



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

February 14, 2017

Addendum No. 1

RE: Contract # C203993

WBS # 46478.3.1

STATE FUNDED

Tyrrell-Dare Counties (B-5936)

Bridge #7 Over Alligator River On US-64

February 21, 2017 Letting

To Whom It May Concern:

Reference is made to the plans furnished to you on this project.

The following revisions have been made to the plans:

Sheet No.	Revisions
S-1	Revised to add "Asbestos Assessment" to the "Total Bill of Materials"
S-5	Revised to add note concerning "Asbestos Assessment"
S-390	Revised to correct the dowel spacing for the prestressed pile jackets to the intended maximum 6'-0" spacing
S-391	Revised to correct the dowel spacing for the prestressed pile jackets to the intended maximum 6'-0" spacing

Please void the above listed sheets in your plans and staple the revised sheets thereto.

The following revisions have been made to the proposal:

Page No.	Revisions
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 02-14-2017".
Table of Contents	The first page of the Table of Contents has been revised to show the below noted special provision being added
G-28	Added the project special provision entitled "Subletting Of Contract (Second Revision)"

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND DEVELOPMENT
1591 MAIL SERVICE CENTER
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900
Fax: (919) 250-4127
Customer Service: 1-877-368-4968

Location:
1020 BIRCH RIDGE DR.
RALEIGH, NC 27610

Website: www.ncdot.gov

Page No.	Revisions
BPS-1	Revised "Table Of Contents" to include the project special provision entitled "Asbestos Assessment for Control House Renovation Activities"
BPS-42 and New BPS-43 and BPS-44	Revised to add the project special provision entitled "Asbestos Assessment for Control House Renovation Activities"
BPM-40	Added "3." Under 2.0 Materials, A. Conformance within the project special provision entitled "Auxiliary Operating System"

Please void the Proposal Cover and the other revised pages and staple the revised Proposal Cover and other revised pages thereto. Staple new Pages BPS-43 and BPS-44 after revised Page BPS-42.

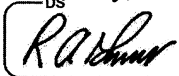
On the item sheets the following **new** pay item has been added:

<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
059-886000000-N- SP	Asbestos Assessment	NEW ITEM	Lump Sum

The Contractor's bid must include this new pay item. The contract will be prepared accordingly.

The Expedite File has been updated to reflect this revision. Please download the Expedite Addendum File and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

Sincerely,



R. A. Garris, PE
Contract Officer

RAG/jag

cc: Mr. Lamar Sylvester, PE	Mr. Ray Arnold, PE
Mr. Jerry Jennings PE	Ms. Theresa Canales, PE
Mr. Rodger Rochelle, PE	Ms. Marsha Sample
Mr. R.E. Davenport, PE	Mr. Mike Gwyn
Mr. Ken Kennedy, PE	Mr. Mitchell Dixon
Ms. Jaci Kincaid	Ms. Penny Higgins
Project File (2)	Ms. Lori Strickland

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH, N.C.

PROPOSAL

INCLUDES ADDENDUM No. 1 DATED 02-14-2017

DATE AND TIME OF BID OPENING: **FEBRUARY 21, 2017 AT 2:00 PM**

CONTRACT ID C203993
WBS 46478.3.1

FEDERAL-AID NO. STATE FUNDED
COUNTY TYRRELL, DARE
T.I.P. NO. B-5936
MILES 2.828
ROUTE NO. US 64
LOCATION BRIDGE #7 OVER ALLIGATOR RIVER ON US-64.

TYPE OF WORK BRIDGE REHABILITATION

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A STRUCTURE PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

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PROPOSAL SHEET**

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Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:

(9-18-12)

SP1 G185

Revise the *2012 Standard Specifications* as follows:

Replace all references to “State Highway Administrator” with “Chief Engineer”.

SUBLETTING OF CONTRACT:

(11-18-2014)

108-6

SP1 G186

Revise the *2012 Standard Specifications* as follows:

Page 1-66, Article 108-6 Subletting of Contract, line 37, add the following as the second sentence of the first paragraph:

All requests to sublet work shall be submitted within 30 days of the date of availability or prior to expiration of 20% of the contract time, whichever date is later, unless otherwise approved by the Engineer.

Page 1-67, Article 108-6 Subletting of Contract, line 7, add the following as the second sentence of the fourth paragraph:

Purchasing materials for subcontractors is not included in the percentage of work required to be performed by the Contractor. If the Contractor sublets items of work but elects to purchase material for the subcontractor, the value of the material purchased will be included in the total dollar amount considered to have been sublet.

SUBLETTING OF CONTRACT (SECOND REVISION):

Page 1-66, Article 108-6 Subletting of Contract, Line 47, change the figure 40% to “25%”

Page 1-67, Article 108-6, Subletting of Contract Lines 5, 6, 7, Delete the entire sentence beginning with the words “In any event....”

**Project Special Provisions
Structures
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Silicone Joint Sealant	(SPECIAL)	BPS-26
Falsework and Formwork	(04-05-12)	BPS-27
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Submittal of Working Drawings	(06-19-15)	BPS-36
Asbestos Assessment for Control House Renovation Activities	(SPECIAL)	BPS-42



DocuSigned by:
Robbie Weisz
 CEA153463B6D43D...
 2/10/2017

2. Submit one hard copy of submittal to the Engineer. Submit a second copy of submittal electronically (PDF via email) or by facsimile, US mail or other delivery service to the appropriate Geotechnical Engineering Unit regional office. Electronic submission is preferred.
3. The Pile Driving Equipment Data Form is available from:
https://connect.ncdot.gov/resources/Geological/Pages/Geotech_Forms_Details.aspx
See second page of form for submittal instructions.
4. Electronic copy of submittal is required. See referenced provision.

