



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

October 22, 2007

U.S. Army Corps of Engineers
Raleigh Regulatory Field Office
6508 Falls of the Neuse Road, Suite 120
Raleigh, North Carolina 27615

ATTN: Mr. John Thomas
NCDOT Coordinator

SUBJECT: **Permit Modification Request for TIP I-2511CB**, I-85 Improvements from North of SR 1002 to North of SR 2120 Near the Town of Spencer in Rowan County, State Project No. 8.1631503, Tip No. I-2511CB.

Debit \$570 for Major WQC modification from WBS Element No. 34163.1.2.

REFERENCE: 404 Individual Permit issued October 7, 2004 (Modifications dated September 20, 2005, and December 16, 2005); USACE Action ID 200221534.

401 Water Quality Certification No. 3456 issued April 20, 2004 (Modifications dated January 7, 2005, February 9, 2005, October 6, 2005, and November 30, 2005); DWQ Project No. 040271.

Dear Sir:

The North Carolina Department of Transportation (NCDOT) is requesting a permit modification for the above referenced project. The need for the permit modification arose when solid rock was discovered during construction at Permit Site 1 on the west side of I-85 where a headwall had been previously proposed. To construct the headwall would require substantial blasting of bedrock in the stream bed in order to provide a large enough footing for the headwall. The blasting activity would require that McCanless Road be closed to traffic for an additional two weeks. NCDOT proposes to eliminate the headwall from the construction plans and extend the existing 30-inch Reinforced Concrete Pipe (RCP) an additional 13 feet. This will add an additional 13 linear feet of permanent stream impact but will minimize disturbance in the stream bed and shorten the construction time. Attached please find the updated permit drawings and half-size plan sheets of the impact area.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
NATURAL ENVIRONMENT UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-715-1334 or
919-715-1335

FAX: 919-715-5501

WEBSITE: WWW.NCDOT.ORG

LOCATION:
PARKER LINCOLN BUILDING
2728 CAPITAL BLVD. SUITE 240
RALEIGH NC 27604

The revised design does not compromise NCDOT's compliance with the existing permit conditions. No new impact sites have resulted from the design modifications. Minor design changes have resulted in an increase in impacts at only one site (Site 1). The design modifications have been evaluated for compliance with the avoidance/minimization criteria and are in compliance with all previous Individual Permit factors, including the following:

- Protected Species,
- Cultural Resources,
- Aquatic Life passage, and
- FEMA compliance.
-

Modification History

The original permit, dated October 7, 2004, authorized 2,218 linear feet of permanent stream impacts (994 linear feet to Town Creek and 1,224 linear feet to UTs to Town Creek), 0.051 acre of permanent impacts to riverine wetlands, and 0.47 acre of permanent impacts to non-riverine wetlands. The permit modification issued by the USACE (September 20, 2005) authorized 2,060 linear feet of permanent stream impacts (a reduction of 158 linear feet), 0.049 acre of permanent riverine wetland impacts (a reduction of 0.002 acre) and 0.47 acre of permanent non-riverine wetland impacts (unchanged). A second permit modification was issued by the USACE on December 16, 2005, in which stream and wetland impacts were not altered, only the staging technique of the onsite stream mitigation construction at Site 5 changed.

Proposed Modification

The following table summarizes the jurisdictional impacts currently permitted at each site with the exception of Site 1, which reflects the proposed increase in impacts.

Site	Permanent Wetland Impacts (acres)*		Temporary Stream Impacts (acre)	Permanent Stream Impacts (linear feet)	Stream Impacts Requiring Mitigation (linear feet)	Natural Channel Design (linear feet)
	Riverine	Non-Riverine				
1	0	0	< 0.01	115 (+13)	115 (+13)	0
2	0	0	< 0.01	163	163	0
3	0	0	< 0.01	80	0	0
4	0.002	0	< 0.01	90	90	0
5	0	0	0	864	864	1,375
6	0.047	0	< 0.01	200	37	0
7A & B	0	0	0.01	362	200	0
8	0	0.47	< 0.01	85	0	0
9	0	0	0.03	114	114	0
10	0	0	0	0	0	0
Total	0.049	0.47	0.05	2,073 (+13)	1,583 (+13)	1,375

* = Includes fill, excavation, and mechanized clearing. (+/-) = Indicates the impact increase or decrease

Following is a description of the design modification and the associated changes to the previously permitted stream impacts at Site 1.

