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Anthony Lee Washington III
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HDR ENGINEERING, INC. 120 BRENTWOOD COMMONS WAY SUITE 525 BRENTWOOD, TN 37027 ANTHONY L. WASHINGTON III, P.E. NO. 119749

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 SHEETS	ROADWAY-SIGN3
ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND STANDARD TRAFFIC OPERATIONS DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
TABULATED QUANTITIES	2F

YEAR	PROJECT NO.	SHEET NO.	
2025	NH-I-240-1(299)	ROADWAY-SIGN 3	

REV. 03-07-25: ADDED SHEET

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

> SIGNATURE SHEET

ROADWAY INDEX

NUMBERING OF SHEETS.

STANDARD ROADWAY DRAWINGS

DESCRIPTION

STANDARD TRAFFIC OPERATIONS DRAWINGS

DESCRIPTION

LOOP LEAD-INS, CONDUIT AND PULL BOXES

DWG.

SIGNALS

T-SG-2

REV.

06-27-16

TYPE	YEAR	PROJECT NO.	SHEET NO.	
RESURF.	2025	NH-I-240-1(299)	1A	

REV. 01-22-25: ADDED SHEET ROADWAY-SIGN2 TO INDEX. REV. 03-07-25: ADDED SHEET ROADWAY-SIGN3 TO INDEX.

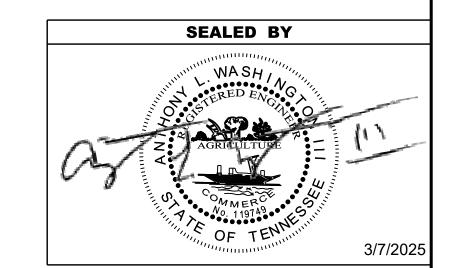
SHEET NAME	SHEET NO.
SIGNATURE SHEETS	ROADWAY-SIGN1
SIGNATURE SHEETS	
SIGNATURE SHEETS	ROADWAY-SIGN3
TITLE SHEET	1
ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND STANDARD TRAFFIC OPERATIONS DRAWINGS	1A
PROJECT COMMITMENTS	1B
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B, 2B1, 2B2
GENERAL NOTES	2C
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E, 2E1
TABULATED QUANTITIES	2F
UTILITY NOTES AND UTILITY OWNERS	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL	4
TRAFFIC DETECTION LOOPS DETAIL	5
BRIDGE PLANS	B-1

NOTE: THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT USED IN THE

NO UTILITY SHEETS INCLUDED IN THIS SET OF PLANS.

STANDAF LEGENDS		VAY TITLE SHEET, ABBREVIATIONS, AND
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD-L-3	03-01-23	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
DESIGN -	TRAFFIC (CONTROL
T-M-3	07-07-23	MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS
T-M-5	03-01-23	MARKING DETAIL FOR FREEWAYS
T-M-6	03-01-23	MARKING DETAIL FOR EXPRESSWAY AND FREEWAY INTERCHANGES
T-M-7	06-28-19	GORE MARKING DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-8	06-28-19	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-9	05-01-23	PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS
T-M-9A		PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS
T-M-9B		PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS
T-M-15	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-04-21	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-04-21	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-14	03-04-21	TWO-OUTSIDE LANE CLOSURE FOR INTERSTATES AND EXPRESSWAYS
T-WZ-18	07-07-23	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-WZ-60		FREEWAY RESURFACING SIGNING LAYOUT
T-WZ-63	01-09-24	WORK ZONE IN THE VICINITY OF AN ENTRANCE RAMP
T-WZ-64		WORK ZONE IN THE VICINITY OF AN EXIT
T-WZ-FAB1		FLASHING YELLOW ARROW BOARD

	02-20-20	STANDARD ABBREVIATIONS A THROUGH L	T-SG-3	07-11-17	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
		STANDARD ABBREVIATIONS M THROUGH Z	T-SG-3A	06-27-16	ALTERNATE DETECTION DETAILS
	02-20-20	STANDARD LEGEND			
		STANDARD LEGEND			
	03-01-23	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING			
N -	TRAFFIC (CONTROL			
	07-07-23	MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS			
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	03-01-23	MARKING DETAIL FOR EXPRESSWAY AND FREEWAY INTERCHANGES			
	06-28-19	GORE MARKING DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES			
	06-28-19	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS			
	05-01-23	PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS			
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		PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS			
	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES			
)	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS			
	03-04-21	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS			
2	03-04-21	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS			
ļ	03-04-21	TWO-OUTSIDE LANE CLOSURE FOR INTERSTATES AND EXPRESSWAYS			
3	07-07-23	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS			
)		FREEWAY RESURFACING SIGNING LAYOUT			
3	01-09-24	WORK ZONE IN THE VICINITY OF AN ENTRANCE RAMP			
ļ		WORK ZONE IN THE VICINITY OF AN EXIT			
AB1		FLASHING YELLOW ARROW BOARD			



