Index Of Sheets
SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

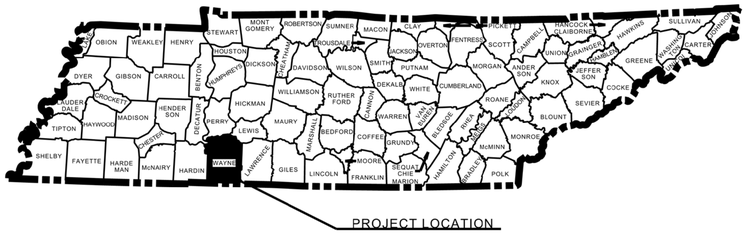
TENN.	YEAR	SHEET NO.
	2008	1
FED. AID PROJ. NO.	BRZE-9100(35)	
STATE PROJ. NO.	91945-3493-94	

WAYNE COUNTY

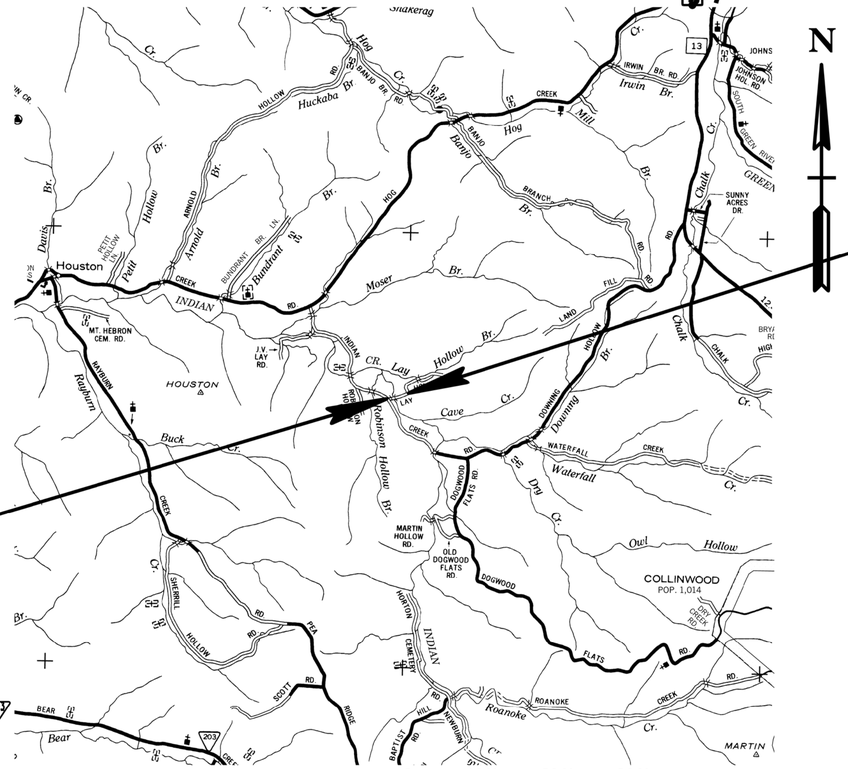
LAY HOLLOW ROAD
BRIDGE AND APPROACHES OVER INDIAN
CREEK AT L.M. 0.05

CONSTRUCTION

STATE HIGHWAY NO. __ F.A.H.S. NO. ____



NO EXCLUSIONS



BRZE-9100(35)
BEGIN PROJECT NO. 91945-3493-94CONSTRUCTION
STA. 30+04.58 LAY HOLLOW ROAD
N 327230.71 E 1419514.97

BRZE-9100(35)
END PROJECT NO. 91945-3493-94 CONSTRUCTION
STA. 39+50.00 LAY HOLLOW ROAD
N 327438.50 E 1420434.14

ROADWAY LENGTH	0.127 MILES
BRIDGE LENGTH	0.052 MILES
BOX BRIDGE LENGTH	0.000 MILES ▲
PROJECT LENGTH	0.179 MILES

▲ Not included in the project length.

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TRAFFIC DATA	
ADT (2008)	40
ADT (2028)	50
DHV (2028)	7
D	60 - 40
T (ADT)	5 %
T (DHV)	3 %
V	30 MPH

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

DATE:

APPROVED:
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 JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT ROAD SP. SV. 2 : SHANE HESTER

DESIGNER : ASO HAWRAMI CHECKED BY : KAROLEE PHILLIPS

P.E. NO. 91945-1493-94 (DESIGN)

PIN NO. 102060.00

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

4/20/2017 3:55:50 PM
N:\SURVEY\DESIGN\Aso\Design Team\Projects\Contract Plans Reading Class\ClassMaterials\Roadway & Bridge Plan Files\WAA473ConstTitle.Sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	1A

STANDARD ROADWAY DRAWINGS

INDEX

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	04-15-04	STANDARD LEGEND FOR EROSION AND SEDIMENT CONTROL
RD-L-6	04-15-04	STANDARD LEGEND FOR EROSION 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	10-15-02	CLEAR ZONE CRITERIA
RD01-SE-3	10-15-02	RURAL SUPERELEVATION DETAILS
RD01-TS-1	10-15-02	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS

SAFETY APPURTENANCES AND FENCE

S-GR-11	06-30-05	W-BEAM & THRIE BEAM BARRIER RAIL AND RUB RAIL ALTERNATES
S-GR-12	05-27-03	W-BEAM BARRIER POST DETAILS AND SPECIFICATIONS
S-GR-13	05-27-03	BARRIER RAIL MOUNTING, POST BLOCK-OUTS WITH VERTICAL ADJUSTMENT HOLES
S-GR-13A		BARRIER RAIL MOUNTING POST FOR PLASTIC BLOCK-OUTS WITH HORIZONTAL ADJUSTMENT HOLES
S-GR-14	09-05-98	W-BEAM BARRIER FASTENING HARDWARE AND BRIDGE APPROACH DELINEATORS
S-GR-15	06-30-05	W-BEAM BARRIER TERMINAL ELEMENT DETAILS
S-GR-21	03-10-05	LENGTH OF NEED AND TERMINAL REQUIREMENTS IN FILLS
S-GR-23	09-11-02	GUARDRAIL ATTACHMENT TO STRUCTURES AND PROTECTIVE GUARDRAIL AT BRIDGE ENDS DETAILS
S-GR-24	05-27-01	MINIMUM INSTALLATION LENGTH FOR PROTECTIVE GUARDRAIL AT BRIDGE ENDS
S-GR-26	09-05-01	GUARDRAIL TERMINAL ANCHOR (TYPE 21) POST LAYOUT AND ERECTION DETAILS
S-GR-27	05-27-03	GUARDRAIL TERMINAL ANCHOR (TYPE 21) ELEMENT ASSEMBLY DETAILS
S-GR-28	06-30-05	GUARDRAIL TERMINAL ANCHOR (TYPE 21) POST AND ASSEMBLY DETAILS
S-GR-39	05-27-01	DETAILS FOR CONSTRUCTION OF EARTH PAD FOR TYPE 21 GUARDRAIL END TERMINALS

ROADWAY AND PAVEMENT APPURTENANCES

RP-R-1	05-27-01	RAMPS TO SIDE ROADS

TRAFFIC CONTROL APPURTENANCES

T-S-18	05-27-01	END OF ROADWAY AND DEAD END SIGNS, METAL BARRICADES (TYPE III) & WORK ZONE SPEED SIGNS

EROSION CONTROL AND LANDSCAPING

EC-STR-1	03-15-04	PAY ITEMS, GENERAL NOTES &TEMPORARY DEWATERING STRUCTURE
EC-STR-2	04-15-06	TEMPORARY SEDIMENT FILTER BAGS
EC-STR-3C	04-15-06	TEMPORARY SILT FENCE WITH BACKING
EC-STR-3E	04-15-06	EROSION CONTROL FABRIC JOINING DETAILS
EC-STR-6	04-15-06	ROCK CHECK DAMS
EC-STR-7	04-15-06	TEMPORARY SEDIMENT TRAP WITH TEMPORARY SILT SCREEN CHECK DAM
EC-STR-11	04-15-06	ROCK SILT SCREENS
EC-STR-25	04-15-06	TEMPORARY ROAD STABILIZATION AND TEMPORARY CULVERT CROSSING
EC-STR-31	04-15-06	TEMPORARY DIVERSION CHANNELS
EC-STR-34	01-19-05	INSTALLATION DETAIL FOR EROSION CONTROL BLANKETS
EC-STR-37	04-15-06	TEMPORARY SEDIMENT TUBE

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ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	2A

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	201-01	CLEARING AND GRUBBING	LS	1
	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1453
(1)	203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	2523
	203-06	WATER	M.G.	15
	203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	313
	209-03	CHECK DAMS	S.F.	487
	209-05	SEDIMENT REMOVAL	C.Y.	67
(2)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1750
(3)	209-09.01	SANDBAGS	BAG	1850
	209-09.02	TEMPORARY SEDIMENT FILTER BAG (14'6" X 2'0" X 13'3")	BAG	2
	209-10.20	TEMPORARY SEDIMENT TRAP	C.Y.	79
(4)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	158
(5)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	991
(7)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	111
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	173
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	2
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	7
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	96
	705-01.01	GUARDRAIL AT BRIDGE ENDS	L.F.	108
	705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	213
	705-04.04	GUARDRAIL TERMINAL (TYPE 21)	EACH	4
(8)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	1514
	712-01	TRAFFIC CONTROL	LS	1
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	24
	712-06	SIGNS (CONSTRUCTION)	S.F.	115
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	4
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	108
	717-01	MOBILIZATION	LS	1
(9)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	438
(6)	740-11.01	TEMPORARY SEDIMENT TUBE 8 IN	L.F.	120
	801-01	SEEDING (WITH MULCH)	UNIT	34
(10)	801-02.01	CROWN VETCH MIXTURE (WITHOUT MULCH)	UNIT	8
	801-03	WATER (SEEDING & SODDING)	M.G.	14
	801-07	SEED (SUPPLEMENTAL APPLICATION)	LB.	10
	801-08	FERTILIZER (SUPPLEMENTAL APPLICATION)	TON	1
(11)	803-01	SODDING (NEW SOD)	S.Y.	932
(12)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	461

FOOTNOTES:

(1) INCLUDED 220 C.Y. FOR CONSTRUCTION OF FIELD ENTRANCE.
(2) 224 L.F. FOR SEDIMENT FILTER BAG.
(3) TO BE USED FOR FLOW DIVERSION DURING BUILDING PROPOSED BRIDGE AND REMOVING EXISTING BRIDGE AS DIRECTED BY THE ENGINEER.
(4) FOR CONSTRUCTION OF SEDIMENT FILTER BAG.
(5) 26 TONS INCLUDED FOR FIELD ENTRANCE.
(6) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT, QUANTITIES MY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER.
(7) 110 TONS FOR SEDIMENT FILTER BAG AND 1 TON FOR 3 ROCK SILT SCREENS.
(8) 47 TONS INCLUDED FOR 3 ROCK SILT SCREENS.
(9) 88 S.Y. FOR EROSION FILTER BAGS, 225 S.Y. FOR 9 ROCK CHECK DAMS, 12 S.Y. FOR 2 SEDIMENT TRAPS, 113 S.Y. FOR 3 ROCK SILT SCREENS.
(10) TO BE USED ON ALL 2:1 SLOPES.
(11) TO BE USED FOR ALL SPECIAL DITCHES.
(12) TO BE USED ON ALL 2:1 SLOPES.

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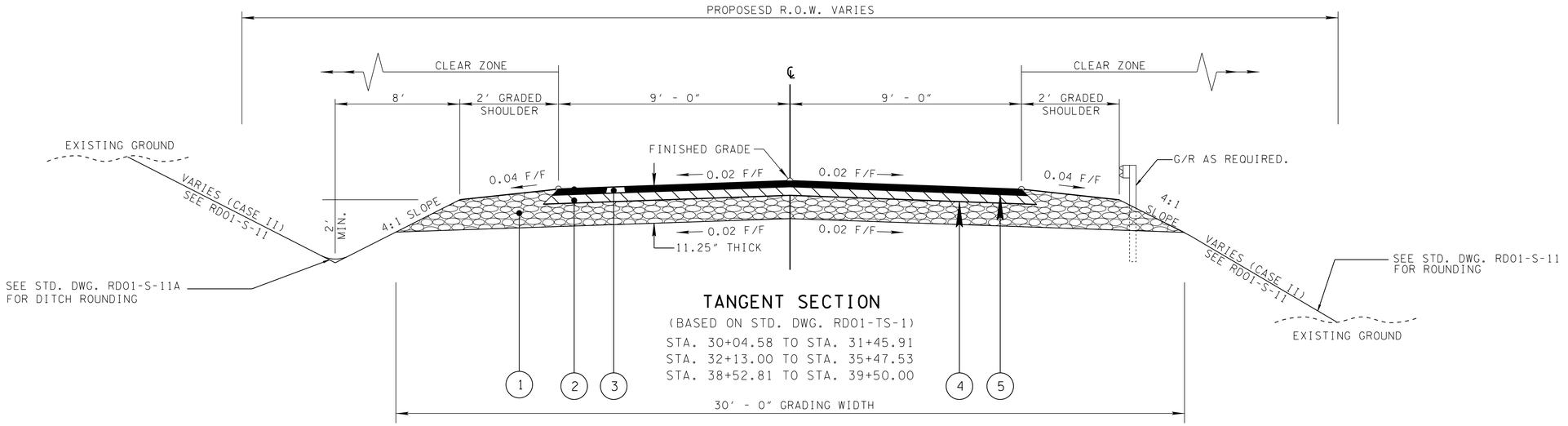
ESTIMATED
ROADWAY
QUANTITIES

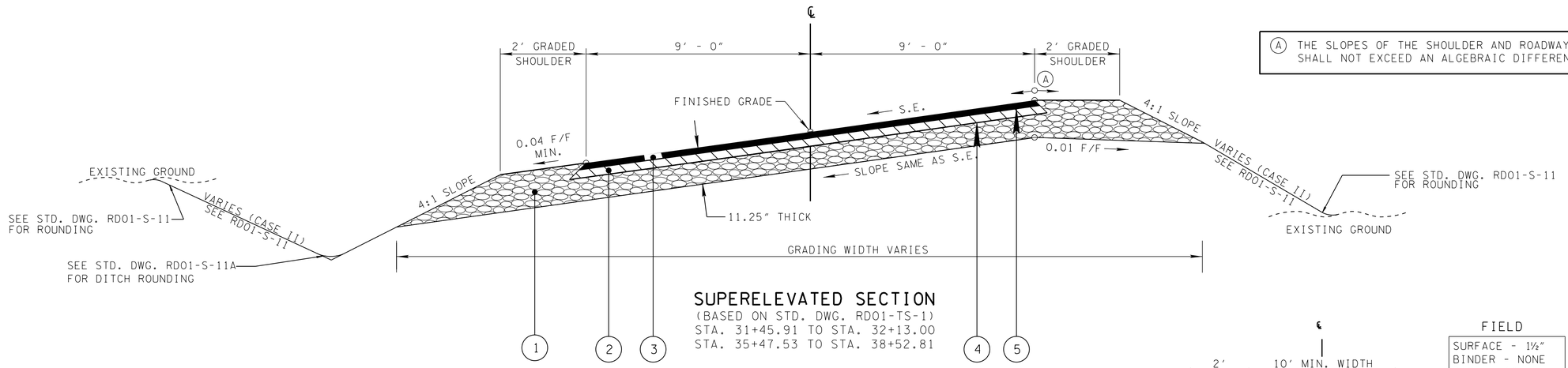
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	2
CONST.	2008	BRZE-9100(35)	2B

REV. 2-12-07: ADDED TYPICAL FOR FIELD ENTRANCE.



TANGENT SECTION

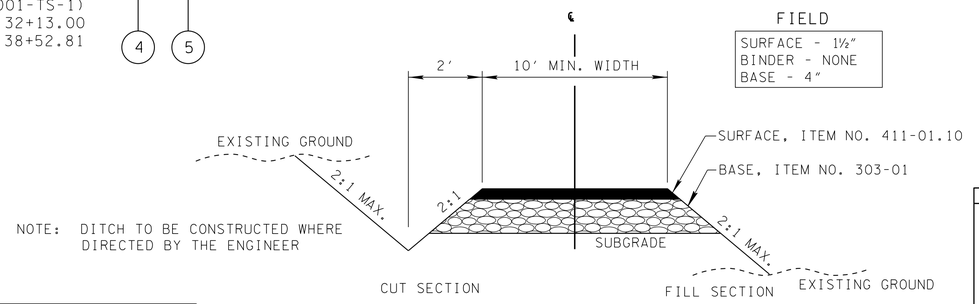
(BASED ON STD. DWG. RD01-TS-1)
STA. 30+04.58 TO STA. 31+45.91
STA. 32+13.00 TO STA. 35+47.53
STA. 38+52.81 TO STA. 39+50.00



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-1)
STA. 31+45.91 TO STA. 32+13.00
STA. 35+47.53 TO STA. 38+52.81

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



TYPICAL SECTION

FIELD ENTRANCE

PROPOSED PAVEMENT SCHEDULE

(1) MINERAL AGGREGATE (STONE) @ 8" 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	(4) PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) (0.30 - 0.35 GAL/SY) 402-02 AGGREGATE FOR COVER MATERIAL (PC) (8 - 12 LB/SY)
(2) ASPHALT CONCRETE (BINDER) @ 2.00" (APPROXIMATE 226 LBS./SQ. YD.) (ROADWAY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22)(BPMB-HM) GRADING "B-M2"	(5) TACK COAT 403-01 BITUMIMOUS MATERIAL FOR TACK COAT (TC) (0.02 GAL/SQ. YD.
(3) ASPHALT CONCRETE MIX (SURFACE) @ 1.25" (APPROXIMATE 132.5 LBS./ SQ. YD.) (ROADWAY) 411-01.10 ACS (PG64-22) GRADING "D"	

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TYPICAL SECTIONS AND PAVEMENT SCHEDULE

NOT TO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	2C

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) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.

(3) 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

(4) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, TOPSOILED AND SEEDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. TOPSOIL, IN ACCORDANCE WITH SECTION 203 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEMS 203-04 AND/OR 203-07. SEEDING, IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 801-01.

(5) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

GUARDRAIL

(6) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

(7) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.

DRAINAGE

(8) 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.

UTILITIES

(9) 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.

(10) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS 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.

(11) 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.

(12) 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.

(13) 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.

MISCELLANEOUS

(14) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.

(15) 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

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

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DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
SPECIAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	2D

(21) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 10 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.

(22) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

(23) ANY STREAM CROSSINGS BY ANY TYPE OF TRUCKS OR EQUIPMENT SHALL BE MADE IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE GENERAL ARAP PERMIT FOR ROAD CROSSINGS. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. NO. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.

(24) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES OVER TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ON ALL PROJECTS.

(25) EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED CONCURRENTLY WITH CLEARING OPERATIONS, AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.

(26) CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS AND SHALL BE PHASED FOR PROJECTS THAT HAVE OVER 50 ACRES OF SOIL DISTURBANCE. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION PROJECT, UNLESS APPROVED IN WRITING BY THE ENVIRONMENTAL DIVISION.

(27) EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION, REPAIR, AND MAINTENANCE OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS AND 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 EROSION PREVENTION AND SEDIMENT CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

(28) 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.

(29) 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.

(30) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL 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.

(31) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.

(32) INSTREAM EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) DEVICES ARE NOT APPROVED, UNLESS SPECIFIED IN WRITING BY THE ENVIRONMENTAL DIVISION.

(33) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. 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.

(34) 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.

(35) CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS.

(36) PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 15 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 15 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 RUNS WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

(37) 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 EROSION PREVENTION AND SEDIMENT CONTROL (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.

(38) INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE DONE BEFORE ANTICIPATED STORM EVENTS (OR SERIES OF STORM EVENTS SUCH AS INTERMITTENT SHOWERS OVER ONE OR MORE DAYS), DURING, OR WITHIN TWENTY-FOUR (24) HOURS AFTER THE END OF A STORM EVENT OF 0.5 INCH OR GREATER, AND AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. AN ANTICIPATED STORM EVENT IS DEFINED AS A 50% OR GREATER CHANCE OF RAINFALL ACCORDING TO A DOCUMENTED LOCAL OR NATIONAL SOURCE (I.E., NOAA, WEATHER.COM, LOCAL NEWSPAPER).

(39) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION PREVENTION AND SEDIMENT CONTROL (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.

(40) UPON CONCLUSION OF THE INSPECTIONS, EROSION PREVENTION AND SEDIMENT CONTROL (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 PRACTICABLE 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.

(41) THE CONTRACTOR SHALL MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN ON-SITE (OR AT NEARBY OFFICE) AND SHALL PLACE COPIES OF ANY PROJECT-RELATED PERMITS ON THE PROJECT BULLETIN BOARD.

(42) 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 AND/OR SECTION 404 PERMIT(S). 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.

(43) ONLY CLEAN ROCK MAY BE PLACED DIRECTLY INTO WATERS OF THE STATE/U.S. AS INDICATED ON THE PLANS AND PERMITS. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER FILL MATERIALS TO BE DISCHARGED BELOW ORDINARY HIGH WATER MUST BE FREE OF FINES, SEDIMENT, SOIL, POLLUTANTS, CONTAMINANTS, TOXIC MATERIALS, ASPHALT, TRASH, AND/OR OTHER WASTE MATERIALS.

(44) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.

(45) EXCAVATION AND FILL ACTIVITIES SHALL BE SEPARATED FROM FLOWING WATERS IN ACCORDANCE WITH EROSION AND SEDIMENT CONTROL PLAN OR STANDARD DRAWING EC-STR-31 OR AN ALTERNATE METHOD APPROVED BY THE ENVIRONMENTAL DIVISION. ALL SURFACE WATER FLOWING TOWARD THE EXCAVATION OR FILL WORK SHALL BE DIVERTED THROUGH USE OF PIPES, COFFERDAMS, BERMS, OR TEMPORARY CHANNELS. TEMPORARY DIVERSION CHANNELS SHALL BE USED TO DIVERT THE NORMAL STREAM FLOW PATH FROM AN ERODIBLE AREA UNTIL SUCH AREAS CAN BE STABILIZED. TEMPORARY DIVERSION CHANNELS MUST BE PROTECTED BY NON-ERODIBLE MATERIAL AND LINED TO THE EXPECTED HIGH WATER LEVEL IN ACCORDANCE WITH EC-STR-31. COFFERDAMS MUST BE CONSTRUCTED OF SANDBAGS, CLEAN ROCK, STEEL SHEETING OR OTHER NON-ERODIBLE MATERIAL. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS.

(46) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE MODIFIED TO INCLUDE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

(47) NO STREAM SHALL BE USED AS TRANSPORTATION ROUTES FOR HEAVY EQUIPMENT UNLESS THE STREAM IS A COMMERCIALLY NAVIGABLE WATERWAY AND BARGES ARE USED. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT, CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. NO. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

(48) 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.

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GENERAL NOTES

(49) 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.

(50) BORROW AND WASTE DISPOSAL 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.

(51) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.

(52) 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 STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.

(53) WETLANDS AREAS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

(54) 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, 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.

(55) 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 DESIGN DIVISIONS SHALL REVIEW AND APPROVE ANY REVISION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

(56) FOR PROJECTS THAT DISCHARGE INTO HIGH QUALITY 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 DESIGN DIVISIONS SHALL REVIEW AND APPROVE ANY REVISION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT.

(57) FOR PROJECTS THAT DISCHARGE INTO HIGH QUALITY 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 25 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 STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE ENVIRONMENTAL AND 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. THIS REQUIREMENT DOES NOT APPLY TO ANY VALID ARAP OR EQUIVALENT PERMIT(S) ISSUED BY FEDERAL AUTHORITIES.

(58) EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN, AND MUST BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY. ALL EPSC MEASURES AS WELL AS BUFFER ZONES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE KEPT IN GOOD AND EFFECTIVE OPERATION CONDITION.

(59) 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, EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION RECORDS AND PRECIPITATION RECORDS.

(60) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING THE LOCATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. 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.

(61) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(62) THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE UPDATED BY CONSTRUCTION WHENEVER EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTIONS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR IS 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.

(63) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

(64) 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.

