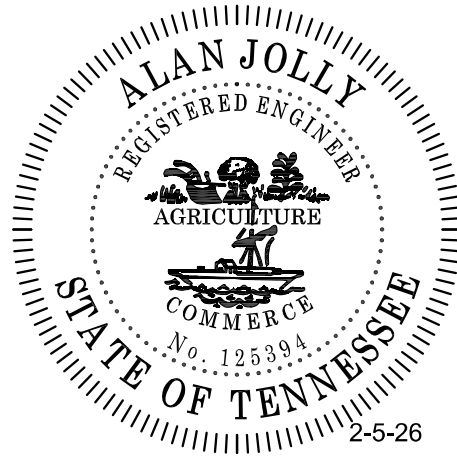




THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Alan E Jolly

Digitally signed by Alan E Jolly
DN: CN=Alan E Jolly,
dnQualifier=A01410D00000198CE2ABC7200178D30,
O=BARGE DESIGN SOLUTIONS, C=US
Reason: I agree to specified portions of this document
Date: 2026.02.05 12:35:48-06'00'

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BARGE DESIGN SOLUTIONS, INC.
615 3RD AVE S #700, NASHVILLE, TN 37210

NASHVILLE, TN
ALAN JOLLY, P.E. NO. 125394

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE OF TENN. CODE ANN. §62-2-306.

SHEET NAME

SHEET NO.

SIGNATURE SHEETSROADWAY-SIGN4

ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS 1A

ESTIMATED ROADWAY QUANTITIES2

TYPICAL SECTIONS AND PAVEMENT SCHEDULE 2B

[illegible]

ROADWAY INDEX

SHEET NAME	SHEET NO.	DWG.	REV.	DESCRIPTION	DWG.	REV.	DESCRIPTION
SIGNATURE SHEETS.....ROADWAY-SIGN1-ROADWAY-SIGN-4					D-CB-12RA	01-28-22	STANDARD PRECAST
TITLE SHEET 1		10-101.00 STANDARDS ROADWAY DRAWINGS			D-CB-12RB	02-20-20	FOR USE WITH 6" VERT
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS..... 1A		RD11-SE-1		TRANSITION AND CROSS SLOPE DETAILS			STANDARD PRECAST
STANDARD ROADWAY AND TRAFFIC DESIGN DRAWINGS 1A1		RD11-TS-1	06-28-19	DESIGN STANDARDS FOR LOW-VOLUME ROADS	D-CB-12S	02-20-20	CATCH BASIN FOR US
ESTIMATED ROADWAY QUANTITIES 2		RD11-TS-1A	06-28-19	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS	D-CB-12SB	02-20-20	STANDARD RECTANG
TYPICAL SECTIONS..... 2B		RD18-TS-5		UBRAN MINOR ARTERIAL (2-3 LANE)			BASIN
GENERAL NOTES..... 2C, 2C1		RD11-TS-6		TYPICAL CURB & GUTTER SECTIONS WITH SHOULDERS	D-CB-12SC	02-20-20	STANDARD 4' X 4' SQ
ENVIRONMENTAL NOTES..... 2E				AND WITH GRASS STRIPS			BASIN
TABULATED QUANTITIES 2F		RD11-TS-6A		TYPICAL CURB & GUTTER SECTIONS WITHOUT	D-CB-12SD	02-20-20	STANDARD 5' 2" X 5' 2
RIGHT-OF-WAY NOTES, UTILITY NOTES, AND UTILITY OWNERS..... 3				SHOULDERS AND WITH GRASS STRIPS			BASIN
RIGHT-OF-WAY ACQUISITION TABLE(S) 3A		RD11-TS-6B		TYPICAL CURB AND GUTTER SECTIONS WITH	D-CB-99R	01-28-22	STANDARD 7' X 7' SQ
PROPERTY MAP(S)..... 3A1		RD11-TS-6C		SHOULDERS AND WITHOUT GRASS STRIPS	D-CB-99RA	10-29-21	BASIN
PRESENT LAYOUT(S)..... 4 – 6				TYPICAL CURB AND GUTTER SECTIONS WITHOUT	D-CB-99RB	02-20-20	STANDARD 4' X 4' SQ
RIGHT-OF-WAY DETAILS 4A – 6A		RD11-TS-7	07-17-20	SHOULDERS AND WITHOUT GRASS STRIPS			BASIN
PROPOSED LAYOUT(S) 4B – 6B				DESIGN STANDARDS 2-LANE CURB & GUTTER WITH	D-RS-3		MISCELLANEOUS DET
PROPOSED PROFILE(S) 4C – 6C				CONTINUOUS 2-WAY LEFT-TURN LANE WITHOUT GRASS	D-JBS-1	02-20-20	STANDARD 32" X 32" S
SIDE ROADS PROFILE(S) ① 7-8		RD11-S-11		STRIPS			BOX
PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILE(S)..... 9				DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE	D-JBS-2	02-20-20	STANDARD 4' X 4' SQ
DRAINAGE MAP(S)..... 10-11		RD11-S-11A		SLOPE DEVELOPMENT			BOX
CULVERT SECTION(S) 12		RD11-S-11B		ROADSIDE DITCH DETAILS FOR DESIGN AND	D-JBS-3	02-20-20	STANDARD 5' 2" X 5' 2
EROSION PREVENTION AND SEDIMENT CONTROL PLANS..... 13-16B				CONSTRUCTION			JUNCTION BOX
ROADWAY CROSS SECTIONS 17-39		RD11-S-11B		DESIGN AND CONSTRUCTION DETAILS FOR ROCK CUT	D-JBS-4	02-20-20	STANDARD 7' X 7' SQ
TRAFFIC CONTROL PLANS T1 – T4		RD11-SD-1		SLOPE AND CATCHMENT			BOX
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLANS S-1-S-8		RD11-SD-2		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL	D-JBS-5	02-20-20	STANDARD 9' X 9' SQ
UTILITY PLANS U1-1				NOTES			BOX
NOTE: THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT USED IN THE		RD11-SD-3		INTERSECTION SIGHT DISTANCE LANDSCAPE AND	D-RJB-1		PRECAST ROUND JUN
NUMBERING OF SHEETS.				OBSTRUCTION			120")
Footnotes: Sheets not used 2A				INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS	10-104.00		ROADWAY, PAVEMENT AP
① Haul Road profiles follow Side Road profiles in the sheet numbering sequence.		10-102.00 PIPE CULVERTS, ENDWALLS, AND ENERGY DISSIPATERS			FENCES		
		D-PB-1	03-01-23	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION	RP-D-15	04-01-25	DETAILS OF STANDAR
		D-PB-2	03-01-23	STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION	RP-D-16	04-01-25	DETAILS OF LOWERE
		D-PB-3	11-30-20	INDUCED TRENCH SOIL EMBANKMENT FOR PIPE			DRIVEWAYS
				CULVERT INSTALLATION	RP-DHO-1	05-01-20	MEDIAN OPENINGS O
		D-PB-4	01-09-24	PIPE COLLAR DETAILS	RP-DHO-2	07-30-24	MEDIAN OPENING DE
		D-PE-18A	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 18" PIPE (FOR 3:1,			& J-TURN INTERSECT
				4:1 & 6:1 SLOPES)	RP-I-5	05-01-20	EXAMPLES OF STREE
		D-PE-18B	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 18" PIPE, BILL OF	RP-PMR-1	05-01-20	STANDARD DETAILS S
				STEEL AND PRECAST NOTES			MAINTENANCE RAMP
		D-PE-24A	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 24" PIPE (FOR 3:1,	RP-R-1	04-21-25	STANDARD RAMP DE
				4:1 & 6:1 SLOPES)			DRIVEWAYS
		D-PE-24B	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 24" PIPE, BILL OF	RP-R-1A	04-21-25	STANDARD RAMP DE
				STEEL AND PRECAST NOTES			ROADWAYS
		D-SEW-1A	07-07-23	TYPE "SAFETY" SIDE ENDWALL WITH STEEL PIPE GRATE,	RP-SC-1	05-04-22	SLOPING CONCRETE
				FOR 15" THRU 48" PIPES, 6:1 SLOPE	RP-VC-10	03-04-21	VERTICAL CONCRETE
		10-103.00 CATCH BASINS AND MANHOLES					(FOR 8" TO 12" GUTTE
		D-CB-12LP	02-20-20	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LP	RP-VC-11	03-04-21	VERTICAL CONCRETE
				CATCH BASIN FOR USE WITH 6" VERTICAL CURB			(FOR 6" & 7" GUTTER
		D-CB-12LPA		ALTERNATE REINFORCEMENT FOR PRECAST CONCRETE	S-F-1	03-01-23	HIGH VISIBILITY FENC
				32" X 32" NO. 12LP CATCH BASIN	S-RP-2	06-28-19	STANDARD CONCRET
		D-CB-12P	02-20-20	STANDARD PRECAST RECTANGULAR CONCRETE NO.12			
				CATCH BASIN			

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	23S211-S3-002	1A
PS&E	2026	23S211-S3-002	1A

REV. 01-06-26:
ADDED ROADWAY-SIGN-2 TO SHEET INDEX.

