



US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: November 5, 2008
Comment Deadline: December 5, 2008
Corps Action ID #: SAW-1994-02124

The Wilmington District, Corps of Engineers (Corps) has received an application from the **North Carolina Department of Transportation** seeking Department of the Army authorization to impact **4.35 acres of jurisdictional wetlands and 296 linear feet of stream** associated with the **widening of US 158/NC 34 from East of the Pasquotank River to the US 158/NC 34 split in Camden County**, North Carolina. Federal Aid Project No. STP-158(2), Division 1, TIP Nos. R-2414 A&B

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at www.saw.usace.army.mil/wetlands

Applicant: Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA
NC Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

AGENT (if applicable): Mr. Michael Turchy
Project Development and Environmental Analysis
NC Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1548

Authority

The Corps will evaluate this application and a decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of Section 404 of the Clean Water Act.

Location

The proposed project is located along US 158/NC 34 from east of the Pasquotank River in Elizabeth City to the US 158/NC 34 split in Belcross for a distance of approximately 5.5 miles. The project is adjacent to jurisdictional wetlands connected to the Pasquotank River and crosses four wetland and stream areas adjacent to unnamed tributaries to Sawyers Creek and the Pasquotank River. The project is located in the Pasquotank River Basin, Hydrologic Unit 03010205. The project starts at Latitude 36.3006009N, Longitude 76.2130681W and ends at Latitude 36.3497732N, Longitude 76.1533081W.

Existing Site Conditions

Land use in the project area is primarily low-density residential, low-density commercial, farmland and undeveloped woodland. Land on the southwest portion of the project is primarily undeveloped forested wetlands and transitions into scattered residential, commercial, and farmland to the northeast of Haywood Drive to the project end point near Belcross. The topography in the study area is characterized as flat. The study area is located in the Coastal Plain physiographic province of North Carolina.

Applicant's Stated Purpose

The purpose of this project is to improve safety, increase economic benefits and improve the Level of Service of US 158/NC 34.

Project Description

The project is identified as TIP # R-2414 A&B. The following description of work is taken from data provided by the applicant. The applicant has proposed to fill 4.25 acres and excavate 0.1 acres of jurisdictional wetlands. Also, the applicant proposes to permanently impact 296 linear feet and temporarily impact 174 linear feet of stream. These impacts are needed to widen an existing two lane facility to a multi-lane facility along the approximate 5.5 mile section of highway. Additionally, the applicant has proposed to hand clear 10.41 acres of jurisdictional riparian wetlands of which 6.61 acres is needed for utility line relocations. The project has been designed with asymmetrical widening. Avoidance mitigation measures were taken during the planning and NEPA compliance stages and minimization measures were incorporated as part of the project design. The applicant is proposing to offset unavoidable impacts to wetlands and streams through EEP. EEP in a letter dated July 14, 2008, has committed to providing the necessary compensatory mitigation for the project. Additionally, the applicant is proposing to mitigate for 50 linear feet of stream impact on site by replacing an existing 50 foot culvert with a 100 foot bridge. Overall plans showing the location of the proposed construction and impact sites are included with this public notice. Additional

detailed plans and findings for the project may be reviewed at the U.S. Army Corps of Engineers Regulatory Field Office at 107 Union Drive, Suite 202, Washington, North Carolina 27889.

Impacts to Waters of the United States

R-2414 Stream Classifications

Section	Permit Site No.	Stream Name	Sub-basin	Stream Index No.	Best Usage Classification
A	11	UT to Pasquotank River	03-01-50	30-3-(7)	SC
B	3	UT to Pasquotank River	03-01-50	30-3-(7)	SC
B	6	UT to Sawyers Creek	03-01-50	30-3-6	C; Sw
B	7	UT to Sawyers Creek	03-01-50	30-3-6	C; Sw

All streams in the project area are perennial

Wetland Impacts & Descriptions

Section	Permit Site No.	Permanent (ac)	Temporary (ac)	Mitigation Required
A	1	<0.01	--	Yes
A	3	0.01	--	Yes
A	4	0.03	--	Yes
A	5	<0.01	--	Yes
A	6	0.02	--	Yes
A	7	0.12	--	Yes
A	8	1.46	--	Yes
A	9	0.01	--	Yes
A	10	0.18	--	Yes
Total Section A		1.83	--	--
B	2	0.09	--	Yes
B	3	1.04	--	Yes
B	4	0.06	--	Yes
B	5	0.08	--	Yes
B	6	0.86	--	Yes
B	7	0.38	--	Yes
Total Section B		2.52	--	--
Total For A & B		4.35	--	--

All wetlands impacted are riparian wetlands

Surface Water Impacts & Descriptions

Section	Permit Site No.	Stream Name	Permanent (ft)	Permanent (ac)	Temporary (ft)	Temporary (ac)
A	11	UT to Pasquotank River	--	--	105	0.08
B	3		121	0.04	29	0.01
B	6		92	0.05	21	0.01
B	7		83	0.02	83	0.01
Total For Section B			296	0.11	133	0.03
Total For A & B			296*	0.11	238	0.11

*Only 246 feet of mitigation has been required due to the bridge replacing the 50' culvert at Site 11. All remaining sites listed above required mitigation.

Other Required Authorizations

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice combined with appropriate application fee at the North Carolina Division of Water Quality central office in Raleigh will constitute initial receipt of an application for a 401 Water Quality Certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, Transportation Permitting Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Attention: Mr. Brian Wrenn (NC Department of Transportation projects) by December 5, 2008.

The applicant has not provided to the Corps, a certification statement that his/her proposed activity complies with and will be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2(b)(2), the Corps can not issue a permit for the proposed work until the applicant submits such a certification to the Corps and the North Carolina Division of Coastal Management (NCDCM), and the NCDCM notifies the Corps that it concurs with the applicant's consistency certification.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project will not adversely impact EFH or associated

fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places and has determined that registered properties, or properties listed as being eligible for inclusion therein are located within the project area and/or will be affected by the proposed work. The Creekmore Store property and the Sawyer Graveyard were found to be eligible for the National Register. The project will not impact the Sawyer Graveyard. NCDOT has agreed to move the Creekmore Store to the rear of its property for mitigation purposes and NCDOT will coordinate with SHPO prior to construction so that measures are taken to preserve the historic character of the store.

Endangered Species

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined pursuant to the Endangered Species Act of 1973, that the proposed project will have no effect on federally listed endangered or threatened species or their formally designated critical habitat.

Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidate State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

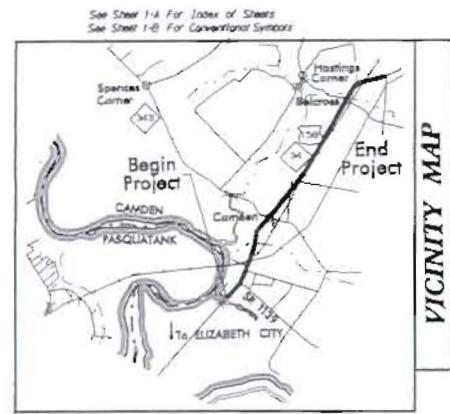
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, December 5, 2008. Comments should be submitted to Mr. Bill Biddlecome, US Army Corps of Engineers, Washington Regulatory Field Office, Post Office Box 1000, Wilmington 27889-1000.

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at <http://regulatory.usacesurvey.com/> to complete the survey online.

CONTRACT:

TIP PROJECT: R-2414B



VICINITY MAP

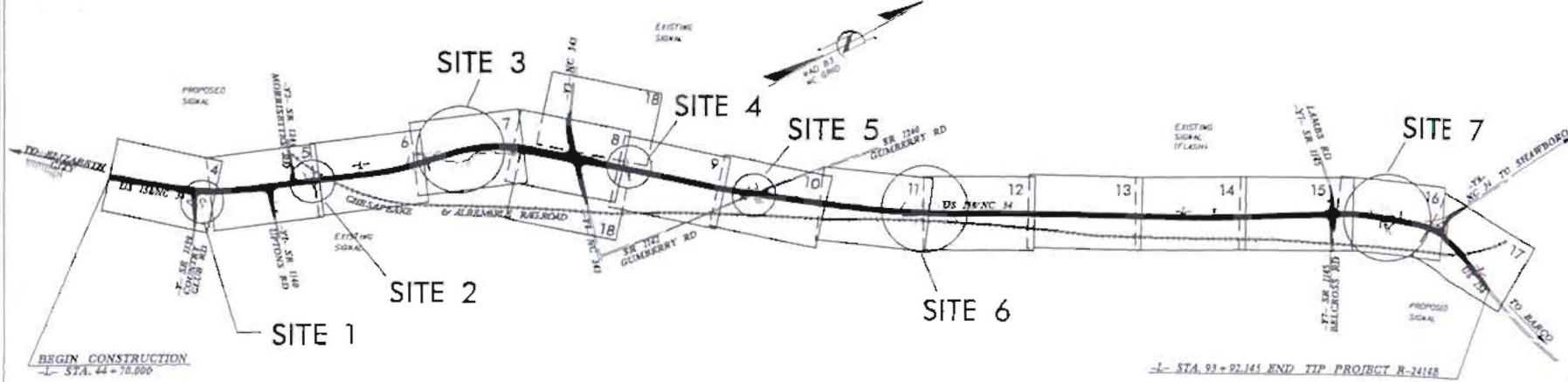
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

CAMDEN COUNTY

LOCATION: US 158-NC 34 FROM NORTH OF SR 1257
TO EAST OF NC 34 IN BELCROSS

TYPE OF WORK: GRADING, DRAINAGE, PAVING,
CURB & GUTTER, CULVERTS & SIGNALS

STATE HIGHWAY NUMBER	R-2414B	PERMIT NO.	1
STATE PROJECT NO.	34430.1.1	PLAT NO.	STP-158(2)
STATE PROJECT NO.	34430.2.5	PERMIT	PE
ROW & UTILITIES			
ALL DIMENSIONS IN METERS UNLESS OTHERWISE SHOWN			
Permit Drawing Sheet 1 of 38			



-L- STA. 93 + 02.145 END TIP PROJECT R-2414B

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS

GRAPHIC SCALES



DESIGN DATA

ADT (2009) = 26,000
ADT (2029) = 41,500

DHV = 12%

D = 60%

T = 6%*

V = 80 km/h

*TTST 2% - DUAL 4%

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2414B =
TOTAL LENGTH TIP PROJECT R-2414B =

4.823 Km
4.823 Km

BM STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

NOVEMBER 15, 2006

LETTING DATE:

NOVEMBER 17, 2009

EDWARD G. WETHERILL, PE

PROJECT ENGINEER

BOB A. MAY, PE

PROJECT DESIGN ANALYST

NCDOT CONTACT:

B. DOUG TAYLOR, PE

ROADWAY DESIGN PROJECT ENGINEER

HYDRAULICS ENGINEER

LIAISON P.A.

