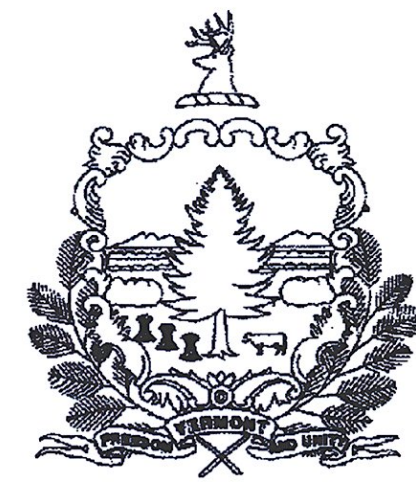


INDEX OF SHEETS  
SEE SHEET 2 FOR INDEX OF SHEETS

# STATE OF VERMONT AGENCY OF TRANSPORTATION

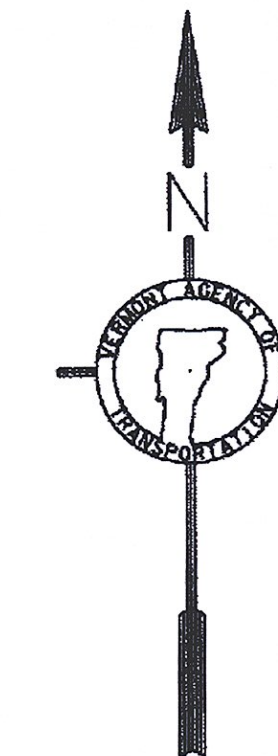
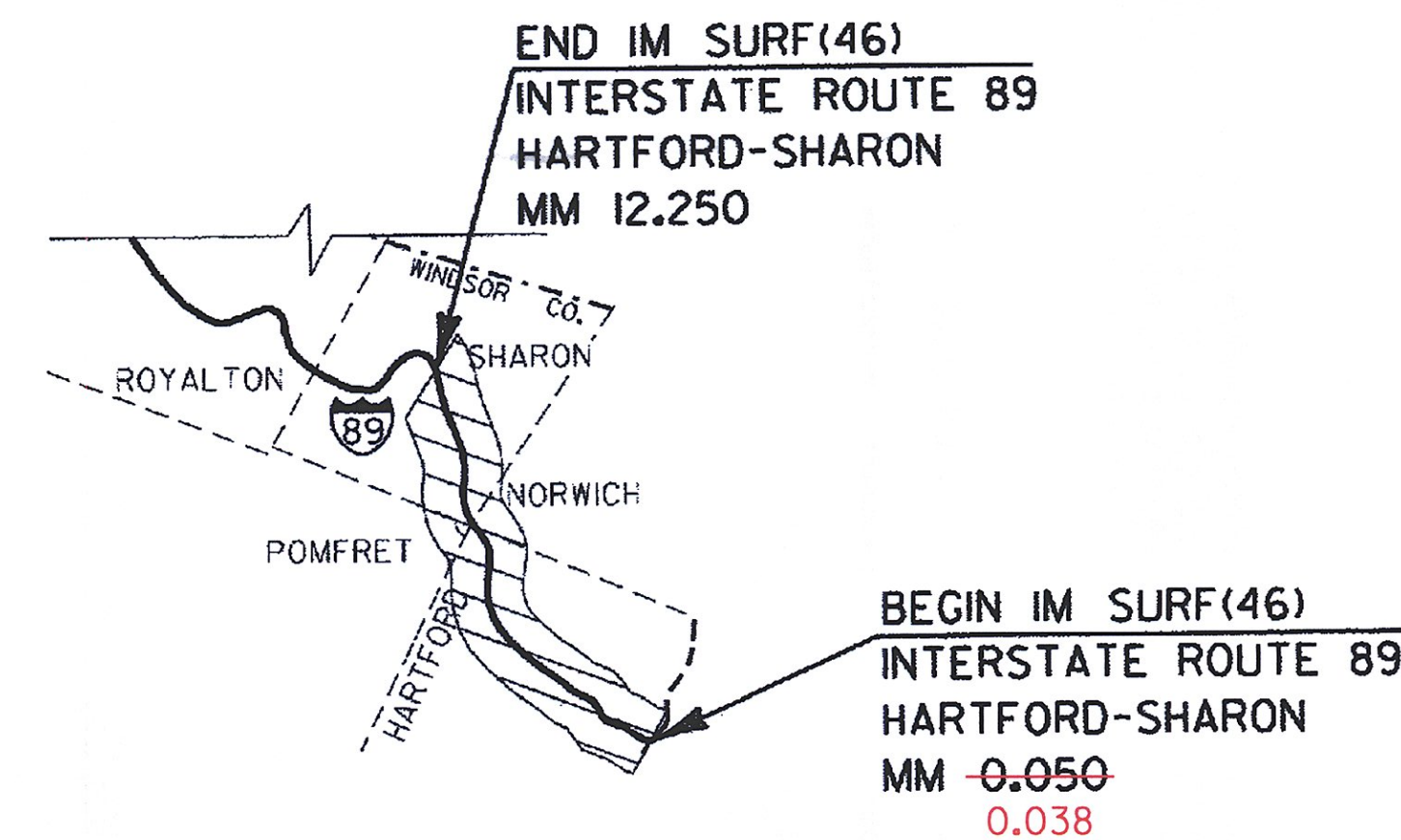
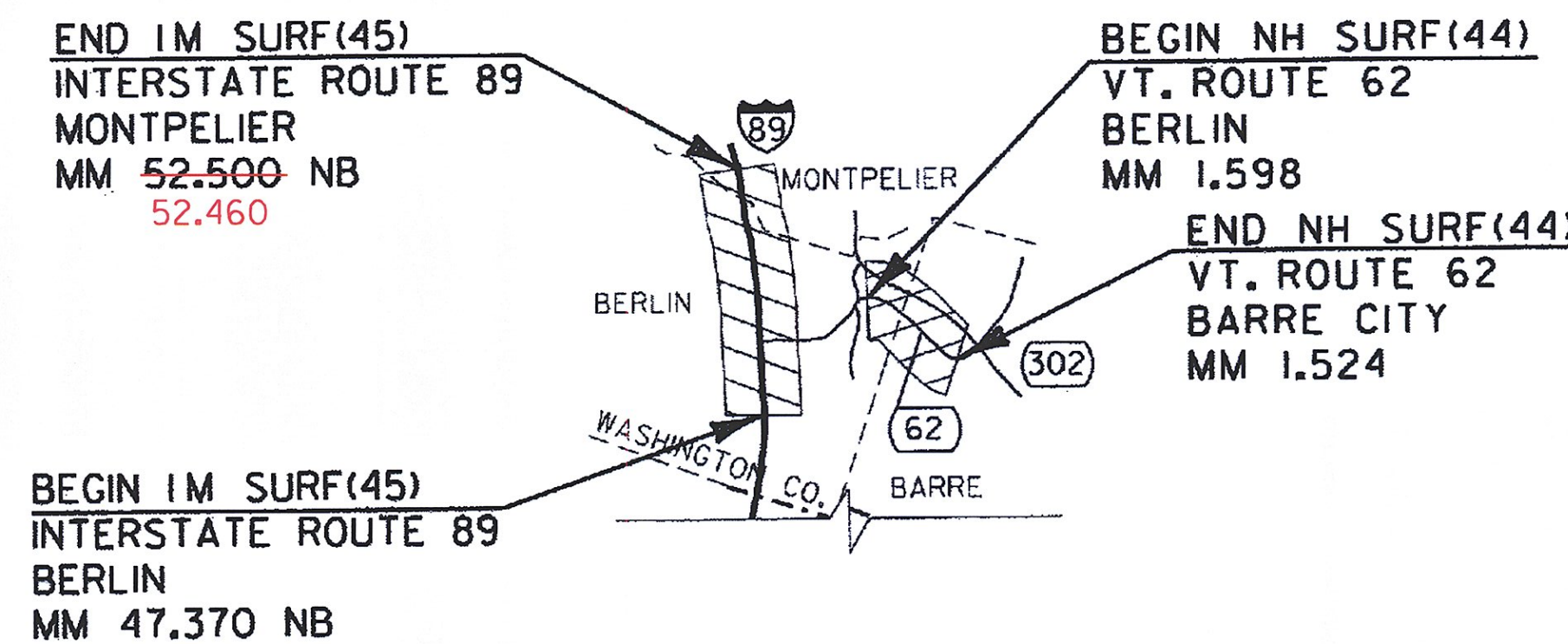
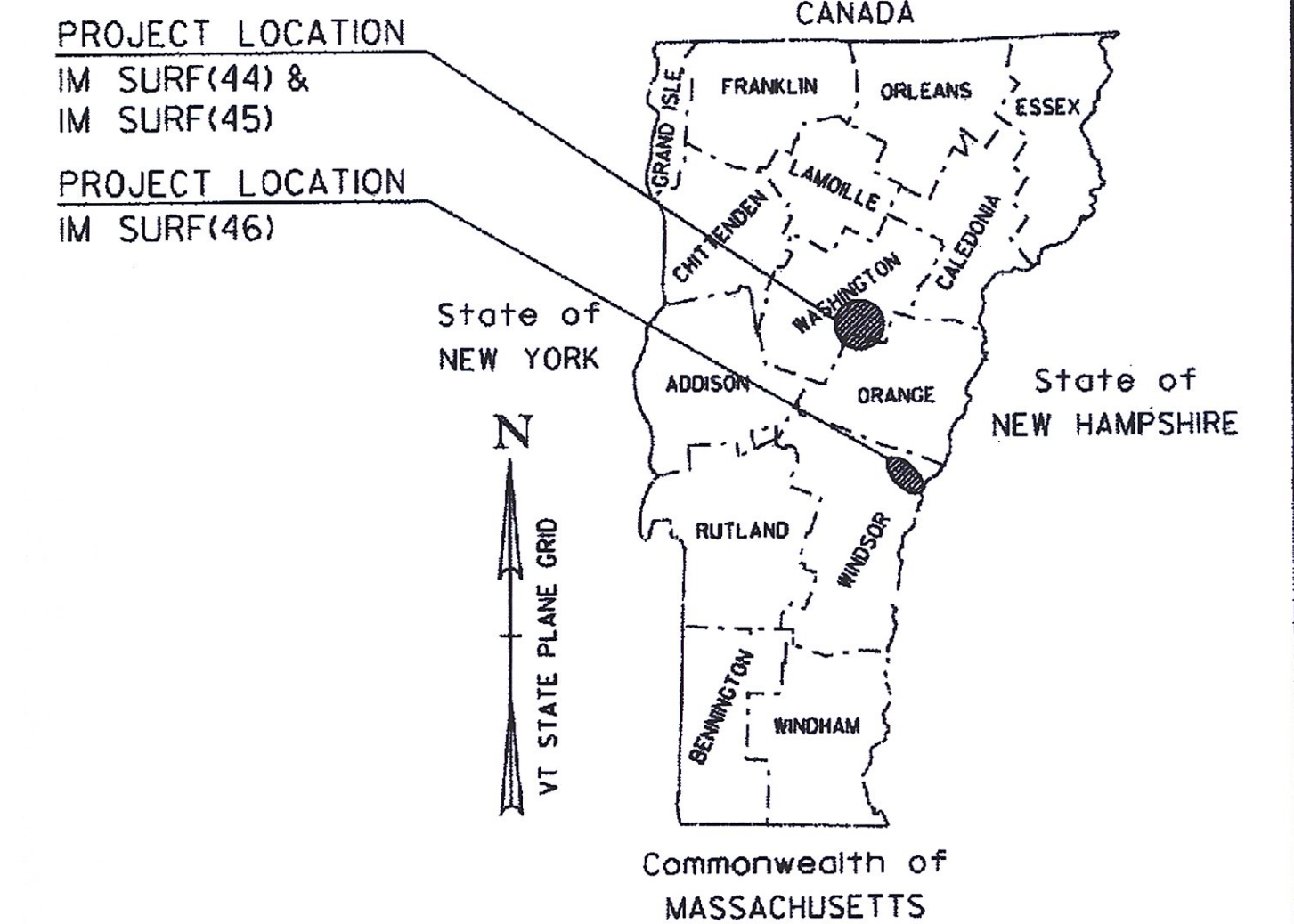


## PROPOSED IMPROVEMENTS TOWNS OF BERLIN, BARRE CITY, MONTPELIER, HARTFORD & SHARON COUNTIES OF WINDSOR & WASHINGTON INTERSTATE ROUTE 89 (NB)(NHS) & VT. ROUTE 62 (EB & WB)

**BERLIN - BARRE CITY  
COUNTY OF WASHINGTON  
NH SURF (44)  
SEE SHEET 7  
FOR ADDITIONAL PROJECT INFORMATION**

**BERLIN-MONTPELIER  
COUNTY OF WASHINGTON  
IM SURF (45)  
SEE SHEET 24  
FOR ADDITIONAL PROJECT INFORMATION**

**HARTFORD-SHARON  
COUNTY OF WINDSOR  
IM SURF (46)  
SEE SHEET 40  
FOR ADDITIONAL PROJECT INFORMATION**



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.

QUALITY ASSURANCE PROGRAM : LEVEL I	
SURVEYED BY :	NA
SURVEYED DATE :	NA
DATUM	
VERTICAL	NA
HORIZONTAL	NA

NOT TO SCALE

RECORD PLANS	
CONTRACTOR:	ALL STATES ASPHALT, INC. - SUNDERLAND, MA
RESIDENT ENGINEER:	SANDRA SCHMITT
CONSTRUCTION BEGAN:	SEPTEMBER 9, 2014
CONSTRUCTION COMPLETE:	JULY 23, 2015
RECORD PLANS BY:	SANDRA SCHMITT & AARON JAMES
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY <i>Sandra E. Schmitt</i>	RESIDENT ENGINEER
DATE	06-24-16
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found by contacting Vtrans Records Management.	

DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED <i>Kevin A. Marchisio</i>	DATE 5/23/14
PROJECT MANAGER : JONATHAN C. HARRINGTON, P.E.	
PROJECT NAME : BERLIN-BARRE CITY, BERLIN-MONTPELIER & HARTFORD-SHARON	
PROJECT NUMBER : NH SURF (44), IM SURF (45) & IM SURF (46)	
SHEET 1 OF 64 SHEETS	

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- 2. COMPOSITE INDEX OF SHEETS
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- 4.-5. COMPOSITE QUANTITY SHEETS
- 6. COMPOSITE TRAFFIC NOTES

BERLIN-BARRE CITY NH SURF(44)

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- 8. TYPICAL SECTIONS - ALTERNATE A
- 9. TYPICAL SECTIONS - ALTERNATE B
- 10. PROJECT NOTES
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- 15. VEHICLE DETECTION DETAIL SHEET
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- 22. ROUGHNESS DATA INFORMATION SHEET
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- 59. PAVEMENT MARKING DETAIL SHEET - MISCELLANEOUS DETAILS
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STRUCTURES DETAIL SHEET

SD-516.10 BRIDGE JOINT ASPHALTIC PLUG

VAOT STANDARDS

E-191	02/01/99
E-192	10/12/00
E-193	08/18/95
T-1	08/06/12
T-10	08/06/12
T-11	08/06/12
T-12	08/06/12
T-13	08/06/12
T-16	08/06/12
T-17	08/06/12
T-22	08/06/12
T-23	08/06/12
T-28	08/06/12
T-29	08/06/12
T-30	08/06/12
T-31	08/06/12
T-33	08/06/12
T-36	08/06/12

PROJECT NAME: BERLIN-BARRE CITY, BERLIN-MONTPELIER, HARTFORD-SHARON

PROJECT NUMBER: NH SURF(44), IM SURF(45), IM SURF(46)

FILE NAME: I3a636/pvtmgt/p13a636\_wrk.dgn PLOT DATE: 06-JUN-2014

PROJECT LEADER: J. HARRINGTON

DRAWN BY: J. REDMOND

DESIGNED BY: J. REDMOND

CHECKED BY: J. HARRINGTON

COMPOSITE INDEX OF SHEETS

SHEET 2 OF 64

**GENERAL INFORMATION**

**SYMBOLY LEGEND NOTE**

THE SYMBOLY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLY. THE SYMBOLY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

**R.O.W. ABBREVIATIONS (CODES) & SYMBOLS**

POINT CODE	DESCRIPTION
CH	CHANNEL EASEMENT
CONST	CONSTRUCTION EASEMENT
CUL	CULVERT EASEMENT
D&C	DISCONNECT & CONNECT
DIT	DITCH EASEMENT
DR	DRAINAGE EASEMENT
DRIVE	DRIVEWAY EASEMENT
EC	EROSION CONTROL
HWY	HIGHWAY EASEMENT
I&M	INSTALL & MAINTAIN EASEMENT
LAND	LANDSCAPE EASEMENT
R&RES	REMOVE & RESET
R&REP	REMOVE & REPLACE
SR	SLOPE RIGHT
UE	UTILITY EASEMENT
(P)	PERMANENT EASEMENT
(T)	TEMPORARY EASEMENT
■	BNDNS BOUND SET
▣	BNDNS BOUND TO BE SET
●	IPNS IRON PIN SET
⊙	IPNS IRON PIN TO BE SET
⊠	CALC EXISTING ROW POINT
○	PROW PROPOSED ROW POINT
[LENGTH]	LENGTH CARRIED ON NEXT SHEET

**COMMON TOPOGRAPHIC POINT SYMBOLS**

POINT CODE	DESCRIPTION
⊕	APL BOUND APPARENT LOCATION
○	BM BENCH MARK
▣	BND BOUND
▣	CB CATCH BASIN
⊕	COMB COMBINATION POLE
▣	DITHR DROP INLET THROATED DNC
⊕	EL ELECTRIC POWER POLE
○	FPOLE FLAGPOLE
○	GASFIL GAS FILLER
○	GP GUIDE POST
×	GSO GAS SHUT OFF
○	GUY GUY POLE
○	GUYW GUY WIRE
×	GV GATE VALVE
⊕	H TREE HARDWOOD
△	HCTRL CONTROL HORIZONTAL
▲	HVCTRL CONTROL HORIZ. & VERTICAL
◇	HYD HYDRANT
●	IP IRON PIN
●	IPIPE IRON PIPE
⊕	LI LIGHT - STREET OR YARD
♩	MB MAILBOX
○	MH MANHOLE (MH)
▣	MM MILE MARKER
●	PM PARKING METER
▣	PMK PROJECT MARKER
○	POST POST STONE/WOOD
⊕	RRSIG RAILROAD SIGNAL
⊕	RRSL RAILROAD SWITCH LEVER
⊕	S TREE SOFTWOOD
⊕	SAT SATELLITE DISH
⊕	SHRUB SHRUB
⊕	SIGN SIGN
⊕	STUMP STUMP
⊕	TEL TELEPHONE POLE
○	TIE TIE
⊕	TSIGN SIGN W/DOUBLE POST
⊕	VCTRL CONTROL VERTICAL
○	WELL WELL
×	WSO WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

**PROPOSED GEOMETRY CODES**

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

**UTILITY SYMBOLY**

**UNDERGROUND UTILITIES**

— UT —	TELEPHONE
— UE —	ELECTRIC
— UC —	CABLE (TV)
— UEC —	ELECTRIC+CABLE
— UET —	ELECTRIC+TELEPHONE
— UCT —	CABLE+TELEPHONE
— UECT —	ELECTRIC+CABLE+TELEP.
— G —	GAS LINE
— W —	WATER LINE
— S —	SANITARY SEWER (SEPTIC)

**ABOVE GROUND UTILITIES (AERIAL)**

— T —	TELEPHONE
— E —	ELECTRIC
— C —	CABLE (TV)
— EC —	ELECTRIC+CABLE
— ET —	ELECTRIC+TELEPHONE
— AER E&T —	ELECTRIC+TELEPHONE
— CT —	CABLE+TELEPHONE
— ECT —	ELECTRIC+CABLE+TELEP.
—	UTILITY POLE GUY WIRE

