

Index Of Sheets

SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

CARTER COUNTY

STATE ROUTE 37 (US-19E)
INTERSECTION AT STATE ROUTE 67 (US-321)
LOG MILE 16.84

CONSTRUCTION
SIGNALIZATION, SIGNING AND PAVEMENT MARKING
STATE HIGHWAY NO. 37/67 F.A.H.S. NO. 37/67

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	STP/NH-SIP-37(16)	
STATE PROJ. NO.	10003-3264-94	



PROJECT LOCATION

- NO RIGHT-OF-WAY REQUIRED
- NO EXCLUSIONS
- NO EQUATIONS

UNOFFICIAL SET
NOT FOR BIDDING

10003-1264-94
END PROJ. STP/NH-SIP-37(16)
STA. 38+55.00

10003-1264-94
BEGIN PROJ. STP/NH-SIP-37(16)
STA. 30+72.00



ROADWAY LENGTH	0.000 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	0.000 MILES

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED FEBRUARY 4, 2014 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT C.E. MANAGER 1 ROLAND LEE JONES, P.E.
DESIGNED BY TRANSYSTEMS
DESIGNER JOSH LELJEDAL CHECKED BY STEPHEN K. BRYAN, P.E., PTOE
P.E. NO. 10003-1264-94
PIN NO. 117760.00

TRAFFIC DATA (SR 37)

ADT (2014)	12,170
ADT (2019)	12,770
DHV (2019)	1,145
D	60 - 40
T (ADT)	7 %
T (DHV)	5 %
V	50 MPH

TRAFFIC DATA (SR 67)

ADT (2014)	7,830
ADT (2019)	8,220
DHV (2019)	709
D	60 - 40
T (ADT)	6 %
T (DHV)	4 %
V	35 MPH

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE: _____

APPROVED: [Signature]
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-STP-37(16)	1A

INDEX

STANDARD ROADWAY DRAWINGS

SHEET NAME	SHEET NO.
TITLE SHEET	1
ROADWAY INDEX AND STANDARD DRAWINGS INDEX.....	1A
ESTIMATED ROADWAY QUANTITIES	2
GENERAL NOTES AND SPECIAL NOTES.....	2A – 2B
TABULATED QUANTITIES	2C
UTILITY CONTACTS AND NOTES.....	3
PRESENT LAYOUT.....	4
SIGNAL LAYOUT	5
SIGNAL DETAILS	5A
TRAFFIC CONTROL SIGNING.....	6
UTILITIES INDEX, UTILITY OWNERS AND UTILITY SHEETS	U1-1

NO PROJECT COMMITMENT SHEET INCLUDED IN THIS SET OF PLANS

DWG. NO	REV.	DESCRIPTION
ROADWAY DESIGN STANDARDS		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
TRAFFIC CONTROL APPURTENANCES		
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	11-01-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-15-13	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	09-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-9	11-01-11	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-12	05-27-03	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, SQUARE TUBES
T-S-16	11-01-11	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-19-13	STANDARD MEMBERS BENDAWAY SIGN SUPPORTS STEEL DESIGN
T-S-20	11-01-11	SIGN DETAILS
T-SG-2	07-29-04	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	11-11-04	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
T-SG-4		SPAN WIRE AND MESSENGER CABLE DETAILS
T-SG-5	07-29-04	CONTROLLER CABINET DETAILS
T-SG-7	11-01-11	SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS
T-SG-7A	11-01-11	TYPICAL SIGNAL HEAD PLACEMENT
T-SG-8	11-01-11	STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS
T-SG-9A		MISCELLANEOUS SIGNAL DETAILS
T-SG-10	05-06-13	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-12	11-01-11	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS
T-WZ-40	04-02-12	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-41	04-02-12	LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS

DWG. NO	REV.	DESCRIPTION
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-37	08-01-12	SEDIMENT TUBES

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX
AND
STANDARD
DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(16)	2

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	0.5
201-01	CLEARING AND GRUBBING	LS	0.5
712-01	TRAFFIC CONTROL	LS	0.5
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
712-06	SIGNS (CONSTRUCTION)	S.F.	239
712-08.03	ARROW BOARD (TYPE C)	EACH	3
713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK)	EACH	3
(1) 713-16.20	SIGNS (W3-3)	EACH	5
716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	199
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	100
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	6
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	LF	292
717-01	MOBILIZATION	LS	0.5
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	5
730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	1
730-02.30	SIGNAL HEAD ASSEMBLY (140 A1 WITH BACKPLATE)	EACH	1
(2) 730-03.21	INSTALL PULL BOX (TYPE B)	EACH	9
730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
730-05.02	SERVICE CABLE (2 CONDUCTOR, # 8 AWG)	L.F.	250
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	810
730-09.01	SPAN WIRE ASSEMBLY(22,500 LBS.MIN.BRK STRENGTH)	L.F.	331
730-10.01	TETHER WIRE ASSEMBLY - 1/4" DIAMETER	L.F.	331
730-11.01	STEEL CONDUIT RISER ASSEMBLY	EACH	1
730-12.01	CONDUIT 1" DIAMETER (PVC)	L.F.	50
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	440
730-12.07	CONDUIT 1" DIAMETER (RGS)	L.F.	200
730-12.08	CONDUIT 2" DIAMETER (RGS)	L.F.	330
730-12.12	CONDUIT 1" DIAMETER (JACK AND BORE)	L.F.	130
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	590
730-13.01	VEHICLE LOOP DETECTOR (SHELF MOUNT)	EACH	7
730-14.01	SHIELDED DETECTOR CABLE	L.F.	970
730-14.02	SAW SLOT	L.F.	430
730-14.03	LOOP WIRE	L.F.	820
730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1
730-23.01	STEEL STRAIN POLE (SIGNAL SUPPORT)	EACH	4
740-11.01	TEMPORARY SEDIMENT TUBE 8IN (EPSC)	L.F.	100
801-01	SEEDING (WITH MULCH)	UNIT	1
801-03	WATER (SEEDING AND SODDING)	M.G.	1

FOOTNOTES

- (1) UNIT PRICE PER EACH SHALL INCLUDE COST FOR THE REQUIRED TYPE P8 POST.
- (2) CONTRACTOR TO BE RESPONSIBLE FOR COSTS OF OBTAINING ELECTRICAL SERVICE CONNECTION.

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(16)	2A

GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (2) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

MISCELLANEOUS

- (1) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

SIGNING

- (1) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.
- (2) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.
- (3) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.
- (4) THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND LINE.
- (5) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

SIGNALIZATION

- (1) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.
- (2) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.
- (3) SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS PRIOR TO ACTIVATION OF THE SIGNAL.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- (3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (5) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED

FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

- (6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION PREVENTION AND SEDIMENT CONTROL DISTURBED AREA

- (1) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- (2) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.
- (3) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- (4) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.
- (5) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.

SEDIMENT CONTROL

- (6) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- (7) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
- (8) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

- (9) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
- (10) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.
- (11) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(16)	2B

SPECIAL NOTES

SIGNALIZATION

- (1) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.
- (2) ALL CIRCULAR AND ARROW INDICATIONS WITHIN ALL VEHICULAR SIGNAL HEADS PROPOSED FOR THIS PROJECT SHALL CONSIST OF AN LED (LIGHT EMITTING DIODE) SIGNAL MODULE UNLESS OTHERWISE NOTED IN THE PLANS.
- (3) CIRCULAR INDICATIONS SHALL MEET "ITE VTC SH-LED CIRCULAR SIGNAL SUPPLEMENT" FOR EXPANDED/EXTENDED VIEW. ARROW INDICATIONS SHALL MEET "ITE VTC SH-3 LED ARROW SPECIFICATION" FOR EXPANDED/EXTENDED VIEW. PEDESTRIAN INDICATIONS SHALL MEET "ITE PTCSI PART 2".
- (4) INCANDESCENT OR SCREW-IN MODULES ARE NOT ACCEPTABLE.
- (5) COMPATIBILITY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.
- (6) MANUFACTURER SHALL PROVIDE A MINIMUM FIVE YEAR WARRANTY FOR OPERATION OF THE UNIT.
- (7) ALL SIGNAL HEADS SHALL INCLUDE SWIVEL BALANCE ADJUSTERS TO MAINTAIN THE PROPER VISIBILITY. COSTS OF THE ADJUSTERS TO BE INCLUDED IN COSTS OF THE SIGNAL HEADS.
- (8) THE ATTACHMENT OF THE TETHER WIRE TO THE POLE SHALL BE LOCATED BELOW THE LOWEST ELEVATION OF THE SIGNAL HEADS.

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(16)	2C

PERMANENT SIGN QUANTITIES

	DESCRIPTION	UNIT	QUANTITY	SIZE	MATERIAL	THICKNESS	M.U.T.C.D. NO.	REMARKS
1	SIGNAL AHEAD	EACH	5	30" X 30"	ALUMINUM	0.080"	W3-3	SEE NOTE 1 BELOW
2	US 321 LEFT	EACH	1	96" X 18"	ALUMINUM	0.080"	D3-1	SEE SHEET 5, SIGN S1
2	STATE LINE RD.	EACH	1	96" X 18"	ALUMINUM	0.080"	D3-1	SEE SHEET 5, SIGN S2
2	US 321 RIGHT	EACH	1	96" X 18"	ALUMINUM	0.080"	D3-1	SEE SHEET 5, SIGN S3
	TOTAL		8					

- 1 UNIT PRICE PER EACH SHALL INCLUDE COST FOR THE REQUIRED TYPE P8 POST
- 2 SIGNS PAID AS EACH

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED
QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(16)	2
CONST.	2014	STP/NH-SIP-37(16)	3

UTILITIES

- (1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- (2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- (3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- (5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

UTILITY OWNERS LIST

WATER:

CITY OF ELIZABETHTON
ATTN: JIM ROBERTS
136 SOUTH SYCAMORE
ELIZABETHTON, TN. 37643-3328
OFFICE: 423-547-6307
FAX: 423-547-6305
NOTE* UTILITY TO BE
CONSTRUCTED SOON. NOT
INSTALLED AT TIME OF SURVEY

HAMPTON UTILITIES DISTRICT
ATTN: TERRY BANNER
203 MAIN ST.
HAMPTON, TN 37658
OFFICE: (423) 725-2112

SOUTH ELIZABETHTON UTILITY DISTRICT
ATTN: LINDA BIRCHFIELD
1520 GAP CREEK ROAD
ELIZABETHTON, TN 37643-5700
OFFICE: (423) 542-8588

NORTH ELIZABETHTON WATER CO-OP
ATTN: JIM WILLIAMS
105 EMERALD POINT
ELIZABETHTON, TN 37643
OFFICE: (423) 543-1304

GAS:

ATMOS ENERGY CORP.
ATTN: JAMES HOLT
2833 W. MARKET ST.
JOHNSON CITY, TN 37604
OFFICE: 423-926-1888 EXT.235
FAX: 423-926-1828
CELL: 423-791-5263

ELECTRIC:

ELIZABETHTON ELECTRIC SYSTEMS
400 HATCHER LANE
ATTN: GREG DUGGER
P.O.BOX 790
ELIZABETHTON, TN 37643-0790
OFFICE: 423-542-1101
FAX: 423-542-8797

TELEPHONE:

CENTURY LINK
ATTN: ANDY ICE-ENGINEERING OFFICE
101 N ROANE ST.
TNJHNC0201
JOHNSON CITY, TN 37601
OFFICE: 423-461-7724

CABLE:

CHARTER CABLE
ATTN: RICK GRAY
10417 WALLACE ALLEY ST.
KINGSPORT, TN 37663
OFFICE: 423-247-8195
FAX: 423-247-1807

SEWER:

CITY OF ELIZABETHTON
ATTN: JOHANN COETZEE
136 SOUTH SYCAMORE
ELIZABETHTON, TN. 37643-3328
OFFICE: 423-547-6300
FAX: 423-547-6305

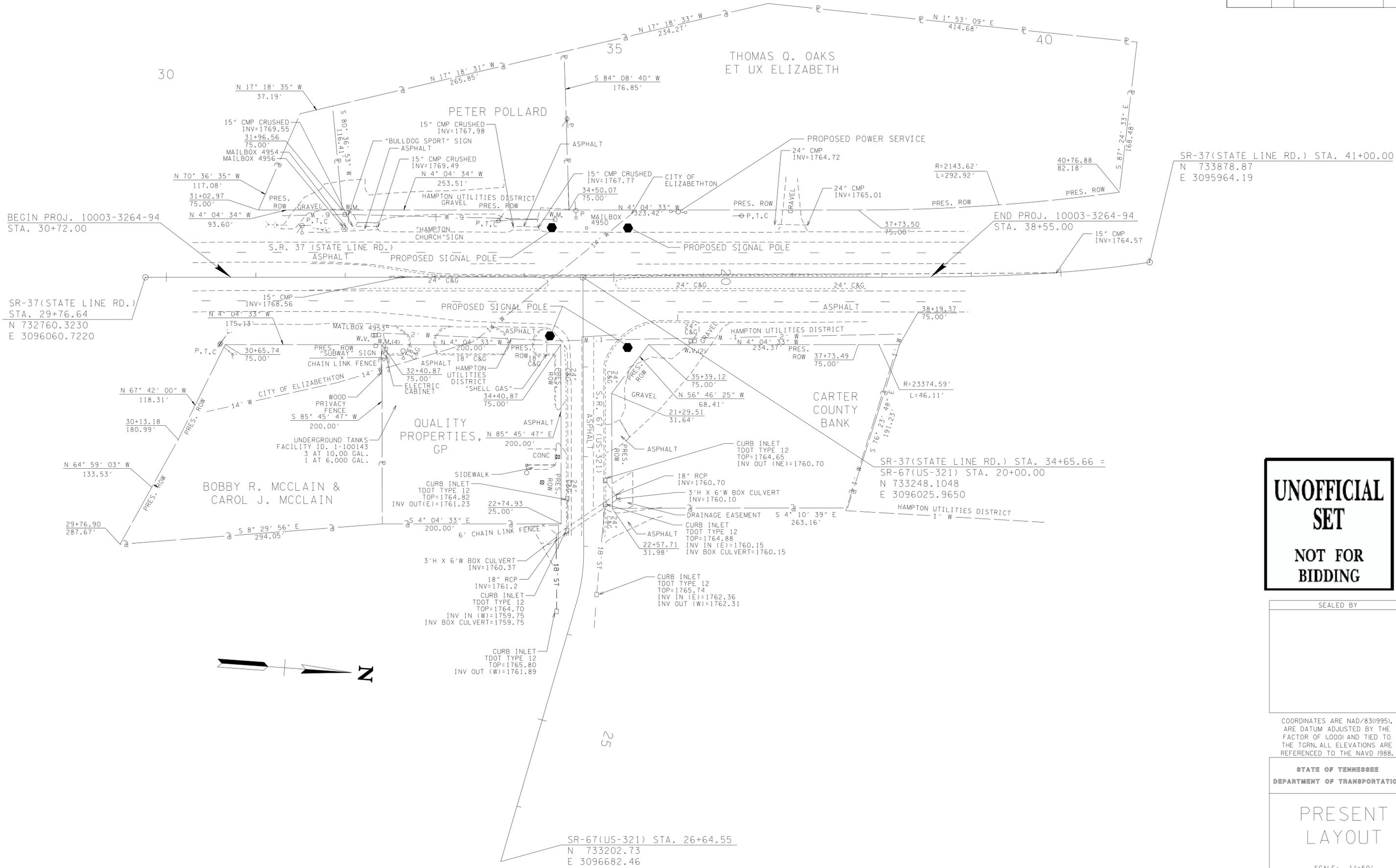
**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY
OWNERS AND
UTILITY NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(16)	3
CONST.	2014	STP/NH-SIP-37(16)	4



SR-37 (STATE LINE RD.) STA. 41+00.00
 N 733878.87
 E 3095964.19

BEGIN PROJ. 10003-3264-94
 STA. 30+72.00

SR-37 (STATE LINE RD.)
 STA. 29+76.64
 N 732760.3230
 E 3096060.7220

SR-37 (STATE LINE RD.) STA. 34+65.66 =
 SR-67 (US-321) STA. 20+00.00
 N 733248.1048
 E 3096025.9650

SR-67 (US-321) STA. 26+64.55
 N 733202.73
 E 3096682.46

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

SEALED BY

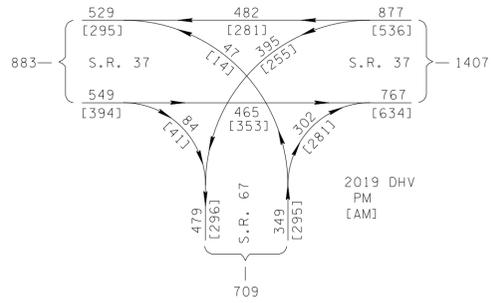
COORDINATES ARE NAD/83(1995),
 ARE DATUM ADJUSTED BY THE
 FACTOR OF 1.0001 AND TIED TO
 THE TGRN. ALL ELEVATIONS ARE
 REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

