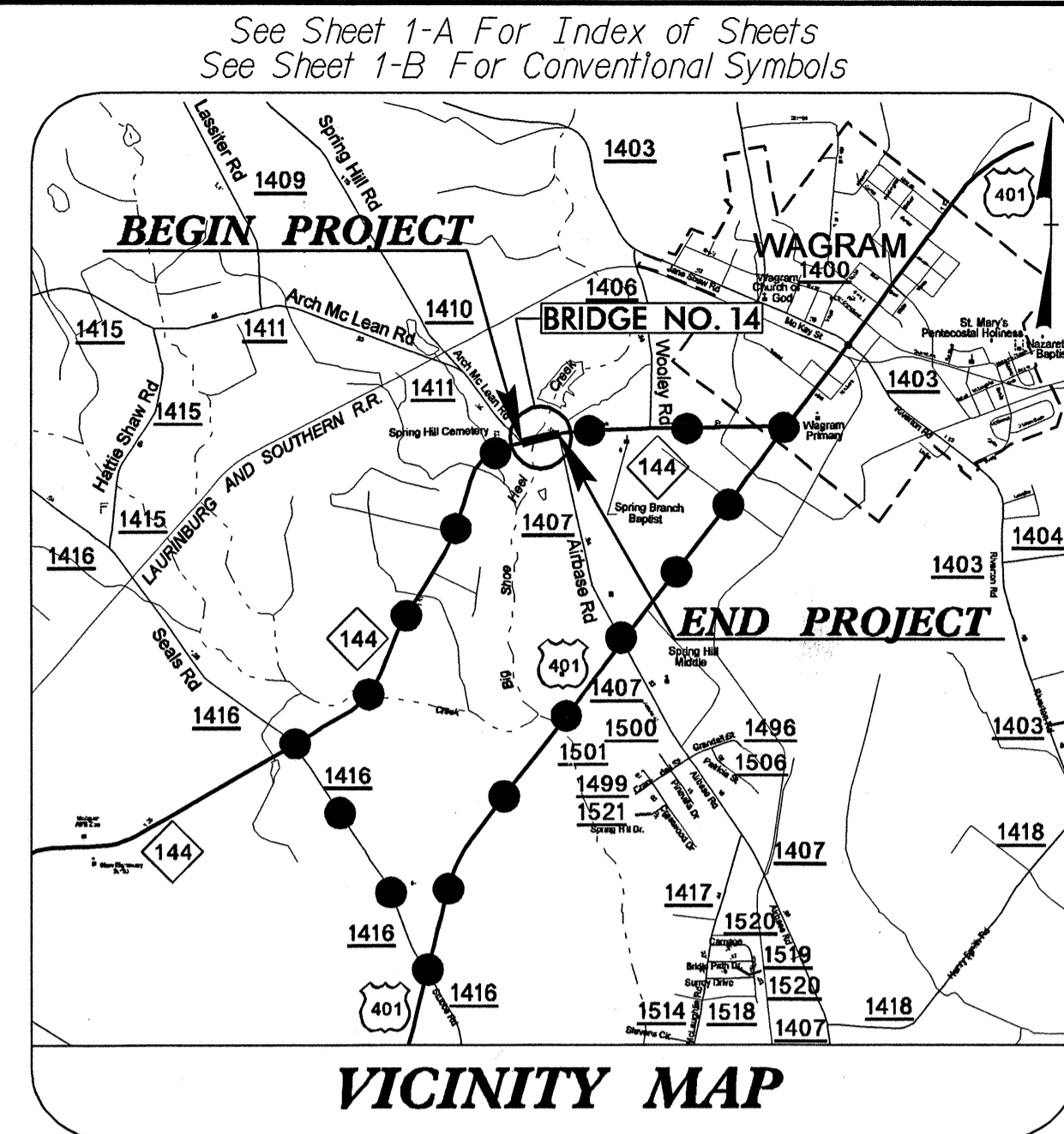


| | | | |
|-----------------|-----------------------------|-------------|--------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| N.C. | B-4274 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 33615.1.1 | BRSTP-1405 (5) | PE | |
| 33615.2.1 | BRSTP-1405 (5) | R/W & UTIL. | |
| 33615.3.1 | BRSTP-0144 (1) | CONST. | |

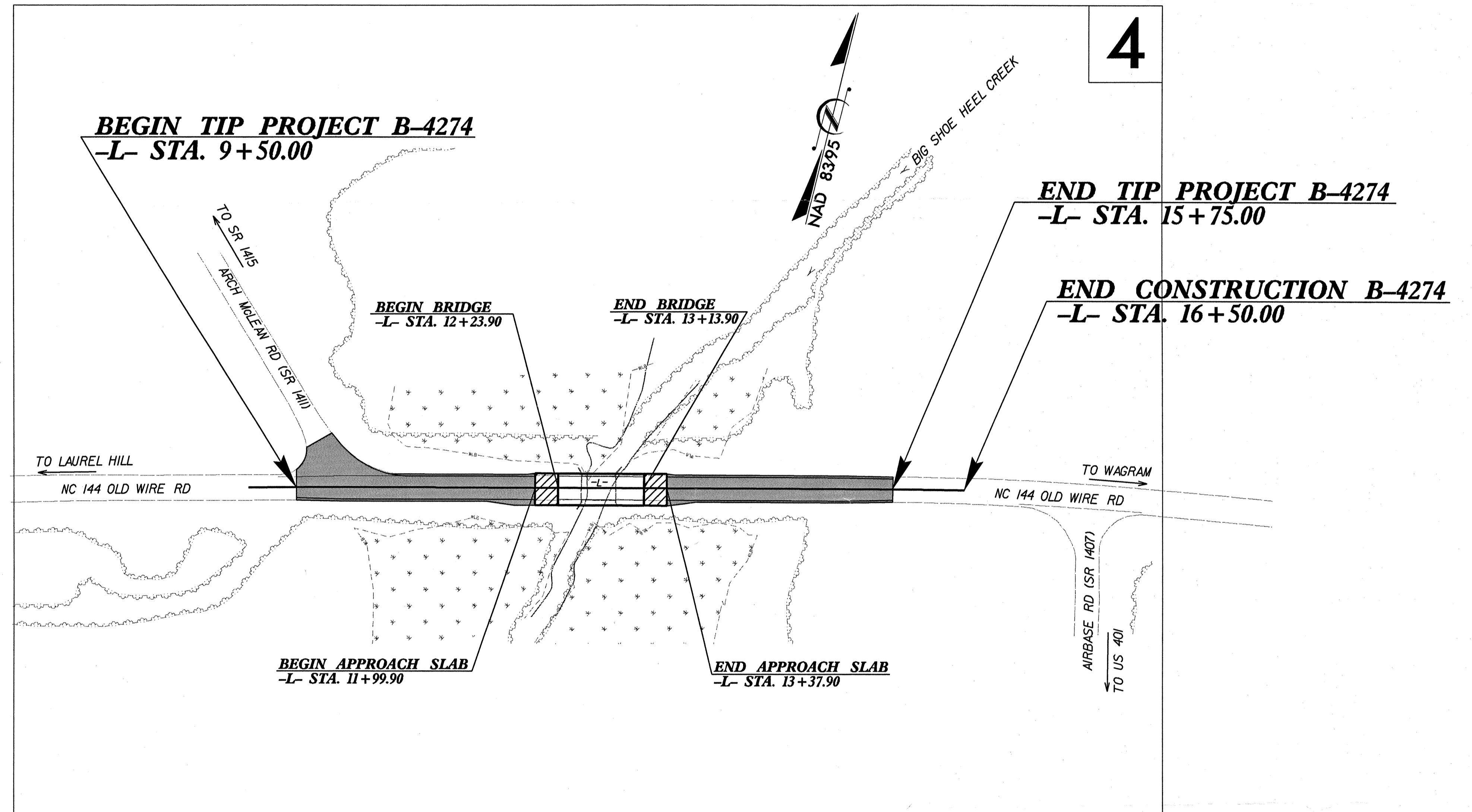
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SCOTLAND COUNTY

LOCATION: BRIDGE NO. 14 OVER BIG SHOE HEEL CREEK ON NC 144
TYPE OF WORK: GRADING, PAVING, DRAINAGE & STRUCTURE

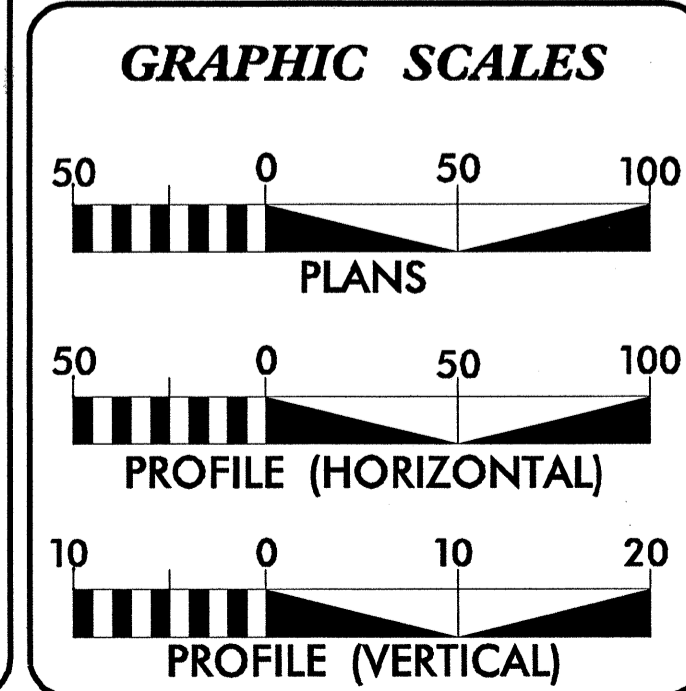


●●● OFFSITE DETOUR

** DESIGN EXCEPTION REQUIRED FOR BRIDGE WIDTH.



NCDOT CONTACT : CATHY HOUSER, P.E.
ROADWAY DESIGN-ENGINEERING COORDINATION



DESIGN DATA

| | |
|-------------------|-----------------------|
| ADT 2008 = | 3676 |
| ADT 2028 = | 5926 |
| DHV = | 10 % |
| D = | 60 % |
| T = | 5 % * |
| V = | 60 MPH |
| * TTST 2% DUAL 3% | |
| FUNC. CLASS = | RURAL MAJOR COLLECTOR |