Site 1, Sheet 4 of 35

Station 647+50 – L – (LT/RT)

The design for the existing RCP extension in UT to Town Creek is being proposed for modification to eliminate the headwall previously permitted due to the amount of blasting of bedrock in the stream channel that would be required to construct the footing for the headwall. The additional 13 linear feet of permanent stream impact is from the proposed extension of the RCP. The quantity of temporary stream impacts associated with the installation of the pipe extension is less than was associated with the headwall, although the reportable quantity (<0.01 acre) remains unchanged. The area of temporary impact will be shifted 13 feet further downstream to the end of the proposed RCP extension.

Authorized Impact: 102 linear feet permanent stream and <0.01 acre of temporary stream impacts;

Proposed Impact: 115 linear feet permanent stream and <0.01 acre of temporary stream impacts.

Impact change: increase of 13 linear feet of permanent stream impacts (which requires mitigation through EEP).

Mitigation Strategy

Of the 2,218 linear feet of permanent stream impact that was originally permitted, 1,642 linear feet of impact required mitigation, with 1,375 linear feet of that impact to be mitigated by on-site natural stream design. The mitigation for the remaining 267 linear feet of permanent stream impact was obtained through EEP. The September 2005 permit modification resulted in an overall reduction of 158 linear feet of permanent stream impact, which included a reduction of 72 linear feet of stream impact that required EEP mitigation. The impacts to be offset by mitigation through EEP were thus reduced to 195 linear feet. With the addition of the proposed 13 linear feet of permanent impact to a UT designated as requiring mitigation in this application, the revised stream impacts to be offset by mitigation through EEP are 208 linear feet. The EEP currently lists mitigation for 267 linear feet of stream impact for this project. As the current stream impacts requiring mitigation, including the additional 13 linear feet proposed in this application, are below the amount currently authorized through EEP, no additional mitigation is required with this application.

Regulatory Approvals

The NCDOT respectfully requests that the referenced Section 404 Permit be modified to reflect the revisions outlined in this letter. The NCDOT is also hereby requesting a modification of the 401 Water Quality Certification from the NCDWQ. In compliance with Section 143-215.3D(e) of the NCAC, we have provided a method of debiting \$570, as noted in the subject line of this application, as payment for processing the Section 401 permit modification application. We are providing five copies of this application to the North Carolina Department of Environment and Natural Resources, NCDWQ for their review.

If you have any questions or need additional information, please contact Bill Barrett at (919) 715-1624.

Respectfully,



Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

attachments:

Permit Drawings - Sheet 4 of 35, Sheet 4 of 35 (w/ contours), Sheet 5 of 35, and Sheet 34 of 35.
Half Size Plan Sheets – Sheet 5, and Sheet 5 (w/ contours).

cc:

w/attachment

Mr. John Hennessy, NCDWQ (5 Copies)
Ms. Marla Chambers, NCWRC
Ms. Kathy Matthews, USEPA
Mr. Ronald Mikulak, USEPA – Atlanta, GA
Mr. Clarence W. Coleman, P.E., FHWA
Ms. Marella Buncick, USFWS
Dr. David Chang, P.E., Hydraulics
Mr. Mark Staley, Roadside Environmental
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Greg Perfetti, P.E., Structure Design
Mr. S. P. Ivey, P.E., Division Engineer
Mr. Kent Boyer, DEO
File: I-2511CB

w/o attachment

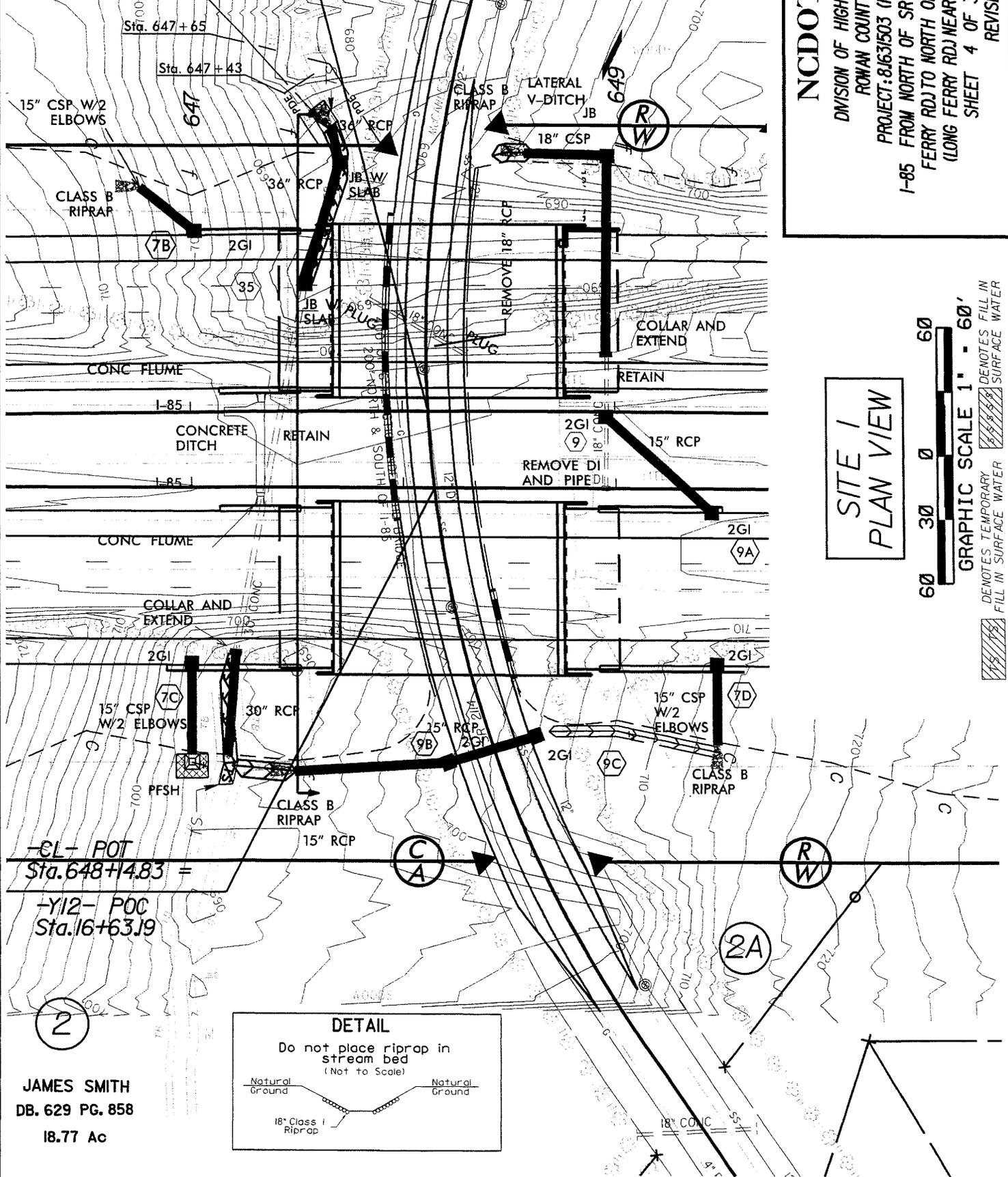
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Mr. Eric Midkiff, P.E., PDEA Project Planning Engineer
Ms. Beth Harmon, EEP
Mr. Todd Jones, NCDOT External Audit Branch
Mr. Carl Goode, PE, Human Environment Unit Head

NCDOT

DIVISION OF HIGHWAYS
ROWAN COUNTY

PROJECT: 81631503 (1-251CB)
I-85 FROM NORTH OF SR 1002 (BRINGLE
FERRY RD.) TO NORTH OF SR 2120
(LONG FERRY RD.) NEAR SPENCER
SHEET 4 OF 35
REVISED 10/22/07

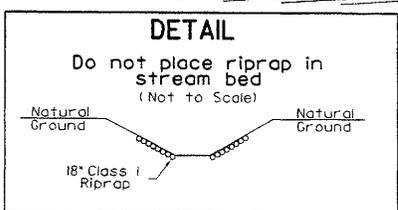
SEE DETAIL THIS SHEET
CLASS 1 RIPRAP; DO NOT PLACE
RIPRAP IN STREAM BOTTOM



**SITE 1
PLAN VIEW**



DENOTES TEMPORARY FILL IN SURFACE WATER
FILL IN SURFACE WATER



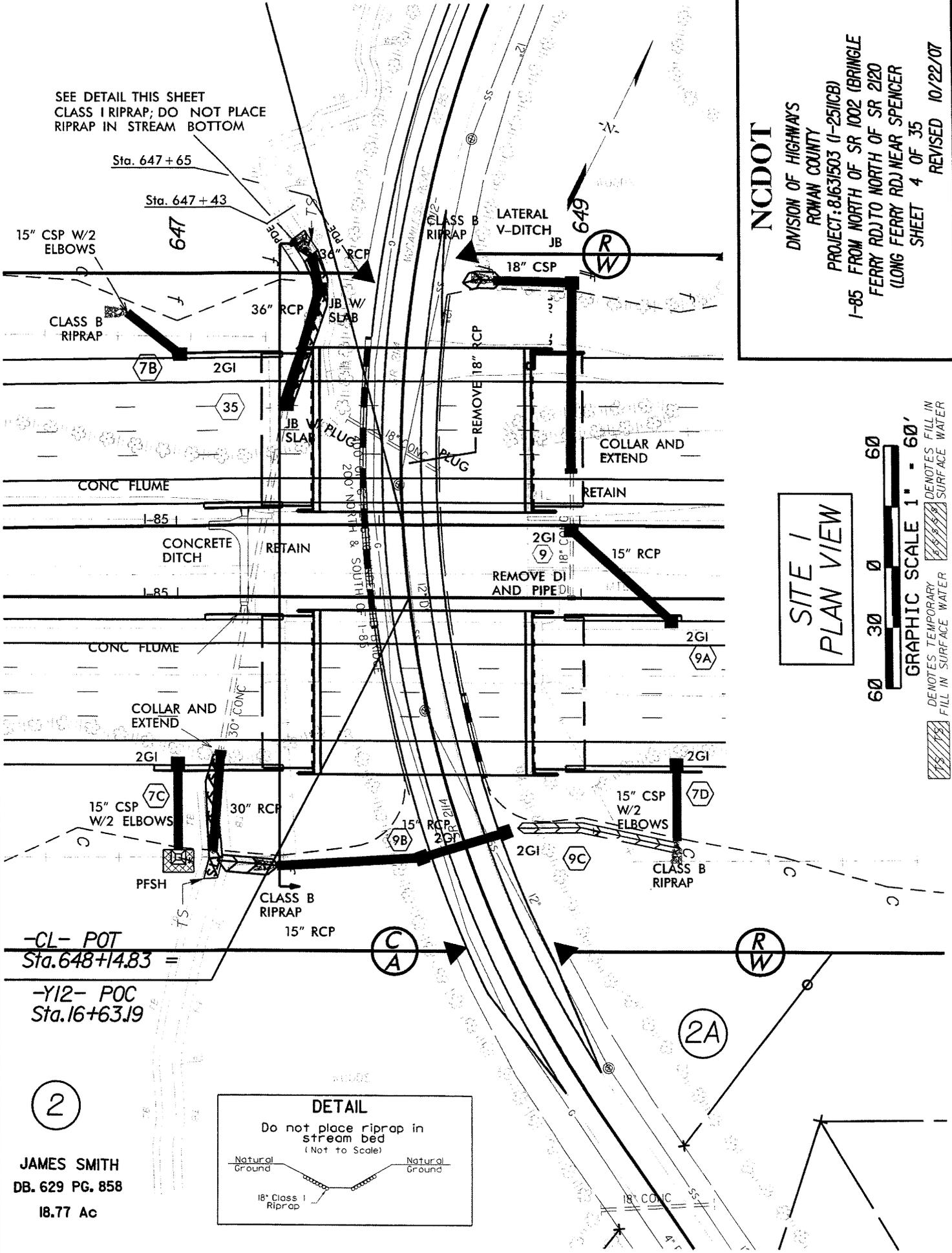
JAMES SMITH
DB. 629 PG. 858
18.77 Ac

SEE DETAIL THIS SHEET
CLASS I RIPRAP; DO NOT PLACE
RIPRAP IN STREAM BOTTOM

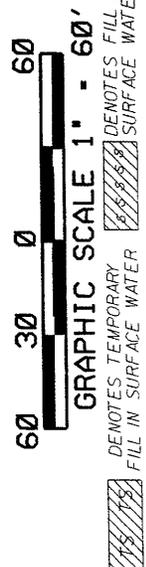
NCDOT

DIVISION OF HIGHWAYS
ROWAN COUNTY

PROJECT: 81631503 (1-25)(CB)
I-85 FROM NORTH OF SR 1002 (BRINGLE
FERRY RD) TO NORTH OF SR 2120
(LONG FERRY RD) NEAR SPENCER
SHEET 4 OF 35
REVISED 10/22/07

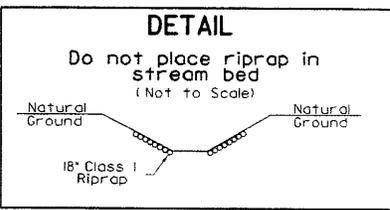


**SITE 1
PLAN VIEW**

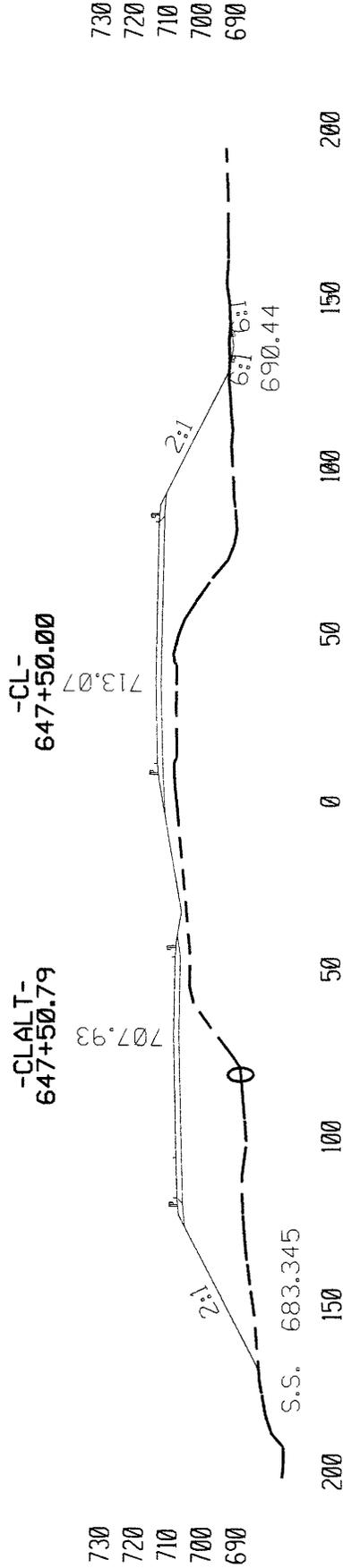


2

JAMES SMITH
DB. 629 PG. 858
18.77 Ac



-CL- POT
Sta. 648+14.83 =
-Y12- POC
Sta. 16+63.19



**SITE 1
CROSS SECTION VIEW**



NCDDOT
 DIVISION OF HIGHWAYS
 ROWAN COUNTY
 PROJECT: 81631503 (1-251ICB)
 I-85 FROM NORTH OF SR 1002 (BRINGLE
 FERRY RD) TO NORTH OF SR 2120
 (LONG FERRY RD) NEAR SPENCER
 SHEET 5 OF 35
 DATE 10/22/07

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Fill In Wetlands (ac)	Temp.Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Fond) (ac)	Temp.Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)	
1	64+50-L-(LT/RT)	30' RCP	0	0	0	0	0.000	0	< 0.01	115	0	
2	680+00-L-(LT/RT)	30' RCP	0	0	0	0	0.020	0	< 0.01	153	0	
3	48+67-C5R-(LT)	18' RCP	0	0	0	0	0.007	0	< 0.01	80	0	
4	CRFIC 18+00	18' RCP	0	0	0	0.002	0.020	0	< 0.01	90	0	
5	CRF18 18+00 to CRP1A 28+00	NONE	0	0	0	0	0.6+0	0	0	864	1375	
6	31+40 -CSRC- (LT)	NONE	0.047	0	0	0	0.009	0	< 0.01	200	0	
7A	807+50-L- (RT)	18' 30' RCP	0	0	0	0	0.020	0	< 0.01	152	0	
7B	812+23 -L- (LT/RT)	8' 18' RCBC	0	0	0	0	0.030	0	0.01	200	0	
8	73+00 -CSR-	NONE	0.3	0	0	0.7	0.000	0	< 0.01	85	0	
9	752+65.85-L-(LT/RT)	4.11x3' RCBC	0	0	0	0	0.000	0	0.030	14	0	
10	63+97.5 to 66+58.5 CSW	3-span bridge	0	0	0	0	0.000	0	0	0	0	
TOTALS:			0.347	0	0	0.72	0.655	0	0.05	2073	1375	

- SITE 3: 80ft. Does not require mitigation.
- SITE 6: 153ft. Does not require mitigation.
- 377ft. Does require mitigation
- SITE 7A: 152ft. Does not require mitigation.
- SITE 8: 85ft. Does not require mitigation.

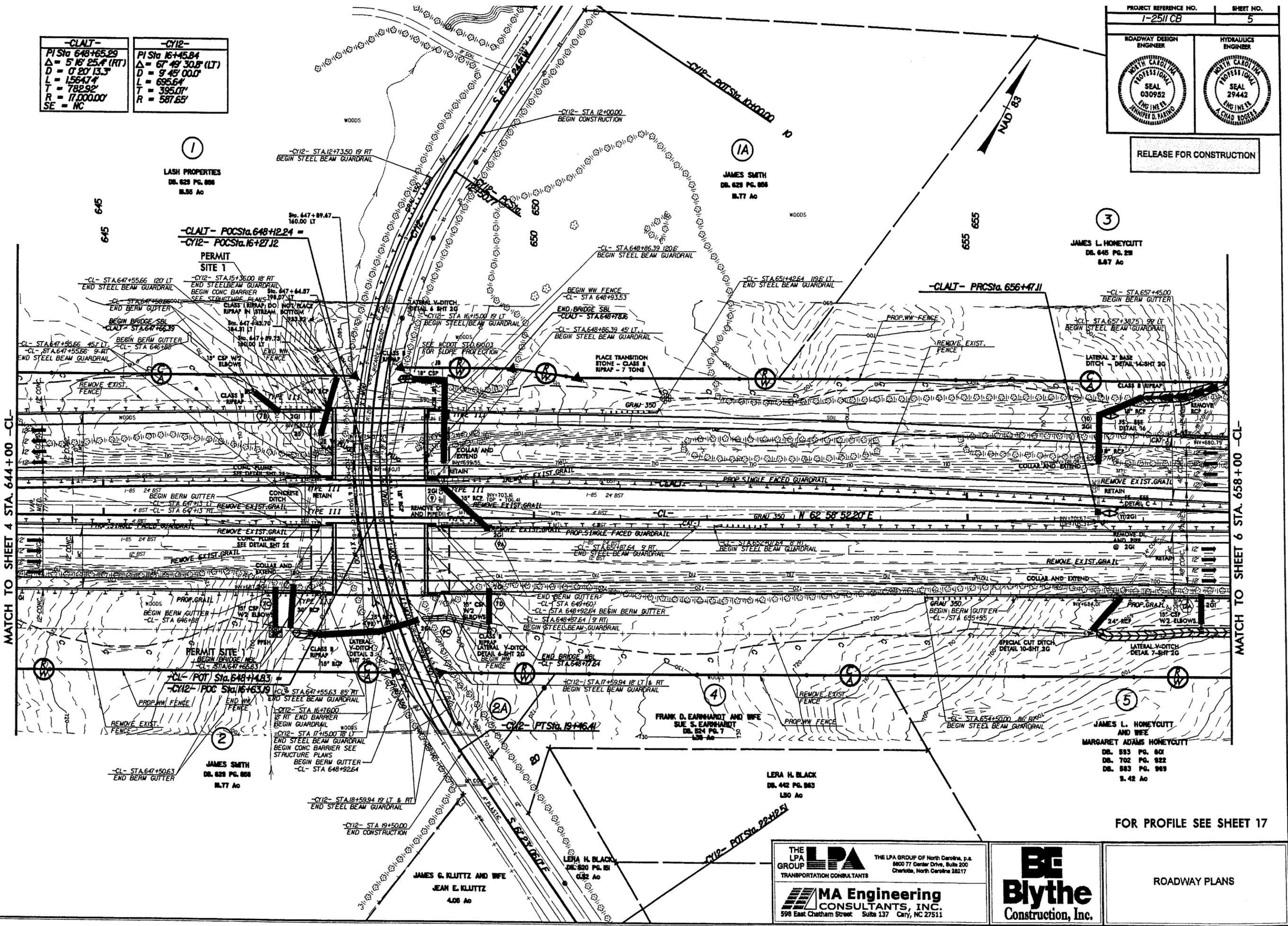
Temporary In-stream work areas = 200 linear feet (0.047 acres).

NCDOT
 DIVISION OF HIGHWAYS
 ROWAN COUNTY
 PROJECT: 81631503 (1-251ICB)
 I-85 FROM NORTH OF SR 1002 (BRINGLE FERRY RD.) TO NORTH OF SR 2120 (LONG FERRY RD.) NEAR SPENCER
 SHEET 34 OF 35 10/22/07

PROJECT REFERENCE NO. 1-2511 CB	SHEET NO. 5
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 030952 ENGINEER KENNETH D. HADDO	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 29442 ENGINEER A. CHAD ROGERS

RELEASE FOR CONSTRUCTION

-CLALT- PI Sta 648+165.29 Δ = 5' 16" 25.4' (RT) D = 0' 20" 13.3" L = 1564.74 T = 782.92 R = 17,000.00' SE = NC	-CY12- PI Sta 16+45.84 Δ = 67' 49" 30.8' (LT) D = 9' 45" 00.0" L = 695.64 T = 395.07' R = 587.65'
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MATCH TO SHEET 4 STA. 644+00 -CL-

MATCH TO SHEET 6 STA. 658+00 -CL-

FOR PROFILE SEE SHEET 17

REVISIONS

OR AUG-2007 10:37
p:\projects\10191\10191.dwg
c:\p\10191\10191.dwg

THE LPA GROUP
TRANSPORTATION CONSULTANTS

MA Engineering
CONSULTANTS, INC.
598 East Chatham Street, Suite 137 Cary, NC 27511

BE Blythe
Construction, Inc.