PRESENT
 LAYOUT

SCALE: 1"=50'

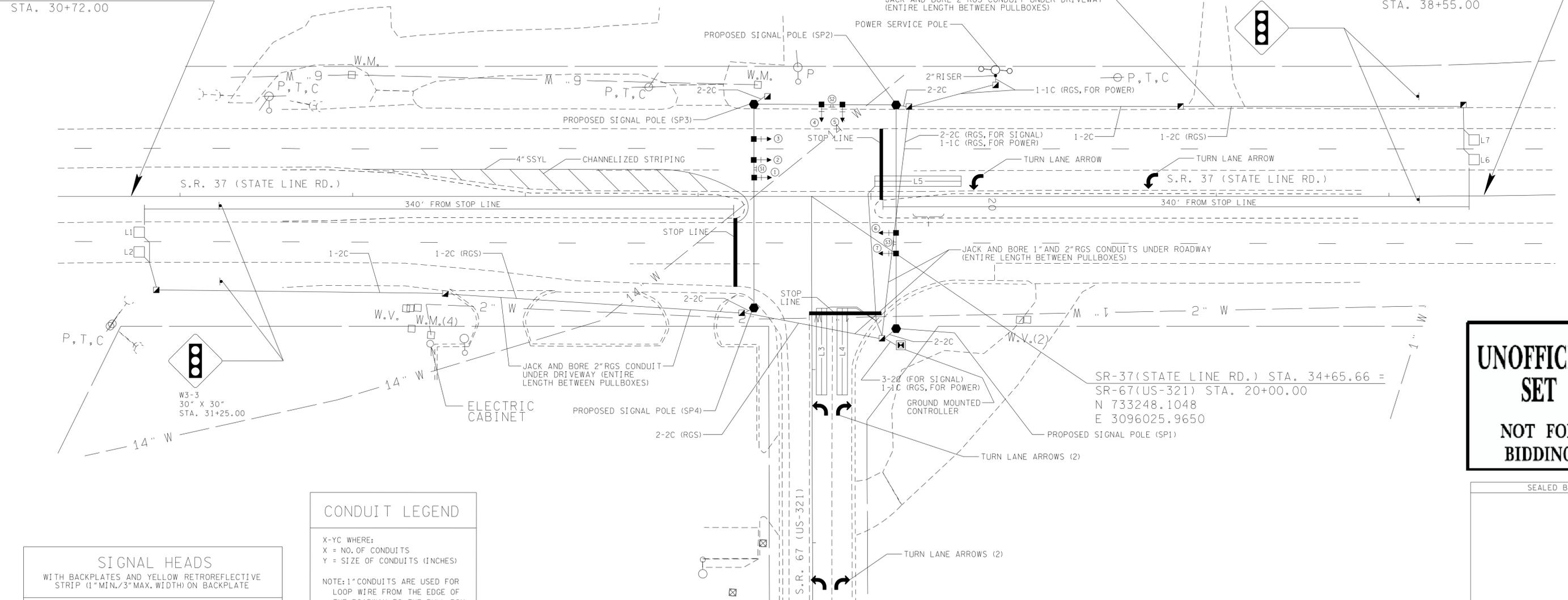
TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(16)	4
CONST.	2014	STP/NH-SIP-37(16)	5



35

BEGIN PROJ. 10003-3264-94
STA. 30+72.00

END PROJ. 10003-3264-94
STA. 38+55.00



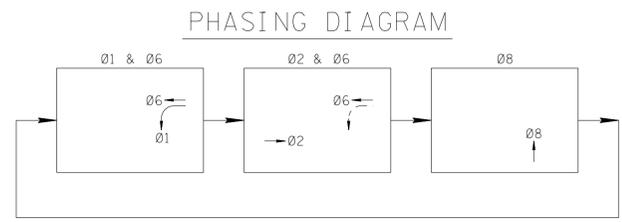
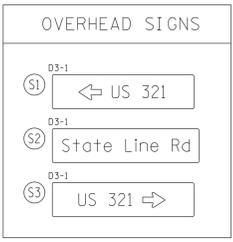
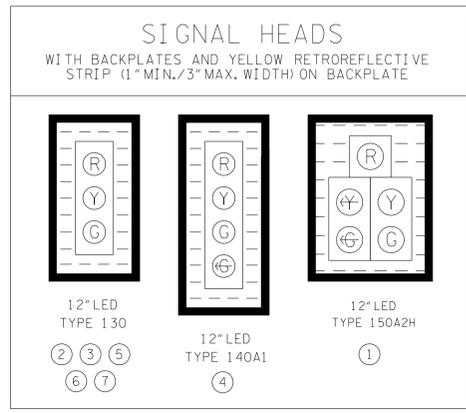
UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
SIGNAL LAYOUT
S.R. 37 AT
S.R. 67
SCALE: 1"=30'

CONDUIT LEGEND
X-YC WHERE:
X = NO. OF CONDUITS
Y = SIZE OF CONDUITS (INCHES)
NOTE: 1" CONDUITS ARE USED FOR LOOP WIRE FROM THE EDGE OF THE ROADWAY TO THE PULL BOX.



2/5/2013 3:52:39 PM g:\NAI2\0074\Road\Construction Plans\005 - Signal Layout.sht

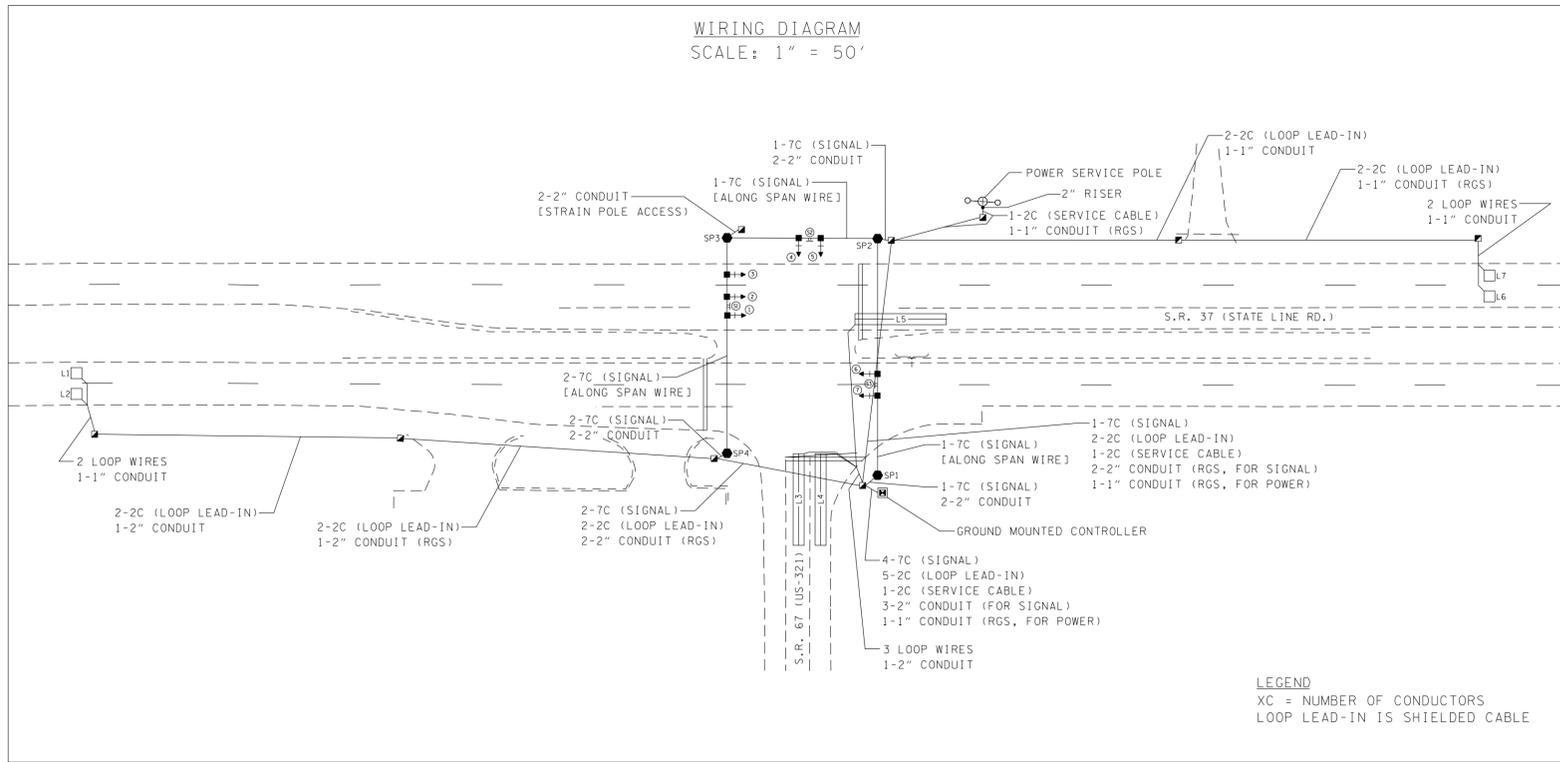
TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(16)	4A
CONST.	2014	STP/NH-SIP-37(16)	5A

MOVEMENT PHASE	Ø1 & Ø6	Ø2 & Ø6	Ø8
MIN GREEN	8	15	8
EXTENSION	4	4	4
YELLOW CLEARANCE	4.5	4.5	4.5
RED CLEARANCE	1.5	1.5	1.5
MAX GREEN 1	30	40	25
MAX GREEN 2	30	40	25
MAX RECALL		X	
MIN RECALL			
NON-LOCK	X		X
VEH OMIT			
PED OMIT	X	X	X
FLASH	YELLOW	YELLOW	RED

NOTE: 1. EXISTING SIGNAL TIMINGS PROVIDED ARE BASIC TIMINGS.

LOOP NO.	SIZE	TYPE	FUNCTION	CONTROLLER PHASE	TERMINALS
L1	6' X 6'	LOOP	PULSE	Ø2	
L2	6' X 6'	LOOP	PULSE	Ø2	
L3	6' X 50'	QUADRAPOLE	PRESENCE	Ø8	
L4	6' X 50'	QUADRAPOLE	PRESENCE	Ø8	
L5	6' X 50'	QUADRAPOLE	PRESENCE	Ø1	
L6	6' X 6'	LOOP	PULSE	Ø6	
L7	6' X 6'	LOOP	PULSE	Ø6	

SIGNAL HEAD	CONTROLLER PHASE TERMINALS
1	Ø1 & Ø6
2	Ø6
3	Ø6
4	Ø8
5	Ø8
6	Ø2
7	Ø2

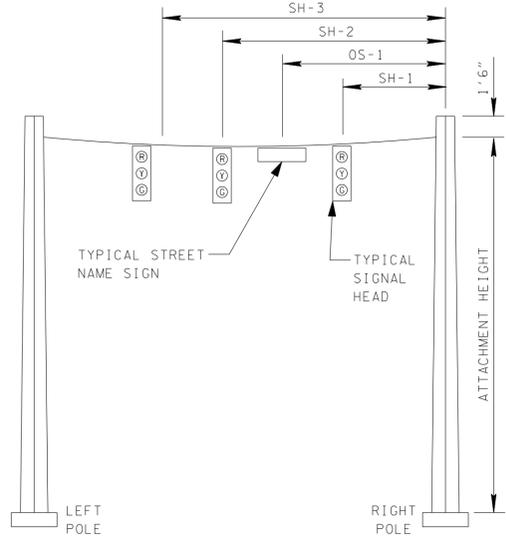


UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SIGNAL DETAILS
S.R. 37 AT
S.R. 67



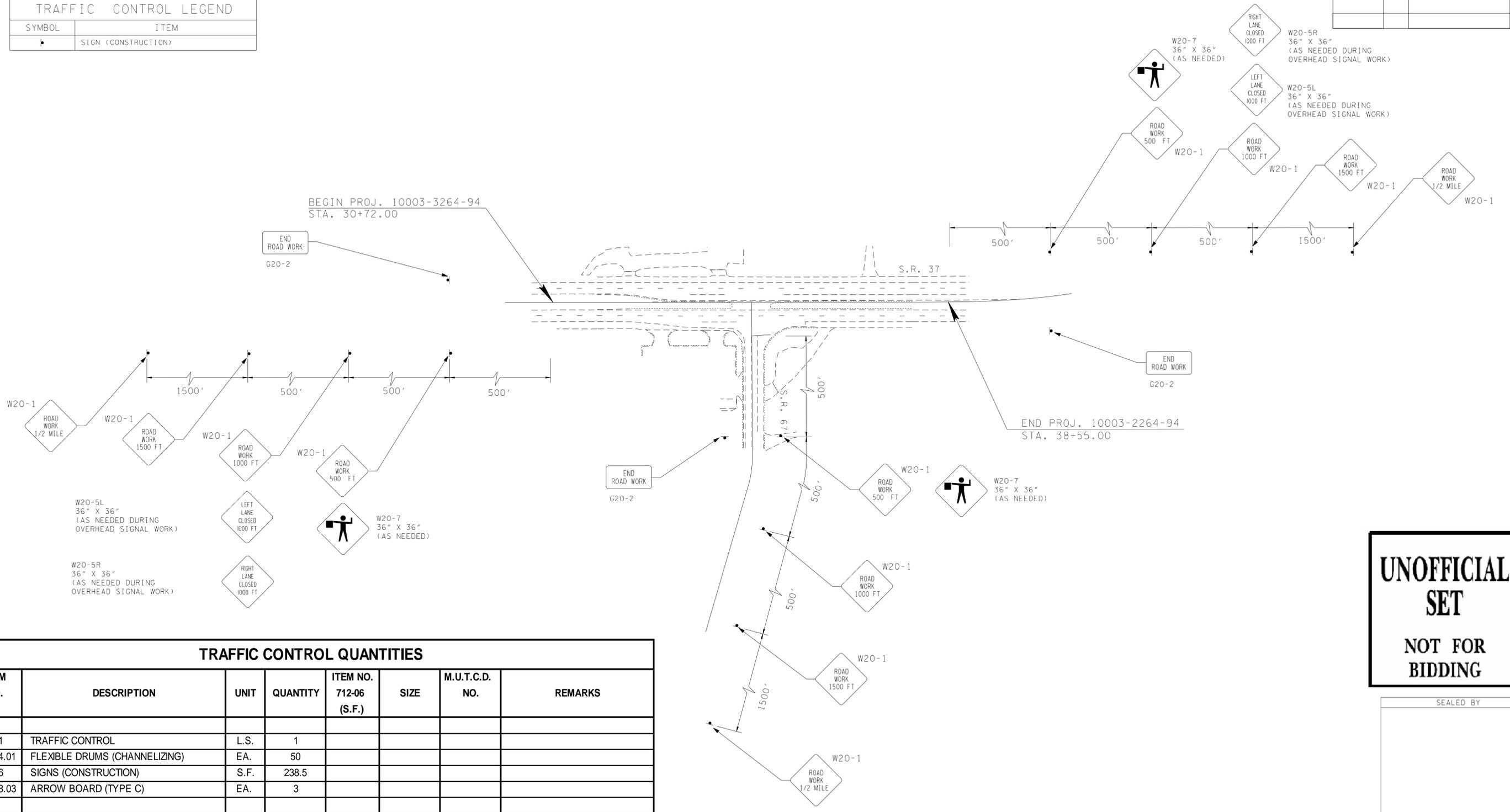
STRAIN POLE	FROM S.R. 37 CENTERLINE		COORDINATES	POLE HEIGHT	POLE BASE ELEVATION	ATTACHMENT HEIGHT	MOMENT CAPACITY	FOUNDATION	
	STATION	OFFSET						DIAMETER	DEPTH
SP1	35+15	77' RT	N 733302.3855 E 3096098.6803	30'	1768.0	28'	216,600 FT-LBS	3'-0"	22'
SP2	35+15	53' LT	N 733293.2055 E 3095969.8496	30'	1768.0	28'	285,000 FT-LBS	3'-0"	25'
SP3	34+39	53' LT	N 733211.0594 E 3095975.2884	32'	1768.6	29'	274,100 FT-LBS	3'-0"	25'
SP4	34+39	65' RT	N 733219.4169 E 3096092.5762	32'	1768.8	29'	195,100 FT-LBS	3'-0"	21'