**ASBESTOS ASSESSMENT FOR CONTROL HOUSE
RENOVATION ACTIVITIES**

(SPECIAL)

INSPECTION FOR ASBESTOS CONTAINING MATERIAL

Prior to conducting control house renovation activities, the Contractor shall thoroughly inspect the control house or affected components for the presence of asbestos containing material (ACM) using a firm prequalified by NCDOT to perform asbestos surveys. The inspection must be performed by a N.C. accredited asbestos inspector with experience inspecting bridges or other industrial structures. The N.C. accredited asbestos inspector must conduct a thorough inspection, identifying all asbestos-containing material as required by the Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants (NESHAP) Code of Federal Regulations (CFR) 40 CFR, Part 61, Subpart M.

The Contractor shall submit an inspection report to the Engineer, which at a minimum must include information required in 40 CFR 763.85 (a)(4) vi)(A)-(E), as well as a project location map, photos of existing structure, the date of inspection and the name, N.C. accreditation number, and signature of the N.C. accredited asbestos inspector who performed the inspection and completed the report. The cover sheet of the report shall include project identification information. Place the following notes on the cover sheet of the report and check the appropriate box:

- ACM was found
 ACM was not found

REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL

If ACM is found, notify the Engineer. Compensation for removal and disposal of ACM is considered extra work in accordance with Article 104-7 of the Standard Specifications.

An Asbestos Removal Permit must be obtained from the Health Hazards Control Unit (HHCU) of the N.C. Department of Health & Human Services, Division of Public Health, if more than 35 cubic feet, 160 square feet, or 260 linear feet of regulated ACM (RACM) is to be removed from a structure and this work must be completed by a contractor prequalified by NCDOT to perform asbestos abatement. RACM is defined in 40 CFR, Part 61, Subpart

M. Note: 40 CFR 763.85 (a)(4) vi)(D) defines ACM as surfacing, TSI and Miscellaneous which does not meet the NESHAP RACM.

DEMOLITION NOTIFICATION

Even if no ACM is found (or if quantities are less than those required for a permit), a Demolition Notification (DHHS-3768) must be submitted to the HHCU. Notifications and Asbestos Permit applications require an original signature and must be submitted to the HHCU 10 working days prior to beginning demolition activities. The 10 working day period starts based on the post-marked date or date of hand delivery. Demolition that does not begin as originally notified requires submission of a separate revision form HHCU 3768-R to HHCU. Reference the North Carolina Administrative Code, Chapter 10A, Subchapter 41C, Article .0605 for directives on revision submissions.

Contact Information

Health Hazards Control Unit (HHCU)
N.C. Department of Health and Human Services
1912 Mail Service Center
Raleigh, NC 27699-1912
Telephone: (919) 707-5950
Fax: (919) 870-4808

SPECIAL CONSIDERATIONS

Buncombe, Forsyth, and Mecklenburg counties also have asbestos permitting and NESHAP requirements must be followed. For projects involving permitted RACM removals, both the applicable county and the state (HHCU) must be notified.

For demolitions with no RACM, only the local environmental agencies must be notified. Contact information is as follows:

Buncombe County

WNC Regional Air Pollution Control Agency
49 Mt. Carmel Road
Asheville, NC 28806
(828) 250-6777

Forsyth County

Environmental Affairs Department
537 N. Spruce Street
Winston-Salem, NC 27101
(336) 703-2440

Mecklenburg County

Land Use and Environmental Services Agency
Mecklenburg Air Quality
700 N. Tryon Street

Charlotte, NC 28202
(704) 336-5430

ADDITIONAL INFORMATION

Additional information may be found on N.C. asbestos rules, regulations, procedures and N.C. accredited inspectors, as well as associated forms for demolition notifications and asbestos permit applications at the N.C. Asbestos Hazard Management Program website:

www.epi.state.nc.us/epi/asbestos/ahmp.html

BASIS OF PAYMENT

Payment for the work required in this provision will be at the lump sum contract unit price for "Asbestos Assessment". Such payment will be full compensation for all asbestos inspections, reports, permitting and notifications.

system developed by the Contractor shall be compatible with the requirements of these provisions.

2.0 MATERIALS

A. CONFORMANCE

1. All equipment and its installation shall conform to the requirements of the 1988 Standard Specifications for Movable Highway Bridges of the American Association of State Highway and Transportation Officials, 1992 and 1993 revisions except as may be otherwise provided herein.
2. Materials and construction shall conform to the requirements of any applicable local, state and federal rules and ordinances. The Contractor shall obtain any required permits and approvals of all Departments or Agencies having jurisdiction. All work shall be in conformance with the requirements of the United States Coast Guard and local governing authorities.
3. The proposed auxiliary span drive system shall meet or exceed the capabilities of the existing capstan system.

B. MATERIAL REQUIREMENTS

The contractor's plan must meet or exceed these requirements. The materials used to fabricate the final auxiliary system components shall be in accordance with the requirements specified in "General Machinery".

