200 CFS |
| FREQUENCY OF DESIGN FLOOD | = 25 YRS. |
| DESIGN HIGH WATER ELEVATION | = 121.400 |
| DRAINAGE AREA | = 99 SQ. MI. |
| BASIC DISCHARGE (Q100) | = 13,000 CFS |
| BASIC HIGH WATER ELEVATION | = 122.700 |

OVERTOPPING FLOOD DATA

| | |
|--------------------------------|-------------|
| OVERTOPPING DISCHARGE | = 9,200 CFS |
| FREQUENCY OF OVERTOPPING FLOOD | = 25 YRS. |
| OVERTOPPING FLOOD ELEVATION | = 119.460 |

NOTES

ASSUMED LIVE LOAD = HS25 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.

THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.

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

FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.

THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT, MAINTAIN AND AFTERWARDS REMOVE A TEMPORARY STRUCTURE AT STATION 22+61.00 -L- FOR USE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE. SEE SPECIAL PROVISIONS FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY STRUCTURE.

FOR SAND SEAL, SEE SPECIAL PROVISION.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

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 TRANSPORTATION 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.

THE EXISTING STRUCTURE CONSISTING OF 6 SPANS, 1 @ 30'-4" AND 5 @ 30'-3" OF REINFORCED CONCRETE DECK ON I-BEAMS AND SUPPORTED BY REINFORCED CONCRETE CAPS ON TIMBER PILES WITH A CLEAR ROADWAY WIDTH OF 24'-0" AND LOCATED AT THE PROPOSED SITE, SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE FURTHER DETERIORATE THIS LOAD LIMITATION MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS. FOR PAY ITEM FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PLANS.

STEEL SHEET PILING REQUIRED FOR SHORING SHALL BE HOT ROLLED.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 30 FT. LEFT AND RIGHT OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.

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

ALL BAR SUPPORTS USED IN THE BARRIER RAIL AND BENT CAPS AND ALL INCIDENTAL REINFORCING STEEL SHALL BE EPOXY COATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

PILES FOR END BENT NO. 1 AND END BENT NO. 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.

PILES AT ALL BENTS SHALL BE DRIVEN TO AN ELEVATION NO HIGHER THAN EL. 90.0 AND SATISFY THE BEARING CAPACITY OF 50 TONS EACH.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.

THE SCOUR CRITICAL ELEVATION FOR ALL BENTS IS EL. 100.0. THE SCOUR CRITICAL ELEVATION IS FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", NOVEMBER, 1995.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

TOP-DOWN CONSTRUCTION METHODS ARE REQUIRED FOR THE CONSTRUCTION OF THIS STRUCTURE. THE USE OF TEMPORARY CAUSEWAYS OR A WORK BRIDGE WILL NOT BE PERMITTED.

THE STEEL PILES SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS. FOR GALVANIZING STEEL PILES, SEE SPECIAL PROVISIONS.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 22+61.00-L-."

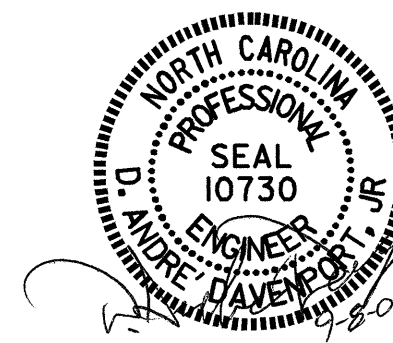
TOTAL BILL OF MATERIAL

| | CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMPORARY STRUCTURE | REMOVAL OF EXISTING STRUCTURE | UNCLASSIFIED STRUCTURE EXCAVATION | CLASS A CONCRETE | BRIDGE APPROACH SLABS | REINFORCING STEEL | HP 12X53 STEEL PILES | | GALVANIZING STEEL PILES | CONCRETE BARRIER RAIL | PLAIN RIP RAP CLASS II (2'-0" THICK) | FILTER FABRIC FOR DRAINAGE | ELASTOMERIC BEARINGS | 3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS | |
|----------------|-------------------------------------------------------------|-------------------------------|-----------------------------------|------------------|-----------------------|-------------------|----------------------|----------|-------------------------|-----------------------|--------------------------------------|----------------------------|----------------------|------------------------------------------------|----------|
| | | | | | | | NO. | LIN. FT. | | | | | | NO. | LIN. FT. |
| | LUMP SUM | LUMP SUM | LUMP SUM | CU. YDS. | LUMP SUM | LBS. | | | LUMP SUM | LIN. FT. | TONS | SO. YDS. | LUMP SUM | | |
| SUPERSTRUCTURE | | | | | | | | | 384.76 | | | | | 64 | 3072.00 |
| END BENT NO. 1 | | | | 15.5 | | 2579 | 10 | 250 | | | 63 | 70 | | | |
| BENT NO. 1 | | | | 13.3 | | 2598 | 11 | 440 | LUMP SUM | | | | | | |
| BENT NO. 2 | | | | 13.3 | | 2598 | 11 | 440 | LUMP SUM | | | | | | |
| BENT NO. 3 | | | | 13.3 | | 2598 | 11 | 440 | LUMP SUM | | | | | | |
| END BENT NO. 2 | | | | 15.5 | | 2579 | 10 | 300 | | | 71 | 80 | | | |
| TOTAL | LUMP SUM | LUMP SUM | LUMP SUM | 70.9 | LUMP SUM | 12952 | 53 | 1870 | LUMP SUM | 384.76 | 134 | 150 | LUMP SUM | 64 | 3072.00 |

PROJECT NO. B-3879
NASH COUNTY
 STATION: 22+61.00-L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 FOR BRIDGE OVER
 STONEY CREEK ON SR
 1603 BETWEEN US 64
 AND SR 1609



DRAWN BY: D. A. DAVENPORT DATE: 5/04
 CHECKED BY: H.T. BARBOUR DATE: 6/04

08-SEP-2004 15:13
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| REVISIONS | | | | | | TOTAL SHEETS |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | |
| 1 | | | 3 | | | 26 |
| 2 | | | 4 | | | |

STR. 1 NCBDG