REV. 02-03-26:
ADDED ROADWAY-SIGN-3 TO SHEET INDEX.

REV. 02-05-26:
ADDED ROADWAY-SIGN-4 TO SHEET INDEX.

SEALED BY

ALAN JOLLY
REGISTERED ENGINEER
SIGNATURE
COMMERCE
No. 125394
STATE OF TENNESSEE

02/05/26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**ROADWAY INDEX
AND STANDARD
ROADWAY DRAWINGS**

(1)

(3)

(3)

(3)

(3)

(4)

(5)

(5)

(5)

(5)

(2)(5)

(6)

(6)

(10)

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 23S211-S3-002
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
202-02.01	REMOVAL OF PIPE (24" CMP ,STA. 15+00.00)	L.F.	196
202-02.02	REMOVAL OF PIPE (SIZE 24" CMP,STA. 17+00.00)	L.F.	163
202-02.03	REMOVAL OF PIPE (SIZE 24" CMP,STA. 19+22.00)	L.F.	45
202-02.04	REMOVAL OF PIPE (SIZE 24" CMP,STA. 19+22.00)	L.F.	49
202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	547
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1207
203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	1614
203-04	PLACING AND SPREADING TOPSOIL	C.Y.	200
203-06	WATER	M.G.	50
203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	200
204-06.01	FLOWABLE FILL (GENERAL)	C.Y.	7
208-01.05	BROOMING AND DEGRASSING SHOULDERS	LM	1.3
209-03.21	FILTER SOCK (12 INCH)	L.F.	2190
209-05	SEDIMENT REMOVAL	C.Y.	24
209-08.08	ENHANCED ROCK CHECK DAM	EACH	3
209-09.01	SANDBAGS	BAG	860
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	7
209-40.30	CATCH BASIN PROTECTION (TYPE A)	EACH	4
209-40.41	CATCH BASIN FILTER ASSEMBLY (TYPE 1)	EACH	4
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	2780
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	30
307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	56
307-01.08	PG 64-22 BASE MIXES (GRADING BM-2)	TON	525
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	1
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	1
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	3277
411-01.10	ACS MIX(PG64-22) GRADING D	TON	1200
415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	1325
607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	629
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	534
607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L.F.	20
611-02.10	JUNCTION BOX TYPE 1	EACH	3
611-07.31	18IN ENDWALL (SIDE DRAIN)	EACH	1
611-07.32	24IN ENDWALL (SIDE DRAIN)	EACH	1
611-07.54	18IN ENDWALL (CROSS DRAIN)	EACH	1
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	7
611-42.01	CATCH BASINS, TYPE 42, 0' -4' DEPTH	EACH	1
611-42.02	CATCH BASINS, TYPE 42, 4' -8' DEPTH	EACH	1
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	183
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	875
708-02.01	MARKERS(CONCRETE R.O.W. POSTS)	EACH	5
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	362
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	180
712-01	TRAFFIC CONTROL	LS	1
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	125
712-06	SIGNS (CONSTRUCTION)	S.F.	429
712-08.03	ARROW BOARD (TYPE C)	EACH	2
713-11.01	"U" SECTION STEEL POSTS	LB.	198
713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	31
713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	76
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	338
716-05.20	PAINTED PAVEMENT MARKING (6"LINE)	LM	1.5
716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	1.246
717-01	MOBILIZATION	LS	1

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 23S211-S3-002
(3)	740-10.03 GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	1550
	740-10.04 GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	3064
	740-11.06 TEMPORARY SEDIMENT TUBE CHECK DAM	EACH	10
(3)(8)	801-01.07 TEMPORARY SEEDING (WITH MULCH)	UNIT	30
(3)(8)	801-02 SEEDING (WITHOUT MULCH)	UNIT	18
(9)	801-03 WATER (SEEDING & SODDING)	M.G.	8
	803-01 SODDING (NEW SOD)	S.Y.	247
(3)	805-12.03 EROSION CONTROL BLANKET (TYPE III)	S.Y.	1000

