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ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 33057-3228-94
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
108-03	CPM PROJECT SCHEDULE	LS	1
201-01	CLEARING AND GRUBBING	LS	1
202-01.50	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	EACH	1
202-02.01	REMOVAL OF PIPE (18" RCP, STA. 50+49 BENHAM DRIVE)	L.F.	105
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	465
202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	1610
202-08.10	REMOVAL OF CURB (CONCRETE CURB)	L.F.	1695
203-01	ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	5017
203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	350
203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	4820
203-04	PLACING AND SPREADING TOPSOIL	C.Y.	483
203-06	WATER	M.G.	16
203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	1002
203-10.15	WASTE MATERIAL	C.Y.	207
203-50	CONSTRUCTION OF HAUL ROAD	LS	1
209-02.04	10" TEMPORARY SLOPE DRAIN	L.F.	71
209-05	SEDIMENT REMOVAL	C.Y.	116
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	3532
209-08.07	ROCK CHECK DAM	EACH	3
209-08.08	ENHANCED ROCK CHECK DAM	EACH	5
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	17
209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	13
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	2692
303-10.04	MINERAL AGGREGATE (SIZE 57)	TON	346
303-10.07	NO. 4 STONE	TON	70
307-01.21	ASP. CONC. MIX (PG70-22)(BPMB-HM) GR. A-S	TON	453
307-02.01	ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING A	TON	490
307-02.08	ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING B-M2	TON	446
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	4
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	15
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	5
407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	766
411-02.10	ACS MIX(PG70-22) GRADING D	TON	239
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	731
502-03.13	CONCRETE PAVEMENT REMOVAL	S.Y.	152
502-04.01	SAWING CONCRETE PAVEMENT (FULL DEPTH)	L.F.	147
604-07.01	RETAINING WALL (WALL C)	S.F.	3355
607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	1155
611-07.01	CLASS "A" CONCRETE (PIPE ENDWALLS)	C.Y.	1
611-07.02	STEEL BAR REINFORCEMENT	LB.	45
611-09.01	ADJUSTMENT OF EXISTING CATCH BASIN	EACH	1
611-12.01	CATCH BASINS, TYPE 12, 0' - 4' DEPTH	EACH	4
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	4
611-12.04	CATCH BASINS, TYPE 12, > 12' - 16' DEPTH	EACH	2
611-14.02	CATCH BASINS, TYPE 14, > 4' - 8' DEPTH	EACH	2
701-01.01	CONCRETE SIDEWALK (4")	S.F.	9316
701-02	CONCRETE DRIVEWAY	S.F.	1391
701-02.03	CONCRETE CURB RAMP	S.F.	207
702-01	CONCRETE CURB	C.Y.	2
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	112
705-06.10	GR TERMINAL TRAILING END (TYPE 13) MASH TL-3	EACH	2
705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH	1
705-06.25	THRIE BEAM BRIDGE TRANSITION MASH TL-3	EACH	4
705-06.27	THRIE BEAM 38IN VEHICLE & PEDESTRIAN SAFETY RAIL MASH TL-3	L.F.	890
705-06.30	GR TERMINAL (ENERGY ABSORBING) MASH TL-2	EACH	1
706-01	GUARDRAIL REMOVED	L.F.	1293
707-02.11	CHAIN-LINK FENCE (6 FOOT) (VINYL COATED)	L.F.	190
707-02.12	END & CORNER POST ASSEMBLIES (6" VINYL COATED)	EACH	5
707-06.01	REMOVAL OF FENCE (VARIOUS)	L.F.	795
708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	11

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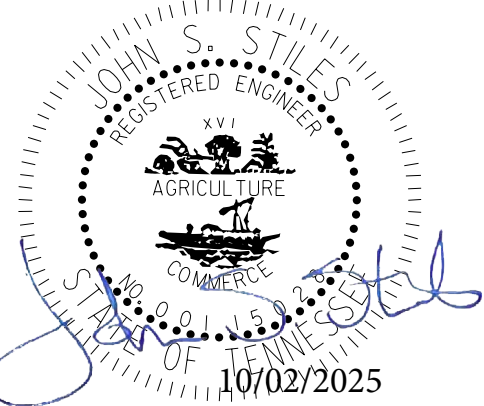
ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 33057-3228-94
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	18
710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	1755
712-01	TRAFFIC CONTROL	LS	1
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2240
712-02.47	BRIDGE MOUNTED INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	440
712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	10
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
712-04.50	BARRIER RAIL DELINEATOR	EACH	268
712-05.01	WARNING LIGHTS (TYPE A)	EACH	76
712-06	SIGNS (CONSTRUCTION)	S.F.	911
712-07.02	TEMPORARY BARRICADES (TYPE II)	L.F.	12
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	144
712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	424
712-09.08	REMOVABLE PAVEMENT MARKING (6" LINE)	L.F.	1029
713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	2
713-01.02	STEEL BAR REINFORCEMENT (FOUNDATION FOR SIGN SUPPORTS)	LB.	271
713-02.21	SIGN POST DELINEATION ENHANCEMENT	L.F.	12
713-06	STEEL I-BEAMS & WF-BEAMS(BREAKAWAY) SIGN SUPPORTS	LB.	493
713-11.01	"U" SECTION STEEL POSTS	LB.	38
713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	85
713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	32
713-14	EXTRUDED ALUMINUM PANEL SIGNS	S.F.	40
713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	3
713-16.50	REMOVE AND REPLACE SIGN (EXISTING STREET NAME SIGNS)	EACH	2
716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(1 COLOR)	EACH	21
716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	15
716-02.04	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	5
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	23
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	76
716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	2305
716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	1.71
716-08.30	HYDROBLAST REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	1.13
716-09.83	CONTRAST PAVEMENT MARKING 6"	L.F.	847
716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	0.81
717-01	MOBILIZATION	LS	1
740-07.04	GEOGRID REINFORCEMENT TYPE 2	S.Y.	524
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	223
740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	762
740-11.02	TEMPORARY SEDIMENT TUBE 12IN	L.F.	1616
801-01	SEEDING (WITH MULCH)	UNIT	7
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	160
801-02	SEEDING (WITHOUT MULCH)	UNIT	45
801-03	WATER (SEEDING & SODDING)	M.G.	9
803-01	SODDING (NEW SOD)	S.Y.	4325
805-01.01	TURF REINFORCEMENT MAT (CLASS I)	S.Y.	392
805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	3581

