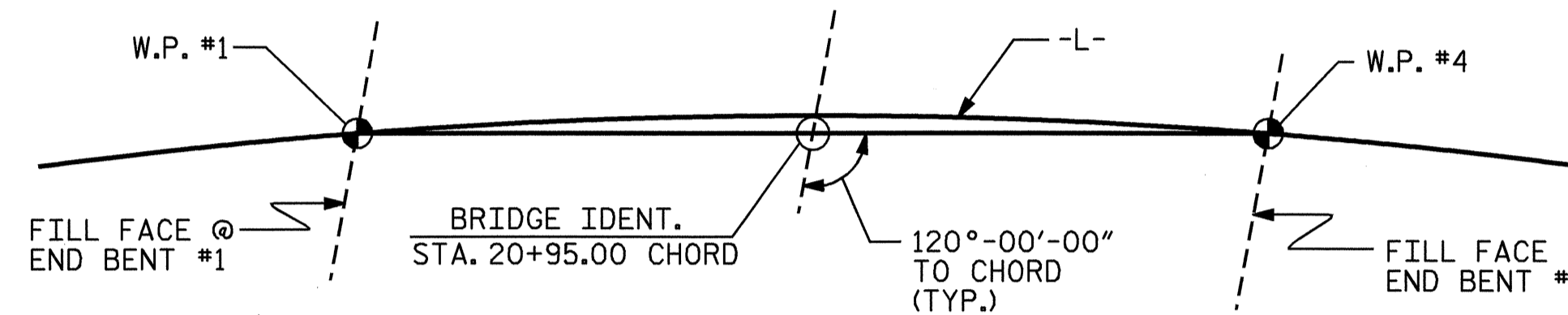


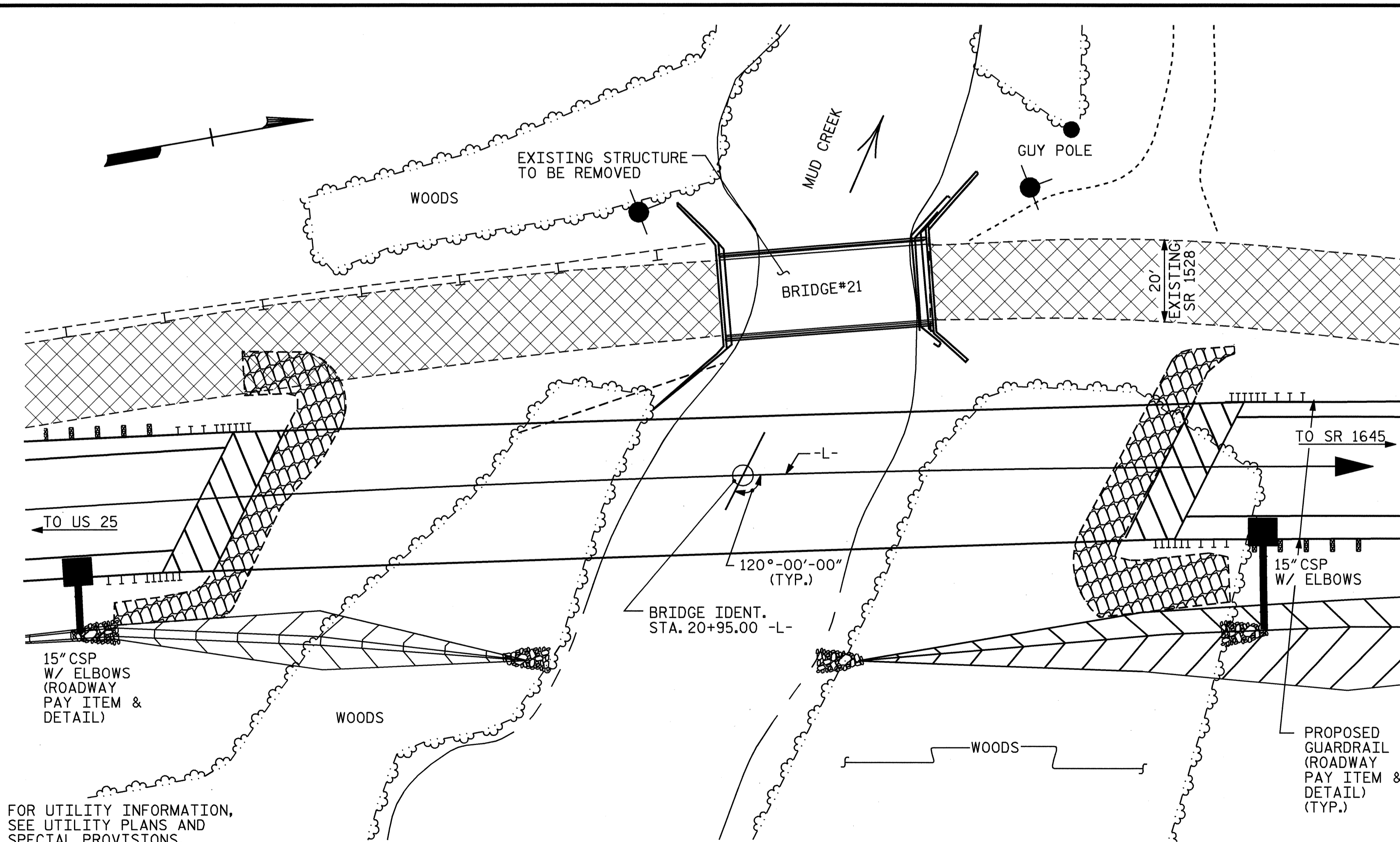
TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	3'-6" Ø DRILLED PIERS IN SOIL	3'-6" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 3'-6" Ø DRILLED PIERS	SID INSPECTIONS	SPT TESTING	CROSSHOLE SONIC LOGGING	CSL TUBES	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	HP 12 X 53 STEEL PILES	STEEL PILE POINTS	CONCRETE BARRIER RAIL	PLAIN RIP RAP CLASS II (2'-0" THICK)	FILTER FABRIC FOR DRAINAGE	ELASTOMERIC BEARINGS	EVAZOTE JOINT SEALS	3'-0" X 2'-9" PRESTRESSED CONCRETE BOX BEAMS	CONCRETE WEARING SURFACE			
	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EA.	EA.	EA.	LIN. FT.	SQ. FT.	CU. YDS.	LUMP SUM	LBS.	LBS.	NO.	LIN. FT.	EA.	LIN. FT.	TONS	SQ. YD.	LUMP SUM	LUMP SUM	NO.	LIN. FT.	SQ. FT.	
SUPERSTRUCTURE									7792		LUMP SUM					435.09				LUMP SUM	LUMP SUM	39	2822.49	7884	
END BENT NO. 1										20.3		3152		12	480	12		120	130						
BENT NO. 1		66.50	18.00	41.23	1	1	1	368.00		30.9		9334	2143												
BENT NO. 2		78.50	18.00	45.28	1	1	1	416.00		30.7		9927	2394												
END BENT NO. 2										19.6		3145		12	360	12		170	190						
TOTAL	LUMP SUM	145.00	36.00	86.51	2	2	2	784.00	7792	101.5	LUMP SUM	25558	4537	24	840	24	435.09	290	320	LUMP SUM	LUMP SUM	39	2822.49	7884	