(65) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" (REFERRED TO AS "LEVEL ONE") COURSE OR EQUIVALENT COURSE. A COPY OF CERTIFICATION RECORDS FOR THIS COURSE SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

(66) 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 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EROSION PREVENTION AND SEDIMENT CONTROL DEVICES ON THE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLAN, CONTAINED IN THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP), TO PROVIDE ACCEPTABLE EROSION PREVENTION AND SEDIMENT CONTROLS DURING ALL STAGES OF CONSTRUCTION.

(67) THE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.

(68) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EROSION PREVENTION AND SEDIMENT CONTROL (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 EROSION PREVENTION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE STORM WATER POLLUTION PREVENTION PLAN (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 EROSION PREVENTION AND SEDIMEMENT CONTROL PLAN 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 EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

(69) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

SPECIAL NOTES:

SEEDING AND SODDING

(1) ITEM NO. 801-01, SEEDING (WITH MULCH), SHALL BE USED ON ALL SLOPES EXCEPT THE LOCATIONS WHERE ITEM NO. 801-02.01, CROWN VETCH MIXTURE (WITHOUT MULCH) AND ITEM NO. 805-12.02, EROSION CONTROL BLANKET (TYPE II) IS USED. FOR LOCATION OF CROWN VETCH MIXTURE (WITHOUT MULCH) AND EROSION CONTROL BLANKET SEE SHEET NO. 5

MISCELLANEOUS

(2) ALL MATERIAL OF EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE WAYNE COUNTY HIGHWAY DEPARTMENT. BLASTING AND OPERATION OF HEAVY, EARTH-MOVING EQUIPMENT IS PROHIBITED ONSITE DURING THE GRAY BAT MATERNITY SEASON (APRIL 1 THROUGH AUGUST 15).

(3) REMOVAL OF RIPARIAN VEGETATION SHOULD BE LIMITED TO THAT ABSOLUTELY NECESSARY TO ACCOMMODATE THE NEW BRIDGE. WHERE POSSIBLE, TREES AND SHRUBS ON STREAMBANKS WILL BE CLEARED BY CUTTING RATHER THAN BY MECHANIZED METHODS, LEAVING THE ROOTS IN PLACE. ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE STABILIZED AS SOON AS POSSIBLE BY USE OF RIPRAP, SEEDING, OR MULCHING, IN COMPLIANCE WITH ARAP, 404, NPDES, OR OTHER PERMIT SPECIFICATIONS.

(4) BEST MANAGEMENT PRACTICES FOR CONTROL OF SEDIMENTATION MUST BE INCLUDED AS PART OF THE CONSTRUCTION CONTRACT.

NPDES

(5) REFER TO THE EROSION CONTROL PLAN, SHEET 5A, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	2E

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GENERAL NOTES AND SPECIAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	2F

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE		STATION		GUARDRAIL				TERMINAL ANCHORS					REMARKS
		LT	RT	FROM	TO	BRIDGE ENDS 705-01.01 (L.F.)	BRIDGE PIERS 705-01.02 (L.F.)	SINGLE TYPE 2 705-02.02 (L.F.)	MEDIAN TYPE 2 705-03.03 (L.F.)	TYPE 12 705-04.02 (EACH)	TYPE 13 705-04.03 (EACH)	TYPE 21 705-04.04 (EACH)	TYPE IN-LINE 705-04.05 (EACH)	TYPE 38 705-04.07 (EACH)	
4A	LAY HOLLOW RD.	X		30+00.00	BRIDGE	27		175				1			
4A	LAY HOLOW RD.	X		BRIDGE	35+90.48	27		12.5				1			
4A	LAY HOLLOW RD.		X	31+59.52	BRIDGE	27		12.5				1			
4A	LAY HOLLOW RD.		X	BRIDGE	35+90.48	27		12.5				1			
TOTALS						**108**	**0**	**212.5**	**0**	**0**	**0**	**4**	**0**	**0**	

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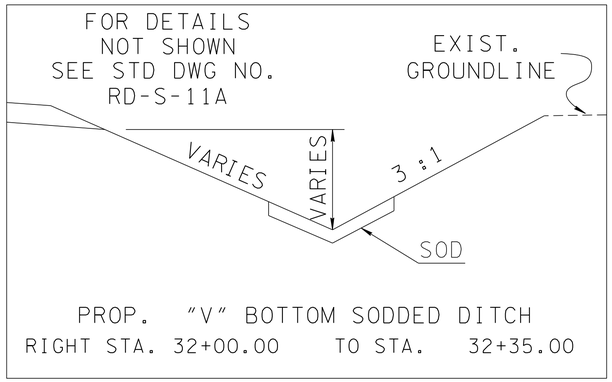
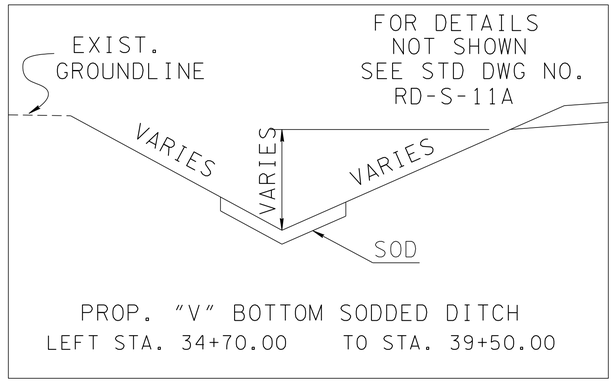
TABULATED QUANTITIES

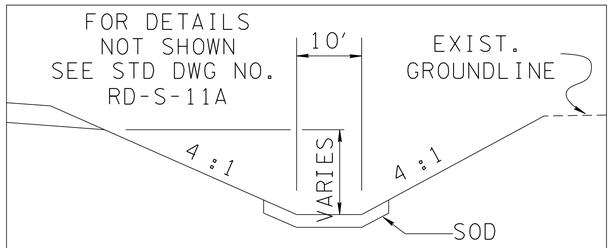
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	2
CONST.	2008	BRZE-9100(35)	2G



PROP. "V" BOTTOM SODDED DITCH
RIGHT STA. 32+00.00 TO STA. 32+35.00



PROP. "V" BOTTOM SODDED DITCH
LEFT STA. 34+70.00 TO STA. 39+50.00



PROP. 10' FLAT BOTTOM SODDED DITCH
RIGHT STA. 36+50.00 TO STA. 39+00.00

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SPECIAL
DITCH
DETAILS

18-APR-2017 10:48
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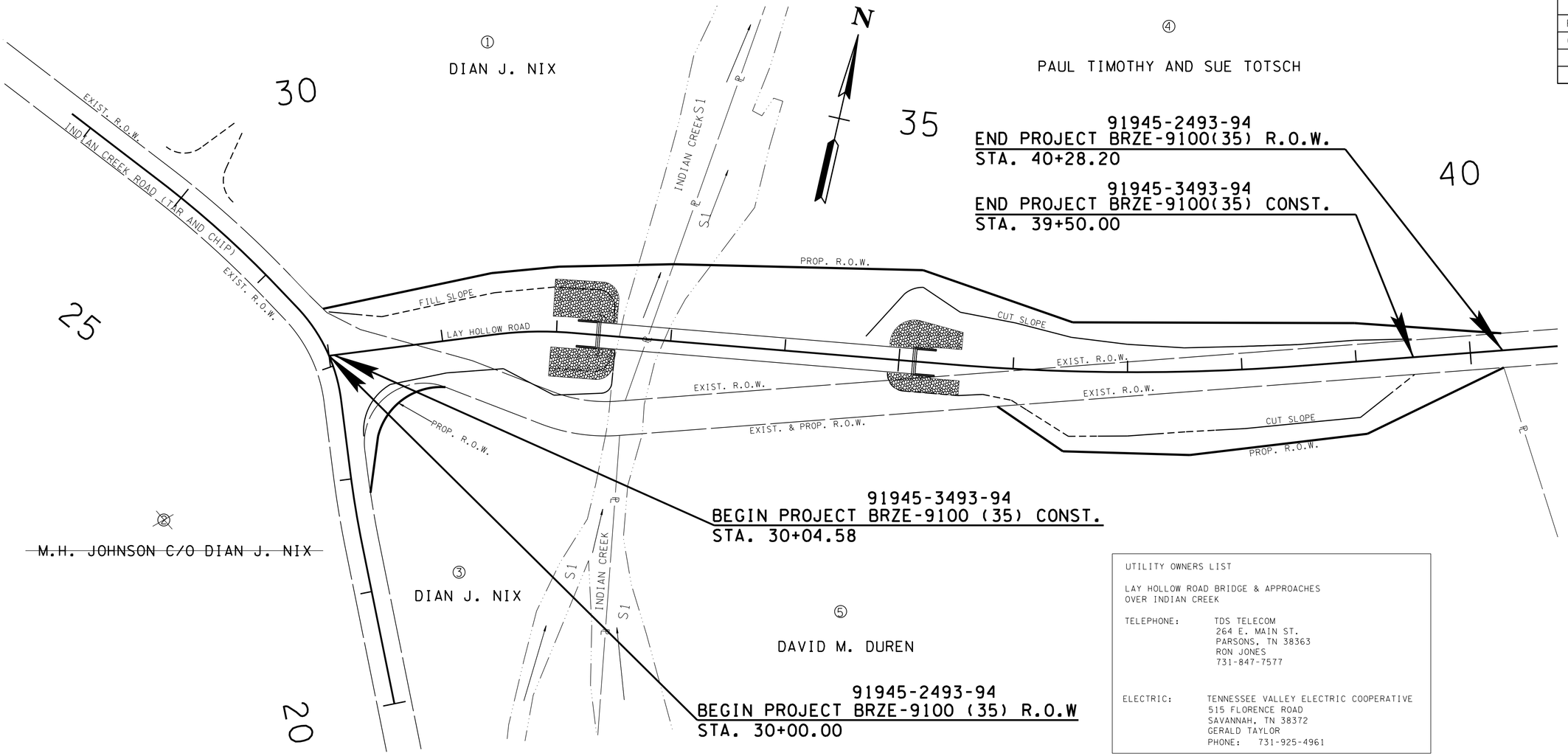
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	3
CONST.	2007	BRZE-9100(35)	3



UTILITY OWNERS LIST

LAY HOLLOW ROAD BRIDGE & APPROACHES
OVER INDIAN CREEK

TELEPHONE: TDS TELECOM
264 E. MAIN ST.
PARSONS, TN 38363
RON JONES
731-847-7577

ELECTRIC: TENNESSEE VALLEY ELECTRIC COOPERATIVE
515 FLORENCE ROAD
SAVANNAH, TN 38372
GERALD TAYLOR
PHONE: 731-925-4961

RIGHT - OF - WAY NOTES:

(1) 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 THER 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 IS TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

(2) EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.

(3) 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.

(4) 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.

(5) ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

(6) 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.

(7) 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.

(8) 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.

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 BK.	PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM DRAINAGE	SLOPE	CONST.
1	DIAN J. NIX	115	7.00	34	203	27.878	0.166	28.044	0.327	0.166	0.493	27.551	0.000			
~~2~~	~~M.H. JOHNSON C/O DIAN J. NIX~~	~~115~~	~~7.00~~	~~15~~	~~413~~		~~74.145~~	~~74.145~~					~~74.145~~			
3	DIAN J. NIX	115	7.00	34	203		2.226	2.226		1087 S.F.	1087 S.F.		2.201			
4	PAUL TIMOTHY AND SUE TOTSCH	115	4.01	34	404	62.239	0.207	62.446	.760	0.207	.967	61.479	0.000			
5	DAVID M. DUREN	115	4.00	118	546		50.750	50.750		.407	.407		50.343			

KENNETH JOE CARPENTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 101619
STATE OF TENNESSEE

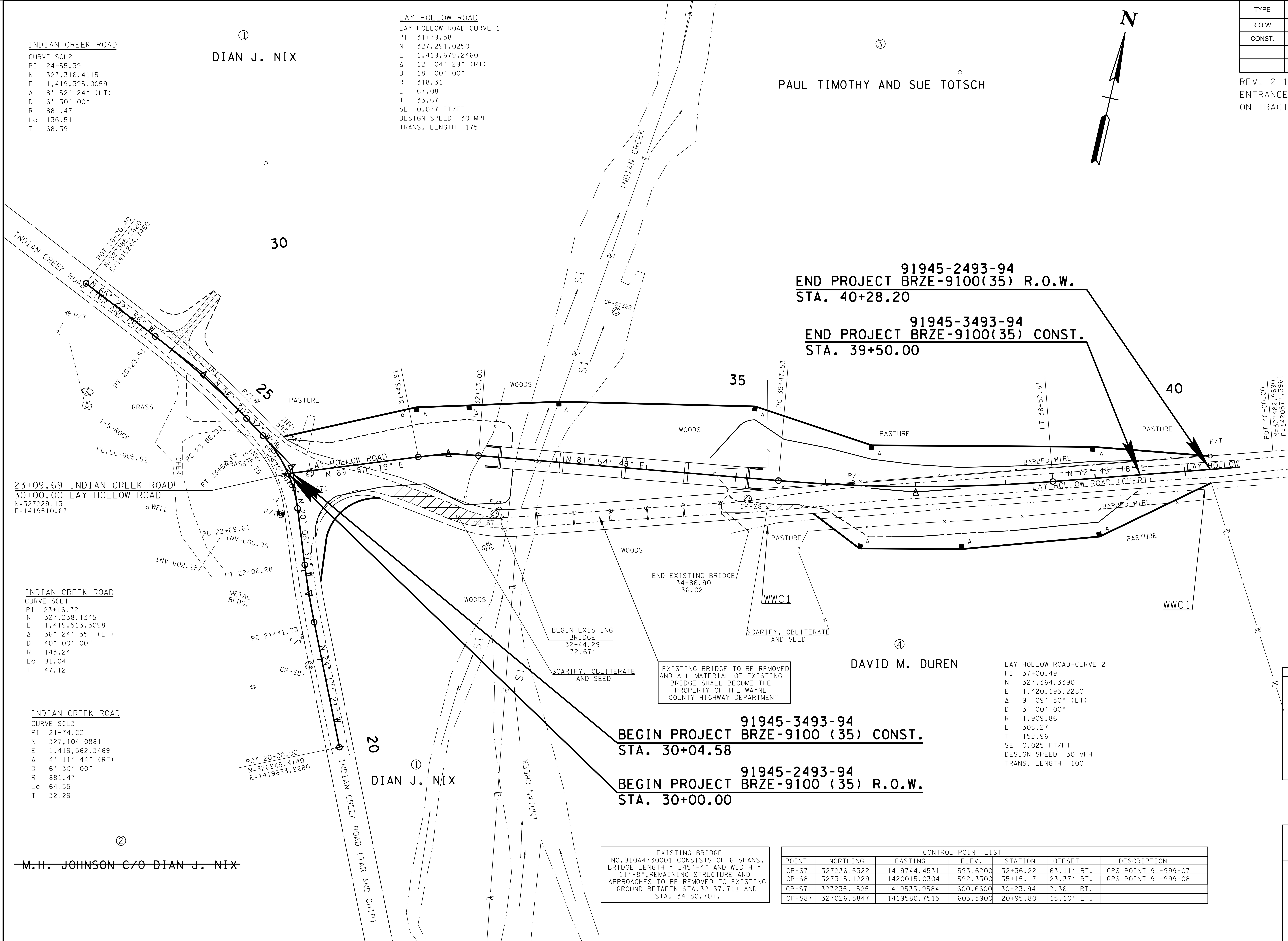
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP AND ACQUISITION TABLE

SCALE: 1"=100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	4
CONST.	2008	BRZE-9100(35)	4

REV. 2-12-07: ADDED FIELD ENTRANCE AT STA. 25+00.00 ON TRACT ONE.



INDIAN CREEK ROAD
CURVE SCL2
PI 24+55.39
N 327,316.4115
E 1,419,395.0059
Δ 8° 52' 24" (LT)
D 6° 30' 00"
R 881.47
Lc 136.51
T 68.39

LAY HOLLOW ROAD
LAY HOLLOW ROAD-CURVE 1
PI 31+79.58
N 327,291.0250
E 1,419,679.2460
Δ 12° 04' 29" (RT)
D 18° 00' 00"
R 318.31
L 67.08
T 33.67
SE 0.077 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 175

INDIAN CREEK ROAD
CURVE SCL1
PI 23+16.72
N 327,238.1345
E 1,419,513.3098
Δ 36° 24' 55" (LT)
D 40° 00' 00"
R 143.24
Lc 91.04
T 47.12

INDIAN CREEK ROAD
CURVE SCL3
PI 21+74.02
N 327,104.0881
E 1,419,562.3469
Δ 4° 11' 44" (RT)
D 6° 30' 00"
R 881.47
Lc 64.55
T 32.29

LAY HOLLOW ROAD-CURVE 2
PI 37+00.49
N 327,364.3390
E 1,420,195.2280
Δ 9° 09' 30" (LT)
D 3° 00' 00"
R 1,909.86
L 305.27
T 152.96
SE 0.025 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 100

EXISTING BRIDGE
NO.91OA4730001 CONSISTS OF 6 SPANS. BRIDGE LENGTH = 245'-4" AND WIDTH = 11'-8". REMAINING STRUCTURE AND APPROACHES TO BE REMOVED TO EXISTING GROUND BETWEEN STA.32+37.71± AND STA. 34+80.70±.

CONTROL POINT LIST

POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S7	327236.5322	1419744.4531	593.6200	32+36.22	63.11' RT.	GPS POINT 91-999-07
CP-S8	327315.1229	1420015.0304	592.3300	35+15.17	23.37' RT.	GPS POINT 91-999-08
CP-S71	327235.1525	1419533.9584	600.6600	30+23.94	2.36' RT.	
CP-S87	327026.5847	1419580.7515	605.3900	20+95.80	15.10' LT.	

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.30+04 TO STA.39+50

SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	4A
CONST.	2008	BRZE-9100(35)	4A

REV. 2-12-07: ADDED FIELD ENTRANCE AT STA. 25+00.00 ON TRACT ONE.

①

DIAN J. NIX

PRES. R.O.W. TRACT NO. 1	
① 25+23.51, 14.82′	② R =911.53′, L =141.16′
③ 23+84.65, 15.00′	④ S 56°30′32″ E, 24.00′
⑤ 23+60.65, 15.00′	⑥ S 58°23′23″ E, 16.58′
⑧ 30+02.91, 37.66′	⑦ S 58°23′23″ E, 4.70′
⑩ 30+30.03, 19.23′	⑨ S 75°57′18″ E, 32.79′
⑫ 30+75.67, 0.00′	⑪ S 87°19′05″ E, 49.53′
⑭ 31+23.43, 20.12′	⑬ S 87°19′05″ E, 51.83′
⑯ 31+98.81, 52.40′	⑮ S 81°45′20″ E, 75.56′
⑰ 21+41.73, 15.00′	⑱ R =866.47′, L =63.45′
⑲ 22+06.28, 15′	⑳ N 20°05′37″ E, 17.06′
㉑ 22+23.33, 15′	

③

PAUL TIMOTHY AND SUE TOTSCH

N

91945-3493-94
BEGIN PROJECT BRZE-9100 (35) CONST.
STA. 30+04.58

91945-2493-94
END PROJECT BRZE-9100(35) R.O.W.
STA. 40+28.20

91945-3493-94
END PROJECT BRZE-9100(35) CONST.
STA. 39+50.00

91945-2493-94
BEGIN PROJECT BRZE-9100 (35) R.O.W.
STA. 30+00.00

23+09.69 INDIAN CREEK ROAD
30+00.00 LAY HOLLOW ROAD
N=327229.13
E=1419510.67

N 65° 22′ 18″ W 983.19′
N 65° 22′ 56″ W 977.18′
N 56° 30′ 32″ W
N 64° 40′ 36″ E 151.32′
FILL SLOPE
N 69° 50′ 19″ E
N 81° 54′ 48″ E
N 72° 45′ 18″ E 352.98′
S 72° 45′ 18″ W 330.80′
S 72° 45′ 18″ W 443.73′
N 72° 45′ 18″ E
N 6° 41′ 54″ E 400.40′
N 20° 05′ 37″ W 63.33′
N 20° 05′ 37″ W 49.82′
N 24° 17′ 21″ W 576.00′
N 24° 17′ 21″ W 595.38′
S 8° 41′ 17″ E 694.22′
S 30° 30′ 00″ E 145.50′
S 30° 30′ 00″ E 177.75′
N 75° 04′ 26″ E 58.58′
N 74° 46′ 12″ E 100.04′
N 78° 32′ 02″ E 218.36′
S 84° 23′ 02″ E 136.42′
N 72° 45′ 18″ E 414.30′
N 77° 32′ 31″ E 245.71′
N 81° 37′ 18″ E 129.75′
S 72° 44′ 19″ W 7.25′
N 6° 41′ 54″ E 126.36′
S 81° 45′ 20″ E 89.01′
N 5° 13′ 19″ W 49.82′
S 63° 41′ 05″ E 64.40′
N 77° 29′ 21″ E 114.02′
N 71° 57′ 37″ E 153.73′
N 51° 26′ 51″ E 137.60′
CUT SLOPE
CUT SLOPE
PROP. R.O.W.
EXIST. & PROP. R.O.W.
PROP. R.O.W.
LAY HOLLOW ROAD
LAY HOLLOW ROAD

R=866.47′ L=134.19′
R=128.24′ L=81.50′
R=128.24′ L=57.05′
R=52.09′ L=107.58′
R=556.29′ L=79.06′
R=158.24′ L=70.40′
R=896.47′ L=65.65′

25+23.51 15.00′
23+86.99 15.00′
23+60.65 15.00′
22+69.61 15.00′
22+06.28 15.00′
21+41.73 15.00′
30+00.00 41.36′
30+75.67 0.00′
30+97.34 40.11′
30+33.51 75.21′
30+20.67 123.35′
31+50.00 55.00′
31+85.80 80.79′
32+00.00 55.00′
32+57.62 56.20′
32+79.30 0.00′
32+62.39 85.82′
32+64.77 55.05′
32+97.02 67.13′
35+15.00 80.00′
35+88.27 33.61′
36+13.27 0.00′
36+40.00 70.00′
36+50.00 45.00′
37+50.00 70.00′
39+00.00 35.00′
39+00.00 65.00′
40+28.20 15.00′
40+28.20 15.00′
40+29.16 15.00′

CP-S71
CP-S87
CP-S7
CP-S8
CP-S1322

25
30
35
40
20

②

~~M.H. JOHNSON C/O DIAN J. NIX~~

①

DIAN J. NIX

④

DAVID M. DUREN

CONTROL POINT LIST						
POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S7	327236.5322	1419744.4531	593.6200	32+36.22	63.11′ RT.	GPS POINT 91-999-07
CP-S8	327315.1229	1420015.0304	592.3300	35+15.17	23.37′ RT.	GPS POINT 91-999-08
CP-S71	327235.1525	1419533.9584	600.6600	30+23.94	2.36′ RT.	
CP-S87	327026.5847	1419580.7515	605.3900	20+95.80	15.10′ LT.	

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.30+04 TO STA.39+50

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	4B
CONST.	2008	BRZE-9100(35)	4B

REV. 2-12-07: ADDED FIELD ENTRANCE AT STA. 25+00.00 ON TRACT ONE.

N

LIMIT OF CONST.
STA. 25+29.76

LIMIT OF CONST.
STA. 0+80.00

10' FIELD ENT.
STA. 25+00.00

30

N 65° 22' 56" W
INDIAN CREEK ROAD

R 25'

R 25'

25

N 56° 30' 32" W

LIMIT OF CONST.
STA. 30+00.00

R 50'

TYPE 21

CLASS A-1
RIP-RAP

BEGIN BRIDGE
STA. 32+35.25

INDIAN CREEK

S1

S1

INDIAN CREEK

35

END BRIDGE
STA. 35+14.75

91945-2493-94
END PROJECT BRZE-9100(35) R.O.W.
STA. 40+28.20

91945-3493-94
END PROJECT BRZE-9100(35) CONST.
STA. 39+50.00

40

'V' BOTTOM SPECIAL DITCH

23+09.69 INDIAN CREEK ROAD
30+00.00 LAY HOLLOW ROAD
N=327229.13
E=1419510.67

LAY HOLLOW ROAD
N 69° 50' 19" E

TYPE 21

N 81° 54' 48" E

LAY HOLLOW ROAD

TYPE 21

N 72° 45' 18" E

LAY HOLLOW

TYPE 21

R 50'

'V' BOTTOM SPECIAL DITCH

N 20° 05' 47" W

N 24° 17' 21" W

20

LIMIT OF CONST.
STA. 30+14.05

S1

S1

INDIAN CREEK

10' T 10' T 10' T 10' T 10' T

STA. 39+00
18.00'

50'
TAPER

17.12'
STA. 39+50

CLASS A-1
RIP-RAP

10' F.B SPECIAL DITCH

91945-3493-94
BEGIN PROJECT BRZE-9100 (35) CONST.
STA. 30+04.58

91945-2493-94
BEGIN PROJECT BRZE-9100 (35) R.O.W.
STA. 30+00.00

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.30+04 TO STA.39+50

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	4C
CONST.	2008	BRZE-9100(35)	4C

REV. 2-12-07: ADDED PROFILE FOR FIELD ENTRANCE AT STA. 25+00.00 OFF INDIAN CREEK ROAD.

