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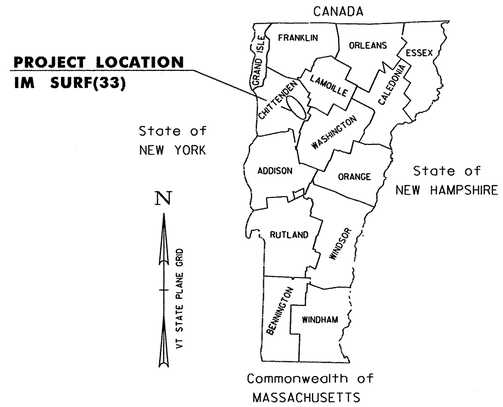
STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENTS
TOWNS OF WATERBURY, BOLTON AND RICHMOND
COUNTIES OF WASHINGTON & CHITTENDEN
INTERSTATE ROUTE 89 (NB & SB)

THIS PROJECT INCLUDES BOTH NORTHBOUND AND SOUTHBOUND BARRELS. NB: MM 63.515 - MM 79.000; SB: MM 63.510 - MM 79.000.
INCLUDED ARE THE RAMPS AT INTERCHANGES 10 & 11, WITH THE EXCEPTION OF RAMP A AT INTERCHANGE 10.

NB LENGTH OF ROADWAY = 81,760.80 FT = 15.485 MILES
SB LENGTH OF ROADWAY = 81,787.20 FT - 15.490 MILES
PROJECT LENGTH = 81,787.20 FT = 15.490 MILES

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES SURFACE PREPARATION INVOLVING PATCHING, POT HOLE REPAIR, CRACK SEALING, COLD PLANING, OVERLAYING WITH A THIN BITUMINOUS SURFACE TREATMENT, TRAFFIC MARKINGS, AND OTHER HIGHWAY RELATED ITEMS.



TRAFFIC DATA

INTERSTATE I-89

LOCATION	AADT		DHV		ESALS	
	2013	2023	2013	2023	2013-2023	2013-2033
NORTHBOUND I-89						
BEGIN PROJECT TO EXIT 11	13 100	14 600	1500	1700	4,170,000	10,007,000
EXIT 11 TO END PROJECT	14 000	15 700	1700	1900	4,223,000	10,154,000
SOUTHBOUND I-89						
BEGIN PROJECT TO EXIT 11	13 100	14 600	1600	1700	2,904,000	6,956,000
EXIT 11 TO END PROJECT	14 000	15 700	1700	1900	3,470,000	8,353,000

QUALITY ASSURANCE PROGRAM: LEVEL I

CONVENTIONAL SYMBOLS

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

RECORD PLANS

CONTRACTOR: PIKE INDUSTRIES, INC. – BERLIN, VT
RESIDENT ENGINEER: JOSH HULETT
CONSTRUCTION BEGAN: OCTOBER 10, 2012
CONSTRUCTION COMPLETE: NOVEMBER 18, 2013
RECORD PLANS BY: JOSH HULETT & JENNA HYDE

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

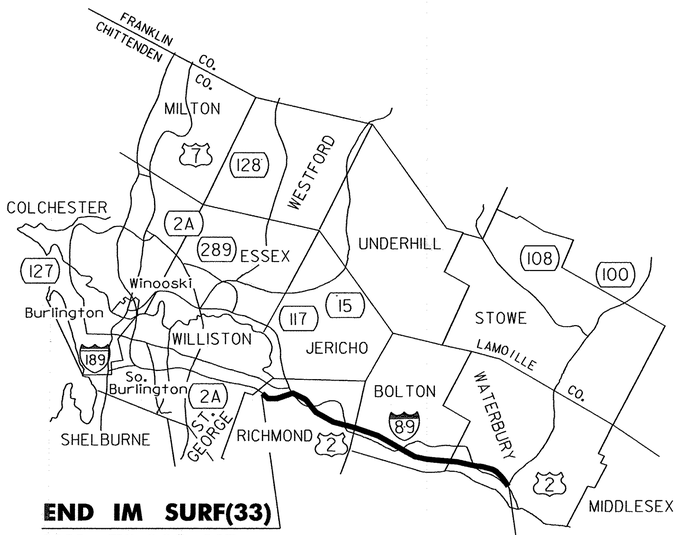
BY _____ RESIDENT ENGINEER

DATE 4/3/14

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.

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

DATUM
VERTICAL N/A
HORIZONTAL N/A



END IM SURF(33)
MM 79.000 NB
MM 79.00 SB

BEGIN IM SURF(33)
MM 63.515 NB
MM 63.510 SB

SUPERPAVE BITUMINOUS CONCRETE PAVEMENT MIXTURE DESIGN CRITERIA		
	I-89 NB	I-89 SB
DESIGN LANE/DESIGN LIFE ESAL	10,154,000	8,353,000
DESIGN NUMBER OF GYRATIONS	80	80
PERFORMANCE GRADED ASPHALT BINDER	SEE SECTION 490	

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.

UNLESS OTHERWISE NOTED, ALL DRAWINGS AND DETAILS ON THESE PLANS ARE DRAWN "NOT TO SCALE".

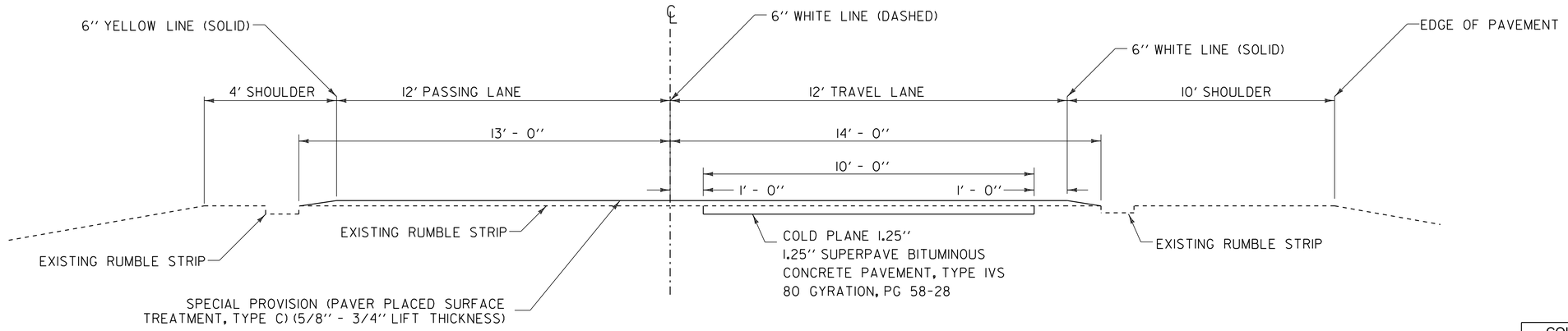
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR
APPROVED _____ DATE _____

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED _____ DATE _____

PROJECT MANAGER : MIKE FOWLER

PROJECT NAME : WATERBURY-RICHMOND
PROJECT NUMBER : IM SURF (33)

SHEET 1 OF 19 SHEETS



TYPICAL SECTION – ALTERNATE A

I–89 NORTHBOUND MM 63.515 TO MM 79.000

I–89 SOUTHBOUND MM 63.510 TO MM 79.000

NOTES:

1. ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING, POTHOLE REPAIR, AND CRACK SEALING SHALL BE PERFORMED PRIOR TO APPLICATION OF THE WEARING COURSE. ALL CRACKS GREATER THAN 0.10 INCH AND UP TO 1 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 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 PAVER PLACED SURFACE TREATMENT. ALL LANE DELINEATION IS TO BE MAINTAINED DURING CONSTRUCTION BY THE USE OF LINE STRIPING TARGETS OR TEMPORARY PAINT. REMOVAL OF EXISTING PAVEMENT MARKINGS TO BE PAID UNDER ITEM 646.85, REMOVAL OF EXISTING PAVEMENT MARKINGS. PICKUP BROOM (TYPE 2) VIA COD/SA

4. A 50' COLD PLANED WEDGE 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 BE PAID 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 BT 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. A 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. SOME SEGMENTS OF THE TRAVEL LANE WITHIN THE PROJECT LIMITS HAVE RUT/WEAR DEPTHS GREATER THAN 0.5". ESTIMATED QUANTITIES FOR ITEMS, 210.10 COLD PLANING BITUMINOUS PAVEMENT, 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, AND 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H) HAVE BEEN INCLUDED FOR REPAIRING AREAS EXHIBITING THIS DISTRESS, AS DETAILED IN THE TYPICAL SECTION. SEGMENTS LISTED IN TABLE 1 AND TABLE 2 HAVE BEEN USED FOR THE PURPOSES OF ESTIMATING QUANTITIES AND WERE DEVELOPED BASED ON DATA FROM 2/15/12 AND 3/8/12 AUTOMATED TRANSVERSE PROFILE SURVEYS. THE ACTUAL FINAL SEGMENTS FOR TREATMENT WILL BE DETERMINED BY THE ENGINEER IN THE FIELD PRIOR TO CONSTRUCTION. IT IS ANTICIPATED THESE MANUAL SURVEYS WILL BE CONDUCTED UNDER A LANE CLOSURE PROVIDED BY THE CONTRACTOR AND CONSIDERED INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL. THESE AREAS SHALL BE COLD PLANED TO A DEPTH OF 1.25" AND REPAVED WITH 1.25'' OF SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TYPE IVS IN ONE PASS ON THE SAME DAY AS COLD PLANING. EMULSIFIED ASPHALT FOR TACK COAT SHALL BE APPLIED TO THE COLD PLANED SURFACE AT A MINIMUM RATE OF 0.080 GAL/SY PRIOR TO PLACEMENT OF THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT.

8. THERE ARE PAVEMENT SENSORS LOCATED AT MM 72.300 NORTHBOUND & SOUTHBOUND WHICH MAY BE IMPACTED BY CONSTRUCTION ACTIVITIES. INSTALLATION OF NEW SENSORS WILL BE PERFORMED BY OTHERS FOLLOWING COMPLETION OF THE PROJECT. THE ENGINEER IS TO CONTACT MARK GERRISH AT 802.828.2834.

TABLE 1

COLD PLANE AND PAVE LOCATIONS--NB	
FROM MM	TO MM
64.2	65.0
65.3	66.2
66.4	67.1
67.2	67.5
67.6	67.9
68.0	68.5
68.6	68.8
68.9	73.2
73.5	73.7
73.9	77.1
77.4	78.0
78.6	78.7
78.8	79.0
TOTAL MILEAGE = 12.300	

TABLE 2

COLD PLANE AND PAVE LOCATIONS--SB	
FROM MM	TO MM
64.5	65.4
65.6	66.7
66.8	67.5
67.6	70.3
70.5	71.3
71.5	72.1
72.3	72.8
72.9	73.0
73.5	73.6
73.8	74.2
74.6	74.7
75.0	76.1
77.0	77.1
77.4	77.9
78.7	78.8
TOTAL MILEAGE = 9.800	

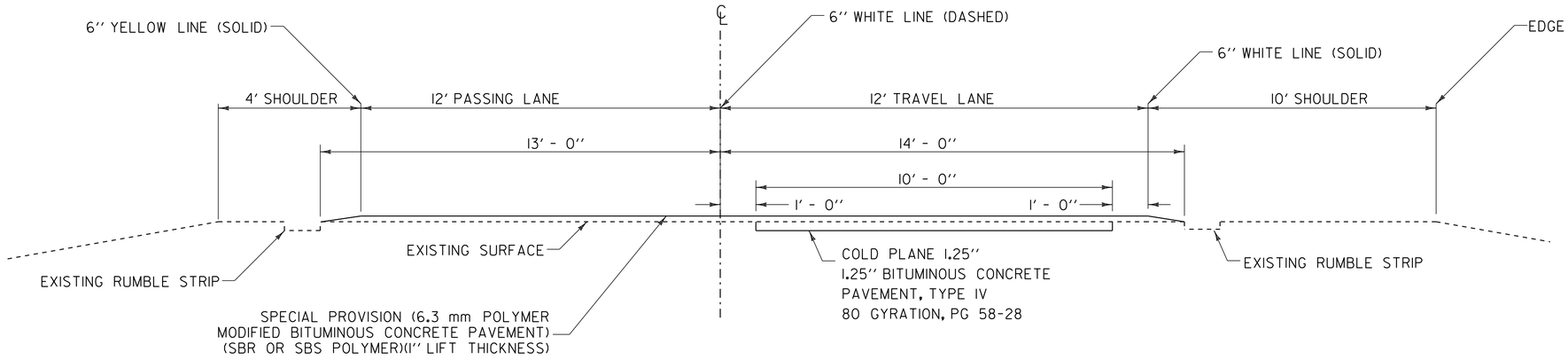
NOT TO SCALE

ALTERNATE A TYPICAL SECTION

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12A178\...12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_02.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PVT. MG.T
SHEET 2 OF 19



TYPICAL SECTION – ALTERNATE B

I–89 NORTHBOUND MM 63.515 TO MM 79.000

I–89 SOUTHBOUND MM 63.510 TO MM 79.000

NOTES:

1. ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING, POTHOLE REPAIR, AND CRACK SEALING SHALL BE PERFORMED PRIOR TO APPLICATION OF THE WEARING COURSE. ALL CRACKS GREATER THAN 0.10 INCH AND UP TO 1 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 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 POLYMER MODIFIED SURFACE TREATMENT. ALL LANE DELINEATION IS TO BE MAINTAINED DURING CONSTRUCTION BY THE USE OF LINE STRIPING TARGETS OR TEMPORARY PAINT. REMOVAL OF EXISTING PAVEMENT MARKINGS TO BE PAID UNDER ITEM 646.85.

4. A 50' COLD PLANED WEDGE 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 BE PAID 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 BT 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. A 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. PRIOR TO THE PLACEMENT OF THE POLYMER MODIFIED SURFACE TREATMENT, 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).

8. THE GYRATION SPECIFICATION FOR THE 6.3 MM POLYMER - MODIFIED BITUMINOUS CONCRETE PAVEMENT SHALL BE 90. PERFORMANCE GRADED BINDER SHALL BE PG 58-28.

9. SOME SEGMENTS OF THE TRAVEL LANE WITHIN THE PROJECT LIMITS HAVE RUT/WEAR DEPTHS GREATER THAN 0.5". ESTIMATED QUANTITIES FOR ITEMS, 210.10 COLD PLANING BITUMINOUS PAVEMENT, 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, AND 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H) HAVE BEEN INCLUDED FOR REPAIRING AREAS EXHIBITING THIS DISTRESS, AS DETAILED IN THE TYPICAL SECTION. SEGMENTS LISTED IN TABLE 1 AND TABLE 2 HAVE BEEN USED FOR THE PURPOSES OF ESTIMATING QUANTITIES AND WERE DEVELOPED BASED ON DATA FROM 2/15/12 AND 3/8/12 AUTOMATED TRANSVERSE PROFILE SURVEYS. THE ACTUAL FINAL SEGMENTS FOR TREATMENT WILL BE DETERMINED BY THE ENGINEER IN THE FIELD PRIOR TO CONSTRUCTION. IT IS ANTICIPATED THESE MANUAL SURVEYS WILL BE CONDUCTED UNDER A LANE CLOSURE PROVIDED BY THE CONTRACTOR AND CONSIDERED INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL. THESE AREAS SHALL BE COLD PLANED TO A DEPTH OF 1.25" AND REPAVED WITH 1.25'' OF SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TYPE IVS IN ONE PASS ON THE SAME DAY AS COLD PLANING. EMULSIFIED ASPHALT FOR TACK COAT SHALL BE APPLIED TO THE COLD PLANED SURFACE AT A MINIMUM RATE OF 0.080 GAL/SY PRIOR TO PLACEMENT OF THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT.

10. THERE ARE PAVEMENT SENSORS LOCATED AT MM 72.300 NORTHBOUND & SOUTHBOUND WHICH MAY BE IMPACTED BY CONSTRUCTION ACTIVITIES. INSTALLATION OF NEW SENSORS WILL BE PERFORMED BY OTHERS FOLLOWING COMPLETION OF THE PROJECT. THE ENGINEER IS TO CONTACT MARK GERRISH AT 802.828.2834.

TABLE 1

COLD PLANE AND PAVE LOCATIONS--NB	
FROM MM	TO MM
64.2	65.0
65.3	66.2
66.4	67.1
67.2	67.5
67.6	67.9
68.0	68.5
68.6	68.8
68.9	73.2
73.5	73.7
73.9	77.1
77.4	78.0
78.6	78.7
78.8	79.0
TOTAL MILEAGE = 12.300	

TABLE 2

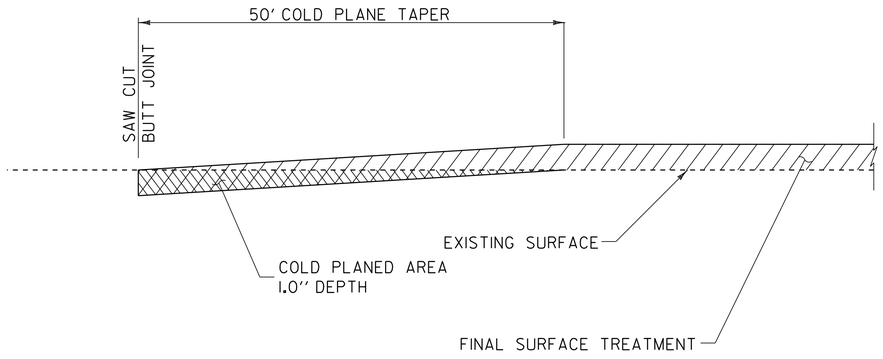
COLD PLANE AND PAVE LOCATIONS--SB	
FROM MM	TO MM
64.5	65.4
65.6	66.7
66.8	67.5
67.6	70.3
70.5	71.3
71.5	72.1
72.3	72.8
72.9	73.0
73.5	73.6
73.8	74.2
74.6	74.7
75.0	76.1
77.0	77.1
77.4	77.9
78.7	78.8
TOTAL MILEAGE = 9.800	

NOT TO SCALE

ALTERNATE B TYPICAL SECTION

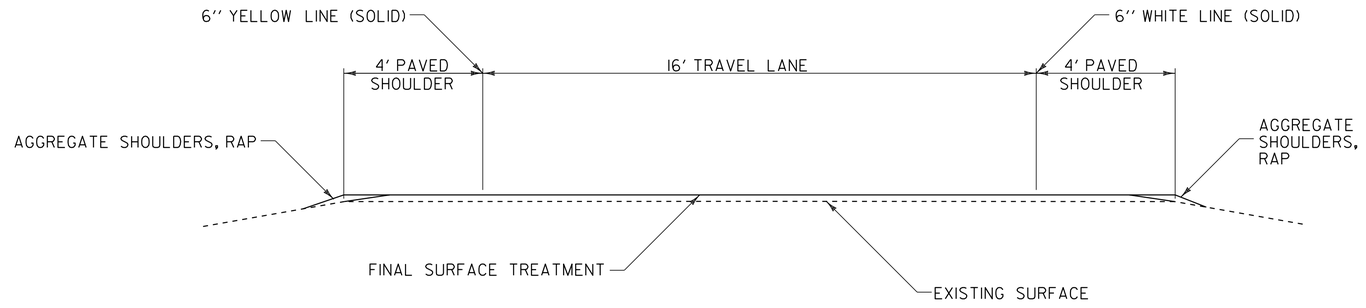
PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12A178\...12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_03.i
PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PVT. MGT.
SHEET 3 OF 19

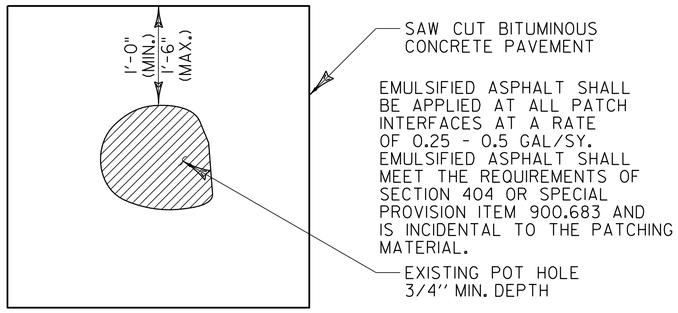


COLD PLANE DETAIL AT BEGIN/END PROJECT & RAMPS

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

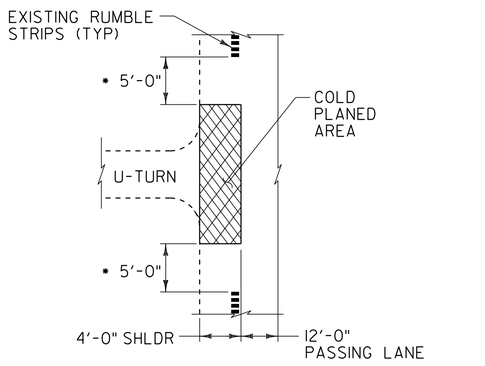


TYPICAL RAMP SECTION

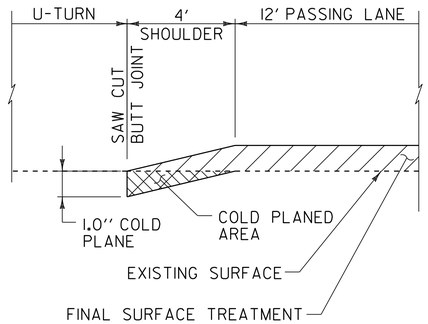


TYPICAL – POT HOLE REPAIR

NOT TO SCALE



* BEGIN COLD PLANING 5'-0" AFTER RUMBLE STRIPS END, AND END COLD PLANING 5'-0" BEFORE RUMBLE STRIPS BEGIN



COLD PLANE DETAIL AT U-TURNS

NOT TO SCALE

MISCELLANEOUS TYPICAL DETAILS

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: 12A178/12A178.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IPARM FILE NAME: 12A178_04.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 4 OF 19

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 ALL ALTERNATES		
	108 000		108 000	LF	SHOULDER BERM REMOVAL	203.40	EST.
	1		1	CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST
	191 000		191 000	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	425
	200		200	TON	AGGREGATE SHOULDERS, RAP	402.13	-
	1		1	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-
	46 500		46 500	LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (AASHTO M 324 (ASTM D 6690) TYPE II)	417.20	EST
	9 600		9 600	TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	490.30	146
	1		1	LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-
	1		1	LU	MAT DENSITY PAY ADJUSTMENT (N.A.B.I.)	490.32	-
2 800			2 800	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	17
100			100	CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST
	400		400	HR	POWER BROOM RENTAL, TYPE I	608.30	EST
	3 000		3 000	HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST
	2 000		2 000	HR	FLAGGERS	630.15	EST
		1	1	LS	FIELD OFFICE, ENGINEERS	631.10	-
		1	1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
		3 000	3 000	DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-
	1		1	LS	MOBILIZATION/DEMOBILIZATION	635.11	-
	1		1	LS	TRAFFIC CONTROL	641.10	-
	4		4	EA	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-
	437 000		437 000	LF	6 INCH WHITE LINE	646.214	434
	350 000		350 000	LF	6 INCH YELLOW LINE	646.215	464
	7 100		7 100	LF	12 INCH WHITE LINE	646.24	58
	250		250	LF	24 INCH STOP BAR	646.26	2
	135		135	EA	LETTER OR SYMBOL	646.30	4
	218 500		218 500	LF	TEMPORARY 6 INCH WHITE LINE	646.620	217
	175 000		175 000	LF	TEMPORARY 6 INCH YELLOW LINE	646.630	232
	3 600		3 600	LF	TEMPORARY 12 INCH WHITE LINE	646.660	79
	130		130	LF	TEMPORARY 24 INCH STOP BAR	646.680	6
	135		135	EA	TEMPORARY LETTER OR SYMBOL	646.690	4
	8 500		8 500	EA	LINE STRIPING TARGETS	646.76	EST
	258 000		258 000	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	321
	1		1	LU	PRICE ADJUSTMENT, FUEL (N.A.B.I)	690.50	-
	305		305	EA	SPECIAL PROVISION (REMOVAL OF RAISED PAVEMENT MARKERS)	900.620	EST
	50		50	TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)	900.680	EST

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		COLD PLANING, BITUMINOUS PAVEMENT
312	SY	BEGIN PROJECT
312	SY	END PROJECT
52 940	SY	BRIDGE & BRIDGE APPROACHES
2 667	SY	INTERCHANGES
134 347	SY	SPOT LEVELING (NB)
425	SY	ROUNDING
191 000	SY	TOTAL
		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
5 262	TON	NORTHBOUND
4 192	TON	SOUTHBOUND
146	TON	ROUNDING
9 600	TON	TOTAL

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: 12A178/12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_05.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT.MGT.
CHECKED BY: PAVT MGMT
SHEET 5 OF 19

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
	1300		1300	CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H)	900.683	EST
					END ITEMS COMMON TO ALL ALTERNATES		
					BEGIN ALTERNATE A		
	547 000		547 000	SY	SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)	900.675	5490
					END ALTERNATE A		
					BEGIN ALTERNATE B		
	1		1	LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-
	31 000		31 000	TON	SPECIAL PROVISION (6.3 MM POLYMER MODIFIED BITUMINOUS CONCRETE PAVEMENT) (SBR OR SBS POLYMER)	900.680	501
	3 750		3 750	CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H)	900.683	EST
					END ALTERNATE B		

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		ALTERNATE A
		SPECIAL PROVISION (PAVER-PLACED SURFACE TREATMENT, TYPE C)
255 834	SY	MAINLINE (NB)
255 916	SY	MAINLINE (SB)
29 760	SY	INTERCHANGES
541 510	SY	SUBTOTAL
5490	SY	ROUNDING
547 000	SY	TOTAL

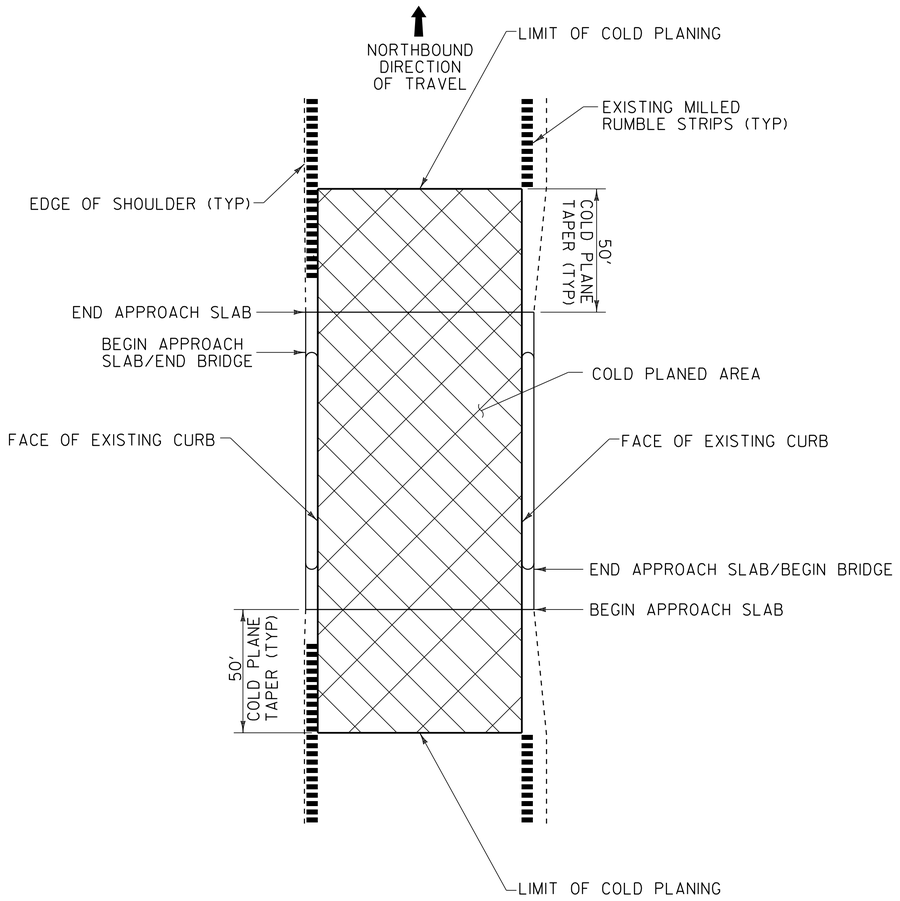
DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		ALTERNATE B
		SPECIAL PROVISION (6.3 MM POLYMER MODIFIED BITUMINOUS CONCRETE PAVEMENT) (SBR OR SBS POLYMER)
14 924	TON	MAINLINE (NB)
14 928	TON	MAINLINE (SB)
647	TON	INTERCHANGES
30 499	TON	SUBTOTAL
501	TON	ROUNDING
31 000	TON	TOTAL

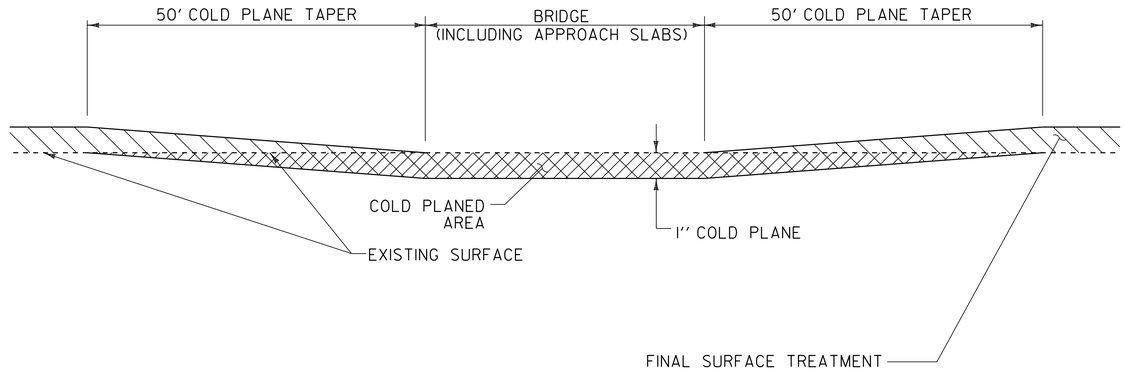
PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: 12A178•A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_06.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 6 OF 19



BRIDGE COLD PLANE TYPICAL PLAN
ALTERNATE A & B



BRIDGE COLD PLANE DETAIL

NOTES:

1. REFER TO ASPHALTIC PLUG JOINT DETAIL SHEET SD-516.10 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 RECOMMEND REPAIRS SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE STATE.

LEGEND

COLD PLANE AREA

ASPHALTIC PLUG-TYPE JOINT LOCATIONS

BRIDGE #	MM	JOINTS	TOTAL LENGTH
46 N	63.515	6	192
46 S	63.532	6	192
48 N	65.244	2	64
48 S	65.244	1	32
49 N	65.374	1	44
49 S	65.374	1	44
50 N	66.643	1	42
50 S	66.643	1	42
51 N	70.582	1	32
51 S	70.582	1	32
52 N	73.549	4	124
52 S	73.549	5	155
53 N	74.393	4	152
53 S	74.393	4	152
55 N	77.098	4	152
55 S	77.098	4	152
56 N	78.410	4	232
56 S	78.410	6	348
57 N	78.535	5	160
57 S	78.535	5	160
58 N	78.748	0	0
58 S	78.748	0	0
59 N	79.977	2	70
59 S	79.977	6	210
TOTAL			2783

REFER TO STRUCTURES DETAIL SHEET SD-516.10

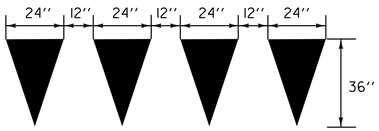
NOT TO SCALE

BRIDGE DETAIL SHEET

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

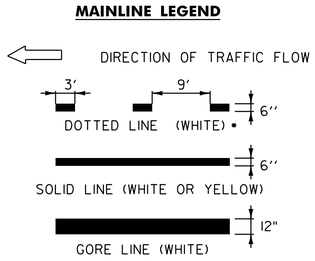
FILE NAME: ...12A178\...12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_07.i

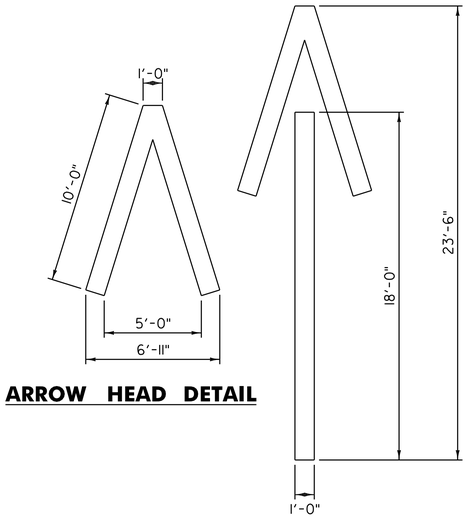
PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 7 OF 19



YIELD LINE DETAIL

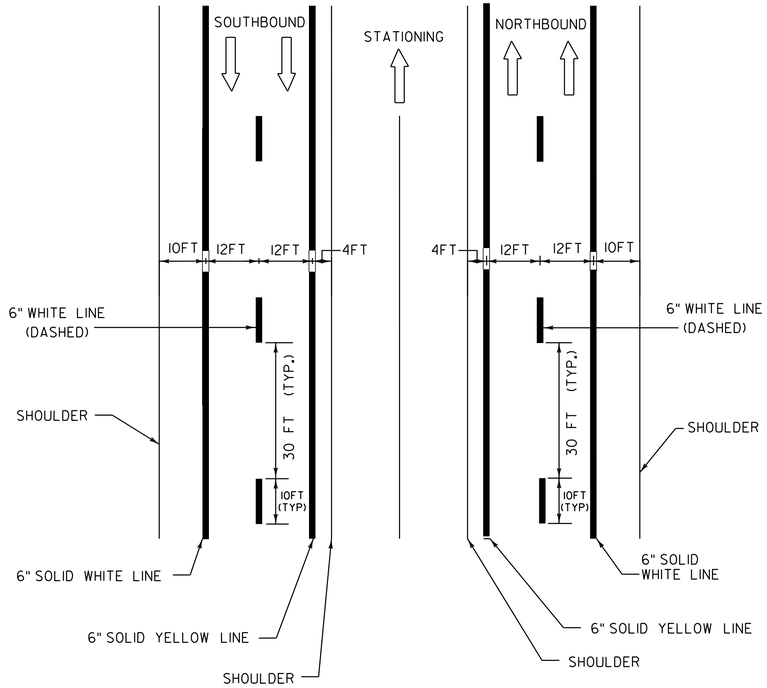
TO BE INSTALLED ONLY AT THE DIRECTION OF THE RESIDENT ENGINEER TO BE PAID AS ONE LETTER OR SYMBOL, PER TRIANGLE





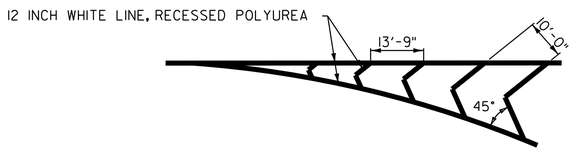
ARROW HEAD DETAIL

WRONG WAY ARROW



PAVEMENT MARKING LINE DETAILS

SEE MAINLINE AND INTERCHANGE LAYOUT SHEETS FOR LOCATIONS AND MATERIALS



GORE MARKING DETAIL

SEE LAYOUT SHEETS FOR LOCATIONS

NOT TO SCALE

PAVEMENT MARKING LAYOUT & DETAIL SHEET

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF(33)

FILE NAME: ...12A178\...12A178.DGN
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_08.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PVT. MGT.
SHEET 8 OF 19

646.26 24 INCH STOP BAR
RAMP "F" STA. 12+34

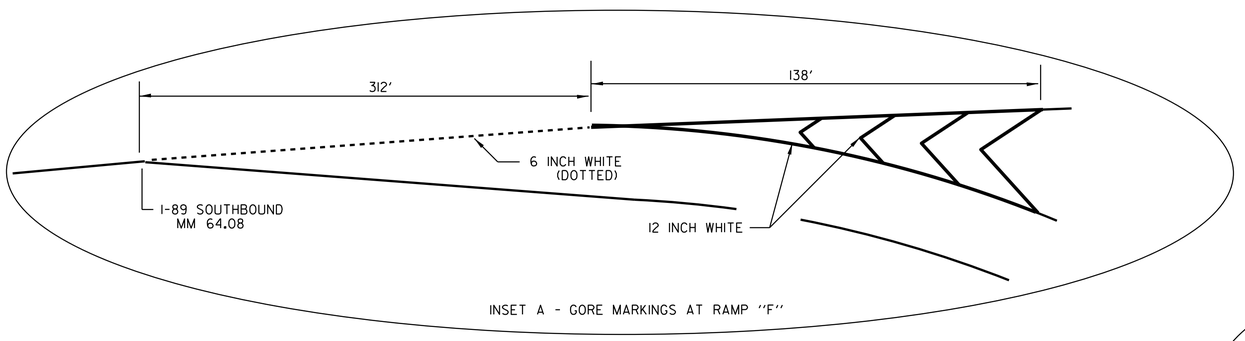
646.30 LETTER OR SYMBOL
RAMP "F" STA. 5+38 "STOP AHEAD"
RAMP "F" STA. 7+35 TO 7+61 2 - "ONLY'S" & 2 - "ARROW'S"
RAMP "F" STA. 8+43 TO 8+69 2 - "ONLY'S" & 2 - "ARROW'S"
RAMP "F" STA. 9+51 TO 9+78 2 - "ONLY'S" & 2 - "ARROW'S"
RAMP "F" STA. 12+27 "STOP"
RAMP "G" STA. 2+10 "YIELD"

646.24 12 INCH WHITE LINE
RAMP "F" STA. 2+85 TO 4+23 LT. (GORE)
RAMP "F"/RAMP "G" GORE STA. 10+76 TO 10+92 RT.
RAMP "E" STA. 4+00 TO 6+30 LT.
RAMP "D" STA. 7+28 TO 9+02 LT.

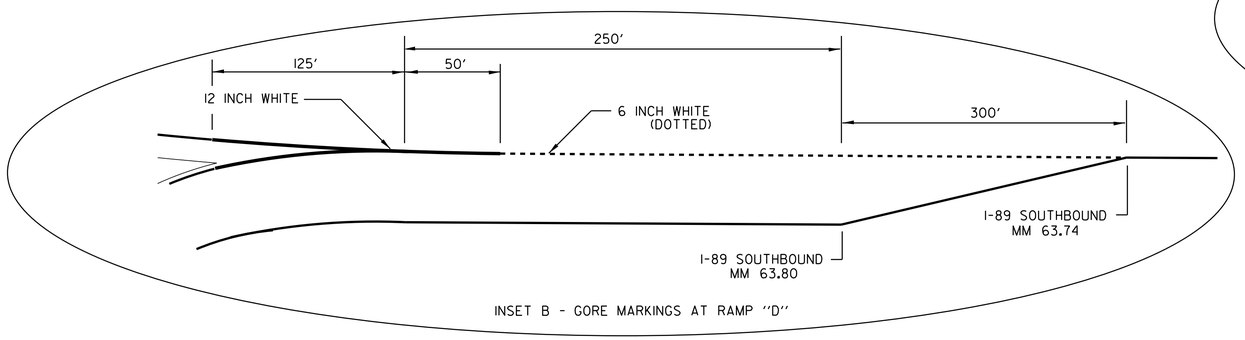
646.214 6 INCH WHITE LINE
RAMP "F" STA. 0+00 TO 12+33 RT. (SOLID)
RAMP "F" STA. 0+00 TO 2+85 LT. (DOTTED)
RAMP "F" STA. 7+35 TO 9+78 LT. (SOLID LANE)
RAMP "G" STA. 0+00 TO 2+10 RT. (SOLID)
RAMP "E" STA. 0+00 TO 6+56 RT. (SOLID)
RAMP "E" STA. 6+30 TO 7+09 LT. (DASHED)
RAMP "D" STA. 0+000 TO 0+304 RT. (SOLID)
RAMP "D" STA. 0+275 TO 0+299 LT. (DASHED)

646.215 6 INCH YELLOW LINE
RAMP "F" STA. 0+129 TO 0+376 LT. (SOLID)
RAMP "G" STA. 0+00 TO 2+10 LT. (SOLID)
RAMP "E" STA. 0+00 TO 4+00 LT. (SOLID)
RAMP "D" STA. 0+00 TO 7+28 LT. (SOLID)

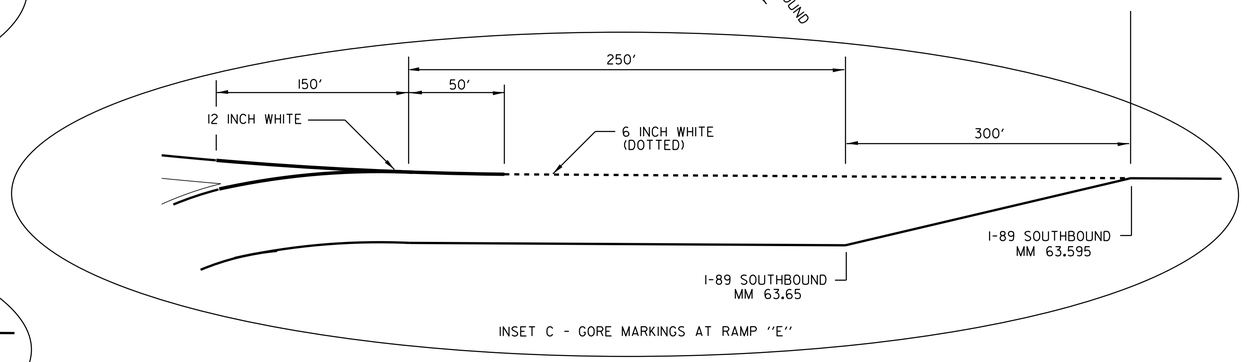
I-89 NORTHBOUND
RAMP "F" STA. 0+00
6 INCH WHITE LINE
6 INCH YELLOW LINE
SEE INSET A BELOW
SEE INSET B BELOW
6 INCH YELLOW LINE
RAMP "H"
VT. ROUTE 100 STOWE
RAMP "D" STA. 8+53
RAMP "F" STA. 9+78 = RAMP "G" STA. 0+00
RAMP "D" STA. 0+00 LIMIT OF TREATMENT
6 INCH WHITE LINE
SEE INSET C BELOW
RAMP "A"
N
MAGNETIC
RAMP "G" STA. 2+10 LIMIT OF TREATMENT
RAMP "E" STA. 0+00 LIMIT OF TREATMENT
RAMP "E" STA. 6+56
6 INCH WHITE LINE
RAMP "C"
VT. ROUTE 100 TO U.S. ROUTE 2
6 INCH YELLOW LINE
RAMP "F" STA. 12+34 LIMIT OF COLD PLANING AND PAVING
(MM 63.510) BEGIN PROJECT IM SURF(33) SB
I-89 SOUTHBOUND



INSET A - GORE MARKINGS AT RAMP "F"



INSET B - GORE MARKINGS AT RAMP "D"



INSET C - GORE MARKINGS AT RAMP "E"

SEE SHEET 11 FOR RAMPS F & G MARKING DETAILS.

NOT TO SCALE

RAMP DETAIL SHEET INTERCHANGE #10 (SB)

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12A178\...12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_09.i
PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 9 OF 19

646.26 24 INCH STOP BAR
RAMP "A" STA. 13+88

646.24 12 INCH WHITE LINE
RAMP "A" STA. 0+00 TO 1+90 LT. (W/DIAGONALS)
RAMP "C" STA. 7+02 TO 8+69 LT.
RAMP "H" STA. 8+89 TO 9+28 LT.

646.30 LETTER OR SYMBOL
RAMP "A" STA. 7+12 "STOP AHEAD"
RAMP "A" STA. 11+38 TO 11+46 - "ONLY" (2)
RAMP "A" STA. 11+94 TO 12+01 - "ARROW" (2)
RAMP "A" STA. 12+57 TO 12+65 - "ONLY" (2)
RAMP "A" STA. 13+12 TO 13+20 - "ARROW" (2)
RAMP "A" STA. 13+75 TO 13+83 - "STOP" (2)

646.214 6 INCH WHITE LINE

RAMP "A" STA. 0+00 TO 13+94 RT. (SOLID)
RAMP "A" NB MM 63.311 TO NB MM 63.422 LT. (DOTTED)
RAMP "A" STA. 11+38 TO 13+88 LT. (SOLID LANE)

RAMP "C" STA. 0+00 TO 11+19 RT. (SOLID)
RAMP "C" STA. 8+69 TO 11+19 LT. (DOTTED)

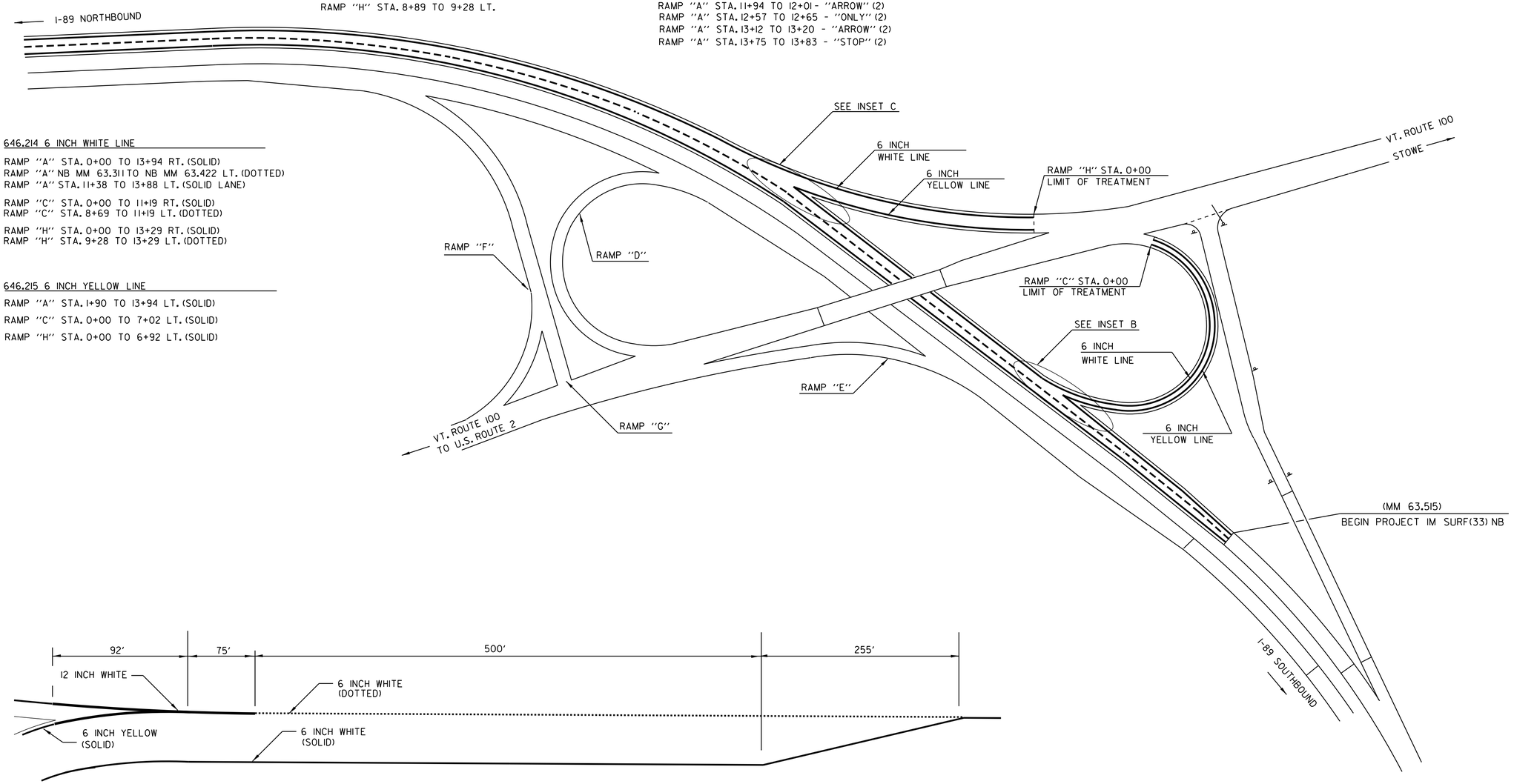
RAMP "H" STA. 0+00 TO 13+29 RT. (SOLID)
RAMP "H" STA. 9+28 TO 13+29 LT. (DOTTED)