C. EQUIPMENT FOR CONCEPT DESIGN FOR AUXILIARY OPERATING SYSTEM

1. The following describes a concept design to operate the swing span and ancillary equipment.
 - a. Pinion, with shaft and bearings similar to the main pinion assembly currently in use, that will mesh with the rack.
 - b. Bevel gear set to drive the pinion.
 - c. Speed reducer with manual disconnect coupling located on the output shaft. Input shaft shall accommodate the brake drum and can be accomplished with an extended input or double input shafts.
 - d. Manual drum brake shall be capable of braking the span as well as holding the span in heavy wind conditions.
 - e. The auxiliary system shall normally be driven with the use of a hand held electric or pneumatically operated drill. Provisions to accommodate the hand drill shall be incorporated into the speed reducer input(s). The power source for the hand drill shall be designed as a standalone power source.
 - f. Provisions to accommodate hand crank operation shall be incorporated into the speed reducer input(s). The hand crank shall be stored on the bridge adjacent to the auxiliary system.
 - g. Appropriate safety measures to prevent personal injury or damage to the Auxiliary System when not in use.
 - h. A method to operate, or provide equivalent operation of, the traffic signals, warning gates, barrier gates and live load supports

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
ROADWAY ITEMS						
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	1330000000-E	607	INCIDENTAL MILLING	267	SY	
0003	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	22.5	TON	
0004	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	1.5	TON	
0005	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	604	SF	
0006	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	96	SF	
0007	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	104	SF	
0008	4415000000-N	1115	FLASHING ARROW BOARD	2	EA	
0009	4430000000-N	1130	DRUMS	177	EA	
0010	4445000000-E	1145	BARRICADES (TYPE III)	116	LF	
0011	4450000000-N	1150	FLAGGER	800	HR	
0012	4480000000-N	1165	TMA	2	EA	
0013	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	400	LF	
0014	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	400	LF	
0015	4847000000-E	1205	POLYUREA PAVEMENT MARKING LINES (4", *****) (HIGHLY REFLECTIVE ELEMENTS)	59,706	LF	
0016	4900000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	188	EA	

County : Tyrrell, Dare

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
STRUCTURE ITEMS						
0017	0000990000-E	SP	GENERIC MISCELLANEOUS ITEM EPOXY MATERIAL	42 GAL		
0018	8217000000-E	425	REINFORCING STEEL (BRIDGE)	1,000 LB		
0019	8664000000-E	SP	SHOTCRETE REPAIRS	938 CF		
0020	8678000000-E	SP	EPOXY RESIN INJECTION	98.1 LF		
0021	8860000000-N	SP	GENERIC STRUCTURE ITEM AUXILIARY OPERATING SYSTEM	Lump Sum	L.S.	
0022	8860000000-N	SP	GENERIC STRUCTURE ITEM BRIDGE CONTROL SYSTEM	Lump Sum	L.S.	
0023	8860000000-N	SP	GENERIC STRUCTURE ITEM CENTER WEDGE MACHINERY	Lump Sum	L.S.	
0024	8860000000-N	SP	GENERIC STRUCTURE ITEM CENTERING DEVICE MACHINERY	Lump Sum	L.S.	
0025	8860000000-N	SP	GENERIC STRUCTURE ITEM CONTROL HOUSE RENOVATIONS	Lump Sum	L.S.	
0026	8860000000-N	SP	GENERIC STRUCTURE ITEM DISCONNECT SWITCHES	Lump Sum	L.S.	
0027	8860000000-N	SP	GENERIC STRUCTURE ITEM DRY TYPE TRANSFORMER	Lump Sum	L.S.	
0028	8860000000-N	SP	GENERIC STRUCTURE ITEM ELECTRICAL DEMOLITION	Lump Sum	L.S.	
0029	8860000000-N	SP	GENERIC STRUCTURE ITEM ELECTRICAL REFURBISHING	Lump Sum	L.S.	
0030	8860000000-N	SP	GENERIC STRUCTURE ITEM END WEDGE MACHINERY	Lump Sum	L.S.	
0031	8860000000-N	SP	GENERIC STRUCTURE ITEM FIELD MEASURING	Lump Sum	L.S.	
0032	8860000000-N	SP	GENERIC STRUCTURE ITEM GROUNDING	Lump Sum	L.S.	
0033	8860000000-N	SP	GENERIC STRUCTURE ITEM HVAC UNIT	Lump Sum	L.S.	

County : Tyrrell, Dare

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0034	8860000000-N	SP	GENERIC STRUCTURE ITEM JUNCTION AND PULL BOXES	Lump Sum	L.S.	
0035	8860000000-N	SP	GENERIC STRUCTURE ITEM LIGHTING	Lump Sum	L.S.	
0036	8860000000-N	SP	GENERIC STRUCTURE ITEM MOTOR CONTROL CENTER	Lump Sum	L.S.	
0037	8860000000-N	SP	GENERIC STRUCTURE ITEM MOTORS	Lump Sum	L.S.	
0038	8860000000-N	SP	GENERIC STRUCTURE ITEM OPERATION & MAINT MANUALS, TRAINING & AS-BUILT DOCUMENTA- TION	Lump Sum	L.S.	
0039	8860000000-N	SP	GENERIC STRUCTURE ITEM PANELBOARD	Lump Sum	L.S.	
0040	8860000000-N	SP	GENERIC STRUCTURE ITEM RACEWAY	Lump Sum	L.S.	
0041	8860000000-N	SP	GENERIC STRUCTURE ITEM SIREN	Lump Sum	L.S.	
0042	8860000000-N	SP	GENERIC STRUCTURE ITEM STABILIZING MACHINERY	Lump Sum	L.S.	
0043	8860000000-N	SP	GENERIC STRUCTURE ITEM START UP & COMMISSIONING	Lump Sum	L.S.	
0044	8860000000-N	SP	GENERIC STRUCTURE ITEM SUBMARINE CABLE	Lump Sum	L.S.	
0045	8860000000-N	SP	GENERIC STRUCTURE ITEM SWITCHES AND RECEPTACLES	Lump Sum	L.S.	
0046	8860000000-N	SP	GENERIC STRUCTURE ITEM TURNING MACHINERY	Lump Sum	L.S.	
0047	8860000000-N	SP	GENERIC STRUCTURE ITEM UTIL SER, MED VOLT EQUIP, AUTO TRANSFER SWITCH & GENERATOR	Lump Sum	L.S.	
0048	8860000000-N	SP	GENERIC STRUCTURE ITEM WIRE AND CABLE	Lump Sum	L.S.	