ROADWAY DESIGN ENGINEER

LIAISON P.A.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

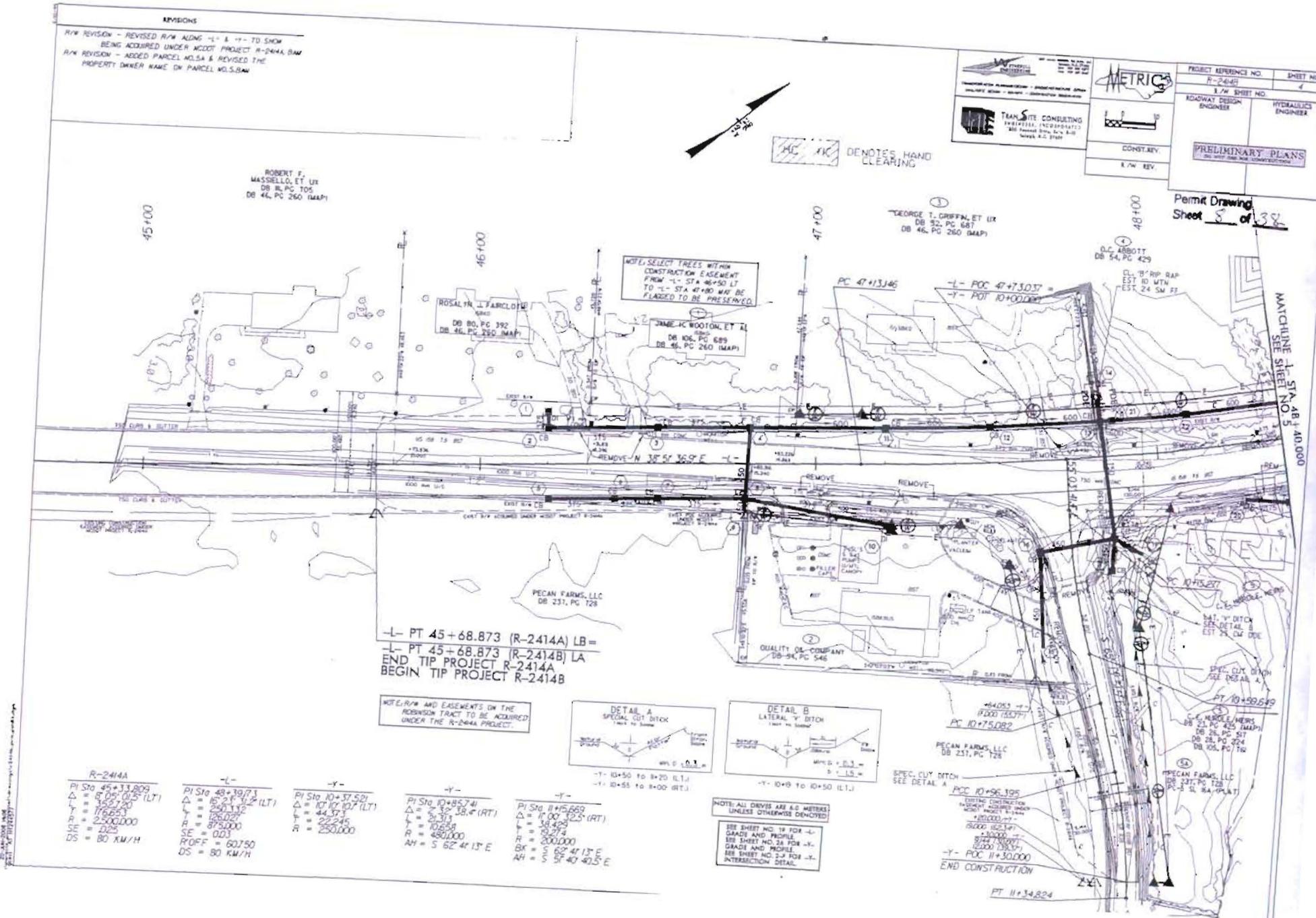


STATE HIGHWAY DESIGN ENGINEER

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)
1	-L- 47+83 LT / 47+94 RT	1 @ 30' RCP					0.01			
2	-L- 51+60 LT / 51+95 RT	1 @ 30' RCP	0.09				0.05			
3	-L- 55+12 LT / 58+49 RT	1 @ 8' x 6' RCBC	0.65				0.26	0.04	0.01	121 29
	-L- 57+44 / 59+45 RT	-	0.30		0.09					
4	-L- 62+65 LT / 62+94 RT	1 @ 24' RCP	0.06				0.04			
5	-L- 67+19 LT / 67+70 RT	1 @ 30' RCP	0.08				0.06			
6	-L- 72+48 LT / 74+48 RT	2 @ 6' x 5' RCBC	0.85		0.01		0.37	0.05	0.01	92 21
Old SITE 7	-L- 82+23 / 82+43 RT	SITE DELETED								
7	-L- 88+60 / 89+28 LT	1 @ 10' x 5' RCBC	0.38				0.16	0.02	0.01	83 19
TOTALS:			2.42		0.10		0.95	0.11	0.03	297 69

0.22 Ac of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures.

Permit Drawing
Sheet 1 of 38



Permit Drawing
Sheet 15 of 38

PROJECT REFERENCE NO. A-2440 SHEET NO. 6
X/W SHEET NO.
ROADWAY DESIGN ENGINEER HYDRAULIC ENGINEER
CONSTRA.
A/W REV
PRELIMINARY PLANS
(Do not use for construction)

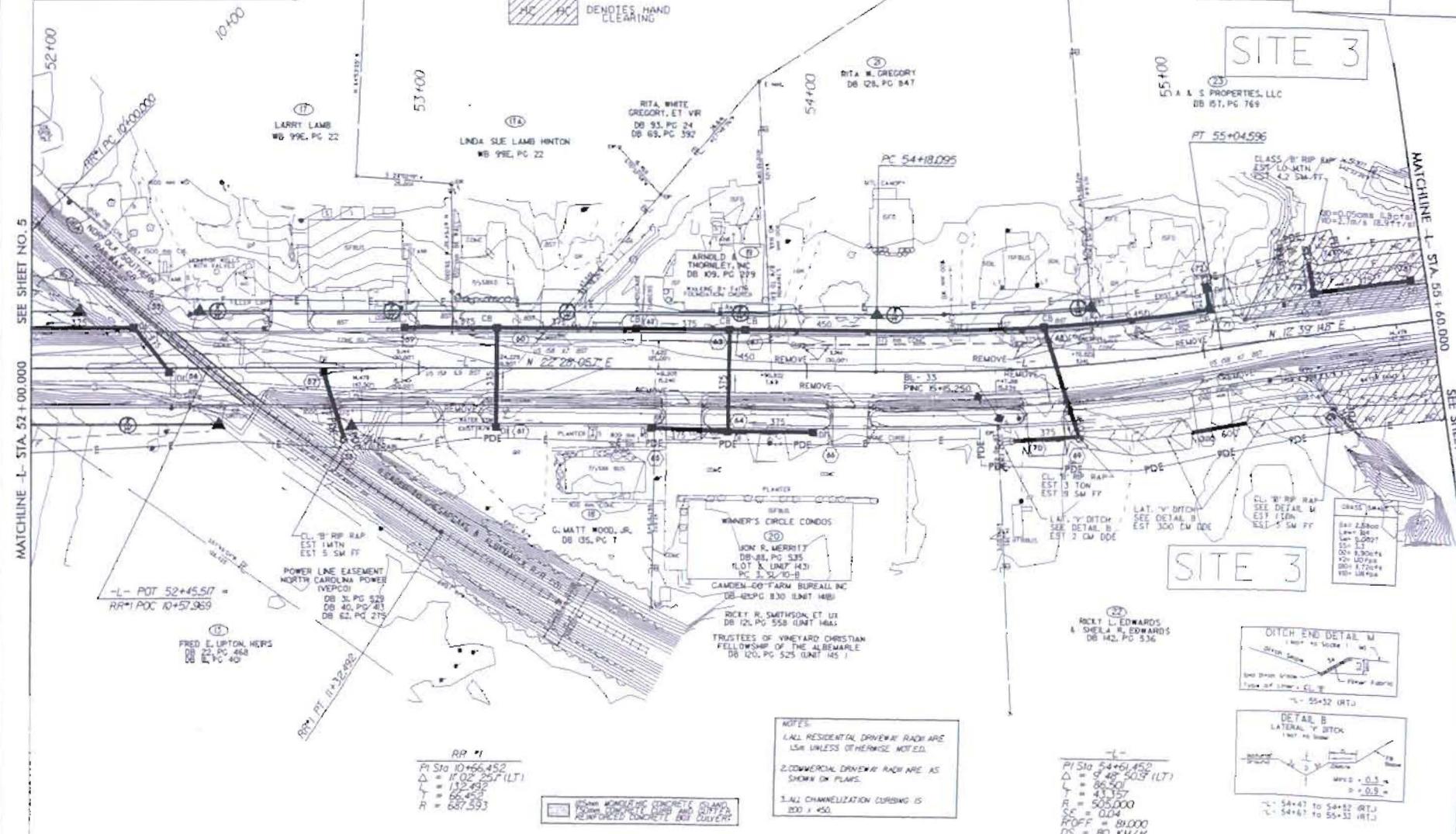


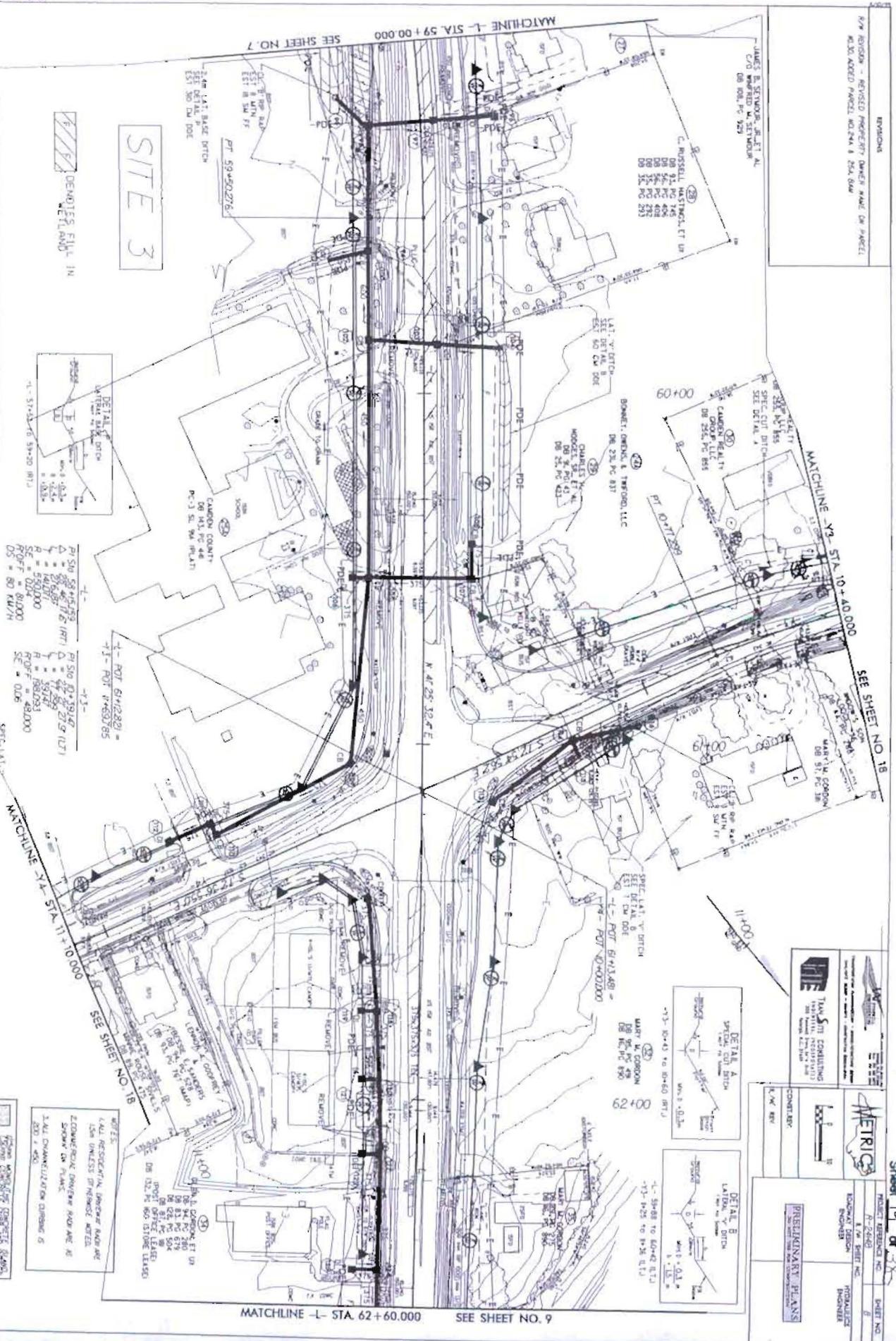
TRANSITE CONSULTING
ENGINEERS INCORPORATED
1000 Franklin Drive, Suite 600
Fairfax, VA 22030



METRA

REVISIONS
8/07/06 - REVISED ROW AND TCE ON PARCEL 221 (ABP)
R/W REVISION - REVISED PROPERTY OWNER NAMES ON PARCEL
NO. 13, 17, 18, 19, 20, 21 & 23, ADDED PARCEL NO. 22A & 22B
R/W REVISION - REVISED PROPERTY OWNER NAME ON PARCEL
NO. 22, 24A





