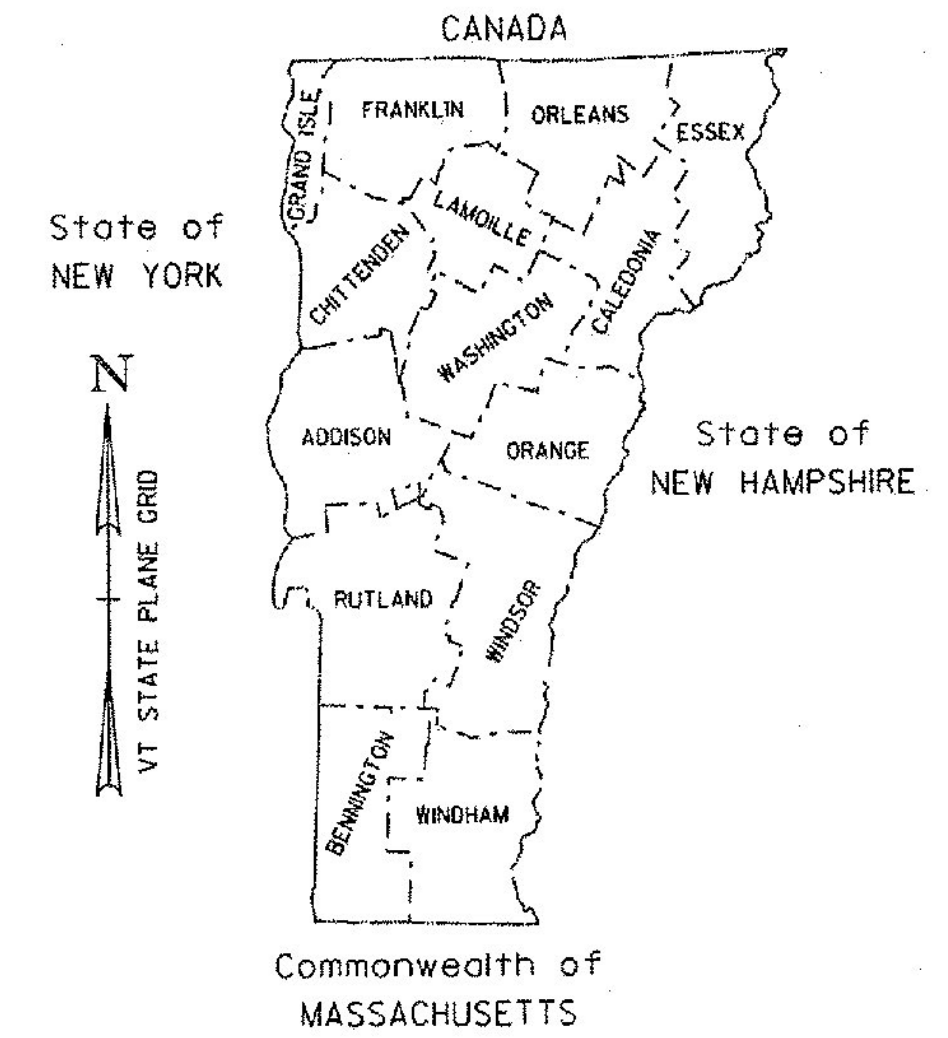


STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT STATEWIDE

COUNTIES OF ADDISON, BENNINGTON, CHITTENDEN, ESSEX, LAMOILLE, ORANGE, WASHINGTON, WINDHAM, AND WINDSOR



LOCATIONS STATEWIDE ON VERMONT ROUTES 9, 11, 12, 100, 102, 108, 232,
244, U.S. ROUTES 2, 5, 7, INTERSTATE 89, AND NEWBURY STATE HIGHWAY.

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL OF
EXISTING WEATHERED GUARDRAIL, THE INSTALLATION OF NEW GALVANIZED
GUARDRAIL, AND OTHER HIGHWAY RELATED ITEMS. WORK ALSO INCLUDES THE
INSTALLATION OF FIVE EXPERIMENTAL MTS END TERMINALS.

ROUTE	TOWN	LF	MILES
NEWBURY ST. HIGHWAY	NEWBURY	475	0.090
US 5	BRATTLEBORO	337.5	0.064
VT 9	WOODFORD	600	0.114
VT 11	PERU	9325	1.766
VT 11	WINHALL	11336	2.147
VT 12	BARNARD	17512.5	3.317
VT 12	BETHEL	2975	0.563
VT 12	POMFRET	3505.5	0.664
VT 12	WOODSTOCK	7425	1.406
VT 100	GRANVILLE	2237.5	0.424
VT 100	MORRISVILLE VILLAGE	800	0.152
VT 102	LEMINGTON	137.5	0.026
VT 108	STOWE	162.5	0.031
VT 232	MARSHFIELD	675	0.128
VT 244	THETFORD	766	0.145
PROJECT TOTAL		58270.0	11.036

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL I	
SURVEYED BY :	N/A
SURVEYED DATE :	N/A
DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

RECORD PLANS	
CONTRACTOR:	F. R. LAFAYETTE, INC. - ESSEX JUNCTION, VT
RESIDENT ENGINEER:	TIM POCKETT
CONSTRUCTION BEGAN:	OCTOBER 13, 2015
CONSTRUCTION COMPLETE:	NOVEMBER 14, 2016
RECORD PLANS BY:	TIM POCKETT & JESSE IVES
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY	RESIDENT ENGINEER
DATE	04/06/17
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found by contacting Vtrans Records Management.	

DIRECTOR OF PROJECT DELIVERY	
APPROVED	DATE 3/20/2015
PROJECT MANAGER : BRUCE MARTIN, P.E.	
PROJECT NAME : STATEWIDE	
PROJECT NUMBER : HES GARD (2)	
SHEET 1 OF 21 SHEETS	

INDEX OF SHEETS

INDEX OF SHEETS

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5-12	ITEM DETAIL SHEETS 1-8
13-20	LOCATION MAPS 1-8
21	TRAFFIC CONTROL SHEET

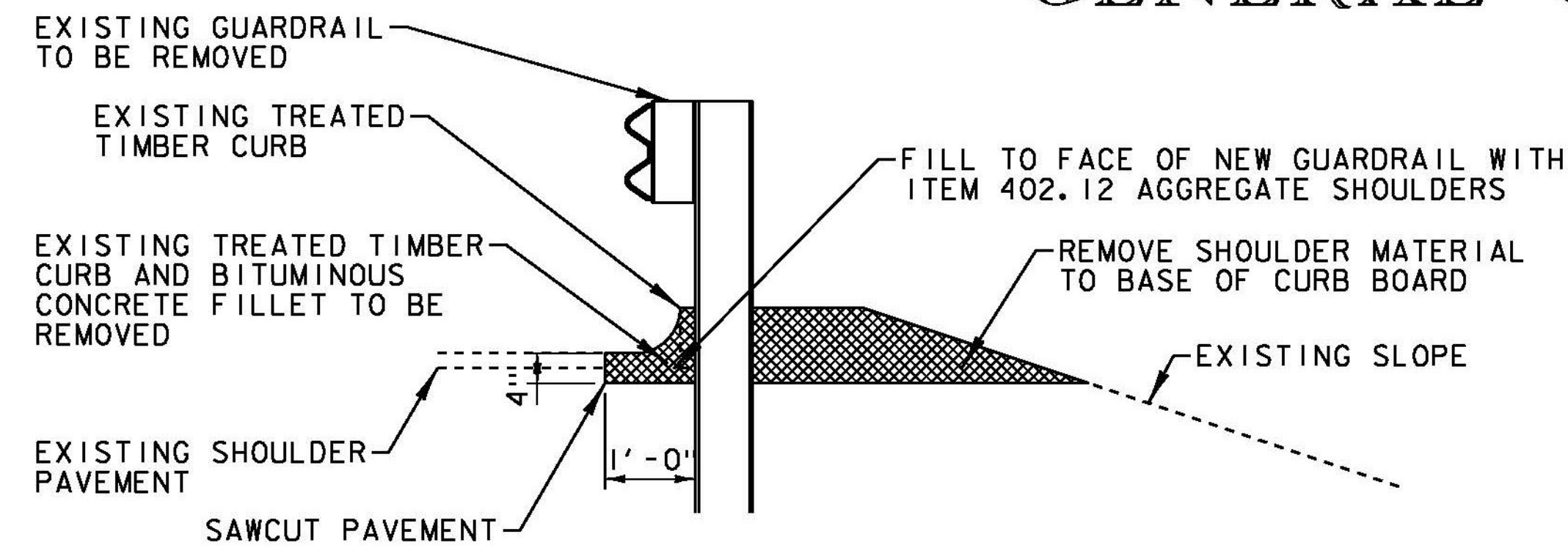
VAOT DESIGN STANDARDS

C-10	CURBING	02-11-2008
G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATORS, TYPICALS)	02-10-2014
G-1BM	BOX BEAM GUARDRAIL	06-13-1997
G-1D	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIUM)	02-10-2014
G-16	STEEL BEAM GUARDRAIL ATTACHMENTS TO EXISTING BRIDGE TERMINAL CONNECTOR FOR STEEL BEAM GUARDRAIL	06-01-1994
G-19	GENERIC PLANS FOR GUARDRAIL END TERMINALS	11-15-2002
S-360A	BRIDGE RAILING, GALVANIZED NETC 2 RAIL	04-23-2012
S-360B	GUARDRAIL APPROACH SECTION, GALVANIZED NETC 2 RAIL	04-23-2012
S-363	GUARDRAIL APPROACH SECTION, GALVANIZED NETC 2 & 4 RAIL	04-23-2012
S-366	LONGSPAN STEEL BEAM GUARDRAIL, GALVANIZED	02-10-2014
S-367A	BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING	05-24-2012
S-367B	GUARDRAIL APPROACH SECTION, GALVANIZED HD STEEL BEAM	05-24-2012
T-1	TRAFFIC CONTROL GENERAL NOTES	08-06-2012
T-11	CONSTRUCTION APPROACH SIGNING DIVIDED HIGHWAY ONE LANE CLOSED	08-06-2012
T-12	TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED	08-06-2012
T-13	TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED	08-06-2012
T-31	CONSTRUCTION SIGN DETAILS	08-06-2012
T-40	DELINEATORS AND MILEPOSTS	01-02-2013
T-45	SQUARE TUBE SIGN POST AND ANCHOR	01-02-2013

PROJECT NAME: STATEWIDE
PROJECT NUMBER: HES GARD(2)

FILE NAME: d13k342frm.dgn	PLOT DATE: 28-APR-2015
PROJECT LEADER: B. MARTIN	DRAWN BY: M. GAMELIN
DESIGNED BY: M. GAMELIN	CHECKED BY: A. KEMPTON
INDEX OF SHEETS	SHEET 2 OF 21

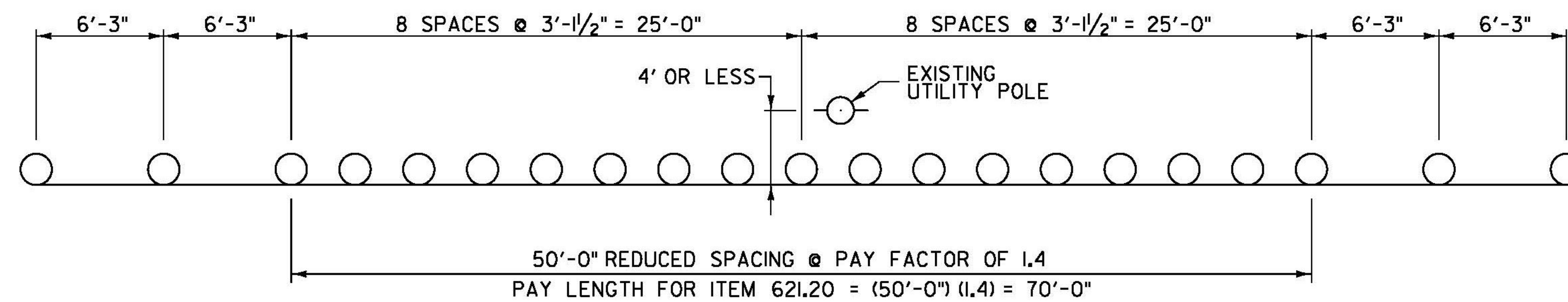
GENERAL GUARDRAIL DETAILS



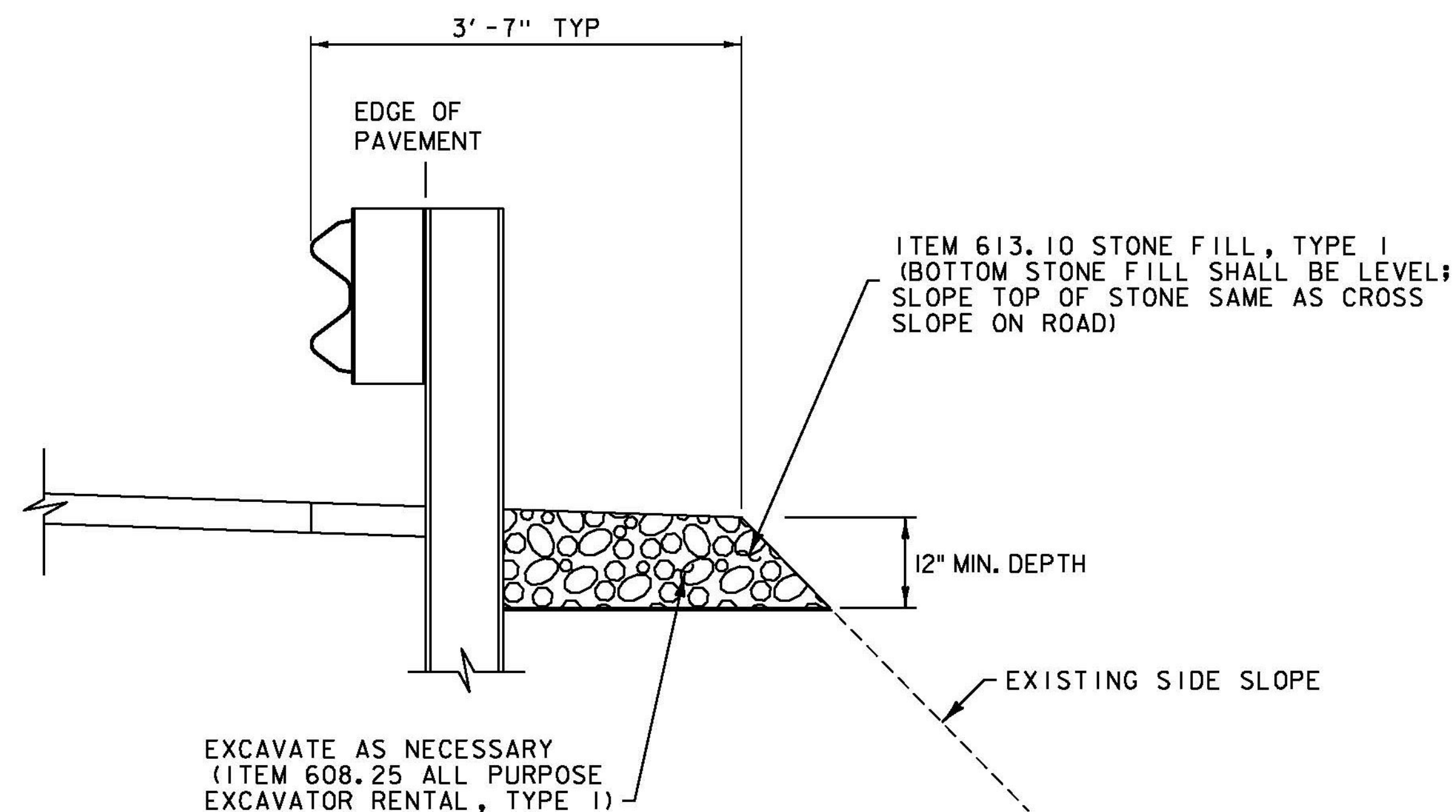
TREATED TIMBER CURB REMOVAL

NOT TO SCALE

NOTE: THE REMOVAL OF TREATED TIMBER CURBING, INCLUDING THE BITUMINOUS CONCRETE FILLET, ANY SAWCUTTING, AND REMOVAL OF SHOULDER MATERIAL TO BASE OF CURB BOARD FROM INSTALLATIONS WHERE EXISTING GUARDRAIL IS REMOVED WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO REMOVAL AND DISPOSAL OF GUARDRAIL.