646.215 6 INCH YELLOW LINE

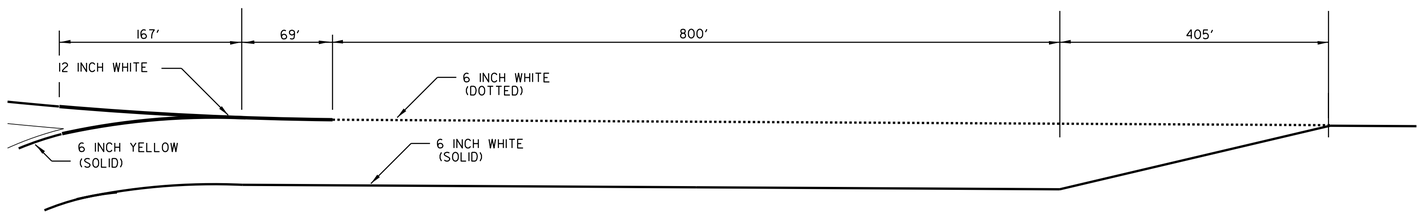
RAMP "A" STA. 1+90 TO 13+94 LT. (SOLID)

RAMP "C" STA. 0+00 TO 7+02 LT. (SOLID)

RAMP "H" STA. 0+00 TO 6+92 LT. (SOLID)



INSET B - GORE MARKINGS AT RAMP "C"



INSET C - GORE MARKINGS AT RAMP "H"

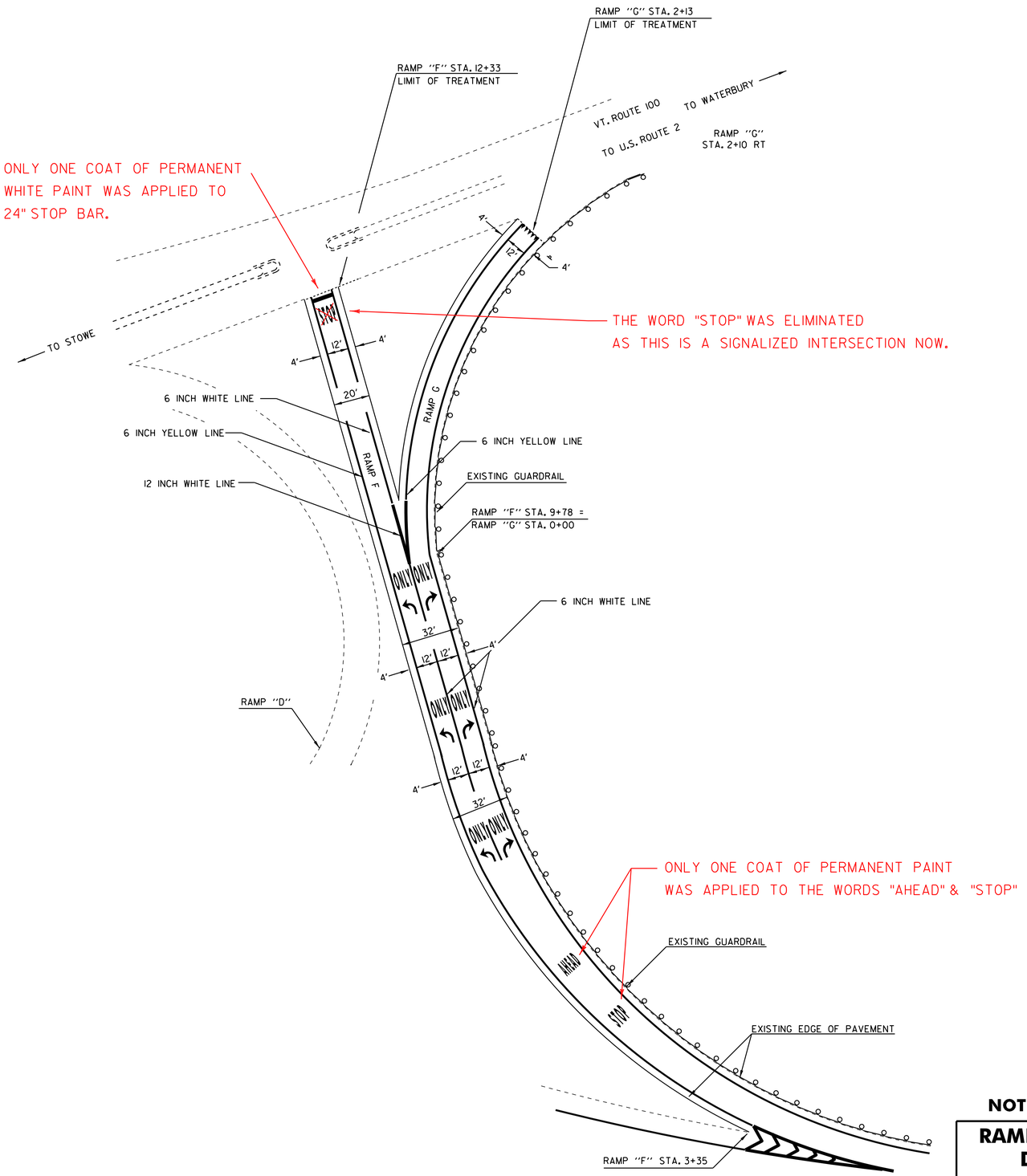
NOT TO SCALE

RAMP DETAIL SHEET INTERCHANGE #10 (NB)

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12IAI78\...12AI78.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12AI78_10.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 10 OF 19



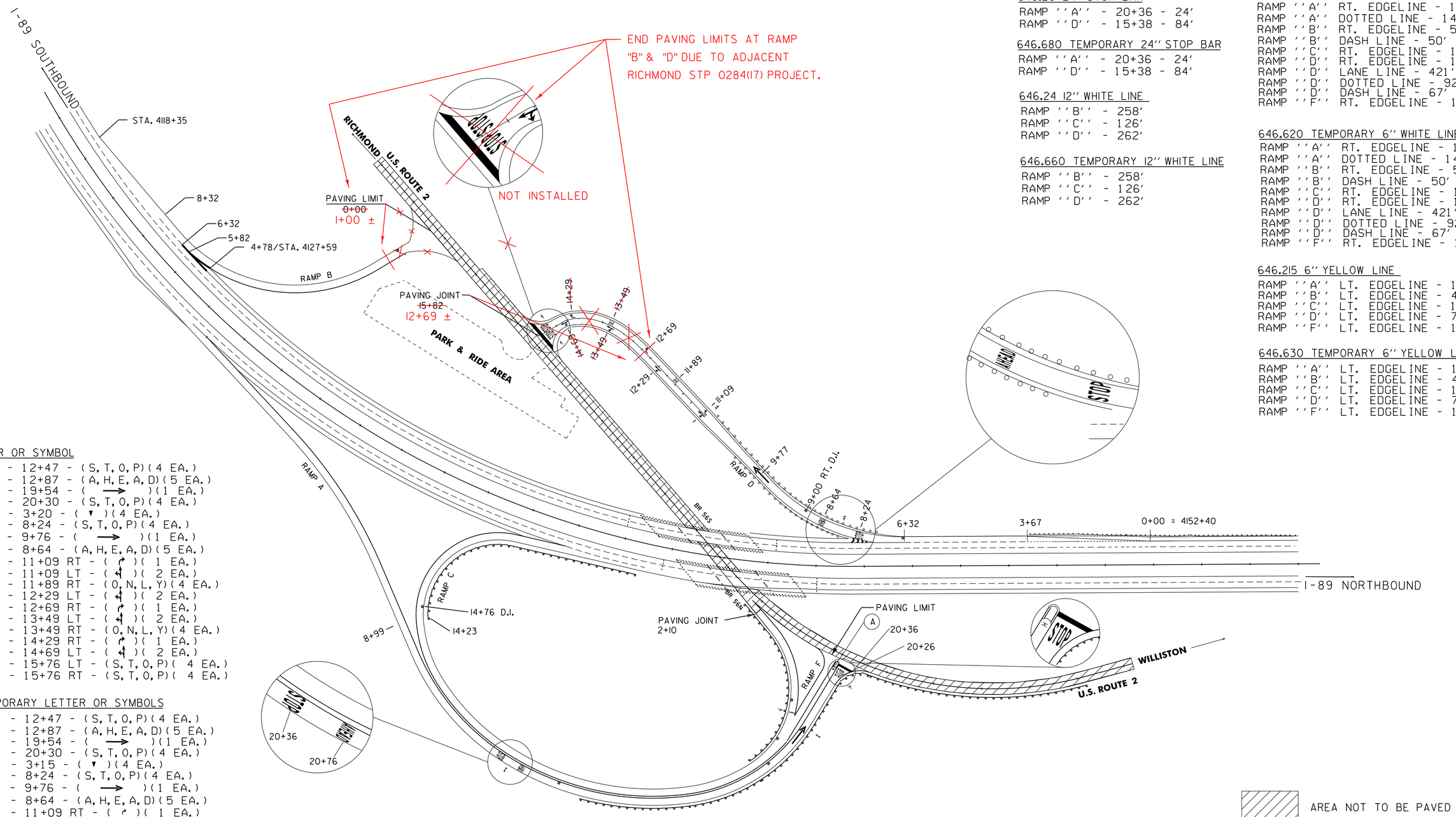
NOT TO SCALE

RAMPS F & G DETAIL SHEET INTERCHANGE #10 (SB)

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12IAI78\...12AI78.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12AI78_II.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 11 OF 19



AREA NOT TO BE PAVED

646.26 24'' STOP BAR
RAMP ''A'' - 20+36 - 24'
RAMP ''D'' - 15+38 - 84'

646.680 TEMPORARY 24'' STOP BAR
RAMP ''A'' - 20+36 - 24'
RAMP ''D'' - 15+38 - 84'

646.24 12'' WHITE LINE
RAMP ''B'' - 258'
RAMP ''C'' - 126'
RAMP ''D'' - 262'