Permit Drawing
Sheet 24 of 38

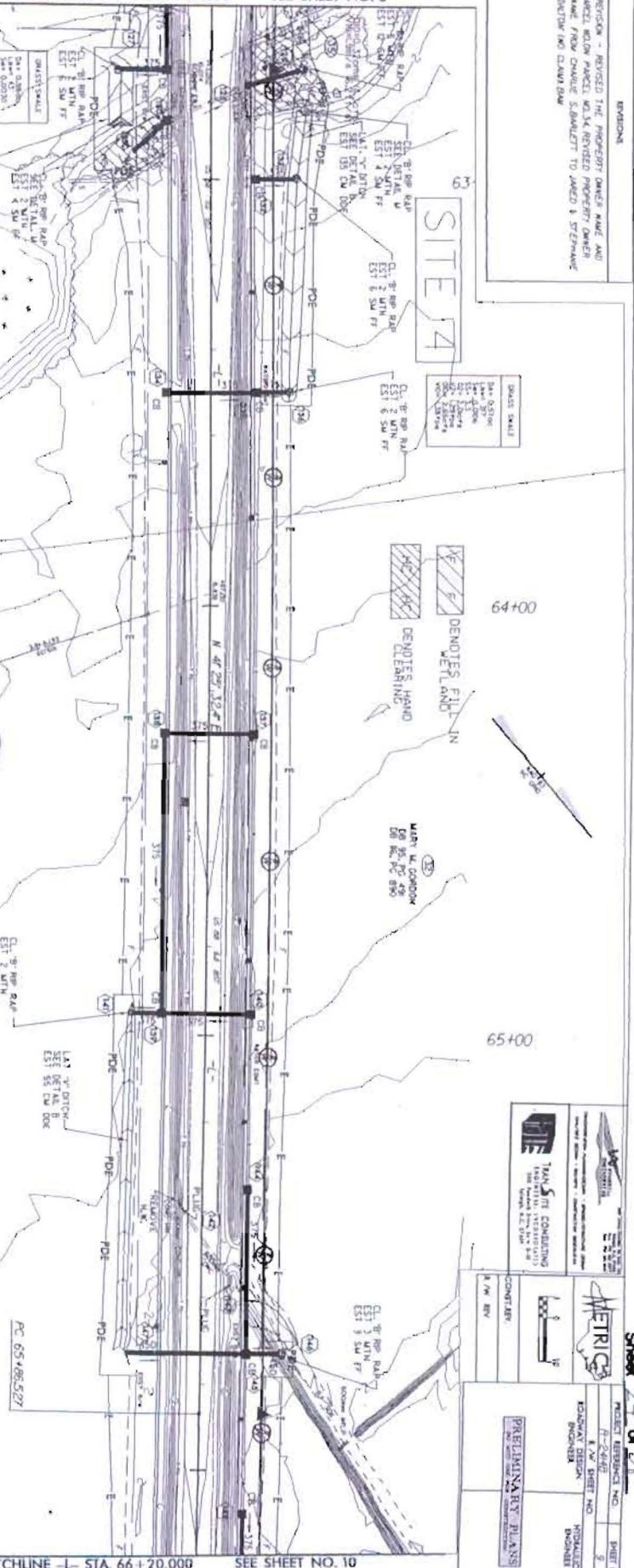
REVISIONS
REVISED - REVISED THE PROPERTY OWNER NAME AND
PARCEL NUMBER NO. 5A REVISED PROPERTY OWNER
NAME FROM CHARLES SABOURA TO JAMES & STEPHANIE
BROUARD AND CLAUDE BOURGEOIS

Metric

PROJECT REFERENCE NO. 9
PERMIT NO. PT-24442
DRAWING NO. 24
HOUSING DESIGN
HYDRAULICS
ENGINEER

PRELIMINARY PLANS

MATCHLINE -L- STA. 62 + 60.000 SEE SHEET NO. 8



(3) DE 94 PC 280
DE 83 PC 679
DE 90 PC 504
DE 90 PC 460 (STORY LEASE)

GLEN D. GORDON, ET AL
LATENT V. DETAIL B
(NOT TO SCALE)

SITE 4

DITCH END DETAIL M
(NOT TO SCALE)
DE 94 PC 280
DE 83 PC 679
DE 90 PC 504
DE 90 PC 460 (STORY LEASE)

PI Sta 62+60.000
PI Sta 62+65.44 ft (LT)
PI Sta 62+65.44 ft (LT)

PI Sta 62+65.44 ft (LT)
PI Sta 62+65.44 ft (LT)

PI Sta 62+65.44 ft (LT)
PI Sta 62+65.44 ft (LT)

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PI Sta 62+65.44 ft (LT)

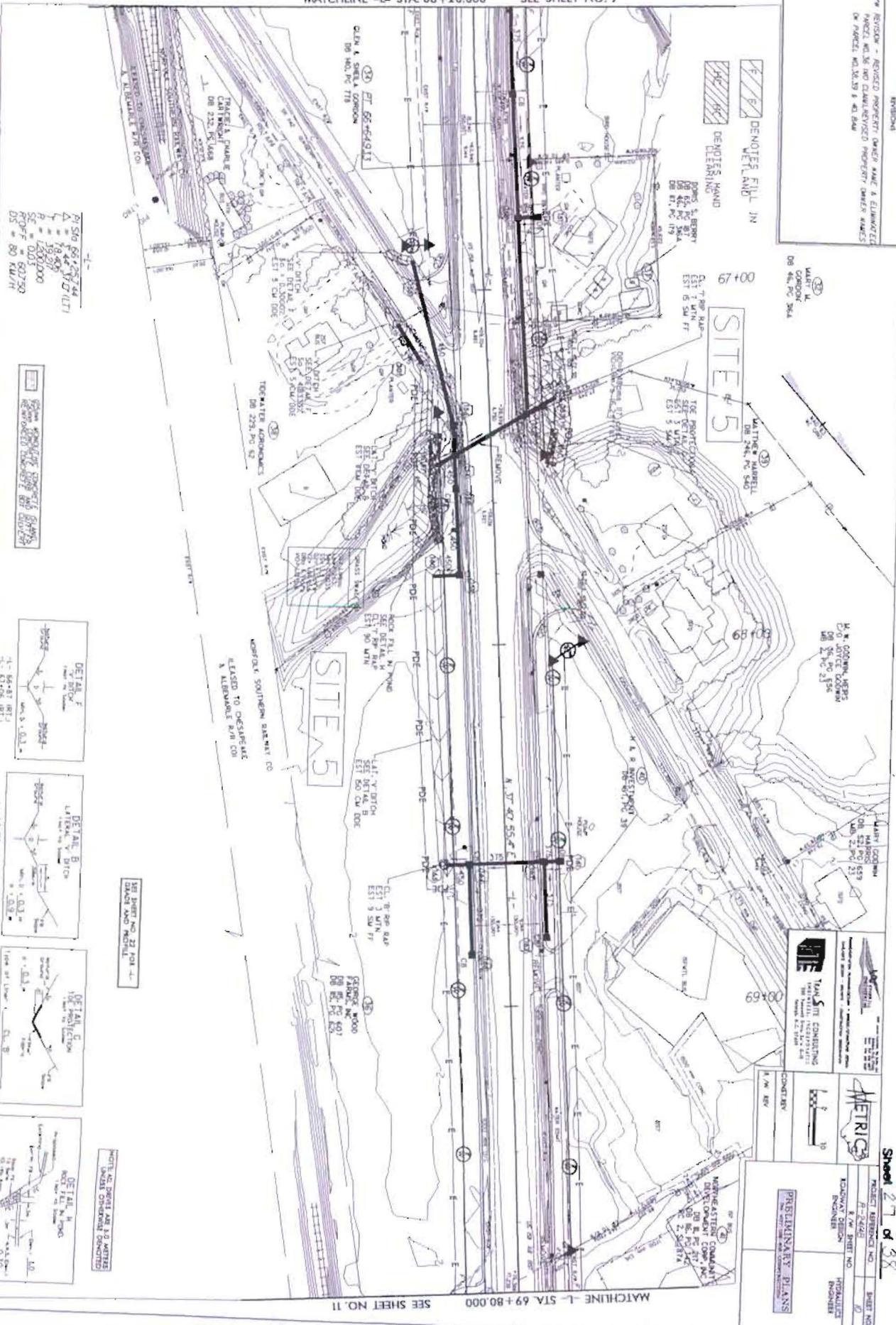
(3) GLEN D. GORDON,
DETAIL B (NOT TO SCALE)

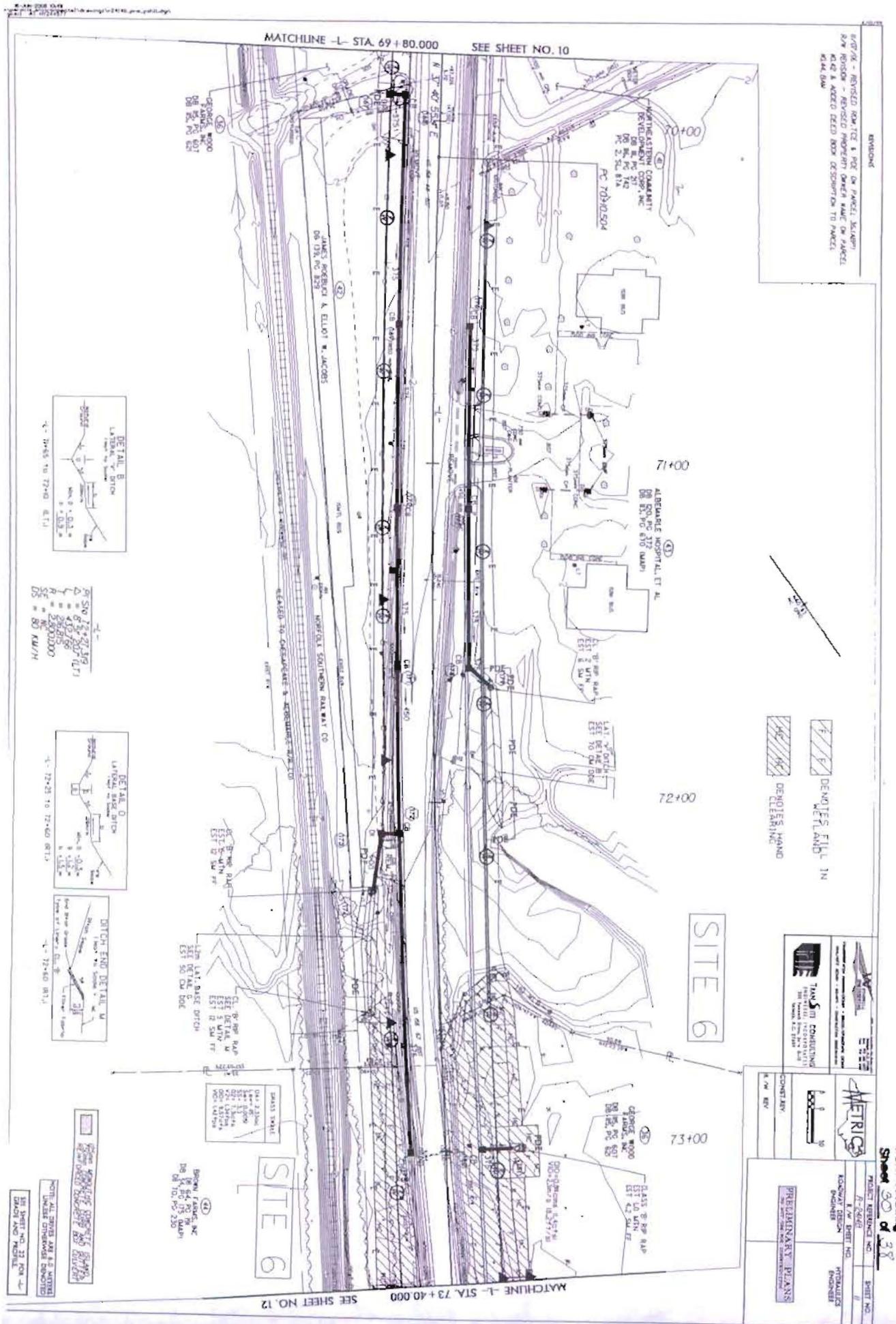
GEORGE KODD
LANDSCAPE INC.
DE 94 PC 280
DE 83 PC 679

DETAIL B
NOT TO SCALE

MATCHLINE -L STA. 66+20.000

SEE SHEET NO. 9





Permit Drawing

Sheet 13 of 33

Project Reference No.: 12
Rev. No.: 10
Sheet No.: 13

Hydraulics
Benchmarks

PRELIMINARY PLANS
N.B.: This drawing is preliminary and subject to change.



CONSTR.
S.W. END

DETAIL A

DETAIL B

DETAIL C

DETAIL D

SITE 6

- DENOTES FILL IN
- DENOTES HABITAT CLEARING
- DENOTES EXCAVATION IN WETLAND

74+00

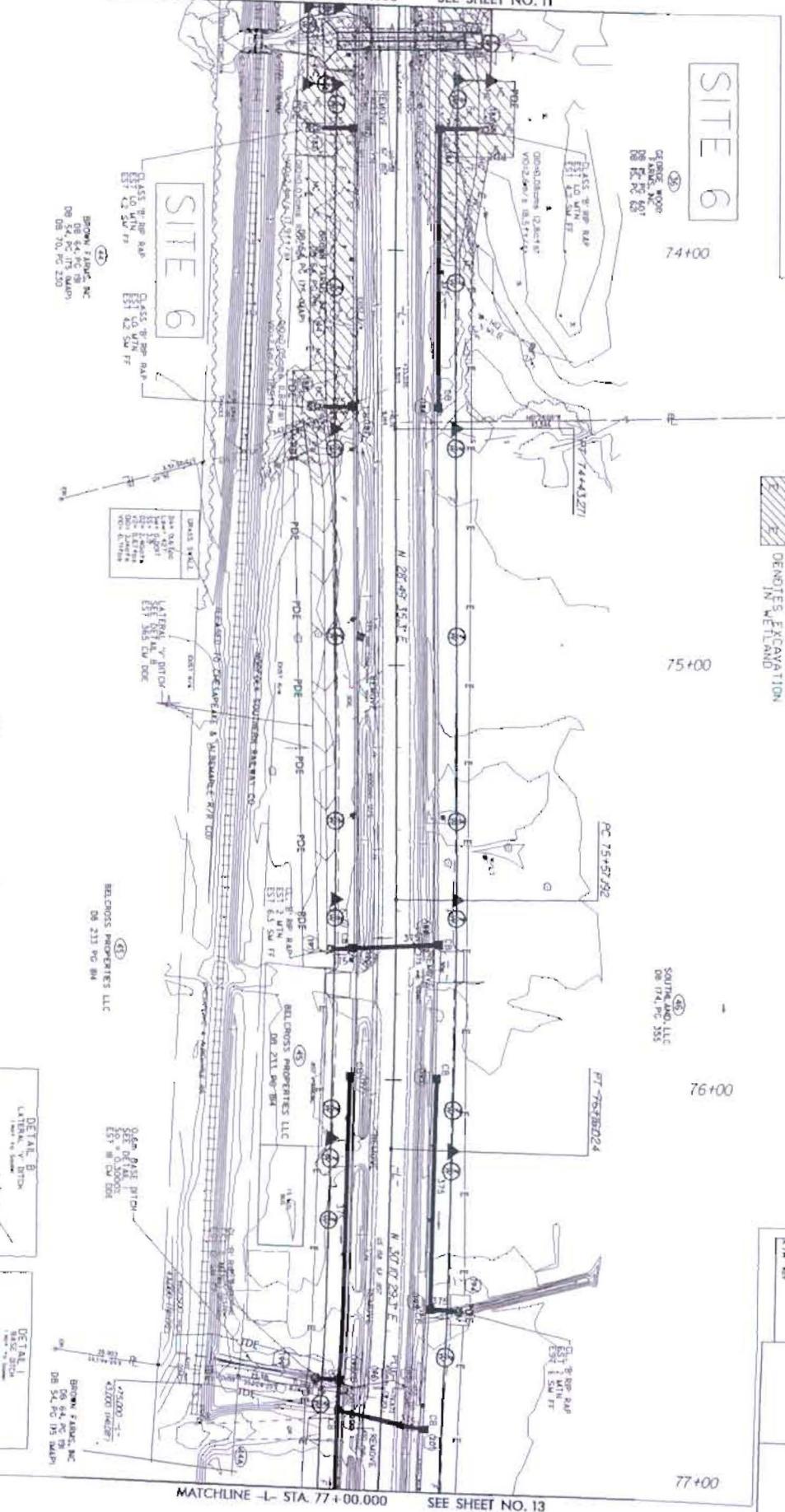
75+00

76+00

77+00

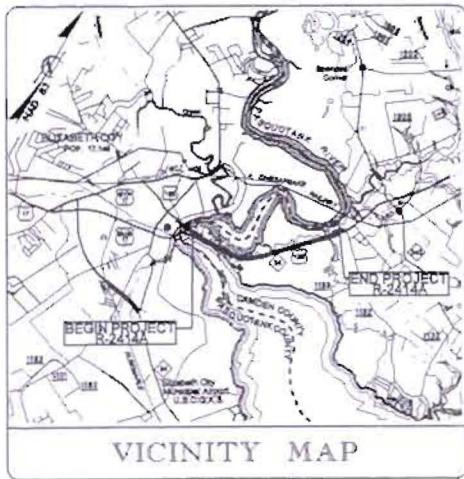
MATCHLINE - STA. 73+40.000

SEE SHEET NO. 11

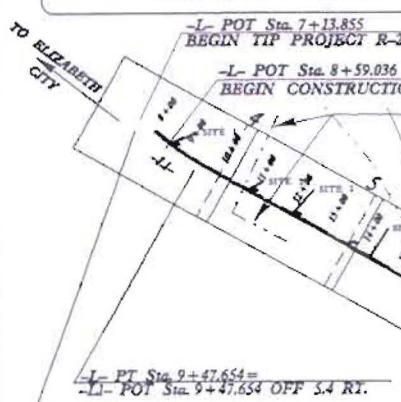




TIP PROJECT: R-2414A



VICINITY MAP



-LI- POT Sta. 7+12.730
BEGIN CONSTRUCTION

GRAPHIC SCALES



STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS



ALL DIMENSIONS IN
METERS
AND/OR MILLIMETERS
UNLESS OTHERWISE SHOWN

TIP NO. R-2414A SHEET NO. UO-1

Permit Drawing
Sheet 3 of 16

Utility

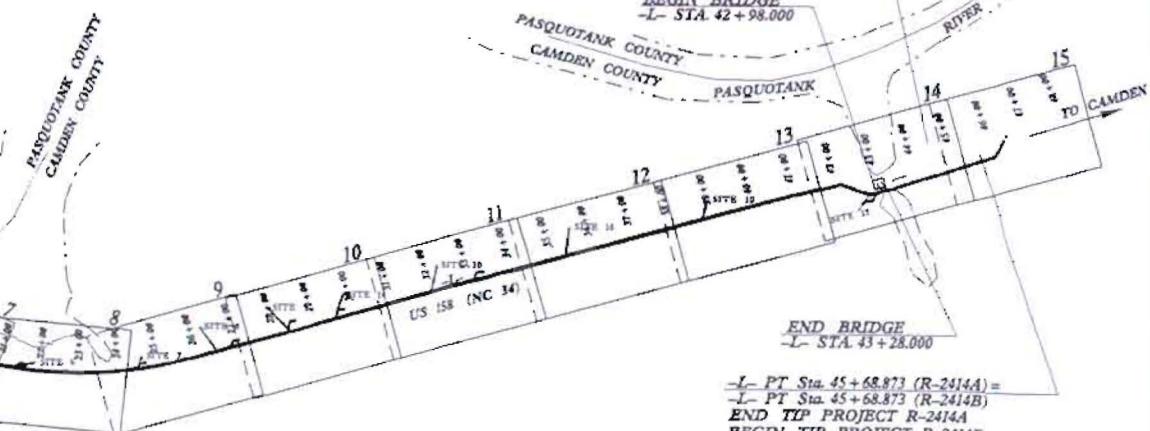


UTILITY BY OTHERS PLANS CAMDEN COUNTY

LOCATION: US 158/NC 34 FORM EAST OF PASQUOTANK RIVER TO SOUTH OF SR 1257 (HAVENWOOD DR.) BETWEEN ELIZABETH CITY AND CAMDEN

TYPE OF WORK: POWER, TELEPHONE AND CABLE RELOCATION

-Y - HAVENWOOD DR.
SR 1257

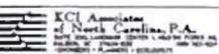


-L- PT Sta. 45+68.873 (R-2414A) =
-L- PT Sta. 45+68.873 (R-2414B)
END TIP PROJECT R-2414A
BEGIN TIP PROJECT R-2414B

CLEARING TO BE PERFORMED BY METHOD II

THIS PROJECT IS WITHIN MUNICIPAL BOUNDARIES OF ELIZABETH CITY

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
INCOMPLETE PLANS
DO NOT USE FOR E&I ACCEPTANCE



PROJECT LENGTH
LENGTH ROADWAY TIP PROJECT R-2414A = 3.825 KM
LENGTH STRUCTURE TIP PROJECT R-2414A = 0.030 KM
TOTAL LENGTH TIP PROJECT R-2414A = 3.855 KM



PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
DESIGN SERVICES
UTILITY SECTION
RR MAIL: EXCELSIOR CENTER
RALEIGH NC 27603-2849
PHONE (919) 733-4249
FAX (919) 733-4249

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Cory Branscum, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Britt McCurry UTILITIES PROJECT DESIGNER

R-2414A Utilities

Site No.	Station (From/To) -L LINE	Structure Size / Type	WETLAND PERMIT IMPACT SUMMARY						SURFACE WATER IMPACTS		
			Permanent Fill in Wetlands (ha)	Temp. Fill in Wetlands (ha)	Excavation in Wetlands (ha)	Mechanized Clearing in Wetlands (ha)	Hand Clearing in Wetlands (ha)	Permanent SW impacts (ha)	Temp SW impacts (ha)	Existing Channel Impacts Temp (m)	Natural Stream Design (m)
1	8+11 TO 8+83							0.072			
2	10+70 TO 11+07							0.024			
3	11+83 TO 13+00							0.074			
4	13+48 TO 14+64							0.136			
5	15+51 TO 15+79							0.030			
6	16+57 TO 23+30							0.767			
7	24+36 TO 25+11							0.092			
8	25+89 TO 28+17							0.184			
9	28+31 TO 28+45							0.006			
10	28+99 TO 41+64							1.291			
11	42+80 TO 43+00							0.004			
TOTALS:								2.679	0 000	0	0 0

Converted to Acres =

6.61

Temporary fill in wetlands for erosion and sediment control measures.

Temporary Stream Impact.
Existing RCBC and Roadway Fill Removed.
Replaced w/ 23.9m of Open Channel.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CAMDEN COUNTY
WBS 34430 1 1 R-2414A

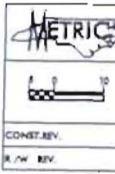
SHEET 2 OF 16 10/13/2008

PROJECT REFERENCE NO. SHEET NO.
R-2414A UD-4

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS

Utility Permit Drawing Sheet 6 of 16



NAD 83

WATER

16+00

[Hatched Box] DENOTES FILL IN
WETLAND

[Hatched Box] HC HC DENOTES HAND
CLEARING

15+00

②
WILLIAM PEFLY
S.A. 46 PL 99

-BL = 2 PINE 1245800
CIV 1.095 LT.

WILLIAM PEFLY
S.A. 46 PL 99

SITE 5

16+00

17+00

17+00

LLOYD D. GRIFFIN
S.A. 46 PL 99

-L TS SLOP +28.33

SITE 6

WATER

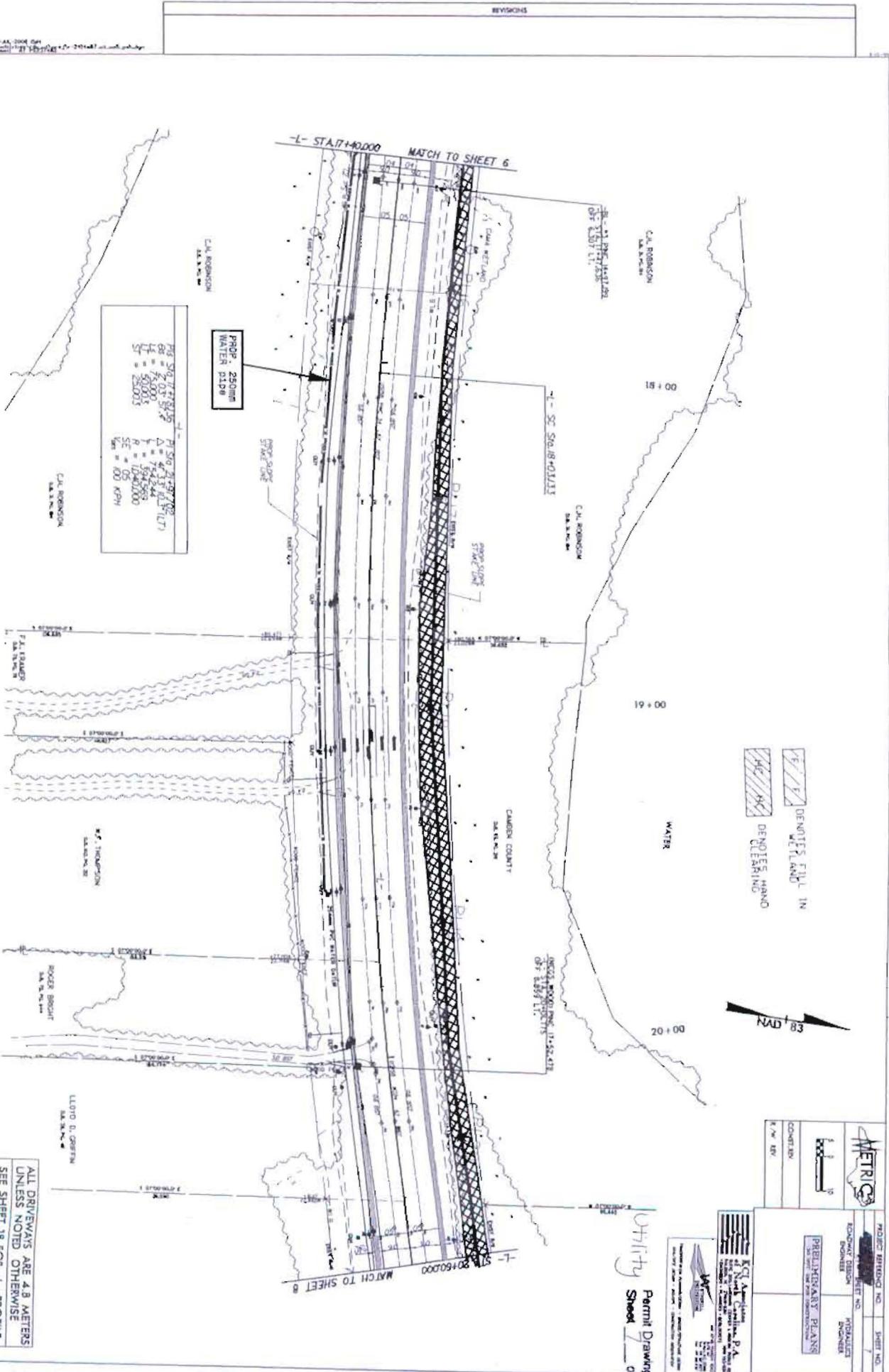
WATER

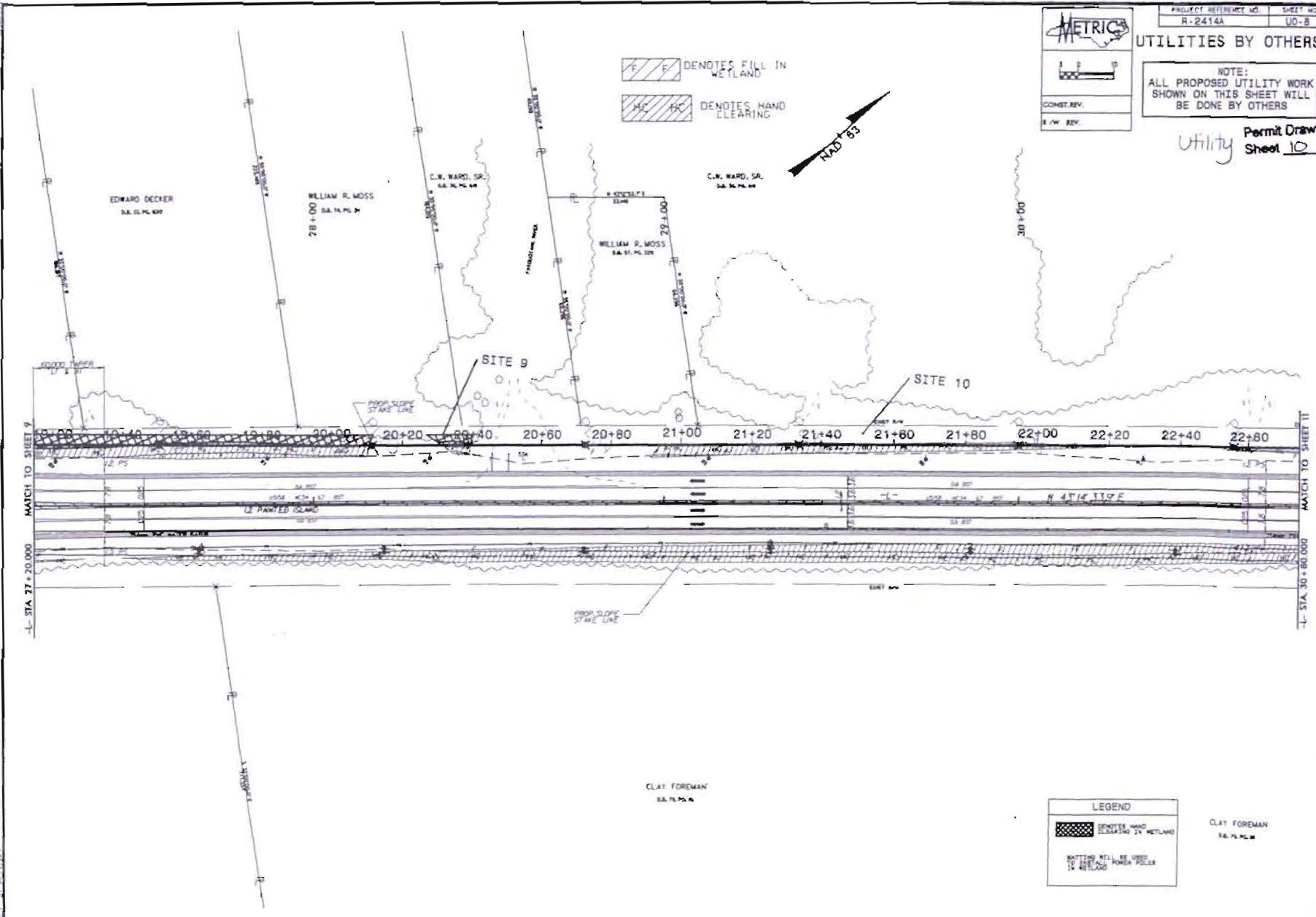
MATCH TO SHEET 5

WATER



SEE SHEET 17 FOR -L PROFILE





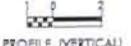
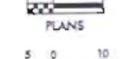
RECEIVED

OCT 2 2 2008
U.S. ARMY CORPS ENG
Washington, D.C.

TIP PROJECT: R-2414A

CONTRACT:

GRAPHIC SCALES



DESIGN DATA

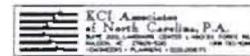
ADT 2008 =	25210
ADT 2028 =	40730
DHV =	12 %
D =	60 %
T =	6 %
V =	80-100 KMH
(TTSF 2 %) =	DUAL 4 %

FUNC. CLASS. = ARTERIAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2414A
 LENGTH STRUCTURE TIP PROJECT R-2414A
 TOTAL LENGTH TIP PROJECT R-2414A

= 3.825 KM
 = 0.030 KM
 = 3.855 KM

CLEARING ON THIS PROJECT WILL BE PERFORMED
BY THE LIMITS ESTABLISHED BY METHOD II

A PORTION OF THIS PROJECT IS WITHIN MUNICIPAL BOUNDARIES OF ELIZABETH CITY



PRE-PLT

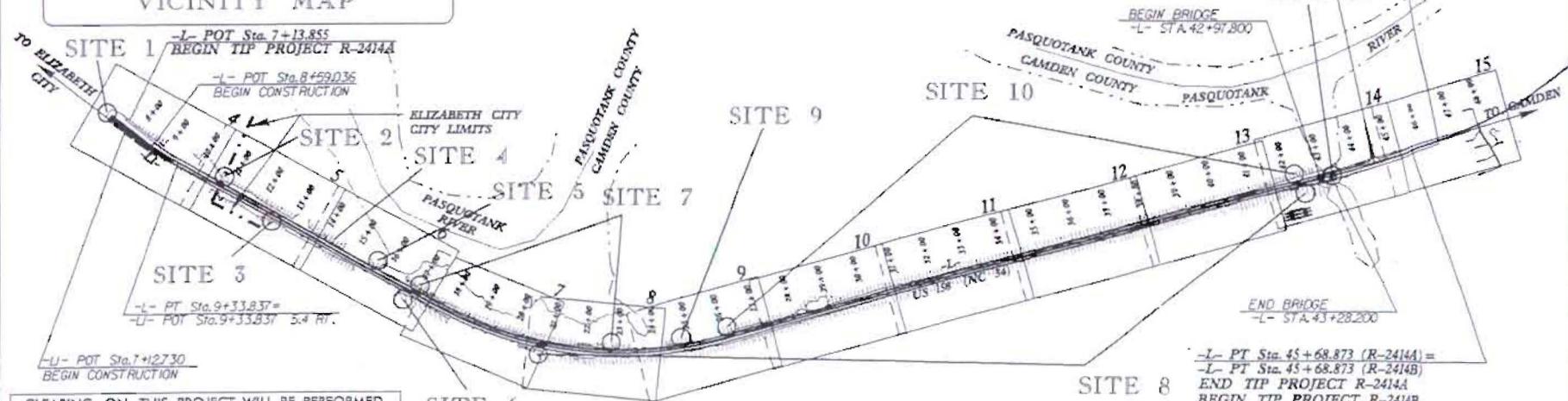
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CAMDEN COUNTY

LOCATION: US 158 / NC 34 FROM EAST OF PASQUOTANK RIVER TO NORTH OF SR 1257 (HAVENWOOD DR.) BETWEEN ELIZABETH CITY AND CAMDEN

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

STATE: N.C.	PROJECT NUMBER: R-2414A	ASSET ID: 1
STATE PROJECT: 34430.1.1	RACE PROJECT: STP-15B(2)	DESCRIPTION: PE
34430.2.4		ROW & UTILITIES CONST.

Permit Drawing
Sheet 5 of 36

-L- PT Sta. 45+68.873 (R-2414A)=
 -L- PT Sta. 45+68.873 (R-2414B)
 END TIP PROJECT R-2414A
 BEGIN TIP PROJECT R-2414B

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Prepared in the Office of: KCI ASSOCIATES Transportation - Project Engineering Division of Highways - Design & Construction Division For The North Carolina Department of Transportation DRAFT STANDARD SPECIFICATIONS
RIGHT OF WAY DATE: November 15, 2006
LETTING DATE: October 21, 2008
EDWARD G. WETHERILL, PE PROJECT DESIGN ENGINEER
BOB A. MAY, PE PROJECT DESIGN ENGINEER
DOUG TAYLOR, PE PROJECT DESIGN ENGINEER
NCDOT CONTACT:
SIGNATURES

HYDRAULICS ENGINEER

EDWARD G. WETHERILL, PE
PROJECT DESIGN ENGINEER

ROADWAY DESIGN
ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DRAWINGS

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)
1	7+00 -L-	18" RCP	<0.01				0.01					
2	10+75 -L- LT						<0.01					
3	12+30 -L- RT	Rip Rap	0.01									
4*	13+80 - 14+63 -L- LT		0.03									
5	15+60 - 15+75 -L- LT		<0.01									
6	16+62 - 18+17 -L- RT		0.02				0.10					
7*	16+79 - 23+30 -L- LT		0.12				0.31					
8*	20+16 - 43+00 -L- RT		1.46				1.51					
9	24+50 - 25+12 -L- LT		0.01				0.03					
10	25+90 - 42+90 -L- LT		0.18				0.89					
11**	43+10 -L-	3 span bridge (Length=100')						0.080		105	50	
TOTALS:			1.83				2.85	0.080		105	50	

* Portion of CAMA Wetland Impacts. Total Listed in Table.

