

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

CUMBERLAND COUNTY

INDUSTRIAL ACCESS ROAD SERVING COLINX LLC IN CROSSVILLE

CONSTRUCTION

STATE HIGHWAY NO. N/A F.A.H.S. NO. N/A

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.		
STATE PROJ. NO.	18950-3540-04	



CUMBERLAND COUNTY
COLINX S.I.A.

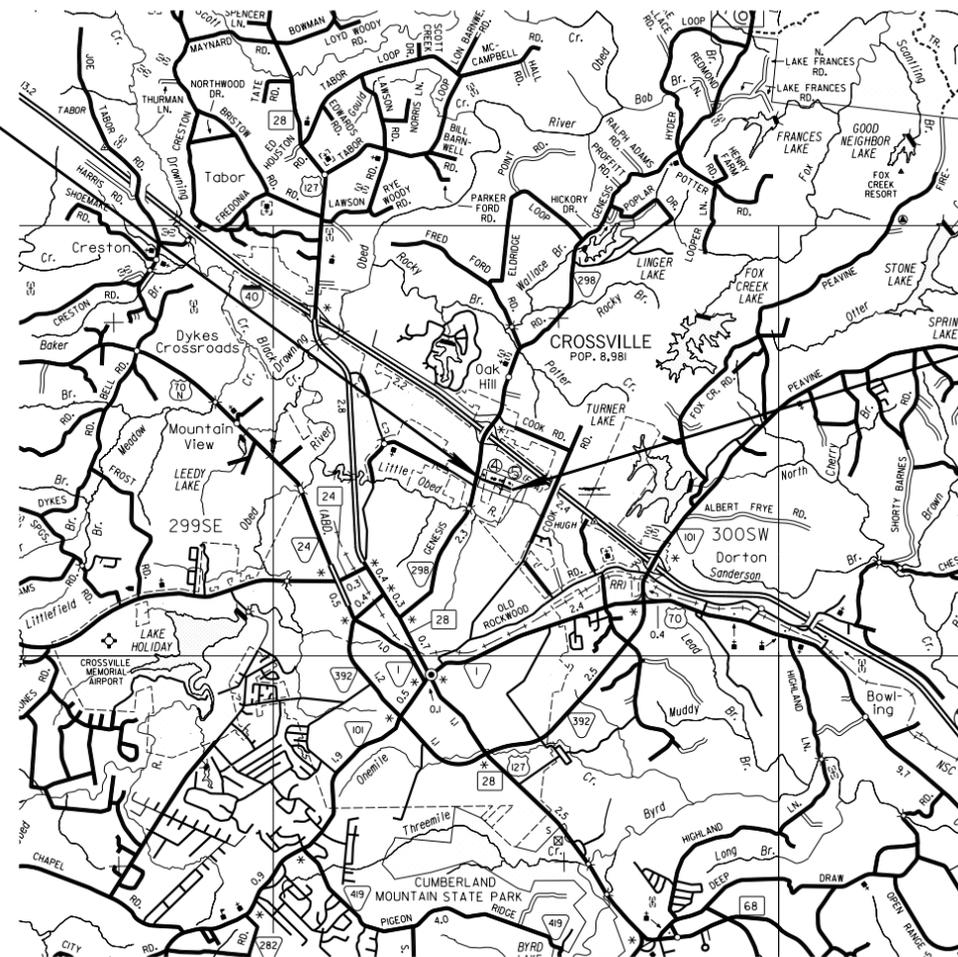
BEGIN PROJ. NO. 18950-3540-04
STA. 100+19.65 (CONST.)

THE CITY OF CROSSVILLE WILL BE RESPONSIBLE FOR ACQUIRING RIGHT-OF-WAY & EASEMENTS FUTURE MAINTENANCE OF THE STATE INDUSTRIAL ACCESS ROAD.

NO EXCLUSIONS
NO EQUATIONS

UNOFFICIAL SET
NOT FOR BIDDING

END PROJ. NO. 18950-3540-04
STA. 116+94.79 (CONST.)



SPECIAL NOTES

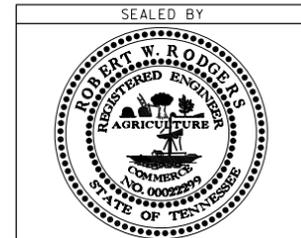
PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

SCALE: 1" = 5280'

ROADWAY LENGTH	0.317 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	0.317 MILES

TRAFFIC DATA	
ADT (2014)	1840
ADT (2034)	1910
DHV (2034)	158
D	52 - 48
T (ADT)	28 %
T (DHV)	19 %
V	35 MPH



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

DATE: _____

APPROVED: *John Schroer*
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

TDOT ROAD SP. SV. 2 ROBERT W. RODGERS, P.E.

DESIGNER MEGAN WILDES CHECKED BY GREGORY J. TAYLOR, P.E.

P.E. NO. 18950-1540-04

PIN NO. 119140.00

INDEX

STANDARD ROADWAY DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	1A

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 (3 SHEETS).....	2B – 2D
TABULATED QUANTITIES (2 SHEETS).....	2E – 2F
PROPERTY MAPS AND RIGHT-OF-WAY ACQUISITION TABLE	3
PRESENT LAYOUTS (2 SHEETS)	4 - 5
R.O.W. DETAILS (2 SHEETS)	4A – 5A
PROPOSED LAYOUTS (2 SHEETS).....	4B – 5B
PROPOSED PROFILES (2 SHEETS).....	4C – 5C
PRIVATE DRIVE AND FIELD RAMP PROFILES	6 – 6A
DRAINAGE MAP	7
EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANS	8, 8A – 8D
TRAFFIC CONTROL PLANS WITH CONSTRUCTION	
PHASING NOTES (3 SHEETS)	9, 9A – 9B
PAVEMENT STRIPING DETAILS (2 SHEETS).....	10, 10A
ROADWAY CROSS SECTIONS (10 SHEETS).....	11 – 20
UTILITIES INDEX, UTILITY OWNERS, AND UTILITY SHEETS	U1-1 – U1-2
STORMWATER POLLUTION PREVENTION PLAN (SWPPP).....	S-1 – S-X

ROADWAY DESIGN STANDARDS

DWG. NO	REV.	DESCRIPTION
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
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
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-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-SE-2	10-15-02	URBAN SUPERELEVATION DETAILS
RD01-TS-1A		DESIGN STANDARDS FOR LOW-VOLUME LOCAL ROADS (ADT<=400)

ROADWAY AND PAVEMENT APPURTENANCES

DWG. NO	REV.	DESCRIPTION
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS

SAFETY APPURTENANCES AND FENCE

DWG. NO	REV.	DESCRIPTION
S-CZ-1		CLEAR ZONE CRITERIA
S-GR31-1		W-BEAM GUARDRAIL
S-GRT-2		TYPE 38 GUARDRAIL TERMINAL
S-GRT-2P		EARTH PAD FOR TYPE 38 TERMINAL
S-RP-2	01-19-99	STANDARD CONCRETE RIGHT-OF-WAY MARKERS
S-PL-2		SAFETY PLAN AT SIDE ROADS OR PRIVATE DRIVES
S-GRT-2P		EARTH PAD FOR TYPE 38 TERMINAL
S-GRT-4		TYPE 13 GUARDRAIL TERMINAL (TRAILING END)
S-GRA-3		GURARDRAIN ANCHOR FOR TYPE 21, 13 AND IN-LINE TERMINALS

TRAFFIC CONTROL APPURTENANCES

DWG. NO	REV.	DESCRIPTION
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-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-16	11-01-11	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-16A	11-01-11	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
TM-S-18	05-27-01	END OF ROADWAY AND DEAD END SIGNS, METAL BARRICADES (TYPE III) & WORK ZONE SPEED SIGNS
T-S-19	07-19-13	STANDARD STEEL SIGN SUPPORTS
T-S-20	11-01-11	SIGN DETAILS
T-WZ-36	04-02-12	LANE CLOSURE ON LOW-VOLUME 2-LANE HIGHWAY
T-WZ-40	04-02-12	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS

EROSION PREVENTION AND SEDIMENT CONTROL

DWG. NO	REV.	DESCRIPTION
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6A	08-01-12	ENHANCED ROCK CHECK DAM
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-42		CATCH BASIN FILTER ASSEMBLY (TYPE 2)
EC-STR-42A		CATCH BASIN FILTER ASSEMBLY (TYPE 2) SLIPCOVER DETAILS

I:\J02\F01\1001.state.rn.us\025Shared\Design County Folder.s\Cumberland\Col.Inx Cox Ave SIA\Information Only Set\001A.sht

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX
AND
STANDARD
DRAWINGS

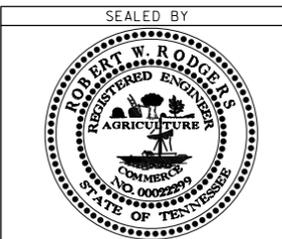
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	2

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1713
203-06	WATER	M.G.	13
203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	241
(2) 209-05	SEDIMENT REMOVAL	C.Y.	104
(2) 209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	993
209-40.42	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EACH	3
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	5270
(2) 303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	3
307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	844
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	876
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	13
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	51
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	4
411-01.10	ACS MIX (PG64-22) GRADING D	TON	535
607-39.02	18" PIPE CULVERT (SIDE DRAIN)	L.F.	798
(2) 621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	35
702-01	CONCRETE CURB	C.Y.	3.12
705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	463
705-04.03	GUARDRAIL TERMINAL (TYPE 13)	EACH	1
705-04.05	GUARDRAIL TERMINAL (TYPE-IN-LINE)	EACH	1
705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	1
707-01.13	GATE - CHAIN-LINK FENCE-6 FOOT (18' CANTILEVER)	EACH	1
707-01.14	GATE - CHAIN-LINK FENCE-6 FOOT (24' CANTILEVER)	EACH	1
707-01.20	TEMP 6FT CHAIN LINK W/3 STRAND B. WIRE	L.F.	867
707-01.52	GATE - CHAIN-LINK FENCE (6 FOOT - 7' SWING)	EACH	6
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	492
708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	1
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	50
(1) 709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	574
712-01	TRAFFIC CONTROL	LS	1
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	33
712-05.01	WARNING LIGHTS (TYPE A)	EACH	6
712-06	SIGNS (CONSTRUCTION)	S.F.	47
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	32
713-16.20	SIGNS (STOP (R1-1) (30"X30") POST AND INSTALLATION)	EACH	1
716-02.04	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	9
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	38
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	2
(3) 716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	2.8
716-13.06	SPRAY THERMO PVMT MRKNG (40 mil) (4IN LINE)	L.M.	1.4
716-13.09	SPRAY THERMO PVMT MRKNG (40 mil) (4IN DOTTED LINE)	L.F.	23
717-01	MOBILIZATION	LS	1
(2) 740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	1391
(2) 801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	26
(4) 801-03	WATER (SEEDING & SODDING)	M.G.	32
(2) 803-01	SODDING (NEW SOD)	S.Y.	2890
(2) 806-02.03	PROJECT MOWING	CYCL	1

- (1) FOR ROCK CHECK DAMS
- (2) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
- (3) FOR TEMPORARY MARKING
- (4) INCLUDES 3 MG FOR EROSION PREVENTION AND SEDIMENT CONTROL.

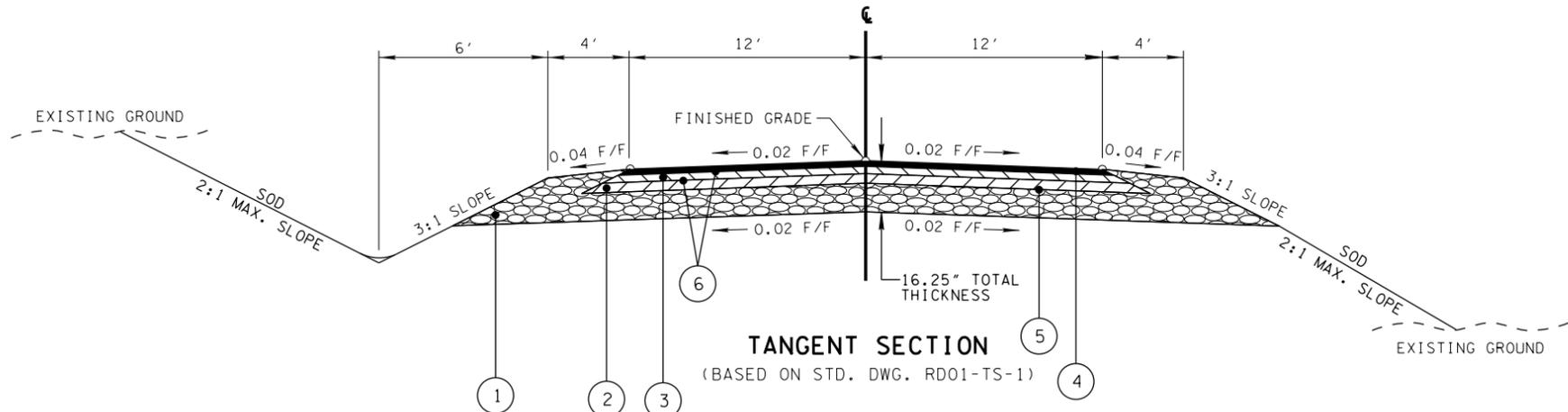
**UNOFFICIAL
SET
NOT FOR
BIDDING**



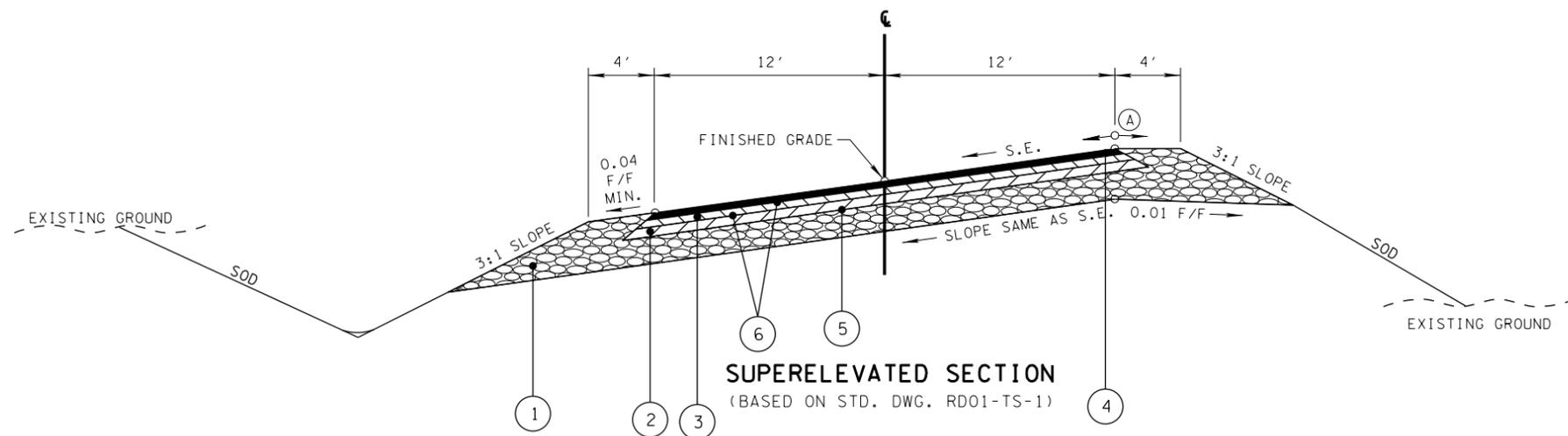
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**ESTIMATED
ROADWAY
QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	2
CONST.	2014	18950-3540-04	2A



