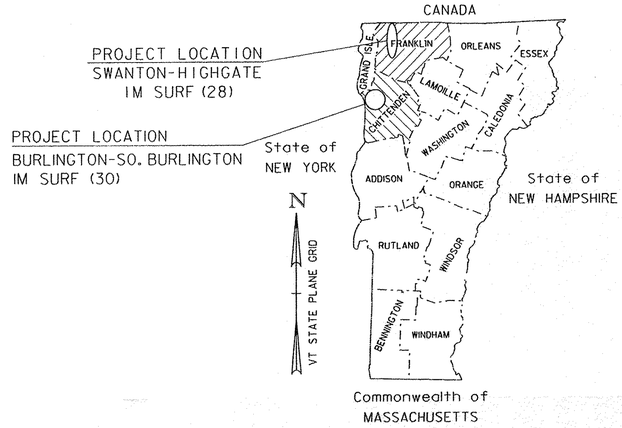
INDEX OF SHEETS

SEE SHEET 2

STATE OF VERMONT

AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT

CITIES OF BURLINGTON AND SO. BURLINGTON
COUNTY OF CHITTENDEN
INTERSTATE ROUTE 189 EASTBOUND AND WESTBOUND

TOWNS OF SWANTON AND HIGHGATE
COUNTY OF FRANKLIN
INTERSTATE ROUTE 89 NORTHBOUND

BURLINGTON-SO. BURLINGTON
IM SURF (30)
SEE SHEET 11
FOR ADDITIONAL PROJECT INFORMATION

SWANTON-HIGHGATE
IM SURF (28)
SEE SHEET 38
FOR ADDITIONAL PROJECT INFORMATION

RECORD PLANS

CONTRACTOR:	PIKE INDUSTRIES, INC. – BERLIN, VT
RESIDENT ENGINEER:	BOB SUCKERT
CONSTRUCTION BEGAN:	JULY 15, 2012
CONSTRUCTION COMPLETE:	OCTOBER 1, 2012
RECORD PLANS BY:	BOB SUCKERT

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY _____ RESIDENT ENGINEER

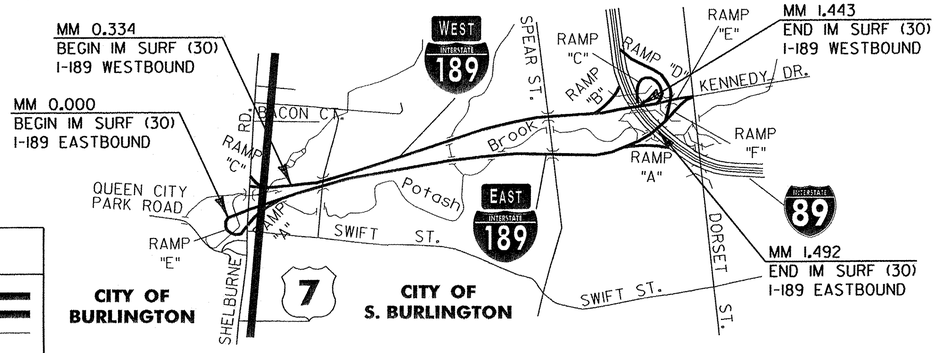
DATE 3-13-15

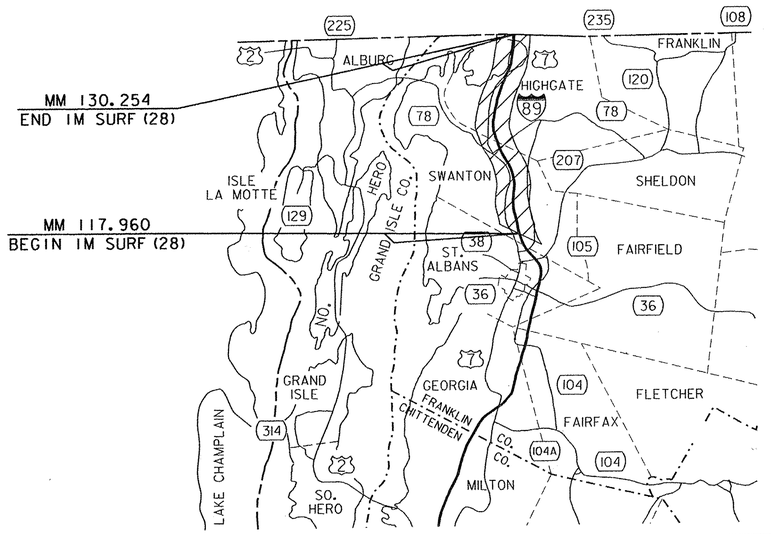
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

UTILITY LEGEND
- ◇ = EXISTING HYDRANT
- DI = EXISTING DI
- ○ = EXISTING MANHOLE
- TEL = EXISTING TELEPHONE MANHOLE
- ELEC = EXISTING ELECTRIC MANHOLE
- SMH = EXISTING SEWER MANHOLE
- WSO = EXISTING WATER SHUTOFF
- GSO = EXISTING GAS SHUTOFF
- = EXISTING LIGHT POLE
- = EXISTING SCUPPER

SIGN LEGEND
- RET = RETAIN
- B-B = BACK TO BACK

QUALITY ASSURANCE PROGRAM: LEVEL I





BUILT AS DESIGNED

CONVENTIONAL SYMBOLS

- COUNTY LINE
- TOWN LINE
- LIMITS OF ACCESS
- POINT OF ACCESS
- FENCE LINE
- STONE WALL
- TRAVELED WAY
- GUARD RAIL
- RAILROAD
- SURVEY LINE
- CULVERT
- POWER POLE
- TELEPHONE POLE
- TREES
- CONTROL OF ACCESS
- PROPERTY LINE
- R.O.W. TAKING LINE
- SLOPE RIGHTS (SR SR SR)
- TOP OF CUT
- TOE OF SLOPE

SURVEYED BY :	N/A
SURVEYED DATE :	N/A

DATUM

VERTICAL	N/A
HORIZONTAL	N/A

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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.

DIRECTOR OF PROGRAM DEVELOPMENT

APPROVED Jason V. Tourville DATE 4-12-2012

PROJECT MANAGER : M. FOWLER

PROJECT NAME : BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE

PROJECT NUMBER : IM SURF (30) & IM SURF (28)

SHEET 1 OF 49 SHEETS

COMPOSITE INDEX

BURLINGTON-SO. BURLINGTON IM SURF (30)

SWANTON-HIGHGATE IM SURF (28)

STRUCTURES DETAIL SHEET

STANDARDS

E-100	CONSTRUCTION APPROACH SIGNS	01/02/04
E-100A	SIDE ROAD CONSTRUCTION APPROACH SIGNS	01/02/04
E-101	CONSTRUCTION SIGN DETAILS	05/30/03
E-102	CONSTRUCTION SIGN DETAILS	06/30/03
E-102A	CONSTRUCTION SIGN DETAILS	05/01/04
E-103	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED	03/01/04
E-105	TRAFFIC CONTROL FOR CONSTRUCTION VEHICLE U-TURNS ON DIVIDED HIGHWAY	05/01/04
E-106	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	03/01/04
E-107A	BREAKAWAY BARRICADE DETAILS	06/08/09
E-108	CONSTRUCTION ZONE LONGITUDINAL DROP OFFS	06/08/09
E-108A	CONSTRUCTION ZONE LONGITUDINAL DROP OFFS FOR PAVING	06/08/09
E-191	PAVEMENT MARKING DETAILS	02/01/99
E-192	PAVEMENT MARKING DETAILS	10/12/00
E-193	PAVEMENT MARKING DETAILS	08/18/95

COMPOSITE INDEX OF SHEETS

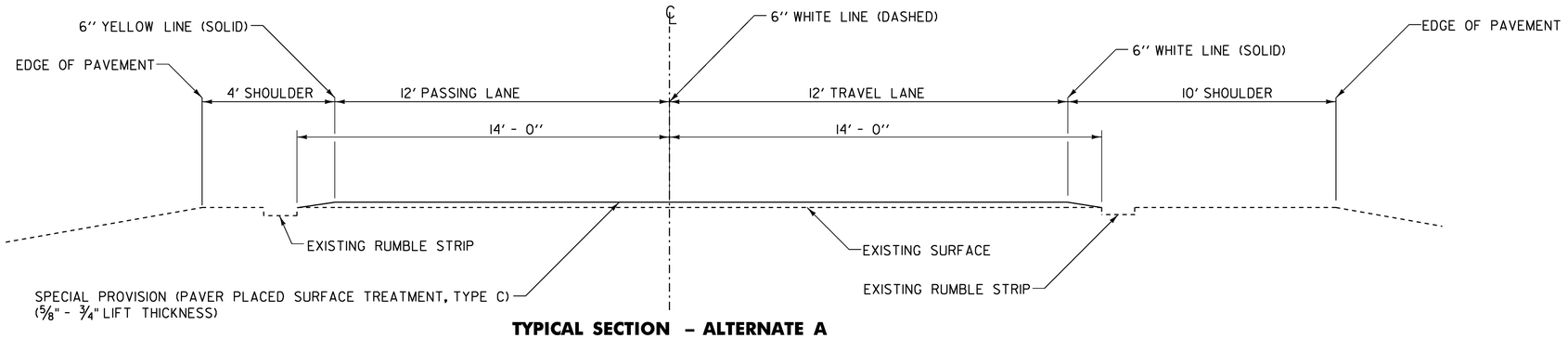
PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE

PROJECT NUMBER: IM SURF (30) & IM SURF (28)

FILE NAME: IIa024/IIa024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IIa024compind.i

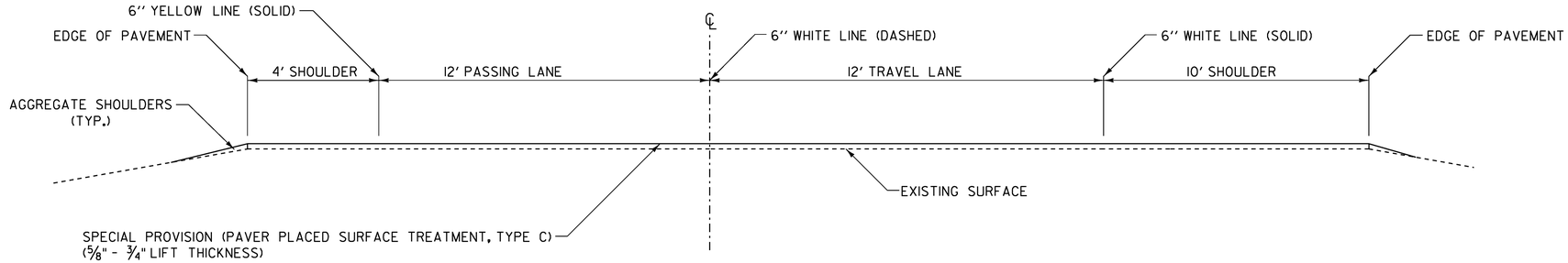
PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 2 OF 49

TYPICAL SECTION

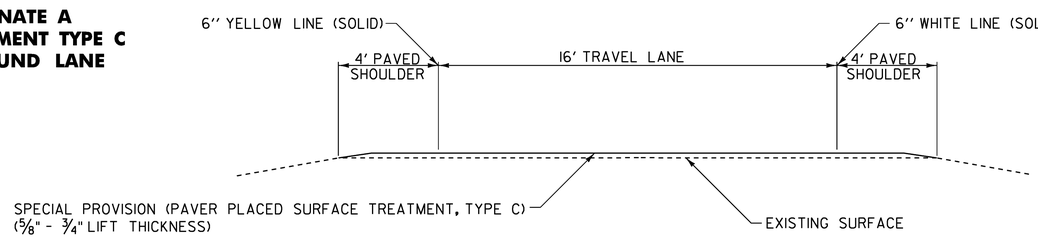


TYPICAL SECTION – ALTERNATE A
PAVER PLACED SURFACE TREATMENT TYPE C

TYPICAL SECTION WITHOUT RUMBLE STRIPS



TYPICAL SECTION – ALTERNATE A
PAVER PLACED SURFACE TREATMENT TYPE C
MIRROR IMAGE FOR WESTBOUND LANE



TYPICAL RAMP SECTION

NOT TO SCALE

COMPOSITE ALTERNATE A TYPICAL SECTIONS

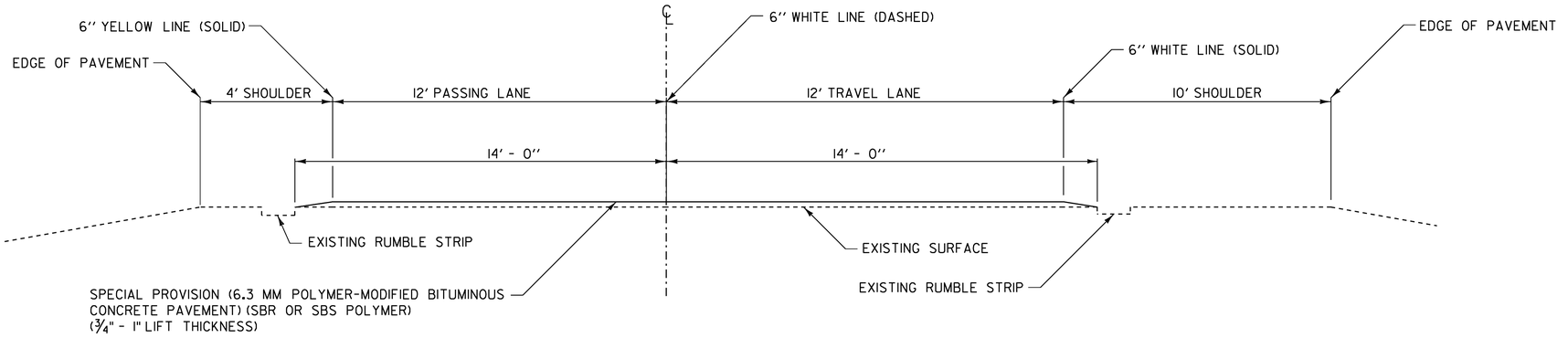
PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE

PROJECT NUMBER: IM SURF (30) & IM SURF (28)

FILE NAME: IIa024/IIa024COMPOSITE.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IIa024comptyl.i

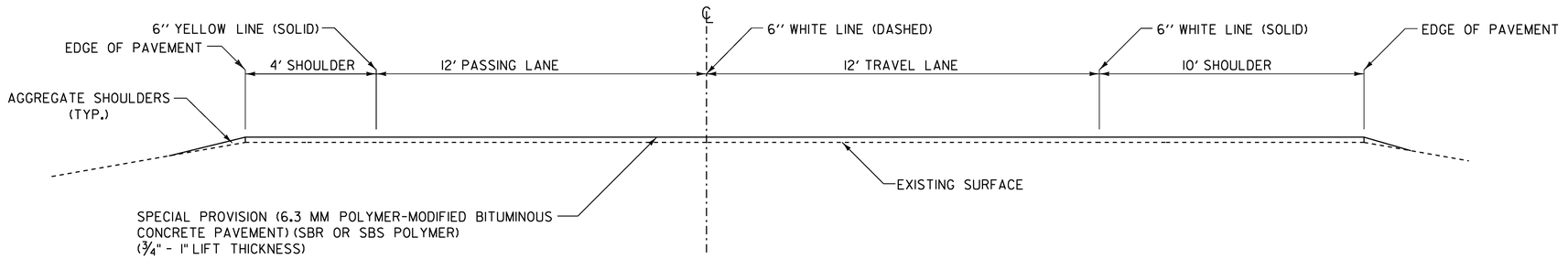
PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 3 OF 49

TYPICAL SECTION

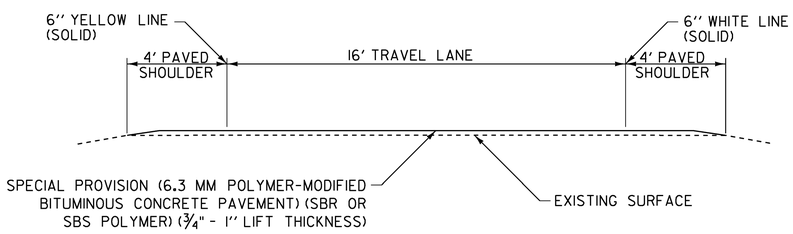


TYPICAL SECTION – ALTERNATE B
6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT

TYPICAL SECTION WITHOUT RUMBLE STRIPS



TYPICAL SECTION – ALTERNATE B
6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT
MIRROR IMAGE FOR WESTBOUND LANE



TYPICAL RAMP SECTION

NOTES:

1. PRIOR TO THE PLACEMENT OF THE POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT, EMULSIFIED ASPHALT SHALL BE APPLIED TO ALL EXISTING PAVEMENT SURFACES AND ON ALL COLD PLANED SURFACES AT A RATE OF 0.080 GAL/SY (+/- 0.01GAL/SY) OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL BE RS-1H OR CRS-1H PER THE MANUFACTURER'S RECOMMENDATION AND PAID UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H).

2. THE GYRATION SPECIFICATION FOR THE 6.3 MM POLYMER - MODIFIED BITUMINOUS CONCRETE PAVEMENT SHALL BE 65. PG BINDER SHALL BE 58-28.

NOT TO SCALE

COMPOSITE ALTERNATE B TYPICAL SECTIONS

PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE

PROJECT NUMBER: IM SURF (30) & IM SURF (28)

FILE NAME: 11a024/11a024COMPOSITE.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
11a024compty2.1

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT

COMPOSITE QUANTITY SHEET 1

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BURLINGTON - SO. BURLINGTON IM SURF (30)				SWANTON-HIGHGATE IM SURF (28)			SUMMARY OF ESTIMATED QUANTITIES				
NON-PART.	BRIDGE	ROADWAY	FULL C.E.	BRIDGE	ROADWAY	FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
									BEGIN ITEMS COMMON TO ALTERNATES		
		9,840			13,700		23,540	LF	SHOULDER BERM REMOVAL	203.40	
		1			1		2	CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	
		6,030			5,750		11,780	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	
		400			550		950	TON	AGGREGATE SHOULDERS	402.12	
		1			1		2	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	
		10,000			32,500		42,500	LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (AASHTO M324 (ASTM D 6690) TYPE II)	417.20	
	450			310			760	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	
	100			100			200	CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	
		20			70		90	HR	POWER BROOM RENTAL, TYPE I	608.30	
1							1	EA	ADJUST ELEVATION OF VALVE BOX	629.20	
		280			280		560	HR	UNIFORMED TRAFFIC OFFICERS	630.10	
		175			200		375	HR	FLAGGERS	630.15	
			0.5			0.5	1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	
		0.5			0.5		1	LS	MOBILIZATION/DEMOBILIZATION	635.11	
		1					1	LS	TRAFFIC CONTROL (IM SURF (30))	641.10	
					1		1	LS	TRAFFIC CONTROL (IM SURF (28))	641.10	
		5			4		9	EA	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	
					1,070		1,070	LF	4 INCH YELLOW LINE	646.21	
		48,400			172,000		220,400	LF	6 INCH WHITE LINE	646.214	
		37,500			135,370		172,870	LF	6 INCH YELLOW LINE	646.215	
		4,450			4,400		8,850	LF	12 INCH WHITE LINE	646.24	
		150			115		265	LF	24 INCH STOP BAR	646.26	
		206			50		256	EA	LETTER OR SYMBOL	646.30	
		340					340	LF	CROSSWALK MARKING	646.31	
					540		540	LF	TEMPORARY 4 INCH YELLOW LINE	646.610	
		24,200			86,000		110,200	LF	TEMPORARY 6 INCH WHITE LINE	646.620	
		18,740			67,680		86,420	LF	TEMPORARY 6 INCH YELLOW LINE	646.630	
		2,220			2,210		4,430	LF	TEMPORARY 12 INCH WHITE LINE	646.660	
		75			55		130	LF	TEMPORARY 24 INCH STOP BAR	646.680	
		103			25		128	EA	TEMPORARY LETTER OR SYMBOL	646.690	
		170					170	EA	TEMPORARY CROSSWALK MARKING	646.700	
		2,200			7,900		10,100	EA	LINE STRIPING TARGETS	646.76	
		41,000			119,060		160,060	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	
		1			1		2	LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	
		1					1	EA	SPECIAL PROVISION (VIDEO VEHICLE DETECTION SYSTEM) (I-189 @ DORSET ST.)	900.620	

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE

PROJECT NUMBER: IM SURF (30) & IM SURF (28)

FILE NAME: 11a024/11a024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
11a024compqsl.1

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 5 OF 49

COMPOSITE QUANTITY SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BURLINGTON - SO. BURLINGTON IM SURF (30)				SWANTON-HIGHGATE IM SURF (28)			SUMMARY OF ESTIMATED QUANTITIES				
NON-PART.	BRIDGE	ROADWAY	FULL C.E.	BRIDGE	ROADWAY	FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
		50			50		100	TON	SPECIAL PROVISION (BITUMINOUS CONCRETE	900.680	
									PAVEMENT SURFACE PREPARATION, TYPE I)		
									END ITEMS COMMON TO ALTERNATES		
									BEGIN ALTERNATE A		
		72,300			212,500		284,800	SY	SPECIAL PROVISION (PAVER PLACED SURFACE	900.675	
									TREATMENT, TYPE C)		
									END ALTERNATE A		
									BEGIN ALTERNATE B		
		1			1		2	LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	
		4,220			12,400		16,620	TON	SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS	900.680	
									CONCRETE PAVEMENT)(SBR OR SBS POLYMER)		
		500			1,430		1,930	CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	
									END ALTERNATE B		

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

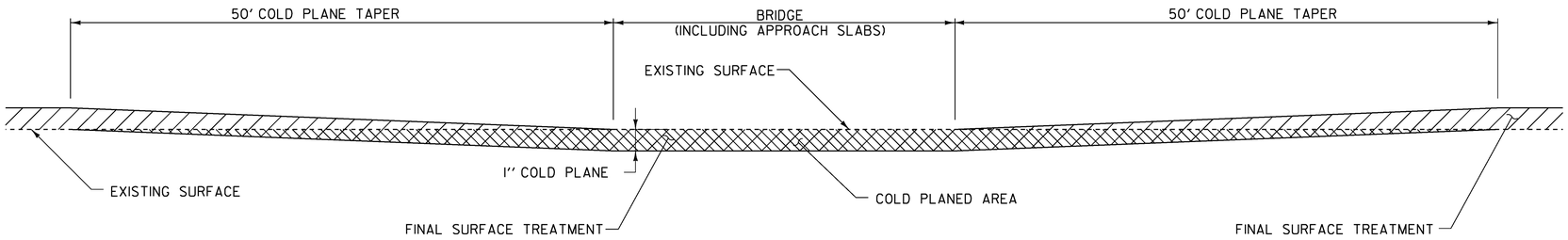
DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE

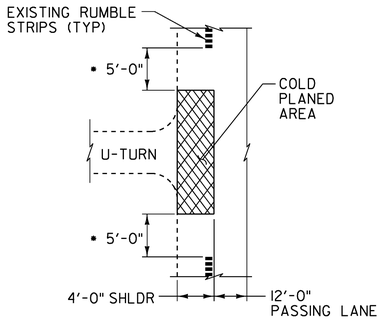
PROJECT NUMBER: IM SURF (30) & IM SURF (28)

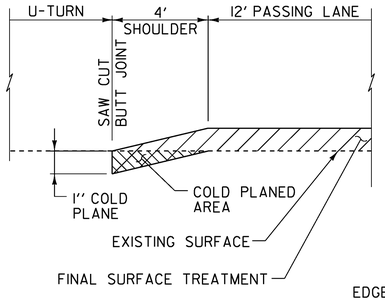
FILE NAME: 11a024/11a024COMPOSITE.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
11a024compqs2.1

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 6 OF 49

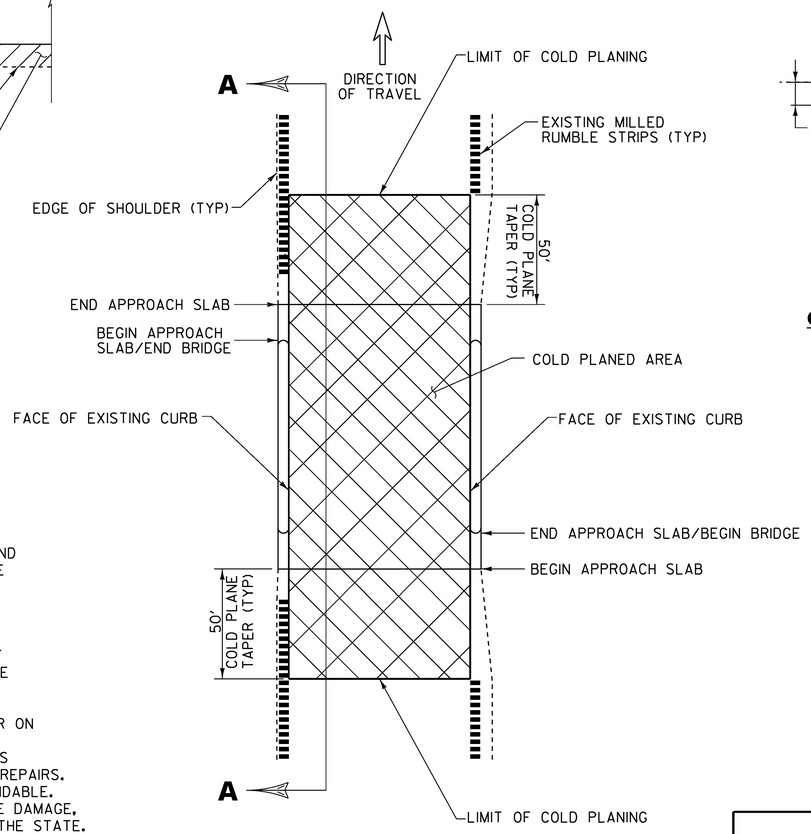


BRIDGE COLD PLANE TYPICAL SECTION A-A



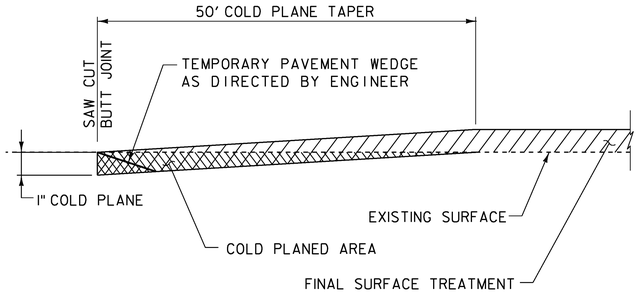


COLD PLANE DETAIL AT U-TURNS



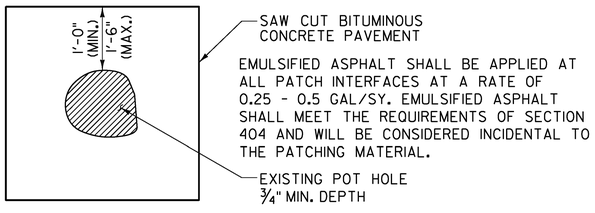
BRIDGE COLD PLANE TYPICAL PLAN

NOT TO SCALE



COLD PLANE DETAIL AT BEGIN /END PROJECT & RAMPS

NOTES:
1. SURFACE PREPARATION IS REQUIRED ON ALL RAMPS.



TYPICAL POT HOLE REPAIR
NOT TO SCALE

NOTES:

1. REFER TO ASPHALTIC PLUG JOINT DETAIL SHEET. ALL NEW JOINTS TO BE PAID FOR UNDER ITEM 516.10, "BRIDGE EXPANSION JOINT, ASPHALTIC PLUG."
2. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DAMAGING DRAINAGE STRUCTURES AND EXPANSION JOINTS. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE SOLE EXPENSE OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID THE ACCUMULATION OF DEBRIS IN THE DRAINAGE STRUCTURES LOCATED AT CURB LINE AND IN THE EXPANSION JOINTS. THE CONTRACTOR SHALL EXAMINE THESE BRIDGE FEATURES ON A DAILY BASIS TO ENSURE THAT DEBRIS HAS NOT ACCUMULATED. ANY DEBRIS WHICH IS PRESENT SHALL BE REMOVED BY THE CONTRACTOR AT NO COST TO THE STATE.
4. THE CONTRACTOR SHALL USE CAUTION WHEN COLD PLANING AND PAVING OPERATIONS OCCUR ON BRIDGE DECKS. SHOULD ANY DAMAGE OCCUR TO THE DECK OR MEMBRANE AS A RESULT OF THESE OPERATIONS THE ENGINEER SHALL CONTACT THE VTRANS CONSTRUCTION STRUCTURES ENGINEER TO PROVIDE AN ASSESSMENT OF THE DAMAGE AND RECOMMEND ANY NECESSARY REPAIRS. THE CONSTRUCTION STRUCTURES ENGINEER WILL ALSO DETERMINE IF THE DAMAGE WAS AVOIDABLE. IF THE CONTRACTOR IS DETERMINED BY THE RESIDENT ENGINEER TO BE AT FAULT FOR THE DAMAGE, THE RECOMMENDED REPAIRS SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE STATE.

LEGEND

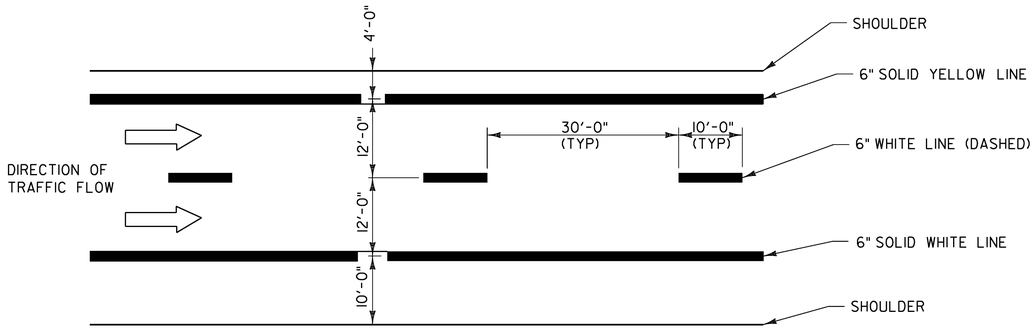
MILLED SURFACE

COMPOSITE COLD PLANE DETAIL SHEET

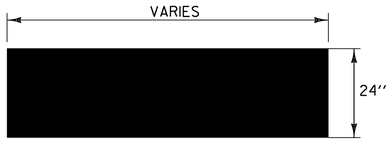
PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (30) & IM SURF (28)

FILE NAME: IIa024/IIa024COMPOSITE.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: M. FOWLER
IIa024compcpd.1

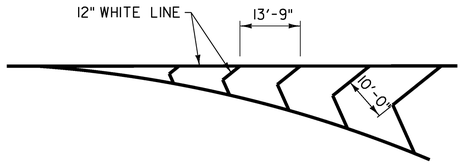
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: PAVT MGMT
SHEET 7 OF 49



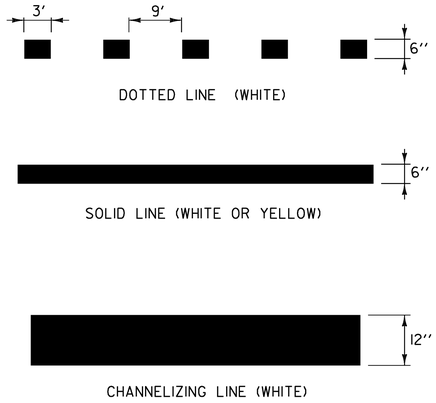
TYPICAL MAINLINE MARKING PLAN



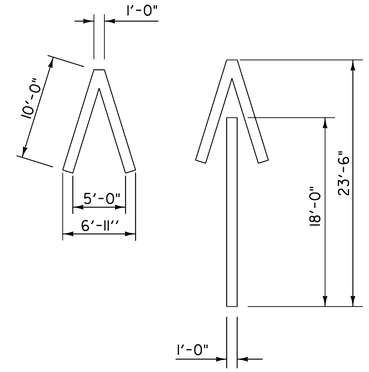
STOP BAR DETAIL



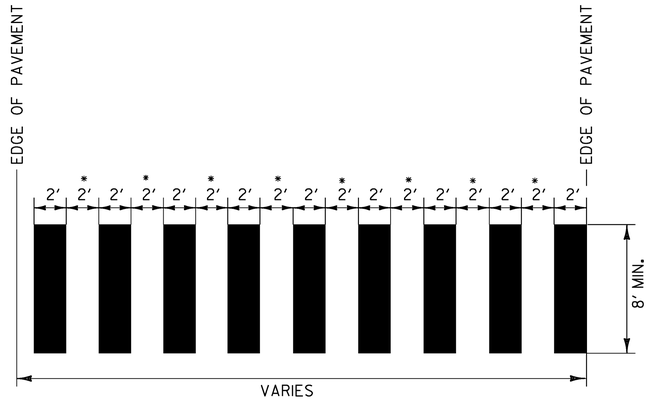
GORE MARKING DETAIL



PAVEMENT MARKING LINE DETAILS



WRONG WAY ARROW DETAILS



• ADJUST SPACING (12''-24'') TO AVOID WHEEL PATHS

BLOCK PATTERN CROSSWALK DETAIL

PROJECT NOTES:

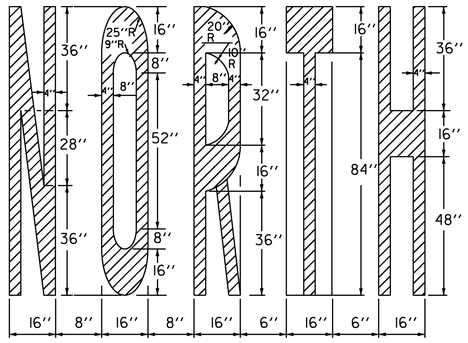
1. ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING, POTHOLE REPAIR, AND CRACK SEALING SHALL BE PERFORMED PRIOR TO PLACEMENT OF THE FINAL SURFACE TREATMENT. ALL CRACKS GREATER THAN 0.10 INCH AND UP TO 1.0 INCH IN WIDTH SHALL BE SEALED USING THE "BLOW AND GO" FLUSH FILL METHOD. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE PAID FOR UNDER ITEM 417.20, BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD. THE PATCHING OF ALL CRACKS GREATER THAN 1.0 INCH AND ALL OTHER PATCHING AND POTHOLE REPAIR SHALL BE COMPLETED USING BITUMINOUS CONCRETE PAVEMENT IN ACCORDANCE WITH ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I). AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED TO COVER ALL COSTS ASSOCIATED WITH THIS WORK.
2. FOLLOWING COMPLETION OF COLD PLANING, THE MILLED SURFACE FOR ALL BRIDGES SHALL ALSO RECEIVE CRACK SEALING AND RELATED PATCHING AND POTHOLE REPAIR TREATMENTS AS DIRECTED BY THE ENGINEER.
3. ALL EXISTING PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO ANY CRACK SEALING BEING PERFORMED AND PRIOR TO APPLYING THE FINAL SURFACE TREATMENT. ALL LANE DELINEATION IS TO BE MAINTAINED DURING CONSTRUCTION BY THE USE OF LINE STRIPING TARGETS OR TEMPORARY PAINT.
4. A 50' COLD PLANED TRANSITION SHALL BE CONSTRUCTED AT THE PROJECT BEGIN, PROJECT END, AND AT ALL BRIDGE APPROACHES OR AS DIRECTED BY THE ENGINEER. ANY SAWCUTTING AT BUTT JOINTS SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 210.10, COLD PLANING, BITUMINOUS PAVEMENT. THE CONTRACTOR SHALL USE CAUTION WHEN COLD PLANING AND PAVING OPERATIONS OCCUR ADJACENT TO EXISTING DROP INLETS OR CATCH BASINS. ANY DAMAGE WHICH OCCURS TO THESE DRAINAGE STRUCTURES AS A RESULT OF THESE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE OF VERMONT.
5. IF IT IS DETERMINED BY THE ENGINEER IN AREAS ALONG THE BASE OF THE GUARDRAIL THAT WINTER SAND AND OTHER DEBRIS HAS ACCUMULATED SUFFICIENTLY TO AFFECT PROPER CRACK SEALING AND RELATED PATCHING AND POTHOLE REPAIR TREATMENTS, THIS MATERIAL SHALL BE REMOVED PRIOR TO CRACK SEALING, PATCHING, AND POTHOLE REPAIR AS DIRECTED BY THE ENGINEER. AN ESTIMATED QUANTITY FOR ITEM 203.40, SHOULDER BERM REMOVAL HAS BEEN INCLUDED TO COVER THE COSTS ASSOCIATED WITH THIS WORK.
6. TWO (2) APPLICATIONS OF FINAL PAVEMENT MARKINGS WILL BE REQUIRED. SEE SPECIAL PROVISIONS FOR COMPLETION DATE REQUIREMENTS.
7. SEE SPECIAL PROVISIONS FOR MINIMUM RETRO-REFLECTIVITY REQUIREMENTS.

NOT TO SCALE

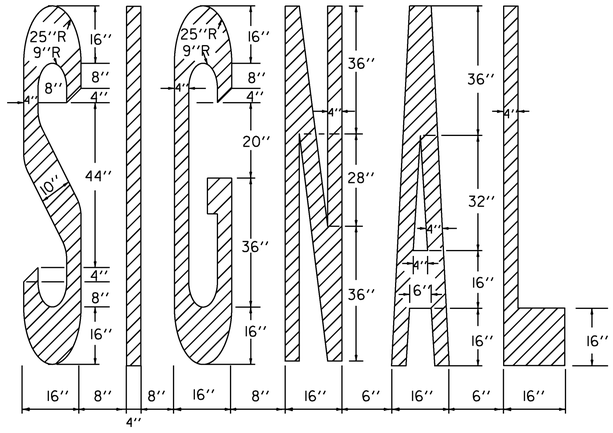
COMPOSITE PAVEMENT MARKING DETAIL SHEET #1

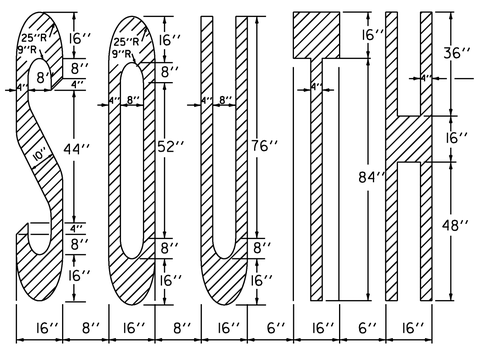
PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (30) & IM SURF (28)

FILE NAME: IIA024/IIA024COMPOSITE.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IPARM FILE NAME: iia024comppmdl.i
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: PAVT MGMT
SHEET 8 OF 49

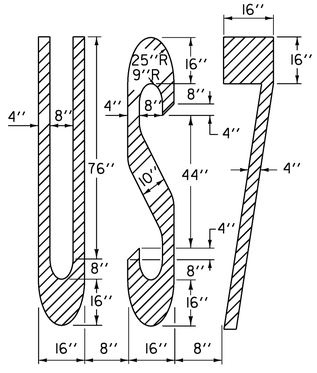


ADJUST TO AVAILABLE PAVEMENT WIDTH





ADJUST TO AVAILABLE PAVEMENT WIDTH



NOT TO SCALE

COMPOSITE PAVEMENT MARKING DETAIL SHEET #2

PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (30) & IM SURF (28)

FILE NAME: IIA024/IIA024COMPOSITE.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IPARM FILE NAME: IIa024comppmd2.i

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: PAVT MGMT
SHEET 9 OF 49

TRAFFIC CONTROL NOTES:

1. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 641.10, TRAFFIC CONTROL.

2. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH VTRANS STANDARDS E-103, E-106 AND THE LATEST REVISION OF THE 2009 MUTCD. PAYMENT FOR PROVIDING THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.

3. THE BID PRICE FOR TRAFFIC CONTROL, ITEM 641.10, SHALL INCLUDE ALL APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, PORTABLE ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID FOR SEPARATELY:

   630.10 - UNIFORMED TRAFFIC OFFICERS
   630.15 - FLAGGERS
   646.610 - TEMPORARY 4 INCH YELLOW LINE
   646.620 - TEMPORARY 6 INCH WHITE LINE
   646.630 - TEMPORARY 6 INCH YELLOW LINE
   646.660 - TEMPORARY 12 INCH WHITE LINE
   646.680 - TEMPORARY 24 INCH STOP BAR
   646.690 - TEMPORARY LETTER OR SYMBOL
   646.700 - TEMPORARY CROSSWALK MARKING
   646.76 - LINE STRIPING TARGETS

4. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PROVIDED FOR USE ALONG THIS PROJECT. THE PLACEMENT OF THESE UNITS AS WELL AS THE MESSAGE WILL BE APPROVED BY THE ENGINEER. THESE SIGNS WILL BE PAID FOR UNDER ITEM 641.15, PORTABLE CHANGEABLE MESSAGE SIGN.

5. FOR THE DURATION OF THE SWANTON-HIGHGATE IM SURF (28) PROJECT, THE CONTRACTOR SHALL POSITION A PCMS PRIOR TO I-89 EXITS 21 AND 22 NORTHBOUND WARNING NORTHBOUND MOTORISTS OF EXPECTED ROADWAY CONDITIONS AND REDUCED ROADWAY WIDTHS. FOR THE DURATION OF THE BURLINGTON-SO. BURLINGTON IM SURF (30) PROJECT, THE CONTRACTOR SHALL POSITION A PCMS PRIOR TO ENTERING I-189 FROM US ROUTE 7, KENNEDY DRIVE, DORSET ST., INTERSTATE 89 NORTHBOUND, AND INTERSTATE 89 SOUTHBOUND WARNING MOTORISTS OF EXPECTED ROADWAY CONDITIONS AND REDUCED ROADWAY WIDTHS.

6. PCMS SHOULD NOT REPLACE ANY OF THE SIGNING DETAILED IN THE MUTCD AND SHOULD NOT BE USED IF STANDARD TRAFFIC CONTROL DEVICES ADEQUATELY PROVIDE THE INFORMATION THE MOTORISTS NEED TO TRAVEL SAFELY.

7. THE PCMS SHOULD COMMUNICATE WHAT INFORMATION MOTORISTS NEED TO KNOW. UNNECESSARY INFORMATION SHOULD BE AVOIDED. MESSAGES SHOULD BE UPDATED PERIODICALLY TO DESCRIBE THE WORK ACTIVITY OCCURRING SO THAT THE PCMS CONTINUES TO COMMAND THE ATTENTION OF MOTORISTS.

8. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS.

9. REFER TO VT. STATE STANDARDS AND THE 2009 MUTCD FOR TEMPORARY TRAFFIC CONTROL SIGN COLORS.

10. DURING CONSTRUCTION IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAINTAIN ONE-LANE TRAFFIC FOR EXTENDED PERIODS OF TIME. IN NO CASE SHALL THE PAVED WIDTH FOR ONE-LANE TRAFFIC, INCLUDING SHOULDERS, BE REDUCED TO LESS THAN 15 FEET IN WIDTH. THIS PAVED WIDTH SHALL REMAIN FREE OF OBSTRUCTIONS AND OBSTACLES AT ALL TIMES.

11. ADDITIONAL RAMP SIGNING MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.

12. THE DISTANCE SHOWN ON THE "ROAD WORK NEXT XXX MILES" (G20-1) SHALL BE STATED TO THE NEAREST 1 MILE. REFER TO PART 6 OF THE 2009 MUTCD SECTION 6F.51. THESE SIGNS SHOULD BE SPACED APPROXIMATELY EVERY 2-3 MILES ALONG THE PROJECT AS A REMINDER TO THE TRAVELLING PUBLIC.

13. EXISTING SPEED LIMIT SIGNS SHALL BE COMPLETELY COVERED WHEN REDUCED SPEED SIGNS ARE POSTED. KEEP RECORDS WHEN POSTING THE WORK ZONE SPEED LIMIT FOR LEGAL PURPOSES; DOCUMENTING DATES, TIMES, AND LOCATIONS OF SIGNS. WHEN WORK ZONE SPEED LIMIT IS NOT IN USE ALL ASSOCIATED SIGNS SHALL BE COVERED, TURNED, AND OR LAID FLAT SO AS THE TRAVELLING PUBLIC CANNOT READ THESE SIGNS.

14. PORTABLE OR STATIONARY WORK ZONE SPEED LIMIT SIGNS SHOULD BE SPACED EVERY 1.5 TO 2 MILES WHERE APPLICABLE AS A REMINDER TO THE MOTORIST TRAVELLING THROUGH THE WORK ZONE THE SPEED THEY SHOULD BE TRAVELLING.

15. WHEN REDUCED REGULATORY SPEED LIMIT SIGNS ARE USED, THE RESUMPTION OF THE USUAL SPEED LIMIT SHALL BE INDICATED BY AN APPROPRIATE SPEED LIMIT SIGN AT THE END OF THE WORK ZONE.

16. COORDINATION WITH THE BORDER PATROL WILL BE REQUIRED FOR THE SWANTON-HIGHGATE IM SURF (28) PROJECT. CONTACT PORT DIRECTOR KEVIN COY AT 802-868-2778.

COMPOSITE TRAFFIC CONTROL NOTES

PROJECT NAME: BURLINGTON-SO. BURLINGTON & SWANTON-HIGHGATE

PROJECT NUMBER: IM SURF (30) & IM SURF (28)

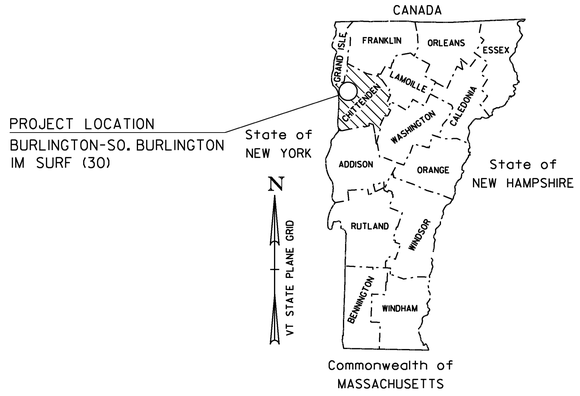
FILE NAME: 11a024/11a024COMPOSITE.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
11a024comptcn.i

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 10 OF 49

INDEX OF SHEETS
SEE SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT
CITIES OF BURLINGTON AND SO. BURLINGTON
COUNTY OF CHITTENDEN
INTERSTATE ROUTE 189 (NHS)



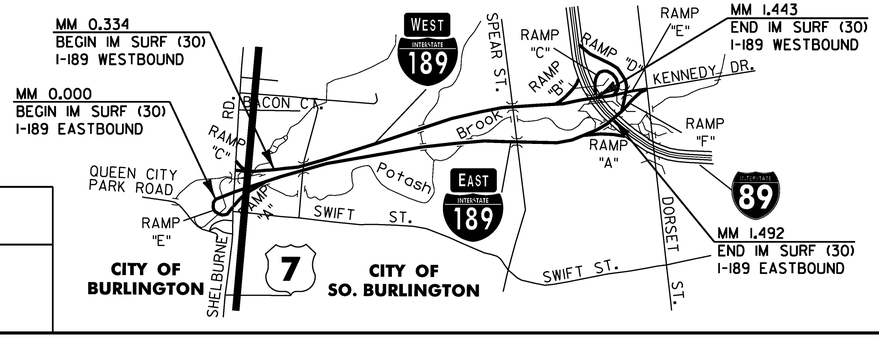
BEGINNING IN THE CITY OF BURLINGTON ON I-189 EASTBOUND AT MM 0.000 AND EXTENDING EASTERLY ON I-189 FOR A DISTANCE OF 1.492 MILES TO MM 1.492 IN THE CITY OF SO. BURLINGTON. PROJECT ALSO INCLUDES I-189 WESTBOUND BEGINNING AT MM 0.334 AND EXTENDING EASTERLY 1.109 MILES TO MM 1.443. PROJECT INCLUDES ASSOCIATED RAMPS AS DESCRIBED BELOW.

PROJECT DATA		LENGTH (MILES)
I-189 EASTBOUND (MM EB 0.000 TO MM EB 1.492)	=	1.492
I-189 WESTBOUND (MM WB 0.334 TO MM WB 1.443)	=	1.076
US RTE. 7 INTERCHANGE EB RAMP "A" (MM 0.027 TO MM 0.228)	=	0.201
US RTE. 7 INTERCHANGE WB RAMP "C" (MM 0.000 TO MM 0.260)	=	0.260
US RTE. 7 INTERCHANGE EB RAMP "E" (MM 0.030 TO MM 0.160)	=	0.130
I-89 INTERCHANGE WB RAMP "C" FROM I-89 NORTHBOUND (MM 0.224 TO MM 0.258)	=	0.034
I-89 INTERCHANGE EB RAMP "A" TO I-89 SOUTHBOUND (MM 0.000 TO MM 0.097)	=	0.097
I-89 INTERCHANGE EB RAMP "D" TO I-89 NORTHBOUND (MM 0.000 TO MM 0.050)	=	0.050
I-89 INTERCHANGE WB RAMP "E" FROM DORSET ST. (MM 0.000 TO MM 0.182)	=	0.149
I-89 INTERCHANGE EB RAMP "F" TO DORSET ST. (MM 0.000 TO MM 0.162)	=	0.162
TOTAL LENGTH OF PROJECT	=	3.651
TOTAL LENGTH OF ROADWAY	=	3.651

TRAFFIC DATA
I-189 EB & WB

LOCATION	AADT		DHV		ESALS	ESALS
	2012	2022	2012	2022	2012 - 2022	2012 - 2032
EASTBOUND	20,100	20,700	2500	2500	3,766,000	9,273,000
WESTBOUND	20,100	20,700	2200	2200	3,904,000	9,604,000

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES SURFACE PREPARATION INVOLVING PATCHING, POT HOLE REPAIR, AND CRACK-SEALING AS NECESSARY; OVERLAYING WTH A THIN BITUMINOUS SURFACE TREATMENT ON THE EXISTING TYPICAL AND APPLICABLE PAVEMENT MARKINGS; SIGNAL WORK.



UTILITY LEGEND
- = EXISTING HYDRANT
- DI = EXISTING DI
- = EXISTING MANHOLE
- TEL = EXISTING TELEPHONE MANHOLE
- ELEC = EXISTING ELECTRIC MANHOLE
- SMH = EXISTING SEWER MANHOLE
- WSO = EXISTING WATER SHUTOFF
- GSO = EXISTING GAS SHUTOFF
- = EXISTING LIGHT POLE
- = EXISTING SCUPPER

SIGN LEGEND
- RET = RETAIN
- B-B = BACK TO BACK

QUALITY ASSURANCE PROGRAM: LEVEL I

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS (SR SR SR)
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : N/A
SURVEYED DATE : N/A

DATUM
VERTICAL N/A
HORIZONTAL N/A

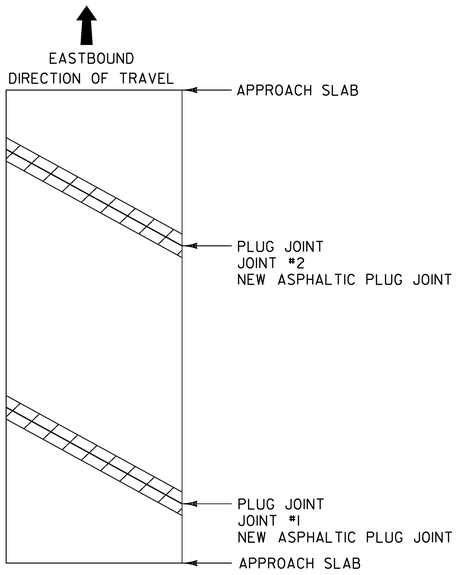
THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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.

PROJECT MANAGER : M. FOWLER

PROJECT NAME : BURLINGTON - SO. BURLINGTON
PROJECT NUMBER : IM SURF (30)

SHEET 1 OF 49 SHEETS

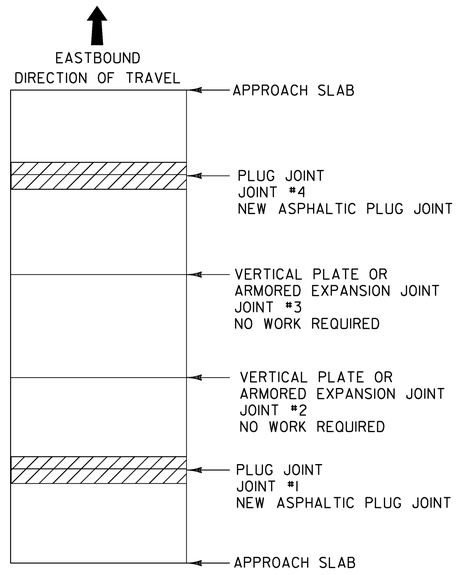


BRIDGE 2E

MM 0.320

LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 40'
JOINT #2 - 40'

TOTAL = 80'

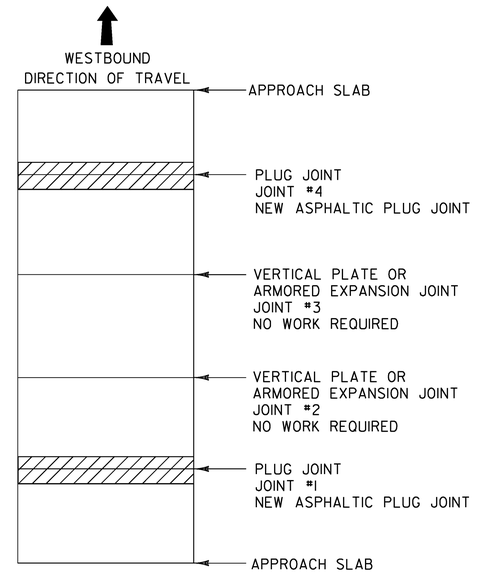


BRIDGE 3E

MM 1.116

LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 40'
JOINT #2 - 40'

TOTAL = 80'

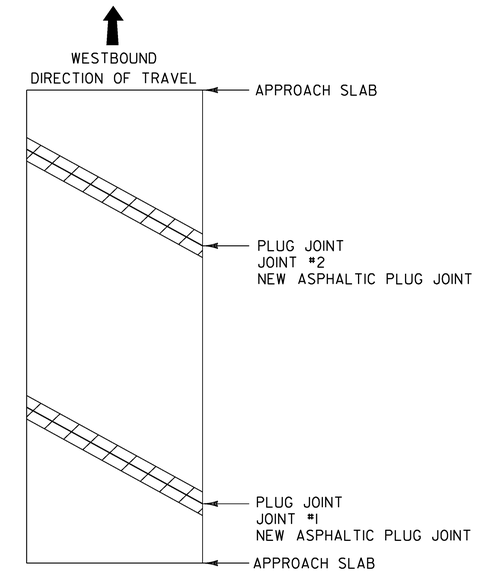


BRIDGE 3W

MM 1.126

LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 38'
JOINT #2 - 38'

TOTAL = 76'

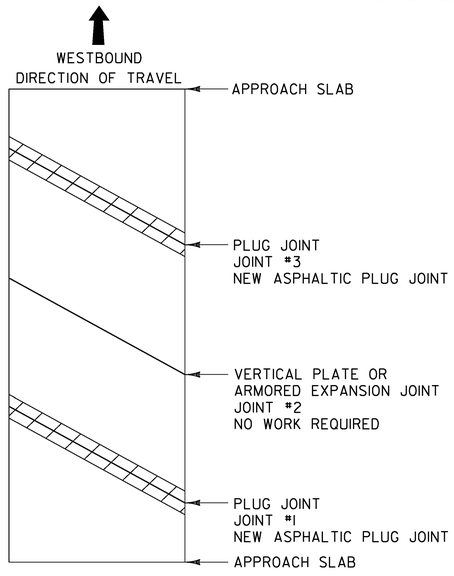


BRIDGE 2W

MM 0.324

LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 40'
JOINT #2 - 40'

TOTAL = 80'



BRIDGE NO.67-E RAMP E

MM 0.097

LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 40'
JOINT #2 - 40'

TOTAL = 80'

NOTES:

1. BRIDGE 4W HAS A MEMBRANE PROJECT EXPECTED TO BE COMPLETED BY JUNE 29, 2012 AND THEREFORE IS NOT INCLUDED UNDEROF THIS PROJECT.
2. SEE STRUCTURES DETAIL SD-516.10, BRIDGE JOINT ASPHALTIC PLUG FOR NOTES AND DETAILS.
3. AN ADDITIONAL ASPHALTIC PLUG JOINT SHALL BE INSTALLED AT RAMP C MM 0.203 (SEE LAYOUT SHEET #4).

NOT TO SCALE

BRIDGE DETAIL SHEET

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: lla028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IPARM FILE NAME: lla028bdl.i

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: PAVT MGMT
SHEET 12 OF 49

VIDEO VEHICLE DETECTION SYSTEM NOTES:

1. VIDEO VEHICLE DETECTORS SHALL BE PLACED SO THAT OCCLUSION IS MINIMIZED AND PHASING IS NOT AFFECTED.

2. VIDEO VEHICLE DETECTION AREAS SHALL EXTEND FIVE FEET PAST THE STOP BAR.

3. THE CONTRACTOR SHALL VERIFY IN THE FIELD THAT THERE IS ADEQUATE SPACE IN THE EXISTING CONDUIT AND CONTROLLER FOR VIDEO VEHICLE DETECTION CABLE AND EQUIPMENT.

4. ANY OTHER MISCELLANEOUS EQUIPMENT AND LABOR NECESSARY TO PROVIDE A FULLY FUNCTIONAL VIDEO VEHICLE DETECTION SYSTEM SHALL BE INCIDENTAL TO ITEM 900.620 SPECIAL PROVISION (VIDEO VEHICLE DETECTION SYSTEM).

5. ALL EXISTING VEHICLE DETECTOR LOOPS BEING REPLACED WITH VIDEO DETECTION ARE TO BE DISCONNECTED AT THE EXISTING PULLBOX LOCATIONS AND WIRING REMOVED BACK TO THE CABINET.

6. VIDEO VEHICLE DETECTION SYSTEM SHALL BE ONE OF THE MANUFACTURERS LISTED IN THE SPECIAL PROVISIONS OR APPROVED EQUAL.

7. EXISTING CONTROLLER TIMINGS SHALL BE RETAINED.

8. ALL EXISTING LOOP DETECTOR EQUIPMENT TO BE SALVAGED IS TO BE REMOVED AND RETURNED BY THE CONTRACTOR TO SOUTH BURLINGTON PUBLIC WORKS. COORDINATE THROUGH JUSTIN RABIDOUX AT 802-658-7961.

9. PRIOR TO COLD PLANING, THE CONTRACTOR SHALL DISCONNECT THE VEHICLE DETECTOR LOOP IN THE CONTROLLER CABINET AND CUT IT AT THE CURB OR SHOULDER. ONCE THE VEHICLE DETECTOR LOOP IS DISCONNECTED, THE SIGNAL PHASE THAT IT WAS CALLING SHALL BE SET ON MAXIMUM RECALL OR THE SIGNAL SHALL BE SET TO FLASH WHILE TRAFFIC IS BEING CONTROLLED BY A UNIFORMED TRAFFIC OFFICER. DETECTOR AND SIGNAL WORK SHALL BE INCIDENTAL TO PAY ITEM 900.620 SPECIAL PROVISION (VIDEO VEHICLE DETECTION SYSTEM). UNIFORMED TRAFFIC OFFICERS WILL BE PAID FOR UNDER CONTRACT ITEM 630.10, UNIFORMED TRAFFIC OFFICERS.