LEFT POLE	RIGHT POLE	SPAN	SH-1	SH-2	SH-3	SH-4	OS-1	OS-2	OS-3
SP4	SP3	118'	21'	33'	43'		38'		
SP3	SP2	83'	32'	44'			38'		
SP2	SP1	130'	44'	56'			50'		

NOTE: ALL MEASUREMENTS ARE WITH RESPECT TO THE RIGHT POLE.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(16)	5
CONST.	2014	STP/NH-SIP-37(16)	6

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	SIGN (CONSTRUCTION)



TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	ITEM NO.		M.U.T.C.D. NO.	REMARKS
				712-06 (S.F.)	SIZE		
712-01	TRAFFIC CONTROL	L.S.	1				
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EA.	50				
712-06	SIGNS (CONSTRUCTION)	S.F.	238.5				
712-08.03	ARROW BOARD (TYPE C)	EA.	3				
SIGNS 712-06	END ROAD WORK	S.F.	3	13.5	36"X18"	G20-2	
	ROAD WORK 1/2 MILE	S.F.	3	27	36"X36"	W20-1	
	ROAD WORK 1500 FT	S.F.	3	27	36"X36"	W20-1	
	ROAD WORK 1000 FT	S.F.	3	27	36"X36"	W20-1	
	ROAD WORK 500 FT	S.F.	3	27	36"X36"	W20-1	
	LEFT LANE CLOSED 1000 FT	S.F.	3	27	36"X36"	W20-5L	
	RIGHT LANE CLOSED 1000 FT	S.F.	3	27	36"X36"	W20-5R	AS NEEDED DURING OVERHEAD SIGNAL WORK
	LANE REDUCTION (LEFT)	S.F.	2	18	36"X36"	W4-2L	
	LANE REDUCTION (RIGHT)	S.F.	2	18	36"X36"	W4-2R	
	FLAGGER	S.F.	3	27	36"X36"	W20-7	AS NEEDED
TOTAL			19	238.5			

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC
CONTROL PLAN

SCALE: NTS

2/5/2013 3:53:37 PM g:\NAI2\0074\Road\Construction Plans\006 - Traffic Control\Signing.sht

Index Of Sheets

SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	STP/NH-SIP-37(17)	
STATE PROJ. NO.	10003-3265-94	

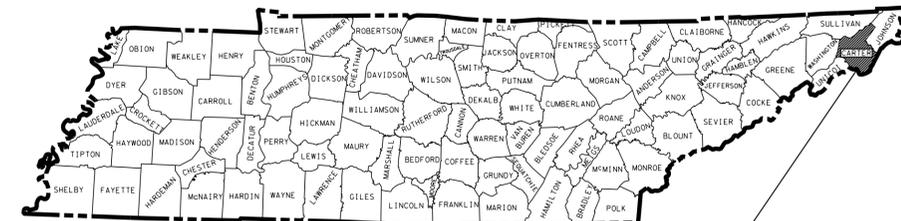
CARTER COUNTY

STATE ROUTE 37 (US-19E)
AT RACHEL CLAWSON ROAD/
HAMPTON HIGH SCHOOL
LOG MILE 16.16

CONSTRUCTION

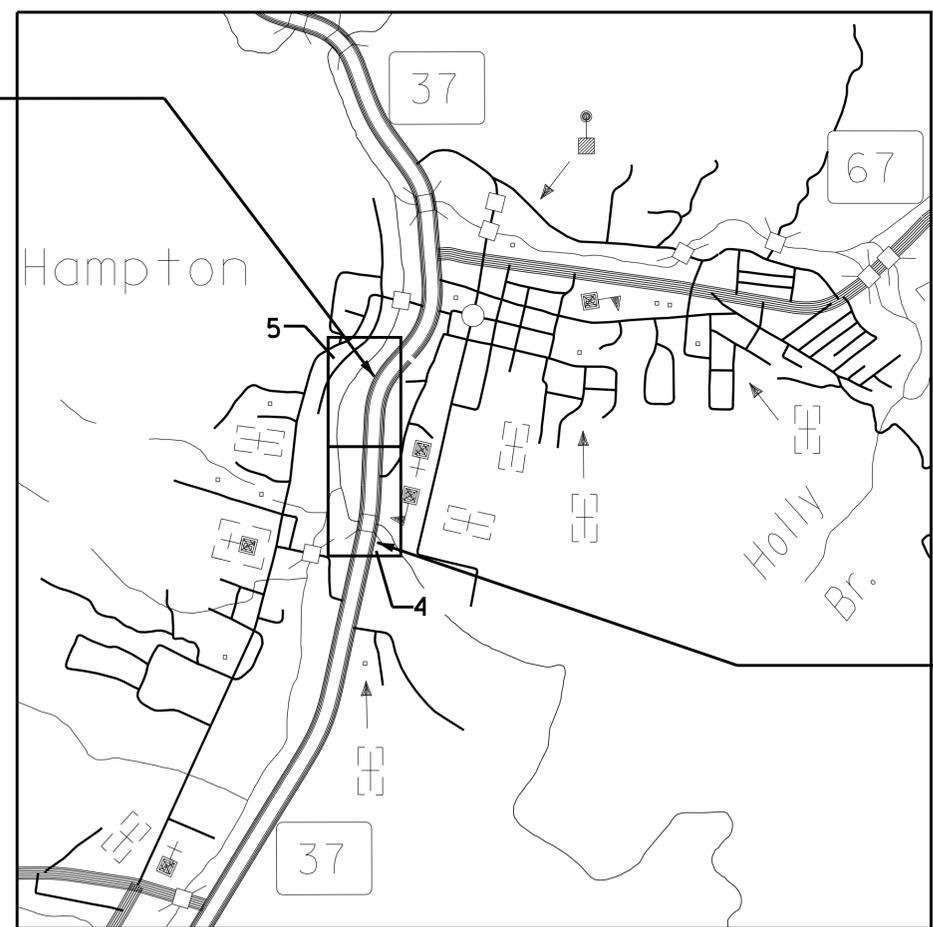
GRADING, PAVING, FLASHING SIGNAL, SIGNING AND PAVEMENT MARKING

STATE HIGHWAY NO. 37 F.A.H.S. NO. 37



PROJECT LOCATION

10003-3265-94
END PROJ. STP/NH-SIP-37(17)
STA. 920+10.00



NO RIGHT-OF-WAY REQUIRED

NO EXCLUSIONS
NO EQUATIONS

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

10003-3265-94
BEGIN PROJ. STP/NH-SIP-37(17)
STA. 905+50.00

APPROVED: *Paul D. Degges*
PAUL D. DEGGES, CHIEF ENGINEER

DATE: _____

APPROVED: *John Schroer*
JOHN SCHROER, COMMISSIONER

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED FEBRUARY 4, 2014 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT C.E. MANAGER 1 ROLAND LEE JONES, P.E.
DESIGNED BY TRANSYSTEMS
DESIGNER JOSH LELJEDAL CHECKED BY STEPHEN K. BRYAN, P.E., PTOE
P.E. NO. 10003-1265-94
PIN NO. 117765.00



ROADWAY LENGTH	0.277 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	0.277 MILES

TRAFFIC DATA	
ADT (2014)	9,030
ADT (2019)	9,450
DHV (2019)	945
D	50 - 50
T (ADT)	7 %
T (DHV)	5 %
V	50 MPH

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

INDEX

SHEET NAME	SHEET NO.
TITLE SHEET	1
ROADWAY INDEX AND STANDARD DRAWINGS INDEX	1A
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVING SCHEDULE	2A
GENERAL NOTES AND SPECIAL NOTES	2B – 2C
TABULATED QUANTITIES	2D
UTILITY OWNERS AND UTILITY NOTES	3
PRESENT LAYOUTS	4 - 5
PROPOSED LAYOUTS	4A – 5A
PROPOSED PROFILES	4B – 5B
DRAINAGE MAP	6
EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANS	7 – 7B
EXISTING CONTOURS	8 – 8A
PROPOSED CONTOURS	9 – 9A
PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES	10
TRAFFIC CONTROL PLAN	10A – 10B
ROADWAY CROSS SECTIONS	11 - 17
UTILITIES INDEX, UTILITY OWNERS, AND UTILITY SHEETS	U1-1

NO PROJECT COMMITMENT SHEET INCLUDED IN THIS SET OF PLANS

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
ROADWAY DESIGN STANDARDS		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-8		STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-S-12	08-01-09	CLEAR ZONE CRITERIA
RD01-TS-3A	10-15-02	DESIGN STANDARDS 4 AND 6 LANE ARTERIAL HIGHWAYS WITH DEPRESSED MEDIANS
TRAFFIC CONTROL APPURTENANCES		
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-L-1	02-15-07	STANDARD LIGHTING FOUNDATION DETAILS
T-M-1	11-01-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-15-13	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-9	11-01-11	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-12	05-27-03	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, SQUARE TUBES
T-S-16	11-01-11	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-19-13	STANDARD MEMBERS BENDAWAY SIGN SUPPORTS STEEL DESIGN
T-S-20	11-01-11	SIGN DETAILS
T-S-23C	07-19-13	BREAKAWAY U-POST SIGN SUPPORTS
T-SG-9	11-16-07	DETAILS OF CANTILEVER SIGNAL SUPPORT
T-SG-9A		MISCELLANEOUS SIGNAL DETAILS
T-SG-10	05-06-13	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-13	06-01-09	FLASHING BEACON DETAIL
T-WZ-18	03-13-09	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-WZ-40	04-02-12	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-41	04-02-12	LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS

DWG. NO	REV.	DESCRIPTION
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6	08-01-12	SEDIMENT TUBE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(17)	1A

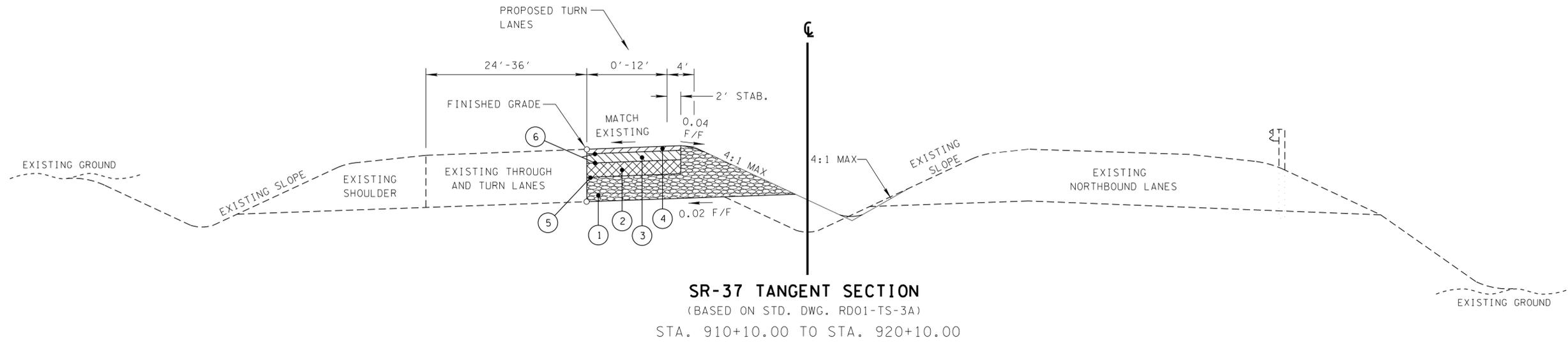
**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**INDEX
AND
STANDARD
DRAWINGS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	2
CONST.	2014	STP/NH-SIP-37(17)	2A



PROPOSED PAVEMENT SCHEDULE		
① MINERAL AGGREGATE BASE (10"± DEPTH) <small>ITEM 303-01 MINERAL AGGREGATE TYPE A BASE, GRADING D</small>	② BLACK BASE (APPROX. 460 LBS./S.Y.) (4"± DEPTH) <small>ITEM 307-01.01 ASPHALT CONCRETE MIX (PG 64-22) (BPMB-HM) GRADING A</small>	③ BINDER (APPROX. 254.25 LBS./S.Y.) (2.25"± DEPTH) <small>ITEM 307-01.08 ASPHALT CONCRETE MIX (PG 64-22) (BPMB-HM) GRADING B-M2</small>
④ SURFACE (APPROX. 106 LBS./S.Y.) (1.25"± DEPTH) <small>ITEM 411-01.10 ACS MIX (PG 64-22) GRADING D</small>	⑤ PRIME COAT <small>ITEM 402-01 BIT. MATERIAL FOR PRIME COAT (PC) @ 0.30-0.35 GAL/S.Y. ITEM 402-02 AGGREGATE FOR COVER MATERIAL (PC) @ 8-12 LBS./S.Y.</small>	⑥ TACK COAT <small>ITEM 403-01 BIT. MATERIAL FOR TACK COAT (TC) @ 0.02 GAL/S.Y.</small>

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL
SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(17)	2B

GENERAL NOTES

GRADING

- ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

- ITEM NO. 801-01, SEEDING (WITH MULCH), SHALL BE USED WHERE EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.

DRAINAGE

- THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

MISCELLANEOUS

- NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

PAVEMENT MARKINGS

FINAL PAVEMENT MARKING IF 4" ENHANCED FLATLINE THERMOPLASTIC IS USED

- PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.01, ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

PAVEMENT

PAVING

- THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.

SIGNING

- THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.
- AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.
- THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

SIGNALIZATION

- EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

- IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06.10, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

- A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

- TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

- USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

- THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

- ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

- AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.
- CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.
- CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.

SEDIMENT CONTROL

- EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
- CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.
- OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

- SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

INSPECTION, MAINTENANCE, REPAIR

- EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.
- INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
- SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.

MATERIALS

- WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**GENERAL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2014	STP/NH-SIP-37(17)	2C

GENERAL NOTES (CONTINUED)

LITTER, DEBRIS, WASTE, PETROLEUM

- (16) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.
- (17) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

SPECIAL NOTES

SIGNALIZATION

- (1) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.
- (2) ALL CIRCULAR AND ARROW INDICATIONS WITHIN ALL VEHICULAR SIGNAL HEADS PROPOSED FOR THIS PROJECT SHALL CONSIST OF AN LED (LIGHT EMITTING DIODE) SIGNAL MODULE UNLESS OTHERWISE NOTED IN THE PLANS.
- (3) CIRCULAR INDICATIONS SHALL MEET "ITE VTCSH-LED CIRCULAR SIGNAL SUPPLEMENT" FOR EXPANDED/EXTENDED VIEW. ARROW INDICATIONS SHALL MEET "ITE VTCSH-3 LED ARROW SPECIFICATION" FOR EXPANDED/EXTENDED VIEW. PEDESTRIAN INDICATIONS SHALL MEET "ITE PTCSI PART 2".
- (4) INCANDESCENT OR SCREW-IN MODULES ARE NOT ACCEPTABLE.

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES
AND
SPECIAL NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(17)	2D

ESTIMATED GRADING QUANTITIES							
STATION TO STATION	ROAD & DRAINAGE EXC. (UNCL.)		BORROW EXCAVATION		CHANNEL	EXCESS EXC.	EMB.
	COMMON - C.Y.	S. ROCK - C.Y.	UNCL. - C.Y.	S. ROCK - C.Y.	EXC. C.Y.	WASTE C.Y.	EMB. C.Y.
	910+10.00 To 920+10.00	955					660
TOTALS	955	0	0	0	0	660	180

1 Road and Drainage Excavation includes 415 C.Y. of topsoil excavation. Proposed slopes require 295 C.Y. of topsoil. Assumption was made that common excavation material is unsuitable as embankment requiring 180 C.Y. of borrow material after 20% shrinkage factor is applied.

