

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

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2006 ROADWAY STANDARD DRAWINGS
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 | |
| 200.03 | Method of Clearing - Method III |
| 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' |
| 310.10 | Driveway Pipe Construction |
| 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 | |
| 815.03 | Pipe Underdrain and Blind Drain |
| 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 |
| 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 |
| 862.04 | Anchoring End of Guardrail - B-77 and B-83 Anchor Units |
| 876.02 | Guide for Rip Rap at Pipe Outlets |

GENERAL NOTES:

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

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. 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 III.

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.

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

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
- Progress Energy
 - City of Kinston - Power, Sewer
 - Embarq
 - Suddenlink Communications
 - North Lenoir Water Corporation

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

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 | ○ EIP |
| Property Corner | ⊕ |
| Property Monument | □ ECM |
| 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 | ⊕ |
| Proposed Lateral, Tail, Head Ditch | ▬ |
| False Sump | ▬ |

RAILROADS:

| | |
|--------------------|---------------|
| Standard Gauge | _____ |
| RR Signal Milepost | ○ MILEPOST 35 |
| Switch | □ 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 | ▬ 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 | ⊕ |
| 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 | ⊕ |
| 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 | ⊕ |
| 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:

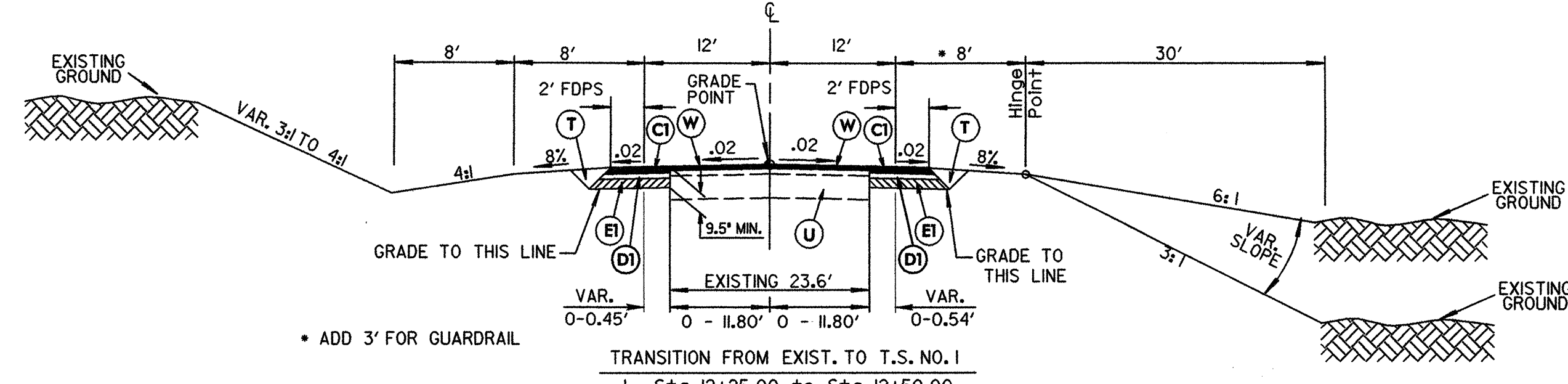
| | |
|-----------------------------------|-----------|
| Gas Valve | ⊕ |
| Gas Meter | ⊕ |
| Recorded U/G Gas Line | -G- |
| Designated U/G Gas Line (S.U.E.*) | -G- |
| Above Ground Gas Line | -A/G Gas- |

SANITARY SEWER:

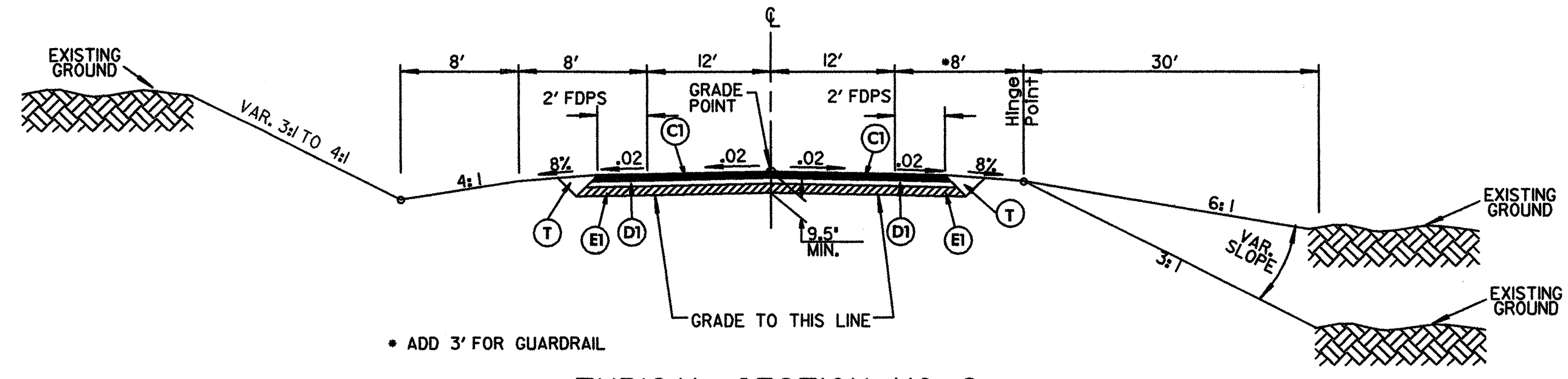
| | |
|--|----------------------|
| Sanitary Sewer Manhole | ⊕ |
| Sanitary Sewer Cleanout | ⊕ |
| U/G Sanitary Sewer Line | -SS- |
| Above Ground Sanitary Sewer | -A/G Sanitary Sewer- |
| Recorded SS Forced Main Line | -FSS- |
| Designated SS Forced Main Line (S.U.E.*) | -FSS- |

MISCELLANEOUS:

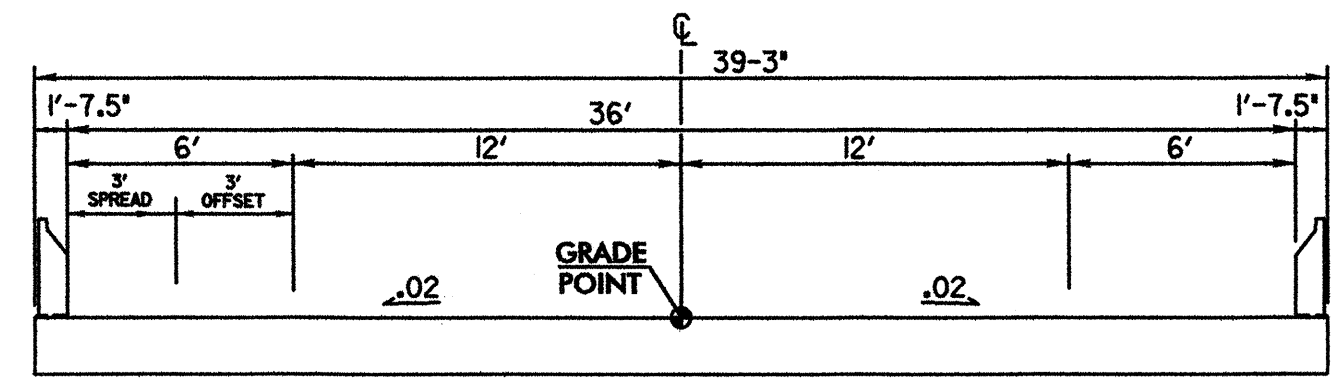
| | |
|--|--------|
| Utility Pole | ● |
| Utility Pole with Base | □ |
| Utility Located Object | ○ |
| Utility Traffic Signal Box | ⊕ |
| Utility Unknown U/G Line | -?UTL- |
| U/G Tank; Water, Gas, Oil | □ |
| A/G Tank; Water, Gas, Oil | □ |
| U/G Test Hole (S.U.E.*) | ⊕ |
| Abandoned According to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



