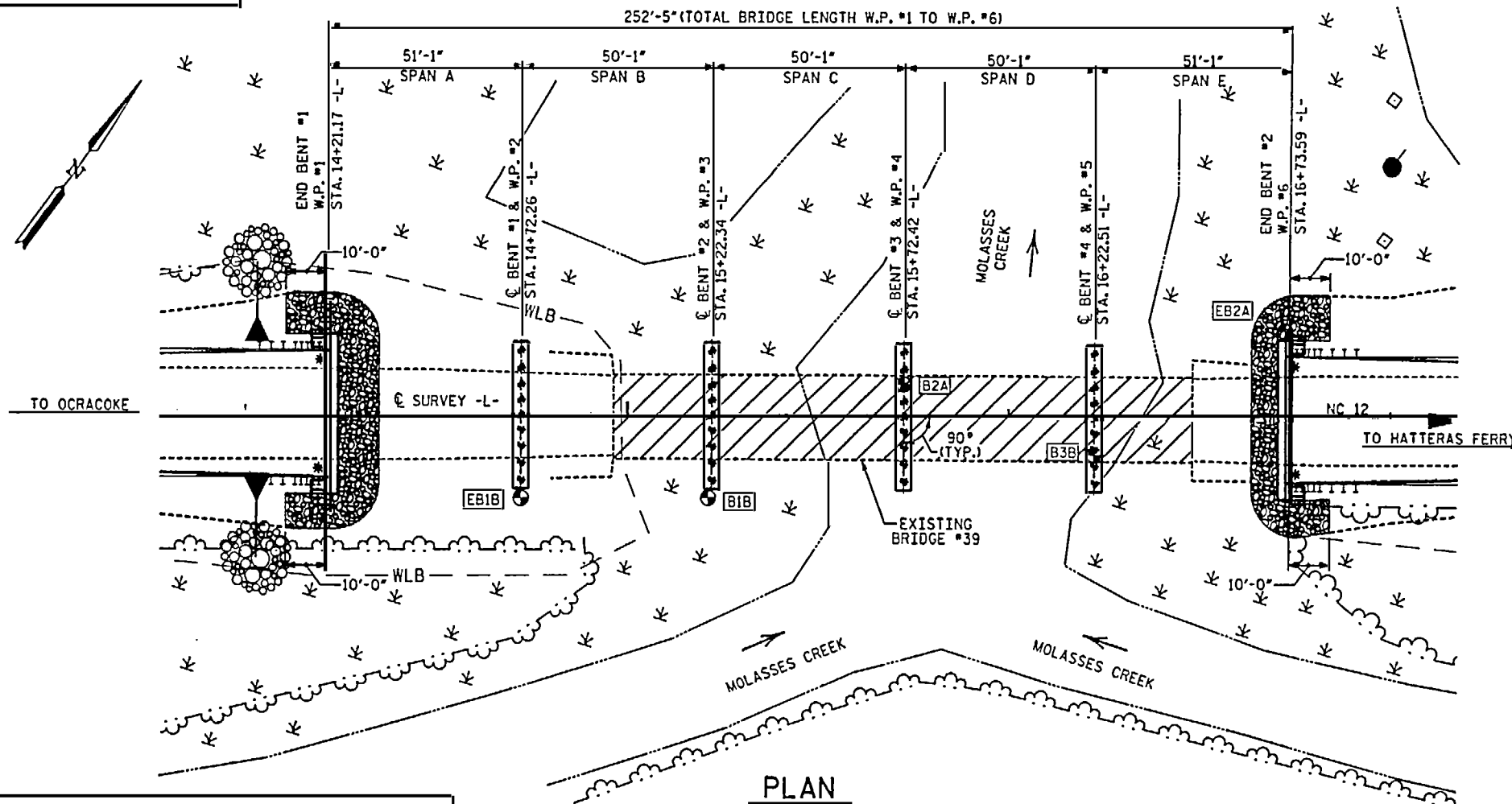


B-5016

#39 HYDE

EXISTING BRIDGE NO. 39
22'-6" CLEAR ROADWAY
SPANS: 20 @ VARIOUS LENGTHS = 152'
TIMBER DECK ON TIMBER JOISTS
ABUTMENTS & INT. BENTS
TIMBER CAP ON TIMBER PILES

TBM #1
NAIL IN POWER POLE
66.18' LT. OF STA. 16+99.79 -L-
ELEV. 1.90



PLAN

SCALE: 1"=20'

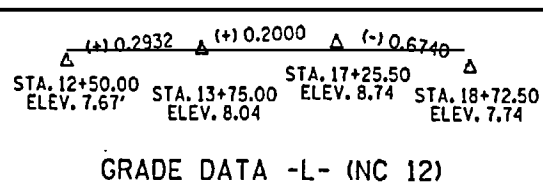
- DENOTES GEO-TECH BORE LOCATIONS.
- * DENOTES GUARDRAIL CONNECTION REQUIRED. SEE "PRECAST CONCRETE END POST DETAILS" SHEET.

