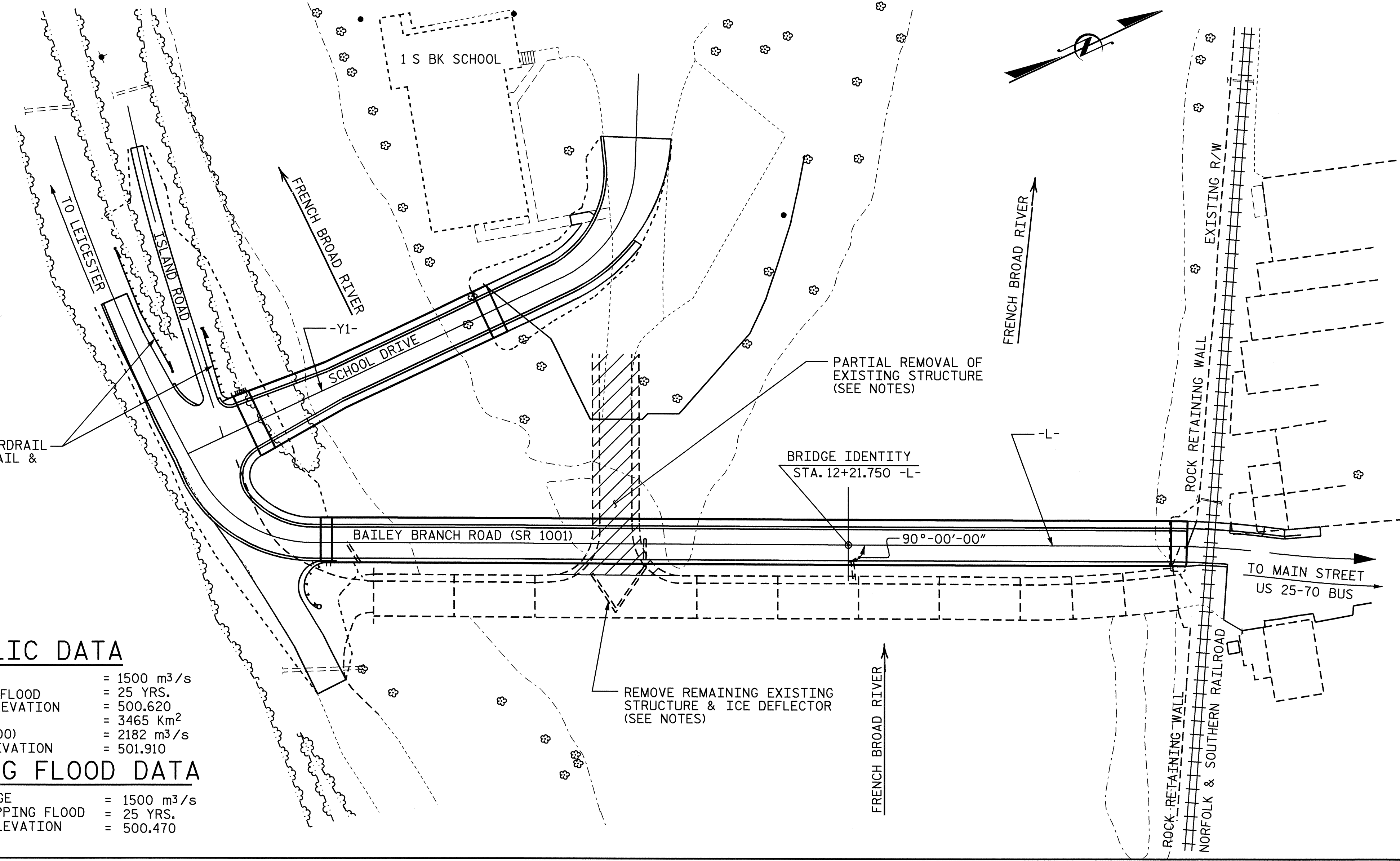


B.M. #2 -RR SPIKE IN BASE OF 375mm OAK TREE 26.533m RIGHT OF -L- STA. 11+07.565 ELEV. 504.099

NOTES

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 ALL ELEVATIONS ARE IN METERS.
 ASSUMED LIVE LOAD = MS 18 OR ALTERNATE LOADING.
 FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SNSM.
 FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.
 THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.
 THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", NOVEMBER, 1995.
 BEFORE CONSTRUCTION OF PROPOSED STRUCTURE, THE EXISTING STRUCTURE AS SHOWN IN THE CROSS-HATCHED AREA OF LOCATION SKETCH SHALL BE PARTIALLY REMOVED. THIS AREA SHALL BE CUT FLUSH WITH THE OUTSIDE EDGE OF EXISTING SUPERSTRUCTURE OR AS DIRECTED BY THE ENGINEER.
 AFTER SERVING AS A TEMPORARY STRUCTURE, THE REMAINING EXISTING STRUCTURE CONSISTING OF 11 REINFORCED CONCRETE DECK SPANS ON STEEL I BEAMS WITH A CLEAR ROADWAY WIDTH OF 7.2 METERS ON REINFORCED CONCRETE ABUTMENTS AND POST & BEAM BENTS AND LOCATED APPROXIMATELY 12.0±m UPSTREAM FROM PROPOSED STRUCTURE 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.
 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.
 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.
 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 12+21.750 -L-".
 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.
 THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 360,000 kg OF REINFORCING STEEL, ONE 760mm SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 360,000 kg OF REINFORCING STEEL, TWO 760mm 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.
 AT THE CONTRACTOR'S OPTION, AND UPON REMOVAL OF THE CAUSEWAY, THE CLASS II RIP RAP USED IN THE CAUSEWAY MAY BE PLACED AS RIP RAP SLOPE PROTECTION. SEE SPECIAL PROVISIONS FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS AT STATION 12+21.750 -L-.
 THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 10.00m EACH SIDE 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.
 SEE SHEET 6 OF 6 FOR ADDITIONAL NOTES.



HYDRAULIC DATA

DESIGN DISCHARGE	= 1500 m ³ /s
FREQUENCY OF DESIGN FLOOD	= 25 YRS.
DESIGN HIGH WATER ELEVATION	= 500.620
DRAINAGE AREA	= 3465 Km ²
BASIC DISCHARGE (Q100)	= 2182 m ³ /s
BASIC HIGH WATER ELEVATION	= 501.910

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 1500 m ³ /s
FREQUENCY OF OVERTOPPING FLOOD	= 25 YRS.
OVERTOPPING FLOOD ELEVATION	= 500.470