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND STANDARD TRAFFIC OPERATIONS DRAWINGS

ITEM NO.	DESCRIPTION	UNIT	QUANTIT ^N 791240-F8-00
202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	4040
203-06	WATER	M.G.	7
208-01.05	BROOMING & DEGRASSING SHOULDERS	L.M.	17
303-02	MINERAL AGGREGATE, TYPE B BASE, GRADING (C OR D)	TON	472
307-03.08	ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING B-M2	TON	914
403-02.01	TRACKLESS TACK COAT	TON	230
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	7144
411-01.21	LONGITUDINAL JOINT SEALANT	L.M.	43
411-03.10	ACS MIX(PG76-22) GRADING D	TON	21920
411-12.01	SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	14
415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	28713
712-01	TRAFFIC CONTROL	LS	1
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	616
712-05.01	WARNING LIGHTS (TYPE A)	EACH	54
712-05.03	WARNING LIGHTS (TYPE C)	EACH	562
712-06	SIGNS (CONSTRUCTION)	S.F.	1911
712-06.16	SIGNS (CONSTRUCTION)(REDUCED SPEED WARNING)	EACH	10
712-08.03	ARROW BOARD (TYPE C)	EACH	2
712-08.08	SPEED FEEDBACK SIGN ASSEMBLY	EACH	2
712-08.09	DIGITAL SPEED LIMIT SIGN ASSEMBLY	EACH	9
712-08.12	QUEUE PROTECTION TRUCK	DAY	120
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	4
716-01.22	SNOWPLOWABLE RAISED PAVMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	546
716-01.23	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(2 COLOR)	EACH	2361
716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	2907
716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	1068
716-02.07	PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	4356
716-02.23	PLASTIC PAVEMENT MARKING (12IN BARRIER LINE)	L.F.	6257
716-03.09	PLASTIC WORD PAVEMENT MARKING (EAST)	EACH	4
716-03.10	PLASTIC WORD PAVEMENT MARKING (WEST)	EACH	4
716-04.04	PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.	193
716-04.07	PLASTIC PAVEMENT MARKING (EXIT ONLY ARROW)	EACH	11
716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	58.9
716-10.50	PREFORMED PLASTIC PAVEMENT MARKING (INTERSTATE SHIELD)	EACH	8
716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	58.9
716-12.03	ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE)	L.F.	12686
716-12.05	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.	10641
716-12.09	ENHANCED FLAT LINE THERMO (12IN LINE)	L.F.	249
716-12.10	ENHANCED FLAT LINE THERMO (12IN DOTTED)	L.F.	10560
717-01	MOBILIZATION	LS	1
730-03.20	INSTALL PULL BOX (TYPE A)	EACH	2
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	40
730-14.02	SAW SLOT	L.F.	750
730-14.03	LOOP WIRE	L.F.	3000