**PROJECT CONSTRUCTION SYMBOLY**

—	CLEAR ZONE
—	PLAN LAYOUT MATCHLINE

**PROJECT CONSTRUCTION FEATURES**

▲	TOP OF CUT SLOPE
○	TOE OF FILL SLOPE
⊕	STONE FILL
⊕	BOTTOM OF DITCH 'L
---	CULVERT PROPOSED
---	STRUCTURE SUBSURFACE
PDF	PROJECT DEMARCATION FENCE
BF	BARRIER FENCE
XXXXXX	TREE PROTECTION ZONE (TPZ)
////	STRIPING LINE REMOVAL
~~~~	SHEET PILES

**CONVENTIONAL BOUNDARY SYMBOLY**

**BOUNDARY LINES**

—	TOWN BOUNDARY LINE
—	COUNTY BOUNDARY LINE
—	STATE BOUNDARY LINE
---	PROPOSED STATE R.O.W. (LIMITED ACCESS)
---	PROPOSED STATE R.O.W.
---	STATE ROW (LIMITED ACCESS)
---	STATE ROW
---	TOWN ROW
---	PERMANENT EASEMENT LINE (P)
---	TEMPORARY EASEMENT LINE (T)
---	SURVEY LINE
---	PROPERTY LINE (P/L)
SR	SLOPE RIGHTS
6f	6F PROPERTY BOUNDARY
4f	4F PROPERTY BOUNDARY
HAZ	HAZARDOUS WASTE

**EPSC LAYOUT PLAN SYMBOLY**

**EPSC MEASURES**

ONNOONNOONNO	FILTER CURTAIN
—	SILT FENCE
—	SILT FENCE WOVEN WIRE
—	CHECK DAM
▣	DISTURBED AREAS REQUIRING RE-VEGETATION
⊕	EROSION MATTING

**ENVIRONMENTAL RESOURCES**

—	WETLAND BOUNDARY
---	RIPARIAN BUFFER ZONE
---	WETLAND BUFFER ZONE
---	SOIL TYPE BOUNDARY
---	THREATENED & ENDANGERED SPECIES
HAZ	HAZARDOUS WASTE AREA
---	AGRICULTURAL LAND
---	FISH & WILDLIFE HABITAT
---	FLOOD PLAIN
---	ORDINARY HIGH WATER (OHW)
---	STORM WATER
---	USDA FOREST SERVICE LANDS
---	WILDLIFE HABITAT SUIT/CONN

**ARCHEOLOGICAL & HISTORIC**

---	ARCHEOLOGICAL BOUNDARY
---	HISTORIC DISTRICT BOUNDARY
---	HISTORIC AREA
Ⓜ	HISTORIC STRUCTURE

**CONVENTIONAL TOPOGRAPHIC SYMBOLY**

**EXISTING FEATURES**

---	ROAD EDGE PAVEMENT
---	ROAD EDGE GRAVEL
---	DRIVEWAY EDGE
---	DITCH
---	FOUNDATION
---	FENCE (EXISTING)
---	FENCE WOOD POST
---	FENCE STEEL POST
---	GARDEN
---	ROAD GUARDRAIL
---	RAILROAD TRACKS
---	CULVERT (EXISTING)
---	STONE WALL
---	WALL
---	WOOD LINE
---	BRUSH LINE
---	HEDGE
---	BODY OF WATER EDGE
---	LEDGE EXPOSED





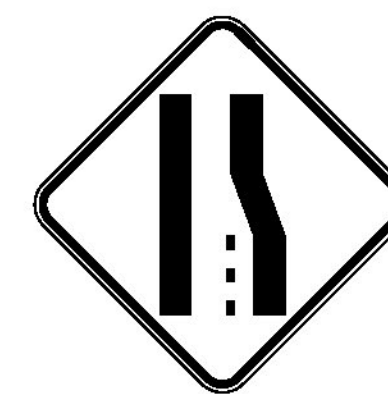
## COMPOSITE TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC 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 NOT BE PAID SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10, "TRAFFIC CONTROL".
2. THE 2009 MUTCD SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS, SIGNALS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC CONTROL 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 THE MUTCD.
3. ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. THE BID PRICE FOR "TRAFFIC CONTROL", ITEM 641.10 FOR EACH PROJECT, 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 VAOT 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 AND 630.15 - UNIFORMED TRAFFIC OFFICERS AND FLAGGERS  
 646.622 TEMPORARY 6 INCH WHITE LINE, PAINT  
 646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 646.692 TEMPORARY LETTER OR SYMBOL, PAINT  
 646.662 TEMPORARY 12 INCH WHITE LINE, PAINT  
 646.672 TEMPORARY 12 INCH YELLOW LINE, PAINT  
 646.702 TEMPORARY CROSSWALK MARKINGS, PAINT  
 646.712 TEMPORARY RAILROAD CROSSING SYMBOL, PAINT  
 646.76 LINE STRIPING TARGETS
5. 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". 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.

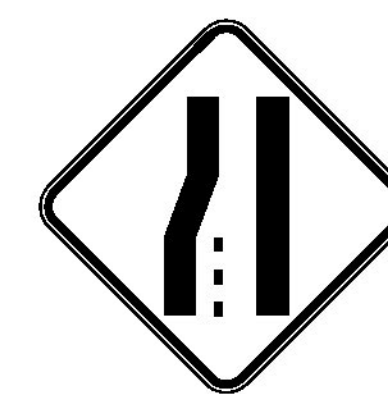
THE PCMS SHALL CONSIST OF EITHER ONE OR TWO PHASES. TYPICALLY, A PHASE SHALL CONSIST OF UP TO THREE LINES OF EIGHT CHARACTERS PER LINE. THE PCMS SHOULD BE USED AS A SUPPLEMENT AND NOT AS A SUBSTITUTE FOR CONVENTIONAL SIGNS AND PAVEMENT MARKINGS.

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.

6. IN ADVANCE OF ANY PROPOSED INTERCHANGE RAMP CLOSURES THE CONTRACTOR SHALL SUBMIT A PLAN THAT WILL DEPICT HOW ADVANCED WARNING TO THE TRAVELING PUBLIC WILL BE ACCOMMODATED DURING THE CLOSURE. ADVANCED WARNING SHALL BE DEFINED AS PROVIDING ADVANCED WARNING SIGNS, BOTH STATIC AND PCMS, THAT PROVIDE INFORMATION FOR MOTORISTS TO SAFELY UTILIZE THE REGIONALLY ACCEPTABLE OPPORTUNITIES FOR SEEKING AN ALTERNATE ROUTE PRIOR TO APPROACHING THE INTERCHANGE INVOLVING RAMP CLOSURES. THE PLAN WILL NEED TO BE SUBMITTED FOR REVIEW AND COMMENT BY THE PROJECT MANAGER A MINIMUM OF 7 CALENDAR DAYS AHEAD OF ANY PLANNED CLOSURE. APPROVAL OF THE PLAN SHALL BE IN PLACE 72 HOURS BEFORE WORK MAY BEGIN. INSTALLATION OF THE PCMS NETWORK SHALL BE DONE 48 HOURS BEFORE WORK MAY BEGIN. ELEMENTS OF THE PLAN SHALL INCLUDE BUT WILL NOT BE LIMITED TO THE LOCATION OF PCMS AND ASSOCIATED MESSAGES, ANY OTHER NECESSARY SIGNAGE, LOCATIONS FOR DEPLOYMENT OF UNIFORMED TRAFFIC OFFICERS AND FLAGGERS, AND SEQUENCING AND DURATION OF CLOSURE FOR EACH RAMP WITHIN THE RESPECTIVE INTERCHANGE. NO MORE THAN ONE INTERCHANGE PER WORK PERIOD MAY HAVE RAMP CLOSURES. FOR ANY GIVEN NIGHT WORK PERIOD, NO ACTIVITIES INVOLVING THE CLOSURE OF RAMP MAY BEGIN BEFORE 9:00 PM AND THE RAMP SHALL BE REOPENED TO TRAFFIC BY 5:00 AM. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10, TRAFFIC CONTROL.
7. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH VAOT STANDARDS. PAYMENT FOR PROVIDING THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL". ADD G20-5aP "WORK ZONE" PLAQUE AND R2-6aP "FINES DOUBLED" PLAQUE TO SPEED LIMIT SIGNS (SEE FIG. 6F-3 OF MUTCD). OMIT VR-355 "FINES DOUBLED FOR SPEEDING IN WORK ZONE" SIGN.
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 INTERSECTING HIGHWAYS.
9. REFER TO VT. STATE STANDARDS, THE SPECIAL PROVISIONS, AND THE MUTCD FOR TEMPORARY TRAFFIC CONTROL SIGN DIMENSIONS AND COLORS.
10. SIGN W4-2 MAY BE REPLACED WITH W9-2:



W4-2



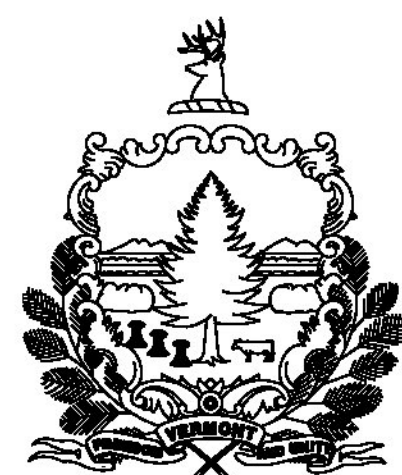
W9-2



**NOT TO SCALE**

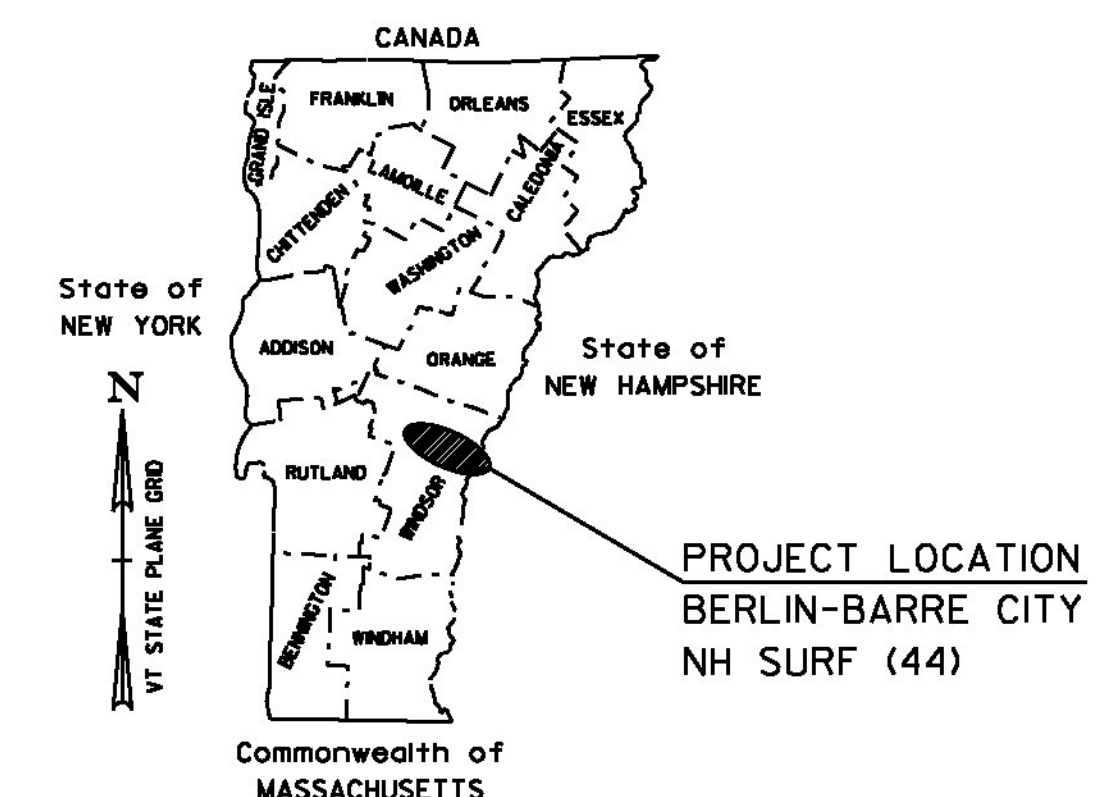
PROJECT NAME: BERLIN-BARRE CITY	
PROJECT NUMBER: NH SURF(44)	
FILE NAME: I3b634/pvtmgt/p13b634.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
COMPOSITE TRAFFIC NOTES	SHEET 6 OF 64

# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENT TOWN OF BERLIN & BARRE CITY COUNTY OF WASHINGTON VT 62 (EB & WB)(PRINCIPAL ARTERIAL)

BEGINNING IN THE TOWN OF BERLIN ON VT ROUTE 62 AT MM 1.598 AND EXTENDING EASTERLY FOR A DISTANCE OF 16,181 FEET (3.065 MILES)  
TO MM 1.524 IN THE CITY OF BARRE. PROJECT ALSO INCLUDES WESTBOUND FROM MM 2.526 TO THE END OF PROJECT A DISTANCE OF 10,487.43 FEET (1.986 MILES),  
AND RAMP A OF THE BERLIN STATE HIGHWAY FOR A DISTANCE OF 3,067.58 FEET (0.581 MILES).



### PROJECT DATA

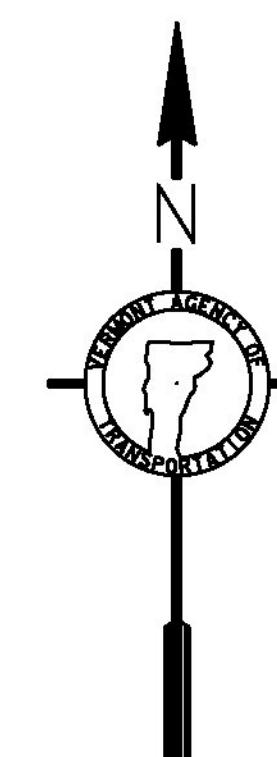
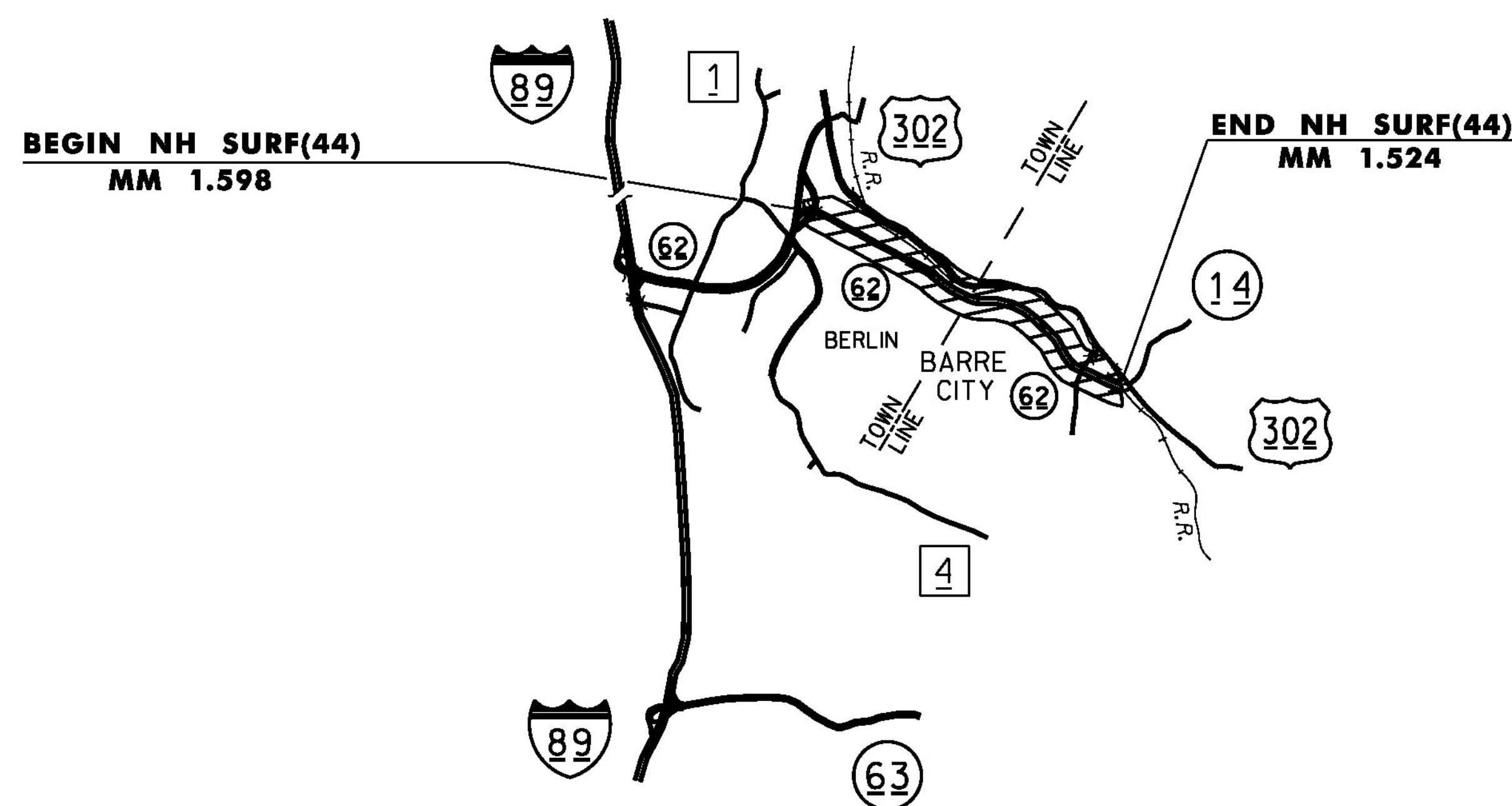
VT 62 MM 1.598 BERLIN TO MM 2.526 BERLIN  
VT 62 EB MM 2.526 BERLIN TO MM 1.524 BARRE CITY  
VT 62 WB MM 2.526 BERLIN TO MM 1.524 BARRE CITY  
BERLIN STATE HIGHWAY RAMP A MM 0.000 TO MM 0.581

LENGTH OF PROJECT = 29,736.96 FEET    5.632 MILES  
LENGTH OF ROADWAY = 29,736.96 FEET    5.632 MILES

### TRAFFIC DATA

VT ROUTE 62	2014 AADT	2024 AADT	2014 DHV	2024 DHV	FLEXIBLE ESALS (2014-2024)	FLEXIBLE ESALS (2014-2034)
BEGIN PROJECT TO BERLIN ST.	10,900	11,100	1200	1300	2,290,000	4,707,000
BERLIN ST. TO MAIN ST.	8,400	8,600	960	980	1,039,000	2,180,000

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

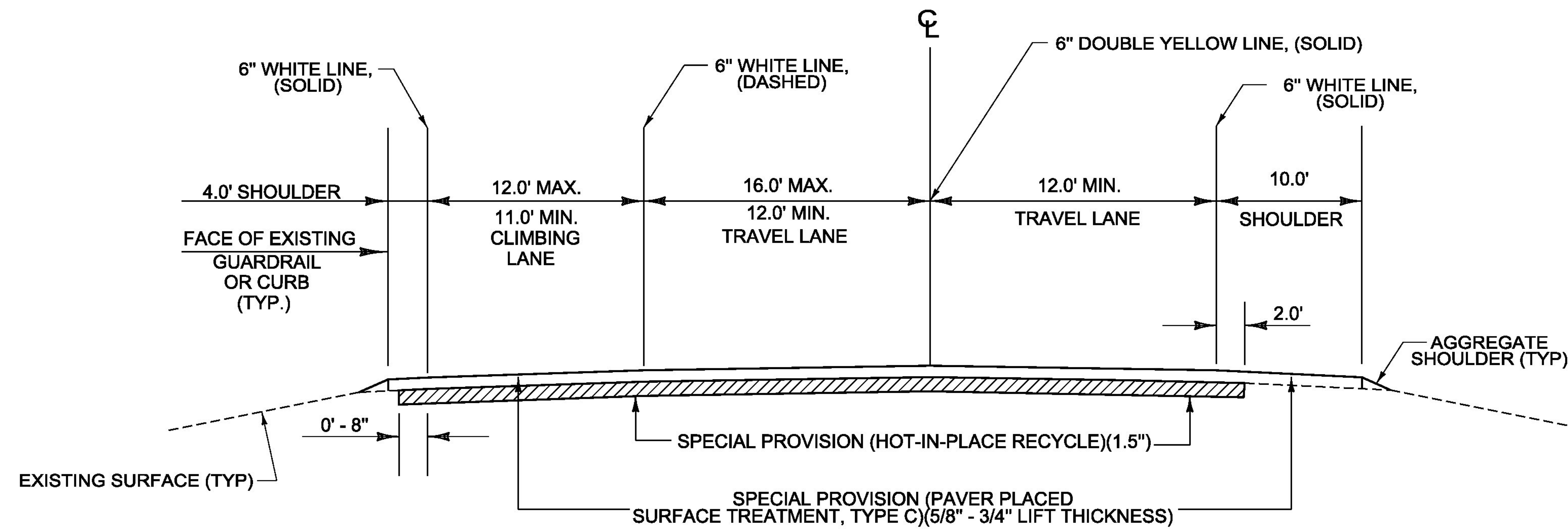


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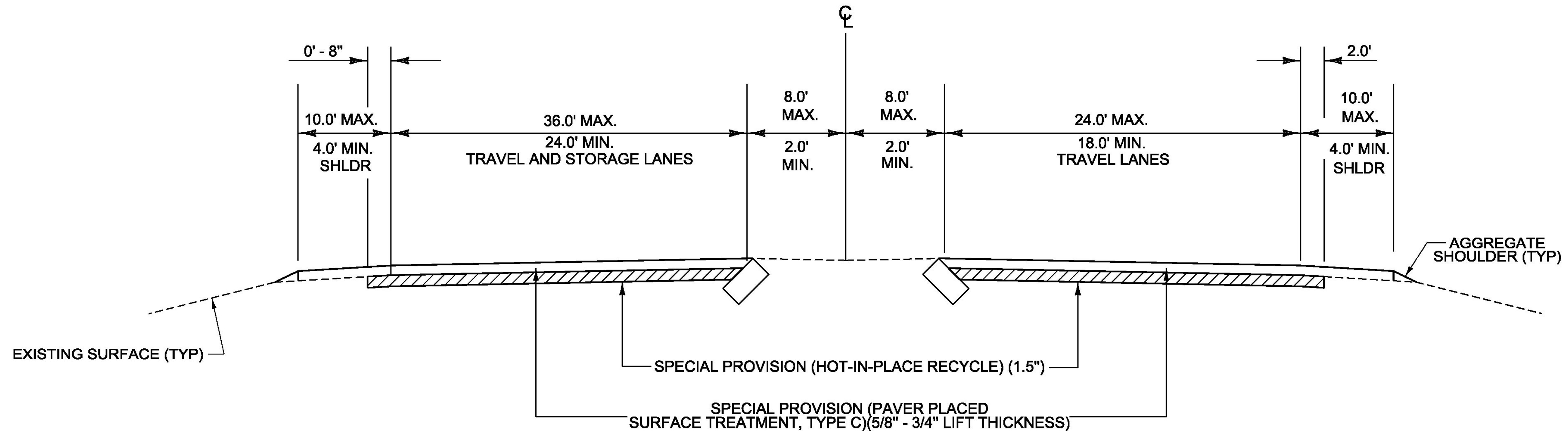
THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.  
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL 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.

QUALITY ASSURANCE PROGRAM : LEVEL I	
SURVEYED BY :	NA
SURVEYED DATE :	NA
DATUM	
VERTICAL	NA
HORIZONTAL	NA

PROJECT MANAGER :	JONATHAN C. HARRINGTON, P. E.
PROJECT NAME :	BERLIN-BARRE CITY
PROJECT NUMBER :	NH SURF (44)
SHEET 7	OF 64



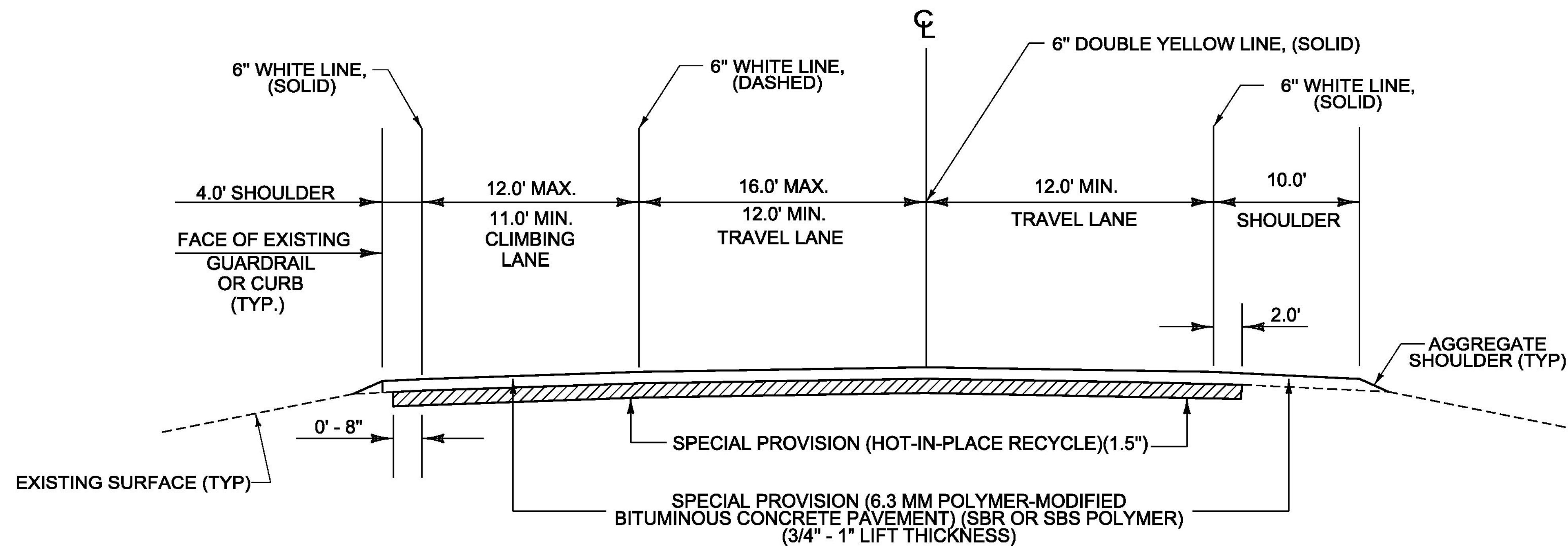
**TYPICAL SECTION - ALTERNATE A**  
**VT RTE 62**  
**BERLIN MM 1.598 TO MM 2.526**



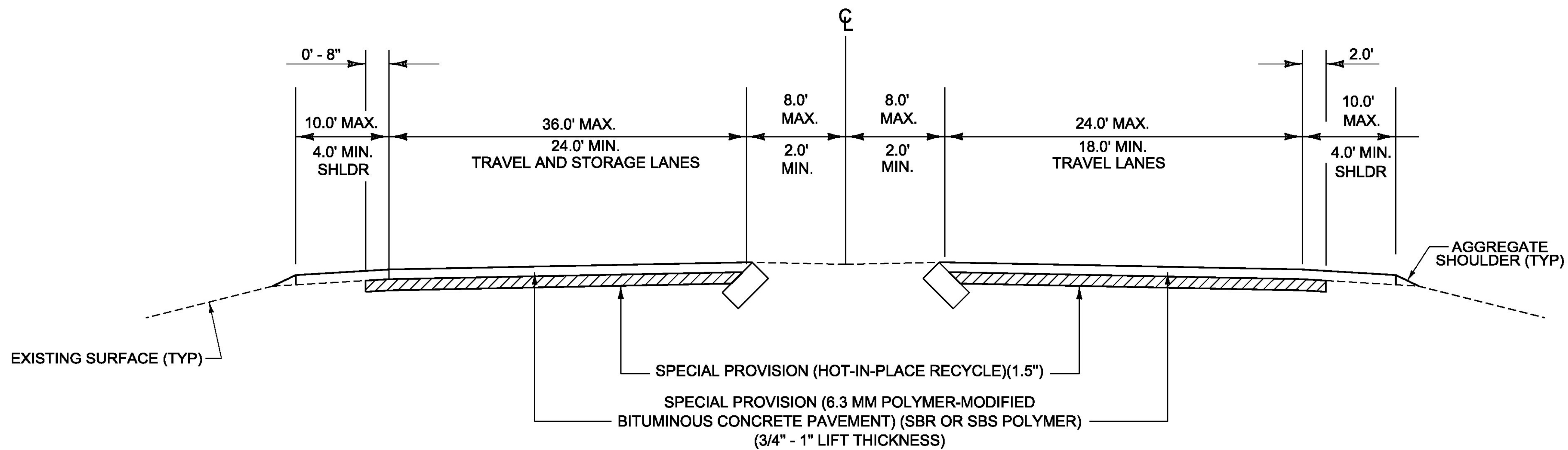
**TYPICAL SECTION W/MEDIAN ISLAND - ALTERNATE A**  
**VT RTE 62**  
**BERLIN MM 2.526 TO MM 2.934**  
**BARRE CITY MM 0.000 TO MM 1.189**  
**BARRE CITY MM 1.208 TO MM 1.524**

**NOT TO SCALE**

PROJECT NAME:	BERLIN-BARRE CITY
PROJECT NUMBER:	NH SURF(44)
FILE NAME:	I3B634/pvtmgt/pi3b634.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
TYPICAL SECTIONS - ALTERNATE A	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	8 OF 64



**PROJECT TYPICAL SECTION - ALTERNATE B  
VT RTE 62  
BERLIN MM 1.598 TO MM 2.526**

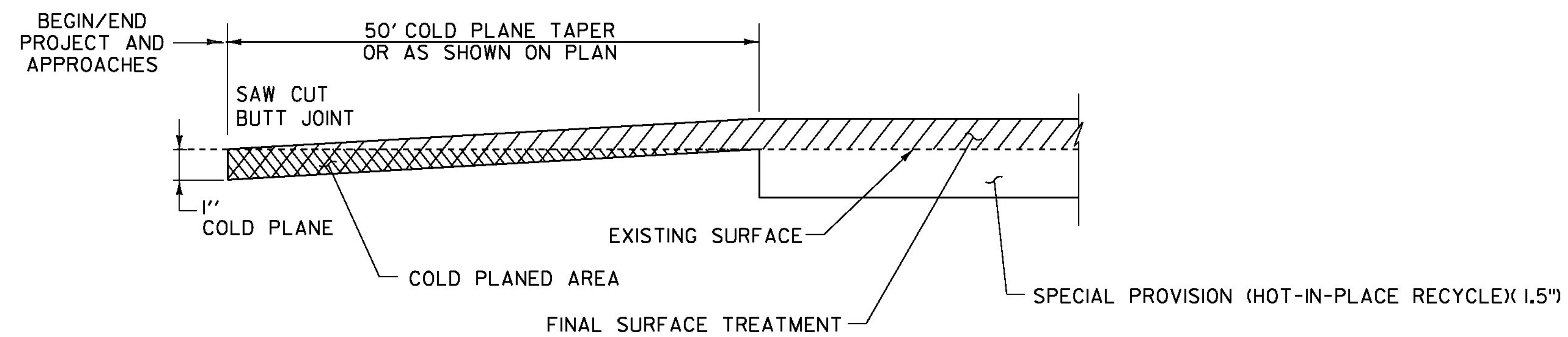


**PROJECT TYPICAL SECTION W/MEDIAN ISLAND - ALTERNATE B  
VT RTE 62  
BERLIN MM 2.526 TO MM 2.934  
BARRE CITY MM 0.000 TO MM 1.189  
BARRE CITY MM 1.208 TO MM 1.524**

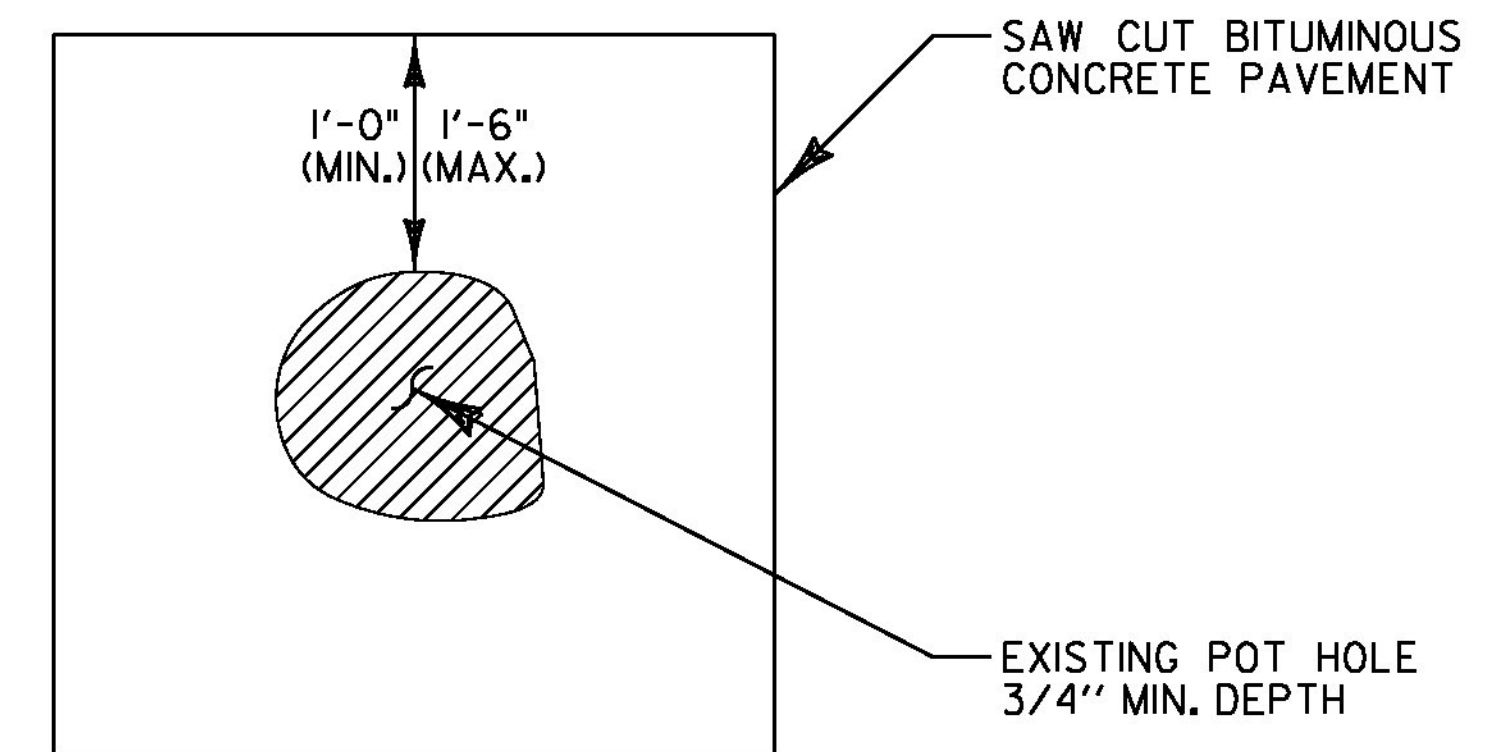
- NOTES FOR ALTERNATE B:
- PRIOR TO THE PLACEMENT OF THE POLYMER MODIFIED BITUMINOUS CONCRETE PAVEMENT, EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL HOT-IN-PLACE RECYCLE AT A RATE OF 0.080 GAL/SY (+/- 0.01GAL/SY) OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL BE RS-IH OR CRS-IH PER THE MANUFACTURER'S RECOMMENDATION AND PAID UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-IH OR CRS-IH).
  - THE GYRATION SPECIFICATION FOR THE 6.3 MM POLYMER - MODIFIED BITUMINOUS CONCRETE PAVEMENT SHALL BE 80. PG BINDER SHALL BE 70-28.

**NOT TO SCALE**

PROJECT NAME: BERLIN-BARRE CITY	PLOT DATE: 06-JUN-2014
PROJECT NUMBER: NH SURF(44)	DRAWN BY: PVT. MGT.
FILE NAME: I3B634/pvtmgt/pi3b634.dgn	CHECKED BY: PVT. MGT.
PROJECT LEADER: J. HARRINGTON	SHEET 9 OF 64
DESIGNED BY: PVT. MGT.	TYPICAL SECTIONS - ALTERNATE B



**TYPICAL APPROACH AREA DETAIL MAINLINE**



**TYPICAL - POT HOLE REPAIR**

NOTE:  
EMULSIFIED ASPHALT SHALL BE APPLIED AT ALL PATCH INTERFACES AT A RATE OF 0.25 - 0.50 GAL/SY. EMULSIFIED ASPHALT SHALL MEET THE REQUIREMENTS OF SECTION 404 AND WILL BE CONSIDERED INCIDENTAL TO THE PATCHING MATERIAL.

**NOTES:**

1. EXISTING SHOULDER PAVEMENT SURFACES BEYOND THE LIMITS OF THE FINAL SURFACE TREATMENT SHALL RECEIVE ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING, POT HOLE REPAIR, AND CRACK-SEALING PRIOR TO APPLICATION OF THE FINAL SURFACE TREATMENT. ALL CRACKS GREATER THAN 0.10" AND UP TO 1.0" IN WIDTH SHALL BE SEALED USING THE "BLOW AND GO" 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" AND ALL OTHER PATCHING AND POT HOLE 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. EXISTING SHOULDER PAVEMENT SURFACES BEYOND THE LIMITS OF THE FINAL SURFACE TREATMENT SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POT HOLE REPAIR TREATMENTS.
3. FOLLOWING COMPLETION OF COLD PLANING, THE MILLED SURFACE FOR ALL BRIDGES SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POT HOLE REPAIR TREATMENTS, AS DIRECTED BY THE ENGINEER.