TYPICAL SECTION NO. 1
 USE TYPICAL SECTION NO. 1 AS FOLLOWS
 -L- Sta. 12+50.00 to Sta. 12+50.00
 -L- Sta. 18+53.00 to Sta. 20+25.00
 TRANSITION FROM T.S. NO. 1 TO EXIST.
 -L- Sta. 20+25.00 to Sta. 20+50.00

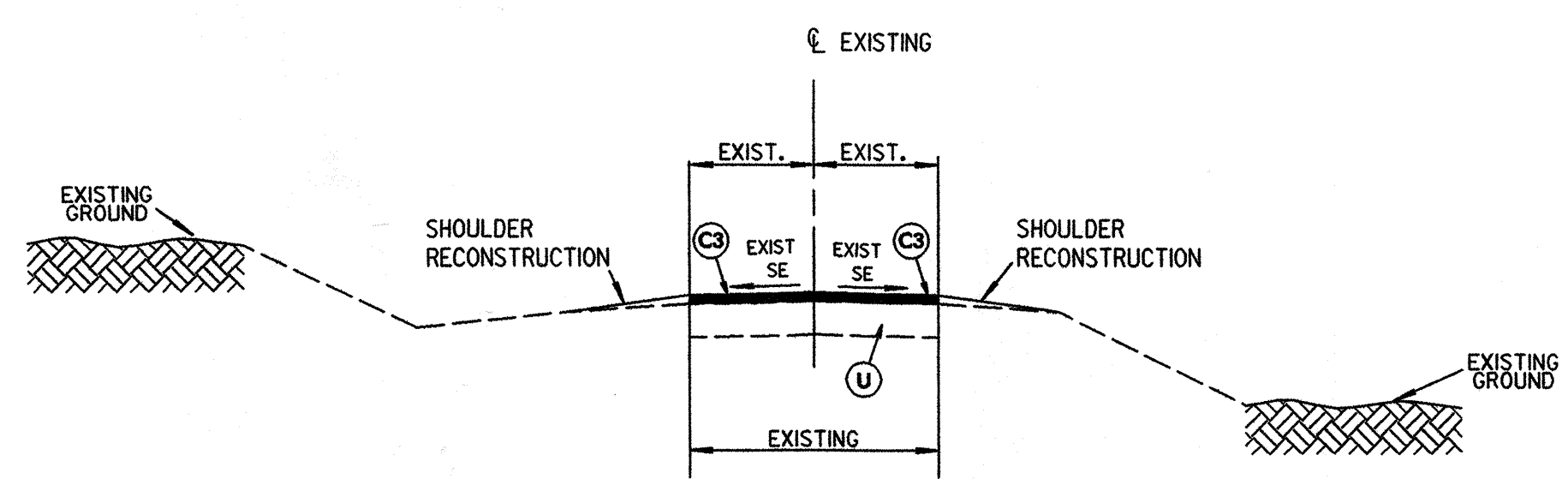


TYPICAL SECTION NO. 2
 USE TYPICAL SECTION NO. 2 AS FOLLOWS
 -L- Sta. 14+33.00 to Sta. 15+82.00 (BEGIN BRIDGE)
 -L- Sta. 16+77.00 (END BRIDGE) to Sta. 18+53.00