91945-2493-94
BEGIN PROJECT BRZE-9100(35) R.O.W.
STA. 30+00.00

91945-3493-94
BEGIN PROJECT BRZE-9100(35) CONST.
STA. 30+04.58

EARTHWORK BALANCES

EXC.(UNCL.) COMMON: 1453 C.Y.
(INCL.260 C.Y. UNSUITABLE MATERIAL)

EMB. 3231 C.Y.
(INCL.220 C.Y. FOR FIELD ENTRANCE)

SHR. 15%
SW. 15%

BORROW MATERIAL 2523 C.Y.

91945-2493-94
END PROJECT BRZE-9100(35) R.O.W.
STA. 40+28.20

91945+3493-94
END PROJECT BRZE-9100(35) CONST.
STA. 39+50.00

23+09.69 INDIAN CREEK ROAD (EXISTING)
30+04.58 LAY HOLLOW ROAD (PROPOSED)

600.86

5+77.87 INDIAN CREEK
32+59.82 LAY HOLLOW ROAD (PROPOSED)

VPC 33+80.00
EL. 597.61

VPI 34+50.00
EL 597.00

END BRIDGE
STA 35+14.75

VPT 35+20.00
VPC 35+20.00
EL. 593.02

VPI 36+40.00
EL 586.19

VPI 37+60.00
EL. 586.71

VPI 39+50.00
EL. 587.55

PROP. VERTICAL ALIGNMENT

EXISTING GROUND

CP-S71

CP-S7

CP-S8

-0.87%

-5.49%

-5.69%

+0.44%

-0.45%

-0.49%

-0.60%

1.06%

OH WIRE
STA. 32+50.06
L. W. ELEV. 593.35
1 P/T

OH WIRE
STA. 32+59.74
L. W. ELEV. 591.92
1 P/T

EXTREME HIGH WATER ELEV. 591.99 OBTAINED FROM LOCAL RESIDENT

ORDINARY HIGH WATER,ELEV. 584.58 OBTAINED BY FIELD OBSERVATION

CLASS"A-1" RIP-RAP

CLASS"A-1" RIP-RAP

OH WIRE
STA. 36+30.02
L. W. ELEV. 586.36
1 P/T

PROP. F.G.

OH WIRE
STA. 36+30.02
L. W. ELEV. 586.36
1 P/T

OH WIRE
STA. 40+29.12
L. W. ELEV. 590.75
1 P/T

LT.' V' BOTTOM

RT. 10' FLAT BOTTOM

K = 39
VC = 240.00'
V = 30 MPH

K = 29
VC = 140.00'
V = 30 MPH

EXISTING BRIDGE
NO.910A47300O1 CONSISTS OF 6 SPANS. BRIDGE LENGTH = 245'-4" AND WIDTH = 11'-8". REMAINING STRUCTURE AND APPROACHES TO BE REMOVED TO EXISTING GROUND BETWEEN STA.32+37.71+ AND STA. 34+80.70+.

BEGIN SPECIAL DITCH
RT.STA.32+00.00
RT. EL. 583.67

END SPECIAL DITCH
RT.STA.32+55.00
RT. EL. 583.30

BEGIN SPECIAL DITCH
LT.STA.34+70.00
LT. EL. 583.91

SPECIAL DITCH
LT. VPI STA.35+15
LT. EL. 584.19

BEGIN SPECIAL DITCH
RT.STA.36+50.00
RT.EL. 582.84

END SPECIAL DITCH
RT.STA.39+00.00
RT.EL. 584.07

END SPECIAL DITCH
LT.STA.39+50.00
LT.EL. 585.15

INDIAN CREEK ROAD
F.G ELV. 597.50

EDGE OF PAVEMENT
STA. 0+08.54
ELV. 597.14

4.22%

-15.00%

K = 2
VC = 28.00'
LIMIT OF WORK
STA. 0+80.00
588.60

-1.28%

VPI 0+64.12
EL 588.81

PROPOSED STRUCTURE: 4-SPAN BRIDGE
DRAINAGE AREA = 42.5 S.M
DESIGN DISCHARGE (50 YR.) = 5080 CFS
WATER AREA PROVIDED BELOW EL.586.77 = 1226.62 F.S
50 YR. VELOCITY = 4.14 FPS
50 YR. BRIDGE BACKWATER = 0.22 FT. @ EL.587.70
ROADWAY OVERTOPPING EL. = 586.50 FT.
100 YR. DISCHARGE 11300 CFS @ EL.589.26 FT.

CP-S71
Sta. 30+23.94, 2.36'(RT)
N 327235.1525
E 1419538.9584
ELEV 600.66
ALLUM. DISK

CP-S7
Sta. 32+36.22, 63.11'(RT)
N 327236.5322
E 1419744.4531
ELEV 593.62
ALLUM. DISK

CP-S8
Sta. 35+15.17, 23.37'(RT)
N 327315.1229
E 1420015.0304
ELEV 592.33
ALLUM. DISK

	EXISTING	STA. 30+04.58	174.87' TRANSITION	FULL SUPER	STA. 31+79.45	175.00' TRANSITION	NORMAL CROWN	STA. 33+54.45	143.08' NORMAL CROWN	NORMAL CROWN	STA. 34+97.53	100' TRANSITION	FULL SUPER	STA. 35+97.53	205.27' FULL SUPER	FULL SUPER	STA. 38+02.80	147.20' TRANSITION	EXISTING	STA. 39+50
SUPERELEVATION RATE LEFT FT./ FT.	-0.035	-0.006	0.026	0.058	0.077	0.066	0.038	0.010	-0.018	-0.020	-0.020	-0.020	-0.020	-0.020	-0.025	-0.025	-0.025	-0.025	-0.023	-0.026	-0.030
SUPERELEVATION RATE RIGHT FT./ FT.	0.034	0.000	-0.033	-0.061	-0.077	-0.066	-0.038	-0.020	-0.020	-0.020	-0.020	-0.019	0.004	0.025	0.025	0.025	0.025	0.025	0.004	-0.019	0.030

10' FIELD ENTRANCE LEFT @ STA. 25+00 INDIAN CREEK ROAD

605 600 595 590 585 580 575

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

SCALE: 1"=50' HORIZ.
1"=5' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	5
CONST.	2008	BRZE-9100(35)	5

91945-3493-94
BEGIN PROJECT BRZE-9100(35) CONST.
STA. 30+04.58

91945-2493-94
BEGIN PROJECT BRZE-9100(35) R.O.W.
STA. 30+00.00

91945-2493-94
END PROJECT BRZE-9100(35) R.O.W.
STA. 40+28.20

91945-3493-94
END PROJECT BRZE-9100(35) CONST.
STA. 39+50.00

NOTE:
FOR BUILDING PROPOSED BRIDGE PIERS SEE PHASE 1 DETAIL FOR FLOW DIVERSION.

NOTE:
FOR REMOVING EXISTING BRIDGE PIERS SEE PHASE 2 DETAIL FOR FLOW DIVERSION.

LIMITS OF CROWN VETCH AND EROSION COTROL BLANKET (TYPE II)

LAY HOLLOW ROAD
N 69° 50' 19" E
N 81° 54' 48" E
N 72° 45' 18" E
LAY HOLLOW ROAD

INDIAN CREEK

WWC1
WWC1

N 20° 05' 37" W
N 24° 17' 21" W

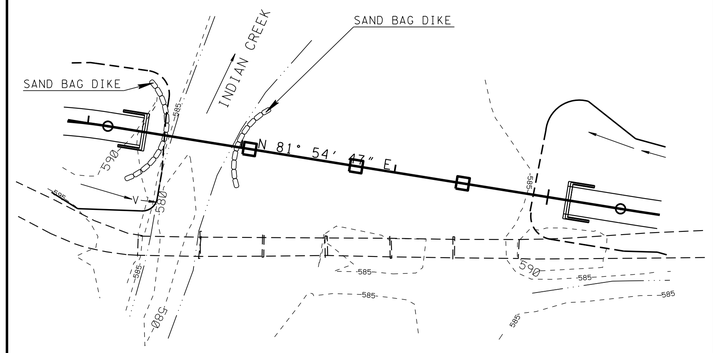
20
25
30
35
35
40

EROSION CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
SFB SFB SFB	TEMPORARY SILT FENCE WITH BACKING	EC-STR-3C
SFB SFB SFB SFB	TEMPORARY SEDIMENT FILTER BAG	EC-STR-2
	TEMPORARY ROCK CHECK DAM IN V-DITCH	EC-STR-6
	TEMPORARY ROCK CHECK DAM IN TRAPEZOIDAL DITCH	EC-STR-6
	TEMPORARY SEDIMENT TRAP WITH TEMPORARY SILT SCREEN CHECK DAM	EC-STR-7
	SAND BAGS	
TUBE TUBE TUBE TU	TEMPORARY SEDIMENT TUBES	EC-STR-37
	TEMPORARY ROCK SILT SCREEN USED IN ROADSIDE DITCHES	EC-STR-11
	TEMPORARY DIVERSION CHANNEL	EC-STR-31

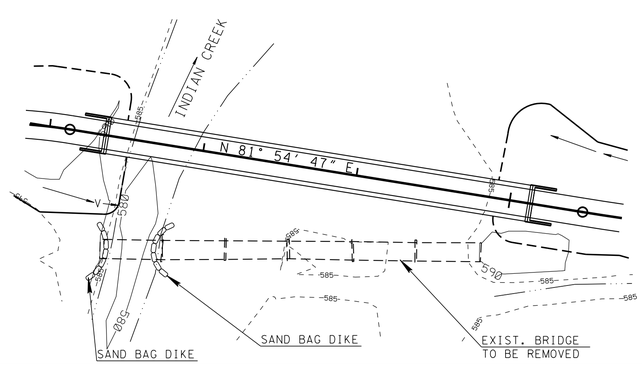
PHASE 1

NOTES:
(1) SAND BAGS SHALL BE USED DURING BUILDING PROPOSED PIERS IN OR CLOSE TO THE STREAM, STD. DWG. EC- STR- 31.
(2) SLURRY PUMPED WATER FROM EXCAVATED AREAS SHALL BE FILTERED THROUGH TEMPORARY SEDIMENT FILTER BAG PRIOR TO DISCHARGE INTO STREAM.
(3) CONTRACTORS RESPONSIBILITY, IF USING SLIP-FORMS FOR CONSTRUCTION OF PROPOSED BRIDGE PARAPETS, SHOULD BE COUNTABLE TO CATCH AND AVOID CONCRETE SPILLOVER FROM ENTERING STREAM.



PHASE 2

NOTES:
(1) SAND BAGS SHALL BE USED DURING DEMOLITION AND REMOVAL OF THE EXISTING PIERS IN OR CLOSE TO THE STREAM, STD. DWG. EC- STR- 31.
(2) SLURRY PUMPED WATER FROM EXCAVATED AREAS SHALL BE FILTERED THROUGH TEMPORARY SEDIMENT FILTER BAG PRIOR TO DISCHARGE INTO STREAM.



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EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	5A

EROSION PREVENTION AND SEDIMENT CONTROL NOTES:

(1) 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 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EROSION PREVENTION AND SEDIMENT CONTROL DEVICES ON THE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLAN, CONTAINED IN THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP), TO PROVIDE ACCEPTABLE EROSION PREVENTION AND SEDIMENT CONTROLS DURING ALL STAGES OF CONSTRUCTION.

(2) THE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.

(3) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EROSION PREVENTION AND SEDIMENT CONTROL (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 DEVICES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE STORM WATER POLLUTION PREVENTION PLAN (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 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 EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

(4) PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 15 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 15 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 RUNS WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

SPECIAL NOTES :

(1) BLASTING AND OPERATION OF HEAVY, EARTH-MOVING EQUIPMENT IS PROHIBITED ONSITE DURING THE GRAY BAT MATERNITY SEASON (APRIL 1 THROUGH AUGUST 15).

(2) REMOVAL OF RIPARIAN VEGETATION SHOULD BE LIMITED TO THAT ABSOLUTELY NECESSARY TO ACCOMMODATE THE NEW BRIDGE. WHERE POSSIBLE, TREES AND SHRUBS ON STREAMBANKS WILL BE CLEARED BY CUTTING RATHER THAN BY MECHANIZED METHODS, LEAVING THE ROOTS IN PLACE. ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE STABILIZED AS SOON AS POSSIBLE BY USE OF RIPRAP, SEEDING, OR MULCHING, IN COMPLIANCE WITH ARAP, 404, NPDES, OR OTHER PERMIT SPECIFICATIONS.

(3) BEST MANAGEMENT PRACTICES FOR CONTROL OF SEDIMENTATION MUST BE INCLUDED AS PART OF THE CONSTRUCTION CONTRACT.

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EROSION PREVENTION AND SEDIMENT CONTROL PLAN (SPECIAL NOTES)

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	4
CONST.	2008	BRZE-9100(35)	8

91945-2493-94
BEGIN PROJECT BRZE-9100(35) R.O.W.
STA. 30+00.00

91945-3493-94
BEGIN PROJECT BRZE-9100(35) CONST.
STA. 30+04.58

30

INDIAN CREEK ROAD (TAR AND CHIP)

PC 31+45.91

PT 32+13.00

INDIAN CREEK

35

PC 35+47.53

91945-2493-94
END PROJECT BRZE-9100(35) R.O.W.
STA. 40+28.20

91945-3493-94
END PROJECT BRZE-9100(35) CONST.
STA. 39+50.00

40

CUT SLOPE

PT 38+52.81

LAY HOLLOW ROAD

INDIAN CREEK ROAD (TAR AND CHIP)

INDIAN CREEK

PROJECT LOCATION

DRAINAGE AREA
= 42.5 S.M

HYDRAULIC DATA:
DRAINAGE AREA = 42.5 S.M
DESIGN DISCHARGE (50 YR.) = 5080 CFS
WATER AREA PROVIDED BELOW EL.586.77 = 1226.62 F.S
50 YR. VELOCITY = 4.14 FPS
50 YR. BRIDGE BACKWATER = 0.22 FT. @ EL.587.70
ROADWAY OVERTOPPING EL. = 586.50 FT.
100 YR. DISCHARGE 11300 CFS @ EL.589.26 FT.

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DRAINAGE MAP

STA.30+04 TO STA.39+50

SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	9

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTES

(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) 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. 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 30-FOOT SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(4) 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. 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. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS 30-FOOT SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(5) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFOI DEVICES.

SEQUENCE OF CONSTRUCTION

PHASE I: CONSTRUCT PROPOSED BRIDGE AND PROPOSED ALIGNMENT ON NORTH SIDE OF EXISTING ROAD. BUILD FIELD ENTRANCE ON INDIAN CREEK ROAD AND ADD PROPOSED GUARDRAIL NORTH SIDE OF PROPOSED BRIDGE.

PHASE II: MOVE TRAFFIC TO PROPOSED ALIGNMENT, REMOVED EXISTING BRIDGE AND GRAVEL WHILE SHAPING SLOPES AROUND PROPOSED BRIDGE, ADD PROPOSED GUARDRAIL TO SOUTH SIDE OF PROPOSED BRIDGE.

TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	ITEM NO. 712-06 (S.F.)	SIZE	M.U.T.C.D. NO.	REMARKS
712-01	TRAFFIC CONTROL	L.S.	1				
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	24				
712-05.01	WARNING LIGHTS (TYPE "A")	EACH	4				
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	108				
712-06	SIGNS (CONSTRUCTION)	S.F.					
	ROAD WORK AHEAD	S.F.	3	27	36" X 36"	W20-1	
	ROAD WORK 1000 FT.	S.F.	3	27	36" X 36"	W20-1	
	ROAD WORK 500 FT.	S.F.	3	27	36" X 36"	W20-1	
	END ROAD WORK	S.F.	3	13.5	36" X 18"	G20-2	
	ROAD CLOSED	S.F.	2	20	48" X 30"	R11-2	
TOTAL				**115**			

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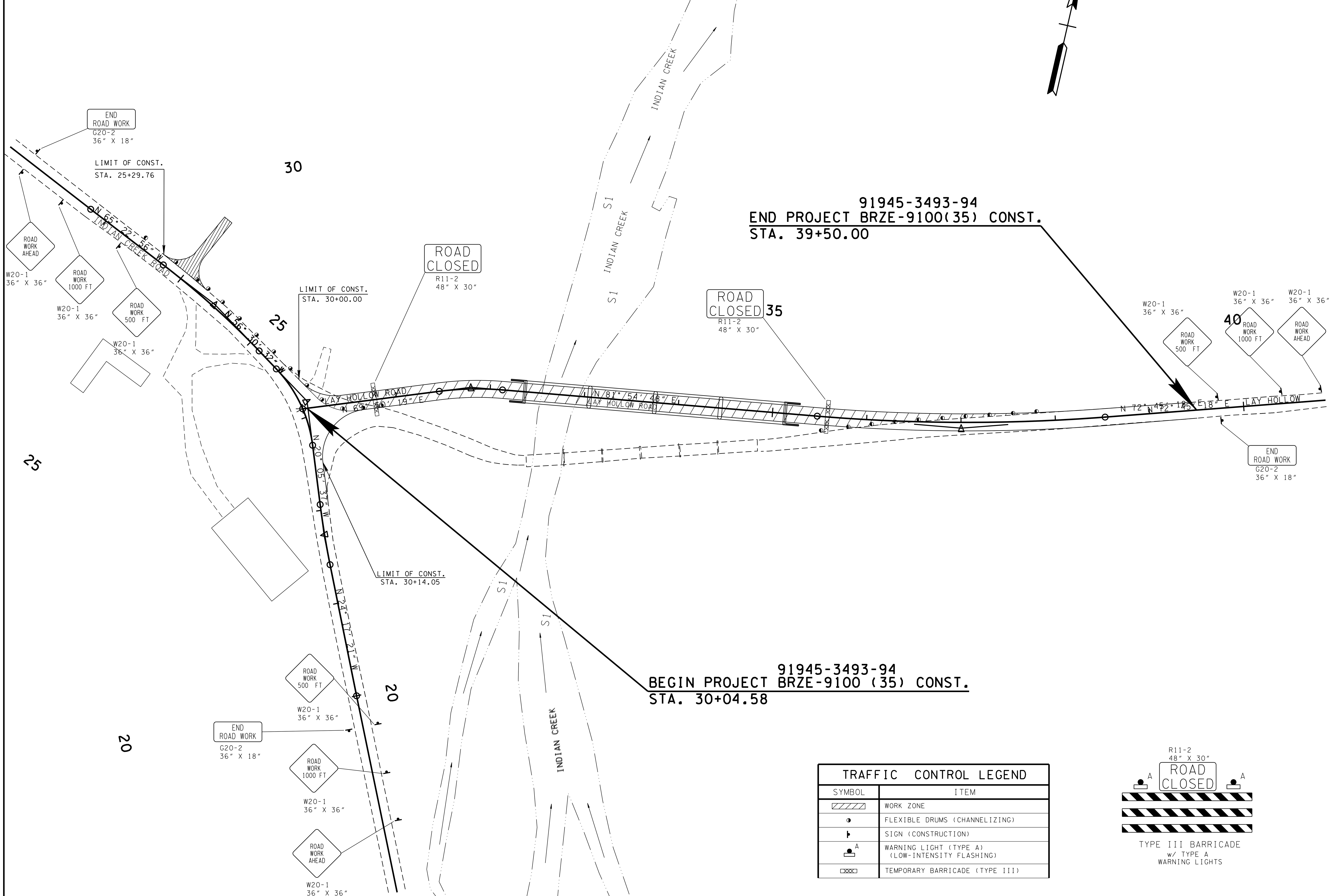
TRAFFIC CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	9A

PHASE I:

CONSTRUCT PROPOSED BRIDGE AND PROPOSED ALIGNMENT ON NORTH SIDE OF EXISTING ROAD , BUILD FIELD ENTRANCE ON INDIAN CREEK ROAD AND ADD PROPOSED GUARDRAIL NORTH SIDE OF PROPOSED BRIDGE.



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
(hatched)	WORK ZONE
◑	FLEXIBLE DRUMS (CHANNELIZING)
(sign)	SIGN (CONSTRUCTION)
(light) A	WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING)
(barricade)	TEMPORARY BARRICADE (TYPE III)

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TRAFFIC
CONTROL PLAN
PHASE 1

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2008	BRZE-9100(35)	9B

PHASE II
MOVE TRAFFIC TO PROPOSED ALIGNMENT, REMOVE EXISTING BRIDGE AND GRAVEL WHILE SHAPING SLOPES AROUND PROPOSED BRIDGE . ADD PROPOSED GUARDRAIL TO SOUTH SIDE OF PROPOSED BRIDGE.