4. ALL LANE DELINEATION IS TO BE MAINTAINED DURING CONSTRUCTION BY THE USE OF LINE STRIPING TARGETS OR TEMPORARY PAINT.
5. 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. THE LONGITUDINAL EDGES WITH THE SURFACE SHALL BE FEATHERED AS SHOWN ON THE TYPICAL SECTION, OR AS DIRECTED BY THE ENGINEER. ANY SAWCUTTING AT BUTT JOINTS SHALL BE PAID INCIDENTAL TO ITEM 210.10, COLD PLANING, BITUMINOUS PAVEMENT.
6. 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 POT HOLE REPAIR TREATMENTS, THIS MATERIAL SHALL BE REMOVED PRIOR TO CRACK-SEALING, PATCHING, AND POT HOLE 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.
7. THE SCREED OF THE PAVER SHALL BREAK AT THE BREAK POINT OF THE SHOULDER SUCH THAT THE DESIGNED NOMINAL THICKNESS IS CARRIED ONTO THE SHOULDER AND BROKEN OR PINCHED BY ROLLING. EDGE HEIGHT SHALL BE MEASURED A MINIMUM OF FIVE RANDOMLY SPACED POINTS PER TENTH OF A MILE. IF IT IS FOUND THAT THE AVERAGE HEIGHT IS GREATER THAN 3/4" OVER THE TENTH OF A MILE MEASURES SHALL BE PERFORMED SUCH THAT THE 3/4" MAXIMUM HEIGHT IS ACHIEVED. THIS APPLIES TO BOTH THE 10' AND 4' SHOULDER SIDES OF THE HIGHWAY.

PROJECT NAME:	BERLIN-BARRE CITY
PROJECT NUMBER:	NH SURF(44)
FILE NAME:	I3B634/pvtmgt/pi3B634_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PROJECT NOTES	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	10 OF 64

**NOT TO SCALE**

# QUANTITY SHEET 1

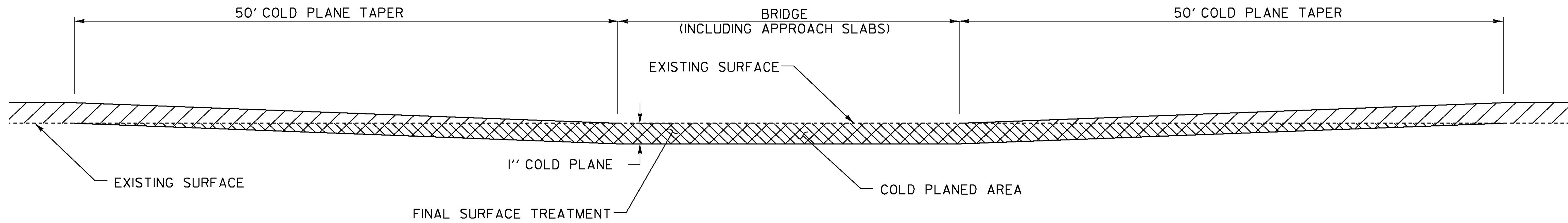
SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
						ROADWAY	BRIDGE	C. E. ITEMS	ALTERNATE A	ALTERNATE B	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						9700					9700		LF	SHOULDER BERM REMOVAL	203.40	185			COLD PLANE BITUMINOUS PAVEMENT
						1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST	611 SY		MAINLINE APPROACHES
						2400					2400		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	103	1075 SY		BERLIN STREET APPROACHES
						300					300		TON	AGGREGATE SHOULDERS	402.12	7	103 SY		BRIDGES
						1					1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-	2400 SY		ROUND
						1500					1500		LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (AASHTO M 234 (ASTM D 6690) TYPE II)	417.20	EST			TOTAL
						600					600		TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	490.30	EST	600 TON		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
							110				110		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	6			SPOT LEVELING - ESTIMATED AMOUNT
							100				100		CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST			LOCATIONS TO BE DETERMINED BY THE ENGINEER
						10					10		EACH	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS I	604.412	EST			
						30					30		HR	POWER BROOM RENTAL, TYPE I	608.30	EST			
						100					100		HR	TRUCK RENTAL	608.37	EST			
						200					200		HR	TRUCK-MOUNTED ATTENUATOR	608.45	EST			
						100					100		HR	TRUCK-MOUNTED ATTENUATOR, AWW/PV	608.50	EST			
						400					400		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
						200					200		HR	FLAGGERS	630.15	EST			
								0.33			0.33		LS	FIELD OFFICE, ENGINEERS	631.10	-			
								0.33			0.33		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-			
								3000			3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-			
						0.33					0.33		LS	MOBILIZATION/DEMOBILIZATION	635.11	-			
						1					1		LS	TRAFFIC CONTROL (NH SURF(44))	641.10	EST			
						5					5		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	EST			
						38000					38000		LF	DURABLE 6 INCH WHITE LINE, POLYUREA	646.424	709			
						32000					32000		LF	DURABLE 6 INCH YELLOW LINE, POLYUREA	646.434	1016			
						40					40		LF	DURABLE 12 INCH YELLOW LINE, POLYUREA	646.474	EST			
														BEGIN OPTION AA					
						130					130		LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482	8			
						130					130		LF	DURABLE 24 INCH STOP BAR, POLYUREA	646.484	8			
														END OPTION AA					
														BEGIN OPTION BB					
						80					80		EACH	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492	2			
						80					80		EACH	DURABLE LETTER OR SYMBOL, POLYUREA	646.494	2			
														END OPTION BB					
														BEGIN OPTION CC					
						75					75		LF	DURABLE CROSSWALK MARKING, THERMOPLASTIC	646.502	3			
						75					75		LF	DURABLE CROSSWALK MARKING, POLYUREA	646.504	3			
														END OPTION CC					

PROJECT NAME: BERLIN-BARRE CITY  
 PROJECT NUMBER: NH SURF(44)  
 FILE NAME: I3B634/pvtmgt/pi3b634.dgn PLOT DATE: 06-JUN-2014  
 PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
 DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
 QUANTITY SHEET I SHEET II OF 64

# QUANTITY SHEET 2

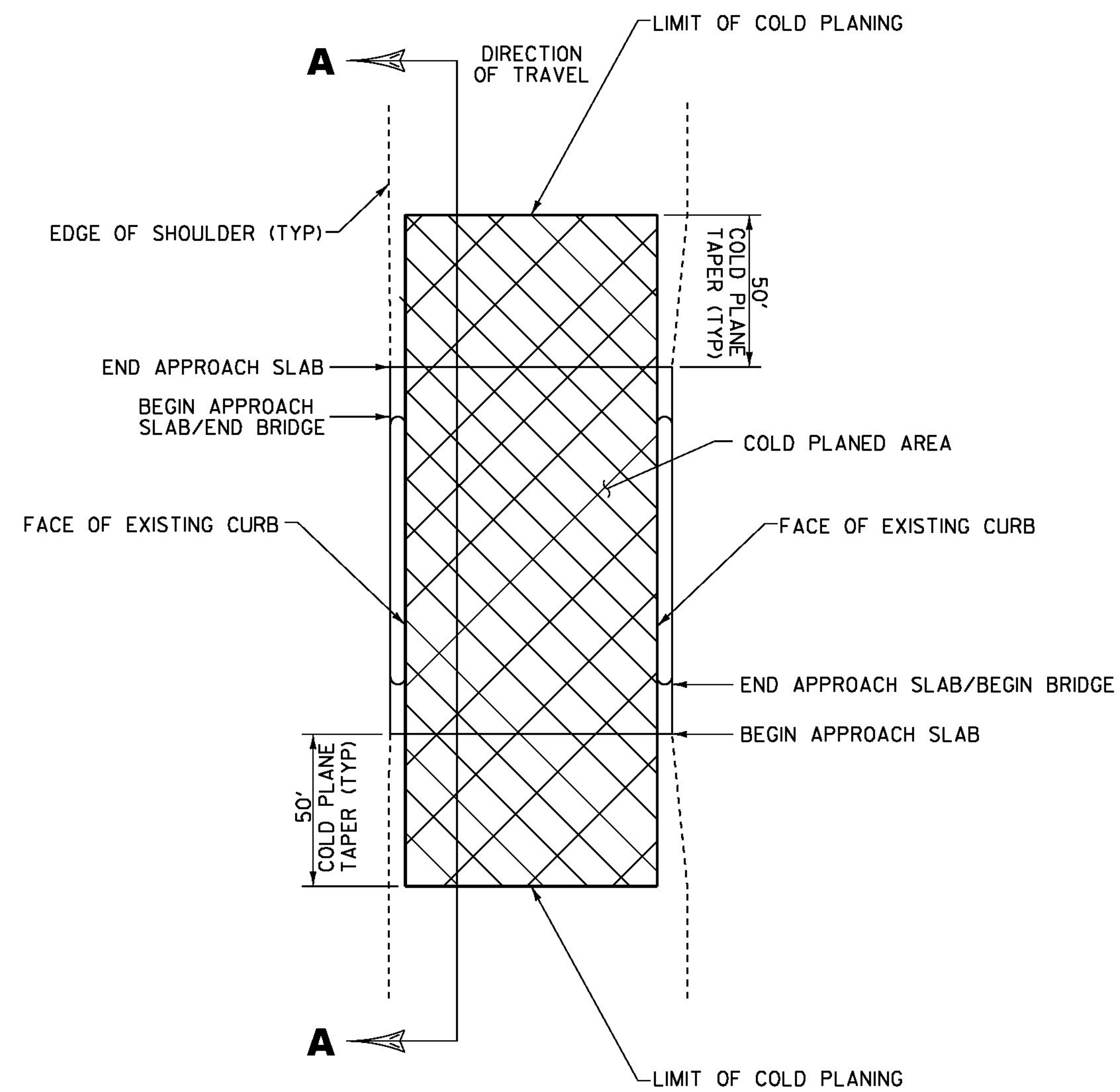
SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
					ROADWAY	BRIDGE	C. E. ITEMS	ALTERNATE A	ALTERNATE B	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
													BEGIN OPTION DD					
					2					2		EACH	DURABLE RAILROAD CROSSING SYMBOL, THERMOPLASTIC	646.512	-			
					2					2		EACH	DURABLE RAILROAD CROSSING SYMBOL, POLYUREA	646.514	-			
													END OPTION DD					
					38000					38000		LF	TEMPORARY 6 INCH WHITE LINE, PAINT	646.622	709			
					32000					32000		LF	TEMPORARY 6 INCH YELLOW LINE, PAINT	646.632	1016			
					40					40		LF	TEMPORARY 12 INCH YELLOW LINE, PAINT	646.672	EST			
					130					130		LF	TEMPORARY 24 INCH STOP BAR, PAINT	646.682	8			
					58					58		EACH	TEMPORARY LETTER OR SYMBOL, PAINT	646.692	4			
					75					75		LF	TEMPORARY CROSSWALK MARKING, PAINT	646.702	3			
					2					2		EACH	TEMPORARY RAILROAD CROSSING SYMBOL, PAINT	646.712	-			
					1800					1800		EACH	LINE STRIPING TARGETS	646.76	76			
					1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
					2					2		EACH	SPECIAL PROVISION (PEDESTRIAN SIGNAL HEADS, COUNTDOWN)(VT. ROUTE 62 @ BERLIN STREET)	900.620	-			
					1					1		EACH	SPECIAL PROVISION (VEHICLE STOP BAR DETECTION SYSTEM)(VT 62 @ BERLIN STREET)	900.620	-			ALTERNATE ZA1 SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)
					87000					87000		SY	SPECIAL PROVISION (HOT-IN-PLACE RECYCLE)	900.675	1207	103,235	SY	VT. ROUTE 62 EB & WB
					50					50		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)	900.680	EST	1,765	SY	ROUND
													BEGIN ALTERNATE ZA1			105,000	SY	TOTAL
									105000	105000		SY	SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)	900.675	1765			ALTERNATE ZA2 SPECIAL PROVISION (6.3 MM POLYMER MODIFIED BIT. CONC. PAVEMENT)(SBR OR SBS POLYMER)
													END ALTERNATE ZA1					
													BEGIN ALTERNATE ZA2					
									1	1		LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-	6,022	TON	VT. ROUTE 62 EB & WB
									6100	6100		TON	SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)	900.680	78	78	TON	ROUND
									800	800		CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	105	6,100	TON	TOTAL
													END ALTERNATE ZA2					

PROJECT NAME: BERLIN-BARRE CITY  
PROJECT NUMBER: NH SURF(44)  
FILE NAME: I3B634/pvtmgf/pi3b634.dgn PLOT DATE: 06-JUN-2014  
PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
QUANTITY SHEET 2 SHEET 12 OF 64



**BRIDGE COLD PLANE DETAIL**

BRIDGE #11 BARRE CITY MM 1.398



**BRIDGE COLD PLANE TYPICAL PLAN**

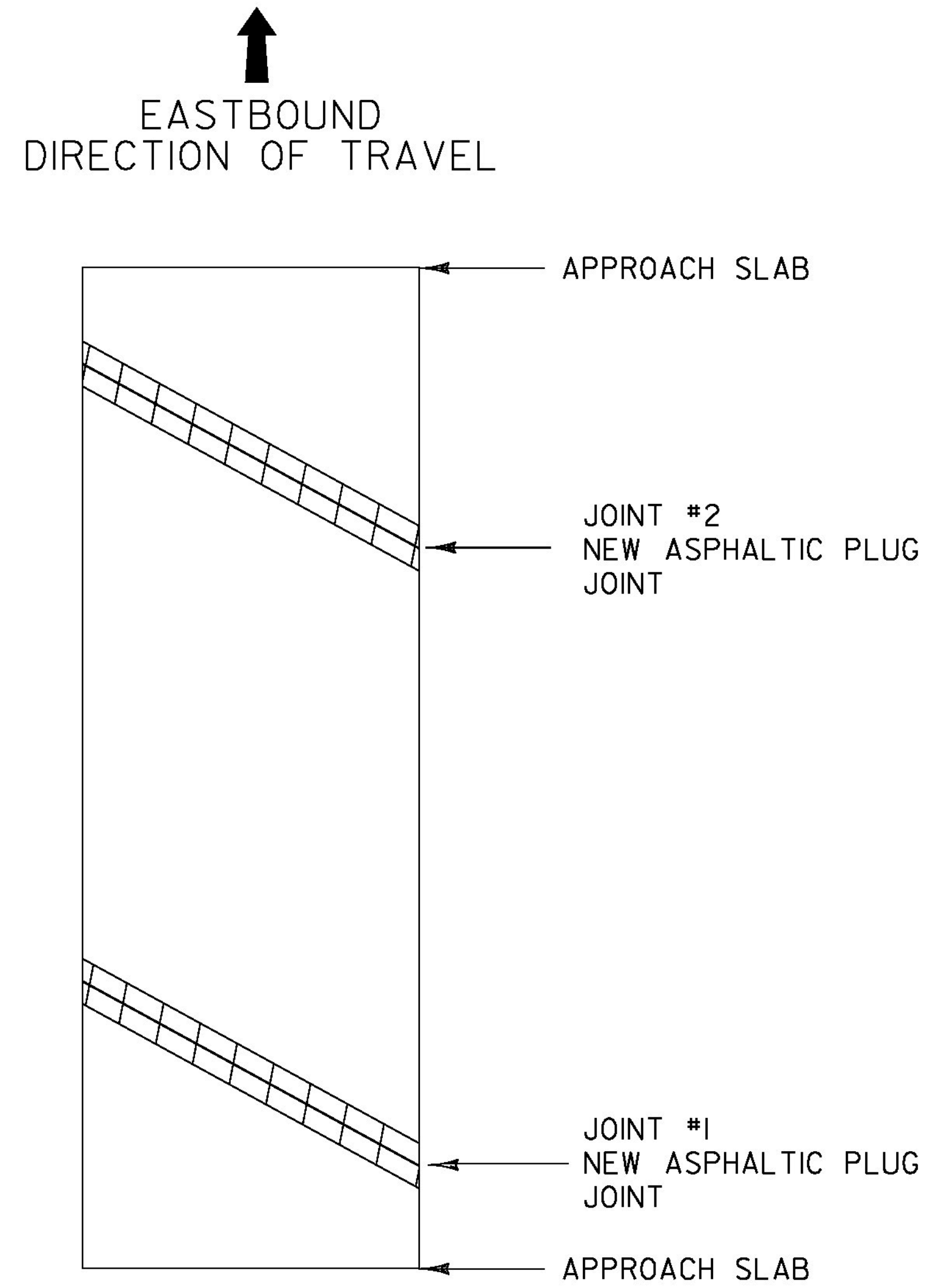
NOT TO SCALE

**NOTES:**

1. REFER TO ASPHALTIC PLUG JOINT DETAIL SHEET, SD-516.10. ALL NEW JOINTS SHALL 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 NO COST TO THE STATE.
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 ENGINEER TO BE AT FAULT FOR THE DAMAGE, THE RECOMMENDED REPAIRS SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE STATE.

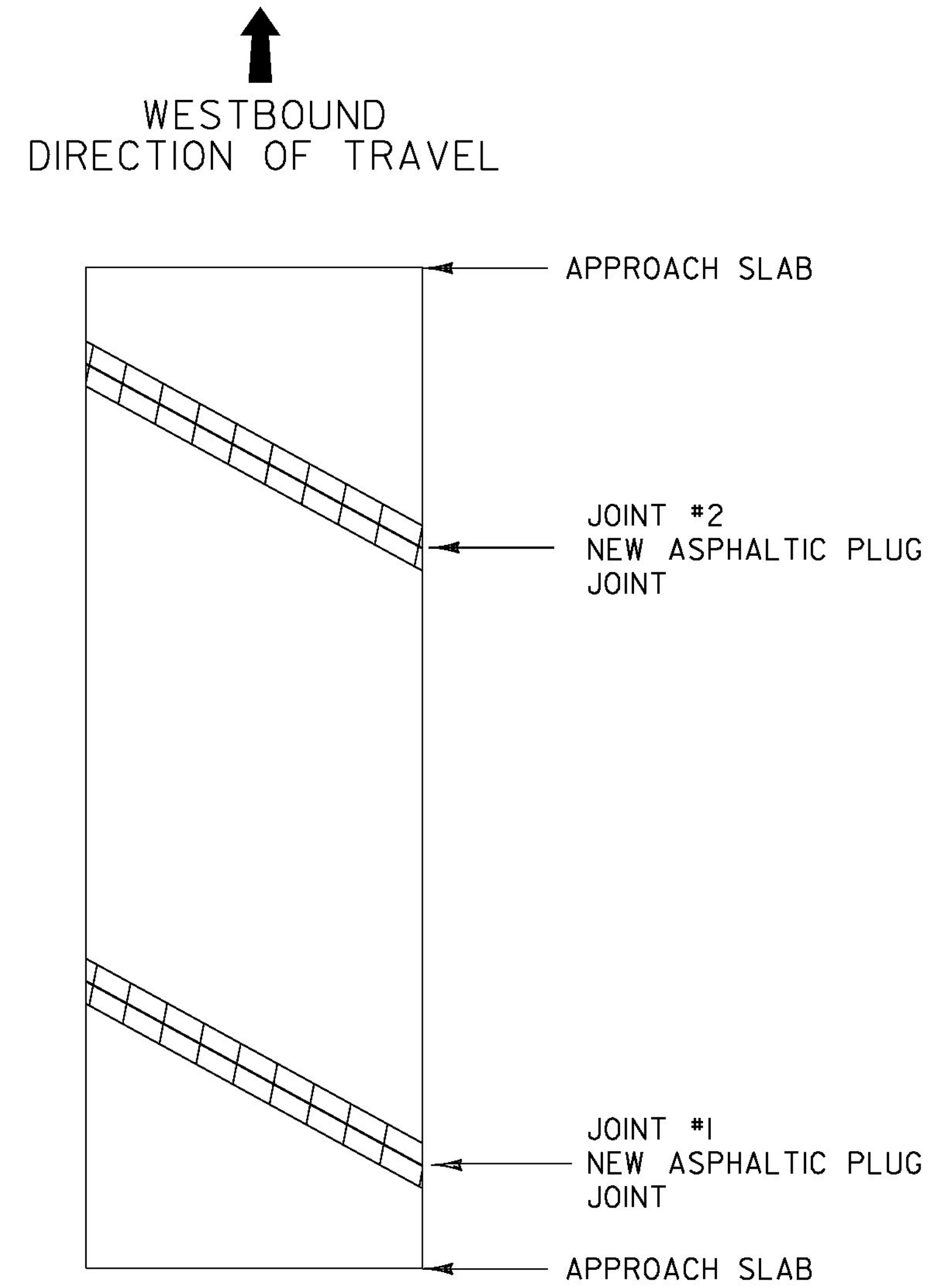
**NOT TO SCALE**

PROJECT NAME: BERLIN-BARRE CITY	PLOT DATE: 06-JUN-2014
PROJECT NUMBER: NH SURF(44)	DRAWN BY: PVT. MGT.
FILE NAME: I3B634/pvtmgt/pi3b634.dgn	CHECKED BY: PVT. MGT.
PROJECT LEADER: J. HARRINGTON	SHEET 13 OF 64
DESIGNED BY: PVT. MGT.	
BRIDGE DETAIL SHEET 1	



**BRIDGE 11N EB**  
BARRE CITY MM 1.398 EB

LENGTH OF ASPHALTIC PLUG JOINTS:  
JOINT #1 - = 27'  
JOINT #2 - = 27'  
  
TOTAL = 54'



**BRIDGE 11N WB**  
BARRE CITY MM 1.398 WB

LENGTH OF ASPHALTIC PLUG JOINTS:  
JOINT #1 - = 27'  
JOINT #2 - = 27'  
  
TOTAL = 54'

**LEGEND**

EXISTING BRIDGE JOINTS TO BE  
REPAIRED WITH ASPHALTIC PLUG JOINT

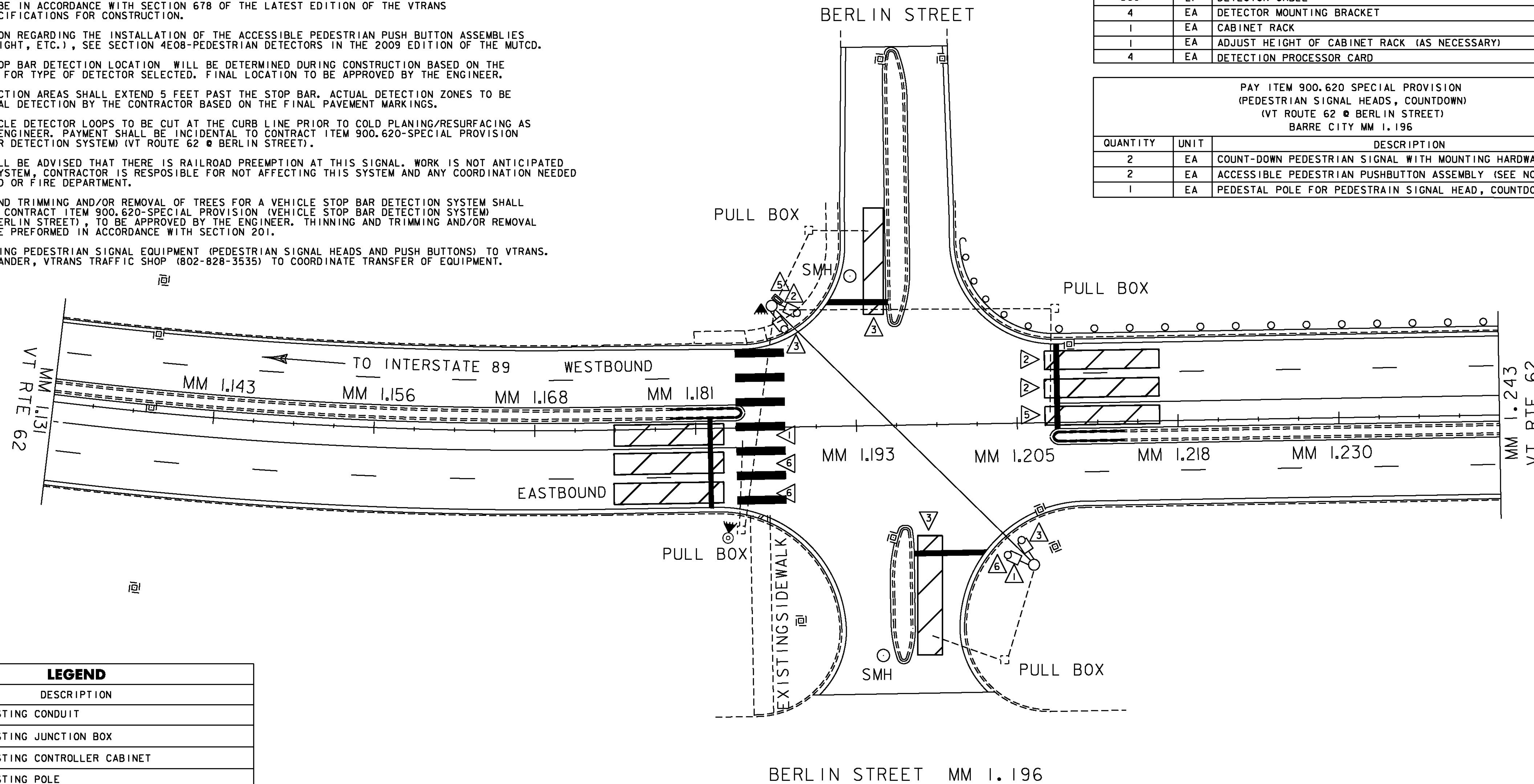
PROJECT NAME: BERLIN-BARRE CITY	
PROJECT NUMBER: NH SURF(44)	
FILE NAME: I3B634/pvtmgt/pi3b634.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
BRIDGE DETAIL SHEET 2	SHEET 14 OF 64

**NOTES:**

1. THIS PLAN SHEET IS NOT TO SCALE AND SHALL ONLY BE USED AS A GUIDE FOR THE PLACEMENT OF THE HARDWARE LISTED. THE CONTRACTOR SHALL CONFIRM ALL LOCATIONS IN THE FIELD WITH THE ENGINEER PRIOR TO INSTALLATION. LOCATIONS MAY BE REVISED AS A RESULT OF THE SITE SURVEY.
2. THE CONTRACTOR SHALL VERIFY IN THE FIELD THAT THERE IS ADEQUATE SPACE IN THE CONDUIT FOR DETECTION CABLE AND EQUIPMENT. IF ADDITIONAL CONDUIT INSTALLATION IS REQUIRED, ALL WORK ASSOCIATED WITH THE INSTALLATION SHALL BE INCIDENTAL TO CONTRACT ITEM 900.620-SPECIAL PROVISION (VEHICLE STOP BAR DETECTION SYSTEM) (VT ROUTE 62 @ BERLIN STREET). MATERIALS AND CONSTRUCTION TO BE IN ACCORDANCE WITH SECTION 678 OF THE LATEST EDITION OF THE VTRANS STANDARD FOR SPECIFICATIONS FOR CONSTRUCTION.
3. FOR INFORMATION REGARDING THE INSTALLATION OF THE ACCESSIBLE PEDESTRIAN PUSH BUTTON ASSEMBLIES (ORIENTATION, HEIGHT, ETC.), SEE SECTION 4E08-PEDESTRIAN DETECTORS IN THE 2009 EDITION OF THE MUTCD.
4. THE ACTUAL STOP BAR DETECTION LOCATION WILL BE DETERMINED DURING CONSTRUCTION BASED ON THE OPTIMAL LOCATION FOR TYPE OF DETECTOR SELECTED. FINAL LOCATION TO BE APPROVED BY THE ENGINEER.
5. STOP BAR DETECTION AREAS SHALL EXTEND 5 FEET PAST THE STOP BAR. ACTUAL DETECTION ZONES TO BE SET UP FOR OPTIMAL DETECTION BY THE CONTRACTOR BASED ON THE FINAL PAVEMENT MARKINGS.
6. EXISTING VEHICLE DETECTOR LOOPS TO BE CUT AT THE CURB LINE PRIOR TO COLD PLANING/RESURFACING AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE INCIDENTAL TO CONTRACT ITEM 900.620-SPECIAL PROVISION (VEHICLE STOP BAR DETECTION SYSTEM) (VT ROUTE 62 @ BERLIN STREET).
7. CONTRACTOR SHALL BE ADVISED THAT THERE IS RAILROAD PREEMPTION AT THIS SIGNAL. WORK IS NOT ANTICIPATED TO AFFECT THIS SYSTEM, CONTRACTOR IS RESPONSIBLE FOR NOT AFFECTING THIS SYSTEM AND ANY COORDINATION NEEDED WITH THE RAILROAD OR FIRE DEPARTMENT.
8. ANY THINNING AND TRIMMING AND/OR REMOVAL OF TREES FOR A VEHICLE STOP BAR DETECTION SYSTEM SHALL BE INCIDENTAL TO CONTRACT ITEM 900.620-SPECIAL PROVISION (VEHICLE STOP BAR DETECTION SYSTEM) (VT ROUTE 62 @ BERLIN STREET), TO BE APPROVED BY THE ENGINEER. THINNING AND TRIMMING AND/OR REMOVAL OF TREES SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 201.
9. SALVAGE EXISTING PEDESTRIAN SIGNAL EQUIPMENT (PEDESTRIAN SIGNAL HEADS AND PUSH BUTTONS) TO VTRANS. CONTACT RUSS VELANDER, VTRANS TRAFFIC SHOP (802-828-3535) TO COORDINATE TRANSFER OF EQUIPMENT.

PAY ITEM 900.620 SPECIAL PROVISION (VEHICLE STOP BAR DETECTION SYSTEM) (VT ROUTE 62 @ BERLIN STREET) BARRE CITY MM 1.196		
QUANTITY	UNIT	DESCRIPTION
4	EA	DETECTOR ASSEMBLY
500	LF	DETECTOR CABLE
4	EA	DETECTOR MOUNTING BRACKET
1	EA	CABINET RACK
1	EA	ADJUST HEIGHT OF CABINET RACK (AS NECESSARY)
4	EA	DETECTION PROCESSOR CARD

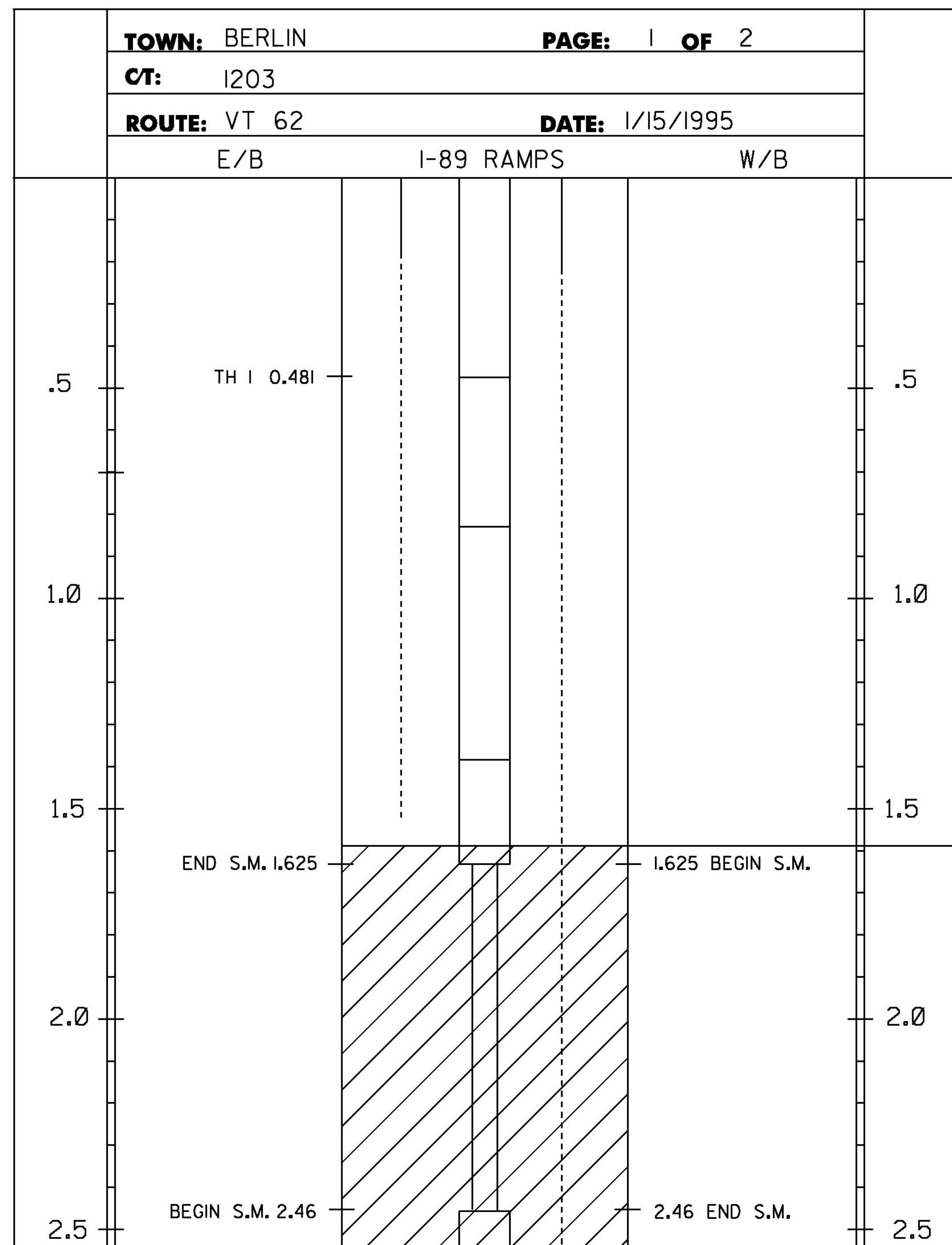
PAY ITEM 900.620 SPECIAL PROVISION (PEDESTRIAN SIGNAL HEADS, COUNTDOWN) (VT ROUTE 62 @ BERLIN STREET) BARRE CITY MM 1.196		
QUANTITY	UNIT	DESCRIPTION
2	EA	COUNT-DOWN PEDESTRIAN SIGNAL WITH MOUNTING HARDWARE
2	EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON ASSEMBLY (SEE NOTE 3)
1	EA	PEDESTAL POLE FOR PEDESTRIAN SIGNAL HEAD, COUNTDOWN



LEGEND	
DESCRIPTION	
---	EXISTING CONDUIT
[ ]	EXISTING JUNCTION BOX
[ ]	EXISTING CONTROLLER CABINET
[ ]	EXISTING POLE
[ ]	EXISTING DETECTION AREA
[ ]	DETECTION AREA
[ ]	EXISTING DETECTOR
[ ]	PROPOSED DETECTOR
[ ]	EXISTING VEHICLE SIGNAL
[ ]	PROPOSED VEHICLE SIGNAL
[ ]	EXISTING PULL BOX
[ ]	EXISTING PEDESTRIAN SIGNAL
[ ]	PROPOSED COUNT-DOWN PEDESTRIAN SIGNAL
[ ]	PROPOSED VEHICLE STOP BAR DETECTOR
[ ]	EXISTING WIRELESS INTERCONNECT ANTENNA

PROJECT NAME: BERLIN-BARRE CITY	PLOT DATE: 06-JUN-2014
PROJECT NUMBER: NH SURF(44)	DRAWN BY: PVT. MGT.
FILE NAME: I3B634/pvtmgt/pl3b634.dgn	CHECKED BY: PVT. MGT.
PROJECT LEADER: J. HARRINGTON	SHEET 15 OF 64
DESIGNED BY: PVT. MGT.	
VEHICLE DETECTION DETAIL SHEET	

**NOT TO SCALE**



DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT

BERLIN:  
 MM 1.598 - 2.935 RT. (EDGE LINE - SOLID)  
 MM 1.598 - 2.935 LT. (EDGE LINE - SOLID)  
 MM 1.598 - 2.935 LT. (DASH)  
 MM 2.541 - 2.935 RT. (DASH)

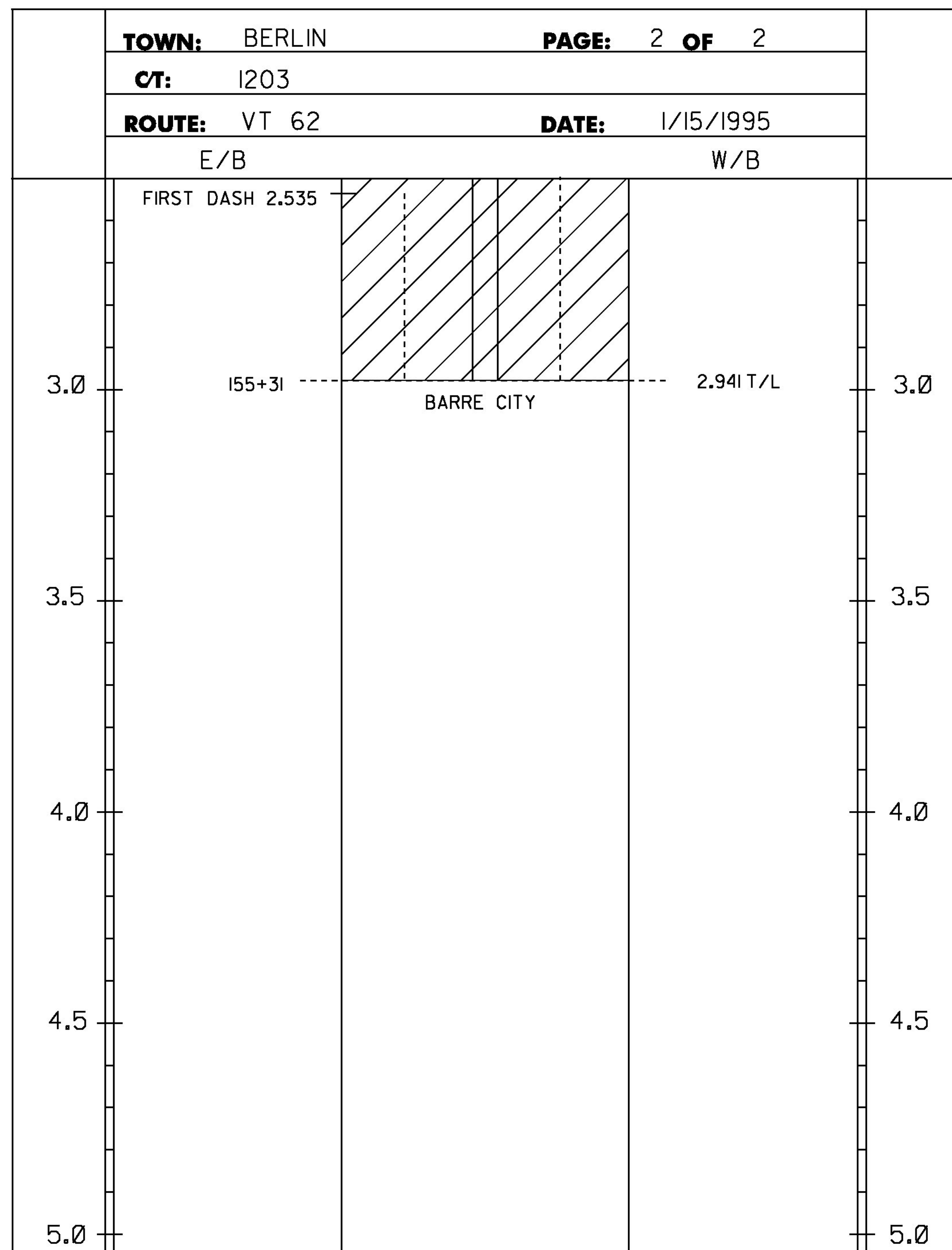
DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT

BERLIN:  
 MM 1.598 - 1.632 RT. (DBL. SOLID RT. PAINTED ISLAND)  
 MM 1.598 - 1.632 LT. (DBL. SOLID LT. PAINTED ISLAND)  
 MM 1.632 - 2.496 CTR. (DBL. SOLID)  
 MM 2.496 - 2.531 RT. (DBL. SOLID RT. PAINTED ISLAND)  
 MM 2.496 - 2.530 LT. (DBL. SOLID LT. PAINTED ISLAND)  
 MM 2.531 - 2.935 RT. (SINGLE SOLID MEDIAN)  
 MM 2.531 - 2.935 LT. (SINGLE SOLID MEDIAN)

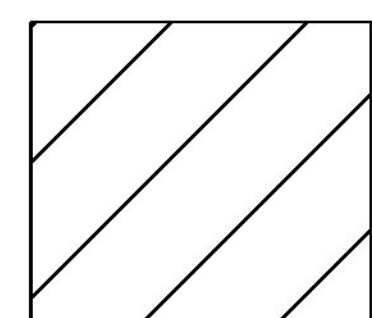
DURABLE 12 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 12 INCH YELLOW LINE, PAINT

BERLIN:  
 MM 2.508 - 2.526 RT. (DIAGONALS)

**MM 1.598**  
**BEGIN PROJECT**  
**NH SURF(44)**



**LEGEND**  
 TWBH-THROUGHWAY BEGINS HERE  
 TWEH-THROUGHWAY ENDS HERE  
 SHB-STATE HIGHWAY BEGINS  
 SHE-STATE HIGHWAY ENDS  
 SL-SPEED LIMIT  
 C/4 TH- CLASS 4 TOWN HIGHWAY  
 T/L-TOWN LINE

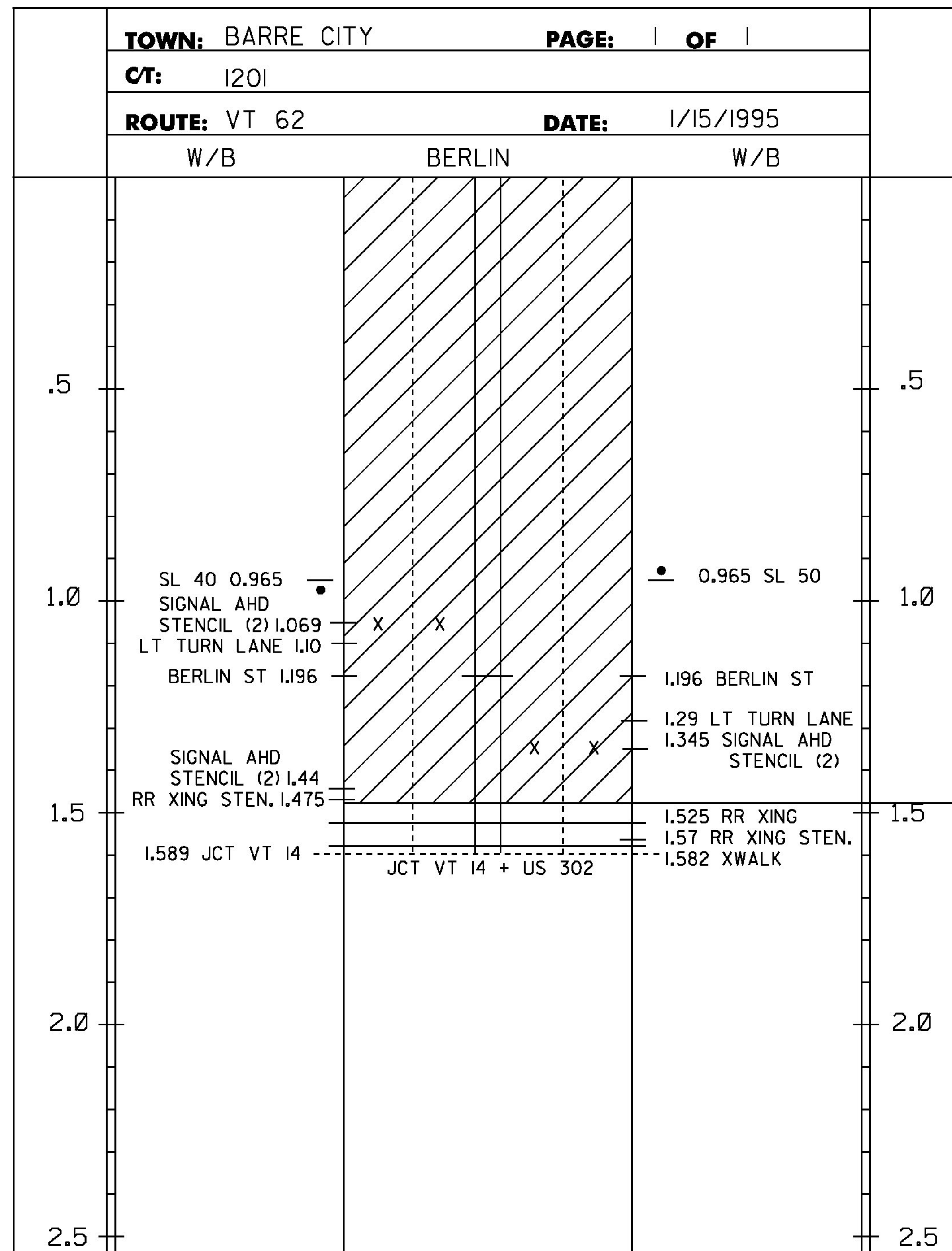


PROJECT AREA

NOTES:  
 1. THIS SHEET TO BE USED FOR THE LAYOUT OF ALL CENTERLINE PAVEMENT MARKINGS.  
 THE RESIDENT ENGINEER MAY CONTACT KEITH SWEET, PAVEMENT MARKING SUPERVISOR  
 AT (802) 828-5573 FOR ASSISTANCE LAYING OUT THE CENTERLINE DURING CONSTRUCTION.

**NOT TO SCALE**

PROJECT NAME: BERLIN-BARRE CITY	
PROJECT NUMBER: NH SURF(44)	
FILE NAME: I3B634/pvtmgf/p13b634.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
LAYOUT SHEET 1	SHEET 16 OF 64



DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT

BARRE CITY:  
 MM 0.000 - 1.188 RT. (EDGE LINE - SOLID RT.)  
 MM 0.000 - 1.183 RT. (DASH)  
 MM 1.093 - 1.128 RT. (DLE)  
 MM 1.128 - 1.183 RT. (LANE LINE - SOLID)  
 MM 1.203 - 1.524 RT. (EDGE LINE - SOLID)  
 MM 1.208 - 1.524 RT. (DASH)  
 MM 0.000 - 1.188 LT. (EDGE LINE - SOLID)  
 MM 0.000 - 1.183 LT. (DASH)  
 MM 1.208 - 1.250 LT. (LANE LINE - SOLID)  
 MM 1.250 - 1.280 LT. (DLE)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT

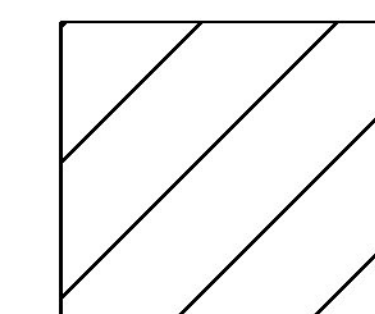
BARRE CITY:  
 MM 0.000 - 1.183 RT. (SINGLE SOLID MEDIAN)  
 MM 0.000 - 1.183 LT. (SINGLE SOLID MEDIAN)  
 MM 1.208 - 1.524 RT. (SINGLE SOLID MEDIAN)  
 MM 1.208 - 1.524 LT. (SINGLE SOLID MEDIAN)

DURABLE LETTER OR SYMBOL, THERMOPLASTIC OR  
 DURABLE LETTER OR SYMBOL, POLYUREA (OPTION ITEM)  
 TEMPORARY LETTER OR SYMBOL, PAINT

BARRE CITY:  
 MM 1.063 RT. (SIGNAL)(2)  
 MM 1.073 RT. (AHEAD)(2)

**MM 1.524  
 END PROJECT  
 NH SURF(44)**

**LEGEND**  
 TWBH-THROUGHWAY BEGINS HERE  
 TWEH-THROUGHWAY ENDS HERE  
 SHB-STATE HIGHWAY BEGINS  
 SHE-STATE HIGHWAY ENDS  
 SL-SPEED LIMIT  
 C/4 TH- CLASS 4 TOWN HIGHWAY  
 T/L-TOWN LINE



PROJECT AREA

NOTES:  
 1. THIS SHEET TO BE USED FOR THE LAYOUT OF ALL CENTERLINE PAVEMENT MARKINGS.  
 THE RESIDENT ENGINEER MAY CONTACT KEITH SWEET, PAVEMENT MARKING SUPERVISOR  
 AT (802) 828-5573 FOR ASSISTANCE LAYING OUT THE CENTERLINE DURING CONSTRUCTION.

**NOT TO SCALE**

PROJECT NAME: BERLIN-BARRE CITY	
PROJECT NUMBER: NH SURF(44)	
FILE NAME: I3B634/pvtmgt/pl3b634.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
LAYOUT SHEET 2	SHEET 17 OF 64

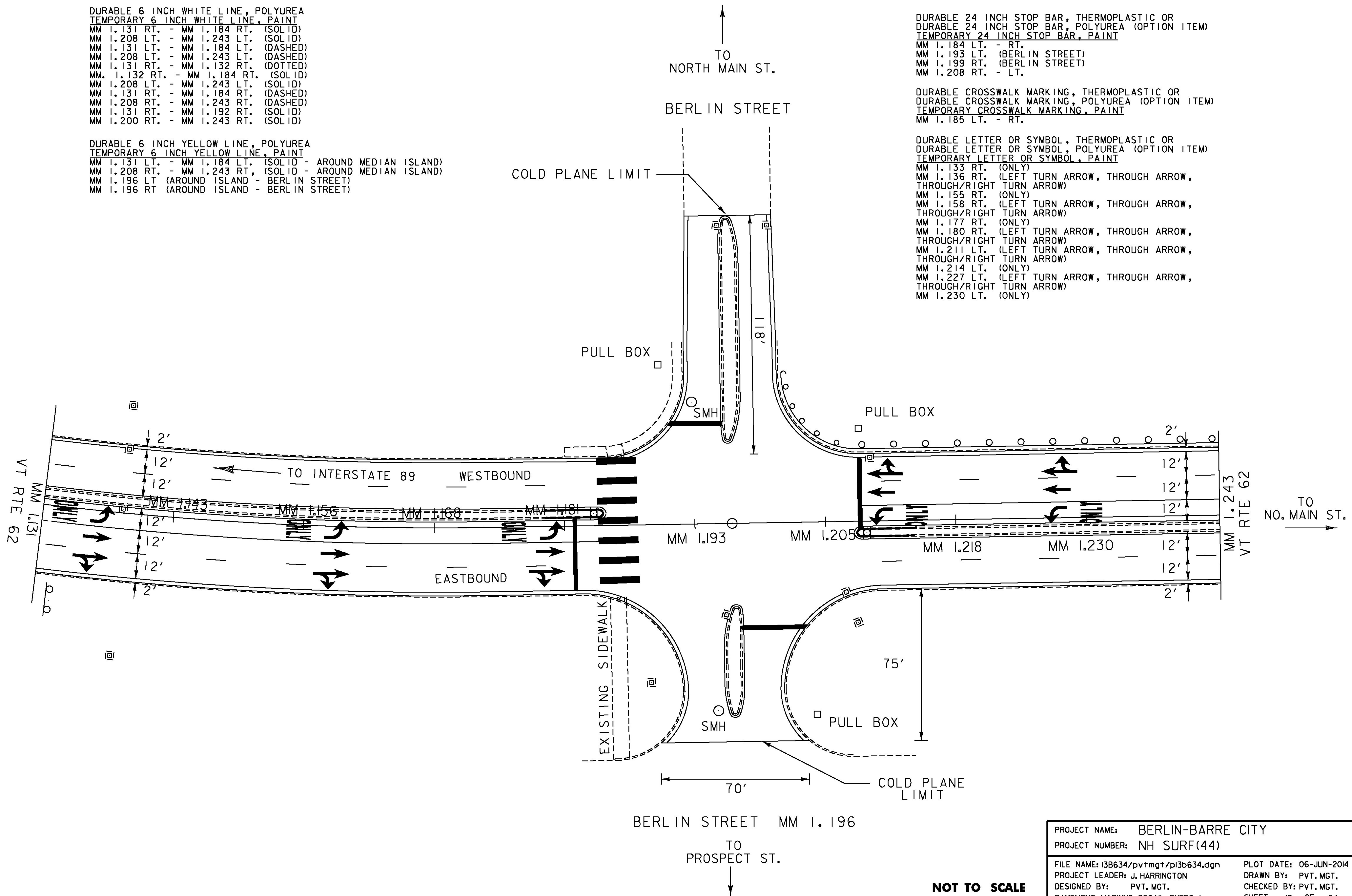
DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 MM 1.131 RT. - MM 1.184 RT. (SOLID)  
 MM 1.208 LT. - MM 1.243 LT. (SOLID)  
 MM 1.131 LT. - MM 1.184 LT. (DASHED)  
 MM 1.208 LT. - MM 1.243 LT. (DASHED)  
 MM 1.131 RT. - MM 1.132 RT. (DOTTED)  
 MM 1.132 RT. - MM 1.184 RT. (SOLID)  
 MM 1.208 LT. - MM 1.243 LT. (SOLID)  
 MM 1.131 RT. - MM 1.184 RT. (DASHED)  
 MM 1.208 RT. - MM 1.243 RT. (DASHED)  
 MM 1.131 RT. - MM 1.192 RT. (SOLID)  
 MM 1.200 RT. - MM 1.243 RT. (SOLID)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 MM 1.131 LT. - MM 1.184 LT. (SOLID - AROUND MEDIAN ISLAND)  
 MM 1.208 RT. - MM 1.243 RT. (SOLID - AROUND MEDIAN ISLAND)  
 MM 1.196 LT. (AROUND ISLAND - BERLIN STREET)  
 MM 1.196 RT. (AROUND ISLAND - BERLIN STREET)

DURABLE 24 INCH STOP BAR, THERMOPLASTIC OR  
 DURABLE 24 INCH STOP BAR, POLYUREA (OPTION ITEM)  
 TEMPORARY 24 INCH STOP BAR, PAINT  
 MM 1.184 LT. - RT.  
 MM 1.193 LT. (BERLIN STREET)  
 MM 1.199 RT. (BERLIN STREET)  
 MM 1.208 RT. - LT.

DURABLE CROSSWALK MARKING, THERMOPLASTIC OR  
 DURABLE CROSSWALK MARKING, POLYUREA (OPTION ITEM)  
 TEMPORARY CROSSWALK MARKING, PAINT  
 MM 1.185 LT. - RT.

DURABLE LETTER OR SYMBOL, THERMOPLASTIC OR  
 DURABLE LETTER OR SYMBOL, POLYUREA (OPTION ITEM)  
 TEMPORARY LETTER OR SYMBOL, PAINT  
 MM 1.133 RT. (ONLY)  
 MM 1.136 RT. (LEFT TURN ARROW, THROUGH ARROW,  
 THROUGH/RIGHT TURN ARROW)  
 MM 1.155 RT. (ONLY)  
 MM 1.158 RT. (LEFT TURN ARROW, THROUGH ARROW,  
 THROUGH/RIGHT TURN ARROW)  
 MM 1.177 RT. (ONLY)  
 MM 1.180 RT. (LEFT TURN ARROW, THROUGH ARROW,  
 THROUGH/RIGHT TURN ARROW)  
 MM 1.211 LT. (LEFT TURN ARROW, THROUGH ARROW,  
 THROUGH/RIGHT TURN ARROW)  
 MM 1.214 LT. (ONLY)  
 MM 1.227 LT. (LEFT TURN ARROW, THROUGH ARROW,  
 THROUGH/RIGHT TURN ARROW)  
 MM 1.230 LT. (ONLY)



**NOT TO SCALE**

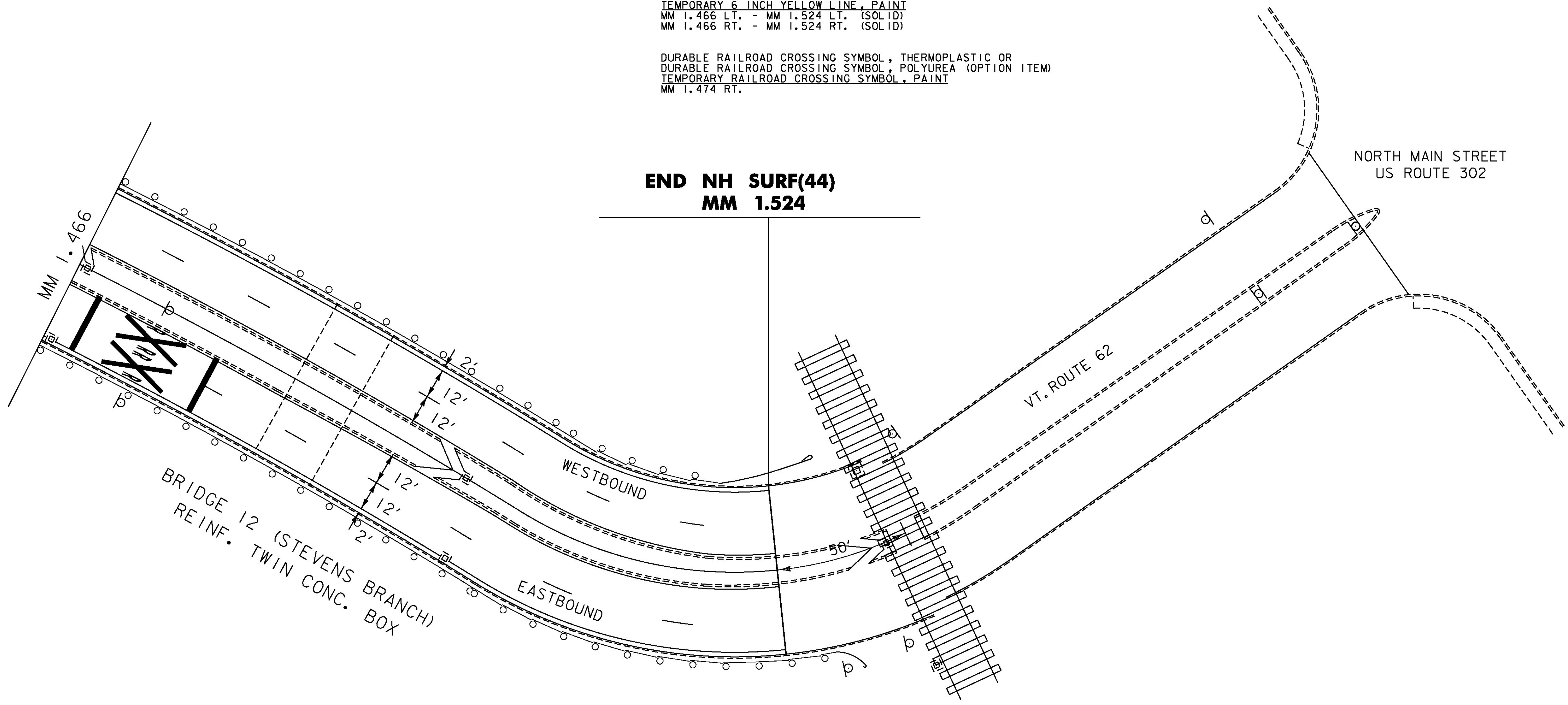
PROJECT NAME: BERLIN-BARRE CITY	PLOT DATE: 06-JUN-2014
PROJECT NUMBER: NH SURF(44)	DRAWN BY: PVT. MGT.
FILE NAME: I3B634/pvtmgt/pl3b634.dgn	CHECKED BY: PVT. MGT.
PROJECT LEADER: J. HARRINGTON	SHEET 18 OF 64
DESIGNED BY: PVT. MGT.	PAVEMENT MARKING DETAIL SHEET 1

DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 MM 1.466 LT. - MM 1.524 LT. (SOLID)  
 MM 1.466 RT. - MM 1.524 RT. (DASHED)  
 MM 1.466 LT. - MM 1.524 LT. (DASHED)  
 MM 1.466 RT. - MM 1.524 RT. (SOLID)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 MM 1.466 LT. - MM 1.524 LT. (SOLID)  
 MM 1.466 RT. - MM 1.524 RT. (SOLID)

DURABLE RAILROAD CROSSING SYMBOL, THERMOPLASTIC OR  
 DURABLE RAILROAD CROSSING SYMBOL, POLYUREA (OPTION ITEM)  
 TEMPORARY RAILROAD CROSSING SYMBOL, PAINT  
 MM 1.474 RT.

**END NH SURF(44)  
 MM 1.524**

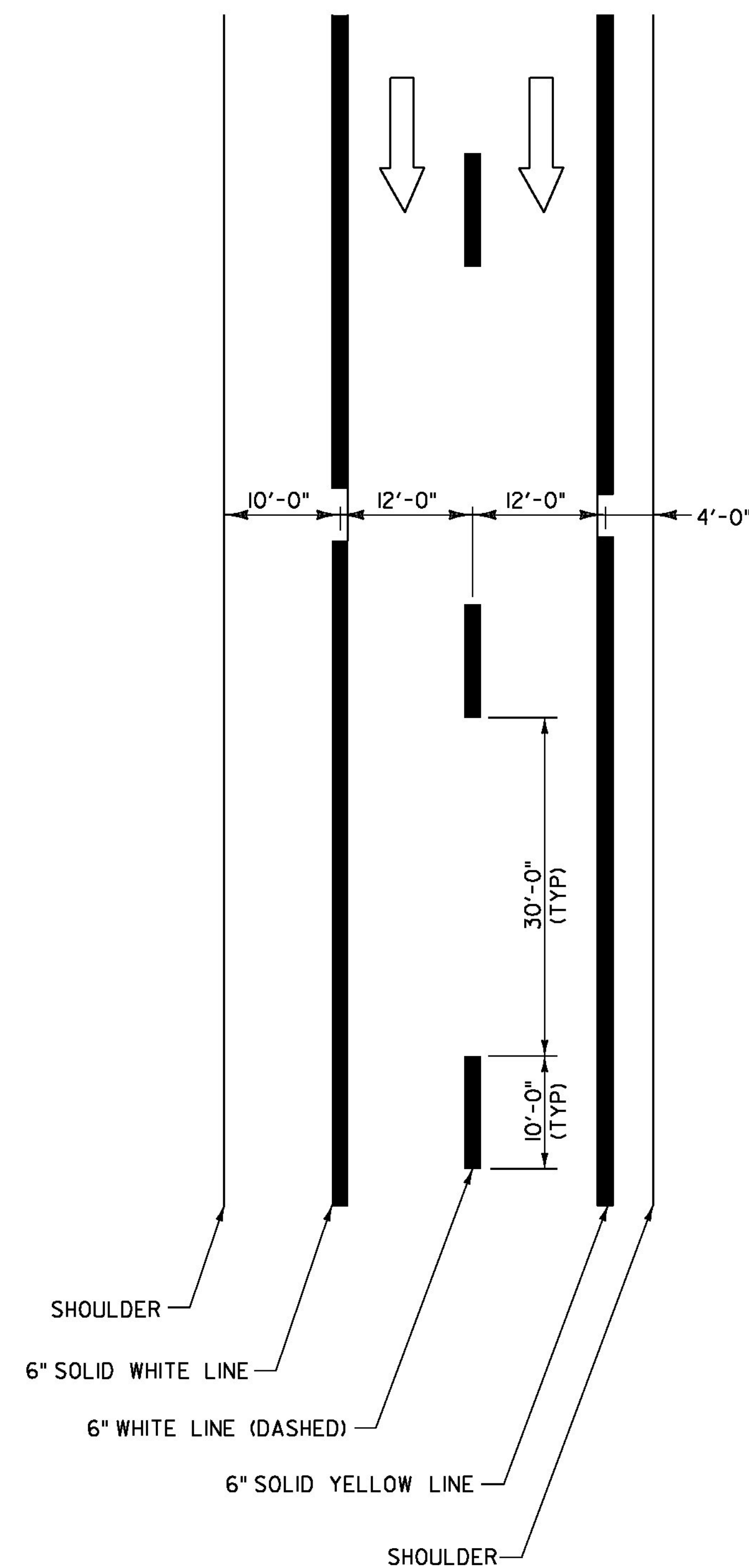


**NOTE:**

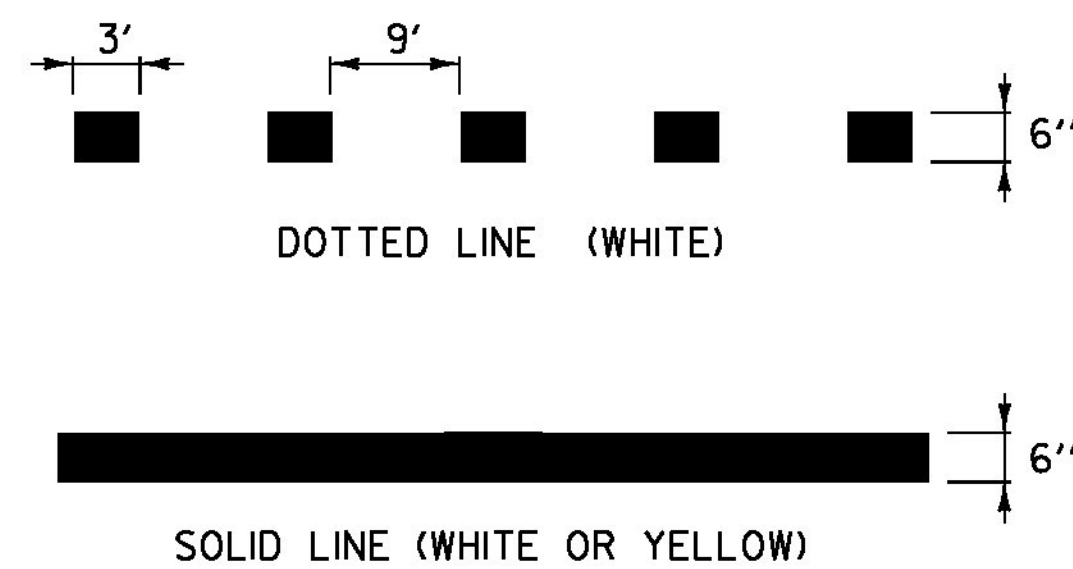
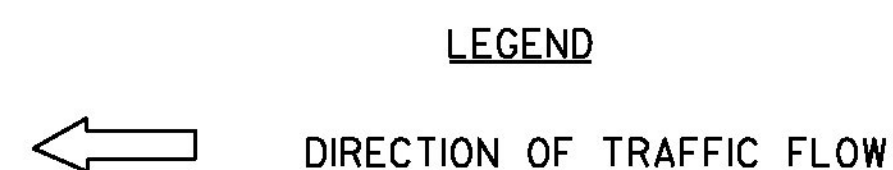
THE CONTRACTOR SHALL NOT PLACE OR PUT INTO OPERATION EQUIPMENT INSIDE THE RAILROAD FOUL ZONE. A TRACK SHALL BE CONSIDERED FOULED AND SUBJECT TO HAZARD WHEN ANY OBJECT OR OPERATION IS BROUGHT CLOSER THAN TWENTY-FIVE (25) FEET TO THE CENTERLINE OF TRACKS.

**NOT TO SCALE**

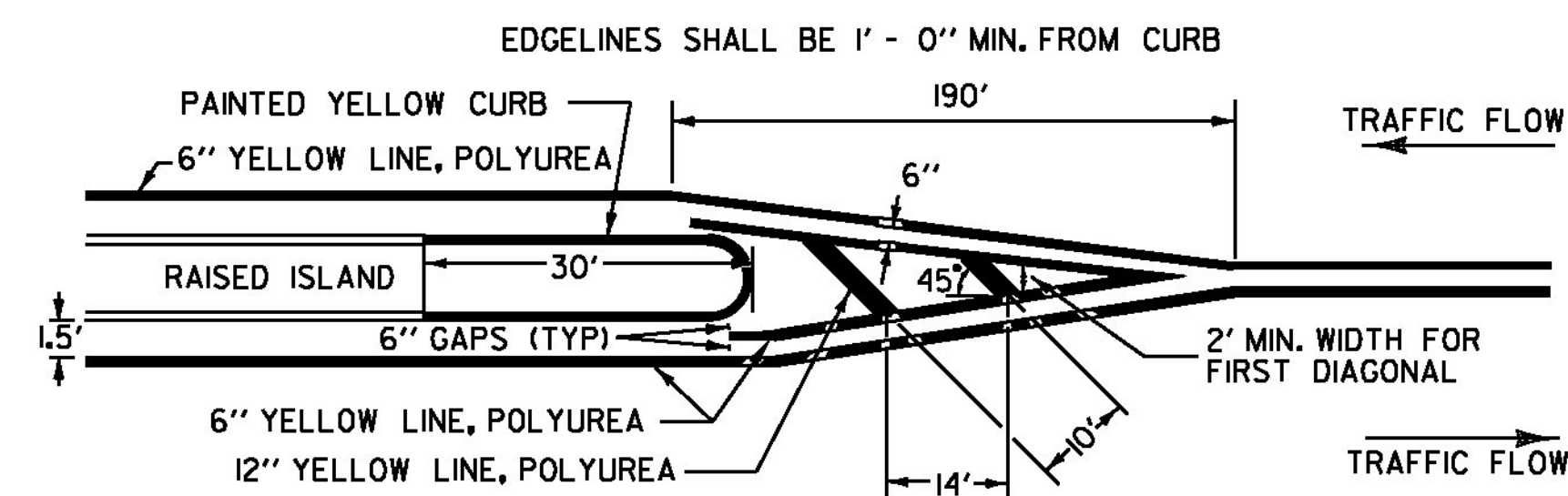
PROJECT NAME: BERLIN-BARRE CITY	PLOT DATE: 06-JUN-2014
PROJECT NUMBER: NH SURF(44)	DRAWN BY: PVT. MGT.
FILE NAME: I3B634/pvtmgt/pi3b634.dgn	CHECKED BY: PVT. MGT.
PROJECT LEADER: J. HARRINGTON	SHEET 19 OF 64
DESIGNED BY: PVT. MGT.	PAVEMENT MARKING DETAIL SHEET 2



**TYPICAL MAINLINE MARKING PLAN**

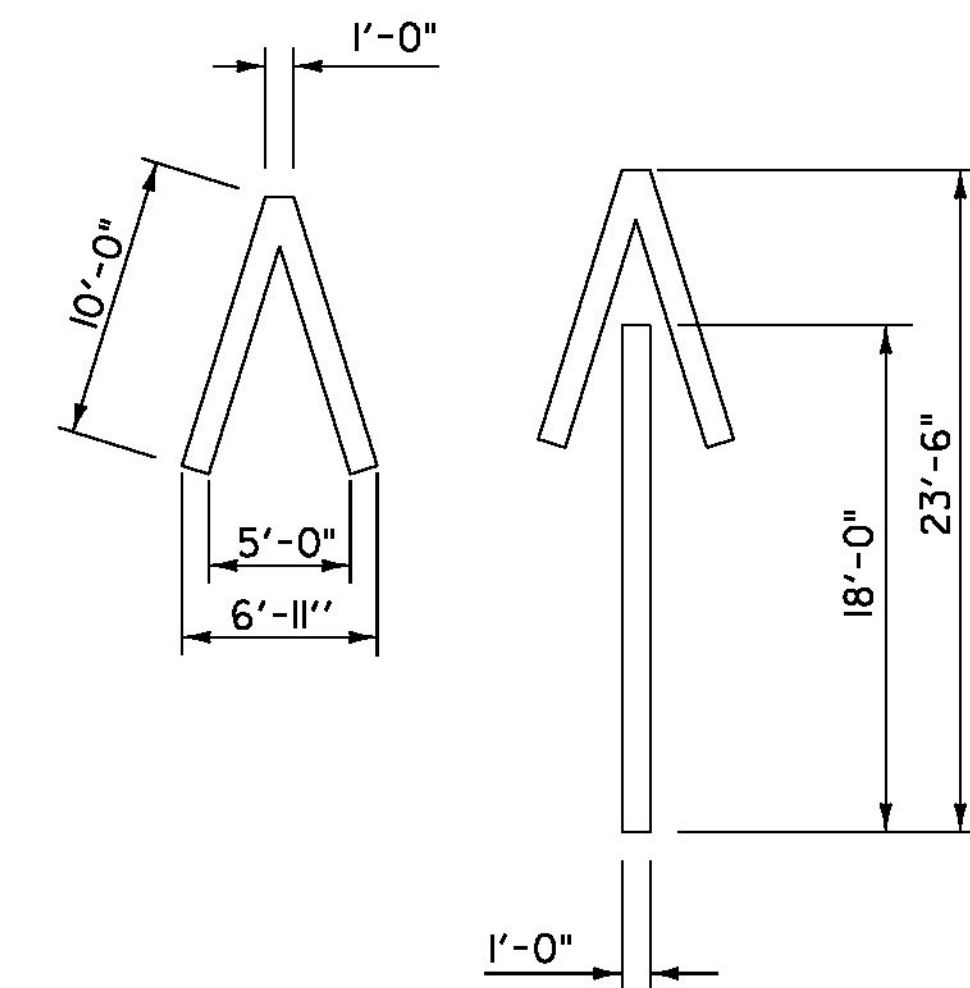


**PAVEMENT MARKING LINE DETAILS**



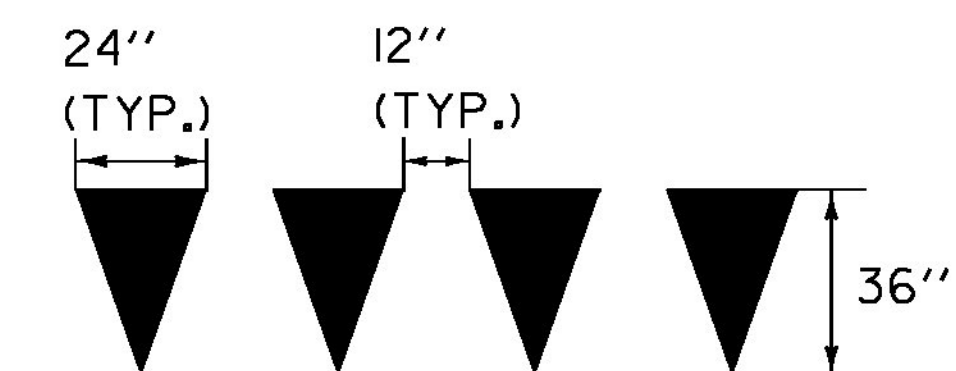
**ISLAND APPROACH MARKINGS**

MM 2.541



**WRONG WAY ARROW**

MARKINGS TO BE PLACED AT EXISTING WRONG WAY SIGN



**YIELD LINE DETAILS**

TO BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.  
ONE TRIANGLE TO BE PAID AS ONE SYMBOL.

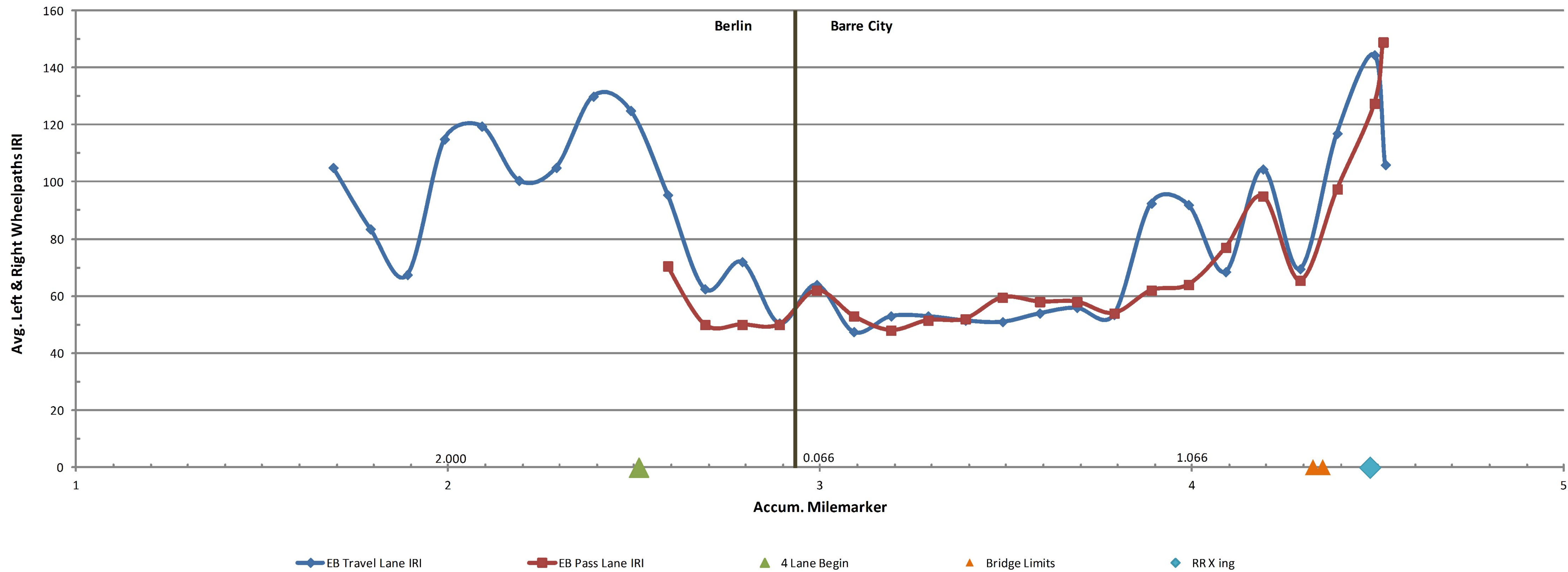
**NOT TO SCALE**

PROJECT NAME: BERLIN-BARRE CITY	PLOT DATE: 06-JUN-2014
PROJECT NUMBER: NH SURF(44)	DRAWN BY: PVT. MGT.
FILE NAME: I3B634/pvtmgt/pi3b634.dgn	CHECKED BY: PVT. MGT.
PROJECT LEADER: J. HARRINGTON	SHEET 20 OF 64
DESIGNED BY: PVT. MGT.	
PAVEMENT MARKING DETAIL SHEET 3	

### VT 62 Berlin-Barre City EB NH SURF (44) Preconstruction IRI

Profiled 10/10/2013

EB Travel Lane Avg. IRI = 83.6 EB Pass Lane Avg. IRI = 69.2

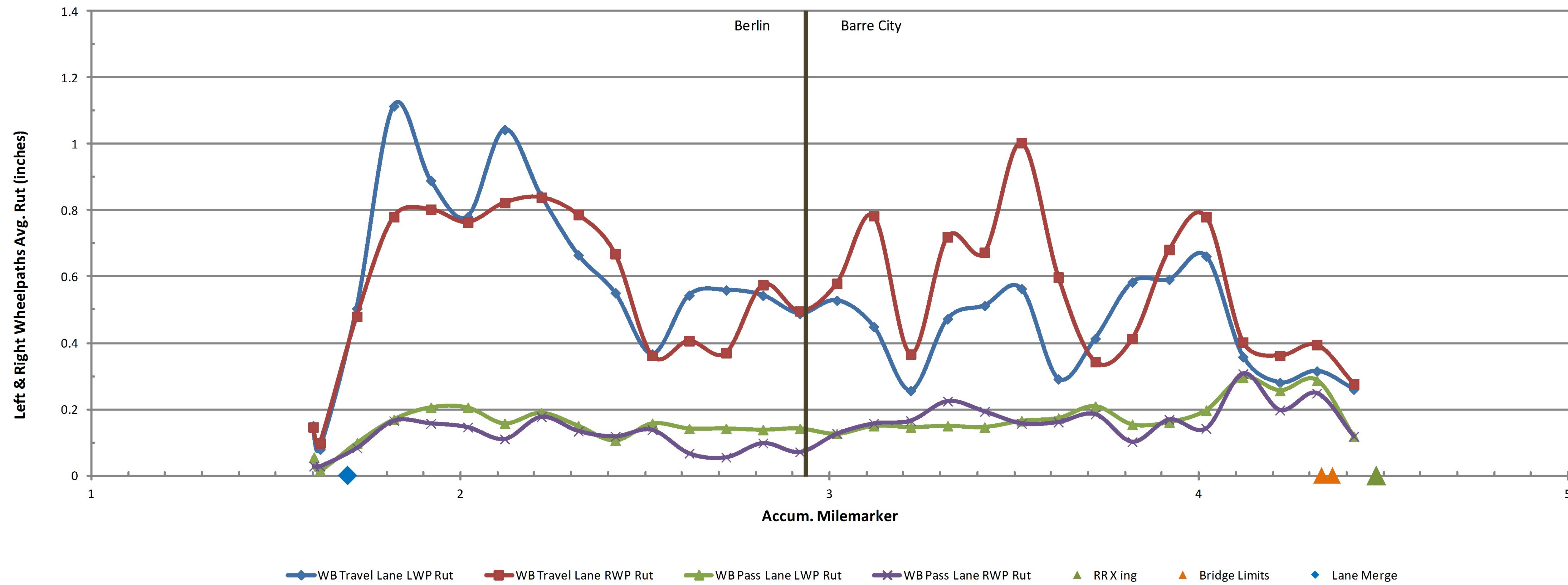


**NOT TO SCALE**

PROJECT NAME: BERLIN-BARRE CITY	
PROJECT NUMBER: NH SURF(44)	
FILE NAME: I3B634/pvtmgt/pi3b634.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
ROUGHNESS DATA INFORMATION SHEET	SHEET 21 OF 64

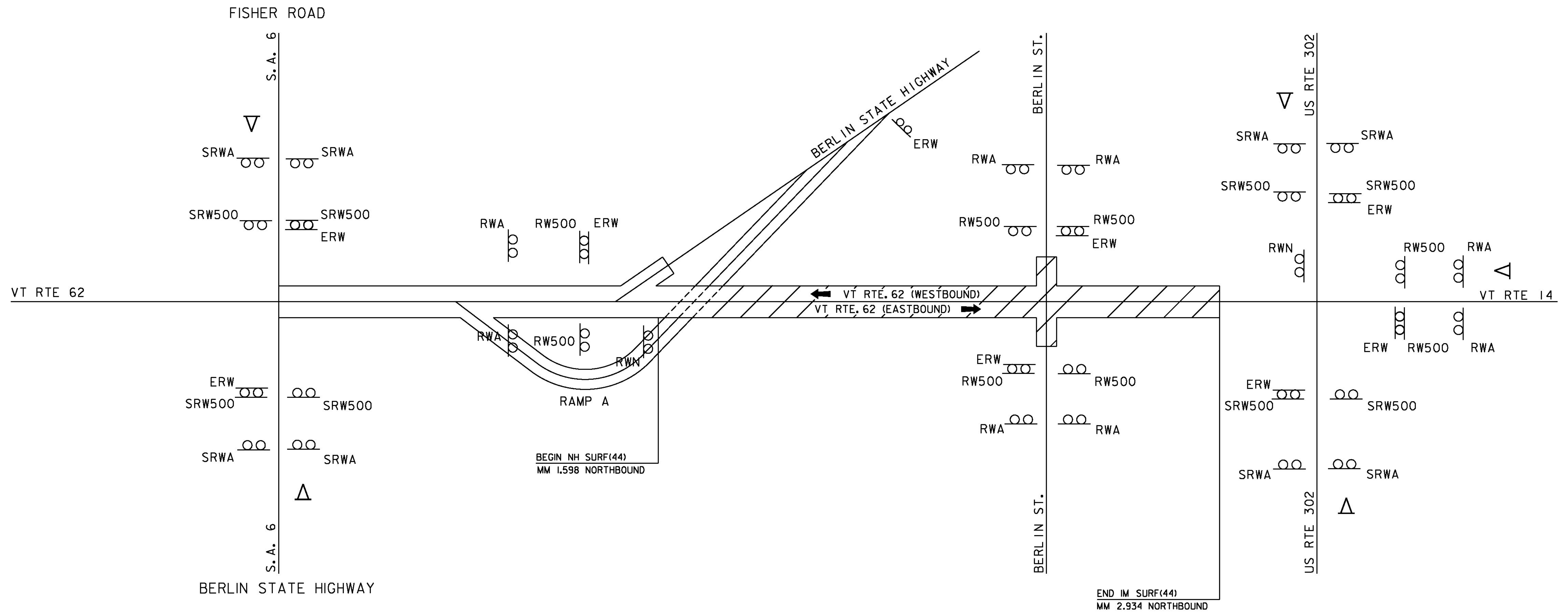
### VT 62 Berlin-Barre City NH SURF(44) Preconstruction Ruts

Profiled 10/10/2013



**NOT TO SCALE**

PROJECT NAME:	BERLIN-BARRE CITY
PROJECT NUMBER:	NH SURF(44)
FILE NAME:	I3B634/pvtmgt/pi3b634.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
RUTTING DATA INFORMATION SHEET	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	22 OF 64



- LEGEND**
- RWA = ROAD WORK AHEAD
  - RW500 = ROAD WORK IN 500 FEET
  - RWN = ROAD WORK NEXT (XX MILES)
  - ERW = END ROAD WORK
  - SRWA = SIDE ROAD WORK AHEAD
  - SRW500 = SIDE ROAD WORK 500 FEET
  - △ = PORTABLE CHANGEABLE MESSAGE SIGN
  - [Hatched Box] = WORK AREA
  - ← = DIRECTION OF TRAFFIC FLOW

SEE VAOT STANDARDS T-1, T-10, T-11 AND T-13 FOR SIGN PLACEMENT.  
