



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 30, 2010

US Army Corps of Engineers
Raleigh Regulatory Field Office
3331 Heritage Trade Dr., Suite 105
Wake Forest, NC 27587

Attention: Mr. John Thomas
NCDOT Coordinator, Division 9

Subject: **Application for a Modification to Section 404 Individual Permit and Individual Section 401 Water Quality Certification** for the widening of I-85 from north of SR 2120 (Long Ferry Road) in Rowan County to south of NC 150 in Davidson County. Federal Aid Project No. NHFIMF-85-3(197)81, WBS 34156.3.GV3, Division 9, TIP No. I-2304AC.

Debit \$570 from WBS 34156.3.GV3

Reference: Individual 401 Certification No. 3455 issued March 19, 2004
Individual 401 Certification No. 3455 Modification issued November 22, 2004
Individual 404 Permit USACE Action ID 1998-21203 issued December 16, 2004
Individual 404 Permit Extension issued April 1, 2009
Individual 404 Permit Modification issued October 7, 2010
Individual 401 Certification Modification issued October 15, 2010

Dear Sir:

The North Carolina Department of Transportation (NCDOT) proposes a modification to the existing Individual Section 404 Permit and Section 401 Water Quality Certification for Permit Impact Site 2 of the above referenced project. The initial Site 2 permit modification was received on October 18, 2010. Based on the plan drawings, only 10 feet of hand clearing is allowed from the end of the bent cap into the wetlands. Due to future maintenance issues with de-icing, the encroaching canopy vegetation, and the safety of the travelling public, NCDOT is requesting an additional 10 feet of hand clearing on the outside of the bridges for a total of 20 feet. Enclosed with this application is the Ecosystem Enhancement Program (EEP) confirmation letter and revised permit drawings.

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

TELEPHONE: 919-431-2000
FAX: 919-431-2001 or
919-431-2002

WEBSITE: WWW.NCDOT.ORG

LOCATION:
4701 ATLANTIC AVE.
SUITE 116
RALEIGH NC 27604

The revised design does not compromise NCDOT's compliance with the existing permit conditions. The revision has been evaluated for compliance with the avoidance/minimization criteria and is in compliance with all previous issues, including the following:

- Protected Species
- Aquatic life passage
- FEMA compliance
- Cultural resources

Permit Site 2

The project is located in HUC 03040103 of the Yadkin River Basin. This modification application is specific to Site 2 for which a 404 Permit Modification was issued on October 7, 2010 and a Section 401 Permit Modification was issued on October 15, 2010. This modification will result in 1.28 acres of additional hand clearing impacts in riparian wetlands at Site 2. Revised total hand clearing impacts at Site 2 are 7.87 acres.

Mitigation

The NCDOT does not believe mitigation for hand clearing is warranted because the hand cleared areas will not lose Clean Water Act Jurisdiction status nor decline in quality. However, the USACE has indicated that any 404 permit issued for this project will require hand clearing mitigation.

Compensatory mitigation for these additional hand clearing impacts of 1.28 acres will be mitigated at 1:5 as done in the previous Site 2 modification. Mitigation needed is 0.26 acres and 0.16 acres will be debited from the Yadkin River Bridge Site. The remaining 0.10 acres of required riparian wetland mitigation will be provided by the EEP based on their letter dated April 30, 2004.

The Yadkin River Bridge Site is located with HUC 03040103 in Rowan County. The mitigation site occurs within Transportation Improvement Program (TIP) project I-2304AA.

In order to offset unavoidable wetland impacts associated with T.I.P. I-2304AA and I-2304 AC, the Yadkin River Bridge Site will be debited 1.07 acres of riverine wetland restoration for I-2304AA and 0.21 acres of wetland restoration for I-2304AC section. This debit is reflected in the debit ledger below. An additional 1.28 acres of wetland impacts due to hand clearing for Site 2 are debited below at a 1:5 ratio.

I-2304AC								
Debit Ledger_ONEID	Site Name	Site TIP	HUC	River Basin	Division	R_W_Rest_Quan	Debit Amount	Debit Type
WM 080-005	Yadkin River Bridge	I-2304AA	3040103	Yadkin	9	2.74	0.21	RW_Restoration (SITE 2)(i-2304AC)
WM 080-005	Yadkin River Bridge	I-2304AA	3040103	Yadkin	9	2.74	1.07	RW_Restoration (Revised Modal of total imp. AA)
WM 080-005	Yadkin River Bridge	I-2304AA	3040103	Yadkin	9	2.74	1.3	RW_Restoration (hand Clearing)
WM 080-005	Yadkin River Bridge	I-2304AA	3040103	Yadkin	9	2.74	0.16	RW_Restoration(I-2304AC)

REGULATORY APPROVALS

Section 404

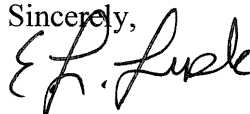
Request is hereby made for a modification to the USACE Individual 404 Permit as required for the above-described activities.

Section 401

We are hereby requesting a modification to the Section 401 Water Quality Certification from the N.C. Division of Water Quality. In compliance with the NCAC Section 143 215.3D(e), we will provide \$570.00 to act as payment for processing the Section 401 permit modification previously noted in this application (See Subject line). We are providing five (5) copies of this modification request to the NCDWQ for their review and approval.

A copy of this permit modification application will be posted on the DOT website at: <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>. If you have any questions or need additional information, please contact Sara Easterly at seeasterly@ncdot.gov or (919) 431-1605.

Sincerely,



per Gregory J. Thorpe, Ph.D., Manager
Project Development and Environmental Analysis Branch

w/attachment

Mr. Brian Wrenn, NCDWQ (5 Copies)

Ms. Marla Chambers, NCWRC

Ms. Jennifer Derby, USEPA

Ms. Marella Buncick, USFWS

W/o attachment (see website for attachments)
Dr. David Chang, P.E., Hydraulics
Mr. Mark Staley, Roadside Environmental
Mr. Dewayne Sykes, P.E., Utilities Unit
Mr. Greg Perfetti, P.E., Structure Design
Mr. S.P. Ivey, P.E., Division Engineer
Mr. Kent Boyer, DEO
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Progr. and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Ms. Beth Harmon, EEP
Mr. Phillip Ayscue, NCDOT Ext. Audit Br.
Mr. Drew Joyner, P.E., HEU Head
Mr. Clarence W. Coleman, P.E., FHWA
Ms. LeiLani Paugh, NEU
Mr. Randy Griffin, NEU
Mr. Eric Midkiff, P.E., PDEA



North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

April 30, 2004

Mr. Gregory J. Thorpe, Ph.D., Manager,
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

Dear Dr. Thorpe:

Subject: Project: I-85 Widening
TIP Number: I-2304AA and AB, Rowan and Davidson Counties

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide compensation for the wetland and stream impacts for the subject projects. Based on the information supplied by you in a letter dated April 5, 2004, the impacts are located in CU 03040103 of the Yadkin River Basin, and are as follows:

Wetland Impacts: 1.24 acres non-riverine wetlands (preservation)
Stream Impacts: 4,455 feet (restoration)

The EEP has agreed to accept mitigation responsibilities for these projects in advance of the original let dates of September 2004 and 2006. The subject project is not listed in Exhibit 2 of the Memorandum of Agreement among the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U. S. Army Corps of Engineers, Wilmington District dated July 22, 2003. However, the wetland mitigation will be provided in accordance with the referenced agreement under Section IX, EEP Transition Period, of the Agreement mitigation. The EEP intends to utilize the Valley Fields Mitigation Site.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

William D. Gilmore, P.E.
Transition Manager

cc: Eric Alsmeyer, USACE-Raleigh
John Hennessy, Division of Water Quality, Wetlands/401 Unit
File: I-2304AA/AB

NC DENR Ecosystem Enhancement Program
1652 Mail Service Center, Raleigh, North Carolina 27699-1652
Phone: 919-715-1413 \ FAX: 919-715-2219 \ Internet: h2o.enr.state.nc.us/wrp/

One
North Carolina
Naturally






WETLAND PERMIT IMPACT SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS					
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
2	868+60 TO 897+27 -LREV-	BRIDGE	0.07	0.02		0.14 *	7.87	<0.01	0.02	90 **	68	
TOTALS:			0.07	0.02	0.00	0.14	7.87	<0.01	0.02	0	68	0




* Mechanized clearing was based on a 4.5ft wide area along the bridge piers in case stumps or roots need to be removed for drilling the piers. This is a conservative estimate and the entire area will not be mechanically cleared.

**Open water fill from bridge piles:
=10 bents * 2 piles/bent * 15.9043 sf/pile = 318.09 sf = 90 ft

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
ROWAN/DAVIDSON COUNTY
WBS - 34156.1.1 (I-2304AC)
SHEET OF 1 of 8 Rev 11/4/2010

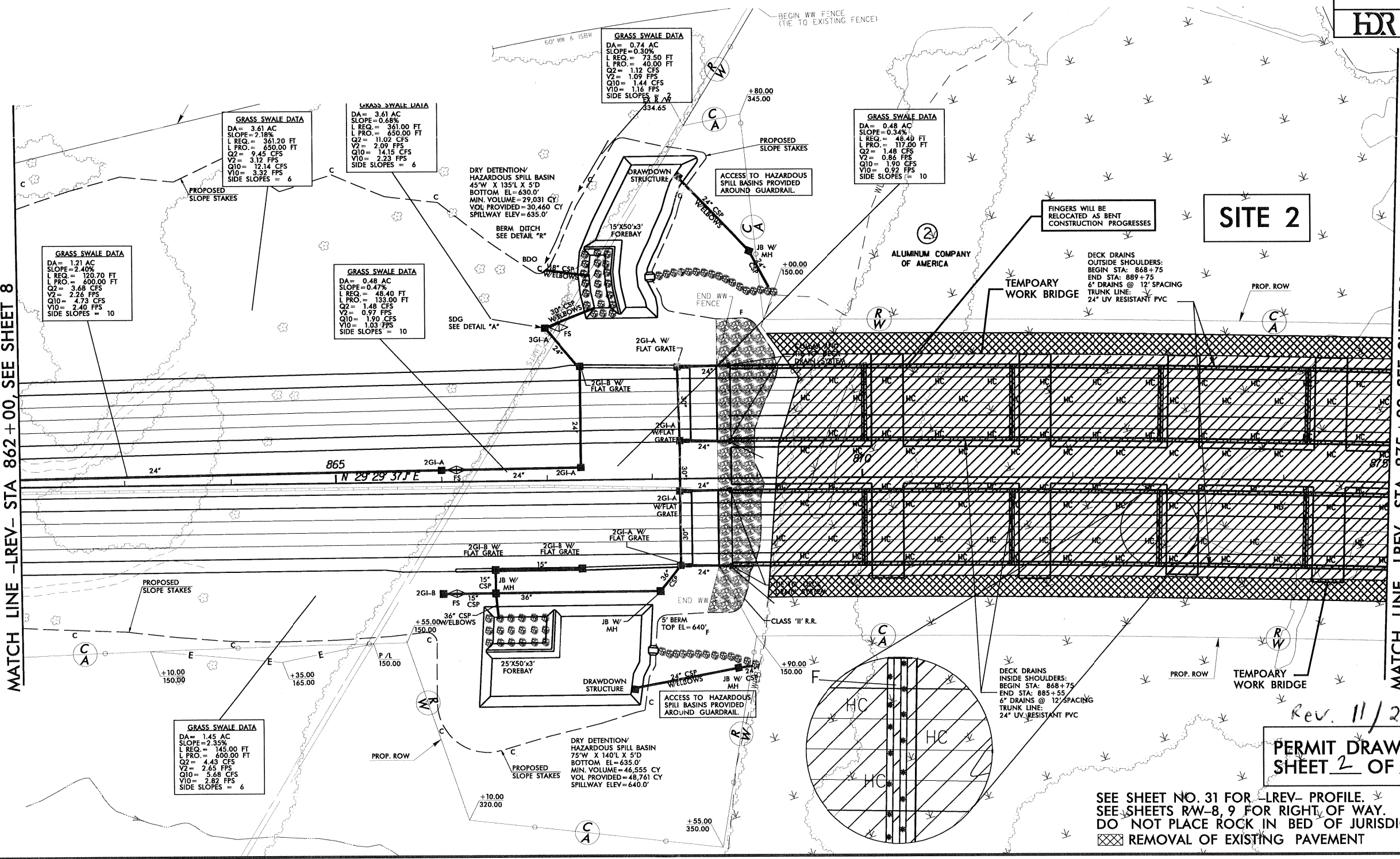
LEGEND

-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES FILL IN WETLAND
-  DENOTES HAND CLEARING
-  ADDITIONAL HAND CLEARING
-  DENOTES MECHANIZED CLEARING

PROJECT REFERENCE NO. I-2304AC	SHEET NO. 9
R/W SHEET NO. I-2304AC R/W-8, 9	ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
 	
STV/ Ralph Whitehead Associates, Inc. 1000 West Morehead St., Ste. 200 Charlotte, NC 28208 NC LICENSE NO. F-0991	
 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, NC 27612 N.C.B.E.L.S. License Number: F-0116	

MATCH LINE -REV- STA 862 + 00, SEE SHEET 8

MATCH LINE -REV- STA 875 + 00, SEE SHEET 10








SITE 2




Rev. 11/22/10
PERMIT DRAWINGS
SHEET 2 OF 8

SEE SHEET NO. 31 FOR -REV- PROFILE.
 SEE SHEETS R/W-8, 9 FOR RIGHT OF WAY.
 DO NOT PLACE ROCK IN BED OF JURISDICTIONAL STREAMS.
 REMOVAL OF EXISTING PAVEMENT

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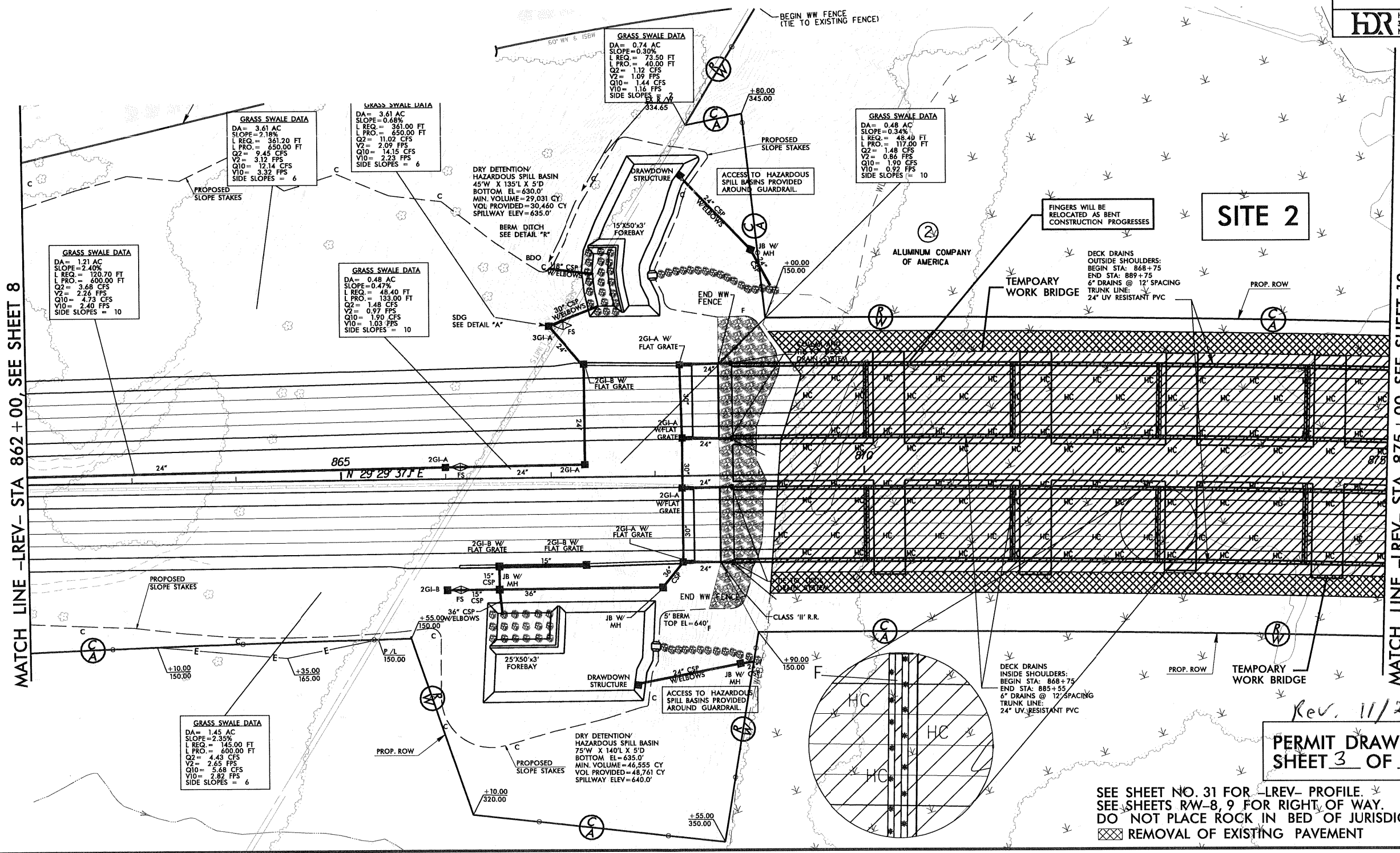
LEGEND

-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES FILL IN WETLAND
-  DENOTES HAND CLEARING
-  ADDITIONAL HAND CLEARING
-  DENOTES MECHANIZED CLEARING

PROJECT REFERENCE NO. I-2304AC	SHEET NO. 9
R/W SHEET NO. I-2304AC RW-8, 9	ROADWAY DESIGN ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
 	
STV / Ralph Whitehead Associates, Inc. 1000 West Morehead St., Ste. 200 Charlotte, NC 28208 NC LICENSE NO. F-0991	
 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 307 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116	

MATCH LINE -LEV- STA 862 + 00, SEE SHEET 8

MATCH LINE -LEV- STA 875 + 00, SEE SHEET 10



Rev. 11/22/10
PERMIT DRAWINGS
SHEET 3 OF 8

SEE SHEET NO. 31 FOR -LEV- PROFILE.
SEE SHEETS RW-8, 9 FOR RIGHT OF WAY.
DO NOT PLACE ROCK IN BED OF JURISDICTIONAL STREAMS.
REMOVAL OF EXISTING PAVEMENT

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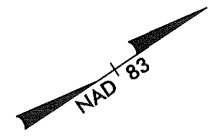
THE
LANE
CONSTRUCTION
CORPORATION

STV/Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208
NC LICENSE NO. F-0991



HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

PROJECT REFERENCE NO. I-2304AC	SHEET NO. 10
R/W SHEET NO. I-2304AC RW-9,10	ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	



LEGEND

- DENOTES IMPACTS IN SURFACE WATER
- DENOTES HAND CLEARING
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- ADDITIONAL HAND CLEARING

-LREV-
Pi Sta 902+37.31
 $\Delta = 20^\circ 10' 00.6''$ (RT)
D = 0' 18' 00.0"
L = 6,722.27'
T = 3,396.27'
R = 19,098.59'
V = 70 MPH
e = NC

①
YADKIN INCORPORATED

SITE 2

②
ALUMINUM COMPANY OF AMERICA

FINGERS WILL BE RELOCATED AS BENT CONSTRUCTION PROGRESSES

TEMPORARY WORK BRIDGE

PROP. ROW

MATCH LINE -LREV- STA 875 + 00, SEE SHEET 9

MATCH LINE -LREV- STA 888 + 00, SEE SHEET 11

TEMPORARY WORK BRIDGE

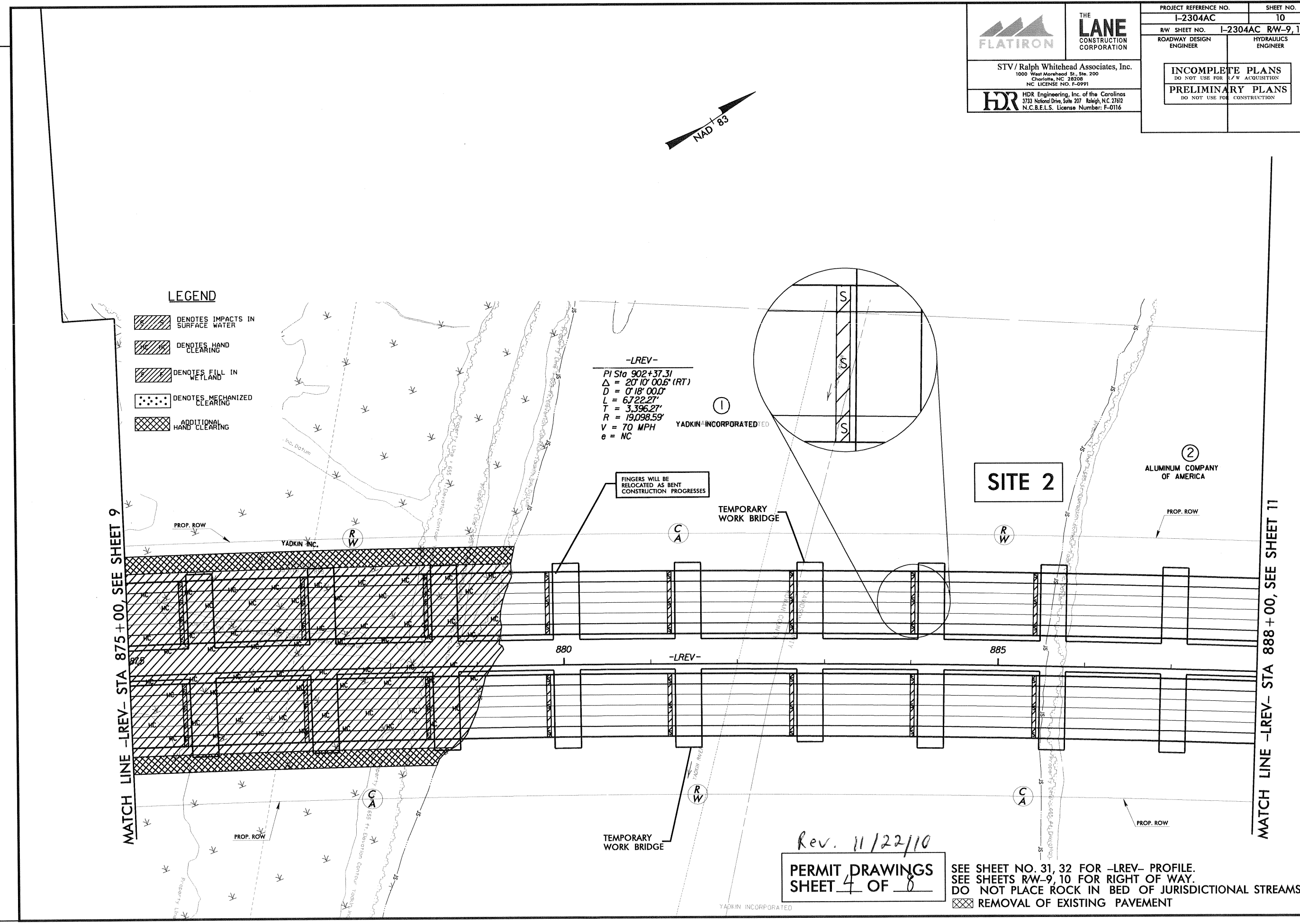
Rev. 11/22/10
PERMIT DRAWINGS
SHEET 4 OF 8

SEE SHEET NO. 31, 32 FOR -LREV- PROFILE.
SEE SHEETS RW-9, 10 FOR RIGHT OF WAY.
DO NOT PLACE ROCK IN BED OF JURISDICTIONAL STREAMS.
 REMOVAL OF EXISTING PAVEMENT

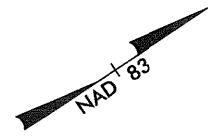
REVISIONS

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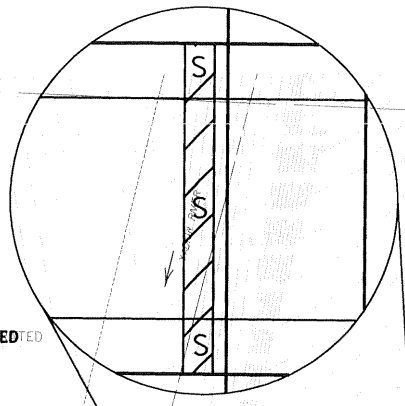
		PROJECT REFERENCE NO.	SHEET NO.
		I-2304AC	10
STV/Ralph Whitehead Associates, Inc. 1000 West Morehead St., Ste. 200 Charlotte, NC 28208 NC LICENSE NO. F-0991		R/W SHEET NO.	I-2304AC R/W-9, 10
	HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
		INCOMPLETE PLANS DO NOT USE FOR ACQUISITION	
		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



LEGEND

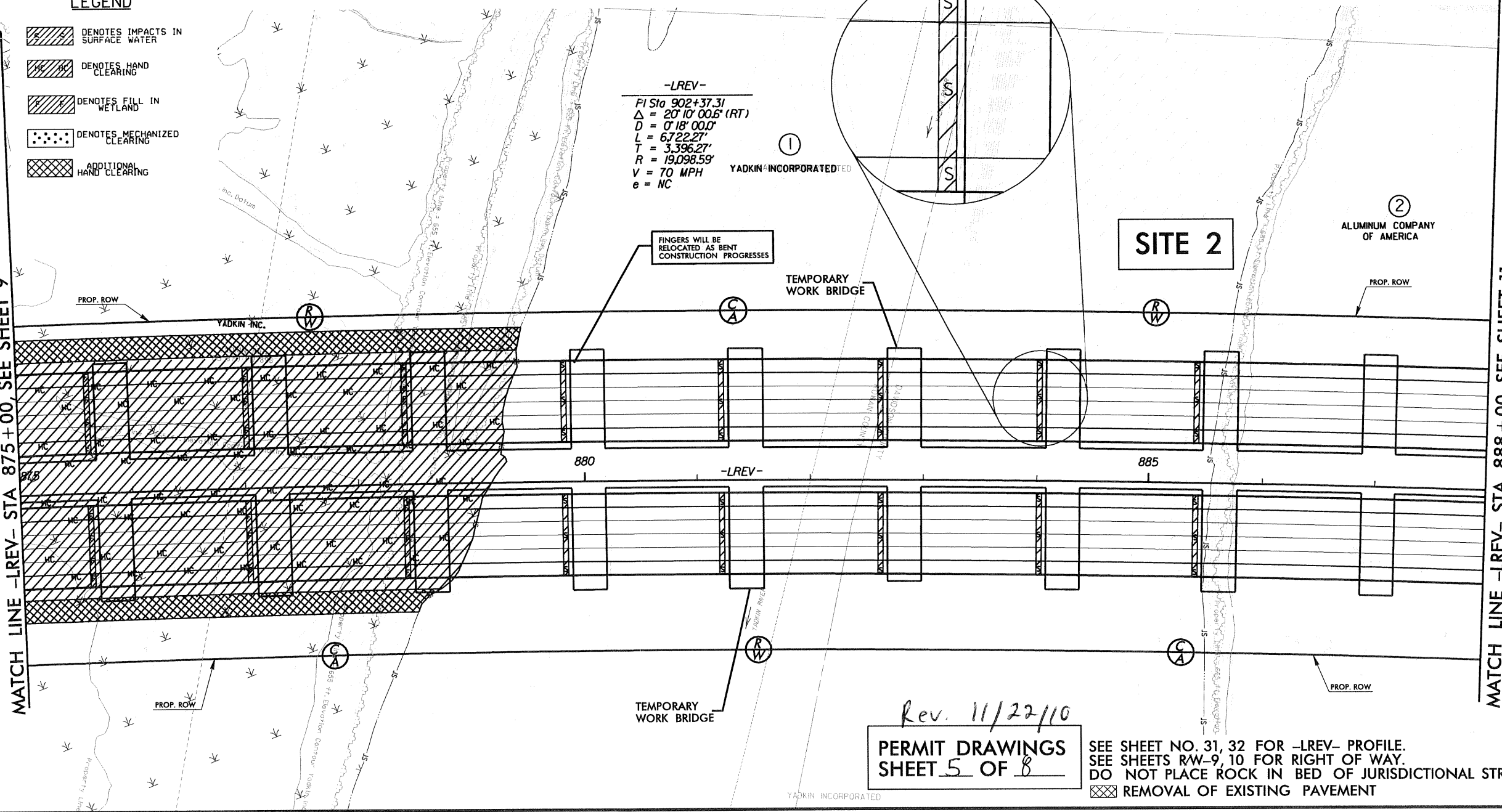
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES HAND CLEARING
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- ADDITIONAL HAND CLEARING

-LREV-
 PI Sta 902+37.31
 $\Delta = 20' 10' 00.6''$ (RT)
 $D = 0' 18' 00.0''$
 $L = 6722.27'$
 $T = 3396.27'$
 $R = 19,098.59'$
 $V = 70$ MPH
 $e = NC$



MATCH LINE -LREV- STA 875 + 00, SEE SHEET 9

MATCH LINE -LREV- STA 888 + 00, SEE SHEET 11



FINGERS WILL BE RELOCATED AS BENT CONSTRUCTION PROGRESSES

TEMPORARY WORK BRIDGE

TEMPORARY WORK BRIDGE

Rev. 11/22/10
PERMIT DRAWINGS
 SHEET 5 OF 8

SEE SHEET NO. 31, 32 FOR -LREV- PROFILE.
 SEE SHEETS R/W-9, 10 FOR RIGHT OF WAY.
 DO NOT PLACE ROCK IN BED OF JURISDICTIONAL STREAMS.
 REMOVAL OF EXISTING PAVEMENT

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REVISIONS

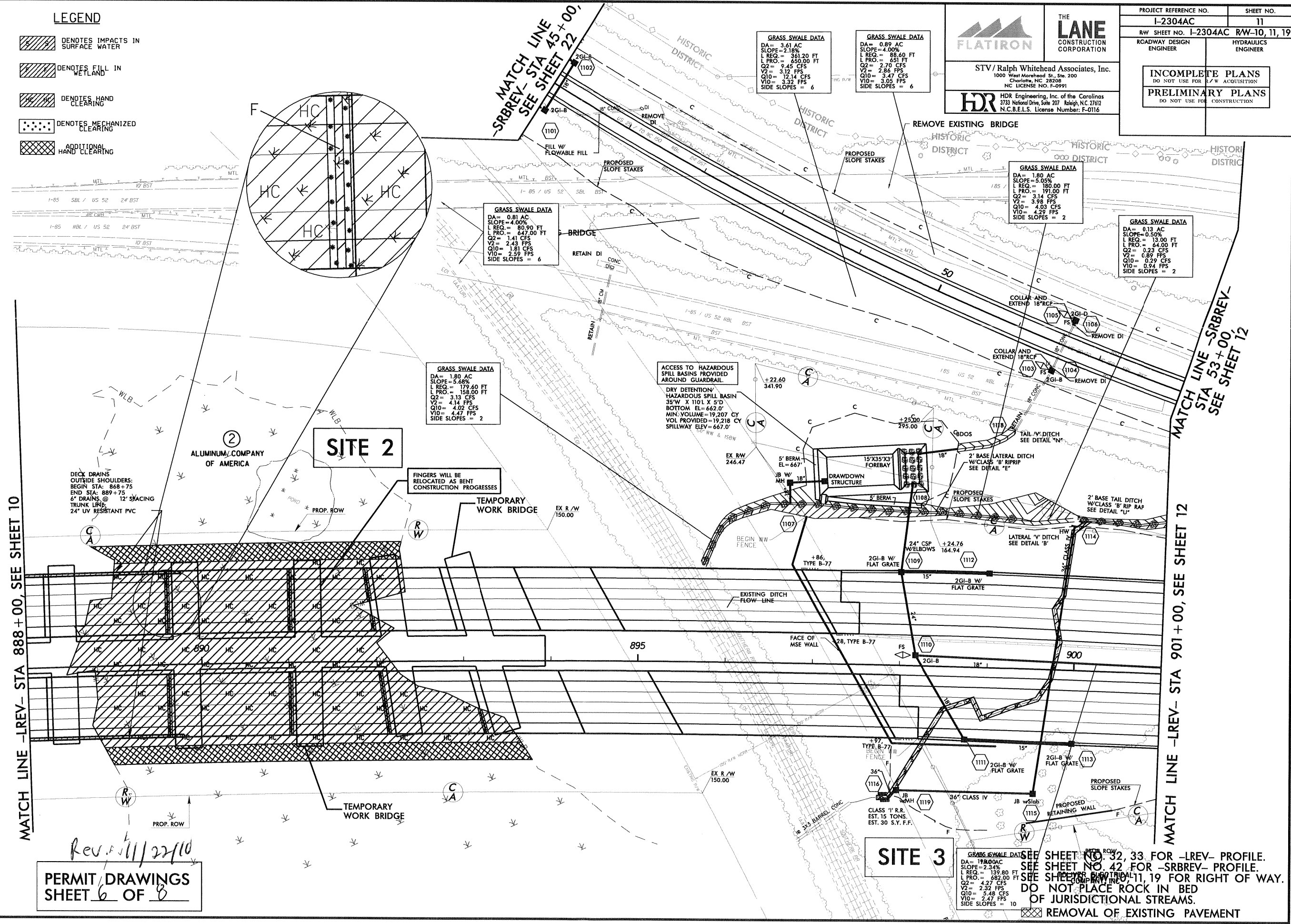
LEGEND

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[Symbol]	DENOTES HAND CLEARING
[Symbol]	DENOTES MECHANIZED CLEARING
[Symbol]	ADDITIONAL HAND CLEARING

	THE LANE CONSTRUCTION CORPORATION
STV / Ralph Whitehead Associates, Inc. 1000 West Morehead St., Ste. 200 Charlotte, NC 28208 NC LICENSE NO. F-0991	
	HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, NC 27612 N.C.B.E.L.S. License Number: F-0116
PROJECT REFERENCE NO. I-2304AC	SHEET NO. 11
R/W SHEET NO. I-2304AC R/W-10, 11, 19	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION








Rev. 11/22/10
**PERMIT DRAWINGS
SHEET 6 OF 8**

SITE 3
GRASS SWALE DATA
DA= 198.00 AC
SLOPE= 2.34%
L REQ.= 139.00 FT
L PRO.= 682.00 FT
Q2= 4.27 CFS
V2= 2.32 FPS
Q10= 5.48 CFS
V10= 2.47 FPS
SIDE SLOPES= 10


SEE SHEET NO. 32, 33 FOR -LREV- PROFILE.
SEE SHEET NO. 42 FOR -SRBREV- PROFILE.
SEE SHEET NO. 11, 19 FOR RIGHT OF WAY.
DO NOT PLACE ROCK IN BED OF JURISDICTIONAL STREAMS.
[Symbol] REMOVAL OF EXISTING PAVEMENT

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LEGEND


-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES FILL IN WETLAND
-  DENOTES HAND CLEARING
-  DENOTES MECHANIZED CLEARING
-  ADDITIONAL HAND CLEARING

PROJECT REFERENCE NO. I-2304AC	SHEET NO. 11
R/W SHEET NO. I-2304AC	R/W-10, 11, 19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

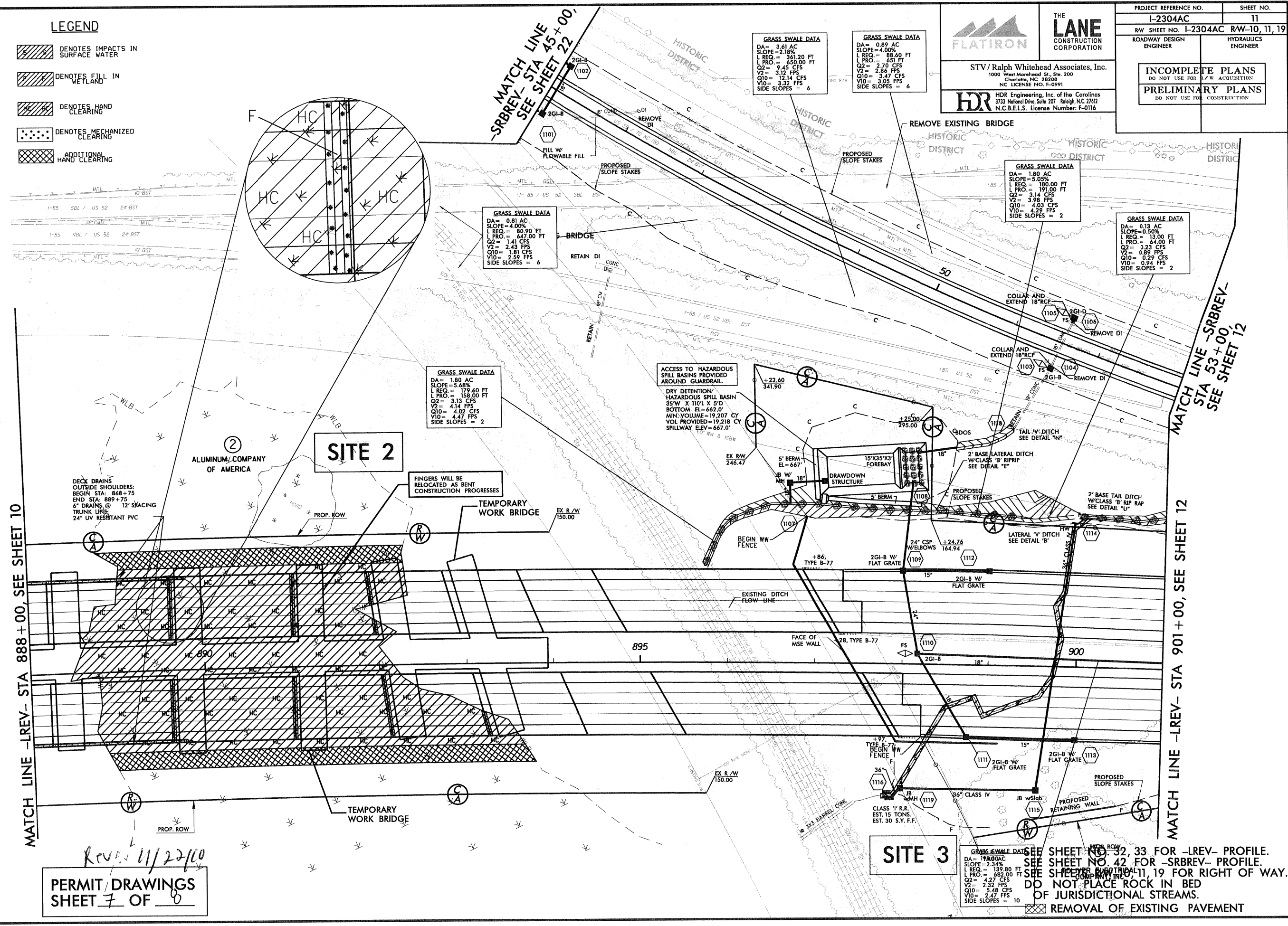


THE LANE CONSTRUCTION CORPORATION

STV/ Ralph Whitehead Associates, Inc.
1000 West Northwood St., Ste. 200
Charlotte, NC 28208
NC LICENSE NO. F-0991

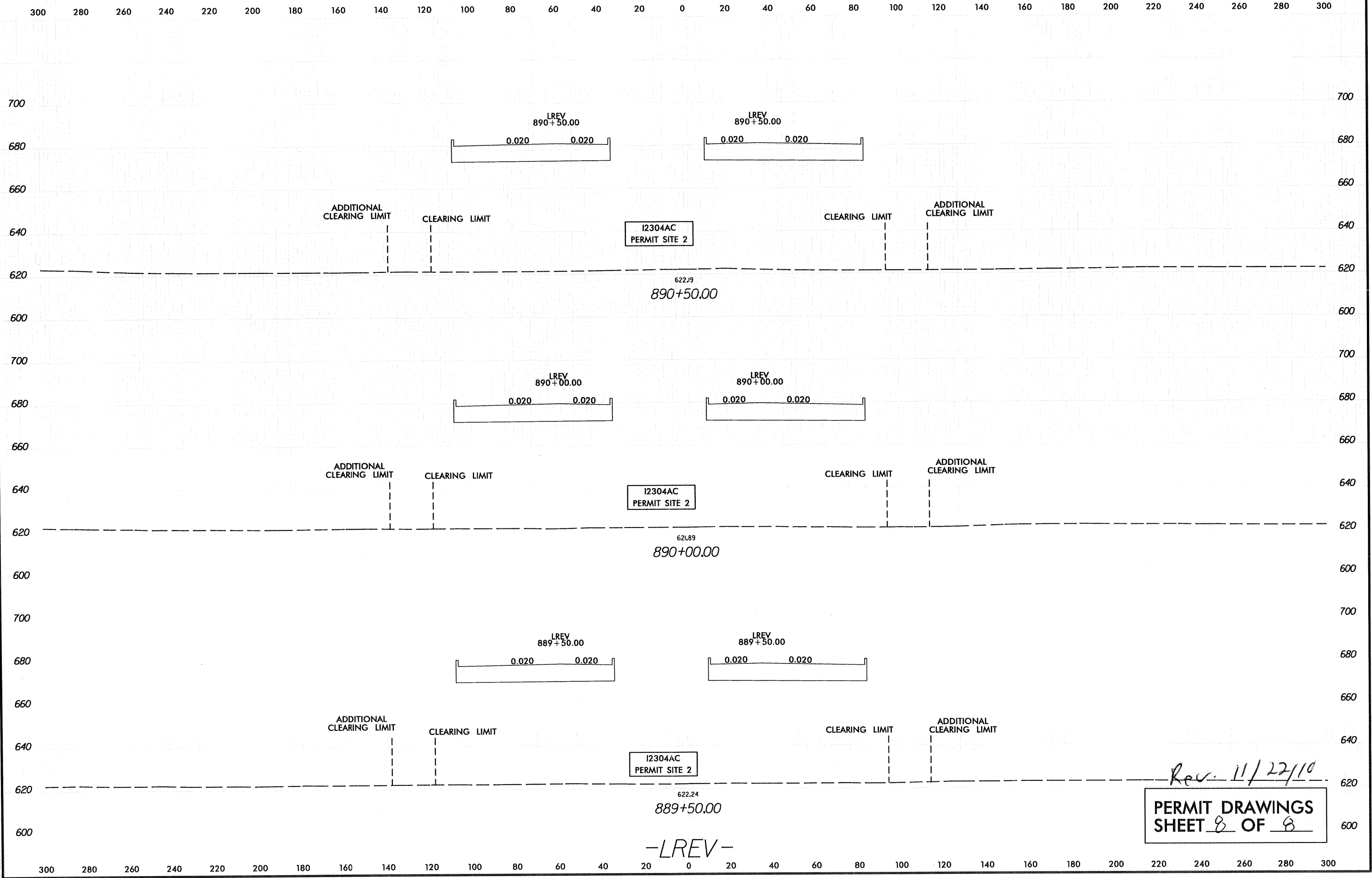


HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207
Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116



PLOT DRIVER: NCD07.pdf_color_eng_100.dpl
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8/23/09



11/4/2010
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Rev. 11/22/10

PERMIT DRAWINGS
SHEET 8 OF 8

-LREV-