TYPE	YEAR	PROJECT NO.	SHEET NO.
PLAN-IN-HAND	2024	BR-STP-320(10)	2
PS&E	2025	BR-STP-320(10)	2

LETTING REVISION 09/25/2025:
ADDED ITEM NO. 108-03 CPM PROJECT SCHEDULE. REVISED ITEM NO.'S 713-01.02, 713-06, AND 713-14 TO REMOVE QUANTITY FOR PROJECT INFORMATION SIGNS.

LETTING REVISION 10/02/2025:
REVISED ITEM NO. 203-03.

SEALED BY



10/02/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES
SHEET 1 OF 2

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PAVEMENT QUANTITIES									
LOCATION (ROADWAY)	TYPE - GRADE - PAY ITEM (TON)								COLD PLANING (S.Y.)
	MINERAL AGG.	BITUMINOUS PLANT MIX BASE (HOT MIX)			PRIME COAT		TACK COAT	ASPHALTIC CONCRETE	
		D	A-S	A				B-M2	
	D								
	303-01	307-01.21	307-02.01	307-02.08	402-01	402-02	403-01	411-02.10	
SR-320 (FULL DEPTH)	1408.0	453.0	490.0	321.0	4.0	15.0	3.0	188.0	
SR-320 (MILL AND OVERLAY)							1.0	49.0	731.0
TRACT 5 LOT REPAIRS	369.0								
TEMPORARY PAVEMENT	270.0			123.0					
DRIVEWAYS	43.0			2.0			1.0	2.0	
CURB AND GUTTER AGGREGATE	339.0								
SIDEWALK AND CURB RAMPS	263.0								
TOTALS	2692.0	453.0	490.0	446.0	4.0	15.0	5.0	239.0	731.0

ESTIMATED GRADING QUANTITIES						
DESCRIPTION		UNADJUSTED VOLUMES (CY)		ADJUSTED VOLUMES (CY)	BALANCE SUMMARY	
		EXC.	EMB.	EXC.	SHRINK = 20 %	SWELL = 20 %
	MAINLINE	1308	4372	1047	EMB.	EXC.
	BRIDGE ABUTMENT	0	448	0		
(1)	HAUL ROADS	3454	1330	2764		
	PAVEMENT	772	0	618		
	EPSC	244	0	196		
(2)	BRIDGE EXCAVATION (WITHIN RR ROW)	207	0	166	4820	VS. -2844
(3)	BRIDGE EXCAVATION (OUTSIDE RR ROW)	2210	0	1768	AVAILABLE	= 1976
	TOPSOIL (EMB.)	386				
	TOPSOIL (EXC.)	97				
TOPSOIL TOTALS (SEE TOPSOIL TABLE)					BORROW MATERIAL	= 2372
ROCK (C.Y.)		TOTALS (C.Y.)			*SEE NOTE 4	
EXC.	EMB.	EXC. (UNCL.)	EMB. (UNCL.)	EXC (COMMON)		
0	0	5017	4820	5017	3555	2844

- (1) NOT INCLUDED IN EARTHWORK QUANTITIES, ALL TO BE INCLUDED IN LUMP SUM OF HAUL ROADS ITEM NO. 203-50.
- (2) INCLUDES EXCAVATION FOR REMOVAL OF EXISTING PIERS AND FOR ABUTMENT NO. 1 SLOPE PAVING WITHIN LIMITS OF RAILROAD ROW AND NOT INCLUDED IN THE BRIDGE PLANS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF TESTING WITH CSX AND THEIR CONSULTANT AND CSX WILL MAKE A DETERMINATION WHERE ANY SPOILS NEED TO BE WASTED.
- (3) INCLUDES EXCAVATION FOR PROPOSED ABUTMENT NO. 1, BENT NO. 1, AND ABUTMENT #2 THAT IS NOT INCLUDED IN THE BRIDGE PLANS. AREA CAN BE SEEN AS HATCHED AREA ON BRIDGE SHEETS U-95-425 AND U-95-430
- (4) CONTRACTORS ATTENTION IS BROUGHT TO THE EARTHWORK BALANCE ON THE PROJECT. A MAJORITY OF THE EXCAVATION MATERIAL WILL NOT BE AVAILABLE FOR USE UNTIL AFTER THE FIRST HALF OF THE BRIDGE IS COMPLETE AND TRAFFIC IS SHIFTED. THE BORROW EXCAVATION LINE ITEM NO. 203-03 HAS BEEN ADJUSTED TO INCORPORATE ALL 4,820 C.Y. OF EMBANKMENT REQUIRED FOR THE PROJECT EXCLUDING HAUL ROADS.

PROPOSED GUARDRAIL											
SHEET NO.	LOCATION	SIDE		STATIONS		GUARDRAIL		TERMINAL ANCHORS			REMARKS
						THRIE BEAM BRIDGE TRAN. MASH TL-3 (20.65')	THRIE BEAM 38IN VEH. & PED. SAFETY RAIL MASH TL3	TYPE 13 MASH TL3 (9.375')	TYPE 21 MASH TL2 (21.875')	TYPE 38 MASH TL3 (46.875')	
		LT	RT	FROM	TO	705-06.25 (EACH)	705-06.27 (L.F.)	705-06.10 (EACH)	705-06.30 (EACH)	705-06.20 (EACH)	
4B	SR-320		X	14+19.24	17+41.32	1	274.44		1		
4B	SR-320	X		14+41.76	17+51.00	1	300.31	1			
4B	SR-320	X		19+14.94	22+60.47	1	299.60			1	
4B	SR-320		X	21+68.47	22+33.24	1	15.47	1			
TOTALS						4	890	2	1	1	

RIGHT OF WAY MARKERS				
	ITEM #: 708-02.01			
SHEET NO.	QUANTITIES			
	"A"	"B"	"C"	TOTALS
4A	8	1	2	11
TOTALS	8	1	2	11

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2022	BR-STP-320(10)	2F
PLAN-IN-HAND	2024	BR-STP-320(10)	2F
PS&E	2025	BR-STP-320(10)	2F

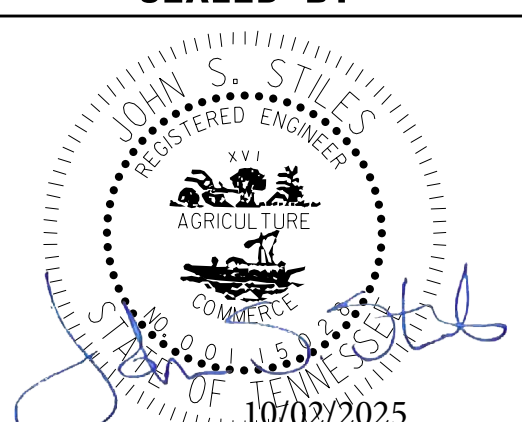
REVISION 12/11/2023: REVISED CATCH BASINS, STORM DRAINAGE ENDWALLS, STORM DRAINAGE PIPES, AND RIGHT OF WAY MARKERS TABULATED QUANTITIES.

LETTING REVISION 10/02/2025: REVISED ESTIMATED GRADING QUANTITIES. SUBTRACTED EMBANKMENT FOR HAUL ROADS FROM EMBANKMENT TOTAL, ADDED EXCESS EXCAVATION FROM HAUL ROADS TO EXC. (AVAIL.), AND REVISED EARTHWORK BALANCE. REVISED FOOTNOTE 4 ON ESTIMATED GRADING QUANTITIES.

TOPSOIL							
IF EXISTING TOPSOIL IS SUITABLE FOR REUSE							
PROPOSED SLOPE AREA S.F.	EXISTING TOPSOIL (EXC.)	EXISTING TOPSOIL (EMB.)	EXISTING TOPSOIL (TOTAL) C.Y.	REQUIRED TOPSOIL C.Y.	PLACING TOPSOIL 203-04 C.Y.	FURNISHED TOPSOIL 203-07 C.Y.	EXCESS TOPSOIL C.Y.
80188	97	386	483	1485	483	1002	0

SPECIAL DITCHES											
ROADWAY	STATION		SIDE	DETAIL NO.	CONFIGURATION			TYPE	HEIGHT (FT.)	SEEDING W/O MULCH 801-02 (UNITS)	TURF REINF. MAT 805-01.01 (S.Y.)
	FROM	TO			FORE (H/V)	BOTTOM WIDTH (FT.)	BACK (H/V)				
SR-320	16+50.00	17+72.81	RT	1	2:1	V	2:1	TURF REINF. MAT	1	3.5	392
TOTALS										4	392

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED
QUANTITIES