Site 3 = 0.01 ac (Fill)

Site 4 = 0.03 ac (Fill)

Site 7 = 0.01 ac (Fill); 0.05 ac (Hand Clearing)

Site 8 = <0.01 ac (Fill); 0.02 ac (Hand Clearing)

** 50 ft of existing box culvert to be removed and replaced with open channel and bridged.

NOTE: 0.79 ac of Temp Impacts in Wetlands in the Hand Clearing areas due to erosion control measures.
Includes 0.77 ac and 0.02 ac of impact to 404 and CAMA wetlands, respectively.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CAMDEN COUNTY
WBS - 34430.1.1 (R-2414A)

US 158 Widening

SHEET

March-08

REVISIONS

8/17/04

SITE 1

DETAIL A	
• PELLET WATERS	
400	400
300	300
200	200
100	100
0	0

F/F
F/F
DENOTES FILL IN
WETLANDS
H/C
H/C
DEPOTS CLEARING
LAND

BEGIN TYP PROJECT R-2444

PY SLOP 3.0% to 2.2%
D = 8.27' H = 33.5'(LT)
R = 84.59' S = 44.59'
SE = 60.0000
Vm = 80 KPH

METRIC
PROJECT REFERENCE NO. R-2444
P.M. SHEET NO. 4
ECONOMIC DESIGN
ENGINEER
TOPOGRAPHIC
DESIGNER
CONSTANT
K/W REV.
Permit Drawing
Sheet 7 of 26
Preliminary Plans
Engineering Services Inc.
Engineering Services Inc.

NAD 83

PROJECT
REFERENCE NO.
R-2444
P.M. SHEET NO.
4
ECONOMIC
DESIGN
ENGINEER
TOPOGRAPHIC
DESIGNER
CONSTANT
K/W REV.
Permit Drawing
Sheet 7 of 26
Preliminary Plans
Engineering Services Inc.
Engineering Services Inc.

BEGIN CONSTRUCTION
R-2444

WATER

PY STA 8+00.00
D = 8.27' H = 33.5'(LT)
R = 84.59' S = 44.59'
SE = 60.0000
Vm = 80 KPH

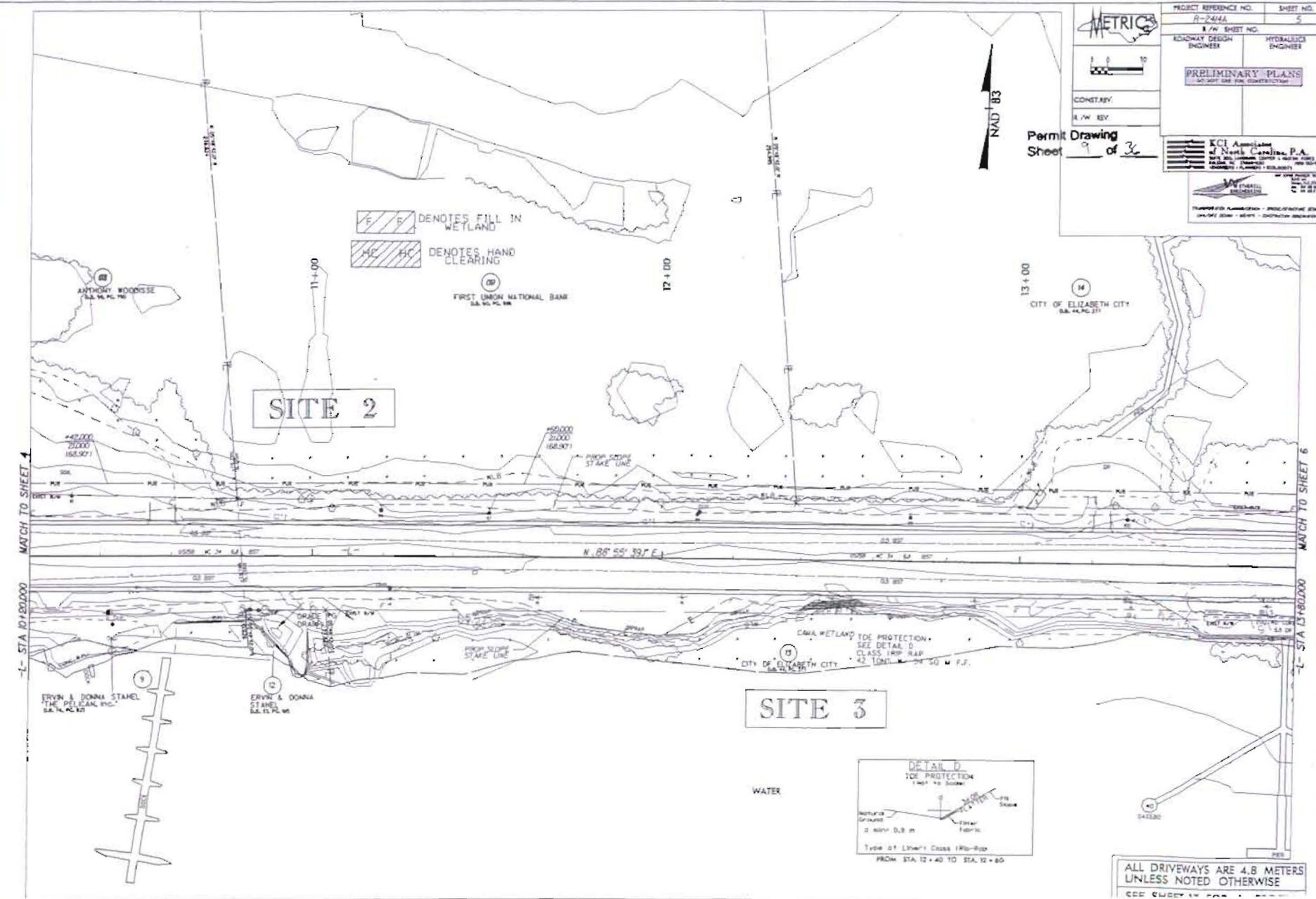
WATER

800

MATCH TO SHEET 5

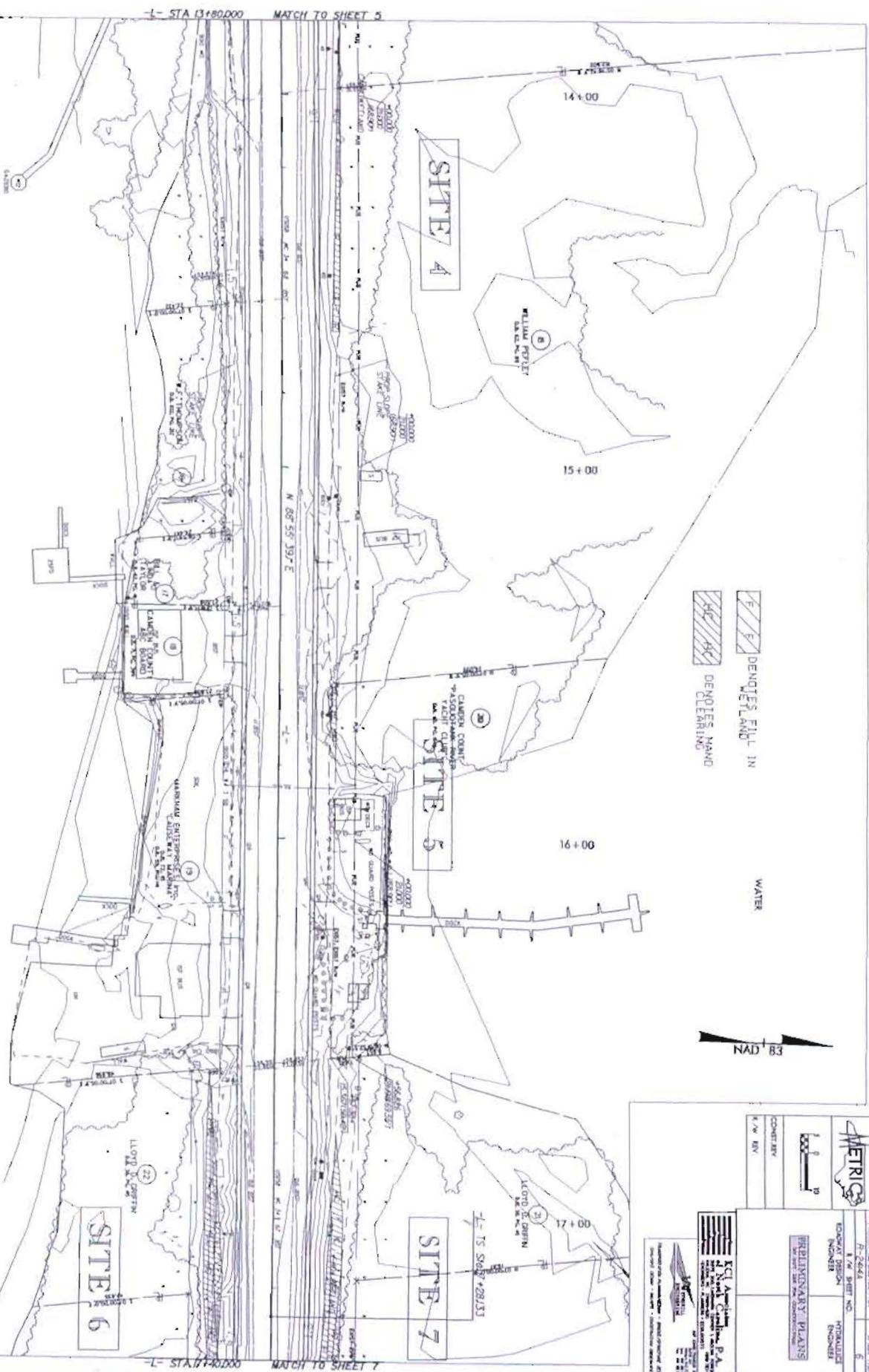
-L STA 10+20.000

REVISIONS



R/W REVISION - REVISED PROPOSED STATION AND OFFSETS FOR TEMPORARY CONST EASEMENT LEFT, BAM

REVISIONS



Permit Drawing
Sheet 13
of 36

PROJECT NUMBER NO. DRAWER NO.

5

A-37-2574-A

5

REV. SHEET NO.

5

ROCKAWAY DESIGN

HYDRAULIC

ENGINEER

CONTRACT

K-36 REV.

METRIC

SCALE

1:1000

DATE

2008-04-25

REVISION

13

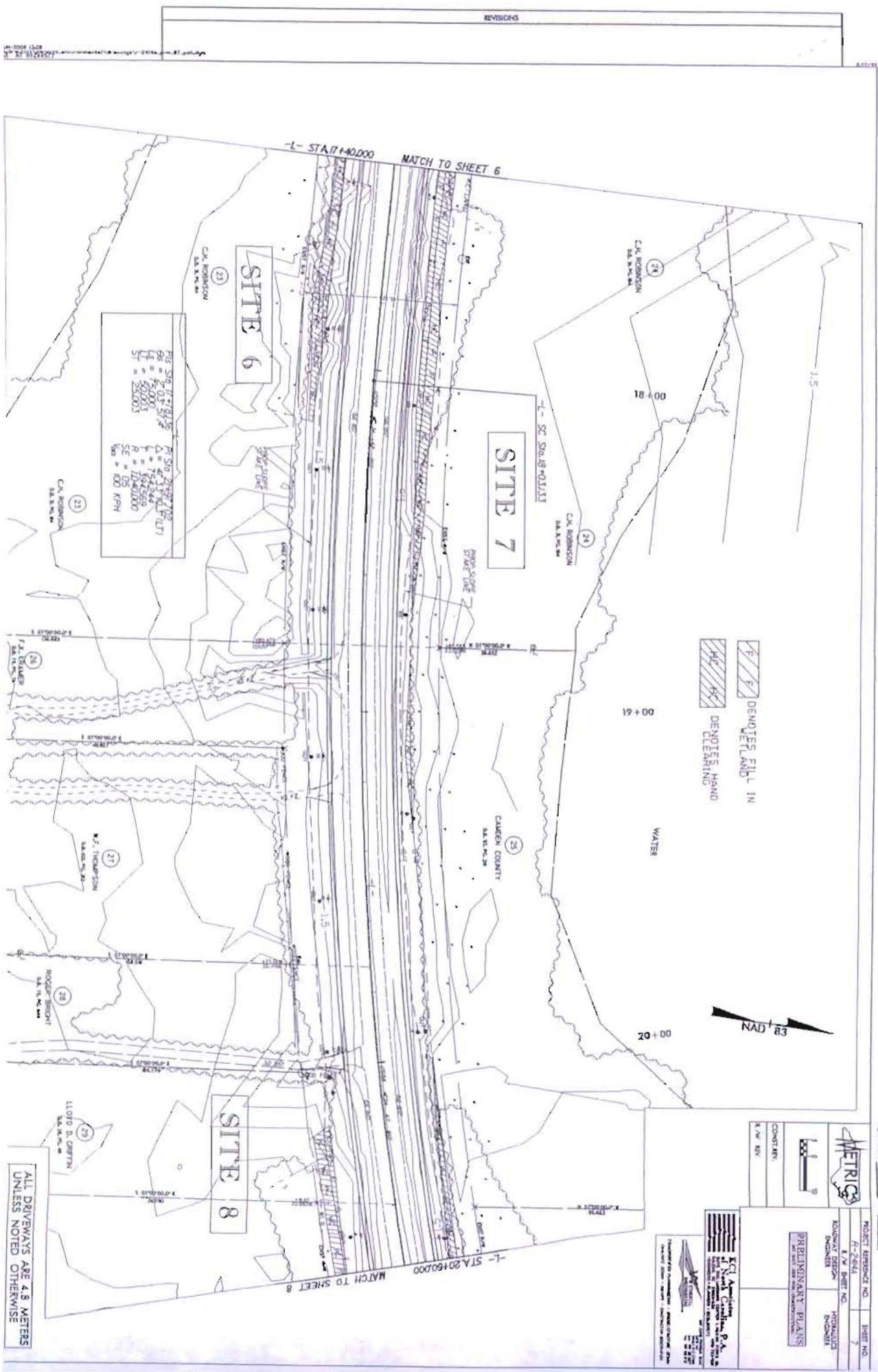
PRELIMINARY PLANS

In accordance with the provisions of the
Water Pollution Control Act, this drawing is
submitted for review by the State
Engineering and Construction Division
of the New Jersey Department of
Environmental Protection.