STEEL BEAM GUARDRAIL POST SPACING AT UTILITY POLE DETAIL



SHOULDER STABILIZATION DETAIL

GENERAL NOTES

1. ALL END TERMINALS FOR GALVANIZED STEEL BEAM GUARDRAIL SHALL BE IN ACCORDANCE WITH STD. G-1D UNLESS OTHERWISE NOTED.
2. THE DELINEATOR AT THE APPROACHING TRAFFIC END OF EACH SEGMENT SHALL BE BLUE. THE DELINEATOR AT THE TRAILING END OF EACH SEGMENT SHALL BE GREEN.
3. THE PROPOSED BRIDGE RAIL REPAIRS ARE APPROXIMATE. THE CONTRACTOR SHOULD ANTICIPATE FIELD FIT WORK. SUCH WORK WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE BRIDGE RAILING REPAIR ITEM.
4. THE REMOVAL AND REPLACEMENT OF ANY BRIDGE RAILING COMPONENTS, INCLUDING ANCHOR BOLTS, GUIDEPOSTS, ETC FROM INSTALLATIONS WHERE EXISTING GUARDRAIL IS REMOVED WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO STEEL BEAM GUARDRAIL, GALVANIZED.
5. ALL BRIDGE RAIL POSTS SHOULD BE REPLACED AT 6' 3" SPACING, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. FOR RUNS INCLUDING BRIDGE RAIL REMOVAL AND INSTALLATION, THE CONTRACTOR SHALL START WORK AT THE BRIDGE AND WORK OUTWARDS TO ENSURE PROPER FIT.
7. THE QUANTITY OF LINEAR FEET OF GUARDRAIL HAS BEEN ROUNDED FOR EACH RUN, TO THE NEAREST 12'-6", TO ALLOW FOR FULL PANELS.
8. ANY DAMAGE TO THE EXISTING PAVEMENT WILL BE REPLACED AT NO COST TO THE AGENCY OF TRANSPORTATION.
9. ANY DAMAGE TO EXISTING CURB, NOT BEING REMOVED, SHALL BE REPLACED AT NO COST TO THE AGENCY OF TRANSPORTATION.
10. STANDARD SHEET S-367B NOTE 1 IS HEREBY MODIFIED AS FOLLOWS: "PAYMENT FOR POST #1 HSS8X4X3/16 OFFSET BLOCKS AND TUBULAR BACKUP RAIL EXTENDING TO POST #1 OFF THE BRIDGE SHALL BE MADE UNDER ITEM 621.737 GUARDRAIL APPROACH SECTION, GALV HD STEEL BEAM."

PROJECT NAME: STATEWIDE
PROJECT NUMBER: HES GARD(2)

FILE NAME: d13K342det.dgn PLOT DATE: 28-APR-2015
PROJECT LEADER: B. MARTIN DRAWN BY: M. GAMELIN
DESIGNED BY: M. GAMELIN CHECKED BY: A. KEMPTON
DETAIL & GENERAL NOTES SHEET SHEET 3 OF 21

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
								ROADWAY	EROSION CONTROL	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								98		98		TON	AGGREGATE SHOULDERS	402.12	0.5			
								864		864		LF	REMOVAL OF EXISTING BRIDGE RAILING	525.10	-			
								684		684		LF	BRIDGE RAILING REPAIR, TYPE II	525.55	-			
								160		160		LF	BRIDGE RAILING REPAIR, TYPE III	525.60	-			
								40		40		HR	POWER GRADER RENTAL	608.15	EST			
								40		40		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	EST			
								40		40		HR	POWER BROOM RENTAL, TYPE I	608.30	EST			
								40		40		HR	TRUCK RENTAL	608.37	EST			
									550	550		CY	STONE FILL, TYPE I	613.10	EST			
								41500		41500		LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20	7			
								14500		14500		LF	STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS	621.205	12.5			
								200		200		LF	STEEL BEAM GUARDRAIL, GALVANIZED/NESTED	621.206	37.5			
								50		50		LF	STEEL BEAM GUARDRAIL, GALVANIZED/NESTED W/8 FEET POSTS	621.207	-			
								2077		2077		LF	BOX BEAM GUARDRAIL	621.30	-			
								7		7		EACH	MANUFACTURED TERMINAL SECTION, FLARED	621.50	-			
								4		4		EACH	TERMINAL CONNECTOR FOR STEEL BEAM GUARDRAIL	621.53	-			
								223		223		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	-			
								38		38		EACH	GUARDRAIL APPROACH SECTION, GALV HD STEEL BEAM	621.737	-			
								56334		56334		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	-			
								40		40		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
								3000		3000		HR	FLAGGERS	630.15	EST			
								1		1		LS	MOBILIZATION/DEMOBILIZATION	635.11	-			
								1		1		LS	TRAFFIC CONTROL	641.10	-			
								30		30		LB	SEED	651.15	EST			
								30		30		LB	FERTILIZER	651.18	EST			
								4		4		TON	AGRICULTURAL LIMESTONE	651.20	EST			
								4		4		TON	HAY MULCH	651.25	EST			
								100		100		SY	TEMPORARY EROSION MATTING	653.20	EST			
								233		233		EACH	DELINEATOR WITH STEEL POST	676.10	-			
								233		233		EACH	REMOVAL OF EXISTING DELINEATOR	676.12	-			
								1		1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
								5		5		EACH	SPECIAL PROVISION (MANUFACTURED TERMINAL SYSTEM, X-LITE TANGENT)	900.620	-			

PROJECT NAME: STATEWIDE
 PROJECT NUMBER: HES GARD(2)
 FILE NAME: d13k342frm.dgn PLOT DATE: 27-MAR-2015
 PROJECT LEADER: B. MARTIN DRAWN BY: M. GAMELIN
 DESIGNED BY: M. GAMELIN CHECKED BY: A. KEMPTON
 QUANTITY SHEET 1 SHEET 4 OF 21

ITEM DETAIL SHEET 1

TOWN	ROUTE	MM	MM	DIR.	402.12 AGGREGATE SHOULDERS	525.10 REMOVAL OF EXISTING BRIDGE RAIL	525.55 BRIDGE RAILING REPAIR, TYPE II	525.60 BRIDGE RAILING REPAIR, TYPE III	613.10 STONE FILL TYPE I	621.20 STEEL BEAM G.R. GALV.	621.205 STEEL BEAM G.R. GALV. W/8 FT POSTS	621.206 STEEL BEAM G.R. GALV./ NESTED	621.207 GALV./ NESTED W/8FT POSTS	621.30 BOX BEAM G.R.	621.50 MANUFAC. TERMINAL SECTION, FLARED	621.53 TERMINAL CONN. FOR S.B. GUARDRAIL	621.60 ANCHOR FOR S.B. GUARDRAIL	621.737 GUARDRAIL APPROACH SECTION, GALV HD	621.80 REMOVE & DISP. OF G.RAIL	REMARKS	REMARKS
					TONS	LF	LF	LF	CY	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF		
NEWBURY	NEWBURY SH	0.412	0.461	EB	1.0 0					262.5						1 0	1		262.5 260	CONNECTS DIRECTLY TO EXISTING BRIDGE RAIL	
NEWBURY	NEWBURY SH	0.459	0.419	WB	4.5 0					212.5						1 0	1		212.5 212	CONNECTS DIRECTLY TO EXISTING BRIDGE RAIL	
BRATTLEBORO	US 5	2.787	2.727	SB						181.5 37.5	212.5 300.0								337.5 338	8 FT POSTS MM = 2.780 - 2.727	⁽²⁾ <u>CLOSE POST SCHEDULE REQUIRED</u>
WOODFORD	VT 9	6.196	6.086	WB	25.83				0 25	512.5 600.0				2					591.5 591	FLARED END TERMINAL	BRIDGE #15A
PERU	VT 11	0.055	0.745	EB	0 51.5				15.68 25	177.0	3152.0 3550.0								3327 3547	PANEL 93.5-98.5 25'(5)=125 LF COMPLETED ON CONTRACT PERU STP SCRP(4)	CONTRACT PERU STP SCRP(4)
PERU	VT 11	0.651	0.482	WB						604.0 862.5									602 851	PANEL 13.5-23.5 25'(10)=250 LF COMPLETED ON CONTRACT PERU STP SCRP(4)	CONTRACT PERU STP SCRP(4)
PERU	VT 11	0.699	0.657	WB					0 25	241.5 325.0	62.5								312.5 321		
PERU	VT 11	0.869	0.976	EB						116.5 50.0	487.5 575.0								621 616.5	8 FT POSTS MM = 0.869 - 0.976	
PERU	VT 11	1.147	1.273	EB						679.0 687.5									679		
PERU	VT 11	1.280	1.380	EB					0 25	529.0 537.5									529 530		
PERU	VT 11	1.380	1.340	WB						229.0 225.0									229 218		
PERU	VT 11	1.760	1.870	EB							591.5 600.0								591.5 592	8 FT POSTS MM = 1.760 - 1.870	
PERU	VT 11	1.932	2.064	EB					25		729.0 750.0								741.5 740	CONTINUES 75' DOWN BROMLEY FARM RD	
PERU	VT 11	1.953	1.940	WB						79.0 62.5	75.0	25.0							154 156	NESTING OF RAIL REQUIRED OVER CULVERT AREA	INSTALL STD. G-1 IN EXISTING LOCATION AND CONFIGURATION
PERU	VT 11	2.066	2.089	EB						154.0 162.5									154 155		
PERU	VT 11	2.167	2.216	EB						254.0 262.5									254	ALL GALVANIZED RUN WITH WEATHERED POSTS	
PERU	VT 11	2.359	2.265	WB						566.5 575.0									566.5 564		
WINHALL	VT 11	0.250	0.082	WB							891.5 887.5								875 880		
WINHALL	VT 11	0.413	0.327	WB					0.67 25	454.0 450.0									450 451		
WINHALL WINHALL	VT 11 VT II	0.574 0.485	0.607 0.500	EB WB	0 1.5					165.0 175.0	25.0								175 171 137.5	SMALL SPAN DETAIL REQUIRED NOT ON PLANS	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
WINHALL	VT 11	0.596	0.519	WB					9.71 25	254.0 412.5	150.0 412.5								400 407		
SHEET TOTAL					58.5 25.83	0	0	0	175 26.06	5487.5 5788	7150.0 6376.5	25	0	0	2	2 0	38 40	0	12538 12198		

PROJECT NAME: STATEWIDE	PLOT DATE: 27-MAR-2015
PROJECT NUMBER: HES GARD(2)	DRAWN BY: M. GAMELIN
FILE NAME: d13k342frm.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 5 OF 21
DESIGNED BY: M. GAMELIN	
ITEM DETAIL SHEET 1	

ITEM DETAIL SHEET 2

TOWN	ROUTE	MM	MM	DIR.	402.12 AGGREGATE SHOULDERS	525.10 REMOVAL OF EXISTING BRIDGE RAIL	525.55 BRIDGE RAILING REPAIR, TYPE II	525.60 BRIDGE RAILING REPAIR, TYPE III	613.10 STONE FILL TYPE I	621.20 STEEL BEAM G.R. GALV.	621.205 STEEL BEAM G.R. GALV. W/8 FT POSTS	621.206 STEEL BEAM G.R. GALV./ NESTED	621.207 GALV./ NESTED W/8FT POSTS	621.30 BOX BEAM G.R.	621.50 MANUFAC. TERMINAL SECTION, FLARED	621.53 TERMINAL CONN. FOR S.B. GUARDRAIL	621.60 ANCHOR FOR S.B. GUARDRAIL	621.737 GUARDRAIL APPROACH SECTION, GALV HD	621.80 REMOVE & DISP. OF G. RAIL	REMARKS	REMARKS
					TONS	LF	LF	LF	CY	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF		
WINHALL	VT 11	0.738	0.821	EB						416.5 425.0							2		425		
WINHALL	VT 11	0.804	0.726	WB	6.93 - 6.50 6.88 -	4/27 4/29				391.5 400.0							2		387.5 389		
WINHALL	VT 11	1.023	1.059	EB				0.52		191.5 187.5							2		175.0 179		
WINHALL	VT 11	1.449	1.369	WB						479.0 525.0	50.0						2		512.5 517		
WINHALL	VT 11	1.456	1.669	EB	0 17.50					254.0 112.5	650.0 800.0						2		900.0 906	8 FT POSTS MM = 1.481- 1.669	
WINHALL	VT 11	1.572	1.458	WB						254.0 275.0	275.0 250.0						2		512.5 516	8 FT POSTS MM = 1.538 - 1.483 & CLOSE POST SCHEDULE	
WINHALL WINHALL	VT 11 VT 11	1.659 2.000	1.577 2.024	WB WB						279.0 262.5 129.0	100.0						2 2		362.5 366 125.0	8 FT POSTS MM = 1.659 - 1.639 & CLOSE POST SCHEDULE	
WINHALL	VT 11	2.111	2.457	EB			4/26 - 4/27 - 4/28 - 5/2 -	0.88 1.00 1.70 2.53		1816.5 1800.0	150.0 175.0						2		1962.5 1965	8 FT POSTS MM = 2.424 - 2.457	
WINHALL	VT 11	2.506	2.540	EB						204.0 200.0							2		187.5 192		
WINHALL	VT 11	2.625	2.517	WB	6.72 -	5/3			9.32	479.0 450.0	150.0 175.0						2		612.5 613	8 FT POSTS MM = 2.547 - 2.517	
WINHALL	VT 11	2.932	2.791	WB						791.5 787.5							2		775.0 779		
WINHALL	VT 11	2.978	3.019	EB				3.43			129.0 225.0		100				2		225.0 226	8 FT POSTS MM = 2.978 - 3.019 & LARGE SPAN DETAIL	
WINHALL	VT 11	3.006	2.971	WB				5.96		204.0 200.0							2		200		
WINHALL	VT 11	3.185	3.130	WB						304.0 300.0							2		287.5 290		
WINHALL	VT 11	3.342	3.545	EB	4.13 - 1.67 -	4/29 5/3			6.56 25	1004.0	75.0			0 1081			2		1079.0 1081	BOX BEAM INSTALLED TO ACCOMMODATE SNOW REMOVAL	BOX BEAM NOT UTILIZED DECISION BETWEEN DESIGNER & BOB LEACH
WINHALL	VT 11	3.510	3.466	WB						229.0				0 230			2		229.0 230	BOX BEAM INSTALLED TO ACCOMMODATE SNOW REMOVAL	BOX BEAM NOT UTILIZED DECISION BETWEEN DESIGNER & BOB LEACH
WINHALL	VT 11	3.575	3.609	EB	2.77 -	4/29		1.04		154.0 150.0		25.0 37.5					2		179		
WINHALL	VT 11	3.616	3.568	WB						241.5 262.5		12.5					2		254.0 253		
BARNARD	VT 12	0.055	0.138	NB	1.60 -	5/12			2.78 25	429.0 275.0	0 150.0						2		425	8 FT POSTS MM = 0.057 - 0.085	
BARNARD	VT 12	1.014	0.940	SB				0 25		404.0 400.0							2		400		
BARNARD	VT 12	1.190	1.243	NB						274.0 150.0	0 137.5	25.0					2		287.5 284	8 FT POSTS MM = 1.196 - 1.203, 1.226 - 1.242	
SHEET TOTAL					24.00	0	0	0	75	7162.5	2012.5	37.5	0	1311	0	0	38	0	10415		
					30.70				39.78	8929.0	1579.0	62.5	100	0			44		10503.5		