PROJECT LENGTH

| | |
|---------------------------------------|-------------|
| Length Roadway TIP Project B-4274 = | 0.101 Miles |
| Length Structure TIP Project B-4274 = | 0.017 Miles |
| Total Length TIP Project B-4274 = | 0.118 Miles |

Prepared In the Office of:

THE LPA GROUP
TRANSPORTATION CONSULTANTS

THE LPA GROUP of North Carolina, p.a.
5000 Falls of Neuse Rd., Suite 304
Raleigh, North Carolina 27609

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: **AUG. 17, 2007**

LETTING DATE: **AUG. 19, 2008**

JEANNE K. RICHTER, P.E.
PROJECT ENGINEER

JODY L. COLE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

6/04/08

ROADWAY DESIGN ENGINEER

5-23-08

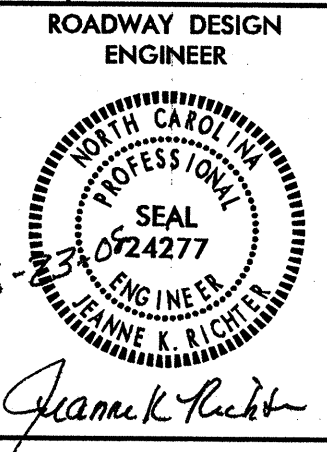
Jeane K. Richter P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Art McMillan P.E.
STATE HIGHWAY DESIGN ENGINEER

09/28/09
 22-MAY-2008 16:26
 I:\Projects\NCDOT\Bridge Group 46 FinalDesign\B4274\Roadway\Proj\B4274_rdy_tsh.dgn
 icole AT LPA20625

TIP PROJECT: B-4274
CONTRACT: C201896



| SHEET NUMBER | SHEET | INDEX OF SHEETS |
|--------------------|---|-----------------|
| 1 | TITLE SHEET | |
| 1-A | INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS | |
| 1-B | CONVENTIONAL SYMBOLS | |
| 1-C | SURVEY CONTROL SHEET | |
| 2 | PAVEMENT SCHEDULE, AND TYPICAL SECTIONS | |
| 2A | ANCHORAGE FOR FRAMES (DETAIL) | |
| 3 | SUMMARY OF QUANTITIES | |
| 3A | EARTHWORK SUMMARY, AND ASPHALT PAVEMENT REMOVAL SUMMARY | |
| 3B | SUMMARY OF DRAINAGE QUANTITIES, AND SUMMARY OF GUARDRAIL | |
| 4 | PLAN AND PROFILE | |
| TCP-1 THRU TCP-4 | TRAFFIC CONTROL PLANS | |
| PM-1 | PAVEMENT MARKING PLANS | |
| EC-1 THRU EC-5 | EROSION CONTROL PLANS | |
| SIGN-1 THRU SIGN-4 | SIGNING PLANS | |
| UC-1 THRU UC-3 | UTILITY CONSTRUCTION PLANS | |
| UD-1 THRU UD-2 | UTILITIES BY OTHERS PLANS | |
| X-1 THRU X-5 | CROSS-SECTIONS | |
| S-1 THRU S-22 | STRUCTURE PLANS | |

GENERAL NOTES:

2006 SPECIFICATIONS
EFFECTIVE: 07-18-06
REVISED: 07-18-06

GRADE LINE:
GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED 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 11.

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, EARTH, AND CONCRETE 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.

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.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE

Scotland County Water

Progress Energy

Windstream Communications

ANY 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.

2006 ROADWAY ENGLISH STANDARD DRAWINGS

EFF. 07-18-06
REV. 01-02-07

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 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 11 |
| 225.02 | Guide for Grading Subgrade - Secondary and Local |
| 225.04 | Method of Obtaining Superelevation - Two Lane Pavement |
| DIVISION 3 - PIPE CULVERTS | |
| 300.01 | Method of Pipe Installation - Method 'A' |
| DIVISION 4 - MAJOR STRUCTURES | |
| 422.10 | Reinforced Bridge Approach Fills |
| DIVISION 5 - SUBGRADE, BASES AND SHOULDERS | |
| 560.01 | Method of Shoulder Construction - High Side of Superelevated Curve - Method I |
| DIVISION 8 - INCIDENTALS | |
| 840.00 | Concrete Base Pad for Drainage Structures |
| 840.29 | Frames and Narrow Slot Flat Grates |
| 840.35 | Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates |
| 840.46 | Traffic Bearing Precast Drainage Structure |
| 840.66 | Drainage Structure Steps |
| 846.01 | Concrete Curb, Gutter and Curb & Gutter |
| 846.04 | Drop Inlet Installation in Shoulder Berm Gutter |
| 862.01 | Guardrail Placement |
| 862.02 | Guardrail Installation |
| 862.03 | Structure Anchor Units |
| 876.01 | Rip Rap in Channels |
| 876.02 | Guide for Rip Rap at Pipe Outlets |
| 876.04 | Drainage Ditches with Class 'B' Rip Rap |
| 866.02 | WOVEN WIRE FENCE - WITH WOOD POST |

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

| | |
|-------------------------------------|-----------------|
| State Line | ----- |
| County Line | ----- |
| Township Line | ----- |
| City Line | ----- |
| Reservation Line | ----- |
| Property Line | ----- |
| Existing Iron Pin | ○ |
| Property Corner | → |
| Property Monument | □ |
| Parcel/Sequence Number | (23) |
| Existing Fence Line | ---x---x---x--- |
| Proposed Woven Wire Fence | ○ |
| Proposed Chain Link Fence | □ |
| Proposed Barbed Wire Fence | ◇ |
| Existing Wetland Boundary | ---WLB--- |
| Proposed Wetland Boundary | WLB |
| Existing Endangered Animal Boundary | EAB |
| Existing Endangered Plant Boundary | EPB |

BUILDINGS AND OTHER CULTURE:

| | |
|-------------------------------|---|
| Gas Pump Vent or U/G Tank Cap | ○ |
| Sign | ○ |
| Well | ○ |
| Small Mine | ⋈ |
| Foundation | □ |
| Area Outline | □ |
| Cemetery | + |
| Building | □ |
| School | □ |
| Church | □ |
| Dam | — |

HYDROLOGY:

| | |
|------------------------------------|-----------|
| Stream or Body of Water | ----- |
| Hydro, Pool or Reservoir | □ |
| Jurisdictional Stream | JS |
| Buffer Zone 1 | BZ 1 |
| Buffer Zone 2 | BZ 2 |
| Flow Arrow | ← |
| Disappearing Stream | → |
| Spring | ○ |
| Wetland | ---WLB--- |
| Proposed Lateral, Tail, Head Ditch | FDL |
| False Sump | ▽ |

RAILROADS:

| | |
|--------------------|-------|
| Standard Gauge | ----- |
| RR Signal Milepost | ○ |
| Switch | □ |
| RR Abandoned | ----- |
| RR Dismantled | ----- |

RIGHT OF WAY:

| | |
|--|-------|
| Baseline Control Point | ◆ |
| Existing Right of Way Marker | △ |
| Existing Right of Way Line | ----- |
| Proposed Right of Way Line | ----- |
| Proposed Right of Way Line with Iron Pin and Cap Marker | ----- |
| Proposed Right of Way Line with Concrete or Granite Marker | ----- |
| Existing Control of Access | ○ |
| Proposed Control of Access | ○ |
| Existing Easement Line | E |
| Proposed Temporary Construction Easement | E |
| Proposed Temporary Drainage Easement | TDE |
| Proposed Permanent Drainage Easement | PDE |
| Proposed Permanent Utility Easement | PUE |

ROADS AND RELATED FEATURES:

| | |
|--------------------------------------|-------|
| Existing Edge of Pavement | ----- |
| Existing Curb | ----- |
| Proposed Slope Stakes Cut | C |
| Proposed Slope Stakes Fill | F |
| Proposed Wheel Chair Ramp | WCR |
| Proposed Wheel Chair Ramp Curb Cut | WCC |
| Curb Cut for Future Wheel Chair Ramp | CCFR |
| Existing Metal Guardrail | ----- |
| Proposed Guardrail | ----- |
| Existing Cable Guiderail | ----- |
| Proposed Cable Guiderail | ----- |
| Equality Symbol | ⊕ |
| Pavement Removal | ----- |

VEGETATION:

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

EXISTING STRUCTURES:

| | |
|--|---------|
| MAJOR: | |
| Bridge, Tunnel or Box Culvert | CONC |
| Bridge Wing Wall, Head Wall and End Wall | CONC WW |
| MINOR: | |
| Head and End Wall | CONC HW |
| Pipe Culvert | ----- |
| Footbridge | ----- |
| Drainage Box: Catch Basin, DI or JB | CB |
| Paved Ditch Gutter | ----- |
| Storm Sewer Manhole | ⊕ |
| Storm Sewer | S |

UTILITIES:

| | |
|-------------------------------------|----|
| POWER: | |
| Existing Power Pole | ● |
| Proposed Power Pole | ○ |
| Existing Joint Use Pole | ● |
| Proposed Joint Use Pole | ○ |
| Power Manhole | ⊕ |
| Power Line Tower | ⊗ |
| Power Transformer | ⊗ |
| U/G Power Cable Hand Hole | PH |
| H-Frame Pole | ● |
| Recorded U/G Power Line | P |
| Designated U/G Power Line (S.U.E.*) | P |

TELEPHONE:

| | |
|---|------|
| Existing Telephone Pole | ● |
| Proposed Telephone Pole | ○ |
| Telephone Manhole | ⊕ |
| Telephone Booth | ⊕ |
| Telephone Pedestal | ⊕ |
| Telephone Cell Tower | ⊕ |
| U/G Telephone Cable Hand Hole | PH |
| Recorded U/G Telephone Cable | T |
| Designated U/G Telephone Cable (S.U.E.*) | T |
| Recorded U/G Telephone Conduit | TC |
| Designated U/G Telephone Conduit (S.U.E.*) | TC |
| Recorded U/G Fiber Optics Cable | T FO |
| Designated U/G Fiber Optics Cable (S.U.E.*) | T FO |

WATER:

| | |
|-------------------------------------|-----------|
| Water Manhole | ⊕ |
| Water Meter | ○ |
| Water Valve | ⊗ |
| Water Hydrant | ⊕ |
| Recorded U/G Water Line | W |
| Designated U/G Water Line (S.U.E.*) | W |
| Above Ground Water Line | A/G Water |

TV:

| | |
|--|-------|
| TV Satellite Dish | ⊕ |
| TV Pedestal | ⊕ |
| TV Tower | ⊕ |
| U/G TV Cable Hand Hole | PH |
| Recorded U/G TV Cable | TV |
| Designated U/G TV Cable (S.U.E.*) | TV |
| Recorded U/G Fiber Optic Cable | TV FO |
| Designated U/G Fiber Optic Cable (S.U.E.*) | TV FO |

GAS:

| | |
|-----------------------------------|---------|
| Gas Valve | ◇ |
| Gas Meter | ⊕ |
| Recorded U/G Gas Line | G |
| Designated U/G Gas Line (S.U.E.*) | G |
| Above Ground Gas Line | A/G Gas |

SANITARY SEWER:

| | |
|--|--------------------|
| Sanitary Sewer Manhole | ⊕ |
| Sanitary Sewer Cleanout | ⊕ |
| U/G Sanitary Sewer Line | SS |
| Above Ground Sanitary Sewer | A/G Sanitary Sewer |
| Recorded SS Forced Main Line | FSS |
| Designated SS Forced Main Line (S.U.E.*) | FSS |

MISCELLANEOUS:

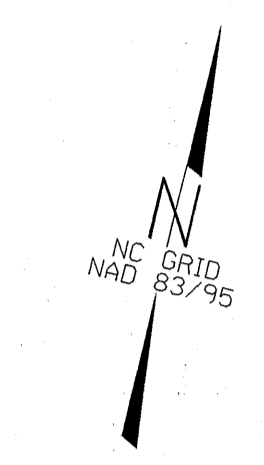
| | |
|--|--------|
| Utility Pole | ● |
| Utility Pole with Base | □ |
| Utility Located Object | ○ |
| Utility Traffic Signal Box | ⊕ |
| Utility Unknown U/G Line | U/G |
| U/G Tank; Water, Gas, Oil | □ |
| A/G Tank; Water, Gas, Oil | □ |
| U/G Test Hole (S.U.E.*) | ⊕ |
| Abandoned According to Utility Records | AATUR |
| End of Information | E.O.I. |

SURVEY CONTROL SHEET B-4274

| BL POINT | DESC. | NORTH | EAST | ELEVATION | L STATION | OFFSET |
|----------|--------|-------------|--------------|-----------|------------------------|----------|
| 101 | BL-101 | 412271.5630 | 1883224.3890 | 235.26 | OUTSIDE PROJECT LIMITS | |
| 102 | BL-102 | 412390.0210 | 1883787.3290 | 224.56 | 12+33.75 | 14.90 LT |
| 103 | BL-103 | 412488.6010 | 1884382.2120 | 231.02 | OUTSIDE PROJECT LIMITS | |

.....
 BM *1 ELEVATION = 234.67
 N 412199 E 1883307
 L STATION 9+00
 S 59° 01' 54.1" W DIST 196.87
 RR SPIKE IN BASE OF 18" PINE TREE

 BM *2 ELEVATION = 222.55
 N 412326 E 1883782
 L STATION 12+14.46 RIGHT
 RR SPIKE IN BASE OF 36" POPLAR TREE



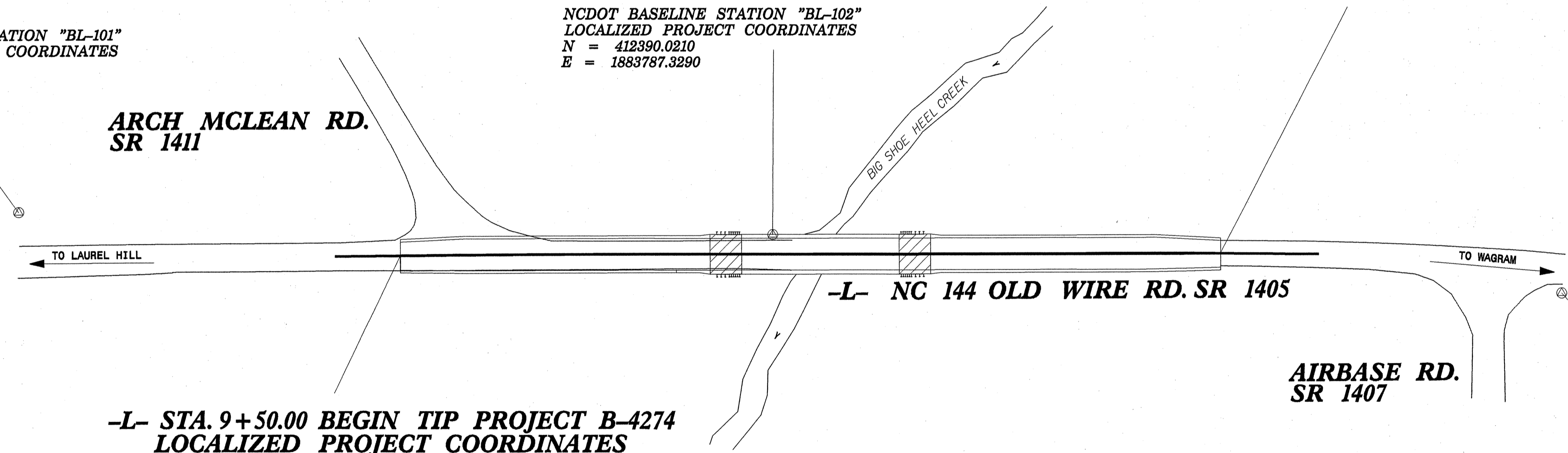
NCDOT BASELINE STATION "BL-101"
 LOCALIZED PROJECT COORDINATES
 N = 412271.5630
 E = 1883224.3890

NCDOT BASELINE STATION "BL-102"
 LOCALIZED PROJECT COORDINATES
 N = 412390.0210
 E = 1883787.3290

**-L- STA. 15+75.00 END TIP PROJECT B-4274
 LOCALIZED PROJECT COORDINATES**
 N = 412456.3310
 E = 1884122.4058

**-L- STA. 9+50.00 BEGIN TIP PROJECT B-4274
 LOCALIZED PROJECT COORDINATES**
 N = 412307.6249
 E = 1883515.3560

NCDOT BASELINE STATION "BL-103"
 LOCALIZED PROJECT COORDINATES
 N = 412488.6010
 E = 1884382.2120



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B4274-1" WITH NAD 83/95 STATE PLANE GRID COORDINATES OF NORTHING: 412539.2670(ft) EASTING: 1884738.8100(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99988710 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4274-1" TO -L- STATION 9+50.00 IS S 79°16'43.8" W 1,245.190' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/)
 THE FILES TO BE FOUND ARE AS FOLLOWS:
 B4274_LS_CONTROL_060427.TXT
- SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
 PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