 CONSTRUCTION APPROACH SIGNING SHALL BE PLACED AS NOT TO  
 INTERFERE WITH EXISTING TRAFFIC CONTROL DEVICES.  
 SEE COMPOSITE TRAFFIC NOTES SHEET.

**NOT TO SCALE**

PROJECT NAME: BERLIN-BARRE CITY	
PROJECT NUMBER: NH SURF(44)	
FILE NAME: I3B634/pvtmgt/pi3b634.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
CONSTRUCTION APPROACH SIGNING SHEET	SHEET 23 OF 64

# STATE OF VERMONT AGENCY OF TRANSPORTATION

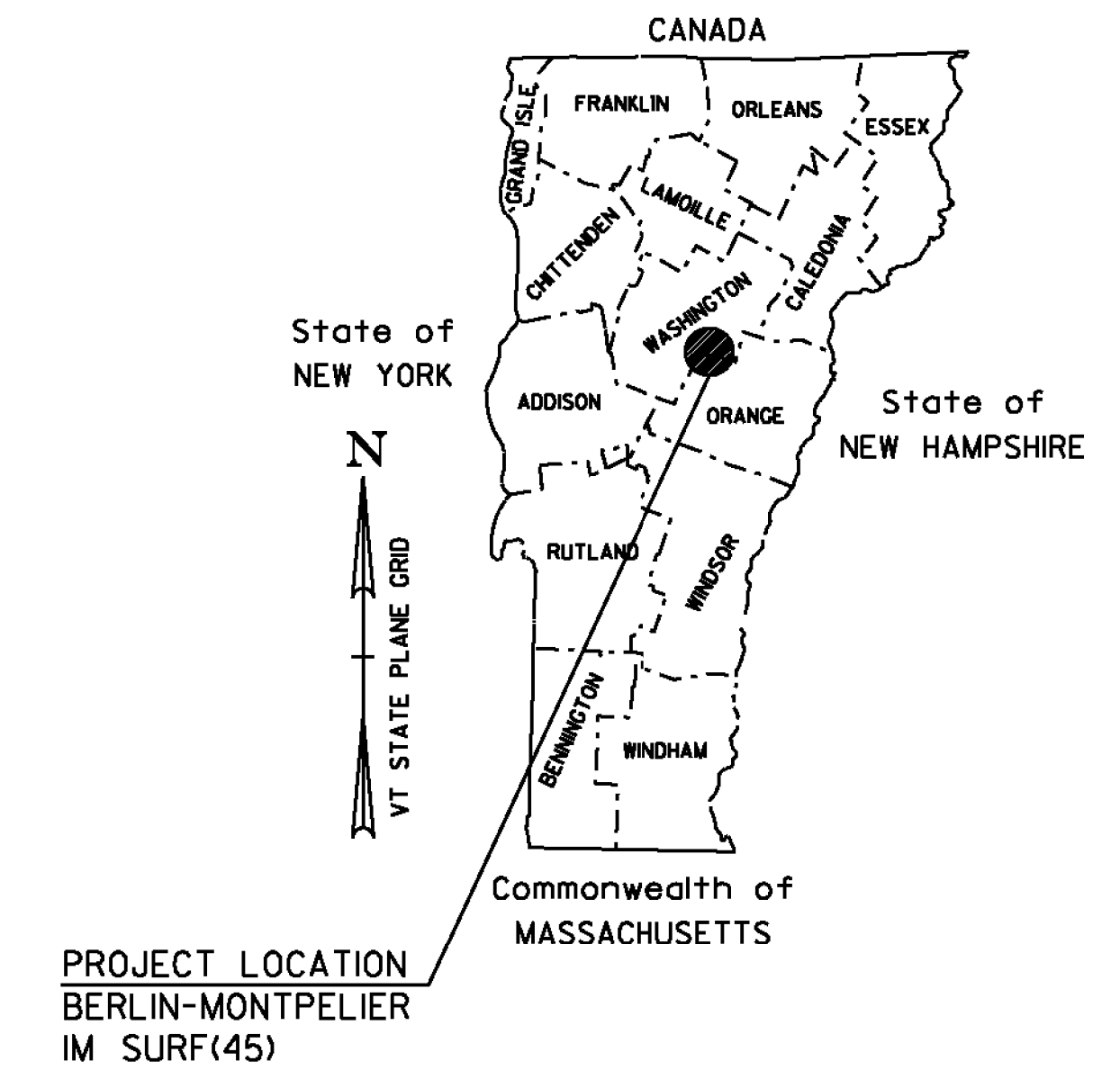


## PROPOSED IMPROVEMENT TOWNS OF BERLIN & MONTPELIER COUNTY OF WASHINGTON INTERSTATE ROUTE 89 (NB)(PRINCIPAL ARTERIAL - NHS)

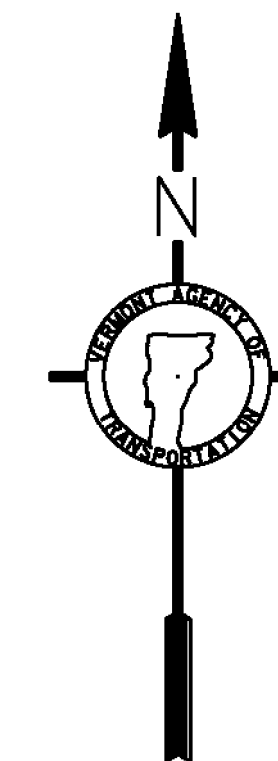
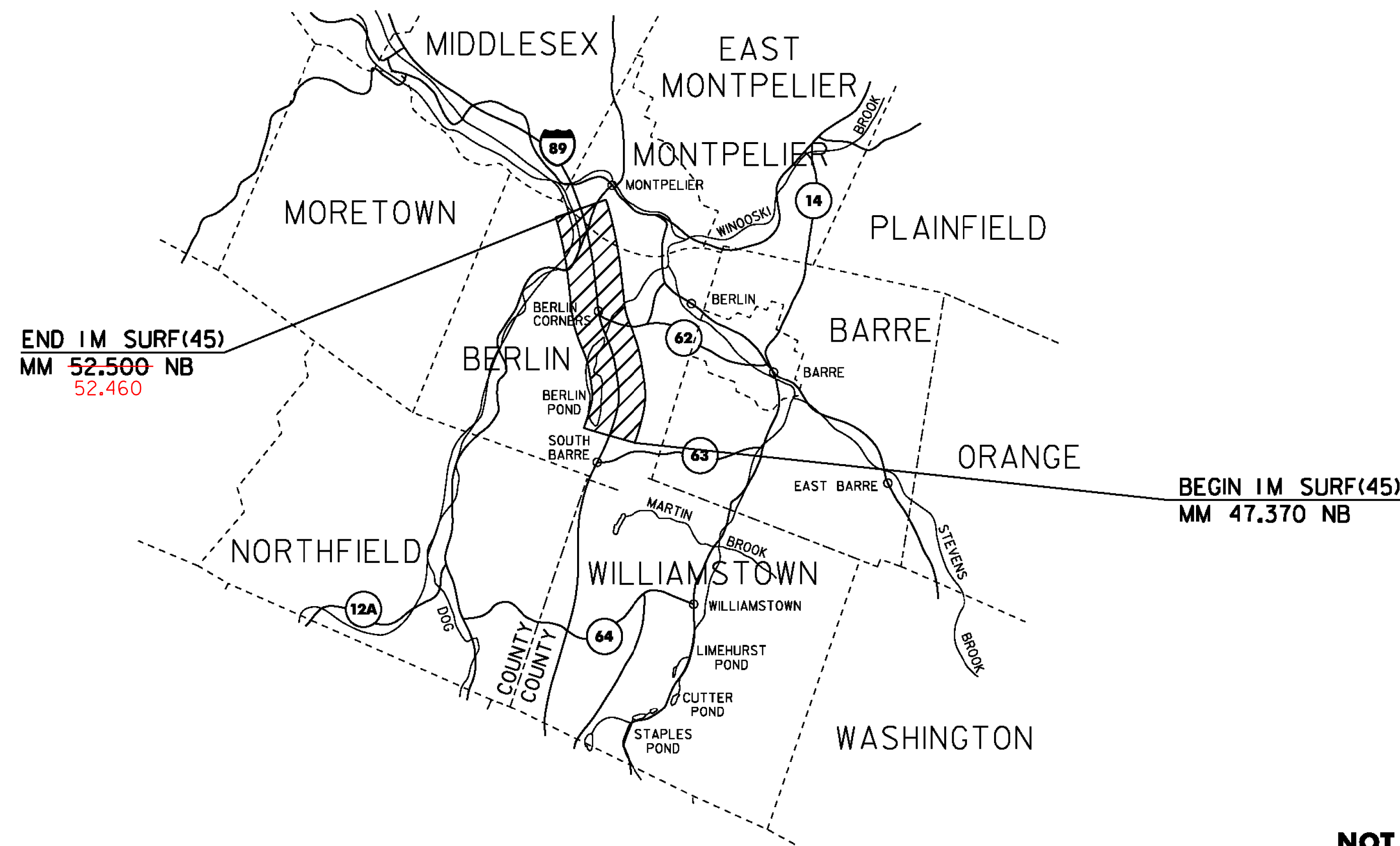
BEGINNING IN THE TOWN OF BERLIN AT MM 47.370 AND EXTENDING NORTHERLY  
ALONG INTERSTATE ROUTE 89 (NORTHBOUND LANE) FOR A DISTANCE OF  
27,086.40 FEET (5.130 MILES) TO MM 52.500 IN THE TOWN OF MONTPELIER.

LENGTH OF ROADWAY = 27,086.40 FEET (5.130 MILES)  
LENGTH OF PROJECT = 27,086.40 FEET (5.130 MILES)

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



TRAFFIC DATA						
I-89 NORTHBOUND	2014 AADT	2024 AADT	2014 DHV	2024 DHV	FLEXIBLE ESALS (2014-2024)	FLEXIBLE ESALS (2014-2034)
BEGIN PROJECT TO EXIT 7	9000	9600	1100	1200	2,408,000	5,447,000
EXIT 7 TO END PROJECT	10,800	11,600	1300	1400	5,123,000	11,939,000

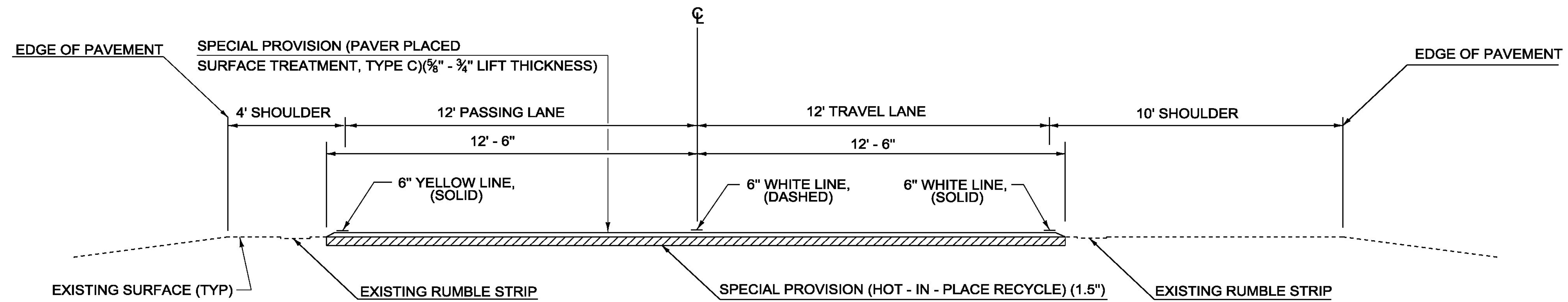


THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.  
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL 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.

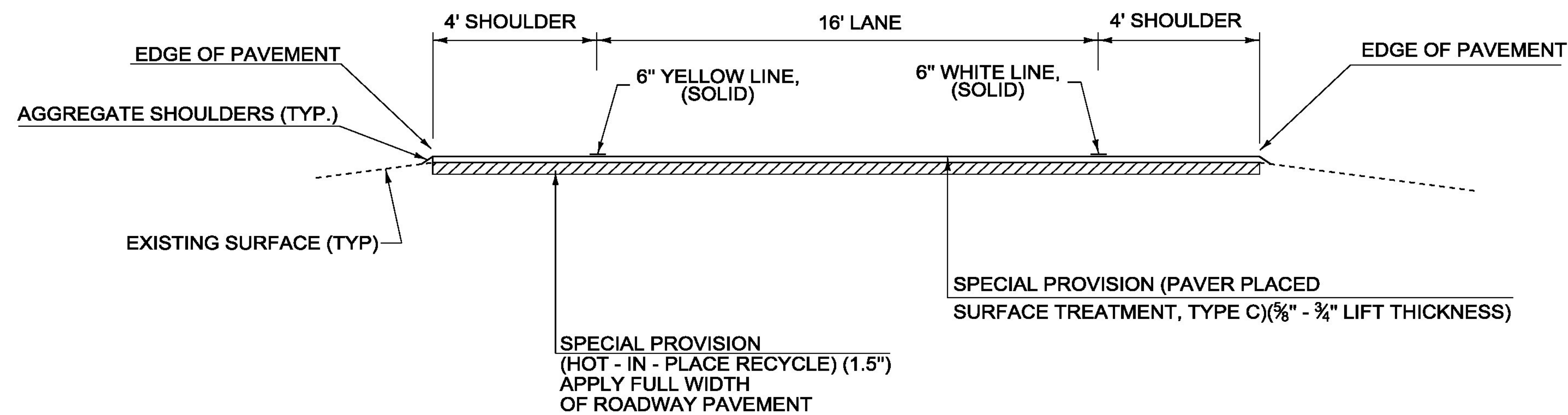
QUALITY ASSURANCE PROGRAM : LEVEL I	
SURVEYED BY :	NA
SURVEYED DATE :	NA
DATUM	
VERTICAL	NA
HORIZONTAL	NA

**NOT TO SCALE**

PROJECT MANAGER :	JONATHAN C. HARRINGTON, P. E.
PROJECT NAME :	BERLIN-MONTPELIER
PROJECT NUMBER :	IM SURF (45)
SHEET	24 OF 64



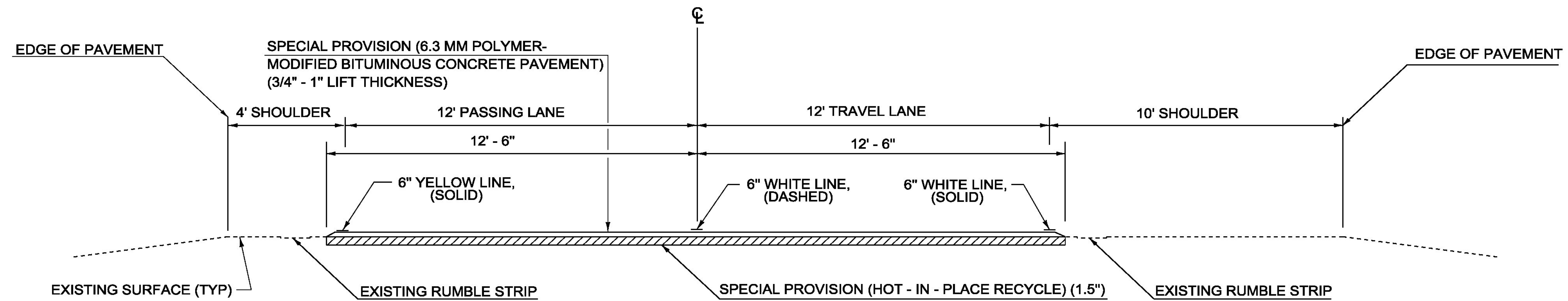
**TYPICAL SECTION - ALTERNATE A**  
**I - 89 NORTHBOUND - BERLIN MM 47.370 - MONTPELIER MM 52.500**



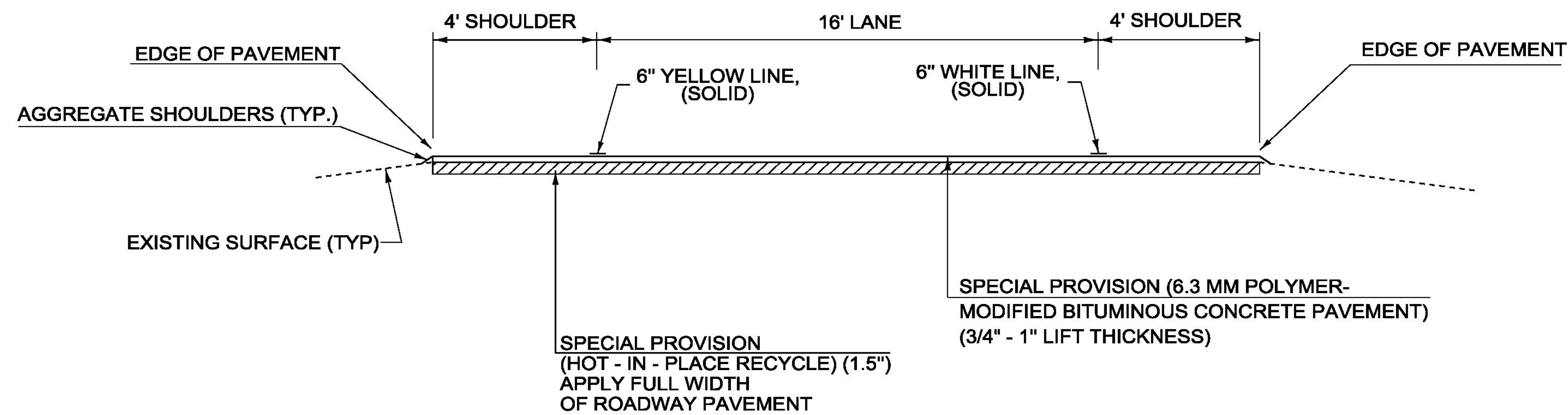
**TYPICAL RAMP SECTION**

PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/pl3a636_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
TYPICAL SECTIONS - ALTERNATE A	
DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	25 OF 64

**NOT TO SCALE**



**TYPICAL SECTION - ALTERNATE B**  
**I - 89 NORTHBOUND - BERLIN MM 47.370 - MONTPELIER MM 52.500**

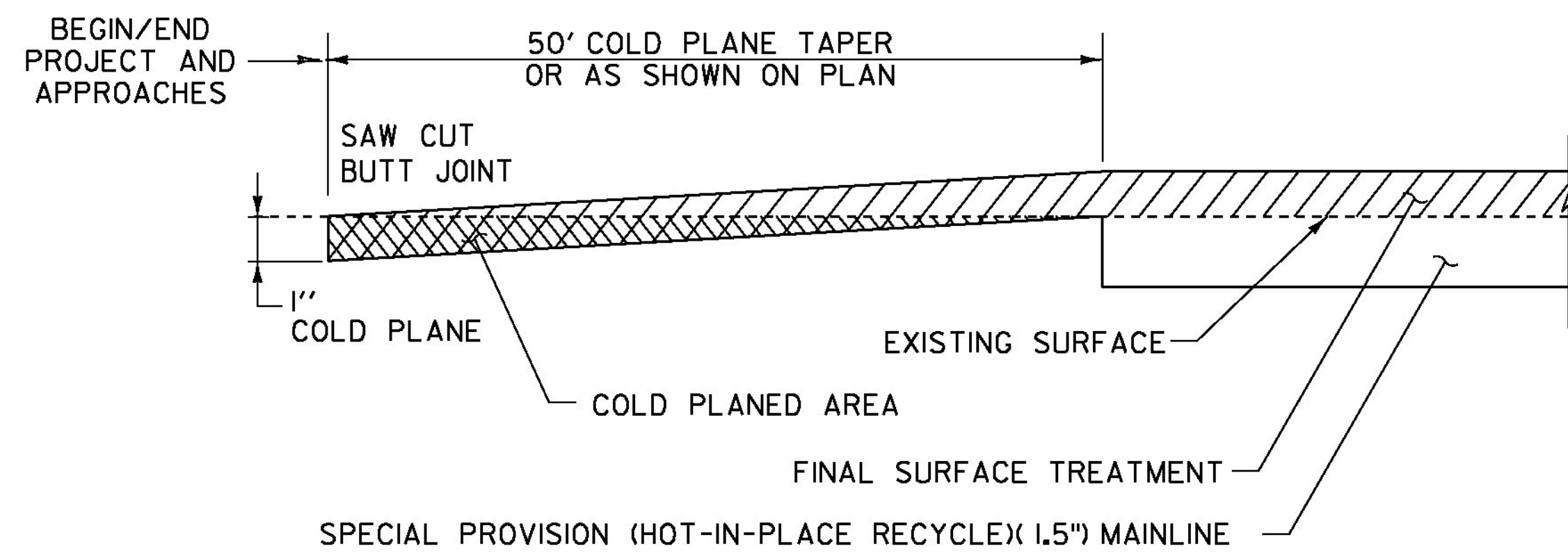


**TYPICAL RAMP SECTION**

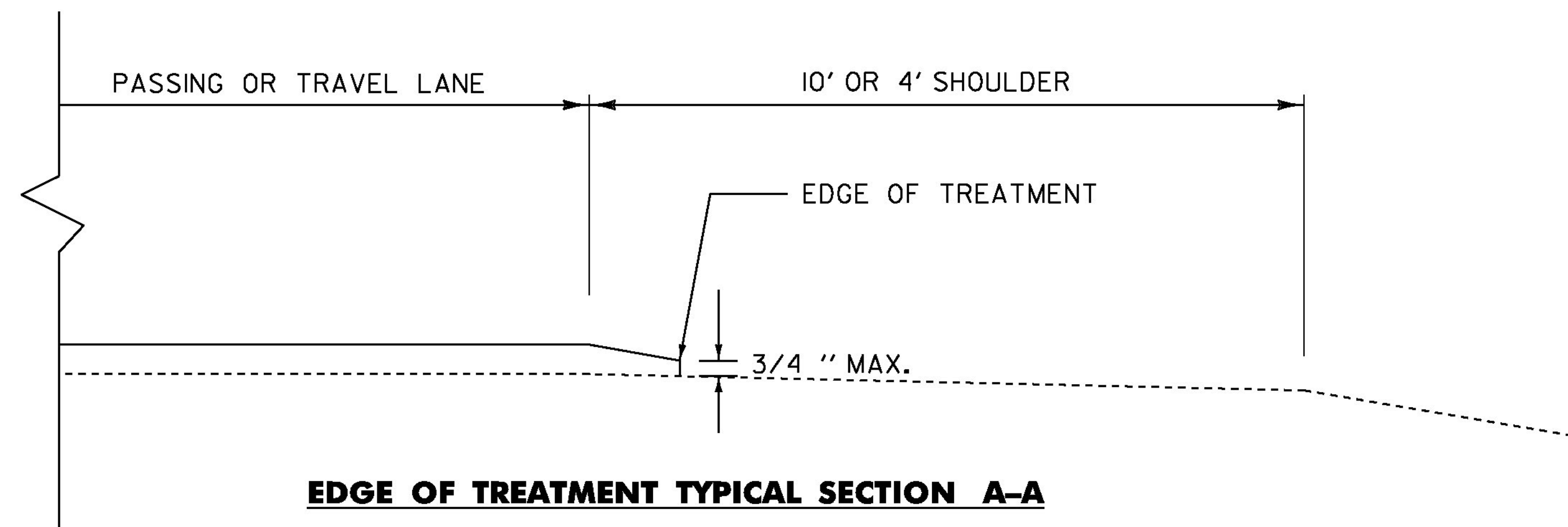
- NOTES FOR ALTERNATE B:
1. PRIOR TO THE PLACEMENT OF THE POLYMER MODIFIED BITUMINOUS CONCRETE PAVEMENT, EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL HOT-IN-PLACE RECYCLE AT A RATE OF 0.080 GAL/SY (+/- 0.01GAL/SY) OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL BE RS-IH OR CRS-IH PER THE MANUFACTURER'S RECOMMENDATION AND PAID UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-IH OR CRS-IH).
  2. THE GYRATION SPECIFICATION FOR THE 6.3 MM POLYMER - MODIFIED BITUMINOUS CONCRETE PAVEMENT SHALL BE 80. PG BINDER SHALL BE 70-28.

**NOT TO SCALE**

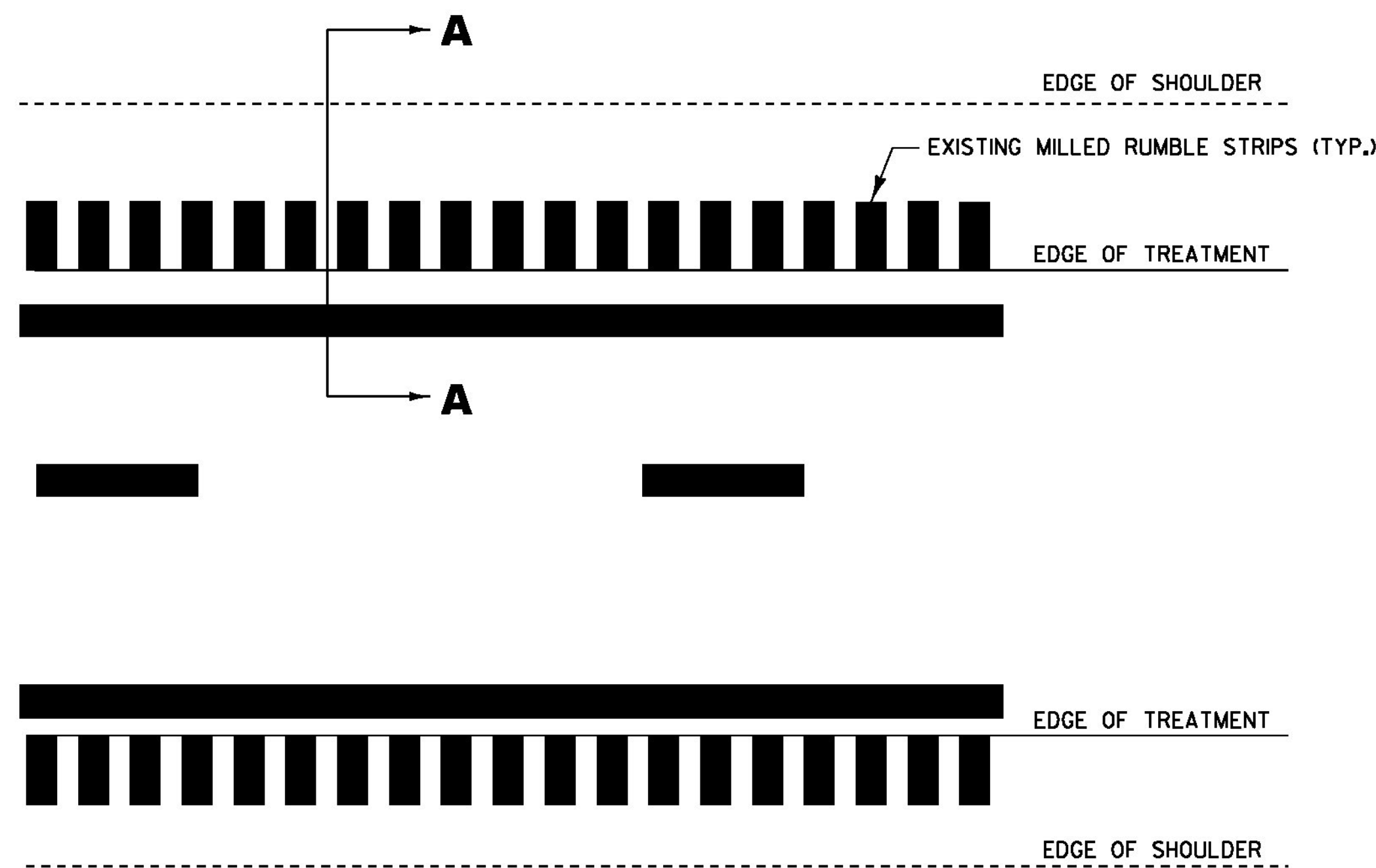
PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
DATE:	06-JUN-2014
PROJECT LEADER:	J. HARRINGTON
DRAWN BY:	PVT. MGT.
DESIGNED BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
TYPICAL SECTIONS - ALTERNATE B	SHEET 26 OF 64



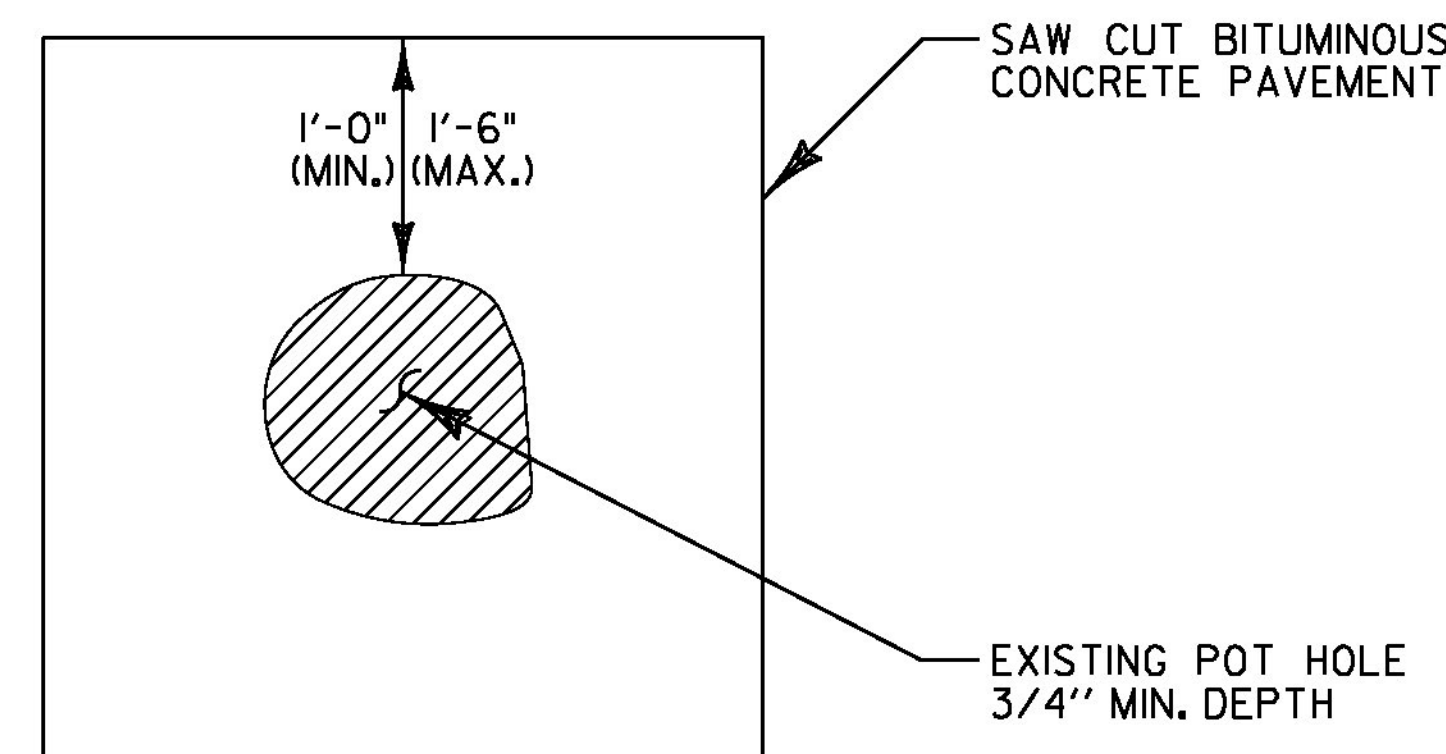
**TYPICAL APPROACH AREA DETAIL MAINLINE & RAMPS**



**EDGE OF TREATMENT TYPICAL SECTION A-A**

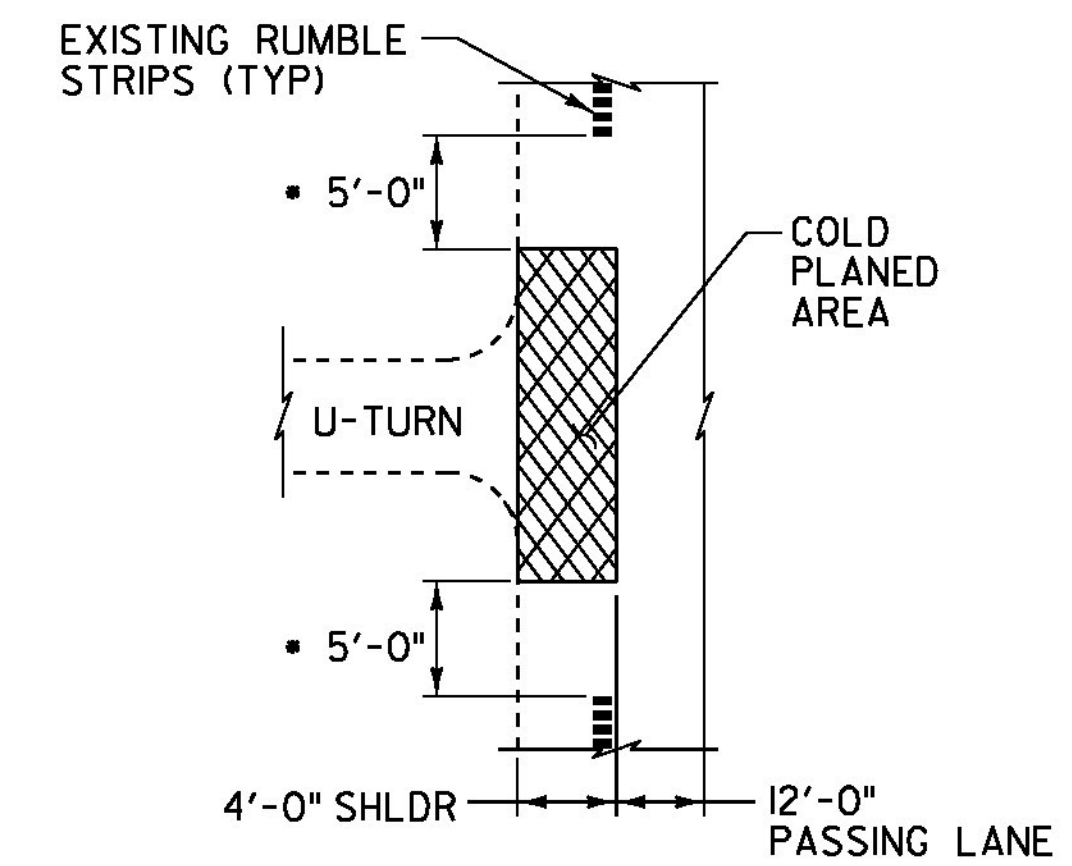


**EDGE OF TREATMENT TYPICAL PLAN**

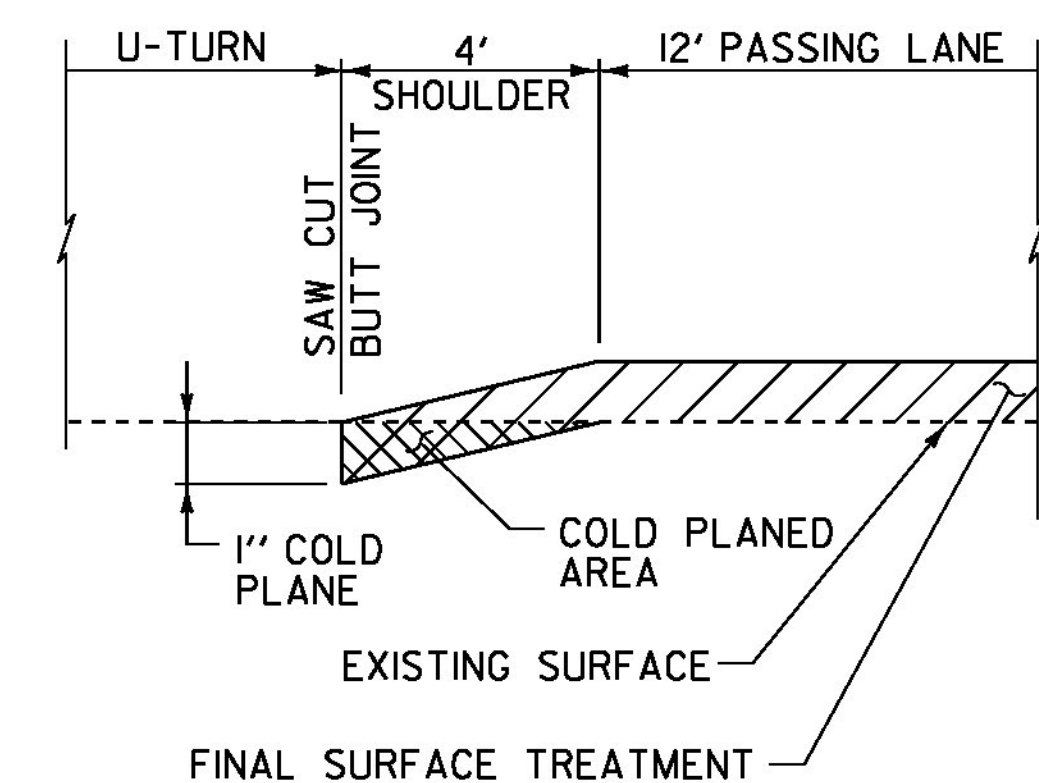


**TYPICAL - POT HOLE REPAIR**

NOTE:  
EMULSIFIED ASPHALT SHALL BE APPLIED AT ALL PATCH INTERFACES AT A RATE OF 0.25 - 0.50 GAL/SY. EMULSIFIED ASPHALT SHALL MEET THE REQUIREMENTS OF SECTION 404 AND WILL BE CONSIDERED INCIDENTAL TO THE PATCHING MATERIAL.



- 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**

**NOTES:**

1. EXISTING SHOULDER PAVEMENT SURFACES BEYOND THE LIMITS OF THE FINAL SURFACE TREATMENT SHALL RECEIVE ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING, POT HOLE REPAIR, AND CRACK-SEALING PRIOR TO APPLICATION OF THE FINAL SURFACE TREATMENT. ALL CRACKS GREATER THAN 0.10" AND UP TO 1.0" IN WIDTH SHALL BE SEALED USING THE "BLOW AND GO" 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" AND ALL OTHER PATCHING AND POT HOLE 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. EXISTING SHOULDER PAVEMENT SURFACES BEYOND THE LIMITS OF THE FINAL SURFACE TREATMENT SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POT HOLE REPAIR TREATMENTS.
3. FOLLOWING COMPLETION OF COLD PLANING, THE MILLED SURFACE FOR ALL BRIDGES SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POT HOLE REPAIR TREATMENTS, AS DIRECTED BY THE ENGINEER.
4. ALL LANE DELINEATION IS TO BE MAINTAINED DURING CONSTRUCTION BY THE USE OF LINE STRIPING TARGETS OR TEMPORARY PAINT.
5. A 50' COLD PLANED WEDGE SHALL BE CONSTRUCTED AT THE PROJECT BEGIN, PROJECT END, RAMPS, AND AT ALL BRIDGE APPROACHES OR AS DIRECTED BY THE ENGINEER. THE LONGITUDINAL EDGES OF THE SURFACE TREATMENT SHALL BE FEATHERED AS SHOWN ON THE TYPICAL SECTION, OR AS DIRECTED BY THE ENGINEER. ANY SAWCUTTING AT BUTT JOINTS SHALL BE PAID INCIDENTAL TO ITEM 210.10, COLD PLANING, BITUMINOUS PAVEMENT.
6. 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 POT HOLE REPAIR TREATMENTS, THIS MATERIAL SHALL BE REMOVED PRIOR TO CRACK-SEALING, PATCHING, AND POT HOLE 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.
7. THE SCREED OF THE PAVER SHALL BREAK AT THE BREAK POINT OF THE SHOULDER SUCH THAT THE DESIGNED NOMINAL THICKNESS IS CARRIED ONTO THE SHOULDER AND BROKEN OR PINCHED BY ROLLING. EDGE HEIGHT SHALL BE MEASURED A MINIMUM OF FIVE RANDOMLY SPACED POINTS PER TENTH OF A MILE. IF IT IS FOUND THAT THE AVERAGE HEIGHT IS GREATER THAN 3/4" OVER THE TENTH OF A MILE MEASURES SHALL BE PERFORMED SUCH THAT THE 3/4" MAXIMUM HEIGHT IS ACHIEVED. THIS APPLIES TO BOTH THE 10' AND 4' SHOULDER SIDES OF THE HIGHWAY.

**NOT TO SCALE**

PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
DATE:	06-JUN-2014
PROJECT LEADER:	J. HARRINGTON
DRAWN BY:	PVT. MGT.
DESIGNED BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
PROJECT NOTES:	SHEET 27 OF 64

# QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
					ROADWAY	BRIDGE	FULL CE ITEMS	ALTERNATE A	ALTERNATE B	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
					9000					9000		LF	SHOULDER BERM REMOVAL	203.40	188			COLD PLANING, BITUMINOUS PAVEMENT
					1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST	289	SY	MAINLINE BEGIN/END APPROACHES
					3600					3600		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	259	533	SY	EXIT 7 RAMPS
					100					100		TON	AGGREGATE SHOULDERS	402.12	4	1090	SY	BRIDGE 37 APPROACHES
					1					1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-	1218	SY	BRIDGE 38 APPROACHES
					500					500		LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (ASSHTO M 234 (ASTM D 6690) TYPE II)	417.20	EST	111	SY	U-TURNS
						90				90		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG (@ FINGER PLATE/VERMONT JOINT)	516.10	4	259	SY	ROUND
						135				135		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	6	3500	SY	TOTAL
						100				100		CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST			
						30				30		HR	POWER BROOM RENTAL, TYPE I	608.30	EST			
						100				100		HR	TRUCK RENTAL	608.37	EST			
						200				200		HR	TRUCK-MOUNTED ATTENUATOR	608.45	EST			
						100				100		HR	TRUCK-MOUNTED ATTENUATOR, AWW/PV	608.50	EST			
						400				400		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
						200				200		HR	FLAGGERS	630.15	EST			
							0.33			0.33		LS	FIELD OFFICE, ENGINEERS	631.10	-			
							0.33			0.33		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-			
							3000			3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-			
					0.33					0.33		LS	MOBILIZATION/DEMobilIZATION	635.11	-			
					1					1		LS	TRAFFIC CONTROL (IM SURF(45))	641.10	-			
					2					2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	EST			
					40000					40000		LF	DURABLE 6 INCH WHITE LINE, POLYUREA	646.424	2888			
					30000					30000		LF	DURABLE 6 INCH YELLOW LINE, POLYUREA	646.434	627			
					1200					1200		LF	DURABLE 12 INCH WHITE LINE, POLYUREA	646.464	65			
													BEGIN OPTION AA					
					15					15		EACH	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492	-			
					15					15		EACH	DURABLE LETTER OR SYMBOL, POLYUREA	646.494	-			
													END OPTION AA					
					40000					40000		LF	TEMPORARY 6 INCH WHITE LINE, PAINT	646.622	2888			
					30000					30000		LF	TEMPORARY 6 INCH YELLOW LINE, PAINT	646.632	627			
					1200					1200		LF	TEMPORARY 12 INCH WHITE LINE, PAINT	646.662	65			
					15					15		EACH	TEMPORARY LETTER OR SYMBOL, PAINT	646.692	-			
					1800					1800		EACH	LINE STRIPING TARGETS	646.76	33			
					2080					2080		SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	EST			ALTERNATE ZA1 SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)
					1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
					76000					76000		SY	SPECIAL PROVISION (HOT-IN-PLACE RECYCLE)	900.675	761	75,239	SY	I-89 NORTHBOUND
					50					50		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)	900.680	EST	4,907	SY	INTERCHANGE #7, RAMP A
													BEGIN ALTERNATE ZA1			3,939	SY	INTERCHANGE #7, RAMP B
																915	SY	ROUND
																85,000	SY	TOTAL
								85000		85000		SY	SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)	900.675	916			

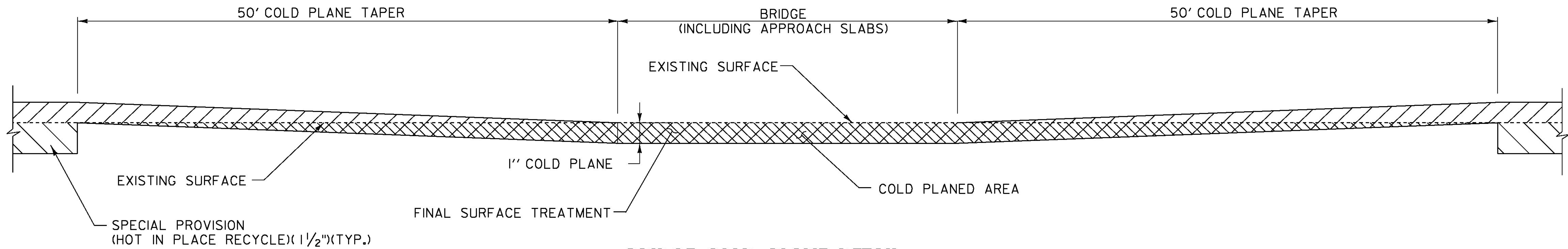
PROJECT NAME: BERLIN-MONTPELIER  
PROJECT NUMBER: IM SURF(45)

FILE NAME: I3a636/pvtmgt/p3a636\_wrk.dgn PLOT DATE: 06-JUN-2014  
PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
QUANTITY SHEET 1 SHEET 28 OF 64

# QUANTITY SHEET 2

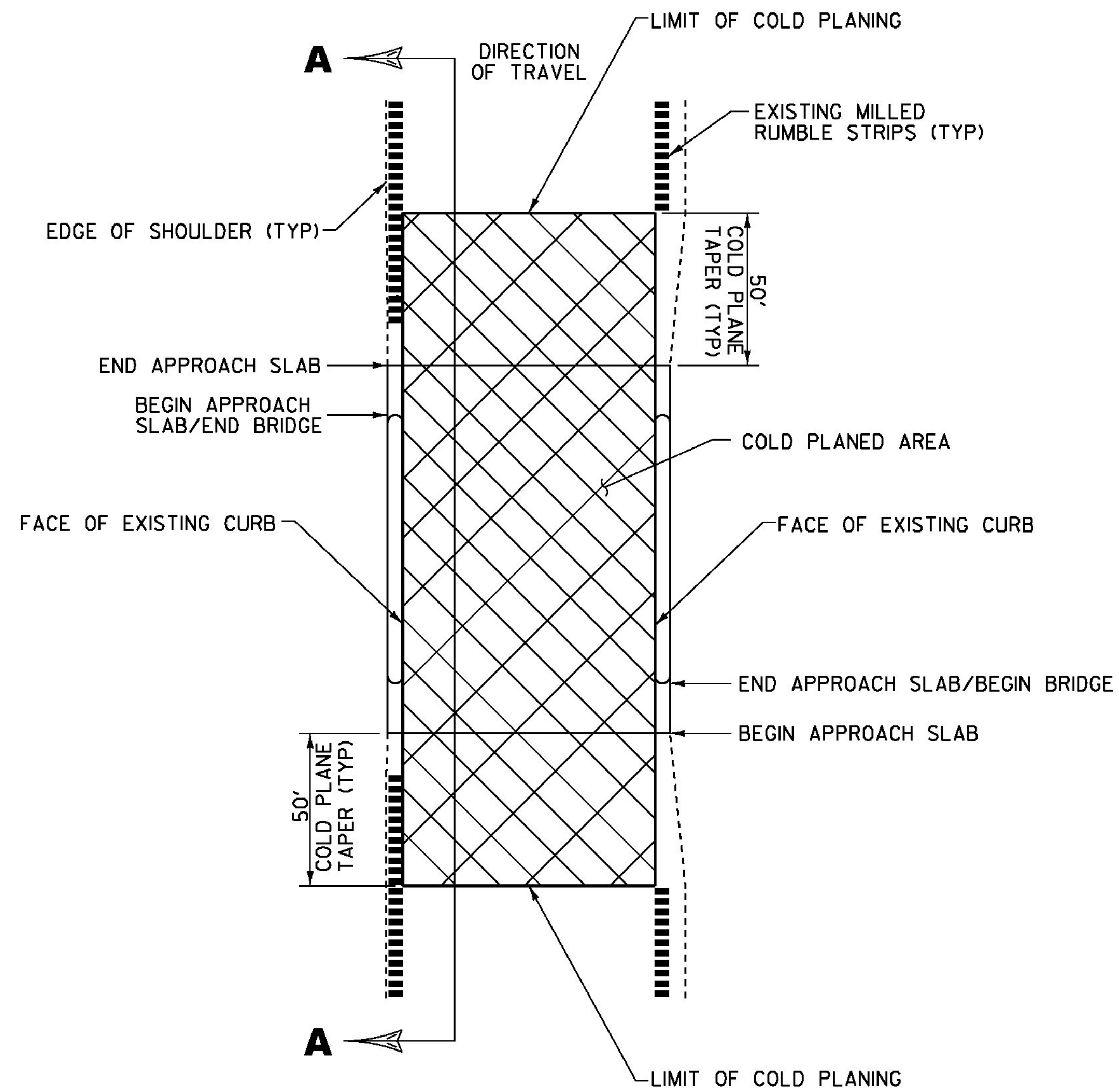
SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
					ROADWAY	BRIDGE	FULL CE ITEMS	ALTERNATE A	ALTERNATE B	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
													END ALTERNATE ZA1					ALTERNATE ZA2
													BEGIN ALTERNATE ZA2					SPECIAL PROVISION
									1	1		LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-			(6.3 MM POLYMER MODIFIED BIT. CONC.
									5000	5000		TON	SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)	900.680	95	4,389 TON		PAVEMENT)(SBR OR SBS POLYMER)
									600	600		CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	34	286 TON		I-89 NORTHBOUND
													END ALTERNATE ZA2			230 TON		INTERCHANGE #7, RAMP A
																95 TON		INTERCHANGE #7, RAMP B
																5,000 TON		ROUND
																		TOTAL

PROJECT NAME: BERLIN-MONTPELIER  
 PROJECT NUMBER: IM SURF(45)  
 FILE NAME: I3a636/pvtmgt/p13a636\_wrk.dgn PLOT DATE: 06-JUN-2014  
 PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
 DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
 QUANTITY SHEET 2 SHEET 29 OF 64



**BRIDGE COLD PLANE DETAIL**

BRIDGE #37N MM 50.000  
 BRIDGE #38N MM 50.290



**BRIDGE COLD PLANE TYPICAL PLAN**

NOT TO SCALE

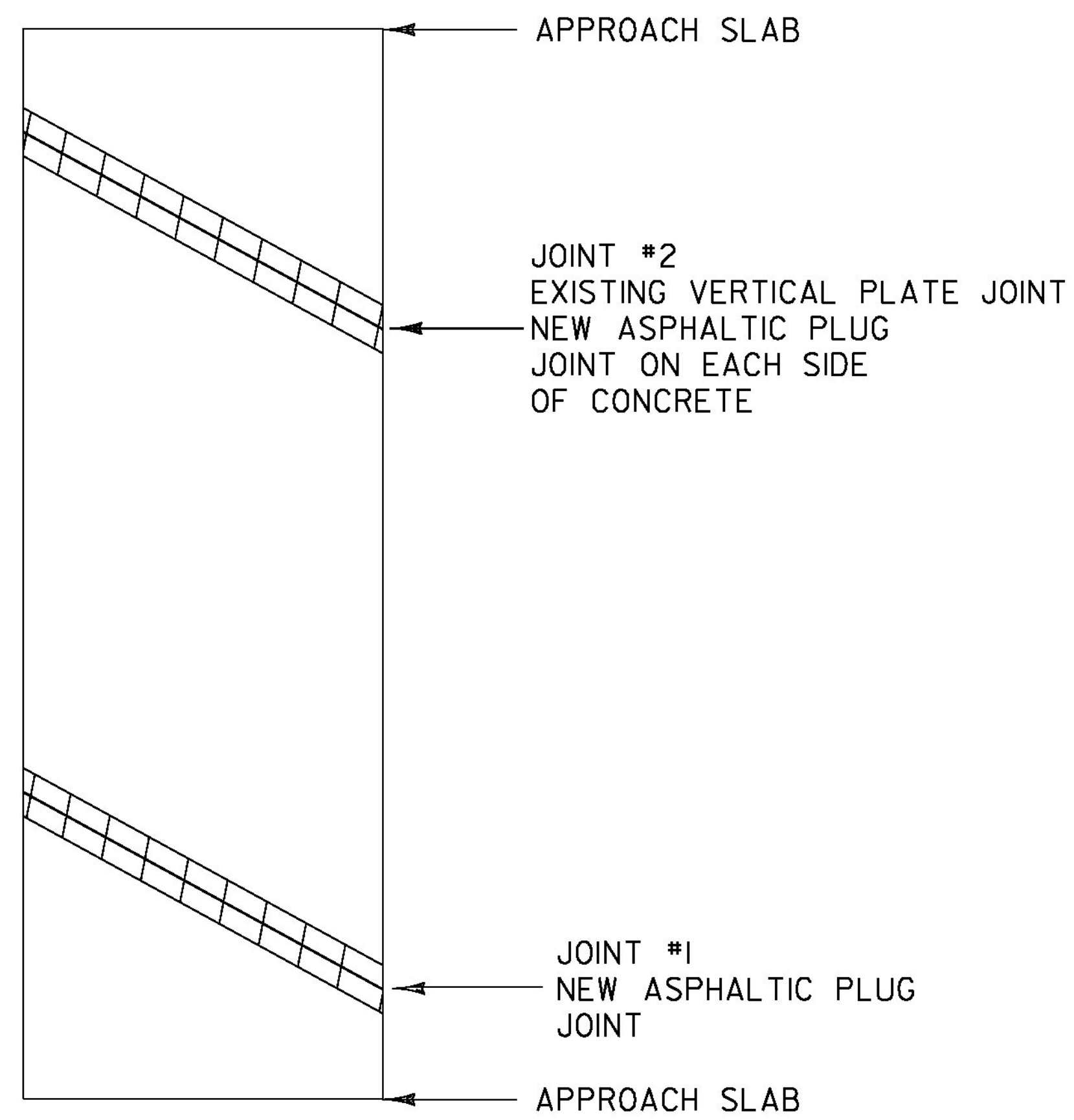
**NOTES:**

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 ENGINEER TO BE AT FAULT FOR THE DAMAGE, THE RECOMMENDED REPAIRS SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE STATE.

**NOT TO SCALE**

PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
BRIDGE DETAIL SHEET I	
DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	30 OF 64

↑  
NORTHBOUND  
DIRECTION OF TRAVEL



**BRIDGE #37N**

MM 50.000

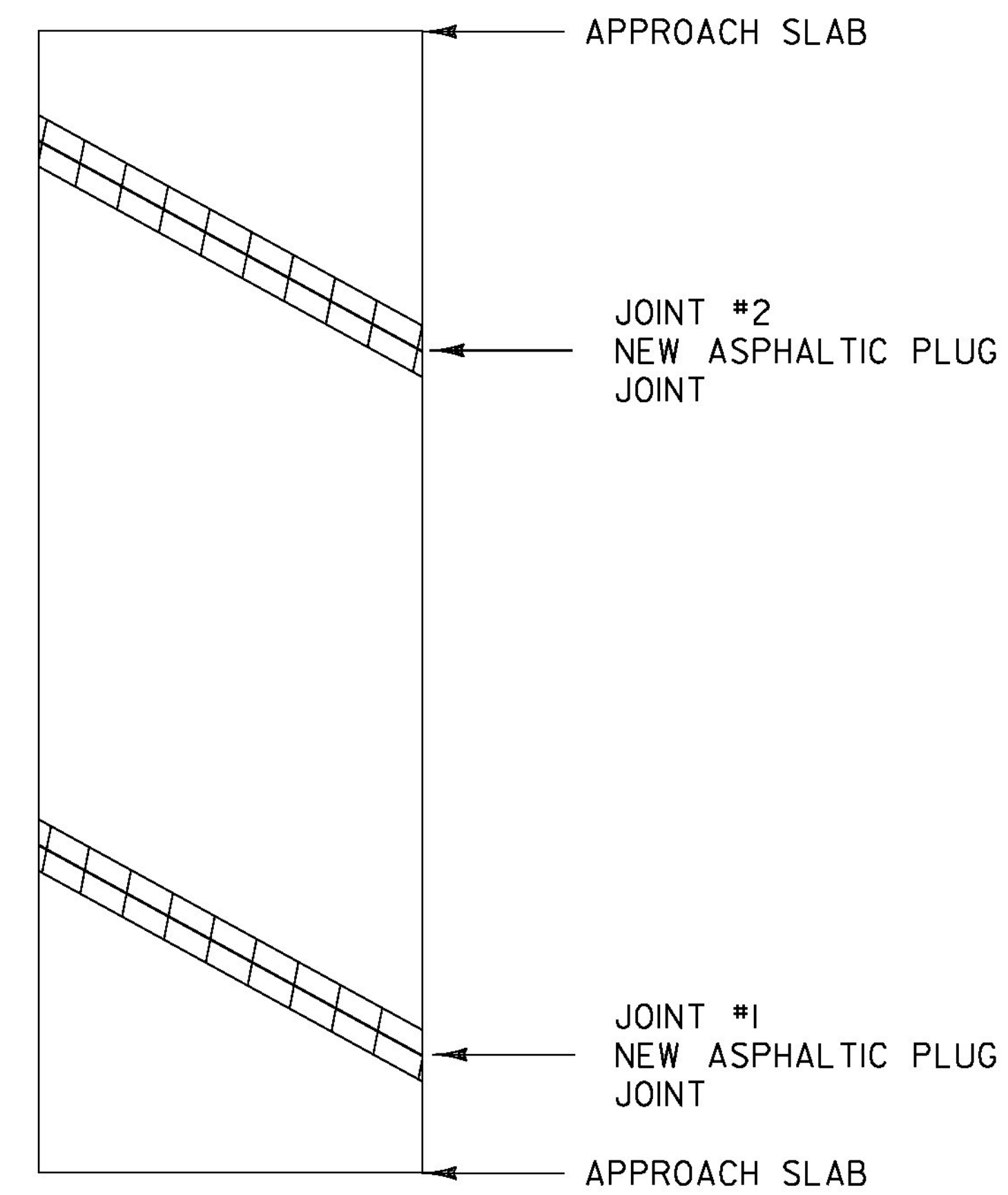
LENGTH OF ASPHALTIC PLUG JOINTS:

JOINT #1 - 43'

JOINT #2 - 43' X 2 = 86'

TOTAL = 129'

↑  
NORTHBOUND  
DIRECTION OF TRAVEL



**BRIDGE #38N**

MM 50.290

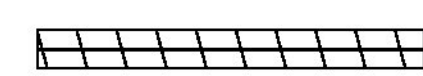
LENGTH OF ASPHALTIC PLUG JOINTS:

JOINT #1 - 43'

JOINT #2 - 43'

TOTAL = 86'

**LEGEND**



EXISTING BRIDGE JOINTS TO BE  
REPAIRED WITH ASPHALTIC PLUG JOINT

**NOT TO SCALE**

PROJECT NAME: BERLIN-MONTPELIER

PROJECT NUMBER: IM SURF(45)

FILE NAME: I3a636/pvtmgt/p3a636\_wrk.dgn PLOT DATE: 06-JUN-2014

PROJECT LEADER: J. HARRINGTON

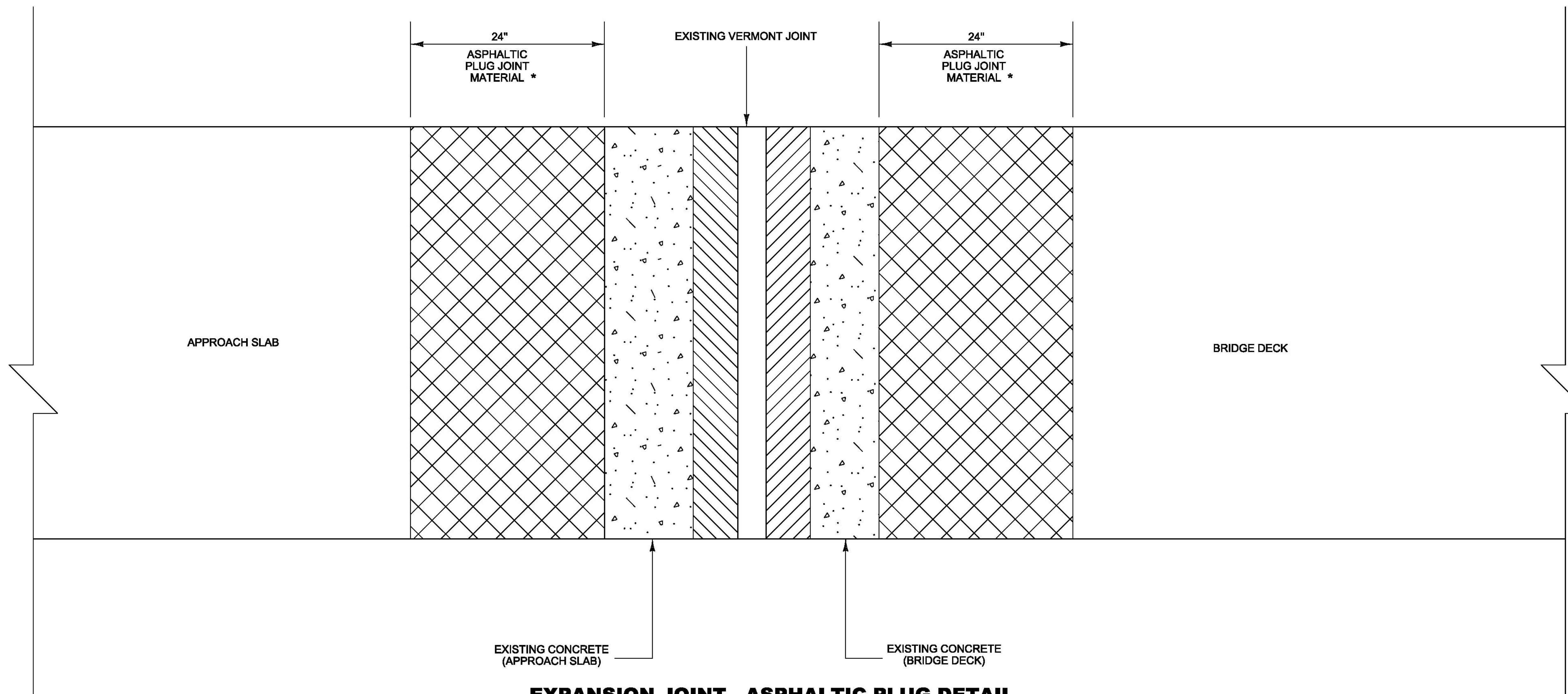
DRAWN BY: PVT. MGT.

DESIGNED BY: PVT. MGT.

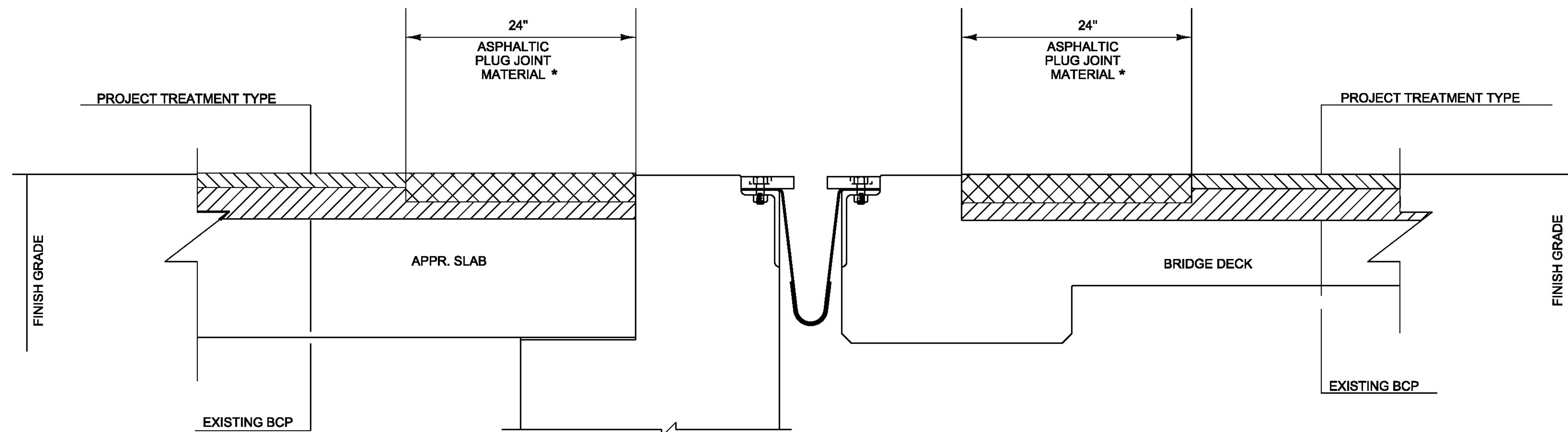
CHECKED BY: PVT. MGT.

BRIDGE DETAIL SHEET 2

SHEET 31 OF 64



**EXPANSION JOINT - ASPHALTIC PLUG DETAIL  
PLAN VIEW  
(VERMONT OR VERTICAL PLATE JOINT)**



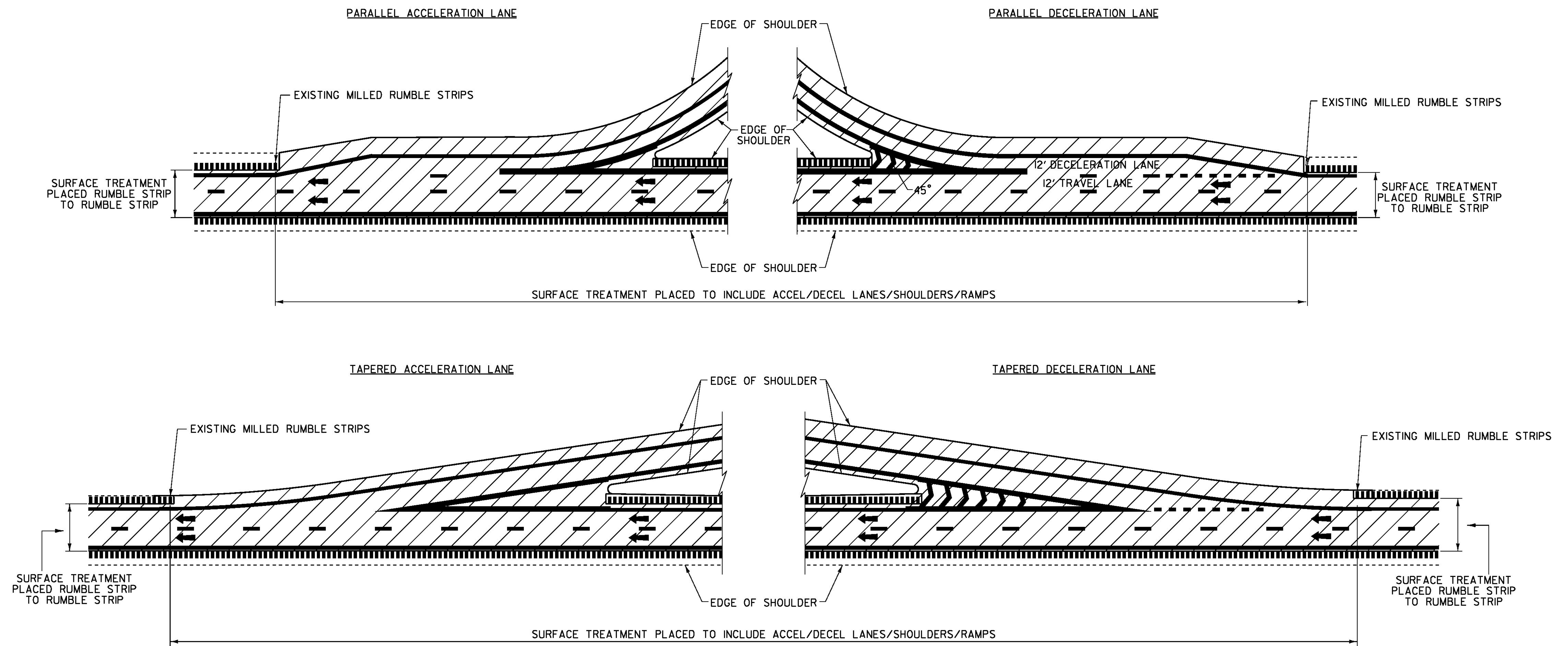
\* 2" MAXIMUM DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER

**EXPANSION JOINT - ASPHALTIC PLUG DETAIL  
CROSS SECTION VIEW  
(VERMONT OR VERTICAL PLATE JOINT)**

**NOT TO SCALE**

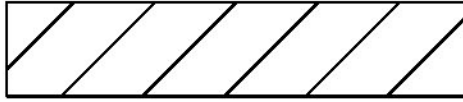


PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmg+/p3a636_wrk.dgn
DATE:	06-JUN-2014
PROJECT LEADER:	J. HARRINGTON
DRAWN BY:	PVT. MGT.
DESIGNED BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
BRIDGE DETAIL SHEET	3
SHEET	32 OF 64

**TYPICAL INTERCHANGE CONSTRUCTION DETAILS # 1**



NOTES:  
I. LINE STRIPING SHOWN FOR REFERENCE ONLY.

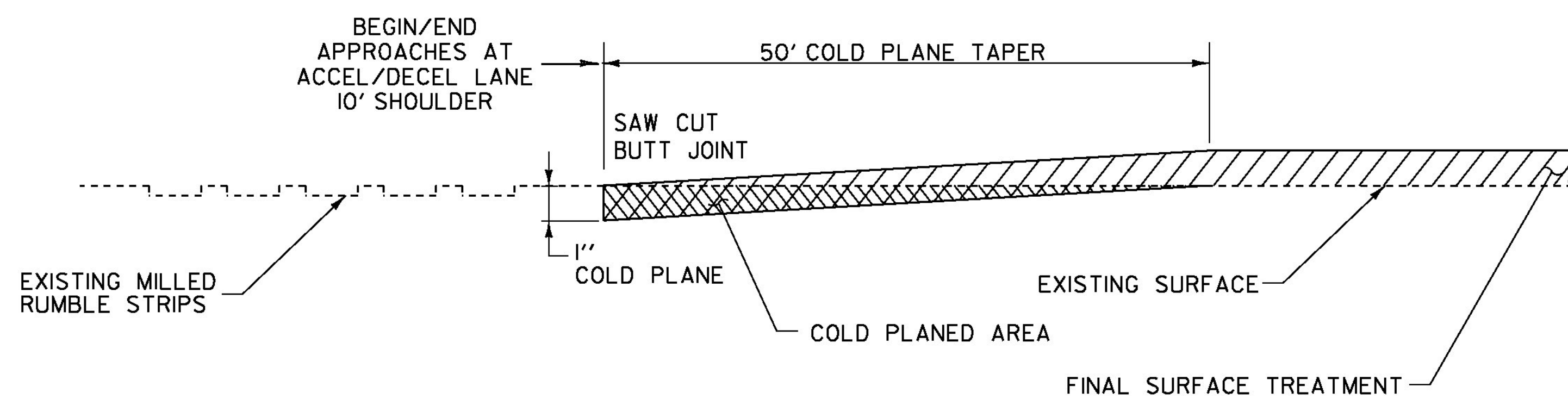
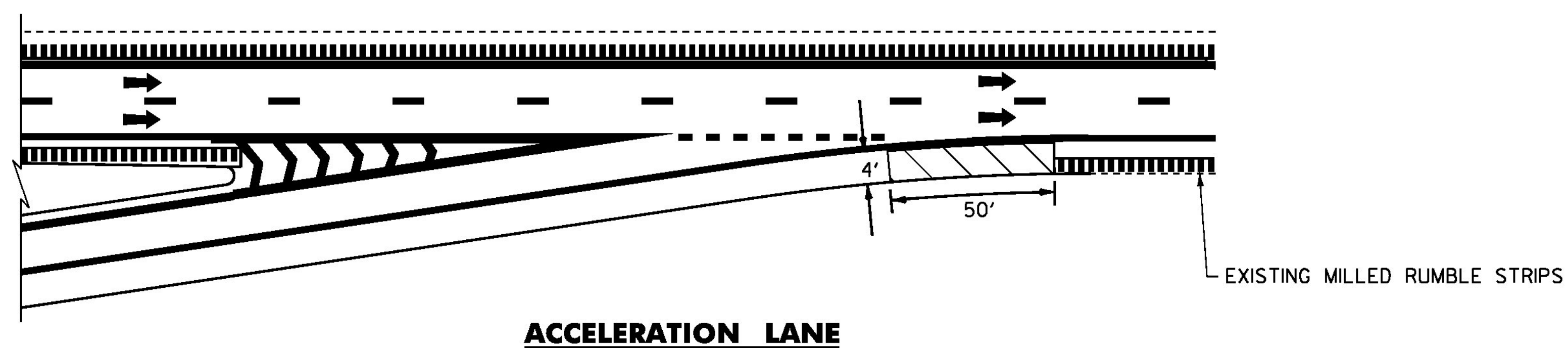
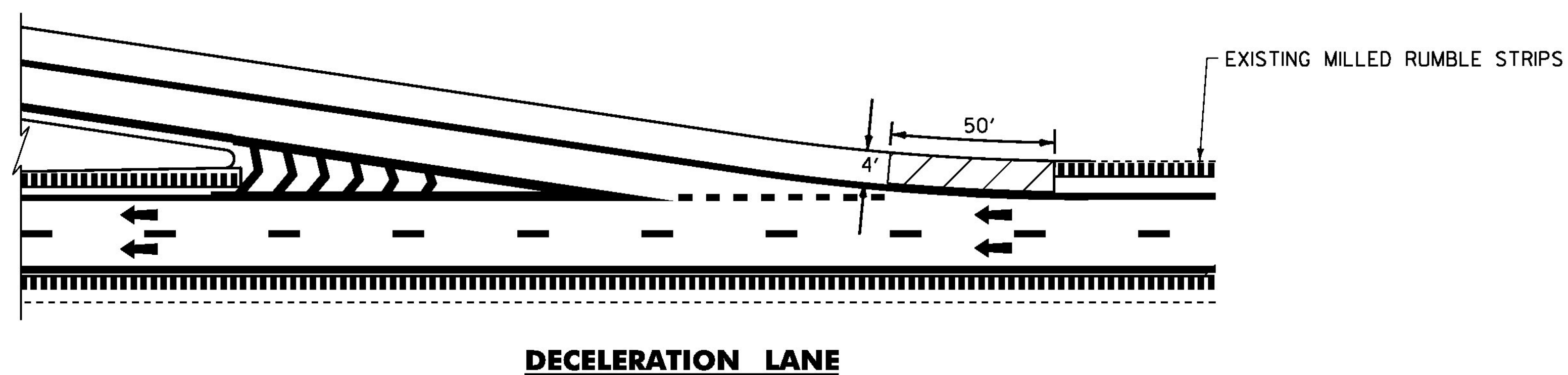
**LEGEND**

-  SURFACE TREATMENT
-  DIRECTION OF TRAFFIC FLOW
-  EXISTING MILLED RUMBLE STRIPS

**NOT TO SCALE**

PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
INTERCHANGE DETAIL SHEET 1	
PLLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	33 OF 64

**TYPICAL INTERCHANGE CONSTRUCTION DETAILS # 2**



**TYPICAL APPROACH AREA DETAIL AT ACCEL/DECEL LANE 10 FT SHOULDER**

**LEGEND**



AREA TO BE COLD PLANED



DIRECTION OF TRAFFIC FLOW



EXISTING MILLED RUMBLE STRIPS

**NOT TO SCALE**

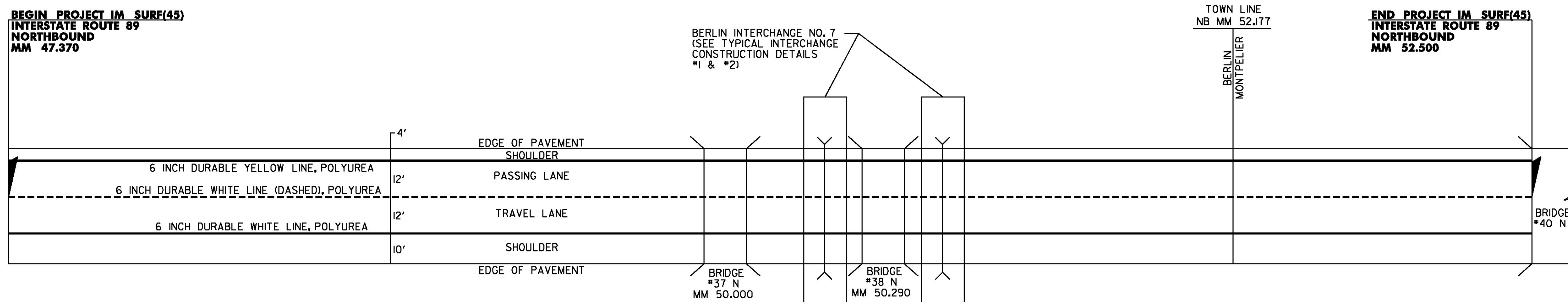
PROJECT NAME: BERLIN-MONTPELIER  
PROJECT NUMBER: IM SURF(45)

FILE NAME: I3a636/pvtmgt/p3a636\_wrk.dgn PLOT DATE: 06-JUN-2014  
PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
INTERCHANGE DETAIL SHEET 2 SHEET 34 OF 64

DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 MM 47.370 - MM 52.500 (SOLID RT)  
 MM 47.370 - MM 52.500 (DASHED CENTERLINE)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 MM 47.370 - MM 52.500 (SOLID LT)

**BEGIN PROJECT IM SURF(45)**  
**INTERSTATE ROUTE 89**  
**NORTHBOUND**  
**MM 47.370**



**NOTES:**

- SPECIAL PRECAUTIONS MUST BE TAKEN TO PREVENT DAMAGE TO THE EXISTING MEMBRANES AT BRIDGES 37-N AND 38-N. THE CONTRACTOR SHALL PERFORM COLD PLANING WITH CAUTION AT THESE LOCATIONS. ANY DAMAGE TO THE MEMBRANE AS A RESULT OF THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE REPLACED AT NO COST TO THE STATE.
- ITEM 646.76, LINE STRIPING TARGETS SHALL BE USED FOR CENTERLINE MARKING ONLY.

**NOT TO SCALE**

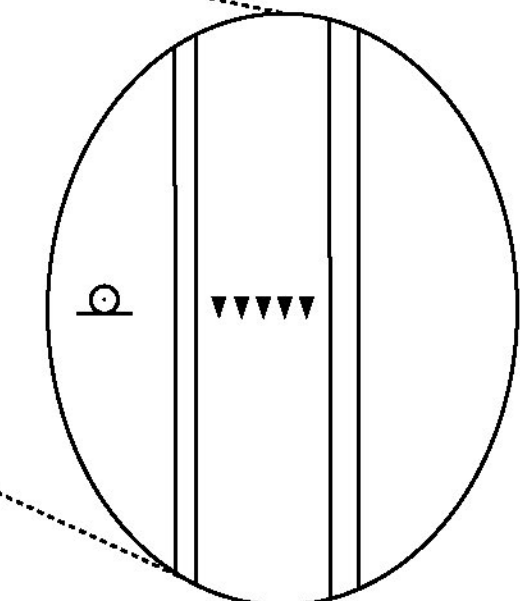
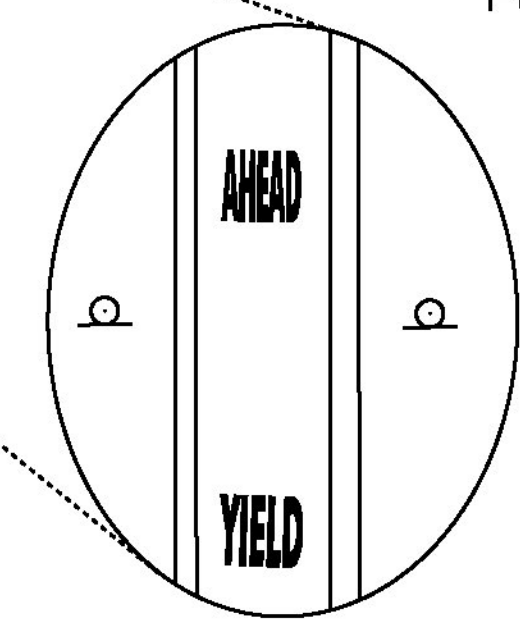
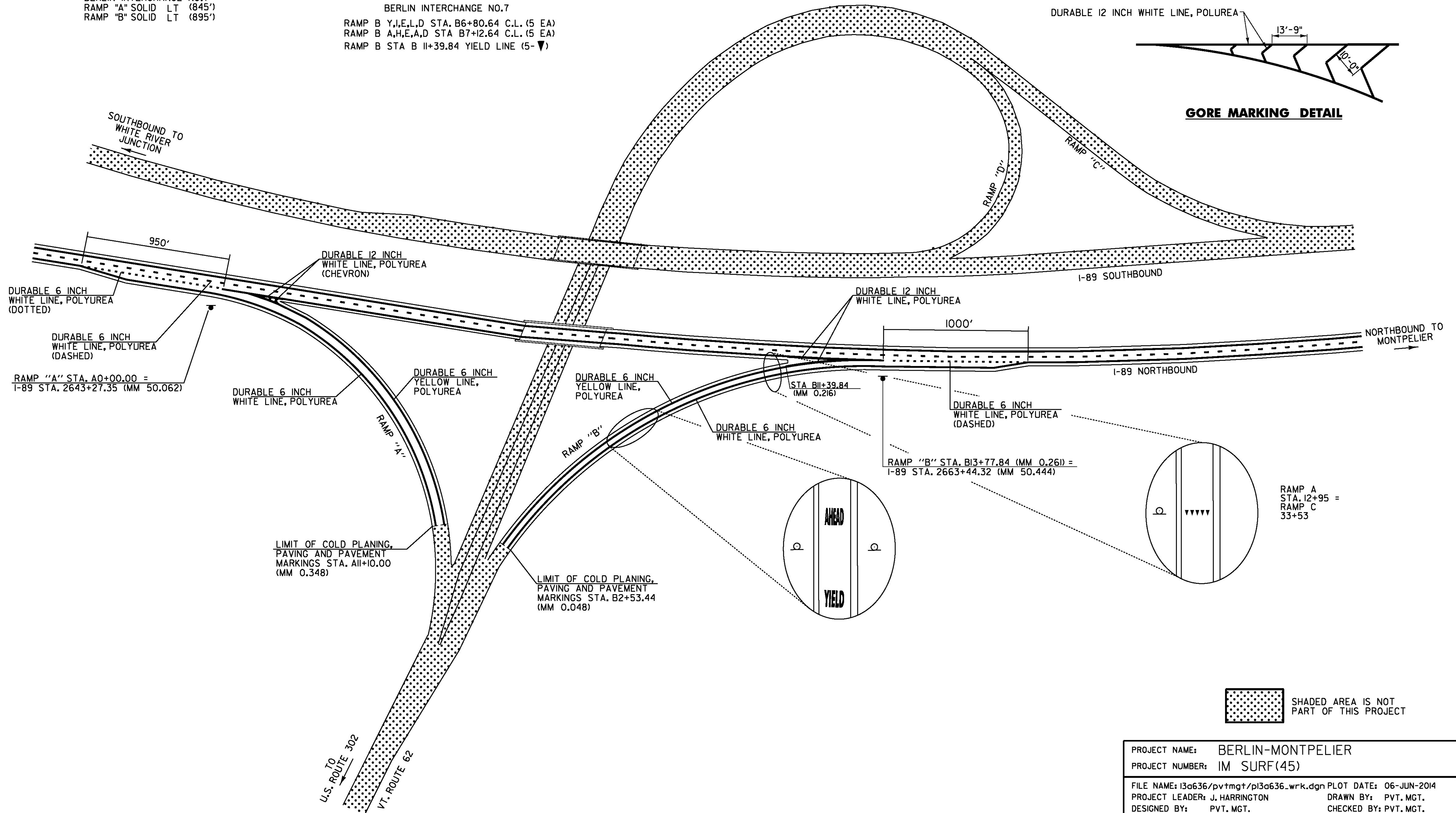
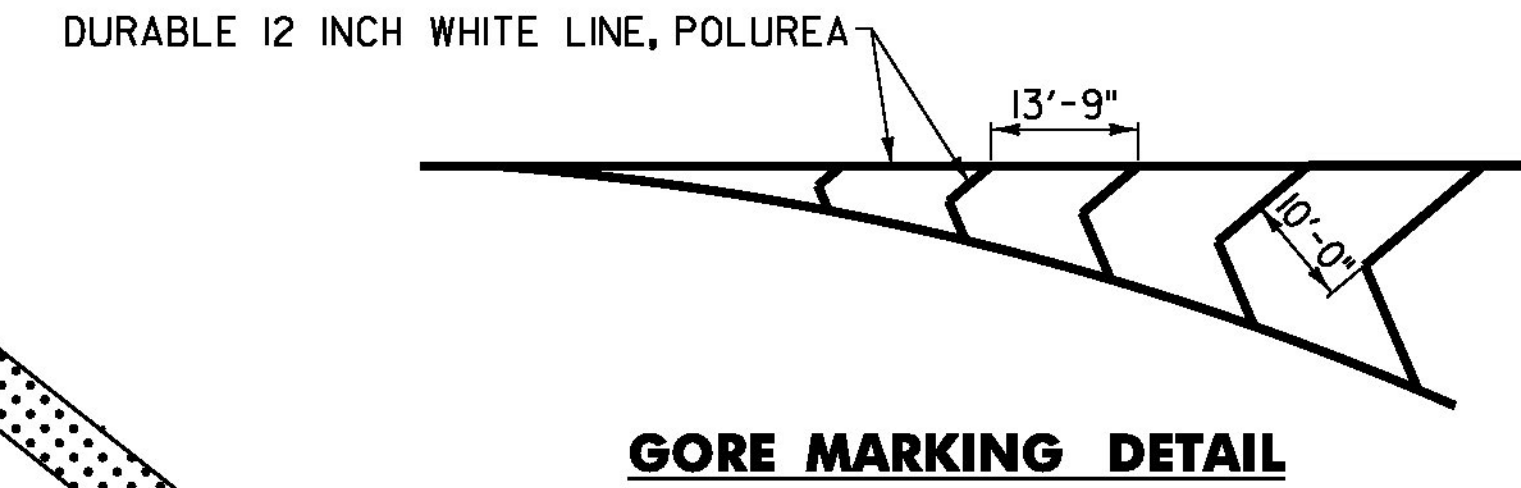
PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET I	
DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	35 OF 64

DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 BERLIN INTERCHANGE NO.7  
 RAMP "A" SOLID RT (1295')  
 RAMP "A" DOTTED LT (730')  
 RAMP "B" SOLID RT (1124')  
 RAMP "B" DOTTED LT (1000')

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 BERLIN INTERCHANGE NO.7  
 RAMP "A" SOLID LT (845')  
 RAMP "B" SOLID LT (895')

DURABLE 12 INCH WHITE LINE, POLYUREA  
 TEMPORARY 12 INCH WHITE LINE, PAINT  
 BERLIN INTERCHANGE NO.7  
 RAMP "A" SOLID LT (400')  
 RAMP "A" CHEVRON MARKINGS (280')  
 RAMP "B" SOLID LT (455')

DURABLE LETTER OR SYMBOL, THERMOPLASTIC OR  
 DURABLE LETTER OR SYMBOL, POLYUREA (OPTION ITEM)  
 TEMPORARY LETTER OR SYMBOL, PAINT  
 BERLIN INTERCHANGE NO.7  
 RAMP B Y,I,E,L,D STA. B6+80.64 C.L. (5 EA)  
 RAMP B A,H,E,A,D STA B7+12.64 C.L. (5 EA)  
 RAMP B STA B 11+39.84 YIELD LINE (5-▼)



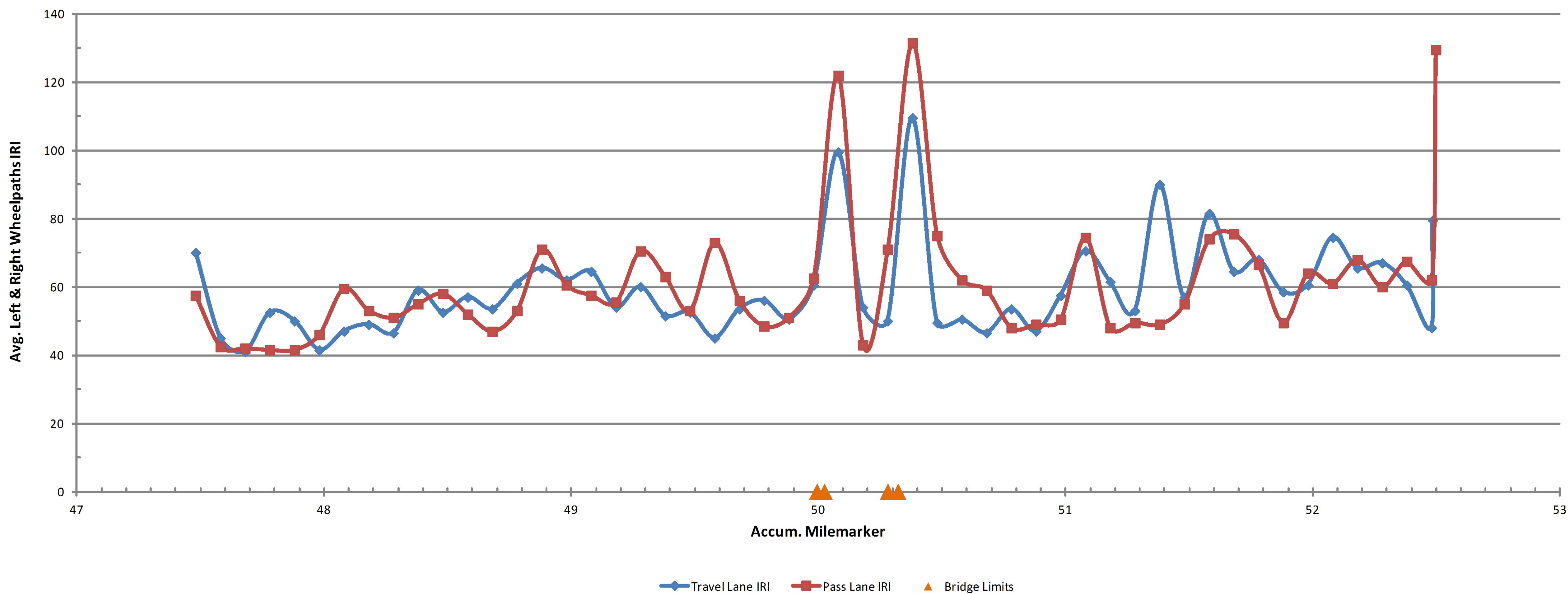
RAMP A  
 STA. 12+95 =  
 RAMP C  
 33+53

PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET 2	
DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	36 OF 64

### I 89 NB Berlin-Montpelier IM SURF(45) Preconstruction IRI

Profiled 9/27 & 11/13/2013

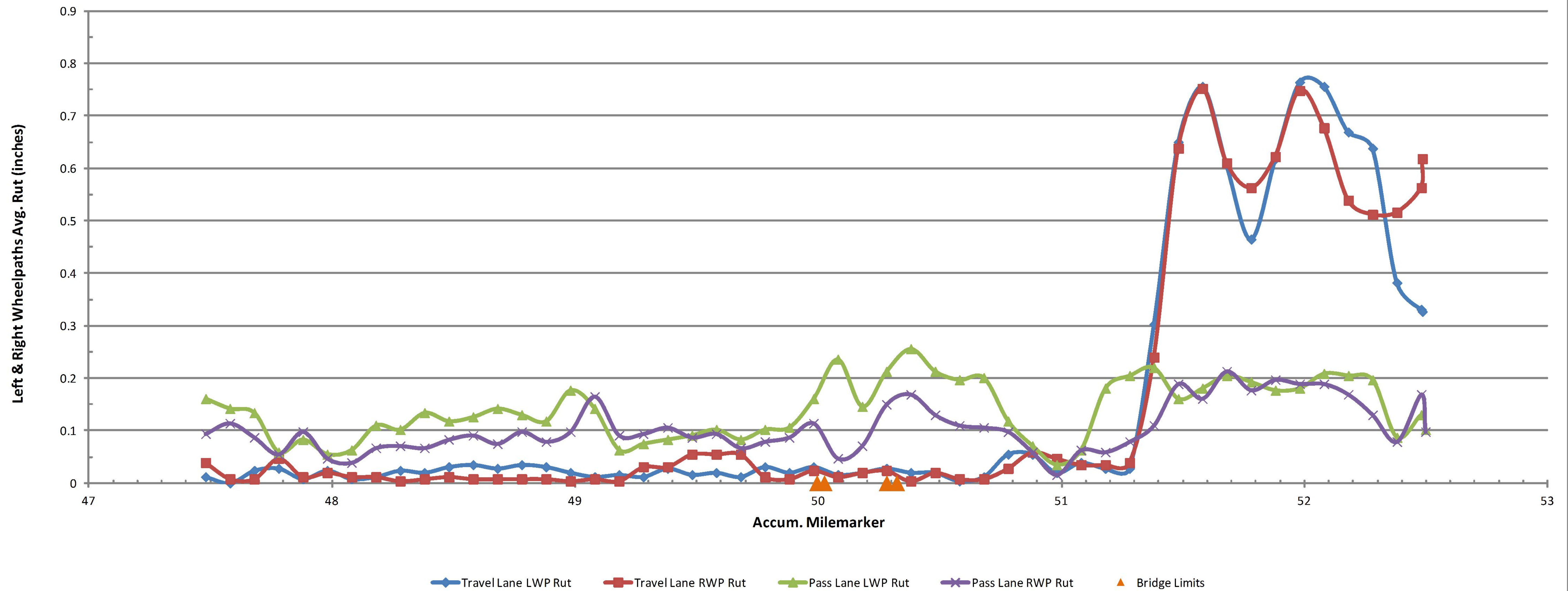
Travel Lane Avg. IRI = 59.2 Pass Lane Avg. IRI = 61.3



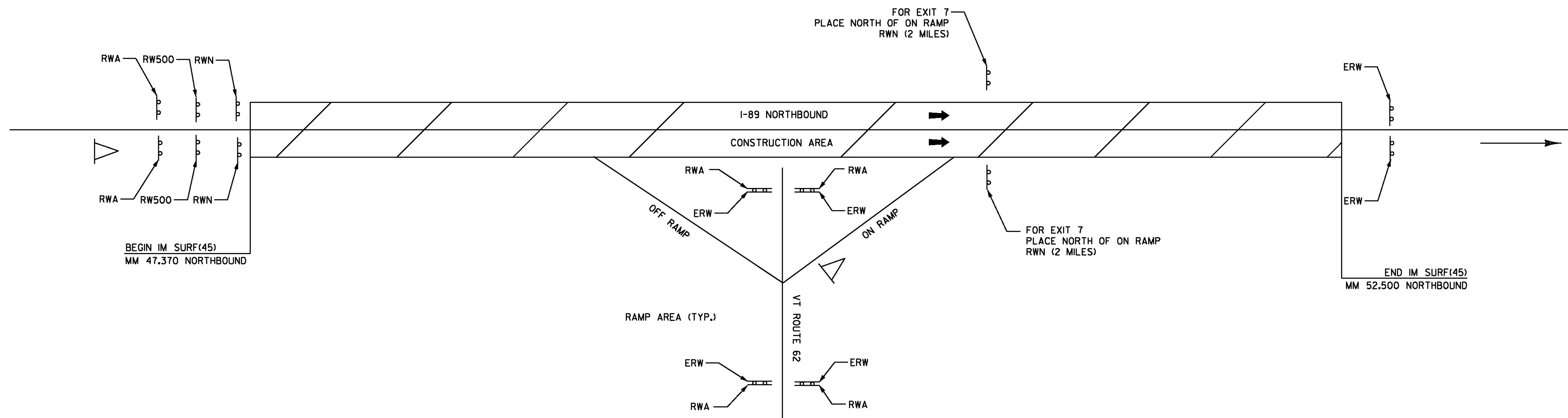
PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
ROUGHNESS DATA INFORMATION SHEET NB	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	37 OF 64

### I 89 NB Berlin-Montpelier IM SURF(45) Preconstruction Ruts

Profiled 9/27 & 11/13/2013



PROJECT NAME:	BERLIN-MONTPELIER
PROJECT NUMBER:	IM SURF(45)
FILE NAME:	I3a636/pvtmgt/p3a636_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
RUTTING DATA INFORMATION SHEET NB	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	38 OF 64



- LEGEND**
- RWA = ROAD WORK AHEAD
  - RW500 = ROAD WORK IN 500 FEET
  - RWN = ROAD WORK NEXT (XX MILES)
  - ERW = END ROAD WORK
  - SRWA = SIDE ROAD WORK AHEAD
  - SRW500 = SIDE ROAD WORK 500 FEET
  - △ = PORTABLE CHANGEABLE MESSAGE SIGN
  - [Hatched Box] = WORK AREA
  - ← = DIRECTION OF TRAFFIC FLOW

SEE VAOT STANDARDS T-1, T-10, T-11 AND T-13 FOR SIGN PLACEMENT.  
 CONSTRUCTION APPROACH SIGNING SHALL BE PLACED AS NOT TO  
 INTERFERE WITH EXISTING TRAFFIC CONTROL DEVICES.  
 SEE COMPOSITE TRAFFIC NOTES SHEET.

PROJECT NAME: BERLIN-MONTPELIER	
PROJECT NUMBER: IM SURF(45)	
FILE NAME: I3a636/pvtmgt/p3a636_wrk.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
CONSTRUCTION APPROACH SIGNING SHEET	SHEET 39 OF 64

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

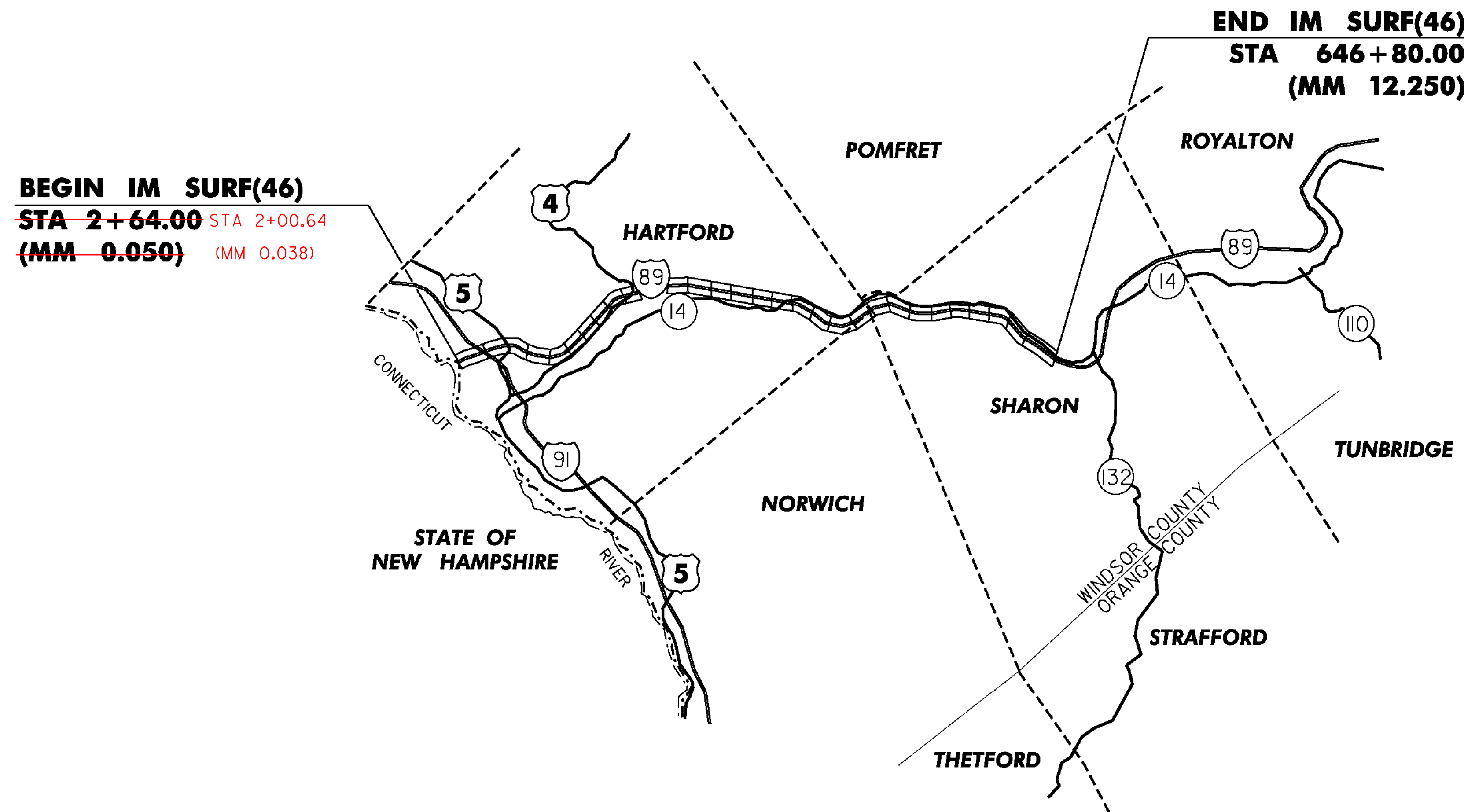
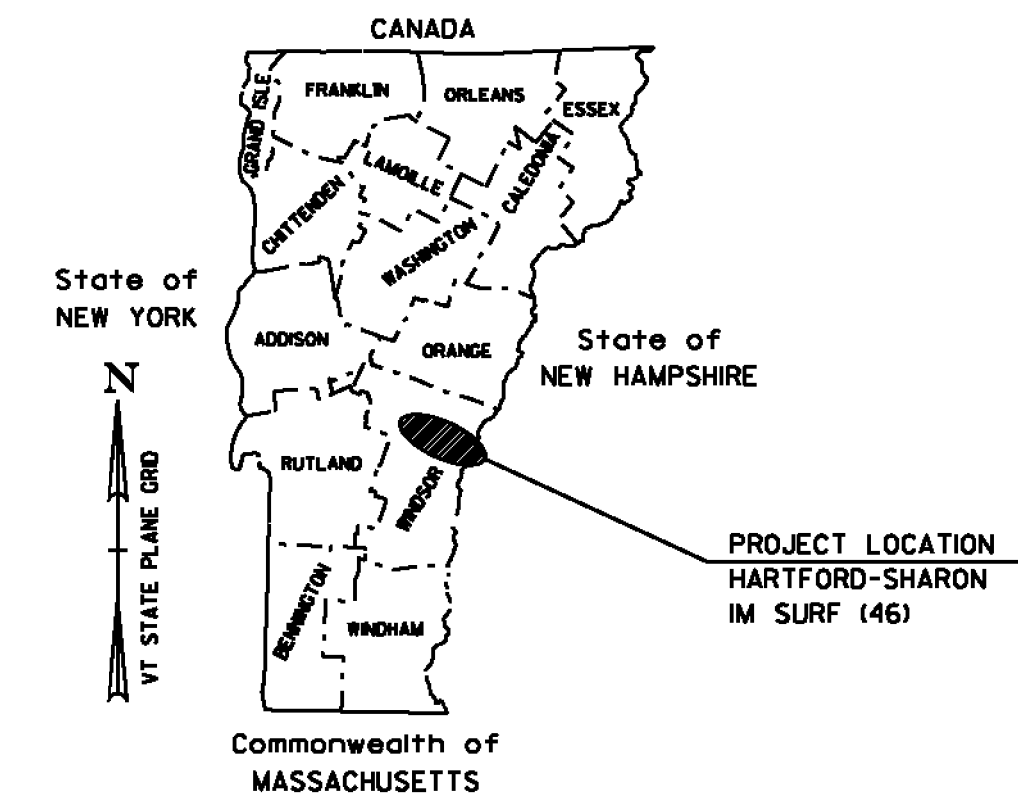


PROPOSED IMPROVEMENT  
TOWNS OF HARTFORD & SHARON  
COUNTY OF WINDSOR  
INTERSTATE ROUTE 89 (NB) (PRINCIPAL ARTERIAL-NHS)

BEGINNING AT STATION 2+64 (MM 0.050) (NORTH END OF THE BRIDGE OVER THE CONNECTICUT RIVER) IN THE TOWN OF HARTFORD,  
AND EXTENDING NORTHERLY ALONG INTERSTATE 89 (IN THE NORTHBOUND LANES) FOR A DISTANCE OF 64,416.00 FEET (12.200 MILES)  
TO STATION 646+80.00 (MM 12.250) IN THE TOWN OF SHARON.

PROJECT DATA	LENGTH	
	(FEET)	(MILES)
NORTHBOUND		
STA 2+64 TO 646+80 (MM 0.050 TO MM 12.250)	64,416.00	12.200
LENGTH OF ROADWAY	64,416.00	12.200
LENGTH OF PROJECT	64,416.00	12.200

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

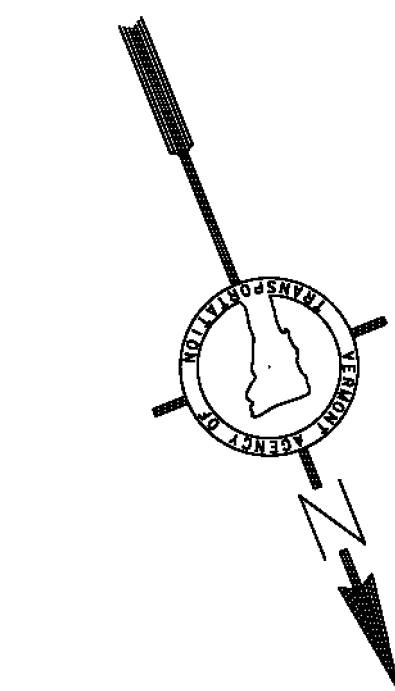


**TRAFFIC DATA**

	2014 AADT	2024 AADT	2014 DHV	2024 DHV	FLEXIBLE ESALS (2014-2024)	FLEXIBLE ESALS (2014-2034)
I-89 NB						
BEGIN PROJECT TO I-91 EXIT 10	19,700	21,200	2700	2900	2,945,000	6,419,000
I-91 EXIT 10 TO I-89 EXIT 1	11,600	11,000	1600	1600	3,539,000	8,104,000
I-89 EXIT 1 TO END OF PROJECT	8,500	9,100	1100	1200	3,860,000	8,945,000

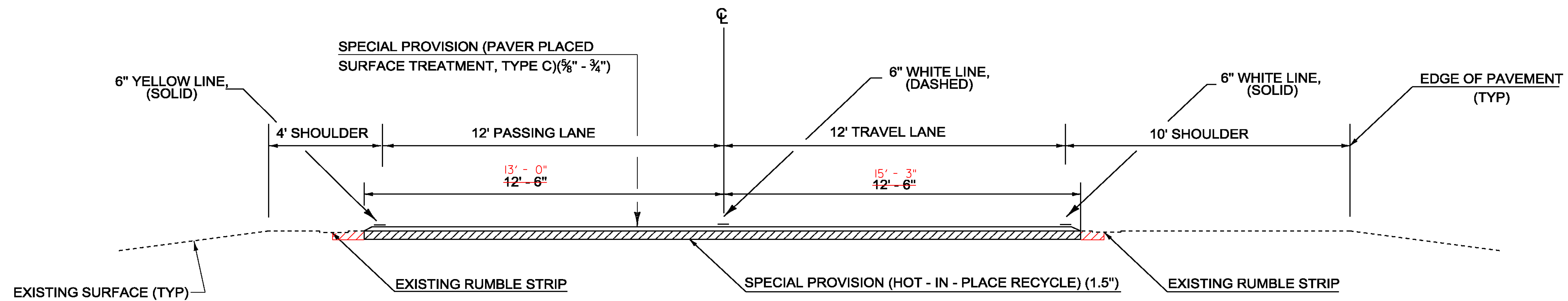
THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.  
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL 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.

QUALITY ASSURANCE PROGRAM : LEVEL I	
SURVEYED BY :	NA
SURVEYED DATE :	NA
DATUM	
VERTICAL	NA
HORIZONTAL	NA

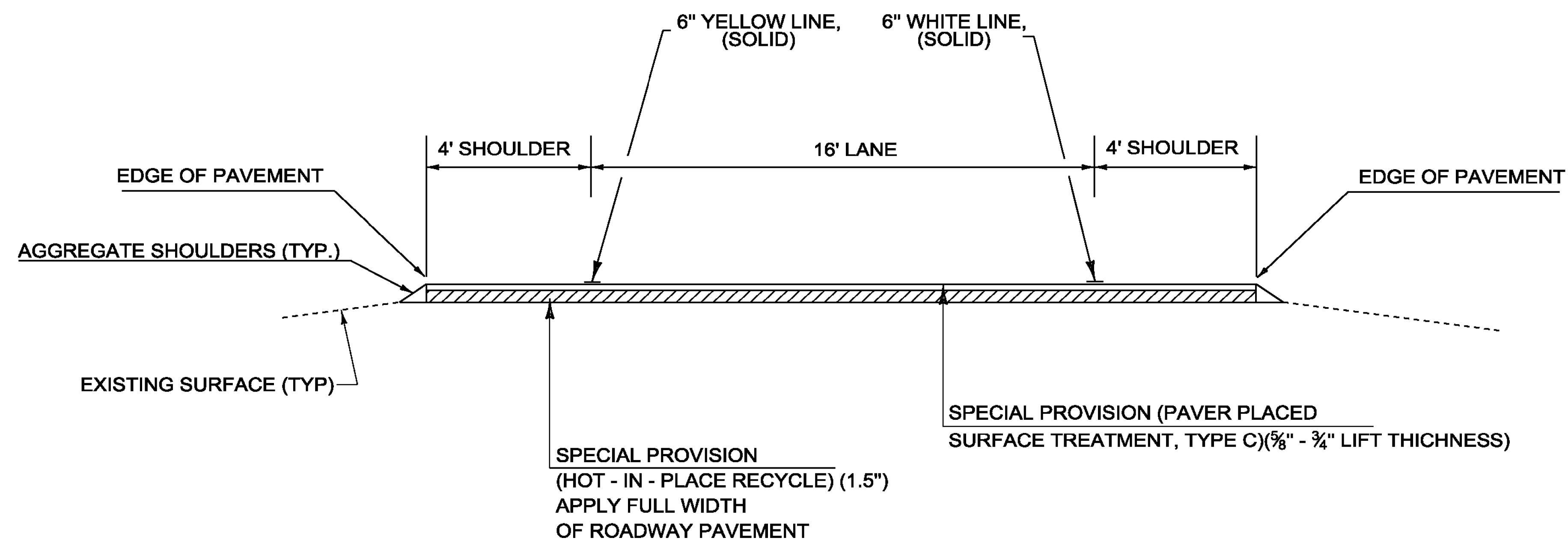


NOT TO SCALE

PROJECT MANAGER :	JONATHAN C. HARRINGTON, P. E.
PROJECT NAME :	HARTFORD-SHARON
PROJECT NUMBER :	IM SURF (46)
SHEET	40 OF 64



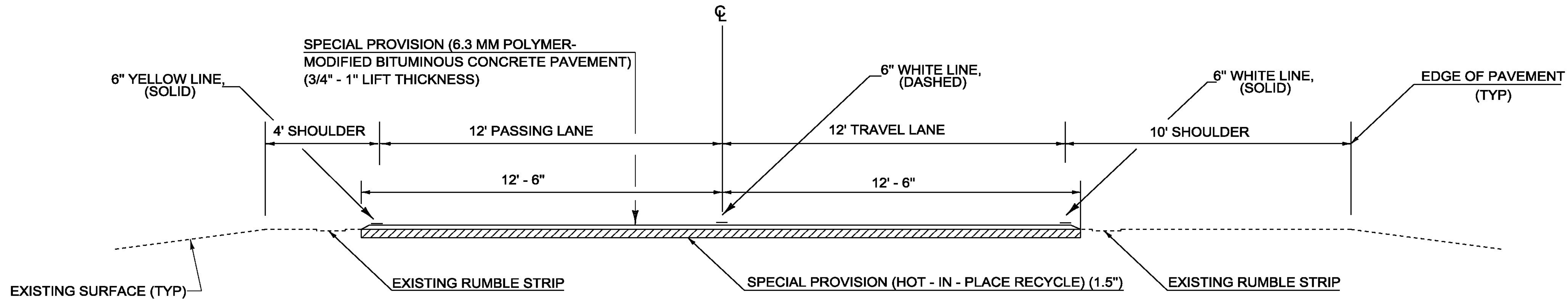
**TYPICAL SECTION - ALTERNATE A**  
**I - 89 NORTHBOUND HARTFORD MM 0.050 - SHARON MM 12.250**



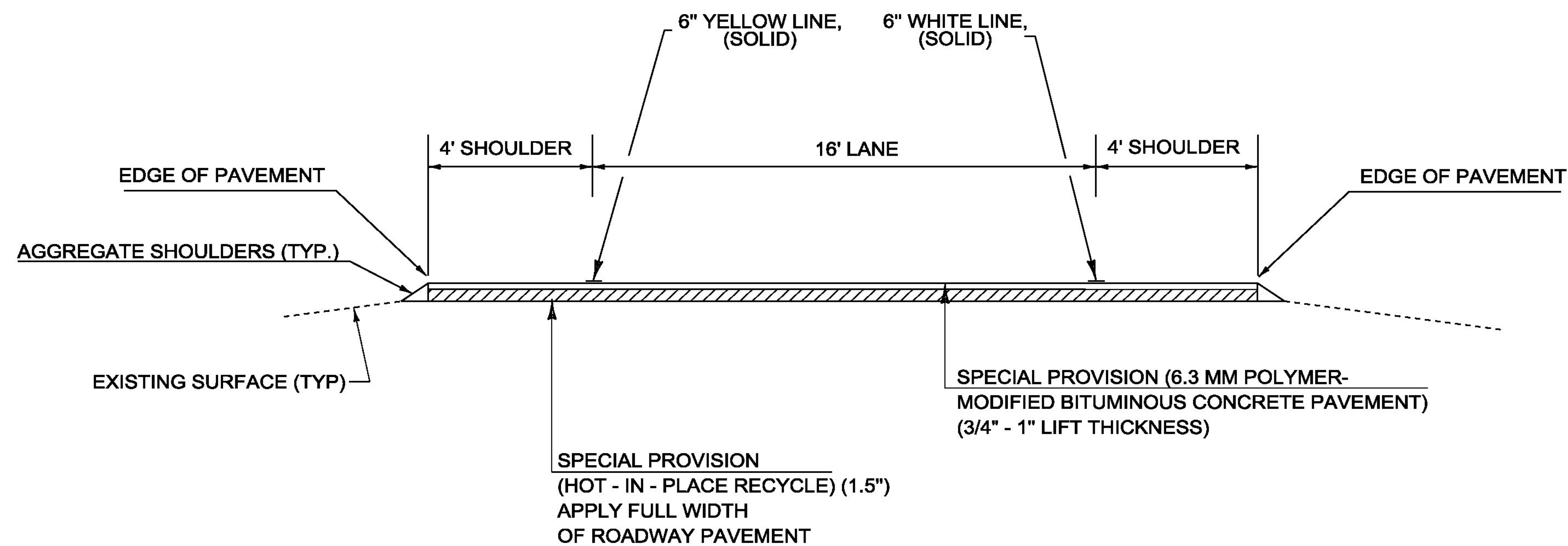
**TYPICAL RAMP SECTION**

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/pl3a638_wrk.dgn
PLOT DATE:	06-JUN-2014
PROJECT LEADER:	J. HARRINGTON
DRAWN BY:	PVT. MGT.
DESIGNED BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
TYPICAL SECTIONS ALTERNATE A	SHEET 41 OF 64



**TYPICAL SECTION - ALTERNATE A**  
**I - 89 NORTHBOUND HARTFORD MM 0.050 - SHARON MM 12.250**

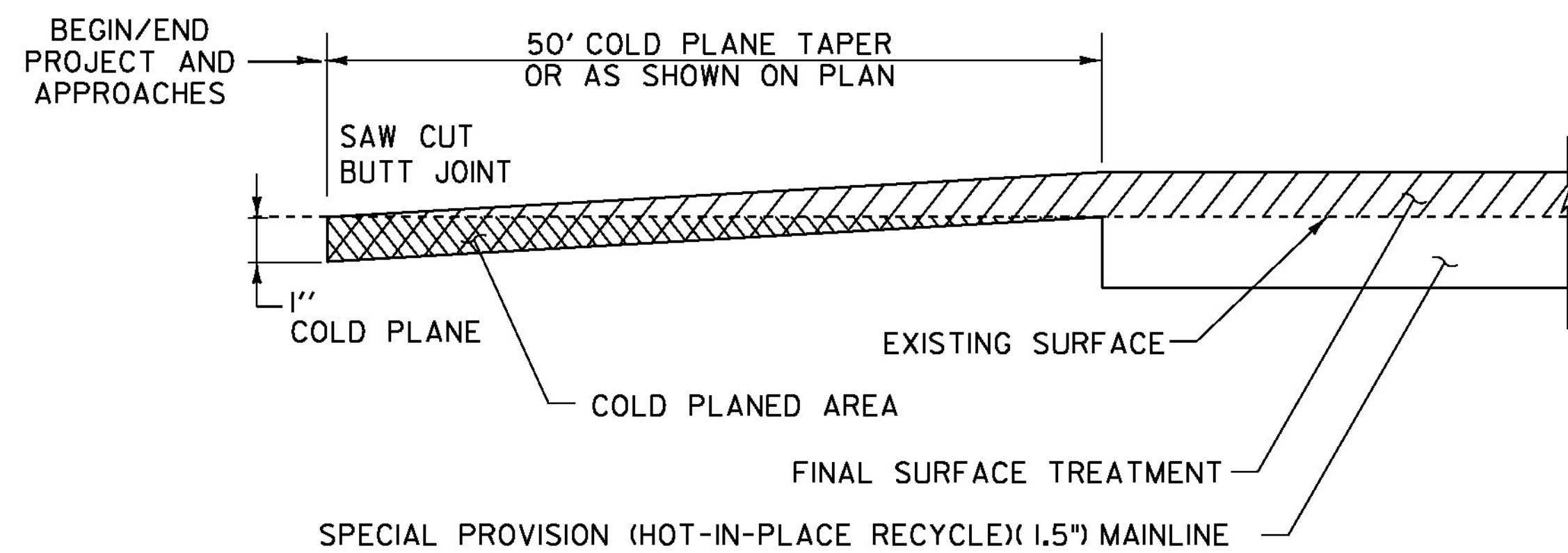


**TYPICAL RAMP SECTION**

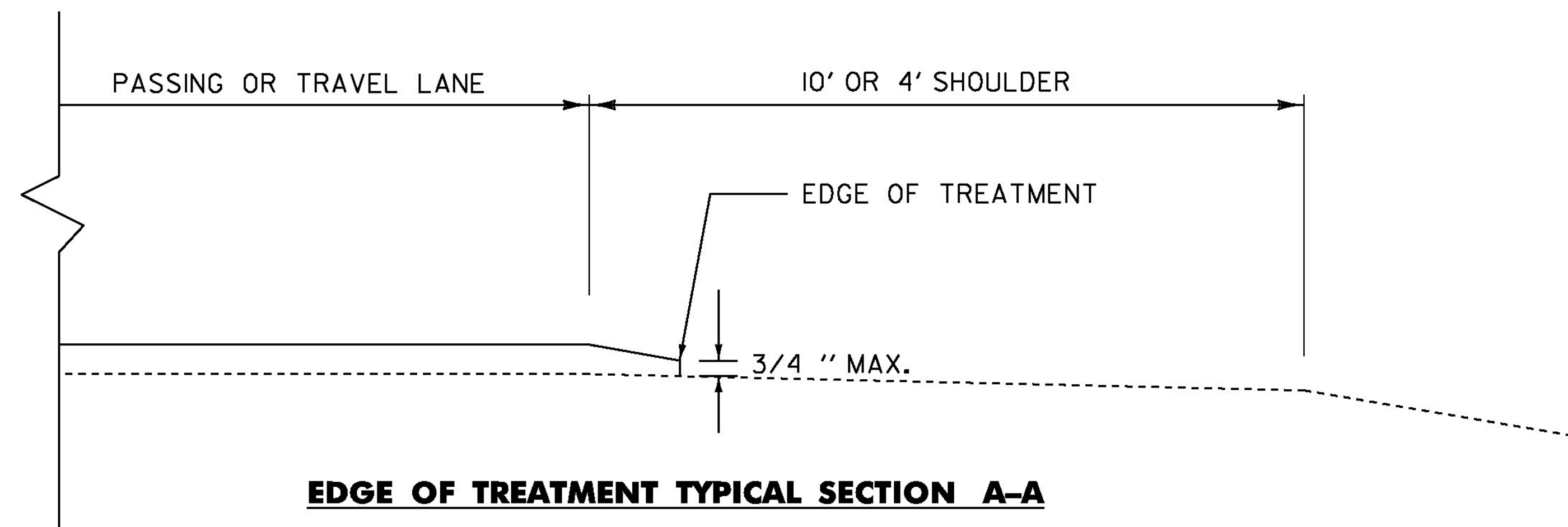
NOTE FOR ALTERNATE B:  
 1. PRIOR TO THE PLACEMENT OF THE POLYMER MODIFIED BITUMINOUS CONCRETE PAVEMENT, EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL HOT-IN-PLACE RECYCLE AT A RATE OF 0.080 GAL/SY (+/- 0.01GAL/SY) OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL BE RS-IH OR CRS-IH PER THE MANUFACTURER'S RECOMMENDATION AND PAID UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-IH OR CRS-IH).  
 2. THE GYRATION SPECIFICATION FOR THE 6.3 MM POLYMER - MODIFIED BITUMINOUS CONCRETE PAVEMENT SHALL BE 80. PG BINDER SHALL BE 70-28.

**NOT TO SCALE**

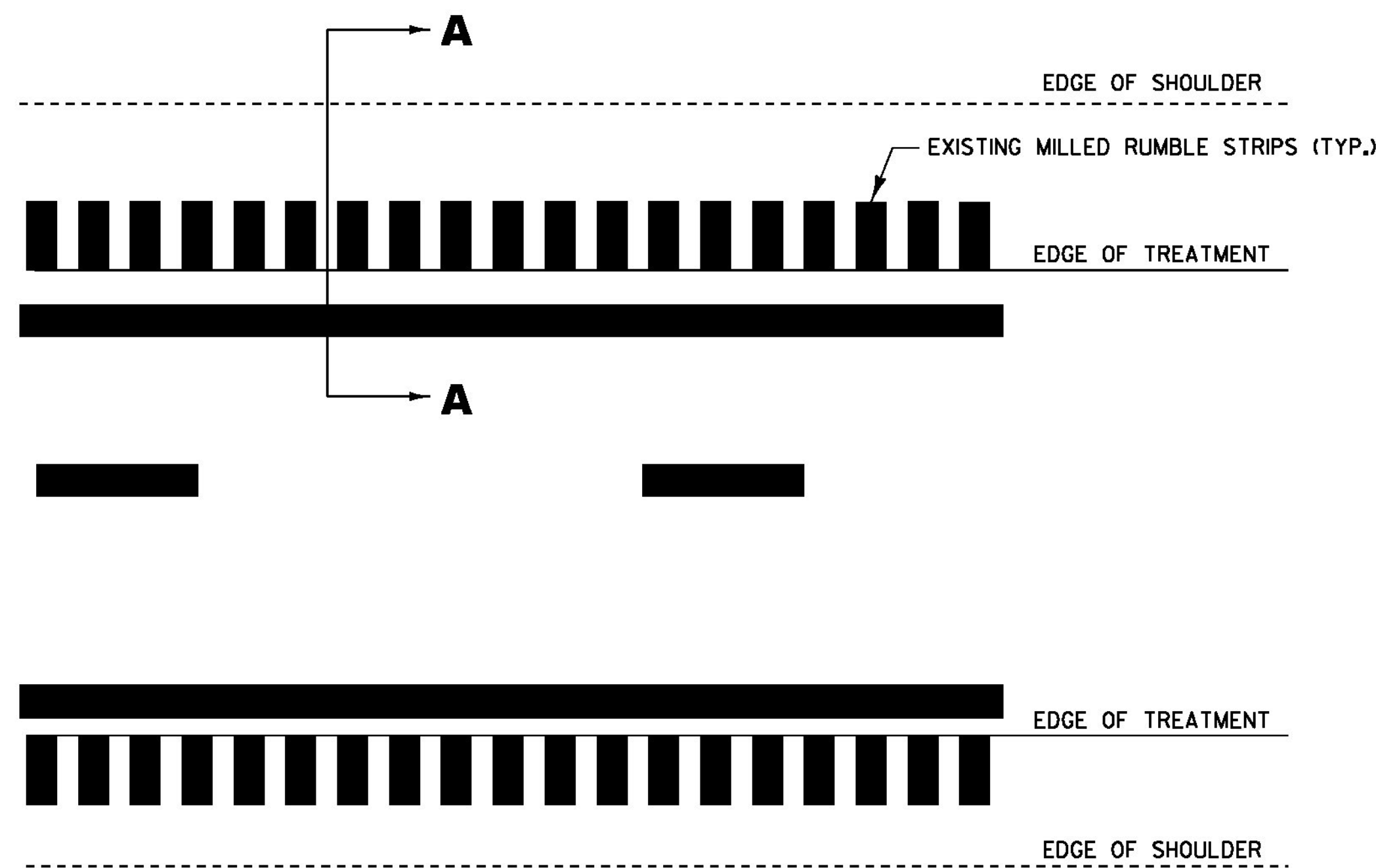
PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmg+/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
TYPICAL SECTIONS ALTERNATE B	
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
DATE:	06-JUN-2014
SHEET	42 OF 64



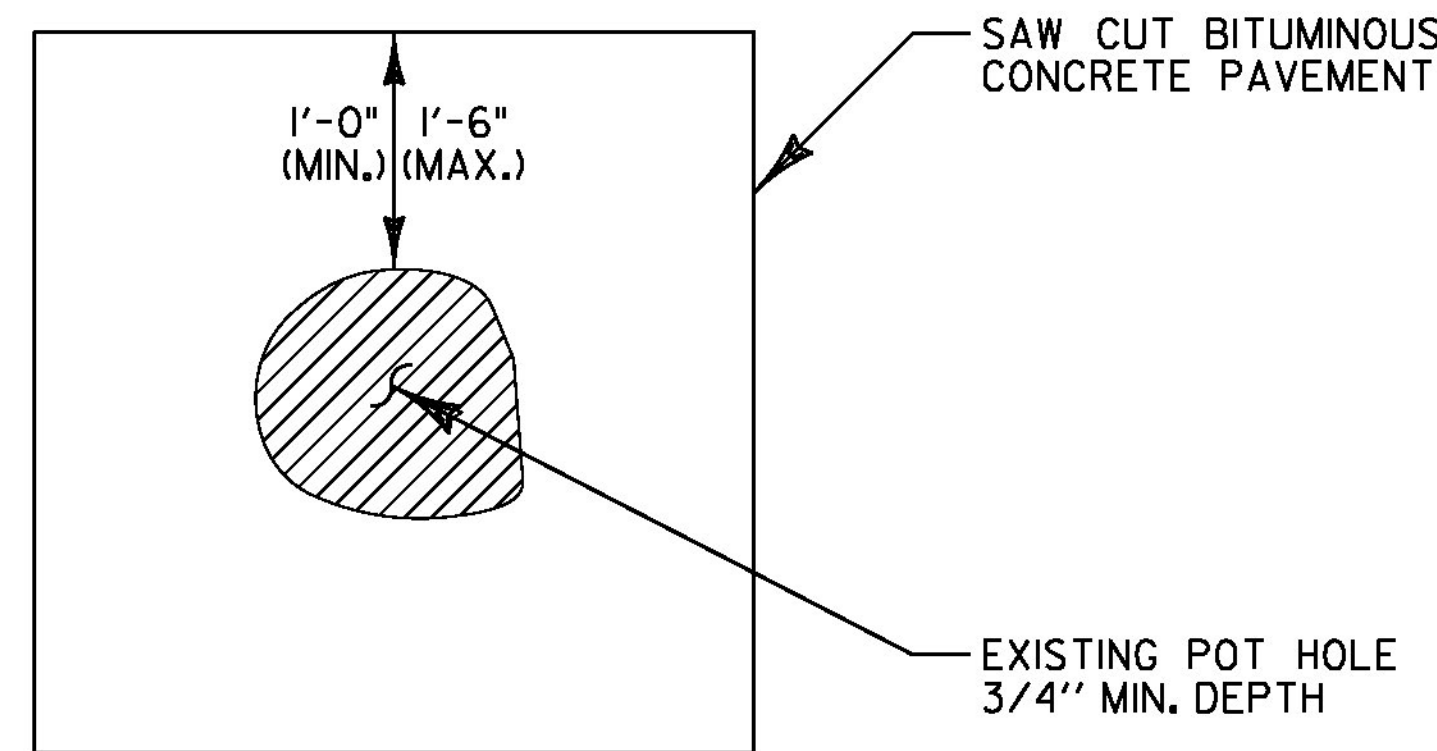
**TYPICAL APPROACH AREA DETAIL MAINLINE & RAMPS**



**EDGE OF TREATMENT TYPICAL SECTION A-A**

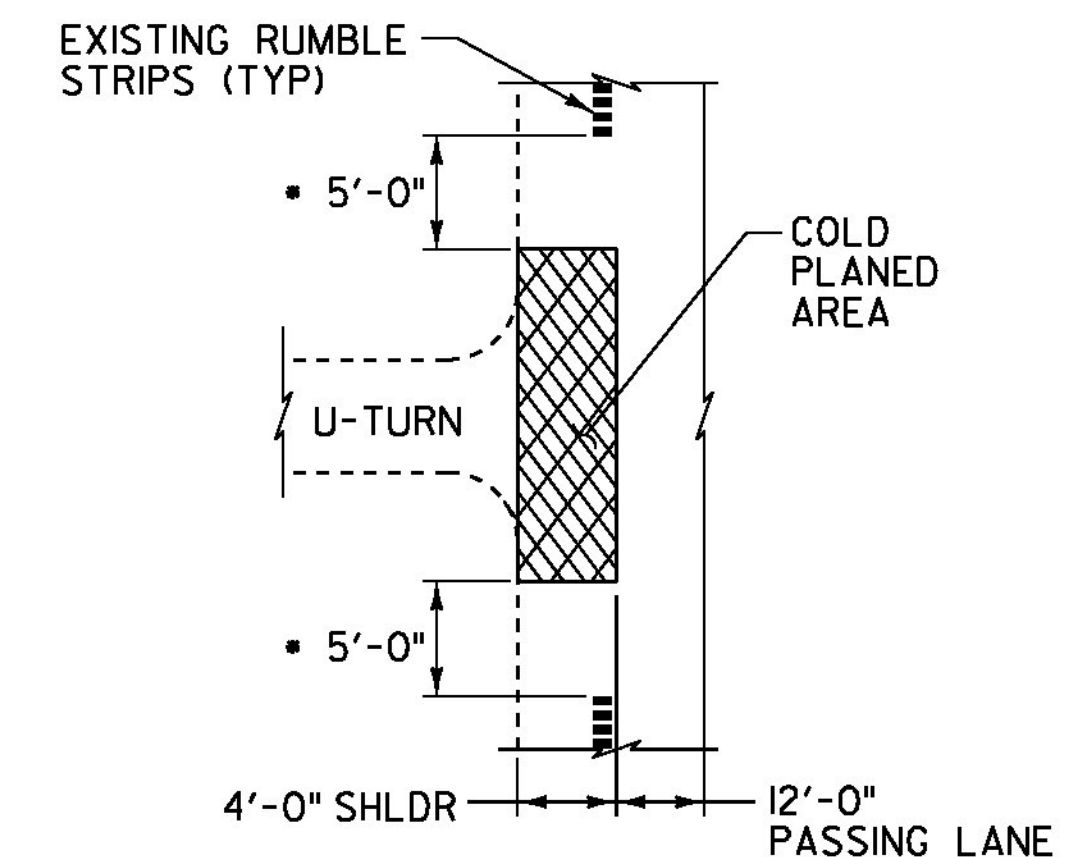


**EDGE OF TREATMENT TYPICAL PLAN**

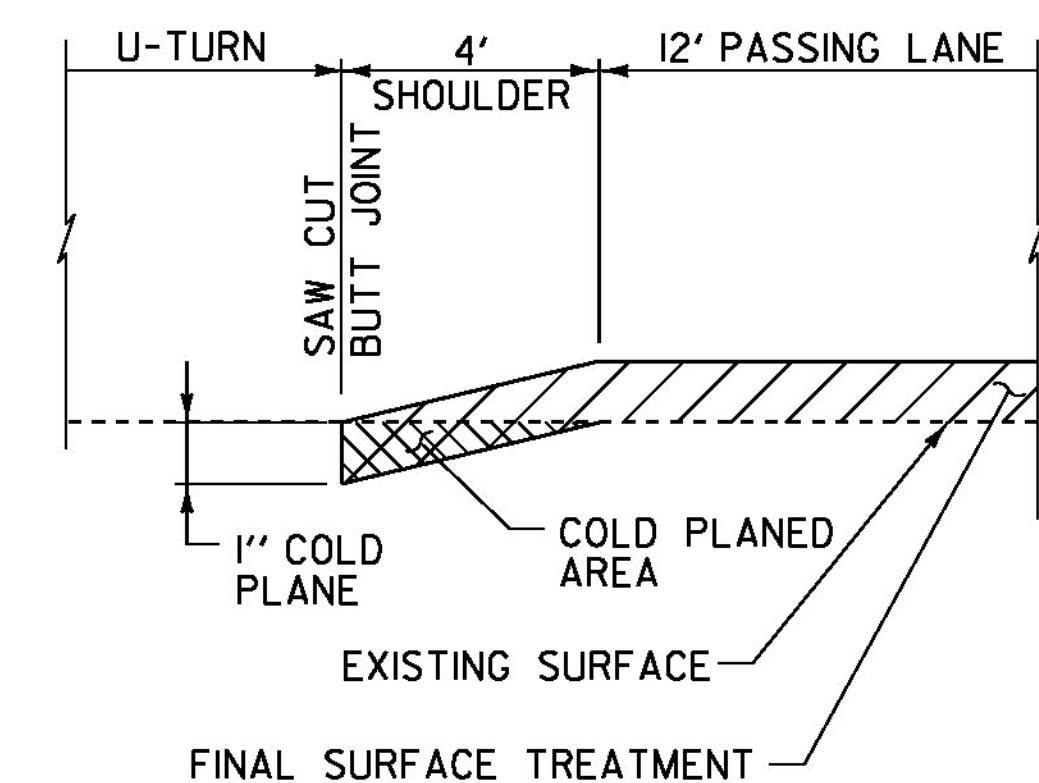