STA. 100+19.65 TO STA. 100+88.00 36'
 STA. 100+88.00 TO STA. 103+00.00 24' TO 12' TRANS RT
 STA. 103+00.00 TO STA. 104+70.21
 STA. 108+21.11 TO STA. 110+25.50
 STA. 113+20.67 TO STA. 116+89.60

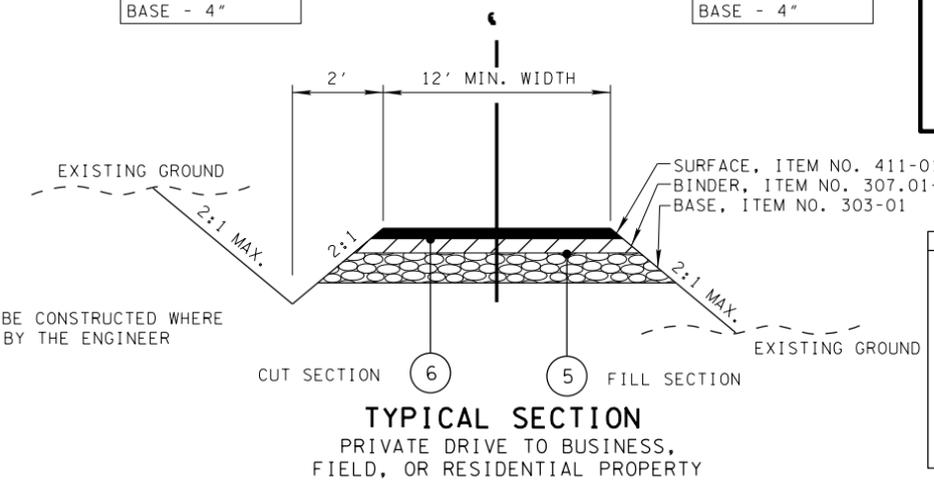


STA. 104+70.21 TO STA. 105+82.71 TRANS. TO 2.6%
 STA. 105+82.71 TO STA. 107+08.61 S.E. 2.6%
 STA. 107+08.61 TO STA. 108+21.11 TRANS. TO N.C.
 STA. 110+25.50 TO STA. 111+38.00 TRANS. TO 3.4%
 STA. 111+38.00 TO STA. 112+08.17 S.E. 3.4%
 STA. 112+08.17 TO STA. 113+20.67 TRANS. TO N.C.

(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.

BUSINESS
 SURFACE - 1/4"
 BINDER - 1/4"
 BASE - 4"

FIELD OR RESIDENTIAL
 SURFACE - 1/2"
 BINDER - NONE
 BASE - 4"

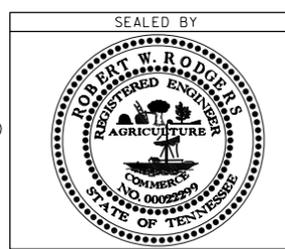


NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

PROPOSED PAVEMENT SCHEDULE

① MINERAL AGGREGATE BASE (10") @ 2.03 TONS/C.Y. 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	④ ASPHALTIC CONCRETE SURFACE (HOT MIX) (1.25") (APPROX. 132.5 LBS./S.Y.) 411-01.10 ACS MIX (PG64-22) GRADING "D"
② BITUMINOUS PLANT MIX BASE (HOT MIX) (3") (APPROX. 345 LBS./S.Y.) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) GRADING "A"	⑤ PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) 0.30-0.35 GAL/S.Y. 402-02 AGGREGATE FOR COVER MATERIAL (PC) 8-12 LB./S.Y.
③ BITUMINOUS PLANT MIX BASE (HOT MIX) (2") (APPROX. 226 LBS./S.Y.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) GRADING "BM-2"	⑥ TACK COAT 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) 0.07 GAL/S.Y.

UNOFFICIAL SET
NOT FOR BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

3-JUN-2014 11:47 \\J02WF01\td01.state.tn.us\025Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\002A-TYPICAL SECTIONS.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	2C

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.

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.

- (6) NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

SEDIMENT CONTROL

- (7) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- (8) 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.
- (9) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL- VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.
- (10) 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.
- (11) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.
- (12) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
- (13) 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.
- (14) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

- (15) 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.
- (16) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.

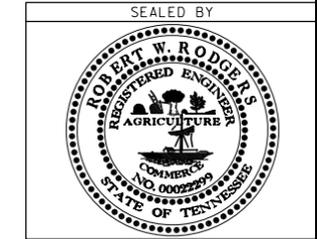
- (17) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.

INSPECTION, MAINTENANCE, REPAIR

- (18) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.
- (19) 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.
- (20) 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.
- (21) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.
- (22) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.
- (23) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
- (24) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.
- (25) THE TDOT PROJECT SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

13-JUN-2014 11:47
 \\J002WF01.f001.state.tn.us\025Shared\Design County Folder\S\Cumberland\Col.Inx Cox Ave SIA\Information Only Set\002C_GEN NOTES2.SHT

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

GENERAL
 NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	2D

MATERIALS

(26) 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.

SWPPP, PERMITS, PLANS, RECORDS

- (27) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.
- (28) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, ROADWAY DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- (29) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.
- (30) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BREIF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.
- (31) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (32) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.
- (33) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.
- (34) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.
- (35) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

- (36) 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.
- (37) 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.

GALLOPING – NO DESIGN NECESSARY. VIBRATION DAMPENERS SHALL BE USED ON ALL CANTILEVERED ARMS THAT ARE 50' OR LONGER.

VORTEX SHEDDING – NOT APPLICABLE ON TRAFFIC SIGNAL SUPPORTS WITH A TAPER OF AT LEAST 0.14 IN/FT.

NATURAL WIND GUSTS – THE YEARLY MEAN WIND SPEED FOR NATURAL WIND GUSTS SHALL BE 11.2 MPH.

THE TRAFFIC SIGNAL SUPPORT POLES SHALL BE POLES WITH CURVED CANTILEVERED ARM(S) IN ACCORDANCE WITH METRO PUBLIC WORKS. FOR POLE AND ARM DETAILS, CONTACT MIKE HIRTZER AT 615-880-3261

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

- (1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 8, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

ENVIRONMENTAL

ECOLOGY

- (1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE WILL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING CONCERNING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR DESIGNATED CONSULTANT WILL NEED TO BE ON-SITE FOR WORK BEING DONE WHICH COULD AFFECT THE STREAM OR SPECIES.

SPECIAL NOTES

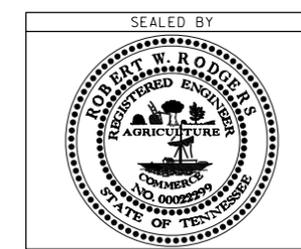
GRADING

- (1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.
- (2) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.
- (3) TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION CONSTRUCTION, DETAIL ROCK AND SOIL DESCRIPTION AND ON SOME PROJECTS, ROCK CORE SAMPLES ARE AVAILABLE FOR INSPECTION AT THE MATERIALS AND TESTS HEADQUARTERS AT 6601 CENTENNIAL BOULEVARD, NASHVILLE, TN OR AT THE TDOT REGION 1 BUILDING IN KNOXVILLE, TN.
- (4) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
- (5) EARTHWORK IS PAID FOR UNDER ITEM 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED). NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

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) THE TRAFFIC SIGNAL SUPPORT POLES SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS (CURRENT EDITION WITH ADDENDA). WIND LOADS SHALL BE BASED ON A BASIC WIND SPEED OF 90 MPH WITH A RECURRENCE INTERVAL OF 50 YEARS. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY I. FATIGUE LOADS ARE BASED ON THE REQUIREMENTS OF SECTION 11.7 OF THE SUBJECT AASHTO DOCUMENT AND THE FOLLOWING LOADS:

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES
AND
SPECIAL NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	2E

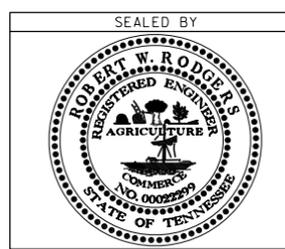
ESTIMATED GRADING QUANTITIES					
STATION TO STATION	ROAD & DRAINAGE EXC. (UNCL.)	BORROW EXCAVATION		EXCESS EXC.	EMB.
	C.Y.	UNCL. - C.Y.	S. ROCK - C.Y.	WASTE C.Y.	
100+19.65 TO 116+94.69	1713			653	837
TOTALS	1713	0	0	653	837

PAVEMENT QUANTITIES							
LOCATION	PAY ITEMS						
	303-01 (TON)	307-01.01 (TON)	307-01.08 (TON)	402-01 (TON)	402-02 (TON)	403-01 (TON)	411-01.10 (TON)
MAINLINE	4491.7	843.3	541.8	8.1	31.8	3.1	313.5
DRIVES	778.0	0.0	333.5	4.7	18.5	0.9	221.3
TOTALS	5269.7	843.3	875.3	12.8	50.3	4.0	534.8

PROPOSED GUARDRAIL										
SHEET NO.	LOCATION	SIDE		STATION		GUARDRAIL	TERMINAL ANCHORS			REMARKS
		LT	RT	FROM	TO	SINGLE TYPE 2 705-02.02 (L.F.)	TYPE 13 705-04.03 (EACH)	TYPE IN-LINE 705-04.05 (EACH)	TYPE 38 705-04.07 (EACH)	
		5A	MAINLINE		X	112+13.24	116+94.69	463	1	
TOTALS						463	1	1	1	

R.O.W. MARKERS				
SHEET NO.	QUANTITIES			
	"A"	"B"	"C"	TOTALS
4A	0	0	1	1
TOTALS	0	0	1	1

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED
QUANTITIES

13-JUN-2014 11:48 \\J02WF01.f001.state.tn.us\025Shared\Design County Folder\s\Cumberland\Col.Inx Cox Ave SIA\Information Only Set\002E.TABQUANTITIES.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	2F

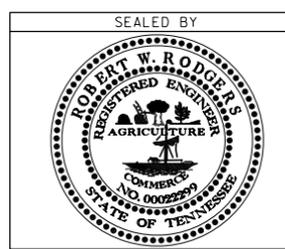
SIDE DRAIN TABULATION

STATION	LOCATION		DESCRIPTION	SURFACE WIDTH (L.F.)	RCP CLASS III OR CMP 16 GA. OR HDPE OR PVC OR SRTRP (L.F.) FILL HEIGHT < OR = 10 FT.					REMARKS
	LT	RT			18"	24"	30"	36"	48"	
101+18.62		X	Bus. Ent.	30	40					
101+43.48	X		Bus. Ent.	96	112					
102+28.44		X	Bus. Ent.	95	120					
102+55.41	X		Bus. Ent.	20	30					
103+37.21	X		Bus. Ent.	92	126					
103+75.94	X		Bus. Ent.	25						
103+56.00		X	Bus. Ent.	18	28					
104+50.74		X	Bus. Ent.	14	24					
105+06.00		X	Bus. Ent.	14	26					
105+36.96		X	Bus. Ent.	14	28					
105+82.90	X		Bus. Ent.	66	80					
107+00.72		X	Bus. Ent.	24	37					
107+63.04		X	Bus. Ent.	25	57					
108+68.60		X	Bus. Ent.	15	36					
108+56.91	X		Pvt. Dr.	15	27					
109+77.29		X	Bus. Ent.	25						
110+83.83	X		Pvt. Dr.	15	27					
111+71.26		X	Bus. Ent.	27						
TOTALS					798	0	0	0	0	

PAVEMENT MARKING QUANTITIES

SHEET NO.	PERMANENT PLASTIC PAVEMENT MARKINGS					
	716-02.04 CHANNELIZATION STRIPING, SY	716-02.05 STOP LINE LF	716-02.06 TURN LANE ARROW, EA	716-13.06 PVMT MARKING (40MIL) (4" LINE), LM		716-13.09 PVMT MARKING (40MIL) (4" DOTTED LINE), LF
				SSWL	DSYL	
10	9	38	2	0.5	0.5	23
10A	0	0	0	0.2	0.2	0
TOTAL	9	38	2	1.40		23

**UNOFFICIAL
SET
NOT FOR
BIDDING**



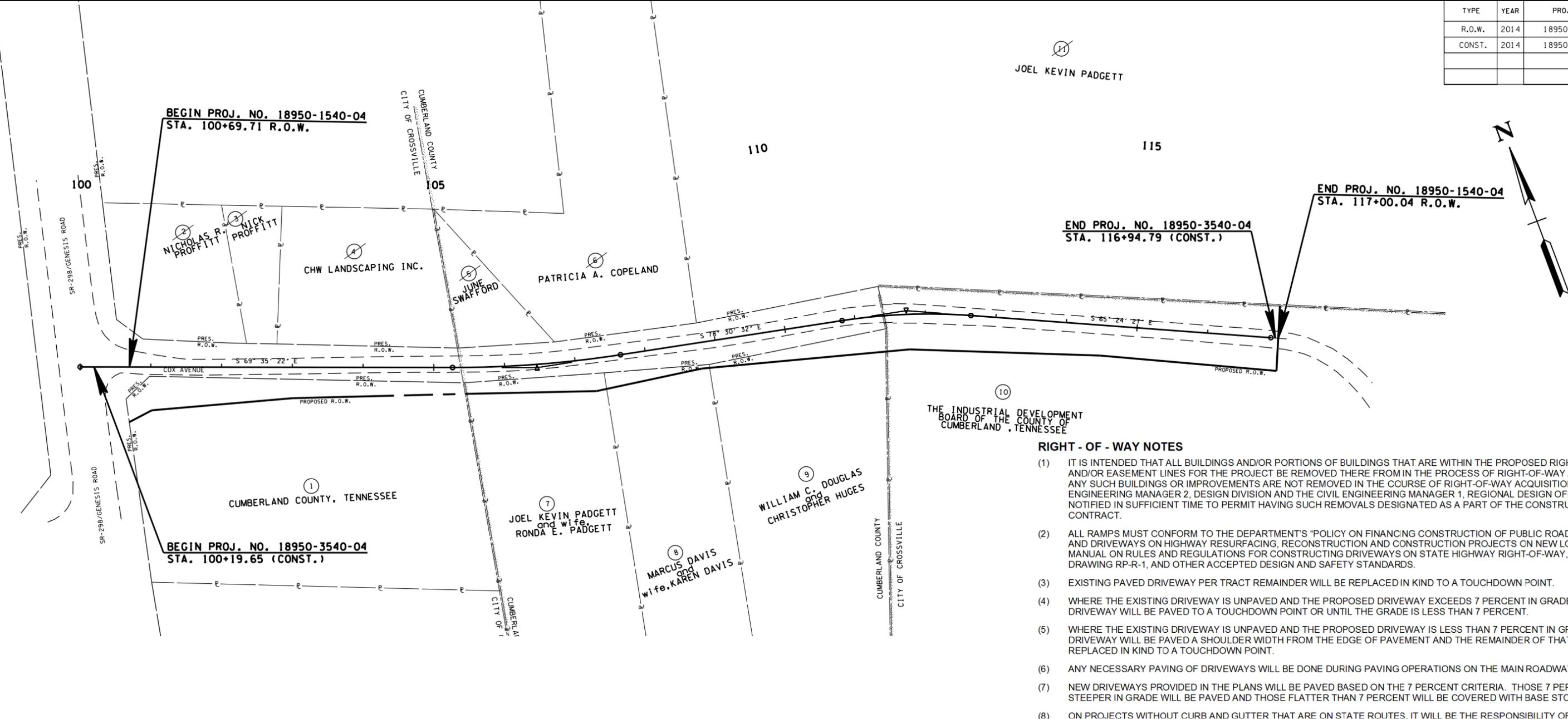
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TABULATED
QUANTITIES**

3-JUN-2014 11:48 \\J02WF01\p01.state.tn.us\025Shared\Design County Folder\s\Cumberland\Col.Inx Cox Ave SIA\Information Only Set\002F_TABQUANTITIES2.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	3
CONST.	2014	18950-3540-04	3

11
JOEL KEVIN PADGETT



RIGHT - OF - WAY NOTES

- IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT BE REMOVED THERE FROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THE CIVIL ENGINEERING MANAGER 2, DESIGN DIVISION AND THE CIVIL ENGINEERING MANAGER 1, REGIONAL DESIGN OFFICE, ARE TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.
- ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY, STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.
- EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.
- WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.
- WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.
- ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.
- NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.
- ON PROJECTS WITHOUT CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT AND TO CONSTRUCT ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.
- ON NON-STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.

UTILITY OWNERS

UTILITY	OWNER	PHONE NO.	CONTACT	ADDRESS	CITY	STATE	ZIP CODE
TELEPHONE	BELLSOUTH DBA AT&T	(865) 539-8579	DAVID OVERMAN	9733 PARKSIDE DR.	KNOXVILLE	TN	37922
WATER	CITY OF CROSSVILLE	(931) 484-5113	SALLY OGLESBY	392 NORTH MAIN ST.	CROSSVILLE	TN	38555
SEWAGE	CITY OF CROSSVILLE	(931) 484-5113	SALLY OGLESBY	392 NORTH MAIN ST.	CROSSVILLE	TN	38555
GAS	UPPER CUMBERLAND GAS UTILITY DISTRICT	(931) 484-9380	CHARLES HERCHER	P.O. BOX 807	CROSSVILLE	TN	38557
POWER	VOLUNTEER ENERGY COOPERATIVE	(423) 334-7001	RODY BLEVINS	18359 HWY 58 NORTH	DECATUR	TN	37322

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA ACRES			AREA TO BE ACQUIRED ACRES			AREA REMAINING ACRES		EASEMENT (SQUARE FEET)		
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST.
				BK.	PAGE											
1	CUMBERLAND COUNTY TENNESSEE	087	089.00	405	22		3.284	3.284		0.324	0.324		2.960			
2	NICHOLAS R. PROFFITT	087	091.02	381	287	0.767		0.767				0.767				
3	NICK PROFFITT	087	090.01	1336	664	0.289		0.289				0.289				
4	C.H.W. LANDSCAPING INC	087	090.00	256	248	1.064		1.064				1.064				
5	JUNE SWAFFORD	087	091.03	1167	1697	0.311		0.311				0.311				
6	PATRICIA A. COPELAND	087	091.11	366	647	3.146		3.146				3.146				
7	JOEL KEVIN PADGETT AND WIFE RHONDA E. PADGETT	087	091.08	1175	2008	2.211		2.211	4063 S.F.	4063 S.F.		2.118				
8	MARCUS DAVIS AND WIFE KAREN DAVIS	087	091.10	1188	245	2.444		2.444	1947 S.F.	1947 S.F.		2.399				
9	WILLIAM C. DOUGLAS AND CHRISTOPHER HUGHES	087	091.14	373	65	3.459		3.459	0.107	0.107		3.352				
10	THE INDUSTRIAL DEVELOPMENT BOARD OF THE COUNTY OF CUMBERLAND TENNESSEE C/O COUNTY EXECUTIVE	087	091.15	1152	106	10.469		10.469	1.107	1.107		9.362				
11	JOEL KEVIN PADGETT	087	091.00	1046	2204	43.178		43.178				43.178				

**UNOFFICIAL SET
NOT FOR BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP
STA. 100+00 TO STA. 117+00
SCALE: 1"=100'

3-JUN-2014 11:48 \\J02WF01\1001-state-tn-us\025Shared\Design County Folder\s\Cumberland\Col\Inx Cox Ave SIA\Information Only Set\003_PropertyMap.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	4
CONST.	2014	18950-3540-04	4

REV. 2/14/14
 UPDATED UTILITY CROSSING NEAR INTERSECTION.
 REV. 4/25/14
 ADDED EXISTING ROW LINES

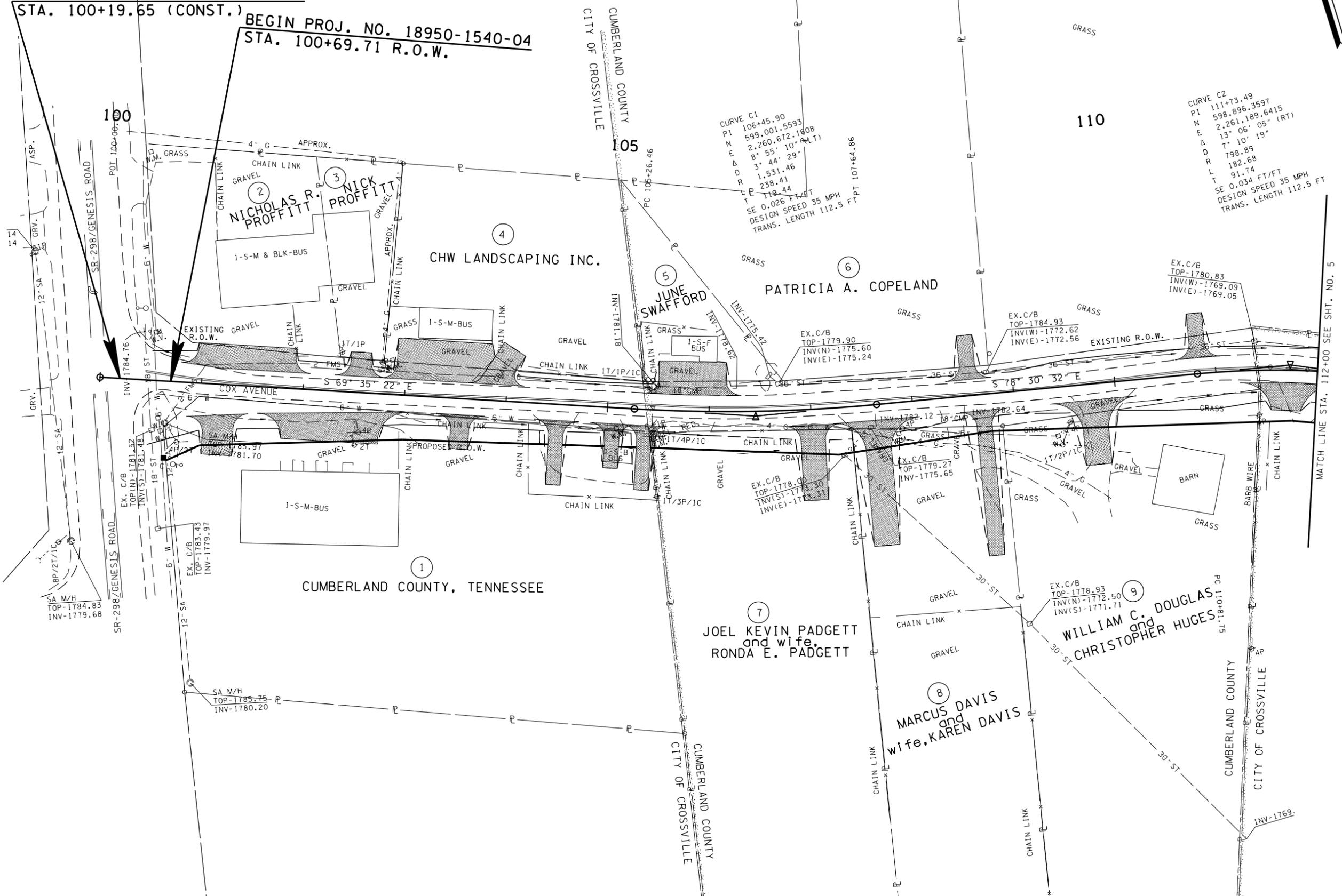
CONTROL POINTS							
Point	North	East	Elevation	Feature	GPSPPOINT	Station	Offset
S01	600694.1264	2260408.4447	1795.6800	XCP	GPS-18-462-01	0+00.00	Off Chain
S02	600203.2783	2260341.7555	1791.8600	XCP	GPS-18-462-02	0+00.00	Off Chain

D.A. FACTOR 1.000137, GEOID '99



BEGIN PROJ. NO. 18950-3540-04
 STA. 100+19.65 (CONST.)

BEGIN PROJ. NO. 18950-1540-04
 STA. 100+69.71 R.O.W.



**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**



COORDINATES ARE NAD/83(1995),
 ARE DATUM ADJUSTED BY THE
 FACTOR OF 1.000137 AND TIED TO
 THE TGRN. ALL ELEVATIONS ARE
 REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**PRESENT
 LAYOUT**

STA. 100+00 TO STA. 112+00

SCALE: 1" = 50'

13-JUN-2014 11:48
 \\J02WF01.f01.state.tn.us\025Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\004.SHT

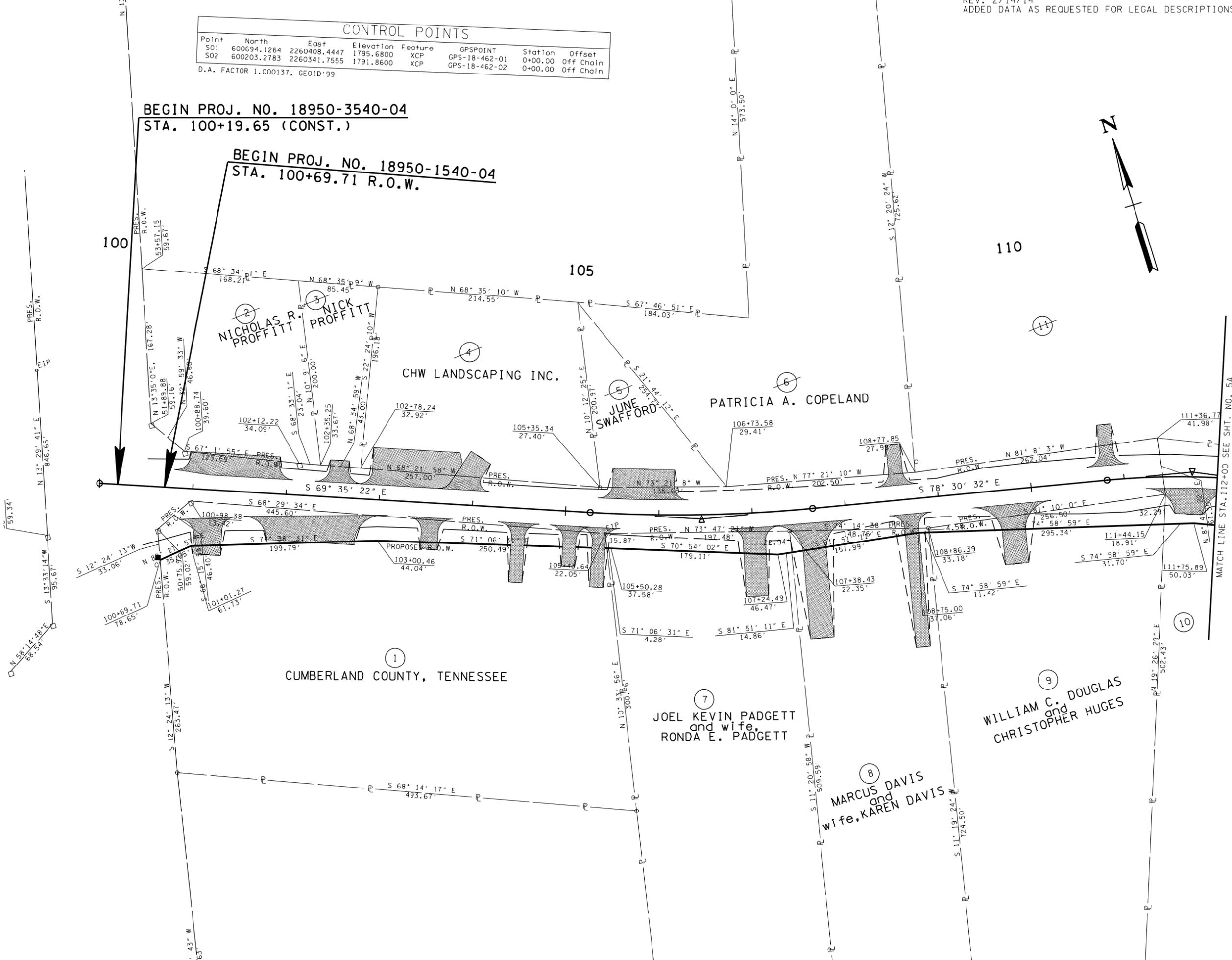
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	4A
CONST.	2014	18950-3540-04	4A

CONTROL POINTS							
Point	North	East	Elevation	Feature	GPSPPOINT	Station	Offset
S01	600694.1264	2260408.4447	1795.6800	XCP	GPS-18-462-01	0+00.00	Off Chain
S02	600203.2783	2260341.7555	1791.8600	XCP	GPS-18-462-02	0+00.00	Off Chain

D.A. FACTOR 1.000137, GEOID'99

BEGIN PROJ. NO. 18950-3540-04
 STA. 100+19.65 (CONST.)