646.660 TEMPORARY 12'' WHITE LINE
RAMP ''B'' - 258'
RAMP ''C'' - 126'
RAMP ''D'' - 262'

646.214 6'' WHITE LINE
RAMP ''A'' RT. EDGELINE - 1716'
RAMP ''A'' DOTTED LINE - 14'
RAMP ''B'' RT. EDGELINE - 557'
RAMP ''B'' DASH LINE - 50'
RAMP ''C'' RT. EDGELINE - 1478'
RAMP ''D'' RT. EDGELINE - 1582'
RAMP ''D'' LANE LINE - 421'
RAMP ''D'' DOTTED LINE - 92'
RAMP ''D'' DASH LINE - 67'
RAMP ''F'' RT. EDGELINE - 150'

646.620 TEMPORARY 6'' WHITE LINE
RAMP ''A'' RT. EDGELINE - 1716'
RAMP ''A'' DOTTED LINE - 14'
RAMP ''B'' RT. EDGELINE - 557'
RAMP ''B'' DASH LINE - 50'
RAMP ''C'' RT. EDGELINE - 1478'
RAMP ''D'' RT. EDGELINE - 1582'
RAMP ''D'' LANE LINE - 421'
RAMP ''D'' DOTTED LINE - 92'
RAMP ''D'' DASH LINE - 67'
RAMP ''F'' RT. EDGELINE - 150'

646.215 6'' YELLOW LINE
RAMP ''A'' LT. EDGELINE - 1716'
RAMP ''B'' LT. EDGELINE - 478'
RAMP ''C'' LT. EDGELINE - 1478'
RAMP ''D'' LT. EDGELINE - 787'
RAMP ''F'' LT. EDGELINE - 150'

646.630 TEMPORARY 6'' YELLOW LINE
RAMP ''A'' LT. EDGELINE - 1716'
RAMP ''B'' LT. EDGELINE - 478'
RAMP ''C'' LT. EDGELINE - 1478'
RAMP ''D'' LT. EDGELINE - 787'
RAMP ''F'' LT. EDGELINE - 150'

646.30 LETTER OR SYMBOL
RAMP ''A'' - 12+47 - (S, T, O, P)(4 EA.)
RAMP ''A'' - 12+87 - (A, H, E, A, D)(5 EA.)
RAMP ''A'' - 19+54 - (→)(1 EA.)
RAMP ''A'' - 20+30 - (S, T, O, P)(4 EA.)
RAMP ''C'' - 3+20 - (▼)(4 EA.)
RAMP ''D'' - 8+24 - (S, T, O, P)(4 EA.)
RAMP ''D'' - 9+76 - (→)(1 EA.)
RAMP ''D'' - 8+64 - (A, H, E, A, D)(5 EA.)
RAMP ''D'' - 11+09 RT - (↱)(1 EA.)
RAMP ''D'' - 11+09 LT - (↰)(2 EA.)
RAMP ''D'' - 11+89 RT - (O, N, L, Y)(4 EA.)
RAMP ''D'' - 12+29 LT - (↰)(2 EA.)
RAMP ''D'' - 12+69 RT - (↱)(1 EA.)
RAMP ''D'' - 13+49 LT - (↰)(2 EA.)
RAMP ''D'' - 13+49 RT - (O, N, L, Y)(4 EA.)
RAMP ''D'' - 14+29 RT - (↱)(1 EA.)
RAMP ''D'' - 14+69 LT - (↰)(2 EA.)
RAMP ''D'' - 15+76 LT - (S, T, O, P)(4 EA.)
RAMP ''D'' - 15+76 RT - (S, T, O, P)(4 EA.)

646.690 TEMPORARY LETTER OR SYMBOLS
RAMP ''A'' - 12+47 - (S, T, O, P)(4 EA.)
RAMP ''A'' - 12+87 - (A, H, E, A, D)(5 EA.)
RAMP ''A'' - 19+54 - (→)(1 EA.)
RAMP ''A'' - 20+30 - (S, T, O, P)(4 EA.)
RAMP ''C'' - 3+15 - (▼)(4 EA.)
RAMP ''D'' - 8+24 - (S, T, O, P)(4 EA.)
RAMP ''D'' - 9+76 - (→)(1 EA.)
RAMP ''D'' - 8+64 - (A, H, E, A, D)(5 EA.)
RAMP ''D'' - 11+09 RT - (↱)(1 EA.)
RAMP ''D'' - 11+09 LT - (↰)(2 EA.)
RAMP ''D'' - 11+89 RT - (O, N, L, Y)(4 EA.)
RAMP ''D'' - 12+29 LT - (↰)(2 EA.)
RAMP ''D'' - 12+69 RT - (↱)(1 EA.)
RAMP ''D'' - 13+49 LT - (↰)(2 EA.)
RAMP ''D'' - 13+49 RT - (O, N, L, Y)(4 EA.)
RAMP ''D'' - 14+29 RT - (↱)(1 EA.)
RAMP ''D'' - 14+69 LT - (↰)(2 EA.)
RAMP ''D'' - 15+76 LT - (S, T, O, P)(4 EA.)
RAMP ''D'' - 15+76 RT - (S, T, O, P)(4 EA.)

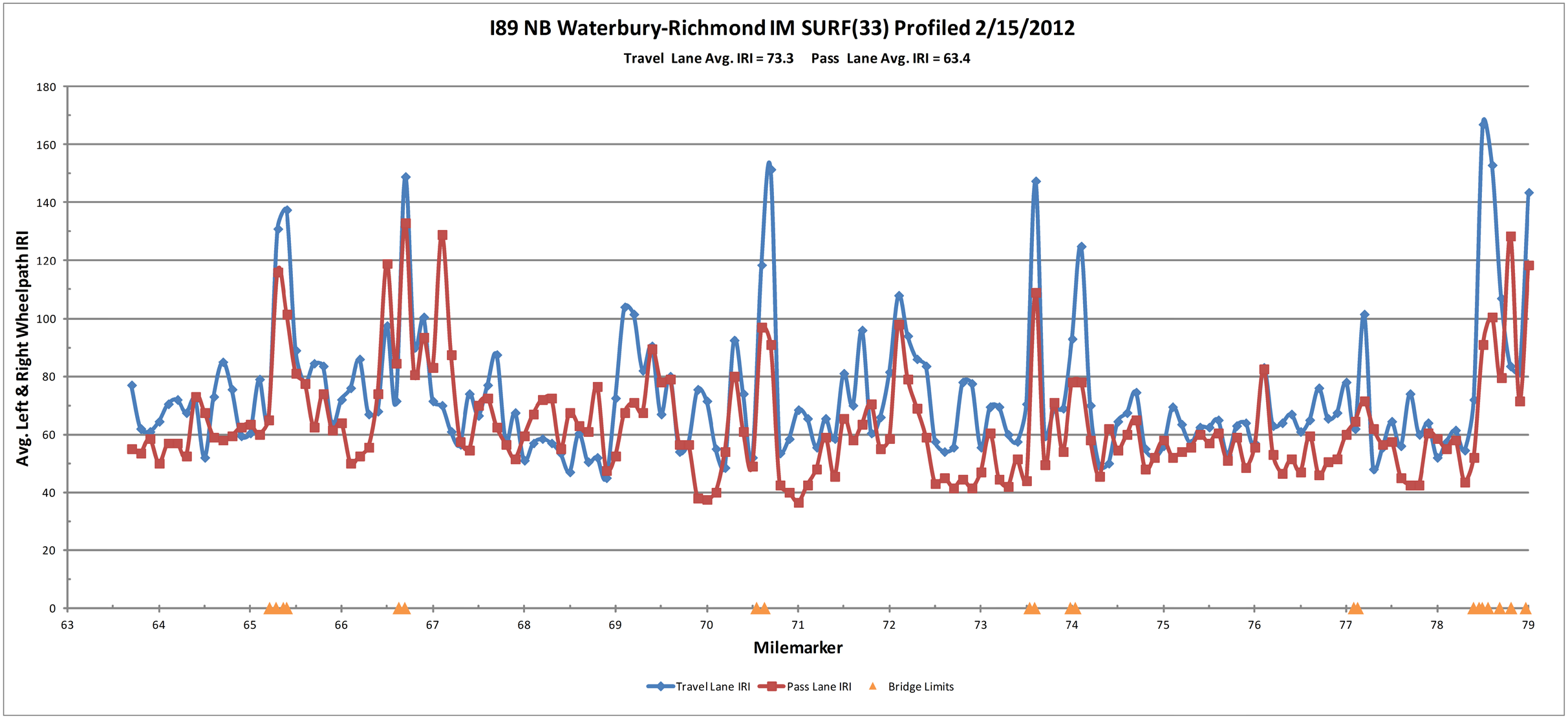
NOT TO SCALE

RAMP DETAIL SHEET INTERCHANGE #11

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12A178\...12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_12.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 12 OF 19



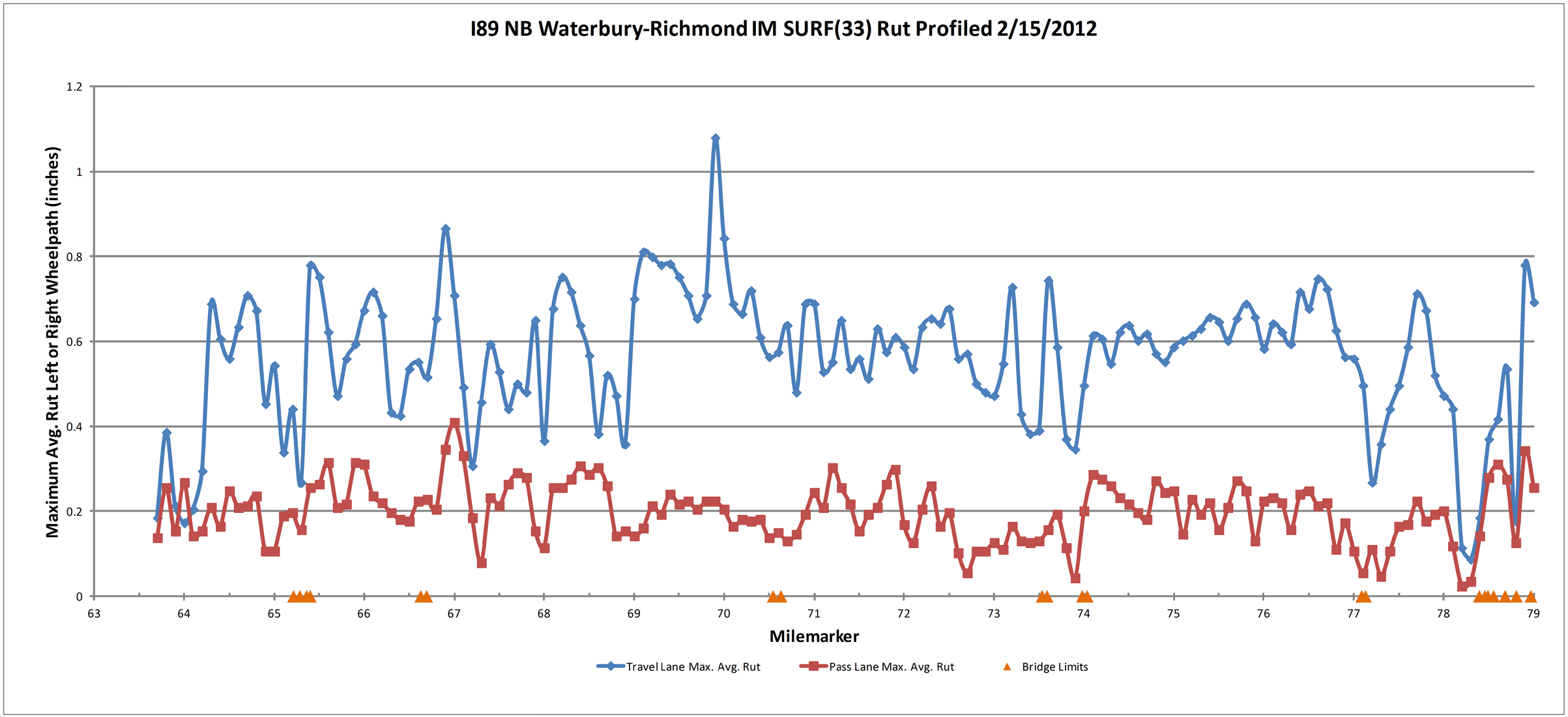
FOR INFORMATIONAL PURPOSES ONLY

NORTHBOUND ROUGHNESS DATA INFORMATION

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...I21AI78\...I2AI78.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: I2AI78_I3.i