**TYPICAL - POT HOLE REPAIR**

NOTE:  
EMULSIFIED ASPHALT SHALL BE APPLIED AT ALL PATCH INTERFACES AT A RATE OF 0.25 - 0.50 GAL/SY. EMULSIFIED ASPHALT SHALL MEET THE REQUIREMENTS OF SECTION 404 AND WILL BE CONSIDERED INCIDENTAL TO THE PATCHING MATERIAL.



- 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**

**NOTES:**

1. EXISTING SHOULDER PAVEMENT SURFACES BEYOND THE LIMITS OF THE FINAL SURFACE TREATMENT SHALL RECEIVE ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING, POT HOLE REPAIR, AND CRACK-SEALING PRIOR TO APPLICATION OF THE FINAL SURFACE TREATMENT. ALL CRACKS GREATER THAN 0.10" AND UP TO 1.0" IN WIDTH SHALL BE SEALED USING THE "BLOW AND GO" 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" AND ALL OTHER PATCHING AND POT HOLE 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. EXISTING SHOULDER PAVEMENT SURFACES BEYOND THE LIMITS OF THE FINAL SURFACE TREATMENT SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POT HOLE REPAIR TREATMENTS.
3. FOLLOWING COMPLETION OF COLD PLANING, THE MILLED SURFACE FOR ALL BRIDGES SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POT HOLE REPAIR TREATMENTS, AS DIRECTED BY THE ENGINEER.
4. ALL LANE DELINEATION IS TO BE MAINTAINED DURING CONSTRUCTION BY THE USE OF LINE STRIPING TARGETS OR TEMPORARY PAINT.
5. A 50' COLD PLANED WEDGE SHALL BE CONSTRUCTED AT THE PROJECT BEGIN, PROJECT END, RAMPS, AND AT ALL BRIDGE APPROACHES OR AS DIRECTED BY THE ENGINEER. THE LONGITUDINAL EDGES OF THE SURFACE TREATMENT SHALL BE FEATHERED AS SHOWN ON THE TYPICAL SECTION, OR AS DIRECTED BY THE ENGINEER. ANY SAWCUTTING AT BUTT JOINTS SHALL BE PAID INCIDENTAL TO ITEM 210.10, COLD PLANING, BITUMINOUS PAVEMENT.
6. 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 POT HOLE REPAIR TREATMENTS, THIS MATERIAL SHALL BE REMOVED PRIOR TO CRACK-SEALING, PATCHING, AND POT HOLE 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.
7. THE SCREED OF THE PAVER SHALL BREAK AT THE BREAK POINT OF THE SHOULDER SUCH THAT THE DESIGNED NOMINAL THICKNESS IS CARRIED ONTO THE SHOULDER AND BROKEN OR PINCHED BY ROLLING. EDGE HEIGHT SHALL BE MEASURED A MINIMUM OF FIVE RANDOMLY SPACED POINTS PER TENTH OF A MILE. IF IT IS FOUND THAT THE AVERAGE HEIGHT IS GREATER THAN 3/4" OVER THE TENTH OF A MILE MEASURES SHALL BE PERFORMED SUCH THAT THE 3/4" MAXIMUM HEIGHT IS ACHIEVED. THIS APPLIES TO BOTH THE 10' AND 4' SHOULDER SIDES OF THE HIGHWAY.

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgf/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PROJECT NOTES	
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	43 OF 64

# QUANTITY SHEET 1

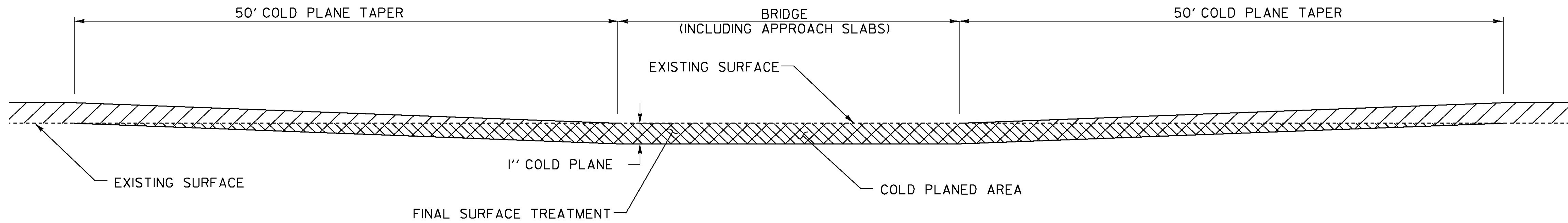
SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
						ROADWAY	BRIDGE	FULL CE ITEMS	ALTERNATE A	ALTERNATE B	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						46000					46000		LF	SHOULDER BERM REMOVAL	203.40	719			COLD PLANING, BITUMINOUS CONCRETE
						1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST	289	SY	APPROACHES
						3800					3800		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	134	1867	SY	RAMPS
						400					400		TON	AGGREGATE SHOULDERS	402.12	85	1210	SY	BRIDGE #6N
						1					1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-	222	SY	U-TURNS AND REST AREA RAMPS
						4500					4500		LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (AASHTO M 234 (ASTM D 6690) TYPE II)	417.20	EST	212	SY	ROUND
							210				210		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG (@ FINGER PLATE/VERMONT JOINT)	516.10	6	3800	SY	TOTAL
							260				260		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	4			
							100				100		CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST			
						100					100		HR	POWER BROOM RENTAL, TYPE I	608.30	EST			
						100					100		HR	TRUCK RENTAL	608.37	EST			
						200					200		HR	TRUCK-MOUNTED ATTENUATOR	608.45	EST			
						100					100		HR	TRUCK-MOUNTED ATTENUATOR, AWW/PV	608.50	EST			
						1000					1000		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
						300					300		HR	FLAGGERS	630.15	EST			
								0.34			0.34		LS	FIELD OFFICE, ENGINEERS	631.10	EST			
								0.34			0.34		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-			
								3000			3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	EST			
						0.34					0.34		LS	MOBILIZATION/DEMOBILIZATION	635.11	-			
						1					1		LS	TRAFFIC CONTROL (IM SURF(46))	641.10	-			
						8					8		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-			
						90000					90000		LF	DURABLE 6 INCH WHITE LINE, POLYUREA	646.424	1494			
						74000					74000		LF	DURABLE 6 INCH YELLOW LINE, POLYUREA	646.434	386			
						4900					4900		LF	DURABLE 12 INCH WHITE LINE, POLYUREA	646.464	104			
														BEGIN OPTION AA					
						35					35		LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482	2			
						35					35		LF	DURABLE 24 INCH STOP BAR, POLYUREA	646.484	2			
														END OPTION AA					
														BEGIN OPTION BB					
						34					34		EACH	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492	-			
						34					34		EACH	DURABLE LETTER OR SYMBOL, POLYUREA	646.494	-			
														END OPTION BB					
						90000					90000		LF	TEMPORARY 6 INCH WHITE LINE, PAINT	646.622	1494			
						74000					74000		LF	TEMPORARY 6 INCH YELLOW LINE, PAINT	646.632	386			
						4900					4900		LF	TEMPORARY 12 INCH WHITE LINE, PAINT	646.662	104			
						35					35		LF	TEMPORARY 24 INCH STOP BAR, PAINT	646.682	2			
						34					34		EACH	TEMPORARY LETTER OR SYMBOL, PAINT	646.692	-			
						4200					4200		EACH	LINE STRIPING TARGETS	646.76	59			
						164					164		LF	PAINTED CURB	646.81	-			
						29					29		SF	PAINTED ISLAND	646.82	-			

PROJECT NAME: HARTFORD-SHARON  
 PROJECT NUMBER: IM SURF(46)  
 FILE NAME: I3a638/pvtmg+/p3a638\_wrk.dgn PLOT DATE: 06-JUN-2014  
 PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
 DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
 QUANTITY SHEET 1 SHEET 44 OF 64

# QUANTITY SHEET 2

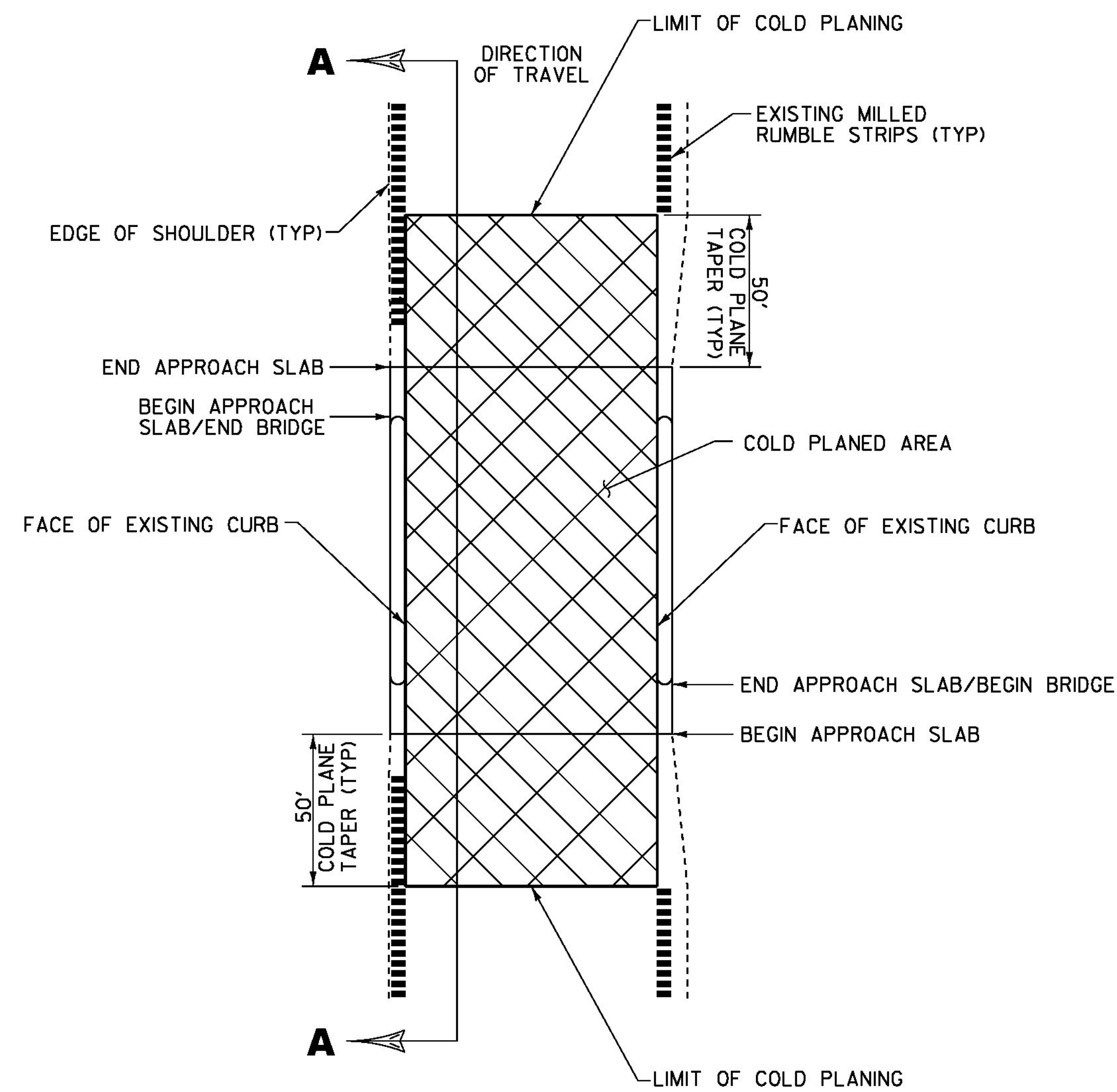
SUMMARY OF ESTIMATED QUANTITIES						TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES					
				ROADWAY	BRIDGE	FULL CE ITEMS	ALTERNATE A	ALTERNATE B	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
				8100					8100		SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	EST			
				1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
				181000					181000		SY	SPECIAL PROVISION (HOT-IN-PLACE RECYCLE)	900.675	2579			
				50					50		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)	900.680	EST			
												BEGIN ALTERNATE ZA1					
							204000		204000		SY	SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)	900.675	2363			
												END ALTERNATE ZA1					
												BEGIN ALTERNATE ZA2					
								1	1		LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-			
								11900	11900		TON	SPECIAL PROVISION (6.3 MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)	900.680	138			
								1400	1400		CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	43			
												END ALTERNATE ZA2					

PROJECT NAME: HARTFORD-SHARON  
 PROJECT NUMBER: IM SURF(46)  
 FILE NAME: I3a638/pvtmg+/p3a638\_wrk.dgn PLOT DATE: 06-JUN-2014  
 PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
 DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
 QUANTITY SHEET 2 SHEET 45 OF 64



**BRIDGE COLD PLANE DETAIL**

BRIDGE #6N MM 1.071  
 BRIDGE #11N MM 6.950



**BRIDGE COLD PLANE TYPICAL PLAN**

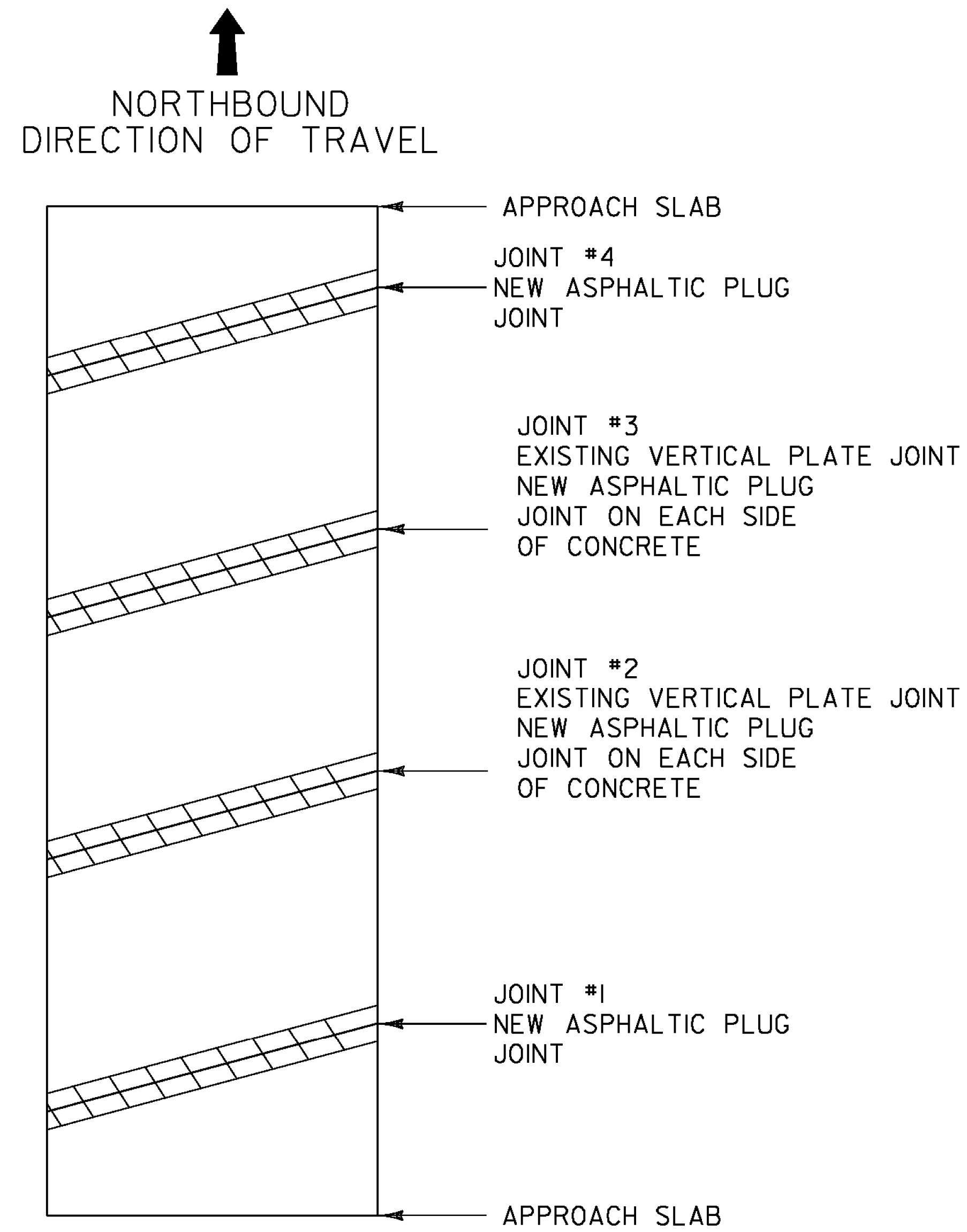
NOT TO SCALE

**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 ENGINEER TO BE AT FAULT FOR THE DAMAGE, THE RECOMMENDED REPAIRS SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE STATE.

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/p13a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
BRIDGE DETAIL SHEET I	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	46 OF 64



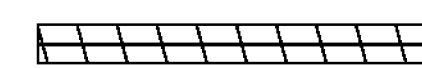
**BRIDGE #6N**

MM 1.071

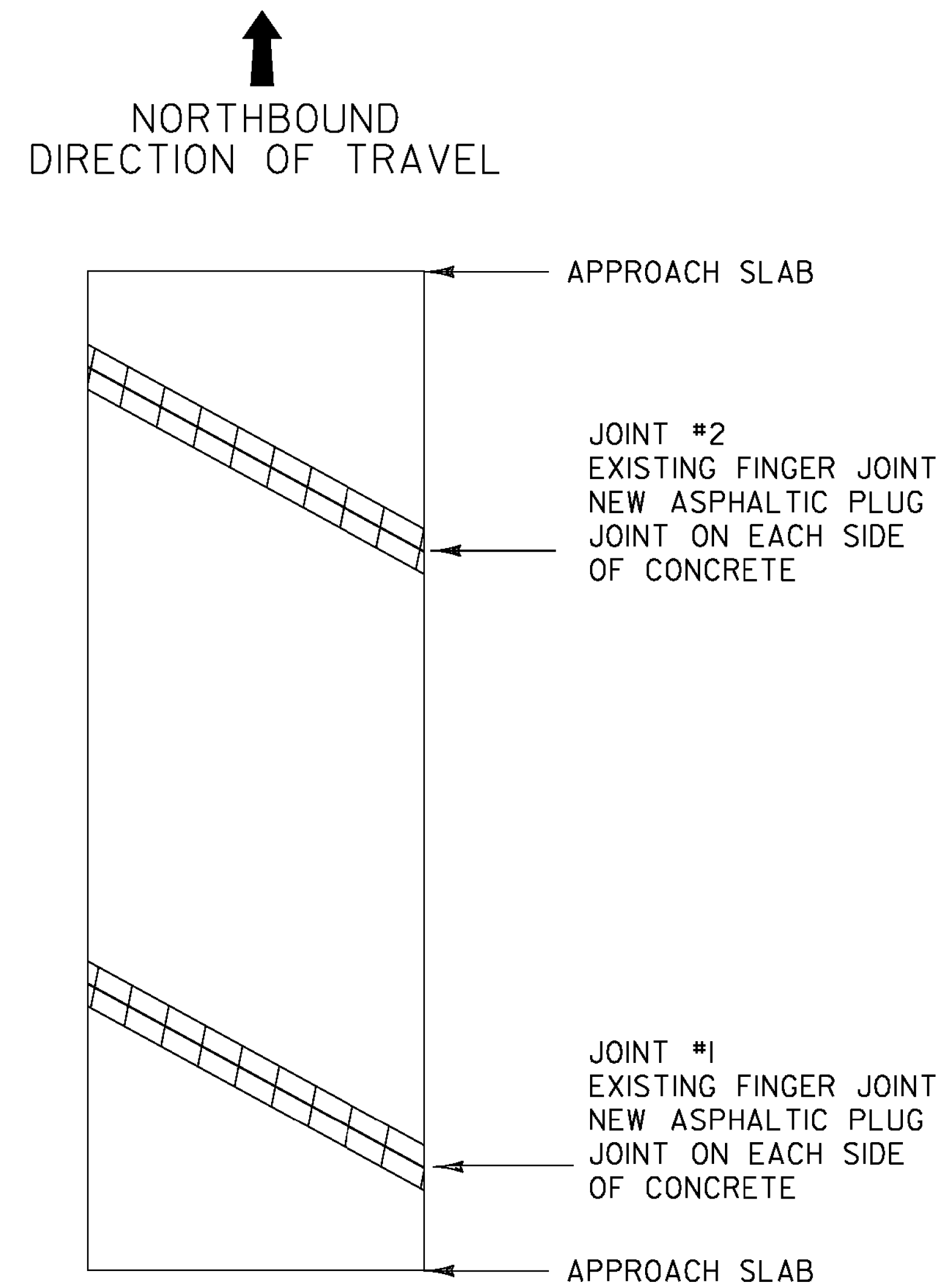
LENGTH OF ASPHALTIC PLUG JOINTS:

- JOINT #1 - 43'
- JOINT #2 - 43' X 2 = 86'
- JOINT #3 - 43' X 2 = 86'
- JOINT #4 - 43'
- TOTAL = 258'

**LEGEND**



EXISTING BRIDGE JOINTS TO BE  
REPAIRED WITH ASPHALTIC PLUG JOINT



**BRIDGE #11N**

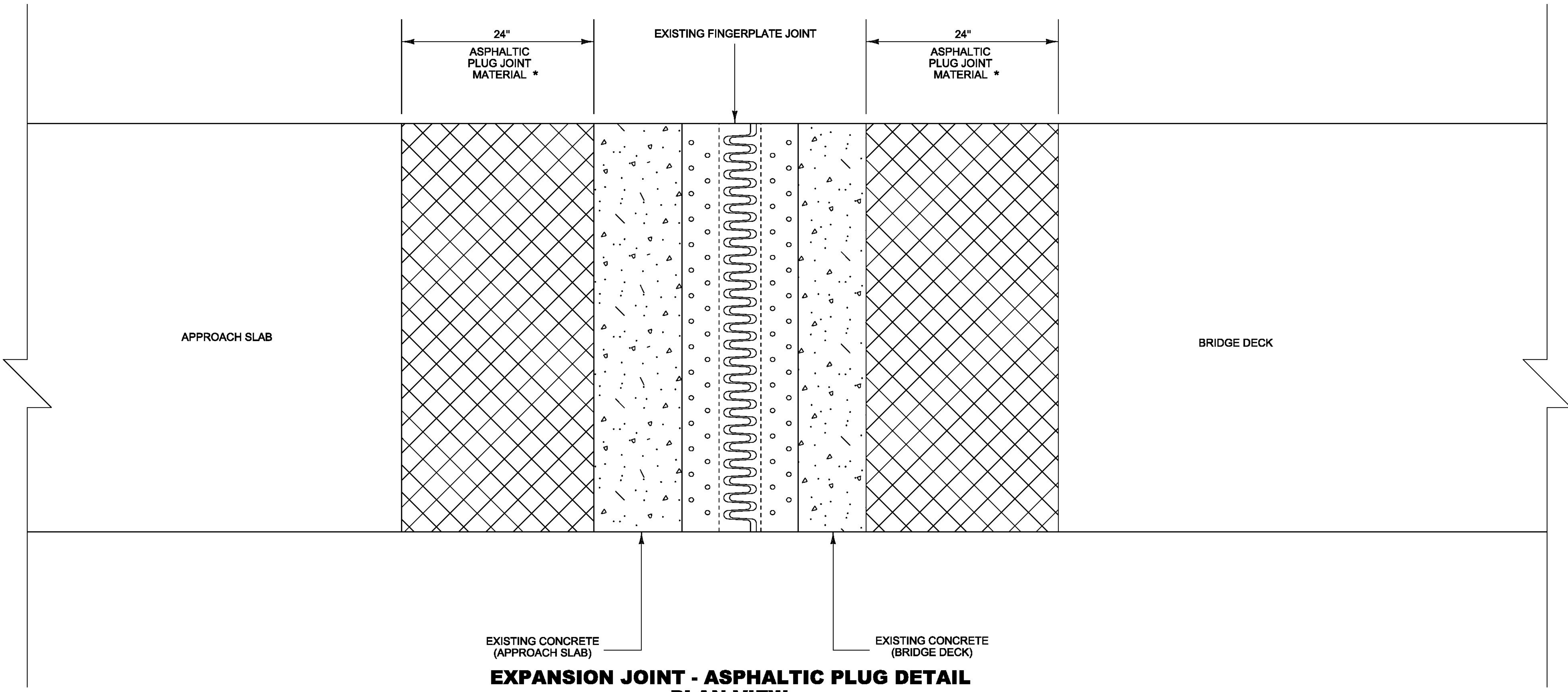
MM 6.950

LENGTH OF ASPHALTIC PLUG JOINTS:

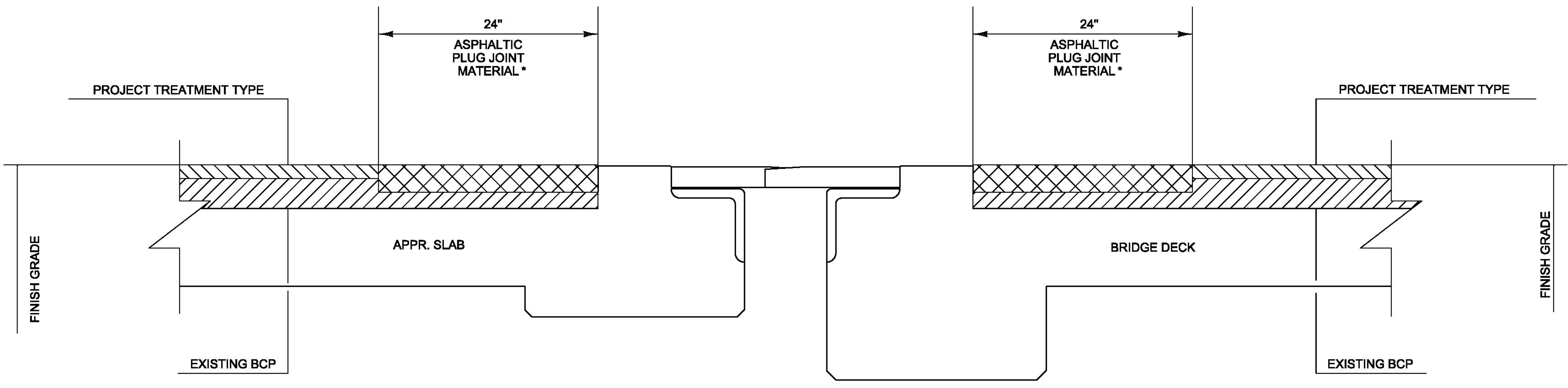
- ~~JOINT #1 - 43' X 2 = 86'~~
- ~~JOINT #2 - 43' X 2 = 86'~~
- TOTAL = 172'
- JOINT #1 - 45.1' X 2 = 90.2'
- JOINT #2 - 45.1' X 2 = 90.2'
- TOTAL = 180.4'

**NOT TO SCALE**

PROJECT NAME: HARTFORD-SHARON	
PROJECT NUMBER: IM SURF(46)	
FILE NAME: I3a638/pvtmgt/pl3a638_wrk.dgn	PLOT DATE: 06-JUN-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: PVT. MGT.
DESIGNED BY: PVT. MGT.	CHECKED BY: PVT. MGT.
BRIDGE DETAIL SHEET 2	SHEET 47 OF 64



**EXPANSION JOINT - ASPHALTIC PLUG DETAIL  
PLAN VIEW  
(FINGER PLATE JOINT)**

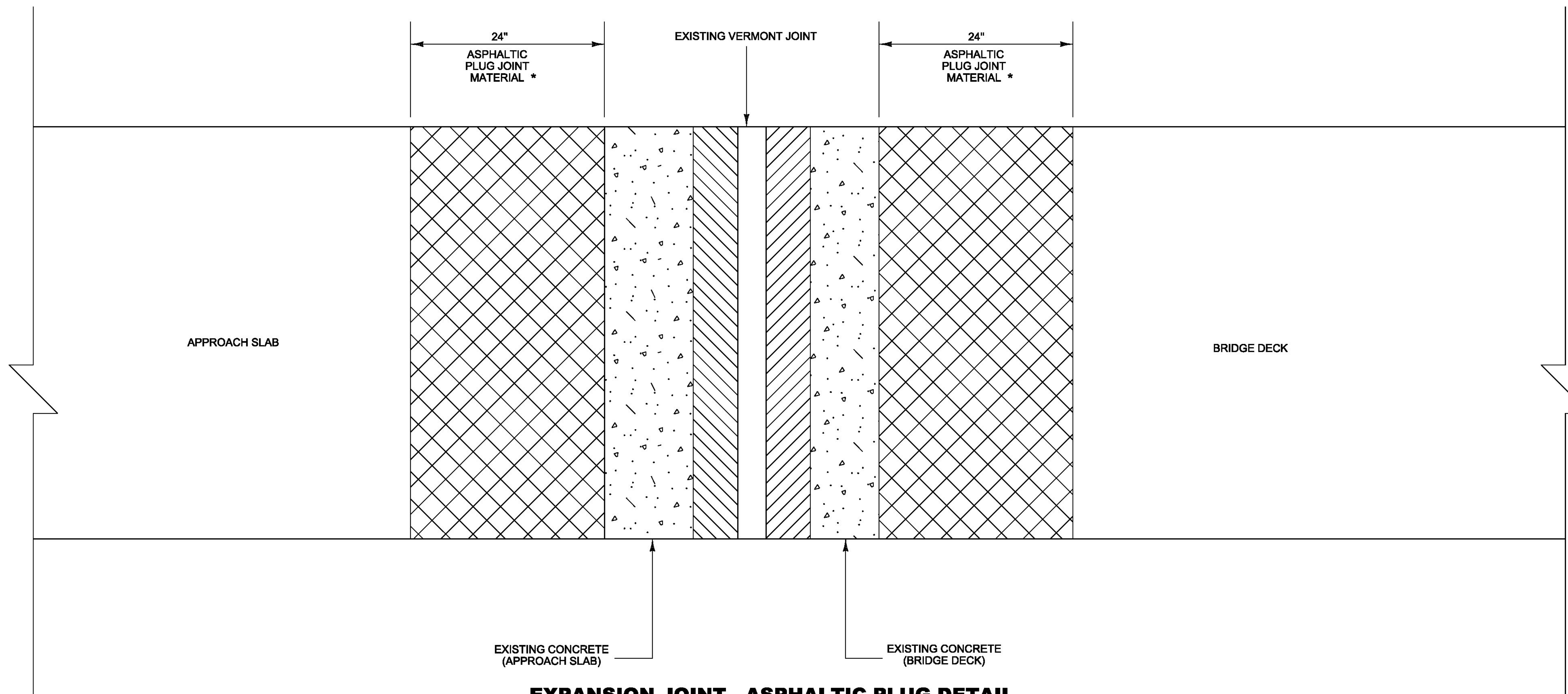


\* 2" MAXIMUM DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER

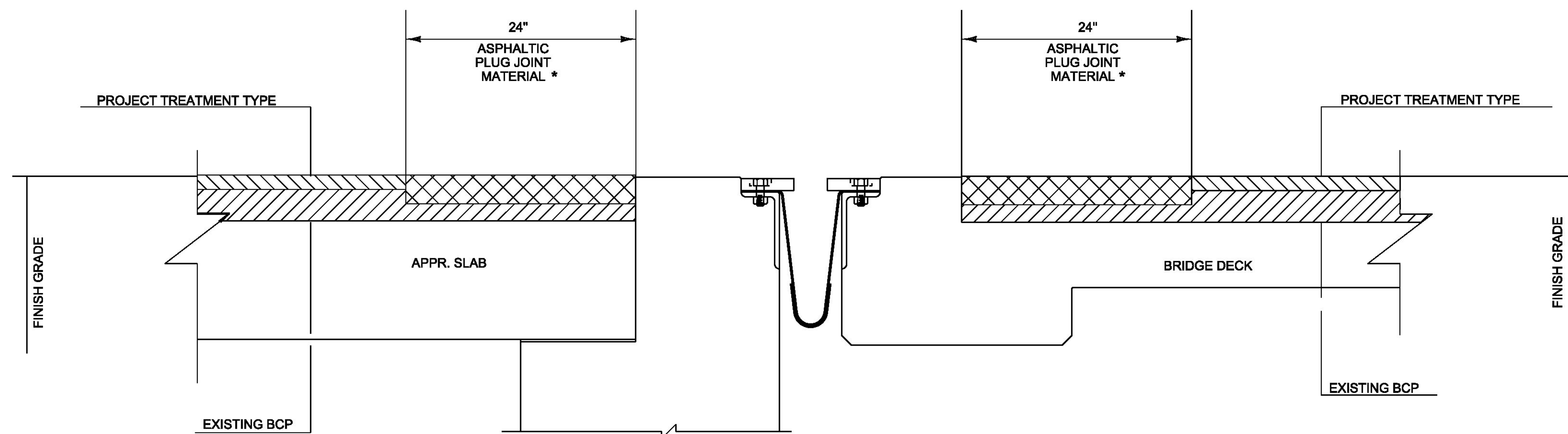
**EXPANSION JOINT - ASPHALTIC PLUG DETAIL  
CROSS SECTION VIEW  
(FINGER PLATE JOINT)**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmg+/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
BRIDGE DETAIL SHEET	3
DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	48 OF 64

NOT TO SCALE



**EXPANSION JOINT - ASPHALTIC PLUG DETAIL  
PLAN VIEW  
(VERMONT OR VERTICAL PLATE JOINT)**



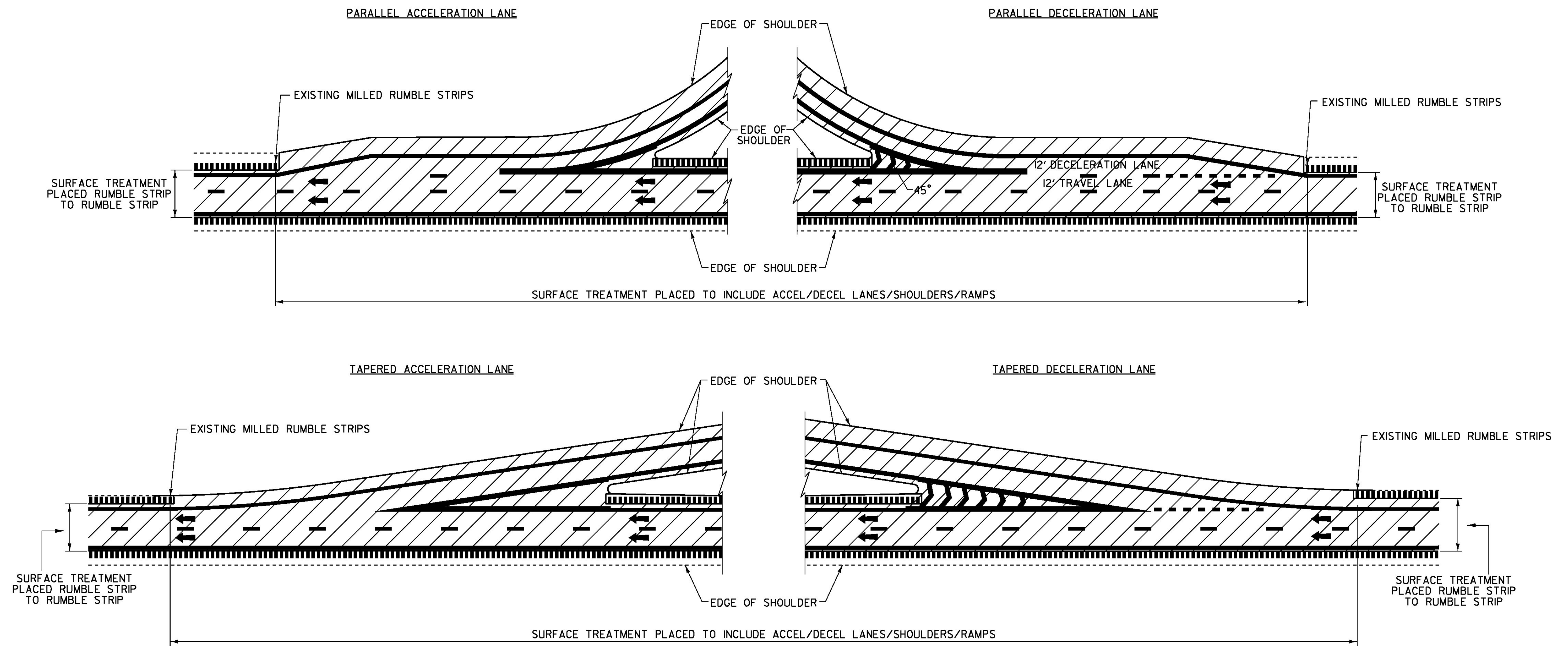
\* 2" MAXIMUM DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER

**EXPANSION JOINT - ASPHALTIC PLUG DETAIL  
CROSS SECTION VIEW  
(VERMONT OR VERTICAL PLATE JOINT)**

NOT TO SCALE

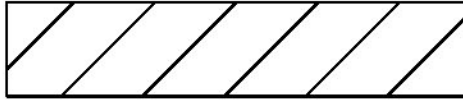


PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmg+/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
BRIDGE DETAIL SHEET	4
DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	49 OF 64

**TYPICAL INTERCHANGE CONSTRUCTION DETAILS # 1**



NOTES:  
I. LINE STRIPING SHOWN FOR REFERENCE ONLY.

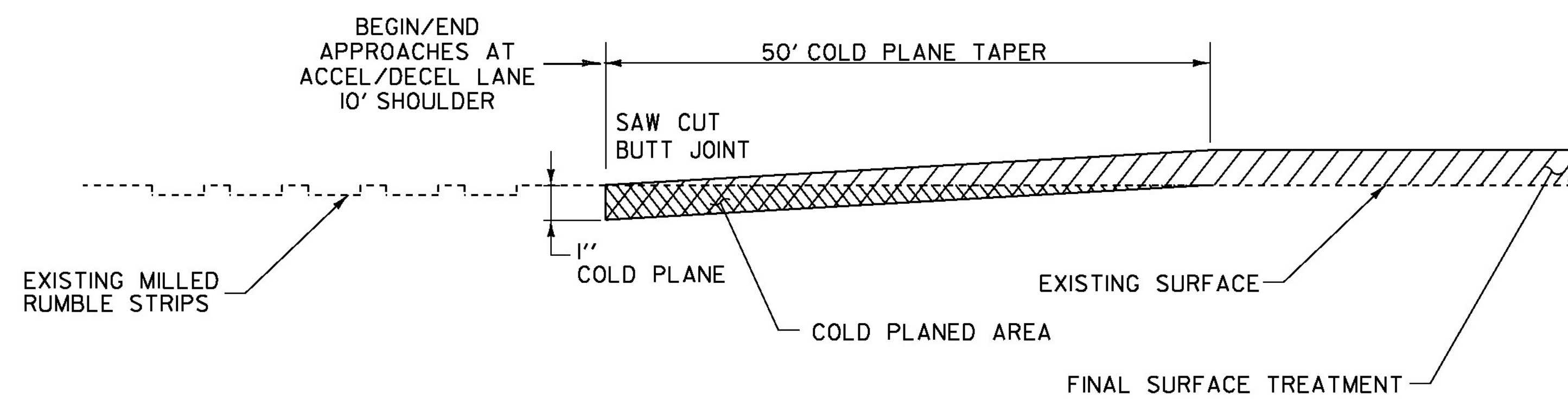
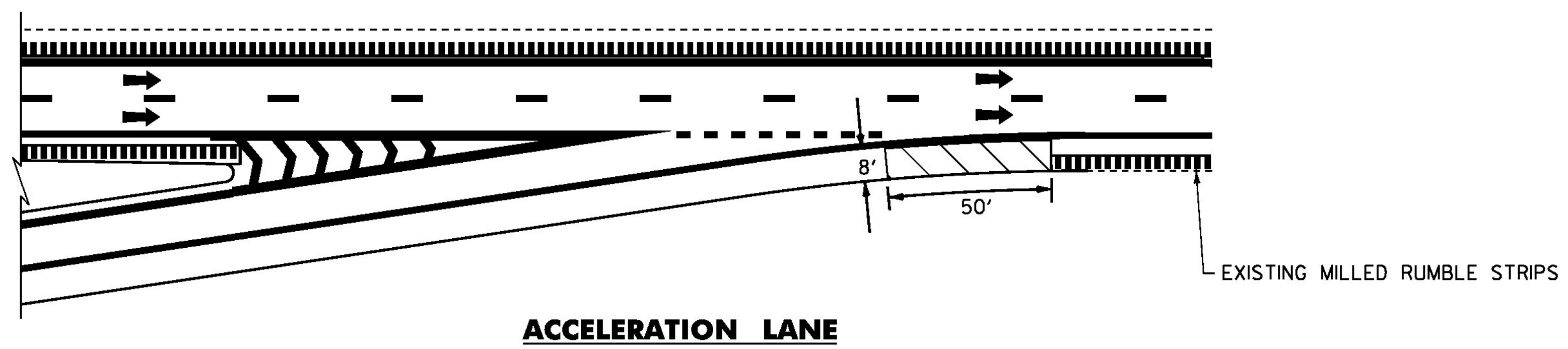
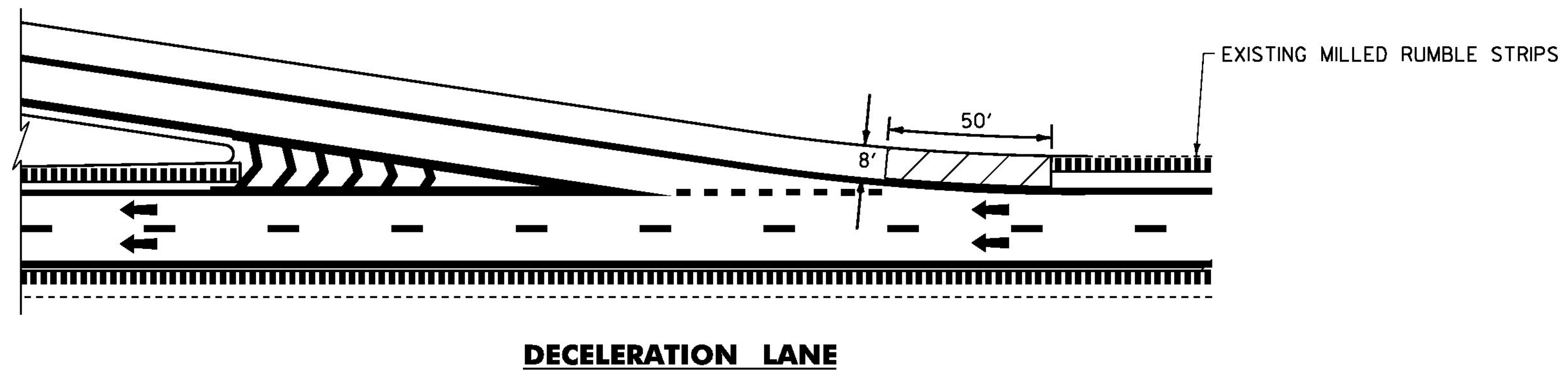
**LEGEND**

-  SURFACE TREATMENT
-  DIRECTION OF TRAFFIC FLOW
-  EXISTING MILLED RUMBLE STRIPS

**NOT TO SCALE**

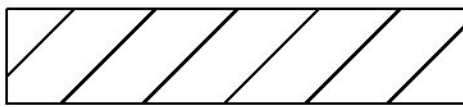


PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
INTERCHANGE DETAIL SHEET 1	
PLLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	50 OF 64