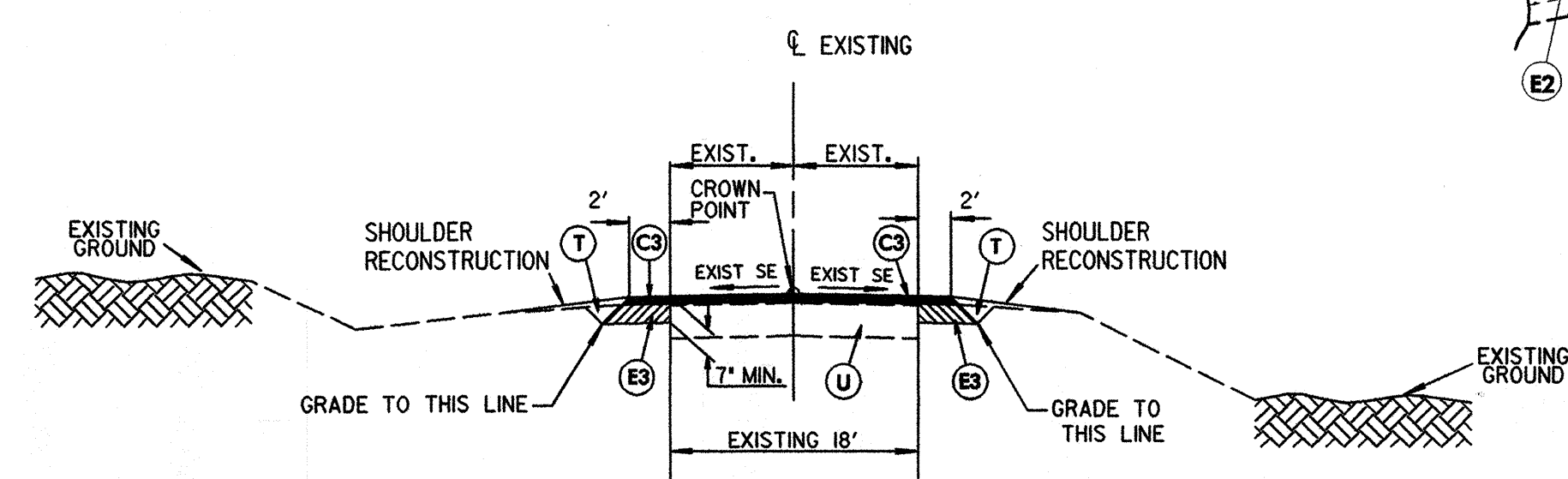


TYPICAL BRIDGE SECTION
 -L- Sta. 15+82.00 to Sta. 16+77.00

* - DESIGN EXCEPTION
 REQUIRED FOR
 BRIDGE WIDTH



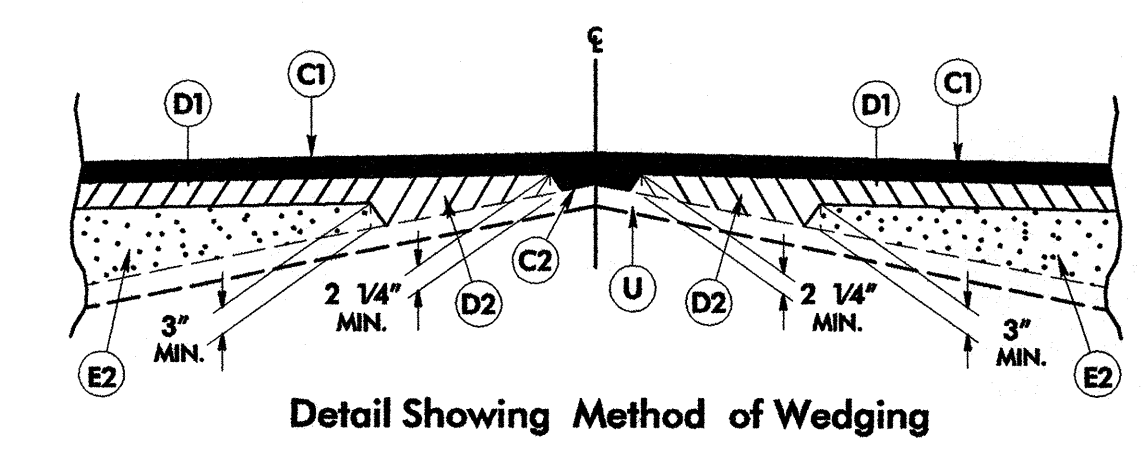
TYPICAL SECTION NO. 3 -DETOUR-
 USE TYPICAL SECTION NO. 3 AS FOLLOWS
 -SR 1810- RESURFACE EXISTING PAVEMENT



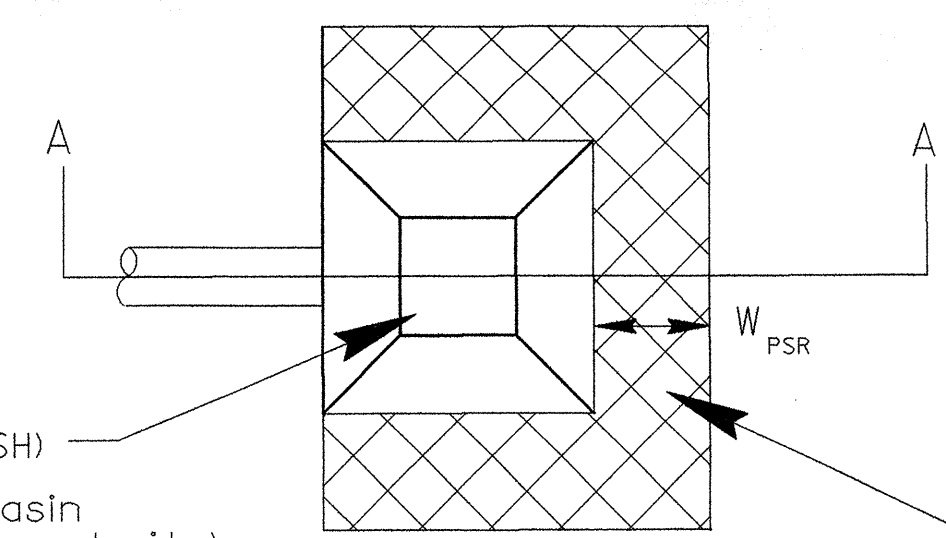
TYPICAL SECTION NO. 4 -DETOUR-
 USE TYPICAL SECTION NO. 4 AS FOLLOWS
 -SR 1811- WIDEN 2 FT AND RESURFACE EXISTING PAVEMENT
 -SR 1745- WIDEN 2 FT AND RESURFACE EXISTING PAVEMENT

| PAVEMENT SCHEDULE | |
|-------------------|---|
| C1 | PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD. IN EACH OF TWO LAYERS. |
| C2 | PROP. VAR. DEPTH ASPHALT CONC. 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 1" OR GREATER THAN 1.5" IN DEPTH. |
| C3 | PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD. |
| D1 | PROP. APPROX. 2.5" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS PER SQ. YD. |
| D2 | PROP. VAR. DEPTH ASPHALT CONC. 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 2.25" OR GREATER THAN 4" IN DEPTH. |
| E1 | PROP. APPROX. 4" ASPHALT CONC. BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD. |
| E2 | PROP. VAR. DEPTH ASPHALT CONC. SURFACE 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" OR GREATER THAN 4" IN DEPTH. |
| E3 | PROP. APPROX. 5.5" ASPHALT CONC. BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS PER SQ. YD. |
| T | EARTH MATERIAL |
| U | EXISTING PAVEMENT |
| W | VARIABLE DEPTH PAVEMENT (SEE WEDGING DETAILS) |

NOTE: ALL SLOPES 1:1 UNLESS OTHERWISE SPECIFIED

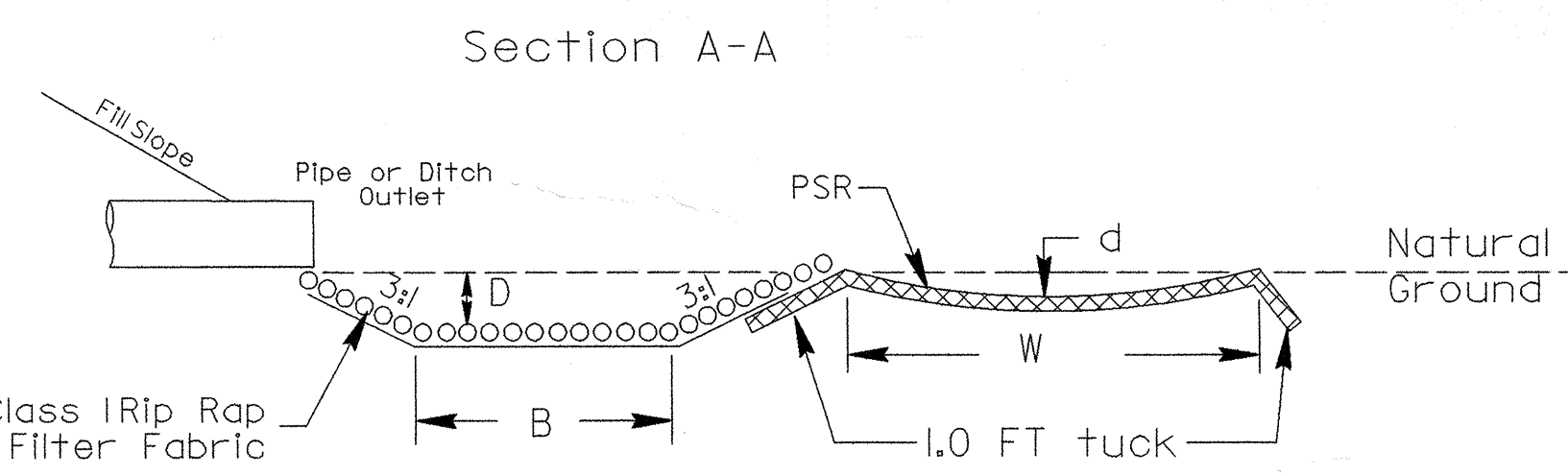


PREFORMED SCOUR HOLE
 (Not to scale)



Preformed Scour Hole (PSH)
 (Rip Rap in basin not shown for clarity)

3.0 ft. to 10.0 ft. of Permanent Soil Reinforcement matting (PSR) to be prescribed around perimeter of scour hole (see plan views); Shall be graded level.



Liner: Class I Rip Rap with Filter Fabric

NOTE: "B" denotes size of basin; For example: 5.0ft. x 5.0ft. PSH, B=5.0

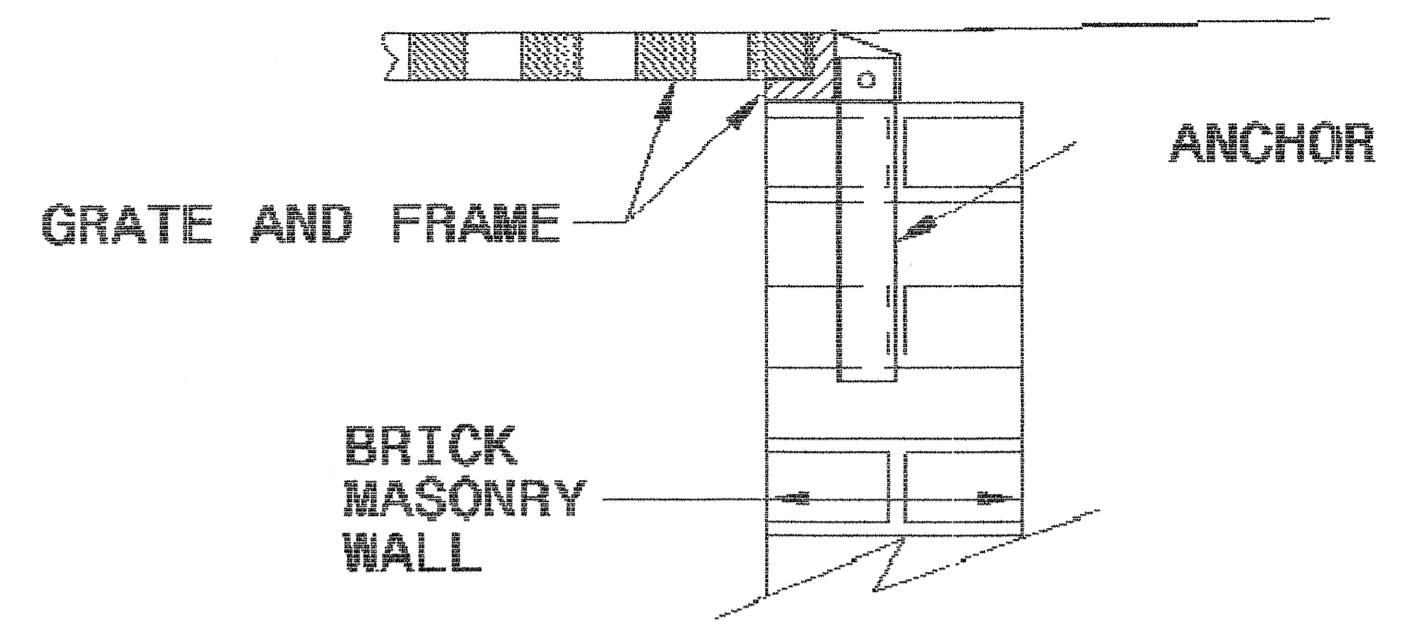
NOTE: The Permanent Soil Reinforcement matting (PSR) shall be seeded with native grasses at installation.

| STATION | B FT. | D FT. | W _{PSR} FT. | d FT. | CLASS I RIP RAP TONS | DDE (CU YD) | FILTER FABRIC (SQ YD) |
|--------------|-------|-------|----------------------|-------|----------------------|-------------|-----------------------|
| 17+16.00 -L- | 4 | 1.5 | 5 | .5 | 9 | 15 | 13 |

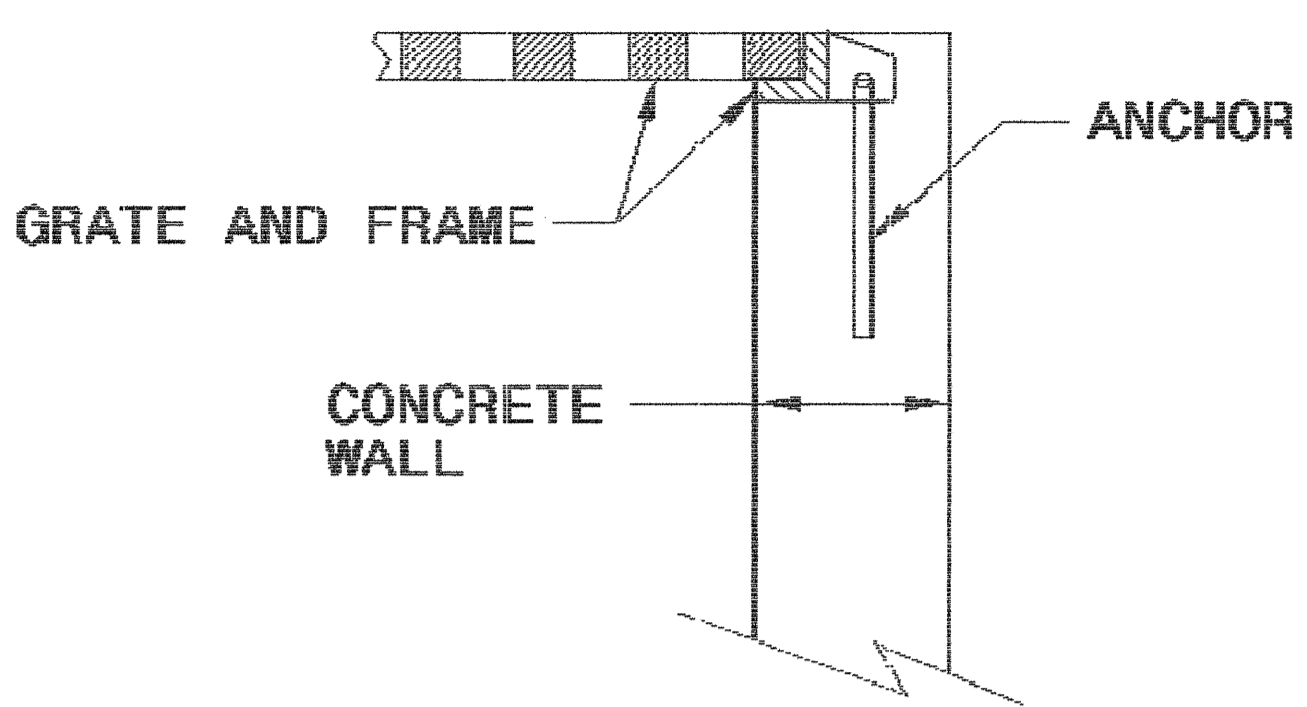
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