PROJECT NAME: STATEWIDE	PLOT DATE: 27-MAR-2015
PROJECT NUMBER: HES GARD(2)	DRAWN BY: M. GAMELIN
FILE NAME: d13k342frm.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 6 OF 21
DESIGNED BY: M. GAMELIN	
ITEM DETAIL SHEET 2	

ITEM DETAIL SHEET 3

TOWN	ROUTE	MM	MM	DIR.	402.12 AGGREGATE SHOULDERS	525.10 REMOVAL OF EXISTING BRIDGE RAIL	525.55 BRIDGE RAILING REPAIR, TYPE II	525.60 BRIDGE RAILING REPAIR, TYPE III	613.10 STONE FILL TYPE I	621.20 STEEL BEAM G.R. GALV.	621.205 STEEL BEAM G.R. GALV. W/8 FT POSTS	621.206 STEEL BEAM G.R. GALV./ NESTED	621.207 GALV./ NESTED W/8FT POSTS	621.30 BOX BEAM G.R.	621.50 MANUFAC. TERMINAL SECTION, FLARED	621.53 TERMINAL CONN. FOR S.B. GUARDRAIL	621.60 ANCHOR FOR S.B. GUARDRAIL	621.737 GUARDRAIL APPROACH SECTION, GALV HD	621.80 REMOVE & DISP. OF G.RAIL	REMARKS	REMARKS
					TONS	LF	LF	LF	CY	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF		
BARNARD	VT 12	0.090	0.000	SB						454.0 362.5	75.0 175.0						2		529	CULVERT #23 (CGMPP), END TREATMENT IN POMFRET	INSTALL RAIL PER STD. G-1, AVOID EXISTING CULVERT
BARNARD	VT 12	1.202	1.168	SB						181.5 187.5		25.0					2		187.5 187	SMALL SPAN DETAIL REQUIRED	
BARNARD	VT 12	1.288	1.308	NB		0 10.0				91.5 87.5			25.0	0 1			2		112.5 113	NESTING OF RAIL REQUIRED BRIDGE # 23 (R.C. BOX)	USE LONGSPAN STANDARD, ADD FULL APPROACH AND MTS TO APPROACH #2
BARNARD	VT 12	1.312	1.291	SB		0 10.0				91.5 87.5			25.0				2		112.5 113	NESTING OF RAIL REQUIRED BRIDGE # 23 (R.C. BOX)	USE LONGSPAN STANDARD, ADD FULL APPROACH AND MTS TO APPROACH #3
BARNARD	VT 12	1.707	1.641	SB						116.5 175.0	250.0 200.0						2		366.5 364	8 FT POSTS MM = 1.680 - 1.645	
BARNARD	VT 12	2.184	1.735	SB					15.28 25	2466.5 2462.5							2		2466.5 2462		
BARNARD	VT 12	2.303	2.222	SB						366.5 362.5							2		362.5 361		
BARNARD	VT 12	2.458	2.626	NB						504.0 350.0	250.0 400.0						2		750.0 737	8 FT POSTS MM = 2.537 - 2.626	
BARNARD	VT 12	2.628	2.353	SB					56.71	1116.5 250.0	100.0 975.0						2		1212.5 1218	8 FT POSTS MM = 2.611 - 2.428	
BARNARD	VT 12	2.707	2.764	NB						104.0 50.0	150.0 200.0						2		250.0 252	8 FT POSTS MM = 2.715 - 2.760	ALL GALVANIZED RUN WITH WEATHERED POSTS
BARNARD	VT 12	2.770	2.661	SB					0 25	491.5 425.0	0 62.5						2		491.5 484	8 FT POSTS MM = 2.766 - 2.754	
BARNARD	VT 12	3.036	3.128	NB					4.63 50	529.0 525.0							2		525.0 522		
BARNARD	VT 12	4.775	4.789	NB						66.5 75.0							2		62.5 66		
BARNARD	VT 12	4.775	4.789	NB						66.5 62.5							2		56.5 57	REPLACE 62' 6" WEATHERED GUARDRAIL ON LEFT SIDE OF TH-3 NORTH RD.	
BARNARD	VT 12	4.775	4.789	NB						54.0 50.0							2		50.0 51	REPLACE 50' WEATHERED GUARDRAIL ON RIGHT SIDE OF TH-3 NORTH RD	
BARNARD	VT 12	4.779	4.810	NB						179.0 212.5		25.0					2		200.0 206	REPLACE 50' WEATHERED GUARDRAIL ON RIGHT SIDE OF TH-3 NORTH RD	
BARNARD	VT 12	5.101	5.152	NB						191.5 175.0	187.5 212.5						2		375.0 378	8 FT POSTS MM = 5.112 - 5.152	
BARNARD	VT 12	5.163	5.190	NB						129.0 125.0	100.0 112.5						2		225.0 233	8 FT POSTS MM = 5.166 - 5.186	
BARNARD	VT 12	5.174	5.152	SB						129.0 137.5							2		125.0 129	LARGE SPAN DETAIL REQUIRED BRIDGE # 23B	
BARNARD	VT 12	5.412	5.433	NB						79.0 125.0		37.5					2		112.5 115	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT	
BARNARD	VT 12	5.447	5.423	SB						91.5 125.0		37.5					2		125	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT	
SHEET TOTAL					0	20 0	0	0	100	6412.5 7499.0	2337.5 1112.5	0.0 125.0	50	0	1 0	0	42	0	8702 8697.5		

PROJECT NAME: STATEWIDE	PLOT DATE: 27-MAR-2015
PROJECT NUMBER: HES GARD(2)	DRAWN BY: M. GAMELIN
FILE NAME: d13k342frm.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 7 OF 21
DESIGNED BY: M. GAMELIN	
ITEM DETAIL SHEET 3	

ITEM DETAIL SHEET 4

TOWN	ROUTE	MM	MM	DIR.	402.12 AGGREGATE SHOULDERS	525.10 REMOVAL OF EXISTING BRIDGE RAIL	525.55 BRIDGE RAILING REPAIR, TYPE II	525.60 BRIDGE RAILING REPAIR, TYPE III	613.10 STONE FILL TYPE I	621.20 STEEL BEAM G.R. GALV.	621.205 STEEL BEAM G.R. GALV. W/8 FT POSTS	621.206 STEEL BEAM G.R. GALV./ NESTED	621.207 GALV./ NESTED W/8FT POSTS	621.30 BOX BEAM G.R.	621.50 MANUFAC. TERMINAL SECTION, FLARED	621.53 TERMINAL CONN. FOR S.B. GUARDRAIL	621.60 ANCHOR FOR S.B. GUARDRAIL	621.737 GUARDRAIL APPROACH SECTION, GALV HD	621.80 REMOVE & DISP. OF G.RAIL	REMARKS	REMARKS
					TONS	LF	LF	LF	CY	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF		
BARNARD	VT 12	5.717	5.838	NB						354.0 412.5	262.5 225.0		12.5				2		629	8 FT POSTS MM = 5.740 - 5.781	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
BARNARD	VT 12	5.744	5.707	SB						179.0 212.5		25					2		200.0 203	BRIDGE #24 (R.C. BOX)	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
BARNARD	VT 12	6.336	6.420	NB					6.41 25	341.5 287.5	175.0 237.5						2		512.5 514		
BARNARD	VT 12	6.495	6.565	NB						366.5 362.5							2		362.5 361		
BARNARD	VT 12	7.243	7.349	NB						579.0 587.5							2		579.0 578		
BARNARD	VT 12	7.424	7.450	NB						170.0 162.5							2		150.0 152	CLOSE POST SCHEDULE REQUIRED	ALL GALVANIZED RUN WITH WEATHERED POSTS
BARNARD	VT 12	7.446	7.433	SB						66.5 100.0		25					2		87.5 95	BRIDGE #26 (CGMP)	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
BARNARD	VT 12	7.453	7.773	NB						1050.0 1137.5	675.0 587.5						2		1725.0 1729	8 FT POSTS MM = 7.550 - 7.659, 7.463 - 7.492	ALL GALVANIZED RUN WITH WEATHERED POSTS
BARNARD	VT 12	8.493	8.632	NB						491.5 437.5	200.0 237.5						2		691.5 668	8 FT POSTS MM = 8.496 - 8.540	
BARNARD	VT 12	8.903	8.968	NB		96.83 98.0	96.83 98.0			229.0 237.5							2	2	250.0 367	BRIDGE # 27 (ROLLED BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
BARNARD	VT 12	9.066	8.919	SB		146.5 98.0	96.50 98.0	50.0		500.0 850.0 302.0	10/22 5/24 & 7/7						2	4 -2	216.0 942 500.0	BRIDGE # 27 (ROLLED BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
BARNARD	VT 12	9.225	9.078	SB		50.0		50.0	10/21	1027.0 1162.5 75.0	6/24						2	2	1152.0 1138	BRIDGE ON TH-80	REPLACE EXISITING BRIDGE RAIL AS IS, USE STANDARD S-367B FOR APPROACH RAIL LAYOUT
BARNARD	VT 12	9.348	9.264	SB		50.0		50.0		404.0 362.5	4/21						2	0 -2	400.0 346	BRIDGE ON TH-80	REPLACE EXISITING BRIDGE RAIL AS IS, USE STANDARD S-367B FOR APPROACH RAIL LAYOUT
BETHEL	VT 12	0.357	0.265	SB	0 8.0				10.42	304.0 337.5	187.5 162.5						2		487.5 488	8 FT POSTS MM = 0.317 - 0.287	
BETHEL	VT 12	0.524	0.435	SB						291.5 237.5	175.0 237.5						2		462.5 464	8 FT POSTS MM = 0.490 - 0.447	ALL GALVANIZED RUN WITH WEATHERED POSTS
BETHEL	VT 12	0.760	0.851	NB						54.0 250.0	425.0 225.0						2		475	8 FT POSTS MM = 0.764 - 0.805	ALL GALVANIZED RUN WITH WEATHERED POSTS EXCEPT END PANEL
BETHEL	VT 12	0.878	0.750	SB						66.5 337.5	625.0 350.0						2		687.5 677	8 FT POSTS MM = 0.819 - 0.754	
BETHEL	VT 12	1.125	1.284	NB						841.5 837.5							2		841.5 838	ALL GALVANIZED RUN WITH WEATHERED POSTS EXCEPT FIRST PANEL	
POMFRET	VT 12	0.097	0.064	SB					2.22	179.0 187.5							2		175.0 176		
POMFRET	VT 12	0.237	0.231	SB		30.0		37.5 30.0		29.0 90.0							1	1 -2	57.5 60	REPLACE EXISTING BRIDGE RAIL SYSTEM IN KIND USING APPROVED MATERIALS. USE APPROACH RAIL STANDARD S-367B FOR APPROACH RAIL LAYOUT FOR WINGWALLS 1 & 4. WINGWALL 2 HAS A CURVE BEGINNING AT THE FIRST POST ON THE BRIDGE AND EXTENDING ON VT12. WINGWALL 3 DOES NOT CURRENTLY MEET ANY STANDARD, MATCH EXISTING.	
POMFRET	VT 12	0.265	0.242	SB		30.0		43.5 30.0		29.0 203.0 87.5							1	2	170.0 173		
SHEET TOTAL					8.0 0	-356 353.33	-196 193.33	-160 181.0	25 19.05	8793.0 8017.0	2262.5 2725.0	0 50.0	0 12.5	0	0	0	39 40.0	12 11.0	11073 10811.5		

THIS RUN HAS BOTH BRG #27 AND BRIDGE ON TH 80 IN IT

PROJECT NAME: STATEWIDE	PLOT DATE: 27-MAR-2015
PROJECT NUMBER: HES GARD(2)	DRAWN BY: M. GAMELIN
FILE NAME: d13k342frm.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 8 OF 21
DESIGNED BY: M. GAMELIN	
ITEM DETAIL SHEET 4	