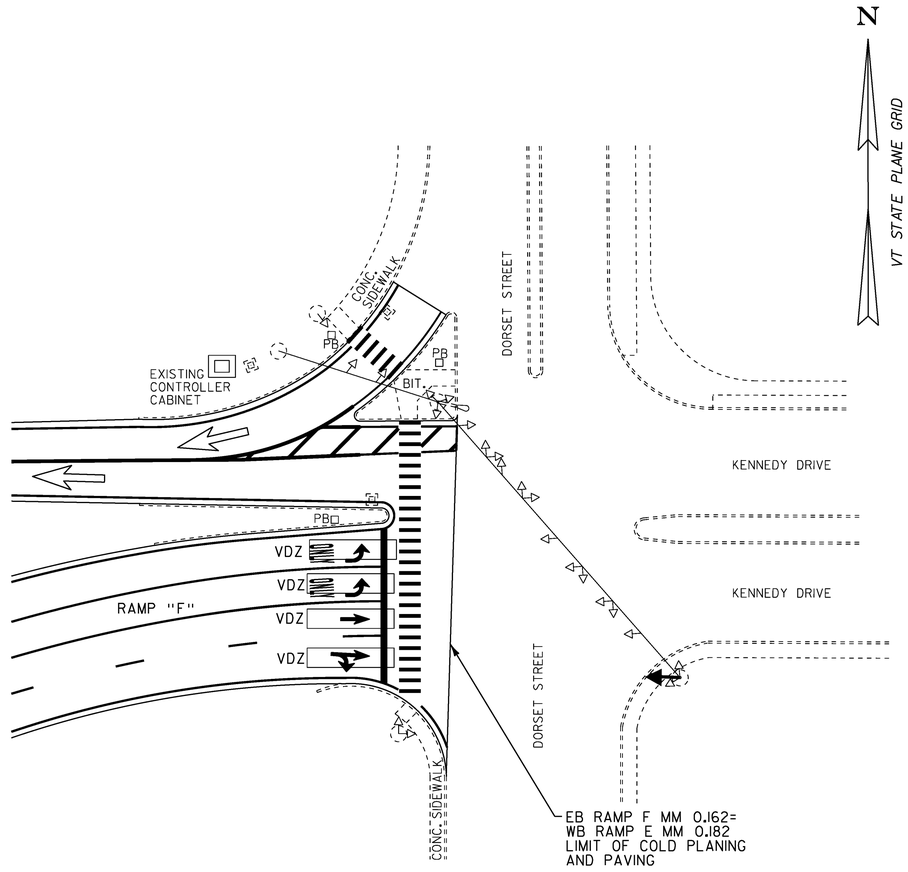
10. ALL TRAFFIC SIGNAL CONDUIT SHALL BE SCHEDULE 80 PVC.

11. ALL TRAFFIC SIGNAL CONDUIT WORK SHALL PERFORMED IN ACCORDANCE WITH VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, SECTION 678.

12. A UNIFORMED TRAFFIC OFFICER WITH A BLUE LIGHT SHALL BE PRESENT DURING ALL LANE CLOSURES.

13. ALL ELECTRICAL WIRING SHALL BE DONE BY A LICENSED ELECTRICIAN AND OVERSEEN BY A MASTER ELECTRICIAN.

LIST OF MAJOR EQUIPMENT	QUANTITY
ITEM 900.620 SPECIAL PROVISION (VIDEO VEHICLE DETECTION SYSTEM) (I-189 @ DORSET ST.)	1
VIDEO VEHICLE DETECTION CAMERAS (TO BE INCIDENTAL TO ITEM 900.620, SPECIAL PROVISION (VIDEO VEHICLE DETECTION SYSTEM) (I-189 @ DORSET ST.)	1



LEGEND

- CT — NEW TRAFFIC CONTROL BOX
- EXISTING STRAIN POLE
- EXISTING MAST ARM
- VDZ — VIDEO DETECTION ZONE
- VIDEO CAMERA
- EXISTING OVERHEAD SIGNAL

NOT TO SCALE

VIDEO VEHICLE DETECTION SYSTEM

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028v1dl.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 13 OF 49

QUANTITY SHEET 1

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

NON-PART.	BRIDGE	ROADWAY	FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
						BEGIN ITEMS COMMON TO ALTERNATES		
		9,840		9,840	LF	SHOULDER BERM REMOVAL	203.40	93
		1		1	CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST.
		6,030		6,030	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	59
		400		400	TON	AGGREGATE SHOULDERS	402.12	31
		1		1	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-
		10,000		10,000	LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (AASHTO M324 (ASTM D 6690) TYPE II)	417.20	EST.
	450			450	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	9
	100			100	CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST.
		20		20	HR	POWER BROOM RENTAL, TYPE I	608.30	EST.
1				1	EA	ADJUST ELEVATION OF VALVE BOX	629.20	-
		280		280	HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.
		175		175	HR	FLAGGERS	630.15	EST.
			0.5	0.5	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
		0.5		0.5	LS	MOBILIZATION/DEMOBILIZATION	635.11	-
		1		1	LS	TRAFFIC CONTROL (IM SURF(30))	641.10	-
		5		5	EA	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-
		48,400		48,400	LF	6 INCH WHITE LINE	646.214	513
		37,500		37,500	LF	6 INCH YELLOW LINE	646.215	388
		4,450		4,450	LF	12 INCH WHITE LINE	646.24	52
		150		150	LF	24 INCH STOP BAR	646.26	4
		206		206	EA	LETTER OR SYMBOL	646.30	-
		340		340	LF	CROSSWALK MARKING	646.31	14
		24,200		24,200	LF	TEMPORARY 6 INCH WHITE LINE	646.620	243
		18,740		18,740	LF	TEMPORARY 6 INCH YELLOW LINE	646.630	184
		2,220		2,220	LF	TEMPORARY 12 INCH WHITE LINE	646.660	21
		75		75	LF	TEMPORARY 24 INCH STOP BAR	646.680	2
		103		103	EA	TEMPORARY LETTER OR SYMBOL	646.690	-
		170		170	EA	TEMPORARY CROSSWALK MARKING	646.700	7
		2,200		2,200	EA	LINE STRIPING TARGETS	646.76	75
		41,000		41,000	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	399
		1		1	LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	
		1		1	EA	SPECIAL PROVISION (VIDEO VEHICLE DETECTION SYSTEM) (I-189 @ DORSET ST.)	900.620	-
		50		50	TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)	900.680	EST.
						END ITEMS COMMON TO ALTERNATES		

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		COLD PLANING, BITUMINOUS PAVEMENT
1333	SY	RAMPS
807	SY	BRIDGE 2E
825	SY	BRIDGE 2W
912	SY	BRIDGE 3E
912	SY	BRIDGE 3W
378	SY	BRIDGE 4W
680	SY	BRIDGE 67-E
124	SY	U-TURN
59	SY	ROUNDING
6030	SY	TOTAL
		AGGREGATE SHOULDERS
70	TON	RAMPS
174	TON	I-189 EASTBOUND
125	TON	I-189 WESTBOUND
31	TON	ROUNDING
400	TON	TOTAL

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: BURLINGTON-SO. BURLINGTON

PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028qs1.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 14 OF 49

QUANTITY SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

NON-PART.	BRIDGE	ROADWAY	FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
						BEGIN ALTERNATE A		
		72,300		72,300	SY	SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)	900.675	732
						END ALTERNATE A		
						BEGIN ALTERNATE B		
		1		1	LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-
		4,220		4,220	TON	SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)	900.680	47
		500		500	CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	19
						END ALTERNATE B		

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		ALTERNATE A
		SPECIAL PROVISION (PAVER-PLACED SURFACE TREATMENT, TYPE C)
21,650	SY	RAMPS
29,416	SY	I-189 EASTBOUND
20,502	SY	I-189 WESTBOUND
732	SY	ROUNDING
72,300	SY	TOTAL
		ALTERNATE B
		SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS, CONCRETE PAVEMENT)(SBR OR SBS POLYMER)
1,261	TON	RAMPS
1,716	TON	I-189 EASTBOUND
1,196	TON	I-189 WESTBOUND
47	TON	ROUNDING
4,220	TON	TOTAL

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: BURLINGTON-SO. BURLINGTON

PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028qs2.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 15 OF 49

BEGIN IM SURF(30) INTERSTATE 189
RAMP E MM 0.160 = I-189 EB MM 0.000

I-189 WESTBOUND

I-189 EASTBOUND

TO DOWNTOWN BURLINGTON

EXISTING CONCRETE TRAFFIC BARRIER

I-189 EB MM 0.013 EW=47'

I-189 EB MM 0.025 EW=47'

7'
12'
12'
12'
16'
12'
12'
16'

6" YELLOW LINE

6" WHITE LINE

BRIDGE NO. 1 U.S. ROUTE 7
OVER I-189 EASTBOUND
EB MM 0.052

CONC. SDWK

I-189 EB MM 0.075

TO I-89

MATCHLINE SEE NEXT SHEET RAMP A MM 0.050

4'
18'
4'

RAMP E MM 0.141 EW=26'

RAMP "E"

CONC. SDWK

6" YELLOW LINE

6" WHITE LINE

RAMP E MM 0.030
LIMIT OF COLD PLANING AND PAVING

4'
18'
4'

CONC. SDWK

TO SHELBURNE

SWIFT STREET

U.S. ROUTE 7 SHELBURNE RD.

6" YELLOW LINE

RAMP "A"

TO I-89

7'*
12'*
12'*
12'*
2'*
2'
4'

RAMP A MM 0.027 EW=33'

6" WHITE LINE

LIMIT OF COLD PLANING AND PAVING

CONC. SDWK

CITY OF BURLINGTON

CITY OF SO. BURLINGTON

N

VT STATE PLANE GRID

I-189 INTERCHANGE NO. 1
U.S. ROUTE 7, RAMP "A" & RAMP "E"

TEMPORARY 6" YELLOW LINE
I-189 EB MM 0.000 TO I-189 EB MM 0.075, SOLID LT.
RAMP A MM 0.027 TO RAMP A MM 0.050, SOLID LT.
RAMP E MM 0.030 TO RAMP E MM 0.160, SOLID LT.

6" YELLOW LINE
RAMP A MM 0.027 TO RAMP A MM 0.050, SOLID LT.
RAMP E MM 0.030 TO RAMP E MM 0.160, SOLID LT.
I-189 EB MM 0.000 TO I-189 EB MM 0.075, SOLID LT.

TEMPORARY 6" WHITE LINE
I-189 EB MM 0.000 TO I-189 EB MM 0.075, SOLID RT.
I-189 EB MM 0.013 TO I-189 EB MM 0.075, DASHED CENTERLINE
RAMP A MM 0.027 TO RAMP A MM 0.050, SOLID RT.
RAMP A MM 0.027 TO RAMP A MM 0.040, SOLID CENTERLINE
RAMP A MM 0.040 TO RAMP A MM 0.050, DASHED CENTERLINE
RAMP E MM 0.030 TO RAMP E MM 0.160, SOLID RT.

6" WHITE LINE
I-189 EB MM 0.000 TO I-189 EB MM 0.075, SOLID RT.
I-189 EB MM 0.013 TO I-189 EB MM 0.075, DASHED CENTERLINE
RAMP A MM 0.027 TO RAMP A MM 0.050, SOLID RT.
RAMP A MM 0.027 TO RAMP A MM 0.040, SOLID CENTERLINE
RAMP A MM 0.040 TO RAMP A MM 0.050, DASHED CENTERLINE
RAMP E MM 0.030 TO RAMP E MM 0.160, SOLID RT.

*MATCH EXISTING CONDITIONS

NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #1

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la1.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 16 OF 49

TEMPORARY 6" WHITE LINE

I-189 EB MM 0.075 TO I-189 EB MM 0.162, SOLID RT./DASHED CENTERLINE
RAMP A MM 0.050 TO RAMP A MM 0.137, SOLID RT.
RAMP A MM 0.050 TO RAMP A MM 0.078, DASHED CENTERLINE

6" WHITE LINE

I-189 EB MM 0.075 TO I-189 EB MM 0.162, SOLID RT./DASHED CENTERLINE
RAMP A MM 0.050 TO RAMP A MM 0.137, SOLID RT.
RAMP A MM 0.050 TO RAMP A MM 0.078, DASHED CENTERLINE

TEMPORARY 6" YELLOW LINE

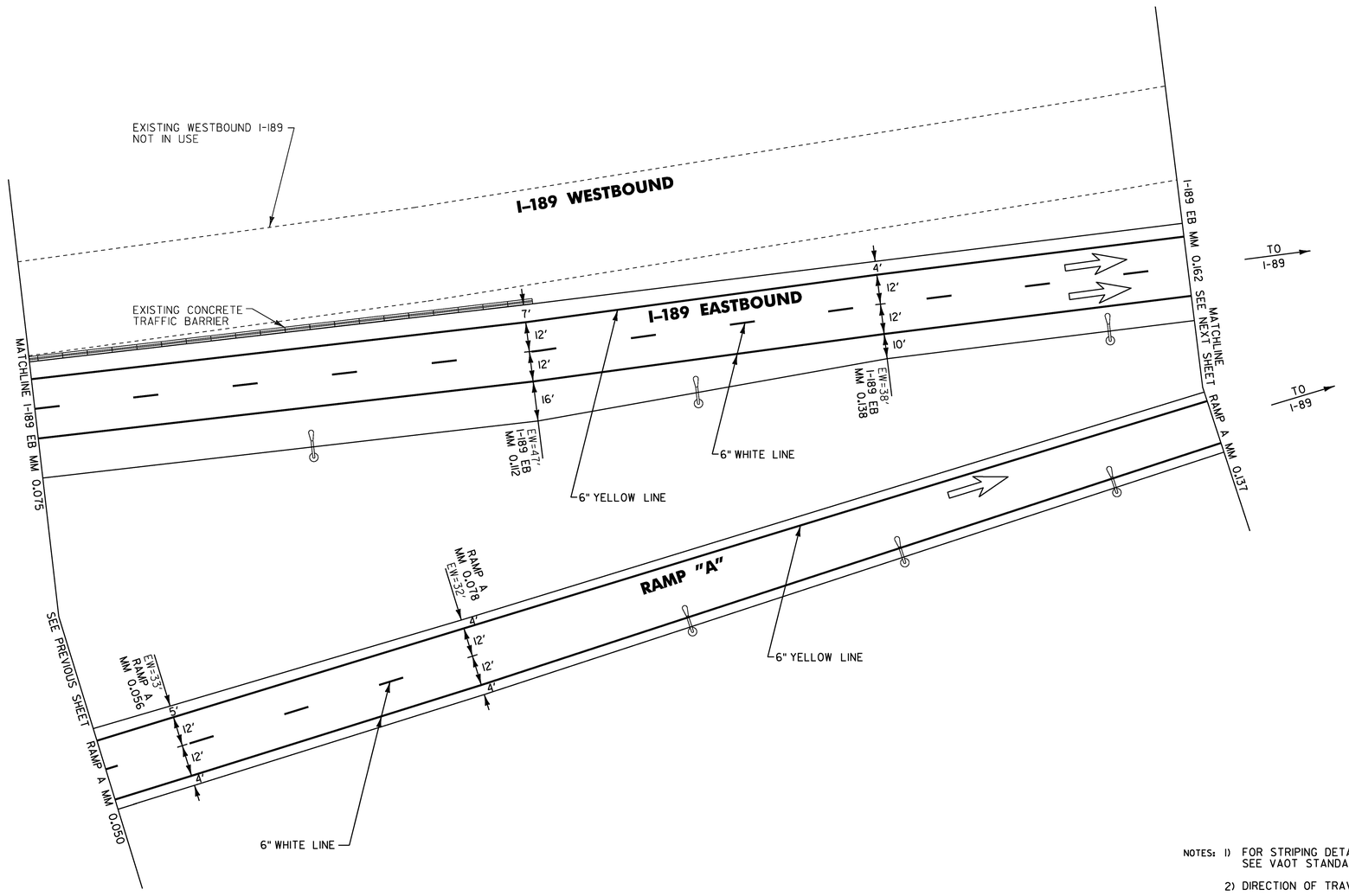
I-189 EB MM 0.075 TO I-189 EB MM 0.162, SOLID LT.
RAMP A MM 0.050 TO RAMP A MM 0.137, SOLID LT.

6" YELLOW LINE

I-189 EB MM 0.075 TO I-189 EB MM 0.162, SOLID LT.
RAMP A MM 0.050 TO RAMP A MM 0.137, SOLID LT.

N

VT STATE PLANE GRID



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192

2) DIRECTION OF TRAVEL

3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #2

PROJECT NAME: BURLINGTON-SO. BURLINGTON

PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la2.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 17 OF 49

TEMPORARY 6" WHITE LINE
I-189 EB MM 0.162 TO I-189 EB MM 0.193, SOLID RT.
I-189 EB MM 0.162 TO I-189 EB MM 0.270, DASHED CENTERLINE
I-189 EB MM 0.193 TO I-189 EB MM 0.270, SOLID RT.
I-189 EB MM 0.232 TO I-189 EB MM 0.270, DOTTED RT.
RAMP A MM 0.137 TO RAMP A MM 0.169, SOLID RT.
RAMP C MM 0.062 TO RAMP C MM 0.162, SOLID RT./DASHED CENTERLINE

6" WHITE LINE
I-189 EB MM 0.162 TO I-189 EB MM 0.193, SOLID RT.
I-189 EB MM 0.162 TO I-189 EB MM 0.270, DASHED CENTERLINE
I-189 EB MM 0.193 TO I-189 EB MM 0.270, SOLID RT.
I-189 EB MM 0.232 TO I-189 EB MM 0.270, DOTTED RT.
RAMP A MM 0.137 TO RAMP A MM 0.169, SOLID RT.
RAMP C MM 0.062 TO RAMP C MM 0.162, SOLID RT./DASHED CENTERLINE

TEMPORARY 6" YELLOW LINE
I-189 EB MM 0.162 TO I-189 EB MM 0.270, SOLID LT.
RAMP A MM 0.137 TO RAMP A MM 0.169, SOLID LT.
RAMP C MM 0.062 TO RAMP C MM 0.162, SOLID LT.

6" YELLOW LINE
I-189 EB MM 0.162 TO I-189 EB MM 0.270, SOLID LT.
RAMP A MM 0.137 TO RAMP A MM 0.169, SOLID LT.
RAMP C MM 0.062 TO RAMP C MM 0.162, SOLID LT.

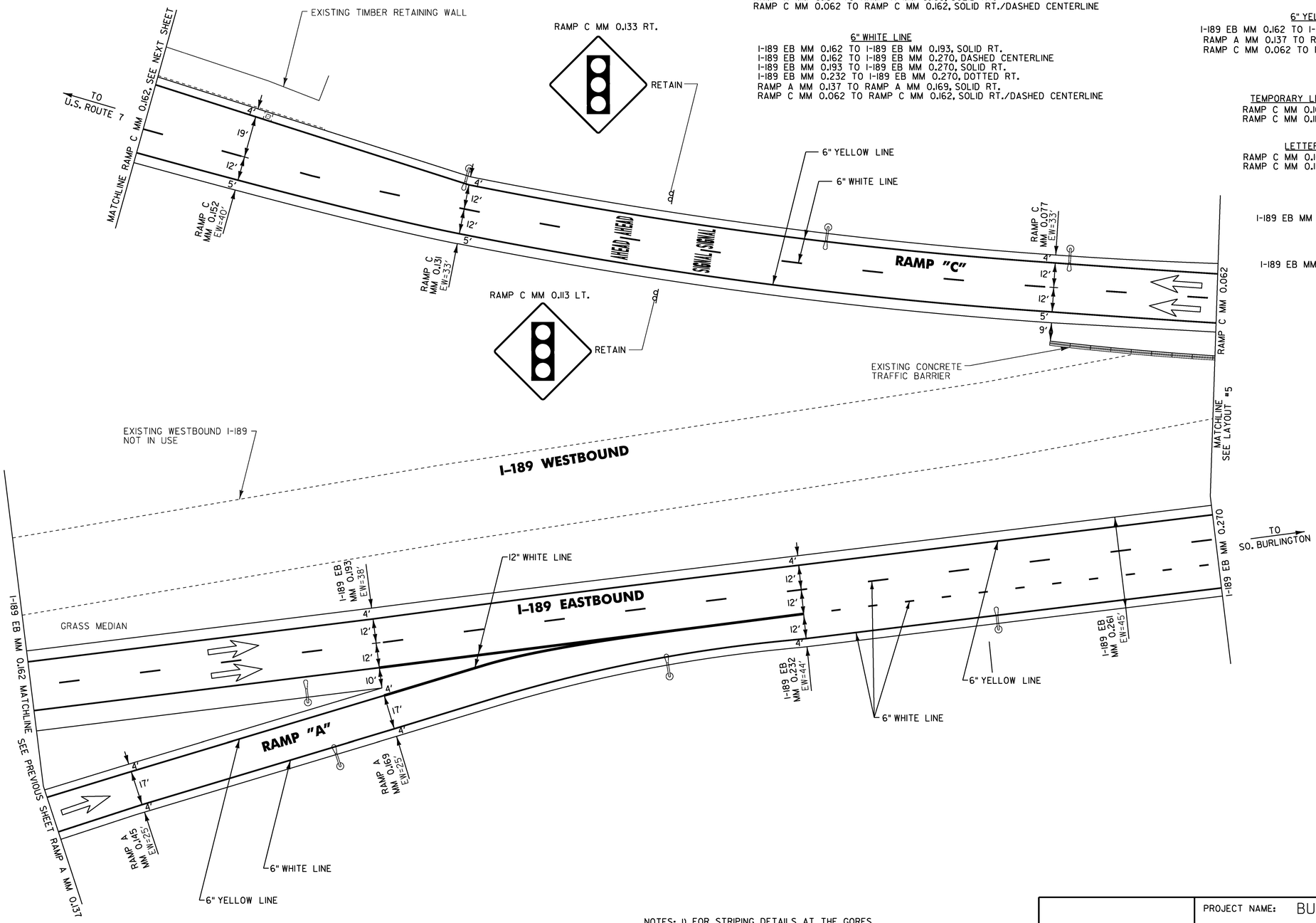
TEMPORARY LETTER OR SYMBOL
RAMP C MM 0.109, LT. & RT. - "SIGNAL"
RAMP C MM 0.117, LT. & RT. - "AHEAD"

LETTER OR SYMBOL
RAMP C MM 0.109, LT. & RT. - "SIGNAL"
RAMP C MM 0.117, LT. & RT. - "AHEAD"

TEMPORARY 12" WHITE LINE
I-189 EB MM 0.193 TO I-189 EB MM 0.232, DOUBLE SOLID RT.

12" WHITE LINE
I-189 EB MM 0.193 TO I-189 EB MM 0.232, DOUBLE SOLID RT.

N
VT STATE PLANE GRID



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #3

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028Ia3.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 18 OF 49

6" YELLOW LINE
RAMP C MM 0.162 TO RAMP C MM 0.251, SOLID LT.
RAMP C MM 0.247 TO RAMP C MM 0.260, SOLID LT. SLIP RAMP
(BREAK FOR CROSSWALK)

TEMPORARY 6" YELLOW LINE
RAMP C MM 0.162 TO RAMP C MM 0.251, SOLID LT.
RAMP C MM 0.247 TO RAMP C MM 0.260, SOLID LT. SLIP RAMP
(BREAK FOR CROSSWALK)

6" WHITE LINE
RAMP C MM 0.162 TO RAMP C MM 0.201, SOLID RT./DASHED CENTERLINE
RAMP C MM 0.177 TO RAMP C MM 0.201, DASHED RT.
RAMP C MM 0.201 TO RAMP C MM 0.255, SOLID RT. & CENTERLINE
RAMP C MM 0.201 TO RAMP C MM 0.260, SOLID RT.

TEMPORARY 6" WHITE LINE
RAMP C MM 0.162 TO RAMP C MM 0.201, SOLID RT./DASHED CENTERLINE
RAMP C MM 0.177 TO RAMP C MM 0.201, DASHED RT.
RAMP C MM 0.201 TO RAMP C MM 0.255, SOLID RT. & CENTERLINE
RAMP C MM 0.201 TO RAMP C MM 0.260, SOLID RT.

TEMPORARY LETTER OR SYMBOL
RAMP C MM 0.202, LT. & RT. - "US7" (2)
RAMP C RT. - "NORTH"
RAMP C LT. - "SOUTH"
RAMP C LT. ↱ (3)
RAMP C CENTERLINE ⬲ (3)
RAMP C RT. ↴ (2)
RAMP C LT. & RT. - "ONLY" (3)
RAMP C RT. - "YIELD"

LETTER OR SYMBOL
RAMP C MM 0.202, LT. & RT. - "US7" (2)
RAMP C RT. - "NORTH"
RAMP C LT. - "SOUTH"
RAMP C LT. ↱ (3)
RAMP C CENTERLINE ⬲ (3)
RAMP C RT. ↴ (2)
RAMP C LT. & RT. - "ONLY" (3)
RAMP C RT. - "YIELD"

12" WHITE LINE
RAMP C DOUBLE SOLID W/ DIAGONALS

TEMPORARY 12" WHITE LINE
RAMP C DOUBLE SOLID W/ DIAGONALS

CROSSWALK MARKING
RAMP C LT. (29')
RAMP C RT. (24')

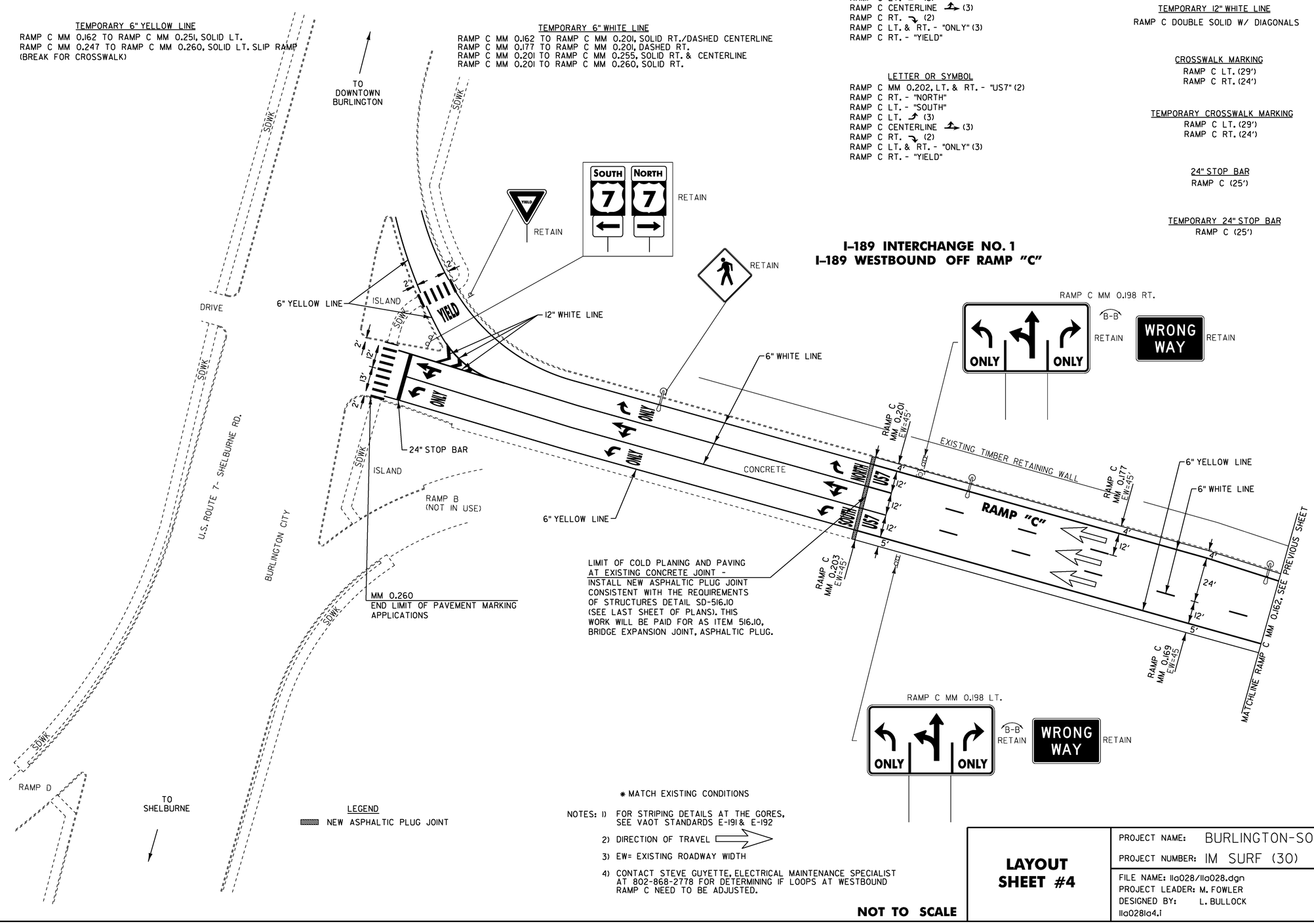
TEMPORARY CROSSWALK MARKING
RAMP C LT. (29')
RAMP C RT. (24')

24" STOP BAR
RAMP C (25')

TEMPORARY 24" STOP BAR
RAMP C (25')

N
VT STATE PLANE GRID

I-189 INTERCHANGE NO. 1
I-189 WESTBOUND OFF RAMP "C"



LEGEND
▨ NEW ASPHALTIC PLUG JOINT

* MATCH EXISTING CONDITIONS

NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL ⇨
3) EW= EXISTING ROADWAY WIDTH
4) CONTACT STEVE GUYETTE, ELECTRICAL MAINTENANCE SPECIALIST AT 802-868-2778 FOR DETERMINING IF LOOPS AT WESTBOUND RAMP C NEED TO BE ADJUSTED.

NOT TO SCALE

LAYOUT SHEET #4

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la4.i
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 19 OF 49

TEMPORARY 6" WHITE LINE

I-189 EB MM 0.270 TO I-189 EB MM 0.385, DASHED CENTERLINE/DOTTED RT./SOLID RT.
I-189 WB MM 0.334 TO I-189 WB MM 0.385, SOLID LT./DASHED CENTERLINE
RAMP C MM 0.000 TO RAMP C MM 0.062, DASHED CENTERLINE/SOLID RT.

6" WHITE LINE

I-189 EB MM 0.270 TO I-189 EB MM 0.385, DASHED CENTERLINE/DOTTED RT./SOLID RT.
I-189 WB MM 0.334 TO I-189 WB MM 0.385, SOLID LT./DASHED CENTERLINE
RAMP C MM 0.000 TO RAMP C MM 0.062, DASHED CENTERLINE/SOLID RT.

TEMPORARY 6" YELLOW LINE

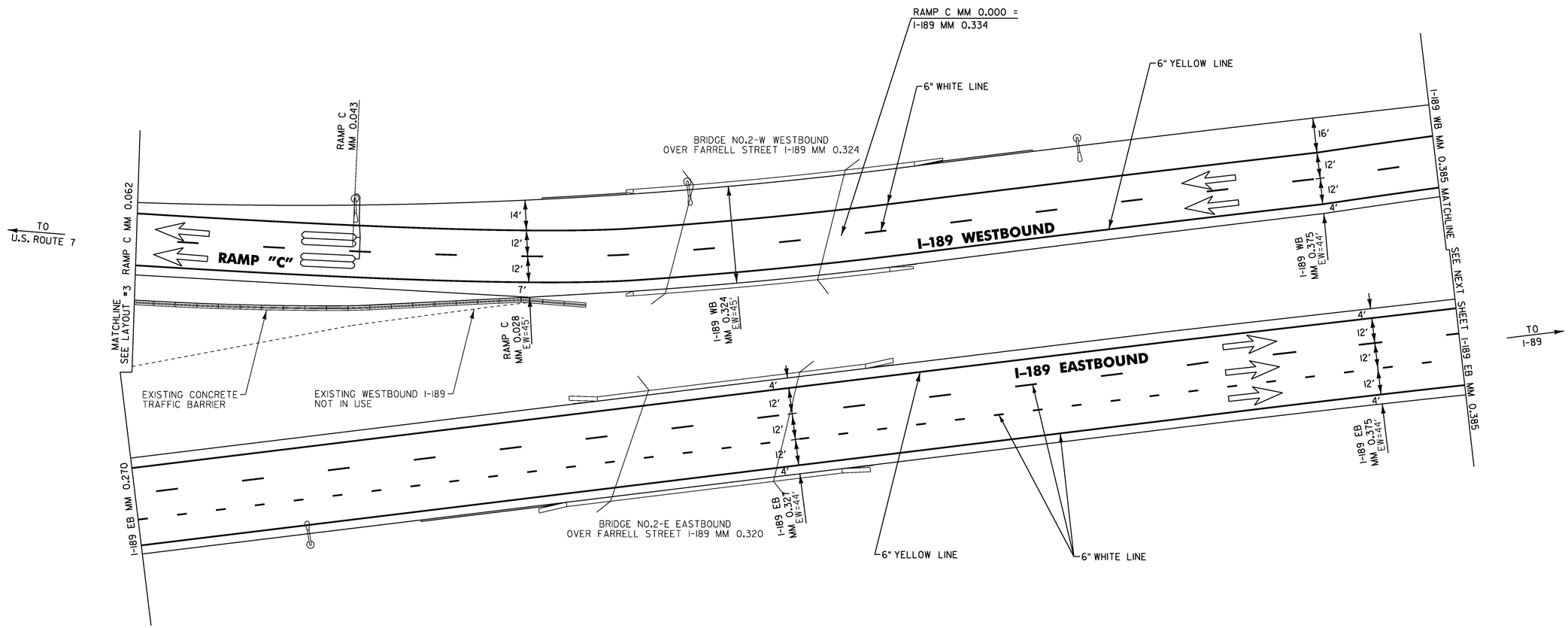
I-189 EB MM 0.270 TO I-189 EB MM 0.385, SOLID LT.
I-189 WB MM 0.334 TO I-189 WB MM 0.385, SOLID RT.
RAMP C MM 0.000 TO RAMP C MM 0.062, SOLID LT.

6" YELLOW LINE

I-189 EB MM 0.270 TO I-189 EB MM 0.385, SOLID LT.
I-189 WB MM 0.334 TO I-189 WB MM 0.385, SOLID RT.
RAMP C MM 0.000 TO RAMP C MM 0.062, SOLID LT.

N

VT STATE PLANE GRID



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192

2) DIRECTION OF TRAVEL

3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #5

PROJECT NAME: BURLINGTON-SO. BURLINGTON

PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la5.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 20 OF 49

TEMPORARY 6" WHITE LINE

I-189 EB MM 0.385 TO I-189 EB MM 0.510, DASHED CENTERLINE/SOLID RT.
I-189 EB MM 0.385 TO I-189 EB MM 0.510, DOTTED RT.
I-189 WB MM 0.385 TO I-189 WB MM 0.510, SOLID LT./DASHED CENTERLINE

6" WHITE LINE

I-189 EB MM 0.385 TO I-189 EB MM 0.510, DASHED CENTERLINE/SOLID RT.
I-189 EB MM 0.385 TO I-189 EB MM 0.510, DOTTED RT.
I-189 WB MM 0.385 TO I-189 WB MM 0.510, SOLID LT./DASHED CENTERLINE

TEMPORARY 6" YELLOW LINE

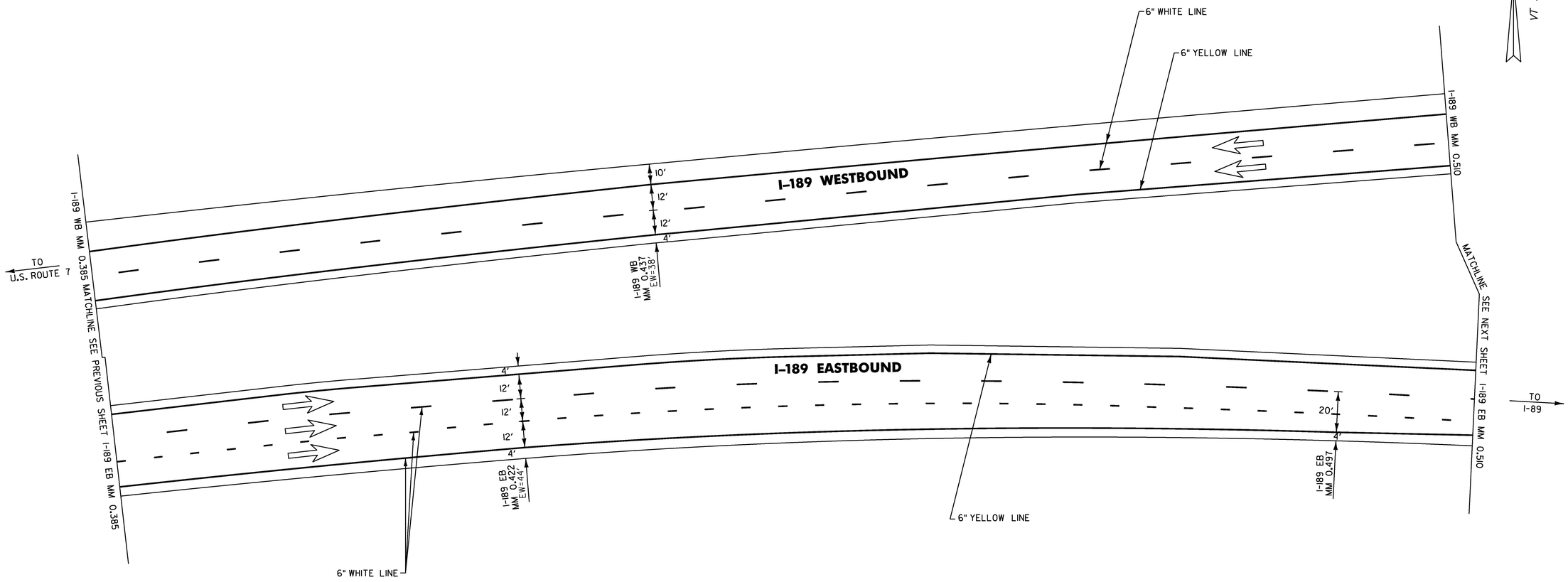
I-189 EB MM 0.385 TO I-189 EB MM 0.510, SOLID LT.
I-189 WB MM 0.385 TO I-189 WB MM 0.510, SOLID RT.

6" YELLOW LINE

I-189 EB MM 0.385 TO I-189 EB MM 0.510, SOLID LT.
I-189 WB MM 0.385 TO I-189 WB MM 0.510, SOLID RT.

N

VT STATE PLANE GRID



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #6

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la6.i

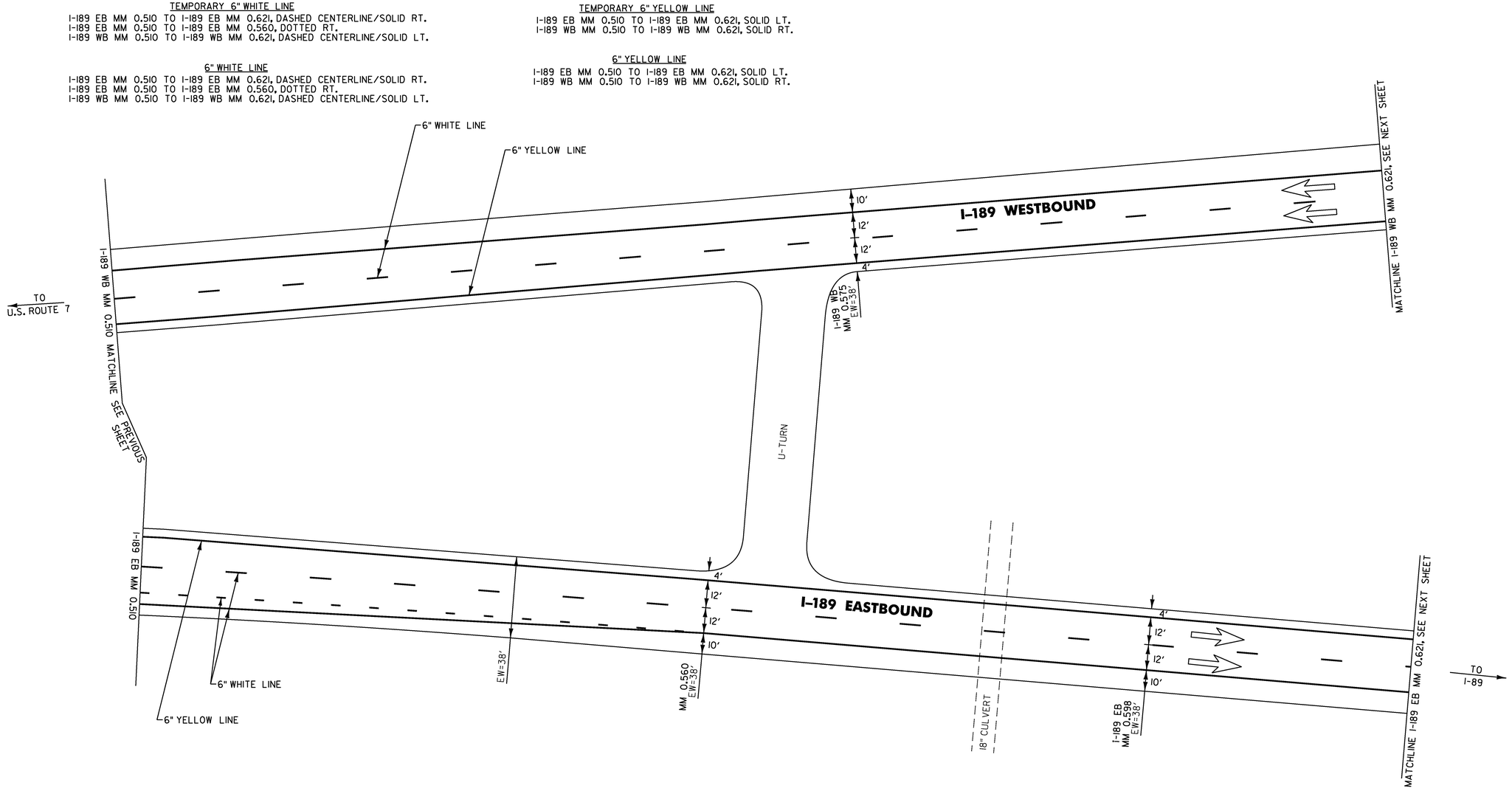
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 21 OF 49

TEMPORARY 6" WHITE LINE
I-189 EB MM 0.510 TO I-189 EB MM 0.621, DASHED CENTERLINE/SOLID RT.
I-189 EB MM 0.510 TO I-189 EB MM 0.560, DOTTED RT.
I-189 WB MM 0.510 TO I-189 WB MM 0.621, DASHED CENTERLINE/SOLID LT.

6" WHITE LINE
I-189 EB MM 0.510 TO I-189 EB MM 0.621, DASHED CENTERLINE/SOLID RT.
I-189 EB MM 0.510 TO I-189 EB MM 0.560, DOTTED RT.
I-189 WB MM 0.510 TO I-189 WB MM 0.621, DASHED CENTERLINE/SOLID LT.

TEMPORARY 6" YELLOW LINE
I-189 EB MM 0.510 TO I-189 EB MM 0.621, SOLID LT.
I-189 WB MM 0.510 TO I-189 WB MM 0.621, SOLID RT.

6" YELLOW LINE
I-189 EB MM 0.510 TO I-189 EB MM 0.621, SOLID LT.
I-189 WB MM 0.510 TO I-189 WB MM 0.621, SOLID RT.



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH
4) DO NOT PAVE U-TURN (SEE SHEET 7)

NOT TO SCALE

LAYOUT SHEET #7

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la7.1

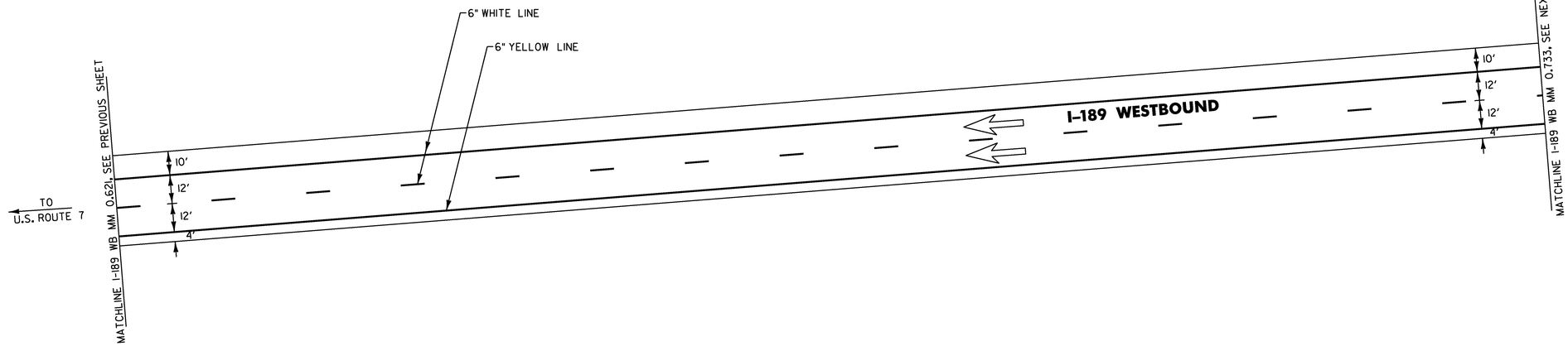
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 22 OF 49

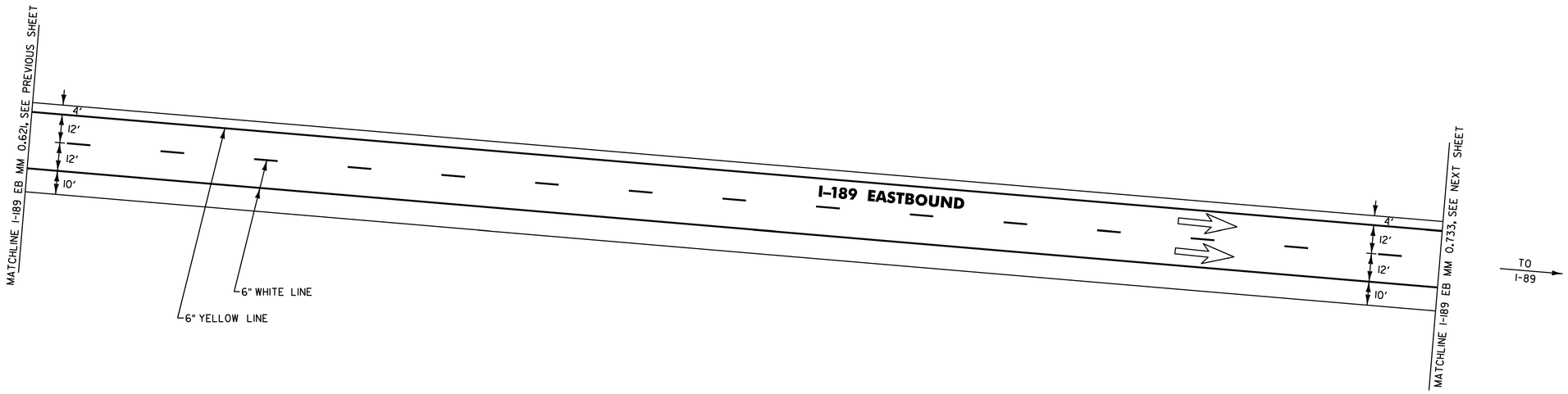
TEMPORARY 6" WHITE LINE
I-189 EB MM 0.621 TO I-189 EB MM 0.733, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 0.621 TO I-189 WB MM 0.733, DASHED CENTERLINE/SOLID LT.

6" WHITE LINE
I-189 EB MM 0.621 TO I-189 EB MM 0.733, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 0.621 TO I-189 WB MM 0.733, DASHED CENTERLINE/SOLID LT.

TEMPORARY 6" YELLOW LINE
I-189 EB MM 0.621 TO I-189 EB MM 0.733, SOLID LT.
I-189 WB MM 0.621 TO I-189 WB MM 0.733, SOLID RT.

6" YELLOW LINE
I-189 WB MM 0.621 TO I-189 WB MM 0.733, SOLID RT.
I-189 EB MM 0.621 TO I-189 EB MM 0.733, SOLID LT.





NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #8

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la8.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 23 OF 49

TEMPORARY 6" WHITE LINE
I-189 EB MM 0.733 TO I-189 EB MM 0.845, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 0.733 TO I-189 WB MM 0.845, DASHED CENTERLINE/SOLID LT.

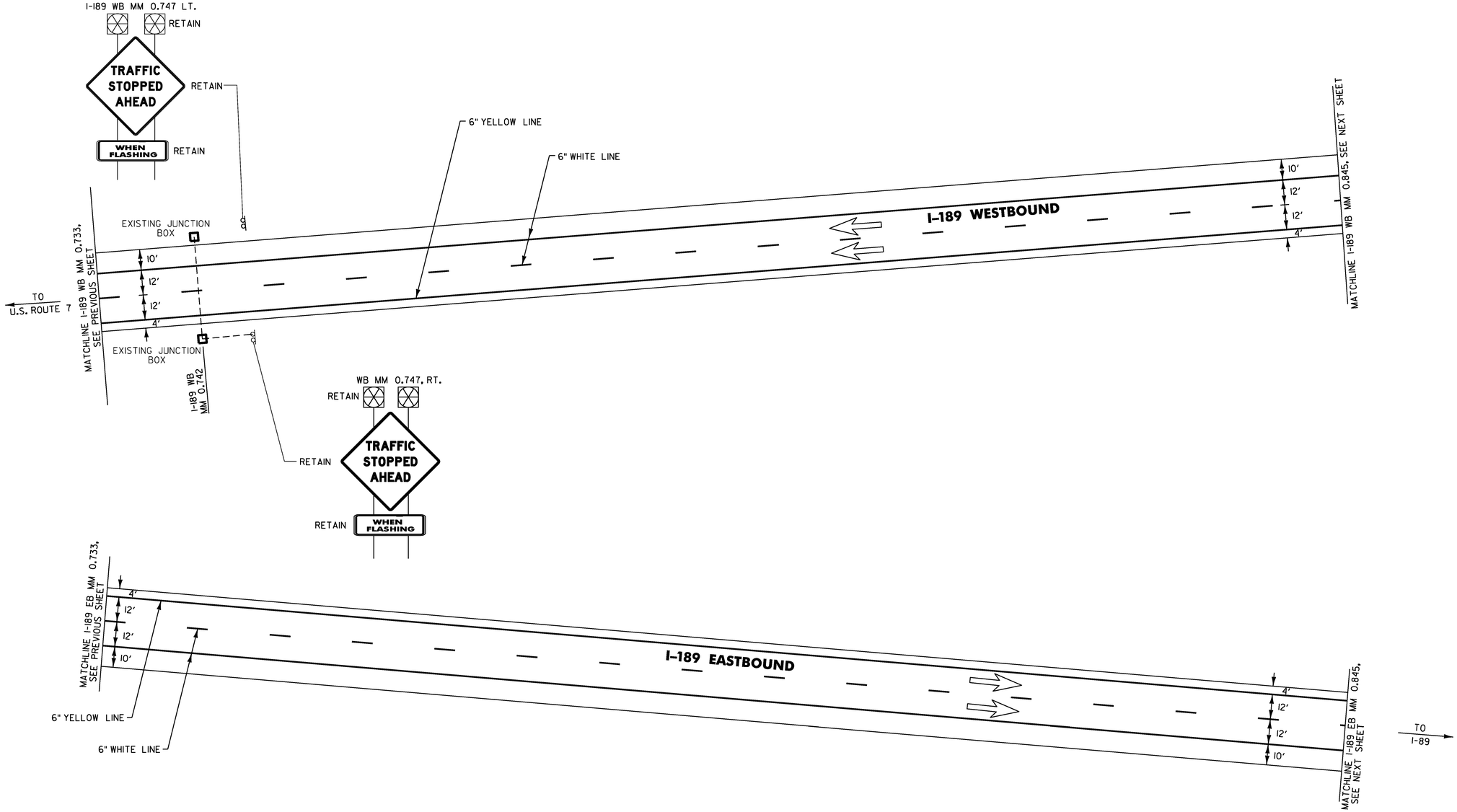
6" WHITE LINE
I-189 EB MM 0.733 TO I-189 EB MM 0.845, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 0.733 TO I-189 WB MM 0.845, DASHED CENTERLINE/SOLID LT.

TEMPORARY 6" YELLOW LINE
I-189 EB MM 0.733 TO I-189 EB MM 0.845, SOLID LT.
I-189 WB MM 0.733 TO I-189 WB MM 0.845, SOLID RT.

6" YELLOW LINE
I-189 EB MM 0.733 TO I-189 EB MM 0.845, SOLID LT.
I-189 WB MM 0.733 TO I-189 WB MM 0.845, SOLID RT.

N

VT STATE PLANE GRID



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #9

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

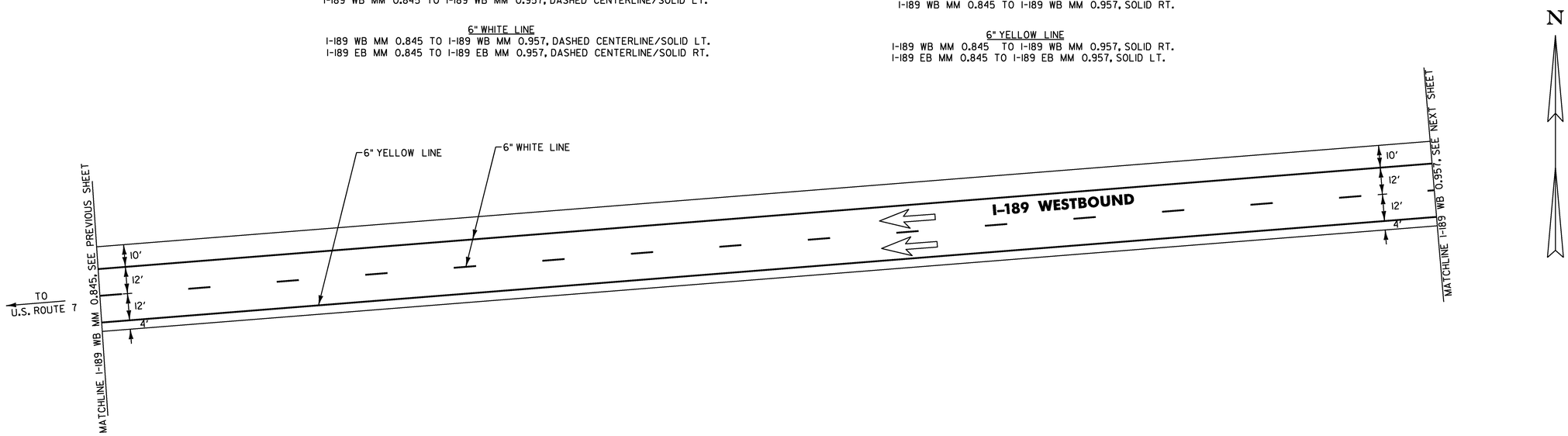
FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028Ia9.i
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 24 OF 49

TEMPORARY 6" WHITE LINE
I-189 EB MM 0.845 TO I-189 EB MM 0.957, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 0.845 TO I-189 WB MM 0.957, DASHED CENTERLINE/SOLID LT.

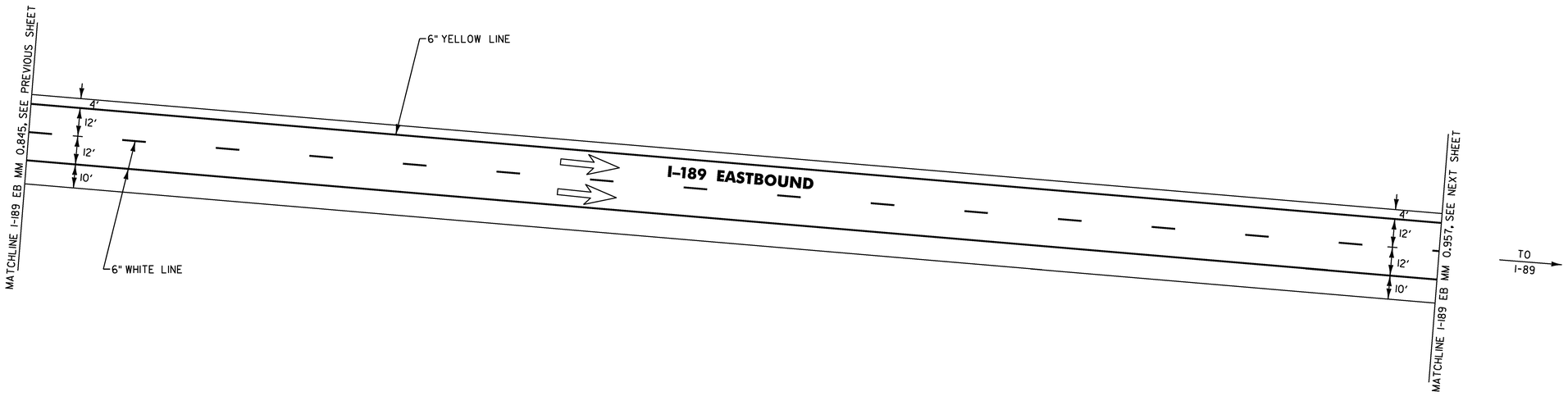
6" WHITE LINE
I-189 WB MM 0.845 TO I-189 WB MM 0.957, DASHED CENTERLINE/SOLID LT.
I-189 EB MM 0.845 TO I-189 EB MM 0.957, DASHED CENTERLINE/SOLID RT.

TEMPORARY 6" YELLOW LINE
I-189 EB MM 0.845 TO I-189 EB MM 0.957, SOLID LT.
I-189 WB MM 0.845 TO I-189 WB MM 0.957, SOLID RT.

6" YELLOW LINE
I-189 WB MM 0.845 TO I-189 WB MM 0.957, SOLID RT.
I-189 EB MM 0.845 TO I-189 EB MM 0.957, SOLID LT.



NOTE: FROM I-189 EB/WB MM 0.845 TO MM 1.417, THE WIDTH OF THE MEDIAN HAS BEEN REDUCED GRAPHICALLY IN ORDER TO SHOW BOTH EASTBOUND AND WESTBOUND ALIGNMENTS.



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #10

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la10.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 25 OF 49

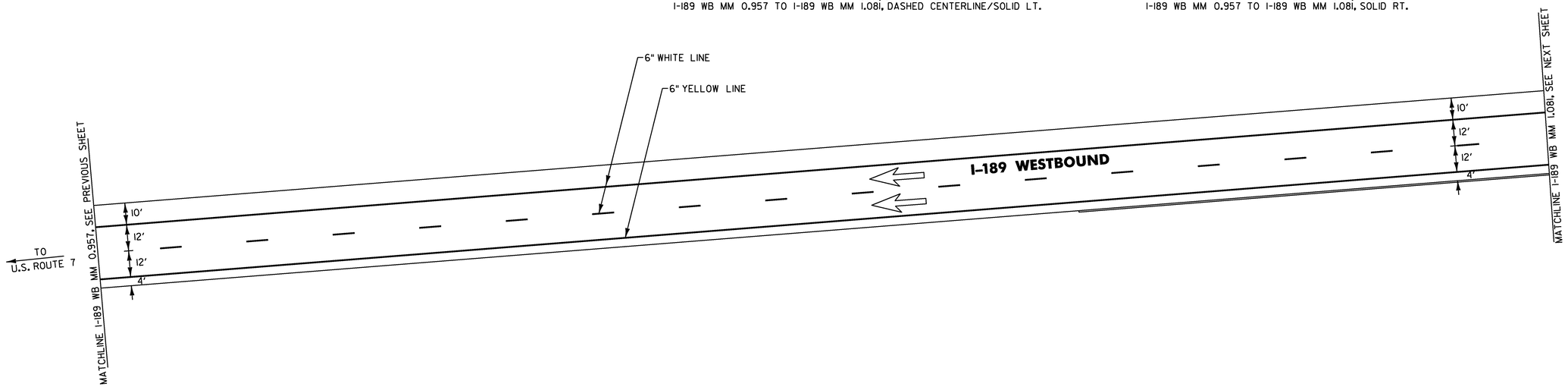
TEMPORARY 6" WHITE LINE
I-189 EB MM 0.957 TO I-189 EB MM 1.081, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 0.957 TO I-189 WB MM 1.081, DASHED CENTERLINE/SOLID LT.