HYDROGRAPHIC DATA:

DESIGN DISCHARGE - 1050 CFS
STORM SURGE - 6 HOUR
DESIGN HIGH WATER ELEVATION - 5.1
DRAINAGE AREA - 0.08 SQ. MI.

OVERTOPPING FLOOD DATA:

OVERTOPPING DISCHARGE - N/A
FREQUENCY OF OVERTOPPING FLOOD - N/A
OVERTOPPING FLOOD ELEVATION - 6.7



NOTES

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING, EXCEPT THAT CORED SLAB UNITS HAVE BEEN DESIGNED FOR HS 25.

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 CONTAINS THE FOLLOWING PRECAST CONCRETE PIECES: PARAPETS, END POSTS, BENT CAPS, END BENT CAPS, BACKWALLS, WINGWALLS, AND WING FOOTINGS. EACH PRECAST CONCRETE PIECE SHALL BE STENCILED WITH ITS PIECE MARK. SEE PIECE MARKS CONTAINED IN THESE PLANS.

CLASS AA (4500 PSI) CONCRETE SHALL BE USED IN ALL PRECAST PIECES LISTED ABOVE AND SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

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.

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

ALL PAVEMENT MARKING WILL BE IN ACCORDANCE WITH THE PAVEMENT MARKING PLANS AND SHALL PROVIDE FOR BICYCLES.

THE CONTRACTOR MAY USE ADHESIVELY ANCHORED ANCHOR BOLTS IN PLACE OF THE 4-BOLT METAL RAIL ANCHOR ASSEMBLY IN THE PRECAST PARAPET PIECES. FIELD TESTING OF THE ADHESIVE BONDING SYSTEM IS REQUIRED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY USE ADHESIVELY ANCHORED DOWELS IN PLACE OF THE #6 D1 DOWELS, THE #7 D2 DOWELS, AND THE

6/29/2007 11:05:41 AM c:\bnu\hyde 39\drawings\B-5016.sd_sum.01.dgn

DRAWN BY : D. G. VESTER DATE : 4/07
CHECKED BY : J. A. BATTS DATE : 4/07

SUPERSTRUCTURE SUMMARY									
	50' EXTERIOR CORED SLAB	50' INTERIOR CORED SLAB	TYPE I ELASTOMERIC BEARING PAD	TYPE II ELASTOMERIC BEARING PAD	PIECE P5	PIECE P10	PIECE EPI	PIECE EP2	2 - BAR METAL RAIL
	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LIN.FT.
SUPERSTRUCTURE									
SPAN A	2	10	12	12	2	8	2	2	
SPAN B	2	10	12	12		10			
SPAN C	2	10	12	12		10			
SPAN D	2	10	12	12		10			
SPAN E	2	10	12	12	2	8	2	2	
TOTAL	10	50	60	60	4	46	4	4	480.75

SUBSTRUCTURE SUMMARY											
	PIECE EB1	PIECE EB2	PIECE BW1	PIECE WW1	PIECE WF1	PIECE BI	PIECE B2	12" PRESTRESSED CONCRETE PILES		16" COMPOSITE PRESTRESSED CONCRETE PILES	
	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EA.	LIN.FT.	EA.	LIN.FT.
SUBSTRUCTURE											
END BENT #1	1	1	3	2	2			6	249.0		
BENT #1						2	1			9	418.5
BENT #2						2	1			9	418.5
BENT #3						2	1			9	418.5
BENT #4						2	1			9	418.5
END BENT #2	1	1	3	2	2			6	279.0		
TOTAL	2	2	6	4	4	8	4	12	528.0	36	1674.0

WBS NO. 41485
HYDE COUNTY
STATION: 15+47.38 -L-
REPLACES BRIDGE NO. 39

PLANS PREPARED BY:
SIMPSON
& ASSOCIATES
5520 Omond Drive
Suite 120
Cary, NC 27518
(919) 852-0468
(919) 852-0598 (Fax)
www.simpsonengr.com



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUPERSTRUCTURE & SUBSTRUCTURE SUMMARY					
33' CLEAR ROADWAY - 90° SKEW					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. 90					TOTAL SHEETS 223