	FOOTNOTES
(1)	TO BE USED AS DIRECTED BY THE ENGINEER.
(2)	FOR REPLACEMENT OF QUANTITY REMOVED UNDER ITEM 202-03.01.
(3)	INCLUDES 40 TONS FOR RAMP REPAIR.
(4)	SEE RAMP, ACCELERATION LANE, AND DECELERATION LANE TABULATION ON SHEET 2F FOR
	QUANTITIES ASSOCIATED WITH RAMPS.
(5)	USE CRAFCO PAVEMENT JOINT ADHESIVE #34524. PAVON JOINT ADHESIVE BY PAVON
	CORPORATION OR DENSO TAPE BY DENSO.
(6)	TO BE USED FOR SEALING OF ALL SURFACE LAYER CONSTRUCTION JOINTS ALONG THE TRAVEL
	LANES AND SHOULDERS AS DIRECTED BY THE ENGINEER
(7)	INCLUDES 6,282 TONS FOR RAMP REPAIR.
(8)	INCLUDES 7,077 TONS FOR SHOULDERS, 5,908 TONS FOR RAMP REPAIRS, AND 240 TONS FOR
	VARIOUS LOCATIONS THROUGHOUT THE PROJECT LIMITS.
(9)	THE CONTRACTOR SHALL COMPLY WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR
	ROAD AND BRIDGE CONSTRUCTION REGARDING TEMPORARY TRAFFIC CONTROL AND THE
	CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
(10)	THE CONTRACTOR IS RESPONSIBLE FOR THE STAKING OF CONSTRUCTION SIGNS. IN THE EVENT
	THAT A CONSTRUCTION AND/OR REGULATORY SIGN IS TEMPORARILY DESIGNATED NOT IN USE
	DURING THE CONSTRUCTION PHASE OF A PROJECT, THE CONTRACTOR SHALL CHOOSE A SIGN
	COVERING APPROVED BY THE ENGINEER, TEMPORARY SIGN COVERINGS SHALL NOT BE PAID
	FOR DIRECTLY BUT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO 712-06 SIGNS
	(CONSTRUCTION).
(11)	ITEM TO BE USED ONLY WHEN A REDUCED SPEED LIMIT IS ESTABLISHED WITHIN THE PROJECT
	CONSTRUCTION WORK ZONE LIMITS. ITEM INCLUDES SIGN FACE, SUPPORTS, AND TWO TYPE "B"
	FLASHERS PER THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
	TURNING ON THE TYPE "B" FLASHERS WHEN WORKERS ARE IN THE CONSTRUCTION WORK ZONE
	AND TURNING THEM OFF WHEN WORKERS ARE NO LONGER IN THE CONSTRUCTION WORK ZONE.
(12)	FOR REMOVAL OF EXISTING PAVEMENT MARKERS.
(13)	THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC.
	PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
(14)	ITEM TO BE USED FOR FINAL PAVEMENT MARKING ONLY.

ITEM TO BE USED FOR TEMPORARY PAVEMENT MARKING ONLY.

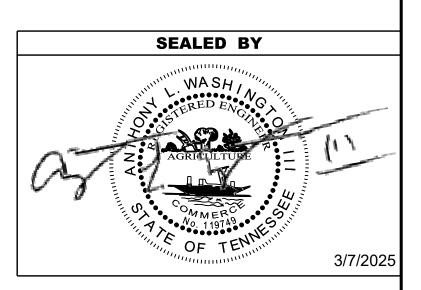
THERE IS NO GUARDRAIL WORK ON THIS PROJECT

THERE ARE NO UTILITY ADJUSTMENTS ON THIS PROJECT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2025	NH-I-240-1(299)	2

REV. 01-22-25: REMOVED ITEMS 730-03.25, 730-05.01 & 730-15.07; ADDED ITEM 730-03.20; REVISED QUANTITY FOR ITEMS 730-12.02, 730-14.02 & 730-14.03; DELETED FOOTNOTE 16.

REV. 03-07-25: REVISED QUANTITY FOR ITEMS 716-01.22, 716-01.23, & 716-01.30



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

TI	RAFFIC CONTROL SIGN TA	BUL	.AT	ION	(RES	URFACIN	NG)
M.U.T.C.D.			SIZE			TOTAL	ITEM NO.
SIGN	LEGEND \ DESCRIPTION	IN	INCH	HES	S.F.	NUMBER	712-06
NO.		L	X	W		REQUIRED	S.F.
G20-1	ROAD WORK NEXT 5 MILES	48"	Х	24"	8	4	32
W20-1	ROAD WORK AHEAD	48"	х	48"	16	10	160
W20-1	ROAD WORK 1 MILE	48"	Х	48"	16	4	64
W20-1	ROAD WORK 1/2 MILE	48"	Х	48"	16	4	64
W20-1	ROAD WORK 1000 FT	48"	Х	48"	16	4	64
W8-11	UNEVEN LANES	48"	Х	48"	16	10	160
W8-15	GROOVED PAVEMENT	48"	Х	48"	16	10	160
W8-15P	MOTORCYCLE (PLAQUE)	30"	Х	24"	5	10	50
G20-2	END ROAD WORK	48"	Х	24"	8	10	80
W21-2	FRESH OIL - PORTABLE	48"	Х	48"	16	4	64
W20-5R	RIGHT LANE CLOSED 1/2 MILE	48"	х	48"	16	4	64
W20-5R	RIGHT LANE CLOSED 1500 FT	48"	х	48"	16	4	64
W4-2R	RIGHT LANE ENDS	48"	Х	48"	16	4	64
W4-1R	MERGE RIGHT ARROW	48"	х	48"	16	2	32
W20-5L	LEFT LANE CLOSED 1/2 MILE	48"	Х	48"	16	4	64
W20-5L	LEFT LANE CLOSED 1500 FT	48"	Х	48"	16	4	64
W20-5R	RIGHT TWO LANES CLOSED 1/2 MILE	48"	Х	48"	16	4	64
W20-5R	RIGHT TWO LANES CLOSED 1500 FT	48"	Х	48"	16	4	64
W20-5L	LEFT TWO LANES CLOSED 1/2 MILE	48"	х	48"	16	4	64