County : Tyrrell, Dare

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0049	8867000000-E	SP	GENERIC STRUCTURE ITEM BRIDGE JOINT REMOVAL	9,429 LF		
0050	8867000000-E	SP	GENERIC STRUCTURE ITEM INJECT AND SEAL CRACK	420 LF		
0051	8867000000-E	SP	GENERIC STRUCTURE ITEM PILE JACKETS	7,013.5 LF		
0052	8867000000-E	SP	GENERIC STRUCTURE ITEM PILE WRAP	280 LF		
0053	8867000000-E	SP	GENERIC STRUCTURE ITEM REJACKETS	438 LF		
0054	8867000000-E	SP	GENERIC STRUCTURE ITEM SILICONE JOINT SEALANT	9,489 LF		
0055	8882000000-E	SP	GENERIC STRUCTURE ITEM PRESTRESSED CONCRETE GIRDER FLANGE REPAIR MATERIAL	279 CF		
0056	8882000000-E	SP	GENERIC STRUCTURE ITEM RESTORE SPALLED AREA - EPOXY	80.4 CF		
0057	8892000000-E	SP	GENERIC STRUCTURE ITEM CONCRETE DECK REPAIR FOR EPOXY OVERLAY	566.7 SF		
0058	8892000000-E	SP	GENERIC STRUCTURE ITEM EPOXY OVERLAY SYSTEM - MECHANICALLY DISTRIBUTED	387,507 SF		
0059	8860000000-N	SP	GENERIC STRUCTURE ITEM ASBESTOS ASSESSMENT	Lump Sum	L.S.	

1100/Feb13/Q480496.7/D430227090000/E59

Total Amount Of Bid For Entire Project :

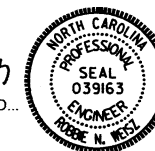
*** TOTAL BILL OF MATERIAL**

BRIDGE	MOBILIZATION	INCIDENTAL MILLING	ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B	ASPHALT BINDER FOR PLANT MIX	△ REINFORCING STEEL	SHOTCRETE REPAIRS	EPOXY RESIN INJECTION	BRIDGE JOINT REMOVAL	PILE JACKETS	REJACKETS	SILICONE JOINT SEALANT	PRESTRESSED CONCRETE GIRDER FLANGE REPAIR MATERIAL	CONCRETE DECK REPAIR FOR EPOXY OVERLAY	EPOXY OVERLAY SYSTEM- MECHANICALLY DISTRIBUTED	ASBESTOS ASSESSMENT
	LUMP SUM	SQ.YDS.	TONS	TONS	LBS.	CU. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	CU. FT.	SO. FT.	SO. FT.	LUMP SUM
TYRRELL #7	LUMP SUM	267	22.5	1.5	1000	938	98.1	9,429	7,013.5	438	9,489	279	566.7	387,507	LUMP SUM

* EXCLUDES BILL OF MATERIAL FOR PIVOT PIER PILE REPAIRS AND FOR MECHANICAL AND ELECTRICAL PLANS, SEE SHT'S SA-1 THRU SA-3 AND SHT'S G-1 THRU M-23.
 △ REINFORCING STEEL QUANTITY IS NOT ANTICIPATED, A TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED REPAIRS ARE ENCOUNTERED.

PROJECT NO. B-5936
TYRRELL COUNTY
 BRIDGE NO. 7

DocuSigned by:
Robbie Weisz
 CEA153463B6D43D...