ITEM DETAIL SHEET 5

TOWN	ROUTE	MM	MM	DIR.	402.12 AGGREGATE SHOULDERS	525.10 REMOVAL OF EXISTING BRIDGE RAIL	525.55 BRIDGE RAILING REPAIR, TYPE II	525.60 BRIDGE RAILING REPAIR, TYPE III	613.10 STONE FILL TYPE I	621.20 STEEL BEAM G.R. GALV.	621.205 STEEL BEAM G.R. GALV. W/8 FT POSTS	621.206 STEEL BEAM G.R. GALV./ NESTED	621.207 GALV./ BOX BEAM G.R. NESTED W/8FT POSTS	621.30 MANUFAC. TERMINAL SECTION, FLARED	621.53 TERMINAL CONN. FOR S.B. GUARDRAIL	621.60 ANCHOR FOR S.B. GUARDRAIL	621.737 GUARDRAIL APPROACH SECTION, GALV HD	621.80 REMOVE & DISP. OF G.RAIL	REMARKS	REMARKS	
					TONS	LF	LF	LF	CY	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF		
POMFRET	VT 12	0.664	0.369	SB						1591.5 1587.5						2		1587.5 1581			
POMFRET	VT 12	1.118	0.995	SB						666.5 662.5						2		654.0 656			
POMFRET	VT 12	1.183	1.138	SB						254.0 250.0						2		250.0 249			
POMFRET	VT 12	1.294	1.234	SB						235.25 225.0	106.25 112.5					2		329.0 326		8 FT POSTS MM = 1.276 - 1.256	
POMFRET	VT 12	1.341	1.375	NB						191.5 187.5						2		187.5 190		BRIDGE # 21 (CGMPP), INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT	END TREATMENT IN BARNARD
WOODSTOCK	VT 12	1.531	1.584	NB		94.0	93.5 94.0			104.0 162.5						2	2	154.0 157		BRIDGE # 16 (ROLLED BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
WOODSTOCK	VT 12	1.586	1.539	SB		94.0	94.0			66.5 125.0						2	2	116.5 121		BRIDGE # 16 (ROLLED BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
WOODSTOCK	VT 12	1.881	1.663	SB				0 25		1141.5 1125.0	112.5 137.5					2		1250.0 1253		8 FT POSTS MM = 1.686 - 1.663	
WOODSTOCK	VT 12	2.175	2.230	NB						179.0 300.0	125.0					2		287.5 290			
WOODSTOCK	VT 12	2.266	2.119	SB	0 7.0					0 712.5	0 50.0			DONE BY OTHERS		0 2		0 751		8 FT POSTS MM = 2.240 - 2.232	
WOODSTOCK	VT 12	2.740	2.664	SB						429.0 425.0						2		412.5 414			
WOODSTOCK	VT 12	3.079	2.750	SB		99.0	103.0 99.0			57.5 1500.0 1302.0	250.0 162.5					1 2 1	2	1552.0 1639 53.5		8 FT POSTS MM = 2.793 - 2.764, BRIDGE #17 (ROLLED BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
WOODSTOCK	VT 12	3.048	3.051	NB		99.0	100.0 99.0			41.5 50.0						1	2	37.5 39		8 FT POSTS MM = 2.793 - 2.764, BRIDGE #17 (ROLLED BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
WOODSTOCK	VT 12	3.112	3.132	NB						79.0 112.5				25.0		2		100.0 104		CULVERT #18 (CGMP)	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
WOODSTOCK	VT 12	3.160	3.115	SB						216.5 237.5				25.0		2		225.0 228		CULVERT #18 (CGMP)	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
WOODSTOCK	VT 12	3.251	3.258	NB		50.0 51.0	55.1 51.0			41.5 62.5						1	2	62.5 40		BRIDGE #19 (CONCRETE T-BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
WOODSTOCK	VT 12	3.284	3.253	SB		50.0 51.0	50.0 51.0			54.0 112.5						2	2	112.5 114		BRIDGE #19 (CONCRETE T-BEAM)	REPLACE W-BEAM WITH APPROVED MATERIALS, USE S-367B APPROACH
WOODSTOCK	VT 12	3.270	3.273	NB						0 12.5						0 1		0 13		BRIDGE APPROACH SCHEDULE II	
WOODSTOCK	VT 12	3.509	3.536	NB						75.0 150.0						1		137.5 139		BRIDGE # 20 (WELDED GIRDER)	LEAVE THE TWO RAIL BOX BEAM AS IS, USE S-367B APPROACH
WOODSTOCK	VT 12	3.536	3.503	SB						112.5 175.0						1		175.0 174		BRIDGE # 20 (WELDED GIRDER)	LEAVE THE TWO RAIL BOX BEAM AS IS, USE S-367B APPROACH
WOODSTOCK	VT 12	3.551	3.563	NB						39.5 75.0						1	1	62.5 64		BRIDGE # 20 (WELDED GIRDER)	LEAVE THE TWO RAIL BOX BEAM AS IS, USE S-367B APPROACH
SHEET TOTAL					-7.0 0	488 486	488 495.6	0	25 0	8250.0 6877.75	462.5 593.75	0.0 50.0	0 0	2	0	36 31	15	8542 7746.5			

PROJECT NAME: STATEWIDE	
PROJECT NUMBER: HES GARD(2)	
FILE NAME: d13k342frm.dgn	PLOT DATE: 27-MAR-2015
PROJECT LEADER: B. MARTIN	DRAWN BY: M. GAMELIN
DESIGNED BY: M. GAMELIN	CHECKED BY: A. KEMPTON
ITEM DETAIL SHEET 5	SHEET 9 OF 21

ITEM DETAIL SHEET 6

TOWN	ROUTE	MM	MM	DIR.	402.12 AGGREGATE SHOULDERS	525.10 REMOVAL OF EXISTING BRIDGE RAIL	525.55 BRIDGE RAILING REPAIR, TYPE II	525.60 BRIDGE RAILING REPAIR, TYPE III	613.10 STONE FILL TYPE I	621.20 STEEL BEAM G.R.	621.205 STEEL BEAM G.R. GALV. W/8 FT POSTS	621.206 STEEL BEAM G.R. GALV./ NESTED	621.207 GALV./ NESTED W/8FT POSTS	621.30 BOX BEAM G.R.	621.50 MANUFAC. TERMINAL SECTION, FLARED	621.53 TERMINAL CONN. FOR S.B. GUARDRAIL	621.60 ANCHOR FOR S.B. GUARDRAIL	621.737 GUARDRAIL APPROACH SECTION, GALV HD	621.80 REMOVE & DISP. OF G.RAIL	REMARKS	REMARKS
					TONS	LF	LF	LF	CY	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF		
WOODSTOCK	VT 12	3.691	3.551	SB						687.5 750.0					1	0 -1		1	743.75 744	BRIDGE # 20 (WELDED GIRDER)	LEAVE THE TWO RAIL BOX BEAM AS IS, USE S-367B APPROACH
WOODSTOCK	VT 12	3.841	3.781	SB						329.0 337.5									325.0 331		
WOODSTOCK	VT 12	3.894	3.845	SB						266.5 275.0									262.5 267		
WOODSTOCK	VT 12	3.968	3.982	NB						66.5 87.5		25.0							75.0 -80	BRIDGE # 20A (CGMP CATTLE PASS)	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
WOODSTOCK	VT 12	4.007	3.955	SB						279.0 287.5									275.0 278	BRIDGE # 20A (CGMP CATTLE PASS)	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
GRANVILLE	VT 100	3.141	3.230	NB						479.0 475.0									475.0 476		
GRANVILLE	VT 100	4.009	3.959	SB						166.5 250.0		0 -25.0							212.5 265	BRIDGE # 24 (CONCRETE SLAB)	LEAVE THE TWO RAIL BOX BEAM AS IS, USE S-367B APPROACH WITH R4B CONNECTION
GRANVILLE	VT 100	3.954	3.982	NB				0 -25	79.0 137.5		0 -25.0								125.0 155	BRIDGE # 24 (CONCRETE SLAB)	LEAVE THE TWO RAIL BOX BEAM AS IS, USE S-367B APPROACH WITH R4B CONNECTION
GRANVILLE	VT 100	8.517	8.266	SB				3.10 -25	1302.0 1325.0		25.0							0 -2	12.5 -0	CONSTRUCTION OF NEW RUN TO PROTECT 42" CULVERT AT MM = 8.325, USE STANDARD G-1	TIE INTO EXISTING RUN AT MM = 8.266
MORRISVILLE VILLAGE	VT 100	5.999	5.848	NB				6.48 -25	819.0 800.0										796	CLOSE POST SCHEDULE REQUIRED	CLOSE POST SCHEDULE REQUIRED
LEMINGTON	VT 102	2.123	2.131	NB					75.0	77.0					0 ±				64.5 -64	REPLACE USING EXISTING POST SPACING AND LAYOUT	TERMINAL CONNECTOR (COVERED BRIDGE)
LEMINGTON	VT 102	2.135	2.139	NB					62.5	64.5					0 ±				52	REPLACE USING EXISTING POST SPACING AND LAYOUT	TERMINAL CONNECTOR (COVERED BRIDGE)
STOWE	VT 108	7.550	7.517	SB						166.5 162.5									158	8 FT POSTS	
MARSHFIELD	VT 232	3.243	3.260	NB				0 -50	104.0 100.0										87.5 -89	CULVERT #4	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
MARSHFIELD	VT 232	3.261	3.243	SB					79.0 100.0		25.0								87.5 -89	CULVERT #4	INSTALL RAIL PER STD. G-1; AVOID EXISTING CULVERT
MARSHFIELD	VT 232	4.341	4.354	NB				1.33 -25	54.0 62.5	0 -50.0	34.1 -25.0								125.0 127	8 FT POSTS MM = 4.345 - 4.350 & 4.335 - 4.340	BRIDGE #5 (ROLLED BEAM), CLOSE POST REQUIRED, USE S-367B APPROACH
MARSHFIELD	VT 232	4.355	4.293	SB				0.89	141.5 262.5	100.0 50.0	37.5 25.0								325.0 327	8 FT POSTS MM = 4.350 - 4.345 & 4.340 - 4.335	BRIDGE #5 (ROLLED BEAM), USE S-367B APPROACH
THETFORD	VT 244	1.028	1.068	EB										290.0 210	0 ±				210	INSTALL FLARED BEGIN TREATMENT WITH STANDARD OFFSET	
THETFORD	VT 244	1.069	1.176	EB										448.0 556					410.0 556	8 FT POSTS MM = 1.111 - 1.157	
SHEET TOTAL					0	0	0	0	150	5388	262.5	100	0	766	2	2	30	11	5064		
									11.8	4852.5	408.0	146.6		738.0	1	0	29	9	4821.75		

PROJECT NAME: STATEWIDE	PLOT DATE: 27-MAR-2015
PROJECT NUMBER: HES GARD(2)	DRAWN BY: M. GAMELIN
FILE NAME: d13k342frm.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 10 OF 21
DESIGNED BY: M. GAMELIN	
ITEM DETAIL SHEET 6	