N

91945-3493-94
END PROJECT BRZE-9100(35) CONST.
STA. 39+50.00

91945-3493-94
BEGIN PROJECT BRZE-9100 (35) CONST.
STA. 30+04.58

END ROAD WORK
G20-2
36" X 18"

LIMIT OF CONST.
STA. 25+29.76

ROAD WORK AHEAD
W20-1
36" X 36"

ROAD WORK 1000 FT
W20-1
36" X 36"

ROAD WORK 500 FT
W20-1
36" X 36"

N 65° 22' 56" W
INDIAN CREEK ROAD

LIMIT OF CONST.
STA. 30+00.00

N 36° 30' 35" W

LAY HOLLOW ROAD
N 69° 50' 19" E

N 81° 54' 48" E
LAY HOLLOW ROAD

N 72° 45' 18" E
LAY HOLLOW

END ROAD WORK
G20-2
36" X 18"

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

N 20° 05' 51" W

LIMIT OF CONST.
STA. 30+14.05

N 24° 17' 21" W

INDIAN CREEK
S1

ROAD WORK 500 FT
W20-1
36" X 36"

END ROAD WORK
G20-2
36" X 18"

ROAD WORK 1000 FT
W20-1
36" X 36"

ROAD WORK AHEAD
W20-1
36" X 36"

W20-1
36" X 36"
ROAD WORK 500 FT

W20-1
36" X 36"
ROAD WORK 1000 FT

W20-1
36" X 36"
ROAD WORK AHEAD

25
30
35
40
20

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
A	WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING)
	TEMPORARY BARRICADE (TYPE III)

R11-2
48" X 30"
ROAD CLOSED
A A
TYPE III BARRICADE
w/ TYPE A
WARNING LIGHTS

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TRAFFIC CONTROL PLAN PHASE 2

SCALE: 1"=50'

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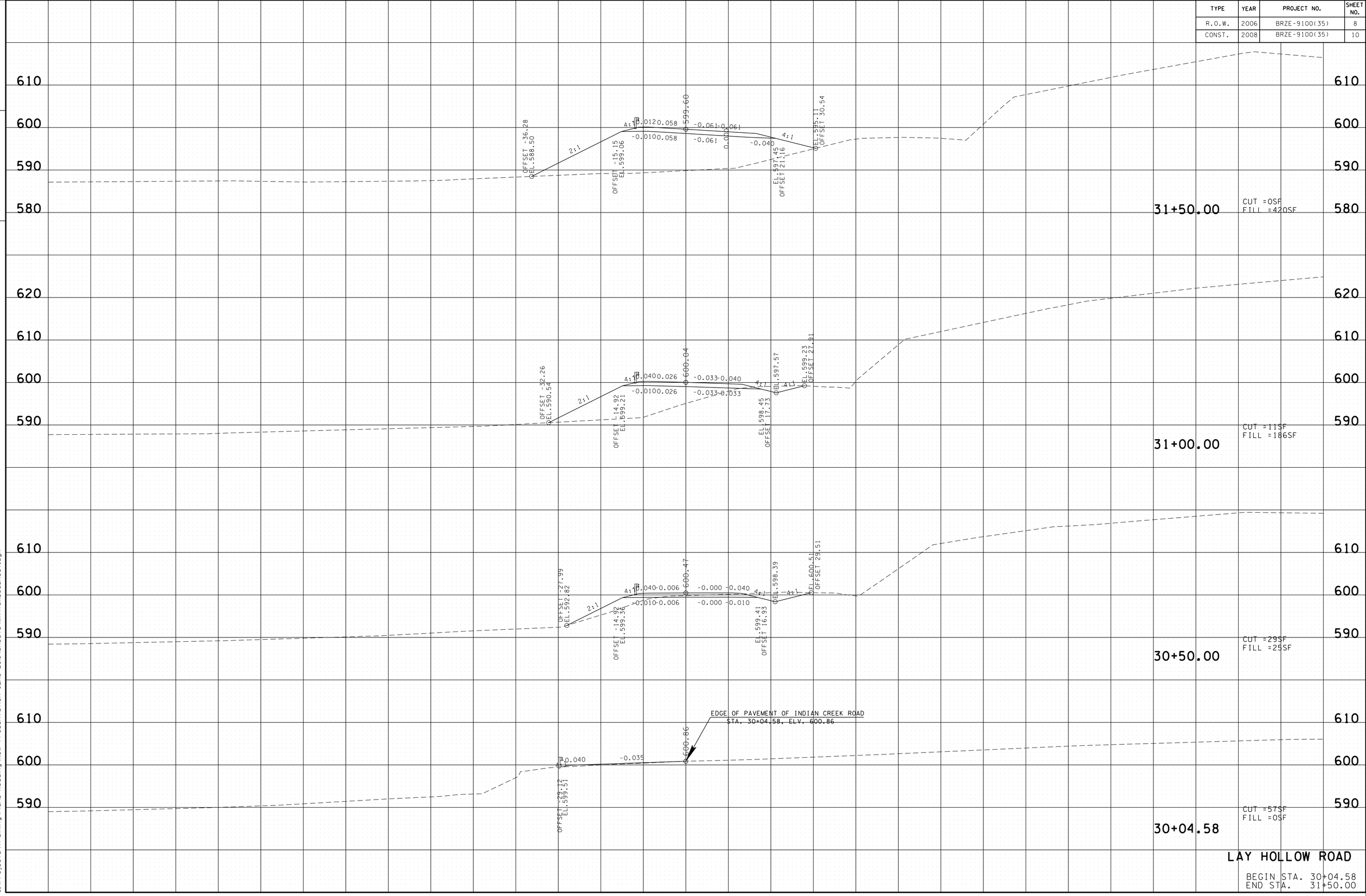
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	8
CONST.	2008	BRZE-9100(35)	10

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



LAY HOLLOW ROAD

BEGIN STA. 30+04.58
END STA. 31+50.00

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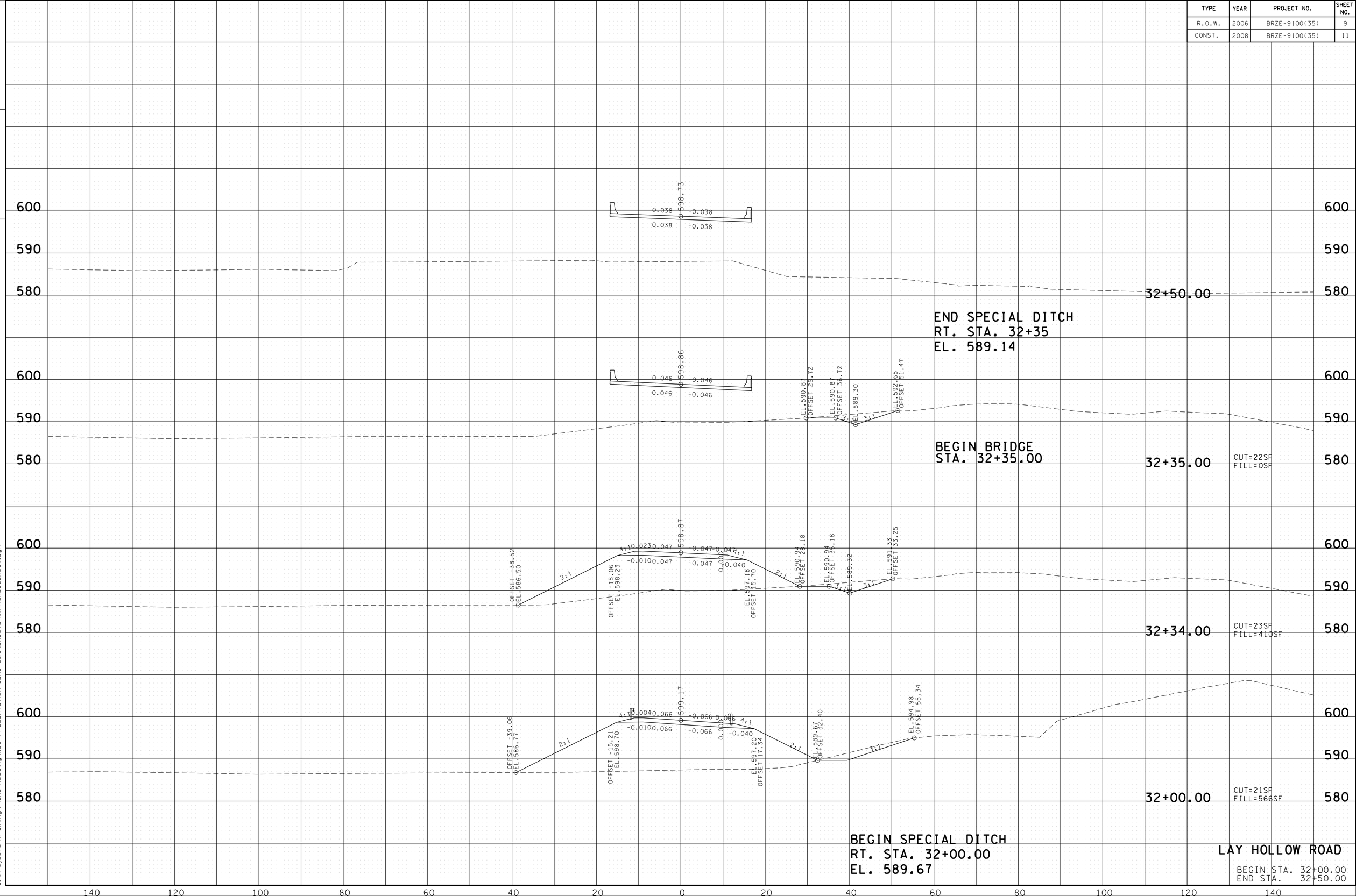
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	9
CONST.	2008	BRZE-9100(35)	11

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



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	10
CONST.	2008	BRZE-9100(35)	12

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

600
590

OFFSET -57.92
EL.588.46
3:1
EL.584.09
3:1
OFFSET -32.50
EL.588.20

594.09
-0.020 -0.019
-0.020 -0.019

CUT=54 SF
FILL =00 SF

35+00.00

BEGIN SPECIAL DITCH
LT. STA. 34+70.00
EL. 583.91

596.16
-0.020 -0.020
-0.020 -0.020

34+50.00

597.36
-0.020 -0.020
-0.020 -0.020

34+00.00

597.87
-0.018 -0.020
-0.018 -0.020

33+50.00

598.30
0.010 -0.020
0.010 -0.020

33+00.00

LAY HOLLOW ROAD

BEGIN STA. 33+00.00
END STA. 35+00.00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

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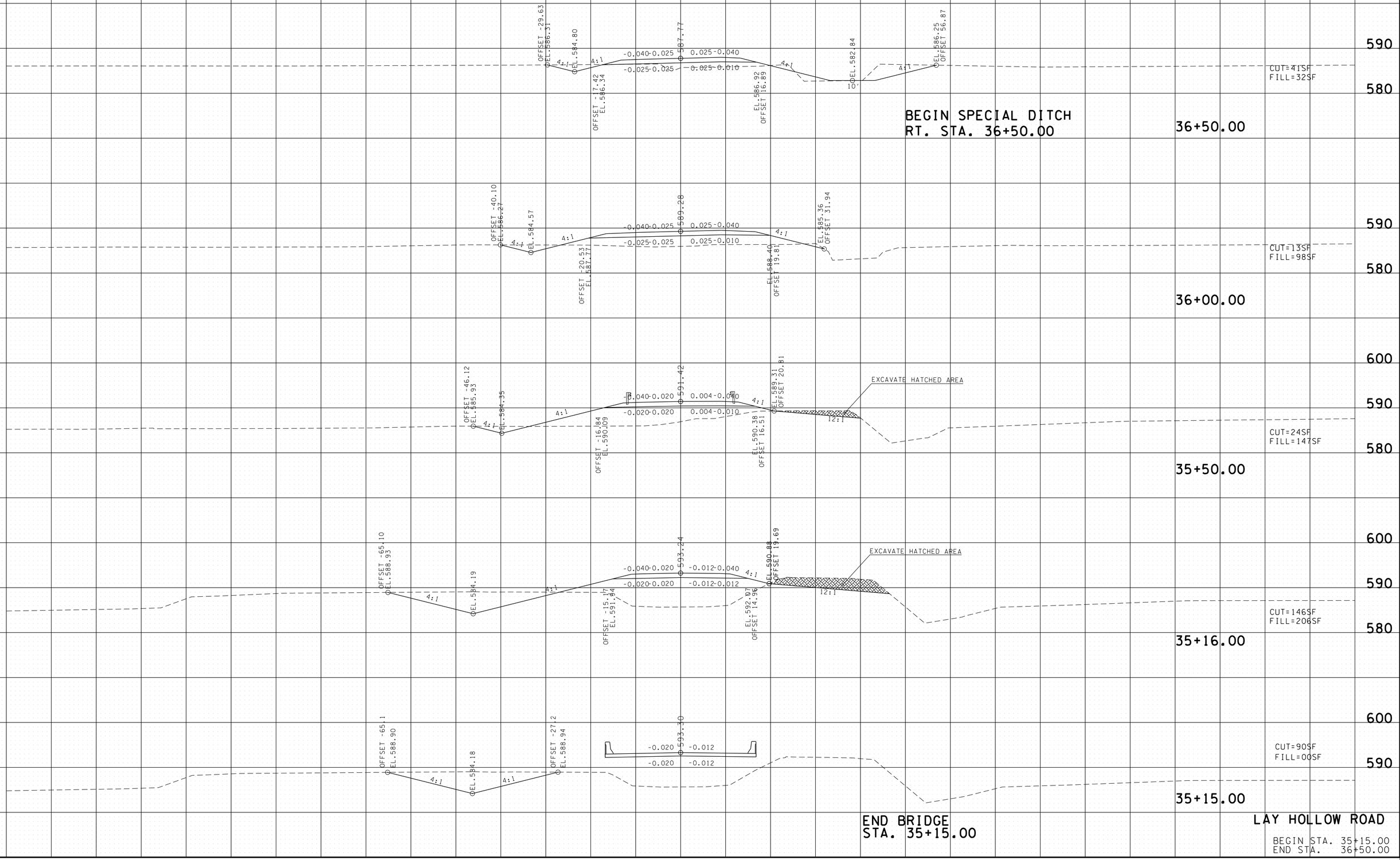
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	11
CONST.	2008	BRZE-9100(35)	13

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



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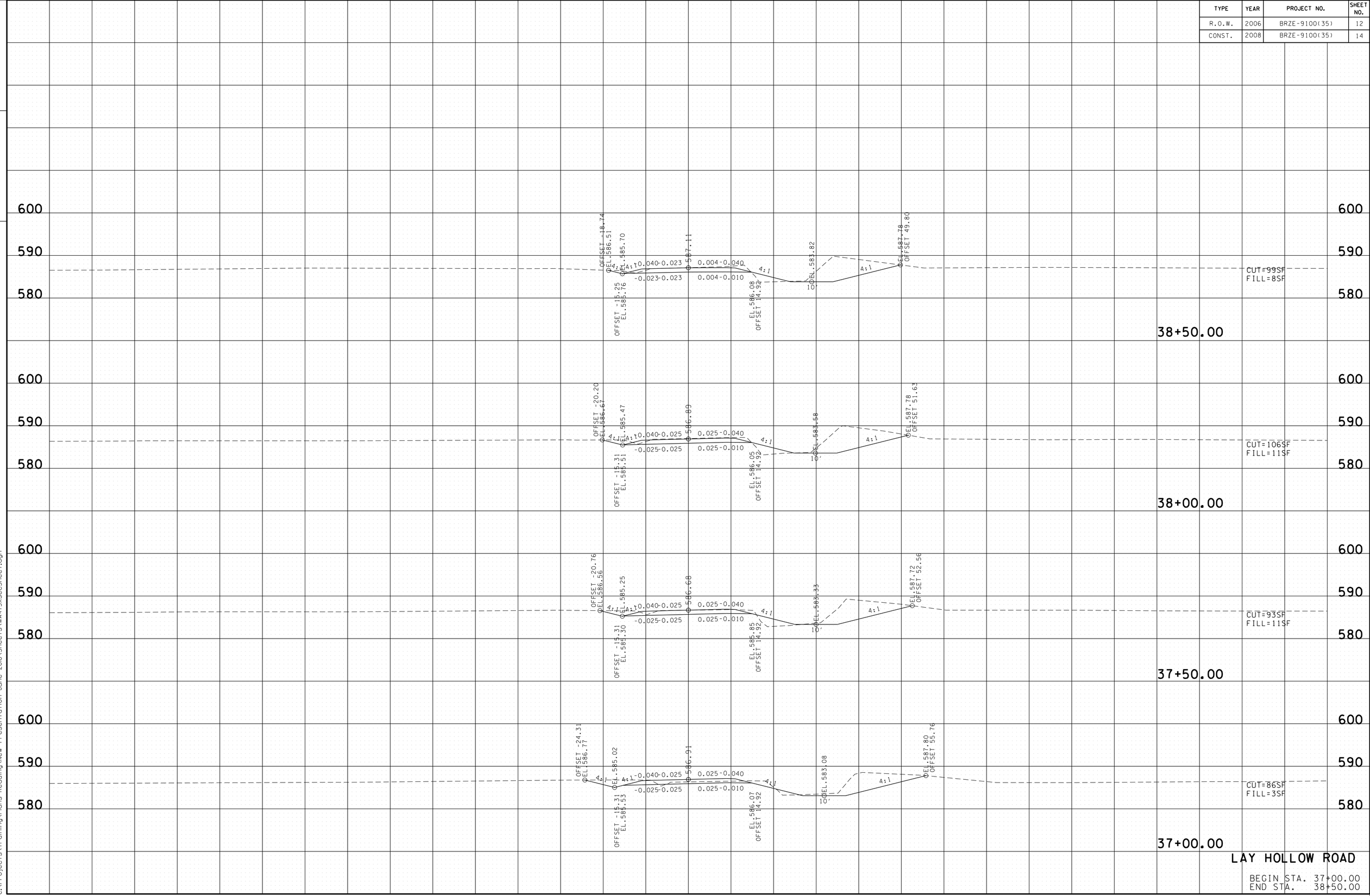
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	12
CONST.	2008	BRZE-9100(35)	14

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2006	BRZE-9100(35)	13
CONST.	2008	BRZE-9100(35)	15

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

41+00.00

40+80.00

40+50.00

40+00.00

39+50.00

39+00.00

END SPECIAL DITCH
LT. STA. 39+50.00

END SPECIAL DITCH
RT. STA. 39+00.00

LAY HOLLOW ROAD

BEGIN STA. 39+00.00
END STA. 41+00.00

CUT=OSF
FILL=OSF

CUT=98SF
FILL=6SF

600
590
580

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

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STANDARD ABBREVIATIONS

AASHTO - - - - - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORATION OFFICIALS
ABUT.- - - - - - ABUTMENT
AC.- - - - - - - ACRE
AC - - - - - - - ASPHALT CEMENT
ACC. - - - - - - ACCESS
ACCEL. - - - - - ACCELERATION
ACS - - - - - - ASPHALTIC CONCRETE SURFACE
ADL - - - - - - AVERAGE DAILY LOADING
ADT - - - - - - AVERAGE DAILY TRAFFIC
AGG. - - - - - - AGGREGATE
AH. - - - - - - AHEAD
ALUM. - - - - - ALUMINUM
APPR. - - - - - APPROACH
APPROX. - - - - APPROXIMATE
ASP. - - - - - - ASPHALT
ASTM - - - - - - AMERICAN SOCIETY FOR TESTING AND MATERIALS
AVG. - - - - - - AVERAGE

B - - - - - - - BRICK
BAR. - - - - - - BARRIER
BAL. - - - - - - BALANCE
BCCMP- - - - - - BITUMINOUS COATED CORRRUGATED METAL PIPE
BEG. - - - - - - BEGINNING
B.G. - - - - - - BELOW GRADE
BK. - - - - - - BACK
BIT. - - - - - - BITUMINOUS
BL. - - - - - - BLOCK
BLDG. - - - - - - BUILDING
BLVD. - - - - - BOULEVARD
B.M. - - - - - - BENCH MARK
BN. - - - - - - BARN
BOR. - - - - - - BORROW
BOTT. - - - - - BOTTOM
BR. - - - - - - BRIDGE
BTWN. - - - - - BETWEEN

CATV - - - - - - CABLE TV
C.A. - - - - - - CONTROLLED ACCESS
CALC. - - - - - CALCULATED
C.B. - - - - - - CATCH BASIN
C.C. - - - - - - CENTER TO CENTER
CFS - - - - - - CUBIC FEET PER SECOND
C & G - - - - - CURB AND GUTTER
CH. - - - - - - CHANNEL
CH.CH. - - - - - CHANNEL CHANGE
C.I.P. - - - - - CAST IRON PIPE
C.I.S. - - - - - CONSTRUCTION IDENTIFICATION SIGN
CK. - - - - - - CREEK
CL. - - - - - - CLASS
℄ - - - - - - - CENTER LINE
CM - - - - - - - CORRUGATED METAL
CMP - - - - - - CORRUGATED METAL PIPE
CMPA - - - - - - CORRUGATED METAL PIPE ARCH
CO. - - - - - - COUNTY or COMPANY
COM. - - - - - - COMMON
CONC. - - - - - CONCRETE
CONN. - - - - - CONNECTION
CONST. - - - - - CONSTRUCTION
CONT. - - - - - CONTINUOUS
CR. - - - - - - CRUSHED
C.R.S.I. - - - - CONCRETE REINFORCING STEEL INSTITUTE
C.S. - - - - - - CURVE TO SPIRAL
CULV. - - - - - CULVERT
C.Y. - - - - - - CUBIC YARD

D - - - - - - - DEGREE OF CURVATURE ON CURVE WITHOUT SPIRALS
D.A. - - - - - - DRAINAGE AREA
DBST - - - - - - DOUBLE BITUMINOUS SURFACE TREATMENT
DBYL - - - - - - DOUBLE BROKEN YELLOW LINE
DECEL - - - - - DECELERATION
D_S - - - - - - - DEGREE OF CURVATURE ON CURVE WITH SPIRALS
DHV - - - - - - DESIGN HOURLY VOLUME
D.I. - - - - - - DROP INLET
DIA. - - - - - - DIAMETER
DR. - - - - - - DRIVE
DWG. - - - - - - DRAWING
DSYL - - - - - - DOUBLE SOLID YELLOW LINE
DWL - - - - - - DOTTED WHITE LINE
DYL - - - - - - DOTTED YELLOW LINE

E - - - - - - - EXTERNAL DISTANCE ON CURVE WITH NO SPIRALS
E - - - - - - - EAST
EBL - - - - - - EASTBOUND LANE
ECM - - - - - - EXISTING CONCRETE MONUMENT
ECP - - - - - - EXISTING CORNER POST
EL. or ELEV. - - ELEVATION
ELONG. - - - - - ELONGATED
EMB. - - - - - - EMBANKMENT
ENGR. - - - - - ENGINEER
ENT. - - - - - - ENTRANCE
E.P. - - - - - - EDGE OF PAVEMENT
EQ. - - - - - - EQUATION
E_S - - - - - - - EXTERNAL DISTANCE ON CURVE WITH SPIRALS
E.S. - - - - - - EDGE OF SHOULDER
ESMT.- - - - - - EASEMENT

E.W. - - - - - - END WALL
EX. - - - - - - EXISTING
EXC. - - - - - - EXCAVATION
EXCL. - - - - - EXCLUDING
EXT. - - - - - - EXTENSION

F - - - - - - - FRAME
F.A. - - - - - - FEDERAL AID
FAP - - - - - - FEDERAL AID PRIMARY
FAS - - - - - - FEDERAL AID SECONDARY
FED. - - - - - - FEDERAL
F.G. - - - - - - FINISHED GRADE
F.H.W.A. - - - - FEDERAL HIGHWAY ADMINISTRATION
FIN. - - - - - - FINISHED
FL.EL. - - - - - FLOOR ELEVATION
F.L. - - - - - - FLOW LINE
FLG. - - - - - - FLANGE
FOC - - - - - - FIBER OPTIC CABLE
F.P. - - - - - - FIRE PLUG
FR.RD. - - - - - FRONTAGE ROAD
FT. - - - - - - FOOT or FEET
F/F - - - - - - FOOT PER FOOT
FUT. - - - - - - FUTURE

G - - - - - - - GAS (PUMP or UTILITY)
GA. - - - - - - GAUGE
GAL. - - - - - - GALLON
GALV. - - - - - GALVANIZED
GAR. - - - - - - GARAGE
GPH - - - - - - GALLONS PER HOUR
GPM - - - - - - GALLONS PER MINUTE
GR. - - - - - - GRADE or GRADED or GRAVEL
G.R. - - - - - - GUARD RAIL
GRAN. - - - - - GRANULAR
GT. - - - - - - GRATE
G.V. - - - - - - GAS VALVE
GW - - - - - - GUY WIRE

H.C.M. - - - - - HIGHWAY CAPACITY MANUAL
HD. - - - - - - HEAD
HO - - - - - - HORIZONTAL OVAL
HOCPC - - - - - HORIZONTAL OVAL CONCRETE PIPE CULVERT
HOR. - - - - - - HORIZONTAL
HSE. - - - - - - HOUSE
HT. - - - - - - HEIGHT
H.W. - - - - - - HIGH WATER
HWY. - - - - - - HIGHWAY
H.S. - - - - - - HIGH STRENGTH
HWL - - - - - - HASH WHITE LINE
HYL - - - - - - HASH YELLOW LINE

I - - - - - - - INTERSTATE
I.D. - - - - - - INSIDE DIAMETER
IN. - - - - - - INLET
INCL. - - - - - - INCLUDE
INV. - - - - - - INVERT
I.P. - - - - - - IRON PIN

JCT - - - - - - JUNCTION
JT. - - - - - - JOINT

L - - - - - - - LENGTH OF CIRCULAR CURVE WITH NO SPIRALS
L_C - - - - - - - LENGTH OF CIRCULAR CURVE BETWEEN SPIRALS
LB. - - - - - - POUND
LB/FT - - - - - POUND PER FOOT
L.C. - - - - - - STRAIGHT LINE DISTANCE BETWEEN T.S. AND S.C.
L.F. - - - - - - LINEAR FEET
LIN.FT. - - - - - LINEAR FEET
LGTH. - - - - - - LENGTH
LIN. - - - - - - LINEAR
LOC. - - - - - - LOCATION
L.P. - - - - - - LIGHT POLE
L_S - - - - - - - LENGTH OF SPIRAL
L.S. - - - - - - LUMP SUM
L.T. - - - - - - LONG TANGENT OF SPIRAL
LT. - - - - - - LEFT

MATL. - - - - - MATERIAL
MAX. - - - - - - MAXIMUM
MCPL. - - - - - MUNICIPAL
MED. - - - - - - MEDIAN
M.G. - - - - - - THOUSAND GALLONS
M.H. - - - - - - MANHOLE
MI. - - - - - - MILE
MIN. - - - - - - MINIMUM
MIN.AGG. - - - - MINERAL AGGREGATE
MOD. - - - - - - MODIFY or MODIFIED
MON. - - - - - - MONUMENT
MPH - - - - - - MILES PER HOUR
MUTCD - - - - - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

N - - - - - - - NORTH
N.A.D. - - - - - NORTH AMERICAN DATUM
NBL - - - - - - NORTHBOUND LANE
N.G.S. - - - - - NATIONAL GEODETIC SURVEY
N.I.C. - - - - - NOT IN CONTRACT
NO. - - - - - - NUMBER