PERMANENT SIGNS													
DESCRIPTION	M.U.T.C.D. NO.	MATERIAL	THICKNESS	UNIT	QUANTITY	SIZE	ITEM NO. 713-13.02 (S.F.)	ITEM NO. 713-13.03 (S.F.)	POST TYPE	POST LENGTH (FT.)	POST WEIGHT (LBS/FT)	ITEM NO. 713-11.02 (LB.)	REMARKS
SCHOOL ADVANCE CROSSING AHEAD	S1-1 W16-9P	ALUMINUM	0.100" 0.080"	S.F.	2	36"X36" 24"X12"		18.00	P5	13.00	3.141	116	SEE SHEETS 4A AND 5A MOUNTED WITH OTHER SIGNS
							4.00	18.00				116	

1 INCLUDES 35 LB FOR TWO (2) 3" SQUARE ANCHORS

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TABULATED
QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	3
CONST.	2014	STP/NH-SIP-37(17)	3

UTILITIES

- (1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- (2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- (3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- (5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

UTILITY OWNERS LIST

WATER:

CITY OF ELIZABETHTON
ATTN: JIM ROBERTS
136 SOUTH SYCAMORE
ELIZABETHTON, TN. 37643-3328
OFFICE: 423-547-6307
FAX: 423-547-6305
NOTE* UTILITY TO BE
CONSTRUCTED SOON. NOT
INSTALLED AT TIME OF SURVEY

HAMPTON UTILITIES DISTRICT
ATTN: TERRY BANNER
203 MAIN ST.
HAMPTON, TN 37658
OFFICE: (423) 725-2112

SOUTH ELIZABETHTON UTILITY DISTRICT
ATTN: LINDA BIRCHFIELD
1520 GAP CREEK ROAD
ELIZABETHTON, TN 37643-5700
OFFICE: (423) 542-8588

NORTH ELIZABETHTON WATER CO-OP
ATTN: JIM WILLIAMS
105 EMERALD POINT
ELIZABETHTON, TN 37643
OFFICE: (423) 543-1304

ELECTRIC:

ELIZABETHTON ELECTRIC SYSTEMS
400 HATCHER LANE
ATTN: GREG DUGGER
P.O.BOX 790
ELIZABETHTON, TN 37643-0790
OFFICE: 423-542-1101
FAX: 423-542-8797

TELEPHONE:

CENTURY LINK
ATTN: ANDY ICE-ENGINEERING OFFICE
101 N ROANE ST.
TNJHNC0201
JOHNSON CITY, TN 37601
OFFICE: 423-461-7724

CABLE:

CHARTER CABLE
ATTN: RICK GRAY
10417 WALLACE ALLEY ST.
KINGSPORT, TN 37663
OFFICE: 423-247-8195
FAX: 423-247-1807

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**UTILITY
OWNERS AND
UTILITY NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	4
CONST.	2014	STP/NH-SIP-37(17)	4

CURVE SC100
 PI 905+92.76
 N 729,306.6174
 E 3,095,168.8617
 Δs 9° 51' 00" (LT)
 Θs 1° 30' 00"
 Δc 6° 51' 00" (LT)
 Δc 1° 30' 00"
 Rc 3,819.72
 Lc 456.67
 Ls 429.18
 Tc 200.00

905
RONNIE WAYNE & PENNY PIERCE

910

CARTER COUNTY BOARD OF EDUCATION

BUSTER D. & SHERRY FREEMAN

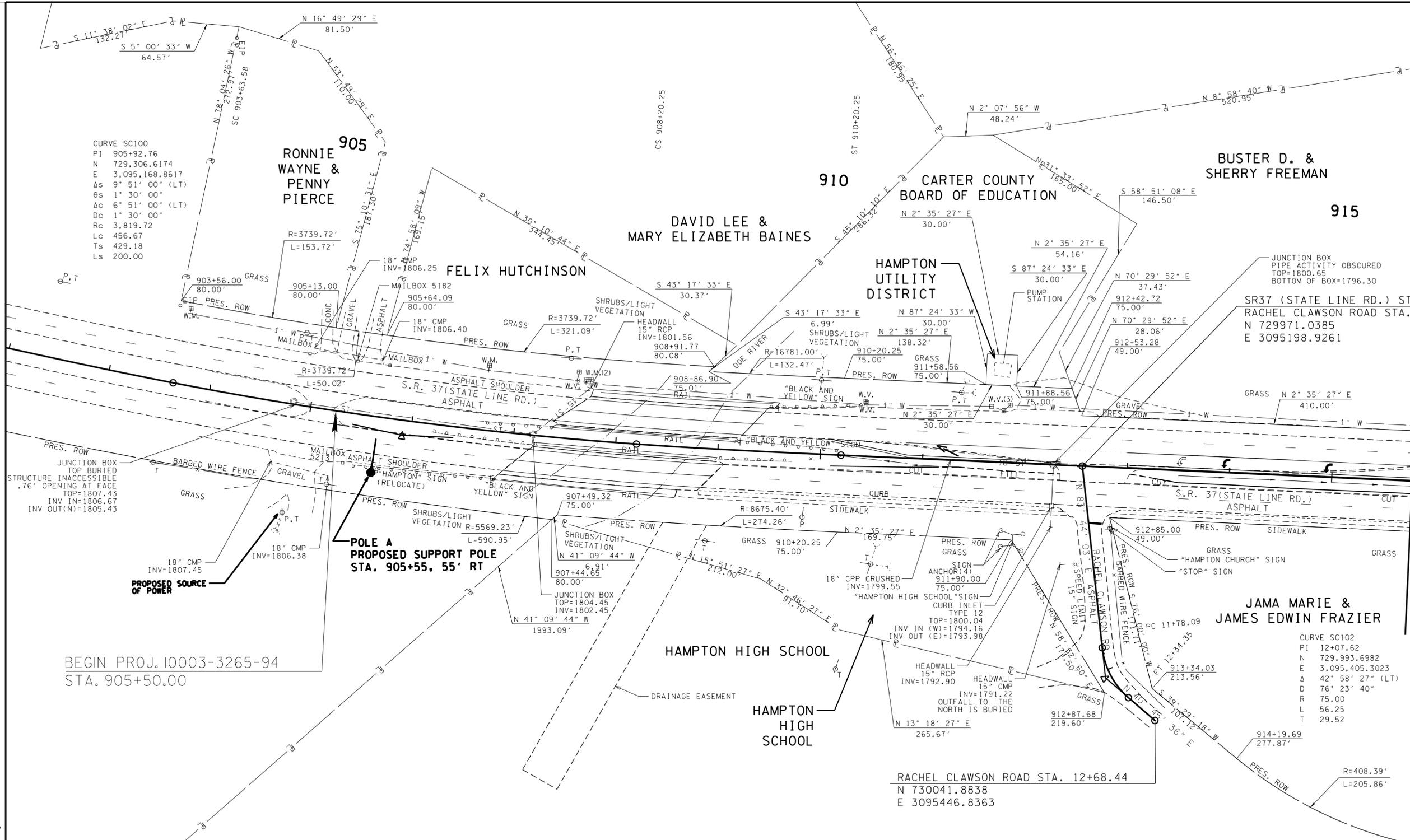
915

DAVID LEE & MARY ELIZABETH BAINES

HAMPTON UTILITY DISTRICT

FELIX HUTCHINSON

**JUNCTION BOX
 PIPE ACTIVITY OBLSCURED
 TOP=1800.65
 BOTTOM OF BOX=1796.30**
**SR37 (STATE LINE RD.) STA. 912+56.17
 RACHEL CLAWSON ROAD STA. 10+00.00
 N 729971.0385
 E 3095198.9261**



JUNCTION BOX
 TOP BURIED
 STRUCTURE INACCESSIBLE
 .76' OPENING AT FACE
 TOP=1807.43
 INV IN=1806.67
 INV OUT(N)=1805.43

**PROPOSED SOURCE
 OF POWER**

**POLE A
 PROPOSED SUPPORT POLE
 STA. 905+55.55 RT**

BEGIN PROJ. I0003-3265-94
 STA. 905+50.00

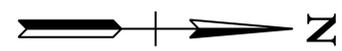
HAMPTON HIGH SCHOOL

HAMPTON HIGH SCHOOL

JAMA MARIE & JAMES EDWIN FRAZIER

**RACHEL CLAWSON ROAD STA. 12+68.44
 N 730041.8838
 E 3095446.8363**

CURVE SC102
 PI 12+07.62
 N 729,993.6982
 E 3,095,405.3023
 Δ 42° 58' 27" (LT)
 D 76° 23' 40"
 R 75.00
 L 56.25
 T 29.52



MATCH LINE STA. 915+79.24 SEE SHEET NO. 5

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995),
 ARE DATUM ADJUSTED BY THE
 FACTOR OF 1.0001 AND TIED TO
 THE TGRN. ALL ELEVATIONS ARE
 REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**PRESENT
 LAYOUT**
 STA. 905+50.00 TO
 STA. 915+79.24
 SCALE: 1"=50'

2/5/2013 4:54:24 PM G:\NAI2\0075\Road\Construction Plans\004 - Present Layout.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	4A
CONST.	2014	STP/NH-SIP-37(17)	4A

905

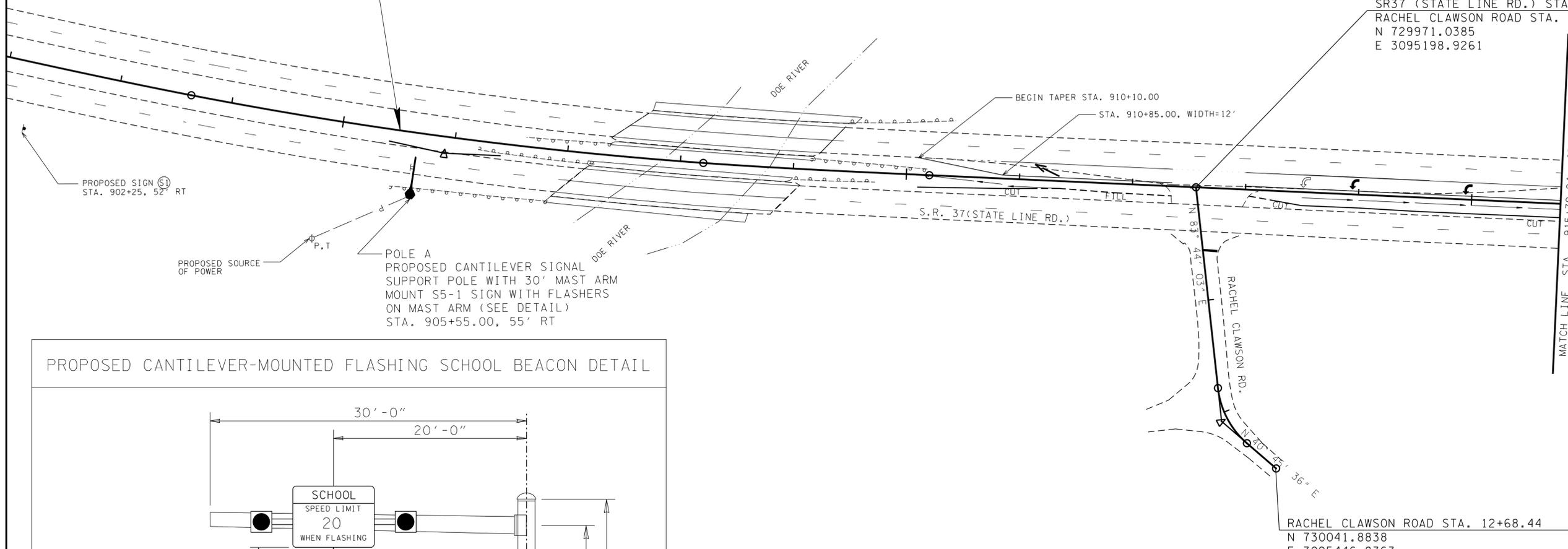
910

915

BEGIN PROJ. 10003-3265-94
STA. 905+50.00

NOTE: ELIZABETHTON ELECTRIC SYSTEM WILL
BRING SERVICE TO TOP OF NEW SUPPORT POLE
FOR SERVICE TO CONTROLLER

SR37 (STATE LINE RD.) STA. 912+56.17
RACHEL CLAWSON ROAD STA. 10+00.00
N 729971.0385
E 3095198.9261

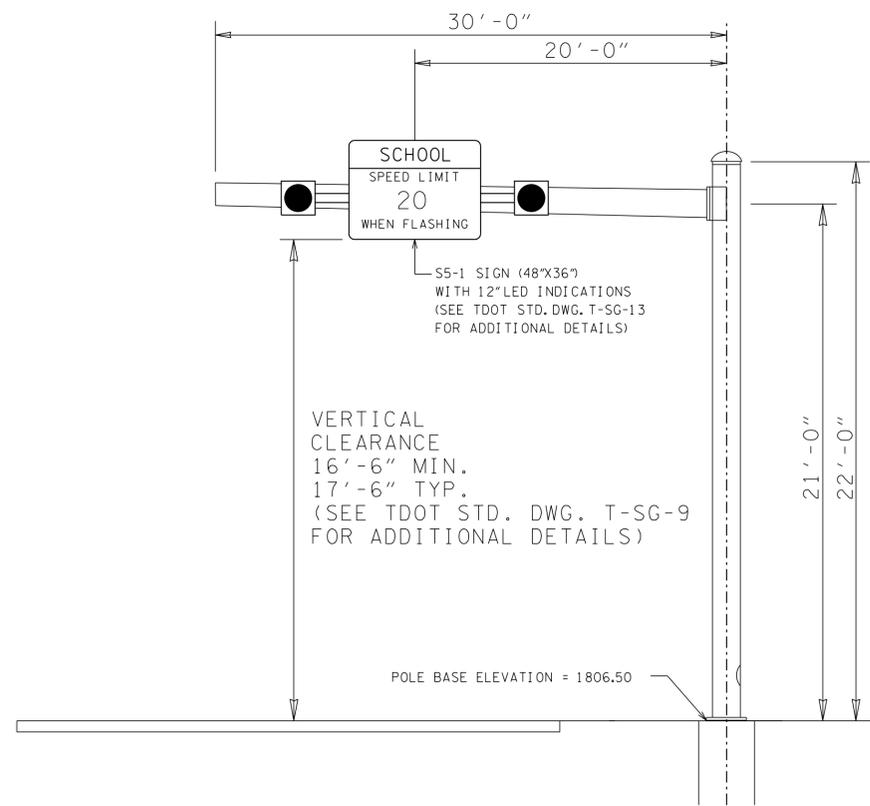


PROPOSED SIGN (S1)
STA. 902+25, 52' RT

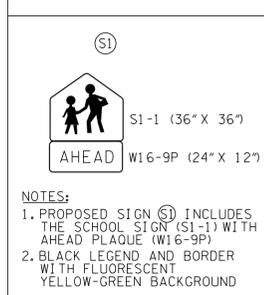
PROPOSED SOURCE
OF POWER

POLE A
PROPOSED CANTILEVER SIGNAL
SUPPORT POLE WITH 30' MAST ARM
MOUNT S5-1 SIGN WITH FLASHERS
ON MAST ARM (SEE DETAIL)
STA. 905+55.00, 55' RT

PROPOSED CANTILEVER-MOUNTED FLASHING SCHOOL BEACON DETAIL



PROPOSED SIGNS



**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.0001 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

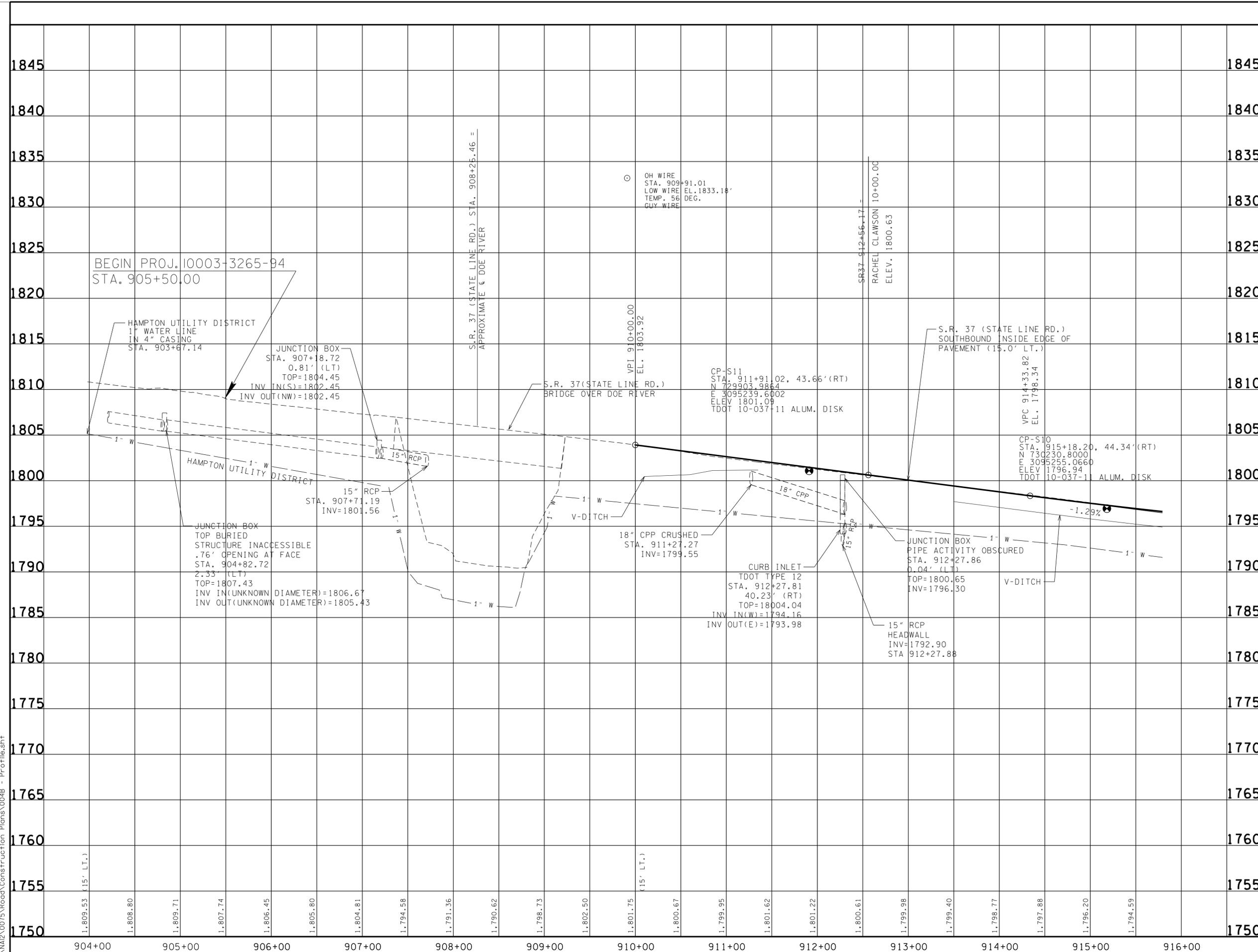
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PROPOSED
LAYOUT**

STA. 905+50.00 TO
STA. 915+79.24

SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	4B
CONST.	2014	STP/NH-SIP-37(17)	4B



2/5/2013 4:54:25 PM
 G:\NAI2\0075\Road\Construction Plans\004B - Profile.sht

**UNOFFICIAL
SET
NOT FOR
BIDDING**

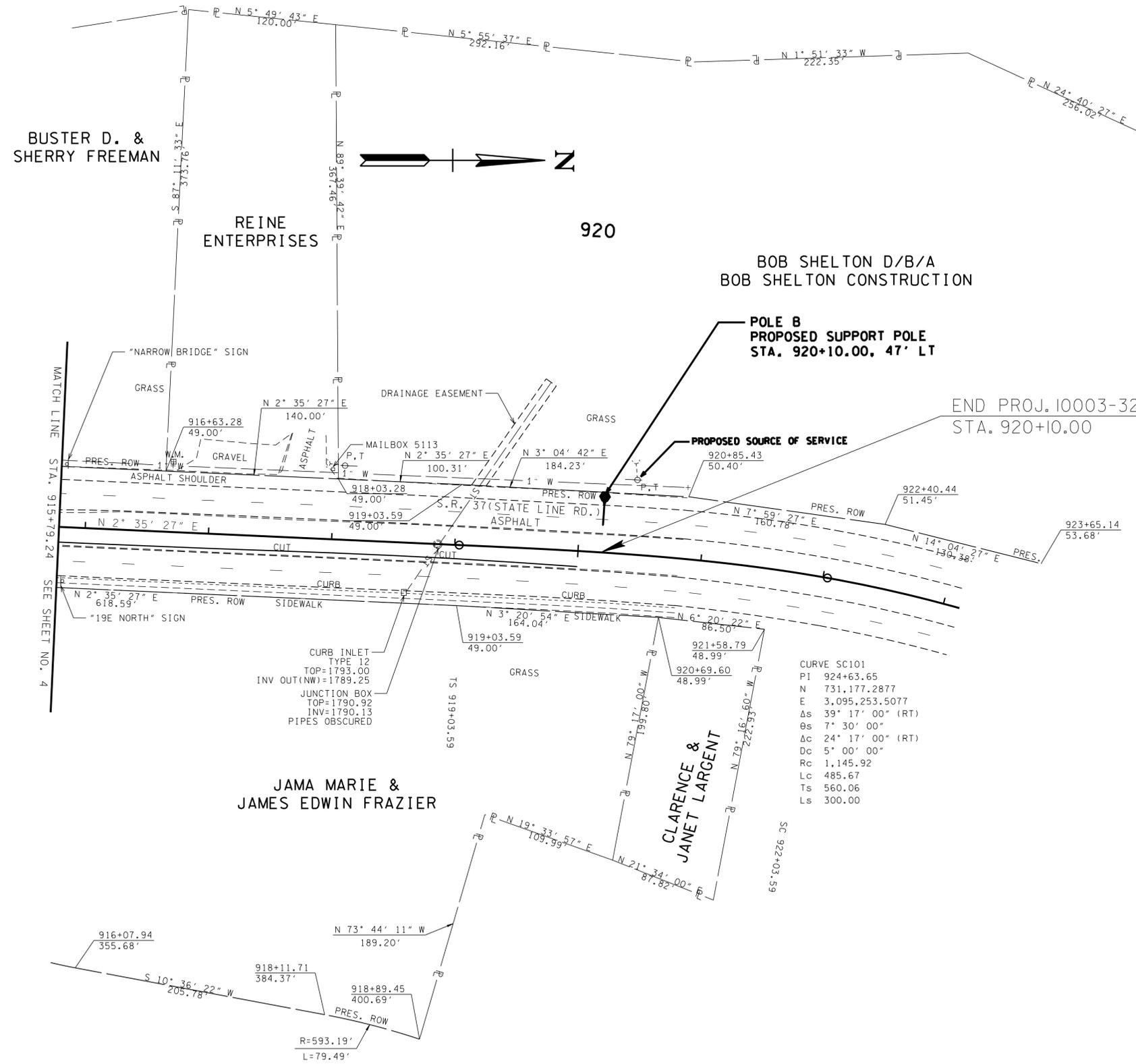
SEALED BY

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

PROFILE

 STA. 905+50.00 TO
 STA. 915+79.24
 SCALE: 1"=50' HORIZ.
 1"=5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	5
CONST.	2014	STP/NH-SIP-37(17)	5



CURVE SC101
 PI 924+63.65
 N 731,177.2877
 E 3,095,253.5077
 Δs 39° 17' 00" (RT)
 Θs 7° 30' 00"
 Δc 24° 17' 00" (RT)
 Dc 5° 00' 00"
 Rc 1,145.92
 Lc 485.67
 Ts 560.06
 Ls 300.00

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

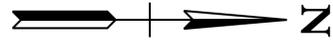
SEALED BY

COORDINATES ARE NAD/83(1995),
 ARE DATUM ADJUSTED BY THE
 FACTOR OF 1.0001 AND TIED TO
 THE TGRN. ALL ELEVATIONS ARE
 REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

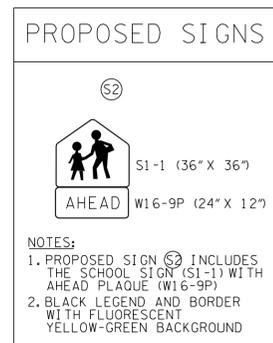
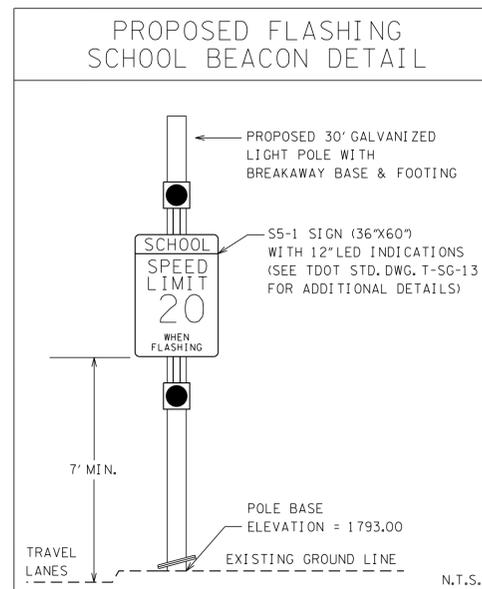
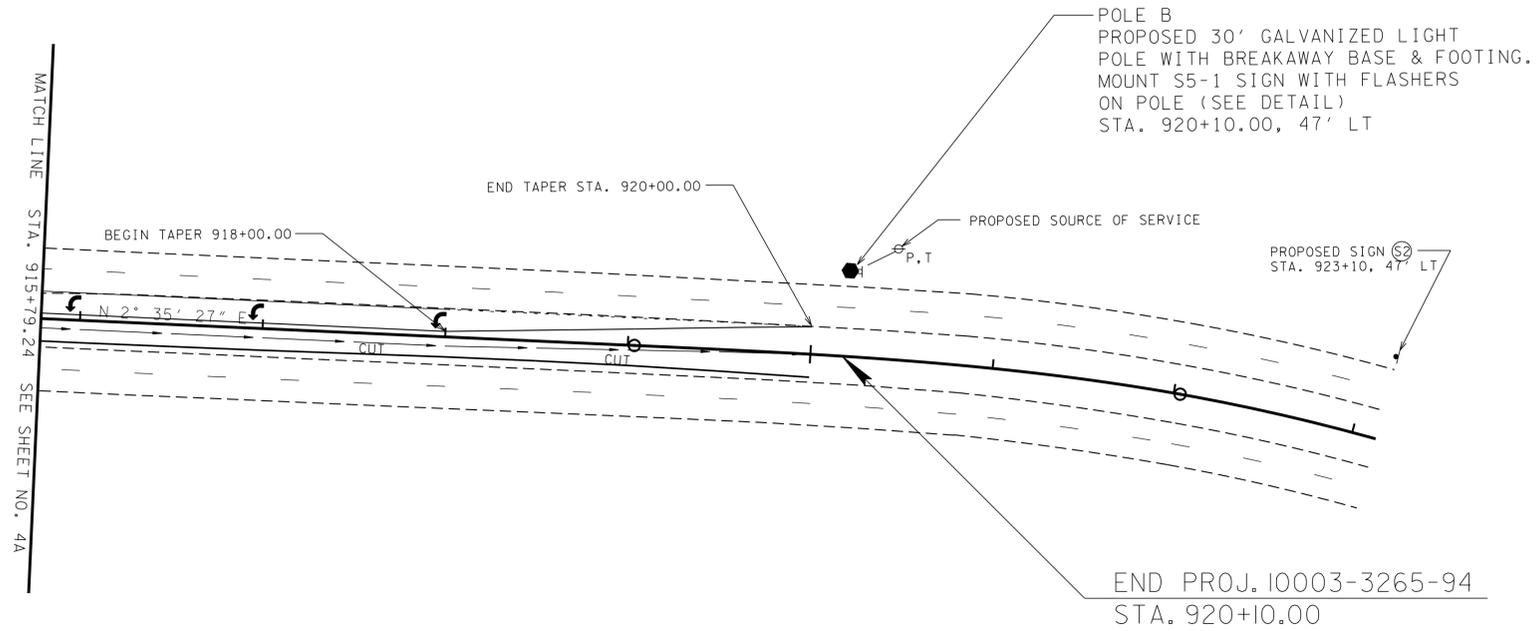
**PRESENT
 LAYOUT**
 STA. 915+79.24 TO
 STA. 920+10.00
 SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	5A
CONST.	2014	STP/NH-SIP-37(17)	5A



920

NOTE: ELIZABETHTON ELECTRIC SYSTEM WILL BRING SERVICE TO TOP OF NEW SUPPORT POLE FOR SERVICE TO CONTROLLER



**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0001 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

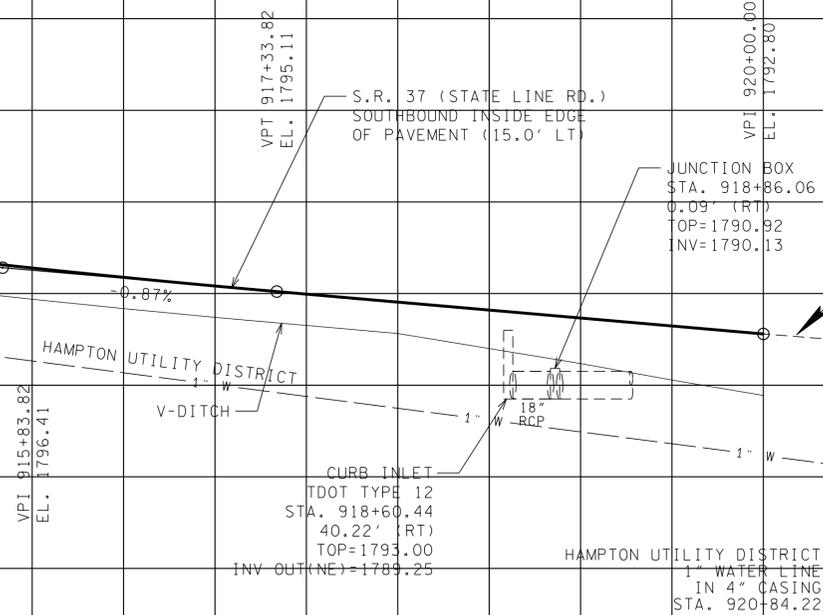
**PROPOSED
LAYOUT**
STA. 915+79.24 TO
STA. 920+10.00
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	5B
CONST.	2014	STP/NH-SIP-37(17)	5B

1845
1840
1835
1830
1825
1820
1815
1810
1805
1800
1795
1790
1785
1780
1775
1770
1765
1760
1755
1750

915+00 916+00 917+00 918+00 919+00 920+00 921+00

VC = 300.00
K = 714
V = 70 MPH



**UNOFFICIAL
SET
NOT FOR
BIDDING**

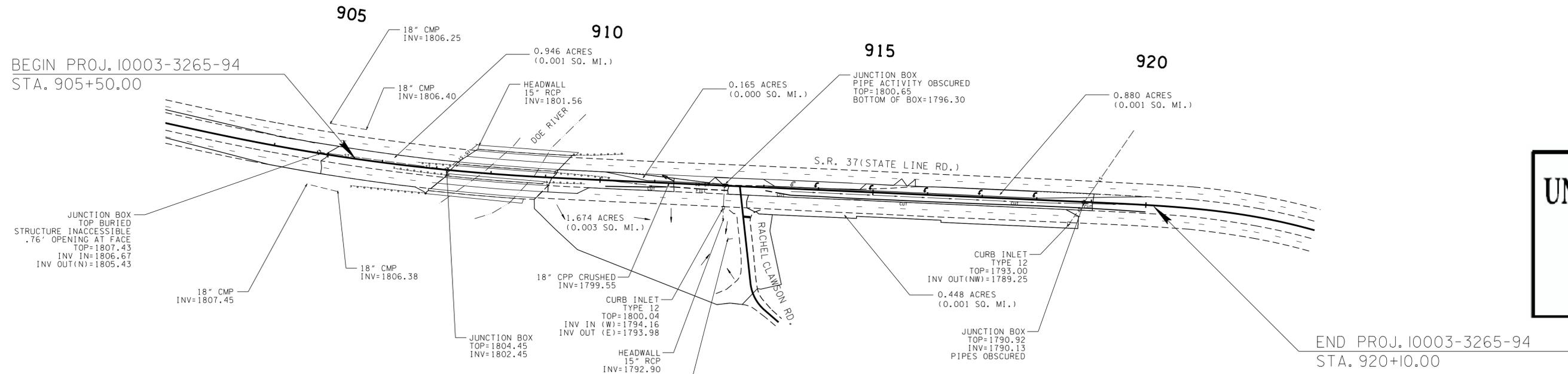
SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE
STA. 915+79.24 TO
STA. 920+10.00
SCALE: 1"=50' HORIZ.
1"=5' VERT.