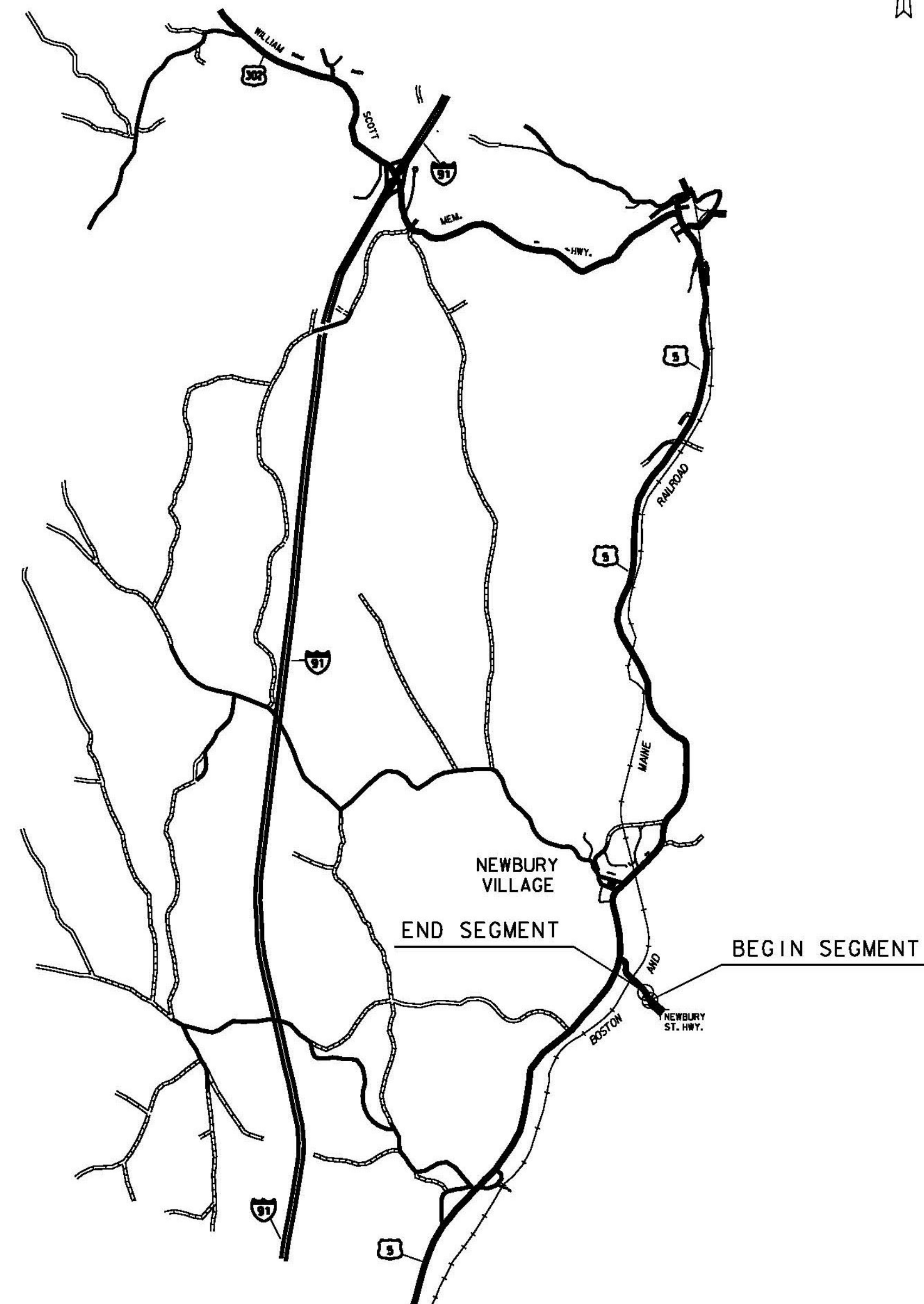
ITEM DETAIL SUMMARY

	402.12 AGGREGATE SHOULDERS	525.10 REMOVAL OF EXISTING BRIDGE RAIL	525.55 BRIDGE RAILING REPAIR, TYPE II	525.60 BRIDGE RAILING REPAIR, TYPE III	613.10 STONE FILL TYPE I	621.20 STEEL BEAM G.RAIL GALV.	621.205 STEEL BEAM G.R. GALV. W/8 FT POSTS	621.206 STEEL BEAM G.R. GALV./ NESTED	621.207 GALV./ W/8FT POSTS	621.30 BOX BEAM G.R.	621.50 MANUFAC. TERMINAL SECTION, FLARED	621.53 TERMINAL CONN. FOR S.B. GUARDRAIL	621.60 ANCHOR FOR S.B. GUARDRAIL	621.737 GUARDRAIL APPROACH SECTION, GALV HD	621.80 REMOVE & DISP. OF G.RAIL	900.620 SPECIAL PROVISION (MANUFACTURED TERMINAL SECTION, X-LITE TANGENT)	REMARKS
	TONS	LF	LF	LF	CY	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF	EACH	
SHEET 1 TOTAL	25.83 58.5	0.0	0.0	0	26.06 175	5788 5487.5	6376.5 7150.0	25.0	0.0	0.0	2	0 2	40 38	0	12198.0 12538	0	
SHEET 2 TOTAL	30.70 24.0	0.0	0.0	0	39.78 75	8929 7162.5	1579.0 2012.5	62.5 37.5	100.0 0.0	0.0 1311.0	0	0	44 38	0	10503.5 10415	0	
SHEET 3 TOTAL	0.0	0.0 20.0	0.0	0	76.62 100	7499 6412.5	112.5 2337.5	12.5 0.0	50.0	0.0	0 1	0	40 42	0	8697.5 8702	0	
SHEET 4 TOTAL	0.0 8.0	353.33 356.0	193.33 196.0	181 160	19.05 25	8017 8793.0	2725.0 2262.5	50.0 0.0	12.5 0.0	0.0	0	0	40 39	11 12	10811.5 11073	0	
SHEET 5 TOTAL	0.0 7.0	486.00 488.0	495.60 488.0	0	0.0 25	5877.75 8250.0	593.75 462.5	50.0 0.0	0.0	0.0	2	0	31 36	15	7746.5 8542	0	
SHEET 6 TOTAL	0.0	0.0	0.0	0	11.80 150	4852.5 5387.5	408.0 262.5	146.6 100.0	0.0	738.0 766.0	1 2	0 2	29 30	9 11	4821.75 5064	0	
SHEET 7 TOTAL	0.0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	5	
TOWN	ROUTE	START MM	END MM	DIR.													
GRANVILLE	VT 100	8.930	9.260	NB		1854.0							2		1850.0		
GRANVILLE	VT 100	8.590	8.610	SB		129.0							2		125.0		
GRANVILLE	VT 100	6.000	6.405	NB		612.5	1475.0		50.0				1		2137.5		
GRANVILLE	VT 100	4.215	4.435	SB		316.5	825.0						2	2	1191.5		
GRANVILLE	VT 100	4.395	4.456	NB		491.5	337.5						2	2	879.0		
GRANVILLE	VT 100	2.857	2.866	SB		27.0							1	1	52.0		
GRANVILLE	VT 100	2.800	2.849	SB		239.5							1	1	264.5		
GRANVILLE	VT 100	8.580	8.825	NB		1016.5	325.0	25.0					2		1362.5		
PROJECT TOTALS	97.5 56.5	864 839.0	684 688.0	160 181.0	550 173.3	41493.0 46649.8	14487.5 15757.3	162.5 484.1	50.0 212.5	2077.0 738.0	7 5	4 0	223 237	38 41	56334 62640	5	

••RUNS OF
GUARDRAIL
ADDED DURING
FINAL INSPECTION

PROJECT NAME: STATEWIDE	PLOT DATE: 27-MAR-2015
PROJECT NUMBER: HES GARD(2)	DRAWN BY: M. GAMELIN
FILE NAME: d13k342frm.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 12 OF 21
DESIGNED BY: M. GAMELIN	
ITEM DETAIL SHEET 8	

NEWBURY

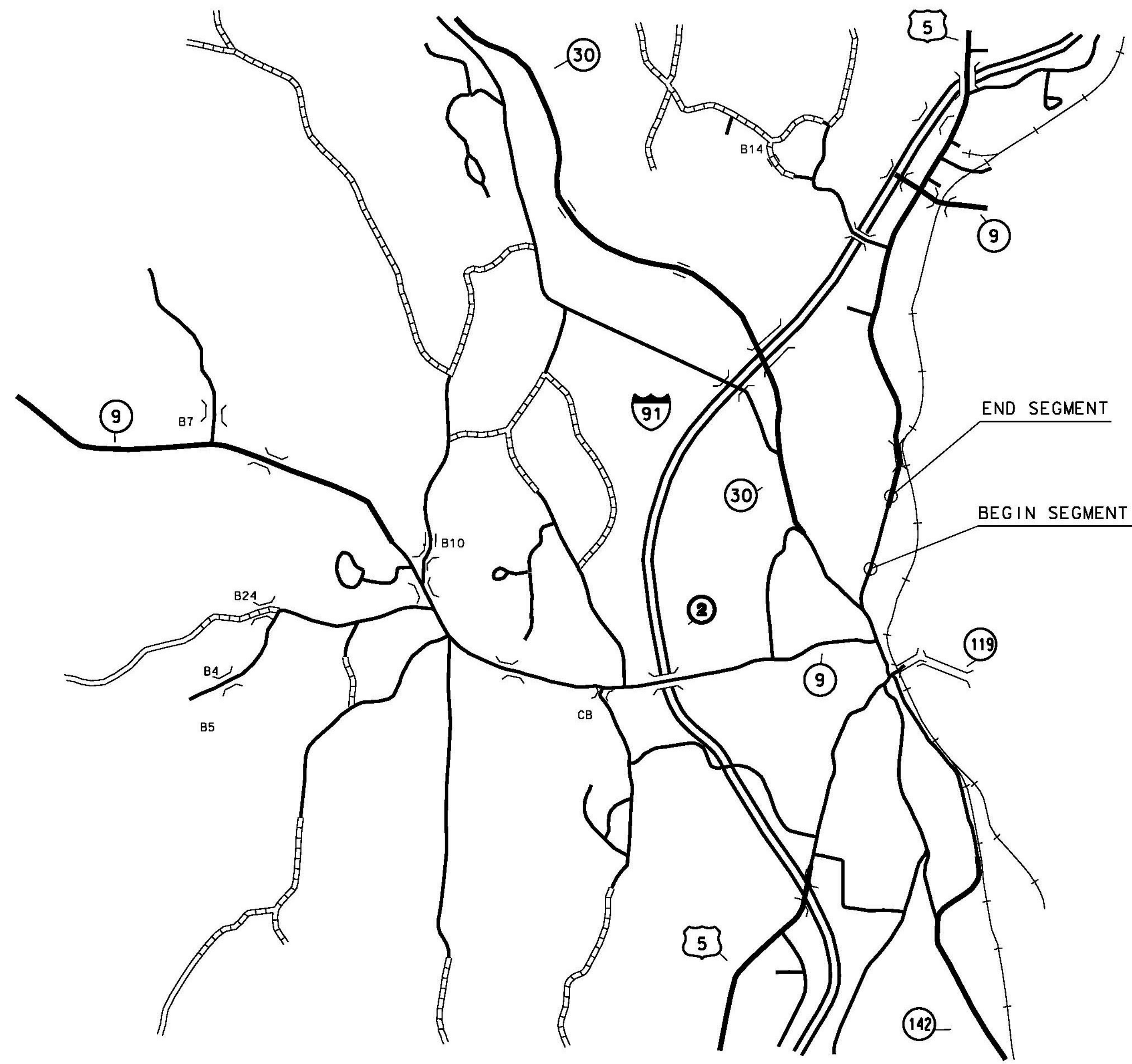


NOT TO SCALE

BEGINNING AT A POINT 0.412 MILES NORTH OF THE VERMONT NEW HAMPSHIRE STATE LINE IN THE TOWN OF NEWBURY ON NEWBURY TOWN HIGHWAY EXTENDING NORTHERLY IN THE TOWN OF NEWBURY TO MILE MARKER 0.461 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

PROJECT NAME:	STATEWIDE
PROJECT NUMBER:	HES GARD(2)
FILE NAME:	I3k342maps.dgn
PROJECT LEADER:	B. MARTIN
DESIGNED BY:	M. GAMELIN
LOCATION MAP SHEET:	I
PLOT DATE:	27-MAR-2015
DRAWN BY:	M. GAMELIN
CHECKED BY:	A. KEMPTON
SHEET:	13 OF 21

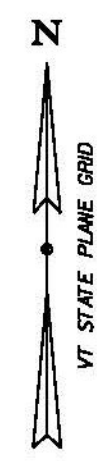
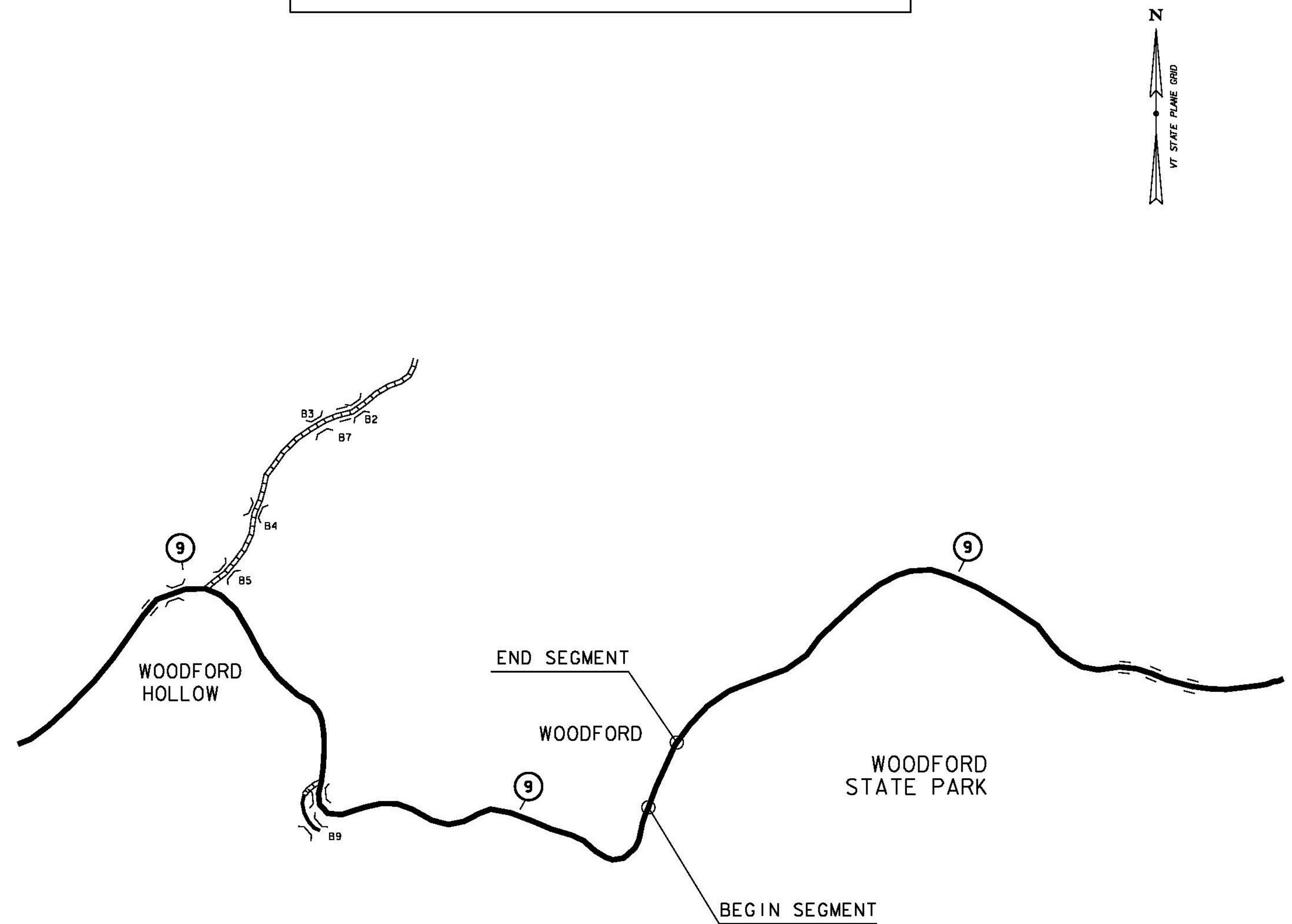
BRATTLEBORO



NOT TO SCALE

BEGINNING AT A POINT 2.727 MILES NORTH OF THE GUILFORD BRATTLEBORO TOWN LINE ON US ROUTE 5 AND CONTINUING NORTHERLY IN THE TOWN OF BRATTLEBORO IN THE SOUTHBOUND LANE FOR A DISTANCE OF 0.060 MILES TO MILE MARKER 2.787 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

WOODFORD

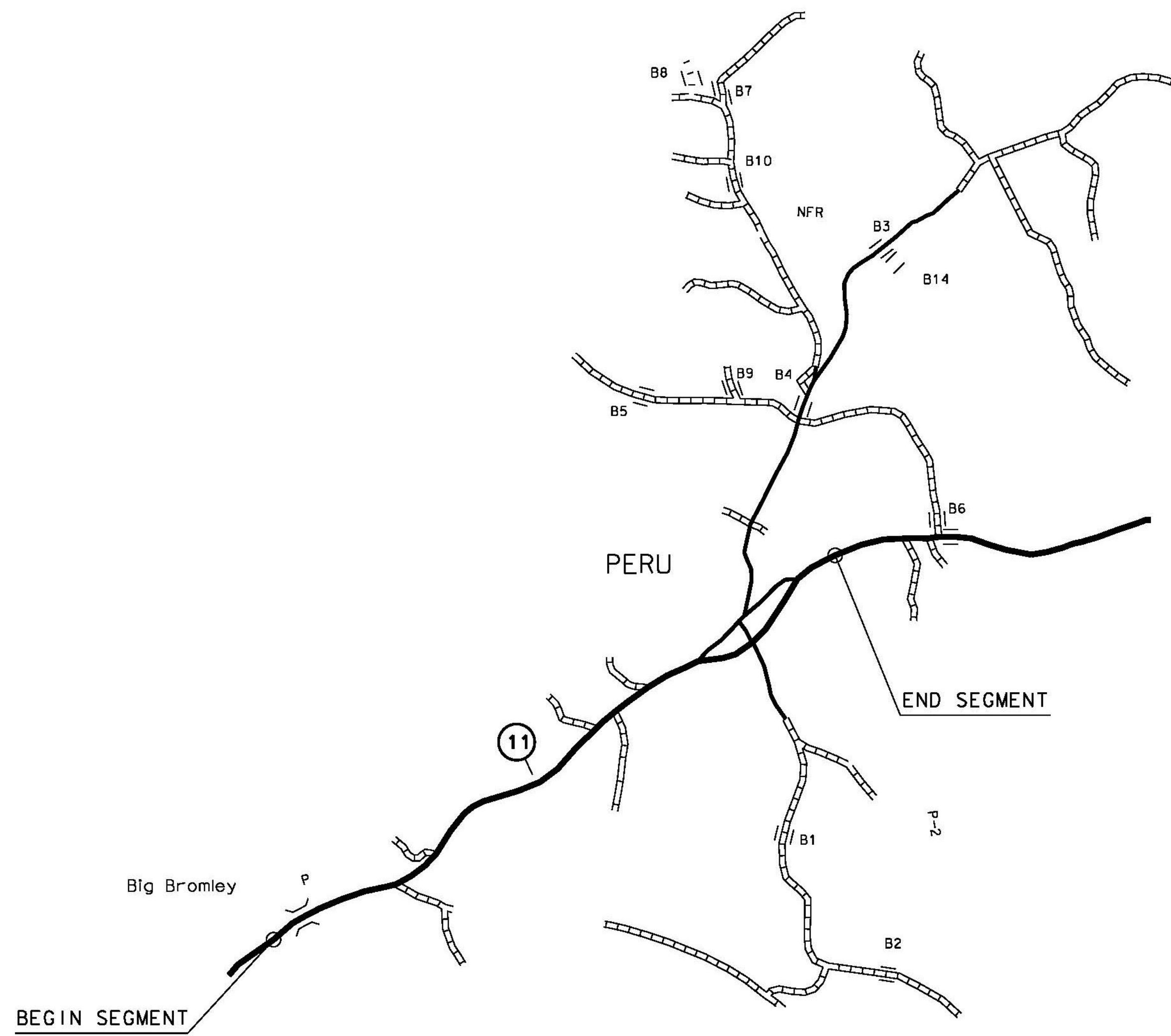


NOT TO SCALE

BEGINNING AT A POINT 6.086 MILES EAST OF THE BENNINGTON WOODFORD TOWN LINE AND EXTENDING EASTERLY IN THE TOWN OF WOODFORD TO MILE MARKER 6.196 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