O.D. - - - - - - OUTSIDE DIAMETER
O.H. - - - - - - OVERHEAD
O.H.W. - - - - - ORDINARY HIGH WATER
O.P. - - - - - - OVERPASS
OUT - - - - - - OUTLET

PB - - - - - - - PEDESTRIAN PUSHBUTTON
P.C. - - - - - - POINT OF CURVATURE
P.C.F. - - - - - POUNDS PER CUBIC FOOT
P.C.O. - - - - - PILE CUT OFF
P.I. - - - - - - POINT OF INTERSECTION
PKWY. - - - - - PARKWAY
PL. - - - - - - PLACE
P.L. - - - - - - PAPER LOCATED
P.O.C. - - - - - POINT ON CURVE
P.O.S.T. - - - - POINT ON SUBTANGENT
P.O.T. - - - - - POINT ON TANGENT
PRES. - - - - - PRESENT
PROJ. - - - - - PROJECT
PROP. - - - - - PROPOSED
P.S.F. - - - - - POUND PER SQUARE FOOT
P.S.I. - - - - - POUND PER SQUARE INCH
P.S.Y. - - - - - POUND PER SQUARE YARD
PT. - - - - - - POINT
P.T. - - - - - - POINT OF TANGENCY
PVC - - - - - - POLYVINYL CHOLRIDE
PVMT. - - - - - PAVEMENT
PVT. - - - - - - PRIVATE
PWR. - - - - - - POWER

Q - - - - - - - DESIGN DISCHARGE (CUBIC FEET PER SECOND)
QUAN. - - - - - QUANTITY

R - - - - - - - RADIUS OF CIRCULAR CURVE WITH NO SPIRALS
R_C - - - - - - - RADIUS OF CIRCULAR CURVE WITH SPIRALS
RCP - - - - - - REINFORCED CONCRETE PIPE
RCPA - - - - - - REINFORCED CONCRETE PIPE ARCH
RDSYL - - - - - REMOVABLE DOUBLE SOLID YELLOW LINE
RD. - - - - - - ROAD
RDY. - - - - - - ROADWAY
REF. - - - - - - REFUSAL
REINF. - - - - - REINFORCED
RELOC. - - - - - RELOCATION
REM. - - - - - - REMAINDER
REQD. - - - - - - REQUIRED
RES. - - - - - - RESIDENCE
REV. - - - - - - REVISED
R.L. - - - - - - REFUSAL LINE
R.O.W. - - - - - RIGHT-OF-WAY
R.R. - - - - - - RAILROAD
RSSWL - - - - - REMOVABLE SINGLE SOLID WHITE LINE
RT. - - - - - - RIGHT
RTE. - - - - - - ROUTE
RY. - - - - - - RAILWAY

S - - - - - - - SOUTH
SBL - - - - - - SOUTHBOUND LANE
SBST - - - - - - SINGLE BITUMINOUS SURFACE TREATMENT
S.C. - - - - - - SPIRAL TO CURVE
SCH. - - - - - - SCHOOL
S.D. - - - - - - SIDE DRAIN
S.E. - - - - - - SUPERELEVATION
SEC. - - - - - - SECTION
S.F. - - - - - - SQUARE FOOT
SHLD. - - - - - SHOULDER
SHR. - - - - - - SHRINKAGE
SHT. - - - - - - SHEET
SL. - - - - - - SLOPE
S.L. - - - - - - STATE LINE
S.P. - - - - - - SUPPORT POLE
SPA. - - - - - - SPACE
SPEC. - - - - - SPECIAL
SPECS. - - - - - SPECIFICATIONS
SPR.D. - - - - - SPRING DRAIN
SQ. - - - - - - SQUARE
S.R. - - - - - - SOLID ROCK
S.R. or ST.RT. - STATE ROUTE
ST. - - - - - - STREET or STATE
S.T. - - - - - - SPIRAL TO TANGENT or SHORT TANGENT OF SPIRAL
STA. - - - - - - STATION
STAB. - - - - - STABILIZED
STD. - - - - - - STANDARD
STL. - - - - - - STEEL
STN. - - - - - - STONE
ST.P. - - - - - STRAIN POLE
STR. - - - - - - STRENGTH or STRAIGHT
STRUC. - - - - - STRUCTURE
SURV. - - - - - SURVEY
SWL. - - - - - - SWELL
S.W. - - - - - - SIDEWALK
S.Y. - - - - - - SQUARE YARD
SBWL - - - - - - SINGLE BROKEN WHITE LINE
SBYL - - - - - - SINGLE BROKEN YELLOW LINE
SSWL - - - - - - SINGLE SOLID WHITE LINE
SSYL - - - - - - SINGLE SOLID YELLOW LINE

T - - - - - - - SUBTANGENT LENGTH ON CURVE WITHOUT SPIRALS
T_C - - - - - - - TANGENT LENGTH FROM S.C. OR C.S. TO INTERSECTION OF TANGENTS
TD - - - - - - - TRENCH DEPTH
TDOT - - - - - - TENNESSEE DEPARTMENT OF TRANSPORTATION
TEMP. - - - - - TEMPORARY
TGRN - - - - - - TENNESSEE GEODETIC REFERENCE NETWORK
THK. - - - - - - THICKNESS
TNPK. - - - - - TURNPIKE
T.P. - - - - - - TURNING POINT
TR. - - - - - - TRACK
T_S - - - - - - - SUBTANGENT LENGTH ON CURVE WITH SPIRAL
T.S. - - - - - - TANGENT TO SPIRAL
T.V.A. - - - - - TENNESSEE VALLEY AUTHORITY
TYP. - - - - - - TYPICAL

UG - - - - - - - UNDERGROUND
U.L. - - - - - - URBAN LIMITS
UNCL.EX. - - - - UNCLASSIFIED EXCAVATION
U.P. - - - - - - UNDERPASS
U.S. - - - - - - UNITED STATES
U.S.C.E. - - - - UNITED STATES CORPS OF ENGINEERS

V - - - - - - - DESIGN SPEED
VAR. - - - - - - VARIABLE
V.C. - - - - - - VERTICAL CURVE
V.C.P. - - - - - VITRIFIED CLAY PIPE
VERT.- - - - - - VERTICAL
VO- - - - - - - VERTICAL OVAL
VOCPC- - - - - - VERTICAL OVAL CONCRETE PIPE CULVERT
V.P.C.-- - - - - VERTICAL POINT OF CURVATURE
V.P.I. - - - - - VERTICAL POINT OF INTERSECTION
V.P.O.C.-- - - - VERTICAL POINT ON CURVE
V.P.T. - - - - - VERTICAL POINT OF TANGENCY

W - - - - - - - WEST
W/ - - - - - - - WITH
WBL - - - - - - WESTBOUND LANE
WD.P.- - - - - - WOOD POLE
WGT. - - - - - - WEIGHT
W.L. - - - - - - WATER LEVEL
W.M. - - - - - - WATER METER
W.V. - - - - - - WATER VALVE
W.W. - - - - - - WING WALL

X_C - - - - - - - SPIRAL COORDINATE
X-ING.- - - - - - CROSSING
X-RD.- - - - - - CROSS-ROAD
X-SEC.- - - - - CROSS-SECTION

Y_C - - - - - - - SPIRAL COORDINATE

REV. 7-1-72: CHANGED DEPARTMENT NAME.

REV. 1-1-76: CHANGED DWG. NO. FROM A-A-1 (SHEET 2) TO RD-A-1.

REV. 11-9-76: REORGANIZED SHEET AND ADDED THE FOLLOWING: AASHTO BIT., H.S., P.C.O., PKWY., P.S.F., PVC, S.R. OR ST. RT., ST. P., T.P., UG, AND WD. P.

REV. 9-18-79: ADDED PAVEMENT MARKING ABBREVIATIONS AS FOLLOWS: DSYL, DWL,HWL, HYL, SDWL, SDYL, SSWL, AND SSYL.

REV. 2-22-88: CHANGED PAVEMENT MARKING ABBREVIATIONS SDWL AND SDYL TO SBWL SBYL. ADDED DBYL AND DYL.

REV 3-20-91: REDREW SHEET AND ADDED THE FOLLOWING: ADL, ASP., BAR., BOR., CATV, CFS, DECEL, E.P., E.S., EX., F/F, FL. EL., FLG, H.C.M., JCT., LB/FT, MPH, MUTCD, N.A.D., N.G.S., O.H.W., PB, REF., TDOT, TGRN, VAR., V.P.C., V.P.I., V.P.O.C., V.P.T., AND WGT.

REV. 6-20-91: ADDED THE FOLLOWING: ECM, ECP, GW, AND W.M.

☒ REV. 10-26-92: ADDED THE FOLLOWING: MOD.

☒ REV. 10-26-93: ADDED THE FOLLOWING: FOC.

☒ REV. 9-5-94: ADDED THE FOLLOWING: ALUM, GPH, GPM, AND TD.

☒ REV. 7-29-98: ADDED THE FOLLOWING: CMPA, HO, HOCPC, RCPA, VO, AND VOCPC.

☒ REV. 12-18-99: ADDED THE FOLLOWING: RDSYL AND RSSWL.

☒ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD ABBREVIATIONS

RD-A-1

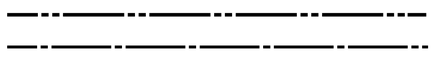
STANDARD LEGEND

EXISTING

BASE LINE CONTROL POINTS

PROPERTY CORNER LOCATED (IRON PIN OR OTHER TYPE MARKING)

DIRECTION AND ANGLE OF DIP OF STRATA



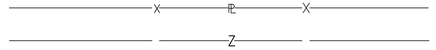
STATE BOUNDARY LINE

COUNTY BOUNDARY LINE

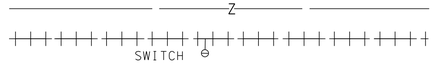
CITY, VILLAGE OR BOROUGH BOUNDARY LINE

PROPERTY LINE

PROPERTY LINE WITH FENCE



SAME PROPERTY OWNER

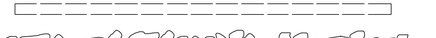


RAILROAD

ROADS (SHOW WIDTH AND NAME OR ROUTE)

CURB AND GUTTER

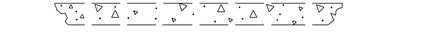
WALL (RETAINING, BRICK, STONE)



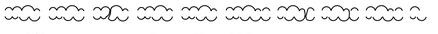
ROCK, EMBANKMENTS, REVETMENTS

SINGLE GUARDRAIL

MEDIAN DIVIDER GUARDRAIL

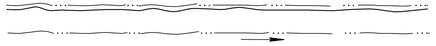


CONCRETE



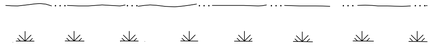
TREE LINE

LARGE STREAM WITH DIRECTIONAL ARROW



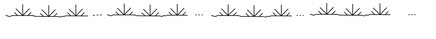
SMALL STREAM WITH DIRECTIONAL ARROW

INTERMITTENT STREAM



SWAMP, MARSH OR WETLAND

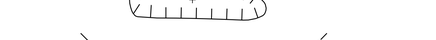
WETLAND BOUNDARY



SPRING

SINKHOLE (SHOW ELEVATION, LOCATION OF LOW POINT AND IF OPEN OR CLOSED)

BRIDGE, BOX OR SLAB BRIDGES AND CULVERTS (DESCRIBE)

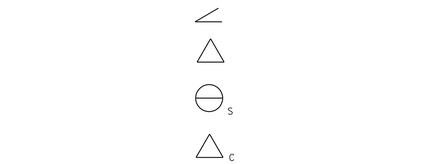


CROSS DRAIN OR SIDE DRAIN CULVERTS (SHOW SIZE, LENGTH, MATERIAL, INLET AND OUTLET ELEVATIONS, AND TYPE OF ENDWALLS)

CATCH BASIN (SHOW TYPE, IF KNOWN)

SEPTIC TANK (SHOW SIZE - DIRECTION OF ARROW INDICATES LOCATION OF OVERFLOW FIELD)

PROPOSED

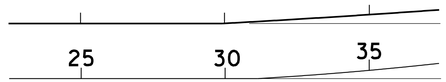


ANGLE

DELTA ANGLE

SPIRAL ANGLE

DELTA ANGLE OF CIRCULAR CURVE (EXCLUDING SPIRAL ANGLE)



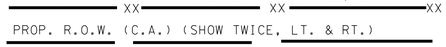
BASE LINE OR SURVEY LINE

CENTERLINE-NUMERALS .20"

PAPER LOCATION CENTERLINE

RIGHT-OF-WAY

RIGHT-OF-WAY, CONTROL OF ACCESS AND FENCE

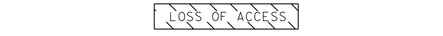


RIGHT-OF-WAY, CONTROL OF ACCESS WITHOUT FENCE

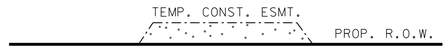
CONTROL OF ACCESS WITH FENCE

R.O.W. MARKER (SHOW TYPE A, B, OR C)

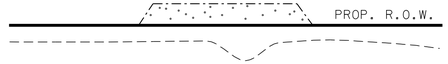
LOSS OF ACCESS



DRAINAGE EASEMENT AND/OR UTILITY EASEMENT (DESIGNATE) PERMANENT



TEMPORARY CONSTRUCTION EASEMENT



TOE OF FILL SLOPE

TOP OF CUT SLOPE

WALL (RETAINING, BRICK, STONE)

REINFORCED CONCRETE PAVEMENT

CURB AND GUTTER

EDGES OF PAVEMENT (SHOW WIDTH)

SINGLE GUARDRAIL

MEDIAN DIVIDER GUARDRAIL

BRIDGE BOX OR SLAB BRIDGES AND CULVERTS (DESCRIBE)

CROSS DRAIN OR SIDE DRAIN CULVERTS (SHOW SIZE, LENGTH, MATERIAL, INLET AND OUTLET ELEVATIONS, AND TYPE OF ENDWALLS)

"V" OR ROUND DITCH LINING TREATMENT

TRAPEZOIDAL DITCH LINING TREATMENT

CHANNEL CHANGE OR LARGE SPECIAL DITCH (DESCRIBE)

CATCH BASIN (SHOW TYPE)

REV. 7-1-72: CHANGED DEPARTMENT NAME.

REV. 1-1-76: CHANGED DRAWING NUMBER FROM A-A-1 (SHEET 1) TO RD-L-1. ADDED SYMBOLS FOR DITCH LINING.

REV. 3-15-76: CHANGED THE WORD "RECTANGULAR" TO "TRAPEZOIDAL REGARDING DITCH LINING.

REV. 1-19-91: REDREW SHEET AND ADDED SYMBOLS FOR EXISTING AND PROPOSED OVERHEAD POWER AND CABLE TV LINES. ADDED RIP-RAP TO DITCH LINING TREATMENT.

☒ REV. 10-26-93: CHANGED SYMBOLS FOR EXISTING AND PROPOSED OVERHEAD UTILITY POLES AND ADDED SYMBOL FOR UNDERGROUND FIBER OPTIC CABLE.

☒ REV. 10-26-94: REDREW SHEET AND ADDED SYMBOL FOR SEPTIC TANK. MOVED WETLAND BOUNDARY SYMBOL FROM OLD DRAWING NO. RD-L-2. MOVED SYMBOLS REFLECTING ALL UTILITY INSTALLATIONS TO NEW DRAWING NO. RD-L-2.

☒ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND

10-26-94 | RD-L-1

- REV. 10-26-94: NEW DRAWING REFLECTING ALL UTILITY RELATED SYMBOLS MOVED FROM DRAWING NO. RD-L-1.
- REV. 2-28-01: CHANGED SYMBOLS FOR OVERHEAD UTILITY LINES AND ADDED SYMBOLS FOR SEWER METERS AND VALVES.
- REV. 9-5-01: CORRECTED DESCRIPTIONS FOR PROPOSED OVERHEAD UTILITY LINES.

STANDARD LEGEND

EXISTING

4" G	GAS LINE (SHOW SIZE)
2" G G.V. 2" G	GAS VALVE IN LINE
24" M.H. 24"	MANHOLE (TYPE P, T, SA, OR ST) IN LINE
24" SA	SANITARY SEWER (SHOW SIZE)
24" ST	STORM SEWER (SHOW SIZE)
FOC UG	UNDERGROUND FIBER OPTIC CABLE
P UG	UNDERGROUND POWER LINE
P T UG P	UNDERGROUND POWER AND TELEPHONE LINE
T UG	UNDERGROUND TELEPHONE LINE
6" W	WATER LINE (SHOW SIZE)
4" W W.V. 4" W	WATER VALVE IN LINE
	FIRE HYDRANT
G.V.	GAS VALVE
	LIGHT POLE
P	LIGHT POLE WITH POWER
T	TELEPHONE POLE
P	POWER POLE
P/T	POWER AND TELEPHONE POLE
P/T/TV	POWER, TELEPHONE AND CABLE TV POLE
	MANHOLE
T	TELEPHONE BOOTH
	TRANSMISSION TOWER (SHOW NUMBER, OWNER AND SIZE AT BASE)
S.M.	SEWER METER
S.V.	SEWER VALVE
W.M.	WATER METER
W.V.	WATER VALVE
P P P P	OVERHEAD POWER LINE
T T T T	OVERHEAD TELEPHONE LINE
P T P T	OVERHEAD POWER AND TELEPHONE LINE
P CATV P CATV	OVERHEAD POWER AND CABLE TV

LET SLASH INDICATE DIRECTION OF OVER HEAD LINE

UTILITY SHEETS ONLY

PROPOSED

4" G 4" G	GAS LINE (SHOW SIZE)
4" G G.V. 4"	GAS VALVE IN LINE
24" TYPE M.H. 24"	MANHOLE (TYPE P, T, SA, OR ST) IN LINE
24" SA 24" SA	SANITARY SEWER (SHOW SIZE)
24" ST 24" ST	STORM SEWER (SHOW SIZE)
FOC UG FOC UG FOC	UNDERGROUND FIBER OPTIC CABLE
P UG P UG P	UNDERGROUND POWER LINE
P UG P T UG	UNDERGROUND POWER AND TELEPHONE LINE
T UG T UG T	UNDERGROUND TELEPHONE LINE
6" W 6" W	WATER LINE (SHOW SIZE)
6" W W.V. 6"	WATER VALVE IN LINE
	FIRE HYDRANT
G.V.	GAS VALVE
	LIGHT POLE
P	LIGHT POLE WITH POWER
T	TELEPHONE POLE
P	POWER POLE
P/T	POWER AND TELEPHONE POLE
P/T/TV	POWER, TELEPHONE AND CABLE TV POLE
	MANHOLE
T	TELEPHONE BOOTH
	TRANSMISSION TOWER (SHOW NUMBER, OWNER AND SIZE AT BASE)
S.M.	SEWER METER
S.V.	SEWER VALVE
W.M.	WATER METER
W.V.	WATER VALVE
P P P	OVERHEAD POWER LINE
T T T T T	OVERHEAD TELEPHONE LINE
P T P T P	OVERHEAD POWER AND TELEPHONE LINE
P CATV P CATV P	OVERHEAD POWER AND CABLE TV LINE

½" OR MORE LENGTH OF DASH

LET SLASH INDICATE DIRECTION OF OVER HEAD LINE

UTILITY SHEETS ONLY

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND FOR UTILITY INSTALLATIONS

10-26-94 RD-L-2

STANDARD LEGEND

EXISTING		PROPOSED	
	LOOP DETECTOR WITH LEAD-IN		LOOP DETECTOR WITH LEAD-IN
	RADAR/VIDEO DETECTION AREA		RADAR/VIDEO DETECTION AREA
	VIDEO DETECTION CAMERA		VIDEO DETECTION CAMERA
	EMERGENCY VEHICLE DETECTOR		EMERGENCY VEHICLE DETECTOR
	POLE MOUNTED CONTROLLER		POLE MOUNTED CONTROLLER
	PAD MOUNTED CONTROLLER		PAD MOUNTED CONTROLLER
N	PEDESTRIAN SIGNAL HEAD WITH NUMBER	N	PEDESTRIAN SIGNAL HEAD WITH NUMBER
N	SIGNAL HEAD WITH NUMBER	N	SIGNAL HEAD WITH NUMBER WITHOUT BACKPLATE
N	SIGNAL HEAD WITH NUMBER AND BACKPLATE	N	SIGNAL HEAD WITH NUMBER AND BACKPLATE
	PULL BOX		PULL BOX
	FIBER OPTIC PULL BOX		FIBER OPTIC PULL BOX
EX 2" C	2" CONDUIT	2" C	2" CONDUIT
	STRAIN POLE FOR SIGNAL SUPPORT		STRAIN POLE FOR SIGNAL SUPPORT
	WOOD POLE FOR SIGNAL SUPPORT		WOOD POLE FOR SIGNAL SUPPORT

REV. 9-18-79: ADDED SIGNAL HEAD WITH NUMBER AND BACKPLATE, PEDESTRIAN PUSHBUTTON WITH NUMBER AND PAVEMENT ARROW TO EXISTING AND PROPOSED LEGEND.

REV. 1-11-82: ADDED EROSION CONTROL LEGEND.

REV. 8-21-89: ADDED WETLAND BOUNDARY.

REV. 1-19-91: REDREW SHEET AND ADDED SYMBOL FOR BOTH BELOW AND ABOVE GROUND SEDIMENT TRAPS.

☐ REV. 10-26-94: CHANGED DRAWING NO. FROM RD-L-2 TO RD-L-3. ADDED LIGHTING SYMBOLS. MOVED WETLAND BOUNDARY SYMBOL TO DRAWING NO. RD-L-1. MOVED EROSION CONTROL SYMBOLS TO DRAWING NO. RD-L-4.

☐ REV. 2-28-01: DELETED SYMBOL FOR EXISTING JACKED AND BORED CONDUIT WITH PULL BOXES.

☐ 4-15-04: CHANGED LEGEND FOR LOOP DECTOR WITH LEAD-IN. ADDED SYMBOLS FOR VIDEO DETECTION AREA, VIDEO DETECTION CAMERA, EMERGENCY VEHICLE DETECTOR, AND FIBER OPTIC PULL BOX. MOVED SYMBOLS BEGINNING WITH SYMBOL FOR GUYING DEVICE ANGLE ANCHOR TO NEW DRAWING NO. RD-L-4.

☐ REV. 3-16-17: ADDED SYMBOL FOR EXISTING RADAR/VIDEO DETECTION AREA. ADDED "RADAR/" BEFORE "VIDEO DETECTION AREA". ADDED "WITHOUT BACKPLATE" AFTER "SIGNAL HEAD WITH NUMBER".

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING

10-26-94 | RD-L-3

- REV. 4-15-04: MOVED SYMBOLS BEGINNING WITH SYMBOL FOR GUYING DEVICE ANGLE ANCHOR FROM DRAWING NO. RD-L-3. ADDED SYMBOLS FOR PEDESTRION POLE FOR SINGLE AND DUAL PUSHBUTTON, DUAL ARM OFFSET TYPE LUMINAIRE AND POLE AND WALL MOUNTED UNDERPASS LIGHT.
- REV. 3-16-17: ADDED "OR PUSHBUTTON POLE" AFTER "PEDESTRIAN POLE" ON FOUR INSTANCES.