TEMPORARY 6" YELLOW LINE
I-189 EB MM 0.957 TO I-189 EB MM 1.081, SOLID LT.
I-189 WB MM 0.957 TO I-189 WB MM 1.081, SOLID RT.

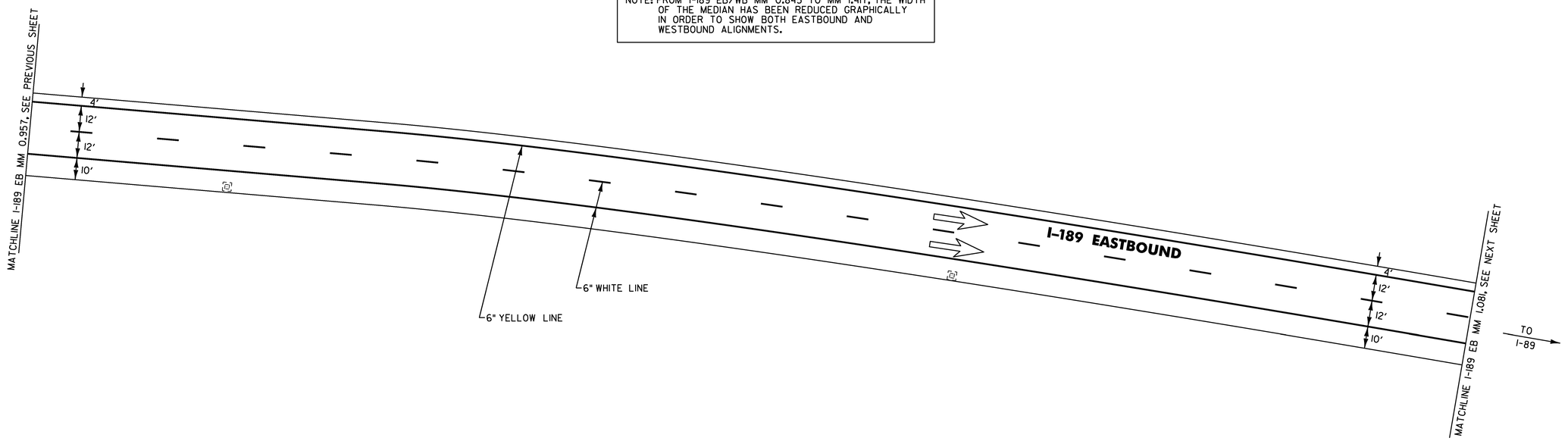
6" WHITE LINE
I-189 EB MM 0.957 TO I-189 EB MM 1.081, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 0.957 TO I-189 WB MM 1.081, DASHED CENTERLINE/SOLID LT.

6" YELLOW LINE
I-189 EB MM 0.957 TO I-189 EB MM 1.081, SOLID LT.
I-189 WB MM 0.957 TO I-189 WB MM 1.081, SOLID RT.

N
VT STATE PLANE GRID



NOTE: FROM I-189 EB/WB MM 0.845 TO MM 1.417, THE WIDTH OF THE MEDIAN HAS BEEN REDUCED GRAPHICALLY IN ORDER TO SHOW BOTH EASTBOUND AND WESTBOUND ALIGNMENTS.



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #11

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028lall.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 26 OF 49

TEMPORARY 6" WHITE LINE
I-189 EB MM 1.081 TO I-189 EB MM 1.205, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 1.081 TO I-189 WB MM 1.205, DASHED CENTERLINE/SOLID LT.
I-189 WB MM 1.135 TO I-189 WB MM 1.205, DOTTED LT.

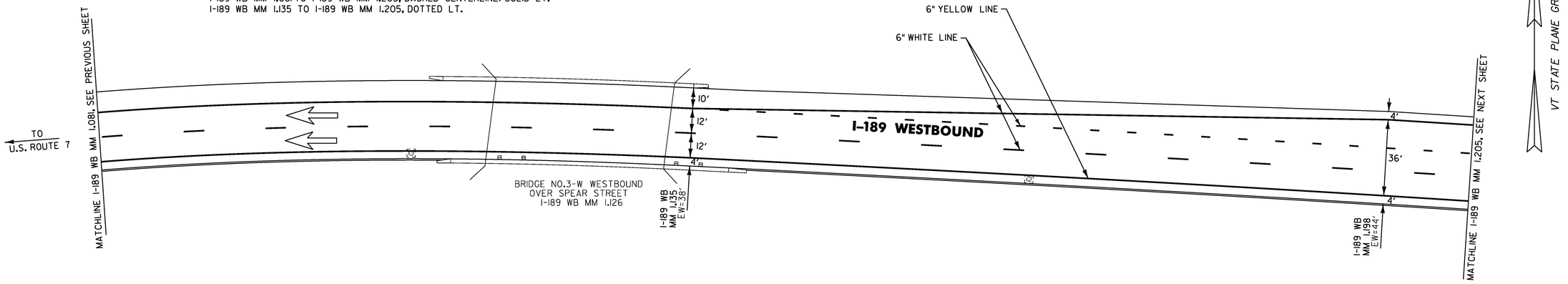
6" WHITE LINE
I-189 EB MM 1.081 TO I-189 EB MM 1.205, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 1.081 TO I-189 WB MM 1.205, DASHED CENTERLINE/SOLID LT.
I-189 WB MM 1.135 TO I-189 WB MM 1.205, DOTTED LT.

TEMPORARY 6" YELLOW LINE
I-189 EB MM 1.081 TO I-189 EB 1.205, SOLID LT.
I-189 WB MM 1.081 TO I-189 WB 1.205, SOLID RT.

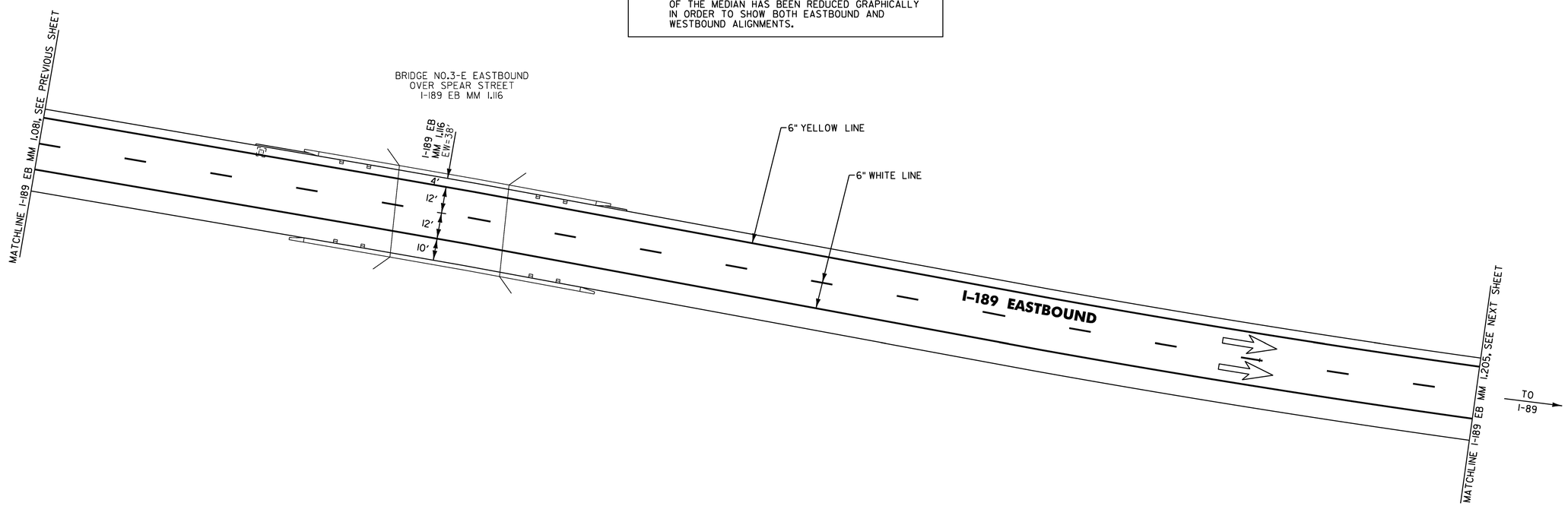
6" YELLOW LINE
I-189 EB MM 1.081 TO I-189 EB 1.205, SOLID LT.
I-189 WB MM 1.081 TO I-189 WB 1.205, SOLID RT.

N

VT STATE PLANE GRID



NOTE: FROM I-189 EB/WB MM 0.845 TO MM 1.417, THE WIDTH OF THE MEDIAN HAS BEEN REDUCED GRAPHICALLY IN ORDER TO SHOW BOTH EASTBOUND AND WESTBOUND ALIGNMENTS.



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #12

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028lal2.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 27 OF 49

TEMPORARY 12" WHITE LINE
I-189 WB MM 1.256 TO I-189 WB MM 1.296, DOUBLE SOLID LT.

12" WHITE LINE
I-189 WB MM 1.256 TO I-189 WB MM 1.296, DOUBLE SOLID LT.

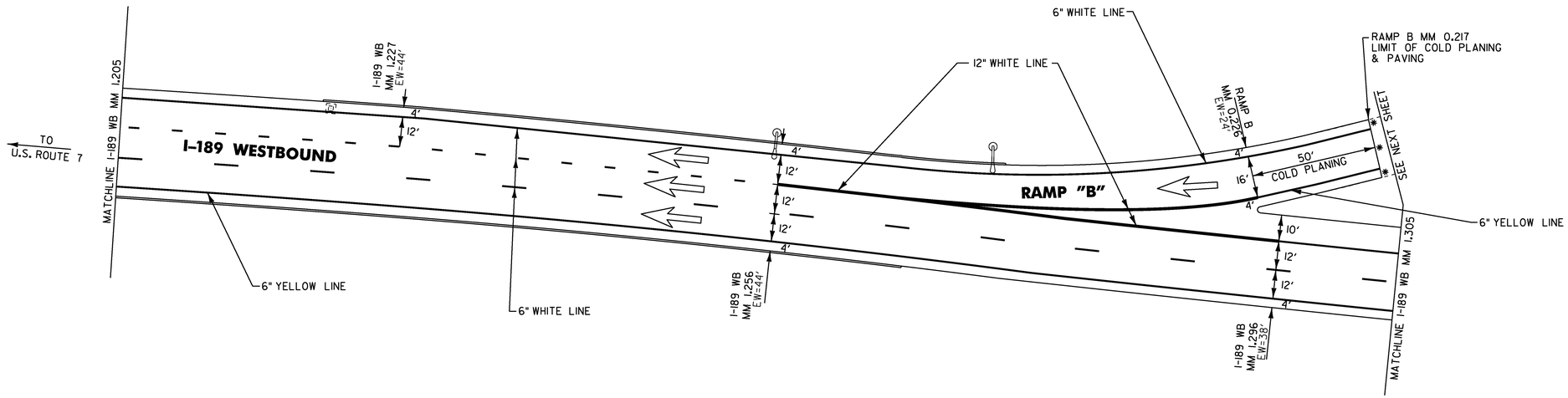
TEMPORARY 6" YELLOW LINE
I-189 EB MM 1.205 TO I-189 EB MM 1.305, SOLID LT.
I-189 WB MM 1.205 TO I-189 WB MM 1.305, SOLID RT.
RAMP B MM 0.217 TO RAMP B 0.226, SOLID LT

6" YELLOW LINE
I-189 EB MM 1.205 TO I-189 EB MM 1.305, SOLID LT.
I-189 WB MM 1.205 TO I-189 WB MM 1.305, SOLID RT.
RAMP B MM 0.217 TO RAMP B 0.226, SOLID LT

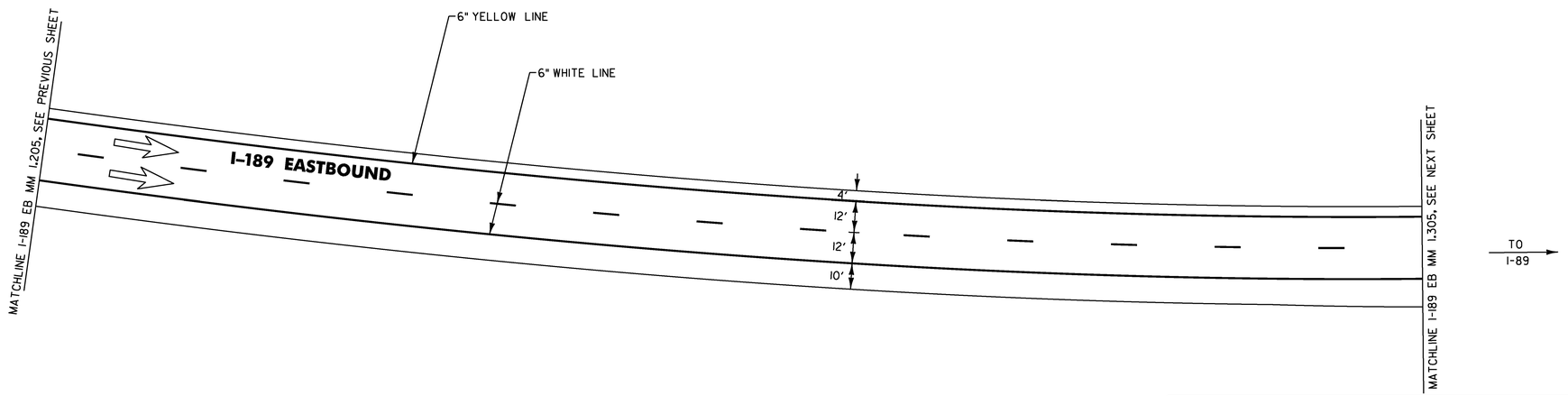
TEMPORARY 6" WHITE LINE
I-189 EB MM 1.205 TO I-189 EB MM 1.305, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 1.205 TO I-189 WB MM 1.292, SOLID FAR LT.
I-189 WB MM 1.205 TO I-189 WB MM 1.305, DASHED CENTERLINE
I-189 WB MM 1.205 TO I-189 WB MM 1.256, DOTTED LT.
I-189 WB MM 1.296 TO I-189 WB MM 1.305, SOLID LT.
RAMP B MM 0.217 TO RAMP B MM 0.226, SOLID RT.

6" WHITE LINE
I-189 EB MM 1.205 TO I-189 EB MM 1.305, DASHED CENTERLINE/SOLID RT.
I-189 WB MM 1.205 TO I-189 WB MM 1.292, SOLID FAR LT.
I-189 WB MM 1.205 TO I-189 WB MM 1.305, DASHED CENTERLINE
I-189 WB MM 1.205 TO I-189 WB MM 1.256, DOTTED LT.
I-189 WB MM 1.296 TO I-189 WB MM 1.305, SOLID LT.
RAMP B MM 0.217 TO RAMP B MM 0.226, SOLID RT.

N
VT STATE PLANE GRID



NOTE: FROM I-189 EB/WB MM 0.845 TO MM 1.417, THE WIDTH OF THE MEDIAN HAS BEEN REDUCED GRAPHICALLY IN ORDER TO SHOW BOTH EASTBOUND AND WESTBOUND ALIGNMENTS.



NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #13

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028la13.1
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 28 OF 49

TEMPORARY 12" WHITE LINE
I-189 EB MM 1.366 TO I-189 EB MM 1.392, DOUBLE SOLID RT. W/DIAGONALS

12" WHITE LINE
I-189 EB MM 1.366 TO I-189 EB MM 1.392, DOUBLE SOLID RT. W/DIAGONALS

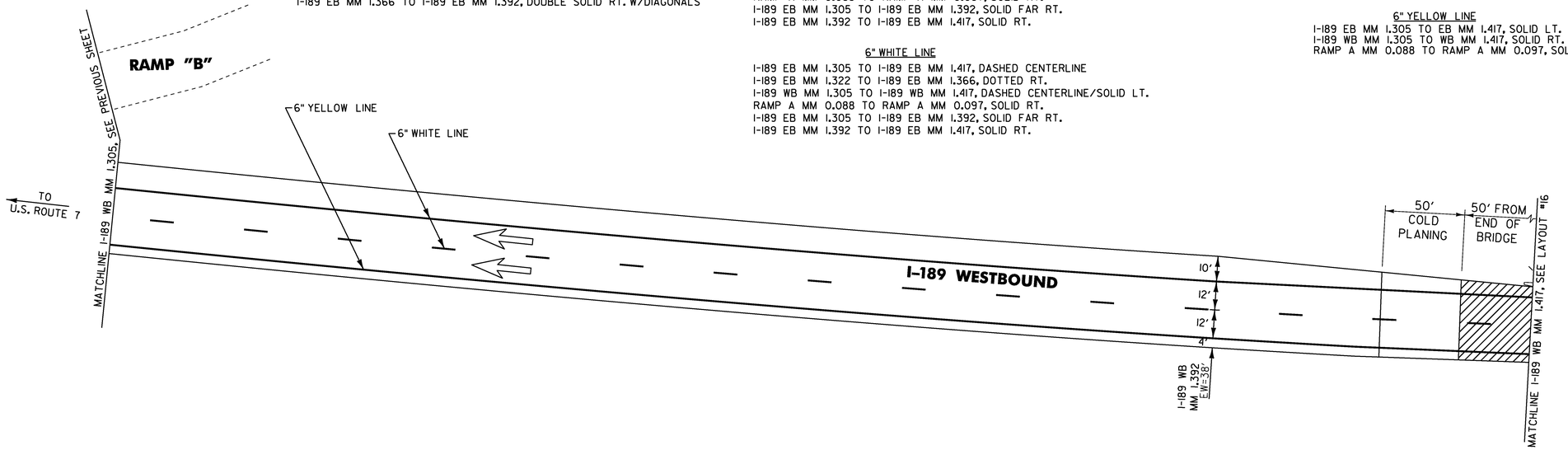
TEMPORARY 6" WHITE LINE
I-189 EB MM 1.305 TO I-189 EB MM 1.417, DASHED CENTERLINE
I-189 EB MM 1.322 TO I-189 EB MM 1.366, DOTTED RT.
I-189 WB MM 1.305 TO I-189 WB MM 1.417, DASHED CENTERLINE/SOLID LT.
RAMP A MM 0.088 TO RAMP A MM 0.097, SOLID RT.
I-189 EB MM 1.305 TO I-189 EB MM 1.392, SOLID FAR RT.
I-189 EB MM 1.392 TO I-189 EB MM 1.417, SOLID RT.

6" WHITE LINE
I-189 EB MM 1.305 TO I-189 EB MM 1.417, DASHED CENTERLINE
I-189 EB MM 1.322 TO I-189 EB MM 1.366, DOTTED RT.
I-189 WB MM 1.305 TO I-189 WB MM 1.417, DASHED CENTERLINE/SOLID LT.
RAMP A MM 0.088 TO RAMP A MM 0.097, SOLID RT.
I-189 EB MM 1.305 TO I-189 EB MM 1.392, SOLID FAR RT.
I-189 EB MM 1.392 TO I-189 EB MM 1.417, SOLID RT.

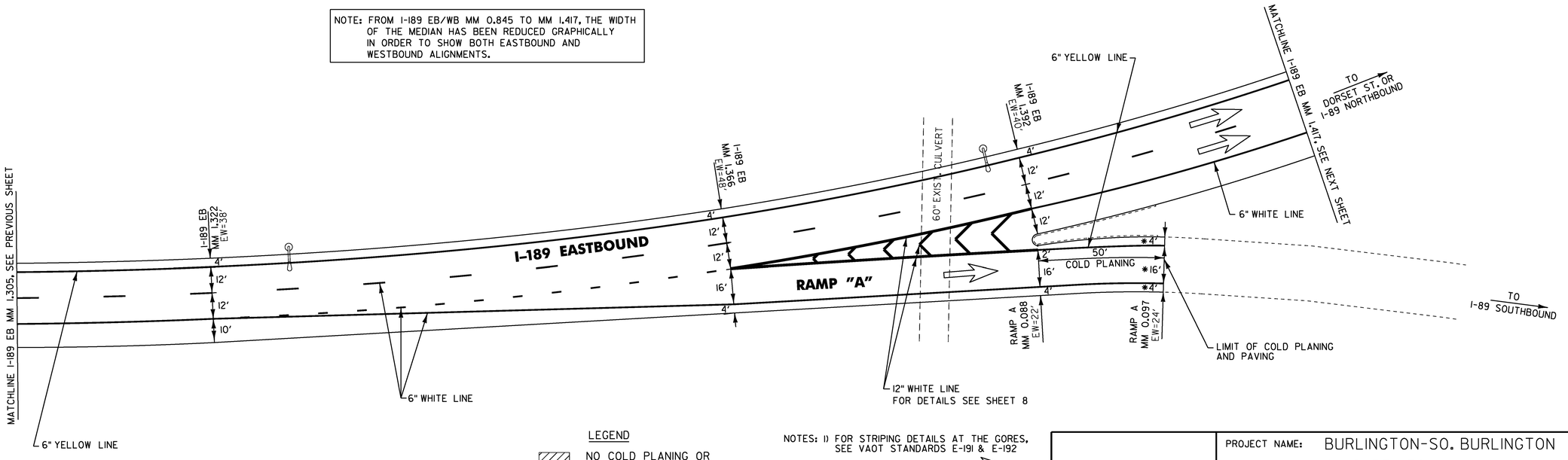
TEMPORARY 6" YELLOW LINE
I-189 EB MM 1.305 TO EB MM 1.417, SOLID LT.
I-189 WB MM 1.305 TO WB MM 1.417, SOLID RT.
RAMP A MM 0.088 TO RAMP A MM 0.097, SOLID LT

6" YELLOW LINE
I-189 EB MM 1.305 TO EB MM 1.417, SOLID LT.
I-189 WB MM 1.305 TO WB MM 1.417, SOLID RT.
RAMP A MM 0.088 TO RAMP A MM 0.097, SOLID LT

N
VT STATE PLANE GRID



NOTE: FROM I-189 EB/WB MM 0.845 TO MM 1.417, THE WIDTH OF THE MEDIAN HAS BEEN REDUCED GRAPHICALLY IN ORDER TO SHOW BOTH EASTBOUND AND WESTBOUND ALIGNMENTS.



LEGEND
NO COLD PLANING OR PAVING IN THIS AREA

*MATCH EXISTING CONDITIONS

NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

NOT TO SCALE

LAYOUT SHEET #14

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: lla028/lla028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
lla028lal4.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 29 OF 49

TEMPORARY 12" WHITE LINE
RAMP F MM 0.008 TO RAMP F MM 0.017, SOLID CENTERLINE
RAMP F MM 0.017 TO RAMP F MM 0.037, DOUBLE SOLID LT. W/DIAGONALS

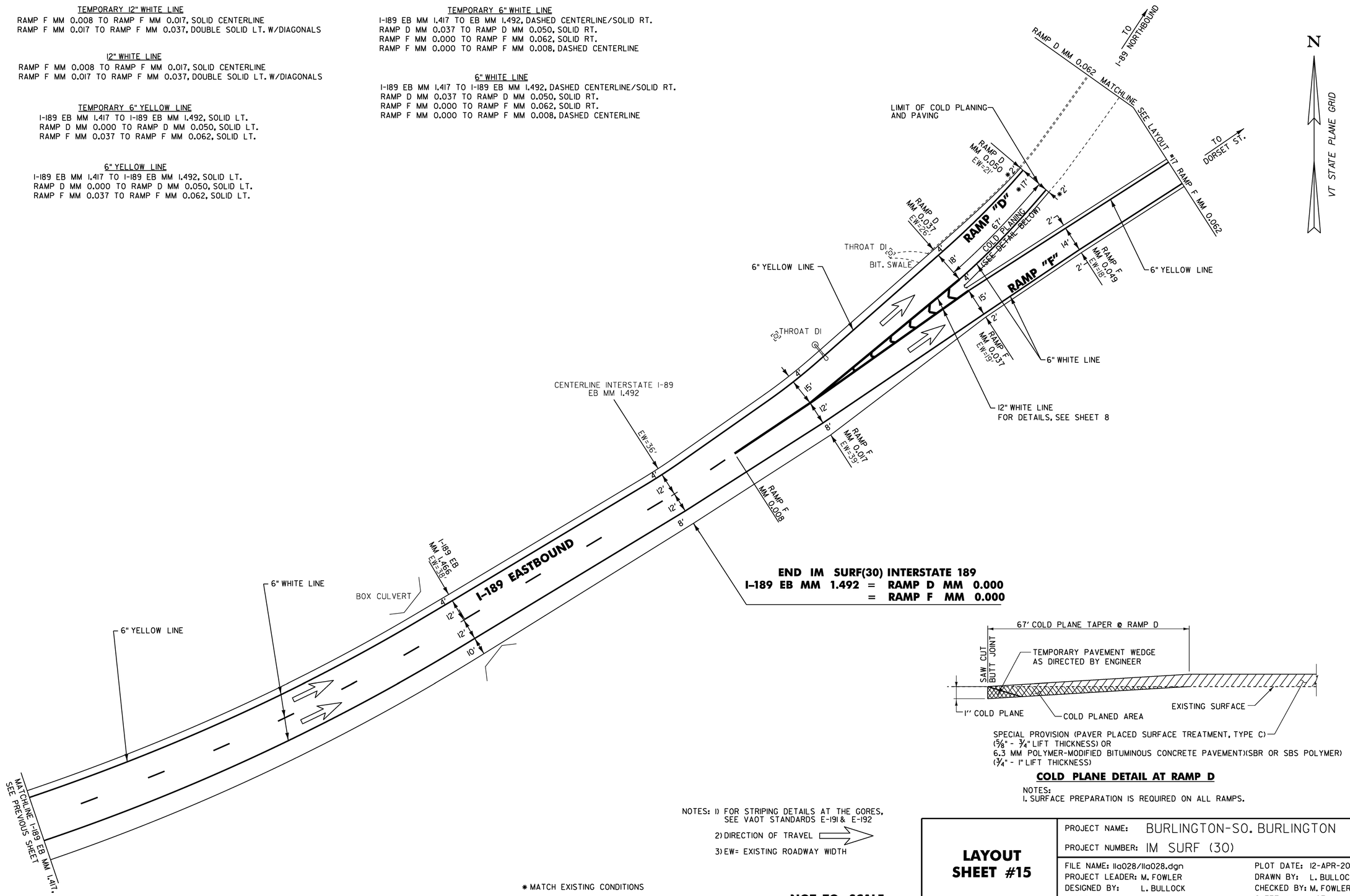
12" WHITE LINE
RAMP F MM 0.008 TO RAMP F MM 0.017, SOLID CENTERLINE
RAMP F MM 0.017 TO RAMP F MM 0.037, DOUBLE SOLID LT. W/DIAGONALS

TEMPORARY 6" YELLOW LINE
I-189 EB MM 1.417 TO I-189 EB MM 1.492, SOLID LT.
RAMP D MM 0.000 TO RAMP D MM 0.050, SOLID LT.
RAMP F MM 0.037 TO RAMP F MM 0.062, SOLID LT.

6" YELLOW LINE
I-189 EB MM 1.417 TO I-189 EB MM 1.492, SOLID LT.
RAMP D MM 0.000 TO RAMP D MM 0.050, SOLID LT.
RAMP F MM 0.037 TO RAMP F MM 0.062, SOLID LT.

TEMPORARY 6" WHITE LINE
I-189 EB MM 1.417 TO EB MM 1.492, DASHED CENTERLINE/SOLID RT.
RAMP D MM 0.037 TO RAMP D MM 0.050, SOLID RT.
RAMP F MM 0.000 TO RAMP F MM 0.062, SOLID RT.
RAMP F MM 0.000 TO RAMP F MM 0.008, DASHED CENTERLINE

6" WHITE LINE
I-189 EB MM 1.417 TO I-189 EB MM 1.492, DASHED CENTERLINE/SOLID RT.
RAMP D MM 0.037 TO RAMP D MM 0.050, SOLID RT.
RAMP F MM 0.000 TO RAMP F MM 0.062, SOLID RT.
RAMP F MM 0.000 TO RAMP F MM 0.008, DASHED CENTERLINE



END IM SURF(30) INTERSTATE 189
I-189 EB MM 1.492 = RAMP D MM 0.000
= RAMP F MM 0.000

SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)
(5/8" - 3/4" LIFT THICKNESS) OR
6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)
(3/4" - 1" LIFT THICKNESS)

COLD PLANE DETAIL AT RAMP D

NOTES:
1. SURFACE PREPARATION IS REQUIRED ON ALL RAMPS.

NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

* MATCH EXISTING CONDITIONS

NOT TO SCALE

LAYOUT SHEET #15

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028Ial5.I
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 30 OF 49

TEMPORARY 12" WHITE LINE
RAMP E MM 0.006 TO RAMP E MM 0.031, SOLID CENTERLINE
RAMP E MM 0.031 TO RAMP E MM 0.052, DOUBLE SOLID LT.