PROJECT NAME:	STATEWIDE
PROJECT NUMBER:	HES GARD(2)
FILE NAME:	I3k342maps.dgn
PROJECT LEADER:	B. MARTIN
DESIGNED BY:	M. GAMELIN
LOCATION MAP SHEET	2
PLOT DATE:	27-MAR-2015
DRAWN BY:	M. GAMELIN
CHECKED BY:	A. KEMPTON
SHEET	14 OF 21

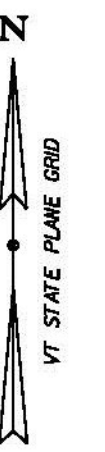
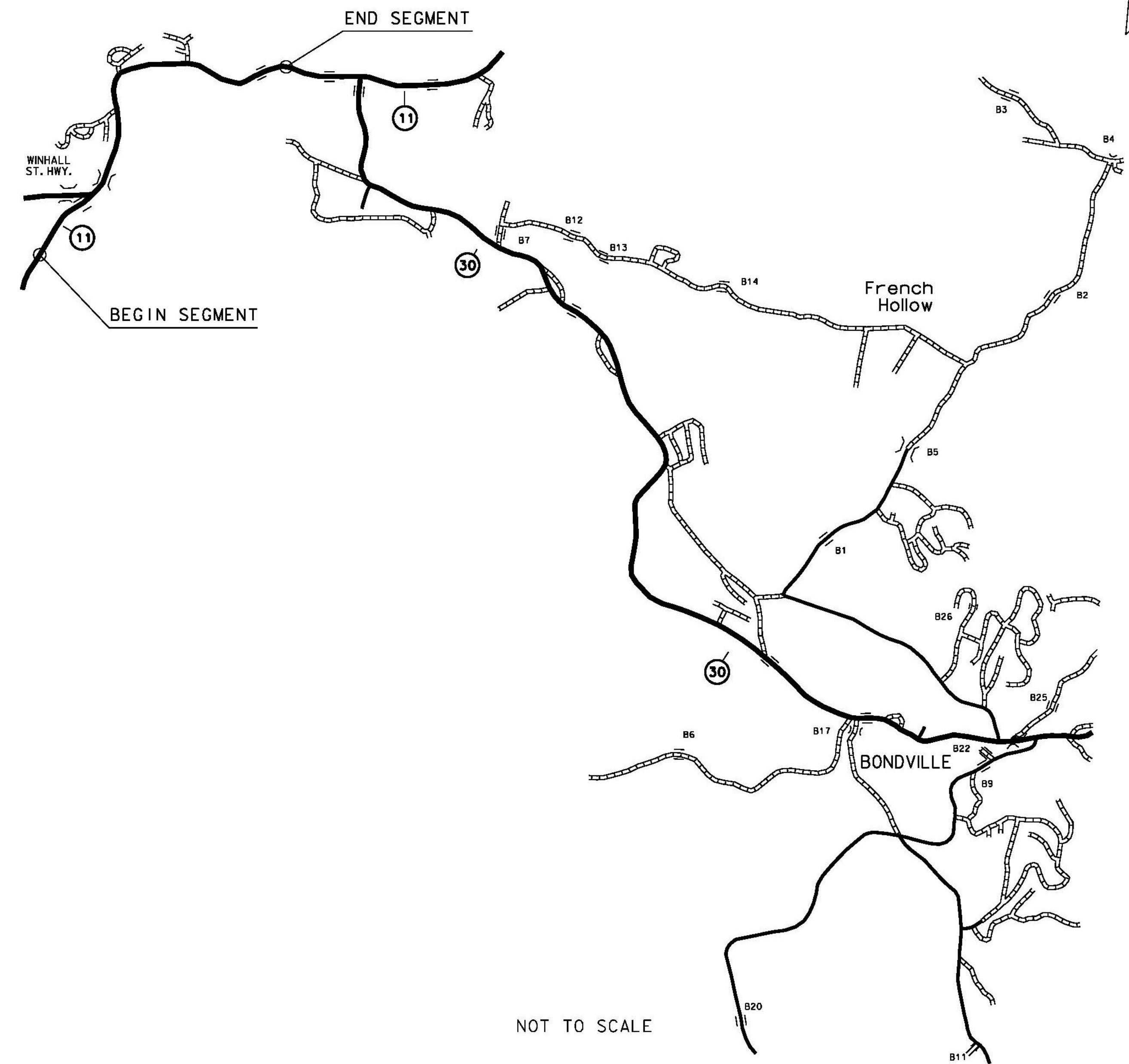
PERU



NOT TO SCALE

BEGINNING AT A POINT 0.055 MILES NORTH OF THE WINHALL PERU TOWNLINE ON VT ROUTE 11 AND EXTENDING NORTHERLY IN THE TOWN OF PERU TO MILE MARKER 2.359 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

WINHALL



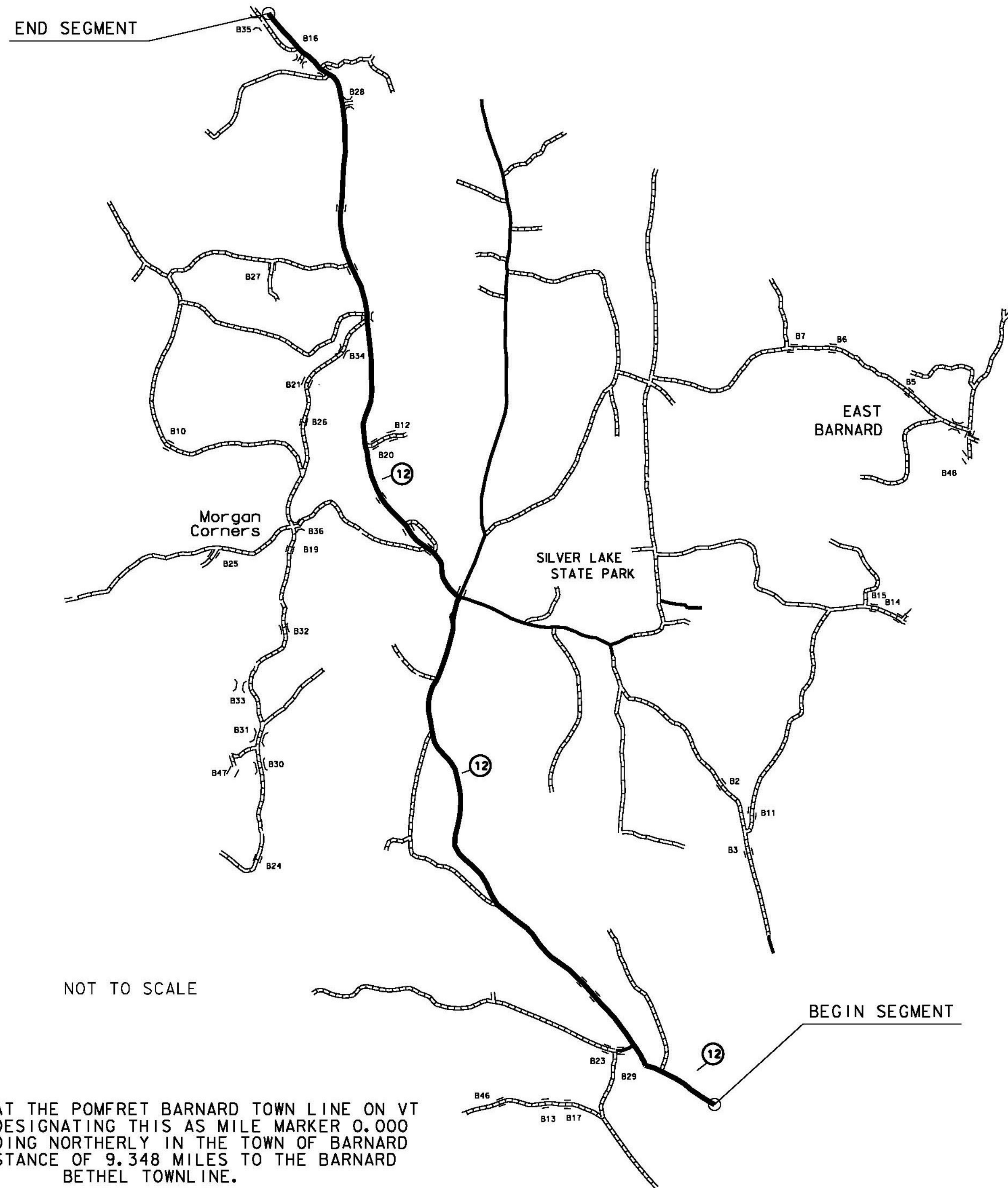
NOT TO SCALE

BEGINNING AT A POINT 0.082 MILES NORTH OF THE MANCHESTER WINHALL TOWN LINE ON VT ROUTE 11 AND EXTENDING NORTHERLY IN THE TOWN OF WINHALL TO MILE MARKER 3.616 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

PROJECT NAME: STATEWIDE
PROJECT NUMBER: HES GARD(2)

FILE NAME: I3k342maps.dgn PLOT DATE: 27-MAR-2015
PROJECT LEADER: B. MARTIN DRAWN BY: M. GAMELIN
DESIGNED BY: M. GAMELIN CHECKED BY: A. KEMPTON
LOCATION MAP SHEET 3 SHEET 15 OF 21

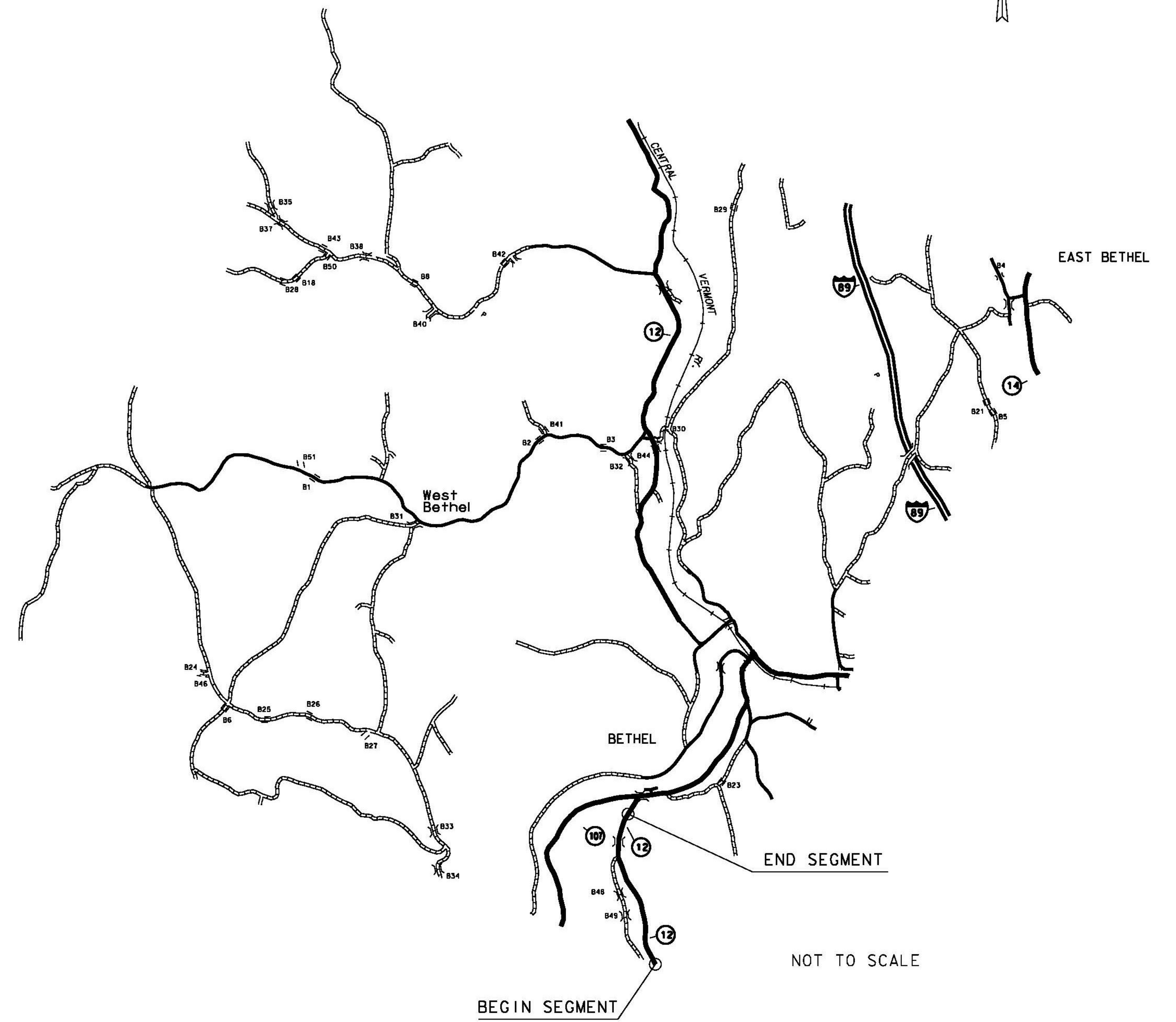
BARNARD



NOT TO SCALE

BEGINNING AT THE POMFRET BARNARD TOWN LINE ON VT ROUTE 12 DESIGNATING THIS AS MILE MARKER 0.000 AND EXTENDING NORTHERLY IN THE TOWN OF BARNARD FOR A DISTANCE OF 9.348 MILES TO THE BARNARD BETHEL TOWNLINE.