STANDARD LEGEND

EXISTING		PROPOSED
	GUYING DEVICE ANGLE ANCHOR	 GUYING DEVICE ANGLE ANCHOR
	GUYING DEVICE VERTICAL ANCHOR	 GUYING DEVICE VERTICAL ANCHOR
	PEDESTRIAN PUSHBUTTON	 PEDESTRIAN PUSHBUTTON
	PEDESTRIAN POLE OR PUSHBUTTON POLE FOR SINGLE PUSHBUTTON	 PEDESTRIAN POLE OR PUSHBUTTON POLE FOR SINGLE PUSHBUTTON
	PEDESTRIAN POLE OR PUSHBUTTON POLE FOR DUAL PUSHBUTTON	 PEDESTRIAN POLE OR PUSHBUTTON POLE FOR DUAL PUSHBUTTON
	HIGH MAST POLE WITH LUMINAIRES ON FULL RING	 HIGH MAST POLE WITH LUMINAIRES ON FULL RING
	HIGH MAST POLE WITH LUMINAIRES ON HALF RING	 HIGH MAST POLE WITH LUMINAIRES ON HALF RING
	SINGLE ARM OFFSET TYPE LUMINAIRE AND POLE	 SINGLE ARM OFFSET TYPE LUMINAIRE AND POLE
	DUAL ARM OFFSET TYPE LUMINAIRE AND POLE	 DUAL ARM OFFSET TYPE LUMINAIRE AND POLE
		 WALL MOUNTED UNDERPASS LIGHT
	LIGHTING CONTROL CENTER	 LIGHTING CONTROL CENTER
	RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL	 RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL
	RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL WITH AUTOMATIC GATE	 RAILROAD - HIGHWAY CROSSING FLASHING SIGNAL WITH AUTOMATIC GATE
		 JACKED OR BORED CONDUIT WITH PULL BOXES

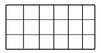
- MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING

4-15-04 | RD-L-4

STANDARD LEGEND



DEWATERING STRUCTURE

SEDIMENT FILTER BAG

* SF * SF * SF *

SILT FENCE

* SFB * SFB * SFB *

SILT FENCE WITH WIRE BACKING

* ESF * ESF * ESF *

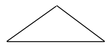
ENHANCED SILT FENCE

* ESF * ESF * ESF *

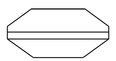
ENHANCED SILT FENCE

ENHANCED SILT FENCE CHECK (TRAPEZOIDAL DITCH)

ENHANCED SILT FENCE CHECK (V-DITCH)

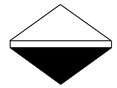


ROCK CHECK DAM (V-DITCH)

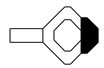


ROCK CHECK DAM (TRAPEZOIDAL DITCH)

ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH)



ENHANCED ROCK CHECK DAM (V-DITCH)



ENHANCED ROCK CHECK DAM (CHANNEL)

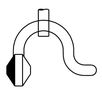
SEDIMENT TRAP WITH ENHANCED ROCK CHECK DAM

SEDIMENT TRAP WITH GABION CHECK DAM

SOCKSOCK**SOCK**SOCK**

FILTER SOCK

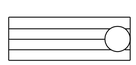
CULVERT PROTECTION (TYPE 1)



CULVERT PROTECTION (TYPE 2)

ROCK SEDIMENT DAM

ROCK AND EARTH SEDIMENT EMBANKMENT



SEDIMENT BASIN

- REV. 10-26-94: MOVED EROSION AND SEDIMENT CONTROL LEGENDS FROM OLD STANDARD DRAWING NO. RD-L-2 AND THE ESC-STR SERIES OF DETAIL SHEETS.
- REV. 5-27-95: ADDED NEW SYMBOLS.
- REV. 5-27-96: MODIFIED SYMBOL FOR TEMPORARY CATCH BASIN.
- REV. 7-29-97: CHANGED LEGEND FOR TEMPORARY SLOPE DRAIN PIPE.
- REV. 5-27-01: CHANGED REFERENCE IN LEGEND FROM DUMPED ROCK TO RIP-RAP.
- REV. 12-18-02: REMOVED SYMBOLS FOR TYPE IA, IB, IC, AND ID EROSION DITCH CHECKS. ADDED SYMBOL FOR TYPE I EROSION DITCH CHECK, TEMPORARY SILT FENCE (WITH BACKING), AND TEMPORARY ENHANCED SILT FENCE.
- REV. 1-22-03: ADDED SYMBOL FOR TYPE EC IA FILTER BARRIER DITCH CHECK.
- REV. 10-26-03: DELETED LEGEND FOR TYPE EC V FILTER BARRIER.
- REV.3-15-04: MOVED PART OF LEGEND BEGINNING WITH TEMPORARY ROCK AND SEDIMENT DAM TO NEW SHEET RD-L-5. CHANGED LEGEND FOR TEMPORARY CATCH BASIN SILT FENCE SILT TRAP. ADD TEMPORARY CATCH BASIN FILTER ASSEMBLY (TYPE 1 THROUGH 9).
- REV. 4-15-04: CHANGED DRAWING NUMBER FROM RD-L-4 TO RD-L-5.
- REV.5-1-08: REFORMATTED DRAWING IN CONJUNCTION WITH RD-L-6.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL

10-26-94 | RD-L-5

STANDARD LEGEND

A	CATCH BASIN PROTECTION (TYPE A)
B	CATCH BASIN PROTECTION (TYPE B)
C	CATCH BASIN PROTECTION (TYPE C)
D	CATCH BASIN PROTECTION (TYPE D)
E	CATCH BASIN PROTECTION (TYPE E)
RP ED	PERMANENT RIPRAP ENERGY DISSIPATOR
TCC	TEMPORARY CULVERT CROSSING (DESCRIBE NUMBER AND SIZE OF PIPES)
TCE	TEMPORARY CONSTRUCTION EXIT
TCF	TEMPORARY CONSTRUCTION FORD
π π π π π π π	TEMPORARY BERM
IN DIV	INSTREAM DIVERSION

	TEMPORARY SLOPE DRAIN
	PERMANENT SLOPE DRAIN PIPE (SHOW SIZE)
	TEMPORARY DIVERSION CHANNEL (DESCRIBE - SIZE AND TYPE OF LINING)
	TEMPORARY DIVERSION CULVERT (DESCRIBE NUMBER AND SIZE OF PIPES)
	SUSPENDED PIPE DIVERSION
	EROSION CONTROL BLANKET
CFB CFB	COMPOST FILTER BERM
MFB MFB	MULCH FILTER BERM
	TURF REINFORCEMENT MAT
TUBE**TUBE**TUBE	SEDIMENT TUBE

- REV. 10-26-94: MOVED EROSION AND SEDIMENT CONTROL LEGENDS FROM OLD STANDARD DRAWING NO. RD-L-2 AND THE ESC-STR SERIES OF DETAIL SHEETS.
- REV. 5-27-95: ADDED NEW SYMBOLS.
- REV. 5-27-96: MODIFIED SYMBOL FOR TEMPORARY CATCH BASIN.
- REV. 7-29-97: CHANGED LEGEND FOR TEMPORARY SLOPE DRAIN PIPE.
- REV. 5-27-01: CHANGED REFERENCE IN LEGEND FROM DUMPED ROCK TO RIP-RAP.
- REV. 12-18-02: REMOVED SYMBOLS FOR TYPE IA, IB, IC, AND ID EROSION DITCH CHECKS. ADDED SYMBOL FOR TYPE I EROSION DITCH CHECK, TEMPORARY SILT FENCE (WITH BACKING), AND TEMPORARY ENHANCED SILT FENCE.
- REV. 1-22-03: ADDED SYMBOL FOR TYPE EC IA FILTER BARRIER DITCH CHECK.
- REV. 10-26-03: DELETED LEGEND FOR TYPE EC V FILTER BARRIER.
- REV.3-15-04: MOVED PART OF LEGEND BEGINNING WITH TEMPORARY ROCK AND SEDIMENT DAM TO NEW SHEET RD-L-5. CHANGED LEGEND FOR TEMPORARY CATCH BASIN SILT FENCE SILT TRAP. ADD TEMPORARY CATCH BASIN FILTER ASSEMBLY (TYPE 1 THROUGH 9).
- REV. 4-15-04: CHANGED DRAWING NUMBER FROM RD-L-4 TO RD-L-5.
- REV.5-1-08: REFORMATTED DRAWING IN CONJUNCTION WITH RD-L-5.
- REV. 3-30-10: ADDED SYMBOL FOR INSTREAM DIVERSION.

☒ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

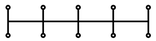
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL

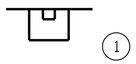
10-26-94 | RD-L-6

REV. 05-24-12: ADDED HIGH VISIBILITY FENCE.

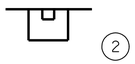
STANDARD LEGEND



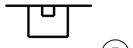
FLOATING TURBIDITY CURTAIN



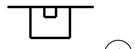
CURB INLET PROTECTION (TYPE 1)



CURB INLET PROTECTION (TYPE 2)



CURB INLET PROTECTION (TYPE 3)



CURB INLET PROTECTION (TYPE 4)

GABION CHECK DAM

CATCH BASIN FILTER ASSEMBLY (TYPE 1)

CATCH BASIN FILTER ASSEMBLY (TYPE 2)

CATCH BASIN FILTER ASSEMBLY (TYPE 3)

CATCH BASIN FILTER ASSEMBLY (TYPE 4)

*HVF*HVF*

HIGH VISIBILITY FENCE

CATCH BASIN FILTER ASSEMBLY (TYPE 5)

CATCH BASIN FILTER ASSEMBLY (TYPE 6)

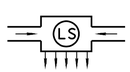
CATCH BASIN FILTER ASSEMBLY (TYPE 7)

CATCH BASIN FILTER ASSEMBLY (TYPE 8)

CATCH BASIN FILTER ASSEMBLY (TYPE 9)

CATCH BASIN FILTER ASSEMBLY (TYPE 10)

CATCH BASIN FILTER ASSEMBLY (TYPE 11)



LEVEL SPREADER (DUAL DIRECTION)

LEVEL SPREADER (SINGLE DIRECTION)

RIP-RAP

SAND BAG

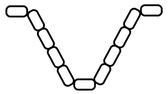
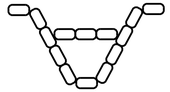
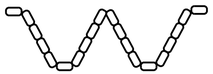
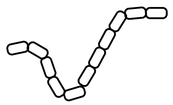
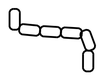
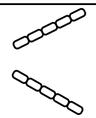
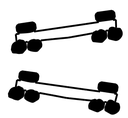
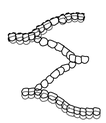
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

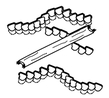
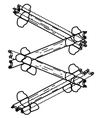
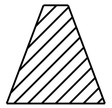
STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL

5-1-08 | RD-L-7

STANDARD LEGEND

REV. 9-15-17: DELETED VARIOUS ITEMS. MODIFIED VARIOUS ITEMS. ADDED STD. DWG. NAMES. REDESIGNED VARIOUS ITEMS ADDED LEGENDS FOR BOULDER TOE AND COIR FIBER EROSION CONTROL BLANKETS.

SYMBOL	ITEM	STD. DWG.
TOE TOE	LONGITUDINAL STONE TOE	D-NSD-13
	BOULDER CLUSTERS	D-NSD-21
	BOULDER CROSS VANE	D-NSD-22
	BOULDER CROSS VANE WITH STEP	D-NSD-23
	BOULDER W-WEIR	D-NSD-24
	BOULDER VANE	D-NSD-25
	J-HOOK	D-NSD-25
	LOG VANES, ROOT WADS AND BOULDER J-HOOK	D-NSD-26
	BOULDER STEP POOLS	D-NSD-27
	LOG STEP POOLS	D-NSD-27
	BOULDER RIFFLE	D-NSD-28

SYMBOL	ITEM	STD. DWG.
	BOULDER AND LOG RIFFLE	D-NSD-28
	LOG RIFFLE	D-NSD-28A
	CONSTRUCTED ALLUVIAL RIFFLE	D-NSD-29
	CLAY CHANNEL PLUG	D-NSD-31
	WOOD TOE WITH GEO-LIFTS	D-NSD-32
	BOULDER TOE WITH GEO-LIFTS	D-NSD-32A
	COIR FIBER EROSION CONTROL BLANKET	D-NSD-33
** ROLL **	COIR FIBER ROLLS	D-NSD-33
VV LS VV	LIVE SILTATION	D-NSD-34
VV LF VV	LIVE FASCINE	D-NSD-35
	BRUSH MATTRESS PATTERNING	D-NSD-36

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD LEGEND FOR NATURAL STREAM DESIGN

09-01-11 | RD-L-8

Updated: 12/12/2016

THIS IS THE GENERAL INDEX INDEXES SPECIFIC TO A PROJECT MAY NOT INCLUDE SOME OF THESE SHEETS

ROADWAY INDEX

Index Of Sheets
See Sheet 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

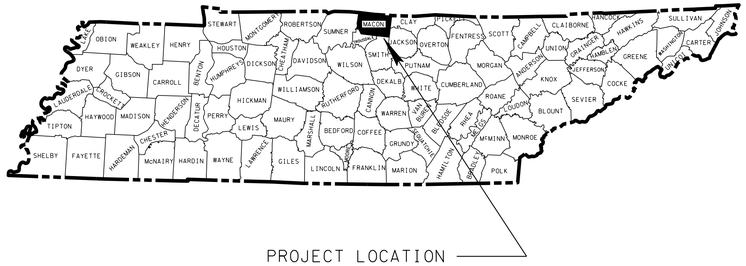
MACON COUNTY

SR-151, BRIDGE OVER SALT LICK CREEK
(L.M. 2.47)

CONSTRUCTION

STATE HIGHWAY NO. 151 F.A.H.S. NO. N/A

TENN.	YEAR	SHEET NO.
	2016	1
FED. AID PROJ. NO.	BR-STP-151(3)	
STATE PROJ. NO.	56009-3210-94	



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STA. 20+70.00
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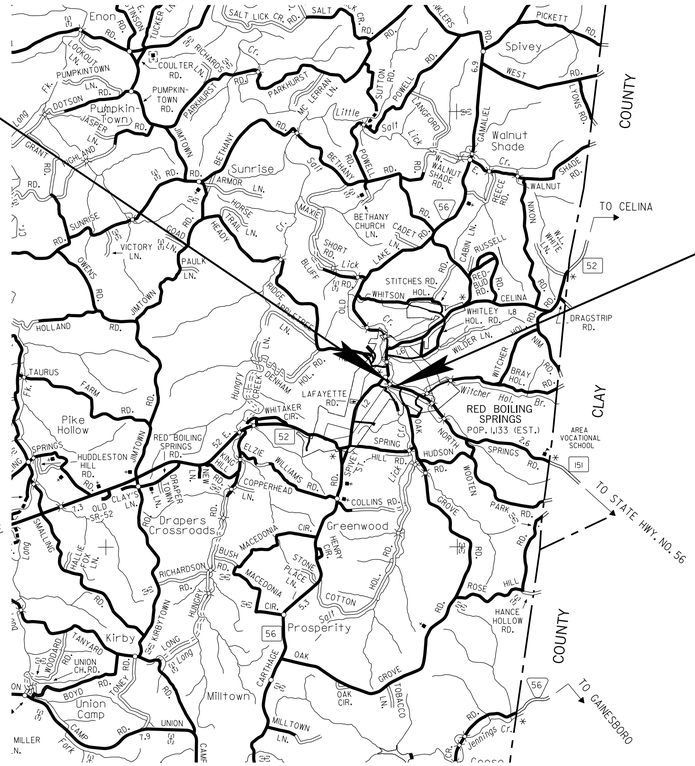

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BEGIN PROJECT BR-STP-151(3) CONST.
STA. 16+50.00
N 799952.4442 E 2013022.4108

NO EXCLUSIONS	
NO EQUATIONS	

ROADWAY LENGTH	0.071 MILES
BRIDGE LENGTH	0.000 MILES
SLAB BRIDGE LENGTH	0.008 MILES
PROJECT LENGTH	0.079 MILES

SEALED BY
KATHERINE J. LLOYD
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 106423
STATE OF TENNESSEE

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

DATE:

APPROVED:
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 JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT C. E. MANAGER I ROBERT BRAUN, P.E.

DESIGNER REUBEN BOWMAN, JR CHECKED BY DONNIE SIRICHANTO, P.E.

P.E. NO. 56009-1210-94 (DESIGN)

PIN NO. 108884.00

TRAFFIC DATA	
ADT (2016)	1310
ADT (2036)	1570
DHV (2036)	201
D	65 - 35
T (ADT)	4 %
T (DHV)	3 %
V	30 MPH

SURVEY REC: 11-01-11
UPDATE REC: 1-09-13

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

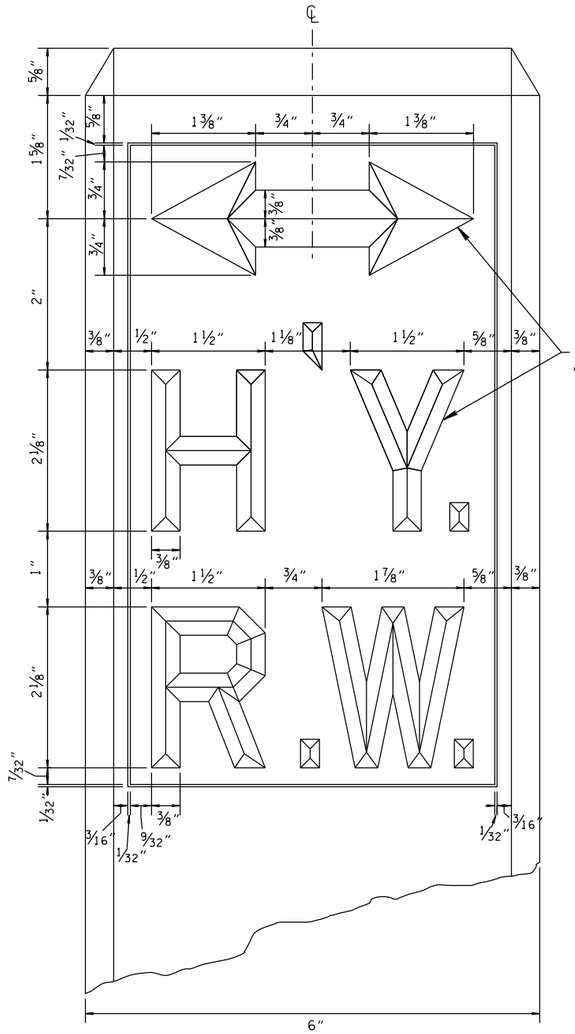
17-FEB-2016 13:09
C:\PROJECTS\MACON\SR151SaltLickCreek\00ICONST.SHT

REV. 7-2-72: CHANGED DEPARTMENT NAME.

REV. 1-1-76: CHANGED DRAWING NUMBER FROM RW-M-2a(68) TO S-RP-2.

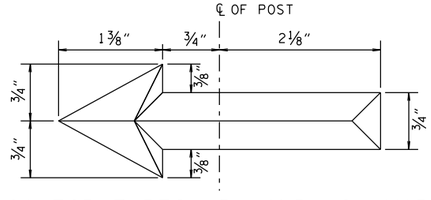
REV. 4-18-90: REDREW SHEET AND CHANGED SHEET NAME. THE DESIGNATION "POSTS" HAS BEEN CHANGED TO "MARKERS". MODIFIED GENERAL NOTES.

- ☐ REV. 5-27-96: CHANGED DIMENSION OF DETAIL ON TYPE "B" AND "C" MARKERS.
- ☐ REV. 1-19-99: MODIFIED GENERAL NOTES AND ADDED PRECAST SPECIFICATIONS.
- ☐ REV. 2-8-16: REVISED GENERAL NOTES.

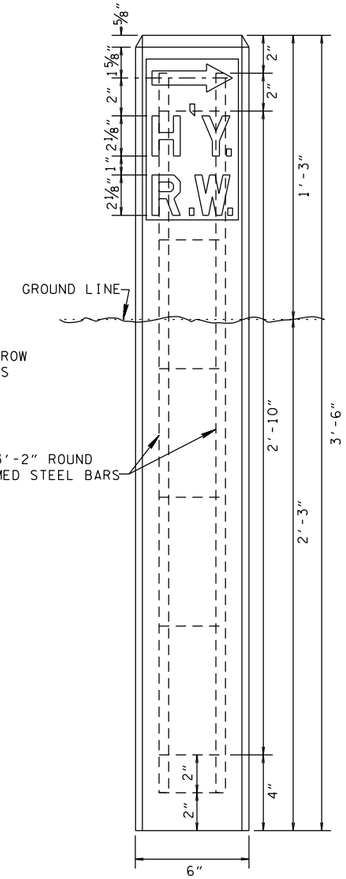


DETAIL OF INSCRIPTION

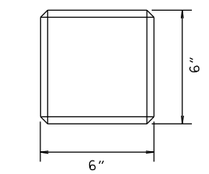
CROSS-SECTION



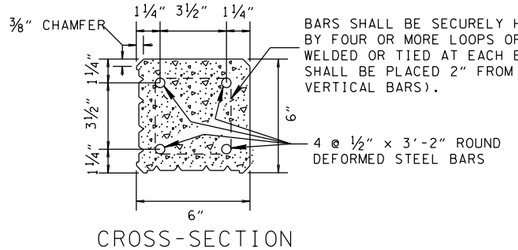
ARROW FOR TYPES "B" AND "C" MARKERS
SCALE = FULL SIZE



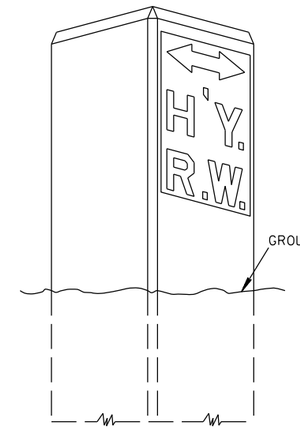
FRONT VIEW



TOP VIEW



CROSS-SECTION
SCALE 3" = 1'



TYPE "A"
INSCRIPTION ON ONE SIDE
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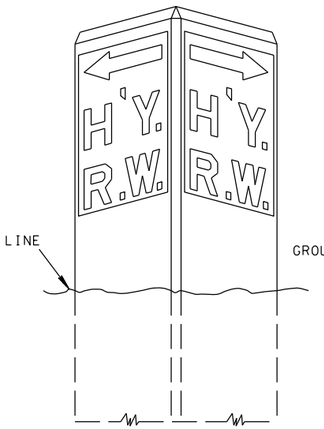
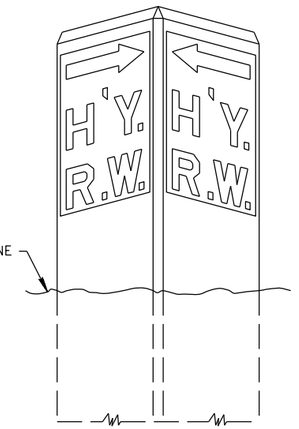


TYPE "B"
INSCRIPTION ON TWO SIDES
(TURNS TO CENTERLINE)



TYPE "C"
INSCRIPTION ON TWO SIDES
(TURNS AWAY FROM CENTERLINE)

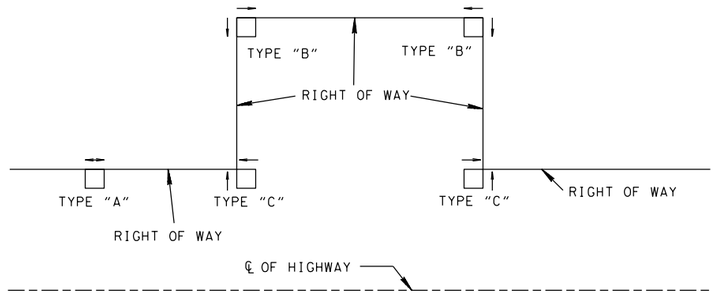


DIAGRAM SHOWING TYPES OF MARKERS TO USE

GENERAL NOTES

(A) CONCRETE RIGHT-OF-WAY MARKERS SHALL BE CONSTRUCTED AND ERECTED IN ACCORDANCE WITH THIS DRAWING AND SECTION 708, MONUMENTS AND MARKERS, OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

(B) CONCRETE: F_c = 4000 PSI AT 28 DAYS
REINFORCING STEEL: ASTM A615,
f_y = 60,000 PSI
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(C) PRECAST RIGHT-OF-WAY MARKERS UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED RIGHT-OF-WAY MARKERS UNITS AT HIS OWN EXPENSE.

(D) RIGHT-OF-WAY MARKERS ARE TO BE INSTALLED FLUSH WITH THE GROUND IN AREAS WHERE THEY MIGHT BE AN OBSTACLE TO VEHICLES, MOWERS, ETC.

(E) PAYMENT ITEM NO. 708-02.01 MARKERS (CONCRETE RIGHT-OF-WAY POSTS.) EACH

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD CONCRETE RIGHT-OF-WAY MARKERS

S-RP-2

REV. 10-15-02: NEW SHEET. REPLACES RD-TS-1.

REV. 2-5-16: REMOVE DETAIL A AND DETAIL B.

DESIGN LOADING: ALL NEW AND REHABILITATED BRIDGES SHALL BE DESIGNED FOR HS-20 LOADING.

FOR NEW ROUTE CONSTRUCTION OR ROUTE RECONSTRUCTION PROJECTS:

THE MINIMUM CLEAR WIDTH FOR NEW BRIDGES SHALL BE EQUAL TO THE FULL WIDTH OF THE APPROACH ROADWAY (CURB-TO-CURB OR FULL SHOULDER WIDTH AS APPLICABLE).

TABLE I.
MINIMUM CLEAR ROADWAY WIDTHS AND DESIGN LOADINGS FOR NEW AND RECONSTRUCTED BRIDGES (SEE PAGE 390)

DESIGN ADT (VEH/DAY)	DESIGN LOADING	MINIMUM CLEAR ROADWAY WIDTH OF BRIDGE (1)
UNDER 400	HS-20	TRAVELED WAY + 4 FT. (2 FT. EACH SIDE)
400 TO 2,000	HS-20	TRAVELED WAY + 6 FT. (3 FT. EACH SIDE)
OVER 2,000	HS-20	APPROACH ROADWAY WIDTH

TABLE II.
MINIMUM STRUCTURAL CAPACITIES AND MINIMUM ROADWAY WIDTHS FOR EXISTING BRIDGES TO REMAIN IN PLACE (SEE PAGE 390) (3)

DESIGN ADT (VEH/DAY)	DESIGN LOADING (STRUCTURAL CAPACITY)	MINIMUM CLEAR ROADWAY WIDTH (FT) (4)
0 TO 50	H-15	20
50 TO 250	H-15	20
250 TO 1,500	H-15	22
1,500 TO 2,000	H-15	24
OVER 2,000	H-15	28

TABLE III. MINIMUM DESIGN SPEEDS FOR LOCAL RURAL ROADS

TYPE OF TERRAIN	DESIGN SPEED (MPH) FOR SPECIFIED DESIGN ADT (VEH/DAY)					
	UNDER 50	50-250	250-400	400 TO 1,500	1,500 TO 2,000	2,000 AND OVER
LEVEL	30	30	40	50	50	50
ROLLING	20 (6)	30	30	40	40	40
MOUNTAINOUS	20 (6)	20 (6)	20 (6)	30	30	30

TABLE IV. LOCAL ROADS AND STREETS - DESIGN STANDARDS (8)

DESIGN STANDARDS (FOR GIVEN DESIGN SPEED)		DESIGN SPEEDS (MPH)										MINIMUM WIDTH OF SHOULDERS FOR ALL SPEEDS (FEET) (SEE PAGE 388)
		15	20	25	30	35	40	45	50	55	60	
MINIMUM WIDTH OF TRAVELED WAY IN RURAL AREAS (FEET) (SEE PAGE 388)	DESIGN ADT UNDER 400	18	18	18	18	18	18	20	20	22	22	4 (7)
	DESIGN ADT 400 - 1,500	20 (7)	20 (7)	20 (7)	20 (7)	20 (7)	20 (7)	22	22	22	22	5 (7) (9)
	DESIGN ADT 1,500 - 2,000	20	22	22	22	22	22	22	22	24 (10)	24 (10)	6
	DESIGN ADT OVER 2,000	22	24 (10)	24 (10)	24 (10)	24 (10)	24 (10)	24 (10)	24 (10)	24 (10)	24 (10)	8
MINIMUM RADIUS (FEET) 0.04 MAX. S.E.		70	125	205	300	420	565	730	930	1190	1505	SEE PAGE 145
MINIMUM RADIUS (FEET) 0.06 MAX. S.E.		65	115	185	275	380	510	660	835	1065	1340	
MINIMUM RADIUS (FEET) 0.08 MAX. S.E.		60	105	170	250	350	465	600	760	965	1205	
MAXIMUM RURAL GRADES %	LEVEL TERRAIN	9	8	7	7	7	7	7	6	6	5	SEE PAGE 386
	ROLLING TERRAIN	12	11	11	10	10	10	9	8	7	6	
	MOUNTAINOUS TERRAIN	17	16	15	14	14	13	12	10	10	X	
MINIMUM STOPPING SIGHT DISTANCE (FEET)		80	115	155	200	250	305	360	425	495	570	SEE PAGE 385
MINIMUM "K" VALUE	CREST VERTICAL CURVE	3	7	12	19	29	44	61	84	114	151	
	SAG VERTICAL CURVE	10	17	26	37	49	64	79	96	115	136	
MINIMUM PASSING SIGHT DISTANCE (FEET)		X	710	900	1090	1280	1470	1625	1835	1985	2135	SEE PAGE 386
MINIMUM "K" VALUE FOR CREST VERTICAL CURVE		X	180	289	424	585	772	943	1203	1407	1628	
SUPERELEVATION		SEE STANDARD DRAWINGS RD01-SE-2 AND RD01-SE-3										

GENERAL NOTES

(A) FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO 2001.

(B) FOR URBAN DESIGN GUIDANCE AND CRITERIA, REFERENCE IS MADE TO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO, 2001, PAGES 393 TO 408.

(C) PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO, 2001.

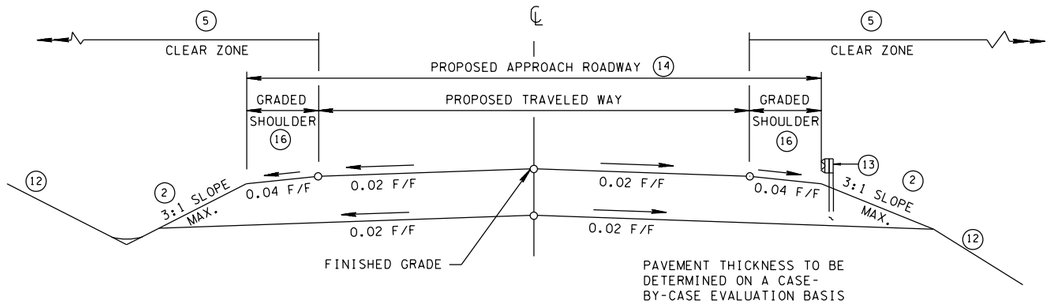
(D) REFERENCE IS ALSO MADE TO THE "ROADSIDE DESIGN GUIDE," AASHTO, 2011.

(E) FOR CORNER SIGHT DISTANCE AT RURAL INTERSECTIONS SEE PAGES 654 THROUGH 681. ALSO STANDARD DRAWING SD-SERIES.

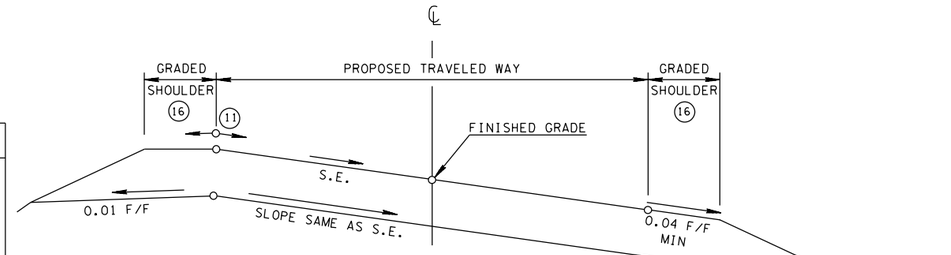
(F) IF NO ABOVE GROUND UTILITIES ARE INVOLVED, MINIMUM RIGHT-OF-WAY SHALL BE TRAVELED WAY PLUS CLEAR ZONE (MINIMUM OF 10 FEET EACH SIDE).

(G) IF ABOVE GROUND UTILITIES ARE INVOLVED, MINIMUM RIGHT-OF-WAY SHALL BE SUFFICIENT TO ACCOMMODATE THE UTILITIES OUTSIDE THE CLEAR ZONE.

(H) DESIRABLE RIGHT-OF-WAY IS SLOPE LINES PLUS TEN FEET.



TANGENT SECTION



SUPERELEVATED SECTION

TYPICAL CROSS-SECTIONS

FOOTNOTES

(1) WHERE THE APPROACH ROADWAY WIDTH (TRAVELED WAY PLUS SHOULDERS) IS SURFACED, THAT SURFACE WIDTH SHOULD BE CARRIED ACROSS THE STRUCTURE.

(2) 4:1 SLOPE FOR 40 MILES PER HOUR OR GREATER WITH A DESIGN ADT OF 1,000 OR GREATER OR ANY LOCATION GUARDRAIL IS USED.

(3) THESE STRUCTURES SHOULD BE ANALYZED INDIVIDUALLY, TAKING INTO CONSIDERATION THE CLEAR WIDTH PROVIDED, TRAFFIC VOLUMES, REMAINING LIFE OF THE STRUCTURE, PEDESTRIAN VOLUMES, SNOW STORAGE, DESIGN SPEED, ACCIDENT RECORD, AND OTHER PERTINENT FACTORS.

(4) CLEAR WIDTH BETWEEN CURBS OR RAILS, WHICHEVER IS THE LESSER. MINIMUM CLEAR WIDTHS THAT ARE TWO FEET NARROWER MAY BE USED ON ROADS WITH FEW TRUCKS. IN NO CASE SHALL THE MINIMUM CLEAR WIDTH BE LESS THAN THE APPROACH TRAVELED WAY WIDTH.

(5) THE CLEAR ZONE WIDTH SHALL BE DETERMINED FROM STANDARD DRAWING RD01-S-12. SEE THE "ROADSIDE DESIGN GUIDE," AASHTO, 2002, FOR FURTHER INFORMATION ON CLEAR ZONES.

(6) EFFORTS SHOULD BE MADE TO SELECT A DESIGN SPEED GREATER THAN 20 MILES PER HOUR. SEE PAGE 384 FOR FURTHER INFORMATION.

(7) FOR ROADS IN MOUNTAINOUS TERRAIN WITH A DESIGN YEAR ADT OF 0 TO 600 VEHICLES PER DAY AND THE DESIGN SPEED IS GREATER THAN OR EQUAL TO 15 MILES PER HOUR AND LESS THAN OR EQUAL TO 40 MPH, USE 18 FEET TRAVELED WAY WIDTH AND 2 FEET SHOULDER WIDTH.

(8) ALTHOUGH THE SELECTED DESIGN SPEED ESTABLISHES THE LIMITING VALUES OF CURVE RADIUS AND MINIMUM SIGHT DISTANCE THAT SHOULD BE USED IN DESIGN, THERE SHOULD BE NO RESTRICTION ON THE USE OF FLATTER HORIZONTAL CURVES OR GREATER SIGHT DISTANCES WHERE SUCH IMPROVEMENTS CAN BE PROVIDED AS A PART OF AN ECONOMICAL DESIGN (SEE PAGE 69).

(9) MAY BE USED TO ACHIEVE A MINIMUM ROADWAY WIDTH OF 30 FEET FOR DESIGN SPEEDS GREATER THAN 40 MILES PER HOUR.

(10) WHERE THE WIDTH OF THE TRAVELED WAY IS SHOWN AS 24 FEET, THE WIDTH MAY REMAIN AT 22 FEET ON RECONSTRUCTED HIGHWAYS WHERE ALIGNMENT AND SAFETY RECORDS ARE SATISFACTORY.

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

(12) SEE STANDARD DRAWINGS RD01-S-11 (CASE II) AND RD01-S-11B FOR DESIRABLE SLOPES & NOTE REGARDING GEOLOGICAL RECOMMENDATIONS.

(13) SEE S-PL-6 FOR GUARDRAIL PLACEMENT.

(14) PROPOSED APPROACH ROADWAY WIDTH WILL NOT BE LESS THAN EXISTING WIDTH.

(15) WHEN GUARDRAIL IS PLACED BEHIND CURB AND GUTTER, THE SLOPING CURB HEIGHT MUST BE 4 INCHES OR LESS.

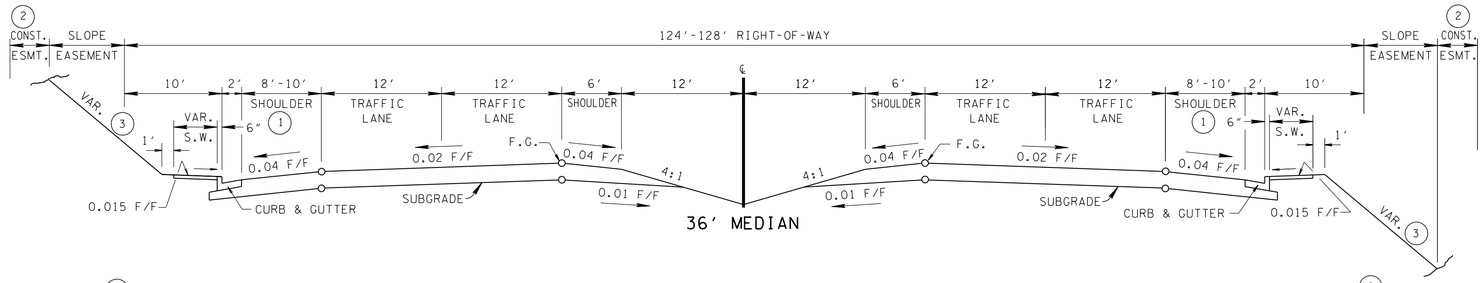
(16) SHOULDER SURFACE TREATMENT TO BE SPECIFIED BY THE DESIGN DIVISION'S PAVEMENT DESIGN SECTION. DESIGNERS SHOULD REFER TO THE DESIGN GUIDELINES FOR PAVEMENT REQUEST PROCEDURES. WHEN SHOULDERS ARE PAVED AND GRADED SHOULDER WIDTH IS 6 FEET OR GREATER, THE SHOULDER SHOULD BE PAVED THE GRADED SHOULDER WIDTH MINUS TWO FEET. WHEN SHOULDERS ARE PAVED AND THE GRADED SHOULDER WIDTH IS LESS THAN 6 FEET, THE SHOULDER SHOULD BE PAVED THE WIDTH OF THE GRADED SHOULDER.

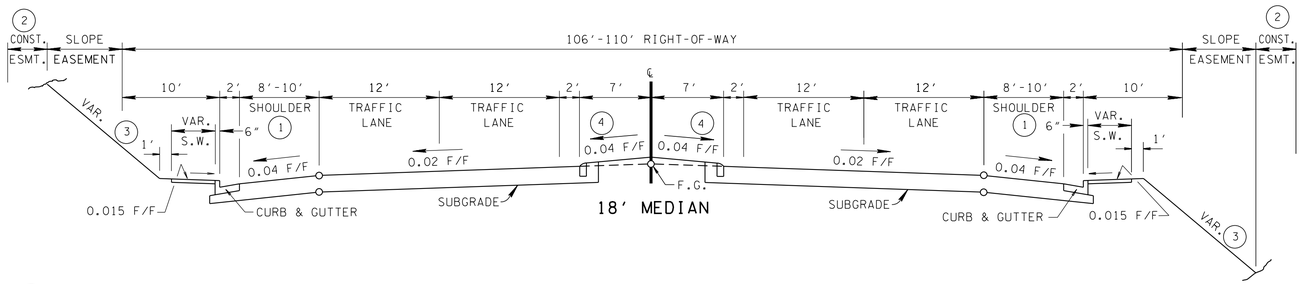
☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

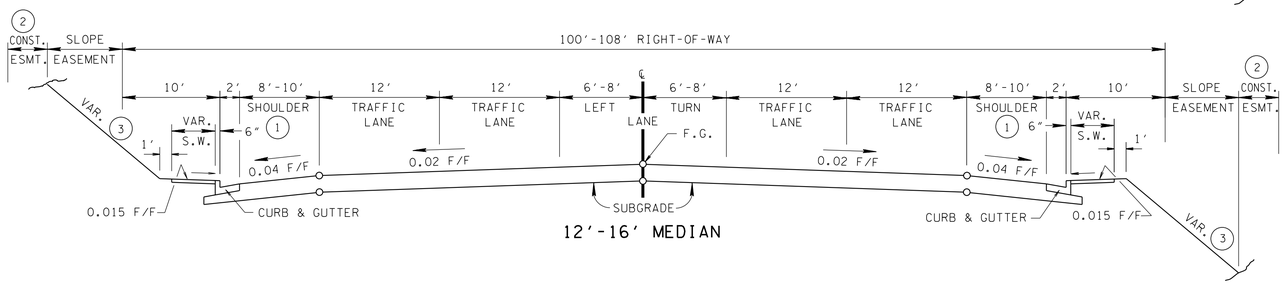
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

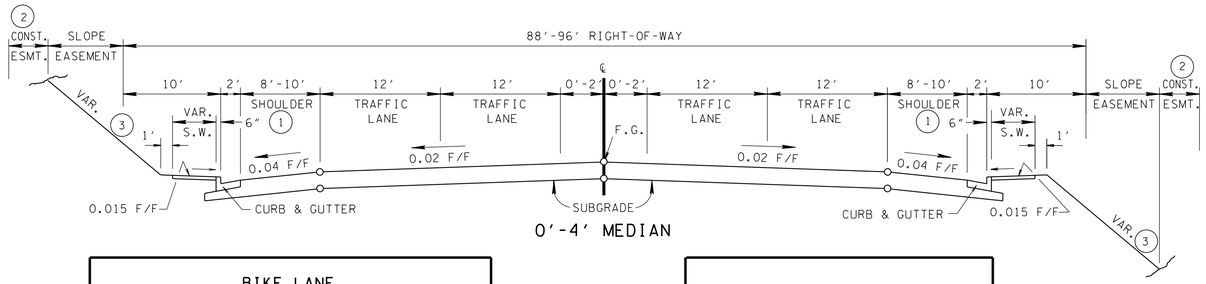
DESIGN STANDARDS FOR LOCAL ROADS AND STREETS

10-15-02 | RD01-TS-1



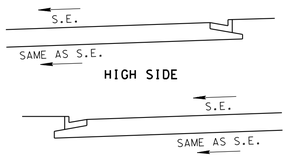




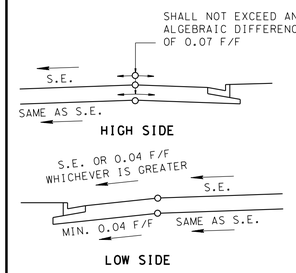


BIKE LANE SHOULDER CROSS SLOPES

ON PROJECTS, WHERE IN THE NEAR FUTURE THE SHOULDER MAY BE USED AS A THROUGH TRAFFIC LANE, THE PAVEMENT SLOPE (0.02 FOOT/FOOT) SHOULD BE USED ON THE SHOULDER IN PLACE OF THE 0.04 FOOT/FOOT SLOPE SHOWN ON THE TYPICAL SECTION. SEE DETAIL FOR SUPERELEVATION OF SHOULDER WITH 0.02 FOOT/FOOT SLOPE.



SUPERELEVATION DETAIL FOR SHOULDERS



SUPERELEVATION DETAIL FOR SHOULDERS

REV. 10-15-02: NEW SHEET. REPLACES RD-TS-6.

☐ REV. 7-31-13: REVISED SIDEWALK WIDTH.

☐ REV: 1-25-16: REVISED GENERAL NOTES.

REV: 10-10-16: REVISED GENERAL NOTES. CLARIFIED SIDEWALK DIMENSION.

GENERAL NOTES

DESIGN SPEED

THESE SECTIONS ARE FOR 45 MILES PER HOUR OR LESS. IF HIGHER SPEED IS PROPOSED USE RD01-TS-6B.

ALIGNMENT

SEE S-PL-6.

SUPERELEVATION AND MEDIAN BARRIERS

SEE APPROPRIATE STANDARD DRAWING IN THE RD01-SE-SERIES AND S-SSMB-SERIES.

SHOULDER

(1) IF SHOULDERS LESS THAN 8', USE RD01-TS-6A.

8' MIN. SHOULDER IS REQUIRED FOR VEHICLE EMERGENCIES AND TO PROVIDE PROPER HORIZONTAL OFFSET TO PEDESTRIAN FACILITIES. UNDER NO CIRCUMSTANCES SHALL THE SHOULDER BE CONSIDERED TO FACILITATE PEDESTRIAN ACCESS. LOCATIONS WHERE EXISTING ROADWAY IS LACKING MIN 8' SHOULDER WIDTH (3R PROJECTS-RESURFACING, RETROFITTING, AND RECONSTRUCTION), MIN 4' SHALL BE PROVIDED. IN SOME INSTANCES, ADJUSTMENT TO LANE WIDTH MAY BE REQUIRED.

CONSTRUCTION EASEMENT

(2) 10' MINIMUM DESIRABLE.

SLOPES

(3) ON URBAN PROJECTS, THE BACKSLOPE AND FORESLOPE DESIGN WILL VERY FROM PROJECT TO PROJECT; AS A GENERAL RULE USE THE FOLLOWING:
3:1 SLOPES OR FLATTER ARE DESIRABLE AND ARE THE MAXIMUM IN REGION IV. 2:1 SLOPES ARE APPLICABLE IN AREAS WHERE RIGHT-OF-WAY RESTRICTIONS OR COST WARRANTS A STEEPER THAN 3:1 SLOPE.

CURBS

(4) MEDIAN CURBS WILL BE 6" SLOPING CURBS. OUTSIDE CURBS WILL BE 4" SLOPING CURBS (SEE RP-MC-1). 6" VERTICAL CURBS MAY BE USED IN URBAN ZONES.

SIDEWALKS AND BIKE LANES

SIDEWALK WIDTH SHALL NOT INCLUDE THE 6" WIDTH OF PROPOSED CURB. SIDEWALK SHALL BE A MINIMUM OF 5' WIDE. REFER TO RP-H-SERIES FOR CURB RAMP DETAILS. IF BIKE LANE IS PROPOSED, BIKE LANE SHALL BE PLACED AS FAR AWAY AS POSSIBLE FROM THE EDGE OF TRAVELED WAY. SEE BIKE LANE BUFFER DETAILS ON T-M-12.

PARKING LANES

FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO, 2011 PAGE NUMBERS 4-72 THROUGH 4-74, 5-14, 6-14, 7-34, AND TO THE CURRENT MUTCD.

3R PROJECTS-RESURFACING, RETROFITTING, AND RECONSTRUCTION

LOCATIONS WHERE EXISTING ROADWAY IS LACKING MIN 8' SHOULDER WIDTH, MIN 4' SHALL BE PROVIDED. IN SOME INSTANCES, ADJUSTMENT TO LANE WIDTH MAY BE REQUIRED. IF MIN 4' SHOULDER CANNOT BE ACHIEVED DUE TO THE ROW LIMITATIONS, UTILITY CONFLICTS, ETC, THEN ADDITIONAL MITIGATION STRATEGIES SUCH AS REDUCING DESIGN SPEED OR GROUND MOUNTED ADVANCED WARNING SIGNS SHALL BE CONSIDERED.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

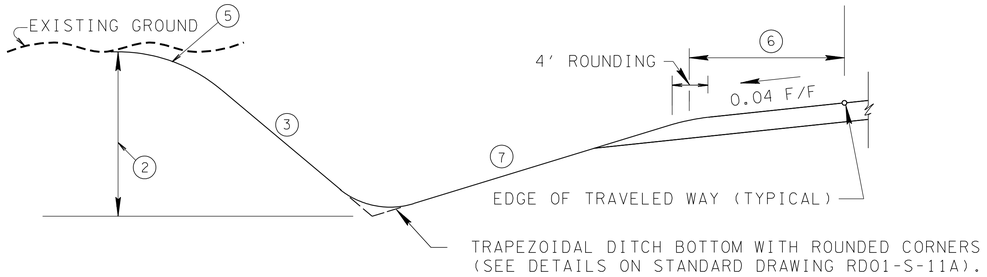
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL CURB AND GUTTER SECTIONS WITH SHOULDER

10-15-02 | RD01-TS-6

REV. 10-15-02: NEW SHEET. REPLACES RD-S-11.

REV. 4-4-03: REMOVED FOOTNOTE (8).



CUT SLOPES IN EARTH

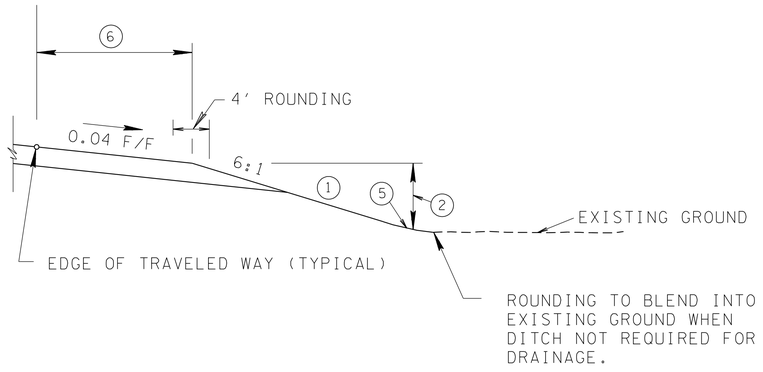
GENERAL SLOPE TABLE			
CASE I		CASE II	
FILL SLOPES (1)	HEIGHT OF FILL (2)	FILL SLOPES (1)	HEIGHT OF FILL (2)
6:1	0'-7'	4:1	0'-6'
4:1	7'-15'	3:1	6'-8'
3:1	15'-28'	2:1	8'-12'
2:1	OVER 28'	(4) 1.5:1	OVER 12'
CUT SLOPES (3)	DEPTH OF CUT (2)	CUT SLOPES (3)	DEPTH OF CUT (2)
4:1	0'-15'	4:1	0'-6'
3:1	15'-20'	3:1	6'-8'
2:1	OVER 20'	2:1	8'-12'
		(4) 1.5:1	OVER 12'

CASE I : FOR ALL INTERSTATE AND ARTERIAL ROUTES. ALSO FOR COLLECTORS WITH A DESIGN SPEED OF 50 MILES PER HOUR OR GREATER AND A DESIGN YEAR ADT OF GREATER THAN 400.

CASE II: FOR LOCAL ROADS AND STREETS AND COLLECTORS NOT COVERED IN CASE I.

SPECIAL NOTE

SHOULDER DETAILS SHOWN ON THIS SHEET ARE APPLICABLE TO OUTSIDE SHOULDER ONLY, ON PROJECTS AS DESCRIBED IN CASE I ABOVE. FOR DETAILS OF INSIDE SHOULDERS ON MULTI-LANE ROADWAYS, SEE APPROPRIATE STANDARD DRAWINGS.



FILL SLOPES

FOOTNOTES

(4) FILL AND/OR CUT SLOPES STEEPER THAN 2:1 ARE TO BE USED ONLY WHEN RECOMMENDED OR APPROVED BY THE SOILS AND GEOLOGY SECTION. WITHOUT THEIR APPROVAL OR RECOMMENDATION, USE 2:1 SLOPES FOR ALL FILL AND/OR CUT SLOPES GREATER THAN 12 FEET. SEE RD01-S-11B FOR ROCK CUT SLOPE AND CATCHMENT DETAILS.

(5) SLOPES AT THE TOE OF FILLS AND TOP OF CUTS SHALL BE ROUNDED TO BLEND INTO THE EXISTING TERRAIN.

(6) FOR CORRECT SHOULDER WIDTH SEE APPROPRIATE DRAWING IN THE RD01-TS-SERIES. SOME SHOULDERS MAY BE LESS THAN 12 FEET.

(7) SEE APPROPRIATE RD01-SERIES DRAWING FOR FORESLOPE.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT

10-15-02 | RD01-S-11

REV. 10-15-02: NEW SHEET.
REPLACES RD-SE-3.

STANDARD RATES OF SUPERELEVATION AND MINIMUM LENGTH OF TRANSITION FOR RURAL HIGHWAYS

E MAX=0.08 DESIRABLE

D	R (FT.)	V=20(MPH)				V=30(MPH)				V=40(MPH)				V=50(MPH)				V=60(MPH)				V=70(MPH)			
		e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)		
			2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN
0°-15′	22,918	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0
0°-30′	11,459	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0	RC	175	175	215	RC	200	200	240
0°-45′	7,639	NC	0	0	0	NC	0	0	0	NC	0	0	0	RC	150	150	195	.022	175	175	225	.028	200	220	290
1°-00′	5,730	NC	0	0	0	NC	0	0	0	RC	125	130	170	.021	150	150	200	.029	175	200	265	.036	200	255	340
1°-30′	3,820	NC	0	0	0	RC	100	110	145	.021	125	130	175	.030	150	180	240	.041	175	245	325	.051	215	320	430
2°-00′	2,865	NC	0	0	0	RC	100	110	145	.027	125	150	200	.038	150	210	280	.051	190	285	380	.065	255	385	510
2°-30′	2,292	NC	0	0	0	.021	100	115	150	.033	125	170	225	.046	160	240	320	.061	220	325	435	.075	285	430	570
3°-00′	1,910	RC	65	100	130	.025	100	125	165	.038	125	185	245	.053	180	265	355	.068	235	355	470	.080	300	450	600
3°-30′	1,637	RC	65	100	130	.028	100	130	175	.043	135	200	265	.058	190	285	375	.074	255	380	505	D(MAX)=3°-00′			
4°-00′	1,432	RC	65	100	130	.031	100	140	185	.047	145	215	285	.063	200	300	400	.078	265	395	525				
5°-00′	1,146	.021	70	100	135	.038	105	160	210	.055	160	240	315	.071	220	330	440	D(MAX)=4°-45′							
6°-00′	955	.025	75	110	145	.043	115	175	230	.062	175	260	345	.077	235	350	470								
7°-00′	819	.028	80	120	155	.048	125	185	245	.067	185	275	370	.080	240	360	480								
8°-00′	716	.031	85	125	165	.053	135	200	265	.071	195	290	385	D(MAX)=7°-30′											
9°-00′	637	.035	90	135	180	.056	140	210	275	.075	200	300	400												
10°-00′	573	.037	95	140	185	.060	145	220	290	.078	210	310	415												
11°-00′	521	.040	100	145	195	.063	150	225	300	.079	210	315	420												
12°-00′	477	.043	105	155	205	.065	155	230	310	.080	210	315	420												
13°-00′	441	.045	105	160	210	.068	160	240	320	D(MAX)=12°-15′															
14°-00′	409	.047	110	165	215	.070	165	245	325																
16°-00′	358	.051	115	175	230	.074	170	255	340																
18°-00′	318	.054	120	180	240	.077	175	265	350																
20°-00′	286	.057	125	185	250	.079	180	270	360																
22°-00′	260	.060	130	195	260	.080	180	270	360																
24°-00′	239	.062	135	200	265	D(MAX)=22°-45′																			
28°-00′	205	.067	140	210	280																				
32°-00′	179	.070	145	220	290																				
36°-00′	159	.074	155	230	305																				
40°-00′	143	.076	155	235	310																				
44°-00′	130	.078	160	240	315																				
48°-00′	119	.079	160	240	320																				
52°-00′	110	.080	160	240	320																				
		D(MAX)=53°-30′																							

E MAX=0.10 FOR REHABILITATION AND RESURFACING PROJECTS ONLY

D	R (FT.)	V=20(MPH)				V=30(MPH)				V=40(MPH)				V=50(MPH)				V=60(MPH)				V=70(MPH)			
		e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)			e/F/F	L(FT.)		
			2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN		2-LN	4-LN	6-LN
0°-15′	22,918	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0
0°-30′	11,459	NC	0	0	0	NC	0	0	0	NC	0	0	0	NC	0	0	0	RC	175	175	215	RC	200	200	240
0°-45′	7,639	NC	0	0	0	NC	0	0	0	NC	0	0	0	RC	150	150	195	.023	175	175	230	.028	200	220	290
1°-00′	5,730	NC	0	0	0	NC	0	0	0	RC	125	130	170	.021	150	150	200	.030	175	200	270	.037	200	260	345
1°-30′	3,820	NC	0	0	0	RC	100	110	145	.021	125	130	175	.031	150	185	245	.043	175	255	340	.054	225	335	445
2°-00′	2,865	NC	0	0	0	RC	100	110	145	.028	125	155	205	.040	150	220	290	.055	200	300	400	.070	270	405	540
2°-30′	2,292	NC	0	0	0	.021	100	115	150	.034	125	175	230	.049	170	250	335	.067	235	350	465	.085	315	475	630
3°-00′	1,910	RC	65	100	130	.025	100	125	165	.040	130	190	255	.057	185	280	370	.077	260	390	520	.096	350	525	700
3°-30′	1,637	RC	65	100	130	.029	100	135	180	.046	140	210	280	.065	205	310	410	.086	285	425	565	.100	360	540	720
4°-00′	1,432	RC	65	100	130	.033	100	145	195	.051	150	225	300	.072	225	335	445	.093	305	455	605	D(MAX)=3°-30′			
5°-00′	1,146	.022	70	105	135	.040	110	165	220	.061	175	260	345	.083	250	375	495	.098	315	475	630				
6°-00′	955	.026	75	115	150	.046	120	180	240	.070	190	285	380	.092	270	405	540	D(MAX)=5°-15′							
7°-00′	819	.029	80	120	160	.053	135	200	265	.078	210	310	415	.098	285	425	570								
8°-00′	716	.033	85	130	170	.058	145	215	285	.084	220	330	440	.100	290	435	580								
9°-00′	637	.036	90	135	180	.063	150	225	300	.089	230	345	460	D(MAX)=8°-15′											
10°-00′	573	.040	100	145	195	.068	160	240	320	.094	240	360	480												
11°-00′	521	.043	105	155	205	.072	170	250	335	.097	250	370	495												
12°-00′	477	.046	110	160	215	.076	175	260	350	.099	250	375	500												
13°-00′	441	.049	115	170	225	.080	180	270	360	.100	255	380	505												
14°-00′	409	.052	120	175	235	.083	190	280	375	D(MAX)=13°-15′															
16°-00′	358	.057	125	185	250	.089	200	295	395																
18°-00′	318	.062	135	200	265	.093	205	310	410																
20°-00′	286	.066	140	210	280	.097	215	320	425																
22°-00′	260	.070	145	220	290	.099	215	325	430																
24°-00′	239	.073	150	225	300	.100	220	325	435																
28°-00′	205	.079	160	240	320	D(MAX)=24°-45′																			
32°-00′	179	.084	170	250	335																				
36°-00′	159	.089	175	265	350																				
40°-00′	143	.092	180	270	360																				
44°-00′	130	.095	185	280	370																				
48°-00′	119	.098	190	285	380																				
52°-00′	110	.099	195	290	385																				
56°-00′	102	.100	195	290	385																				
		D(MAX)=58°-00′																							

LEGEND

D	DEGREE OF CURVE
R	RADIUS OF CURVE
V	ASSUMED DESIGN SPEED
e	RATE OF SUPERELEVATION
L	MINIMUM LENGTH OF TRANSITION
NC	NORMAL CROWN
RC	REMOVE ADVERSE CROWN, SUPERELEVATE AT NORMAL CROWN SLOPE

GENERAL NOTES

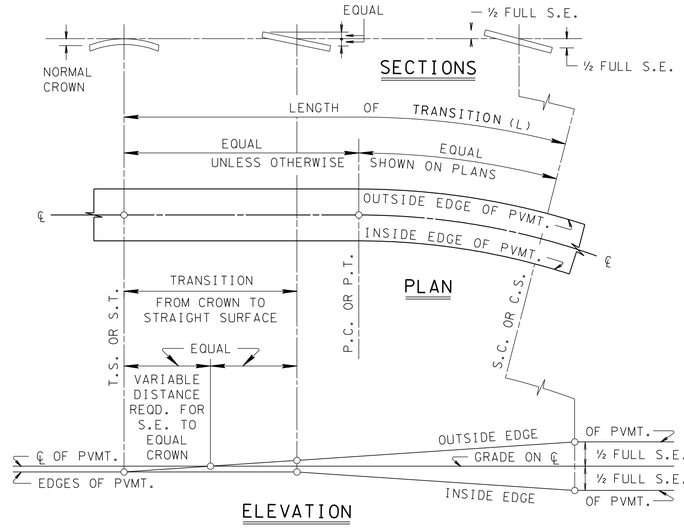
Ⓐ ALL HORIZONTAL CURVES SHALL BE SUPERELEVATED IN ACCORDANCE WITH THIS TABULATION, UNLESS OTHERWISE SHOWN ON THE PLANS.

Ⓑ SPIRALS ARE NOT REQUIRED BELOW 50 MPH AND ABOVE THE HEAVY LINE FOR HIGHER SPEEDS.

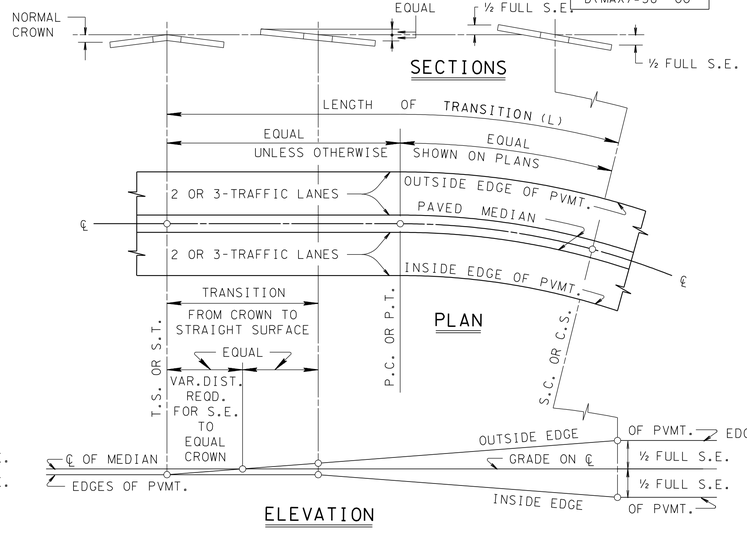
Ⓒ LENGTHS ROUNDED IN MULTIPLES OF 25 OR 50 FEET PERMIT SIMPLER CALCULATIONS.

Ⓓ ALIGNMENT DESIGNS SHOULD BE SO ARRANGED AS TO AVOID SUPERELEVATION TRANSITIONS ON BRIDGE DECKS, IN ORDER TO PREVENT PONDING IN THE AREAS OF ZERO SUPERELEVATION IN THE CROWN CHANGE ZONE.

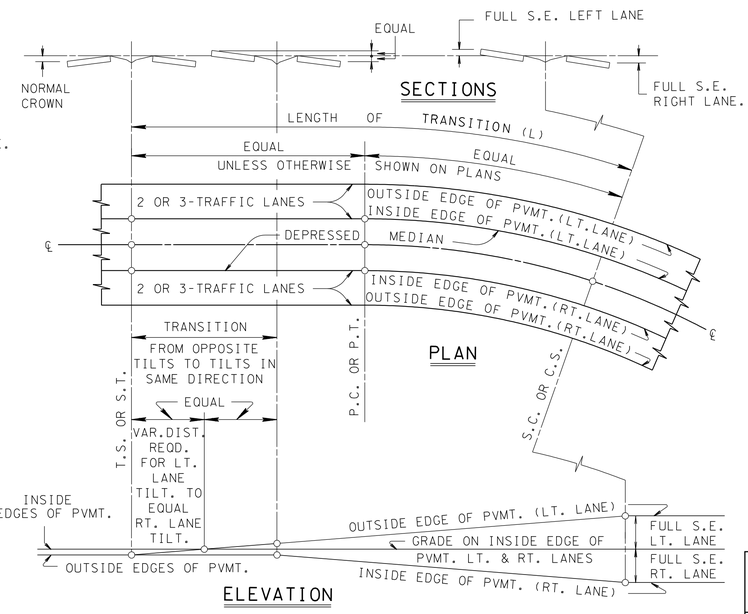
Ⓔ USE RURAL SUPERELEVATION RATES ON ALL URBAN FREEWAYS AND EXPRESSWAYS EXCEPT VIADUCTS.



TYPICAL TRANSITION IN SUPERELEVATION
2-LANE HIGHWAY



TYPICAL TRANSITION IN SUPERELEVATION
4 OR 6-LANE HIGHWAY WITH PAVED MEDIAN



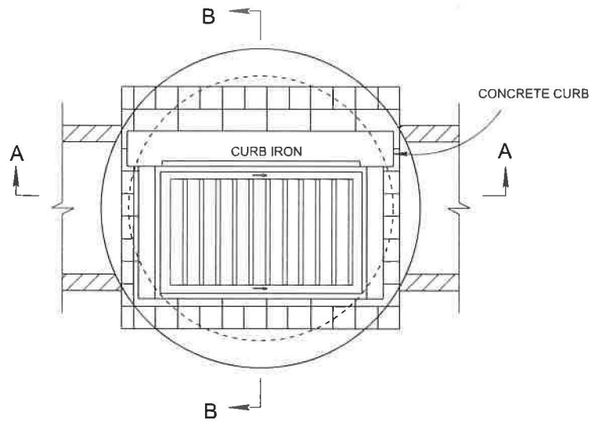
TYPICAL TRANSITION IN SUPERELEVATION
4 OR 6-LANE HIGHWAY WITH DEPRESSED MEDIAN

⊠ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

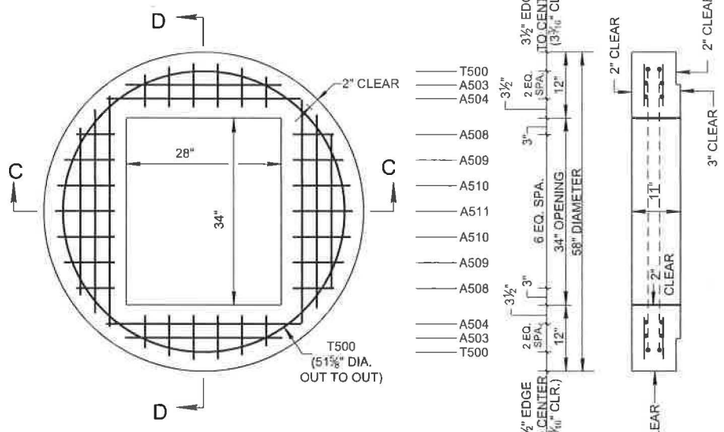
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RURAL SUPERELEVATION DETAILS

10-15-02 | RD01-SE-3

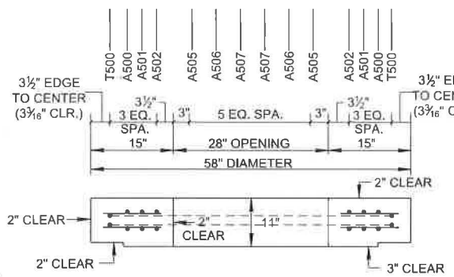


PLAN VIEW

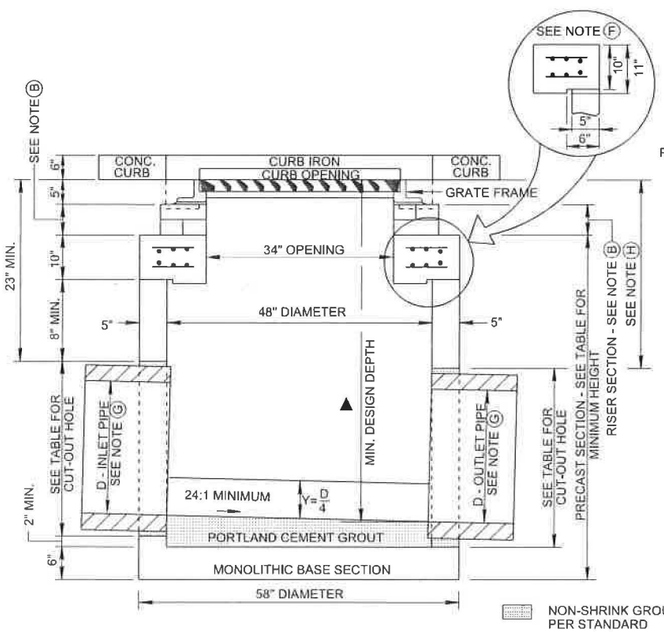


LID REINFORCING

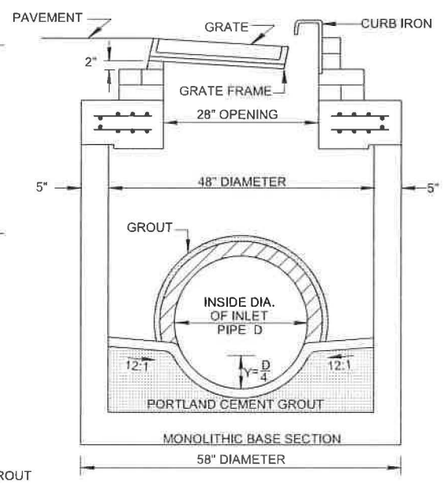
SECTION D-D



SECTION C-C



SECTION A-A



SECTION B-B

NON-SHRINK GROUT PER STANDARD SPECIFICATIONS SECTION 921 REQUIRED AROUND PIPE OPENINGS ONLY

CATCH BASIN MAXIMUM DEPTH NOTE
MAXIMUM DEPTH FOR THIS STRUCTURE IS 20.00'.

CATCH BASIN DIMENSIONS				▲ FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (FEET)
INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	PRECAST SECTION MIN. HEIGHTS (INCHES)	
18	2½	25	**51**	3.89
24	3	32	58	4.43

(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".

(2) ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.

(3) CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

GENERAL NOTES

(A) ALL PRECAST ELEMENTS TO MEET ASTM C478 (CURRENT EDITION) AND AASHTO M199 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.

CONCRETE: f'_c = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, F_y = 60,000 POUNDS PER SQUARE INCH
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(B) THIS DIMENSION MAY VARY FROM A MINIMUM OF 0 INCHES TO A MAXIMUM OF 24 INCHES AS LONG AS 23 INCHES IS SATISFIED. THE CONTRACTOR HAS THE OPTION OF USING BRICK OR STANDARD PRECAST CONCRETE RISER FRAMES. THE USE OF BRICK SHALL BE LIMITED TO 6 INCHES. IF THIS DIMENSION EXCEEDS 6 INCHES, PRECAST CONCRETE RISER FRAMES SHALL BE USED AS SHOWN ON STANDARD DRAWING D-RF-1.

(C) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT HIS OWN EXPENSE.

(D) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.

(E) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.

(F) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99R FOR ADDITIONAL DETAILS.

(G) SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.

(H) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 23 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.

(I) SEE STANDARD DRAWING D-CBB-12A FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.

(J) SEE STANDARD DRAWING D-CB-12RB FOR DETAILS REGARDING 60" AND LARGER CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" VERTICAL CURB).

(K) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-12.01 CATCH BASINS, TYPE 12, 0'-4' DEPTH THROUGH 611-12.05 CATCH BASINS, TYPE 12, > 16'-20' DEPTH PER EACH. PAYMENT INCLUES RISER SECTION AND GRATE.

- ☐ REV. 12-18-95: CHANGED BASE THICKNESS AND VERTICAL DEPTH REQUIREMENTS. ADDED HANDLING AND CUT-OUT HOLE NOTES.
- ☐ REV. 12-18-96: REMOVED 0.5" PREMOLDED FIBER EXPANSION JOINT FROM SECTION "B-B". REMOVED OLD GENERAL NOTE (F). CHANGED LABEL OF LAST FOUR GENERAL NOTES.
- ☐ REV. 4-15-97: CHANGED CATCH BASIN DIMENSION TABLE.
- ☐ REV. 1-19-99: CHANGED MINIMUM DEPTH TABLE AND DRAWING IN GENERAL TO REFLECT REDUCTION IN INVERT DROP ACROSS CATCH BASIN.
- ☐ REV. 12-18-99: MODIFIED CATCH BASIN DIMENSION TABLE.
- ☐ REV. 5-27-01: CHANGED PAY ITEMS IN GENERAL NOTE (I). ADDED CATCH BASIN MAXIMUM DEPTH NOTE.

  REV. 8-01-12: REVISED CATCH BASIN LID FOR COMPLIANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION WITH INTERIMS. REVISED REINFORCING, GENERAL NOTES AND ADDITIONAL MISC. DRAFTING EDITS.
- ☐ REV. 9-24-12: MODIFIED TOP SLAB AND MINIMUM DEPTH.
- ☐ REV. 3-11-14: ELIMINATED STIRRUPS.
- ☐ REV. 05-15-18: REVISED CATCH BASIN MINIMUM DESIGN DEPTH VALUES. CORRECTED STANDARD SPECIFICATIONS SECTION NUMBER TO 921 FOR NON-SHRINK GROUT. ADDED DIMENSION IN SECTION VIEW A-A FOR NOTE (B). CORRECTED REBAR PLACEMENT IN LIDS. ADDED DIMENSION IN SECTION VIEW A-A FOR MINIMUM DESIGN DEPTH. CHANGED TO "VERTICAL CURB" FROM "NONMOUNTABLE CURB". ADJUSTED BOX SECTION MINIMUM HEIGHTS.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD PRECAST 48" CIRCULAR NO. 12 CATCH BASIN

(FOR USE WITH 6" VERTICAL CURB)

5-27-95 | D-CB-12RA

20-JUN-2018 13:34
\\Ag03sdcwf00010\projects\Standard Drawings Folder\Working Folder for Eugene\DRAFT\3 CATCH BASINS AND MANHOLES\1 CATCH BASINS\DCB12RA-20180515.DGN