BEGIN PROJ. NO. 18950-1540-04
 STA. 100+69.71 R.O.W.



UNOFFICIAL SET
 NOT FOR BIDDING



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000137 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

STA. 100+00 TO STA. 112+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	4B
CONST.	2014	18950-3540-04	4B

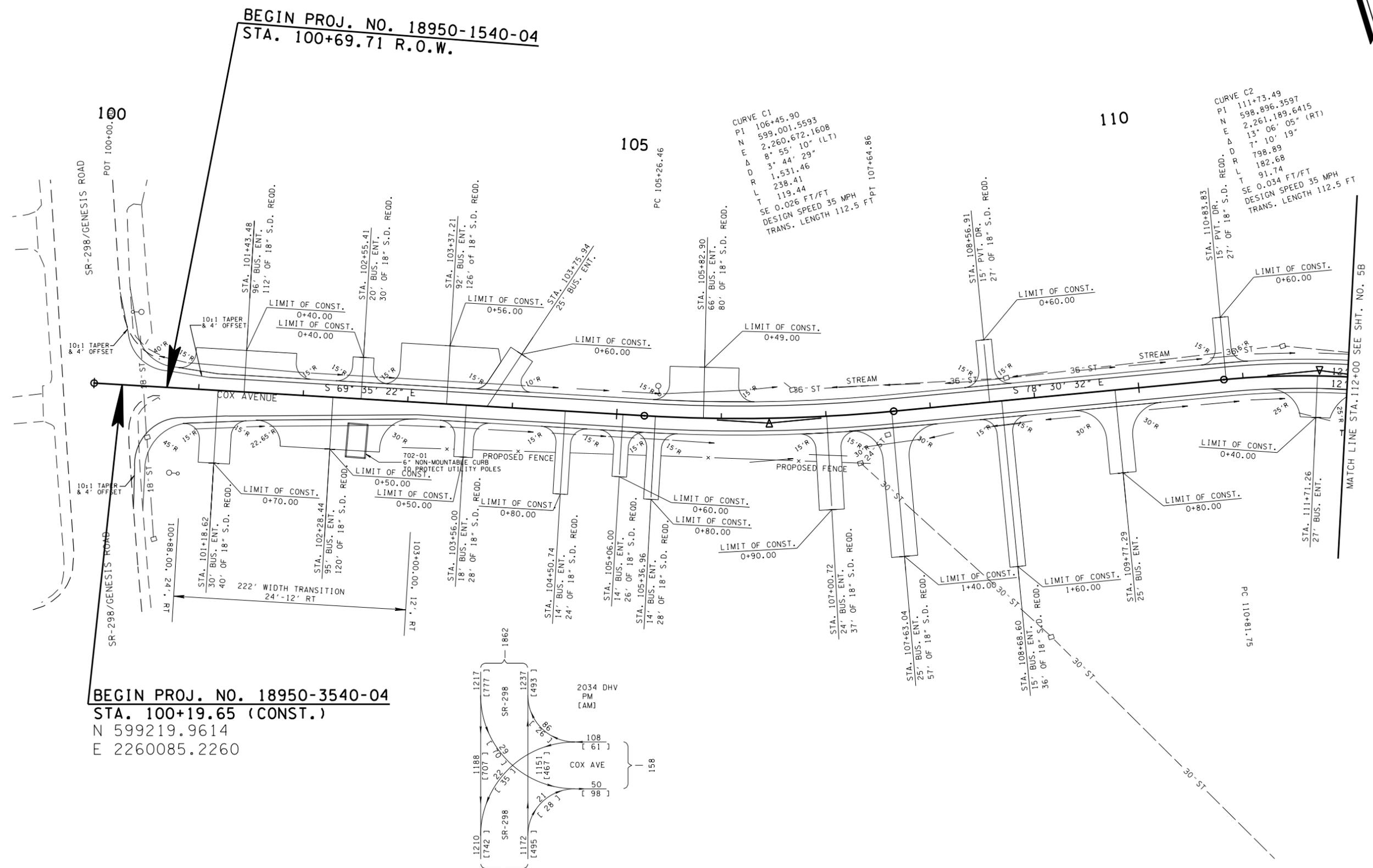


BEGIN PROJ. NO. 18950-1540-04
STA. 100+69.71 R.O.W.

100

105

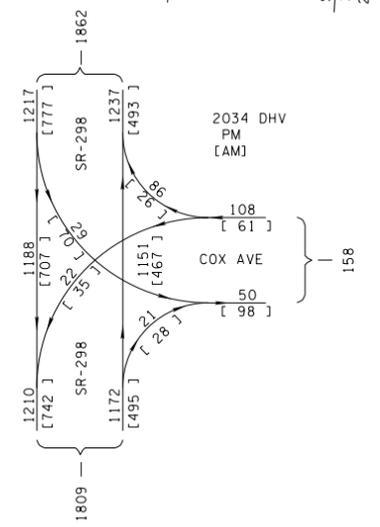
110



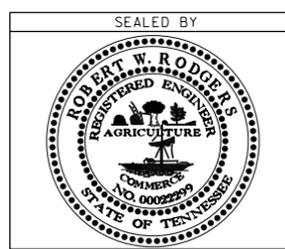
CURVE C1
PI 106+45.90
N 599.001.5593
2,260.672.1608
8° 55' 10" (LT)
3' 44' 29"
1,531.46
238.41
119.44
SE 0.026 FT/FT
DESIGN SPEED 35 MPH
TRANS. LENGTH 112.5 FT
PT 107+64.86

CURVE C2
PI 111+73.49
N 598.896.3597
2,261.189.6415
13° 06' 05" (RT)
7' 10' 19"
798.89
182.68
91.74
SE 0.034 FT/FT
DESIGN SPEED 35 MPH
TRANS. LENGTH 112.5 FT

BEGIN PROJ. NO. 18950-3540-04
STA. 100+19.65 (CONST.)
N 599219.9614
E 2260085.2260



**UNOFFICIAL
SET
NOT FOR
BIDDING**



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000137 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PROPOSED
LAYOUT**

STA. 100+00 TO STA. 112+00

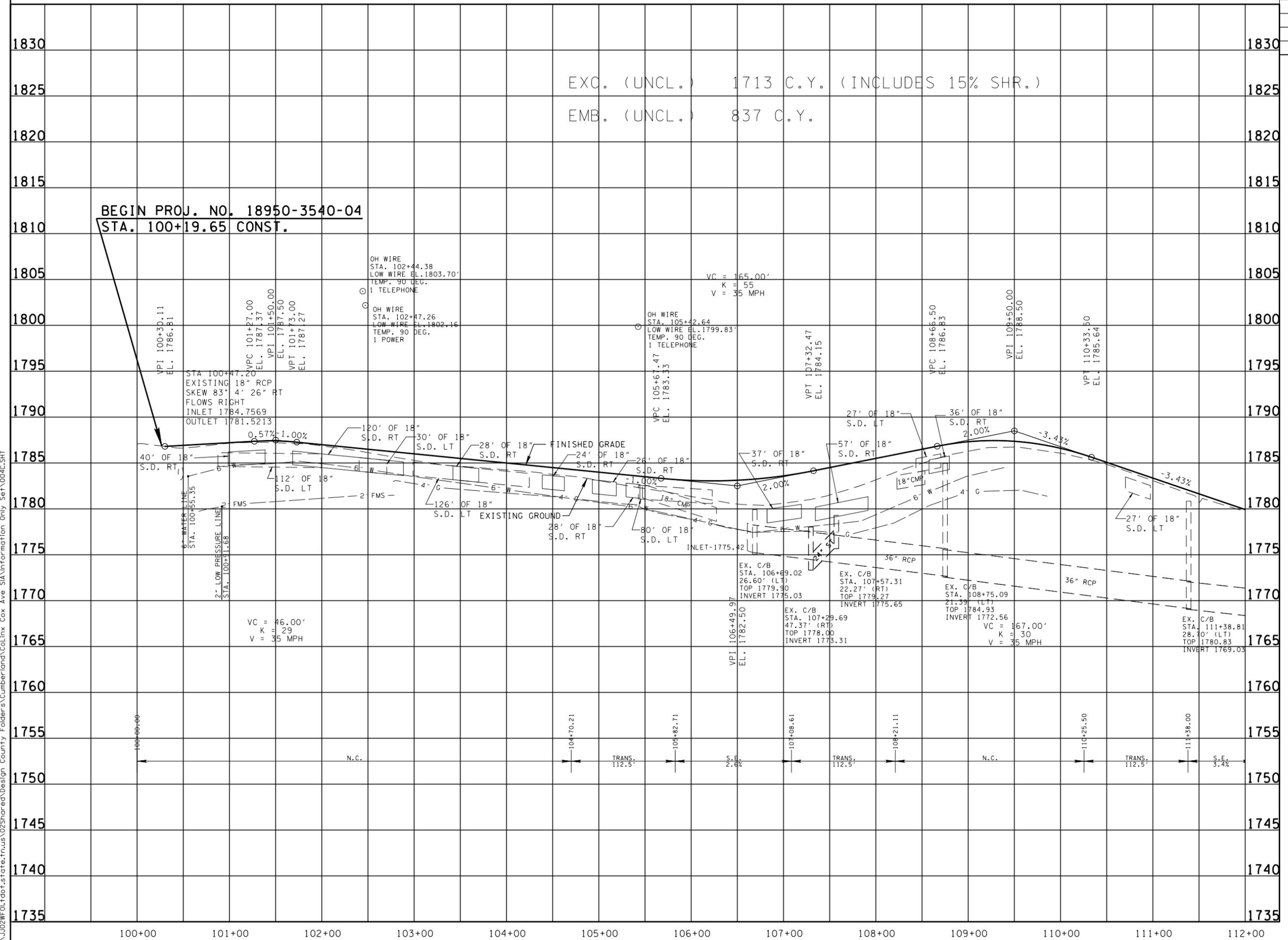
SCALE: 1" = 50'

13-JUN-2014 11:48 \\J02WF01\p01.state.tn.us\02Shared\Design County Folder\s\Cumberland\Col\Inx Cox Ave SIA\Information Only Set\004B.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	4C
CONST.	2014	18950-3540-04	4C

EXC. (UNCL.) 1713 C.Y. (INCLUDES 15% SHR.)
 EMB. (UNCL.) 837 C.Y.

BEGIN PROJ. NO. 18950-3540-04
 STA. 100+19.65 CONST.



**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**



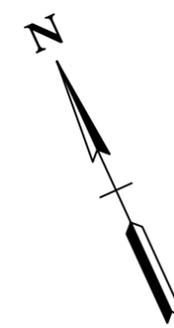
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

PROFILE

STA. 100+00 TO STA. 112+00
 SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.

3-JUN-2014 11:48 \\J02WF01.f01.state.tn.us\025Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\004C.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	5
CONST.	2014	18950-3540-04	5



11

JOEL KEVIN PADGETT

115

END PROJ. NO. 18950-3540-04
STA. 116+94.79 CONST.

END PROJ. NO. 18950-1540-04
STA. 117+00.04 R.O.W.

MATCH LINE STA. 112+00 SEE SHT. NO. 4

GRASS

EX. C/B
TOP-1772.07
INV(W)-1765.77
INV(E)-1765.11

GRASS

CUMBERLAND COUNTY
CITY OF CROSSVILLE

EX. C/B
TOP-1768.82
INV(W)-1762.04
INV(E)-1762.00

INV-1775.16

DETENTION POND

LIMITS OF
DETENTION POND

THE INDUSTRIAL DEVELOPMENT
BOARD OF THE COUNTY OF
CUMBERLAND, TENNESSEE

PT 112+64.42

10

POND

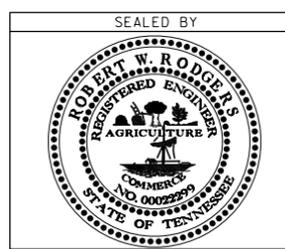
GRAVEL

S 65° 24' 27" E

POT 116+89.60

3-JUN-2014 11:48
\\J02WF01.f001.state.tn.us\025Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\005.SHT

**UNOFFICIAL
SET
NOT FOR
BIDDING**



COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000137 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

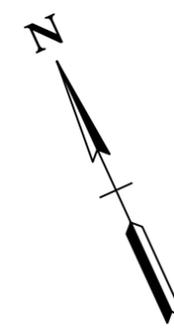
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PRESENT
LAYOUT**

STA. 112+00 TO STA. 117+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	5A
CONST.	2014	18950-3540-04	5A