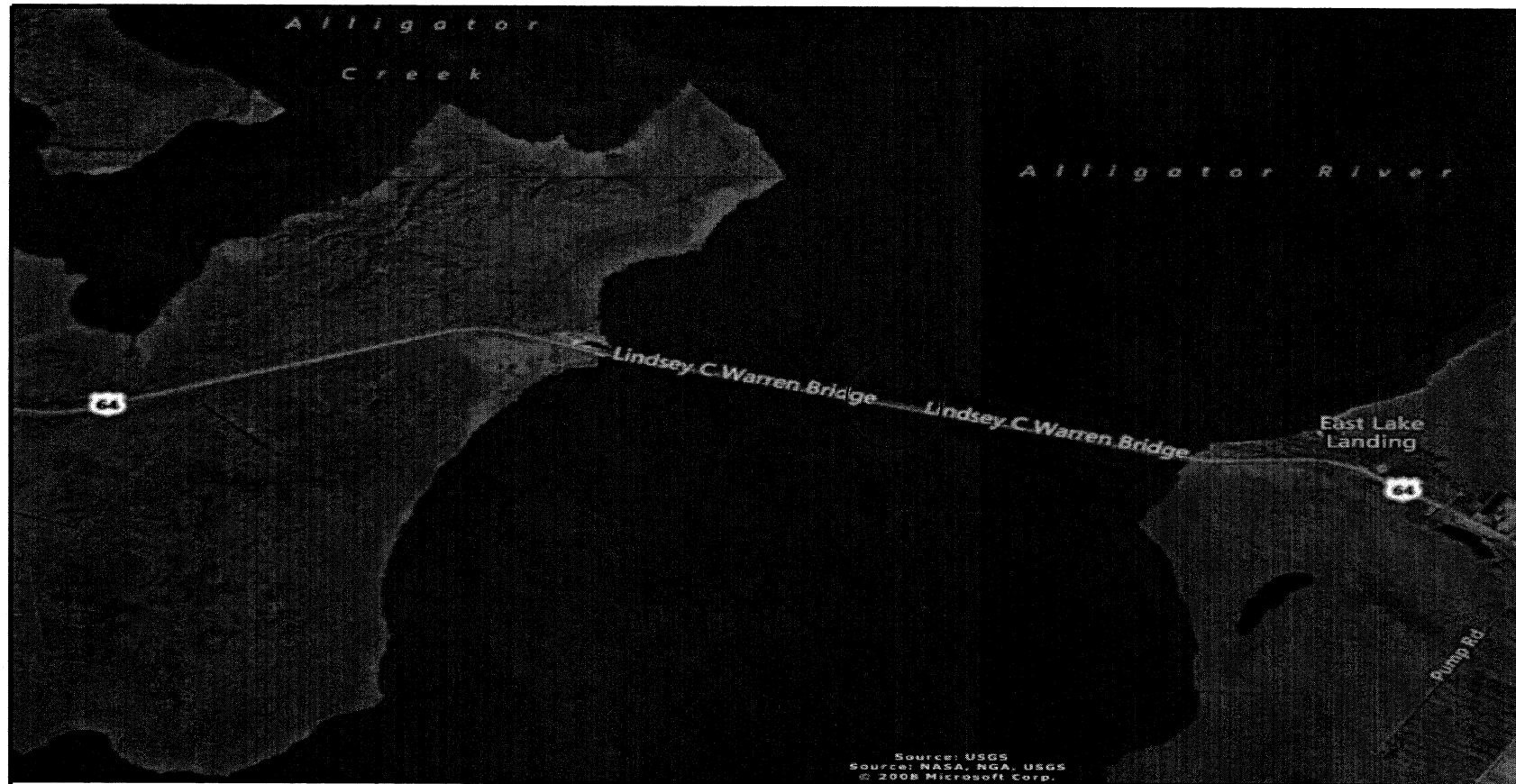


2/10/2017

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH	
TOTAL BILL OF MATERIAL	
REVISIONS	
NO.	DATE
1	3
2	4
SHEET NO.	
S-1	
TOTAL SHEETS	
394	

DRAWN BY : S. T. SANDOR DATE : 06/2016
 CHECKED BY : R. N. WEISZ DATE : 06/2016

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED



LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING THE BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

GENERAL NOTES

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE PREPARATION OF DECK.

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

ROADWAY MILLING IS INCLUDED TO ENSURE A SMOOTH TRANSITION ONTO THE BRIDGE FLOOR. DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL MILL AS REQUIRED TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF BRIDGE.

LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG CENTERLINE OR EDGE OF TRAVEL LANES.

FOR OVERLAY OF BRIDGE WITH EPOXY OVERLAY SYSTEM- MECHANICALLY DISTRIBUTED, SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR PRESTRESSED CONCRETE GIRDER FLANGE REPAIR MATERIAL, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR PILE JACKETS, SEE SPECIAL PROVISIONS.

FOR REJACKETS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT REMOVAL, SEE SPECIAL PROVISIONS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

FOR SECURING VESSELS, SEE SPECIAL PROVISIONS.

FOR MAINTENANCE OF WATER TRAFFIC, SEE SPECIAL PROVISIONS.

FOR WORK IN, OVER, OR ADJACENT TO NAVIGABLE WATERS, SEE SPECIAL PROVISIONS.

FOR ASBESTOS ASSESSMENT, SEE SPECIAL PROVISIONS.