PLOT DATE: 10-APR-2014 14:16
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 13 OF 19



FOR INFORMATIONAL PURPOSES ONLY

NORTHBOUND RUTTING DATA INFORMATION

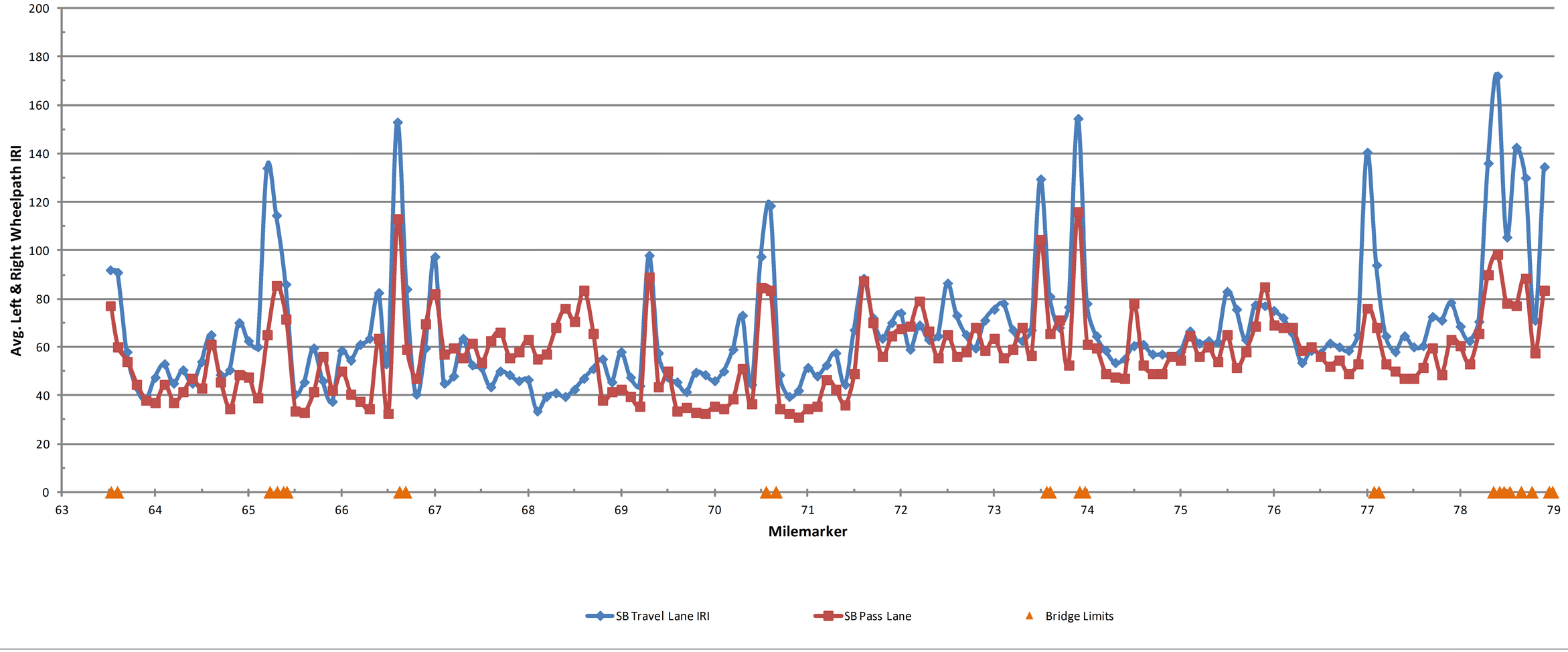
PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...I2IAI78\...I2AI78.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: I2AI78_I4.i

PLOT DATE: 10-APR-2014 14:17
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 14 OF 19

I89 SB Waterbury-Richmond IM SURF(33) IRI Profiled 3/8/2012

Travel Lane Avg. IRI = 66.6 Pass Lane Avg. IRI = 57.1



FOR INFORMATIONAL PURPOSES ONLY

SOUTHBOUND ROUGHNESS DATA INFORMATION

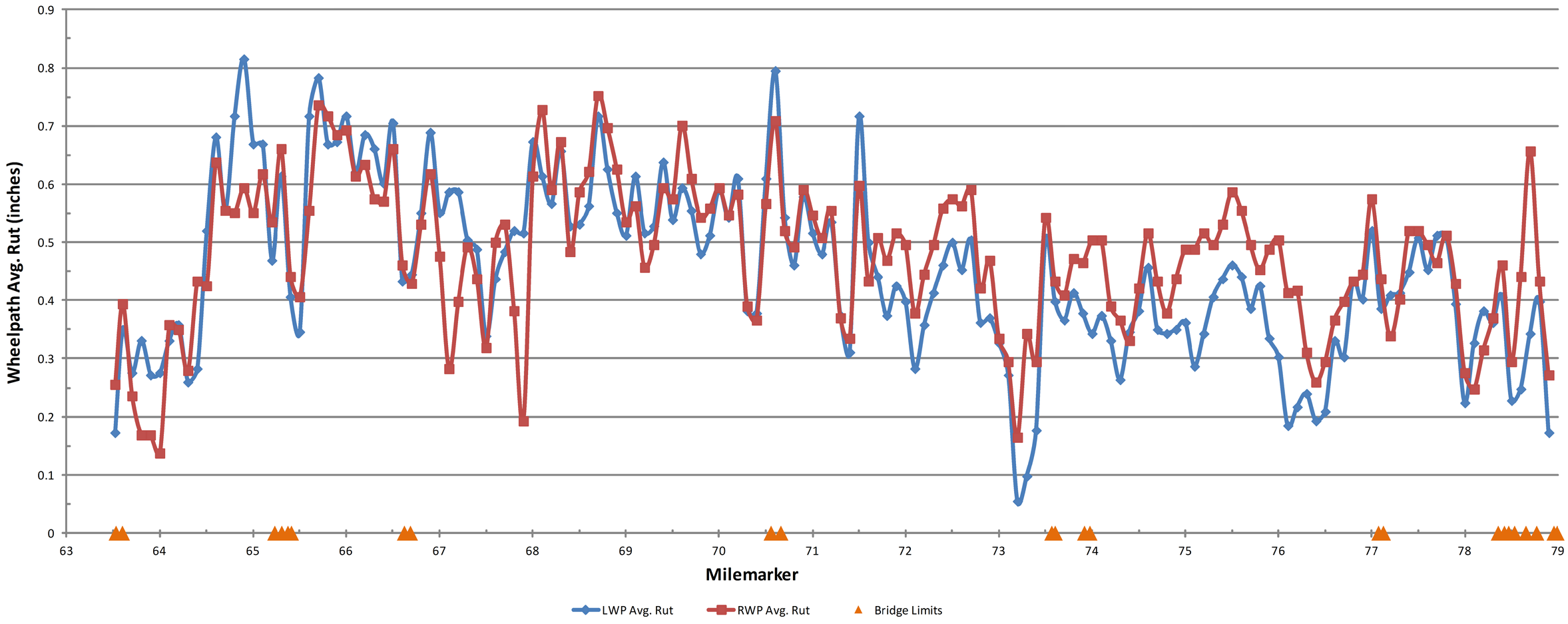
PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...I21AI78\...I2AI78.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: I2AI78_I5.i

PLOT DATE: 10-APR-2014 14:17
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 15 OF 19

I89 SB Travel Lane Waterbury-Richmond IM SURF(33) Wheelpath Ruts

Profiled 3/8/2012



FOR INFORMATIONAL PURPOSES ONLY

SOUTHBOUND RUTTING DATA INFORMATION

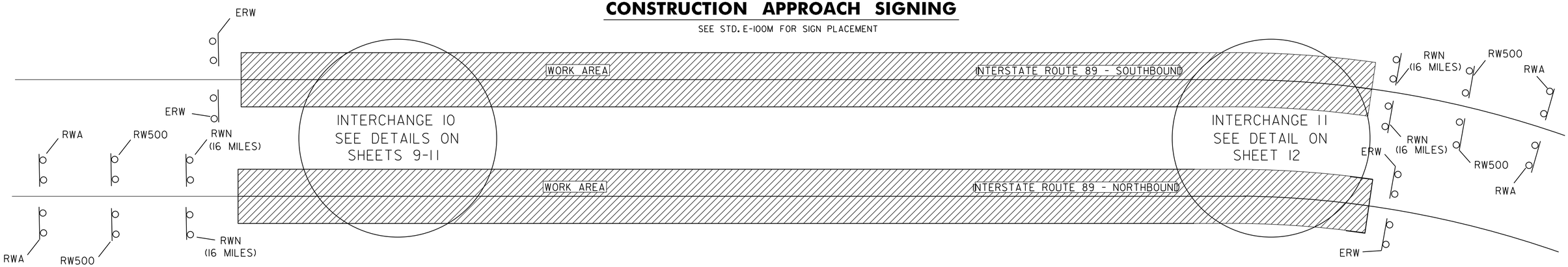
PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...I2IAI78\...I2AI78.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: I2AI78_I6.i

PLOT DATE: IO-APR-2014 I4:I7
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET I6 OF I9

CONSTRUCTION APPROACH SIGNING

SEE STD. E-100M FOR SIGN PLACEMENT



LEGEND

RWA	= ROAD WORK AHEAD
RW500	= ROAD WORK 500 FEET
RWN	= ROAD WORK NEXT 16 MILES (8 MILES AT END OF RAMP "H")
ERW	= END ROAD WORK
SRWA	= SIDE ROAD WORK AHEAD
SRW500	= SIDE ROAD WORK 500 FEET

NOTES:

1. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN TO THE RESIDENT ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND VAOT STANDARD E-103. THIS WORK SHALL INCLUDE THE G20-5aP "WORK ZONE" PLAQUE AS DIRECTED BY THE RESIDENT ENGINEER. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10, TRAFFIC CONTROL.

2. THE CONTRACTOR SHALL POSITION PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WARNING MOTORISTS OF THE EXPECTED ROADWAY CONDITIONS AHEAD. THE MESSAGE TO BE DISPLAYED, AND THEIR PROPOSED LOCATIONS SHALL BE SUBMITTED TO THE RESIDENT ENGINEER IN ADVANCE FOR APPROVAL. THE COST OF PROVIDING THESE MESSAGE SIGNS SHALL BE PAID UNDER ITEM 641.15, PORTABLE CHANGEABLE MESSAGE SIGN.

3. THE BID PRICE FOR TRAFFIC CONTROL, ITEM 641.10, SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, PORTABLE FLASHING 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 RESIDENT ENGINEER SHALL ALSO BE INCLUDED.

4. THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC DEVICES ARE ERECTED OR PLACED, OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED, THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM WITH SUCH STANDARDS.

5. 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. EXISTING SIGNS WHICH CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETELY COVERED OR REMOVED.

6. SEE VAOT STANDARD E-100 FOR ADDITIONAL SIGN PLACEMENT DETAILS.

7. CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

8. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VAOT STANDARDS AND THE SPECIAL PROVISIONS.

9. DIAMOND SHAPED SIGNS SHALL BE 4' X 4' WITH BLACK TEXT AND BORDER ON A RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.