BETHEL



NOT TO SCALE

BEGINNING AT A POINT 0.265 NORTH OF THE BARNARD BETHEL TOWN LINE ON VT ROUTE 12 AND EXTENDING NORTHERLY IN THE TOWN OF BETHEL FOR TO MILE MARKER 1.284 MILES TO CONCLUDE THIS SEGMENT OF THE PROJECT.

PROJECT NAME: STATEWIDE
PROJECT NUMBER: HES GARD(2)

FILE NAME: I3k342maps.dgn	PLOT DATE: 27-MAR-2015
PROJECT LEADER: B. MARTIN	DRAWN BY: M. GAMELIN
DESIGNED BY: M. GAMELIN	CHECKED BY: A. KEMPTON
LOCATION MAP SHEET 4	SHEET 16 OF 21

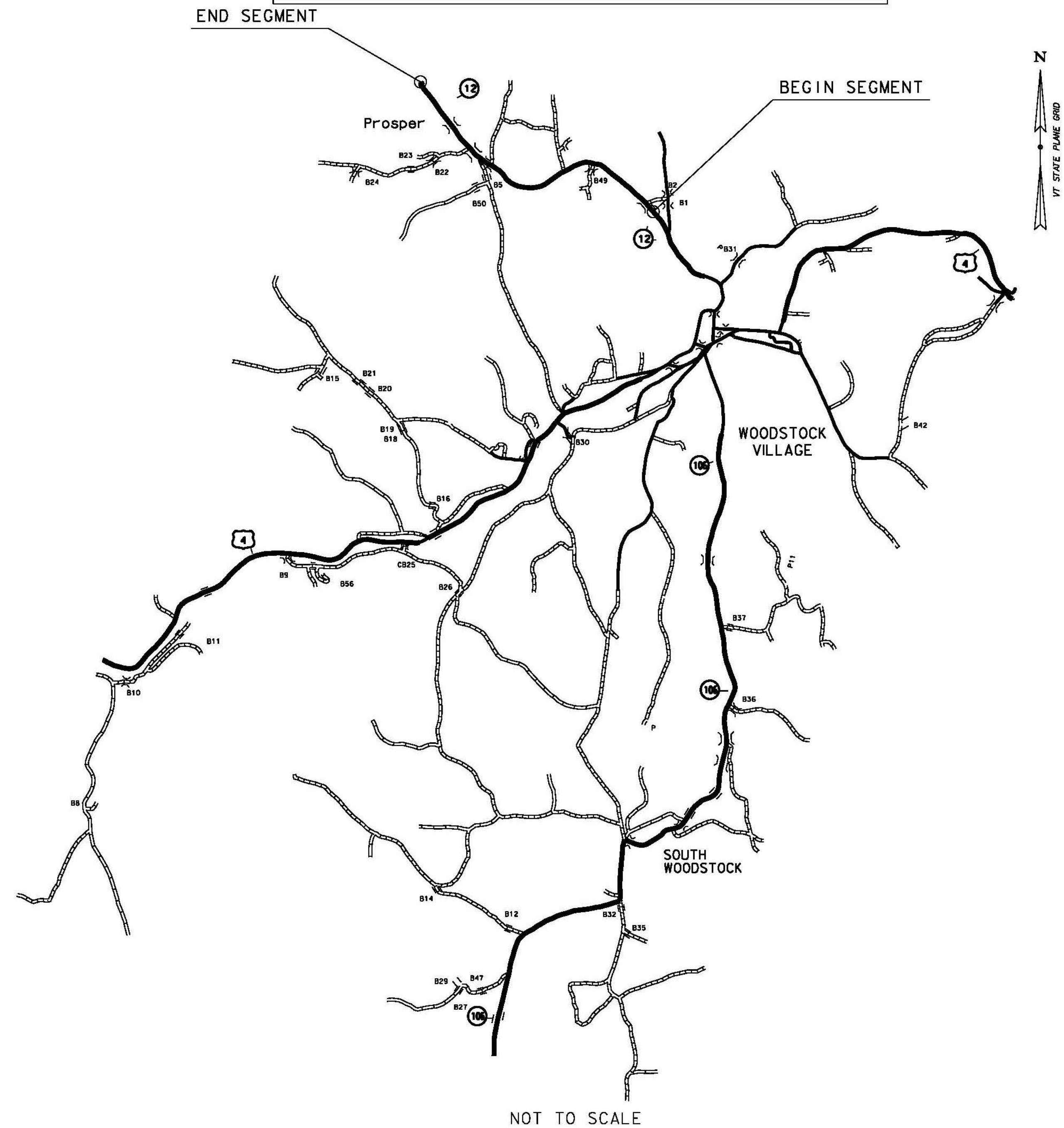
POMFRET



NOT TO SCALE

BEGINNING AT THE WOODSTOCK POMFRET TOWN LINE ON VT ROUTE 12 DESIGNATING THIS AS MILE MARKER 0.000 AND EXTENDING NORTHERLY IN THE TOWN OF POMFRET FOR A DISTANCE OF 1.375 MILES TO THE POMFRET BARNARD TOWNLINE TO CONCLUDE THIS SEGMENT OF THE PROJECT.

WOODSTOCK



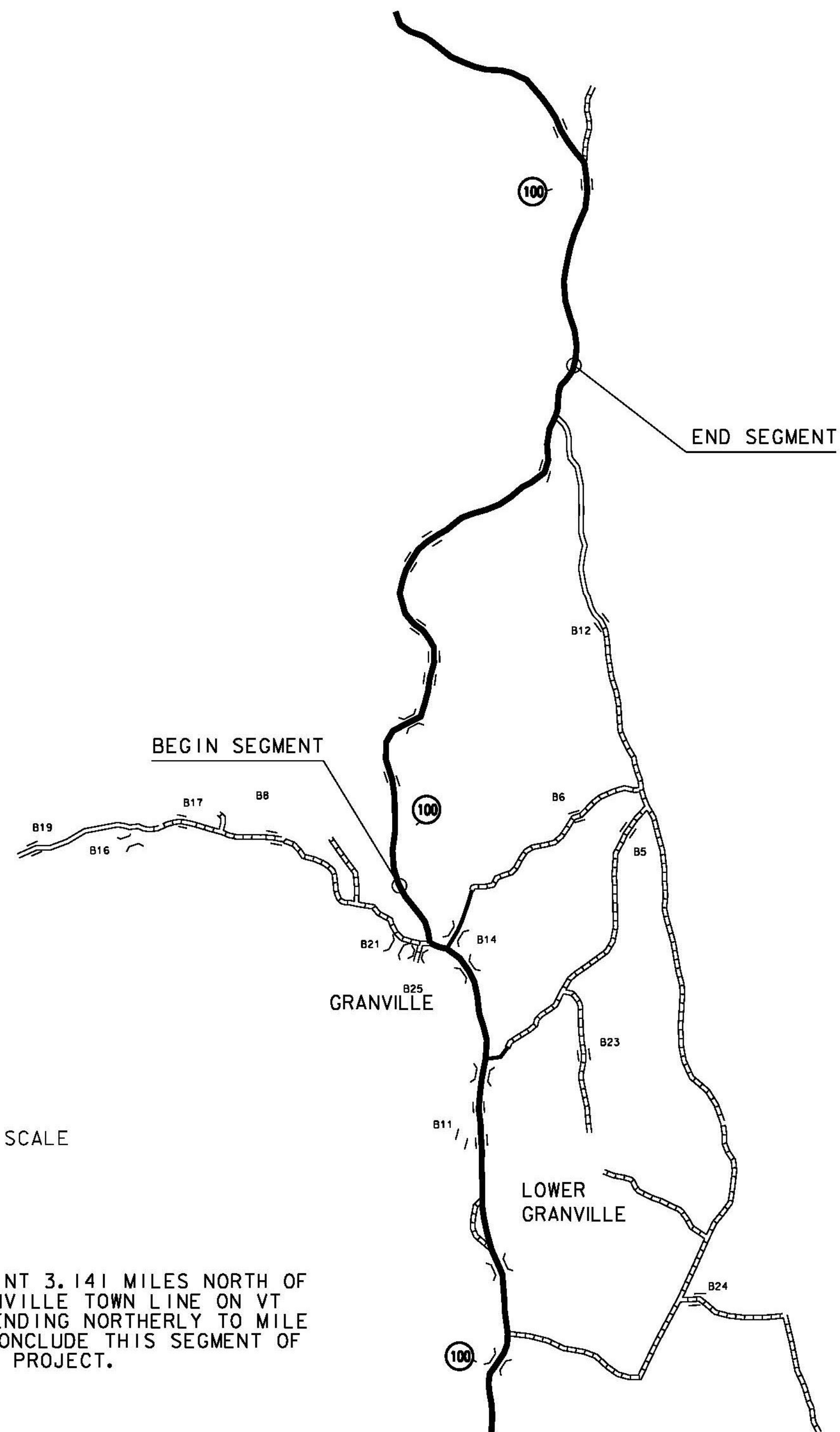
NOT TO SCALE

BEGINNING AT A POINT 1.575 MILES NORTH OF THE VT 12 AND US 4 INTERSECTION AND EXTENDING NORTHERLY IN THE TOWN OF WOODSTOCK TO MILE MARKER 4.007 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

PROJECT NAME: STATEWIDE
PROJECT NUMBER: HES GARD(2)

FILE NAME: I3k342maps.dgn	PLOT DATE: 27-MAR-2015
PROJECT LEADER: B. MARTIN	DRAWN BY: M. GAMELIN
DESIGNED BY: M. GAMELIN	CHECKED BY: A. KEMPTON
LOCATION MAP SHEET 5	SHEET 17 OF 21

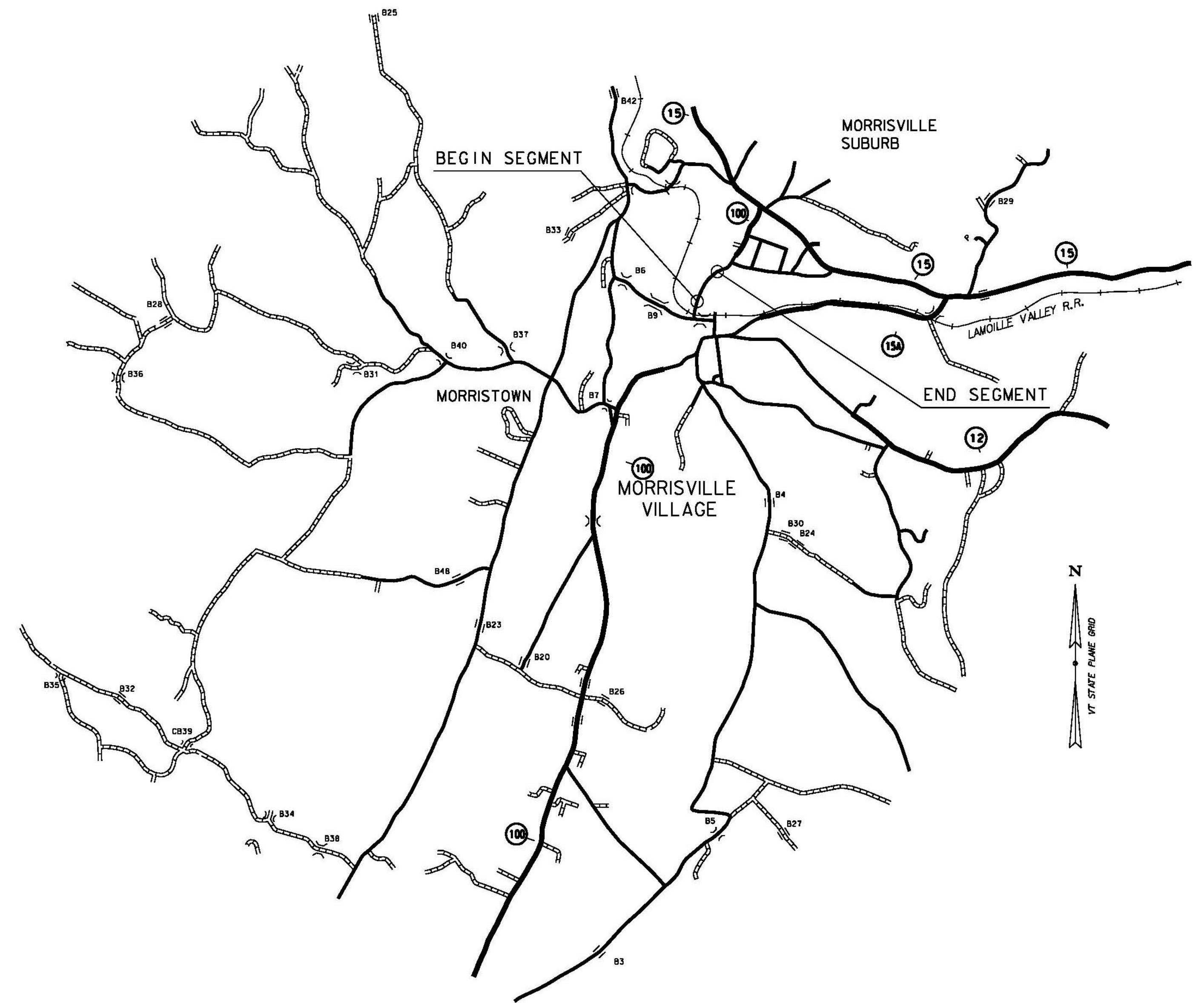
GRANVILLE



NOT TO SCALE

BEGINNING AT A POINT 3.141 MILES NORTH OF THE HANCOCK GRANVILLE TOWN LINE ON VT ROUTE 100 AND EXTENDING NORTHERLY TO MILE MARKER 8.517 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