PROJECT NO. B-5936
TYRRELL COUNTY
 BRIDGE NO. 7



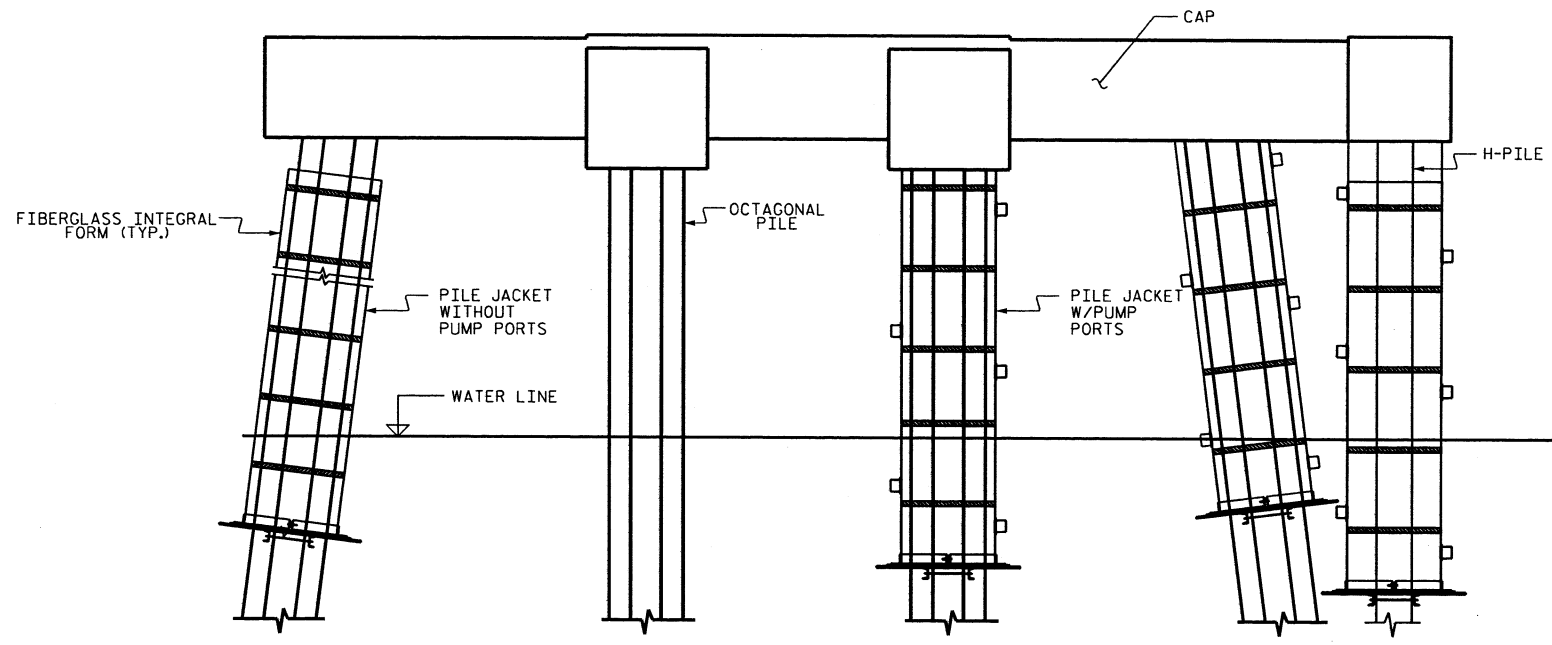
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**GENERAL DRAWING
 BRIDGE #7 ON US64
 OVER THE ALLIGATOR
 RIVER**

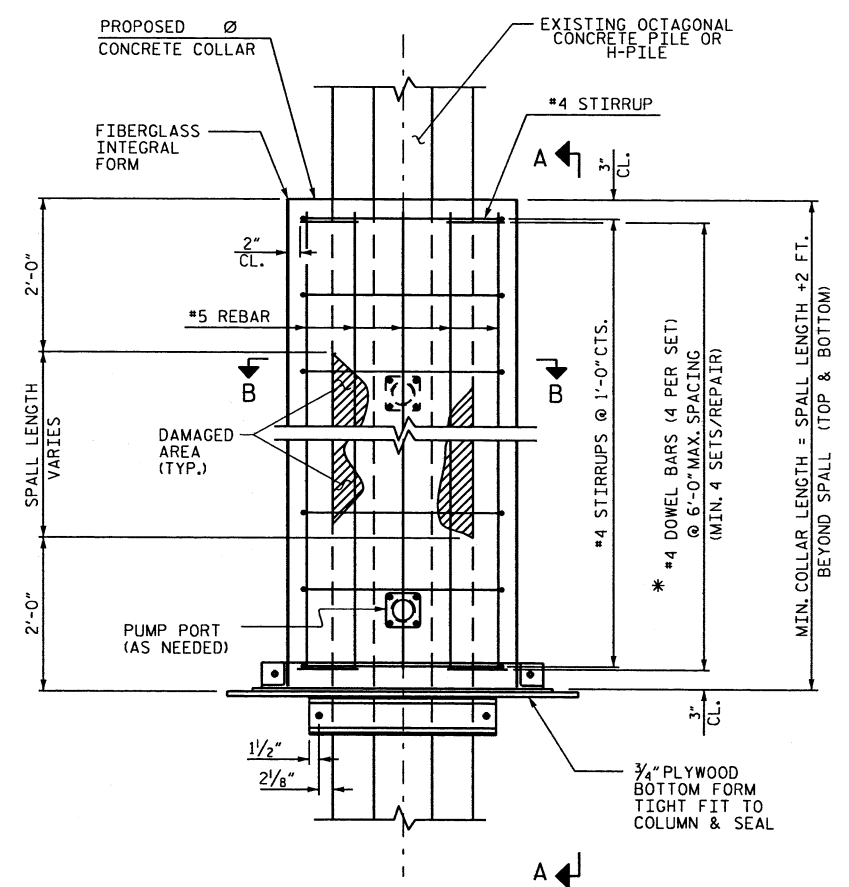
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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-5 TOTAL SHEETS
2			4			

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 CHECKED BY : R. N. WEISZ DATE : 06/2016

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ELEVATION VIEW
(ALL PILE JACKET REPAIR LOCATIONS SIMILAR)



TYPICAL PILE JACKET REPAIR
* FOR H-PILES USE #6 DOWEL BARS

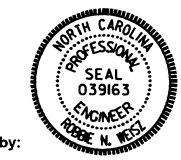
PROJECT NO. B-5936
TYRRELL COUNTY
BRIDGE NO. 7

