

09/28/09

See Sheet 1-A For Index of Sheets

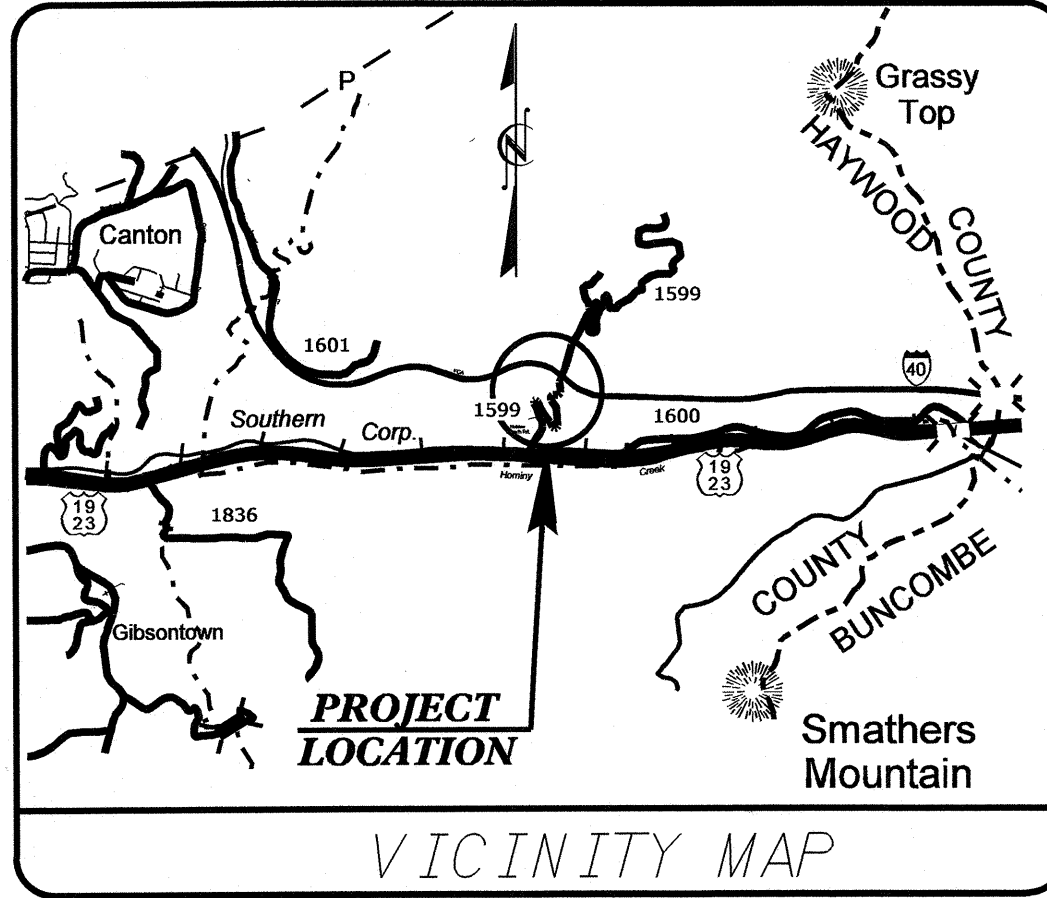
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

HAYWOOD COUNTY

LOCATION: I-40 FROM MILE POST 35 TO MILE POST 36

TYPE OF WORK: DRAINAGE AND PAVING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5402	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46282.1.1	IMS-040-1 (220)	PE	
46282.2.1	IMS-040-1(220)35	RW & UTILITIES	
46282.3.1	IMS-040-1(220)35	CONSTRUCTION	

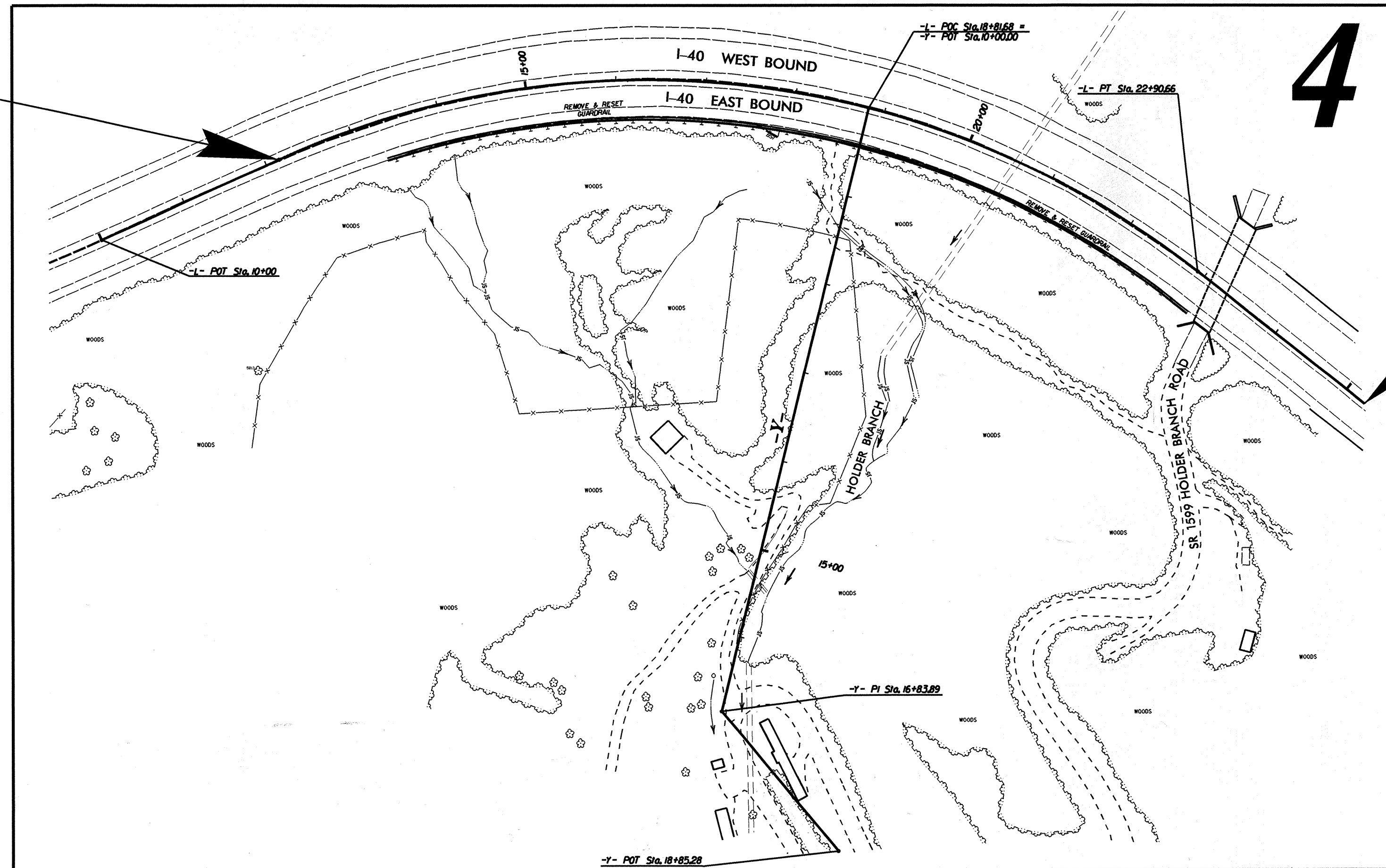


TIP PROJECT: I-5402

CONTRACT: C202959

-L- 12+15.00
BEGIN TIP PROJECT I-5402

TO CANTON

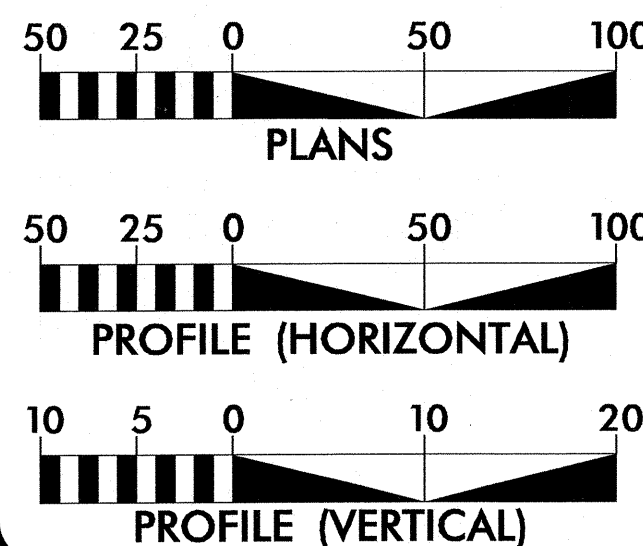


-L- 24+25.00
END TIP PROJECT I-5402

TO WIGGINS RD.

THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES

GRAPHIC SCALES



DESIGN DATA

ADT 2012 = 59,940
 ADT 2035 = 91,740
 DHV = 12 %
 D = 60 %
 T = 31 % *
 V = 70 MPH
 * TTST = 25% DUAL 6%
 FUNC CLASS = INTERSTATE
 STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT I-5402 = 0.229 MILES
 TOTAL LENGTH TIP PROJECT I-5402 = 0.229 MILES

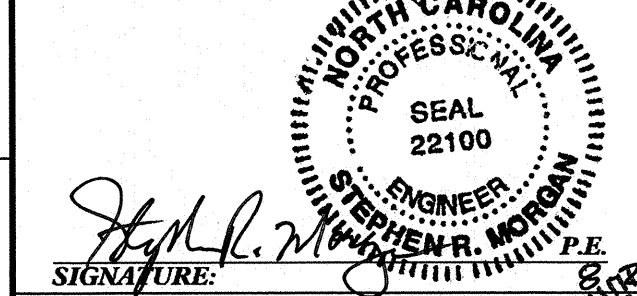
Prepared in the Office of:
DIVISION OF HIGHWAYS
 1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

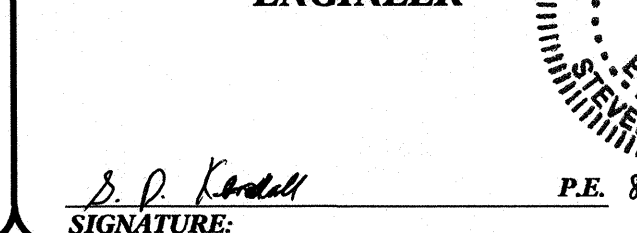
RIGHT OF WAY DATE: **JIMMY S. GOODNIGHT, PE**
 PROJECT ENGINEER
 SEPTEMBER 27, 2011

LETTING DATE: **STEVE D. KENDALL, PE**
 PROJECT DESIGN ENGINEER
 NOVEMBER 20, 2012

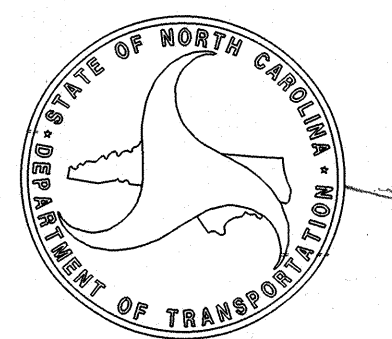
HYDRAULICS ENGINEER



ROADWAY DESIGN ENGINEER

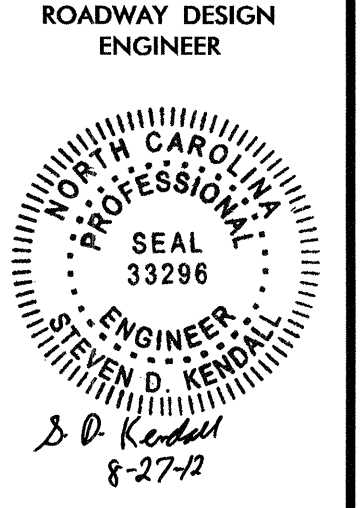


DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



STATE HIGHWAY DESIGN ENGINEER

09-AUG-2012 15:44
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\$\$\$\$\$SERNAME\$\$\$\$\$



STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

2012 ROADWAY ENGLISH STANDARD DRAWINGS

EFF. 1-17-12

GENERAL NOTES

2012 SPECIFICATIONS
EFFECTIVE: 01-17-12
REVISED: 11-01-11

INDEX OF SHEETS

N. C. Department of Transportation – Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans. The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch –

STD.NO.	TITLE
DIVISION 2 – EARTHWORK	
200.02	Method of Clearing – Method II
225.01	Guide for Grading Subgrade – Interstate and Freeway
DIVISION 3 – PIPE CULVERTS	
300.01	Method of Pipe Installation – Method 'A'
DIVISION 5 – SUBGRADE, BASES AND SHOULDERS	
560.02	Method of Shoulder Construction – High Side of Superelevated Curve – Method II
DIVISION 6 – ASPHALT, BASES AND PAVEMENTS	
654.01	Pavement Repair
DIVISION 8 – INCIDENTALS	
806.01	Concrete Right-of-Way Marker
806.02	Granite Right-of-Way Marker
815.03	Pipe Underdrain and Blind Drain
840.00	Concrete Base Pad for Drainage Structures
840.17	Concrete Grated Drop Inlet Type 'A' – 12" thru 72" Pipe
840.18	Concrete Grated Drop Inlet Type 'B' – 12" thru 36" Pipe
840.20	Frames and Wide Slot Flat Grates
840.22	Frames and Wide Slot Sag Grates
840.25	Anchorage for Frames – Brick or Concrete or Precast
840.26	Brick Grated Drop Inlet Type 'A' – 12" thru 72" Pipe
840.27	Brick Grated Drop Inlet Type 'B' – 12" thru 36" Pipe
840.45	Precast Drainage Structure
840.66	Drainage Structure Steps
840.71	Concrete And Brick Pipe Plug
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
866.02	Woven Wire Fence – with Wood Post

GRADE LINE:

GRADING AND SURFACING:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISH ELEVATION OF THE PROPOSED SURFACING AS SHOWN ON THE TYPICAL SECTION.

GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

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

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. No. 815.03 AT LOCATIONS DIRECTED BY 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.

SUBSURFACE PLANS:

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

RIGHT-OF-WAY MARKERS:

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

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE:

WCU POWER
FRONTIER TELEPHONE

SHEET No.	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL PLAN SHEET SYMBOLS
1-C	SURVEY CONTROL SHEET
2	TYPICAL SECTIONS, PAVEMENT SCHEDULE
2-A	DETAIL OF SPECIAL JUNCTION BOX
3	SUMMARY OF QUANTITIES
3-A	SUMMARY OF DRAINAGE QUANTITIES FOR PIPES 48" AND UNDER, GUARDRAIL SUMMARY, SUMMARY OF EARTHWORK, SUMMARY OF EXISTING ASPHALT PAVEMENT REMOVAL, SHOULDER BERM GUTTER SUMMARY, 48" WOVEN WIRE FENCE, 48" WOVEN WIRE EXISTING FENCE RESET, 48" WOVEN WIRE EXISTING FENCE REMOVAL AND PARCEL INDEX
4	PLAN SHEETS /PROFILE SHEET
TMP-1 THRU TMP-7	TRANSPORTATION MANAGEMENT PLAN
EC-1 THRU EC-5	HIGHWAY EROSION CONTROL PLAN
X-1	CROSS-SECTION VOLUME SHEET
X-2 THRU X-8	CROSS-SECTIONS

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	○ EP
Property Corner	-----
Property Monument	□ ECM
Parcel/Sequence Number	⑩②③
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	○ S
Well	○ W
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	----- FLOW
False Sump	▽

RAILROADS:

Standard Gauge	----- CSX TRANSPORTATION
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	----- R/W
Proposed Right of Way Line with Iron Pin and Cap Marker	----- R/W ▲
Proposed Right of Way Line with Concrete or Granite Marker	----- R/W ●
Existing Control of Access	○ CA
Proposed Control of Access	○ CA
Existing Easement Line	----- E
Proposed Temporary Construction Easement	----- E
Proposed Temporary Drainage Easement	----- TDE
Proposed Permanent Drainage Easement	----- PDE
Proposed Permanent Drainage / Utility Easement	----- DUE
Proposed Permanent Utility Easement	----- PUE
Proposed Temporary Utility Easement	----- TUE
Proposed Aerial Utility Easement	----- AUE
Proposed Permanent Easement with Iron Pin and Cap Marker	----- ◆

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
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	○ S
Storm Sewer	----- S

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	○ P
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	○ T
Telephone Booth	□ T
Telephone Pedestal	□ T
Telephone Cell Tower	□ T
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	○ W
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

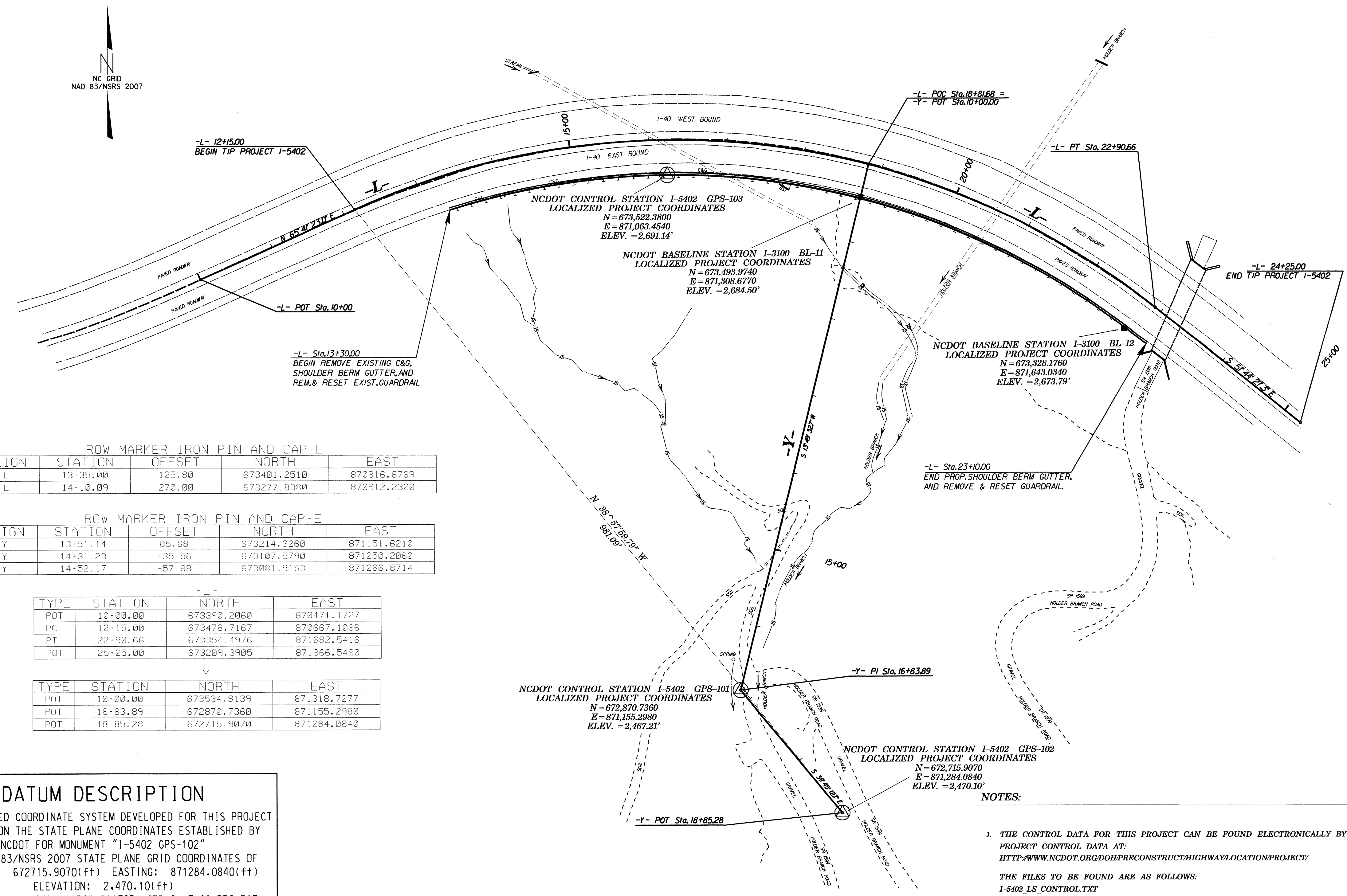
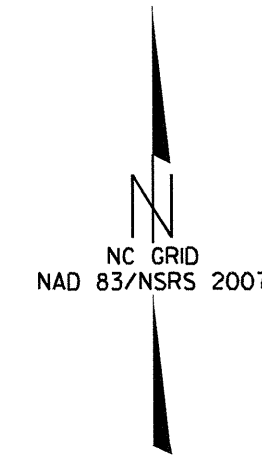
SANITARY SEWER:

Sanitary Sewer Manhole	○ SS
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	----- ?UL
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.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SURVEY CONTROL SHEET I-5402



ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	13+35.00	125.80	673401.2510	870816.6769
L	14+10.09	270.00	673277.8380	870912.2320

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y	13+51.14	85.68	673214.3260	871151.6210
Y	14+31.23	-35.56	673107.5790	871250.2060
Y	14+52.17	-57.88	673081.9153	871266.8714

-L-

TYPE	STATION	NORTH	EAST
POT	10+00.00	673390.2060	870471.1727
PC	12+15.00	673478.7167	870667.1086
PT	22+90.66	673354.4976	871682.5416
POT	25+25.00	673209.3905	871866.5490

-Y-

TYPE	STATION	NORTH	EAST
POT	10+00.00	673534.8139	871318.7277
POT	16+83.89	672870.7360	871155.2980
POT	18+85.28	672715.9070	871284.0840

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "I-5402 GPS-102" WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 672715.9070(±) EASTING: 871284.0840(±) ELEVATION: 2,470.10(±)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999771684

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "I-5402 GPS-102" TO -L- STATION 12+15.00 IS N38°57'59.79"W 981.09'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

NCDOT CONTROL STATION I-5402 GPS-101
LOCALIZED PROJECT COORDINATES
N = 672,870.7360
E = 871,155.2980
ELEV. = 2,467.21'

NCDOT CONTROL STATION I-5402 GPS-102
LOCALIZED PROJECT COORDINATES
N = 672,715.9070
E = 871,284.0840
ELEV. = 2,470.10'

NCDOT CONTROL STATION I-5402 GPS-103
LOCALIZED PROJECT COORDINATES
N = 673,522.3800
E = 871,063.4540
ELEV. = 2,691.14'

NCDOT BASELINE STATION I-3100 BL-11
LOCALIZED PROJECT COORDINATES
N = 673,493.9740
E = 871,308.6770
ELEV. = 2,684.50'

NCDOT BASELINE STATION I-3100 BL-12
LOCALIZED PROJECT COORDINATES
N = 673,328.1780
E = 871,643.0340
ELEV. = 2,673.79'

-L- Sta. 23+10.00
END PROP. SHOULDER BERM CUTTER,
AND REMOVE & RESET GUARDRAIL.

NOTES:

- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PreConstruct/HighwayLocationProject/](http://www.ncdot.org/DOH/PreConstruct/HighwayLocationProject/)
THE FILES TO BE FOUND ARE AS FOLLOWS:
I-5402_LS_CONTROL.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

5/28/99
17-AUG-2012 09:56
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\$\$\$\$\$USER\$NAME\$\$\$\$\$

6/2/99

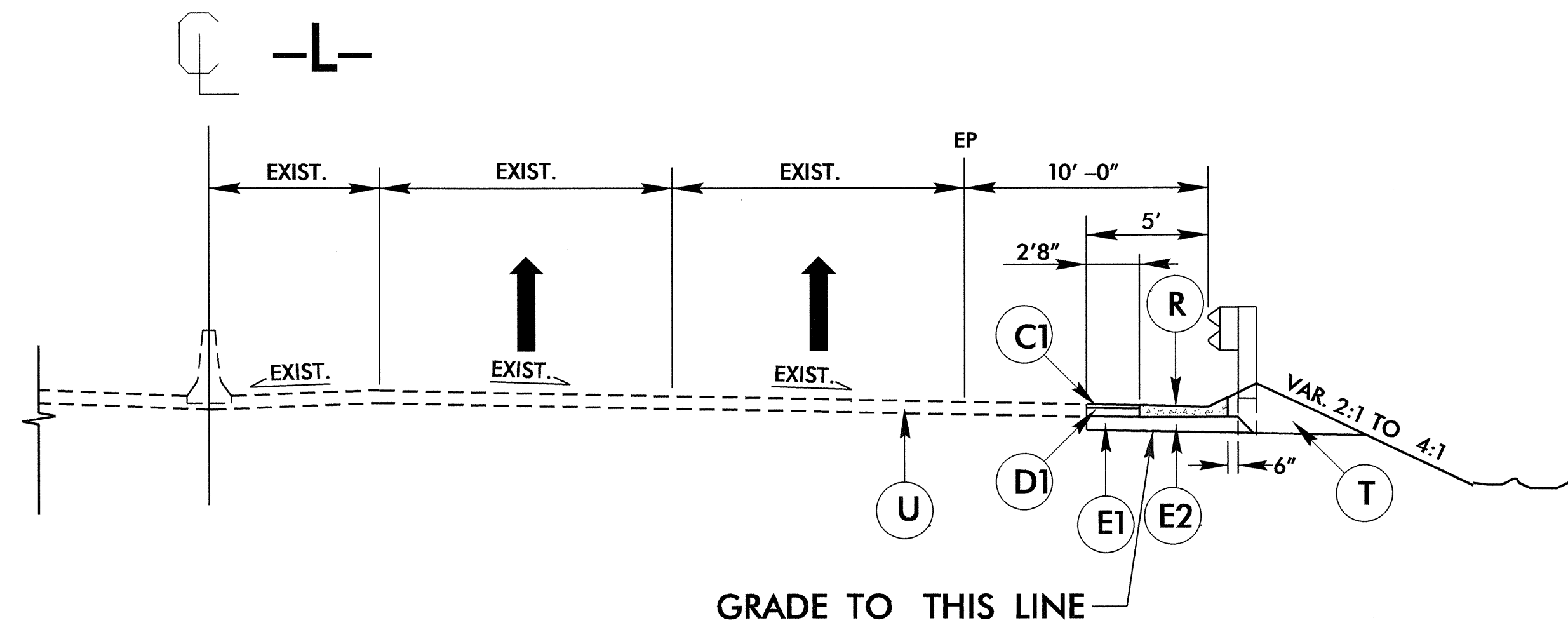
PROJECT REFERENCE NO. 1-5402	SHEET NO. 2
ROADWAY DESIGN ENGINEER SEAL 33296 J. D. KROGEL 8-22-12	PAVEMENT DESIGN ENGINEER SEAL 22896 CLARK S. MORRISON 8/22/12

PAVEMENT SCHEDULE

FINAL PAVEMENT DESIGN

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	R	SHOULDER BERM GUTTER Std. 846.01.
D1	PROP. APPROX. 3½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 399 LBS. PER SQ. YD.	T	EARTH MATERIAL.
E1	PROP. APPROX. 5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, 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 5½" IN DEPTH.		