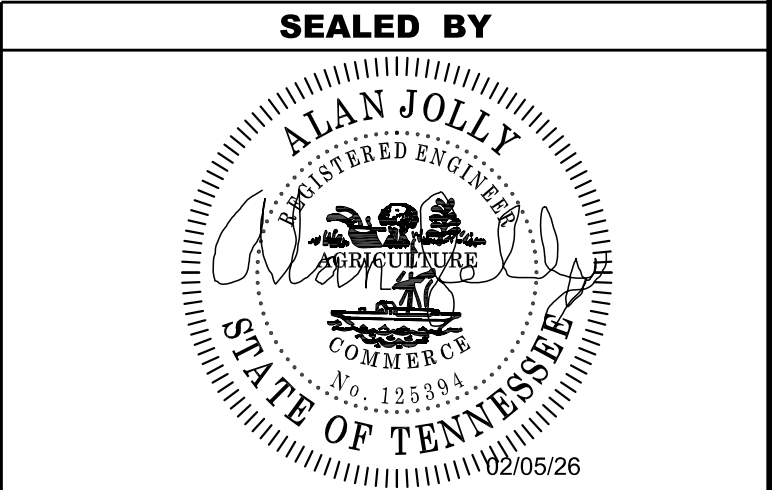
FOOTNOTES	
(1)	1192 C.Y. USED FOR ROADWAY EXCAVATION AND 15 C.Y. USED FOR EPSC
(2)	37 TONS FOR ASPHALT REMOVED FROM CURB AND GUTTER PLACEMENT; 320 TONS FOR MULTI-USE PATH; 48 TONS FOR DRIVEWAY
(3)	SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
(4)	1042 TONS TO BE USED UNDER CURB AND GUTTER; 1,738 TONS FOR MM PATH
(5)	PAVEMENT ITEMS TO BE USED FOR REPLACEMENT OF ASPHALT REMOVED FROM CURB AND GUTTER PLACEMENT.
(6)	THE BEDDING MATERIAL SHALL BE INCLUDED IN THE COST OF THE PROPOSED PIPE CULVERT.
(8)	THE COST OF FERTILIZER AND LIME USED IN INITIAL SEED BED PREPERATION IS TO BE INCLUDED
	ALL QUANTITIES ARE TO BE USED AS DIRECTED BY ENGINEER.
(9)	5 M.G. TO BE USED FOR EROSION PREVENTION AND SEDIMENT CONTROL
(10)	0.6 L.M. TO BE USED FOR 6" DSYL; 0.7 L.M. TO BE USED FOR 6" SSWL

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	23S211-S3-002	2
PS&E	2026	23S211-S3-002	2

REV 01-06-26:
REMOVED ITEM NO. 712-05.01.
REVISED FOOTNOTE 1.

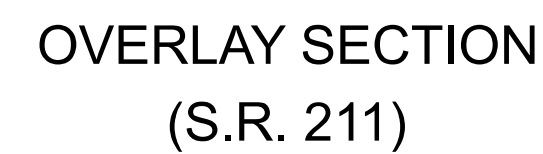
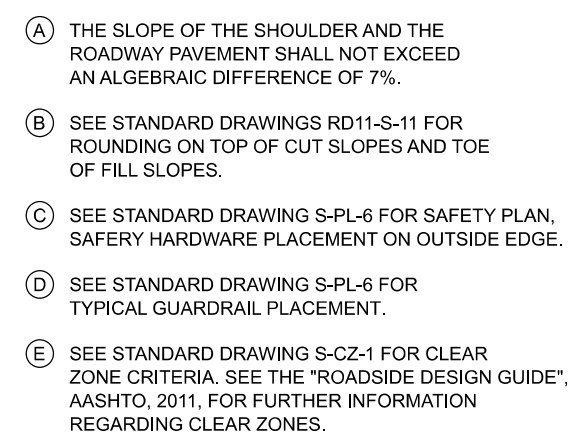
REV 02-03-26:
REVISED ITEM NO. 303-01.
REVISED FOOTNOTE 4.