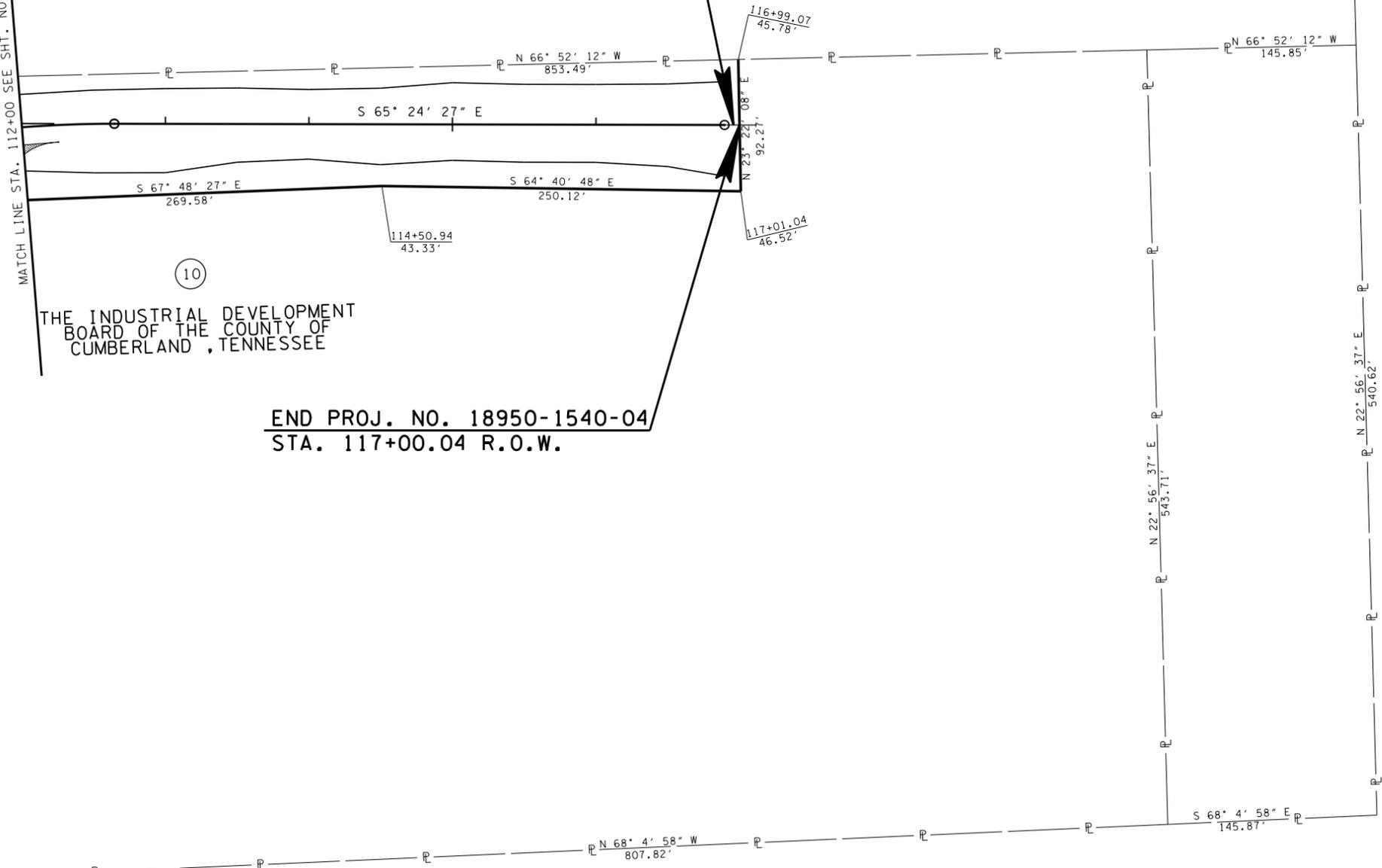
11

JOEL KEVIN PADGETT

115

END PROJ. NO. 18950-3540-04
STA. 116+94.79 CONST

MATCH LINE STA. 112+00 SEE SHT. NO. 4A

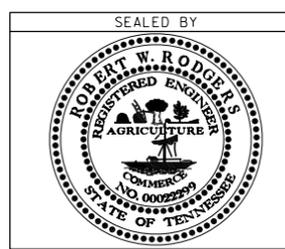


10

THE INDUSTRIAL DEVELOPMENT
BOARD OF THE COUNTY OF
CUMBERLAND, TENNESSEE

END PROJ. NO. 18950-1540-04
STA. 117+00.04 R.O.W.

**UNOFFICIAL
SET
NOT FOR
BIDDING**



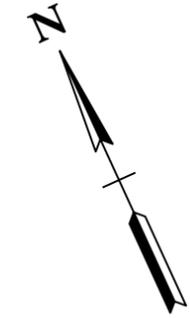
COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000137 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**R.O.W.
DETAILS**
STA. 112+00 TO STA. 117+00
SCALE: 1" = 50'

3-JUN-2014 14:49 \\J02WF01.f001.state.tn.us\02Shared\Design County Folder\s\Cumberland\ColInx Cox Ave SIA\Information Only Set\005A.SHT

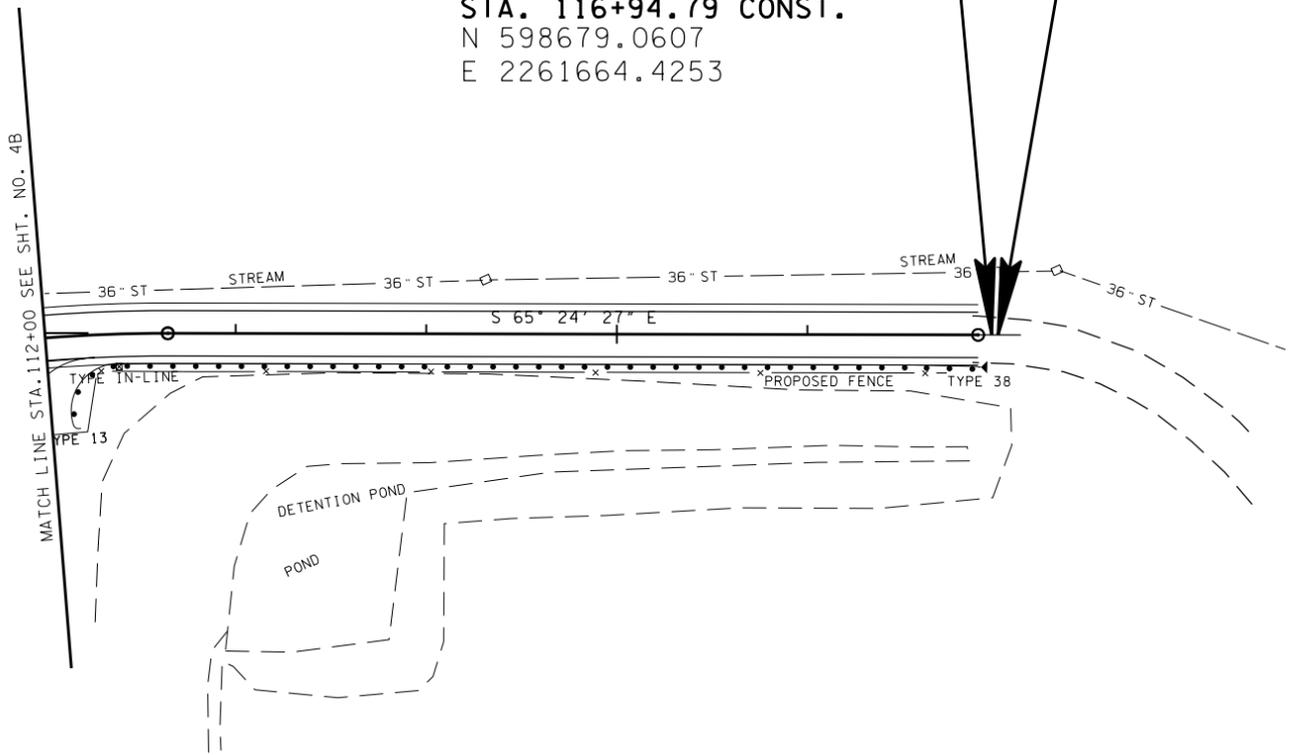
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	5B
CONST.	2014	18950-3540-04	5B



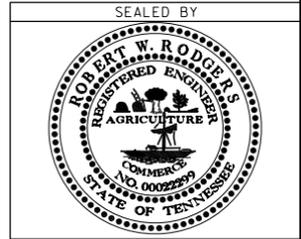
115

END PROJ. NO. 18950-3540-04
 STA. 116+94.79 CONST.
 N 598679.0607
 E 2261664.4253

END PROJ. NO. 18950-1540-04
 STA. 117+00.04 R.O.W.



**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**



COORDINATES ARE NAD/83(1995),
 ARE DATUM ADJUSTED BY THE
 FACTOR OF 1.000137 AND TIED TO
 THE TGRN. ALL ELEVATIONS ARE
 REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**PROPOSED
 LAYOUT**
 STA. 112+00 TO STA. 117+00
 SCALE: 1" = 50'

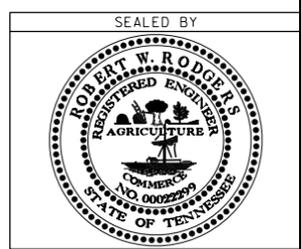
13-JUN-2014 11:49
 \\J02WF01.f001.state.tn.us\02Shared\Design County Folder\s\cumberland\colinx Cox Ave SIA\Information Only Set\005B.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	5C
CONST.	2014	18950-3540-04	5C

3-JUN-2014 11:49 \\J02WF01.f001.state.tn.us\025Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\005C.SHT



**UNOFFICIAL
SET
NOT FOR
BIDDING**



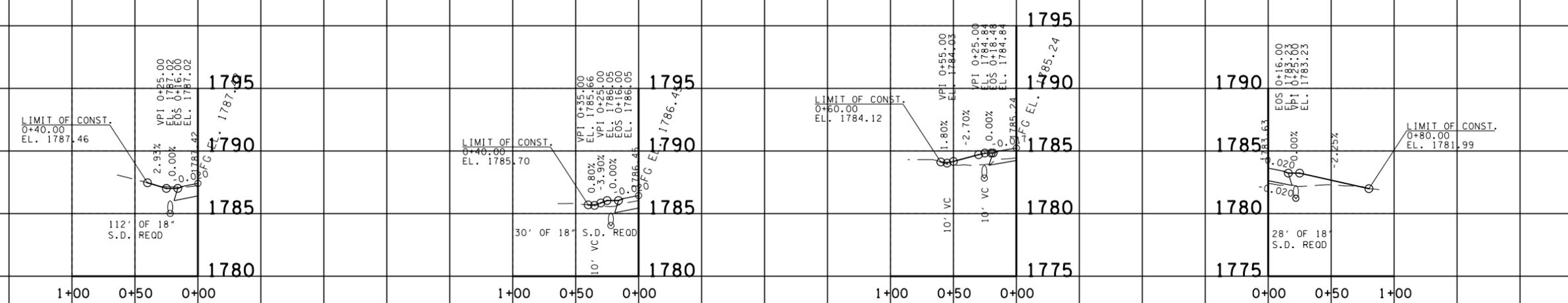
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

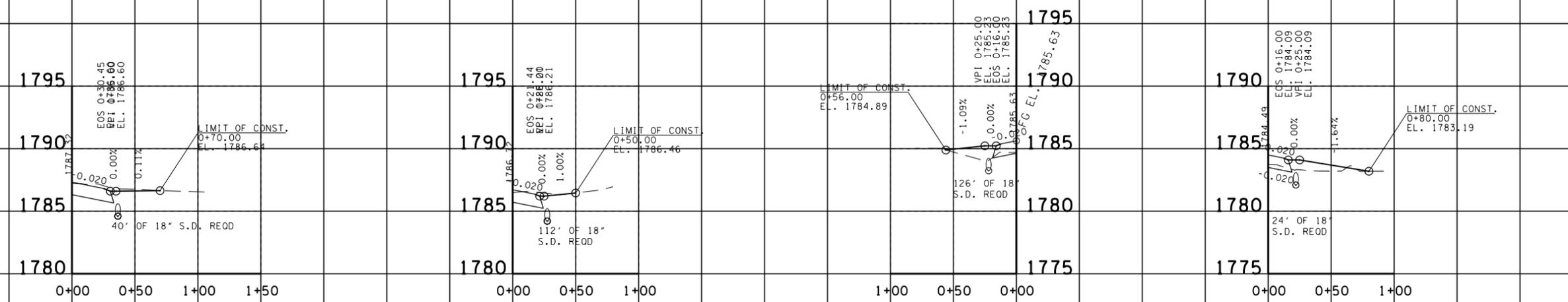
STA. 112+00 TO STA. 117+00
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	6
CONST.	2014	18950-3540-04	6

REV. 6/13/14
 REMOVED BUS. ENT. AT STA. 104+88.64
 MOVED BUSINESS ENTRANCES AT STATIONS:
 105+82.90, 107+63.04, 108+56.91,
 108+38.60, 109+77.29, 110+83.83, &
 111+71.26 TO SHEET 6A.
 ADDED BUSINESS ENTRANCES AT STATIONS:
 103+56.00, 104+50.74, 105+06.00,
 & 105+36.96.

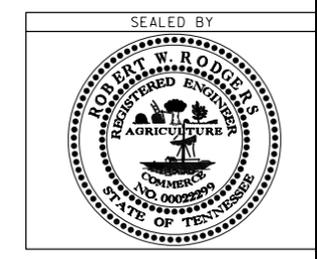


BUS. ENT. LT. 101+43.48 TRACT NO. 2
 BUS. ENT. LT. 102+55.41 TRACT NO. 3
 BUS. ENT. LT. 103+75.94 TRACT NO. 4
 BUS. ENT. RT. 105+36.96 TRACT NO. 1



BUS. ENT. RT. 101+18.62 TRACT NO. 1
 BUS. ENT. RT. 102+28.44 TRACT NO. 1
 BUS. ENT. LT. 103+37.21 TRACT NO. 4
 BUS. ENT. RT. 104+50.74 TRACT NO. 1

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

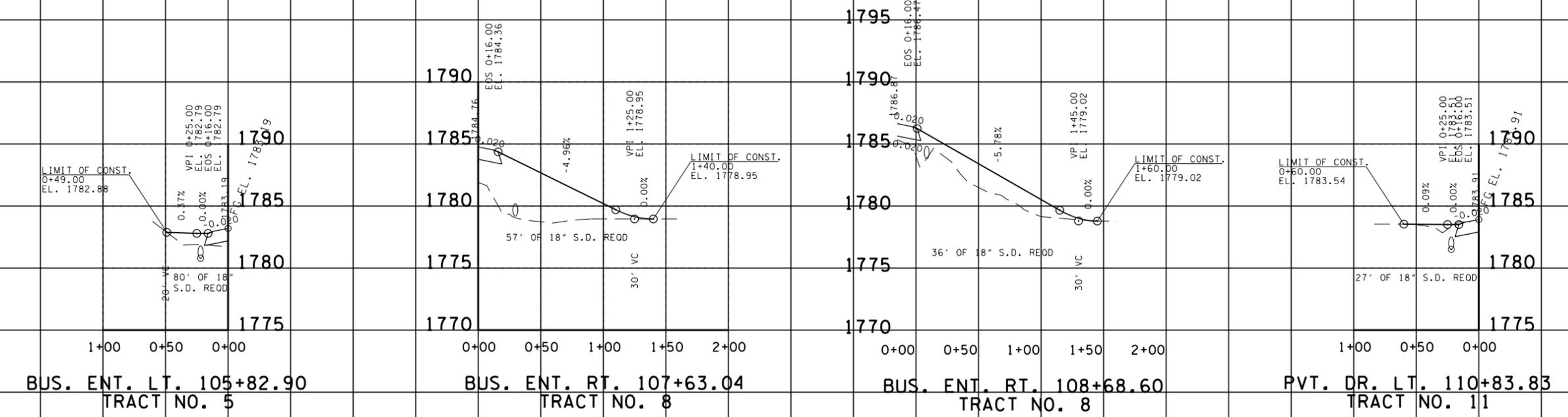
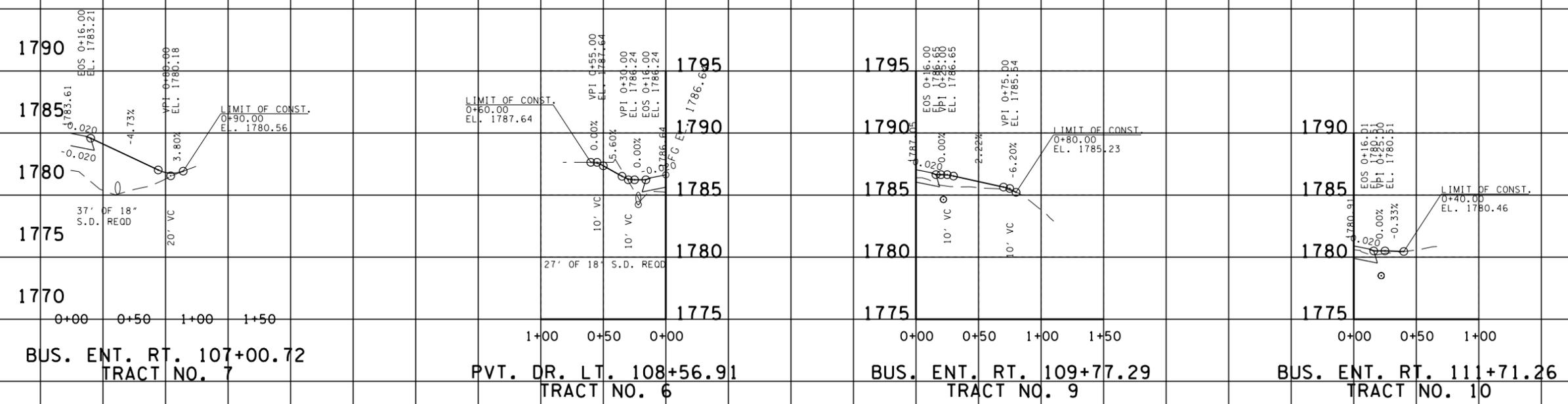
**PROFILE OF
 PRIVATE
 DRIVES**
 SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.

13-JUN-2014 11:49
 \\J02WF01.f01.state.tn.us\025Shared\Design County Folder\s\Cumberland\ColInx Cox Ave SIA\Information Only Set\006_Pv+DrProfiles.sht

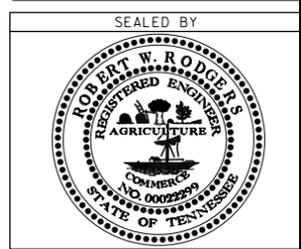
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	6A
CONST.	2014	18950-3540-04	6A

REV. 6/13/14
 ADDED SHEET.
 REVISED BUS. ENT. AT STATION 108+38.60
 TO 108+68.60.
 ADDED BUS. ENT. AT STATION 107+00.72.

13-JUN-2014 11:49 \\J02WF01.f01.state.tn.us\025Shared\Design County Folder\SIA\Information Only Set\006A.PvtDrProfiles.sht



**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**PROFILE OF
 PRIVATE
 DRIVES**
 SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	7
CONST.	2014	18950-3540-04	7



DRAINAGE DATA FOR PIPE
STATION 100+47.20
 DIRECTION OF FLOW RIGHT
 DRAINAGE AREA 1.7 AC
 PRESENT STRUCTURE: 18" RCP (X)FLAT; ()ROLLING; ()HILLY; ()MTNS.
 EXISTING STRUCTURE CONDITION: AVERAGE
 REMARKS:

BEGIN PROJ. NO. 18950-1540-04
STA. 100+69.71 R.O.W.

DRAINAGE AREA	AREA (AC)	C	Q ₅₀ (cfs)	Q ₁₀₀ (cfs)
1	1.70	0.57	0.27	0.31
2	15.56	0.35	1.09	1.74
3	28.24	0.25	1.98	2.26
4	8.50	0.50	1.19	1.36
5	2.84	0.35	0.28	0.32
6	4.41	0.67	0.83	0.95
7	10.31	0.40	1.15	1.32

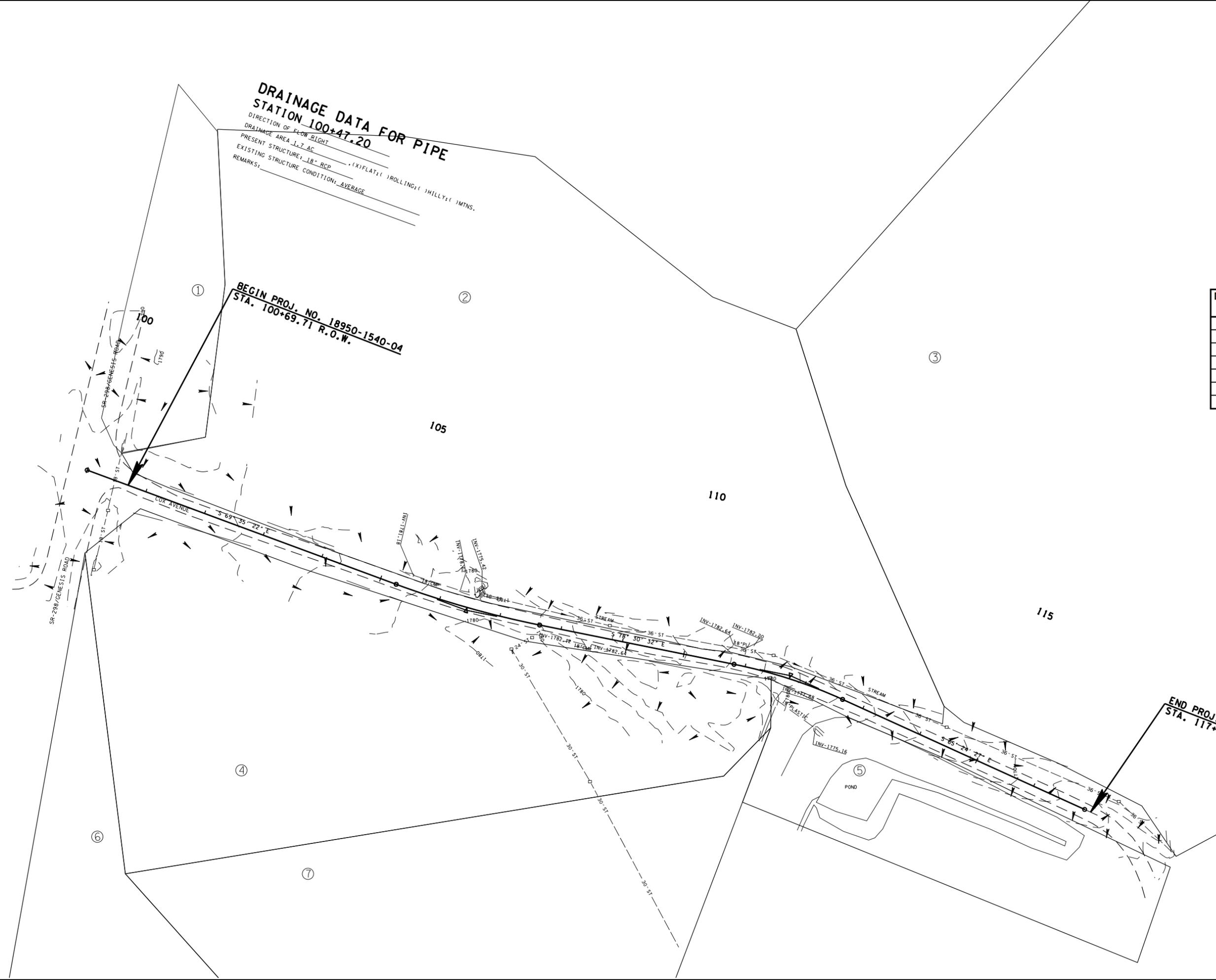
UNOFFICIAL SET
NOT FOR BIDDING



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP
 STA. 100+00 TO STA. 116+00
 SCALE: 1" = 75'

13-JUN-2014 11:49
 \\J02WF01.f001.state.tn.us\025Shared\Design County Folder.s\Cumberland\Col.Inx Cox Ave SIA\Information Only Set\007_DrainageMap.sht



END PROJ. NO. 18950-1540-04
STA. 117+00.04 R.O.W.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	8
CONST.	2014	18950-3540-04	8

KNOWN EXCEPTIONAL TENNESSEE WATERS

- (1) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, AN OUTFALL IN A DRAINAGE AREA OF 5 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT.
- (2) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPs) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

NPDES

- (3) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.
- (4) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.
- (5) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:
 - A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

- (6) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 14 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.
- (7) STEEP SLOPES (A NATURAL OR CREATED SLOPE OF 35% GRADE (2.8H:1V) OR GREATER REGARDLESS OF HEIGHT) SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
- (8) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SSWMP.

UTILITY RELOCATION

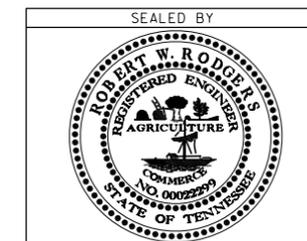
- (9) RAIN WATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED.
- (10) SILT FENCE SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING NO FLOW CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY
- (11) UTILITY CROSSINGS FOR PERENNIAL STREAMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO UTILITIES IN THIS PROJECT IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC). THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLANS (SWPPP).
- (12) IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR INSTALLER TO PROTECT FROM EROSION EXPOSED EARTH RESULTING FROM THEIR OPERATIONS AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.
- (13) FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOIL OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.
- (14) IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC), TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS IN THIS PROJECT, THEREFORE, THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTIONS PREVENTION PLANS (SWPPP). THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT WORK.

- (15) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORM WATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.
- (16) FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.
- (17) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS APPROVED BY THE TDOT PROJECT ENGINEER).
- (18) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO REPLACE IN-PLACE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT PROJECT ENGINEER BEFORE COMMENCING WORK.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EC-STR-42
* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1

TEMPORARY CONSTRUCTION EXITS TO BE PLACED AT THE DIRECTION OF THE ENGINEER

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

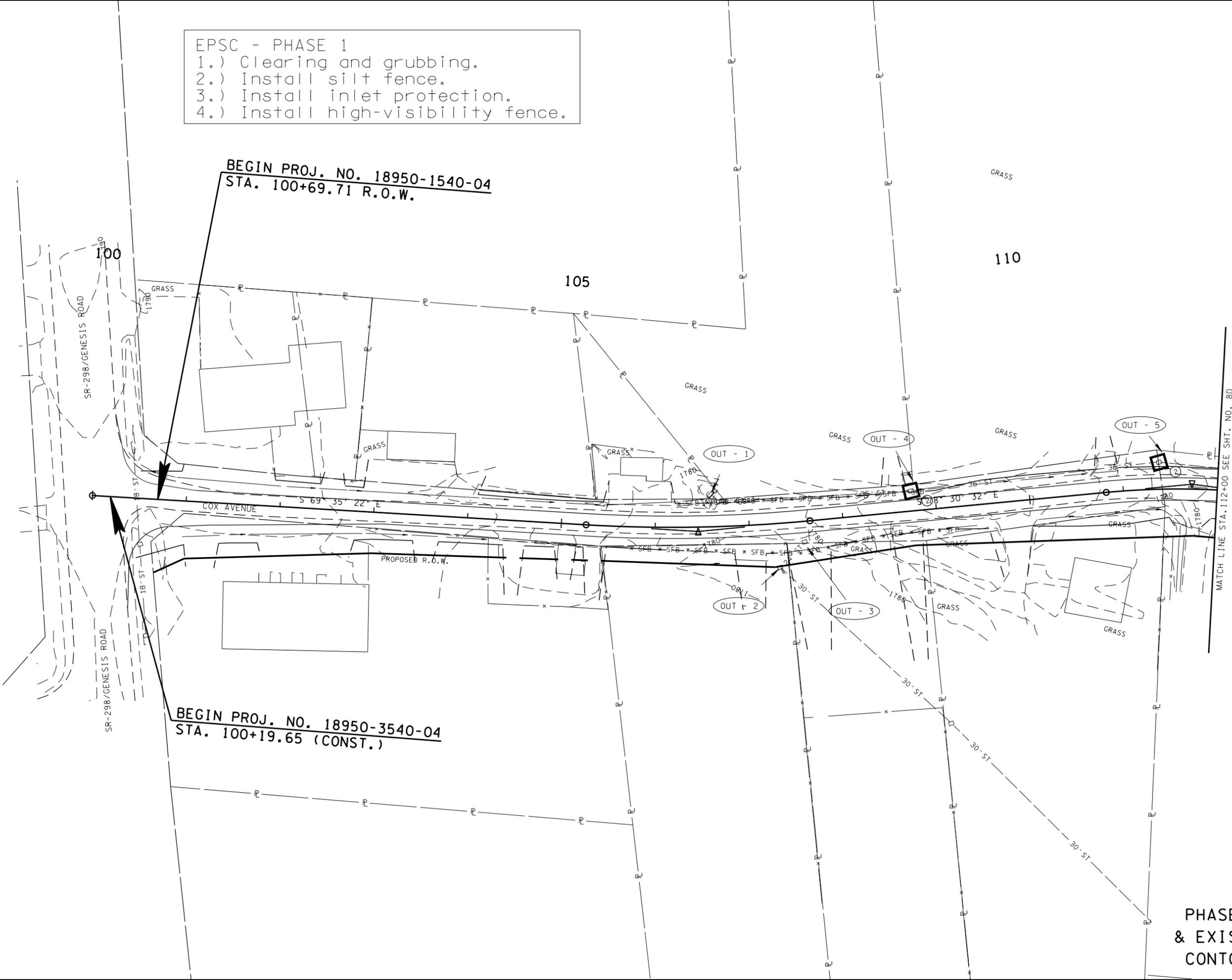
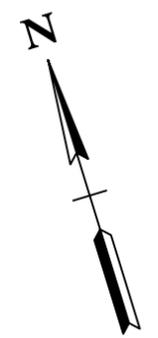
ITEM NO.	DESCRIPTION	UNIT	QUANTITY		
			PHASE 1	PHASE 2	TOTAL
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	993		993
209-40.42	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EACH	3		3
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON		2.1	2.1
621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	35		35
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	50		50
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON		573.4	573.4
740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	86	1304.9	1390.9

SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.

ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	8A
CONST.	2014	18950-3540-04	8A

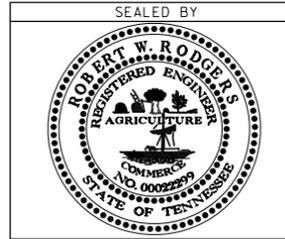
EPSC - PHASE 1
 1.) Clearing and grubbing.
 2.) Install silt fence.
 3.) Install inlet protection.
 4.) Install high-visibility fence.



OUTFALL	AREA (AC.)
OUT-1	0.39
OUT-1	0.44
OUT-1	0.12
OUT-4	0.04
OUT-5	0.12

TOTAL DISTURBED AREA
2.10 AC.

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

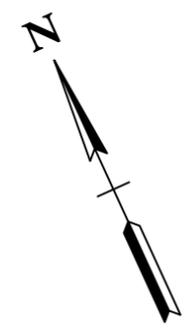
**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**

**PHASE 1
& EXISTING
CONTOURS**

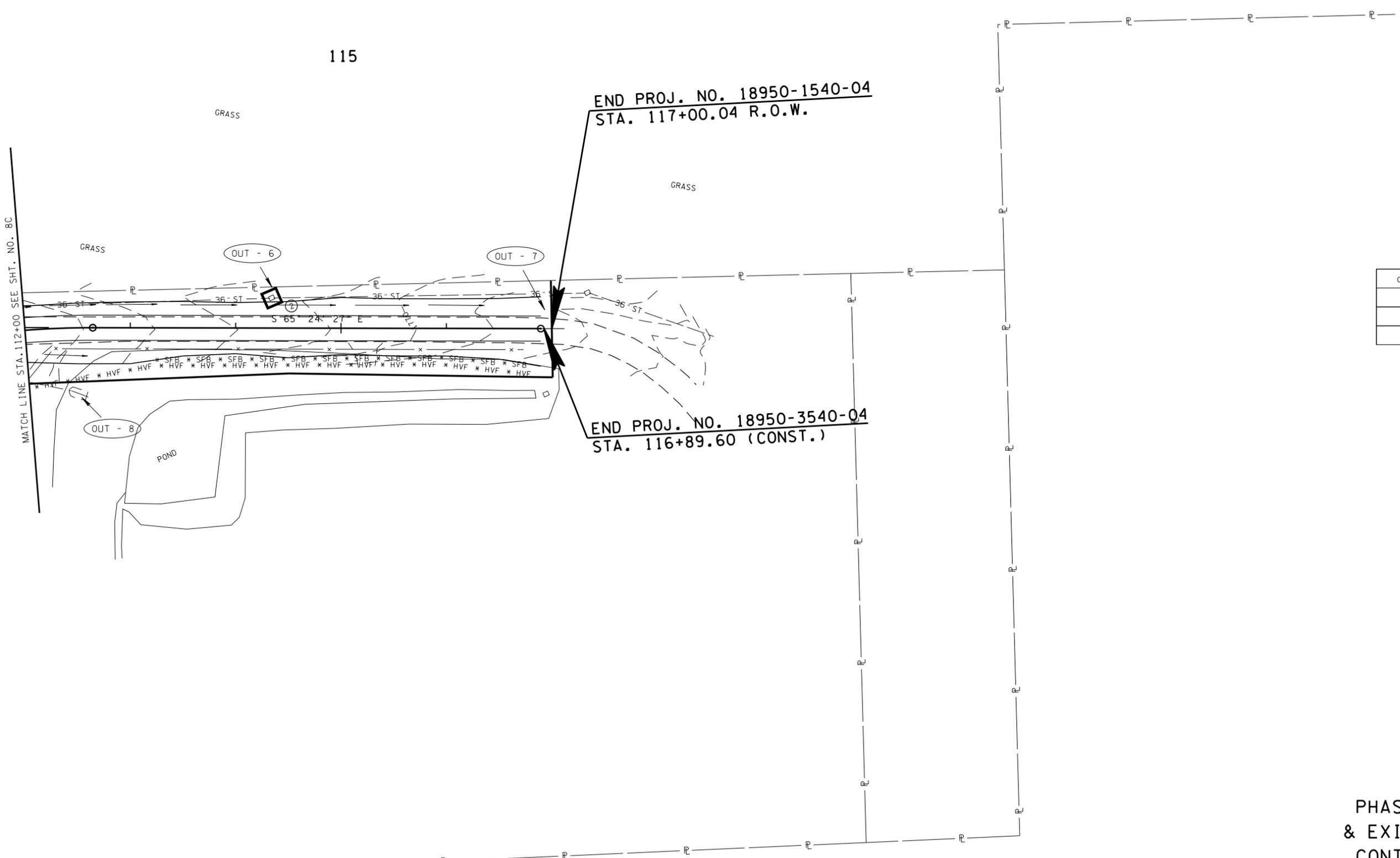
STA. 100+00 TO STA. 112+00
SCALE: 1" = 50'

13-JUN-2014 11:49
 \\J02WF01.f001.state.tn.us\025Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\008A.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	18950-1540-04	8B
CONST.	2014	18950-3540-04	8B

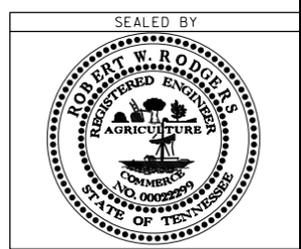


3-JUN-2014 11:49 \\J02WF01.f001.state.tn.us\025Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\008B.SHT



OUTFALL	AREA (AC.)
OUT-6	0.17
OUT-7	0.17
OUT-8	0.26

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PHASE 1
& EXISTING
CONTOURS**

**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**
STA. 112+00 TO STA. 117+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	8C

EPSC - PHASE 2
Install rock check dams.

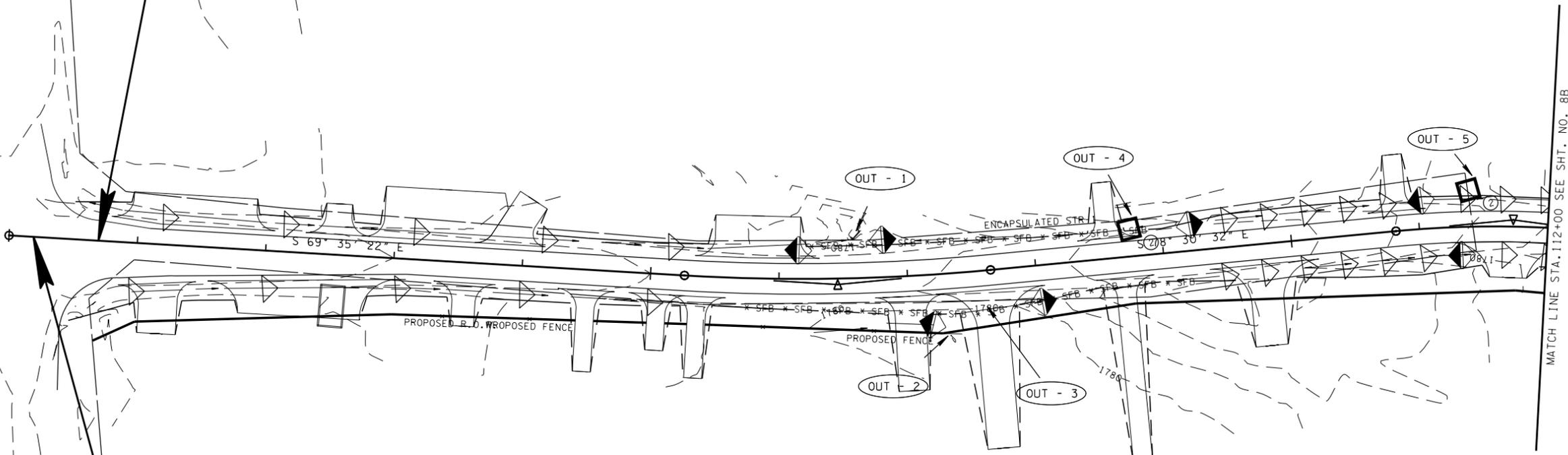


BEGIN PROJ. NO. 18950-1540-04
STA. 100+69.71 R.O.W.

100

105

110



OUTFALL	AREA (AC.)
OUT-1	0.39
OUT-2	0.44
OUT-3	0.12
OUT-4	0.04
OUT-5	0.12

BEGIN PROJ. NO. 18950-3540-04
STA. 100+19.65 (CONST.)

**UNOFFICIAL
SET
NOT FOR
BIDDING**



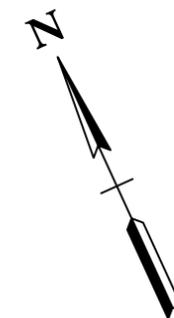
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PHASE 2
& PROPOSED
CONTOURS

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN
STA. 100+00 TO STA. 112+00
SCALE: 1" = 50'

13-JUN-2014 11:49 \\J02WF01.f001.state.tn.us\025Shared\Design County Folder.s\Cumberland\Col.Inx Cox Ave SIA\Information Only Set\008C.SHT

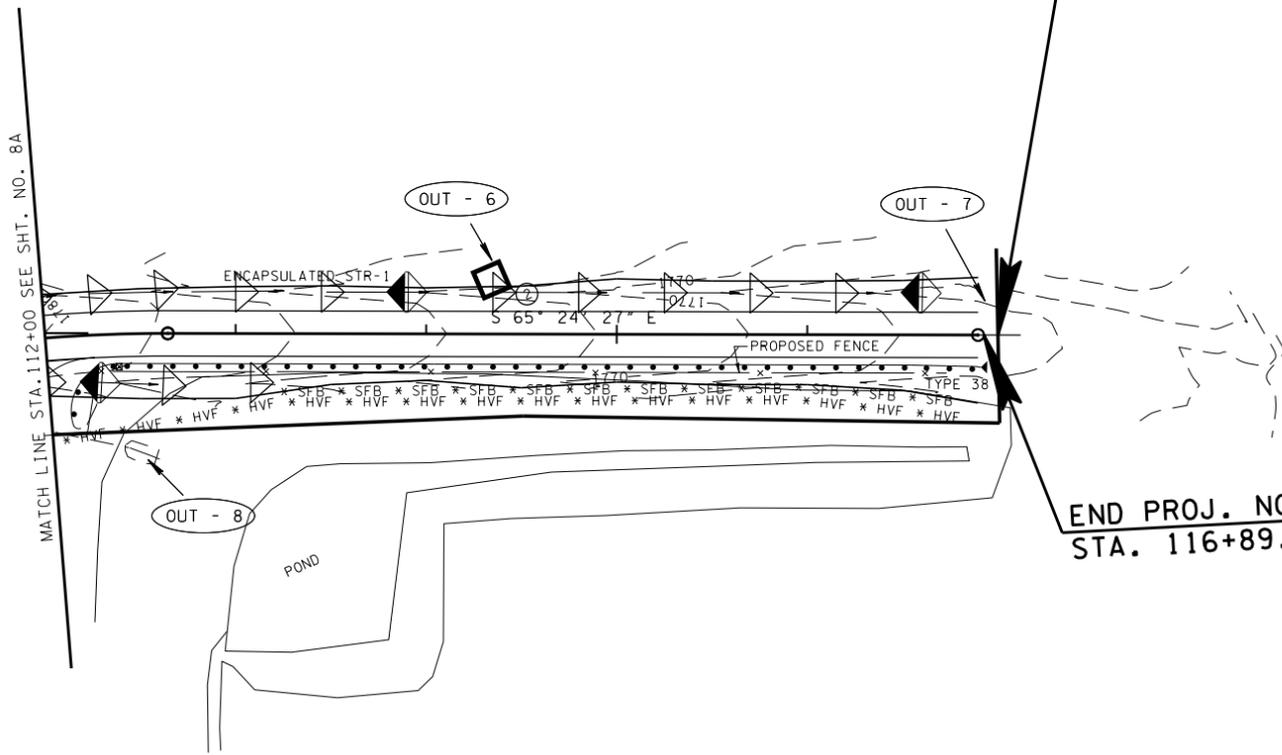
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	8D



115

END PROJ. NO. 18950-1540-04
STA. 117+00.04 R.O.W.

END PROJ. NO. 18950-3540-04
STA. 116+89.60 (CONST.)



OUTFALL	AREA (AC.)
OUT-6	0.17
OUT-7	0.17
OUT-8	0.26

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PHASE 2
& PROPOSED
COUNTOURS

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA. 112+00 TO STA. 117+00
SCALE: 1" = 50'

3-JUN-2014 11:49 \\J02WF01.f001.state.tn.us\02Shared\Design County Folder.s\Cumberland\ColInx Cox Ave SIA\Information Only Set\008D.SHT

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	9

- 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 LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), 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 LANES AND/OR SHOULDER DROP-OFF) 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 LANES AND/OR SHOULDER DROP-OFF) 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 WITH PLAQUE (W8-17 AND W8-17P). 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 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 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 LANES AND/OR SHOULDER DROP-OFF) 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.

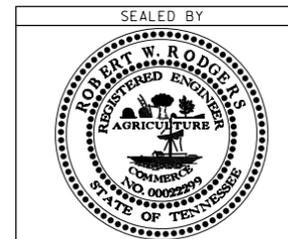
- C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

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.

**UNOFFICIAL
SET
NOT FOR
BIDDING**

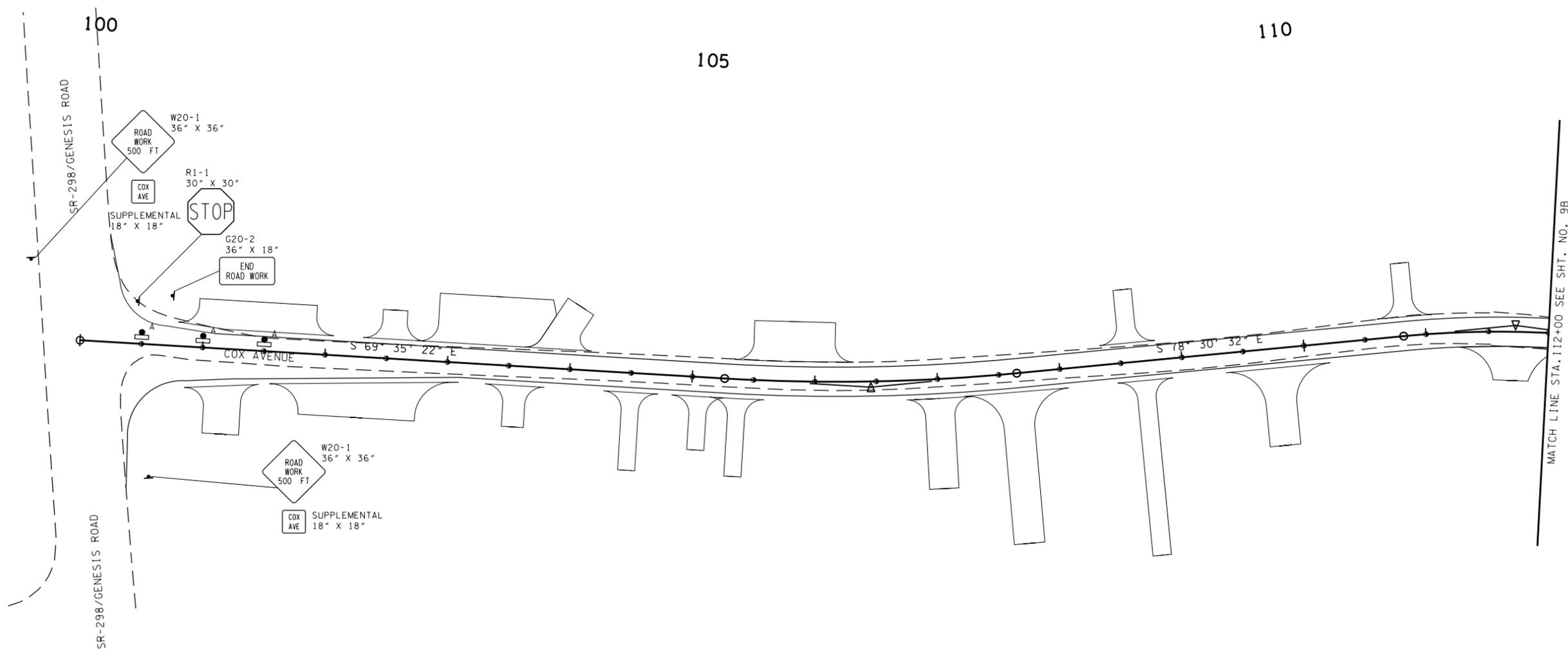


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TRAFFIC
CONTROL
NOTES**

The project will be phase constructed where and as instructed by the engineer.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	9A



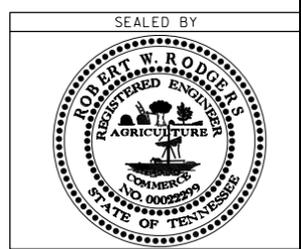
TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
●	FLEXIBLE DRUMS (CHANNELIZING)
▣	TEMPORARY BARRICADE (TYPE III)
A	WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING)

TYPE 3 BARRICADES TO BE PLACED WHERE AND AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL QUANTITIES					
ITEM NO.	DESCRIPTION	SIZE	QUANTITY (EACH)	ITEM NO. 712-06 (S.F.)	REMARKS
-	SUPPLEMENTAL (COX AVE.)	18"X18"	2	4.5	ITEMS ARE TO BE REUSED DURING EACH PHASE OF CONSTRUCTION
G20-1	END OF WORK	36"X36"	2	18	
R1-1	STOP	30"X30"	1	6.25	
W20-1	ROAD WORK AHEAD	36"X36"	2	18	
TOTAL				46.75	

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	33
712-05-01	WARNING LIGHTS (TYPE A)	EACH	6
712-07.03	TYPE 3 TEMPORARY BARRICADE	S.F.	32
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	2.72

**UNOFFICIAL SET
NOT FOR BIDDING**

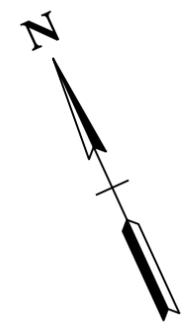


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

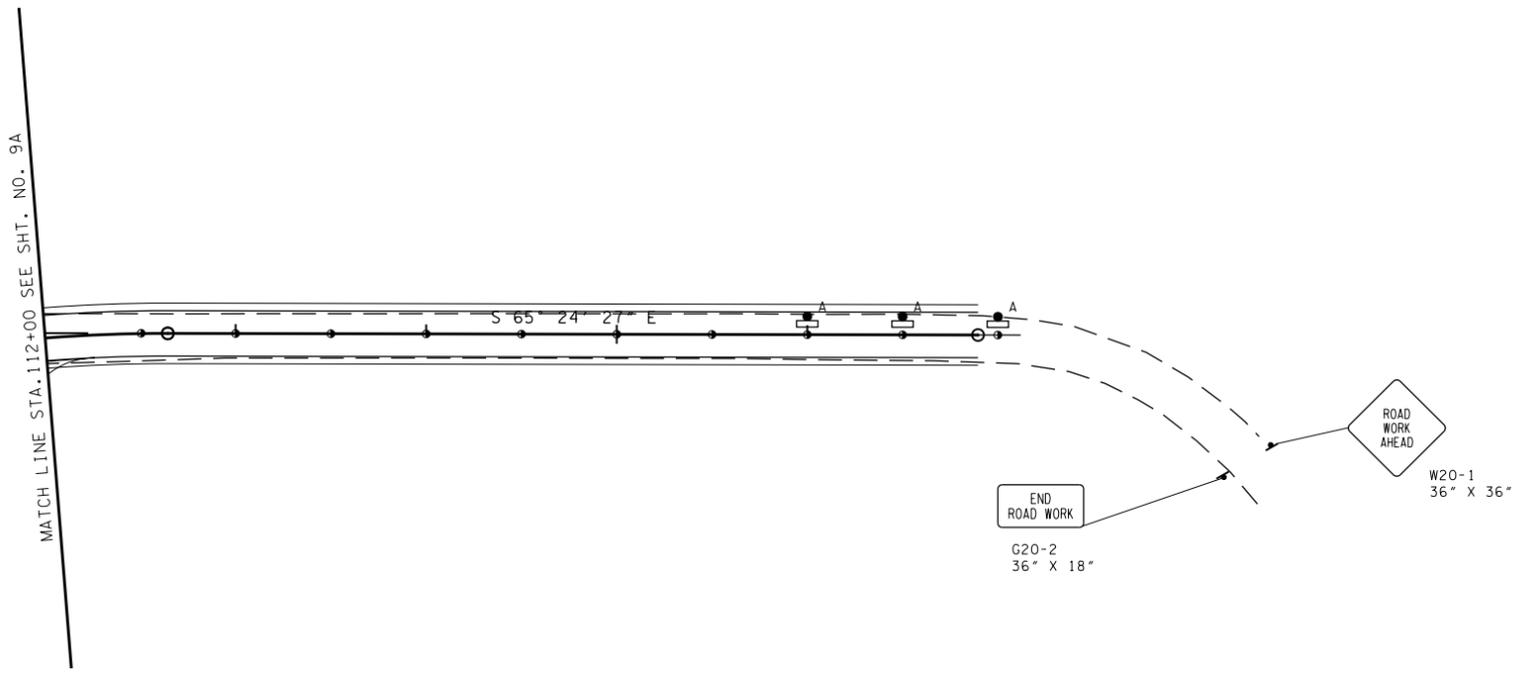
TRAFFIC CONTROL PLAN
STA. 100+00 TO STA. 112+00
SCALE: 1" = 50'

3-JUN-2014 14:49 \\J02WF01\dot.state.rn.us\025Shared\Design County Folder\s\Cumberland\ColInx Cox Ave SIA\Information Only Set\009A_TrafficControl.SHT

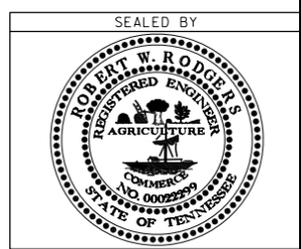
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	9B



115



**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TRAFFIC
CONTROL
PLAN**
STA. 112+00 TO STA. 117+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	10



BEGIN PROJ. NO. 18950-3540-04
STA. 100+19.65 (CONST.)

100

105

110



STOP LINE

4" SSWL

4" DWL

4" SSWL

4" SSYL

S 69° 35' 22" E

4" DSYL

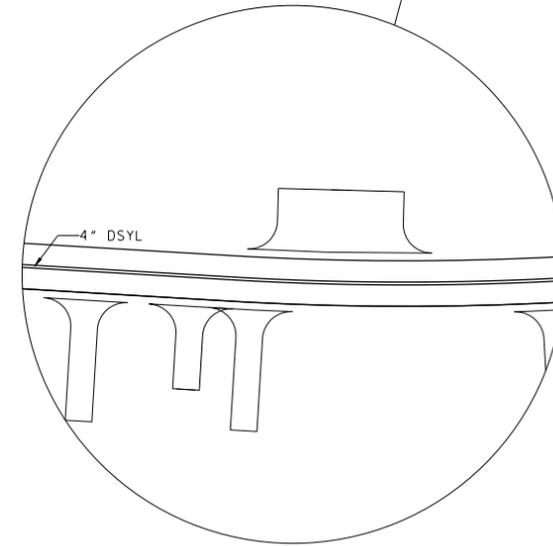
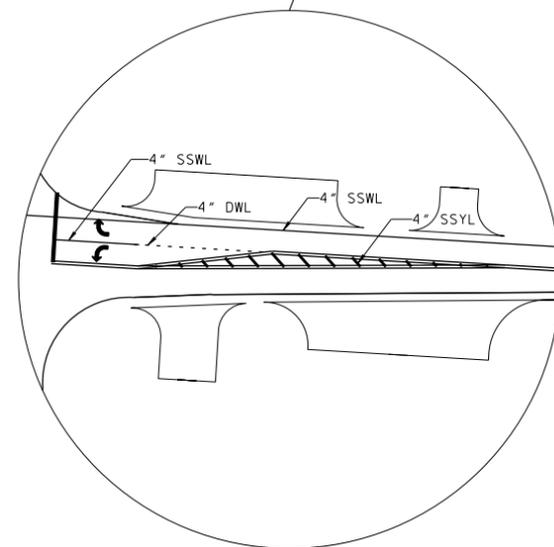
4" SSWL

4" DSYL

S 78° 30' 32" E

4" SSWL

MATCH LINE STA. 112+00 SEE SHT. NO. 10B



**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY



PAVEMENT MARKING QUANTITIES

SHEET NO.	PERMANENT PLASTIC PAVEMENT MARKINGS					
	716-02.04 CHANNELIZATION STRIPING, SY	716-02.05 STOP LINE LF	716-02.06 TURN LANE ARROW, EA	716-13.06 PVMT MARKING (40MIL) (4" LINE), LM		716-13.09 PVMT MARKING (40MIL) (4" DOTTED LINE), LF
				SSWL	DSYL	
10	9	38	2	0.5	0.5	23
10A	0	0	0	0.2	0.2	0
TOTAL	9	38	2	1.40		23

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

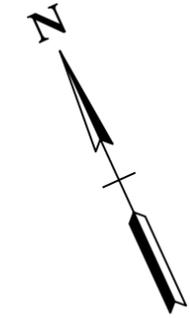
**PAVEMENT
STRIPING
DETAILS**

STA. 100 +00 TO STA. 112 +00

SCALE: 1"=50'

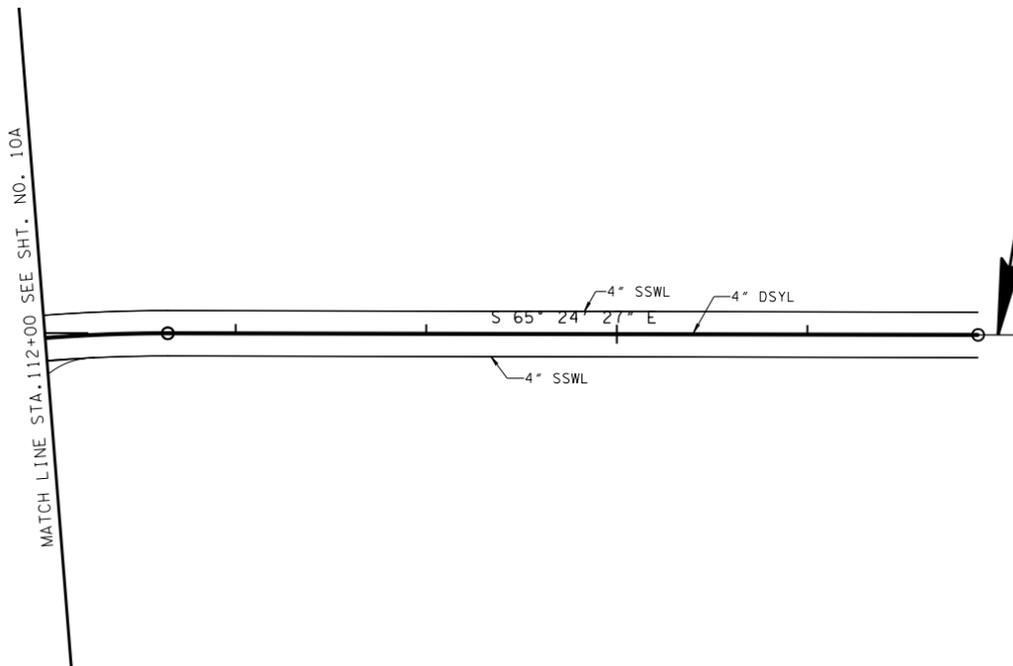
3-JUN-2014 11:49 \\J02WF01\p01.state.tn.us\02Shared\Design County Folder\s\Cumberland\ColInx Cox Ave SIA\Information Only Set\00_PvmtMkng.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	18950-3540-04	10A



115

END PROJ. NO. 18950-3540-04
STA. 116+94.79 (CONST.)



MATCH LINE STA. 112+00 SEE SHT. NO. 10A

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**PAVEMENT
STRIPING
DETAILS**

STA. 112 +00 TO STA. 117 +00

SCALE: 1"=50'