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

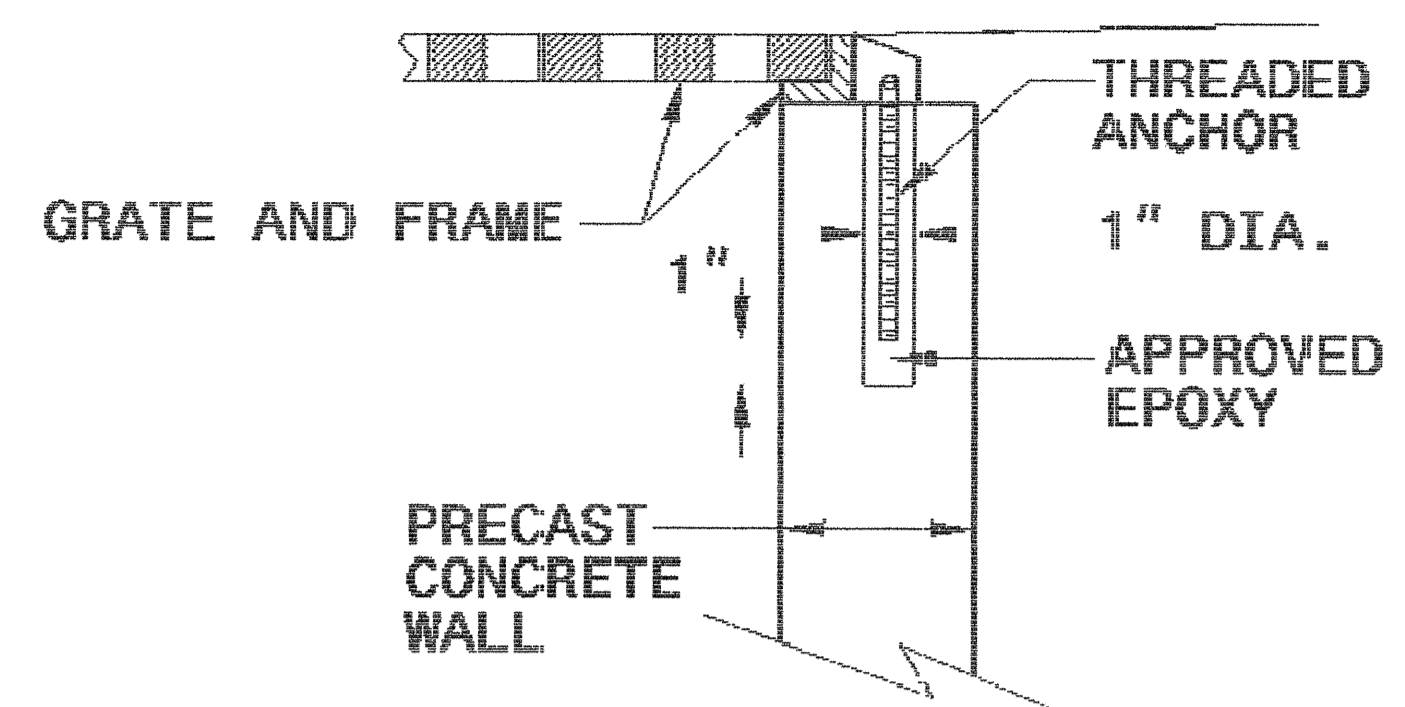
SHEET 1 OF 1
840D25



**BRICK MASONRY
CONSTRUCTION**



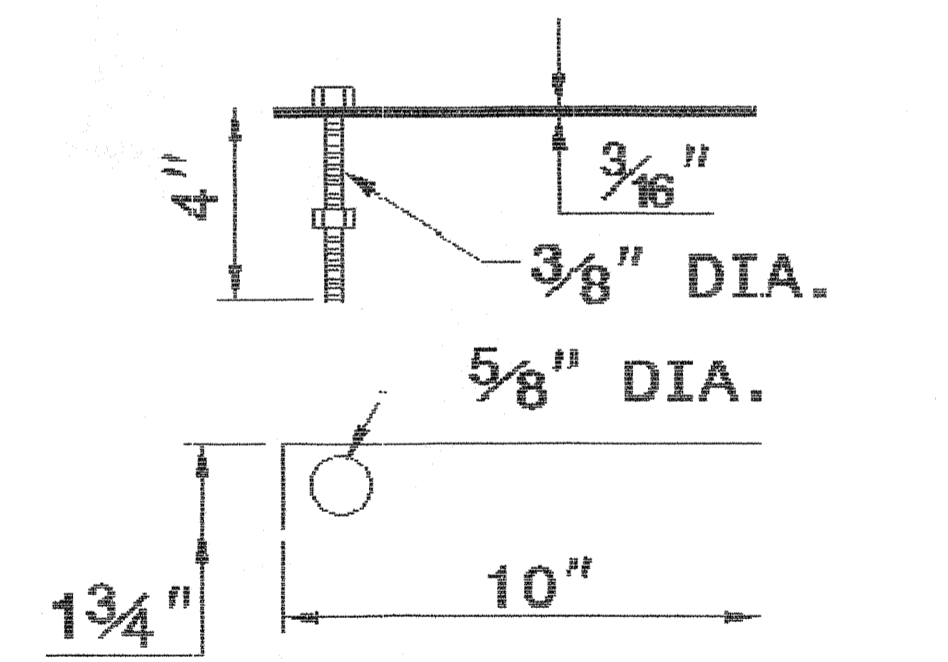
**CONCRETE
CONSTRUCTION**



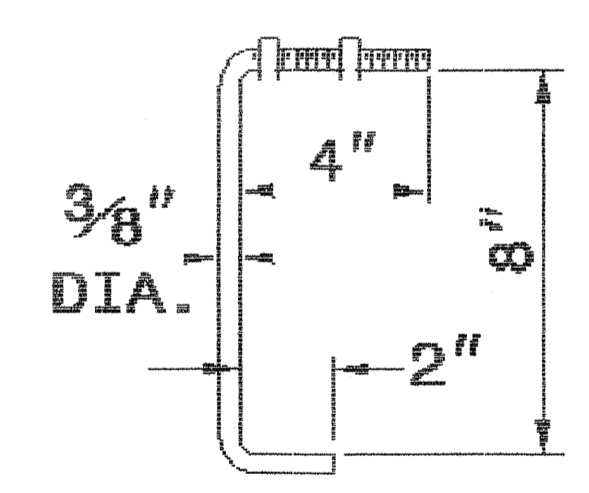
**PRECAST CONCRETE
CONSTRUCTION**

**DETAIL SHOWING ANCHORAGE OF
FRAME FOR GRATED DROP INLET**

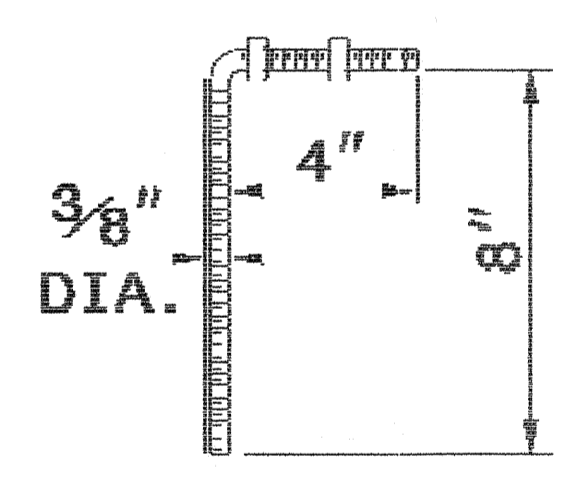
NOTE:
CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL
OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