CHORD LAYOUT

BM #3: 8" SPIKE SET IN 12" HICKORY TREE 103.63' LT. OF STA. 21+69.61 -L-, ELEV. 2063.82



LOCATION SKETCH

DRAWN BY : CR LEWIS DATE : 07/04
 CHECKED BY : MG CHEEK DATE : 08/04

06-JUN-2005 14:39
 RA:\STRUCT2\B3664\clewis\MICROS21\B-3664\21.DGN
 wjhr716

NOTES

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

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

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

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

AFTER SERVING AS A TEMPORARY STRUCTURE, THE EXISTING 2 SPAN STRUCTURE (1 @ 25'-10", 1 @ 25'-6" WITH A CLEAR ROADWAY WIDTH OF 19.1 FEET AND A 2 1/2" ASPHALT WEARING SURFACE ON A TIMBER DECK ON CONTINUOUS I-BEAMS, AND A SUBSTRUCTURE CONSISTING OF REINFORCED CONCRETE ABUTMENTS AND A STEEL CAP AND H-PILE CRUTCH BENT, AND LOCATED APPROXIMATELY 20 FEET FROM THE EXISTING STRUCTURE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1 FT. BELOW THE GROUND LINE.

THE CONCRETE WEARING SURFACE SHALL NOT BE POURED UNTIL THE CONCRETE BARRIER RAIL HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.

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

FOR CONCRETE WEARING SURFACE, SEE SPECIAL PROVISIONS.

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

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."

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

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

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 FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

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.

HYDRAULIC DATA

DESIGN DISCHARGE	= 6000 CFS
FREQUENCY OF DESIGN FLOOD	= 5 YRS
DESIGN HIGH WATER ELEVATION	= 2066.0'
DRAINAGE AREA	= 104 SQ.MI.
BASIC DISCHARGE (Q100)	= 20000 CFS
BASIC HIGH WATER ELEVATION	= 2070.4'

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 6000 CFS
FREQUENCY OF OVERTOPPING FLOOD	= 5 YRS.
OVERTOPPING FLOOD ELEVATION	= 2065.8'



PROJECT NO. B-3664
 HENDERSON COUNTY
 STATION: 20+95.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 BRIDGE NO. 21 ON SR 1528
 OVER MUD CREEK BETWEEN
 US 25 AND SR 1645

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3	
1			3			TOTAL SHEETS 27	
2			4				

NC005