REV 02-05-26:
REMOVED ITEM NO. 611-12.01.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
ESTIMATED ROADWAY QUANTITIES

REV 02-05-26:
ADDED S.U.P. AND CURB
AGGREGATE THICKNESSES



FOR DETAILS NOT SHOWN
SEE STD DWG NO. RD01-S-11A

EXIST. GROUNDLINE

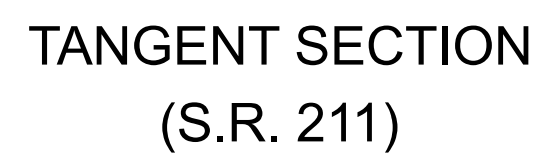
VARIES
4:1 TYP
3:1 MAX.

SOD

VARIES
3:1 TYP
2:1 MAX.

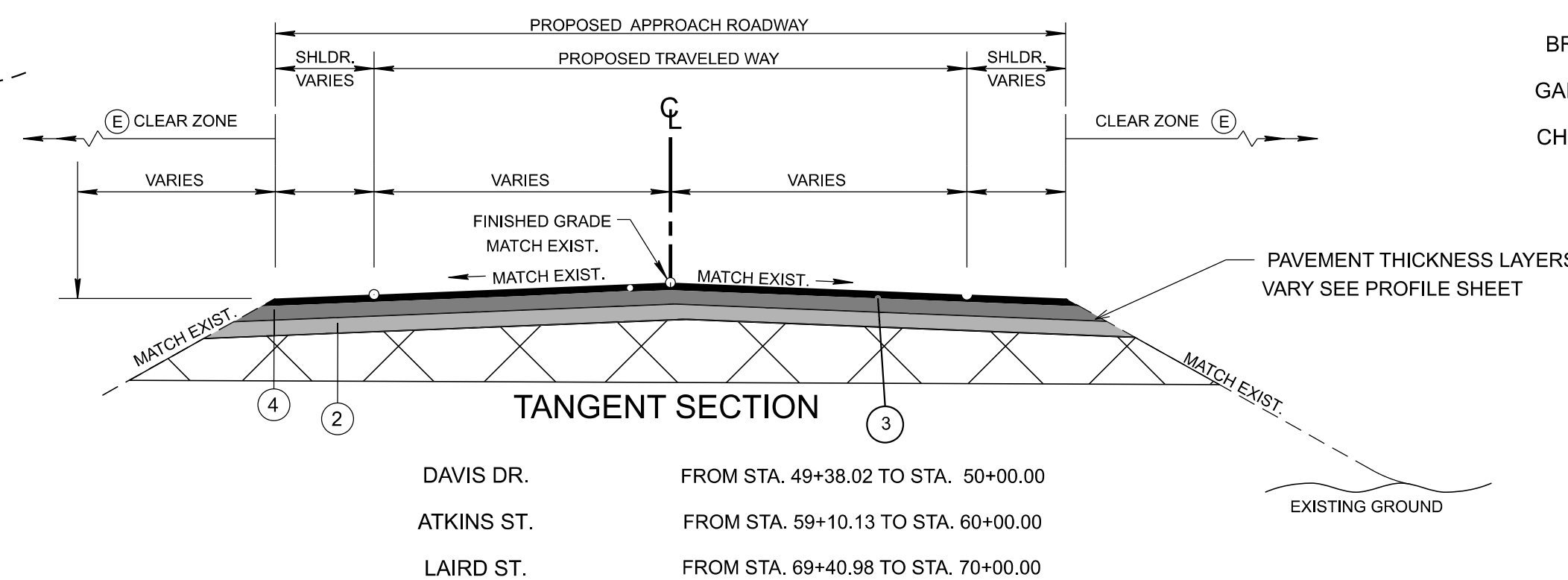
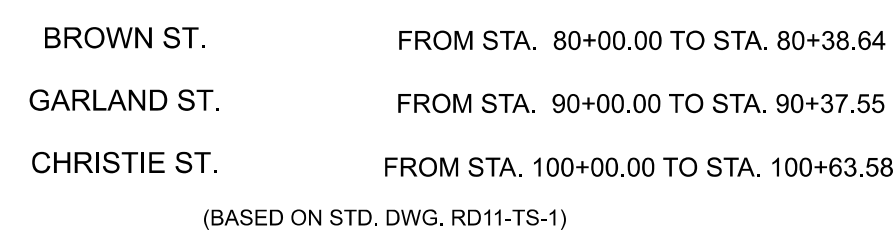
PROP. "V" SOD DITCH

LT. STA. 16+21.22 TO STA. 19+32.95



BUSINESS

SURFACE - 1 1/4"
BINDER - 1 3/4"
BASE - 4"



TYPICAL SECTIONS