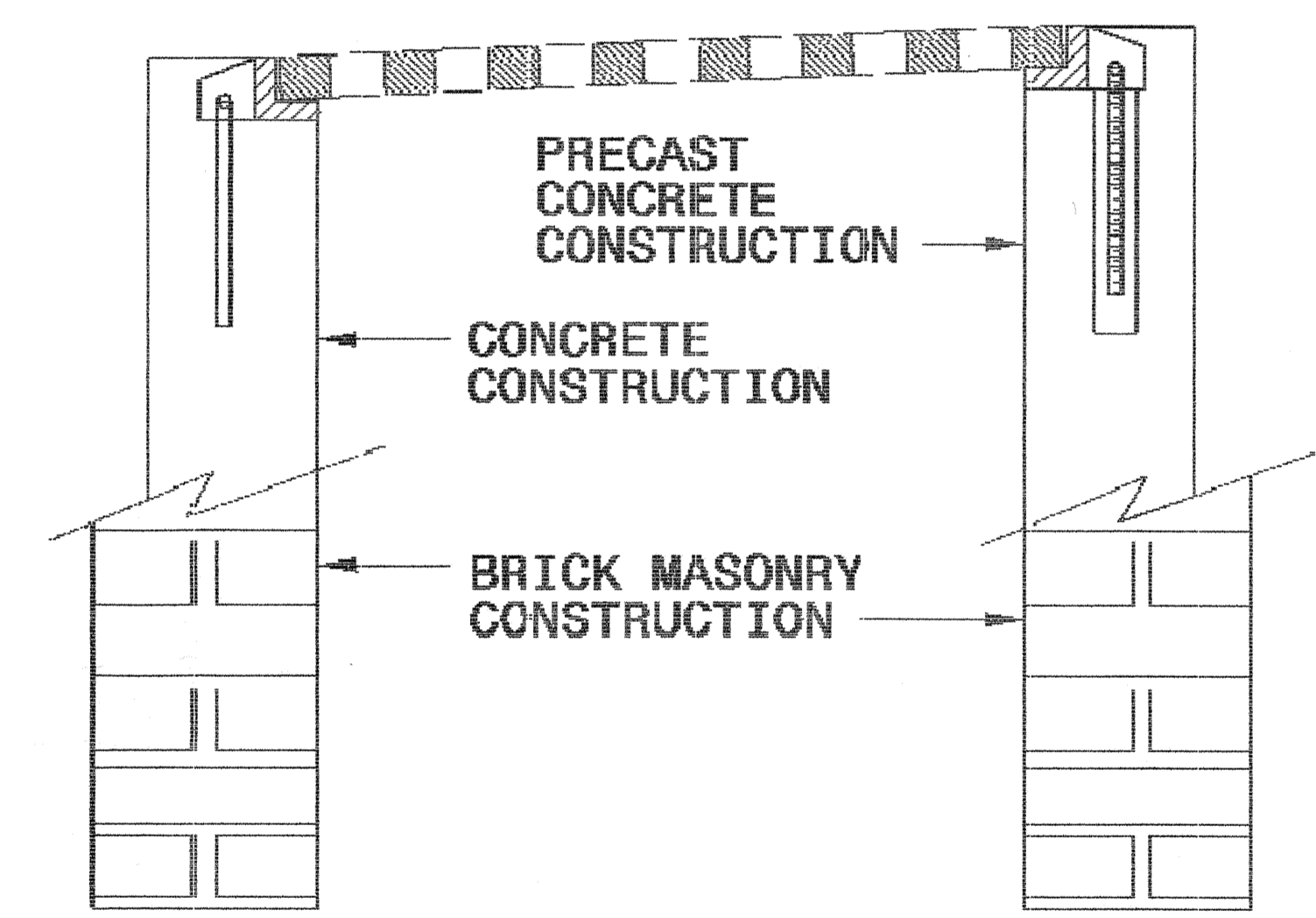
MASONRY ANCHOR
3/8" DIA. BOLT WITH PLATE



CONCRETE ANCHOR
3/8" DIA. BENT BAR



**PRECAST
CONCRETE ANCHOR**
3/8" DIA. BENT BAR



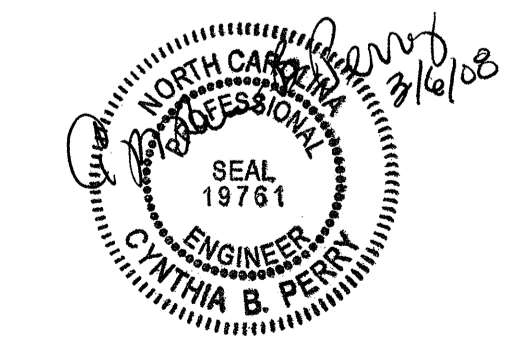
**FRAME AND GRATE INSTALLATION
FOR NORMAL CROWN AND
SUPERELEVATED SECTIONS**

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

C:\Program Files\Autodesk\AutoCAD 2006\Projects\840D25.dwg
 Date: 07/18/06 10:35:35 AM
 User: jerry



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: 9/25/08
 CHECKED BY: DATE:
 FILE SPEC.:

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 User: jerry

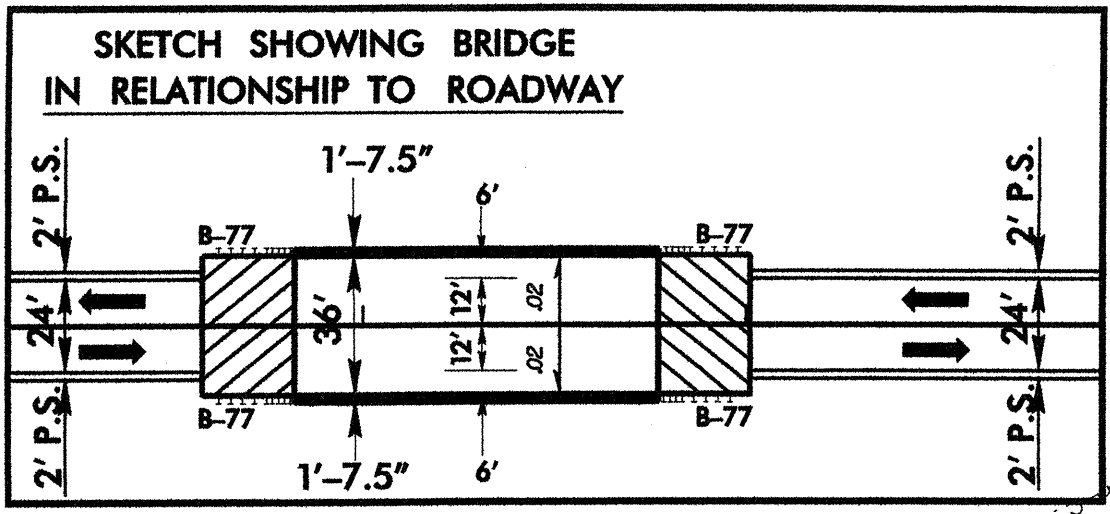
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201762

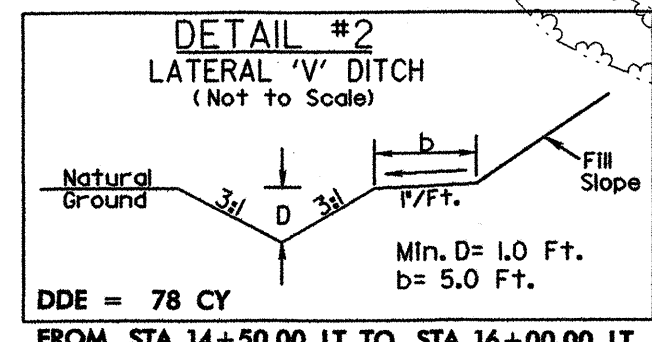
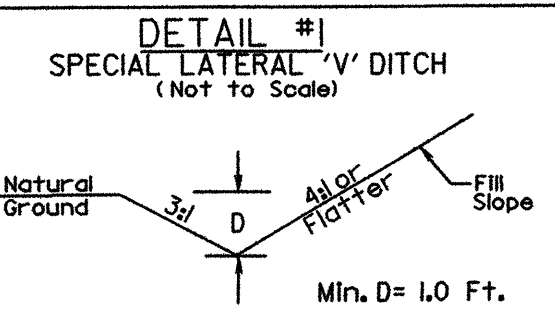
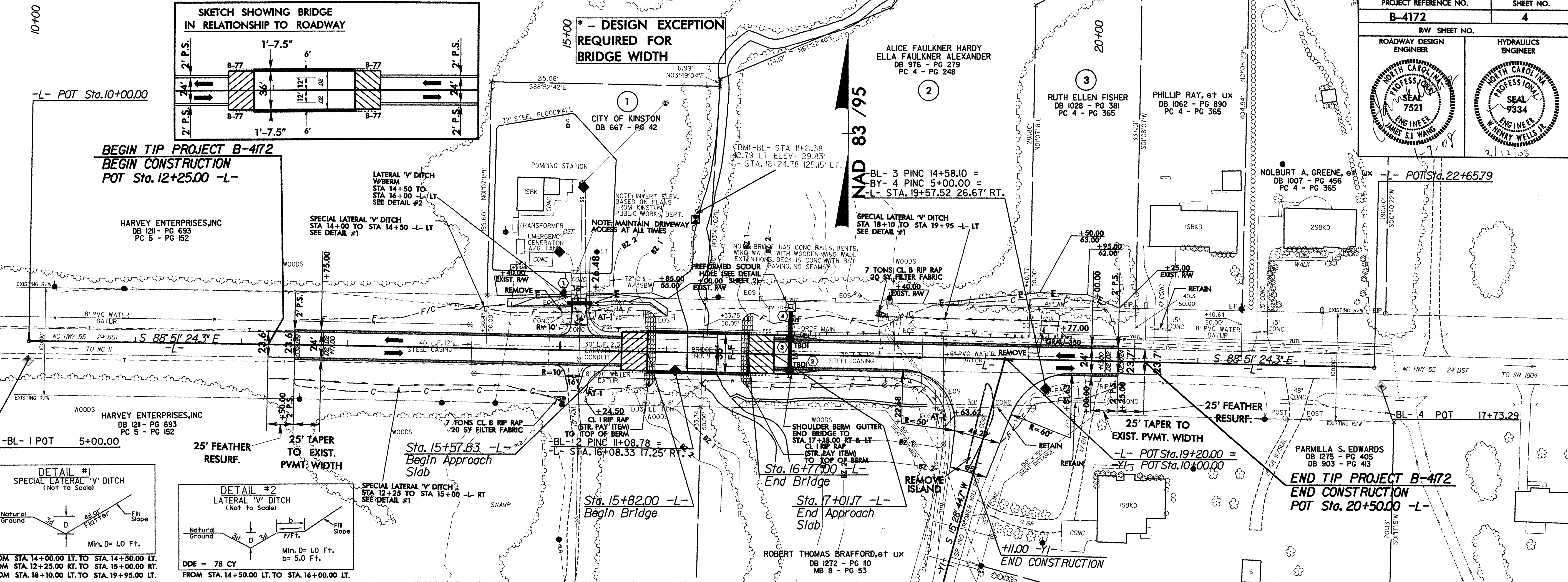
| ItemNumber | Sec # | Quantity | Unit | Description |
|-------------|-------|----------|------|---|
| 000100000-N | 800 | Lump Sum | | MOBILIZATION |
| 002900000-N | SP | Lump Sum | | REINFORCED BRIDGE APPROACH FILL, STATION ***** (16+29.50) |
| 004300000-N | 226 | Lump Sum | | GRADING |
| 005000000-E | 226 | 1 | ACR | SUPPLEMENTARY CLEARING & GRUB-BING |
| 005700000-E | 226 | 200 | CY | UNDERCUT EXCAVATION |
| 013400000-E | 240 | 78 | CY | DRAINAGE DITCH EXCAVATION |
| 019500000-E | 265 | 100 | CY | SELECT GRANULAR MATERIAL |
| 019600000-E | 270 | 100 | SY | FABRIC FOR SOIL STABILIZATION |
| 031800000-E | 300 | 194 | TON | FOUNDATION CONDITIONING MATERIAL, MINOR STRS |
| 034300000-E | 310 | 24 | LF | 15" SIDE DRAIN PIPE |
| 036600000-E | 310 | 56 | LF | 15" RC PIPE CULVERTS, CLASS III |
| 099500000-E | 340 | 52 | LF | PIPE REMOVAL |
| 122000000-E | 545 | 150 | TON | INCIDENTAL STONE BASE |
| 124500000-E | SP | 6.6 | SMI | SHOULDER RECONSTRUCTION |
| 148900000-E | 610 | 1,161 | TON | ASPHALT CONC BASE COURSE, TYPE B25.0B |
| 149800000-E | 610 | 250 | TON | ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B |
| 151900000-E | 610 | 2,755 | TON | ASPHALT CONC SURFACE COURSE, TYPE S9.5B |
| 156000000-E | 620 | 227 | TON | ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22 |
| 202200000-E | 815 | 23 | CY | SUBDRAIN EXCAVATION |
| 203300000-E | 815 | 17 | CY | SUBDRAIN FINE AGGREGATE |
| 204400000-E | 815 | 100 | LF | 6" PERFORATED SUBDRAIN PIPE |
| 205500000-E | 815 | 3 | EA | 6" SUBDRAIN PIPE WYES, TEES, & ELBOWS |
| 207700000-E | 815 | 6 | LF | 6" OUTLET PIPE (SUBDRAINS) |
| 213200000-N | 816 | 1 | EA | CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET |
| 228600000-N | 840 | 2 | EA | MASONRY DRAINAGE STRUCTURES |
| 236700000-N | 840 | 2 | EA | FRAME WITH TWO GRATES, STD 840.29 |
| 255600000-E | 846 | 34 | LF | SHOULDER BERM GUTTER |
| 303000000-E | 862 | 412.5 | LF | STEEL BM GUARDRAIL |
| 304500000-E | 862 | 125 | LF | STEEL BM GUARDRAIL, SHOP CURVED |
| 315000000-N | 862 | 5 | EA | ADDITIONAL GUARDRAIL POSTS |
| 319500000-N | 862 | 3 | EA | GUARDRAIL ANCHOR UNITS, TYPE AT-1 |
| 327000000-N | SP | 1 | EA | GUARDRAIL ANCHOR UNITS, TYPE 350 |
| 331700000-N | 862 | 4 | EA | GUARDRAIL ANCHOR UNITS, TYPE B-77 |
| 364900000-E | 876 | 14 | TON | RIP RAP, CLASS B |
| 365600000-E | 876 | 190 | SY | FILTER FABRIC FOR DRAINAGE |
| 365900000-N | SP | 1 | EA | PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON |
| 440000000-E | 1110 | 339 | SF | WORK ZONE SIGNS (STATIONARY) |
| 441000000-E | 1110 | 57 | SF | WORK ZONE SIGNS (BARRICADE MOUNTED) |
| 442200000-N | 1120 | 30 | DAY | CHANGEABLE MESSAGE SIGN (SHORT TERM) |
| 444500000-E | 1145 | 64 | LF | BARRICADES (TYPE III) |
| 468500000-E | 1205 | 1,536 | LF | THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS) |
| 468600000-E | 1205 | 1,460 | LF | THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS) |
| 477000000-E | 1205 | 380 | LF | COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (3) |
| 481000000-E | 1205 | 100,000 | LF | PAINT PAVEMENT MARKING LINES (4") |
| 483500000-E | 1205 | 48 | LF | PAINT PAVEMENT MARKING LINES (24") |
| 484500000-N | 1205 | 4 | EA | PAINT PAVEMENT MARKING SYMBOL |
| 490000000-N | 1251 | 166 | EA | PERMANENT RAISED PAVEMENT MARKERS |
| 532560000-E | 1510 | 200 | LF | 6" WATER LINE |

| ItemNumber | Sec # | Quantity | Unit | Description |
|-------------|-------|----------|------|--|
| 532580000-E | 1510 | 670 | LF | 8" WATER LINE |
| 554000000-E | 1515 | 1 | EA | 6" VALVE |
| 554600000-E | 1515 | 2 | EA | 8" VALVE |
| 587100000-E | 1550 | 277 | LF | TRENCHLESS INSTALLATION OF *** IN SOIL (8) |
| 587101000-E | 1550 | 277 | LF | TRENCHLESS INSTALLATION OF *** NOT IN SOIL (8) |
| 600000000-E | 1605 | 560 | LF | TEMPORARY SILT FENCE |
| 600600000-E | 1610 | 60 | TON | STONE FOR EROSION CONTROL, CLASS A |
| 600900000-E | 1610 | 160 | TON | STONE FOR EROSION CONTROL, CLASS B |
| 601200000-E | 1610 | 60 | TON | SEDIMENT CONTROL STONE |
| 601500000-E | 1615 | 1.5 | ACR | TEMPORARY MULCHING |
| 601800000-E | 1620 | 50 | LB | SEED FOR TEMPORARY SEEDING |
| 602100000-E | 1620 | 0.25 | TON | FERTILIZER FOR TEMPORARY SEEDING |
| 602400000-E | 1622 | 50 | LF | TEMPORARY SLOPE DRAINS |
| 602700000-N | 1622 | 2 | EA | INLET PROTECTION AT TEMPORARY SLOPE DRAINS |
| 602900000-E | SP | 250 | LF | SAFETY FENCE |
| 603000000-E | 1630 | 570 | CY | SILT EXCAVATION |
| 603600000-E | 1631 | 510 | SY | MATTING FOR EROSION CONTROL |
| 604200000-E | 1632 | 40 | LF | 1/4" HARDWARE CLOTH |
| 607103000-E | SP | 250 | LF | COIR FIBER BAFFLES |
| 608400000-E | 1660 | 1.5 | ACR | SEEDING & MULCHING |
| 608700000-E | 1660 | 1 | ACR | MOWING |
| 609000000-E | 1661 | 50 | LB | SEED FOR REPAIR SEEDING |
| 609300000-E | 1661 | 0.25 | TON | FERTILIZER FOR REPAIR SEEDING |
| 609600000-E | 1662 | 50 | LB | SEED FOR SUPPLEMENTAL SEEDING |
| 610800000-E | 1665 | 1 | TON | FERTILIZER TOPDRESSING |
| 611400000-N | SP | 2 | HR | SPECIALIZED HAND MOWING |
| 611700000-N | SP | 12 | EA | RESPONSE FOR EROSION CONTROL |
| 612300000-E | 1670 | 0.25 | ACR | REFORESTATION |

5/28/95
SYNTHETIC LINES



*** - DESIGN EXCEPTION REQUIRED FOR BRIDGE WIDTH**



BRIDGE HYDRAULIC DATA

| | |
|----------------------------------|-------------|
| DESIGN DISCHARGE | = 910 CFS |
| DESIGN FREQUENCY | = 50 YR |
| DESIGN HW ELEVATION | = 30.4' |
| BASE DISCHARGE | = 1,190 CFS |
| BASE FREQUENCY | = 100 YR |
| BASE HW ELEVATION | = 31.2' |
| OVERTOPPING DISCHARGE | = 2,080 CFS |
| OVERTOPPING FREQUENCY | = +500 YR |
| OVERTOPPING ELEVATION | = 33.33' |
| DATE OF SURVEY | = 3/2/05 |
| W.S. ELEVATION AT DATE OF SURVEY | = 24.2' |

SEE STRUCTURE PLANS S-1 THRU S-20