ROADWAY PLANS

JAMES L. HONEYCUTT AND WIFE
MARGARET ADAMS HONEYCUTT
DB. 583 PG. 801
DB. 702 PG. 922
DB. 583 PG. 949
S. 42 Ac

FRANK D. EARNHARDT AND WIFE
SUE S. EARNHARDT
DB. 824 PG. 7
L38 Ac

LERA H. BLACK
DB. 442 PG. 863
L50 Ac

JAMES G. KLUTTZ AND WIFE
JEAN E. KLUTTZ
4.06 Ac

JAMES SMITH
DB. 629 PG. 868
N.77 Ac

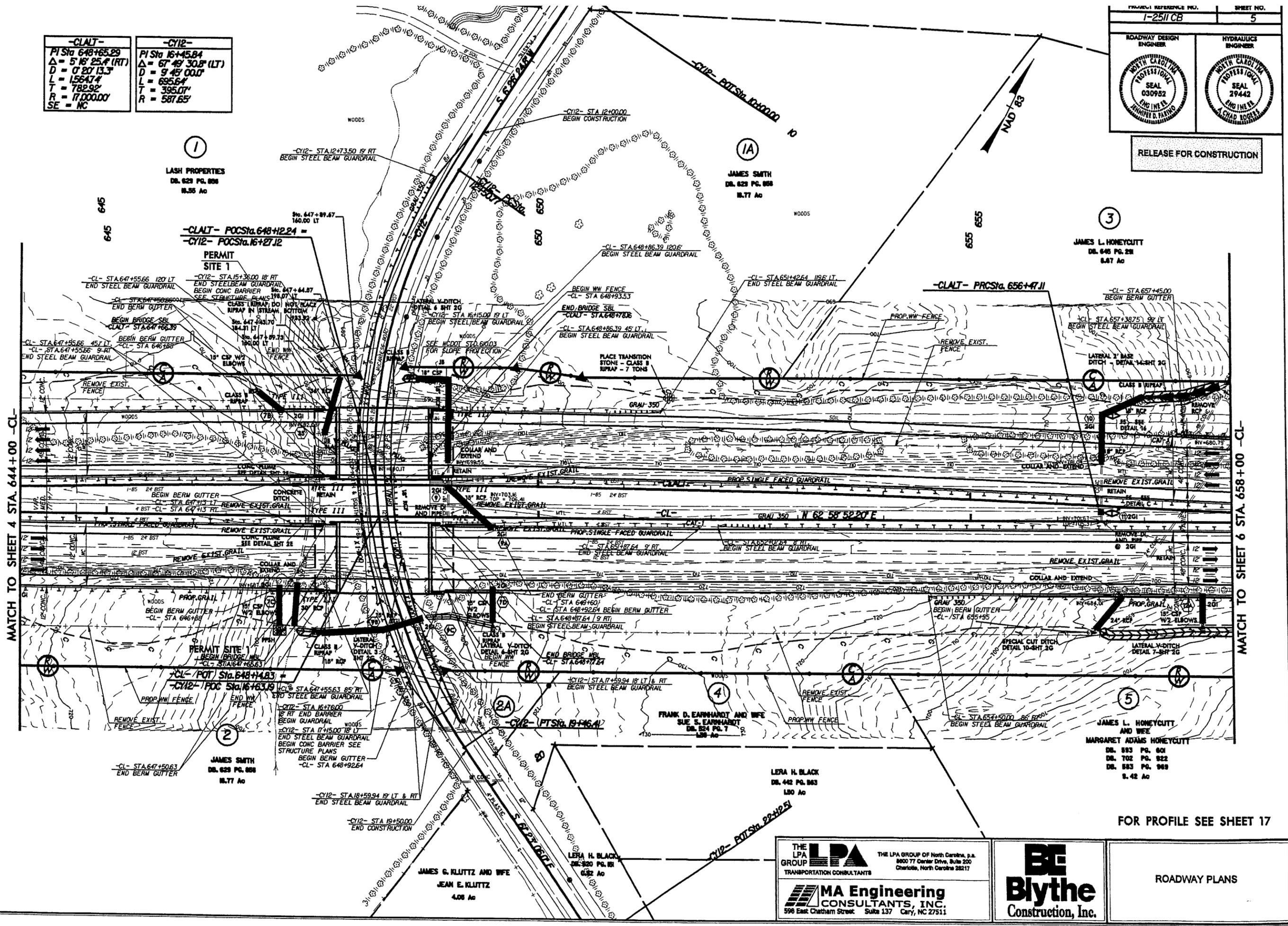
JAMES L. HONEYCUTT
DB. 645 PG. 28
8.87 Ac

JAMES SMITH
DB. 629 PG. 868
N.77 Ac

LASH PROPERTIES
DB. 629 PG. 868
N.95 Ac

PROJECT REFERENCE NO. 1-2511 CB	SHEET NO. 5
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
RELEASE FOR CONSTRUCTION	

-CLALT- PI Sta 648+65.29 Δ = 5' 16" 25.4 (RT) D = 0' 20" 13.3 L = 15647.4 T = 78292' R = 17,000.00 SE = NC	-C112- PI Sta 16+45.84 Δ = 67' 49" 30.8 (LT) D = 9' 45" 00.0 L = 695.64 T = 395.07 R = 587.65
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MATCH TO SHEET 4 STA. 644+00 -CL-

MATCH TO SHEET 6 STA. 658+00 -CL-

①
LASH PROPERTIES
DB. 629 PG. 808
18.55 Ac

①A
JAMES SMITH
DB. 629 PG. 808
18.77 Ac

③
JAMES L. HONEYCUTT
DB. 646 PG. 28
8.87 Ac

②
JAMES SMITH
DB. 629 PG. 808
18.77 Ac

④
FRANK D. EARNHARDT AND WIFE
SUE S. EARNHARDT
DB. 824 PG. 7
1.86 Ac

⑤
JAMES L. HONEYCUTT
AND WIFE
MARGARET ADAMS HONEYCUTT
DB. 883 PG. 801
DB. 702 PG. 822
DB. 883 PG. 908
8.42 Ac

LELA H. BLACK
DB. 442 PG. 863
1.80 Ac

JAMES G. KLUTTZ AND WIFE
JEAN E. KLUTTZ
4.08 Ac

FOR PROFILE SEE SHEET 17

THE LPA GROUP
TRANSPORTATION CONSULTANTS

LPA

THE LPA GROUP OF North Carolina, p.a.
8000 77 Center Drive, Suite 200
Charlotte, North Carolina 28217

MA Engineering
CONSULTANTS, INC.
596 East Chatham Street, Suite 137 Cary, NC 27511

BE Blythe
Construction, Inc.

ROADWAY PLANS

09-AUG-2007 11:01
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