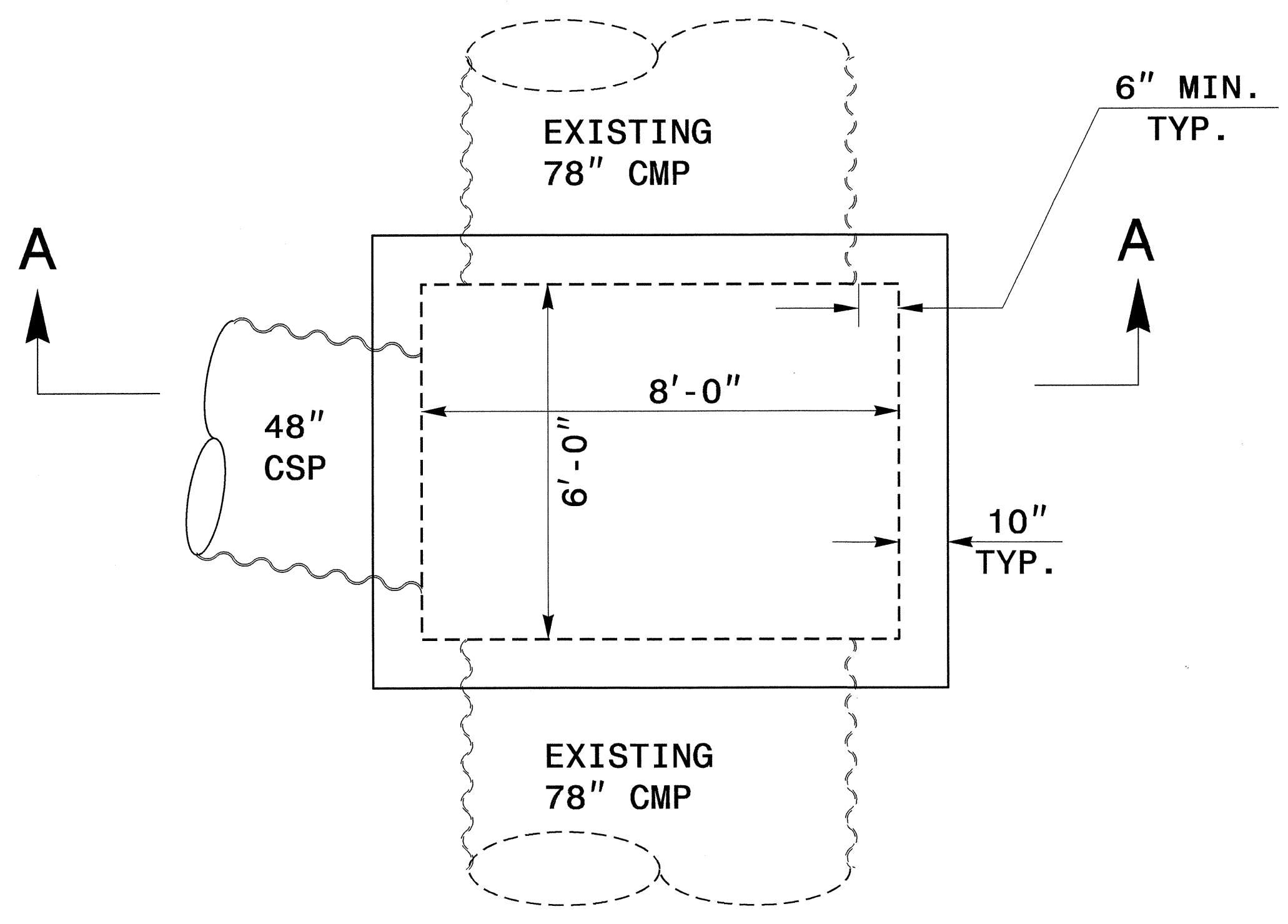
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

-L- Sta. 13+30.00 to Sta. 23+10.00 RT.

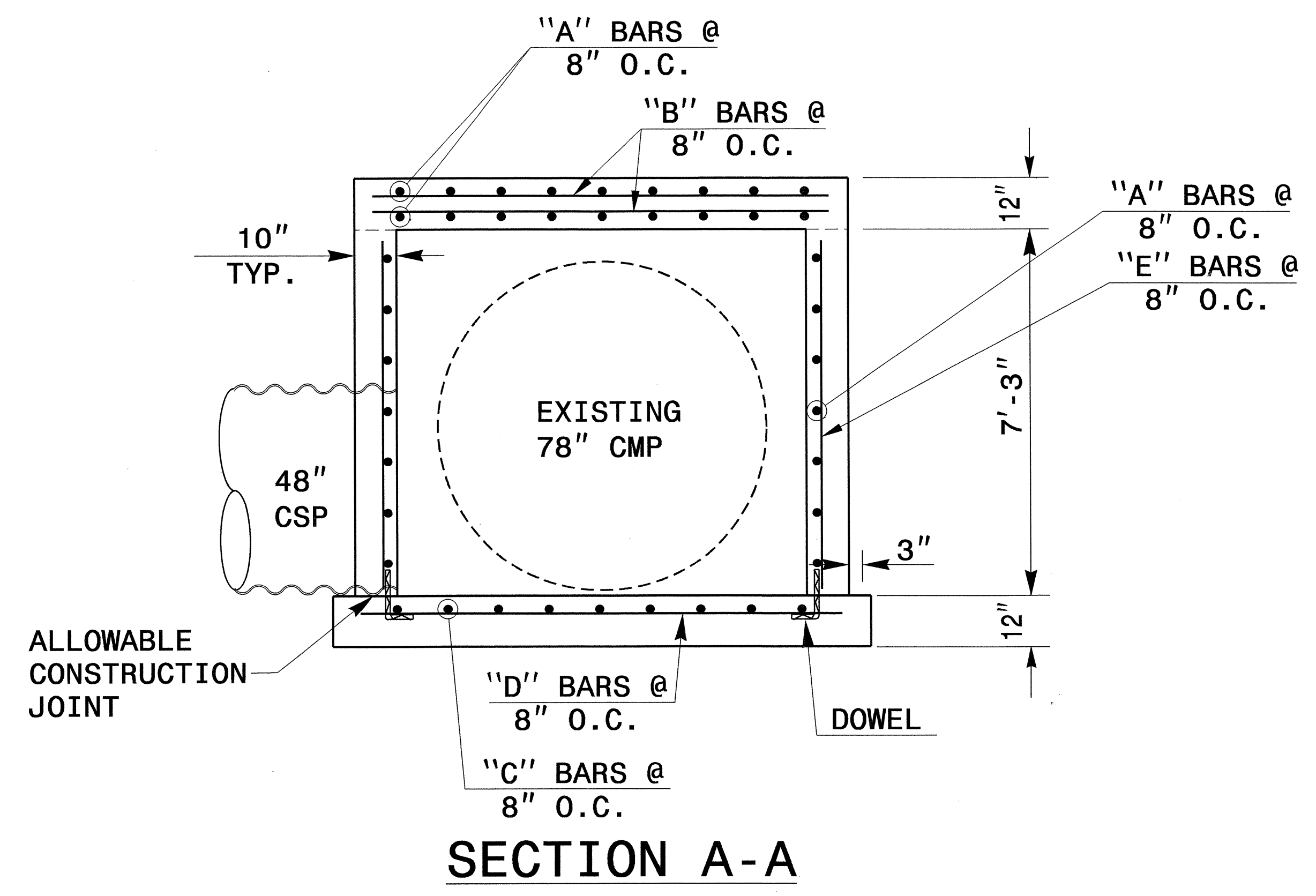
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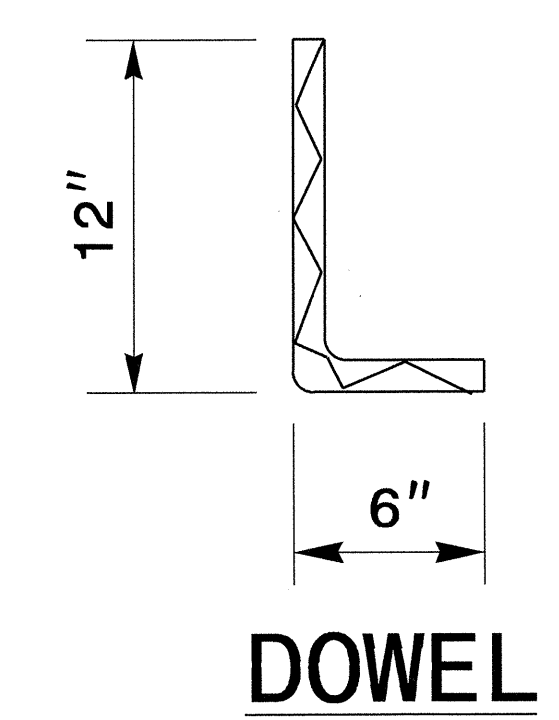
PLAN

GENERAL NOTES:

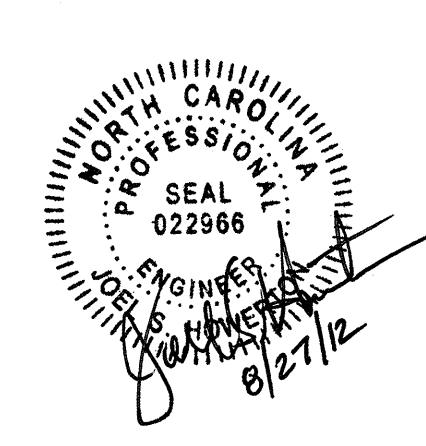
- CONSTRUCT THE BASE SLAB BY FORMING.
- SEE STD. DWG. 840.00 FOR CONSTRUCTION OF BASE SLAB IF PIPE IS SET INTO BASE SLAB.
- USE CLASS 'B' CONCRETE THROUGHOUT.
- CONSTRUCTION OPTIONS: MONOLITHIC POUR, 2" KEYWAY, OR #5 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
- CUT, BEND OR RELOCATE REINFORCING STEEL TO POSITION PIPE AS DIRECTED BY THE ENGINEER.
- CHAMFER ALL EXPOSED CORNERS 1".
- CONTRACTOR MAY ADJUST DIMENSIONS OF BOX AS FIELD CONDITIONS DICTATE OR AS DIRECTED BY THE ENGINEER.



SECTION A-A



BILL OF MATERIAL				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	50	#4	7'-4"	244.8
B	44	#4	9'-4"	274.2
C	15	#4	7'-10"	78.5
D	12	#4	9'-10"	78.8
E	25	#4	7'-1"	118.3
TOTAL REINF. STEEL (lbs.)				794.6
CLASS "B" CONC. (cu. yds.)				12.8
NO DEDUCTIONS FOR PIPES				



CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

DETAIL OF SPECIAL JUNCTION BOX

ORIGINAL BY: K. KEMPF DATE: 5-11-12
 MODIFIED BY: [Signature] DATE: [Blank]
 CHECKED BY: [Signature] DATE: 5/30/12
 FILE SPEC.: special_details\kkempf\english\I5402_ib78cmp.dgn

20 MAY 2012 10:35
 C:\Users\jckempf\Documents\Special_Details\kkempf\english\I5402_ib78cmp.dgn
 \$\$\$USERNAME\$\$\$

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C202959

ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION
0000400000-N	801	Lump Sum		CONSTRUCTION SURVEYING
0001000000-E	200	Lump Sum		CLEARING & GRUBBING .. ACRE(S)
0008000000-E	200	1	ACR	SUPPLEMENTARY CLEARING & GRUBBING
0022000000-E	225	180	CY	UNCLASSIFIED EXCAVATION
0036000000-E	225	20	CY	UNDERCUT EXCAVATION
0106000000-E	230	90	CY	BORROW EXCAVATION
0156000000-E	250	550	SY	REMOVAL OF EXISTING ASPHALT PAVEMENT
0318000000-E	300	95	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES
0320000000-E	300	300	SY	FOUNDATION CONDITIONING GEOTEXTILE
0448200000-E	310	604	LF	15" RC PIPE CULVERTS, CLASS IV
0576000000-E	310	188	LF	*** CS PIPE CULVERTS, ***** THICK (48", 0.109")
0582000000-E	310	80	LF	15" CS PIPE CULVERTS, 0.064" THICK
0636000000-E	310	4	EA	*** CS PIPE ELBOWS, ***** THICK (15", 0.064")
0636000000-E	310	2	EA	*** CS PIPE ELBOWS, ***** THICK (48", 0.064")
0995000000-E	340	50	LF	PIPE REMOVAL
0996000000-N	350	1	EA	PIPE CLEAN-OUT
1220000000-E	545	20	TON	INCIDENTAL STONE BASE
1491000000-E	610	230	TON	ASPHALT CONC BASE COURSE, TYPE B25.0C
1503000000-E	610	62	TON	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C
1523000000-E	610	26	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5C
1575000000-E	620	15	TON	ASPHALT BINDER FOR PLANT MIX
1693000000-E	654	12	TON	ASPHALT PLANT MIX, PAVEMENT REPAIR

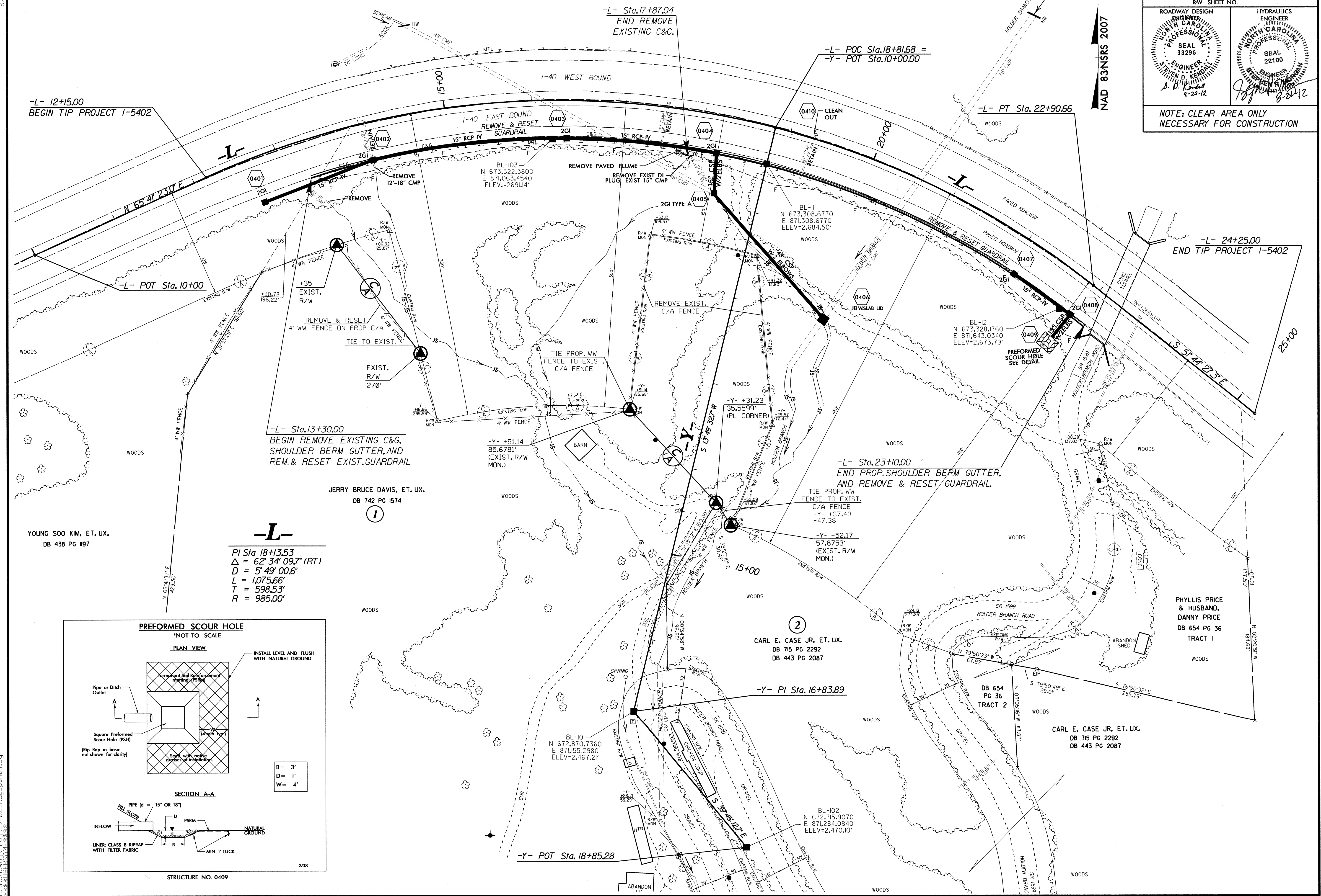
ItemNumber	Sec #	Quantity	Unit	Description
2000000000-N	806	5	EA	RIGHT OF WAY MARKERS
2022000000-E	815	112	CY	SUBDRAIN EXCAVATION
2033000000-E	815	84	CY	SUBDRAIN FINE AGGREGATE
2044000000-E	815	500	LF	6" PERFORATED SUBDRAIN PIPE
2070000000-N	815	1	EA	SUBDRAIN PIPE OUTLET
2077000000-E	815	6	LF	6" OUTLET PIPE
2264000000-E	840	1	CY	PIPE PLUGS
2286000000-N	840	8	EA	MASONRY DRAINAGE STRUCTURES
2308000000-E	840	5.12	LF	MASONRY DRAINAGE STRUCTURES
2364200000-N	840	5	EA	FRAME WITH TWO GRATES, STD 840.20
2365000000-N	840	2	EA	FRAME WITH TWO GRATES, STD 840.22
2556000000-E	846	985	LF	SHOULDER BERM GUTTER
3345000000-E	864	1,000	LF	REMOVE & RESET EXISTING GUARDRAIL
3500000000-E	866	160	LF	WOVEN WIRE FENCE, *** FABRIC (48")
3509000000-E	866	10	EA	4" TIMBER FENCE POSTS, 7'-6" LONG
3515000000-E	866	5	EA	5" TIMBER FENCE POSTS, 8'-0" LONG
3557000000-E	866	20	LF	ADDITIONAL BARBED WIRE
3566000000-E	867	155	LF	WOVEN WIRE FENCE RESET
3656000000-E	876	225	SY	GEOTEXTILE FOR DRAINAGE
3659000000-N	SP	1	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON
4400000000-E	1110	93	SF	WORK ZONE SIGNS (STATIONARY)
4405000000-E	1110	385	SF	WORK ZONE SIGNS (PORTABLE)
4415000000-N	1115	3	EA	FLASHING ARROW BOARD
4420000000-N	1120	2	EA	PORTABLE CHANGEABLE MESSAGE SIGN
4430000000-N	1130	86	EA	DRUMS
4465000000-N	1160	1	EA	TEMPORARY CRASH CUSHIONS

ItemNumber	Sec #	Quantity	Unit	Description
4480000000-N	1165	2	EA	TMA
4485000000-E	1170	1,500	LF	PORTABLE CONCRETE BARRIER
4510000000-N	SP	200	HR	LAW ENFORCEMENT
4600000000-N	SP	32	EA	GENERIC TRAFFIC CONTROL ITEM REMOVE AND REPLACE SNOWPLOW-ABLE PAVEMENT MARKER REFLECTOR
4650000000-N	1251	220	EA	TEMPORARY RAISED PAVEMENT MARKERS
4688000000-E	1205	5,000	LF	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS)
4690000000-E	1205	625	LF	THERMOPLASTIC PAVEMENT MARKING LINES (6", 120 MILS)
4721000000-E	1205	16	EA	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)
4815000000-E	1205	11,250	LF	PAINT PAVEMENT MARKING LINES (6")
4855000000-E	1205	8,750	LF	REMOVAL OF PAVEMENT MARKING LINES (6")
4905000000-N	1253	2	EA	SNOWPLOWABLE PAVEMENT MARKERS
6000000000-E	1605	1,600	LF	TEMPORARY SILT FENCE
6006000000-E	1610	210	TON	STONE FOR EROSION CONTROL, CLASS A
6009000000-E	1610	10	TON	STONE FOR EROSION CONTROL, CLASS B
6012000000-E	1610	100	TON	SEDIMENT CONTROL STONE
6015000000-E	1615	0.5	ACR	TEMPORARY MULCHING
6018000000-E	1620	50	LB	SEED FOR TEMPORARY SEEDING
6021000000-E	1620	0.25	TON	FERTILIZER FOR TEMPORARY SEEDING
6024000000-E	1622	200	LF	TEMPORARY SLOPE DRAINS
6029000000-E	SP	100	LF	SAFETY FENCE
6030000000-E	1630	80	CY	SILT EXCAVATION
6036000000-E	1631	1,500	SY	MATTING FOR EROSION CONTROL
6042000000-E	1632	250	LF	1/4" HARDWARE CLOTH
6071012000-E	SP	1,450	LF	COIR FIBER WATTLE
6084000000-E	1660	0.5	ACR	SEEDING & MULCHING
6087000000-E	1660	0.25	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
6114500000-N	1667	10	MHR	SPECIALIZED HAND MOWING
6117000000-N	SP	18	EA	RESPONSE FOR EROSION CONTROL

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8/17/99



-L- 12+15.00
BEGIN TIP PROJECT 1-5402

-L- POT Sta. 10+00

-L- Sta. 13+30.00
BEGIN REMOVE EXISTING C&G,
SHOULDER BERM GUTTER, AND
REM. & RESET EXIST. GUARDRAIL

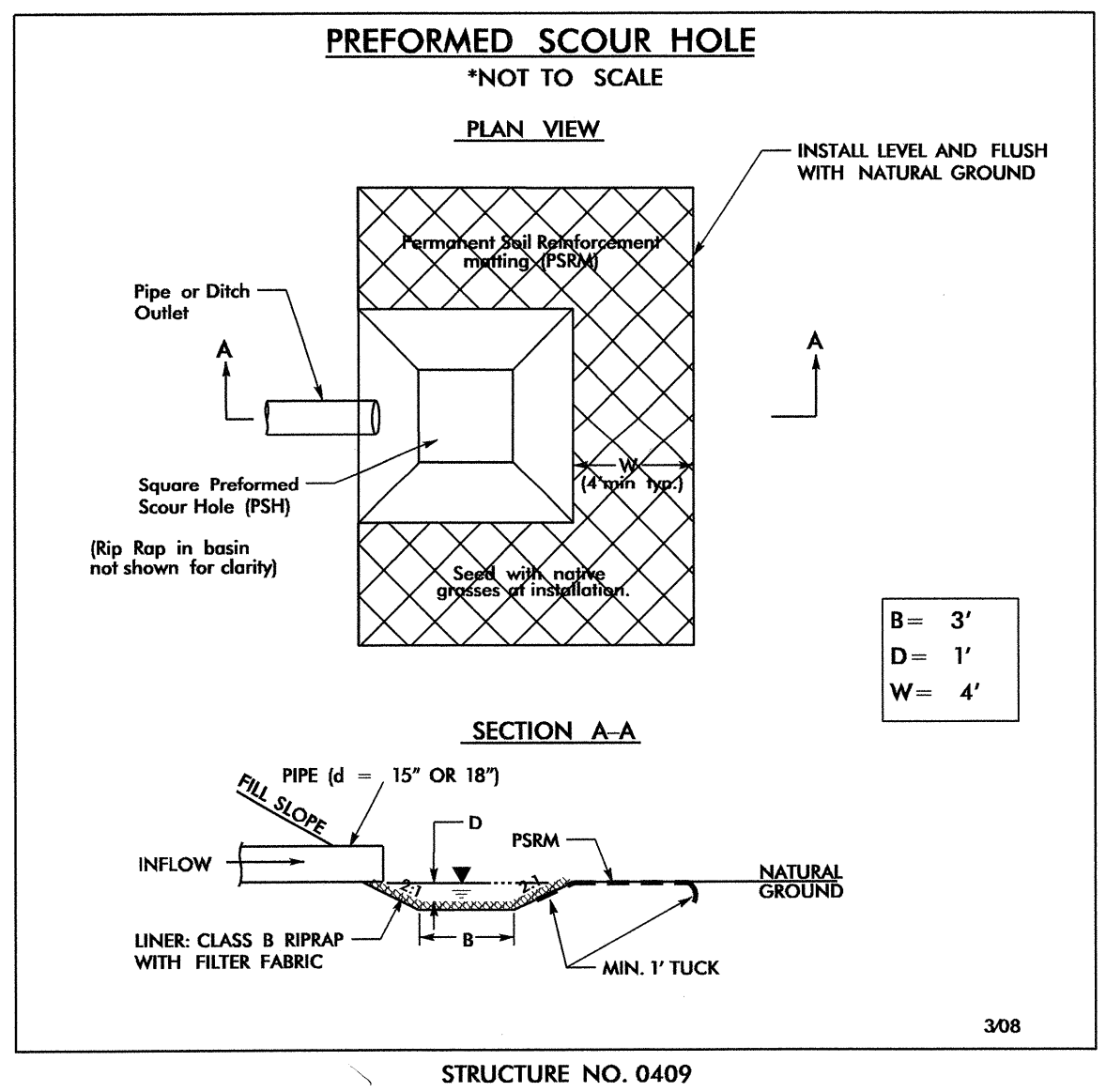
-L- Sta. 17+87.04
END REMOVE
EXISTING C&G.

-L- POC Sta. 18+81.68 =
-Y- POT Sta. 10+00.00

-L- PT Sta. 22+90.66

-L- 24+25.00
END TIP PROJECT 1-5402

-L-
PI Sta 18+13.53
Δ = 62° 34' 09.7" (RT)
D = 5' 49' 00.6"
L = 1,075.66'
T = 598.53'
R = 985.00'



308

21-AUG-2012 08:07 1:5402-Rdy-psm04.dgn