10. RETROREFLECTIVE SHEETING SHALL BE ASTM D 4956 TYPE III OR VIII MINIMUM AS NOTED ON VAOT STANDARD E-100 AND IN THE SPECIAL PROVISIONS.

11. CONSTRUCTION ZONE SIGNS SHALL BE INSTALLED AS OUTLINED IN THE SPECIAL PROVISIONS AND THE VAOT STANDARDS.

12. WHERE TEMPORARY SIGNS ARE PLACED BEHIND GUARDRAIL, THEY SHALL BE ADJUSTED SUCH THAT THE BOTTOMS OF THE SIGNS ARE ABOVE THE TOP OF GUARDRAIL.

13. AS THE PAVING OPERATION MOVES, FLAGGER SIGNS SHALL BE MOVED ACCORDINGLY. AT NO TIME SHOULD THE FLAGGER SYMBOL SIGN BE MORE THAN 1000 FEET FROM THE FLAGGER STATION. FLAGGER SIGNS SHALL BE COVERED OR TURNED AWAY FROM TRAFFIC WHEN FLAGGING OPERATIONS CEASE FOR LONGER THAN 15 MINUTES.

14. BARRELS AND CONES SHALL BE USED TO CLEARLY DEFINE THE TRAVEL SPACE AND PROVIDE SEPARATION FROM THE WORK SPACE ALONG ITS ENTIRE LENGTH.

15. FOR LANE CLOSURES GREATER THAN ½ MILE LONG, PLACE ONE TYPE III BARRICADE ACROSS THE CLOSED LANE AT 1500 FOOT INTERVALS.

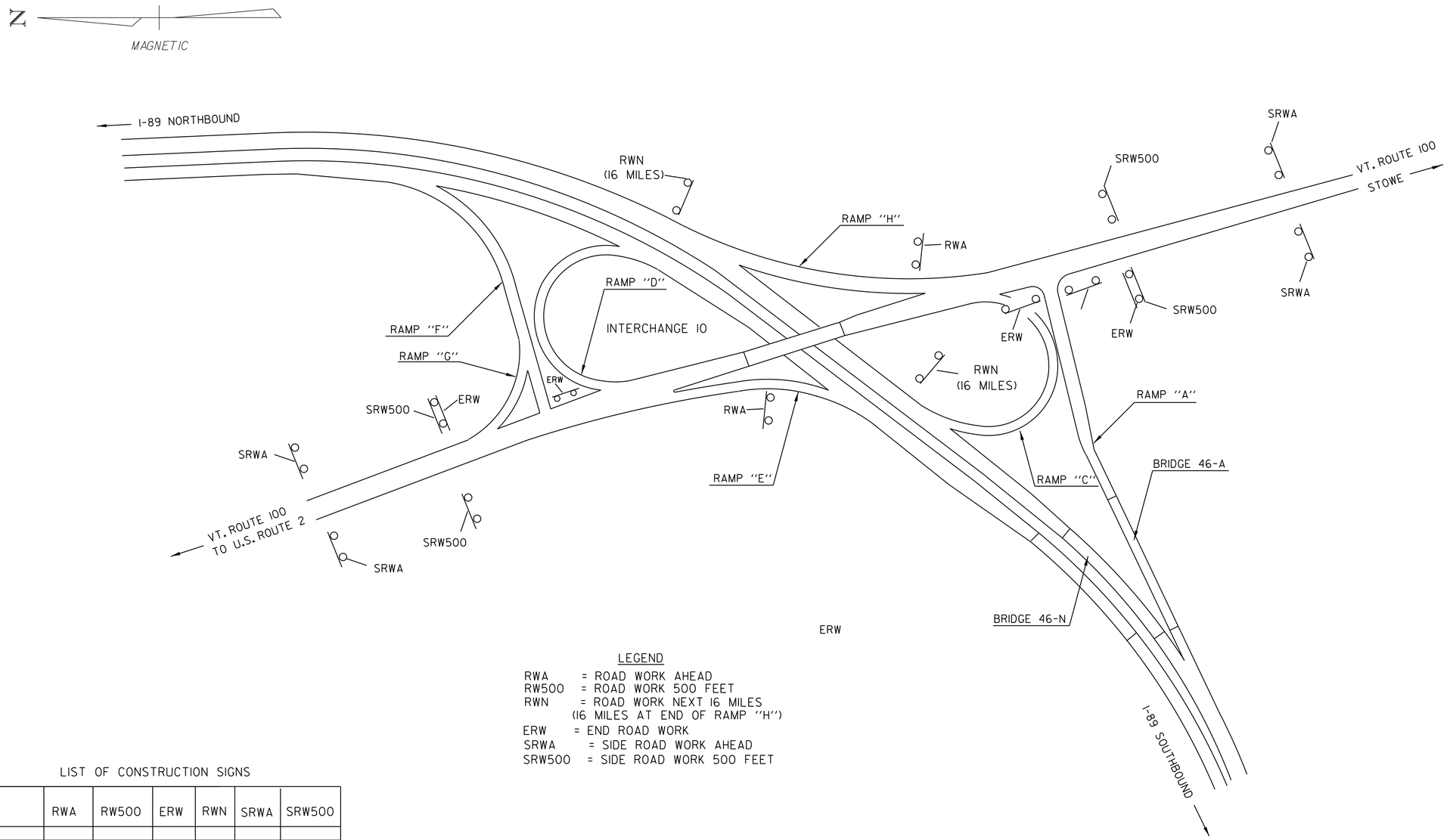
NOT TO SCALE

CONSTRUCTION APPROACH SIGNING SHEET 1

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF(33)

FILE NAME: 12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_17.i

PLOT DATE: 10-APR-2014 14:17
DRAWN BY: PVT. MGT.
CHECKED BY: PVT. MGT.
SHEET 17 OF 19



LEGEND

RWA = ROAD WORK AHEAD
RW500 = ROAD WORK 500 FEET
RWN = ROAD WORK NEXT 16 MILES
(16 MILES AT END OF RAMP "H")
ERW = END ROAD WORK
SRWA = SIDE ROAD WORK AHEAD
SRW500 = SIDE ROAD WORK 500 FEET

LIST OF CONSTRUCTION SIGNS

LOCATION	RWA	RW500	ERW	RWN	SRWA	SRW500
I-89 NORTHBOUND						
BEGIN PROJECT	2	2		2		
END PROJECT			2			
I-89 SOUTHBOUND						
BEGIN PROJECT	2	2		2		
END PROJECT			2			
INTERCHANGE 10						
VT. ROUTE 100			2		4	4
INTERCHANGE 10 RAMPS			1	2		
INTERCHANGE 11						
VT. ROUTE 100			4		4	4
INTERCHANGE 11 RAMPS			2	1		
TOTALS	4	4	13	7	8	8

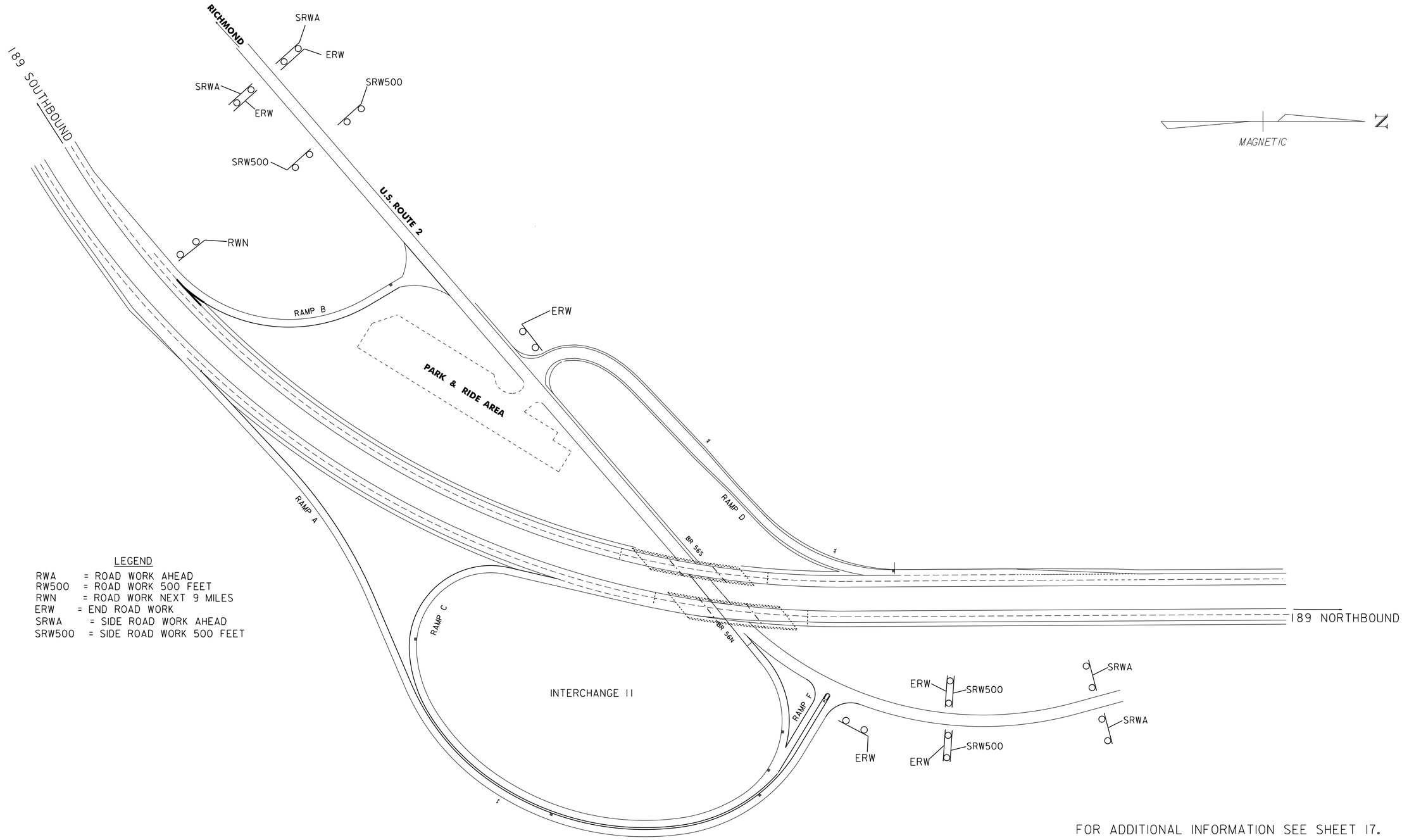
FOR ADDITIONAL INFORMATION SEE SHEET 17.

NOT TO SCALE

CONSTRUCTION APPROACH SIGNING SHEET 2

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12A178\...12A178.dgn
PROJECT LEADER: M. FOWLER
DESIGNED BY: PAVT MGMT
IPARM FILE NAME: 12A178_18.i
PLOT DATE: 10-APR-2014 14:17
DRAWN BY: PAVT MGMT
CHECKED BY: PAVT MGMT
SHEET 18 OF 19



MAGNETIC

LEGEND

RWA = ROAD WORK AHEAD
RW500 = ROAD WORK 500 FEET
RWN = ROAD WORK NEXT 9 MILES
ERW = END ROAD WORK
SRWA = SIDE ROAD WORK AHEAD
SRW500 = SIDE ROAD WORK 500 FEET

FOR ADDITIONAL INFORMATION SEE SHEET 17.

NOT TO SCALE

CONSTRUCTION APPROACH SIGNING SHEET 3

PROJECT NAME: WATERBURY-RICHMOND
PROJECT NUMBER: IM SURF (33)

FILE NAME: ...12A178\...12A178.dgn
PROJECT LEADER: FOWLER
DESIGNED BY: PVT. MGT.
IPARM FILE NAME: 12A178_19.i

PLOT DATE: 10-APR-2014 14:17
DRAWN BY: PVT. MGT.
CHECKED BY: PAVT MGMT
SHEET 19 OF 19