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PILE JACKET REPAIR

1/31/2017



DocuSigned by:
Robbie Weisz
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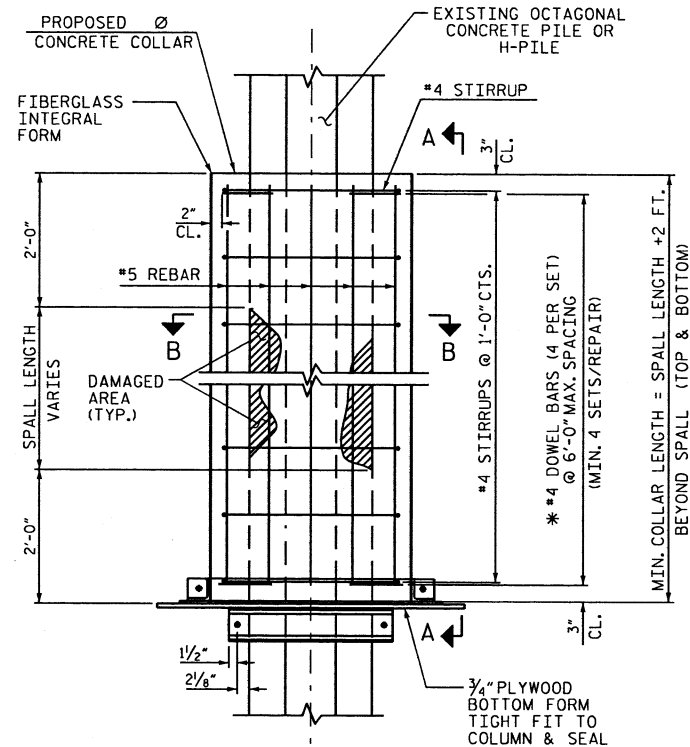
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TOTAL SHEETS
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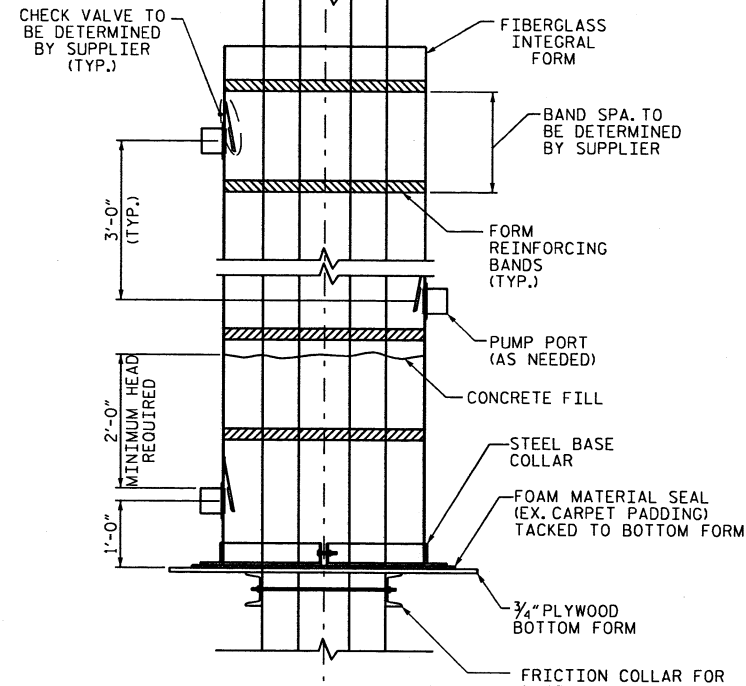
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TYPICAL PILE JACKET WITHOUT PUMP PORTS

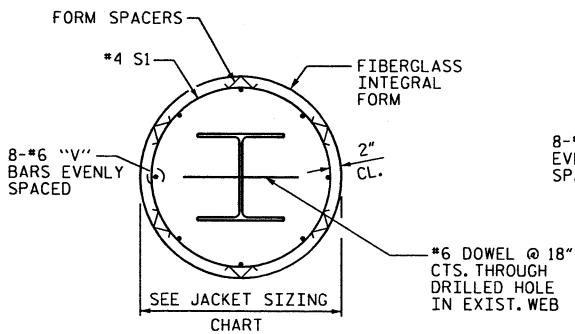


JACKET ELEVATION

* FOR H-PILES USE #6 DOWEL BARS

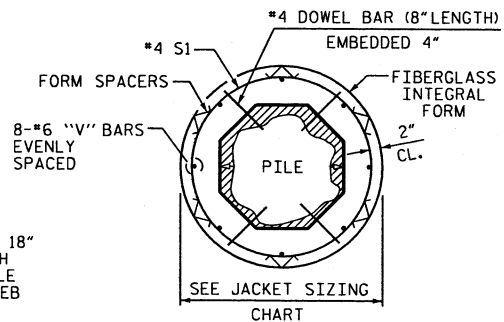


SECTION A-A



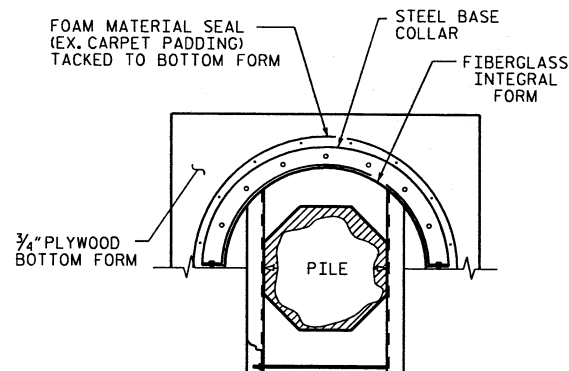
SECTION B-B

H-PILE REPAIR



SECTION B-B

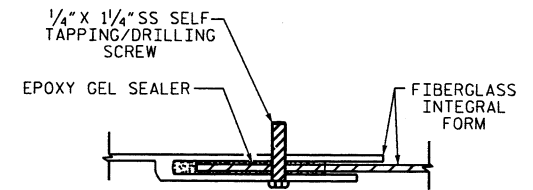
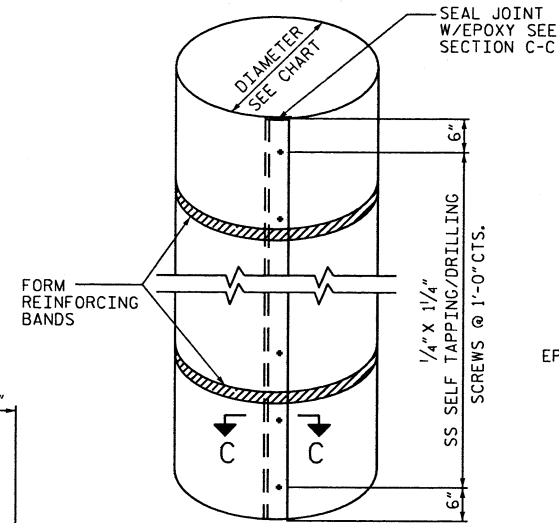
OCTAGONAL PILE REPAIR