NOTE: DRAWING NOT TO SCALE

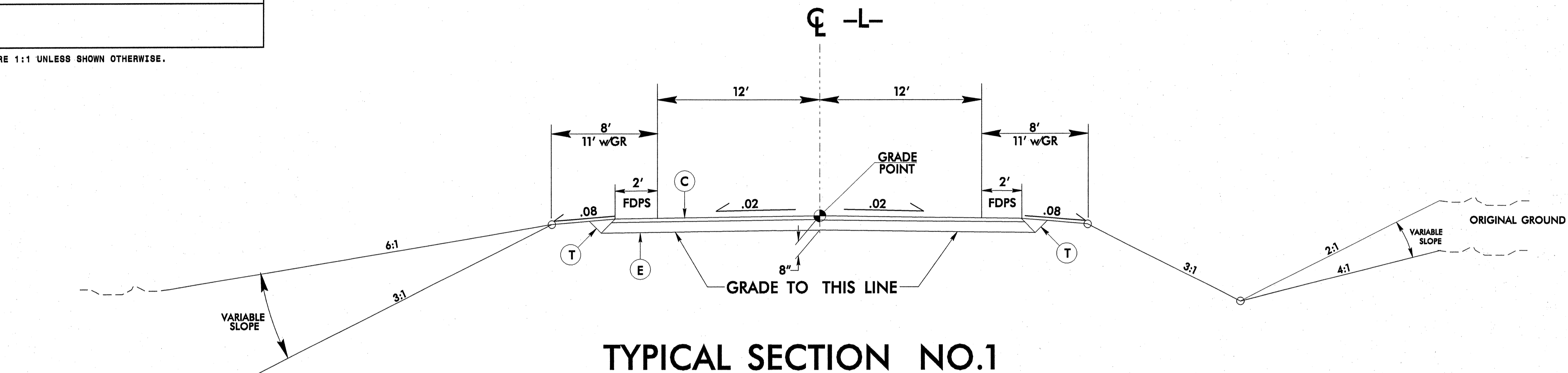
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6/2/99
 28-APP-2008_13:35
 2e_Group_240_Files\Roadway\Proj\B4274_Roadway\Proj\B4274_rdy_tup.dgn
 5/10/09

| PAVEMENT SCHEDULE | |
|-------------------|---|
| A | 5½" PORTLAND CEMENT CONCRETE PAVEMENT |
| C | PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS. |
| E | PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD. |
| T | EARTH MATERIAL. |

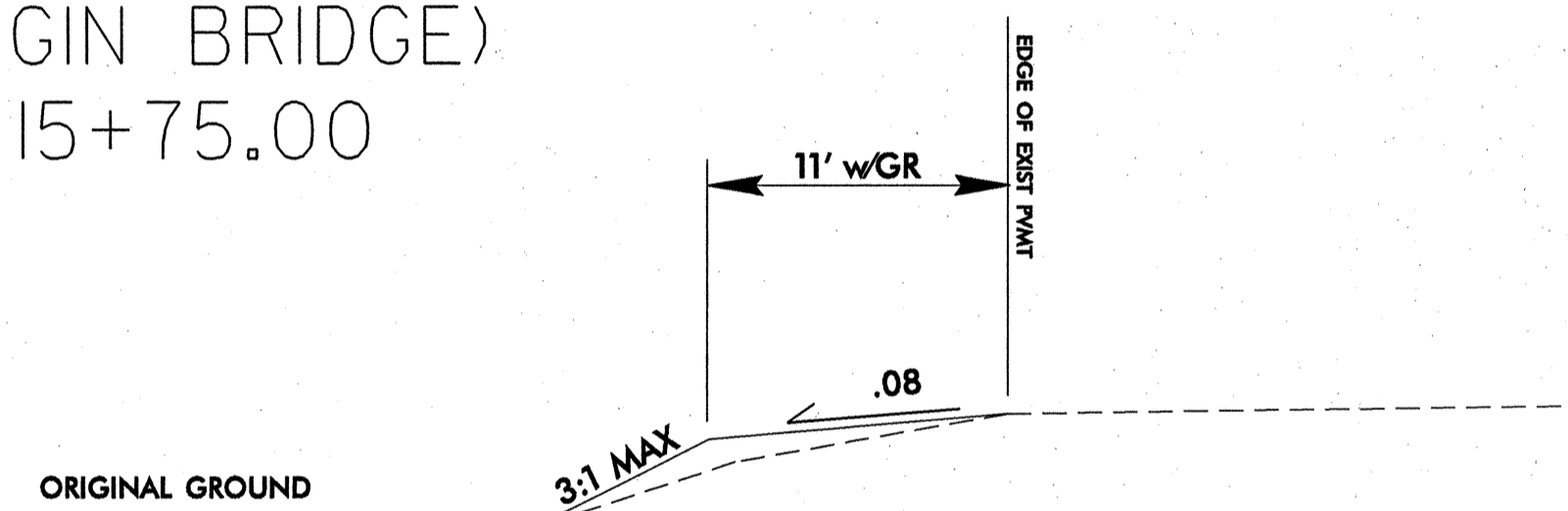
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

| | |
|---------------------------------|------------------------------|
| PROJECT REFERENCE NO. B-4274 | SHEET NO. 2 |
| ROADWAY DESIGN ENGINEER | PAVEMENT DESIGN ENGINEER |
| <i>Jeanne R. Kitchell</i> | <i>Clark S. Morrison</i> |