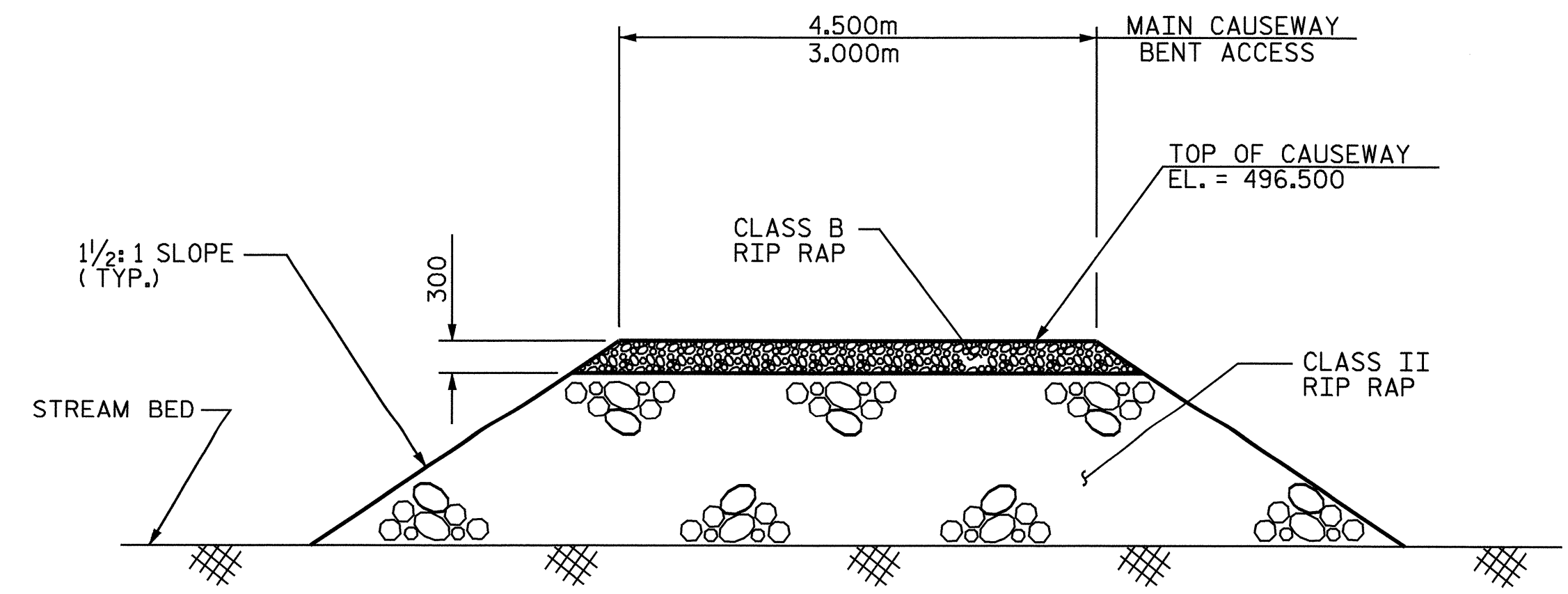
LOCATION SKETCH

FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS

CAUSEWAY CONSTRUCTION SEQUENCE

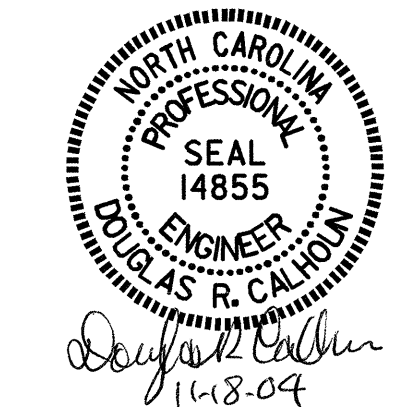
- 1.) CONSTRUCT PHASE I CAUSEWAYS FOR STRUCTURES 1 AND 2.
- 2.) CONSTRUCT STRUCTURE 2 (-Y1-), THEN REMOVE PHASE I CAUSEWAY AT THAT STRUCTURE.
- 3.) AFTER PARTIAL REMOVAL OF EXISTING STRUCTURE, CONSTRUCT STRUCTURE 1 (-L-) FROM ISLAND TO SOUTH SIDE OF RIVER.
- 4.) REMOVE PART OF PHASE I CAUSEWAY IN RIVER AS SHOWN ON PERMIT DRAWINGS.
- 5.) CONSTRUCT PHASE II CAUSEWAY AS SHOWN.
- 6.) CONSTRUCT STRUCTURE 1 (-L-) FROM ISLAND TO TOWN (NORTH) SIDE OF RIVER.
- 7.) REMOVE PHASE II CAUSEWAY AFTER COMPLETION OF STRUCTURE 1 (-L-).
- 8.) CONSTRUCT PHASE III CAUSEWAY FOR REMOVAL FOR AS MUCH AS POSSIBLE OF EXISTING BRIDGE.
- 9.) REMOVE PHASE III CAUSEWAY AFTER PARTIAL REMOVAL OF EXISTING BRIDGE.
- 10.) CONSTRUCT PHASE IV CAUSEWAY FOR REMOVAL OF THE REMAINDER OF THE EXISTING BRIDGE.
- 11.) REMOVE PHASE IV CAUSEWAY AFTER TOTAL REMOVAL OF EXISTING BRIDGE.

NOTE : THE RIVER SHALL AT NO TIME BE TOTALLY BLOCKED BY CAUSEWAYS.



DETAIL OF CAUSEWAY

DRAWN BY : E. G. ALLEN DATE : 7/22/04
 CHECKED BY : W. S. ARAFAT DATE : 8/11/04



PROJECT NO. B-2583
MADISON COUNTY
 STATION: 12+21.750 -L-

SHEET 5 OF 6

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE OVER FRENCH BROAD
 RIVER BETWEEN SR 1001 AND
 US 25 / US 70 BUS

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 112