12" WHITE LINE
RAMP E MM 0.006 TO RAMP E MM 0.031, SOLID CENTERLINE
RAMP E MM 0.031 TO RAMP E MM 0.052, DOUBLE SOLID LT.

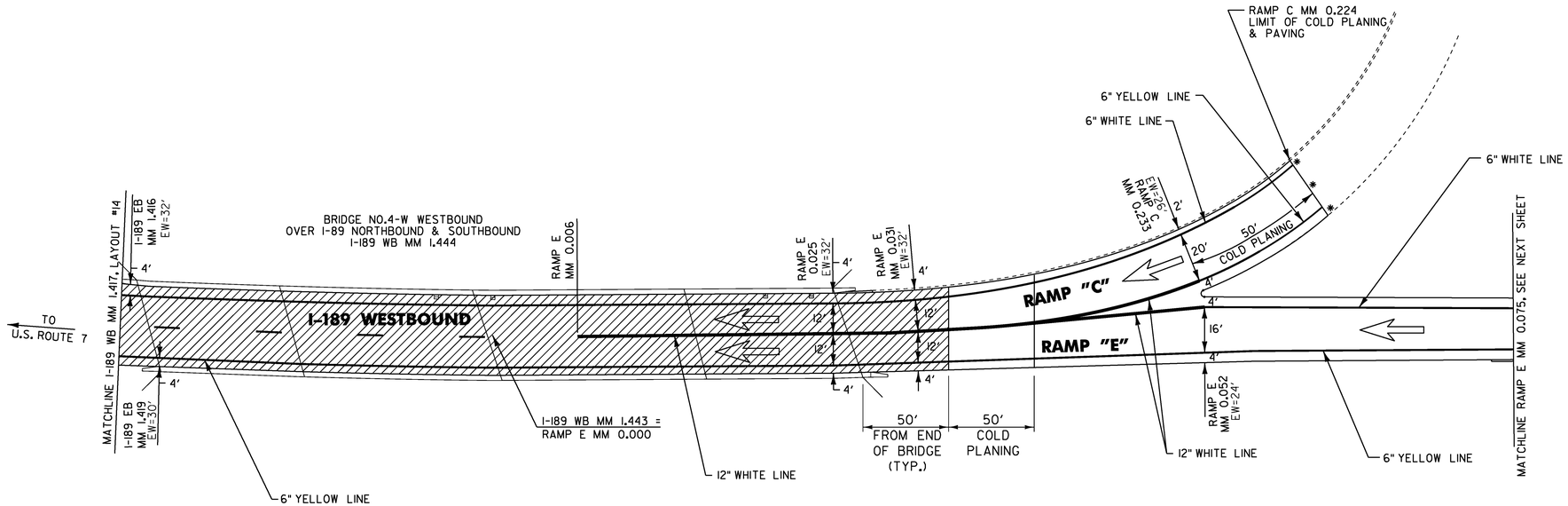
TEMPORARY 6" WHITE LINE
I-189 WB MM 1.417 TO I-189 WB MM 1.443, DASHED CENTERLINE/SOLID LT.
RAMP C MM 0.224 TO RAMP C MM 0.233, SOLID RT.
RAMP E MM 0.000 TO RAMP E MM 0.006, DASHED CENTERLINE
RAMP E MM 0.000 TO RAMP E MM 0.031, SOLID LT
RAMP E MM 0.052 TO RAMP E MM 0.075, SOLID LT
RAMP E MM 0.031 TO RAMP E MM 0.050, SOLID FAR LT.

6" WHITE LINE
I-189 WB MM 1.417 TO I-189 WB MM 1.443, DASHED CENTERLINE/SOLID LT.
RAMP C MM 0.224 TO RAMP C MM 0.233, SOLID RT.
RAMP E MM 0.000 TO RAMP E MM 0.006, DASHED CENTERLINE
RAMP E MM 0.000 TO RAMP E MM 0.031, SOLID LT
RAMP E MM 0.052 TO RAMP E MM 0.075, SOLID LT
RAMP E MM 0.031 TO RAMP E MM 0.050, SOLID FAR LT.

TEMPORARY 6" YELLOW LINE
I-189 WB MM 1.417 TO I-189 WB MM 1.443, SOLID RT.
RAMP E MM 0.000 TO RAMP E MM 0.075, SOLID RT.
RAMP C MM 0.224 TO RAMP C MM 0.233, SOLID LT.

6" YELLOW LINE
I-189 WB MM 1.417 TO I-189 WB MM 1.443, SOLID RT.
RAMP E MM 0.000 TO RAMP E MM 0.075, SOLID RT.
RAMP C MM 0.224 TO RAMP C MM 0.233, SOLID LT.

N
VT STATE PLANE GRID



LEGEND
NO COLD PLANING OR PAVING IN THIS AREA

NOTES:
1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH
4) BRIDGE 4W HAS A MEMBRANE PROJECT TO BE CONSTRUCTED BY JUNE 30, 2012 AND, THEREFORE, WILL BE GAPPED OUT OF THIS PROJECT.

* MATCH EXISTING CONDITIONS

NOT TO SCALE

LAYOUT SHEET #16

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028Ia16.1
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 31 OF 49

TEMPORARY CROSSWALK MARKING
RAMP F MM 0.160 LT. & RT.
SLIP RAMP E 0.179 LT.

CROSSWALK MARKING
RAMP F MM 0.160 LT. & RT.
SLIP RAMP E 0.179 LT.

LETTER OR SYMBOL
RAMP F MM 0.069 CENTERLINE - "SIGNAL"
RAMP F MM 0.077 CENTERLINE - "AHEAD"
RAMP F MM 0.125 LT. - "ONLY" (2)
RAMP F MM 0.127, RT. →
RAMP F MM 0.127, RT. ↱↑
RAMP F MM 0.127, LT. - ↰ (2)
RAMP F MM 0.154, LT. - "ONLY" (2)
RAMP F MM 0.156, RT. ↰↑
RAMP F MM 0.156, RT. →
RAMP F MM 0.156, LT. - ↰ (2)

TEMPORARY LETTER OR SYMBOL
RAMP F MM 0.070 CENTERLINE - "SIGNAL"
RAMP F MM 0.077 CENTERLINE - "AHEAD"
RAMP F MM 0.127 RT. →
RAMP F MM 0.127 RT. ↱↑
RAMP F MM 0.127 LT. - ↰ (2)
RAMP F MM 0.156 RT. ↰↑
RAMP F MM 0.156 RT. →
RAMP F MM 0.156 LT. - ↰ (2)

TEMPORARY 6" YELLOW LINE
RAMP E MM 0.075 TO RAMP E MM 0.178, SOLID RT.
RAMP E MM 0.176 TO RAMP E MM 0.182, SOLID FAR LT.
RAMP F MM 0.062 TO RAMP F MM 0.158, SOLID LT.

6" YELLOW LINE
RAMP E MM 0.075 TO RAMP E MM 0.178, SOLID RT.
RAMP E MM 0.176 TO RAMP E MM 0.182, SOLID FAR LT.
RAMP F MM 0.062 TO RAMP F MM 0.158, SOLID LT.

12" WHITE LINE
RAMP E MM 0.149 TO RAMP E MM 0.162, SOLID CENTERLINE
RAMP E MM 0.162 TO RAMP E MM 0.176, SOLID CENTERLINE & SOLID LT. W/DIAGONALS

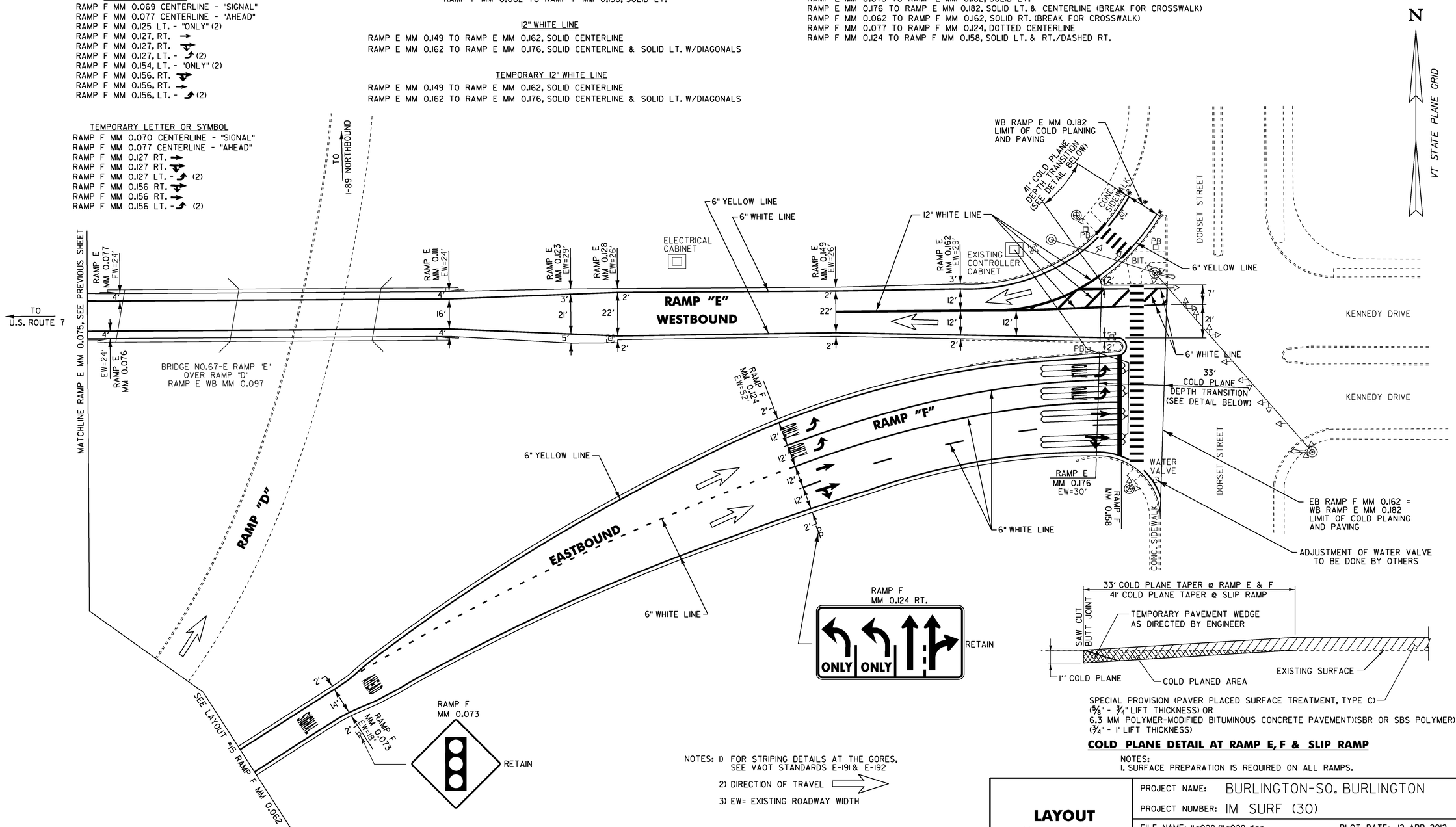
TEMPORARY 12" WHITE LINE
RAMP E MM 0.149 TO RAMP E MM 0.162, SOLID CENTERLINE
RAMP E MM 0.162 TO RAMP E MM 0.176, SOLID CENTERLINE & SOLID LT. W/DIAGONALS

TEMPORARY 6" WHITE LINE
RAMP E MM 0.075 TO RAMP E MM 0.182, SOLID LT.
RAMP E MM 0.176 TO RAMP E MM 0.182, SOLID LT. & CENTERLINE (BREAK FOR CROSSWALK)
RAMP F MM 0.062 TO RAMP F MM 0.162, SOLID RT. (BREAK FOR CROSSWALK)
RAMP F MM 0.077 TO RAMP F MM 0.124, DOTTED CENTERLINE
RAMP F MM 0.124 TO RAMP F MM 0.158, SOLID LT. & RT./DASHED RT.

6" WHITE LINE
RAMP E MM 0.075 TO RAMP E MM 0.182, SOLID LT.
RAMP E MM 0.176 TO RAMP E MM 0.182, SOLID LT. & CENTERLINE (BREAK FOR CROSSWALK)
RAMP F MM 0.062 TO RAMP F MM 0.162, SOLID RT. (BREAK FOR CROSSWALK)
RAMP F MM 0.077 TO RAMP F MM 0.124, DOTTED CENTERLINE
RAMP F MM 0.124 TO RAMP F MM 0.158, SOLID LT. & RT./DASHED RT.

TEMPORARY 24" STOP BAR
RAMP F MM 0.158 LT. & RT.

24" STOP BAR
RAMP F MM 0.158 LT. & RT.



SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)
(⅝" - ¾" LIFT THICKNESS) OR
6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)
(¾" - 1" LIFT THICKNESS)

COLD PLANE DETAIL AT RAMP E, F & SLIP RAMP

NOTES:
1. SURFACE PREPARATION IS REQUIRED ON ALL RAMPS.

NOTES: 1) FOR STRIPING DETAILS AT THE GORES, SEE VAOT STANDARDS E-191 & E-192
2) DIRECTION OF TRAVEL
3) EW= EXISTING ROADWAY WIDTH

* MATCH EXISTING CONDITIONS

NOT TO SCALE

LAYOUT SHEET #17

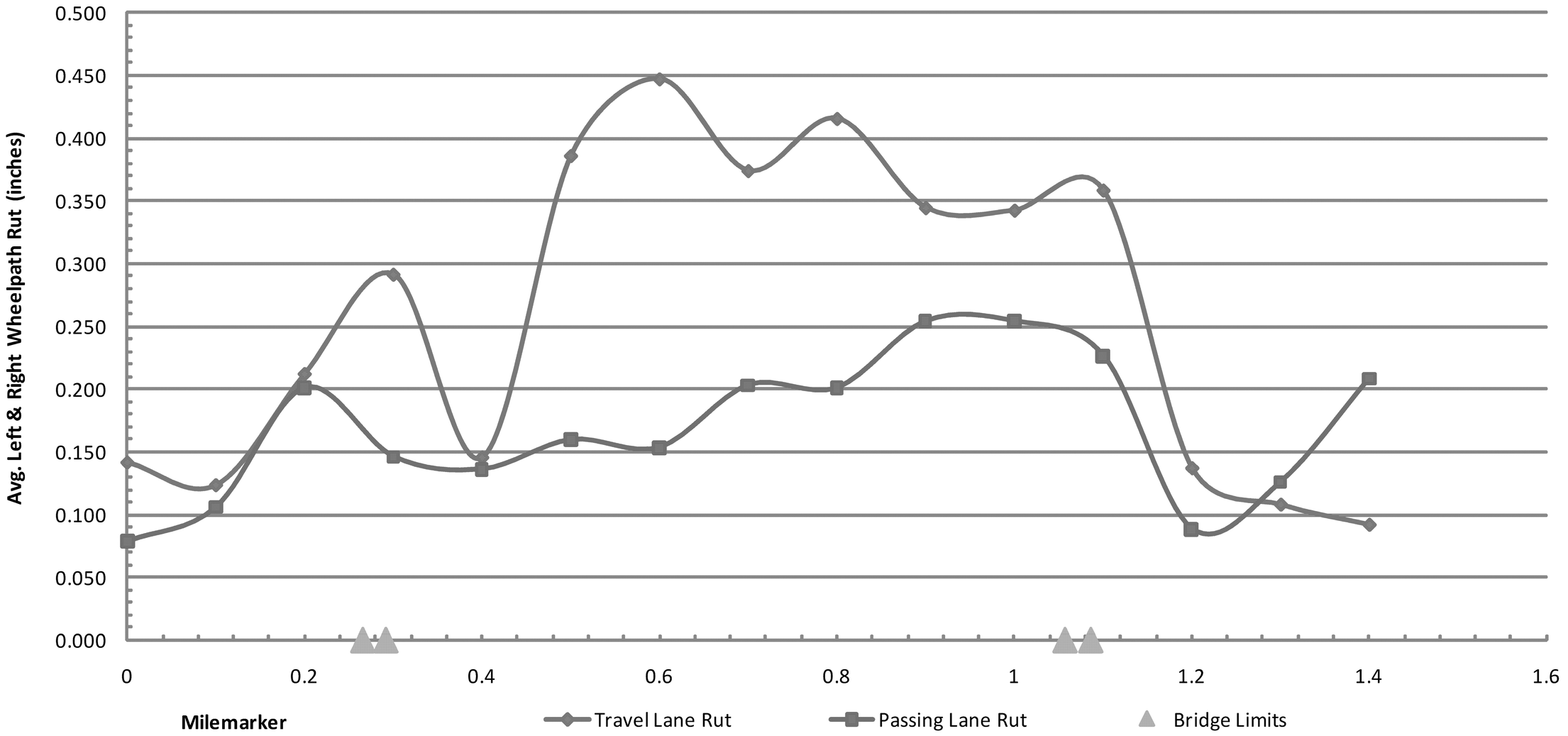
PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028IaI7.I
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 32 OF 49

I-189 Burlington-So. Burlington IM Surf(30) Eastbound Lane Rut

Profiled 9/1/11

EB Travel Lane Avg. Rut = 0.262", EB Passing Lane Avg. Rut = 0.169"



FOR INFORMATIONAL PURPOSES ONLY

NOT TO SCALE

EASTBOUND RUTTING DATA INFORMATION

PROJECT NAME: BURLINGTON-SO. BURLINGTON

PROJECT NUMBER: IM SURF (30)

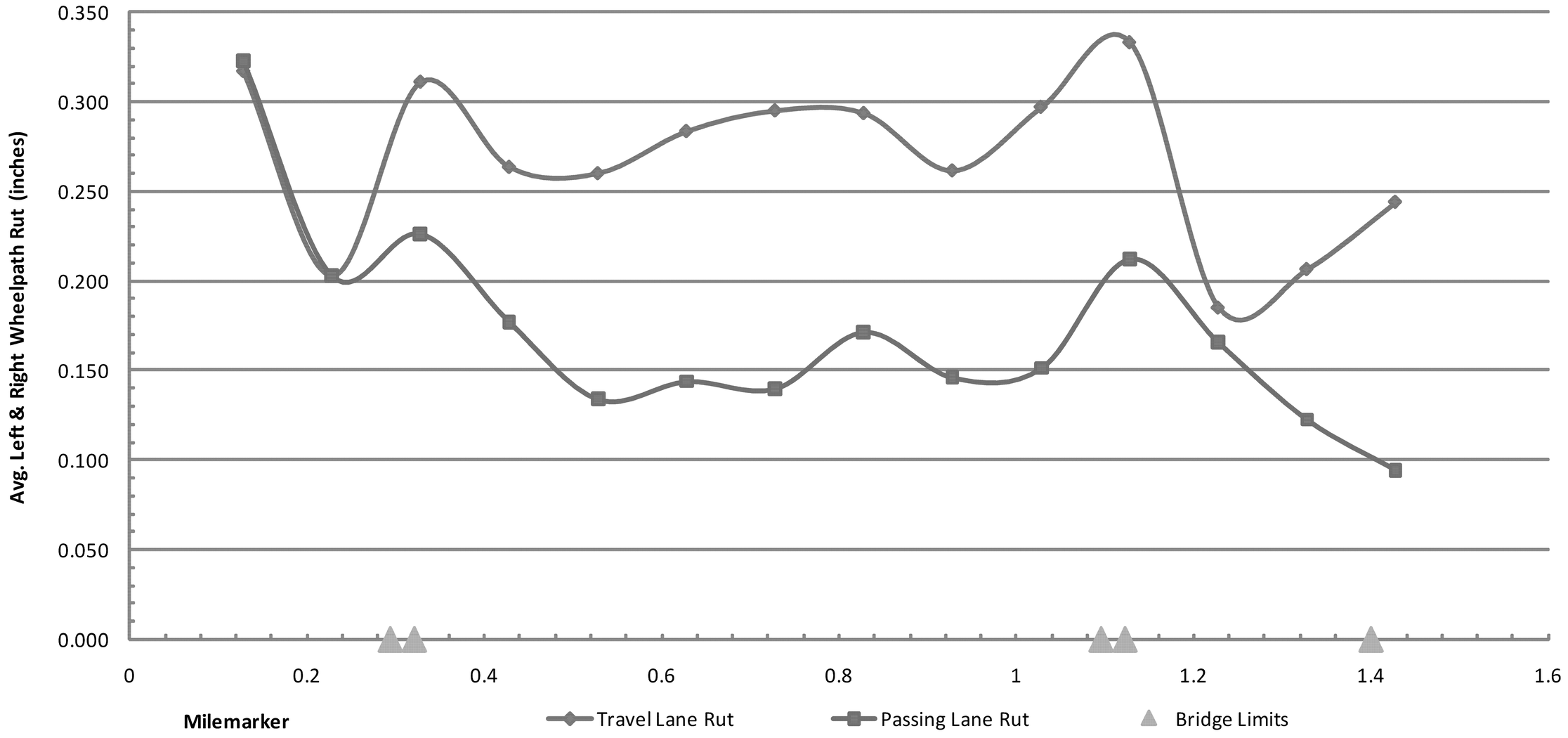
FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028MR02.i

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 33 OF 49

I-189 Burlington-So. Burlington IM Surf(30) Westbound Lane Rut

Profiled 9/1/11

EB Travel Lane Avg. Rut = 0.268", EB Passing Lane Avg. Rut = 0.172"



FOR INFORMATIONAL PURPOSES ONLY

NOT TO SCALE

WESTBOUND RUTTING DATA INFORMATION

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

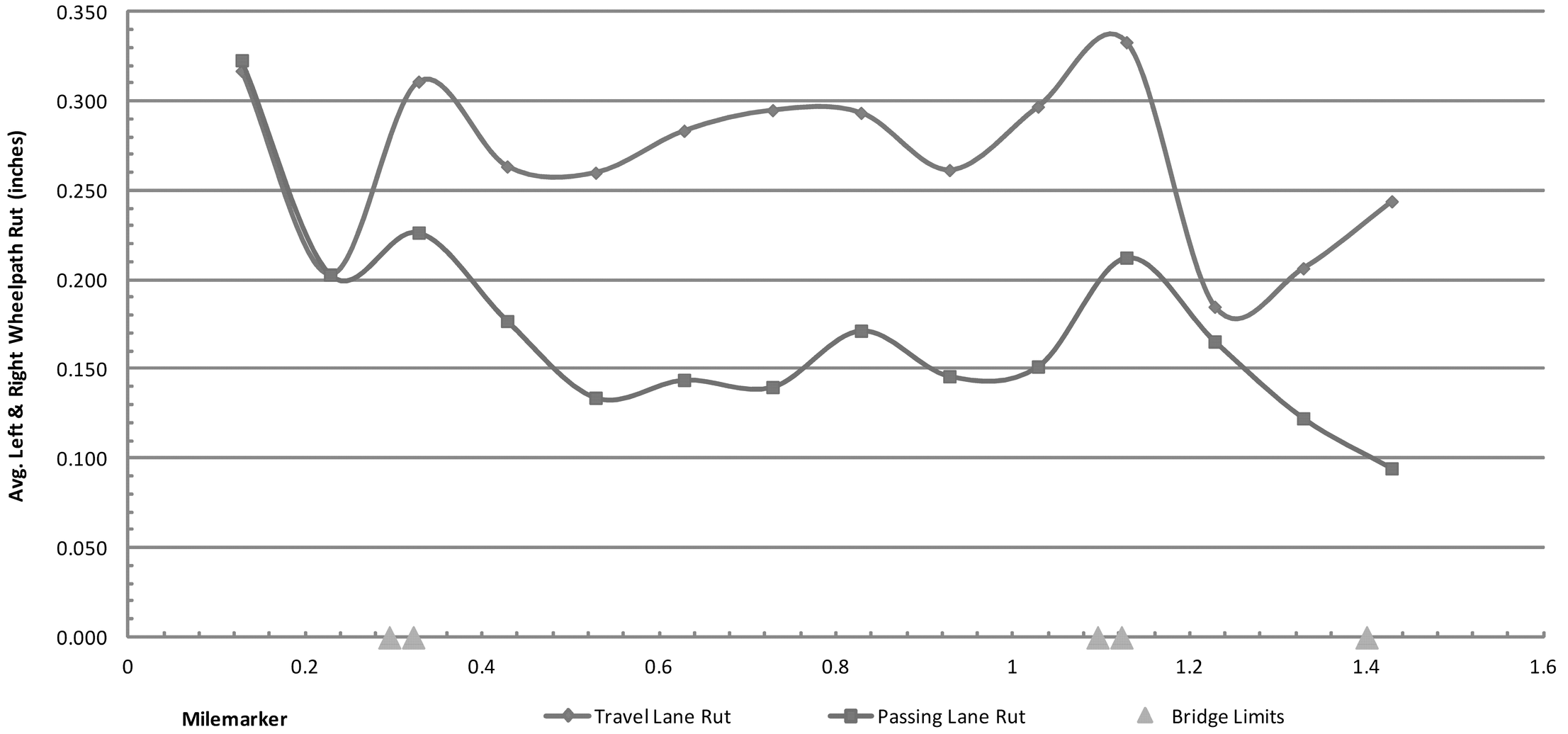
FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028MR02.i

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 34 OF 49

I-189 Burlington-So. Burlington IM Surf(30) Westbound Lane Rut

Profiled 9/1/11

WB Travel Lane Avg. Rut = 0.268", WB Passing Lane Avg. Rut = 0.172"



FOR INFORMATIONAL PURPOSES ONLY

NOT TO SCALE

EASTBOUND ROUGHNESS DATA INFORMATION

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

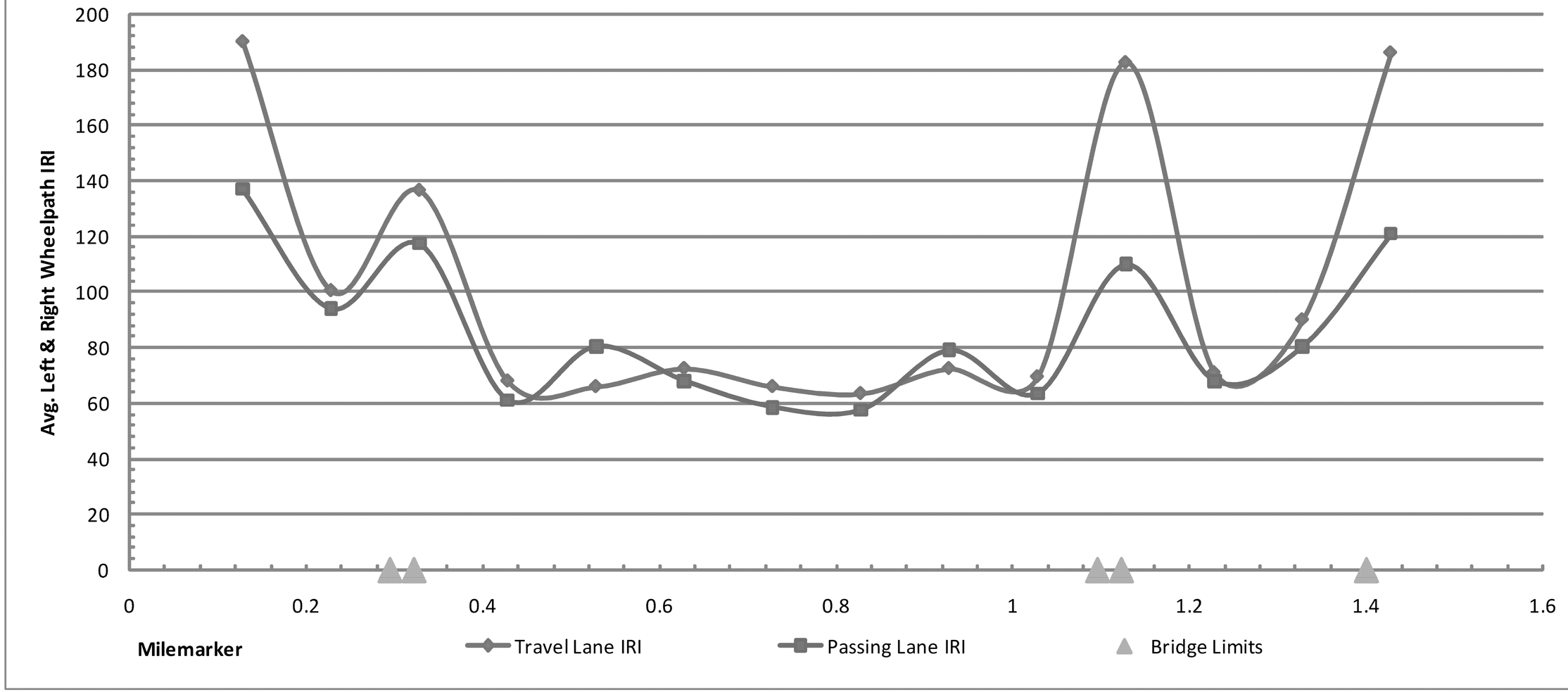
FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028MR02.i

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 35 OF 49

I-189 Burlington-So. Burlington IM Surf(30) Westbound Lane Ride

Profiled 9/1/11

WB Travel Lane Avg. IRI = 102.5, WB Passing Lane Avg. IRI = 85.4, Project Avg. IRI = 93.9



FOR INFORMATIONAL PURPOSES ONLY

NOT TO SCALE

WESTBOUND ROUGHNESS DATA INFORMATION

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

FILE NAME: IIa028/IIa028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa028MR02.i

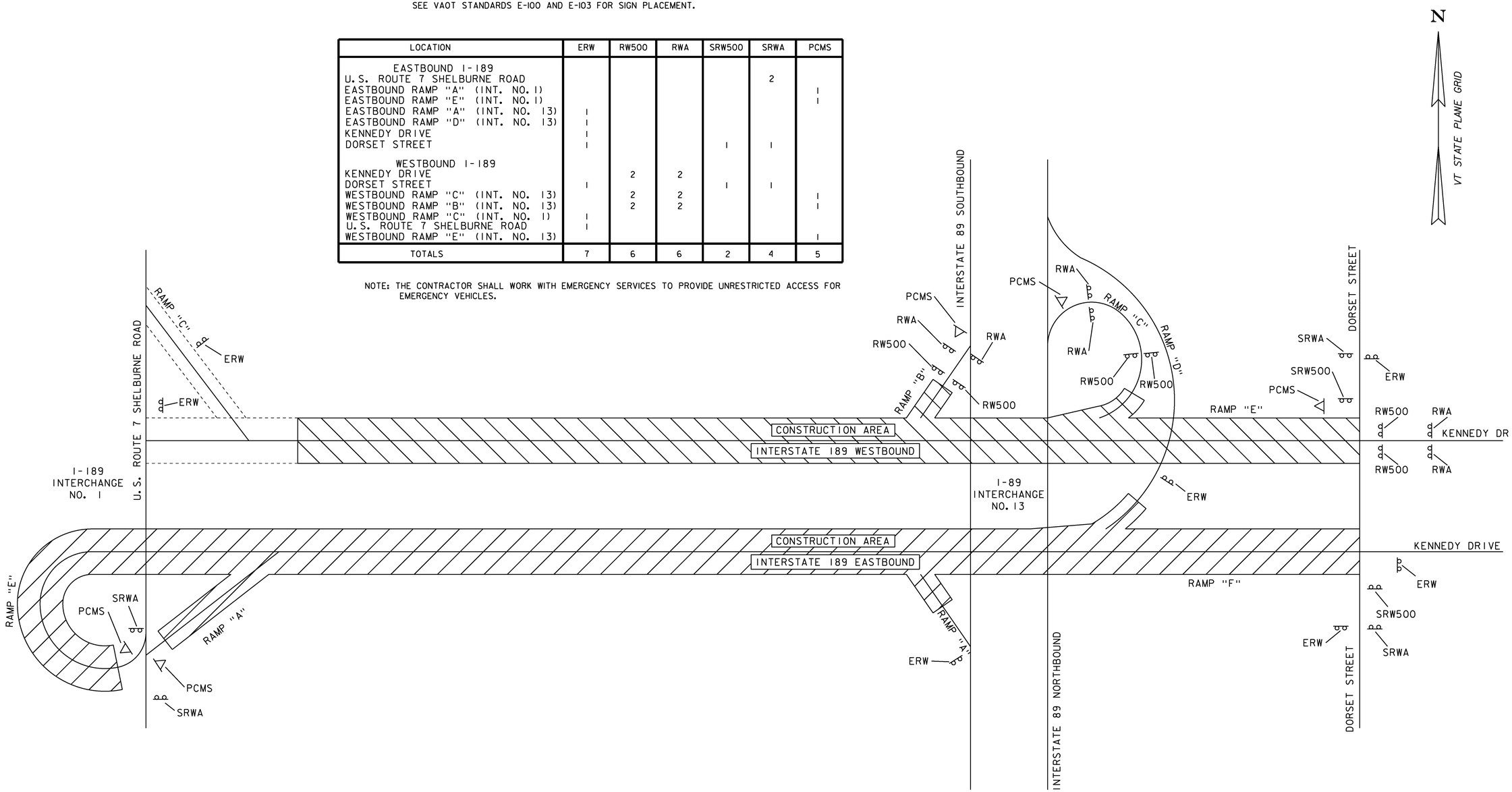
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 36 OF 49

CONSTRUCTION APPROACH SIGNING

SEE VAOT STANDARDS E-100 AND E-103 FOR SIGN PLACEMENT.

LOCATION	ERW	RW500	RWA	SRW500	SRWA	PCMS
EASTBOUND I-189						
U.S. ROUTE 7 SHELBURNE ROAD					2	
EASTBOUND RAMP "A" (INT. NO. 1)						1
EASTBOUND RAMP "E" (INT. NO. 1)						1
EASTBOUND RAMP "A" (INT. NO. 13)	1					
EASTBOUND RAMP "D" (INT. NO. 13)	1					
KENNEDY DRIVE	1					
DORSET STREET	1			1	1	
WESTBOUND I-189						
KENNEDY DRIVE		2	2			
DORSET STREET	1			1	1	
WESTBOUND RAMP "C" (INT. NO. 13)		2	2			1
WESTBOUND RAMP "B" (INT. NO. 13)		2	2			1
WESTBOUND RAMP "C" (INT. NO. 1)	1					
U.S. ROUTE 7 SHELBURNE ROAD	1					
WESTBOUND RAMP "E" (INT. NO. 13)						1
TOTALS	7	6	6	2	4	5

NOTE: THE CONTRACTOR SHALL WORK WITH EMERGENCY SERVICES TO PROVIDE UNRESTRICTED ACCESS FOR EMERGENCY VEHICLES.



LEGEND

ERW = END ROAD WORK
RW500 = ROAD WORK 500 FT
RWA = ROAD WORK AHEAD
SRW500 = SIDE ROAD WORK 500 FT
SRWA = SIDE ROAD WORK AHEAD
◁ = PORTABLE CHANGEABLE MESSAGE SIGN

NOT TO SCALE

CONSTRUCTION APPROACH SIGNING

PROJECT NAME: BURLINGTON-SO. BURLINGTON
PROJECT NUMBER: IM SURF (30)

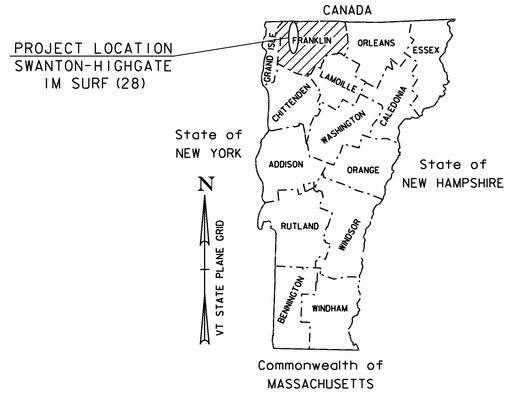
FILE NAME: 11a028/11a028.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a028con.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 37 OF 49

INDEX OF SHEETS

SEE SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION



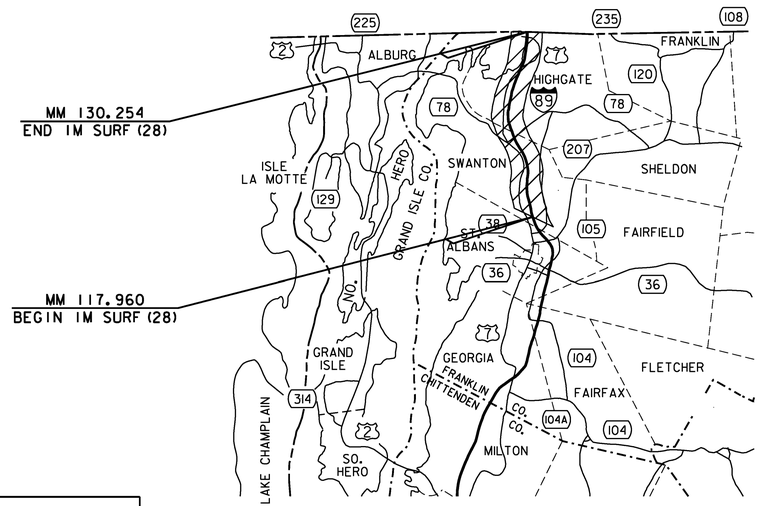
PROPOSED IMPROVEMENT

TOWNS OF SWANTON AND HIGHGATE
COUNTY OF FRANKLIN
INTERSTATE ROUTE 89 NORTHBOUND

BEGINNING IN THE TOWN OF SWANTON IN THE NORTHBOUND LANE AT APPROXIMATE MM 117.960 AND EXTENDING NORTHERLY ALONG INTERSTATE 89 FOR A DISTANCE OF APPROXIMATELY 12.294 MILES (64,912 FEET) TO APPROXIMATELY MM 130.254 AT THE HIGHGATE TOWN LINE AND THE CANADIAN BORDER.

LENGTH OF ROADWAY = 64,912 FEET = 12.294 MILES
LENGTH OF PROJECT = 64,912 FEET = 12.294 MILES

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES SURFACE PREPARATION INVOLVING PATCHING, POTHOLE REPAIR, AND CRACK-SEALING AS NECESSARY; OVERLAYING WITH A THIN BITUMINOUS SURFACE TREATMENT ON THE EXISTING INTERSTATE TYPICAL AND APPLICABLE PAVEMENT MARKINGS.



TRAFFIC DATA

I-89 NORTHBOUND	AADT		DHV		ESALs	
	2012	2022	2012	2022	2012 -2022	2022 -2032
SECTION #1(BEGIN PROJECT TO EXIT 21)	4800	5400	660	740	3,515,000	8,446,000
SECTION #2 (EXIT 21 TO EXIT 22)	1600	1800	220	250	1,324,000	3,193,000
SECTION #3 (EXIT 22 TO END PROJECT)	1700	1900	230	260	2,686,000	6,422,000

QUALITY ASSURANCE PROGRAM: LEVEL I

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS (SR SR SR)
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : N/A
SURVEYED DATE : N/A

DATUM
VERTICAL N/A
HORIZONTAL N/A

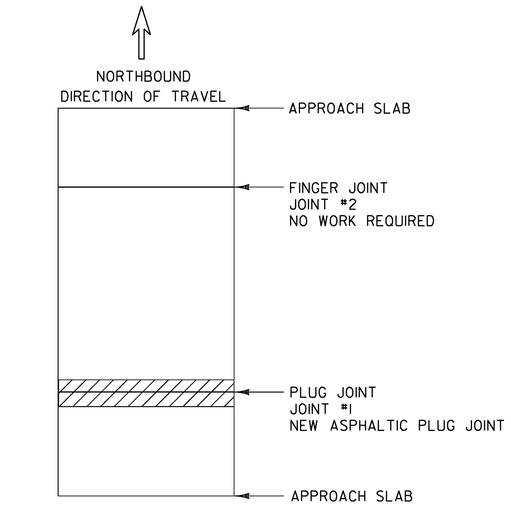
THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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.

PROJECT MANAGER : M. FOWLER

PROJECT NAME : SWANTON-HIGHGATE
PROJECT NUMBER : IM SURF (28)

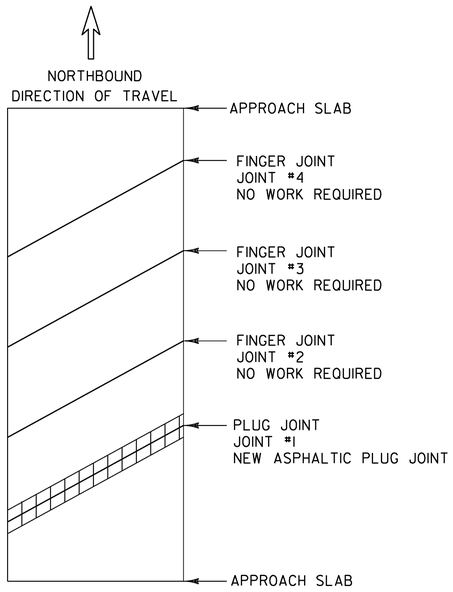
SHEET 38 OF 49 SHEETS



BRIDGE 94N

MM 121.338
LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 38'

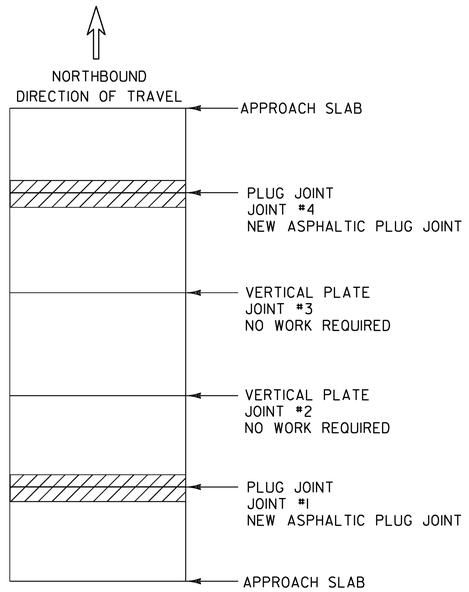
TOTAL = 38'



BRIDGE 96N

MM 122.794
LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 30'

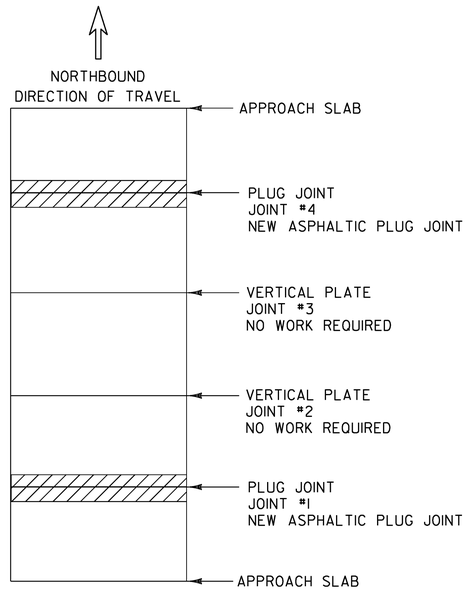
TOTAL = 30'



BRIDGE 97N

MM 123.135
LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 30'
JOINT #4 - 30'

TOTAL = 60'



BRIDGE 98N

MM 123.368
LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - 30'
JOINT #4 - 30'

TOTAL = 60'

NOTES:

1. BRIDGE 100N AT MM 128.373 IS NOT INCLUDED UNDER THIS PROJECT AS IT HAS A NEW MEMBRANE AND JOINTS. AT SOUTHERLY END, EXTEND NEW PAVEMENT 10' PAST EXISTING JOINT AT APPROACH SLAB. AT NORTHERLY END, BEGIN NEW PAVEMENT AT FINGER PLATE JOINT.
2. SEE STRUCTURES DETAIL SD-516.10, BRIDGE JOINT ASPHALTIC PLUG FOR NOTES AND DETAILS.
3. AN ADDITIONAL ASPHALTIC PLUG JOINT SHALL BE INSTALLED AT APPROXIMATE MM 130.005 LT. AND MM 130.125 LT (SEE PAVEMENT MARKING DETAIL AT BORDER).

NOT TO SCALE

BRIDGE DETAIL SHEET

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

FILE NAME: 11a024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: BULLOCK
11a024brd.i

PLOT DATE: 12-APR-2012
DRAWN BY: BULLOCK
CHECKED BY: PAVT MGMT
SHEET 39 OF 49

QUANTITY SHEET 1

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

		BRIDGE	ROADWAY	FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
							BEGIN ITEMS COMMON TO ALTERNATES		
			13,700		13,700	LF	SHOULDER BERM REMOVAL	203.40	183
			1		1	CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST.
			5,750		5,750	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	82
			550		550	TON	AGGREGATE SHOULDERS	402.12	38
			1		1	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-
			32,500		32,500	LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (AASHTO M324 (ASTM D 6690) TYPE II)	417.20	EST.
		310			310	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	13
		100			100	CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST.
			70		70	HR	POWER BROOM RENTAL, TYPE I	608.30	EST.
			280		280	HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.
			200		200	HR	FLAGGERS	630.15	EST.
				0.5	0.5	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
			0.5		0.5	LS	MOBILIZATION/DEMOBILIZATION	635.11	-
			1		1	LS	TRAFFIC CONTROL (IM SURF(28))	641.10	-
			4		4	EA	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-
			1070		1070	LF	4 INCH YELLOW LINE	646.21	10
			172,000		172,000	LF	6 INCH WHITE LINE	646.214	1701
			135,370		135,370	LF	6 INCH YELLOW LINE	646.215	1338
			4,400		4,400	LF	12 INCH WHITE LINE	646.24	27
			115		115	LF	24 INCH STOP BAR	646.26	5
			50		50	EA	LETTER OR SYMBOL	646.30	-
			540		540	LF	TEMPORARY 4 INCH YELLOW LINE	646.610	10
			86,000		86,000	LF	TEMPORARY 6 INCH WHITE LINE	646.620	850
			67,680		67,680	LF	TEMPORARY 6 INCH YELLOW LINE	646.630	664
			2,210		2,210	LF	TEMPORARY 12 INCH WHITE LINE	646.660	24
			55		55	LF	TEMPORARY 24 INCH STOP BAR	646.680	-
			25		25	EA	TEMPORARY LETTER OR SYMBOL	646.690	-
			7,900		7,900	EA	LINE STRIPING TARGETS	646.76	216
			119,060		119,060	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	592
			1		1	LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	
			50		50	TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)	900.680	EST.
							END ITEMS COMMON TO ALTERNATES		

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		COLD PLANING, BITUMINOUS PAVEMENT
311	SY	I-89 NORTHBOUND
533	SY	RAMPS
836	SY	BRIDGE #94N
1497	SY	BRIDGE #96N
800	SY	BRIDGE #97N
833	SY	BRIDGE #98N
422	SY	BRIDGE #100N
436	SY	U-TURN
82	SY	ROUNDING
5750	SY	TOTAL
		AGGREGATE SHOULDERS
116	TON	RAMPS
396	TON	I-89 NORTHBOUND
38	TON	ROUNDING
550	TON	TOTAL

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: SWANTON-HIGHGATE

PROJECT NUMBER: IM SURF (28)

FILE NAME: 11a024/11a024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a024qsl.i

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 40 OF 49

QUANTITY SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

		BRIDGE	ROADWAY	FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
							BEGIN ALTERNATE A		
			212,500		212,500	SY	SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)	900.675	2109
							END ALTERNATE A		
							BEGIN ALTERNATE B		
			1		1	LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-
			12,400		12,400	TON	SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)	900.680	127
			1,430		1,430	CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	15
							END ALTERNATE B		

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		ALTERNATE A
		SPECIAL PROVISION (PAVER-PLACED SURFACE TREATMENT, TYPE C)
8,441	SY	RAMPS
201,950	SY	I-89 NORTHBOUND
2,109	SY	ROUNDING
212,500	SY	TOTAL
		ALTERNATE B
		SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS, CONCRETE PAVEMENT)(SBR OR SBS POLYMER)
492	TON	RAMPS
11,781	TON	I-89 NORTHBOUND
127	TON	ROUNDING
12,400	TON	TOTAL

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: SWANTON-HIGHGATE

PROJECT NUMBER: IM SURF (28)

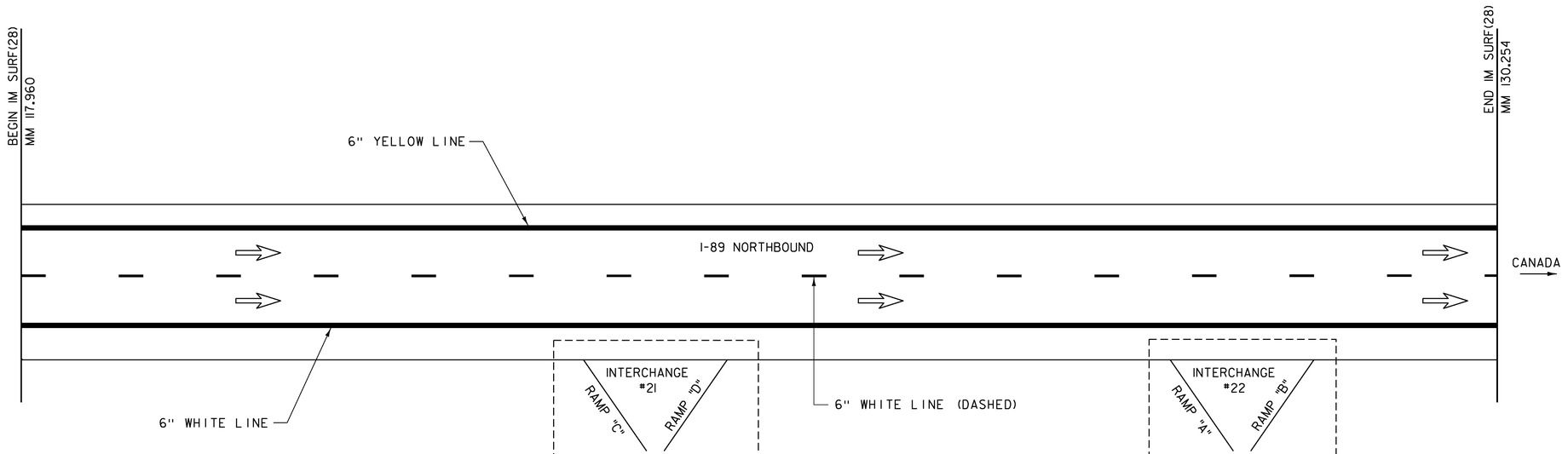
FILE NAME: 11a024/11a024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a024qs2.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 41 OF 49

PAVEMENT MARKING LAYOUT

N

VT STATE PLANE GRID



FOR PAVEMENT MARKING DETAILS AT INTERCHANGE #21 SEE SHEET 43 OF 49

FOR PAVEMENT MARKING DETAILS AT INTERCHANGE #22 SEE SHEET 44 OF 49

6" WHITE LINE

MM 117.960 - MM 130.254 SOLID RT.
MM 117.960 - MM 130.254 DASHED CENTERLINE

6" YELLOW LINE

MM 117.960 - MM 130.254 SOLID LT.

TEMPORARY 6" WHITE LINE

MM 117.960 - MM 130.254 SOLID RT.
MM 117.960 - MM 130.254 DASHED CENTERLINE

TEMPORARY 6" YELLOW LINE

MM 117.960 - MM 130.254 SOLID LT.

NOTE:
1. TWO (2) APPLICATIONS OF FINAL PAVEMENT MARKINGS WILL BE REQUIRED. SEE SPECIAL PROVISIONS FOR COMPLETION DATE REQUIREMENTS.

2. FOR PAVEMENT MARKING DETAIL AT BORDER, SEE SHEET 45.

LEGEND

⇨ = DIRECTION OF TRAFFIC FLOW

NOT TO SCALE

PAVEMENT MARKING LAYOUT

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

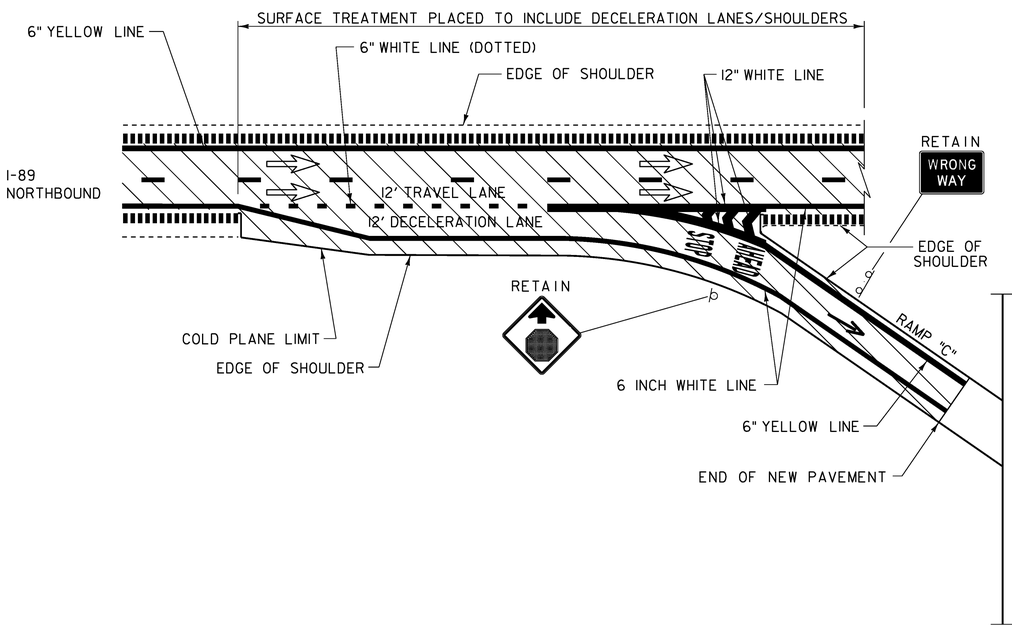
FILE NAME: IIa024/IIa024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
IIa024pmi.I
PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 42 OF 49

INTERCHANGE #21 CONSTRUCTION DETAILS

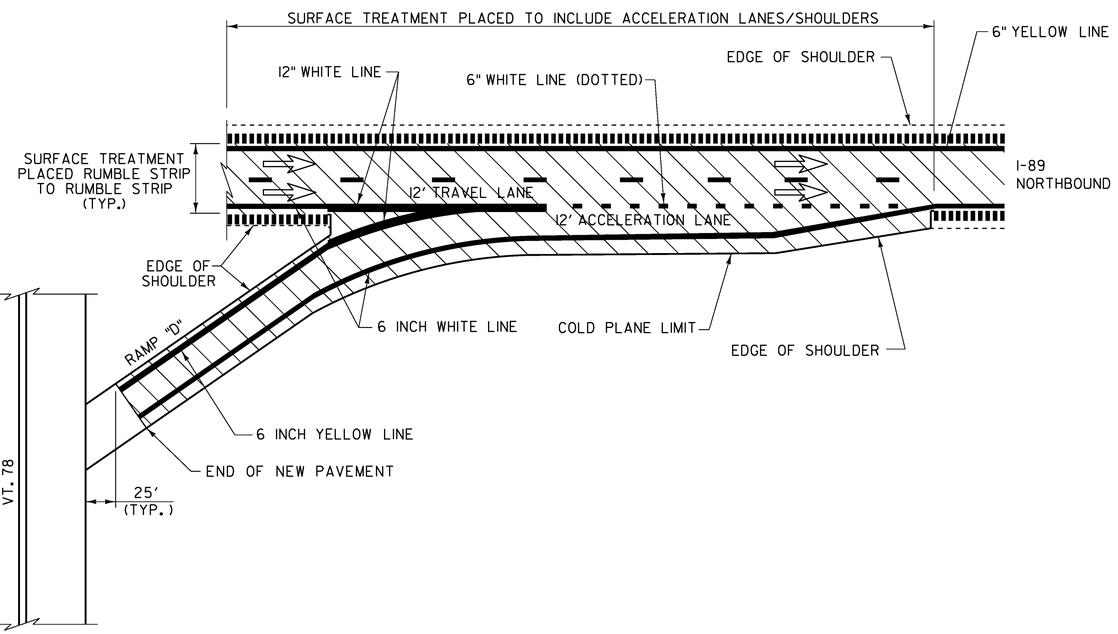
N

VT STATE PLANE GRID

PARALLEL DECELERATION LANE



PARALLEL ACCELERATION LANE



6 INCH WHITE LINE

RAMP "C" DOTTED LT. (112')
RAMP "C" SOLID RT. (762')
RAMP "D" SOLID RT. (852')
RAMP "D" DOTTED LT. (73')

12 INCH WHITE LINE

RAMP "C" DOUBLE SOLID RT. W/ DIAGONALS (324')
RAMP "D" DOUBLE SOLID RT (370')

6 INCH YELLOW LINE

RAMP "C" SOLID LT. (550')
RAMP "D" SOLID LT. (607')

LETTER OR SYMBOL

RAMP "C" - "STOP"
RAMP "C" - "AHEAD"
RAMP "C" - WRONG WAY ARROW SYMBOL →

TEMPORARY 6 INCH WHITE LINE

RAMP "C" DOTTED (112')
RAMP "C" SOLID RT. (762')
RAMP "D" SOLID RT. (852')
RAMP "D" DOTTED (73')

TEMPORARY 12 INCH WHITE LINE

RAMP "C" DOUBLE SOLID RT. W/ DIAGONALS (324')
RAMP "D" DOUBLE SOLID RT (370')

TEMPORARY 6 INCH YELLOW LINE

RAMP "C" SOLID LT. (550')
RAMP "D" SOLID LT. (607')

TEMPORARY LETTER OR SYMBOL

RAMP "C" - "STOP"
RAMP "C" - "AHEAD"
RAMP "C" - WRONG WAY ARROW SYMBOL →

LEGEND

= WORK AREA

= DIRECTION OF TRAFFIC FLOW

= EXISTING MILLED RUMBLE STRIPS

NOT TO SCALE

NOTES:

1. TWO (2) APPLICATIONS OF FINAL PAVEMENT MARKINGS WILL BE REQUIRED. SEE SPECIAL PROVISIONS FOR COMPLETION DATE REQUIREMENTS.
2. SEE STANDARDS E-191, E-192, AND E-193 FOR PAVEMENT MARKING DETAILS.

INTERCHANGE #21 DETAIL SHEET

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

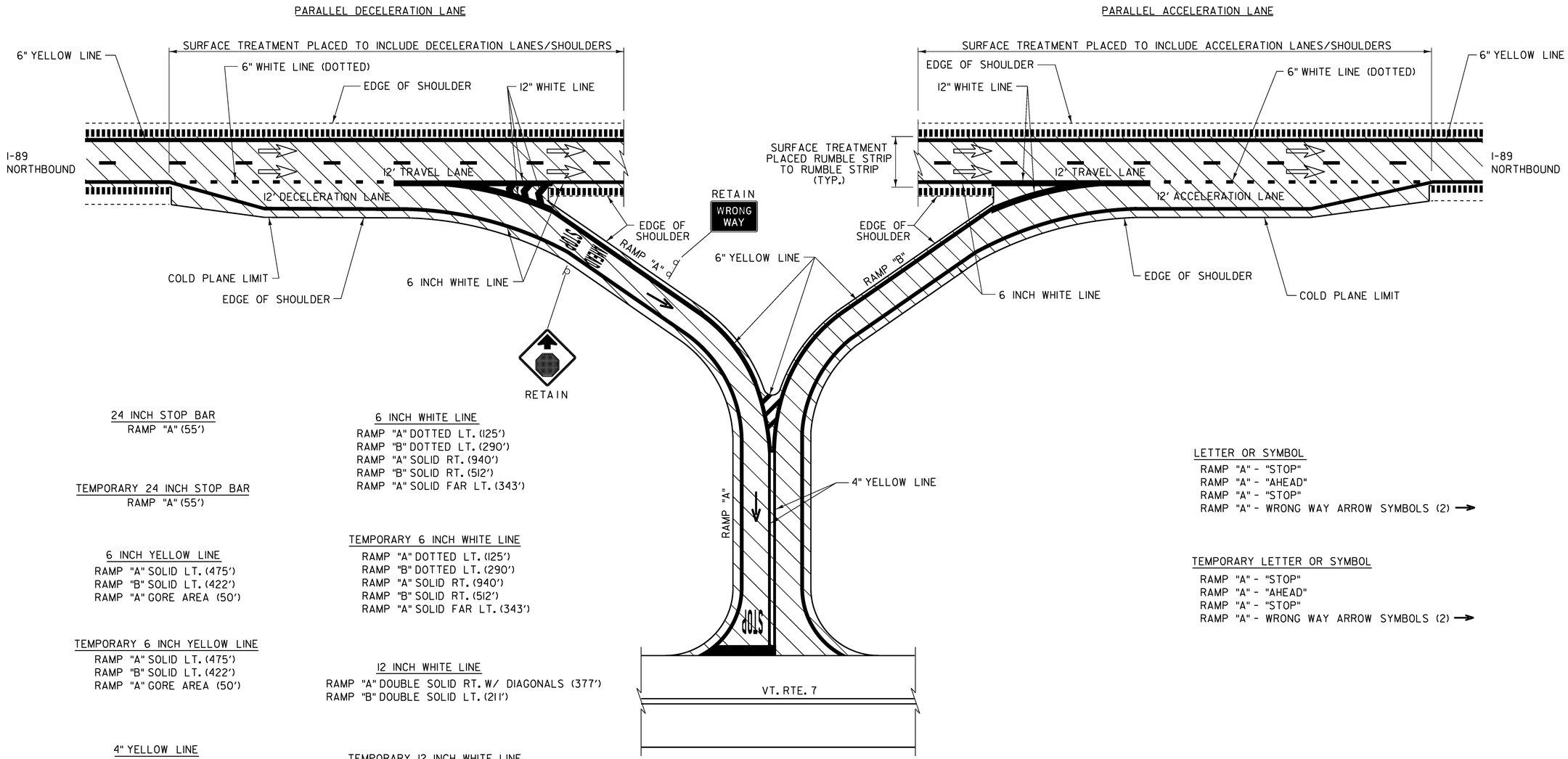
FILE NAME: IIa024/IIa024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IIa024lcdl.l

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 43 OF 49

INTERCHANGE #22 CONSTRUCTION DETAILS

N

VT STATE PLANE GRID



24 INCH STOP BAR
RAMP "A" (55')

TEMPORARY 24 INCH STOP BAR
RAMP "A" (55')

6 INCH YELLOW LINE
RAMP "A" SOLID LT. (475')
RAMP "B" SOLID LT. (422')
RAMP "A" GORE AREA (50')

TEMPORARY 6 INCH YELLOW LINE
RAMP "A" SOLID LT. (475')
RAMP "B" SOLID LT. (422')
RAMP "A" GORE AREA (50')

4" YELLOW LINE
RAMP "A" DOUBLE SOLID LT. (265')

TEMPORARY 4" YELLOW LINE
RAMP "A" DOUBLE SOLID LT. (265')

6 INCH WHITE LINE
RAMP "A" DOTTED LT. (125')
RAMP "B" DOTTED LT. (290')
RAMP "A" SOLID RT. (940')
RAMP "B" SOLID RT. (512')
RAMP "A" SOLID FAR LT. (343')

TEMPORARY 6 INCH WHITE LINE
RAMP "A" DOTTED LT. (125')
RAMP "B" DOTTED LT. (290')
RAMP "A" SOLID RT. (940')
RAMP "B" SOLID RT. (512')
RAMP "A" SOLID FAR LT. (343')

12 INCH WHITE LINE
RAMP "A" DOUBLE SOLID RT. W/ DIAGONALS (377')
RAMP "B" DOUBLE SOLID LT. (211')

TEMPORARY 12 INCH WHITE LINE
RAMP "A" DOUBLE SOLID RT. W/ DIAGONALS (377')
RAMP "B" DOUBLE SOLID LT. (211')

LETTER OR SYMBOL
RAMP "A" - "STOP"
RAMP "A" - "AHEAD"
RAMP "A" - "STOP"
RAMP "A" - WRONG WAY ARROW SYMBOLS (2) →

TEMPORARY LETTER OR SYMBOL
RAMP "A" - "STOP"
RAMP "A" - "AHEAD"
RAMP "A" - "STOP"
RAMP "A" - WRONG WAY ARROW SYMBOLS (2) →

LEGEND

= WORK AREA

= DIRECTION OF TRAFFIC FLOW

= EXISTING MILLED RUMBLE STRIPS

NOTES:

1. TWO (2) APPLICATIONS OF FINAL PAVEMENT MARKINGS WILL BE REQUIRED. SEE SPECIAL PROVISIONS FOR COMPLETION DATE REQUIREMENTS.
2. SEE STANDARDS E-191, E-192, AND E-193 FOR PAVEMENT MARKING DETAILS.

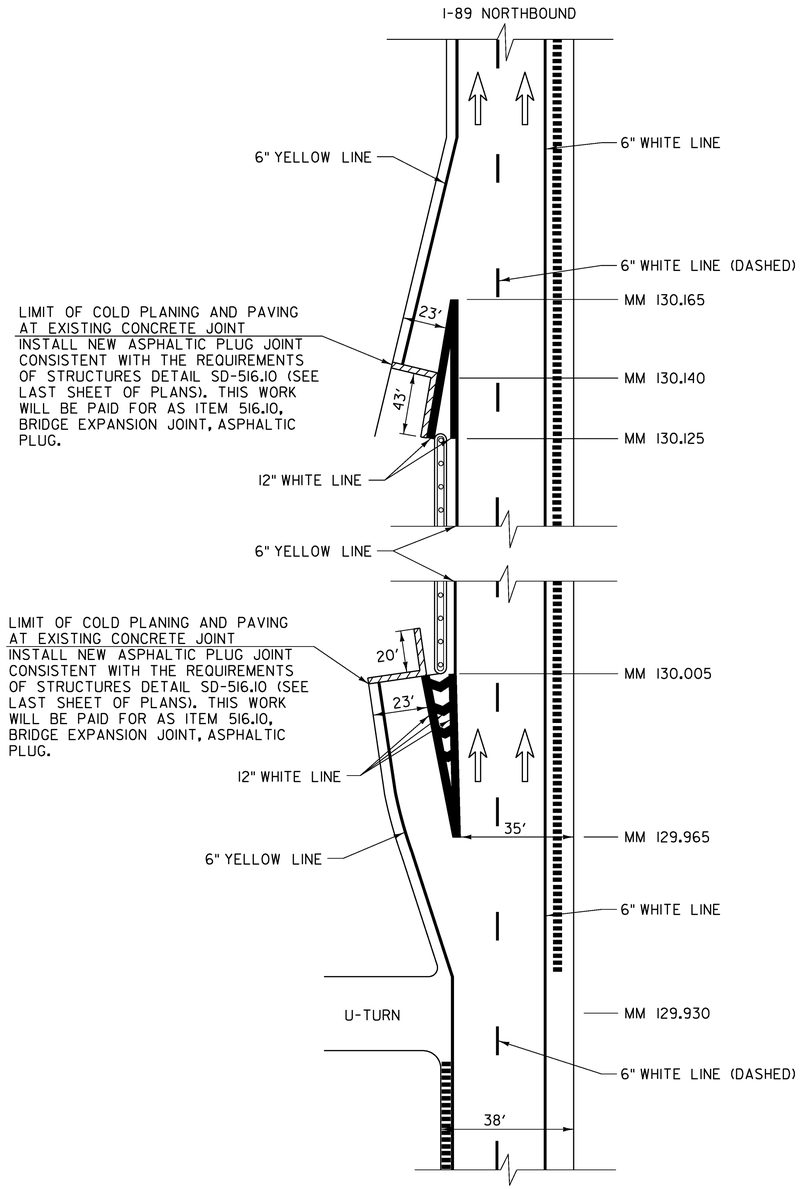
NOT TO SCALE

INTERCHANGE #22 DETAIL SHEET

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

FILE NAME: IIa024/IIa024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IIa024tcd2.i

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 44 OF 49

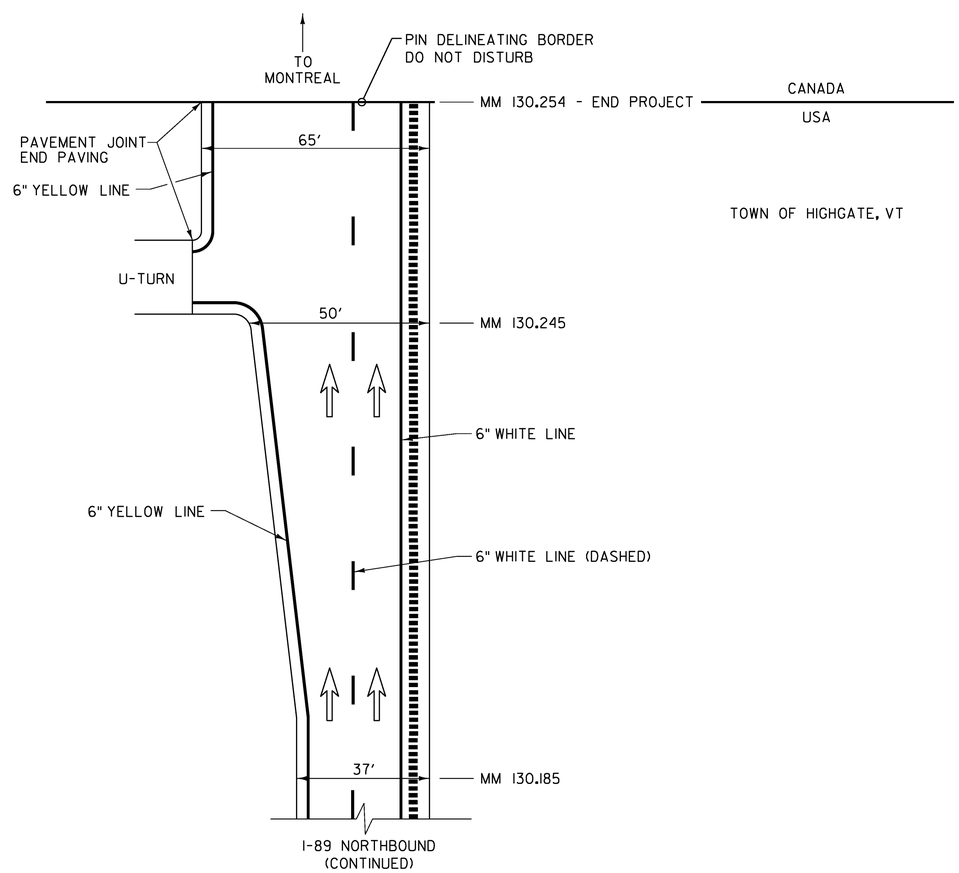


12" WHITE LINE

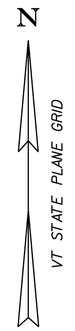
MM 129.965 - MM 130.005 DOUBLE SOLID LT. W/ DIAGONALS
MM 130.125 - MM 130.165 DOUBLE SOLID LT.

TEMPORARY 12" WHITE LINE

MM 129.965 - MM 130.005 DOUBLE SOLID LT. W/ DIAGONALS
MM 130.125 - MM 130.165 DOUBLE SOLID LT.



TOWN OF HIGHGATE, VT



NOTES:

1. TWO (2) APPLICATIONS OF FINAL PAVEMENT MARKINGS WILL BE REQUIRED. SEE SPECIAL PROVISIONS FOR COMPLETION DATE REQUIREMENTS.
2. SEE STANDARDS E-191, E-192, AND E-193 FOR PAVEMENT MARKING DETAILS.
3. FOR ALL OTHER PAVEMENT MARKINGS IN THIS AREA SEE THE PAVEMENT MARKING LAYOUT SHEET.

LEGEND

- DIRECTION OF TRAFFIC FLOW
- EXISTING MILLED RUMBLE STRIPS
- NEW ASPHALTIC PLUG LOCATION

NOT TO SCALE

PAVEMENT MARKING DETAIL AT BORDER

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

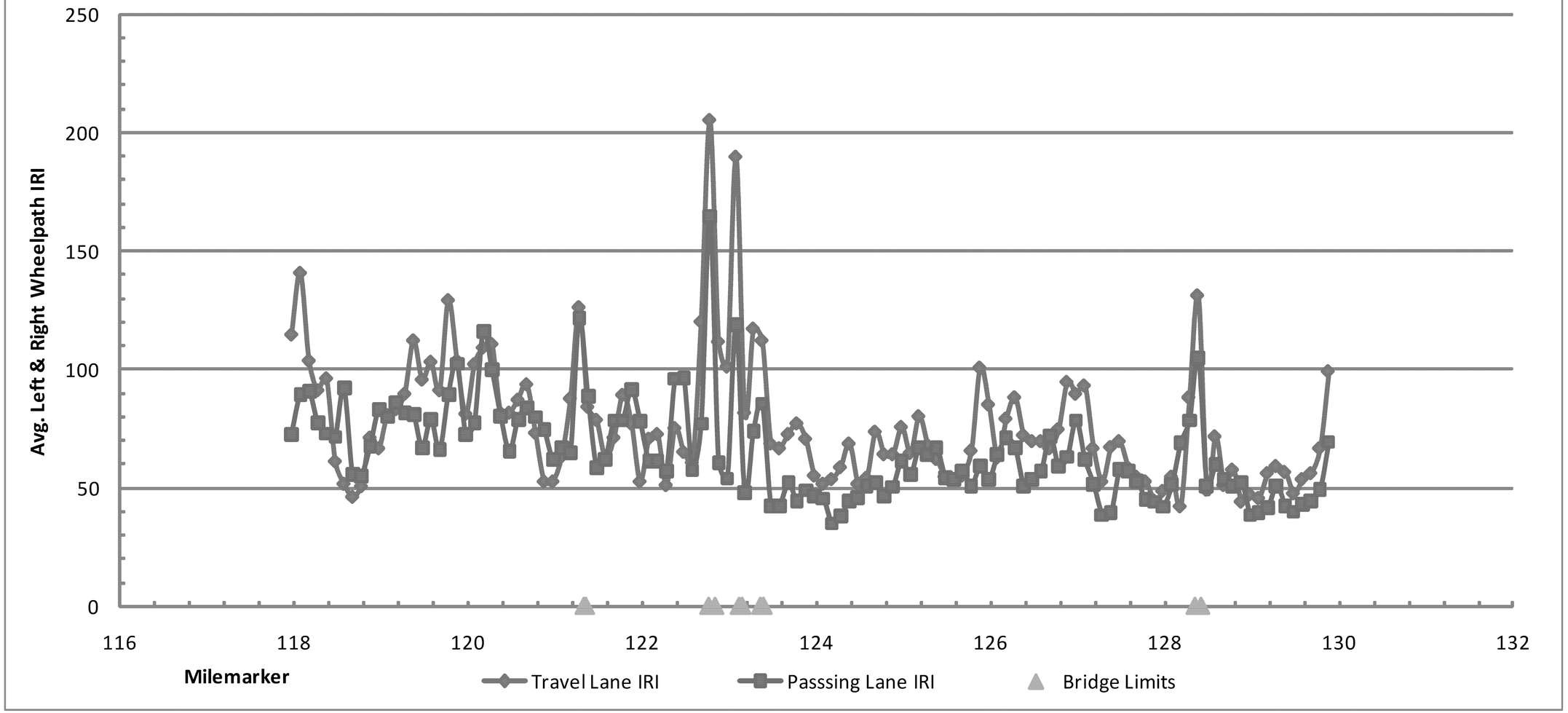
FILE NAME: IIa024/IIa024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IIa024pmdb.1

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 45 OF 49

I-89 Swanton-Highgate IM Surf(28) Ride

Profiled 9/1/11

Travel Lane Avg. IRI = 77.1, Passing Lane Avg. IRI = 65.3, Project Avg. IRI = 71.2



NOTES:

1. THIS IS FOR NORTHBOUND ONLY.
2. THIS IS FOR INFORMATIONAL PURPOSES ONLY.

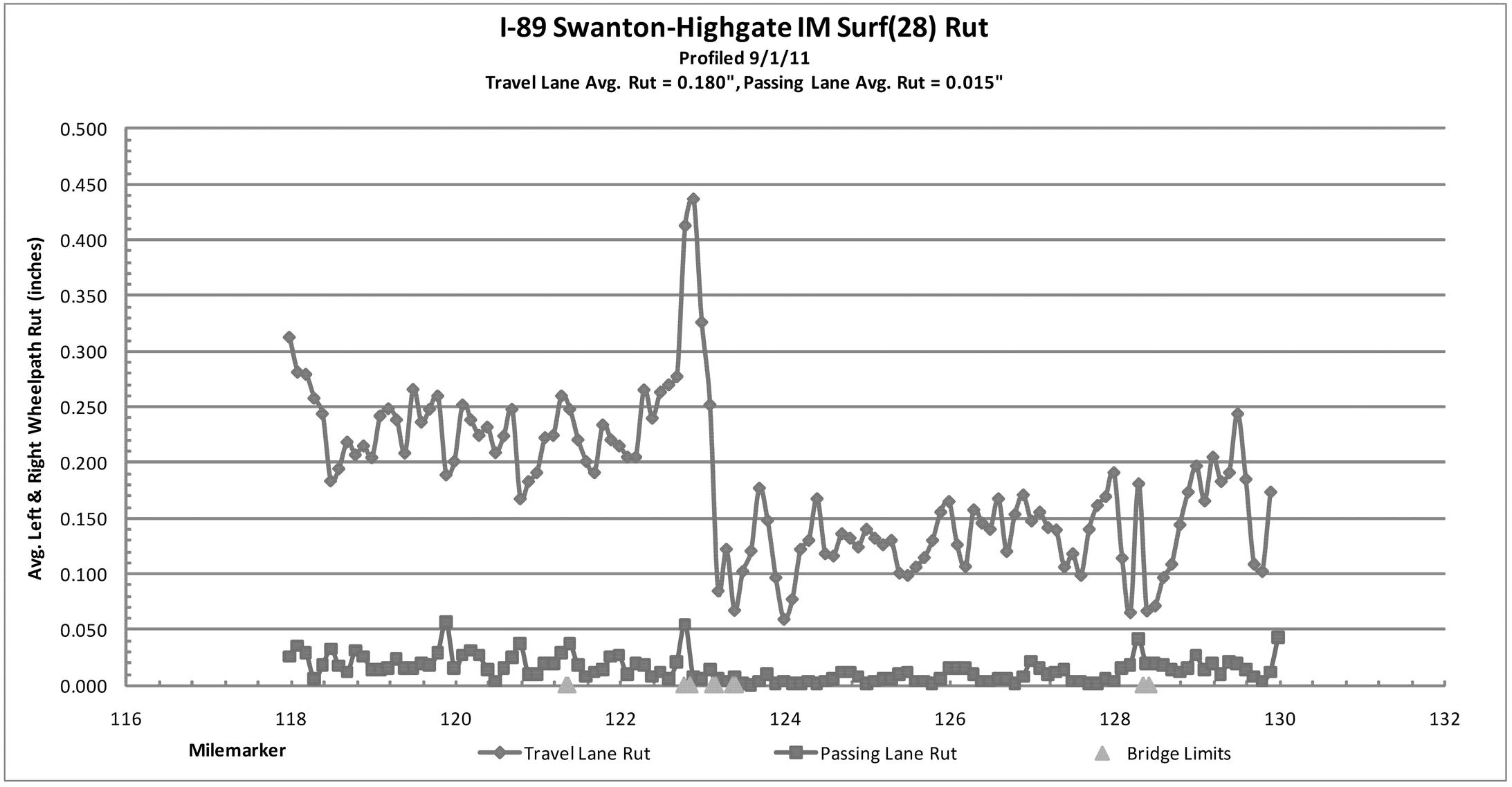
NOT TO SCALE

ROUGHNESS DATA INFORMATION SHEET

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

FILE NAME: IIa024/IIa024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IIa024ride.i

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 46 OF 49



NOTES:

1. THIS IS FOR NORTHBOUND ONLY.
2. THIS IS FOR INFORMATIONAL PURPOSES ONLY.

NOT TO SCALE

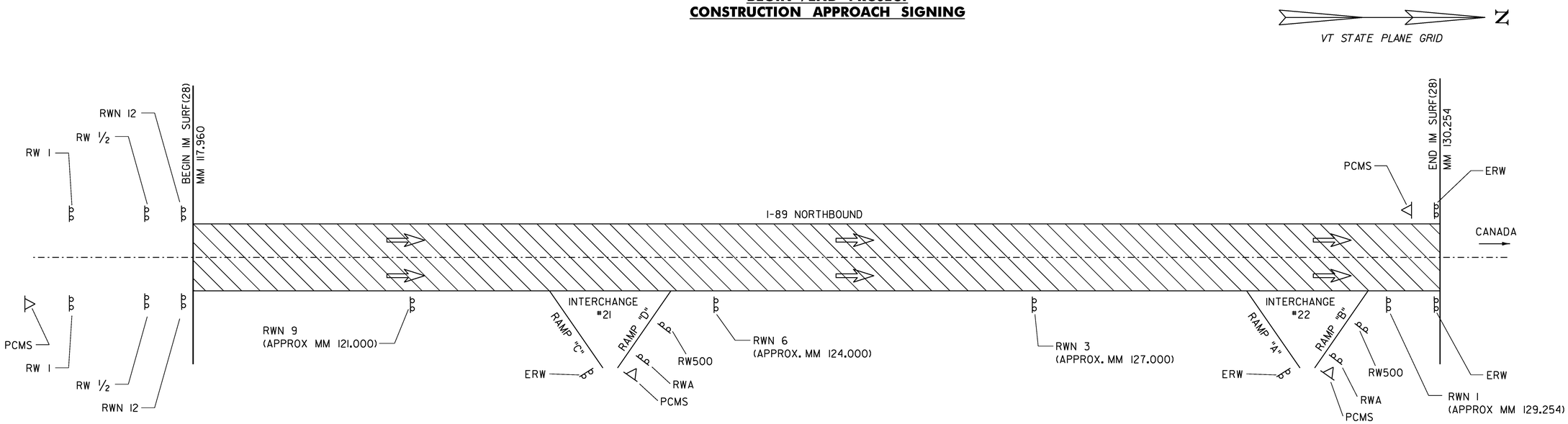
RUTTING DATA INFORMATION SHEET

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

FILE NAME: IIa024/IIa024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IIa024rut.i

PLOT DATE: 12-APR-2012
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 47 OF 49

BEGIN /END PROJECT
CONSTRUCTION APPROACH SIGNING



LEGEND

RW500 = ROAD WORK 500 FT.
RWA = ROAD WORK AHEAD
RWN = ROAD WORK NEXT (X MILES)
ERW = END ROAD WORK
RW 1 = ROAD WORK 1MILE
RW 1/2 = ROAD WORK 1/2 MILE
⇒ = DIRECTION OF TRAFFIC FLOW
▷ = PORTABLE CHANGEABLE MESSAGE SIGN
▨ = WORK AREA

LIST OF CONSTRUCTION SIGNS

LOCATION	RWA	RW500	ERW	RWN	RW 1 MI	RW 1/2 MI	PCMS
I-89 NORTHBOUND			2	5	2	2	2
INTERCHANGE #21	1	1	1				1
INTERCHANGE #22	1	1	1				1
TOTALS	2	2	4	5	2	2	4

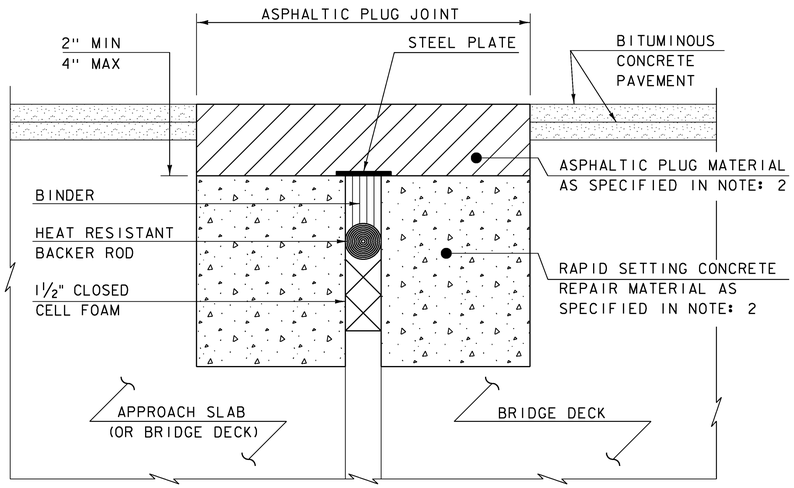
NOT TO SCALE

CONSTRUCTION APPROACH SIGNING

PROJECT NAME: SWANTON-HIGHGATE
PROJECT NUMBER: IM SURF (28)

FILE NAME: 11a024/11a024.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: L. BULLOCK
11a024con.1

PLOT DATE: 12-APR-2012
DRAWN BY: L. BULLOCK
CHECKED BY: M. FOWLER
SHEET 48 OF 49



ASPHALTIC PLUG-TYPE JOINT DETAIL - REHAB

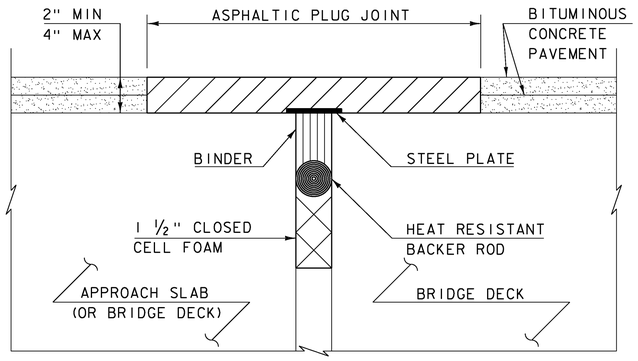
(NOT TO SCALE)

NOTES:

1. THE CONTRACTOR SHALL REMOVE ALL ASPHALTIC PLUG JOINT MATERIAL AND DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. REMOVAL OF THE FIRST 4 INCHES OF MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 516.10 BRIDGE EXPANSION JOINT, ASPHALTIC PLUG. ANY REMOVAL OF MATERIAL GREATER THAN 4 INCHES SHALL BE INCLUDED IN THE BID PRICE OF ITEM 580.20 RAPID SETTING CONCRETE REPAIR MATERIAL WITH COURSE AGGREGATE.

2. THE CONTRACTOR SHALL REPLACE REMOVED MATERIAL THAT IS LESS THAN 4" FROM FINISHED GRADE WITH ASPHALTIC PLUG JOINT MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 707.15. ALL REMOVED MATERIAL THAT IS GREATER THAN 4 INCHES FROM FINISHED GRADE SHALL BE REPLACED WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 780.04.

3. REINFORCING STEEL NOT SHOWN FOR CLARITY.



ASPHALTIC PLUG-TYPE JOINT DETAIL - NEW

(NOT TO SCALE)

ASPHALTIC PLUG JOINT NOTES

INSTALLATION:

1. LOCATE THE JOINT CENTRALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT, MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
2. REMOVE THE BITUMINOUS CONCRETE PAVEMENT FULL DEPTH AS SHOWN ON THE PLANS. THE PAVEMENT SHALL BE DRY AND SAW CUT TO THE LIMITS REQUIRED TO PLACE THE JOINT. A PNEUMATIC HAMMER AND CHISEL MAY BE USED ADJACENT TO THE CURB ONLY WHEN SAW CUTTING IS NOT POSSIBLE.
3. BLAST CLEAN THE JOINT AREA OF DEBRIS, ASPHALT AND SHEET MEMBRANE. THOROUGHLY DRY THE JOINT AREA WITH COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
4. REPAIR MATERIAL GREATER THAN 4 INCHES FROM FINISHED GRADE WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 780.04.
5. PLACE PROPERLY SIZED HEAT RESISTANT BACKER ROD IN THE MOVEMENT GAP ALLOWING FOR 1" +/- OF BINDER ABOVE THE ROD.
6. HEAT AND PLACE THE BINDER MATERIAL AS RECOMMENDED BY THE MANUFACTURER.
7. PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRE-STAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER. THE STEEL PLATES MAY BE OMITTED WHERE THE ENGINEER DETERMINES THAT THE APPROACH SLAB OR BRIDGE DECK WILL PROVIDE INADEQUATE SUPPORT AND WHERE VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.
8. HEAT AND MIX THE BINDER MATERIAL AND AGGREGATE AS RECOMMENDED BY THE MANUFACTURER.
9. INSTALLATION OF MATERIAL, COMPACTION, AND TOP COATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
10. IMMEDIATELY AFTER TOP COATING, CAST AN ANTI-SKID MATERIAL OVER THE JOINT TO REDUCE THE RISK OF TRACKING.
11. ONCE THE JOINT REACHES 82 DEG C (180 DEG F) +/-, WATER MAY BE USED TO EXPEDITE THE COOLING PROCESS.
12. PROTECT JOINT FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 51 DEG C (125 DEG F) +/-.

WEATHER LIMITATIONS

APPLY BINDER MATERIAL ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL OR AS RECOMMENDED BY THE MANUFACTURER:

1. THE AMBIENT AIR TEMPERATURE IS AT LEAST 10 DEG C (50 DEG F) AND RISING.
2. THE ROAD SURFACE IS DRY.
3. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION

BRIDGE JOINT
ASPHALTIC PLUG

STRUCTURES DETAIL
SD-516.10