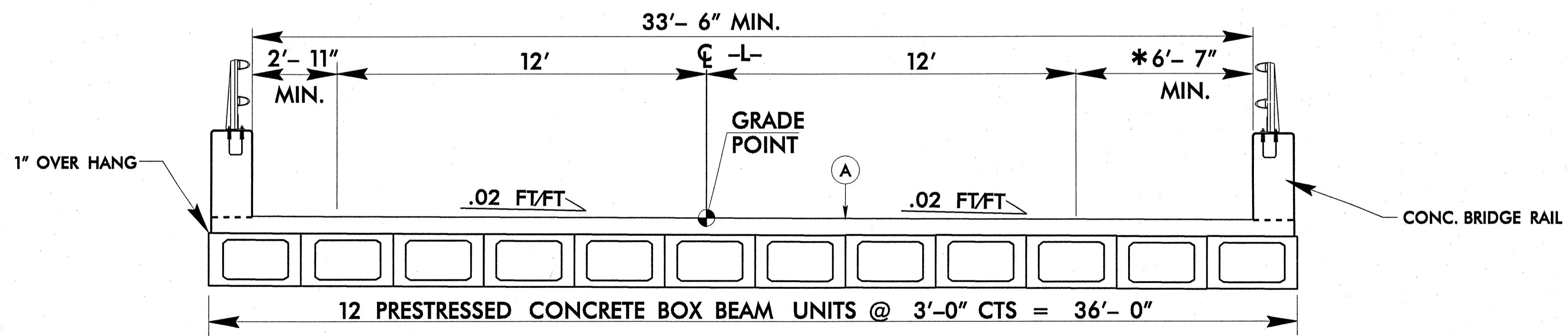
TYPICAL SECTION NO.1

-L- STA. 9+50.00 TO STA. 12+23.90 (BEGIN BRIDGE)
 -L- STA. 13+13.90 (END BRIDGE) TO STA. 15+75.00



PARTIAL TYPICAL

GRADE SHOULDER ONLY FOR GUARDRAIL PLACEMENT
 -L- STA. 15+75.00 TO STA. 16+13.90 LT



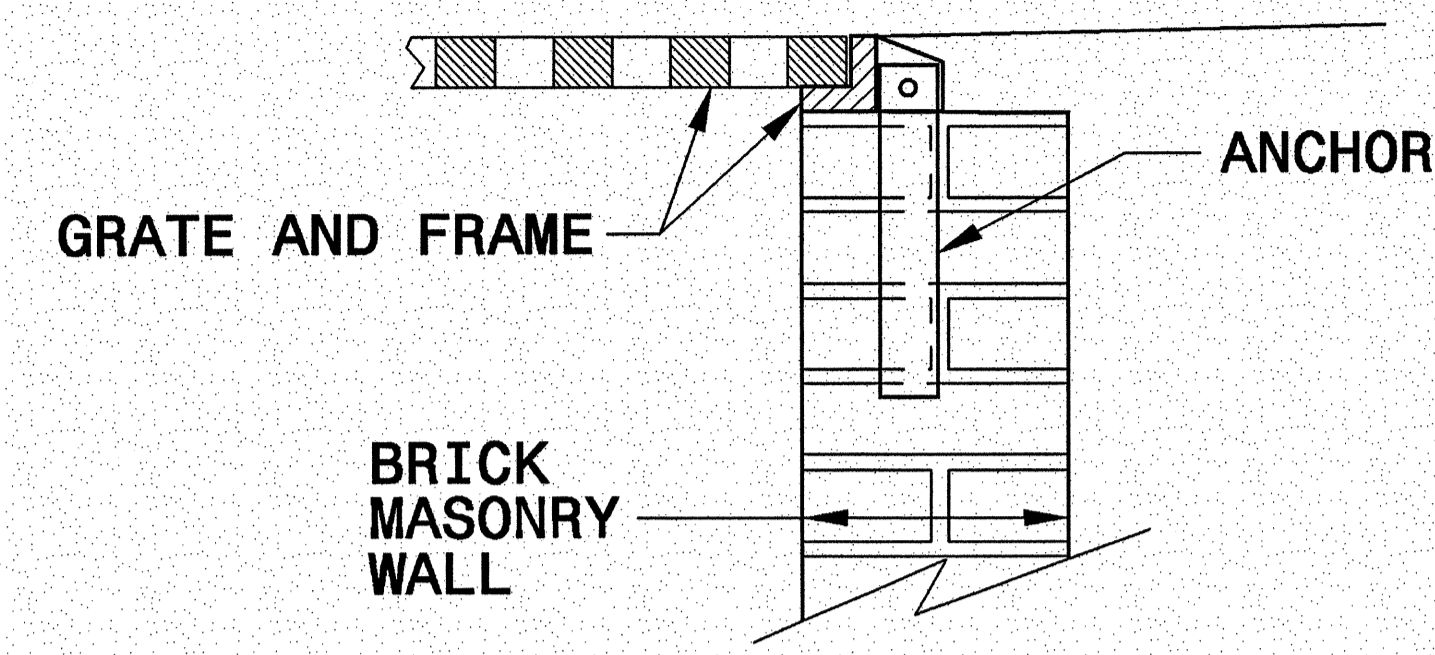
TYPICAL BRIDGE SECTION NO.2

-L- STA. 12+23.90 (BEGIN BRIDGE) TO STA. 13+13.90 (END BRIDGE)
 * WIDENED SHOULDER DUE TO HYDRAULIC SPREAD

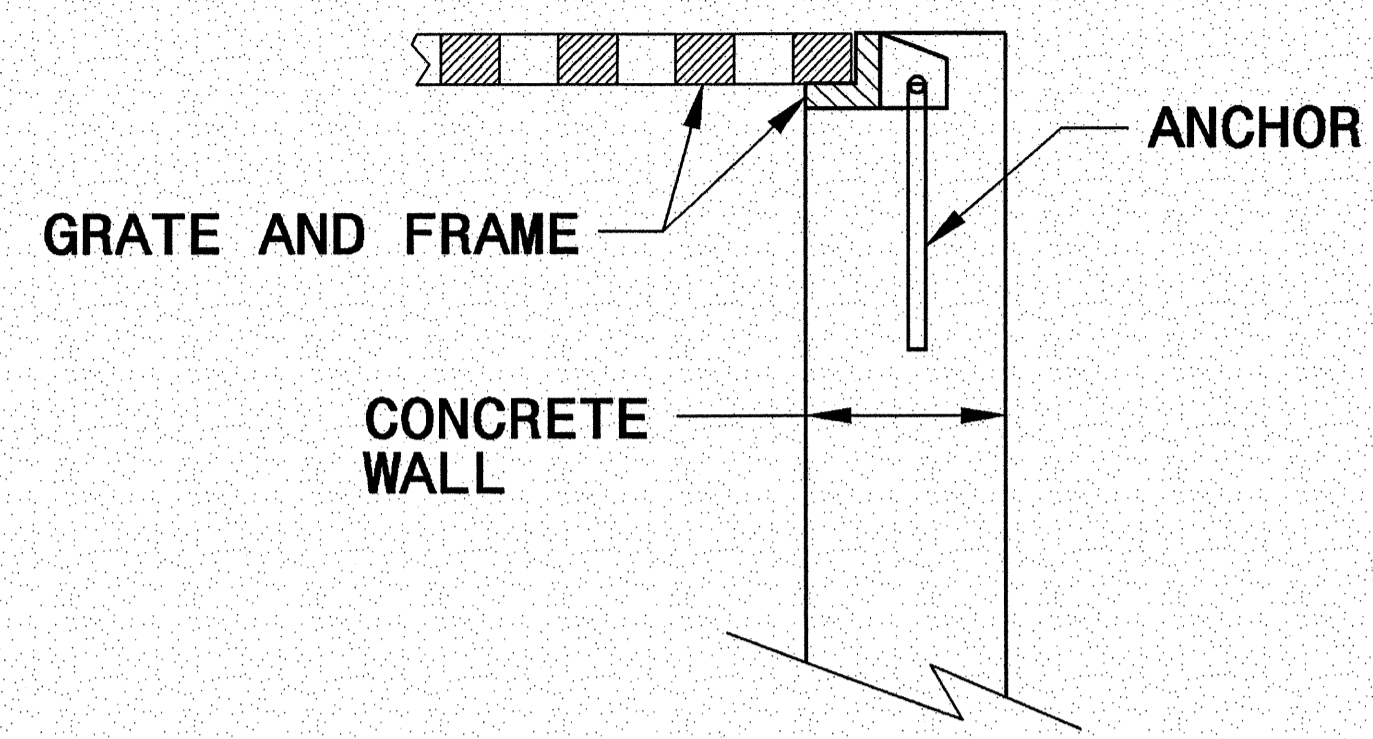
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

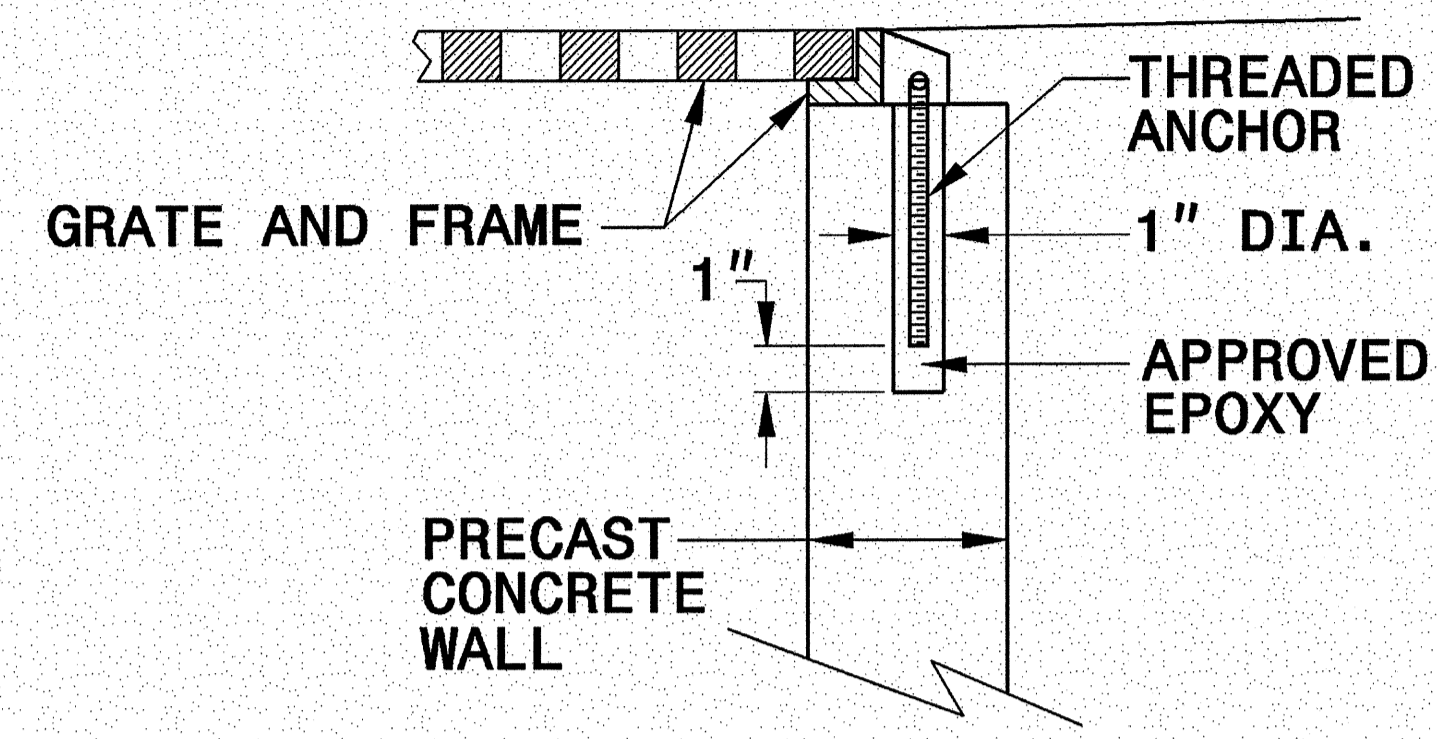
SHEET 1 OF 1
840D25



BRICK MASONRY CONSTRUCTION



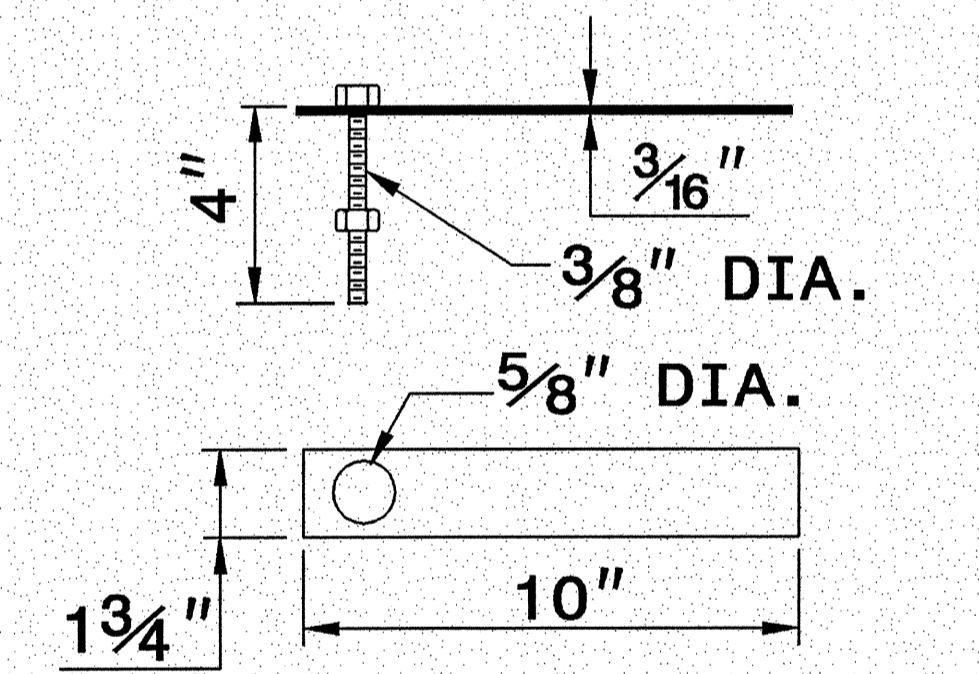
CONCRETE CONSTRUCTION



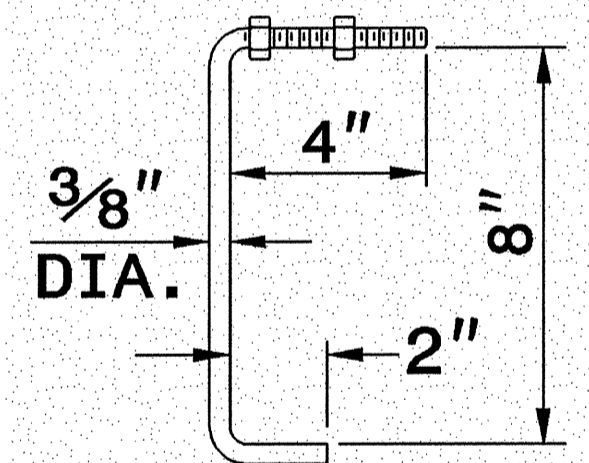
PRECAST CONCRETE CONSTRUCTION

DETAIL SHOWING ANCHORAGE OF FRAME FOR GRATED DROP INLET

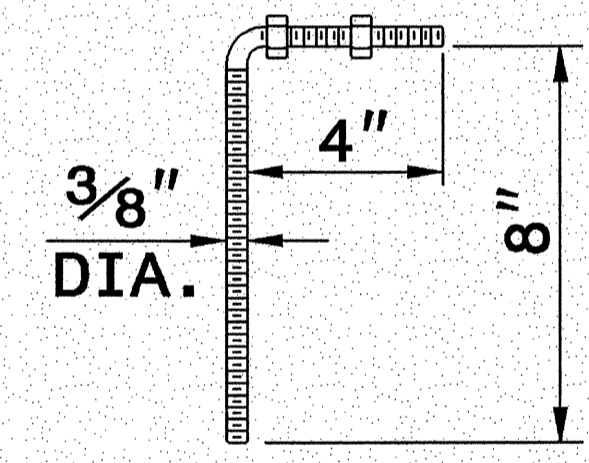
NOTE:
CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



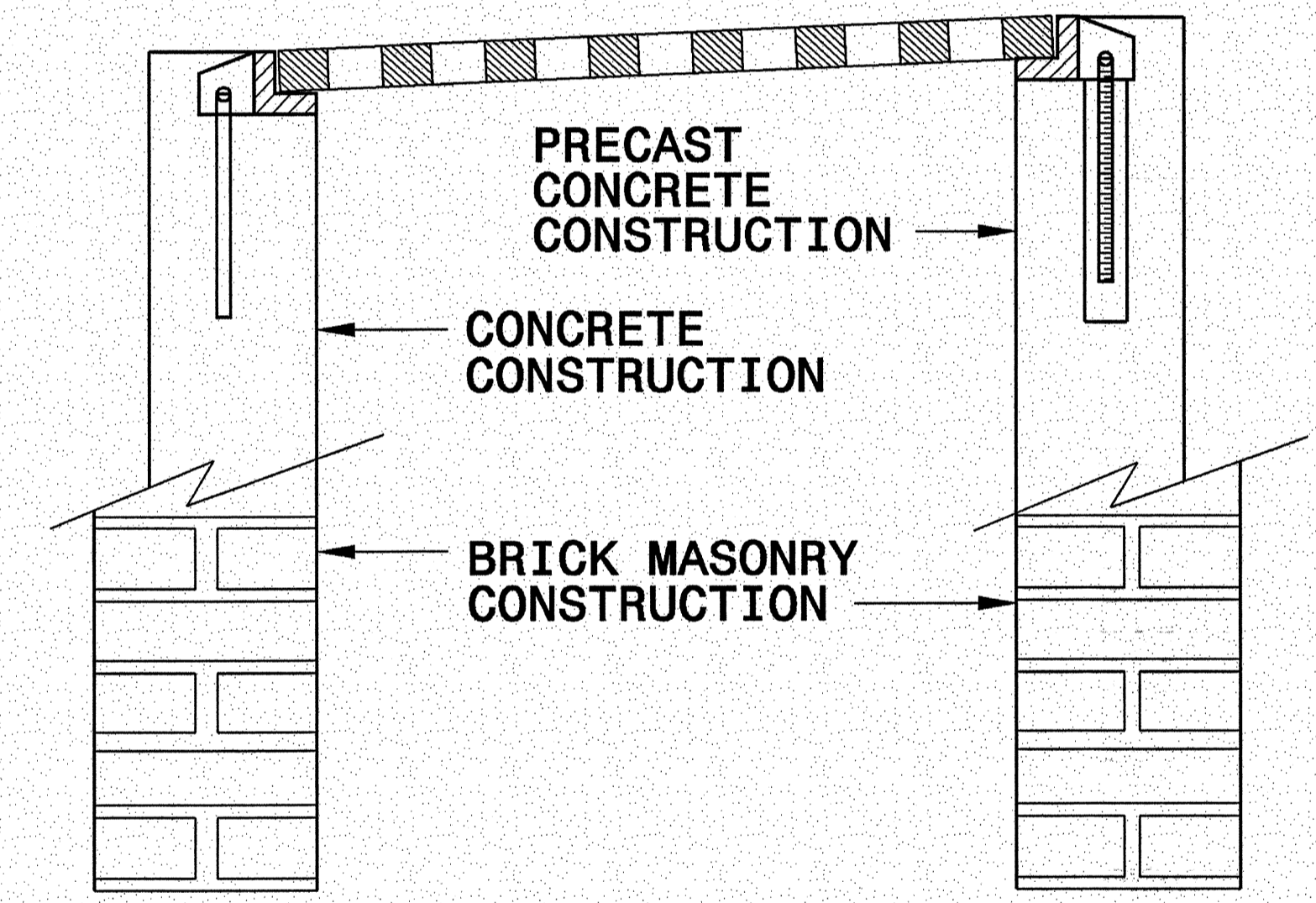
MASONRY ANCHOR
3/8" DIA. BOLT WITH PLATE



CONCRETE ANCHOR
3/8" DIA. BENT BAR



PRECAST CONCRETE ANCHOR
3/8" DIA. BENT BAR



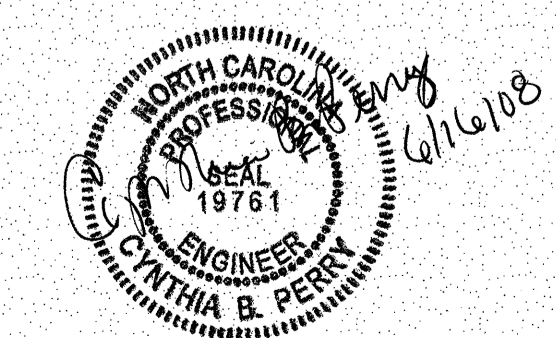
FRAME AND GRATE INSTALLATION FOR NORMAL CROWN AND SUPERELEVATED SECTIONS

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

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

SHEET 1 OF 1
840D25

27 SEP 2006 08:59
C:\projects\Special Details\enr\ward\stds\06\stds to Special Details\840D25 Anchorage for Frames\0840d25.dgn
enrward A1 P2222263



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

SEE PLATE FOR TITLE

| | |
|------------------------------|----------------|
| ORIGINAL BY: 2006 STD 840.25 | DATE: 07/18/06 |
| MODIFIED BY: E.E. WARD | DATE: 9/25/06 |
| CHECKED BY: | DATE: |
| FILE SPEC.: | |

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201896

| ItemNumber | Sec # | Quantity | Unit | Description |
|--------------|-------|----------|------|---|
| 0000100000-N | 800 | Lump Sum | | MOBILIZATION |
| 0029000000-N | SP | Lump Sum | | REINFORCED BRIDGE APPROACH FILL, STATION ***** (12+68.90) |
| 0043000000-N | 226 | Lump Sum | | GRADING |
| 0050000000-E | 226 | 1 | ACR | SUPPLEMENTARY CLEARING & GRUB-BING |
| 0057000000-E | 226 | 400 | CY | UNDERCUT EXCAVATION |
| 0195000000-E | 265 | 750 | CY | SELECT GRANULAR MATERIAL |
| 0196000000-E | 270 | 500 | SY | FABRIC FOR SOIL STABILIZATION |
| 0318000000-E | 300 | 62 | TON | FOUNDATION CONDITIONING MATERIAL, MINOR STRS |
| 0366000000-E | 310 | 12 | LF | 15' RC PIPE CULVERTS, CLASS III |
| 1489000000-E | 610 | 500 | TON | ASPHALT CONC BASE COURSE, TYPE B25.0B |
| 1519000000-E | 610 | 290 | TON | ASPHALT CONC SURFACE COURSE, TYPE S9.5B |
| 1560000000-E | 620 | 40 | TON | ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22 |
| 1693000000-E | 654 | 28 | TON | ASPHALT PLANT MIX, PAVEMENT REPAIR |
| 2286000000-N | 840 | 1 | EA | MASONRY DRAINAGE STRUCTURES |
| 2367000000-N | 840 | 1 | EA | FRAME WITH TWO GRATES, STD 840.29 |
| 2556000000-E | 846 | 22 | LF | SHOULDER BERM GUTTER |
| 3030000000-E | 862 | 550 | LF | STEEL BM GUARDRAIL |
| 3150000000-N | 862 | 5 | EA | ADDITIONAL GUARDRAIL POSTS |
| 3215000000-N | 862 | 4 | EA | GUARDRAIL ANCHOR UNITS, TYPE III |
| 3270000000-N | SP | 4 | EA | GUARDRAIL ANCHOR UNITS, TYPE 350 |
| 3503000000-E | 866 | 300 | LF | WOVEN WIRE FENCE, 47" FABRIC |
| 3509000000-E | 866 | 20 | EA | 4" TIMBER FENCE POSTS, 7'-6" LONG |
| 3515000000-E | 866 | 10 | EA | 5" TIMBER FENCE POSTS, 8'-0" LONG |

| ItemNumber | Sec # | Quantity | Unit | Description |
|--------------|-------|----------|------|--|
| 3563000000-E | SP | 300 | LF | TEMP *** WOVEN WIRE FENCE, COMPLETE W/POSTS (47") |
| 3649000000-E | 876 | 35 | TON | RIP RAP, CLASS B |
| 3656000000-E | 876 | 265 | SY | FILTER FABRIC FOR DRAINAGE |
| 4072000000-E | 903 | 191 | LF | SUPPORTS, 3-LB STEEL U-CHANNEL |
| 4096000000-N | 904 | 2 | EA | SIGN ERECTION, TYPE D |
| 4102000000-N | 904 | 3 | EA | SIGN ERECTION, TYPE E |
| 4108000000-N | 904 | 3 | EA | SIGN ERECTION, TYPE F |
| 4155000000-N | 907 | 12 | EA | DISPOSAL OF SIGN SYSTEM, U-CHANNEL |
| 4400000000-E | 1110 | 334 | SF | WORK ZONE SIGNS (STATIONARY) |
| 4405000000-E | 1110 | 96 | SF | WORK ZONE SIGNS (PORTABLE) |
| 4410000000-E | 1110 | 109 | SF | WORK ZONE SIGNS (BARRICADE MOUNTED) |
| 4445000000-E | 1145 | 96 | LF | BARRICADES (TYPE III) |
| 4450000000-N | 1150 | 16 | HR | FLAGGER |
| 4685000000-E | 1205 | 1,370 | LF | THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS) |
| 4686000000-E | 1205 | 1,370 | LF | THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS) |
| 4710000000-E | 1205 | 10 | LF | THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) |
| 4770000000-E | 1205 | 360 | LF | COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (II) |
| 4900000000-N | 1251 | 8 | EA | PERMANENT RAISED PAVEMENT MARKERS |
| 5326200000-E | 1510 | 932 | LF | 12" WATER LINE |
| 5558000000-E | 1515 | 4 | EA | 12" VALVE |
| 5666000000-E | 1515 | 1 | EA | FIRE HYDRANT |
| 5804000000-E | 1530 | 700 | LF | ABANDON 12" UTILITY PIPE |
| 5871700000-E | 1550 | 300 | LF | TRENCHLESS INSTALLATION OF 12" IN SOIL |
| 5871710000-E | 1550 | 100 | LF | TRENCHLESS INSTALLATION OF 12" NOT IN SOIL |

| ItemNumber | Sec # | Quantity | Unit | Description |
|--------------|-------|----------|------|------------------------------------|
| 6000000000-E | 1605 | 770 | LF | TEMPORARY SILT FENCE |
| 6006000000-E | 1610 | 75 | TON | STONE FOR EROSION CONTROL, CLASS A |
| 6009000000-E | 1610 | 65 | TON | STONE FOR EROSION CONTROL, CLASS B |
| 6012000000-E | 1610 | 25 | TON | SEDIMENT CONTROL STONE |
| 6015000000-E | 1615 | 1 | ACR | TEMPORARY MULCHING |
| 6018000000-E | 1620 | 50 | LB | SEED FOR TEMPORARY SEEDING |
| 6021000000-E | 1620 | 0.25 | TON | FERTILIZER FOR TEMPORARY SEEDING |
| 6029000000-E | SP | 730 | LF | SAFETY FENCE |
| 6030000000-E | 1630 | 335 | CY | SILT EXCAVATION |
| 6036000000-E | 1631 | 470 | SY | MATTING FOR EROSION CONTROL |
| 6038000000-E | SP | 75 | SY | PERMANENT SOIL REINFORCEMENT MAT |
| 6042000000-E | 1632 | 20 | LF | 1/4" HARDWARE CLOTH |
| 6071030000-E | SP | 65 | LF | COIR FIBER BAFFLES |
| 6084000000-E | 1660 | 1 | ACR | SEEDING & MULCHING |
| 6087000000-E | 1660 | 0.5 | ACR | MOWING |
| 6090000000-E | 1661 | 50 | LB | SEED FOR REPAIR SEEDING |
| 6093000000-E | 1661 | 0.25 | TON | FERTILIZER FOR REPAIR SEEDING |
| 6096000000-E | 1662 | 50 | LB | SEED FOR SUPPLEMENTAL SEEDING |
| 6108000000-E | 1665 | 0.5 | TON | FERTILIZER TOPDRESSING |
| 6114000000-N | SP | 2 | HR | SPECIALIZED HAND MOWING |
| 6117000000-N | SP | 12 | EA | RESPONSE FOR EROSION CONTROL |

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DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

SUMMARY OF EARTHWORK

IN CUBIC YARDS

| LOCATION | UNCLASSIFIED EXCAVATION | UNDERCUT | EMBANKMENT +% | BORROW | WASTE |
|--|-------------------------|----------|---------------|------------|-------|
| -L- 9+50.00 TO 12+23.90 (BEGIN BRIDGE) | 68 | | 308 | 240 | |
| -L- 13+13.90 (END BRIDGE) TO 16+13.90 | 110 | | 265 | 155 | |
| SUBTOTAL | 178 | | 573 | 395 | |
| PROJECT TOTALS | 178 | | 573 | 395 | |
| EST. 5% FOR REPLACING TOPSOIL ON ON BORROW PIT | | | | 20 | |
| GRAND TOTALS | 178 | | | 415 | |
| SAY | 200 | | | 450 | |

EST. UNDERCUT EXCAVATION = 400 C.Y.
 EST. SELECT GRANULAR MATERIAL = 750 C.Y.

SUMMARY OF PAVEMENT REMOVAL

IN SQUARE YARDS

| LOCATION | ASPHALT REMOVAL |
|--------------------------|-----------------|
| -L- 9+50.00 TO 12+48.00 | 728 |
| -L- 12+85.00 TO 15+75.00 | 709 |
| TOTAL | 1,437 |
| SAY | 1,440 |

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, Clearing and Grubbing, Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

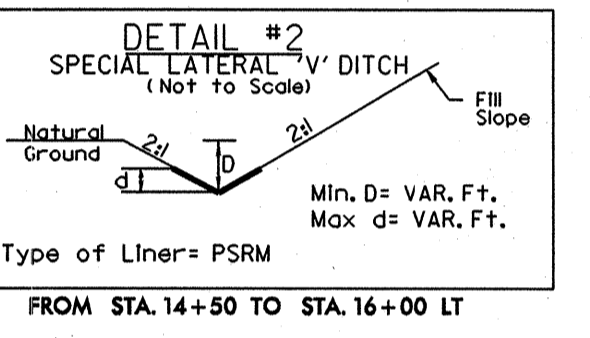
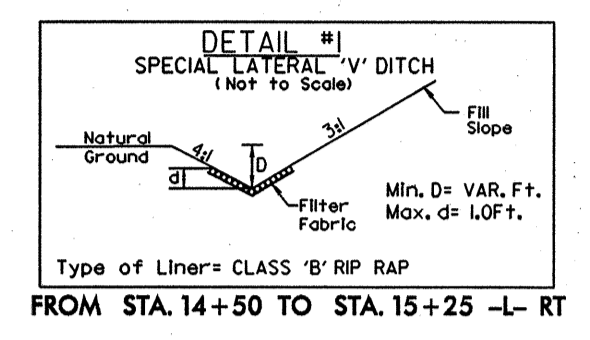
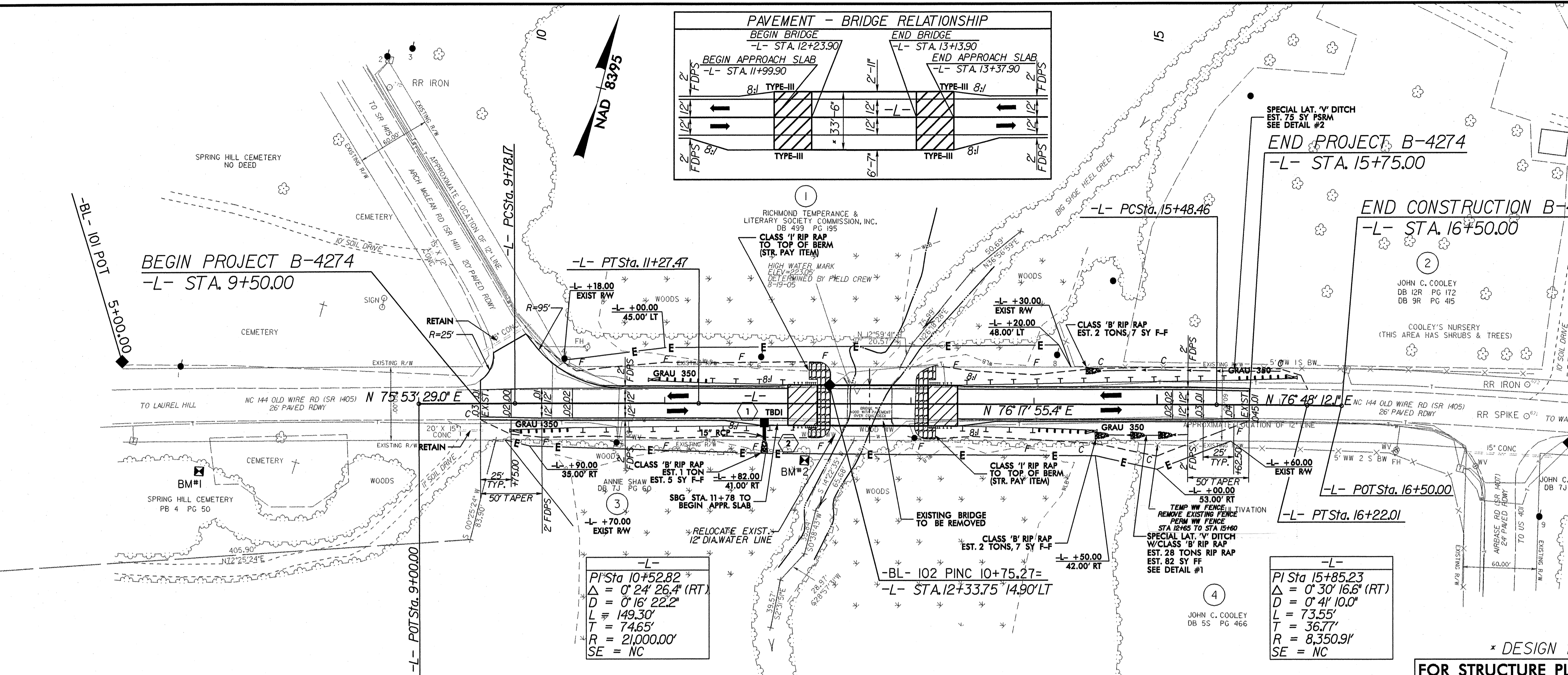
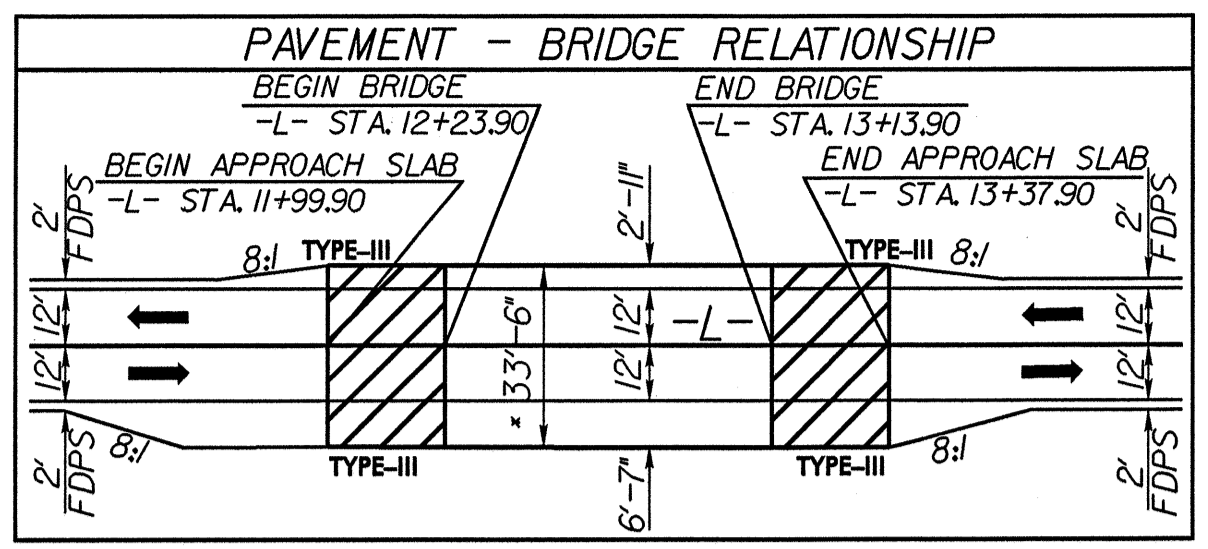
NOTE: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

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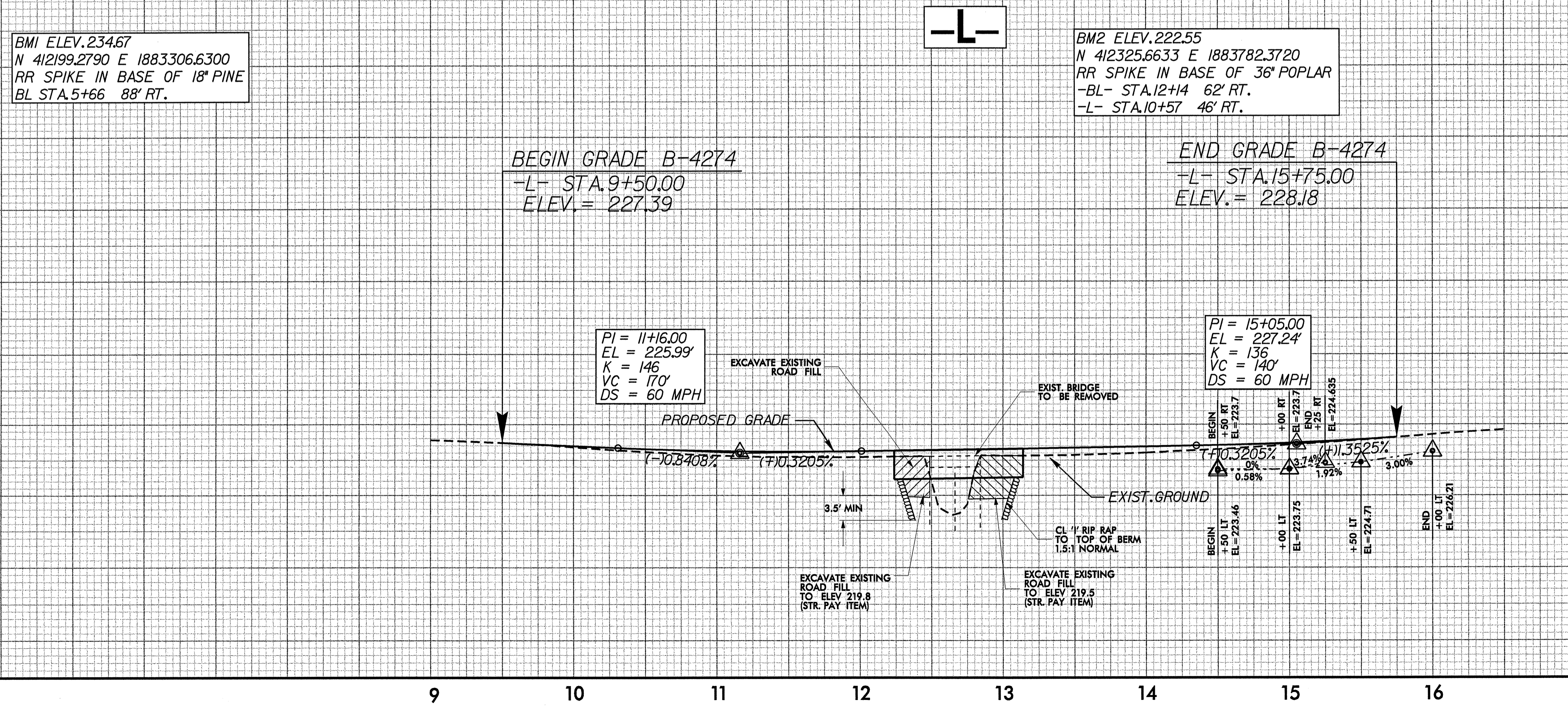
| | | | |
|-------------------------|--------|-----------|---|
| PROJECT REFERENCE NO. | B-4274 | SHEET NO. | 4 |
| R/W SHEET NO. | | | |
| ROADWAY DESIGN ENGINEER | | | |
| HYDRAULICS ENGINEER | | | |
| 6/13/08 | | | |



-L-
 PI Sta 10+52.82
 $\Delta = 0' 24' 26.4"$ (RT)
 $D = 0' 16' 22.2"$
 $L = 149.30'$
 $T = 74.65'$
 $R = 21,000.00'$
 SE = NC

-L-
 PI Sta 15+85.23
 $\Delta = 0' 30' 16.6"$ (RT)
 $D = 0' 41' 10.0"$
 $L = 73.55'$
 $T = 36.77'$
 $R = 8,350.91'$
 SE = NC

* DESIGN EXCEPTION FOR BRIDGE WIDTH
 FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-22



| DITCH LEGEND | |
|--------------|-------|
| LEFT DITCH | ----- |
| RIGHT DITCH | ----- |