MORRISVILLE VILLAGE

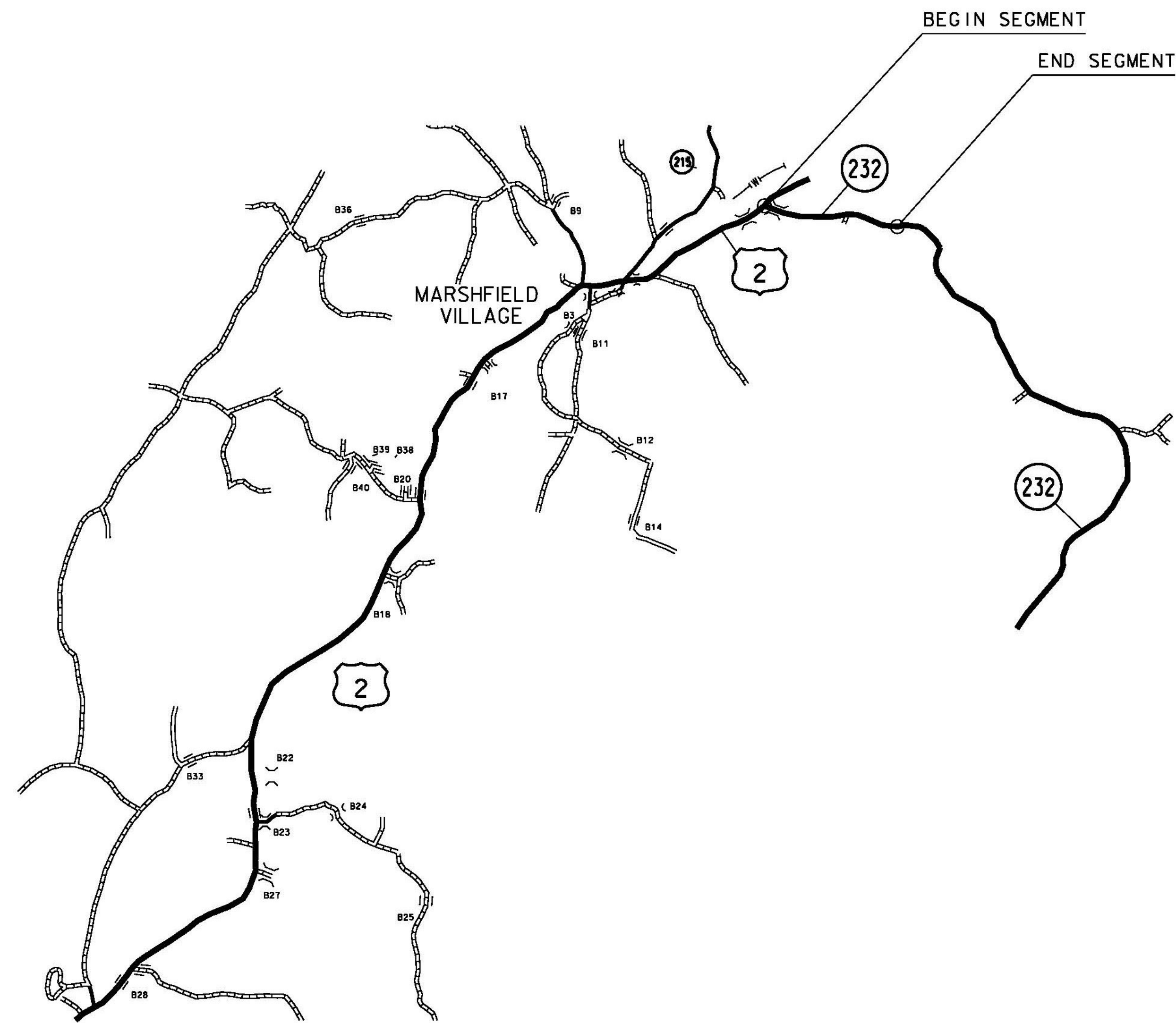


NOT TO SCALE

BEGINNING AT A POINT 5.848 MILES NORTH OF THE STOWE MORRISTOWN TOWN LINE ON VT ROUTE 100 AND EXTENDING NORTHERLY IN MORRISVILLE VILLAGE TO MILE MARKER 5.999 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

PROJECT NAME:	STATEWIDE
PROJECT NUMBER:	HES GARD(2)
FILE NAME:	I3k342maps.dgn
PROJECT LEADER:	B. MARTIN
DESIGNED BY:	M. GAMELIN
LOCATION MAP SHEET	6
PLOT DATE:	27-MAR-2015
DRAWN BY:	M. GAMELIN
CHECKED BY:	A. KEMPTON
SHEET	18 OF 21

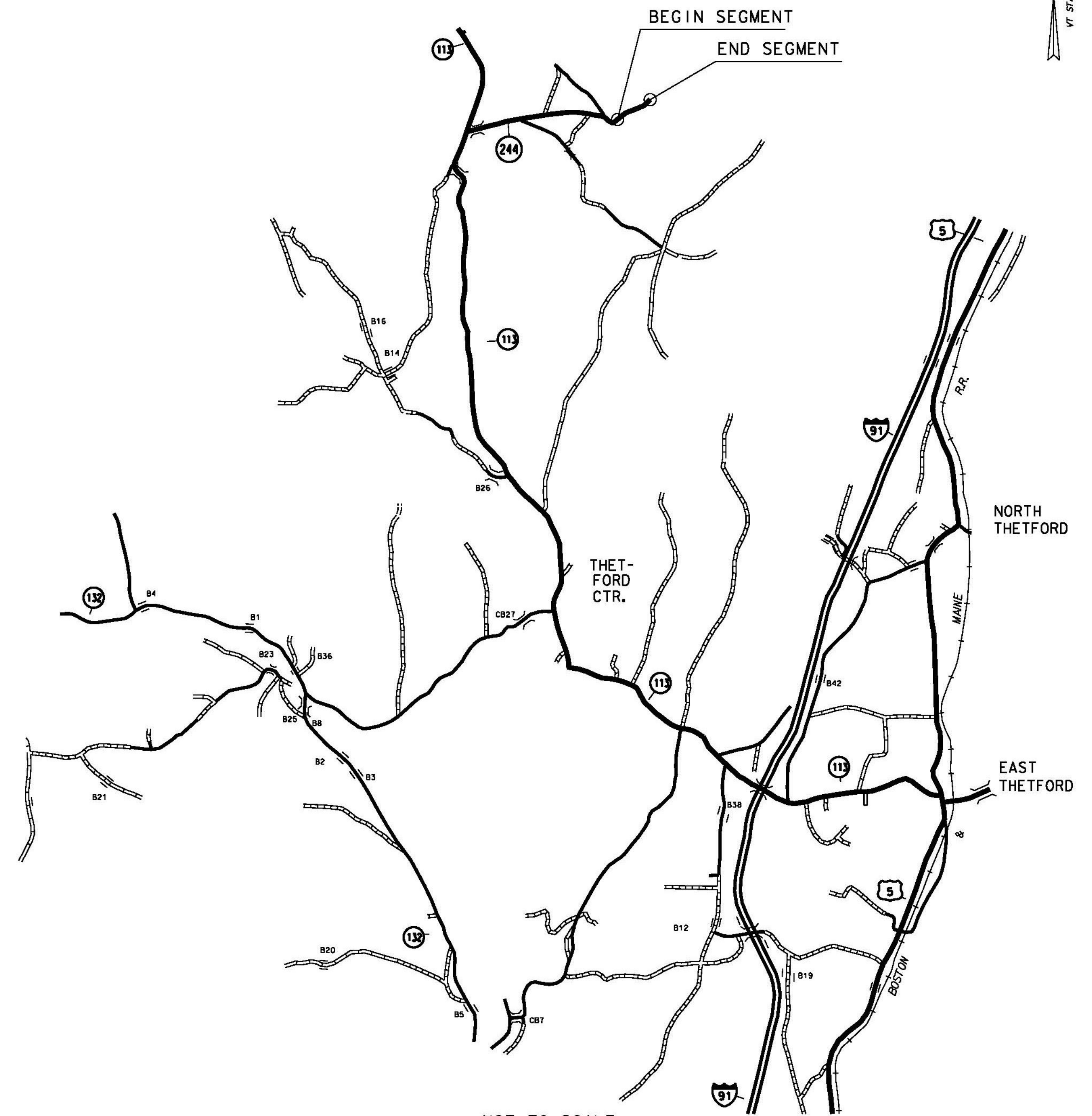
MARSHFIELD



NOT TO SCALE

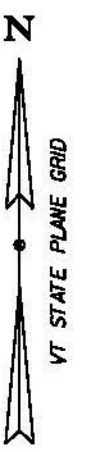
BEGINNING AT A POINT 3.243 MILES NORTH OF THE PEACHAM MARSHFIELD TOWN LINE ON VT ROUTE 232 AND EXTENDING NORTHERLY IN THE TOWN OF MARSHFIELD TO MILE MARKER 4.355 TO CONCLUDE THIS SEGMENT OF THE PROJECT.

THETFORD



NOT TO SCALE

BEGINNING AT A POINT 1.028 MILES EAST OF THE INTERSECTION OF VT ROUTE 113 AND VT ROUTE 244 AND EXTENDING EASTERLY IN THE TOWN OF THETFORD TO MILE MARKER 1.176 TO CONCLUDE THIS SECTION OF THE PROJECT.



PROJECT NAME: STATEWIDE
PROJECT NUMBER: HES GARD(2)

FILE NAME: I3k342maps.dgn
PROJECT LEADER: B. MARTIN
DESIGNED BY: M. GAMELIN
LOCATION MAP SHEET 8

PLOT DATE: 27-MAR-2015
DRAWN BY: M. GAMELIN
CHECKED BY: A. KEMPTON
SHEET 20 OF 21

TEMPORARY TRAFFIC CONTROL NOTES

- TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THESE PROJECT PLANS, APPLICABLE VAOT E-SERIES STANDARD DRAWINGS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2009, AND ITS LATEST REVISIONS, OR AS DIRECTED BY THE ENGINEER. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.
- WHEN WORKING IN THE VICINITY OF EXISTING PEDESTRIAN FACILITIES, ADA PEDESTRIAN ACCOMODATIONS SHALL BE MAINTAINED AT ALL TIMES. PAYMENT WILL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 641.10, TRAFFIC CONTROL.
- THE CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES.
- PAYMENT FOR CONSTRUCTION SIGNING WILL BE MADE UNDER CONTRACT ITEM 641.10, TRAFFIC CONTROL.
- AT NO TIME SHALL THE FLAGGER SIGN BE GREATER THAN 750 FEET IN ADVANCE OF THE FLAGGER STATION.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MUTCD, PART 6.
- PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUIDLINGS, RESIDENCES AND COMMERICAL PROPERTIES AT ALL TIMES. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
- IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF FOUR FEET. IF THE TPAR IS LESS THAN FIVE FEET IN WIDTH, A FIVE FOOT BY FIVE FOOT PASSING SPACE SHOULD BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE SMOOTH AND CONTINUOUS FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.
- IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP-OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF THE MUTCD SHALL BE USED.
- THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
- THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS EXCEPT WHERE PROPER PROTECTION AND A TPAR HAVE BEEN PROVIDED.
- THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN FOR REVIEW AND WRITTEN APPROVAL A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES, ETC.
- PAYMENT FOR DEVELOPING, IMPLEMENTING, AND MAINTAINING THE TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10.
- THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY ON AND OFF-PROJECT SIGNS AND BARRICADES AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
- FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.

Table 6C-1. Recommended Advance Warning Sign Minimum Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by the highway agency

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

Figure 6C-3. Example of a One-Lane, Two-Way Traffic Taper

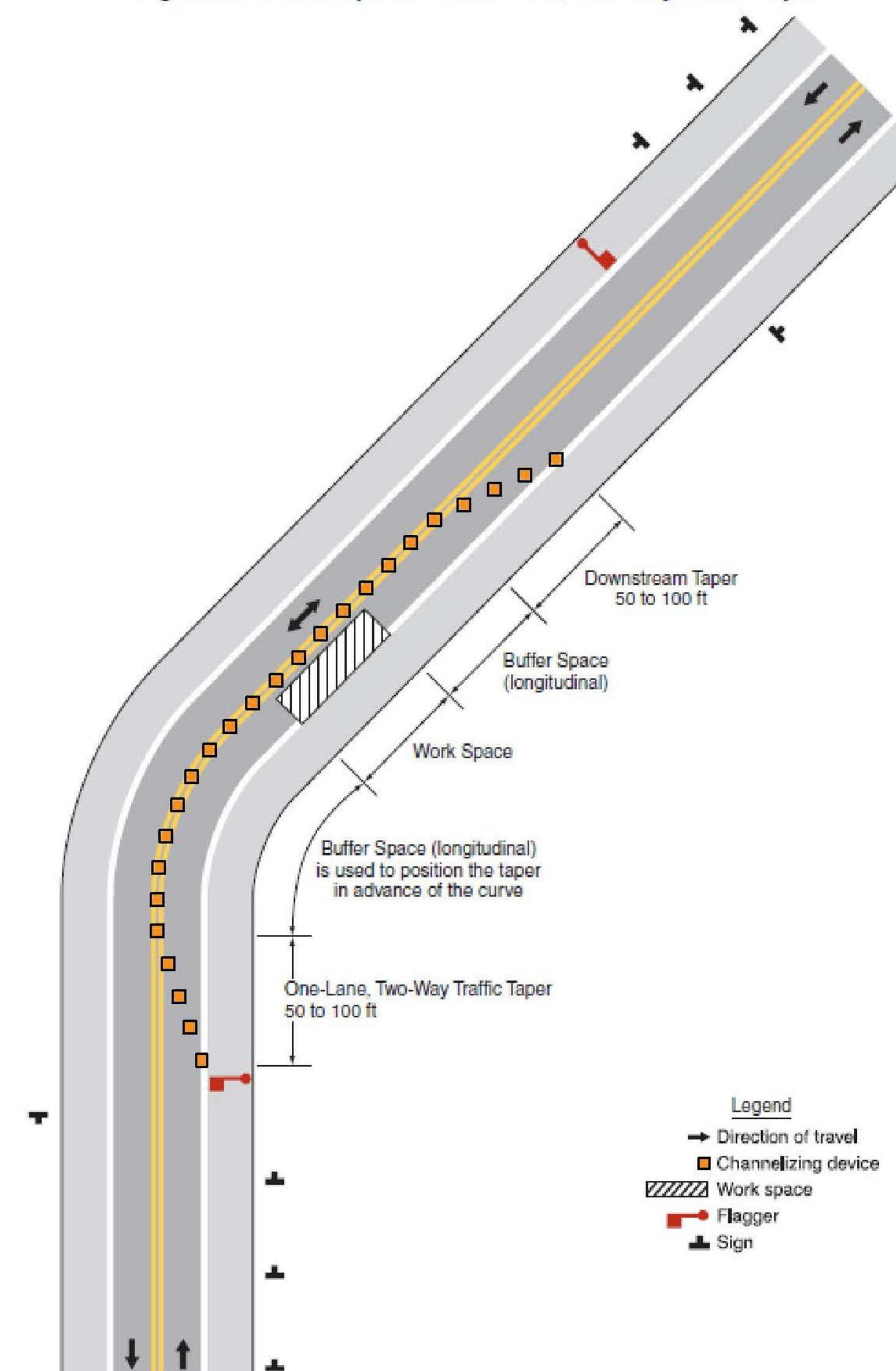


Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length
Merging Taper	at least L
Shifting Taper	at least 0.5 L
Shoulder Taper	at least 0.33 L
One-Lane, Two-Way Traffic Taper	50 feet minimum, 100 feet maximum
Downstream Taper	50 feet minimum, 100 feet maximum

Note: Use Table 6C-4 to calculate L

Table 6C-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

PROJECT NAME: STATEWIDE
PROJECT NUMBER: HES GARD(2)

FILE NAME: d13k342frm.dgn PLOT DATE: 27-MAR-2015
PROJECT LEADER: B. MARTIN DRAWN BY: M. GAMELIN
DESIGNED BY: M. GAMELIN CHECKED BY: A. KEMPTON
TRAFFIC CONTROL SHEET SHEET 21 OF 21