2/5/2013 4:42:22 PM
G:\NAI2\005\Road\Construction Plans\005B - Profile.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	6
CONST.	2014	STP/NH-SIP-37(17)	6



**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**DRAINAGE
MAP**

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	7A
CONST.	2014	STP/NH-SIP-37(17)	7

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
209-05	SEDIMENT REMOVAL	C.Y.	5
209-08.07	ROCK CHECK DAM	EA.	9
1 740-11.01	TEMPORARY SEDIMENT TUBE 8IN (EPSC)	L.F.	50

1 FOR USE AROUND SIGNAL POLES

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
	ROCK CHECK DAM (V-DITCH)	EC-STR-6

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

SEALED BY

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**EPSC
 LEGEND AND
 QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	7
CONST.	2014	STP/NH-SIP-37(17)	7A

CURVE SC100
 PI 905+92.76
 N 729,306.6174
 E 3,095,168.8617
 Δs 9° 51' 00" (LT)
 θs 1° 30' 00"
 Δc 6° 51' 00" (LT)
 Dc 1° 30' 00"
 Rc 3,819.72
 Lc 456.67
 Ts 429.18
 Ls 200.00

SC 903

905

CS 9C

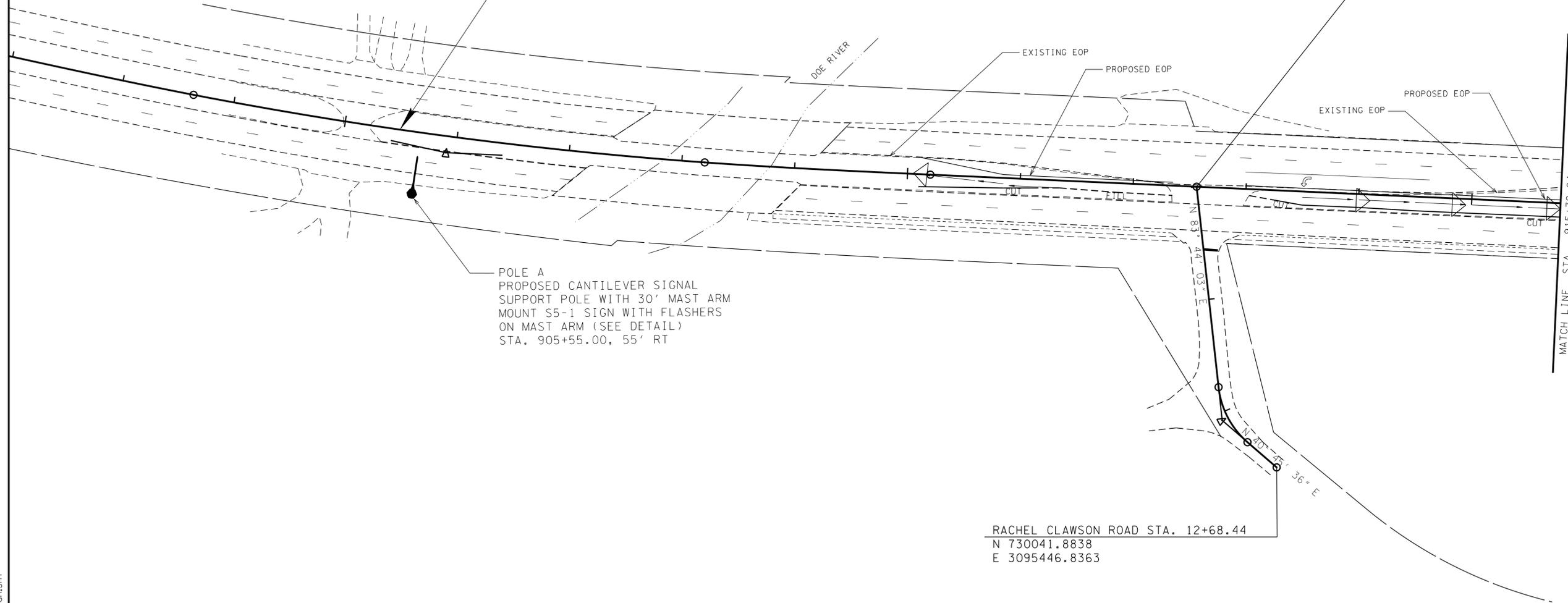
910

ST 1

915

BEGIN PROJ. 10003-3265-94
 STA. 905+50.00

SR37 (STATE LINE RD.) STA. 912+56.17
 RACHEL CLAWSON ROAD STA. 10+00.00
 N 729971.0385
 E 3095198.9261



**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

SEALED BY

Blank box for signature/seal.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**EPSC
 PLAN**

STA. 905+50.00 TO
 STA. 915+79.24
 SCALE: 1"=50'

**EROSION PREVENTION AND
 SEDIMENT CONTROL LEGEND**

SYMBOL	ITEM	STD. DWG.
	ROCK CHECK DAM (V-DITCH)	EC-STR-6



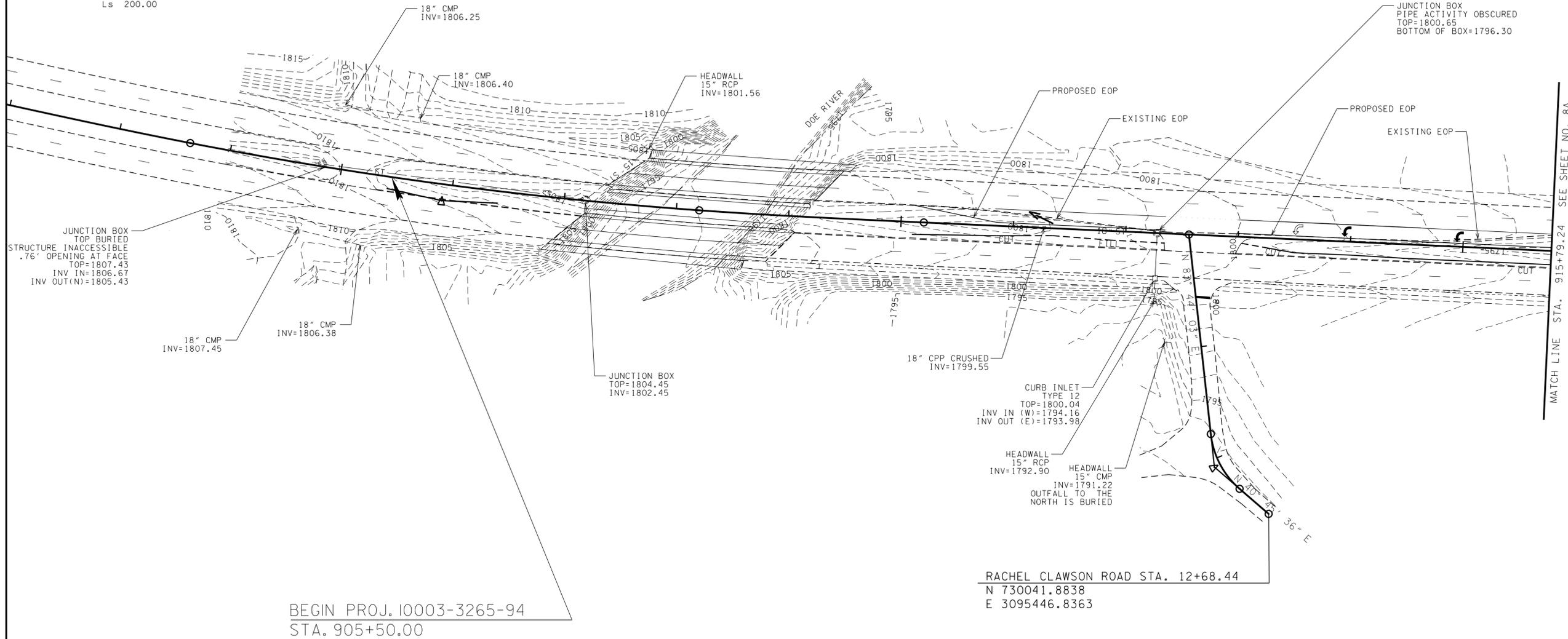
TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	8
CONST.	2014	STP/NH-SIP-37(17)	8

CURVE SC100
PI 905+92.76
N 729,306.6174
E 3,095,168.8617
Δs 9° 51' 00" (LT)
θs 1° 30' 00"
Ac 6° 51' 00" (LT)
Dc 1° 30' 00"
Rc 3,819.72
Lc 456.67
Ts 429.18
Ls 200.00

905

910

915



JUNCTION BOX
TOP BURIED
STRUCTURE INACCESSIBLE
.76' OPENING AT FACE
TOP=1807.43
INV IN=1806.67
INV OUT(N)=1805.43

18" CMP
INV=1807.45

18" CMP
INV=1806.38

18" CMP
INV=1806.25

18" CMP
INV=1806.40

HEADWALL
15" RCP
INV=1801.56

JUNCTION BOX
TOP=1804.45
INV=1802.45

18" CPP CRUSHED
INV=1799.55

CURB INLET
TYPE 12
TOP=1800.04
INV IN (W)=1794.16
INV OUT (E)=1793.98

HEADWALL
15" RCP
INV=1792.90

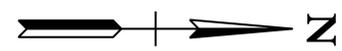
HEADWALL
15" CMP
INV=1791.22
OUTFALL TO THE
NORTH IS BURIED

JUNCTION BOX
PIPE ACTIVITY OBSCURED
TOP=1800.65
BOTTOM OF BOX=1796.30

MATCH LINE STA. 915+79.24 SEE SHEET NO. 8A

BEGIN PROJ. I0003-3265-94
STA. 905+50.00

RACHEL CLAWSON ROAD STA. 12+68.44
N 730041.8838
E 3095446.8363



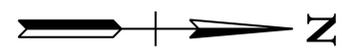
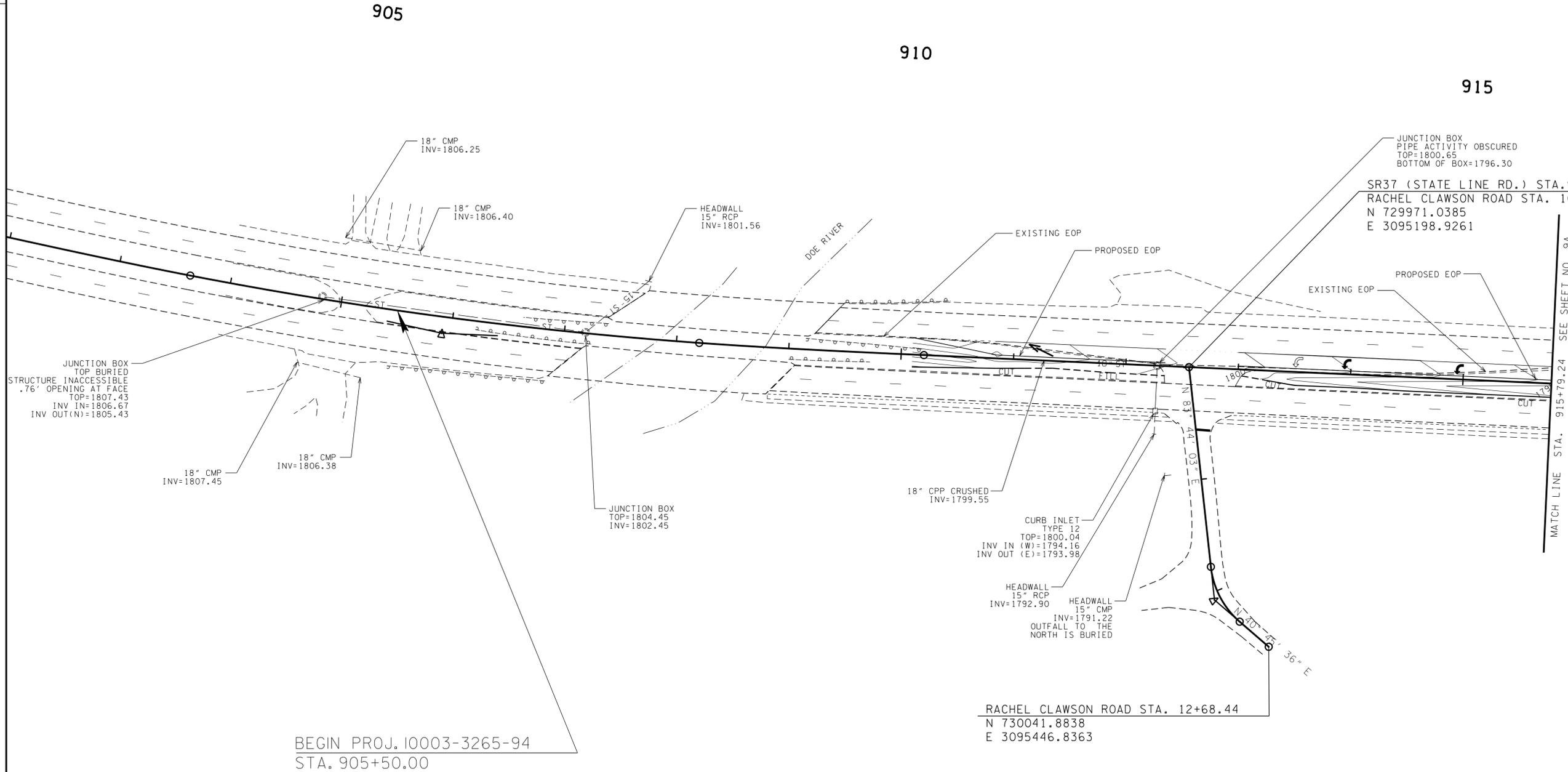
**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EXISTING
CONTOURS**
STA. 905+50.00 TO
STA. 915+79.24
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	9
CONST.	2014	STP/NH-SIP-37(17)	9



**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PROPOSED
CONTOURS**

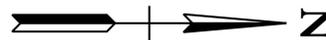
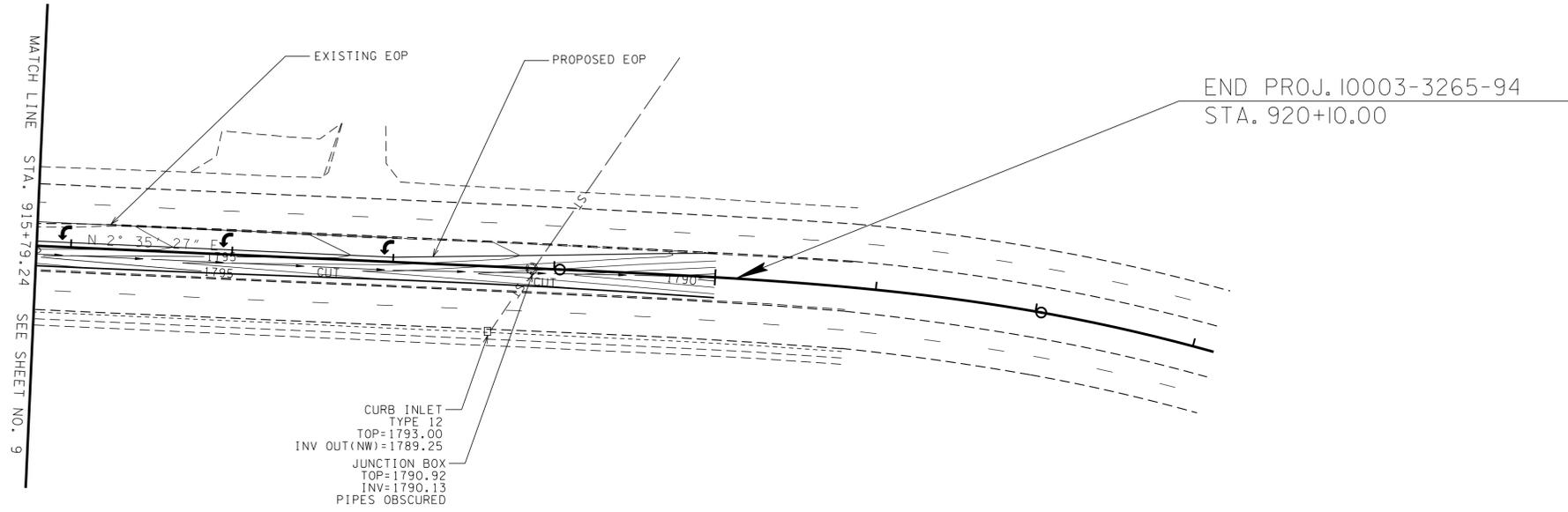
STA. 905+50.00 TO
STA. 915+79.24

SCALE: 1"=50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	9A
CONST.	2014	STP/NH-SIP-37(17)	9A

920



**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PROPOSED
CONTOURS**
STA. 915+79.24 TO
STA. 920+10.00
SCALE: 1"=50'

2/5/2013 4:54:39 PM
G:\NAI2\0075\Road\Construction Plans\009A - Proposed Contours.sht

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE PAVING OR RESURFACING:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 2 INCHES:
 - a. WARNING SIGNS, UNEVEN PAVEMENT (W8-11) AND/OR SHOULDER DROP-OFF (W8-9A), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
 - b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
 - c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
 - d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.
2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES. TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.
 - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
 - b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
 - c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3.5 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

- a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

- b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.
- c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.
- d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN (W8-9A). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING ONE MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.

WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:

- a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:

- a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
- b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
UTILITIES	2013	STP/NH-SIP-37(17)	10
CONST.	2014	STP/NH-SIP-37(17)	10

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TRAFFIC
CONTROL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP/NH-SIP-37(17)	10A

TRAFFIC CONTROL QUANTITIES				
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	REMARKS
712-01	TRAFFIC CONTROL	0.5	L.S.	
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	75	EACH	
712-06	SIGNS (CONSTRUCTION)	166.5	S.F.	
712-08.03	ARROW BOARD (TYPE C)	2	EACH	

TRAFFIC CONTROL QUANTITIES (SIGNS)							
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	SIZE	ITEM NO. 712-06.10 (S.F.)	M.U.T.C.D. NO.	REMARKS
712-06	END ROAD WORK	S.F.	3	36"X18"	13.50	G20-2	
	ROAD WORK 1/2 MILE	S.F.	2	36"X36"	18.00	W20-1	
	LEFT LANE CLOSED 1000 FT	S.F.	1	36"X36"	9.00	W20-5L	AS NEEDED DURING OVERHEAD SIGNAL WORK
	RIGHT LANE CLOSED 1000 FT	S.F.	1	36"X36"	9.00	W20-5R	
	LANE REDUCTION (LEFT)	S.F.	1	36"X36"	9.00	W4-2L	
	LANE REDUCTION (RIGHT)	S.F.	1	36"X36"	9.00	W4-2R	
	FLAGGER	S.F.	3	36"X36"	27.00	W20-7	
	ROAD WORK 1500 FT	S.F.	1	36"X36"	9.00	W20-1	
	ROAD WORK 1000 FT	S.F.	1	36"X36"	9.00	W20-1	
	ROAD WORK 500 FT	S.F.	1	36"X36"	9.00	W20-1	
	ROAD WORK AHEAD	S.F.	1	36"X36"	9.00	W20-1	
	RIGHT SHOULDER CLOSED	S.F.	2	36"X36"	18.00	W21-5R	FOR USE DURING POLE INSTALLATIONS. SEE STANDARD DRAWING T-WZ-18. LANE CLOSURE FOR POLE B INSTALLATION SHALL NOT TAKE PLACE CONCURRENTLY WITH LEFT LANE CLOSURE.
	RIGHT SHOULDER CLOSED 1500 FT	S.F.	2	36"X36"	18.00	W21-5R	
TOTAL					166.50		

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

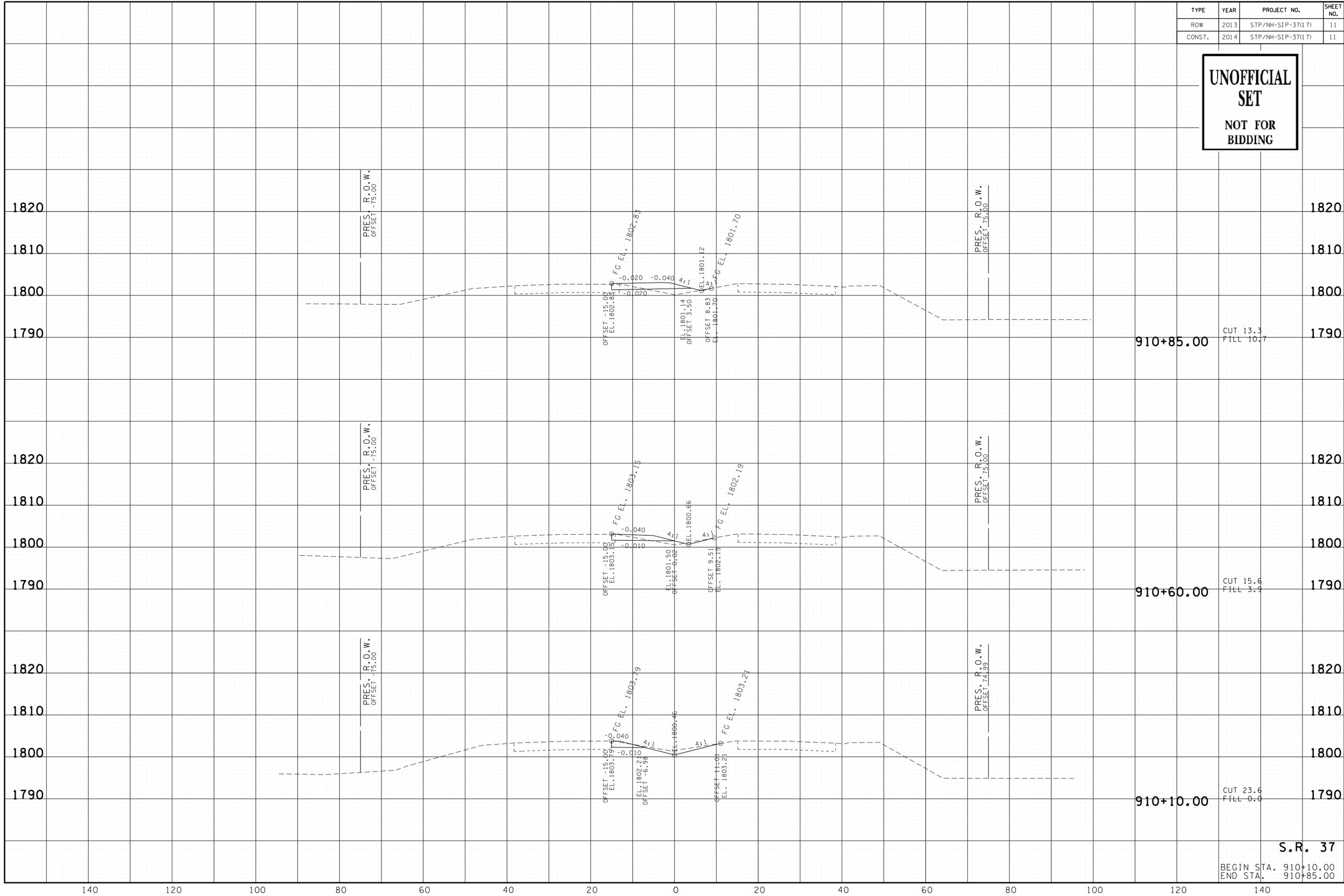
SEALED BY

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC
 CONTROL
 QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2013	STP/NH-SIP-37(1.7)	11
CONST.	2014	STP/NH-SIP-37(1.7)	11

**UNOFFICIAL
SET
NOT FOR
BIDDING**

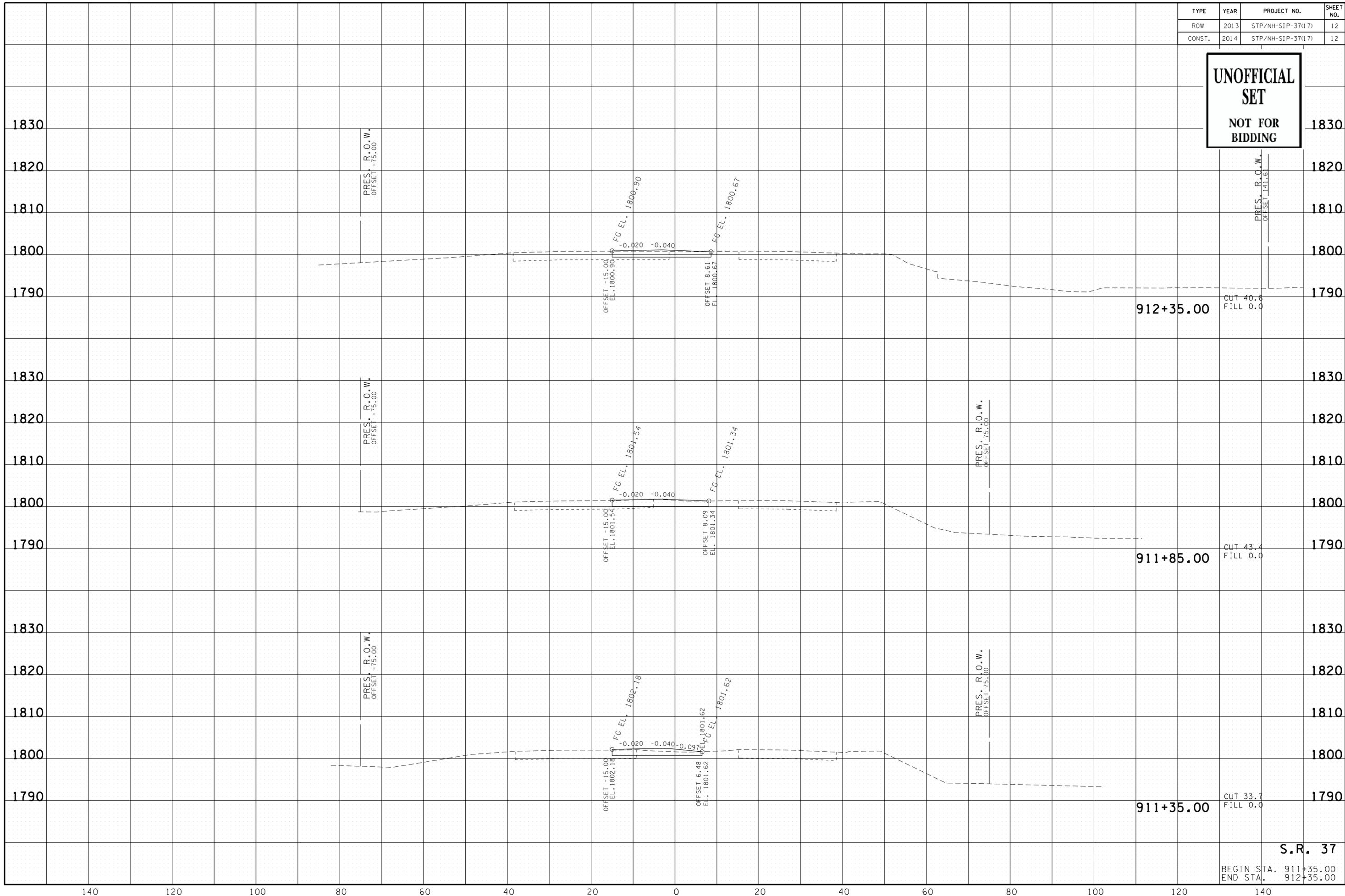


12/5/2013 4:53:59 PM G:\NAI2\0075\Road\Construction Plans\011 - 017 - XSections.sht

S.R. 37
 BEGIN STA. 910+10.00
 END STA. 910+85.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2013	STP/NH-SIP-37(17)	12
CONST.	2014	STP/NH-SIP-37(17)	12

**UNOFFICIAL
SET
NOT FOR
BIDDING**

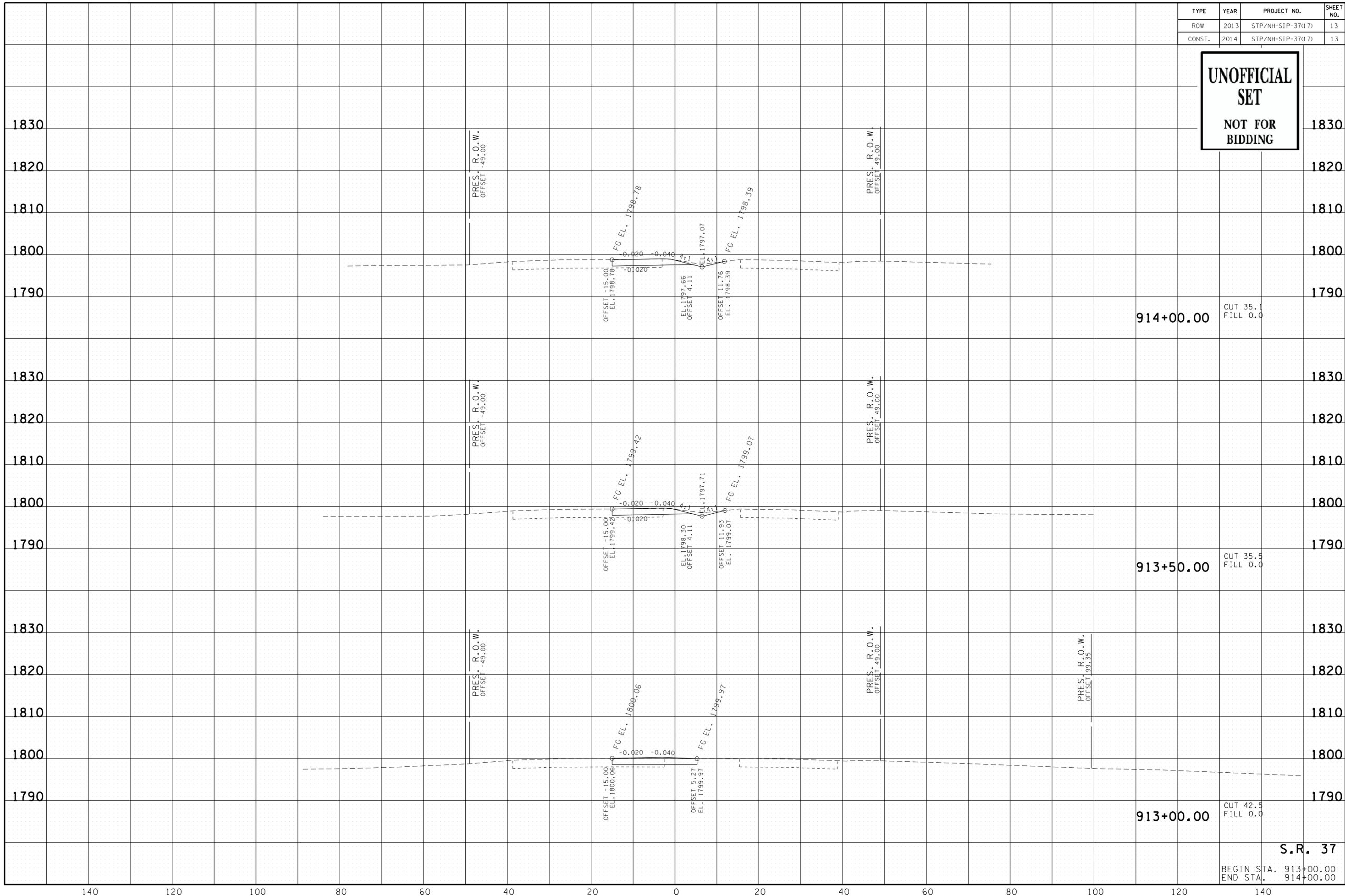


12/5/2013 4:54:00 PM G:\NAI2\0075\Road\Construction Plans\011 - 017 - XSections.sht

S.R. 37
 BEGIN STA. 911+35.00
 END STA. 912+35.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2013	STP/NH-SIP-37(1.7)	13
CONST.	2014	STP/NH-SIP-37(1.7)	13

**UNOFFICIAL
SET
NOT FOR
BIDDING**



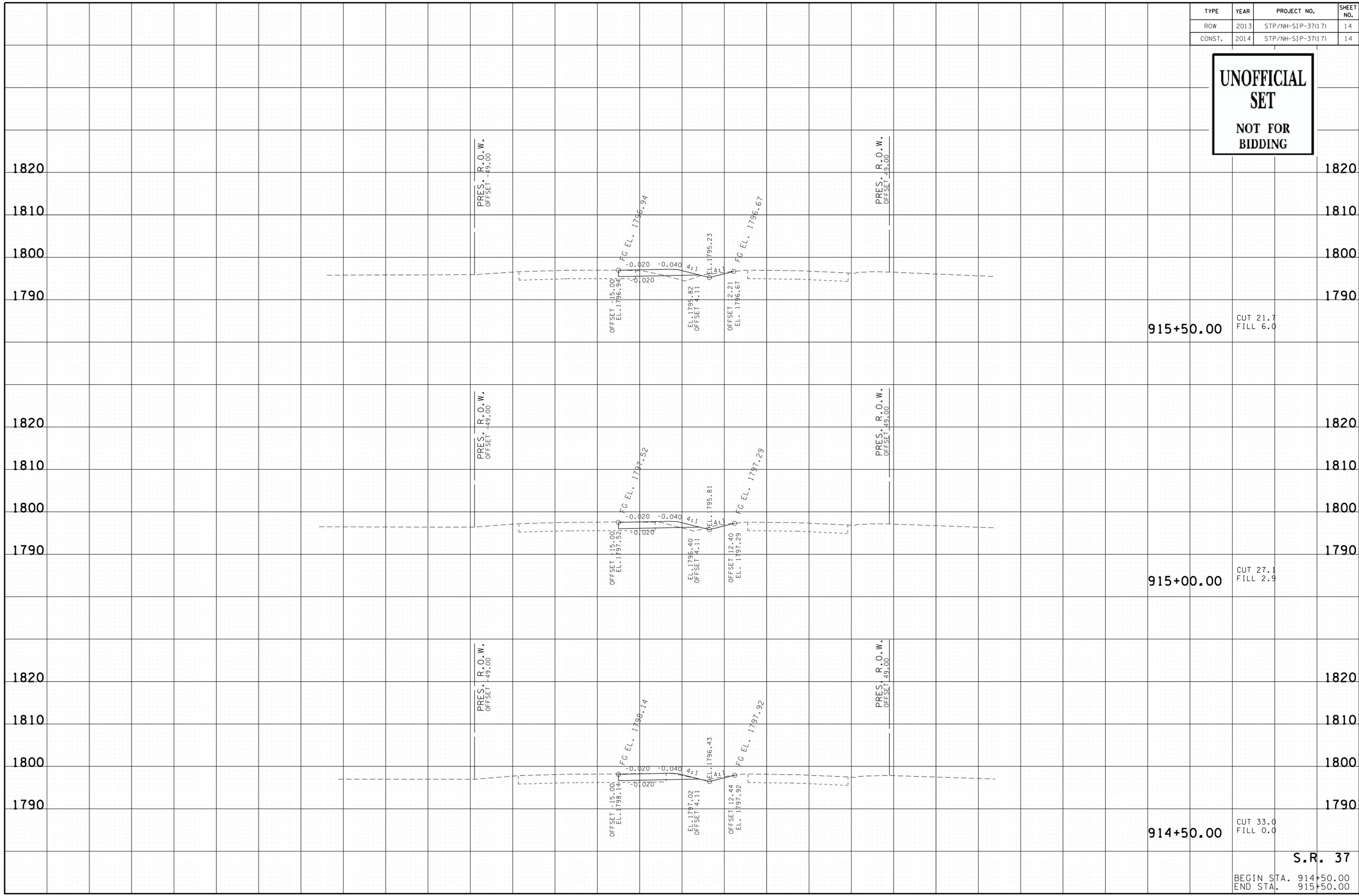
12/5/2013 4:54:00 PM G:\NAI2\0075\Road\Construction Plans\011-017 - XSections.sht

S.R. 37

BEGIN STA. 913+00.00
END STA. 914+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2013	STP/NH-SIP-37(17)	14
CONST.	2014	STP/NH-SIP-37(17)	14

**UNOFFICIAL
SET
NOT FOR
BIDDING**

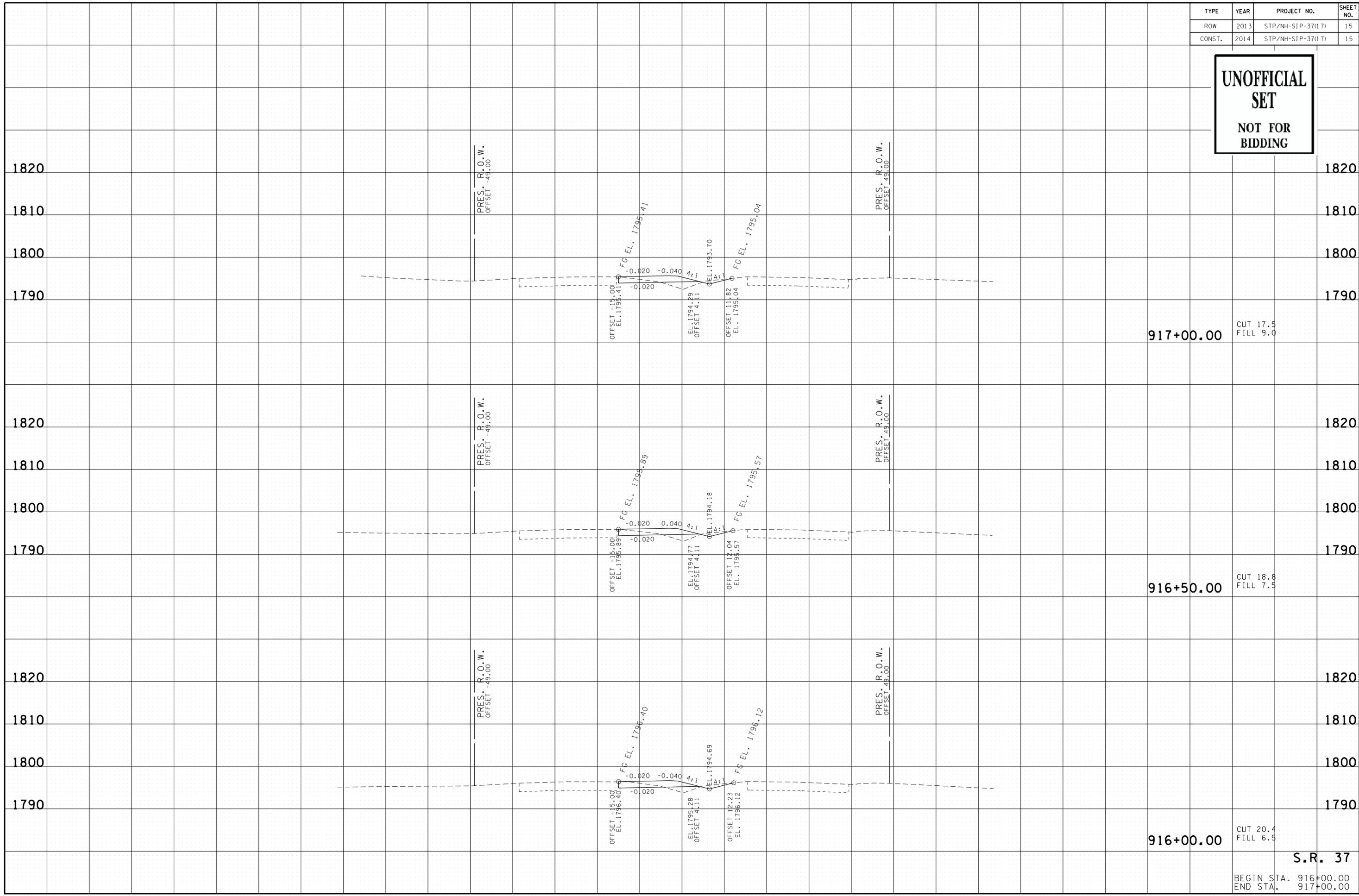


12/5/2013 4:54:01PM G:\NAI2\0075\Road\Construction Plans\011-017 - XSections.sht

S.R. 37
 BEGIN STA. 914+50.00
 END STA. 915+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2013	STP/NH-SIP-37(17)	15
CONST.	2014	STP/NH-SIP-37(17)	15

**UNOFFICIAL
SET
NOT FOR
BIDDING**

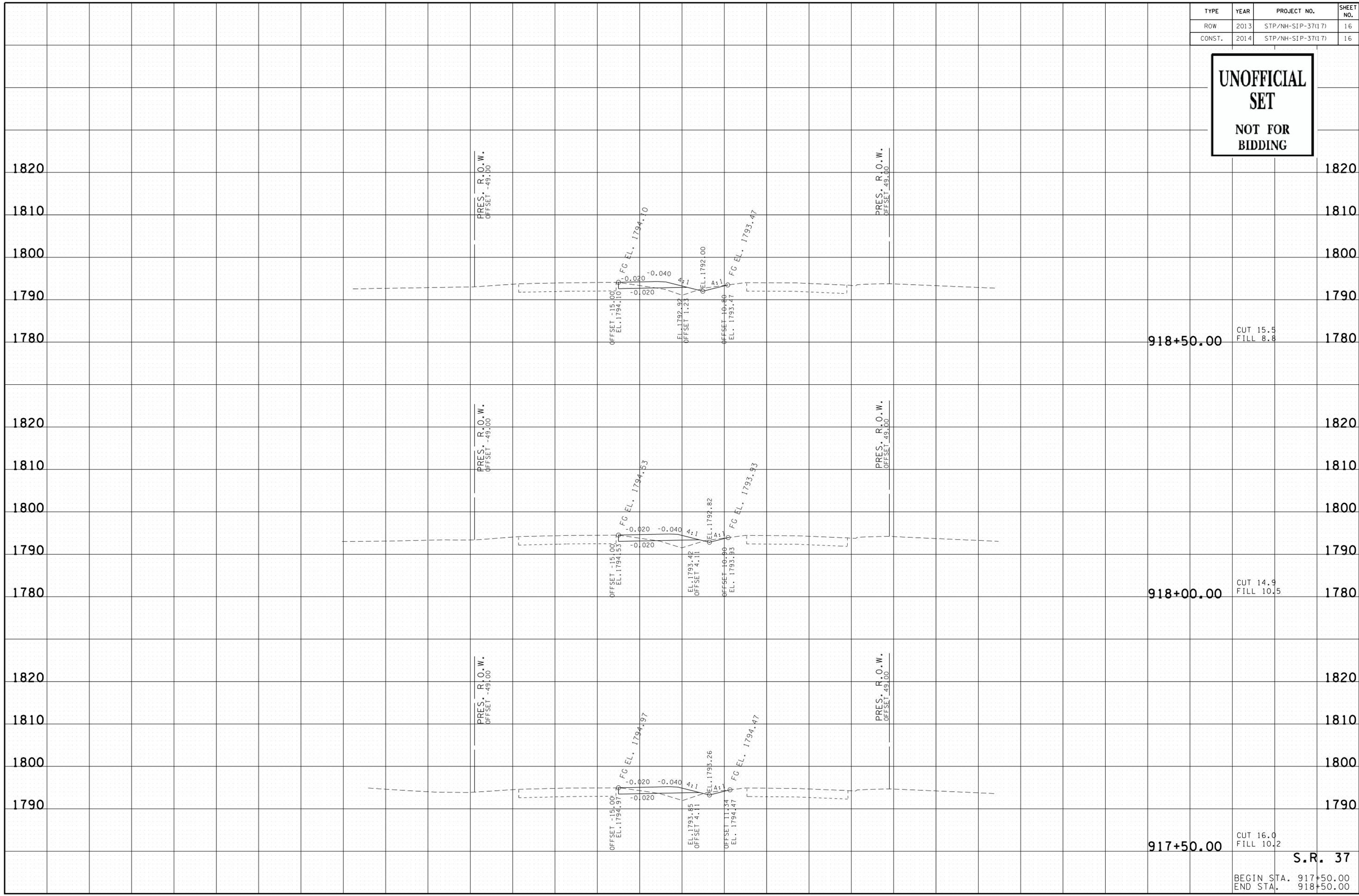


12/5/2013 4:54:02 PM G:\NAI2\0075\Road\Construction Plans\011 - 017 - XSections.sht

S.R. 37
 BEGIN STA. 916+00.00
 END STA. 917+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2013	STP/NH-SIP-37(17)	16
CONST.	2014	STP/NH-SIP-37(17)	16

**UNOFFICIAL
SET
NOT FOR
BIDDING**

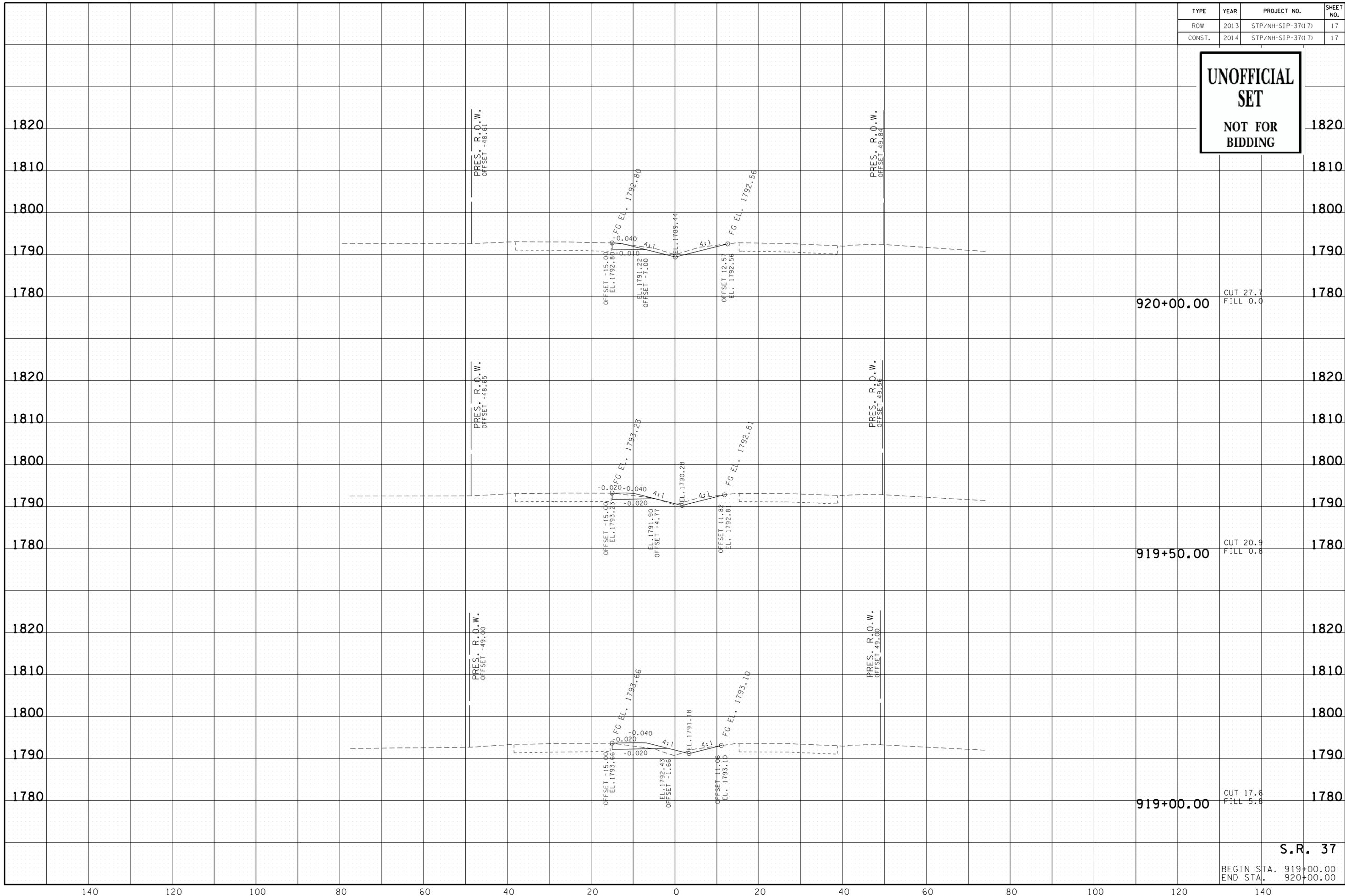


12/5/2013 4:54:02 PM G:\NAI2\0075\Road\Construction Plans\011 - 017 - XSections.sht

CUT 15.5
 FILL 8.8
 918+50.00
 CUT 14.9
 FILL 10.5
 918+00.00
 CUT 16.0
 FILL 10.2
 917+50.00
S.R. 37
 BEGIN STA. 917+50.00
 END STA. 918+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2013	STP/NH-SIP-37(1 7)	17
CONST.	2014	STP/NH-SIP-37(1 7)	17

**UNOFFICIAL
SET
NOT FOR
BIDDING**



12/5/2013 4:54:03 PM G:\NAI2\0075\Road\Construction Plans\011 - 017 - XSections.sht

S.R. 37
 BEGIN STA. 919+00.00
 END STA. 920+00.00