48" x 48"

48" x 48"

48" x 48"

48" x 48"

48" x 36"

72" x 60"

48" x 48"

36" x 30"

16

16

10

10

TOTAL

64

64

32

32

12

30

160

75

1911

THIS CONSTRUCTION SIGNING IS TO BE A MINIMUM. OTHER SIGNS AS DIRECTED BY THE ENGINEER MAY BE REQUIRED DURING DIFFERENT PHASES.

LEFT TWO LANES CLOSED 1500 FT

LEFT LANE ENDS

SHOULDER DROP-OFF

SHOULDER DROP-OFF PLAQUES

YIELD AHEAD

YIELD AHEAD

EXIT OPEN

EXIT

W20-5L

W3-2

R1-2

E5-2

E5-1

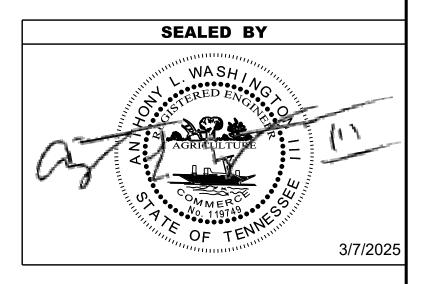
W8-17

W8-17P

			RAMP, AC	CELERATIO	N LANE, AND	DECELERAT	TION LANE T	ABULATION			
MAINLINE	DIRECTION	LOG MILE	ITEM NO. 403-02.01	ITEM NO. 411-03.10	ITEM NO. 415-01.01	ITEM NO. 716-01.23	ITEM NO. 716-01.30	ITEM NO. 716-02.23	ITEM NO. 716-12.02	ITEM NO. 716-12.03	ITEM NO. 716-12.05
MAINLINE	DIRECTION	(L.M.)	TON	TON	TON	EACH	EACH	L.F.	L.M.	L.F.	L.F.
I-240 ENTRANCE RAMP	EB	16.30	3.3	514.0	481.4	50.0	50.0		1.0	1778.0	476.0
I-240 EXIT RAMP	EB	17.32	2.2	343.0	321.6	30.0	30.0		0.7	1117.0	447.0
I-240 ENTRANCE RAMP	EB	17.77	1.0	155.0	145.2	13.0	13.0		0.5	472.0	
I-240 EXIT RAMP	EB	19.16	1.4	226.0	212.1	60.0	60.0	1452.0	2.3		2606.0
I-240 ENTRANCE RAMP	EB	19.39	1.6	253.0	237.2	10.0	10.0		0.6	423.0	
I-240 EXIT RAMP	EB	19.48	6.0	940.0	881.5	25.0	25.0	1007.0	0.8		344.0
I-240 EXIT RAMP	EB	19.71	0.4	60.0	55.8	10.0	10.0		0.5	200.0	85.0
I-240 ENTRANCE RAMP	EB	19.85	0.8	130.0	121.5	10.0	10.0		0.5	429.0	
I-240 ENTRANCE RAMP	EB	19.98				50.0	50.0		2.0	3017.0	336.0
I-240 EXIT RAMP	WB	16.26	3.1	490.0	459.2	50.0	50.0		0.9	1408.0	317.0
I-240 ENTRANCE RAMP	WB	17.00	8.1	1259.8	1181.0	50.0	50.0		2.5	493.0	1921.0
I-240 EXIT RAMP	WB	17.78	5.4	845.0	791.6	25.0	25.0	2179.0	1.7		421.0
I-240 ENTRANCE RAMP	WB	18.85	4.2	650.0	610.1	10.0	10.0		2.2	2977.0	
I-240 ENTRANCE RAMP	WB	19.29	0.5	74.0	69.2	25.0	25.0		0.6	372.0	1305.0
I-240 EXIT RAMP	WB	19.64	2.3	342.0	341.3	40.0	40.0	1012.0	0.8		1629.0
		TOTAL	40.0	6282.0	5908.0	458.0	458.0	5650.0	18.0	12686.0	9887.0

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2025	NH-I-240-1(299)	2F

REV. 03-07-25: REVISED L.M. FOR RAMP, ACCELERATION LANE, AND DECELERATION LANE TABULATION



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES