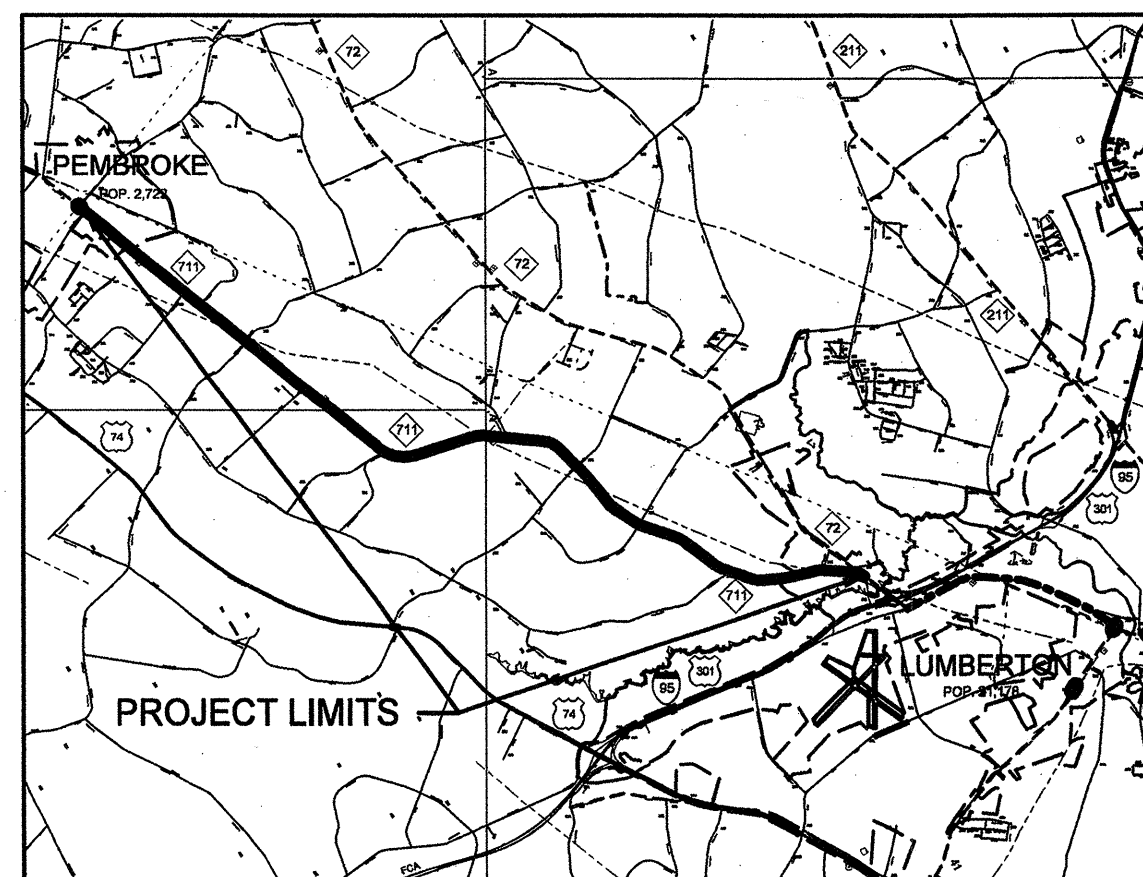


See Sheet 1-A For Index of Sheets



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

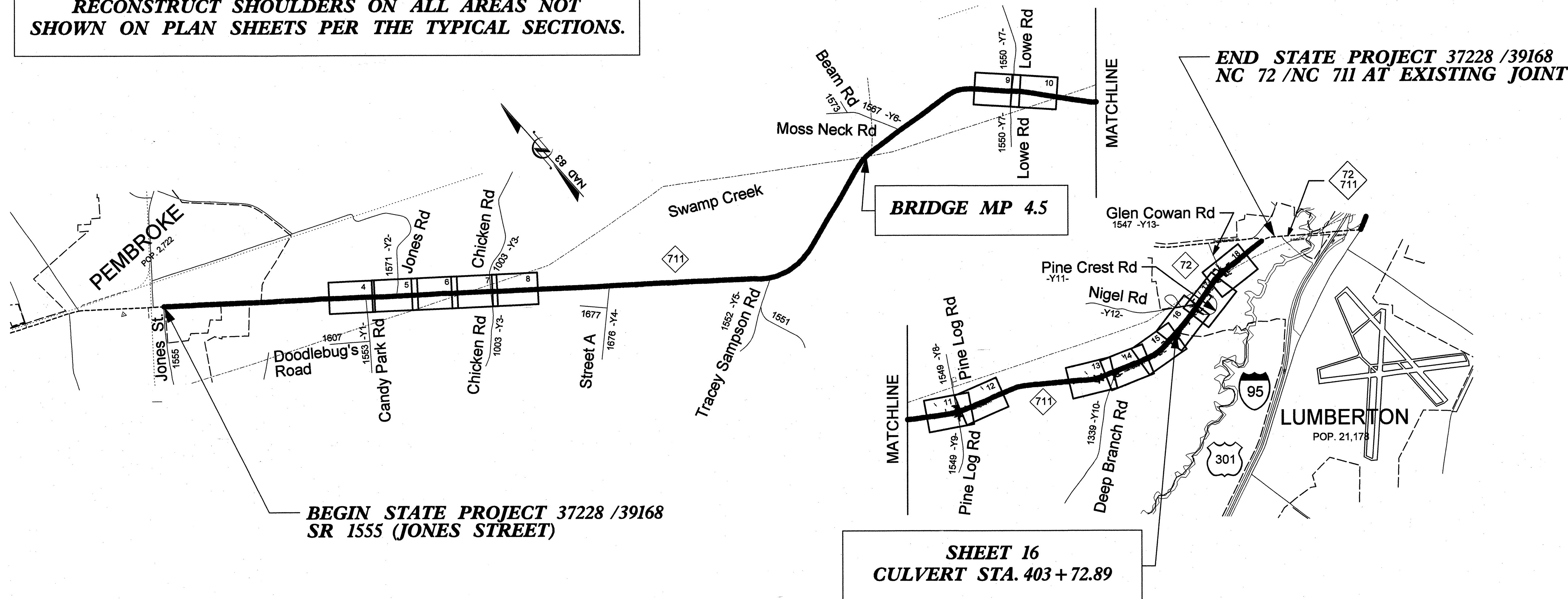
ROBESON COUNTY

**LOCATION: NC 711 FROM SR 1555 (JONES STREET) IN PEMBROKE
TO THE PAVEMENT CHANGE 0.05 MI. EAST OF NC 72**

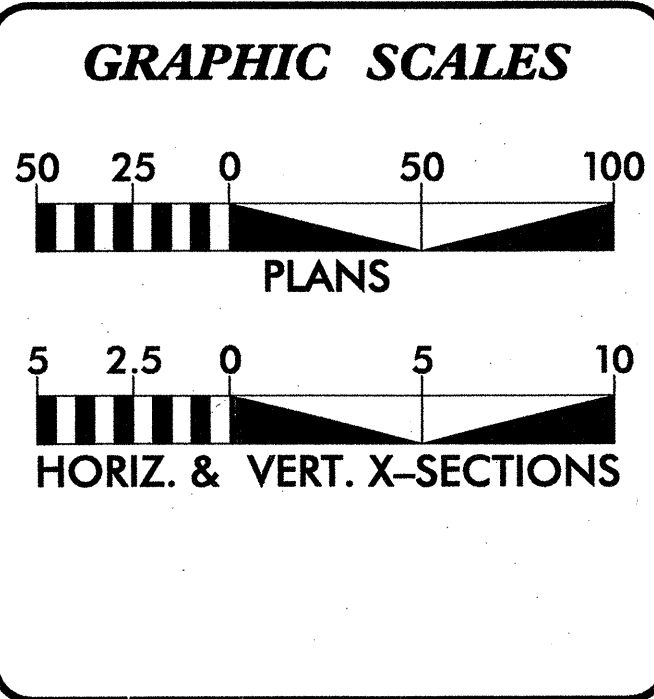
**TYPE OF WORK: GRADING, WIDENING, RESURFACING, DRAINAGE, GUARDRAIL, CULVERT EXTENSION
PAVEMENT MARKINGS, AND UTILITY CONSTRUCTION**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	37228 /39168	1	208
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
37228		P.E., R /W, CONST. UTILITY CONST. UTILITY BY OTHERS	

CONTRACTOR SHALL WIDEN, RESURFACE, AND RECONSTRUCT SHOULDERS ON ALL AREAS NOT SHOWN ON PLAN SHEETS PER THE TYPICAL SECTIONS.



PROJECT: 37228 /39168



DESIGN DATA
ADT 2002 = 17,000

PROJECT LENGTH

LENGTH OF ROADWAY STATE PROJECT 37228 = 9.12 MI.
TOTAL LENGTH STATE PROJECT 37228 = 9.12 MI.

Prepared By:
HDR Engineering, Inc.
of the Carolinas
128 S. Tryon Street, Suite 1400 • Charlotte, N.C. 28202

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
SEPTEMBER 21, 2004

LETTING DATE:
NOVEMBER 21, 2006

HISHAM ABDELAZIZ, PE
PROJECT ENGINEER

LISA M. PODESZWA, PE
PROJECT DESIGN ENGINEER

ROADWAY DESIGN ENGINEER

Lisa M. Podeszwa P.E.
SIGNATURE

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

STATE DESIGN ENGINEER
**DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

APPROVED
DIVISION ADMINISTRATOR

DATE

7/5/2006 7:19:39 PM p:\0016612625.018\HDR_Proposed\Details\NC_711 Title.dgn

PROJECT: 37228
ROBESON COUNTY

GENERAL NOTES: 2002 SPECIFICATIONS

EFFECTIVE: 01-15-02
REVISED: 05-14-03

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARDS
1-B	CONVENTIONAL SYMBOLS
2 THRU 2-B	PAYEMENT SCHEDULE, WEDGING DETAIL, AND TYPICAL SECTIONS
2-C THRU 2-F	GUARDRAIL INSTALLATION DETAIL SHEETS
2-G THRU 2-I	STRUCTURE ANCHOR UNITS DETAIL SHEETS
2-J	25'0" CLEAR SPAN GUARDRAIL DETAIL SHEET
3	SUMMARY OF QUANTITIES
3-A THRU 3-C	DRAINAGE SUMMARY
3-D	EARTHWORK AND GUARDRAIL SUMMARIES
3-E	PARCEL INDEX SHEET
3-F	R/W AREA DATA SHEET
4 THRU 18	PLAN SHEETS
TCP-1 THRU TCP-18	TRAFFIC CONTROL PLANS
PM-1 THRU PM-16	PAVEMENT MARKING PLANS
EC-1 THRU EC-17	EROSION CONTROL PLANS
UC-1 THRU UC-12	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-15	UTILITIES BY OTHERS PLANS
X-1 THRU X-97	CROSS SECTIONS
C-1 THRU C-4	CULVERT PLANS
SN	STRUCTURE GENERAL NOTES

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT CROWN POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT AND EARTH SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS IN PLANS AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE ROBESON COUNTY PUBLIC UTILITIES, NORTH CAROLINA NATURAL GAS, CITY OF LUMBERTON PUBLIC WORKS, TOWN OF PEMBROKE PUBLIC WORKS, BELLSOUTH, TIME WARNER CABLE, AND LUMBEE RIVER EMC.

RELOCATE ALL EXISTING WATER METERS OUT OF PROPOSED DITCH AS DIRECTED BY THE ENGINEER.

ANY ADDITIONAL RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

ROADWAY ENGLISH STANDARD DRAWINGS

REV.04-07-04
EFF. 01-15-02

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January 15, 2002 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
225.06	Method of Grading Sight Distance at Intersections
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation - Method 'A'
310.10	Driveway Pipe Construction
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
838.01	Concrete Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90° Skew
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.31	Concrete Junction Box - 12" thru 66" Pipe
840.32	Brick Junction Box - 12" thru 66" Pipe
840.34	Traffic Bearing Junction Box - for Use with Pipes 42" and Under
840.54	Manhole Frame and Cover
840.71	Concrete and Brick Pipe Plug
840.72	Pipe Collar
846.01	Concrete Curb, Gutter and Curb & Gutter
848.04	Street Turnout
862.01	Guardrail Placement
862D02	Guardrail Installation
862D03	Structure Anchor Units
866.01	Chain Link Fence - 4', 5' and 6' High Fence
866.02	Woven Wire Fence - with Wood Post
866.03	Woven Wire Fence - with Steel Post
876.02	Guide for Rip Rap at Pipe Outlets

5/14/09 5/26/2006 10:33:14 AM C:\Users\jg\Documents\Projects\2006\05\01\01\HDP_Planes\A\Detail\General\Notes\indexof_sheets.dwg

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

*S.U.E = SUBSURFACE UTILITY ENGINEER

CONVENTIONAL SYMBOLS

ROADS & RELATED ITEMS

Edge of Pavement	---
Curb	----
Prop. Slope Stakes Cut	---C---
Prop. Slope Stakes Fill	---F---
Prop. Woven Wire Fence	○—○
Prop. Chain Link Fence	□—□
Prop. Barbed Wire Fence	◇—◇
Prop. Wheelchair Ramp	○ ^{WCR}
Curb Cut for Future Wheelchair Ramp	○ ^{CCFR}
Exist. Guardrail	—T—T—T—
Prop. Guardrail	—T—T—T—
Equality Symbol	⊕
Pavement Removal	⊗

RIGHT OF WAY

Baseline Control Point	◆
Existing Right of Way Marker	△
Exist. Right of Way Line wMarker	---△---
Prop. Right of Way Line with Proposed	—▲—
R/W Marker (Iron Pin & Cap)	▲
Prop. Right of Way Line with Proposed	—▲—
(Concrete or Granite) R/W Marker	▲ ^{CA}
Exist. Control of Access Line	○ ^{CA}
Prop. Control of Access Line	○ ^{CA}
Exist. Easement Line	---E---
Prop. Temp. Construction Easement Line	---E---
Prop. Temp. Drainage Easement Line	---TDE---
Prop. Perm. Drainage Easement Line	---PDE---

HYDROLOGY

Stream or Body of Water	~~~~~
River Basin Buffer	---BZ---
Flow Arrow	→
Disappearing Stream	~>
Spring	○ ⁺
Swamp Marsh	~>~>
Shoreline	---S---
Falls, Rapids	—+—
Prop Lateral, Tail, Head Ditches	—>—

STRUCTURES

MAJOR	
Bridge, Tunnel, or Box Culvert	---CONC---
Bridge Wing Wall, Head Wall and End Wall	---CONC WW---

MINOR	
Head & End Wall	---CONC HW---
Pipe Culvert	===
Footbridge	--->---
Drainage Boxes	□ ^{CB}
Paved Ditch Gutter	---TS---

UTILITIES

Exist. Pole	●
Exist. Power Pole	○
Prop. Power Pole	○
Exist. Telephone Pole	○
Prop. Telephone Pole	○
Exist. Joint Use Pole	○
Prop. Joint Use Pole	○
Telephone Pedestal	⊕
UG Telephone Cable Hand Hold	⊕ ^H
Cable TV Pedestal	⊕ ^{CTV}
UG TV Cable Hand Hold	⊕ ^{TV}
UG Power Cable Hand Hold	⊕ ^P
Hydrant	⊕ ^H
Satellite Dish	⊕ ^D
Exist. Water Valve	⊕ ^V
Sewer Clean Out	⊕ ^{CO}
Power Manhole	⊕ ^P
Telephone Booth	⊕ ^T
Cellular Telephone Tower	⊕ ^{CT}
Water Manhole	⊕ ^W
Light Pole	⊕ ^L
H-Frame Pole	⊕ ^H
Power Line Tower	⊕ ^P
Pole with Base	⊕ ^B
Gas Valve	⊕ ^V
Gas Meter	⊕ ^M
Telephone Manhole	⊕ ^T
Power Transformer	⊕ ^P
Sanitary Sewer Manhole	⊕ ^{SS}
Storm Sewer Manhole	⊕ ^{SS}
Tank; Water, Gas, Oil	⊕ ^T
Water Tank With Legs	⊕ ^T
Traffic Signal Junction Box	⊕ ^T
Fiber Optic Splice Box	⊕ ^F
Television or Radio Tower	⊕ ^T
Utility Power Line Connects to Traffic Signal Lines Cut Into the Pavement	---TS---

Recorded Water Line	---W---
Designated Water Line (S.U.E.*)	---W---
Sanitary Sewer	---SS---
Recorded Sanitary Sewer Force Main	---FSS---
Designated Sanitary Sewer Force Main(S.U.E.*)	---FSS---
Recorded Gas Line	---G---
Designated Gas Line (S.U.E.*)	---G---
Storm Sewer	---S---
Recorded Power Line	---P---
Designated Power Line (S.U.E.*)	---P---
Recorded Telephone Cable	---T---
Designated Telephone Cable (S.U.E.*)	---T---
Recorded U/G Telephone Conduit	---TC---
Designated U/G Telephone Conduit (S.U.E.*)	---TC---
Unknown Utility (S.U.E.*)	---?UTL---
Recorded Television Cable	---TV---
Designated Television Cable (S.U.E.*)	---TV---
Recorded Fiber Optics Cable	---FO---
Designated Fiber Optics Cable (S.U.E.*)	---FO---
Exist. Water Meter	⊕
UG Test Hole (S.U.E.*)	⊕ ^T
Abandoned According to U/G Record	ATTUR
End of Information	E.O.I.

BOUNDARIES & PROPERTIES

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Property Line Symbol	⊕ ^P
Exist. Iron Pin	⊕ ^{EIP}
Property Corner	+
Property Monument	⊕ ^{ECM}
Property Number	⊕ ¹²³
Parcel Number	⊕ ⁶
Fence Line	---X---X---
Existing Wetland Boundaries	---WW & ISBW---
High Quality Wetland Boundary	---WLB---
Medium Quality Wetland Boundaries	---MQ WLB---
Low Quality Wetland Boundaries	---LQ WLB---
Proposed Wetland Boundaries	---WLB---
Existing Endangered Animal Boundaries	---EAB---
Existing Endangered Plant Boundaries	---EPB---

BUILDINGS & OTHER CULTURE

Buildings	---
Foundations	---
Area Outline	---
Gate	---
Gas Pump Vent or UG Tank Cap	○
Church	---
School	---
Park	---
Cemetery	---
Dam	---
Sign	---
Well	---
Small Mine	---
Swimming Pool	---

TOPOGRAPHY

Loose Surface	---
Hard Surface	---
Change in Road Surface	---
Curb	---
Right of Way Symbol	R/W
Guard Post	○ GP
Paved Walk	---
Bridge	---
Box Culvert or Tunnel	---
Ferry	---
Culvert	---
Footbridge	---
Trail, Footpath	---
Light House	---

VEGETATION

Single Tree	---
Single Shrub	---
Hedge	---
Woods Line	---
Orchard	---
Vineyard	---

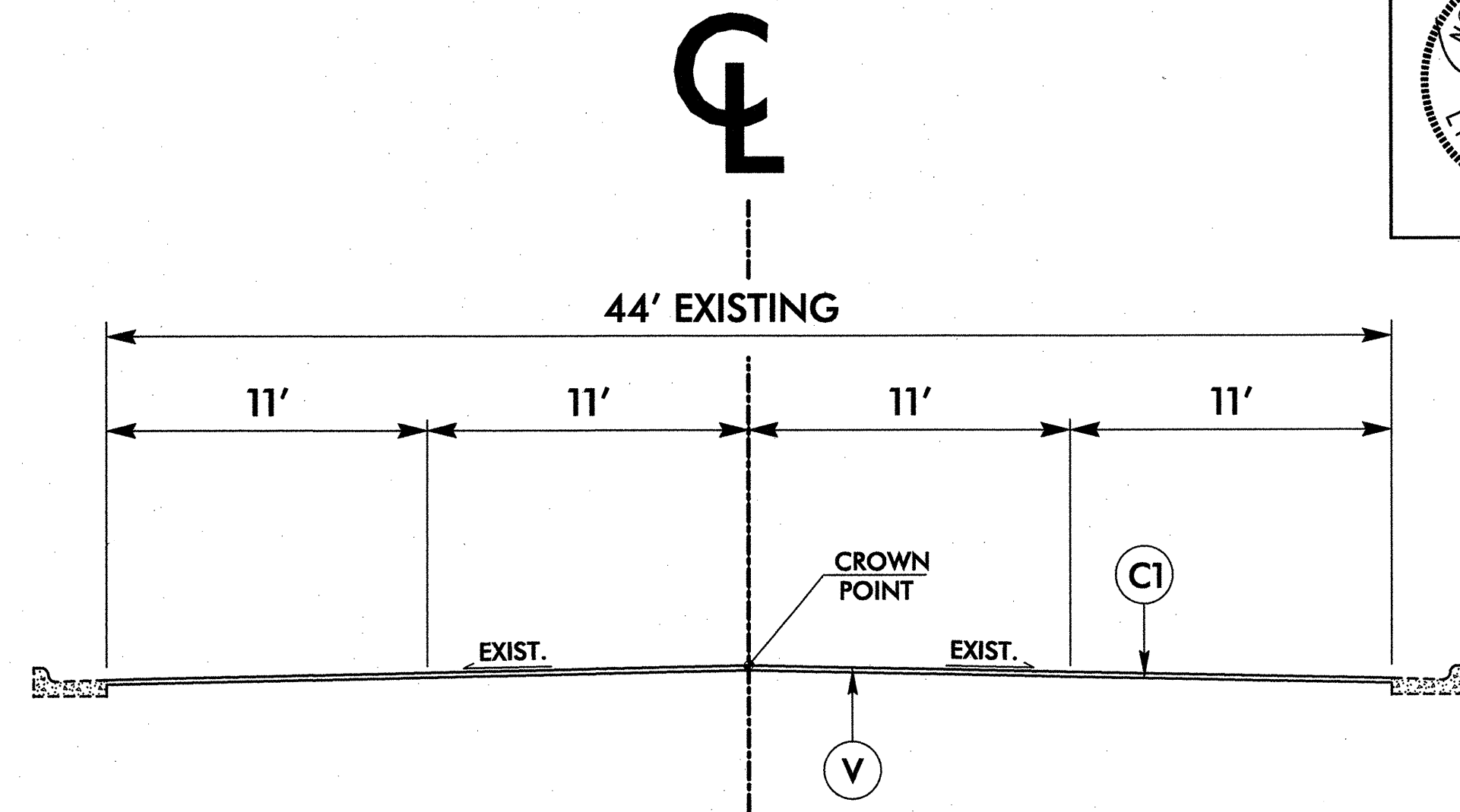
RAILROADS

Standard Gauge	---
RR Signal Milepost	---
Switch	---

5/28/99
5/26/2006
10:34:45 AM
D:\Projects\2006\10-18-06\10-18-06.dwg
P:\Projects\2006\10-18-06\10-18-06.dwg
5/28/99
5/26/2006
10:34:45 AM
D:\Projects\2006\10-18-06\10-18-06.dwg
P:\Projects\2006\10-18-06\10-18-06.dwg

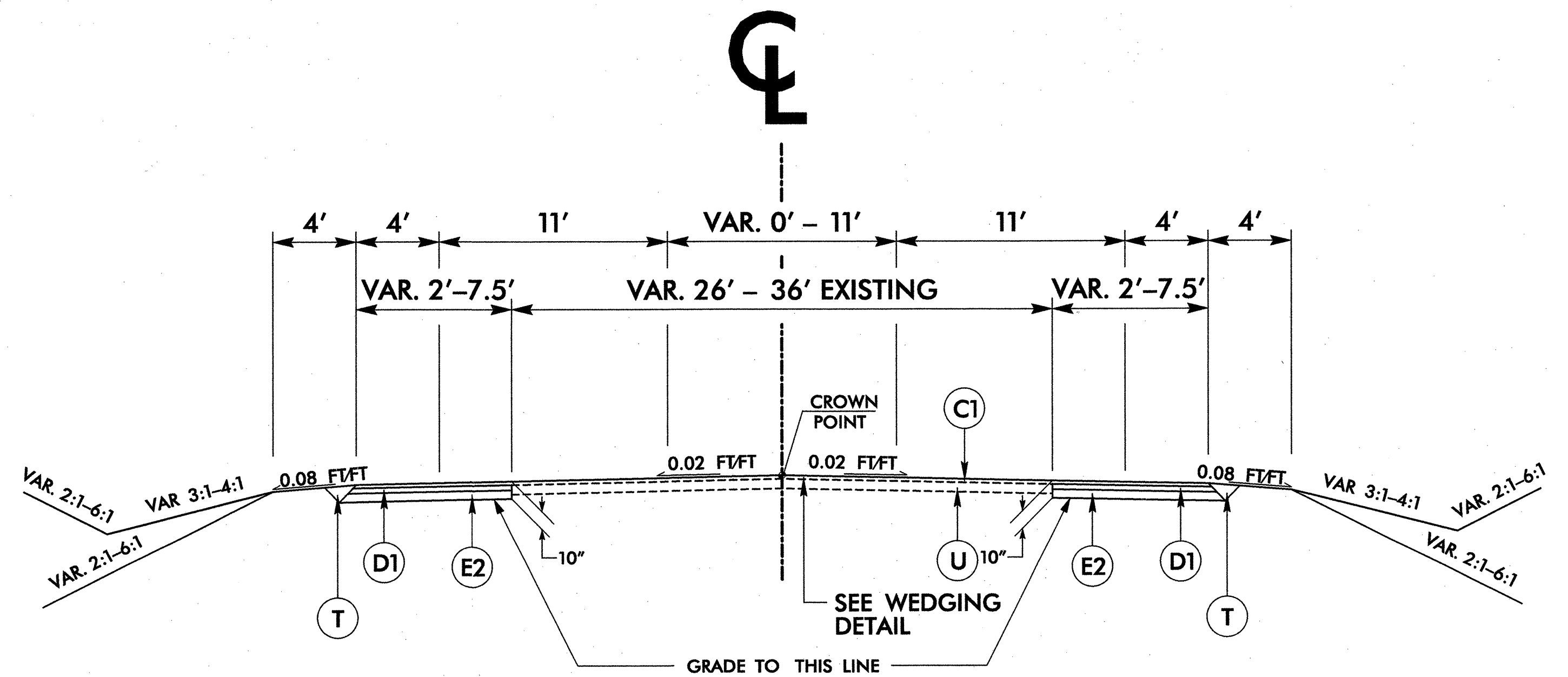
C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 1½" IN DEPTH OR GREATER THAN 2" IN DEPTH.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 684 LBS. PER SQ. YD.
E2	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E3	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 6" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	MILLING BITUMINOUS PAVEMENT 2" DEPTH.

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE SHOWN.



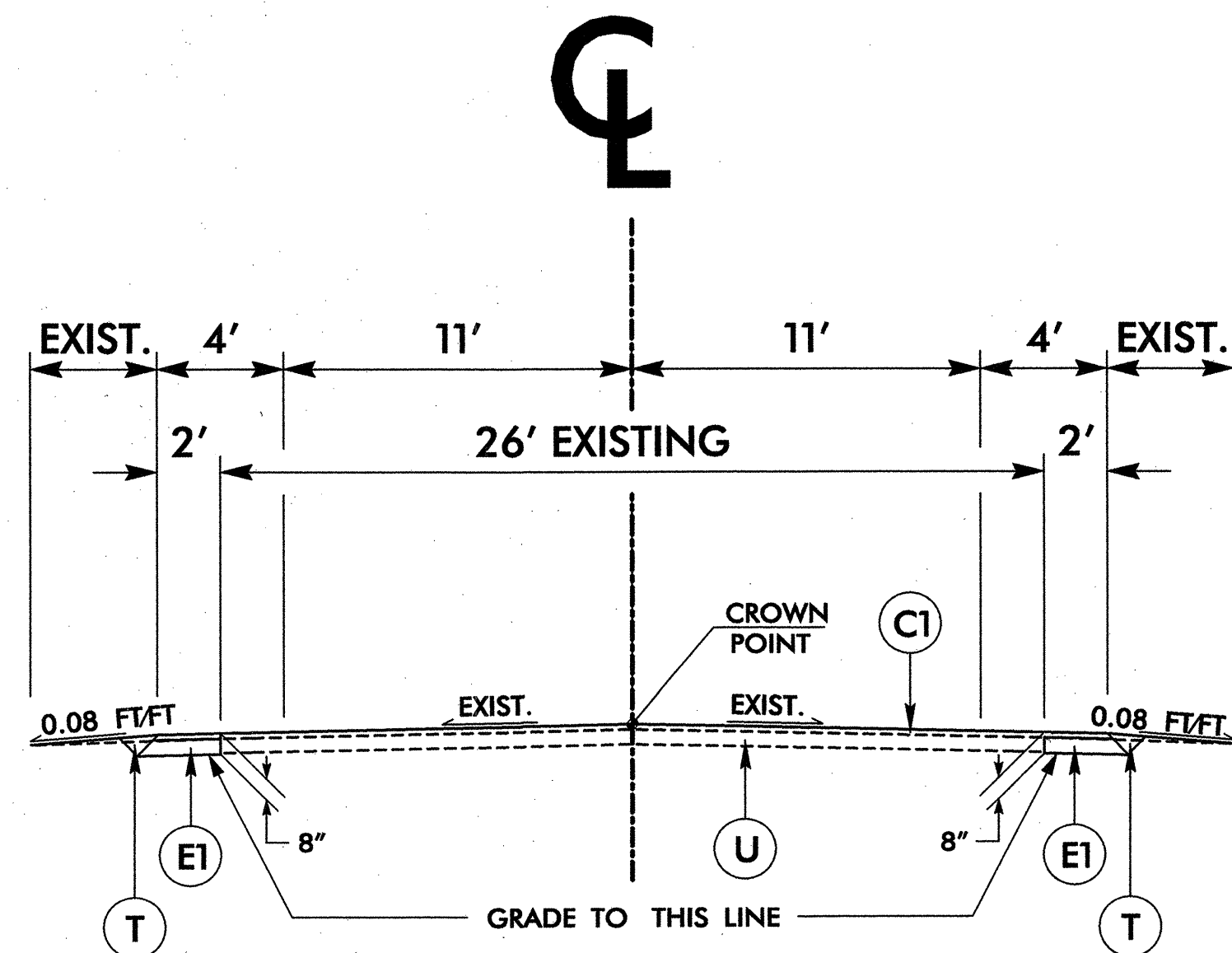
TYPICAL SECTION NO. 1

USE FROM SR 1555 (JONES STREET) TO END OF CURB AND GUTTER



TYPICAL SECTION NO. 3

USE FROM - L - STA. 34+65.02 TO 59+00.00
 272+30.79 TO 288+38.67
 316+86.15 TO 333+11.32
 365+00.00 TO 436+00.00



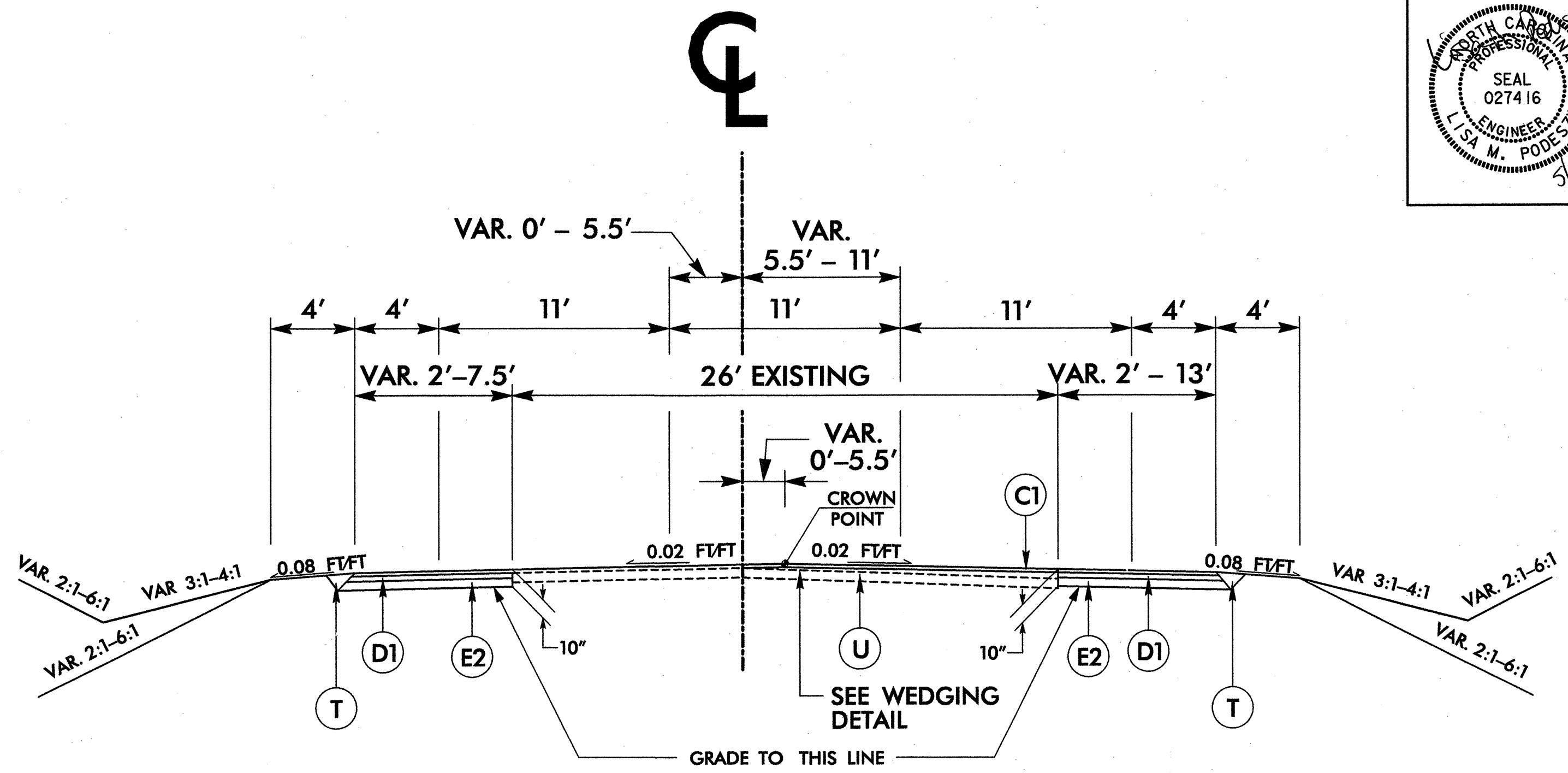
TYPICAL SECTION NO. 2

USE FROM END OF CURB AND GUTTER TO -L- STA. 365+00.00
 WITH EXCEPTION TO STATIONS LISTED UNDER TYPICAL SECTIONS 3, 4, AND 5

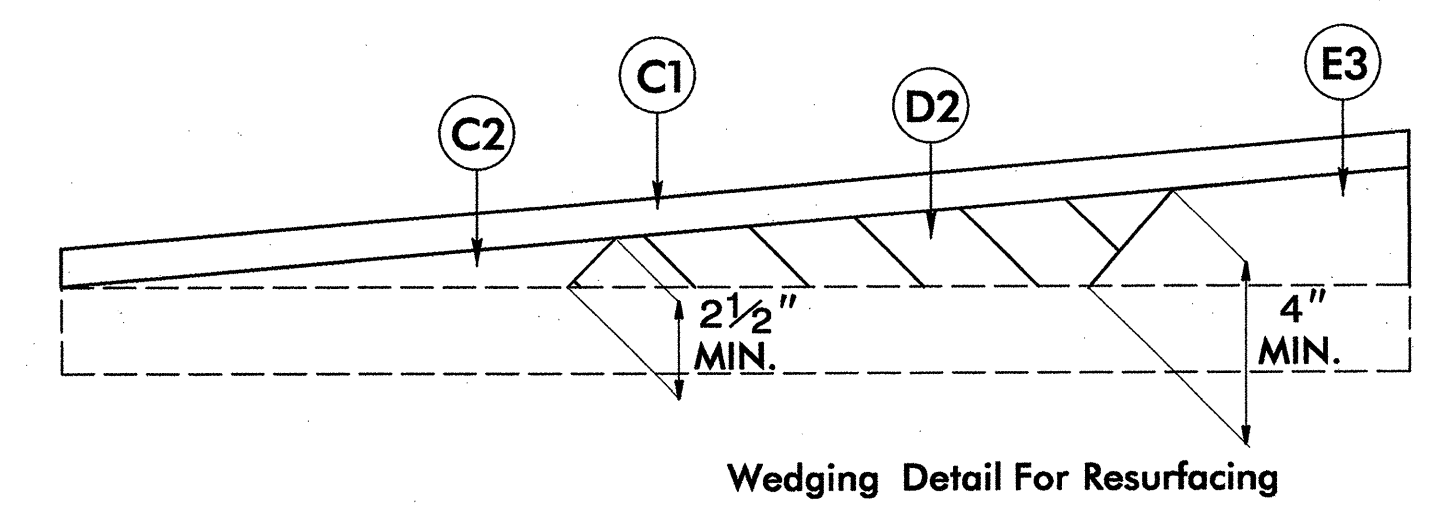
NOTE:
 FOR BRIDGE LOCATED AT MP 4.6, MILL EXISTING ASPHALT 2" AND PLACE 2"
 ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE
 OF 224 LBS PER SQ. YD. MP BEGINS AT SR 1555 (JONES STREET)

C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 1½" IN DEPTH OR GREATER THAN 2" IN DEPTH.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 684 LBS. PER SQ. YD.
E2	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E3	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 6" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	MILLING BITUMINOUS PAVEMENT 2" DEPTH.

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE SHOWN.

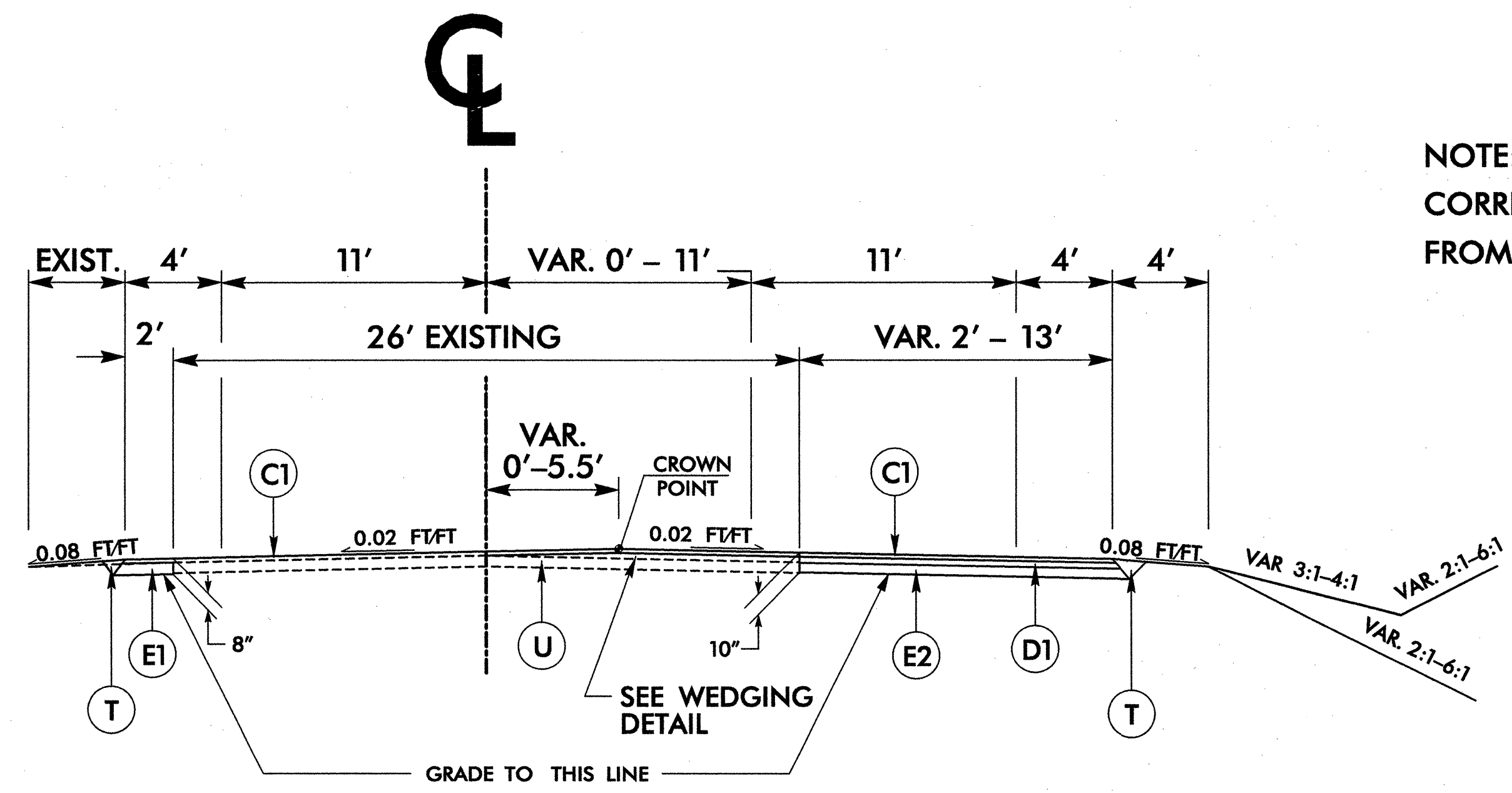


TYPICAL SECTION NO. 4
USE FROM - L - STA. 59+00.00 TO 70+00.00



NOTE:
CORRECT SUPERELEVATION ON CURVE LOCATED - L -
FROM MP 5.4 TO MP 5.6 AS DIRECTED BY THE ENGINEER:
e = 0.051
RUNOFF = 123

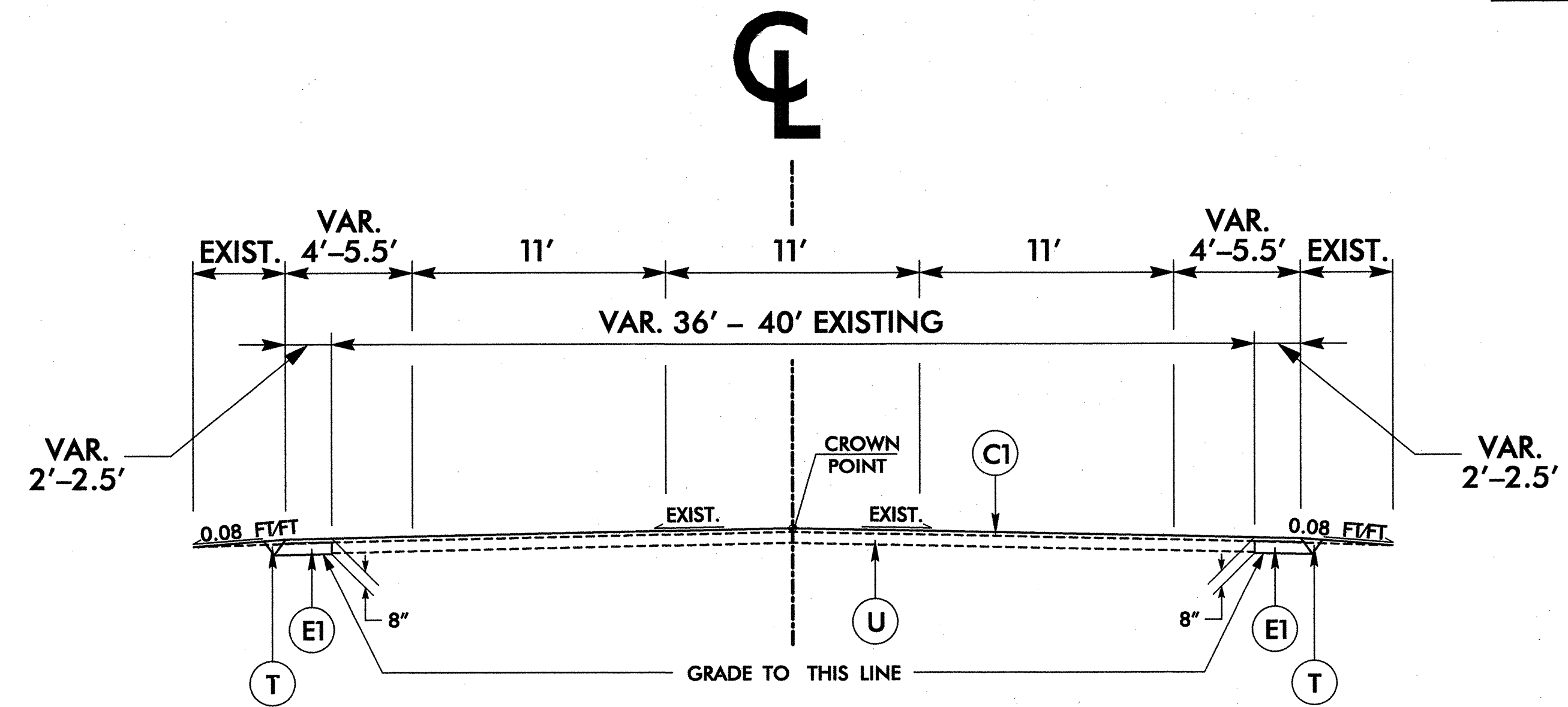
MP BEGINS AT SR 1555
(JONES STREET)



TYPICAL SECTION NO. 5
USE FROM - L - STA. 70+00.00 TO 91+63.64

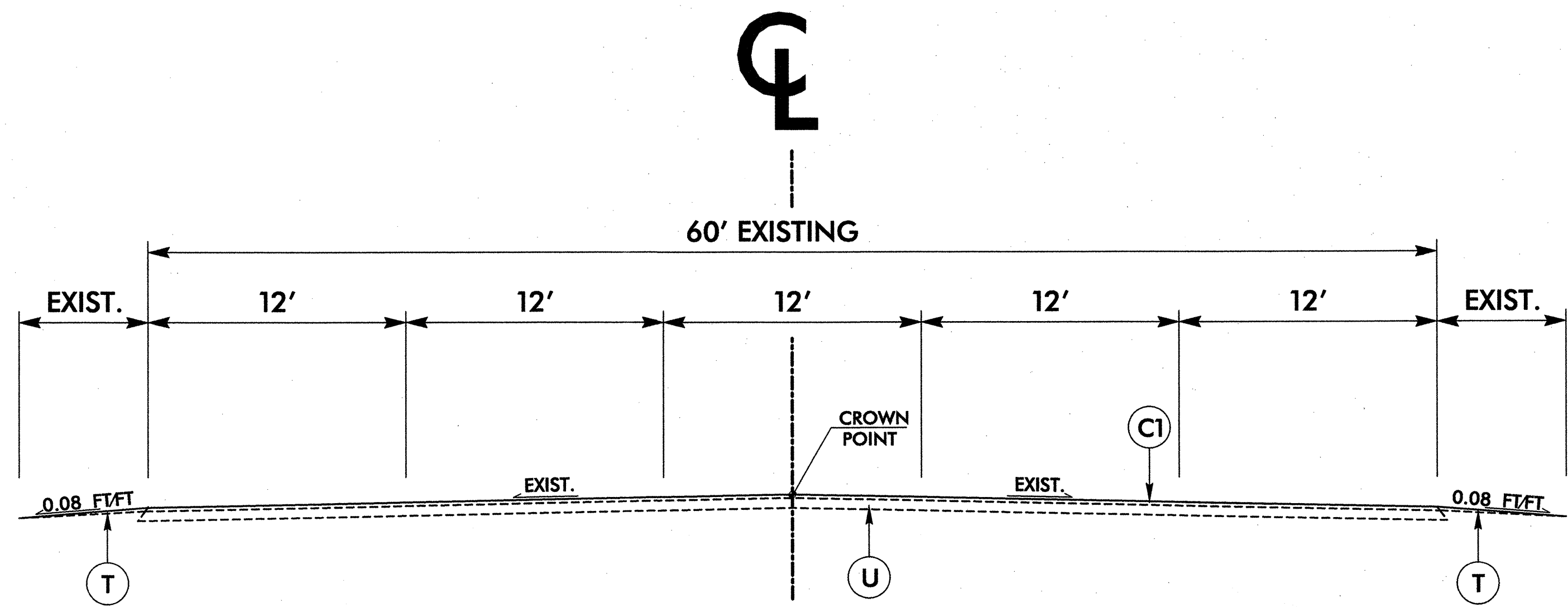
C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 1½" IN DEPTH OR GREATER THAN 2" IN DEPTH.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 684 LBS. PER SQ. YD.
E2	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E3	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 6" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	MILLING BITUMINOUS PAVEMENT 2" DEPTH.

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE SHOWN.



TYPICAL SECTION NO. 6

USE FROM - L - STA. 436+00.00 TO NC 72



TYPICAL SECTION NO. 7

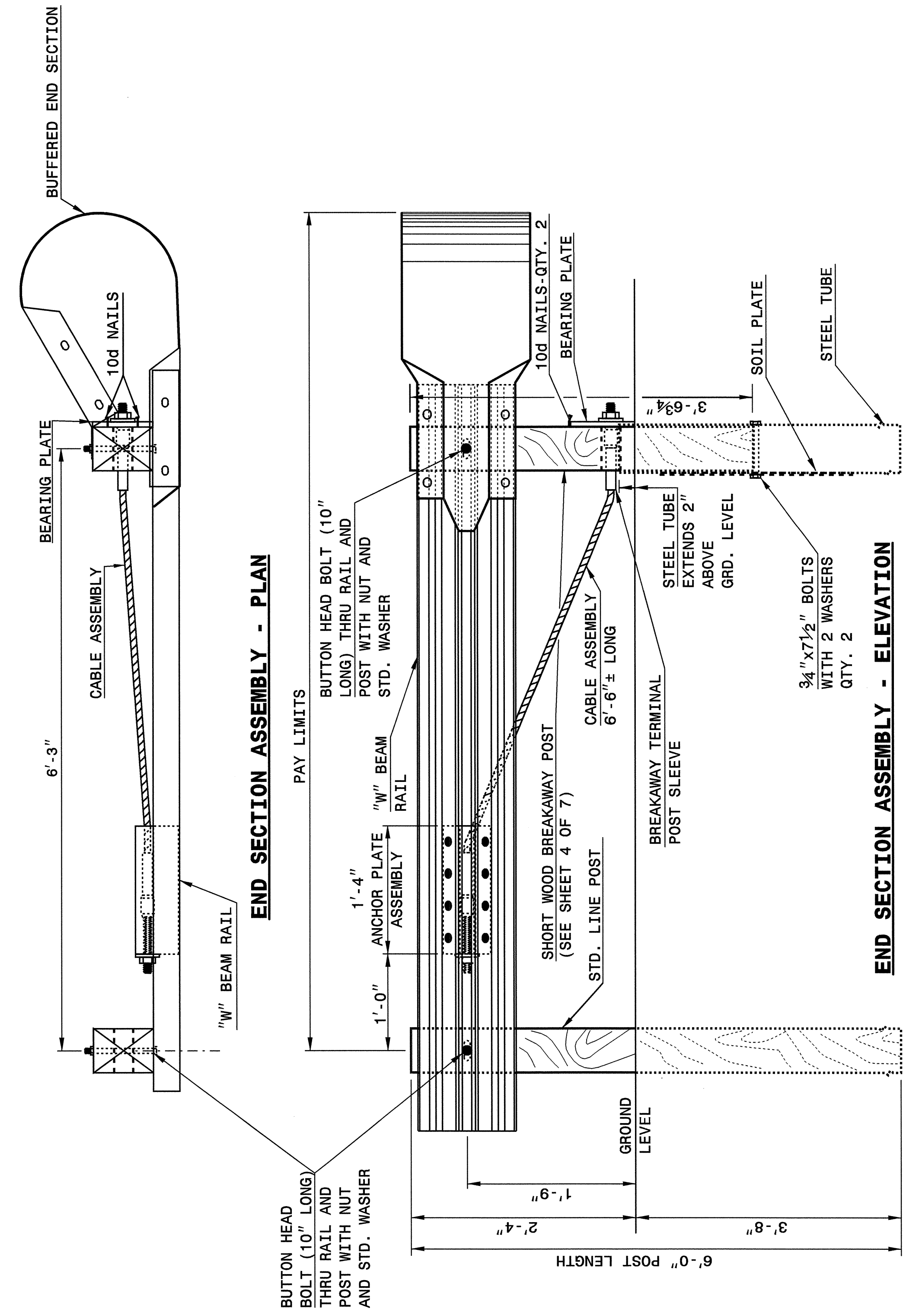
USE FROM NC 72 EASTBOUND TO EXISTING JOINT

5/28/06 11:40 AM I:\Projects\2006\05\018\HDB_Proposed\Details\NC 721_Typical Section.dwg

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR GUARDRAIL INSTALLATION

SHEET 1 OF 7 862D02



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

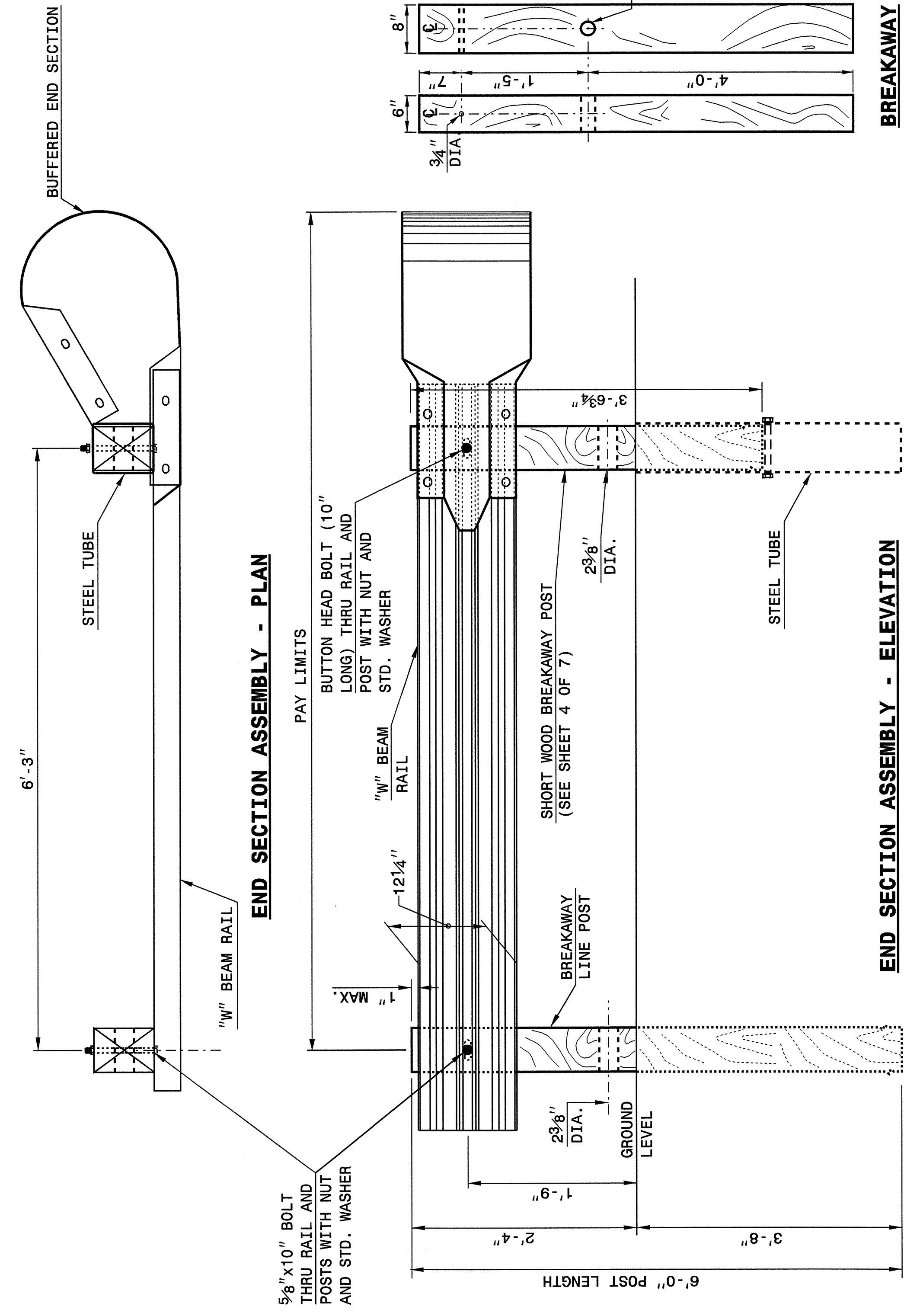
ENGLISH DETAIL DRAWING FOR GUARDRAIL INSTALLATION

SHEET 1 OF 7 862D02

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR GUARDRAIL INSTALLATION

SHEET 2 OF 7 862D02



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR GUARDRAIL INSTALLATION

SHEET 2 OF 7 862D02

PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STD.862.02 DATE: 02-09-03
 MODIFIED BY: E.E. WARD DATE: 3/25/06
 CHECKED BY: Paul S. Ward DATE: 3/25/06
 FILE SPEC.: /usr/stds/02todetail/english/86202/862d02.dgn

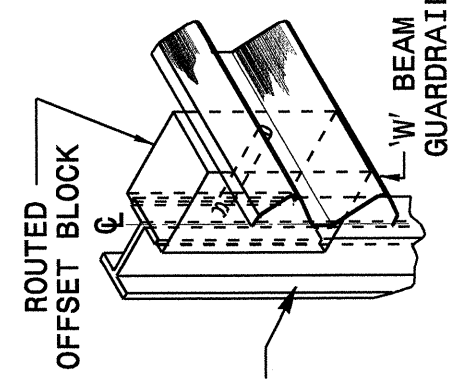
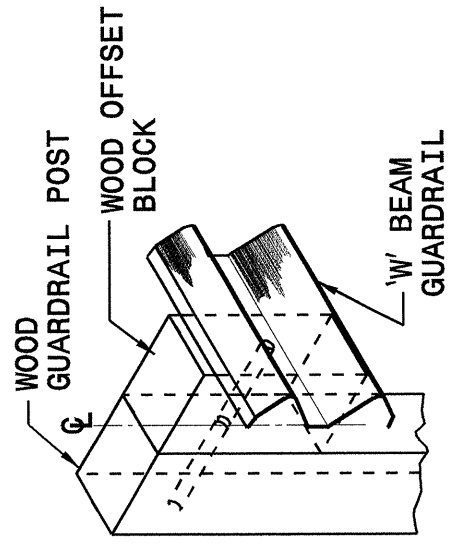


25-MAY-2006 15:39
 S:\Content\Projects\Content\Details\English\86202\056c2d02.dgn
 AT P:\2006\393

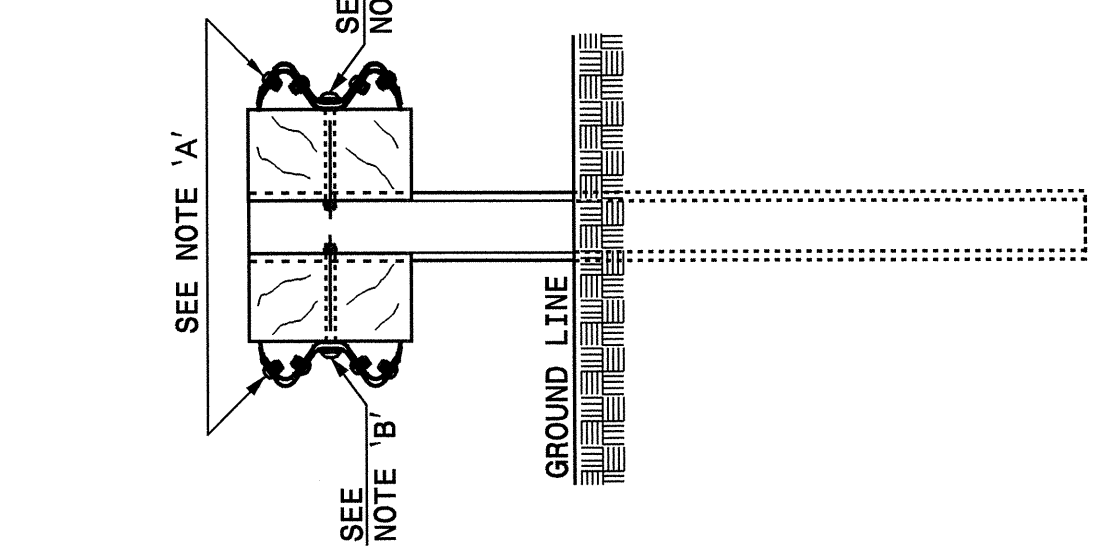
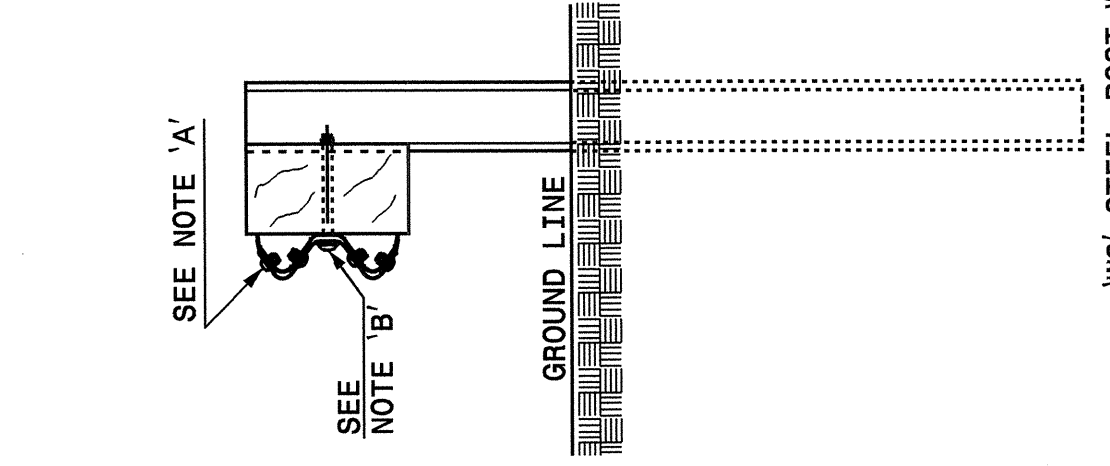
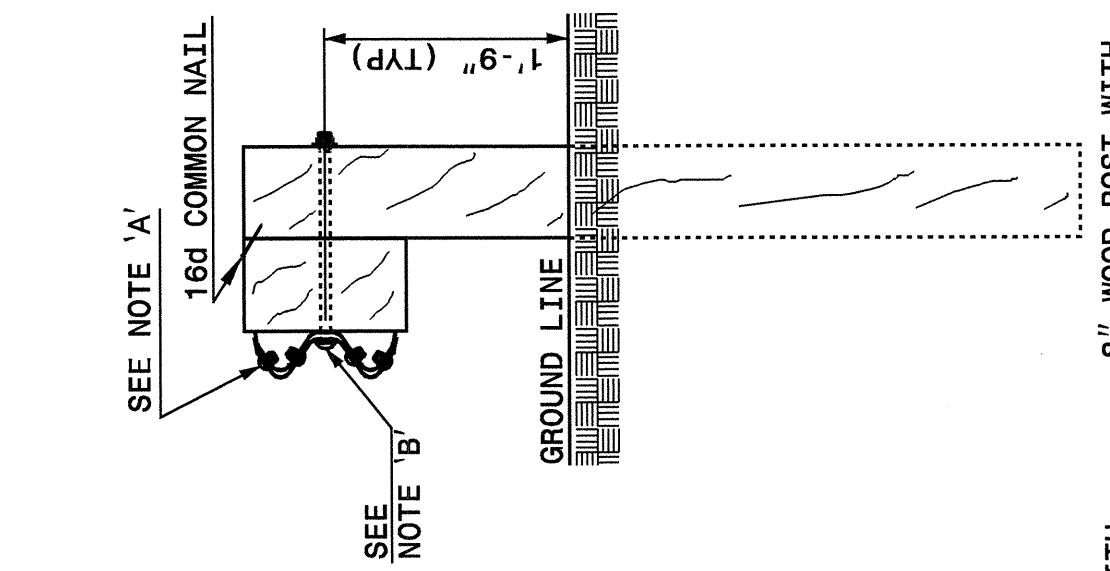
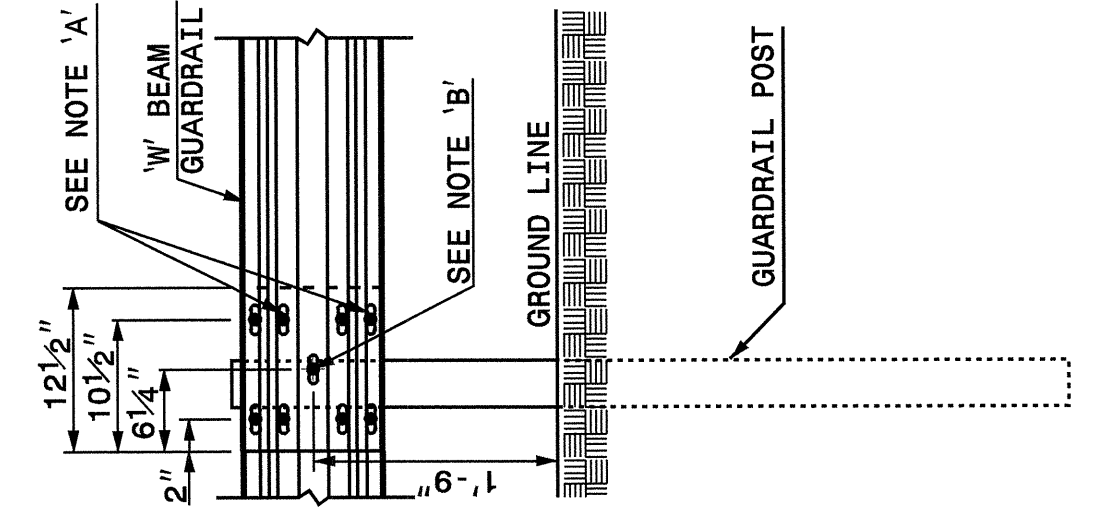
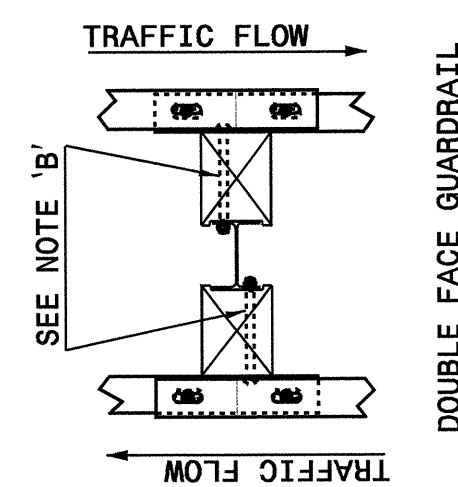
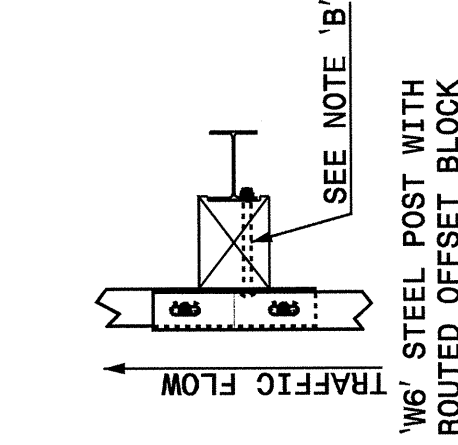
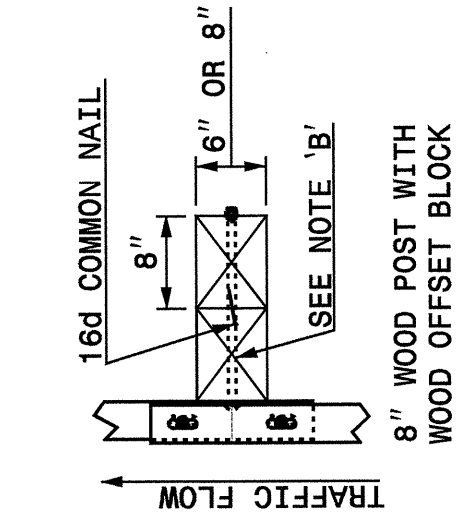
STATE OF
NORTH CAROLINA
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 3 OF 7
862D02



ISOMETRIC VIEWS



ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 3 OF 7
862D02

NOTES:
A - 5/8" DIA. BUTTON HEAD SPICE BOLT 1 1/4" LONG (8 REQ. PER SPICE JOINT).
B - 5/8" DIA. BUTTON HEAD BOLT 7 1/2" / 9" LONG WITH NUT FOR BOLTING 6" / 8" ROUTED OFFSET BLOCK TO STEEL POSTS OR 5/8" DIA. BUTTON HEAD BOLT 18" LONG WITH STD. WASHER UNDER NUT FOR BOLTING TO WOOD POSTS (1 REQ. PER LOCATION)
C - FIELD PUNCHING OF HOLES INTO GUARDRAIL SHALL BE AS DIRECTED BY THE ENGINEER.

TYPICAL GUARDRAIL AND GUARDRAIL POST ALTERNATIVES

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

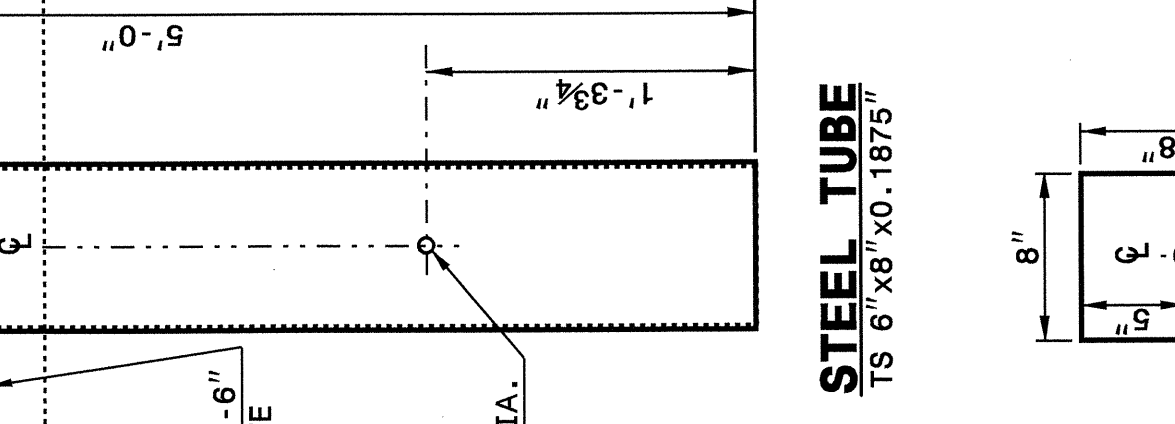
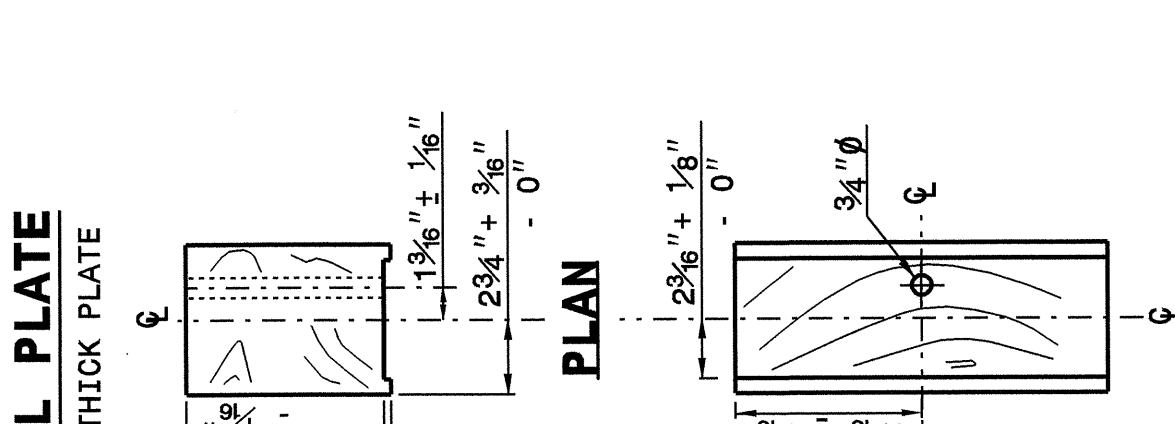
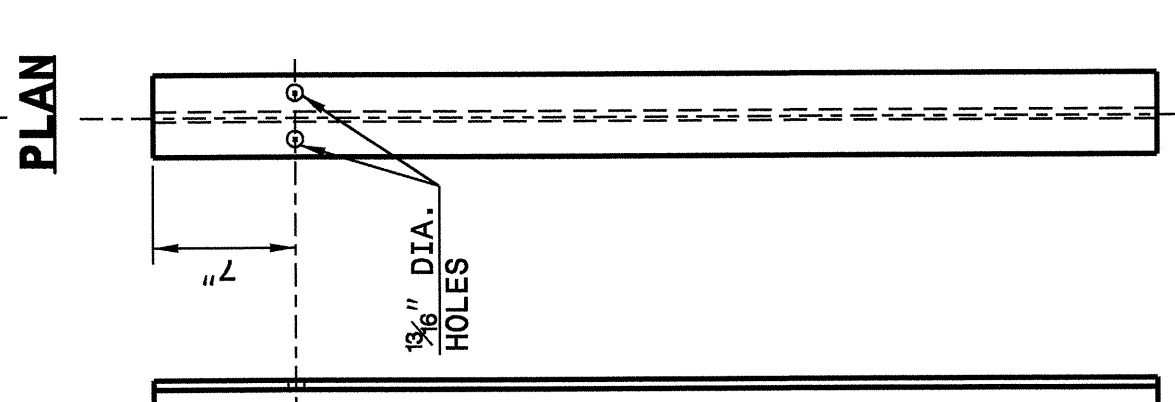
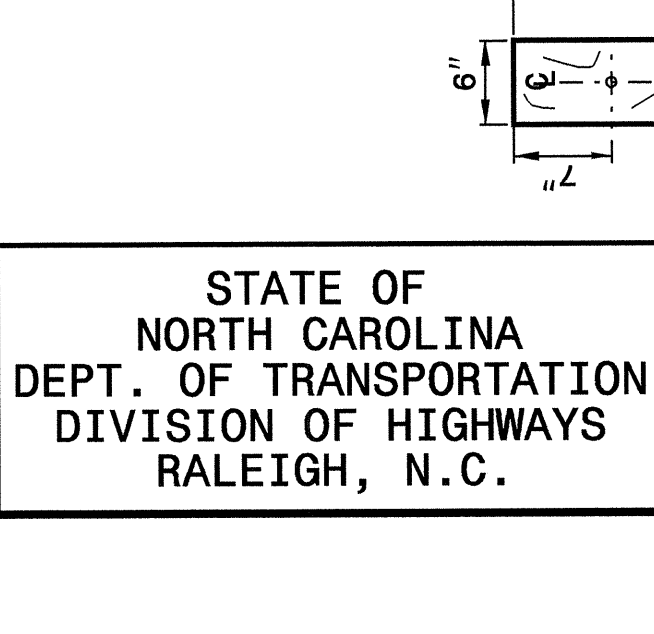
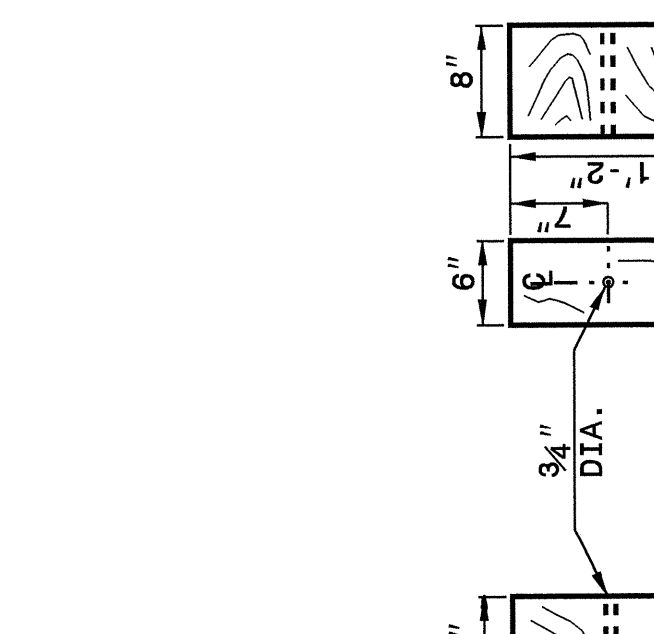
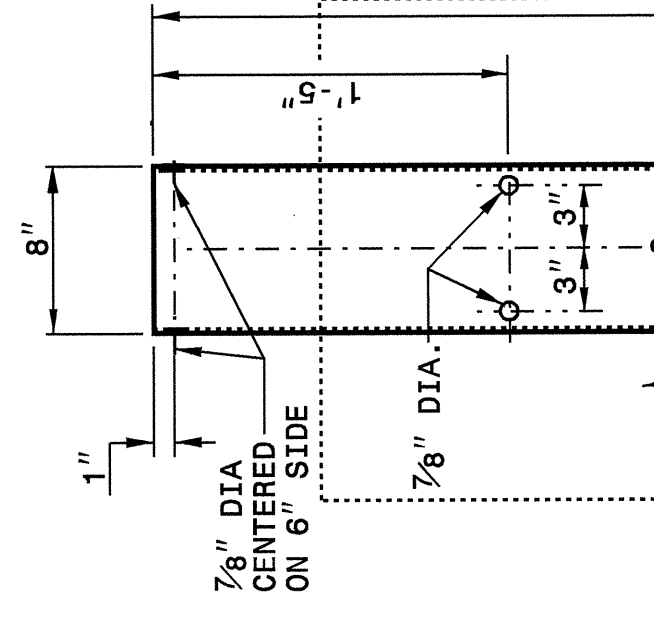
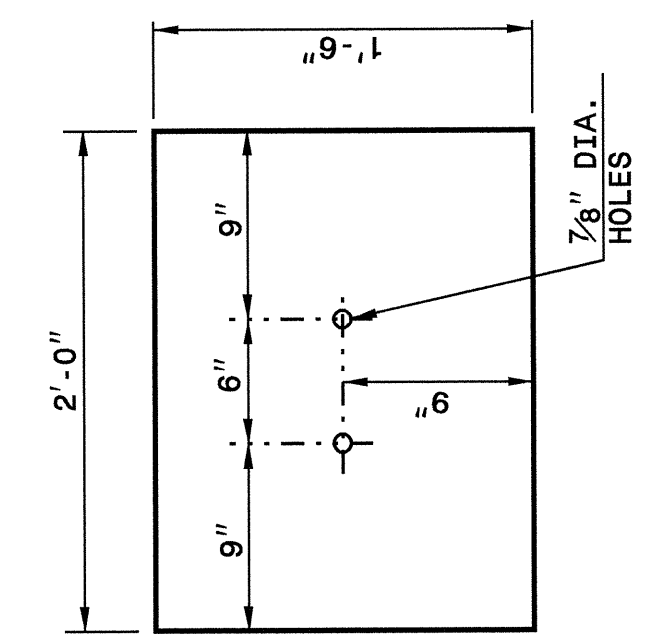
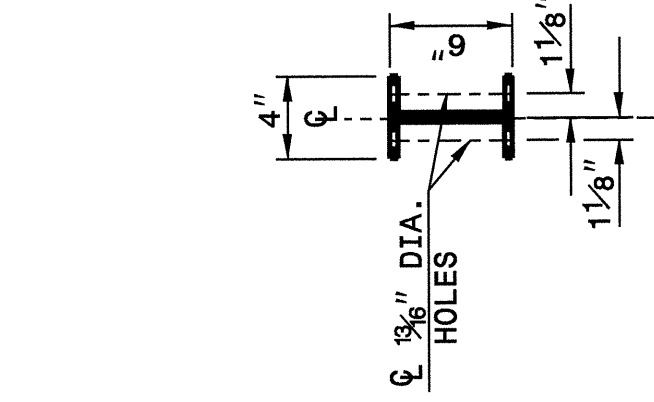
ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 4 OF 7
862D02

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 4 OF 7
862D02

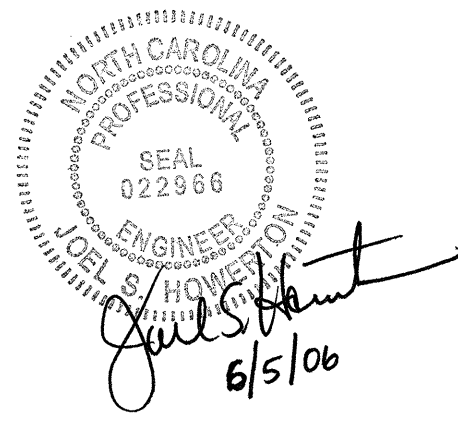


SYSTEM PARTS

PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STD. 862.02 DATE:
MODIFIED BY: E.E. WARD DATE: 02-09-03
CHECKED BY: *Joel S. Hunt* DATE: 5/23/04
FILE SPEC.: *usr/stds/02stdetail/eng1ish/86202/862d02.dgn*



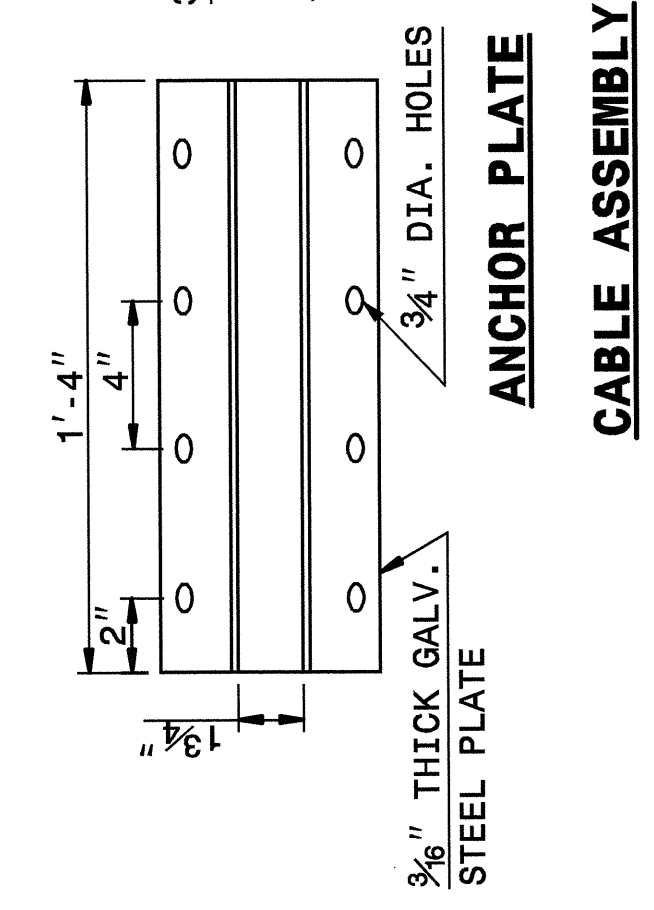
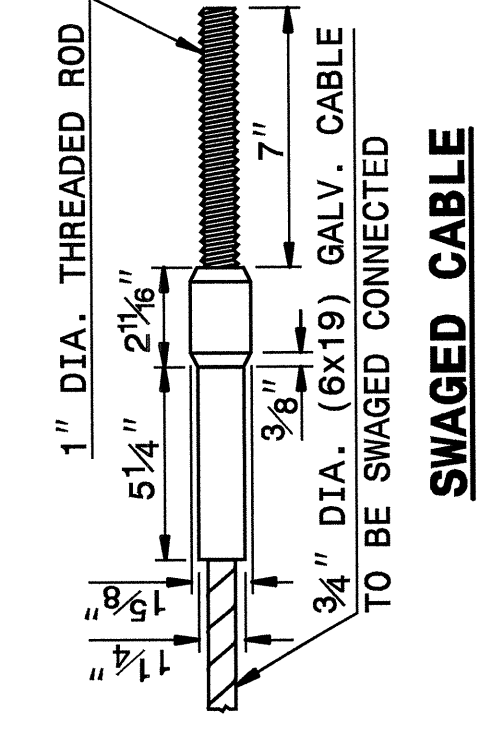
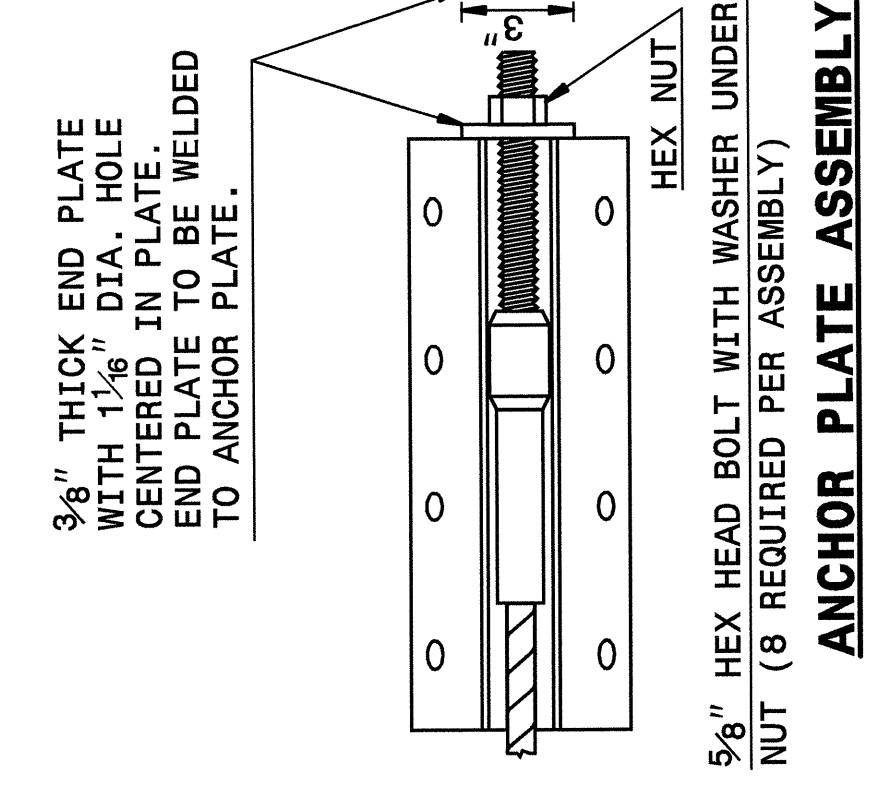
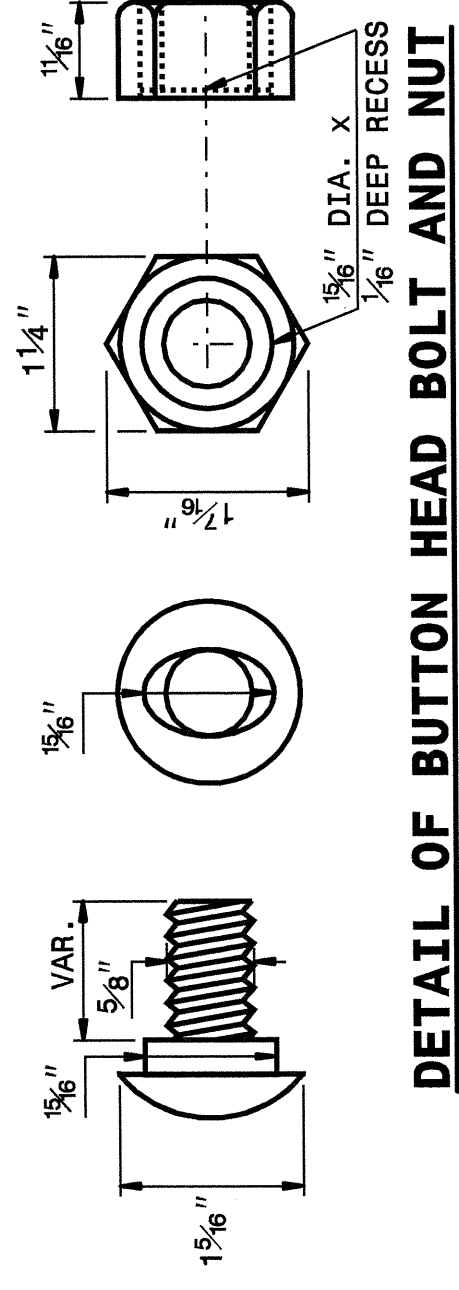
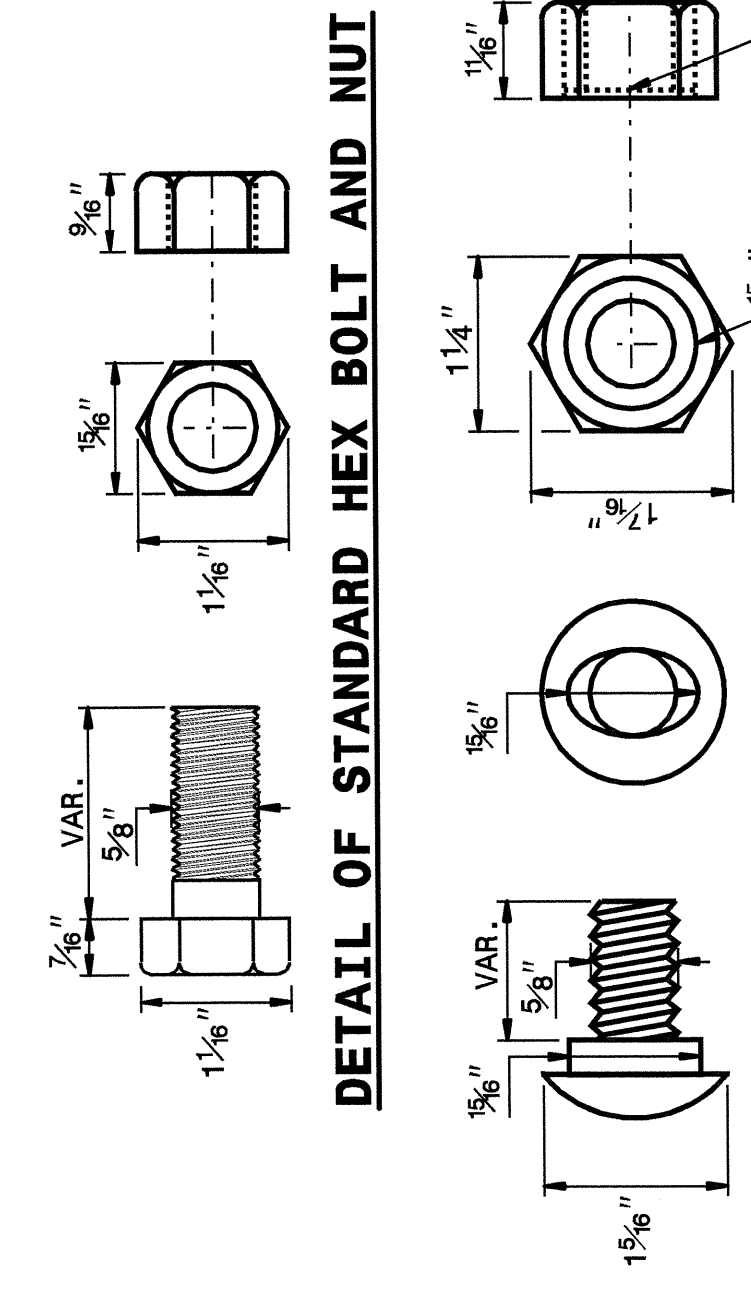
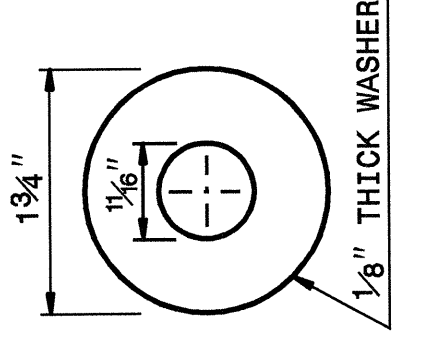
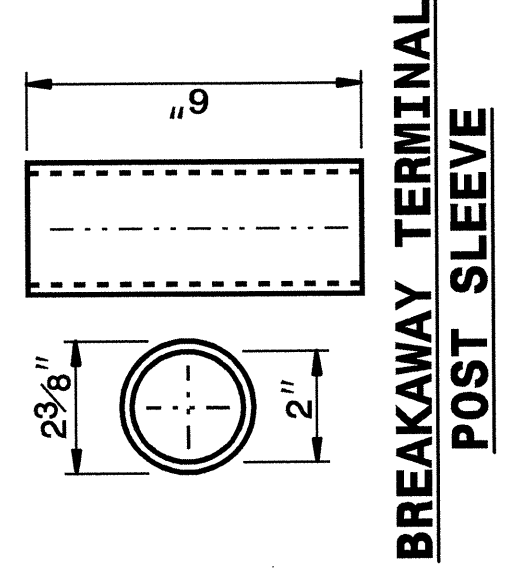
25-MAY-2006 15:39 Special Details\encl\stds\02\stds to Special Details\eng1ish\86202\0862d02.dgn

25-MA1-2006-15339
 s:\concrete\stds\Special Details\vertward\stds\02\stds to Special Details\english\86202\0862d02.dgn
 3/15/06 11:00:30 AM
 3/15/06 11:00:30 AM

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 5 OF 7
862D02



CABLE ASSEMBLY

SYSTEM PARTS

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

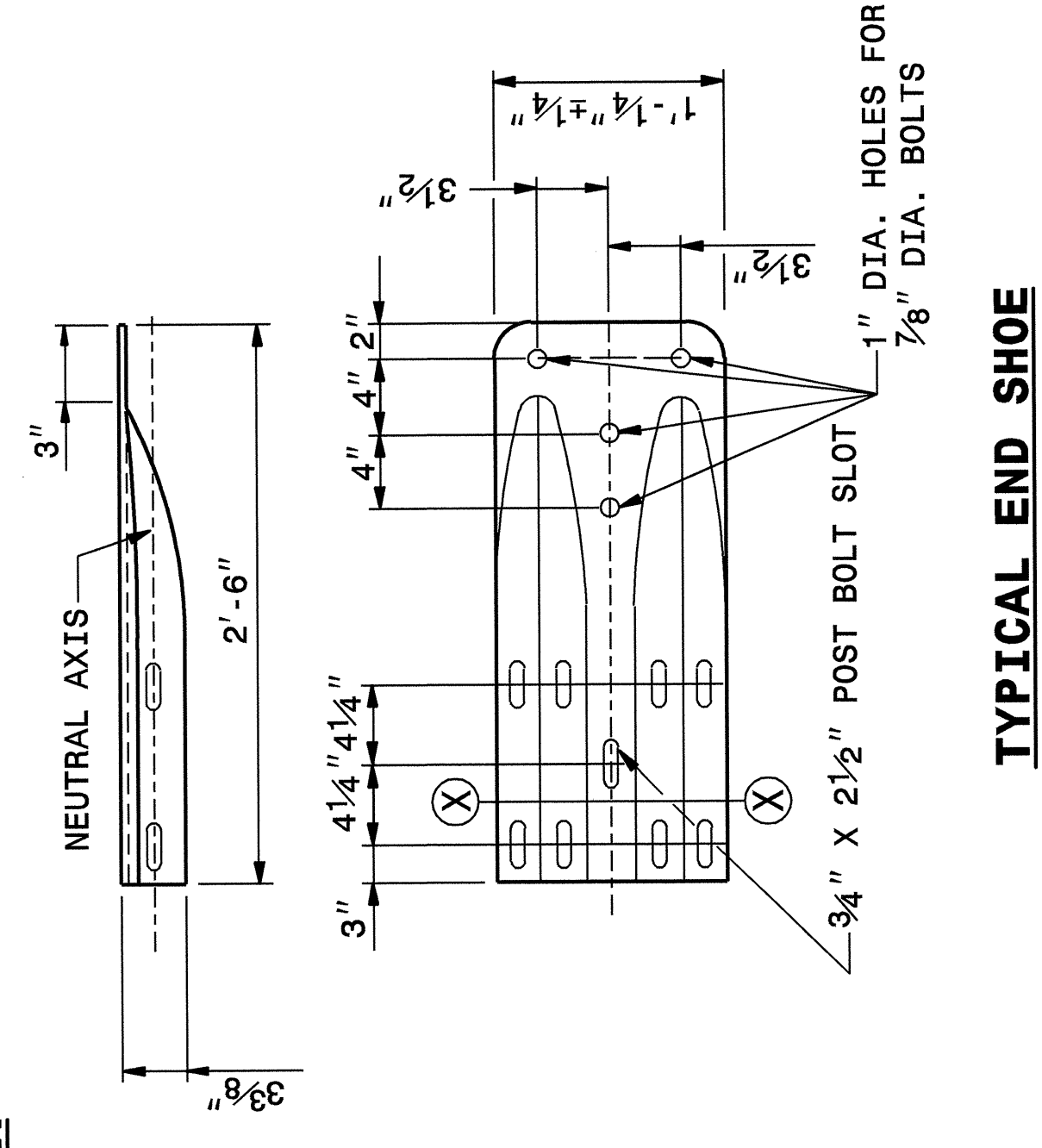
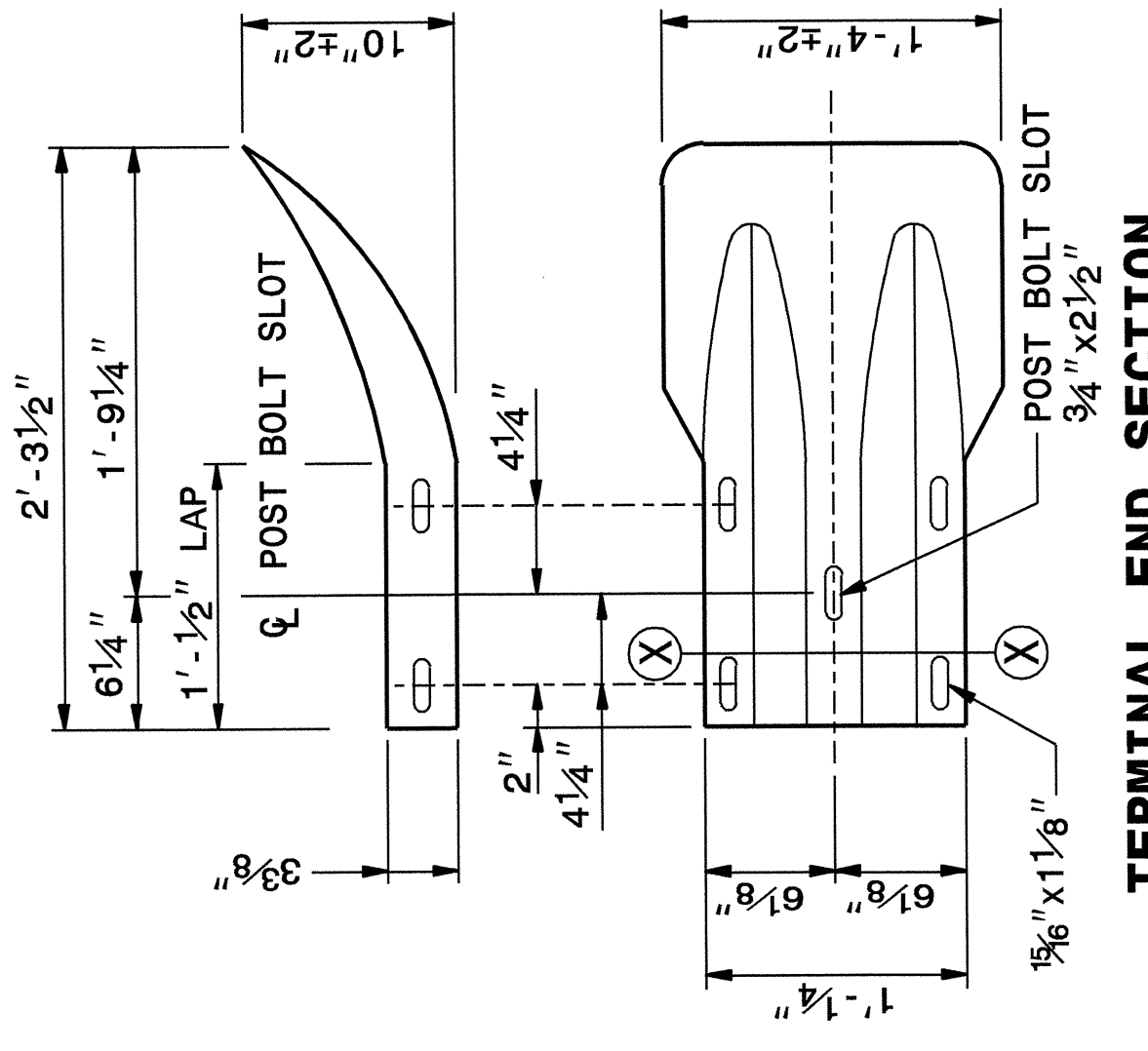
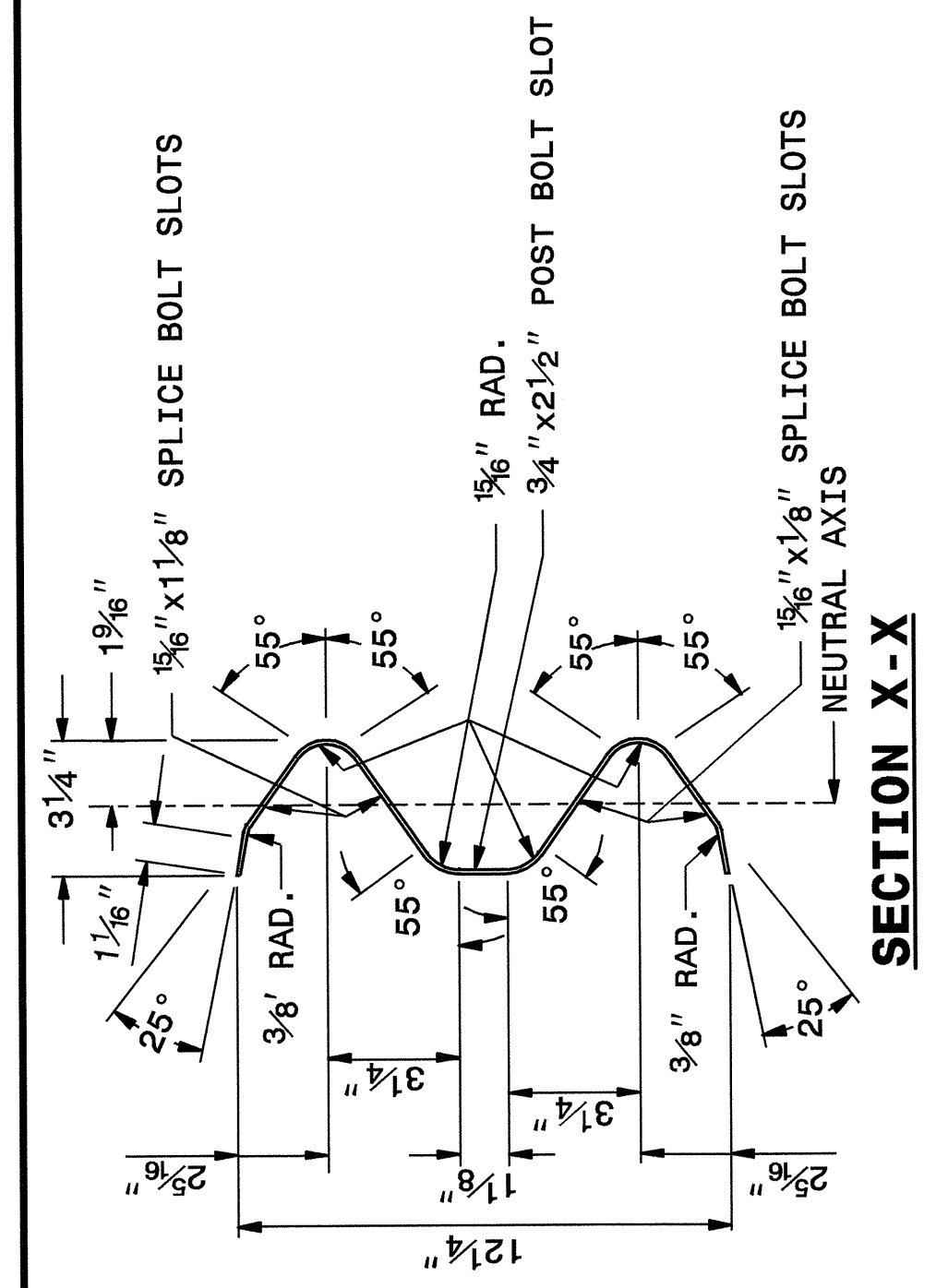
ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 5 OF 7
862D02

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 7
862D02



SYSTEM PARTS - GENERAL USE



PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

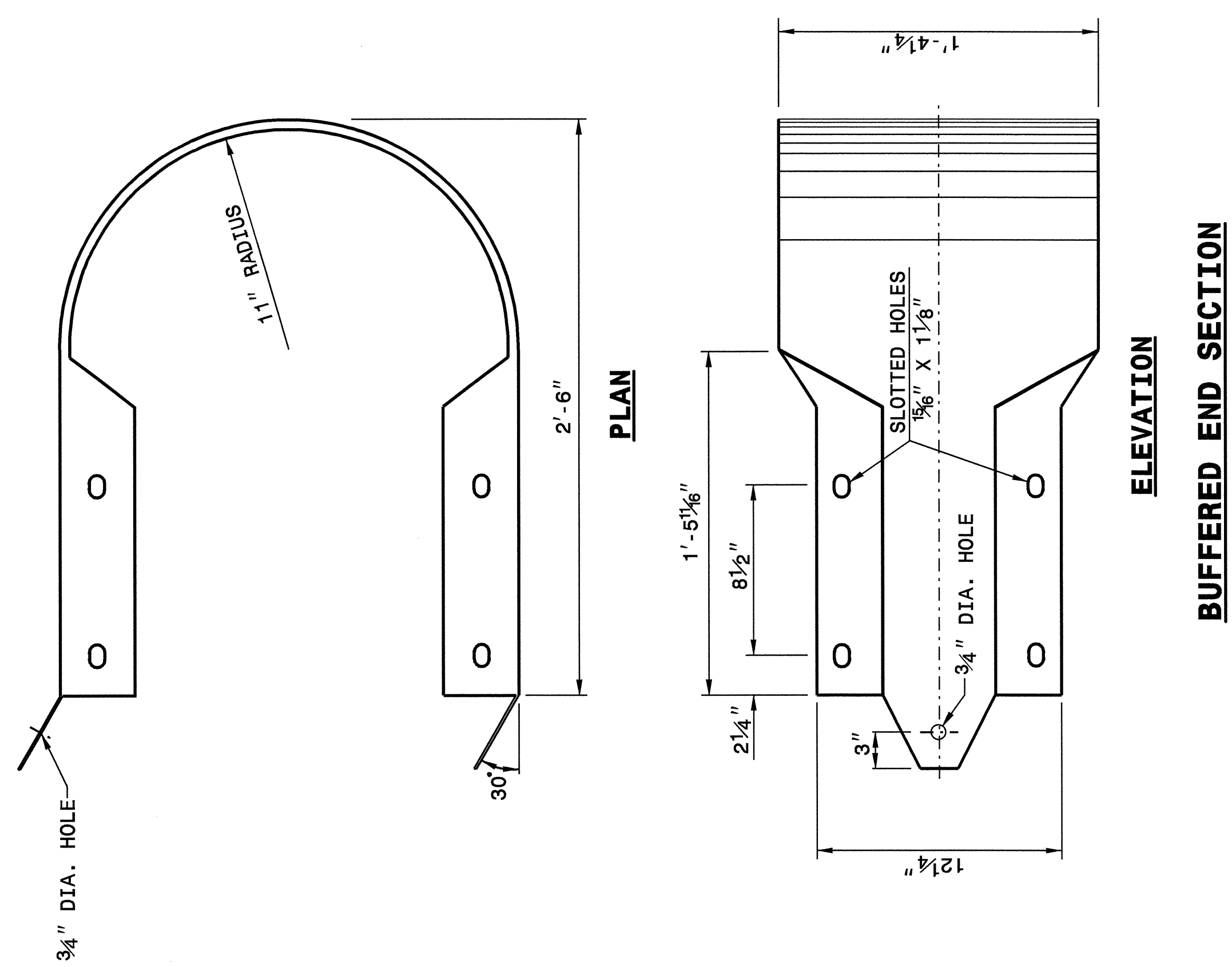
SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STD. 862.02 DATE:
MODIFIED BY: E.E. WARD DATE: 02-09-03
CHECKED BY: *Joel E. Ward* DATE: 5/25/06
FILE SPEC.: s:\stds\02\detail\english\86202\862d02.dgn

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 7 OF 7
862D02



STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 7 OF 7
862D02



**PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN**
Office 919-250-4128 FAX 919-250-4119

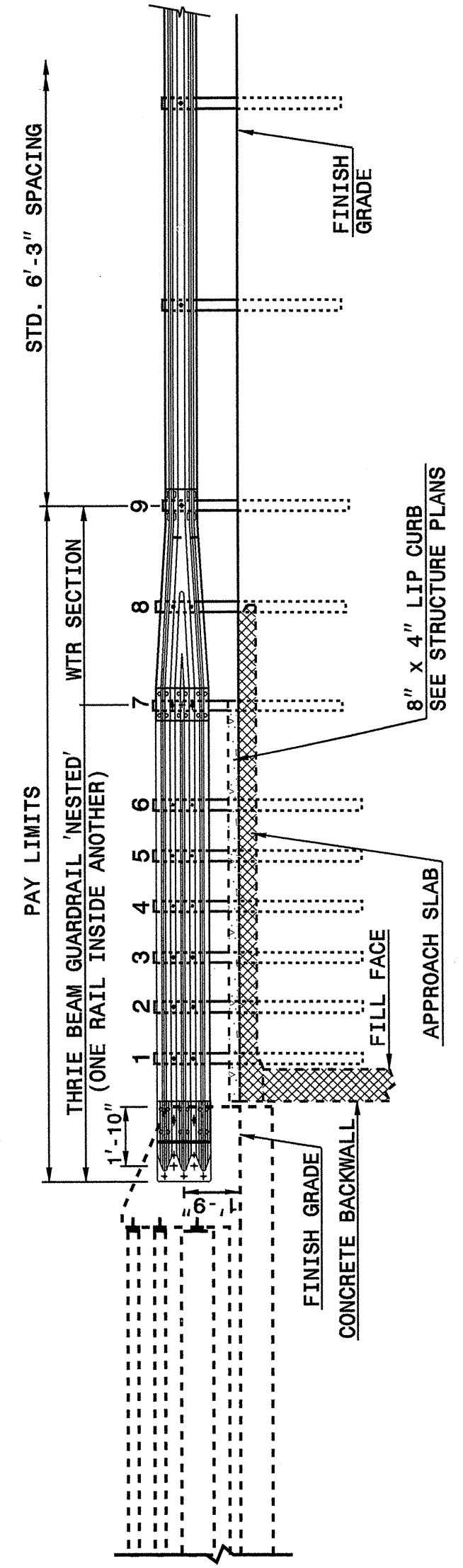
SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STD.862.02 DATE: _____
 MODIFIED BY: E.E. WARD DATE: 02-09-03
 CHECKED BY: *E.E. Ward* DATE: 5/27/06
 FILE SPEC.: /usr/stds/02todetail/eng1ish/86202/862d02.dgn

25-MAY-2006 15:39
 C:\projects\contracts\Special Details\english\86202\0862d02.dgn
 entward AT P522233

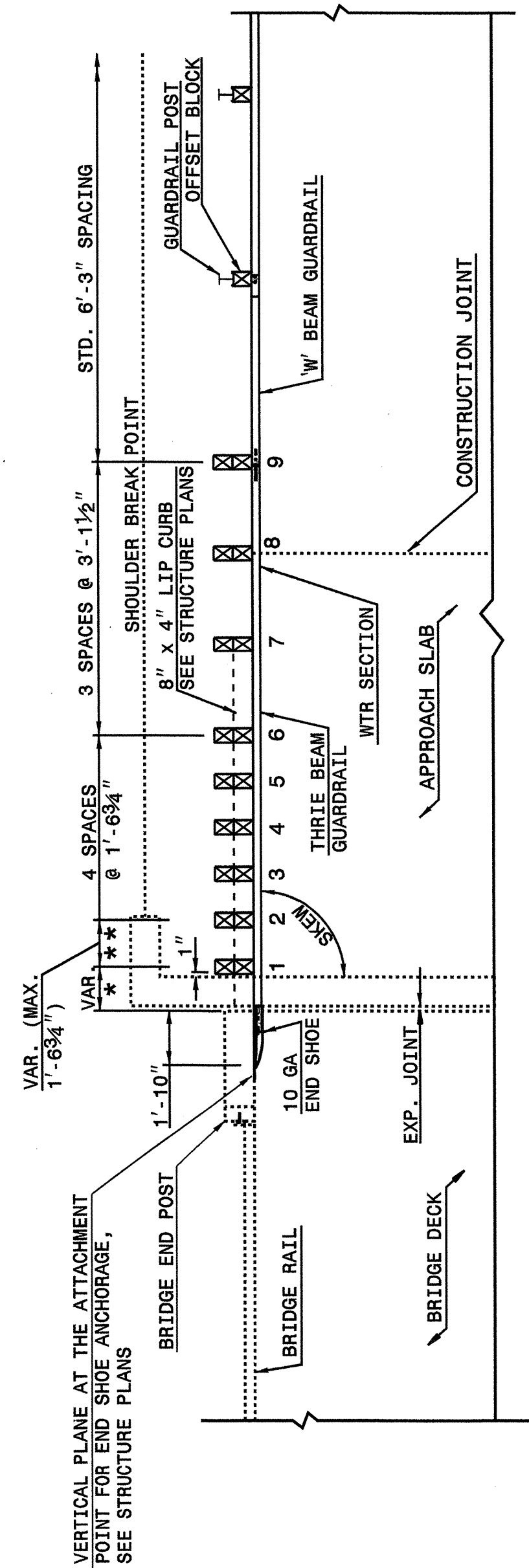
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE (15' MINIMUM LENGTH APPROACH SLAB)
SHEET 1 OF 6
862D03



ELEVATION

NOTE:
 **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT.
 -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
 -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
 -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 -SEE SHEET 5 FOR POST SECTIONS 1 THRU 9.



PLAN VIEW

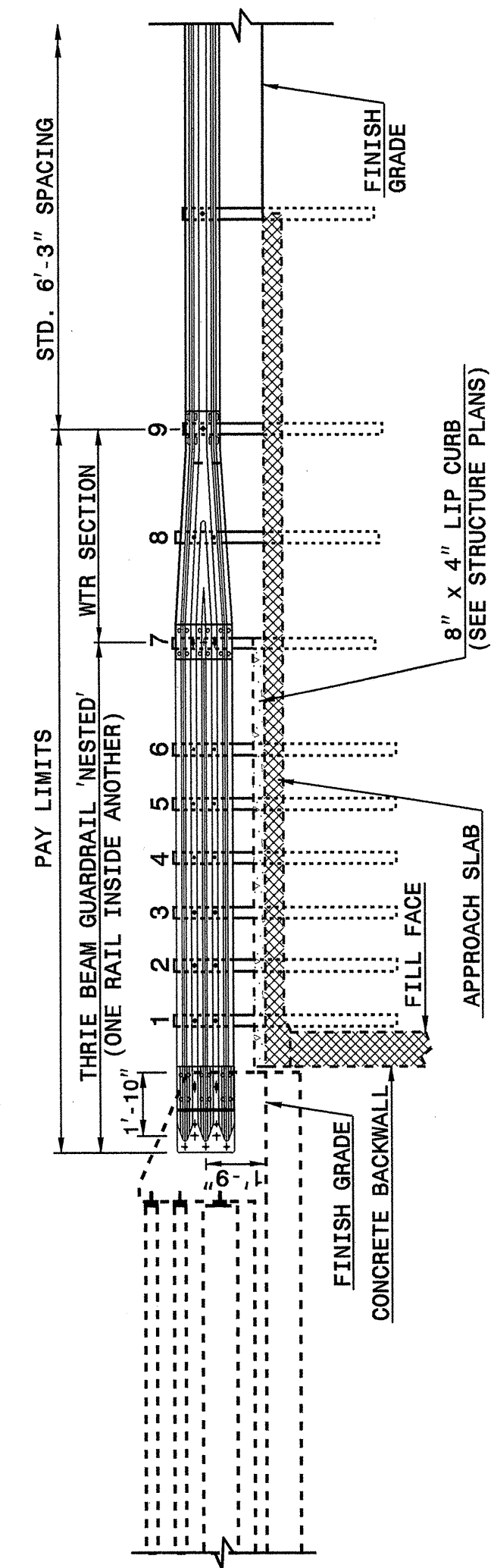
**GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE (15' MINIMUM LENGTH APPROACH SLAB)**

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE (15' MINIMUM LENGTH APPROACH SLAB)
SHEET 1 OF 6
862D03

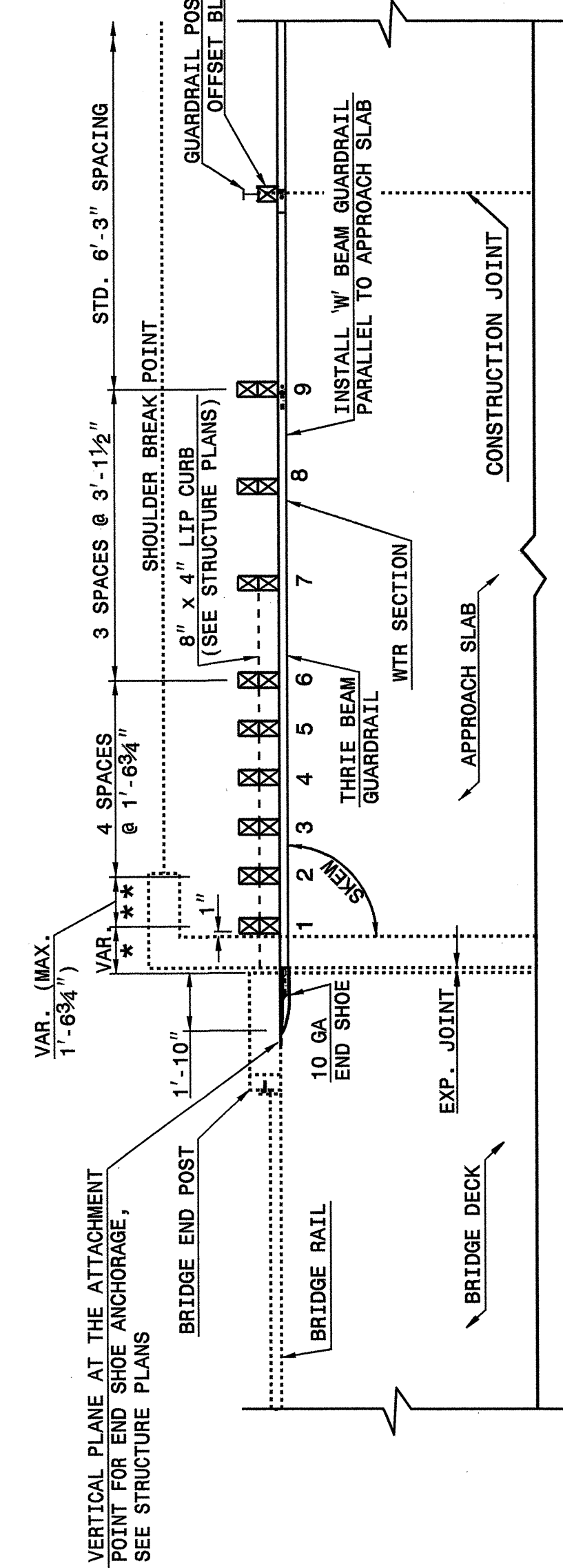
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE (25' MINIMUM LENGTH APPROACH SLAB)
SHEET 2 OF 6
862D03



ELEVATION

NOTE:
 **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT.
 -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
 -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
 -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 -SEE SHEET 5 FOR POST SECTIONS 1 THRU 9.



PLAN VIEW

**GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE (25' MINIMUM LENGTH APPROACH SLAB)**

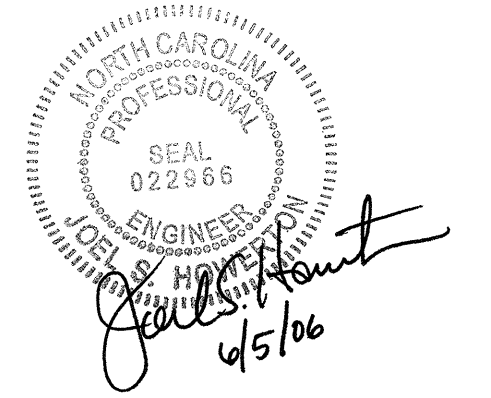
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE (25' MINIMUM LENGTH APPROACH SLAB)
SHEET 2 OF 6
862D03

PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

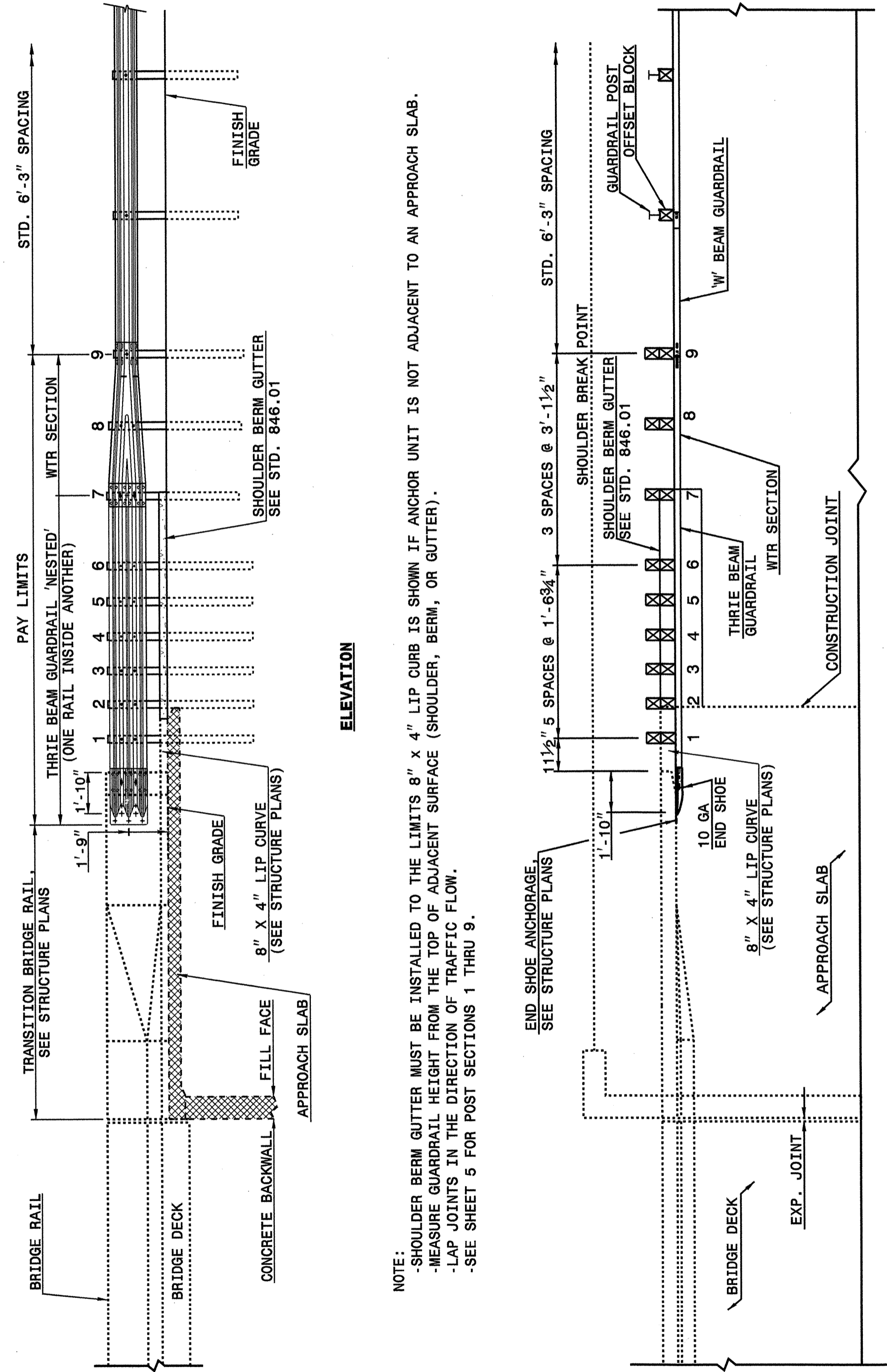
ORIGINAL BY: 2002 STANDARDS DATE: 01-15-02
 MODIFIED BY: E.E. WARD DATE: 09-14-05
 CHECKED BY: *Paul S. Ward* DATE: 1/21/05
 FILE SPEC.: s:\02stdstdetails/english/862d03.dgn



STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON APPROACH SLAB (15' MINIMUM LENGTH APPROACH SLAB)

SHEET 3 OF 6
862D03



NOTE:
 -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
 -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
 -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 -SEE SHEET 5 FOR POST SECTIONS 1 THRU 9.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

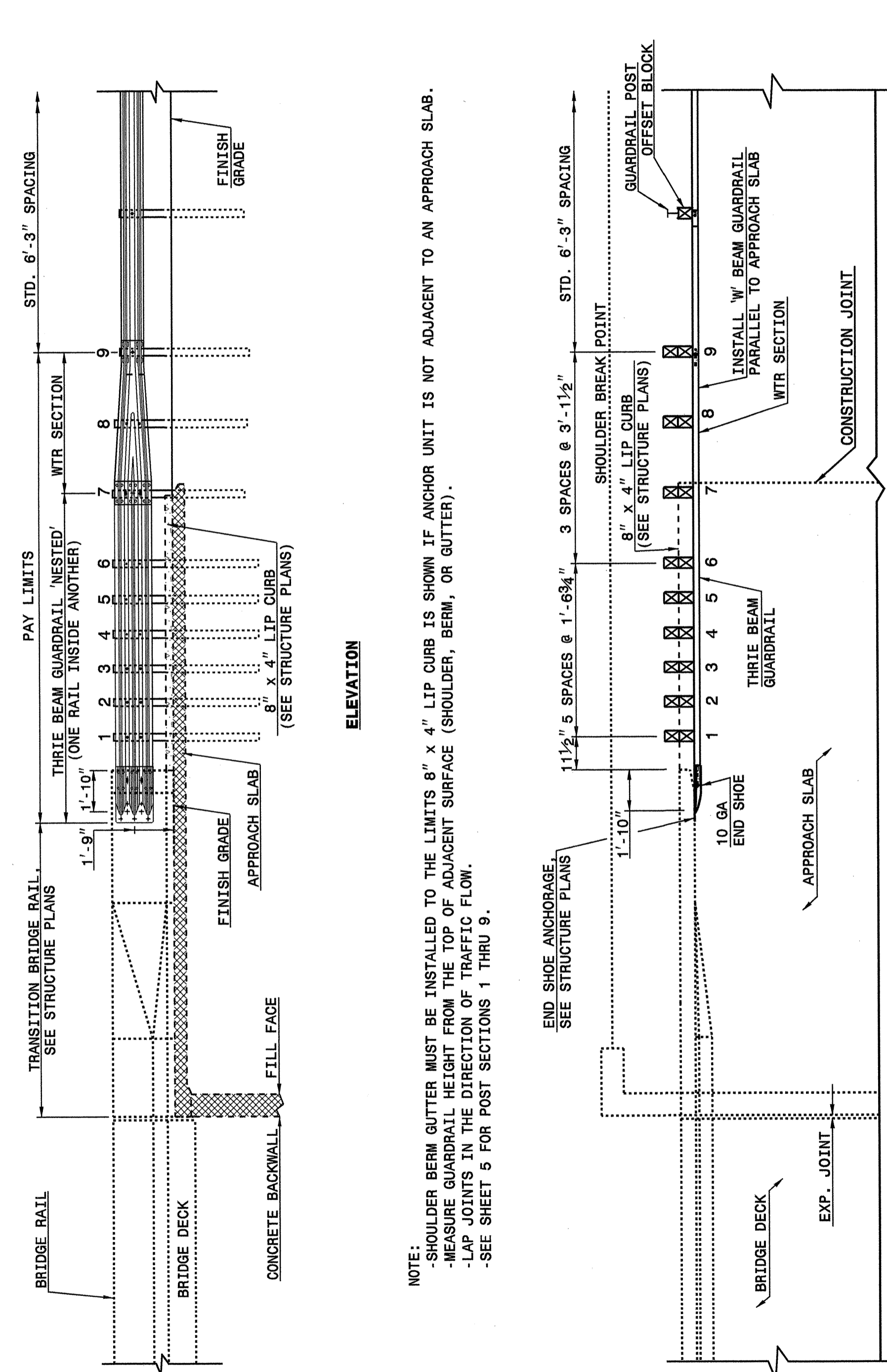
ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON APPROACH SLAB (15' MINIMUM LENGTH APPROACH SLAB)

SHEET 3 OF 6
862D03

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON APPROACH SLAB (25' MINIMUM LENGTH APPROACH SLAB)

SHEET 4 OF 6
862D03



NOTE:
 -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
 -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
 -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 -SEE SHEET 5 FOR POST SECTIONS 1 THRU 9.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON APPROACH SLAB (25' MINIMUM LENGTH APPROACH SLAB)

SHEET 4 OF 6
862D03

PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STANDARDS DATE: 01-15-02
 MODIFIED BY: E.E. WARD DATE: 09-14-05
 CHECKED BY: *John Hunt* DATE: 9/1/05
 FILE SPEC: sds/02stdstodetails/english/862d03.dgn



21-SEP-2005 09:34
 S:\Contracts\2005\stdstodetails\86203\0862d03.dgn
 encward

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III	SHEET 5 OF 6 862D03
<p style="text-align: center;">NOTE: THE MID POST AND OFFSET BLOCK OF THE WTR SECTION WILL REQUIRE SPECIAL BOLT HOLE DRILLING IN THE THRIE BEAM OFFSET BLOCK AND LINE POST.</p>		
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III	SHEET 5 OF 6 862D03

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS ANCHORAGE FOR GUARDRAIL POST ON BOX CULVERT	SHEET 6 OF 6 862D03
<p style="text-align: center;">NOTES FOR:</p> <ul style="list-style-type: none"> GUARDRAIL POST ANCHORED TO STRUCTURE: USE FULL LENGTH $\frac{1}{4}$" BUTT WELDS AT ALL LOCATIONS OF CONTACT BETWEEN THE BASE PLATE, SUPPORT PLATES AND STEEL POST OR STEEL TUBE USE POST AND POST BASE PLATES CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-36 AND GALVANIZED AFTER FABRICATION TO CONFORM TO A.S.T.M. A-123. USE WOOD POSTS WHICH FIT SNUGLY IN THE STEEL TUBE WITH A MAXIMUM OF $\frac{1}{8}$" CLEARANCE BETWEEN TUBE WALL AND POST. <p style="text-align: center;">NEW STRUCTURES:</p> <ul style="list-style-type: none"> ATTACH POST TO INSERT ASSEMBLY UNITS (USING ANCHOR BOLTS SUPPLIED WITH INSERTS) WHICH HAVE BEEN CAST INTO THE STRUCTURE DURING CONSTRUCTION. <p style="text-align: center;">EXISTING STRUCTURES:</p> <ul style="list-style-type: none"> USE CONCRETE ANCHORS CONSISTING OF A STUD BOLT WITH NUT AND WASHER. USE STUDS THREADED ON ONE END AND HAVING AN EXPANDED WEDGE ASSEMBLY POSITIONED AROUND A TAPERED AREA AT THE OTHER END. USE ANCHORS WHICH PROVIDE A MINIMUM SAFE HOLDING POWER OF 2875 LBS FOR $\frac{3}{4}$" OR $1\frac{1}{2}$" DIAMETER BOLT. CALCULATE HOLDING POWER BASED ON $\frac{1}{4}$" THE ACTUAL HOLDING POWER OF THE ANCHOR IN 3500 PSI CONCRETE AS DETERMINED BY AN APPROVED COMMERCIAL TESTING LABORATORY. USE ANCHORS GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-153. SIZE HOLES FOR THE CONCRETE ANCHORS IN ACCORDANCE WITH THE ANCHOR MANUFACTURER'S RECOMMENDATIONS. DRILL HOLES WITH A CARBIDE OR DIAMOND TIPPED MASONRY BIT. POWERED BY A ROTARY OR ROTARY IMPACT DRILL. NO OTHER IMPACT TOOLS WILL BE PERMITTED. DRILL HOLES OR DAMAGED MASONRY BIT. FURNISH DOCUMENTATION OF HOLE SIZE RECOMMENDED FOR THE SPECIFIED ANCHOR TO THE ENGINEER BEFORE DRILLING HOLES. THOROUGHLY CLEAN HOLES FOR ANCHORS OF ALL CONCRETE CHIPS, DUST, GREASE, OIL, ETC. BEFORE ANCHORS ARE INSTALLED. REPAIR ALL DAMAGE CAUSED BY THIS WORK TO THE SATISFACTION OF THE ENGINEER. 		
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS ANCHORAGE FOR GUARDRAIL POST ON BOX CULVERT	SHEET 6 OF 6 862D03

NORTH CAROLINA
PROFESSIONAL
ENGINEER
SEAL
022966
DATE: 6/5/06
J. S. Hunt

**PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN**
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STANDARDS DATE: 01-15-02
 MODIFIED BY: E. E. WARD DATE: 09-14-05
 CHECKED BY: J. S. Hunt DATE: 9/15/05
 FILE SPEC.: 430s/02stdstodetails/english/862d03.dgn

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

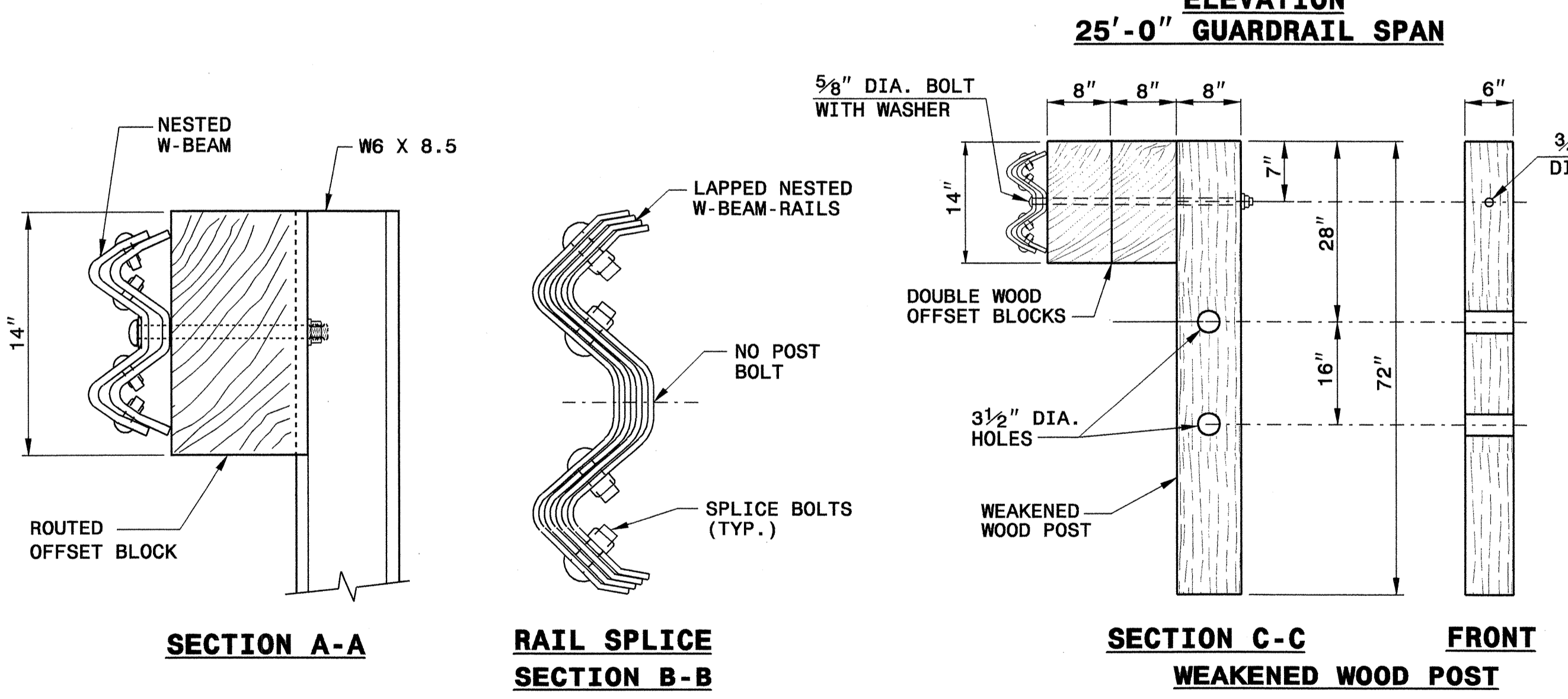
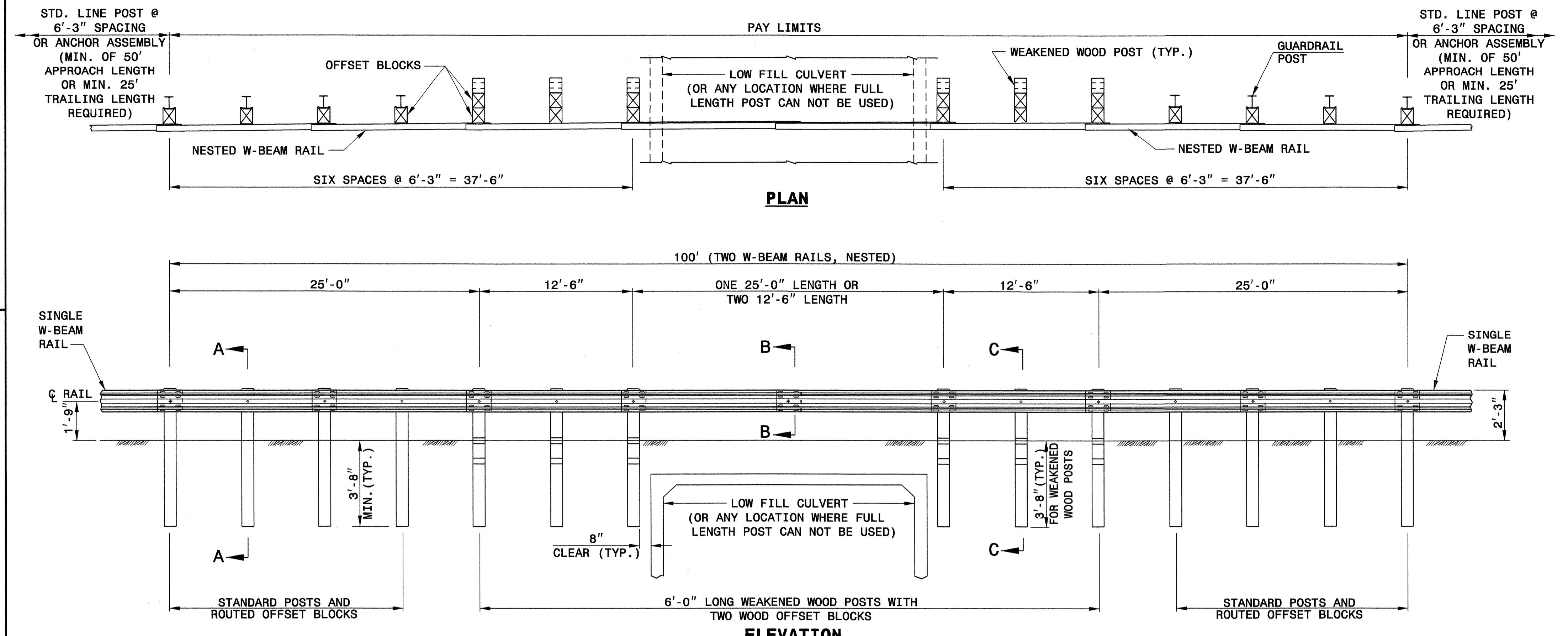
ENGLISH DETAIL DRAWING FOR
GUARDRAIL PLACEMENT
25'-0" CLEAR SPAN
(MEETING NCHRP 350 TL-3 CRITERIA)

SHEET 1 OF 1
862D01

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
GUARDRAIL PLACEMENT
25'-0" CLEAR SPAN
(MEETING NCHRP 350 TL-3 CRITERIA)

SHEET 1 OF 1
862D01



- GENERAL NOTES:
1. LAP RAIL IN THE DIRECTION OF TRAFFIC FLOW.
 2. SEE ROADWAY PLANS FOR LOCATIONS AND CONTINUATION OF RAIL OR END SECTIONS.
 3. 25'-0" SPAN: POSTS MAY BE ELIMINATED SUCH THAT A MAXIMUM OF ONE RAIL SPLICE IS LOCATED WITHIN THE UNSUPPORTED LENGTH. A 25'-0" LENGTH OF NESTED W-BEAM RAIL MAY BE USED TO ELIMINATE A SPLICE WITHIN THE 25'-0" CLEAR SPAN.
 4. MINIMUM DISTANCE OF 5 FEET BEHIND THE GUARDRAIL SHOULD BE CLEAR OF ANY FIXED-OBJECT HAZARDS THAT COULD SNAG AN IMPACTING VEHICLE.

02-APR-2004 11:17
 W:\Spec\Std\Details\ward-d\stds\02-stds to Special Details\english\862D01\862D0109.dgn
 ward
 02/06

E.E. WARD
 2/6/06

DESIGN SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
 Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: FHA HMHS-B58 DATE:
 MODIFIED BY: E.E. WARD DATE: 08-11-03
 CHECKED BY: C. B. Kennedy DATE: 4-7-04
 FILE SPEC.: /usr/std/02stds to details/english/862D01/862D0109.dgn

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201630

Main table with columns: ItemNumber, Sec #, Quantity, Unit, Description, ItemNumber, Sec #, Quantity, Unit, Description, ItemNumber, Sec #, Quantity, Unit, Description. Includes multiple columns of item data and summary rows like '***** END SCHEDULE AA *****' and '***** BEGIN SCHEDULE AA ***** (3 ALTERNATES) *****'.

5/14/99 7/5/2006 7:18:50 PM

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

RIGHT OF WAY AREA DATA SHEET

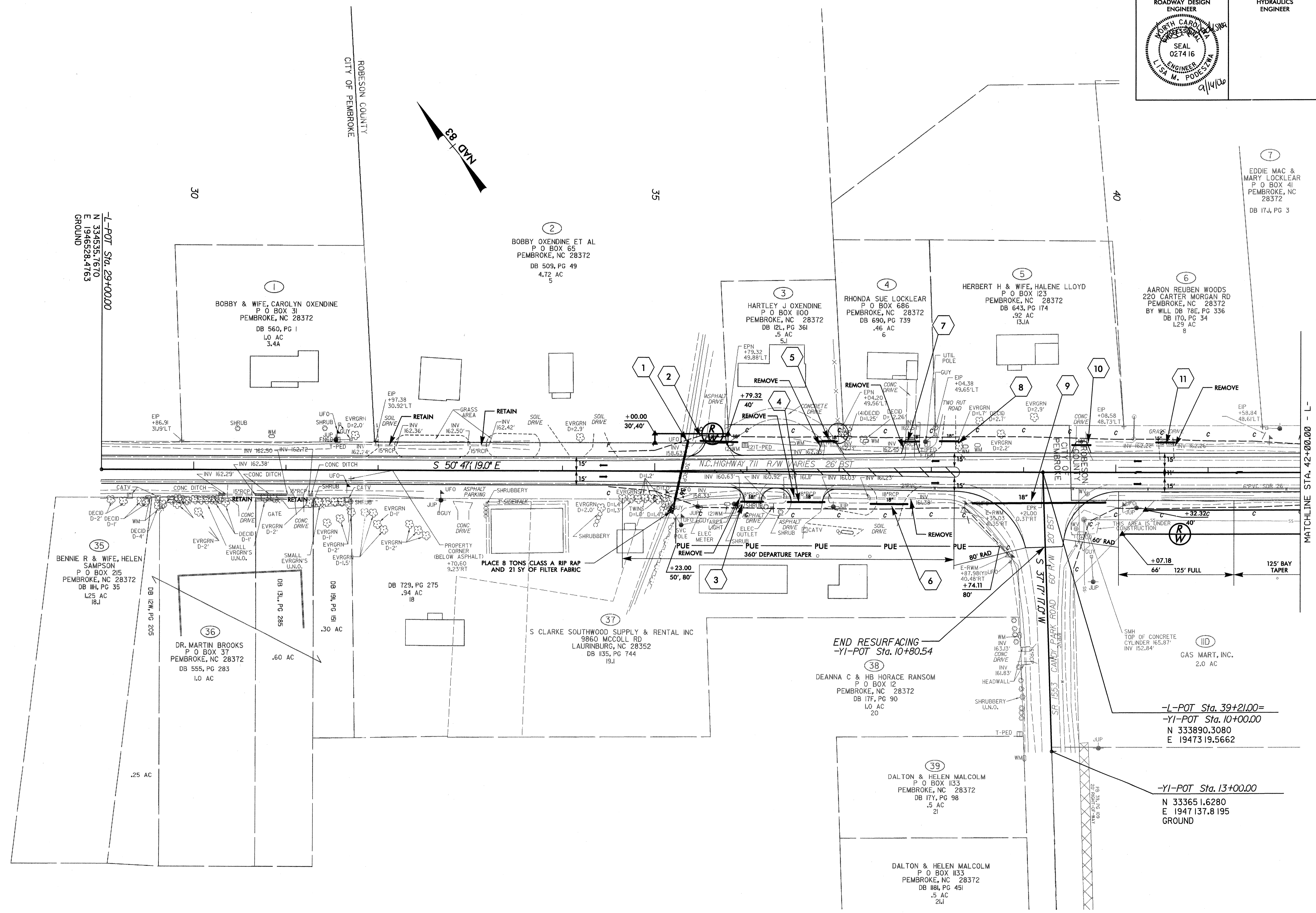
PARCEL NO.	PROPERTY OWNERS NAME	TOTAL ACREAGE	AREA TAKEN	AREA REMAINING RIGHT	AREA REMAINING LEFT	CONSTR. EASEMENT	PERMANENT DRAINAGE EASEMENT	TEMPORARY DRAINAGE EASEMENT	PERMANENT UTILITY EASEMENT	PARCEL NO.	PROPERTY OWNERS NAME	TOTAL ACREAGE	AREA TAKEN	AREA REMAINING RIGHT	AREA REMAINING LEFT	CONSTR. EASEMENT	PERMANENT DRAINAGE EASEMENT	TEMPORARY DRAINAGE EASEMENT	PERMANENT UTILITY EASEMENT
1	BOBBY & WIFE, CAROLYN OXENDINE	43,560.17 SF								25	JOSEPH HARDIN	19.57 AC	508.66 SF		19.56 AC				
2	BOBBY OXENDINE, ET AL	4.72 AC	793.20 SF		4.70 AC					26A	WACHOVIA BANK OF NC TR LOLETA BONEY 06 17969 00	48.38 AC	0.34 AC		48.04 AC		2,919.72 SF		
3	HARTLEY J OXENDINE	21,780.09 SF								26B	WACHOVIA BANK OF NC TR LOLETA BONEY 06 17969 00	23.22 AC	0.25 AC		22.97 AC		976.71 SF		900.03 SF
4	RHONDA SUE LOCKLEAR	20,037.68 SF								26C	WACHOVIA BANK OF NC TR LOLETA BONEY 06 17969 00	38.41 AC	0.37 AC		38.04 AC				
5	HERBERT H & WIFE, HALENE LLOYD	40,075.36 SF								26D	WACHOVIA BANK OF NC TR LOLETA BONEY 06 17969 00	26.80 AC	0.15 AC	26.65 AC		1,000.00 SF	440.68 SF		900.00 SF
6	AARON REUBEN WOODS	1.29 AC								26E	WACHOVIA BANK OF NC TR LOLETA BONEY 06 17969 00	6.20 AC	0.14 AC	6.06 AC					
7	EDDIE MAC & MARY LOCKLEAR									27	RITA HUNT	1.36 AC	1,038.27 SF		1.34 AC				
8	JOSEPH W KOTAI									28	ELMER HOLMES, WIDOWER	16,552.87 SF	866.56 SF		15,686.31 SF				
9	NORMA JEAN THOMPSON	4.61 AC	2,557.89 SF		4.55 AC					29	SYBIL LOWERY, LIFE ESTATE	16,552.87 SF	1,000.01 SF		15,552.86 SF				
10	JULIAN P. & NINA MARTIN	1.06 AC	5,561.89 SF		0.93 AC					30	NORA DEAN HUNT	16,552.87 SF	1,000.02 SF		15,552.85 SF				
11A	BRYANT INVESTMENTS LLC A SC LIMITED LIABILITY CORP	24.91 AC	0.14 AC	24.77 AC						31	DWIGHT DOUGLAS SMITH and wife DIANA L. SMITH	20,037.68 SF	1,000.00 SF		19,037.68 SF				
11B	BRYANT INVESTMENTS LLC A SC LIMITED LIABILITY CORP	77.09 AC	0.16 AC		76.93 AC					32	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	8.04 AC	3,409.91 SF		7.96 AC				
11C	BRYANT INVESTMENTS LLC A SC LIMITED LIABILITY CORP	29.50 AC	0.49 AC	29.01 AC		4,123.95 SF				33	BENJAMIN C. LEACH and wife, HAZEL L. LEACH	20,908.88 SF	2,210.97 SF		18,697.91 SF				
11D	GAS MART, INC.	2.00 AC	1,801.75 SF	1.96 AC						34	ROBESON COUNTY	53.27 AC	3,033.96 SF		53.20 AC				
11E	LUMBEE NATION TRIBAL PROGRAMS, INC.	10.00 AC	0.17 AC		9.83 AC					35	BENNIE R & WIFE, HELEN SAMPSON	1.25 AC							
11F	TOWN OF PEMBROKE	30.00 AC	2,411.62 SF		29.94 AC					36	DR. MARTIN BROOKS	2.15 AC							
12	THE TOWN OF PEMBROKE	2,500.00 SF								37	S CLARKE SOUTHWOOD SUPPLY RENTAL INC								0.23 AC
13	BARBARA O. ANDERSON	28,749.72 SF								38	DEANNA C & HB HORACE RANSOM	43,560.17 SF							
14A	LUMBER RIVER ELECTRIC CORP.	14,810.46 SF								39	DALTON & HELEN MALCOLM	21,780.09 SF							
14B	LUMBER RIVER ELECTRIC CORP.	17,424.07 SF								40	BELL & BROOKS DEVELOPMENT LLC	9.94 AC	2,101.91 SF	9.89 AC					
15	MRS. FAYE LEWIS	151.80 AC								41	HOWARD BROOKS FAMILY LLC	10.00 AC	4,234.92 SF	9.90 AC					
16	JUDITH AND VARDELL BASS	9.43 AC	1,998.02 SF		9.38 AC					42	FRANCES L SCOTT	115.91 AC	0.81 AC	115.10 AC		4,000.03 SF			
17	ROBERT BRAYBOY, JR., ET AL	8.23 AC	0.12 AC		8.11 AC					43A	HAROLD TOWNSEND and wife, PEGGY O. TOWNSEND	8.97 AC	0.10 AC	6.81 AC	2.06 AC				
18	ALLEN LOCKLEAR	12.00 AC	0.17 AC		11.83 AC														
19	CLYDE DIAL	42,210 SF	2,102 SF		40,108 SF					43B	HAROLD TOWNSEND and wife, PEGGY O. TOWNSEND	8.92 AC	0.13 AC	6.78 AC	2.01 AC				
20 LT	N. CARL STUBBS, JR.	48.66 AC	1,896.31 SF		48.62 AC														
20 RT	N. CARL STUBBS, JR.	49.34 AC	1,839.46 SF	49.30 AC						44A	BOBBY SAMPSON and wife, ANDELLA B. SAMPSON	1.32 AC	1,636.81 SF	1.28 AC					
21 LT	ANN BURCHETT & LARUE B. ALLEN	49.07 AC	0.27 AC		48.80 AC					44B	BOBBY RAY SAMPSON	4.49 +/- AC	2,081.75 SF	4.44 +/- AC					
21 RT	ANN BURCHETT & LARUE B. ALLEN	39.08 AC	0.14 AC	38.94 AC		2,147.34 SF				45	ALICE S. OXENDINE, ET AL	4.49 +/- AC	0.14 AC	4.35 +/- AC					
22A	ANN BULLOCK BURCHETT and husband, JOHN BURCHETT	6.82 AC	0.18 AC		6.64 AC					46	LISA B. REAVES	3.26 AC	0.13 AC	3.13 AC		1,759.60 SF			
22B	ANN BULLOCK BURCHETT	1.02 AC	999.74 SF		1.00 AC					47	CURT LOCKLEAR, JR., et als	19.17 AC	0.25 AC	18.92 AC					
23	LAURA TURNER, EARL D. LOCKLEAR, JR., KELLY M. HUNT, JOHNNIE JUNIOR LOCKLEAR, WINDELL HUNT, TRUSTEES FOR VISION OF HOPE CHURCH	2.50 AC	2,002.48 SF		2.45 AC					48	GERBER CHILDRENSWEAR, INC, a Delaware Corporation	17.98 AC							
										49	JANET B. BENSON	36.50 AC	0.11 AC	36.39 AC					
24	BERNICE G. & wife, CYNTHIA H. LOCKLEAR	5.00 AC	1,973.78 SF		4.95 AC					50	WILLIAM D. & CLARA J. MITCHELL	1.60 AC	3,149.37 SF	1.53 AC			602.24 SF		

10/26/98
9/12/2006 12:46:55 PM
C:\MMS\161222\018\ndk_processed_data\161222_018_area_data.dwg

PROJECT REFERENCE NO. 37228/39168	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99
9/12/2006
12:16:46 PM
L:\S\37228\39168\Drawings\DWG_Sheets\DWG_4.dwg

REVISIONS



-L-POT Sta. 29+00.00
N 334535.7670
E 1946528.4763
GROUND

7
EDDIE MAC & MARY LOCKLEAR
P O BOX 41
PEMBROKE, NC
28372
DB 17J, PG 3

6
AARON REUBEN WOODS
220 CARTER MORGAN RD
PEMBROKE, NC 28372
BY WILL DB 78E, PG 336
DB 17O, PG 34
1.29 AC
8

5
HERBERT H & WIFE, HALENE LLOYD
P O BOX 123
PEMBROKE, NC 28372
DB 643, PG 174
.92 AC
13.1A

4
RHONDA SUE LOCKLEAR
P O BOX 686
PEMBROKE, NC 28372
DB 690, PG 739
.46 AC
6

3
HARTLEY J OXENDINE
P O BOX 100
PEMBROKE, NC 28372
DB 12L, PG 361
.5 AC
5.1

2
BOBBY OXENDINE ET AL
P O BOX 65
PEMBROKE, NC 28372
DB 509, PG 49
4.72 AC
5

1
BOBBY & WIFE, CAROLYN OXENDINE
P O BOX 31
PEMBROKE, NC 28372
DB 560, PG 1
1.0 AC
3.4A

-L-POT Sta. 39+21.00=
-Y1-POT Sta. 10+00.00
N 333890.3080
E 1947319.5662

-Y1-POT Sta. 13+00.00
N 333651.6280
E 1947137.8195
GROUND

38
END RESURFACING
-Y1-POT Sta. 10+80.54
DEANNA C & HB HORACE RANSOM
P O BOX 12
PEMBROKE, NC 28372
DB 17F, PG 90
2.0 AC

39
DALTON & HELEN MALCOLM
P O BOX 1133
PEMBROKE, NC 28372
DB 17Y, PG 98
.5 AC
2.1

37
S CLARKE SOUTHWOOD SUPPLY & RENTAL INC
9860 MCCOLL RD
LAURINBURG, NC 28352
DB 1135, PG 744
19.1

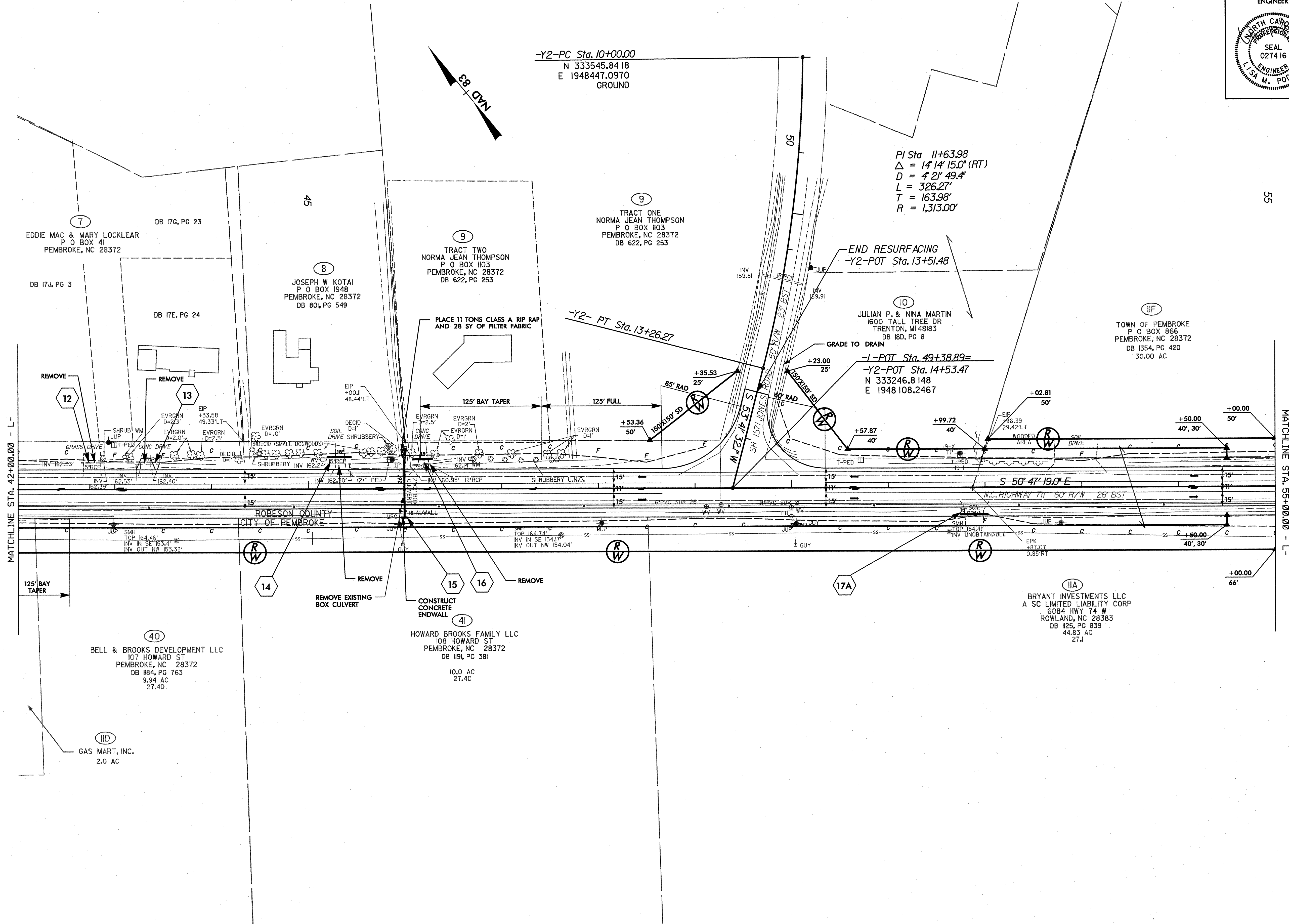
36
DR. MARTIN BROOKS
P O BOX 37
PEMBROKE, NC 28372
DB 555, PG 283
1.0 AC

35
BENNIE R & WIFE, HELEN
SAMPSON
P O BOX 215
PEMBROKE, NC 28372
DB 11H, PG 35
1.25 AC
18.1

MATCHLINE STA. 42+00.00 - L -

8/17/99

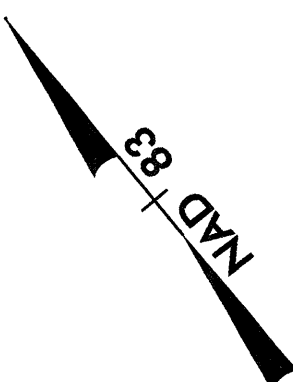
REVISIONS



7/5/2006
6:27:41 PM
C:\p15161512625_0181\dwg\p15161512625.dwg sheets\sheet 5.dwg

MATCHLINE STA. 42+00.00 - L-

MATCHLINE STA. 55+00.00 - L-



7
EDDIE MAC & MARY LOCKLEAR
P O BOX 41
PEMBROKE, NC 28372

DB 17G, PG 23

DB 17J, PG 3

DB 17E, PG 24

8
JOSEPH W KOTAI
P O BOX 1948
PEMBROKE, NC 28372
DB 80I, PG 549

9
TRACT TWO
NORMA JEAN THOMPSON
P O BOX 1103
PEMBROKE, NC 28372
DB 622, PG 253

-Y2-PC Sta. 10+00.00
N 333545.8418
E 1948447.0970
GROUND

-Y2-PT Sta. 13+26.27

PI Sta. 11+63.98
 $\Delta = 14' 14" 15.0" (RT)$
 $D = 4' 21" 49.4"$
 $L = 326.27'$
 $T = 163.98'$
 $R = 1,313.00'$

END RESURFACING
-Y2-POT Sta. 13+51.48

10
JULIAN P. & NINA MARTIN
1600 TALL TREE DR
TRENTON, MI 48183
DB 18D, PG 8

-L-POT Sta. 49+38.89=
-Y2-POT Sta. 14+53.47
N 333246.8148
E 1948108.2467

11F
TOWN OF PEMBROKE
P O BOX 866
PEMBROKE, NC 28372
DB 1354, PG 420
30.00 AC

40
BELL & BROOKS DEVELOPMENT LLC
107 HOWARD ST
PEMBROKE, NC 28372
DB 1184, PG 763
9.94 AC
27.40

41
HOWARD BROOKS FAMILY LLC
108 HOWARD ST
PEMBROKE, NC 28372
DB 119I, PG 381
10.0 AC
27.40

11A
BRYANT INVESTMENTS LLC
A SC LIMITED LIABILITY CORP
6084 HWY 74 W
ROWLAND, NC 28383
DB 1125, PG 839
44.83 AC
27.1

11D
GAS MART, INC.
2.0 AC

14

15

16

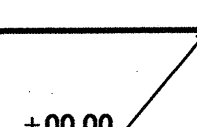
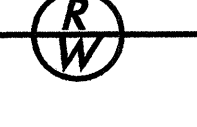
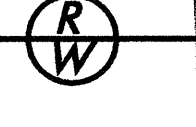
17A

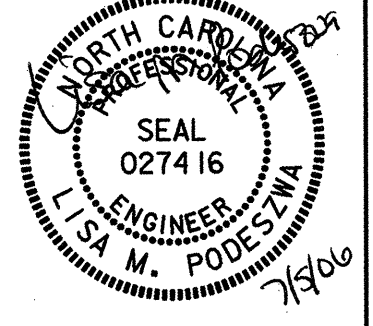
66'

ROBESON COUNTY
CITY OF PEMBROKE

N.C. HIGHWAY 711 60' R/W 26' BSI

S 50' 47" 19.0' E



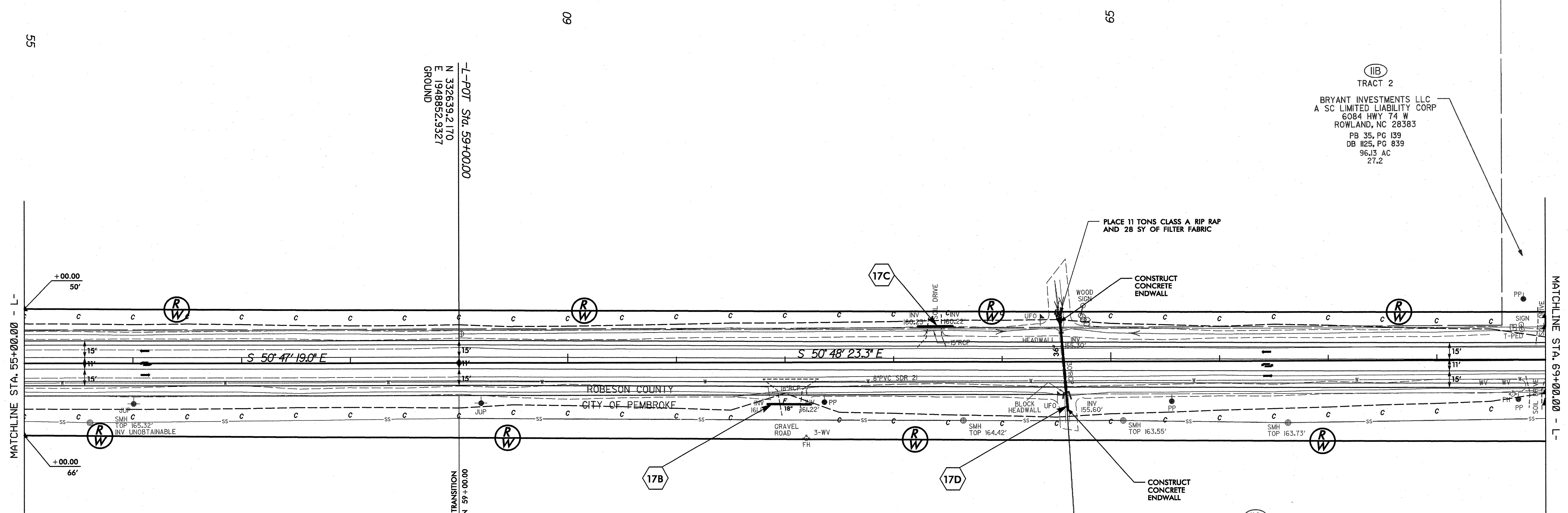
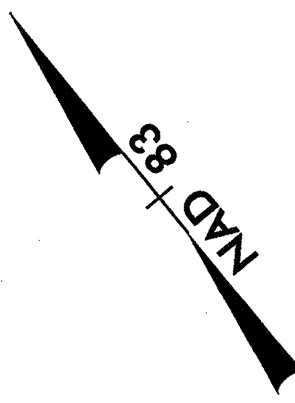
PROJECT REFERENCE NO. 37228/39168	SHEET NO. 6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

(IIF)
TOWN OF PEMBROKE
P O BOX 866
PEMBROKE, NC 28372
DB 1354, PG 420
30.00 AC

(IIB)
TRACT 2
BRYANT INVESTMENTS LLC
A SC LIMITED LIABILITY CORP
6084 HWY 74 W
ROWLAND, NC 28383
PB 35, PG 139
DB 1125, PG 839
96.13 AC
27.2


(IIA)
BRYANT INVESTMENTS LLC
A SC LIMITED LIABILITY CORP
6084 HWY 74 W
ROWLAND, NC 28383
DB 1125, PG 839
44.83 AC
27.1

(IIC)
TRACT 3
BRYANT INVESTMENTS LLC
A SC LIMITED LIABILITY CORP
6084 HWY 74 W
ROWLAND, NC 28383
PB 35, PG 139
DB 1125, PG 839
29.5 AC
27.3



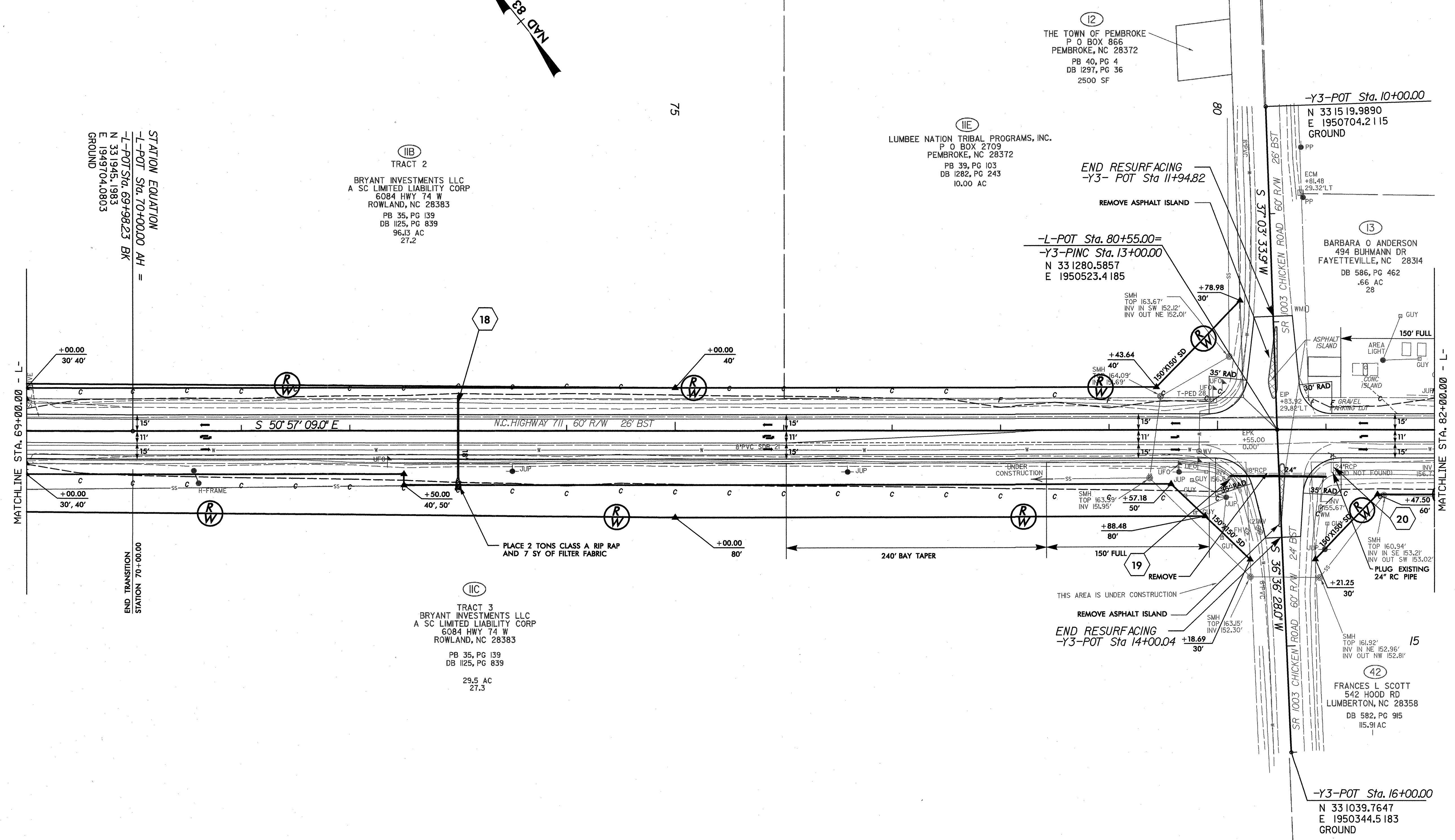
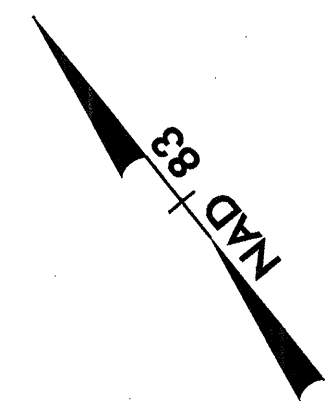
REVISIONS

8/17/99
7/5/2006
6/2/2005
0108\hdx-revised\plan sheets\plan sheets.dwg

PROJECT REFERENCE NO. 37228/39168		SHEET NO. 7	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
			

8/17/99

REVISIONS



STATION EQUATION
 -L-POT Sta. 70+00.00 AH =
 -L-POT Sta. 69+98.23 BK
 N 33 19 45.1983
 E 194 97 04.0803
 GROUND

IIB TRACT 2
 BRYANT INVESTMENTS LLC
 A SC LIMITED LIABILITY CORP
 6084 HWY 74 W
 ROWLAND, NC 28383
 PB 35, PG 139
 DB 1125, PG 839
 96.13 AC
 27.2

IIE LUMBEE NATION TRIBAL PROGRAMS, INC.
 P O BOX 2709
 PEMBROKE, NC 28372
 PB 39, PG 103
 DB 1282, PG 243
 10.00 AC

I12 THE TOWN OF PEMBROKE
 P O BOX 866
 PEMBROKE, NC 28372
 PB 40, PG 4
 DB 1297, PG 36
 2500 SF

-Y3-POT Sta. 10+00.00
 N 33 15 19.9890
 E 195 07 04.2115
 GROUND

I13 BARBARA O ANDERSON
 494 BUHMANN DR
 FAYETTEVILLE, NC 28314
 DB 586, PG 462
 .66 AC
 28

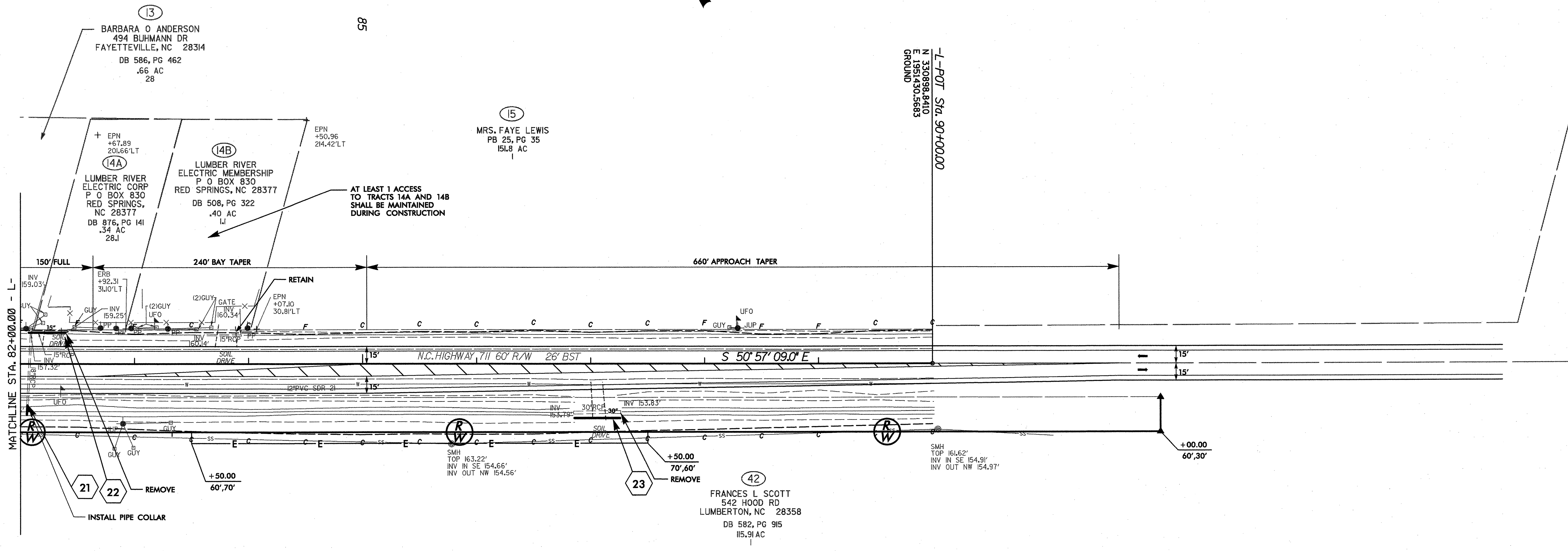
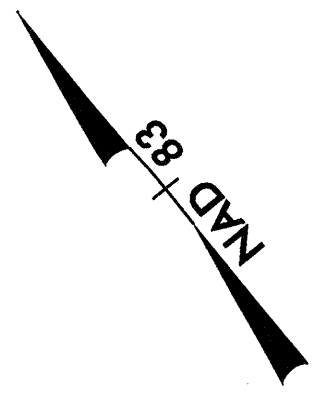
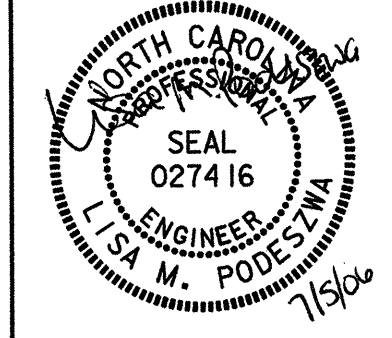
IIC TRACT 3
 BRYANT INVESTMENTS LLC
 A SC LIMITED LIABILITY CORP
 6084 HWY 74 W
 ROWLAND, NC 28383
 PB 35, PG 139
 DB 1125, PG 839
 29.5 AC
 27.3

I15 FRANCES L SCOTT
 542 HOOD RD
 LUMBERTON, NC 28358
 DB 582, PG 915
 115.91 AC

-Y3-POT Sta. 16+00.00
 N 33 10 39.7647
 E 195 03 44.5183
 GROUND

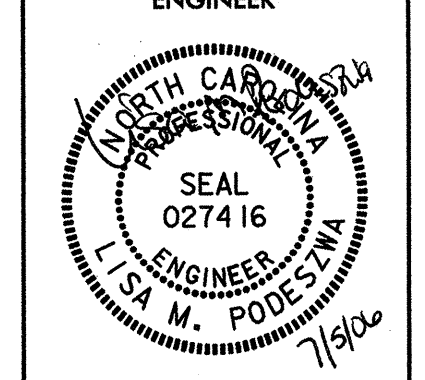
7/27/99
 14 000 51 2025 018 18 1 bdr processed\plan sheets\plan 7.dwg

PROJECT REFERENCE NO. 37228/39168	SHEET NO. 8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

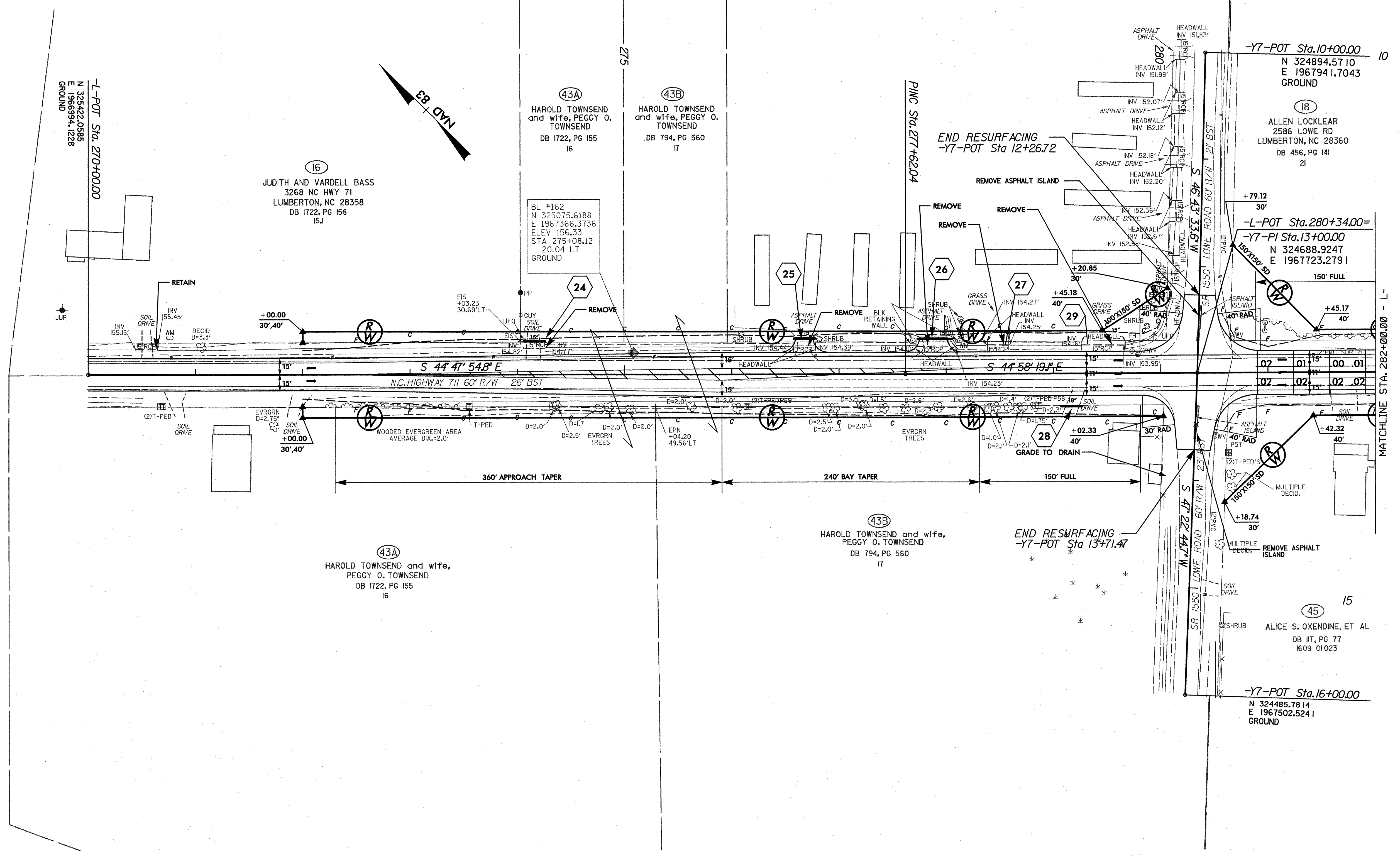


REVISIONS

8/17/99
 7/5/2006
 6:27:43 PM
 c:\work\161225\018\tdr_proposed\plan_sheets\plan_8.dwg



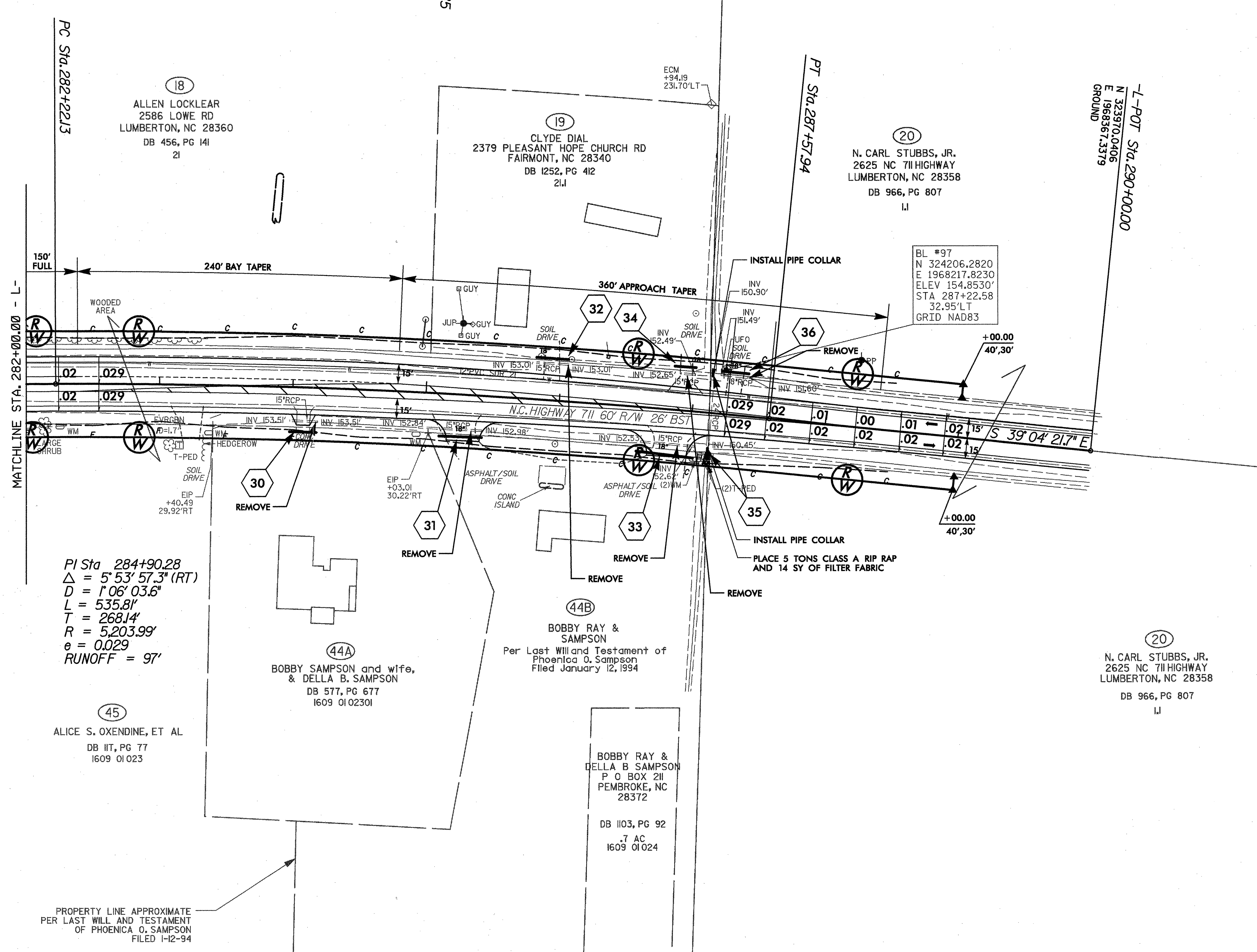
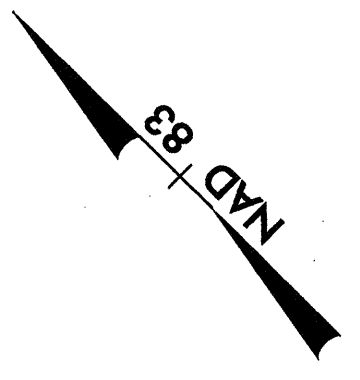
(17)
ROBERT BRAYBOY, JR., ET AL
RT 1, BOX 108
ROWLAND, NC 28383
PB 19, PG 33
DB 885, PG 407
15.1



REVISIONS

8/17/99

7/5/2006
1:45:29 PM
c:\0016512505_018_bdd_processed\job_stsheets\job_9.dwg



$PI \text{ Sta } 284+90.28$
 $\Delta = 5^{\circ} 53' 57.3'' (RT)$
 $D = 106^{\circ} 03.6'$
 $L = 535.81'$
 $T = 268.14'$
 $R = 5,203.99'$
 $e = 0.029$
 $RUNOFF = 97'$

INSTALL PIPE COLLAR
 PLACE 5 TONS CLASS A RIP RAP AND 14 SY OF FILTER FABRIC
 REMOVE

REVISIONS

8/17/99

1/27/06
 1/27/06
 L:\01612625\01612625.dwg
 10.dwg

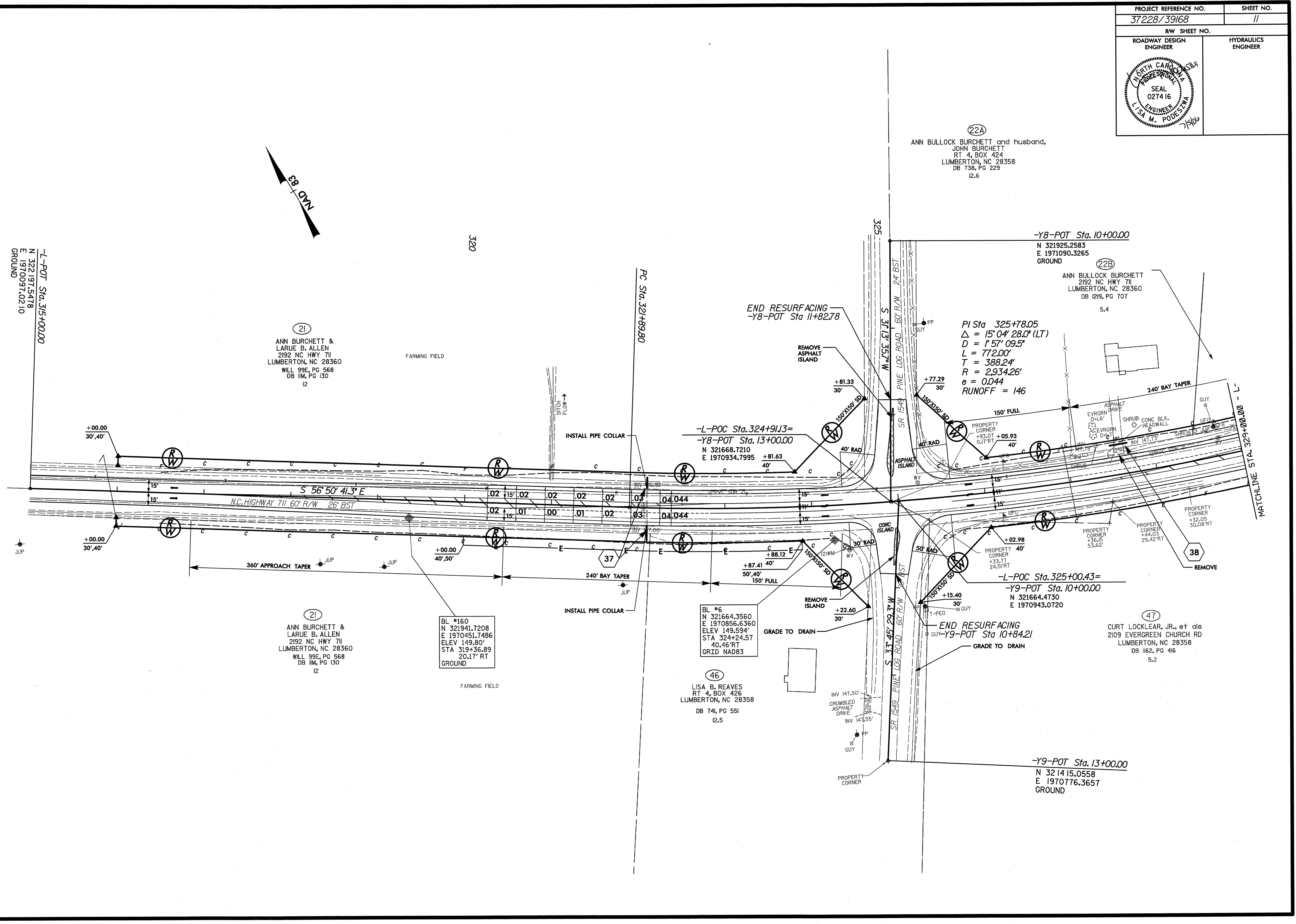
PROPERTY LINE APPROXIMATE
 PER LAST WILL AND TESTAMENT
 OF PHOENICA O. SAMPSON
 FILED 1-12-94

(22A)
ANN BULLOCK BURCHETT and husband,
JOHN BURCHETT
RT 4, BOX 424
LUMBERTON, NC 28358
DB 738, PG 229
12.6

(22B)
ANN BULLOCK BURCHETT
2192 NC HWY 711
LUMBERTON, NC 28360
DB 1219, PG 707
5.4

PI Sta 325+78.05
 $\Delta = 15^\circ 04' 28.0" (LT)$
 $D = 1^\circ 57' 09.5"$
 $L = 772.00'$
 $T = 388.24'$
 $R = 2,934.26'$
 $e = 0.044$
RUNOFF = 146

(47)
CURT LOCKLEAR, JR., et als
2109 EVERGREEN CHURCH RD
LUMBERTON, NC 28358
DB 162, PG 416
5.2



(21)
ANN BURCHETT &
LARUE B. ALLEN
2192 NC HWY 711
LUMBERTON, NC 28360
WILL 99E, PG 568
DB 11M, PG 130
12

(21)
ANN BURCHETT &
LARUE B. ALLEN
2192 NC HWY 711
LUMBERTON, NC 28360
WILL 99E, PG 568
DB 11M, PG 130
12

BL #160
N 321941.7208
E 1970451.7486
ELEV 149.80'
STA 319+36.89
20.17' RT
GROUND

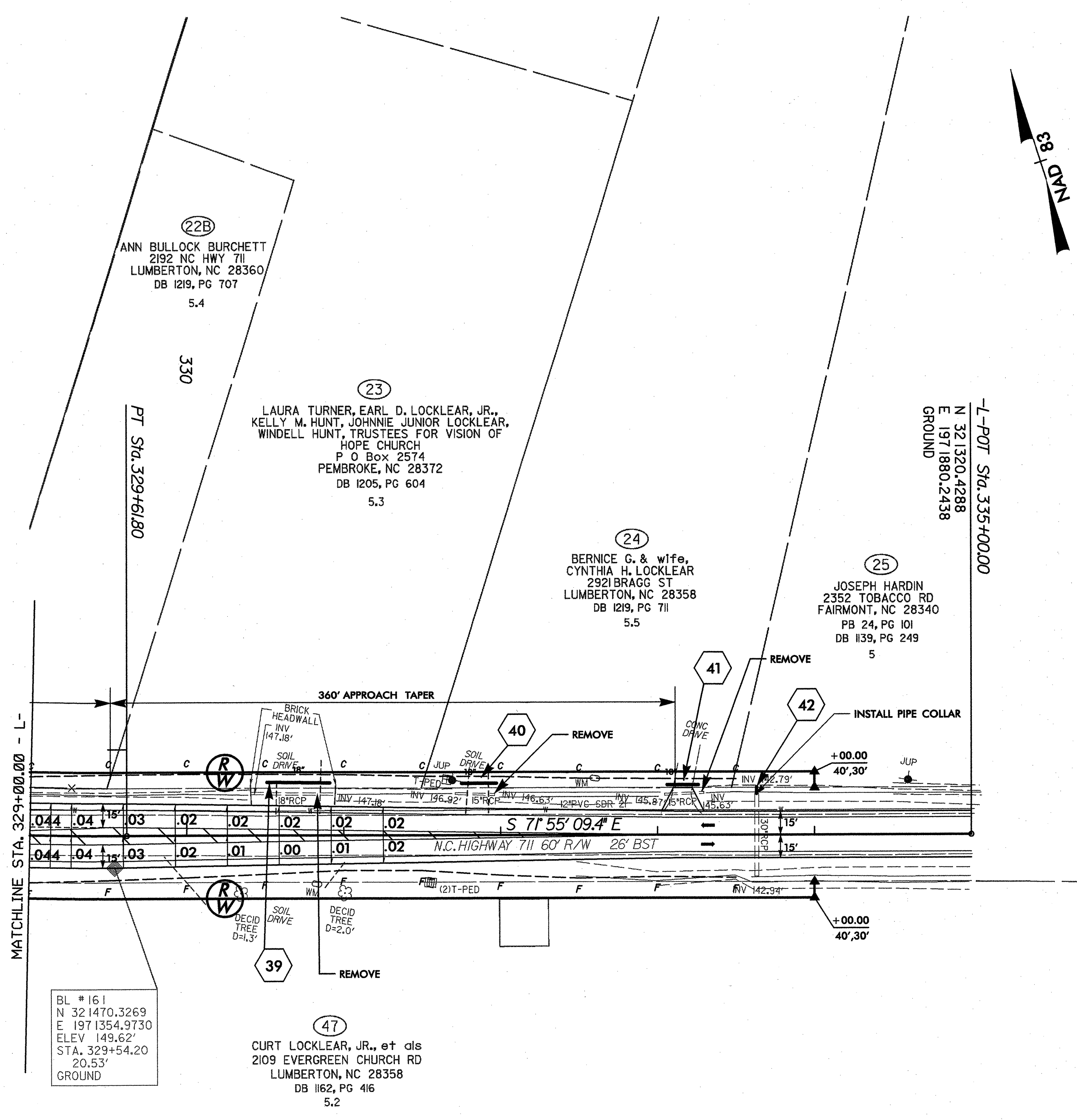
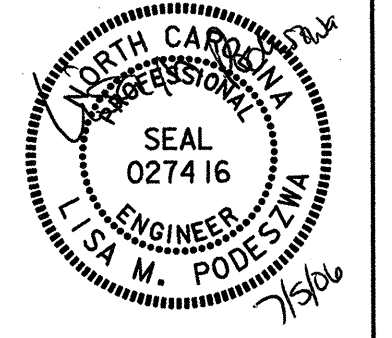
BL #6
N 321664.3560
E 1970856.6360
ELEV 149.594'
STA 324+24.57
40.46' RT
GRID NAD83

(46)
LISA B. REAVES
RT 4, BOX 426
LUMBERTON, NC 28358
DB 741, PG 551
12.5

REVISIONS

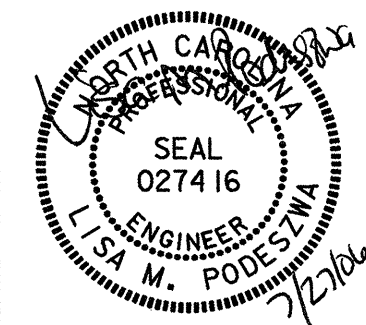
8/17/99
7/5/2006
145
145
145

PROJECT REFERENCE NO. 37228/39168	SHEET NO. 12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

8/17/99
7/5/2006 1:45:55 PM
C:\projects\37228\39168\processed\plan_sheets\plan_12.dwg



L-PT. Sta. 365+00.00
N 319865.6257
E 197446.16896
GROUND

PI/C Sta. 366+82.88

370

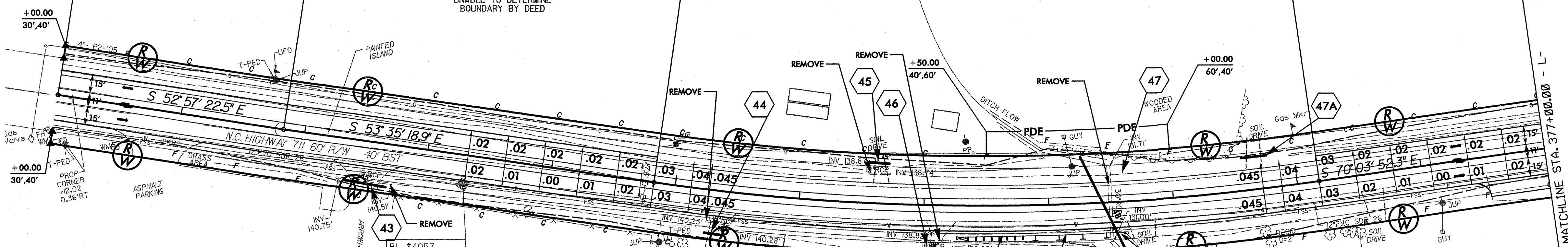
P.C. Sta. 369+82.78

375

P.T. Sta. 375+17.12

(26A)
WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
PB 9, PG 90
DB 95, PG 92
DEED OF POOR QUALITY
1610 02 023
48.38 ACRES IN THIS AREA IS
CLAIMED BY WACHOVIA BANK.
UNABLE TO DETERMINE
BOUNDARY BY DEED

PI Sta 372+52.11
 $\Delta = 16' 28' 33.4" (LT)$
 $D = 3' 04' 47.9"$
 $L = 534.94'$
 $T = 269.33'$
 $R = 1,860.27'$
 $e = 0.045$
RUNOFF = 135



(49)
SECOND TRACT
JANET B. BENSON
4103 CRICKLEWOOD ST
LUMBERTON, NC 28358
DB 19T, PG 217
3-1.2 (08.5 AC)
36.5 AC TOTAL

(43)
BL #4057
N 319648.1344
E 1974713.0765
ELEV 142.37'
STA 368+31.42
23.79' RT
GROUND

(50)
TRACT ONE
WILLIAM D. & CLARA J. MITCHELL
1399 NC HWY 711
LUMBERTON, NC 28360
DB 1053, PG 332
1.6 AC
3-7

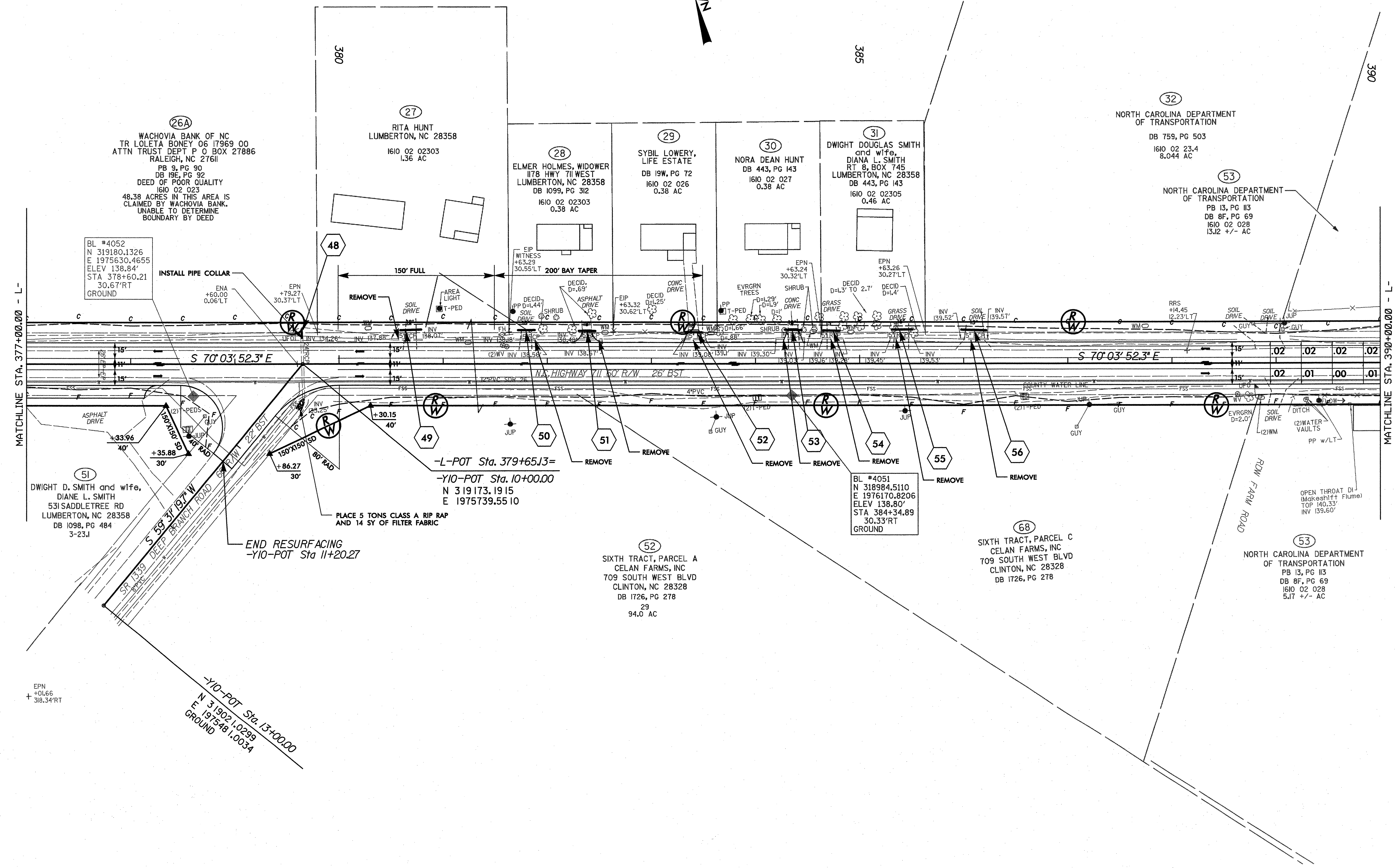
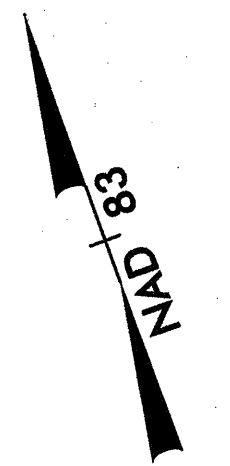
(51)
DWIGHT D. SMITH and wife,
DIANE L. SMITH
531 SADDLETREE RD
LUMBERTON, NC 28358
DB 1098, PG 484
3-23J

(67)
SIXTH TRACT, PARCEL A
CELAN FARMS, INC
709 SOUTH WEST BLVD
CLINTON, NC 28328
DB 1726, PG 278
29
94.0 AC

REVISIONS

8/17/99
7/27/99
7/27/99

8/17/99



(26A) WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
PB 9, PG 90
DB 196, PG 92
DEED OF POOR QUALITY
1610 02 023
48.38 ACRES IN THIS AREA IS
CLAIMED BY WACHOVIA BANK.
UNABLE TO DETERMINE
BOUNDARY BY DEED

(27) RITA HUNT
LUMBERTON, NC 28358
1610 02 02303
1.36 AC

(28) ELMER HOLMES, WIDOWER
1178 HWY 711 WEST
LUMBERTON, NC 28358
DB 1099, PG 312
1610 02 02303
0.38 AC

(29) SYBIL LOWERY,
LIFE ESTATE
DB 19W, PG 72
1610 02 026
0.38 AC

(30) NORA DEAN HUNT
DB 443, PG 143
1610 02 027
0.38 AC

(31) DWIGHT DOUGLAS SMITH
and wife,
DIANA L. SMITH
RT 8, BOX 745
LUMBERTON, NC 28358
DB 443, PG 143
1610 02 02305
0.46 AC

(32) NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DB 759, PG 503
1610 02 23.4
8.044 AC

(53) NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
PB 13, PG 113
DB 8F, PG 69
1610 02 028
13.12 +/- AC

BL #4052
N 319180.1326
E 1975630.4655
ELEV 138.84'
STA 378+60.21
30.67' RT
GROUND

BL #4051
N 318984.5110
E 1976170.8206
ELEV 138.80'
STA 384+34.89
30.33' RT
GROUND

(51) DWIGHT D. SMITH and wife,
DIANE L. SMITH
531 SADDLETREE RD
LUMBERTON, NC 28358
DB 1098, PG 484
3-23.1

(52) SIXTH TRACT, PARCEL A
CELAN FARMS, INC
709 SOUTH WEST BLVD
CLINTON, NC 28328
DB 1726, PG 278
29
94.0 AC

(68) SIXTH TRACT, PARCEL C
CELAN FARMS, INC
709 SOUTH WEST BLVD
CLINTON, NC 28328
DB 1726, PG 278

(53) NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
PB 13, PG 113
DB 8F, PG 69
1610 02 028
5.17 +/- AC

REVISIONS

7/5/2006 1:45:34 PM
C:\00016612625\018\ndr...proposed\plan_sheets\plan_14.dwg

EPN
+01.66
318.34' RT

-Y10-POT Sta. 13+00.00
N 319021.0299
E 1975481.0034
GROUND

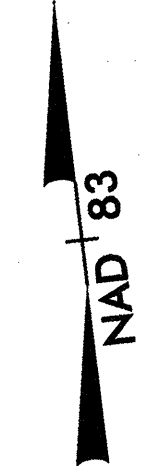
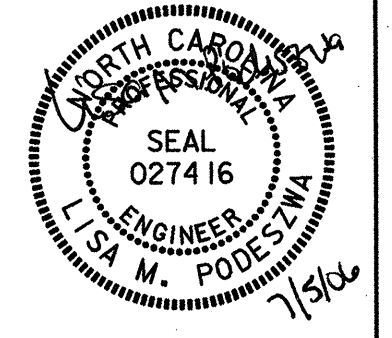
-L-POT Sta. 379+65.13=
-Y10-POT Sta. 10+00.00
N 319173.1915
E 1975739.5510

END RESURFACING
-Y10-POT Sta 11+20.27

PLACE 5 TONS CLASS A RIP RAP
AND 14 SY OF FILTER FABRIC

MATCHLINE STA. 377+00.00 - L-

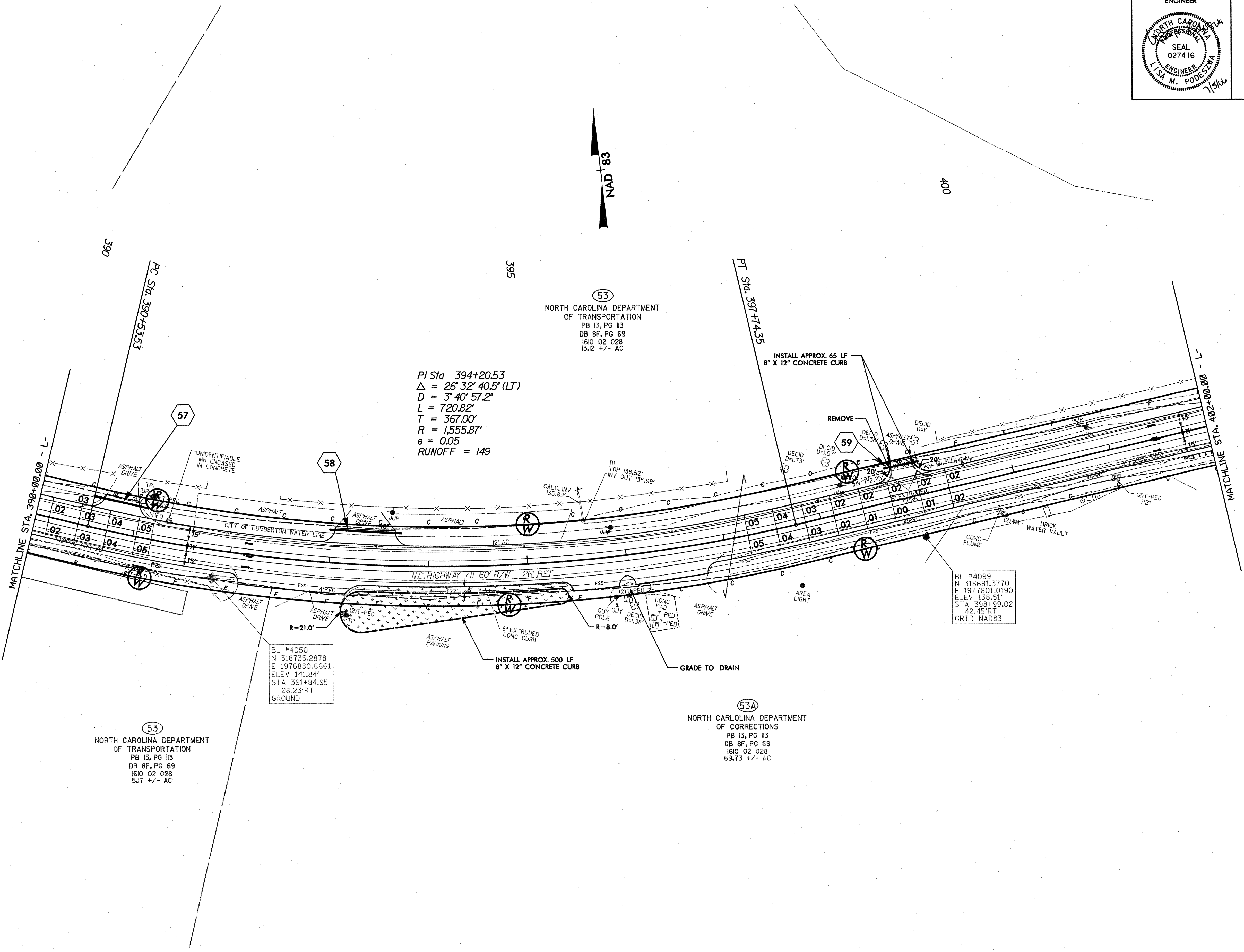
MATCHLINE STA. 390+00.00 - L-



53
NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
PB 13, PG 113
DB 8F, PG 69
1610 02 028
13.12 +/- AC

PI Sta 394+20.53
Δ = 26° 32' 40.5" (LT)
D = 3° 40' 57.2"
L = 720.82'
T = 367.00'
R = 1555.87'
e = 0.05
RUNOFF = 149

INSTALL APPROX. 65 LF
8" X 12" CONCRETE CURB



BL #4099
N 318691.3770
E 1977601.0190
ELEV 138.51'
STA 398+99.02
42.45' RT
GRID NAD83

BL #4050
N 318735.2878
E 1976880.6661
ELEV 141.84'
STA 391+84.95
28.23' RT
GROUND

53
NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
PB 13, PG 113
DB 8F, PG 69
1610 02 028
5.17 +/- AC

53A
NORTH CAROLINA DEPARTMENT
OF CORRECTIONS
PB 13, PG 113
DB 8F, PG 69
1610 02 028
69.75 +/- AC

REVISIONS

8/17/99

7/5/2005
14:35 PM
C:\Users\j... \Documents\37228\39168\39168.dwg

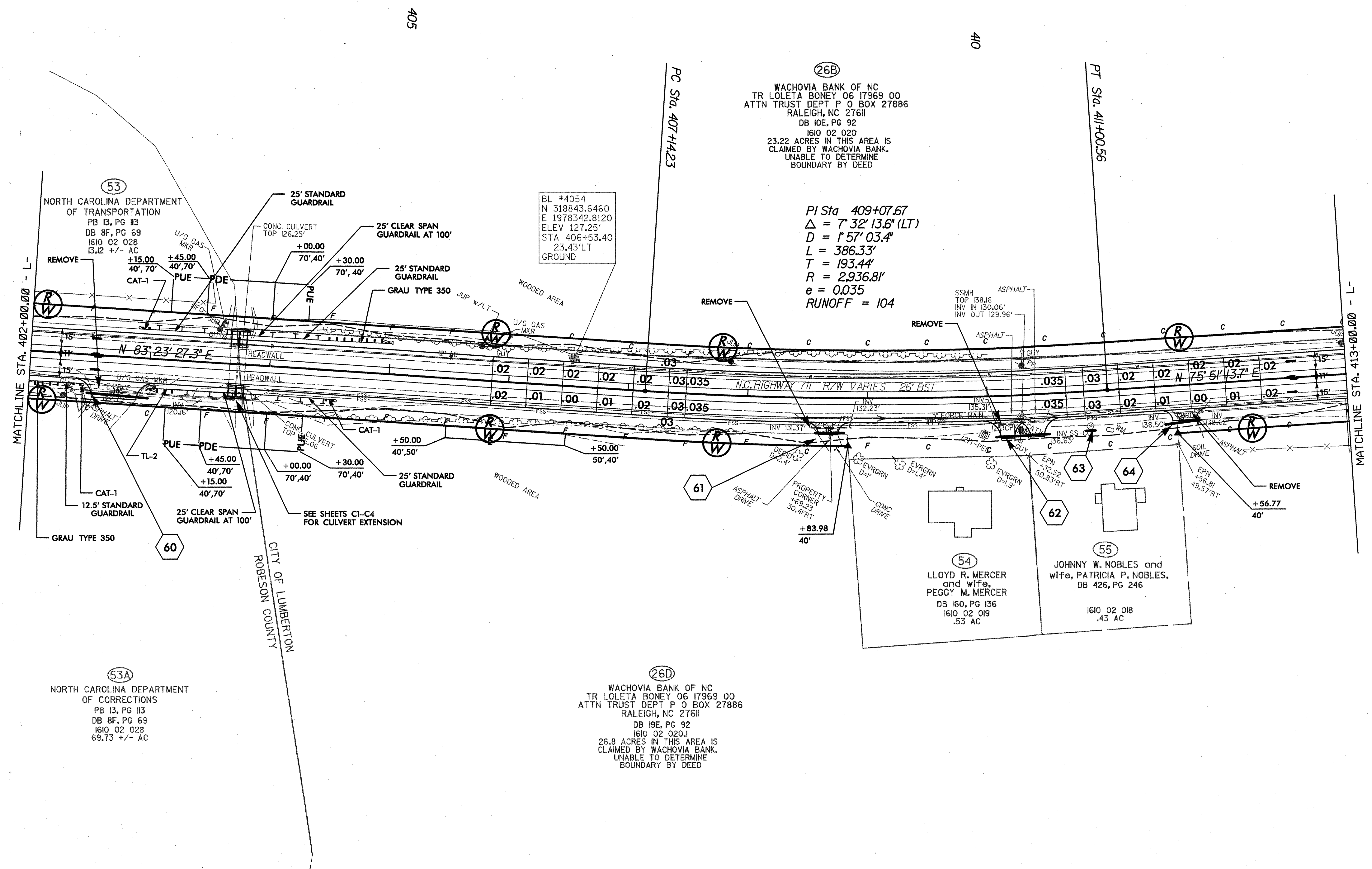
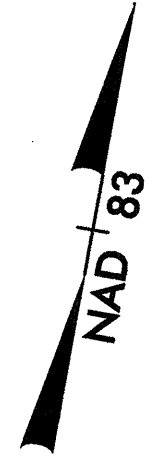
8/17/99

7/27/2006

1:00 PM 10/15/06 10:52 AM 10/15/06

REVISIONS

PROJECT REFERENCE NO. 37228/39168	SHEET NO. 16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



(53)
NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
PB 13, PG 113
DB 8F, PG 69
1610 02 028
13.12 +/- AC

(53A)
NORTH CAROLINA DEPARTMENT
OF CORRECTIONS
PB 13, PG 113
DB 8F, PG 69
1610 02 028
69.73 +/- AC

BL #4054
N 318843.6460
E 1978342.8120
ELEV 127.25'
STA 406+53.40
23.43' LT
GROUND

(26B)
WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
DB 10E, PG 92
1610 02 020
23.22 ACRES IN THIS AREA IS
CLAIMED BY WACHOVIA BANK.
UNABLE TO DETERMINE
BOUNDARY BY DEED

PI Sta 409+07.67
 $\Delta = 7' 32'' 13.6'' (LT)$
 $D = 1' 57'' 03.4''$
 $L = 386.33'$
 $T = 193.44$
 $R = 2,936.81'$
 $e = 0.035$
RUNOFF = 104

SSMH
TOP 138.16
INV IN 130.06'
INV OUT 129.96'

(54)
LLOYD R. MERCER
and wife,
PEGGY M. MERCER
DB 160, PG 136
1610 02 019
.53 AC

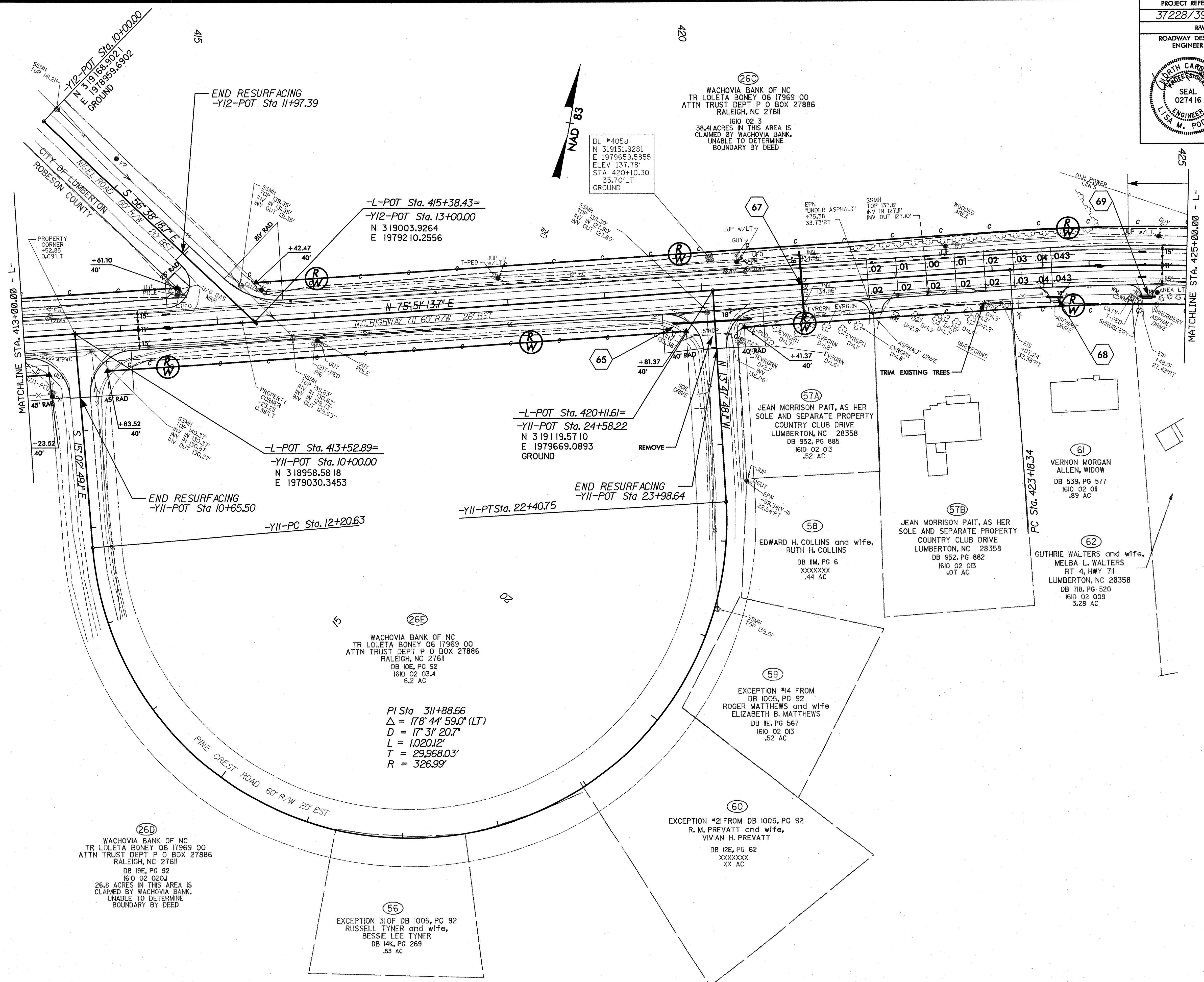
(55)
JOHNNY W. NOBLES and
wife, PATRICIA P. NOBLES,
DB 426, PG 246
1610 02 018
.43 AC

(26D)
WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
DB 19E, PG 92
1610 02 0204
26.8 ACRES IN THIS AREA IS
CLAIMED BY WACHOVIA BANK.
UNABLE TO DETERMINE
BOUNDARY BY DEED

CITY OF LUMBERTON
ROBESON COUNTY

MATCHLINE STA. 402+00.00 - L-

MATCHLINE STA. 413+00.00 - L-



(26C)
WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
1610 02 3
38.4 ACRES IN THIS AREA IS
CLAIMED BY WACHOVIA BANK,
UNABLE TO DETERMINE
BOUNDARY BY DEED

BL #4058
N 319151.9281
E 1979659.5855
ELEV 137.78'
STA 420+10.30
33.70' LT
GROUND

-L-POT Sta. 415+38.43=
-Y12-POT Sta. 13+00.00
N 319003.9264
E 1979210.2556

-L-POT Sta. 420+11.61=
-Y11-POT Sta. 24+58.22
N 319119.5710
E 1979669.0893
GROUND

-L-POT Sta. 413+52.89=
-Y11-POT Sta. 10+00.00
N 318958.5818
E 1979030.3453

(26E)
WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
DB 10E, PG 92
1610 02 03.4
6.2 AC

PI Sta 311+88.66
 $\Delta = 178^\circ 44' 59.0''$ (LT)
 $D = 17' 31' 20.7''$
 $L = 1,020.12'$
 $T = 29,968.03'$
 $R = 326.99'$

(26D)
WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
DB 19E, PG 92
1610 02 020J
26.8 ACRES IN THIS AREA IS
CLAIMED BY WACHOVIA BANK,
UNABLE TO DETERMINE
BOUNDARY BY DEED

(56)
EXCEPTION 31 OF DB 1005, PG 92
RUSSELL TYNER and wife,
BESSIE LEE TYNER
DB 14K, PG 269
.53 AC

(59)
EXCEPTION #14 FROM
DB 1005, PG 92
ROGER MATTHEWS and wife
ELIZABETH B. MATTHEWS
DB 11E, PG 567
1610 02 013
.52 AC

(60)
EXCEPTION #21 FROM DB 1005, PG 92
R. M. PREVATT and wife,
VIVIAN H. PREVATT
DB 12E, PG 62
XXXXXXX
XX AC

(58)
EDWARD H. COLLINS and wife,
RUTH H. COLLINS
DB 11E, PG 6
XXXXXXX
.44 AC

(57B)
JEAN MORRISON PAIT, AS HER
SOLE AND SEPARATE PROPERTY
COUNTRY CLUB DRIVE
LUMBERTON, NC 28358
DB 952, PG 882
1610 02 013
1.07 AC

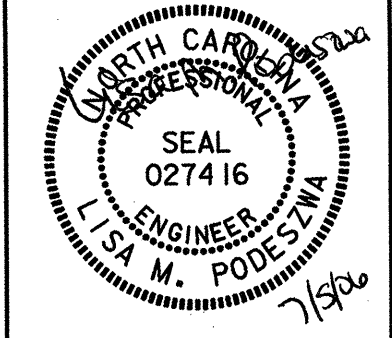
(62)
GUTHRIE WALTERS and wife,
MELBA L. WALTERS
RT 4, HWY 711
LUMBERTON, NC 28358
DB 718, PG 520
1610 02 009
3.28 AC

(61)
VERNON MORGAN
ALLEN, WIDOW
DB 539, PG 577
1610 02 011
.89 AC

(57A)
JEAN MORRISON PAIT, AS HER
SOLE AND SEPARATE PROPERTY
COUNTRY CLUB DRIVE
LUMBERTON, NC 28358
DB 952, PG 885
1610 02 013
.52 AC

REVISIONS

8/17/99
7/5/2006
6:27:46 PM
c:\projects\37228\39168\sheet\17.dwg



(26C)
WACHOVIA BANK OF NC
TR LOLETA BONEY 06 17969 00
ATTN TRUST DEPT P O BOX 27886
RALEIGH, NC 27611
1610 02 3
38.41 ACRES IN THIS AREA IS
CLAIMED BY WACHOVIA BANK.
UNABLE TO DETERMINE
BOUNDARY BY DEED

REPLACE EXISTING DROP
INLET WITH TRAFFIC
BEARING JUNCTION
BOX WITH MANHOLE
END RESURFACING
-Y13-POT Sta 12+34.16
-L-POT Sta. 428+31.04=
-Y13-POT Sta. 13+00.00
N 319254.8322
E 1980474.2385

BL #4059
N 319291.9837
E 1980442.0305
ELEV 138.00'
STA 427+99.10
37.07' LT
GROUND

PI Sta 426+25.15
 $\Delta = 17' 30'' 43.4'' (RT)$
 $D = 2' 52'' 34.5''$
 $L = 608.85'$
 $T = 306.82'$
 $R = 1,992.04'$
 $e = 0.043$
RUNOFF = 129

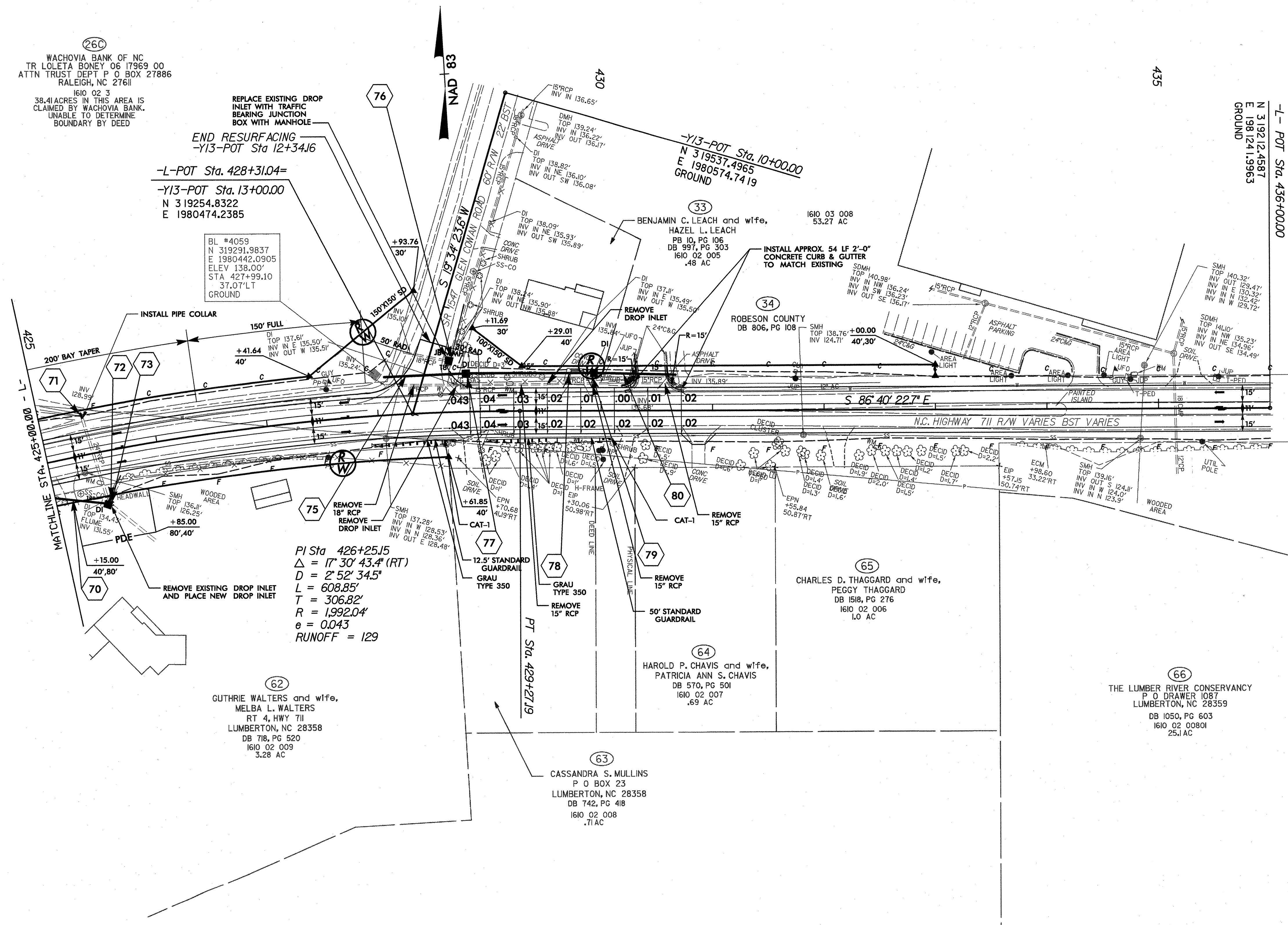
(62)
GUTHRIE WALTERS and wife,
MELBA L. WALTERS
RT 4, HWY 711
LUMBERTON, NC 28358
DB 718, PG 520
1610 02 009
3.28 AC

(63)
CASSANDRA S. MULLINS
P O BOX 23
LUMBERTON, NC 28358
DB 742, PG 418
1610 02 008
.71 AC

(64)
HAROLD P. CHAVIS and wife,
PATRICIA ANN S. CHAVIS
DB 570, PG 501
1610 02 007
.69 AC

(65)
CHARLES D. THAGGARD and wife,
PEGGY THAGGARD
DB 1518, PG 276
1610 02 006
1.0 AC

(66)
THE LUMBER RIVER CONSERVANCY
P O DRAWER 1087
LUMBERTON, NC 28359
DB 1050, PG 603
1610 02 00801
25.1 AC



REVISIONS

8/17/99
 7/5/2006
 6:27:46 PM
 c:\p161\16102005\018.tbl - c:\p161\16102005\018.dwg