Engineering and Construction
Division
New Jersey Department of Environmental Protection
Trenton, NJ 08625

2008-04-25

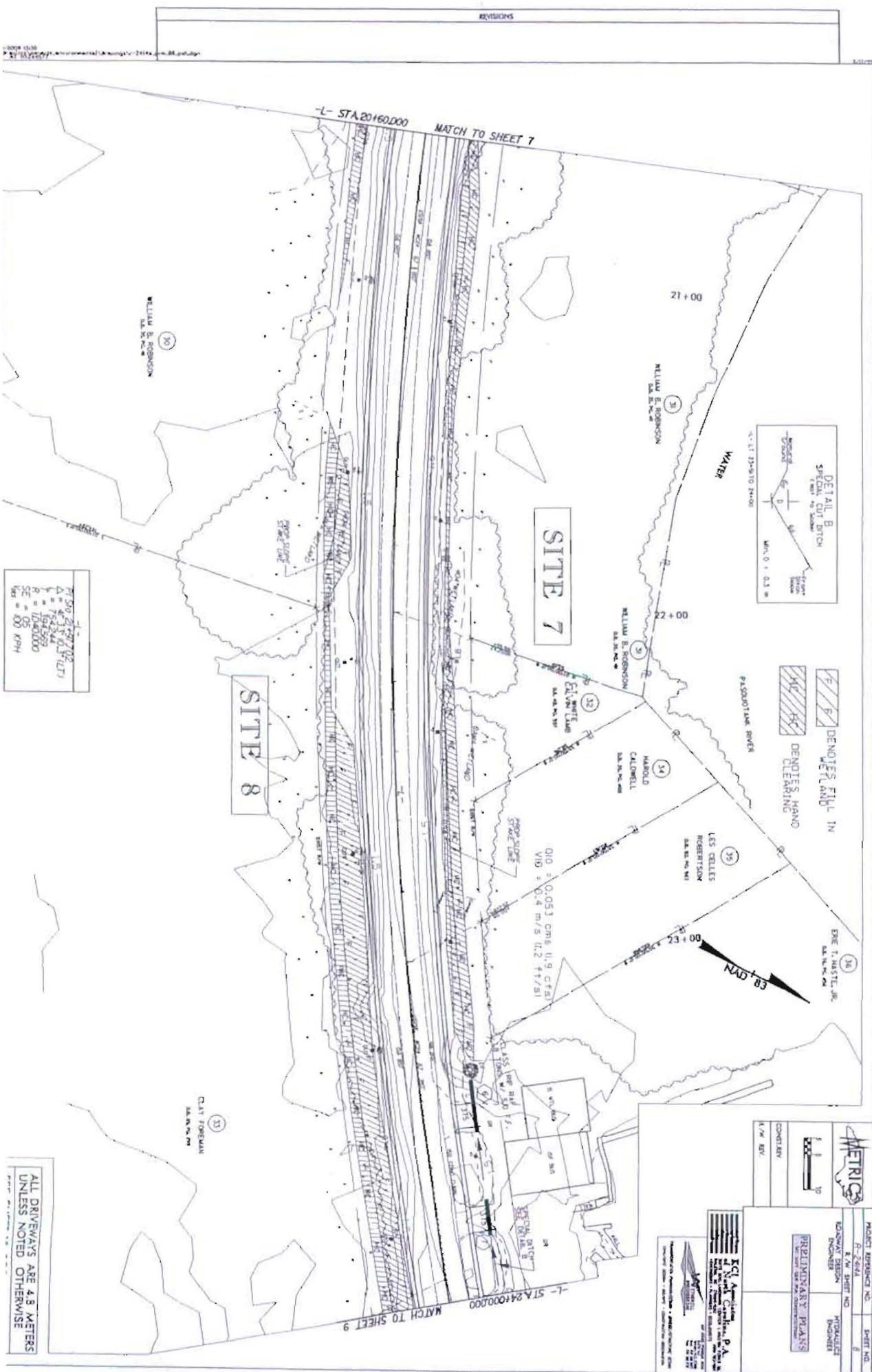
2008-04-25



ALL DRIVEWAYS ARE 4.8 METERS
 UNLESS NOTED OTHERWISE

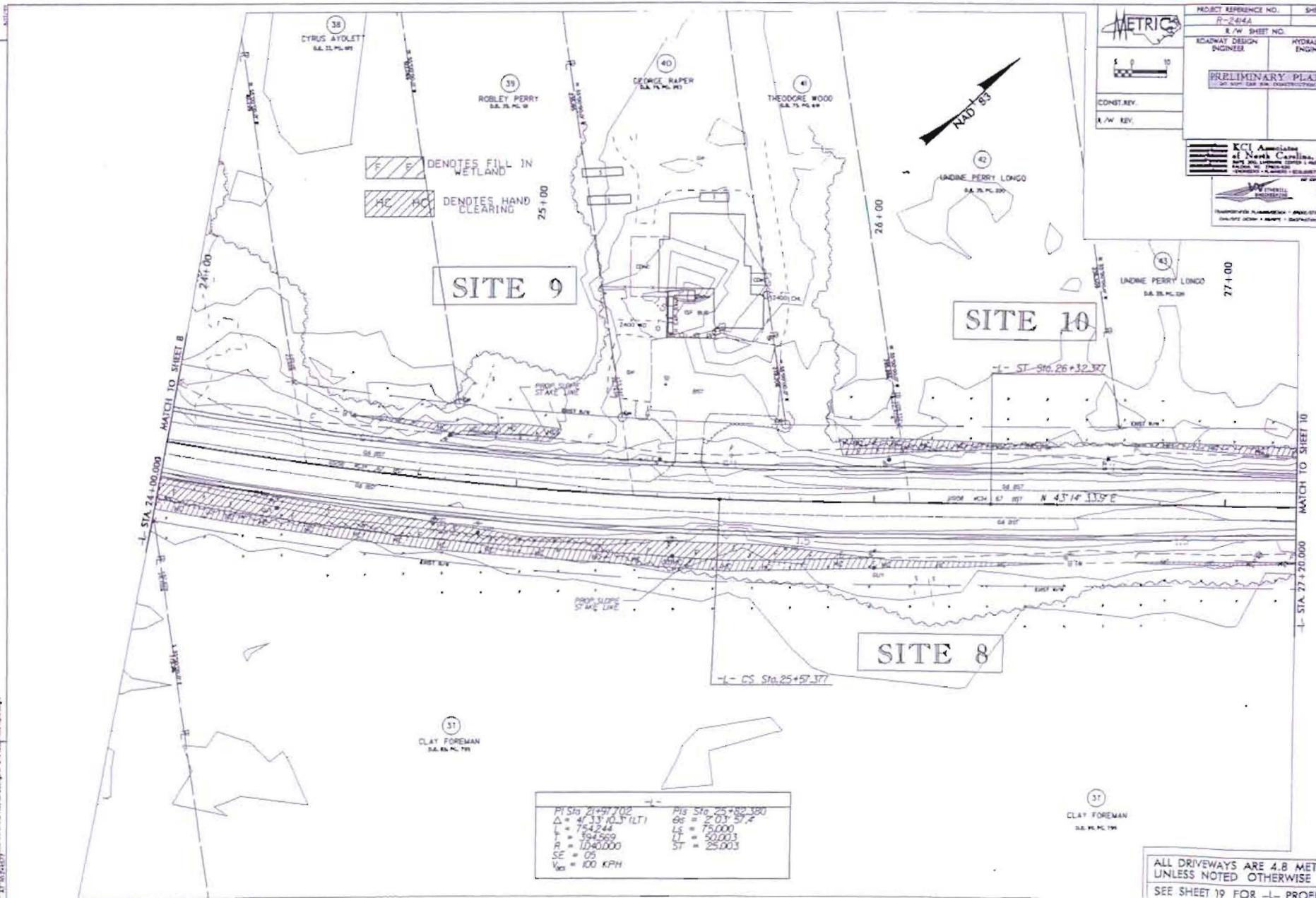
Permit Drawing
Sheet 21 of 30

PROJECT REFERENCE NO.	PERMIT NO.
R-24644	6
DRAWING SHEET NO.	
1	
PRELIMINARY PLANS	
EARTHWORKS	
CONCRETE	
H/W REV.	



PRELIMINARY DRAWING
Sheet 23 of 36

PROJECT REFERENCE NO. R-244A SHEET NO. 9
E/W SHEET NO.
ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER
METRIC
CONSTR.
X/W REV:
KCI Associates of North Carolina, P.A.
3000 NC Highway 158 • Suite 100 • Morrisville, NC 27560
Telephones: 919-290-0000 • Fax: 919-290-0001
WATERSHED ENGINEERING
TRANSPORT PLANNING • HYDRAULIC STRUCTURE DESIGN
GRAVEL DUMP • DREDGE • DREDGE/WATER MANAGEMENT



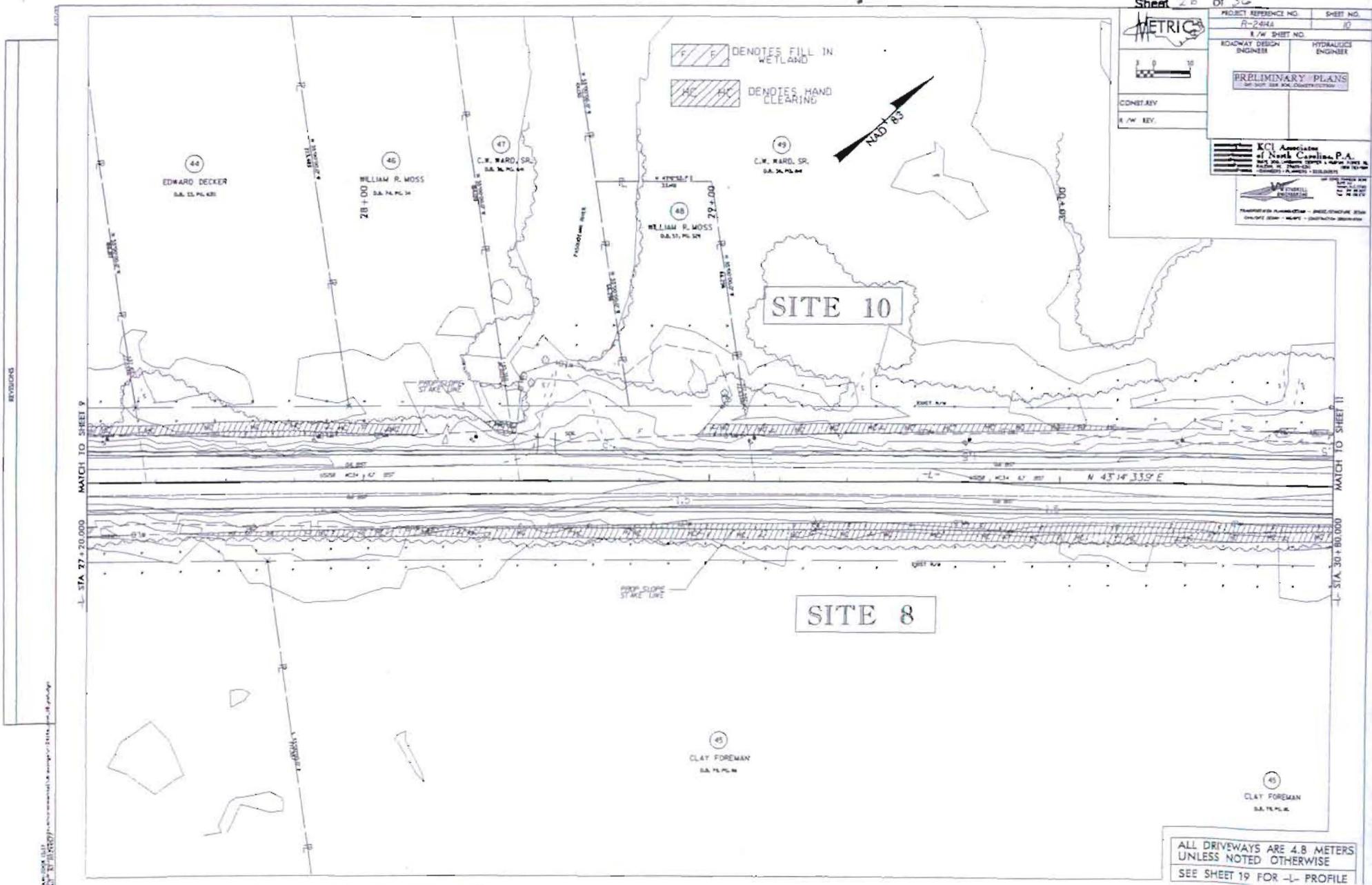
Permit Drawing
Sheet 26 of 36

PROJECT REFERENCE NO.	SHEET NO.
R-2444	10
E/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS <small>FOR THE NEW ROAD CONSTRUCTION</small>	
CONTRACTOR	
E/W REV.	
KCI Associates of North Carolina, P.A. <small>Engineers • Surveyors • Landscapers 1000 N. Tryon Street • Suite 1800 • Charlotte, NC 28204 Telephone: (704) 365-1000 • Facsimile: (704) 365-1020</small>	

 METRIC

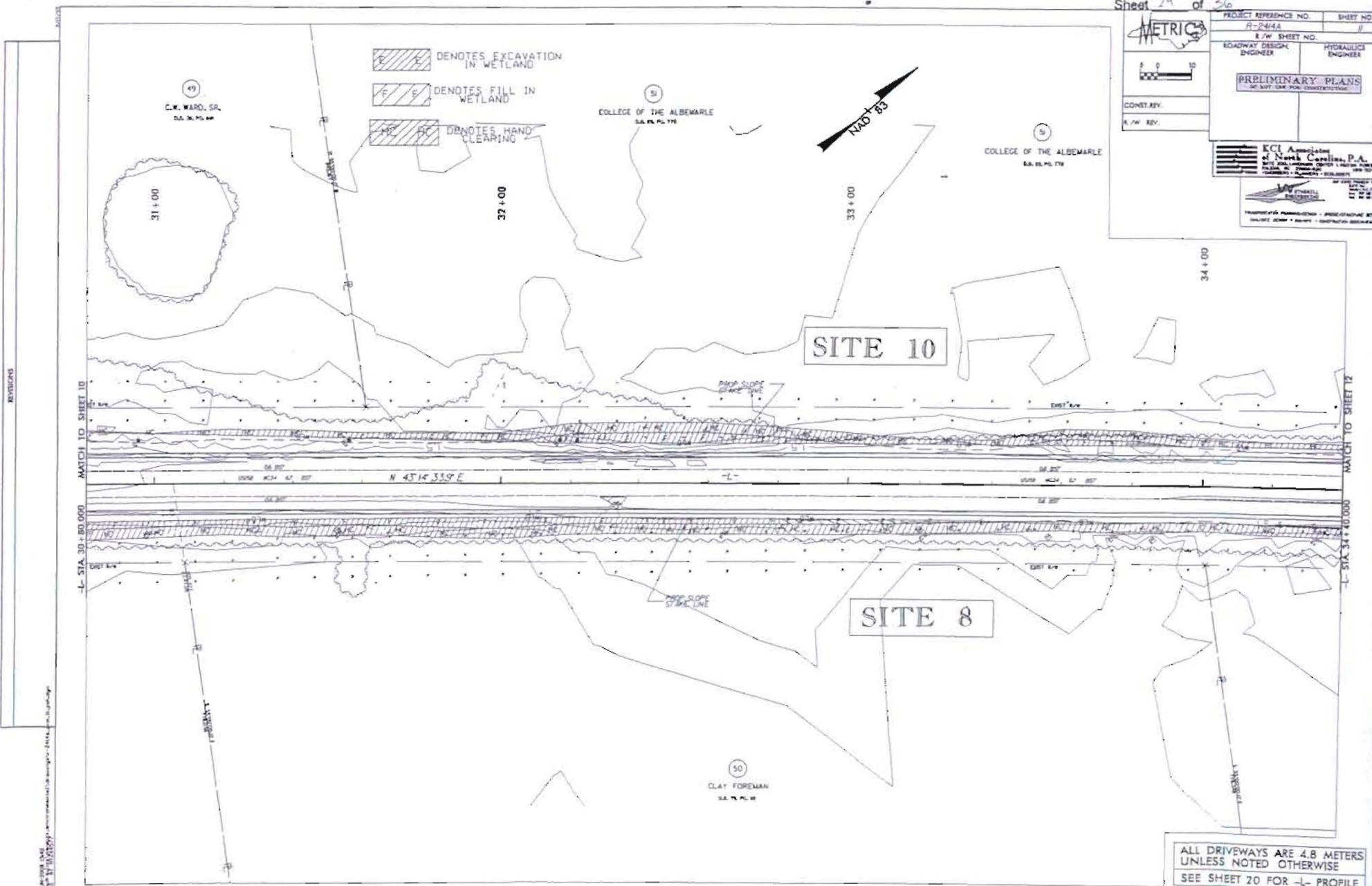
 W. STARNELL
Engineering

TRANSPORTATION PLANNING - ENGINEERING STARS
CHARLOTTE, NC - WILMINGTON - CONSTRUCTION SERVICES



Permit Drawing
Sheet 2a of 36

PROJECT REFERENCE NO.	SHEET NO.
P-2414A	11
E/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULIC ENGINEER
PRELIMINARY PLANS FOR 2001 CONSTRUCTION	
CONTRACTOR:	
A/W KEY:	
ECL Associates of North Carolina, P.A. 1000 E. Morehead Street • Suite 1000 • Charlotte, NC 28204 • (704) 333-1000 FAX: (704) 333-1001	
TYPICAL SECTION DRAWINGS - PRELIMINARY PLAN SHEET 20 - SHEET 20 PROFILE SECTION	



Permit Drawing
Sheet 3 of 3

PROJECT REFERENCE NO.	PERMIT NO.
PF-2444	10
NAME OF SHEET NO.	
COLLEGE OF THE ALBERMARLE	51
DESIGNER	
HYDRAULICS	
ENGINEER	
CONTRACTOR	
OWNER	

PRELIMINARY PLANS

ECL - Cawood, PA

ECL - Cawood, PA

ECL - Cawood, PA

ECL - Cawood, PA

35 + 00
36 + 00
37 + 00
38 + 00

SITE 10

REVISIONS

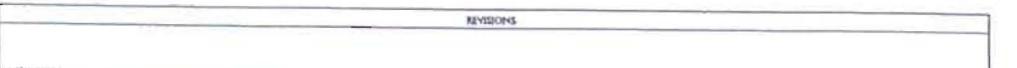
MATCH TO SHEET 11

L STA 34 + 40.000

SITE 8

MATCH TO SHEET 13

L STA 38 + 00.000

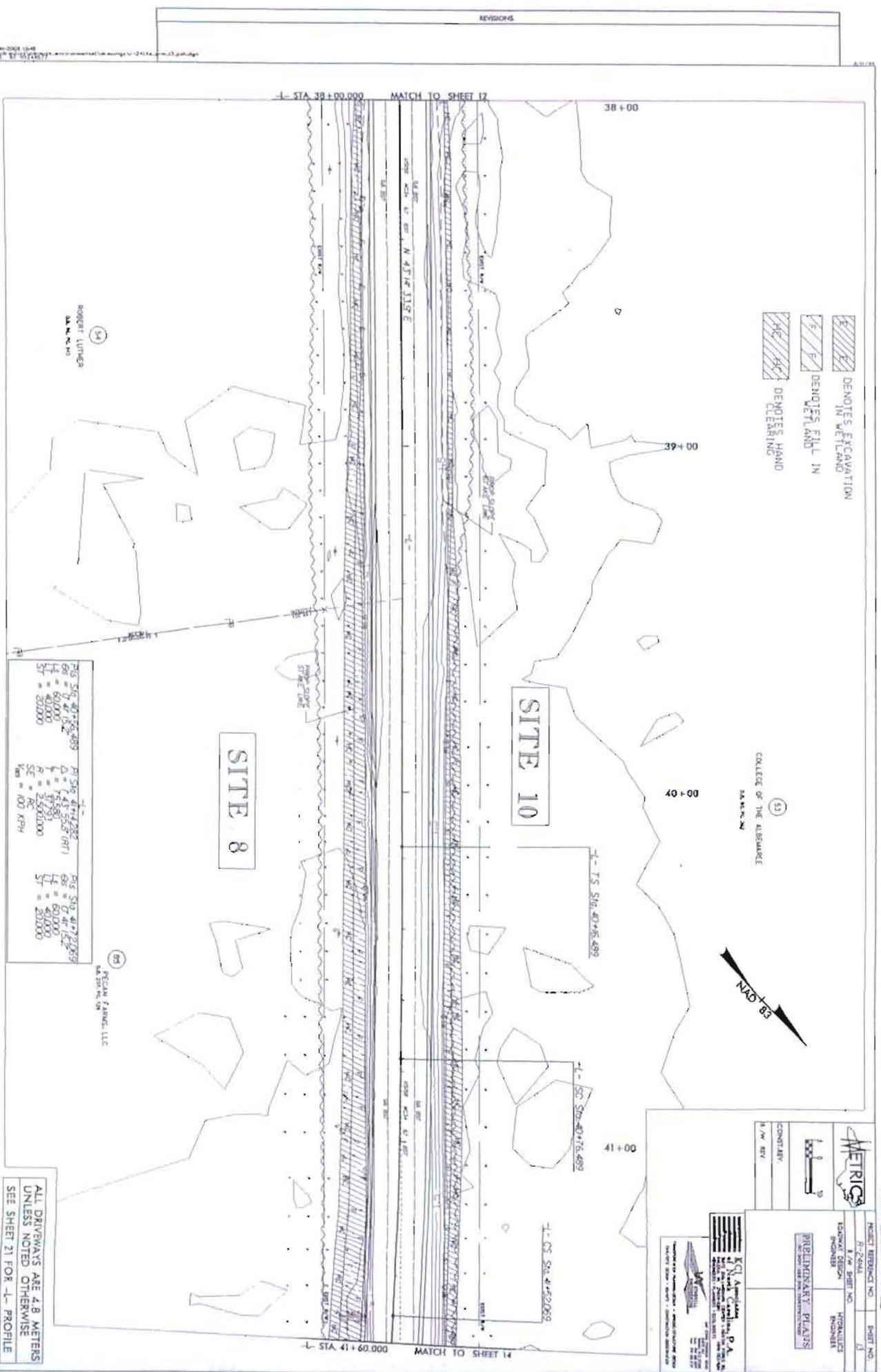


■ D. ROBINSON
With permission available

(2)

(4)
ROBERT LUTHER
L.S., N.C., P.E., P.G.

ALL DRIVEWAYS ARE 4.8 METERS
UNLESS NOTED OTHERWISE
SEE SHEET 20 FOR L PROFILE



Permit Drawing
Sheet 35 of 36