PLATFORM DETAIL

SEE JACKET SIZING CHART

PILE/COLUMN SIZE	RECOMMENDED JACKET SIZE	
	ROUND	SQUARE
12" SQUARE	28" Ø	24" X 24"
14" SQUARE	30" Ø	26" X 26"
16" SQUARE	34" Ø	28" X 28"
20" SQUARE	38" Ø	32" X 32"
24" SQUARE	44" Ø	36" X 36"
30" SQUARE	N/A	42" X 42"
ROUND	PILE Ø + 10"	N/A
OCTAGONAL	PILE Ø + 10"	N/A



SECTION C-C

FIBERGLASS INTEGRAL FORM

REPAIR SEQUENCE

- 1) COMPLETELY REMOVE ALL LOOSE OR DELAMINATED CONCRETE, OIL, GREASE, LAITANCE AND OTHER CONTAMINANTS. PREPARE CONCRETE USING ACCEPTABLE MECHANICAL MEANS AND CONCRETE CLEANERS AND DEGREASERS AS NECESSARY TO OBTAIN CLEAN, SOUND AND ROUGH SURFACES. COARSE AGGREGATE SHALL BE EXPOSED. CONCRETE PILE SURFACES SHOULD BE SOUND AND FREE OF CONTAMINATION. WHERE MARINE GROWTH OR OTHER CONTAMINANTS EXIST, INCLUDING VISIBLE SIGNS OF CORROSION, A HIGH PRESSURE WATER BLAST SHOULD BE UTILIZED TO ENSURE A CLEAN, SOUND, CONTAMINANT-FREE SURFACE FOR OPTIMUM BOND.
- 2) CLEAN REINFORCING STEEL & COLUMNS OR PILE, OF ALL RUST AND FOREIGN MATERIAL.
- 3) DETERMINE FIBERGLASS INTEGRAL FORM LENGTH. CONTRACTOR SHALL ESTABLISH MEAN LOW WATER (MLW) ELEVATION AND SET BOTTOM OF JACKET A MINIMUM OF 2' BELOW THAT ELEVATION. ADDITIONALLY, THE MINIMUM LENGTH SHALL BE 2' ABOVE AND BELOW THE REMOVED DELAMINATED OR LOOSE CONCRETE.
- 4) FOR CONCRETE PILES DRILL 5/8" HOLES AND PLACE #4 DOWELS W/ EPOXY GROUT. FOR H-PILES DRILL HOLES AND PLACE #6 DOWELS.
- 5) BUILD THE REBAR CAGE BY PLACING THE #4 STIRRUPS AND VERTICAL REINFORCING STEEL IN ACCORDANCE WITH THE PROJECT DRAWING.
- 6) INSTALL FORM SPACERS TO INSURE ADEQUATE CONCRETE COVER AT ALL PARTS OF THE SLEEVE.
- 7) INSTALL THE LEAVE-IN PLACE FIBERGLASS FORM (ALSO CALLED JACKET OR COLLAR). THE DIAMETER OF THE JACKET SHOULD BE LARGE ENOUGH TO IN-CIRCLE THE PILE WHILE PROVIDING A MINIMUM OF 5" TOTAL CLEARANCE, 2" OF CLEARANCE BETWEEN THE PILE AND THE REINFORCING STEEL AND 2" OF CLEARANCE BETWEEN THE REINFORCING STEEL AND THE FORM.. (SEE JACKET SIZING CHART)
- 8) INSERT CONCRETE PUMP HOSE THRU TOP OF JACKET AND EXTEND TO JUST ABOVE THE BOTTOM AND PUMP AT A FLOW RATE TO THE DESIRED FILL ELEVATION. IF SITE CONDITIONS PROHIBIT INSERTING PUMP HOSE THRU TOP OF JACKET THEN INSTALL PUMP PORTS AND PLACE CONCRETE AS SHOWN IN THE DETAILS.
- 9) PLACE CONCRETE FILL. INSTALL PUMP PORT(S) IN JACKET FOR UNDERWATER APPLICATIONS. PORTS SHOULD HAVE A CHECK VALVE TO KEEP BACK FLOW OF CONCRETE ONCE PUMP NOZZLE IS REMOVED. FOR CONCRETE PLACEMENTS GREATER THAN 5' USE MULTIPLE PORTS SPACED 3' VERTICALLY AND ALTERNATING 180° FROM PREVIOUS PORT. A MINIMUM OF 2' OF CONCRETE HEAD, IS NEEDED ABOVE PORT PRIOR TO CHANGING PORTS.
- 10) REMOVE FORM WORK WHEN CONCRETE STRENGTH ACHIEVES 3,000 PSI.

PROJECT NO. B-5936

TYRRELL COUNTY

BRIDGE NO. 7

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PILE JACKET REPAIR



1/31/2017

DocuSigned by:
Robbie Weisz

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