**TYPICAL INTERCHANGE CONSTRUCTION DETAILS # 2**



**TYPICAL APPROACH AREA DETAIL AT ACCEL/DECEL LANE 10 FT SHOULDER**

**LEGEND**

-  AREA TO BE COLD PLANED
-  DIRECTION OF TRAFFIC FLOW
-  EXISTING MILLED RUMBLE STRIPS

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
INTERCHANGE DETAIL SHEET 2	
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	51 OF 64

DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 STA 2+64 TO 316+80.00 C.L. (DASHED)  
 STA 2+64 TO 316+80.00 RT (SOLID)

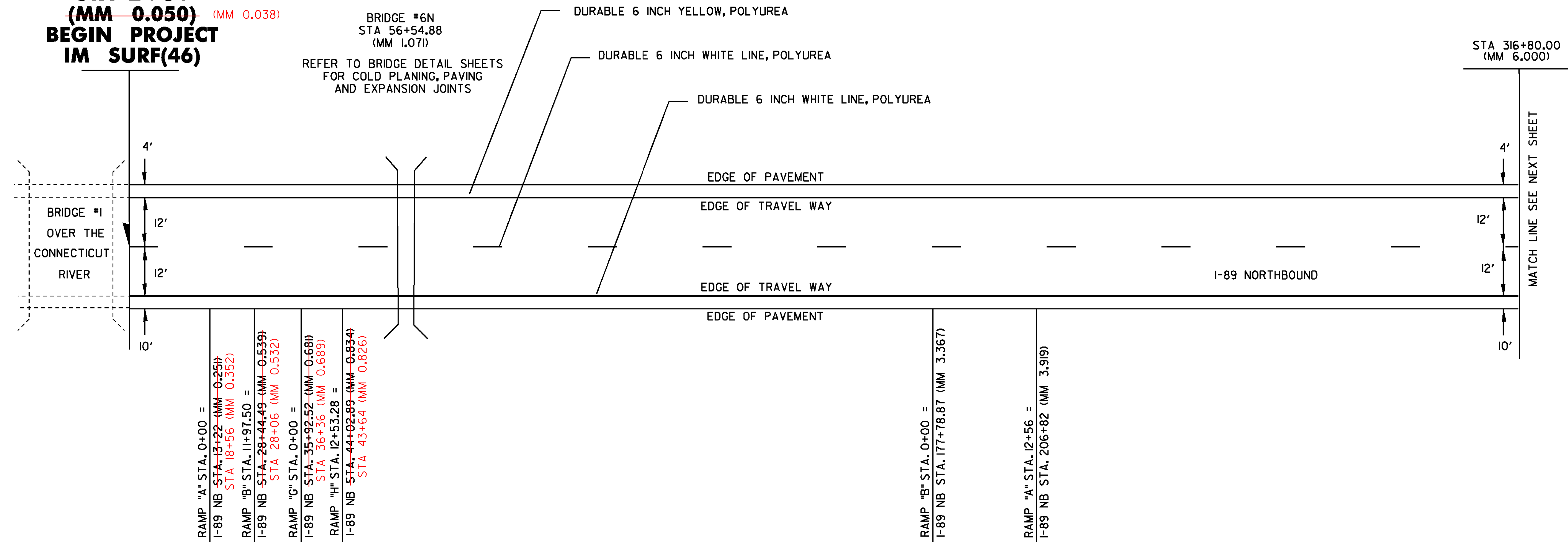
DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 STA 2+64 TO 316+80.00 LT (SOLID)

**INTERSTATE ROUTE 89**

~~STA 2+64~~ STA 2+00.64  
 (MM 0.050) (MM 0.038)  
**BEGIN PROJECT**  
**IM SURF(46)**

BRIDGE #6N  
 STA 56+54.88  
 (MM 1.071)  
 REFER TO BRIDGE DETAIL SHEETS  
 FOR COLD PLANING, PAVING  
 AND EXPANSION JOINTS

STA 316+80.00  
 (MM 6.000)



RAMP "A" STA. 0+00 =  
 I-89 NB STA. 13+22 (MM 0.251)  
 STA 18+56 (MM 0.552)  
 RAMP "B" STA. 11+97.50 =  
 I-89 NB STA. 28+44.49 (MM 0.539)  
 STA 28+06 (MM 0.532)  
 RAMP "C" STA. 0+00 =  
 I-89 NB STA. 35+92.52 (MM 0.681)  
 STA 36+36 (MM 0.689)  
 RAMP "H" STA. 12+53.28 =  
 I-89 NB STA. 44+02.89 (MM 0.834)  
 STA 43+64 (MM 0.826)

REFER TO WHITE RIVER JCT. INTERCHANGE  
 PAVEMENT MARKING DETAILS

RAMP "B" STA. 0+00 =  
 I-89 NB STA. 177+78.87 (MM 3.367)  
 RAMP "A" STA. 12+56 =  
 I-89 NB STA. 206+82 (MM 3.919)

REFER TO QUECHEE INTERCHANGE  
 PAVEMENT MARKING DETAIL

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/pl3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET 1	CHECKED BY: PVT. MGT.
	DATE: 06-JUN-2014
	DRAWN BY: PVT. MGT.
	SHEET 52 OF 64

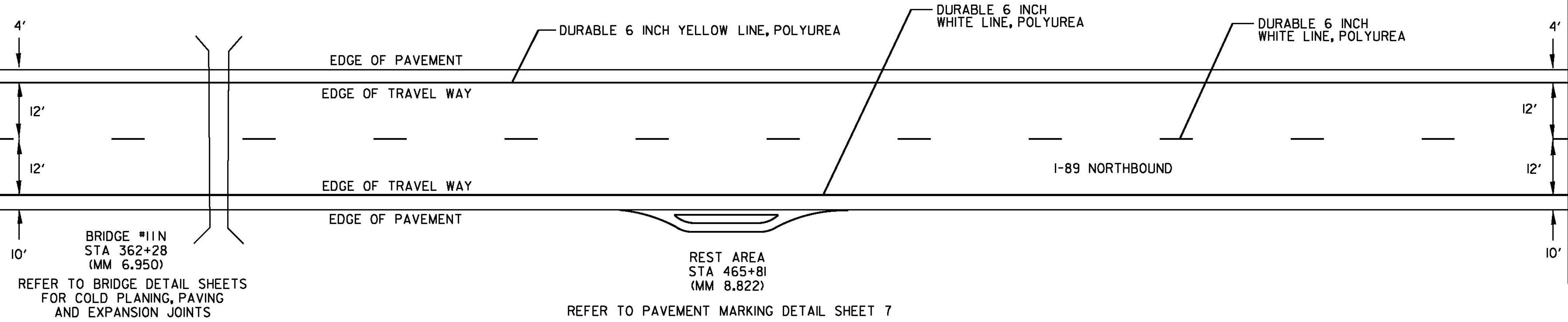
DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 STA 316+80 TO 646+80 C.L. (DASHED)  
 STA 316+80 TO 646+80 RT (SOLID)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 STA 316+80 TO 646+80 LT (SOLID)

STA 316+80.00  
 (MM 6.000)

**INTERSTATE ROUTE 89**  
**STA 646+80.00**  
**(MM 12.250)**  
**END PROJECT**  
**IM SURF(46)**

MATCH LINE SEE PREVIOUS SHEET



BRIDGE #11N  
 STA 362+28  
 (MM 6.950)  
 REFER TO BRIDGE DETAIL SHEETS  
 FOR COLD PLANING, PAVING  
 AND EXPANSION JOINTS

REST AREA  
 STA 465+81  
 (MM 8.822)  
 REFER TO PAVEMENT MARKING DETAIL SHEET 7

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET 2	
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
PLLOT DATE:	06-JUN-2014
SHEET	53 OF 64

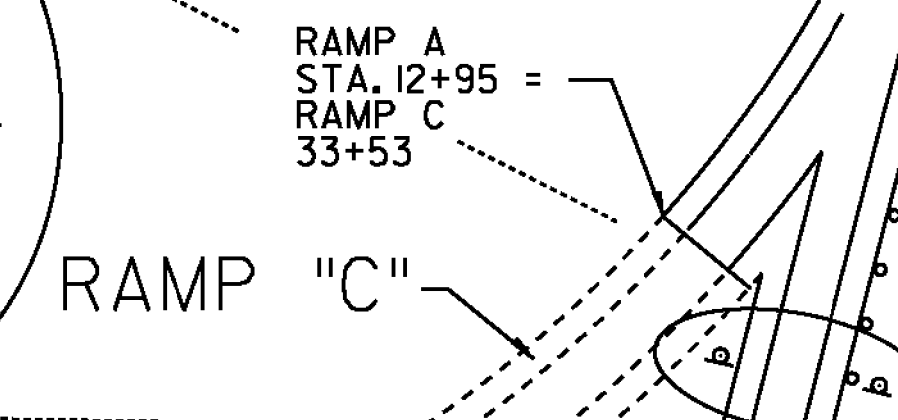
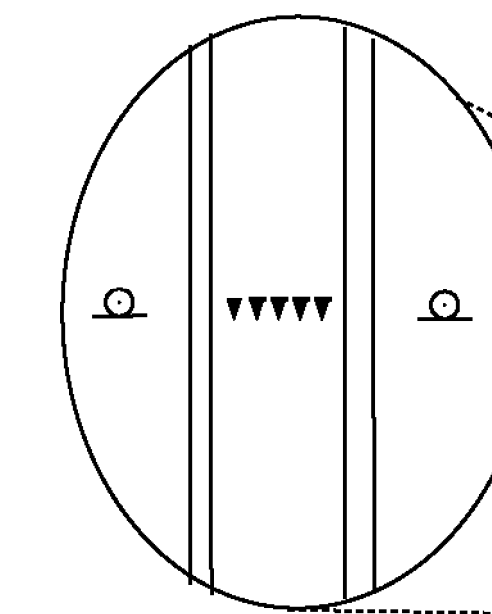
DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 WHITE RIVER JCT. INTERCHANGE  
 RAMP A/RAMP C  
 NORTHBOUND OFF RAMP STA. 5+12 TO 12+96 LT (RAMP A STATIONS)(SOLID)  
 NORTHBOUND OFF RAMP STA. 12+96 TO 21+98 LT (RAMP A STATIONS)(SOLID)

DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 WHITE RIVER JCT. INTERCHANGE  
 RAMP A/RAMP C  
 NORTHBOUND OFF RAMP STA. 0+00 TO 3+48 RT (RAMP A STATIONS)(DOTTED)  
 NORTHBOUND OFF RAMP STA. 3+48 TO 21+98 RT (RAMP A STATIONS)(SOLID)

DURABLE 12 INCH WHITE LINE, POLYUREA  
 TEMPORARY 12 INCH WHITE LINE, PAINT  
 WHITE RIVER JCT. INTERCHANGE  
 RAMP A/RAMP C  
 NORTHBOUND OFF RAMP STA. 3+97 TO 5+12 LT (RAMP A STA.)  
 (GORE AREA W/DIAGONALS)  
 NORTHBOUND OFF RAMP STA. 5+12 TO 34+42 RT (RAMP C STA.)  
 (GORE AREA)  
 NORTHBOUND OFF RAMP STA. 42+55 TO 43+73 LT (RAMP C STA.)  
 (GORE AREA W/ 19INB)

DURABLE LETTER OR SYMBOL, THERMOPLASTIC OR  
 DURABLE LETTER OR SYMBOL, POLYUREA (OPTION ITEM)  
 DURABLE LETTER OR SYMBOL, PAINT  
 WHITE RIVER JCT. INTERCHANGE  
 RAMP A  
 NORTHBOUND OFF RAMP A STA. 9+02 "YIELD AHEAD"  
 NORTHBOUND OFF RAMP A STA. 12+63 "YIELD LINE" (5 - ▼)

RAMP C OMITTED FROM PROJECT  
 RAMP A END PAVING AT STA 18+56

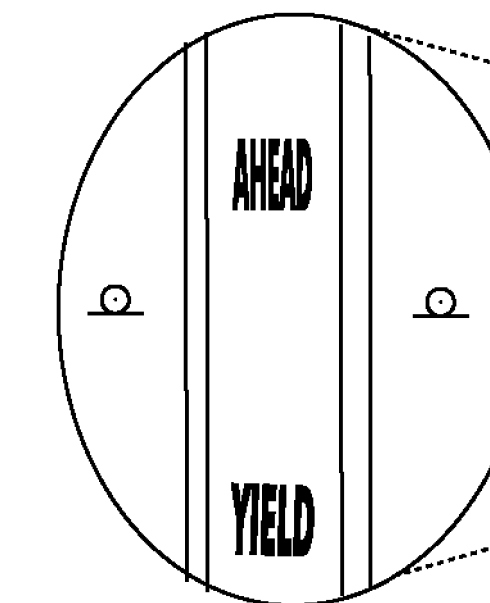


RAMP A  
 STA. 12+95 =  
 RAMP C  
 33+53

RAMP "C"

DURABLE 6 INCH  
 WHITE LINE, POLYUREA

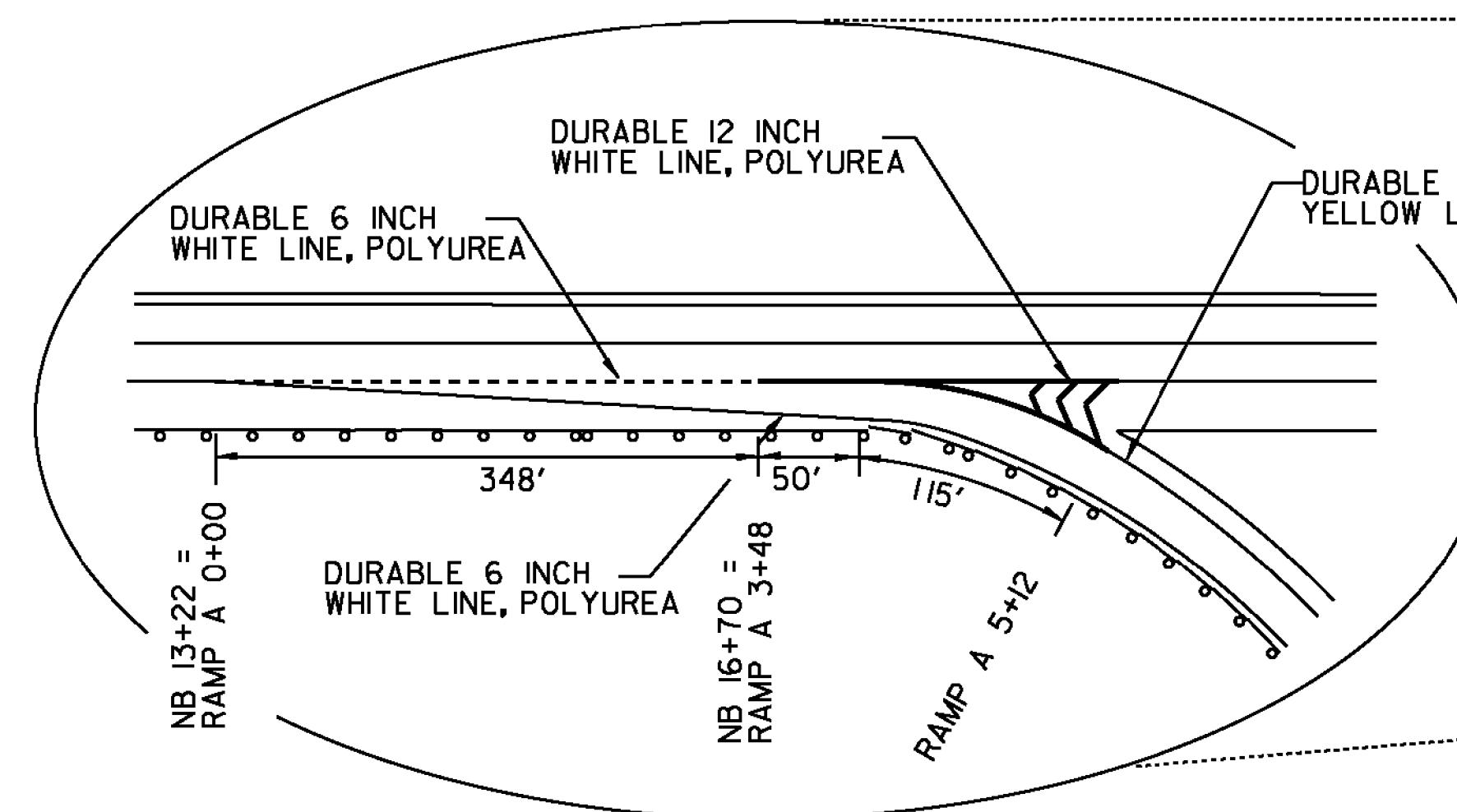
DURABLE 6 INCH  
 YELLOW LINE, POLYUREA



I-89  
 NB

STA 18+56  
 END PAVING

21.0'  
 RAMP A  
 STA. 5+11



**WHITE RIVER JCT. INTERCHANGE  
 I-89 - RAMP A  
 NORTHBOUND OFF RAMP**

PROJECT NAME: HARTFORD-SHARON  
 PROJECT NUMBER: IM SURF(46)

FILE NAME: I3a638/pvtmgt/pl3a638-wrk.dgn PLOT DATE: 06-JUN-2014  
 PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
 DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
 PAVEMENT MARKING DETAIL SHEET 3 SHEET 54 OF 64

NOT TO SCALE

DURABLE 12 INCH  
 WHITE LINE, POLYUREA

RAMP A  
 STA. 21+98 =  
 RAMP C  
 STA. 42+55  
 LIMIT OF  
 COLD PLANING  
 AND PAVING  
 MATCH EXISTING  
 PAVEMENT MARKINGS

DURABLE 6 INCH  
 YELLOW LINE, POLYUREA

DURABLE 6 INCH  
 WHITE LINE, POLYUREA

RAMP C  
 STA. 33+53  
 LIMIT OF  
 COLD PLANING  
 AND PAVING  
 MATCH EXISTING  
 PAVEMENT MARKINGS

DURABLE 12 INCH  
 WHITE LINE, POLYUREA

DURABLE 6 INCH  
 YELLOW LINE, POLYUREA

DURABLE 6 INCH  
 YELLOW LINE, POLYUREA

DURABLE 6 INCH  
 WHITE LINE, POLYUREA

RAMP A  
 STA. 12+96 =  
 RAMP C  
 STA. 33+53

DURABLE 6 INCH  
 WHITE LINE, POLYUREA

DURABLE 6 INCH  
 YELLOW LINE, POLYUREA

RAMP A

RAMP C

DURABLE 6 INCH  
 WHITE LINE, POLYUREA

DURABLE 6 INCH  
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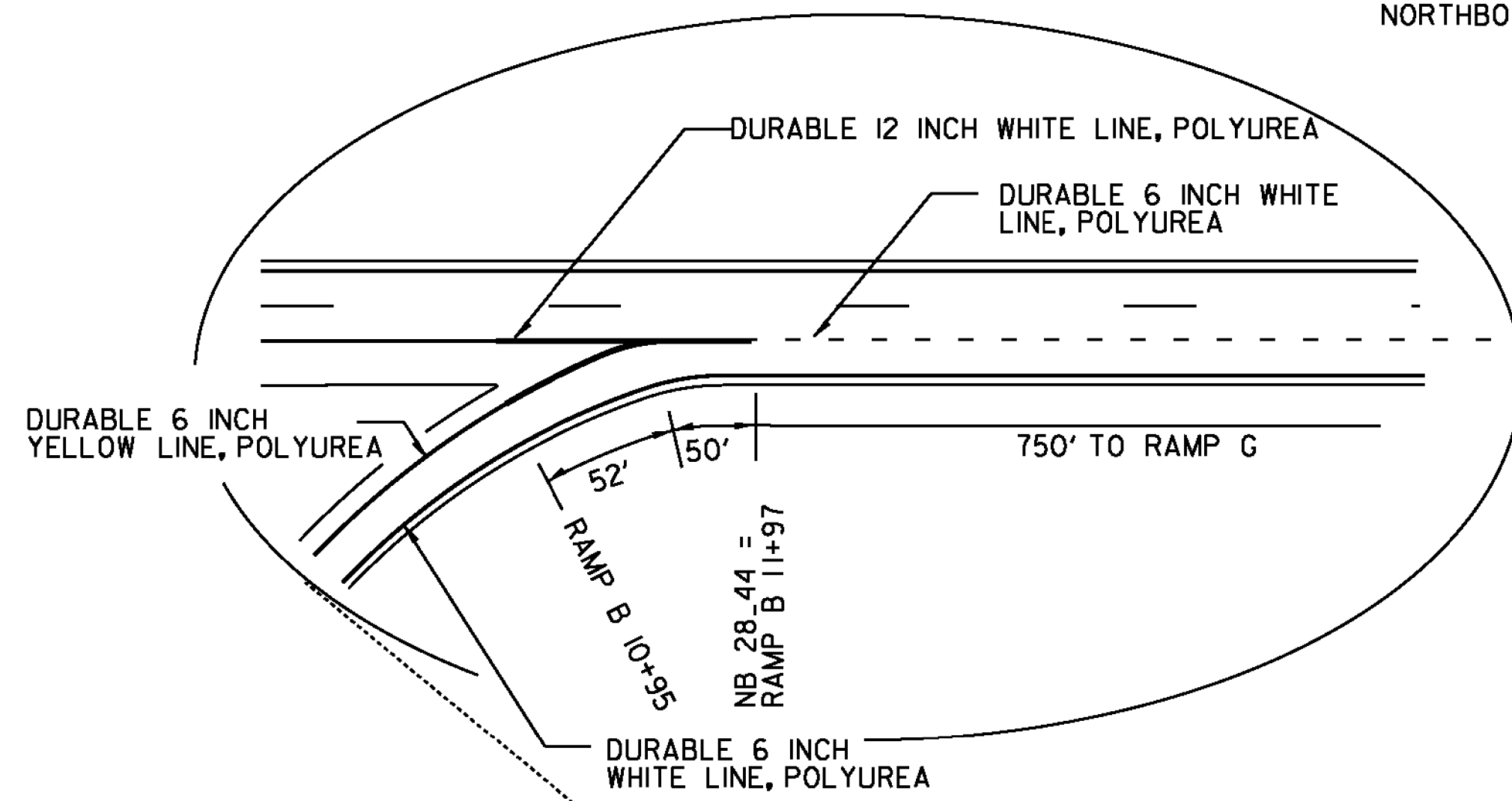
RAMP C

DURABLE 6 INCH  
 WHITE LINE, POLYUREA

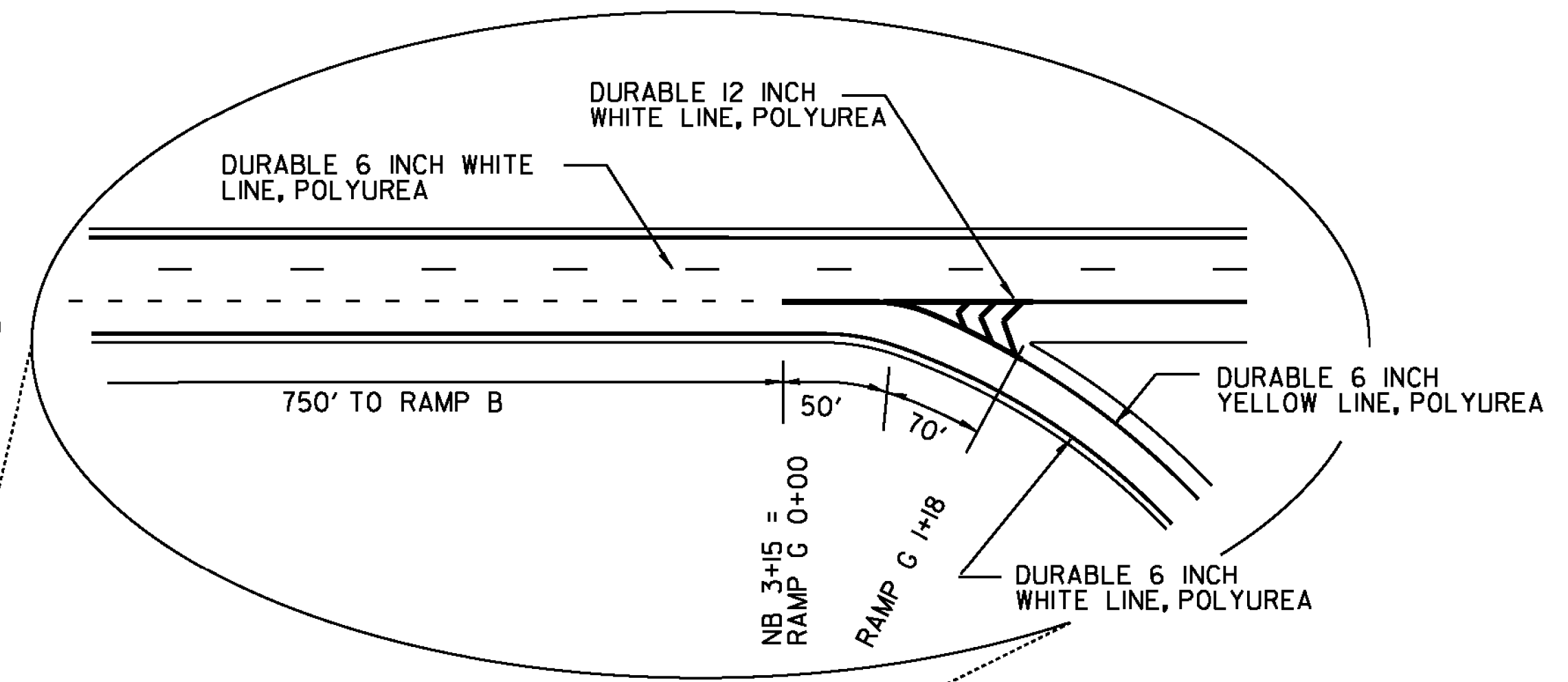
DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 WHITE RIVER JCT. INTERCHANGE  
 I-89 NORTHBOUND STA. 28+44 TO 35+95 RT (DASHED)  
 RAMP B  
 RAMP G  
 NORTHBOUND OFF RAMP STA. 0+00 TO 8+33 RT (SOLID)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 WHITE RIVER JCT. INTERCHANGE  
 RAMP B  
 NORTHBOUND ON RAMP STA. 0+00 TO 11+28 LT (SOLID)  
 RAMP G  
 NORTHBOUND OFF RAMP STA. 1+18 TO 8+33 LT (SOLID)

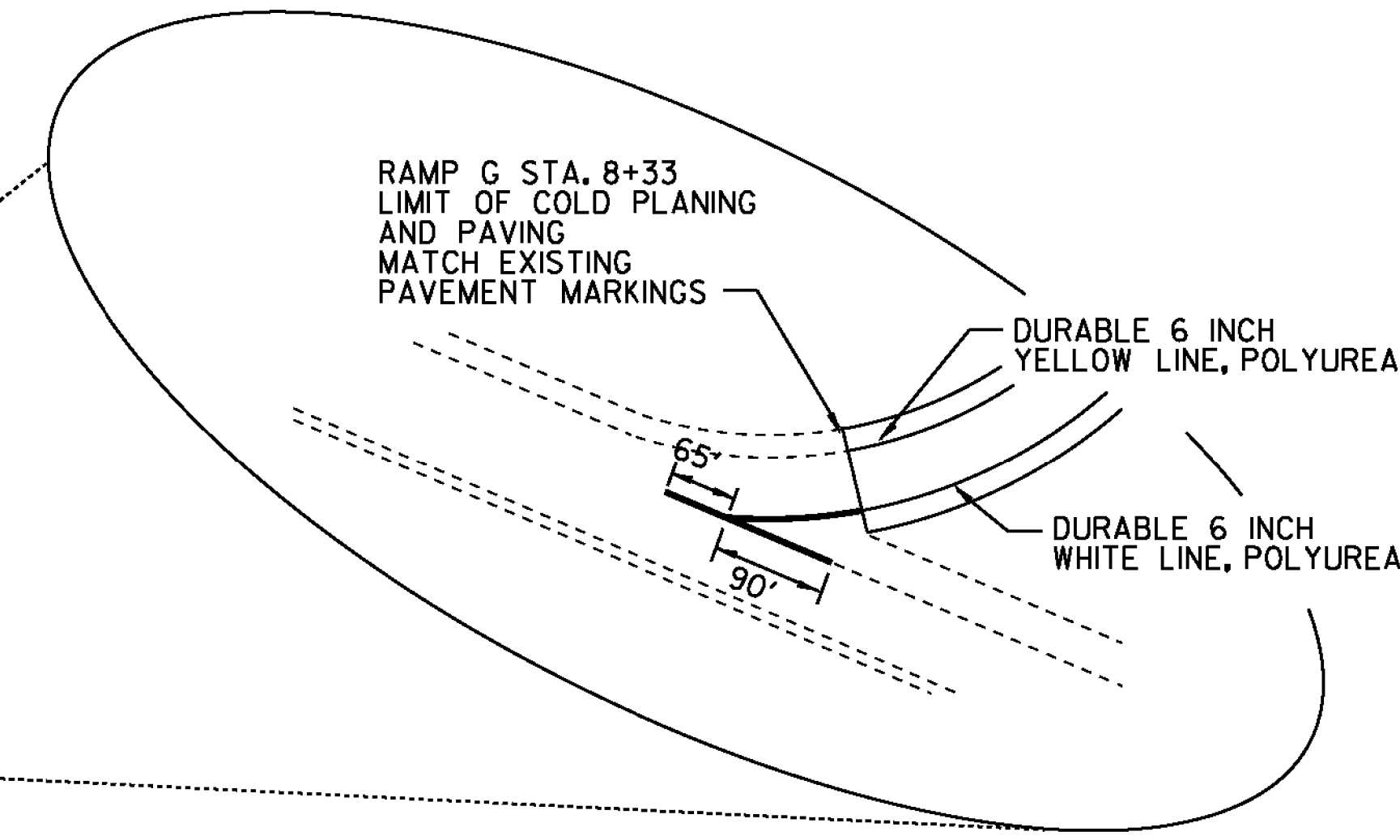
DURABLE 12 INCH WHITE LINE, POLYUREA  
 TEMPORARY 12 INCH WHITE LINE, PAINT  
 WHITE RIVER JCT. INTERCHANGE  
 RAMP B  
 NORTHBOUND ON RAMP STA. 10+95 TO 11+97 LT (GORE AREA)  
 NORTHBOUND ON RAMP STA. 0+00 LT (GORE AREA W/DIAG. AT I-91 NB)  
 RAMP G  
 NORTHBOUND OFF RAMP STA. 0+00 TO 1+18 LT (GORE AREA W/DIAGONALS)  
 NORTHBOUND OFF RAMP STA. 8+33 TO 9+87 LT (GORE AREA W/191 SB)



RAMP B PAVED FROM STA 10+75  
 REMAINDER OF RAMP OMITTED FROM PROJECT

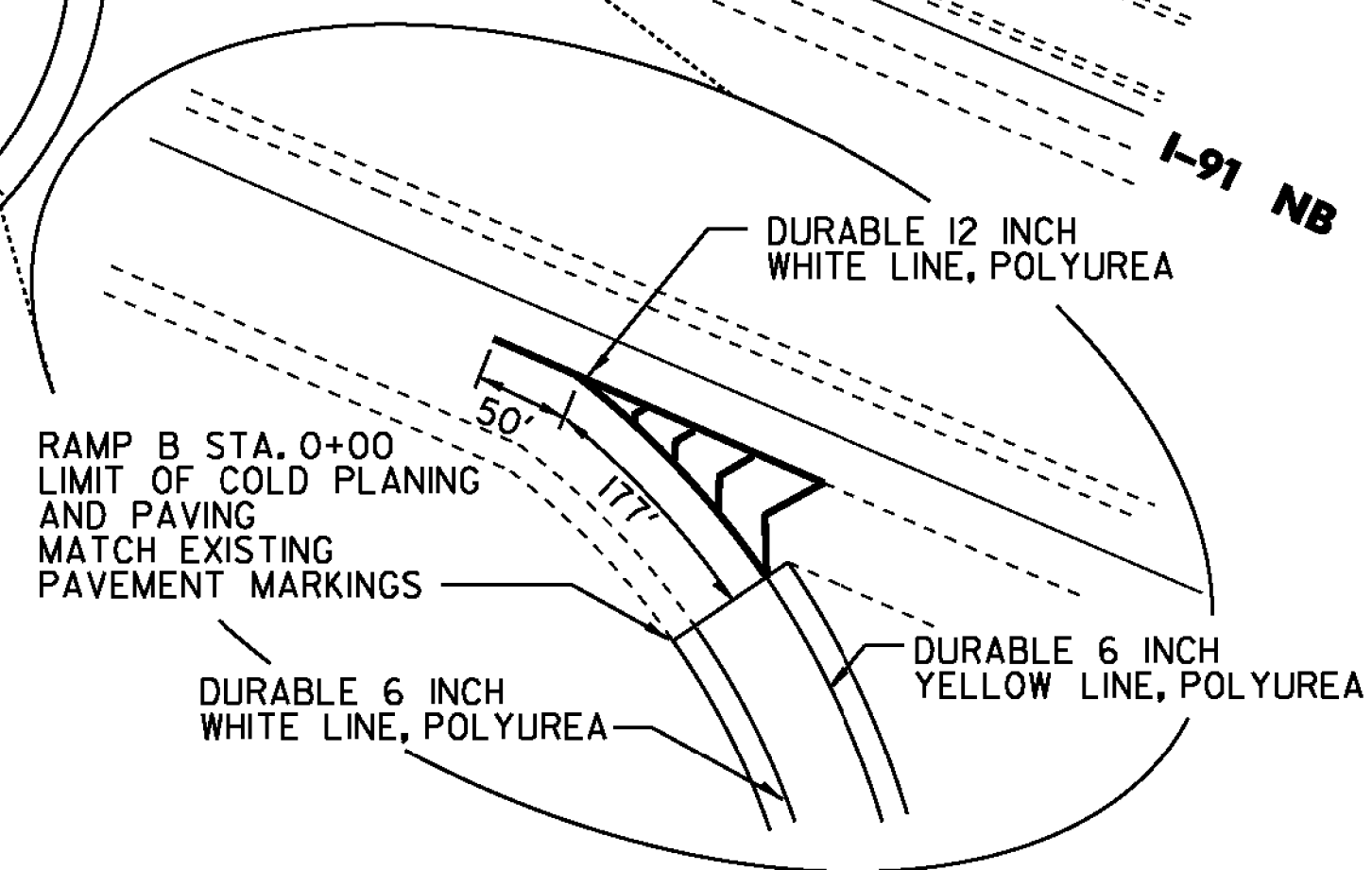
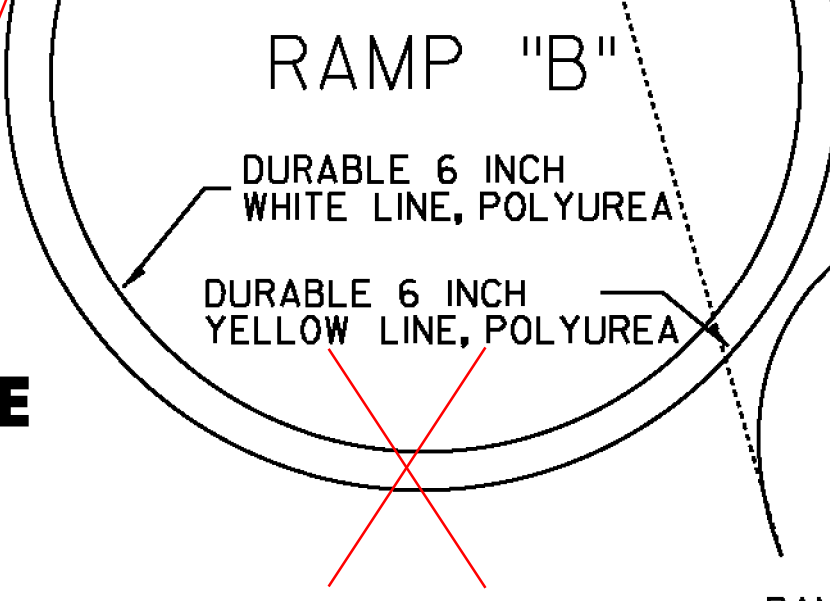


**WHITE RIVER JCT. INTERCHANGE  
 I-89- RAMP G  
 NORTHBOUND OFF RAMP**



RAMP G OMITTED FROM PROJECT  
 PAVED OFF OF I-89 TO STA 36+36

**WHITE RIVER JCT. INTERCHANGE  
 I-89 - RAMP B  
 NORTHBOUND ON RAMP**



**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/pl3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET 4	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	55 OF 64

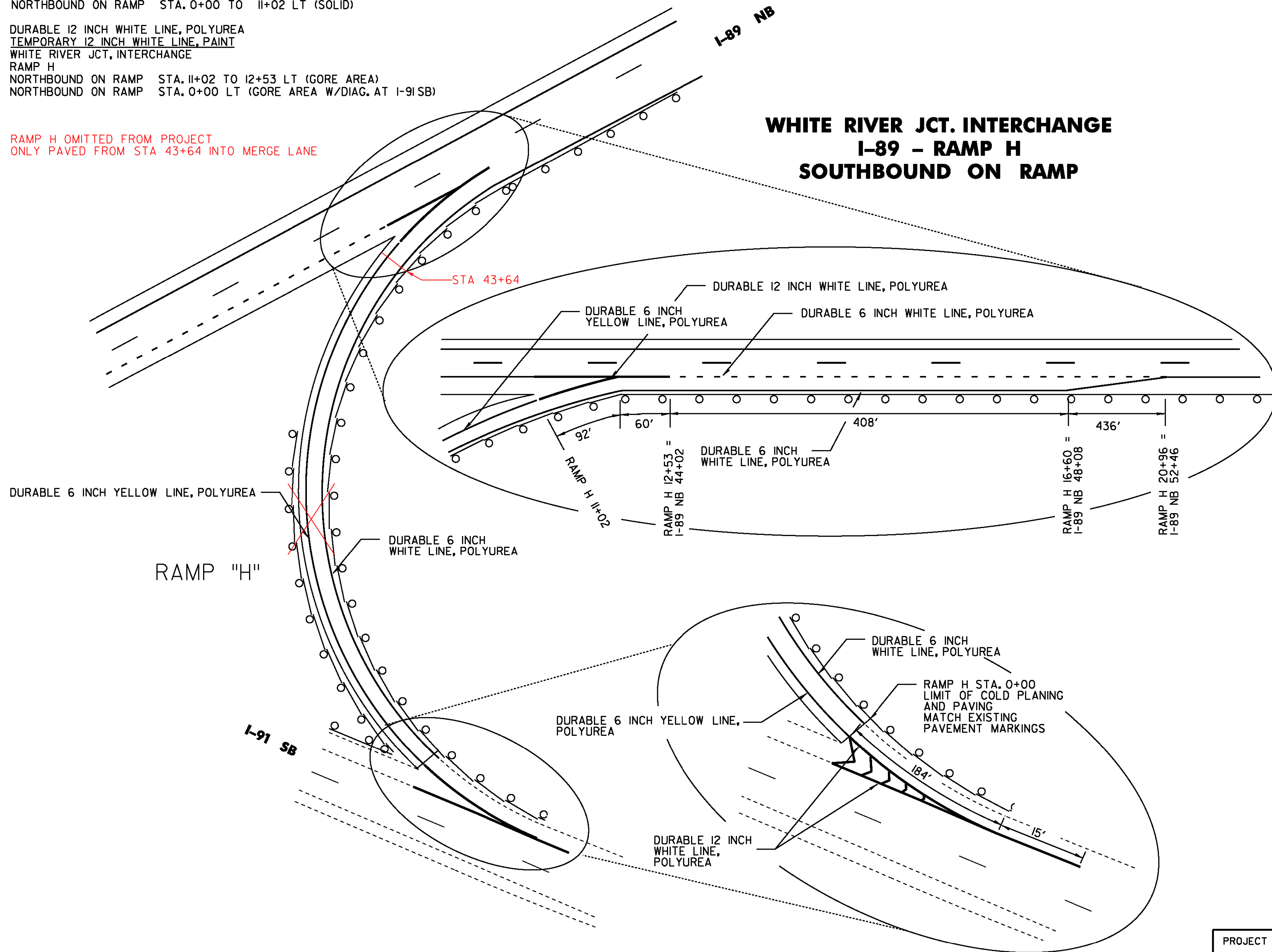
DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 WHITE RIVER JCT, INTERCHANGE  
 RAMP H  
 NORTHBOUND ON RAMP STA. 0+00 TO 12+53 RT (SOLID)  
 NORTHBOUND ON RAMP STA. 12+53 TO 14+57 RT (DASHED)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 WHITE RIVER JCT, INTERCHANGE  
 RAMP H  
 NORTHBOUND ON RAMP STA. 0+00 TO 11+02 LT (SOLID)

DURABLE 12 INCH WHITE LINE, POLYUREA  
 TEMPORARY 12 INCH WHITE LINE, PAINT  
 WHITE RIVER JCT, INTERCHANGE  
 RAMP H  
 NORTHBOUND ON RAMP STA. 11+02 TO 12+53 LT (GORE AREA)  
 NORTHBOUND ON RAMP STA. 0+00 LT (GORE AREA W/DIAG. AT I-91 SB)

RAMP H OMITTED FROM PROJECT  
 ONLY PAVED FROM STA 43+64 INTO MERGE LANE

**WHITE RIVER JCT. INTERCHANGE  
 I-89 - RAMP H  
 SOUTHBOUND ON RAMP**



**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/pl3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET 5	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	56 OF 64

DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 QUECHEE INTERCHANGE  
 RAMP B  
 NORTHBOUND OFF RAMP STA. 0+00 TO 3+00 RT (DOTTED)  
 NORTHBOUND OFF RAMP STA. 3+00 TO 18+14 RT (SOLID)  
 RAMP A  
 NORTHBOUND ON RAMP STA. 0+00 TO 12+56 RT (SOLID)  
 NORTHBOUND ON RAMP STA. 12+56 TO 14+50 RT (DASHED)

DURABLE 6 INCH YELLOW LINE, POLYUREA  
 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 QUECHEE INTERCHANGE  
 RAMP B  
 NORTHBOUND OFF RAMP STA. 4+13 TO 18+14 LT (SOLID)  
 RAMP A  
 NORTHBOUND ON RAMP STA. 0+00 TO 9+78 LT (SOLID)

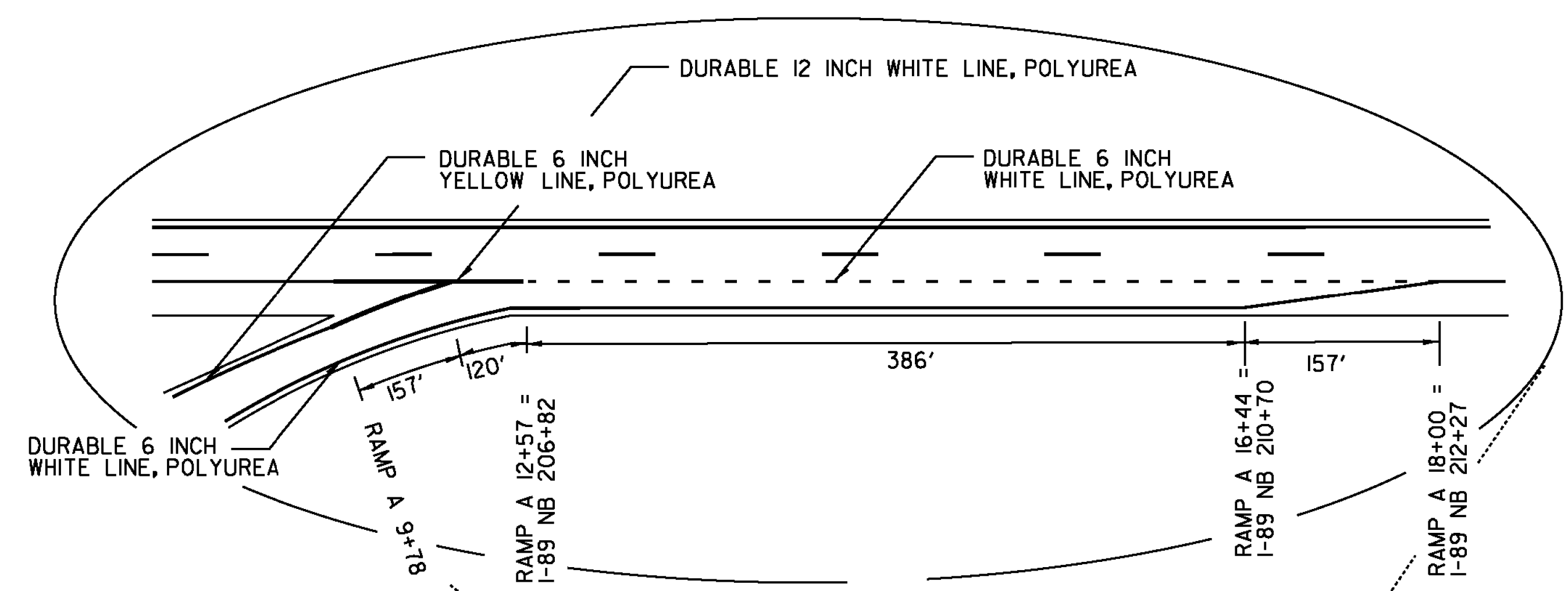
DURABLE 12 INCH WHITE LINE, POLYUREA  
 TEMPORARY 12 INCH WHITE LINE, PAINT  
 QUECHEE INTERCHANGE  
 RAMP B  
 NORTHBOUND OFF RAMP STA. 3+00 TO 4+13 LT (GORE AREA W/DIAG.)  
 RAMP A  
 NORTHBOUND ON RAMP STA. 9+78 TO 12+57 LT (GORE AREA)

DURABLE 24 INCH STOP BAR, THERMOPLASTIC OR  
 DURABLE 24 INCH STOP BAR, POLYUREA (OPTION ITEM)  
 TEMPORARY 24 INCH STOP BAR, PAINT  
 QUECHEE INTERCHANGE  
 RAMP B  
 NORTHBOUND OFF RAMP STA. 18+11

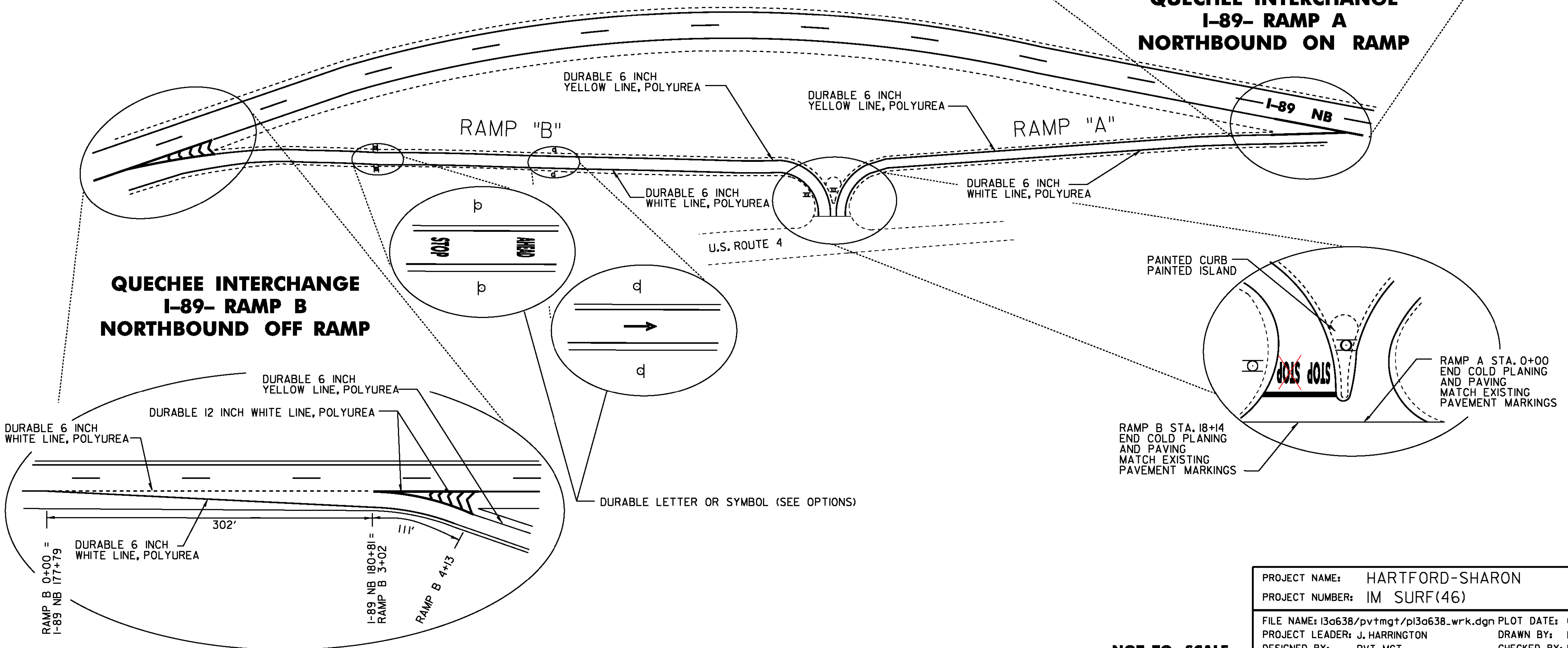
DURABLE LETTER OR SYMBOL, THERMOPLASTIC OR  
 DURABLE LETTER OR SYMBOL, POLYUREA (OPTION ITEM)  
 DURABLE LETTER OR SYMBOL, PAINT  
 QUECHEE INTERCHANGE  
 RAMP B  
 NORTHBOUND OFF RAMP "STOP AHEAD" STA. 8+14  
 NORTHBOUND OFF RAMP "WRONG WAY ARROW" STA. 10+10 (←→)  
 NORTHBOUND OFF RAMP "STOP" (2) STA. 18+04

PAINTED CURB  
 QUECHEE INTERCHANGE  
 RAMP B/RAMP A NORTHBOUND ON/OFF RAMP  
 RAMP B STATIONS 17+36 TO 18+14 LT (164')

PAINTED ISLAND  
 QUECHEE INTERCHANGE  
 RAMP B/RAMP A NORTHBOUND ON/OFF RAMP  
 RAMP B STATIONS 17+35 TO 18+14 LT (29 SF)



**QUECHEE INTERCHANGE  
 I-89- RAMP A  
 NORTHBOUND ON RAMP**



**QUECHEE INTERCHANGE  
 I-89- RAMP B  
 NORTHBOUND OFF RAMP**

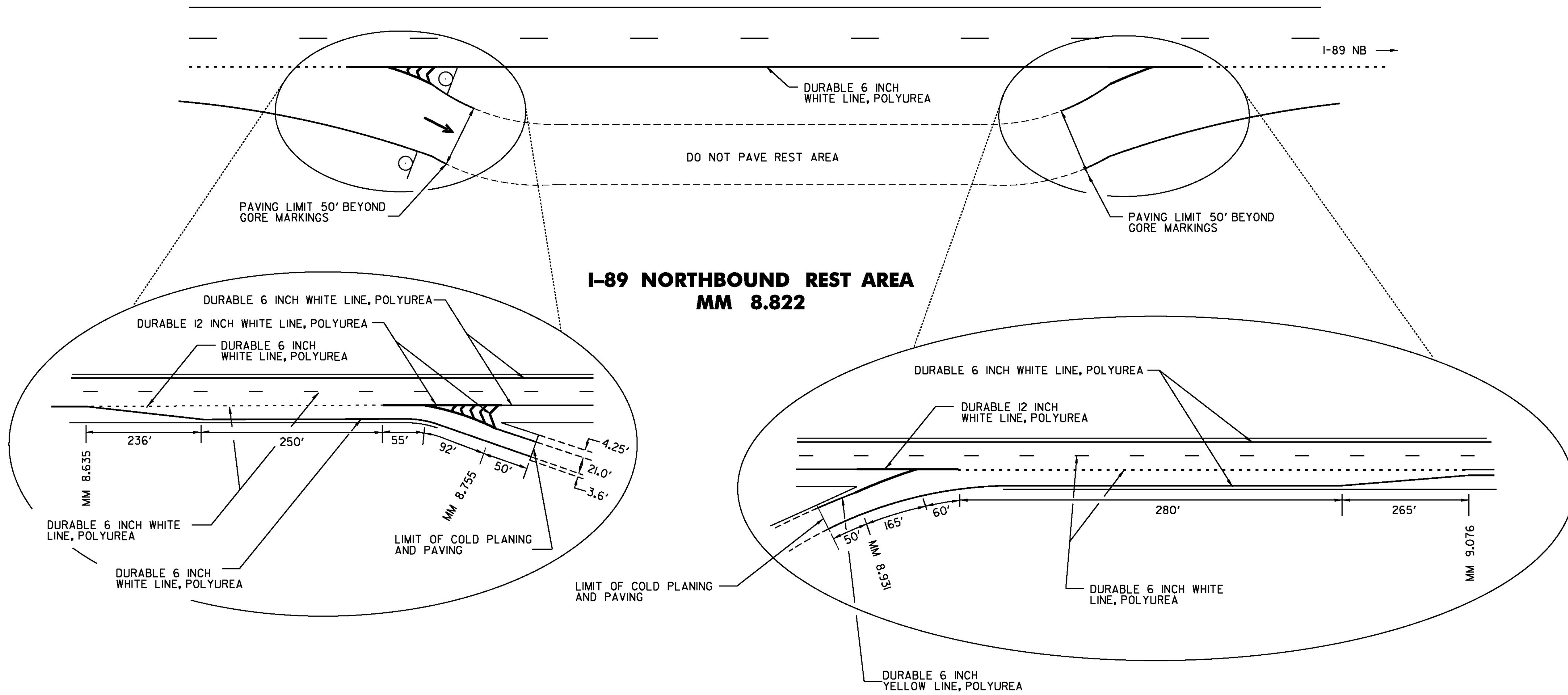
**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/pl3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET 6	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	57 OF 64

DURABLE 6 INCH WHITE LINE, POLYUREA  
 TEMPORARY 6 INCH WHITE LINE, PAINT  
 NORTHBOUND  
 I-89 REST AREA MM 8.635 TO MM 8.755 RT (SOLID)  
 I-89 REST AREA MM 8.635 TO MM 8.727 RT (DOTTED)  
 I-89 REST AREA MM 8.973 TO MM 9.076 RT (DOTTED)  
 I-89 REST AREA MM 8.930 TO MM 9.077 RT (SOLID)

DURABLE 12 INCH WHITE LINE, POLYUREA  
 TEMPORARY 12 INCH WHITE LINE, PAINT  
 NORTHBOUND  
 I-89 REST AREA MM 8.727 TO MM 8.755 RT (GORE AREA W/DIAGONALS)  
 I-89 REST AREA MM 8.930 TO MM 8.973 RT (GORE AREA)

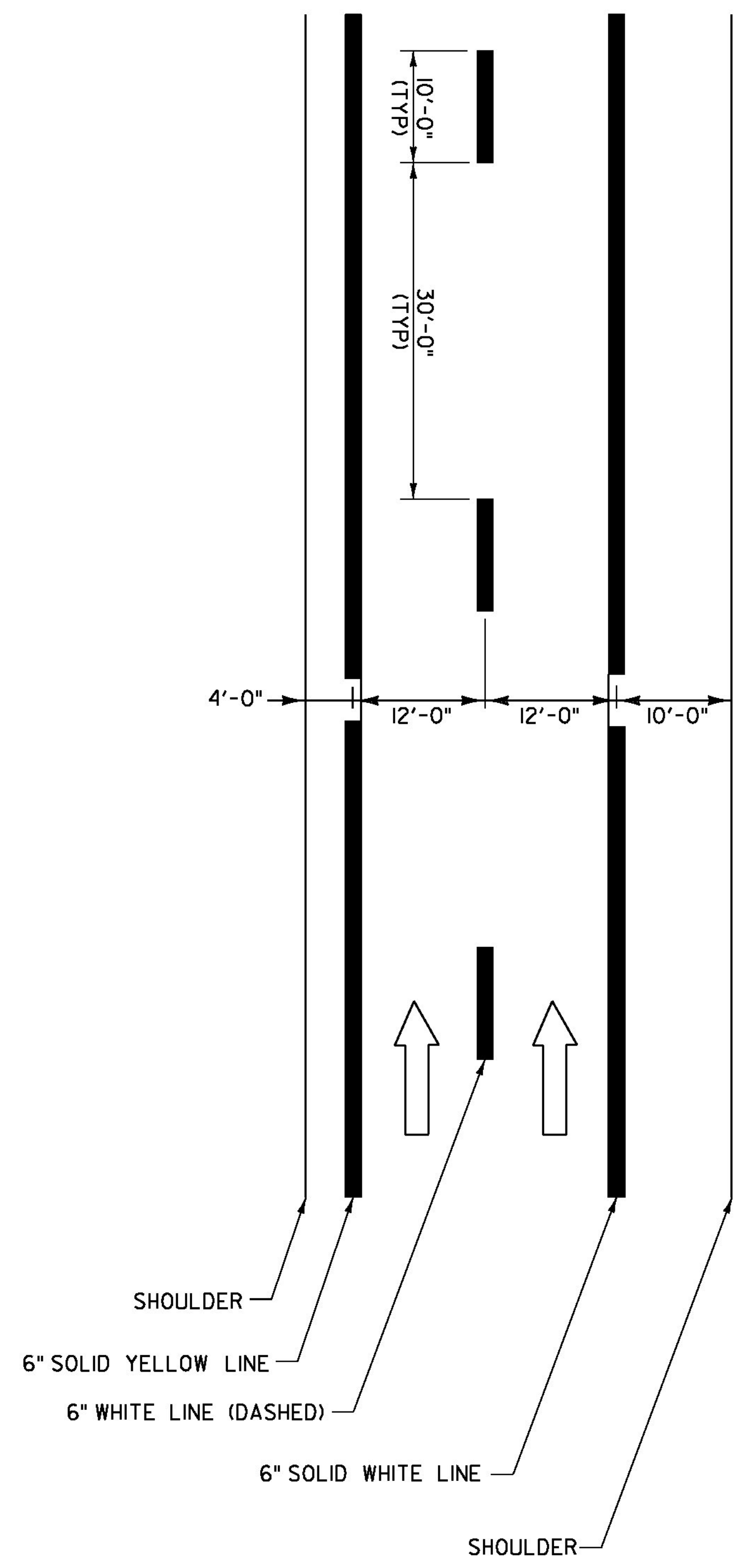
DURABLE LETTER OR SYMBOL, THERMOPLASTIC OR  
 DURABLE LETTER OR SYMBOL, POLYUREA (OPTION ITEM)  
 TEMPORARY LETTER OR SYMBOL, PAINT  
 REST AREA OFF RAMP  
 "WRONG WAY ARROW" NORTHBOUND MM 8.755 RT (→)



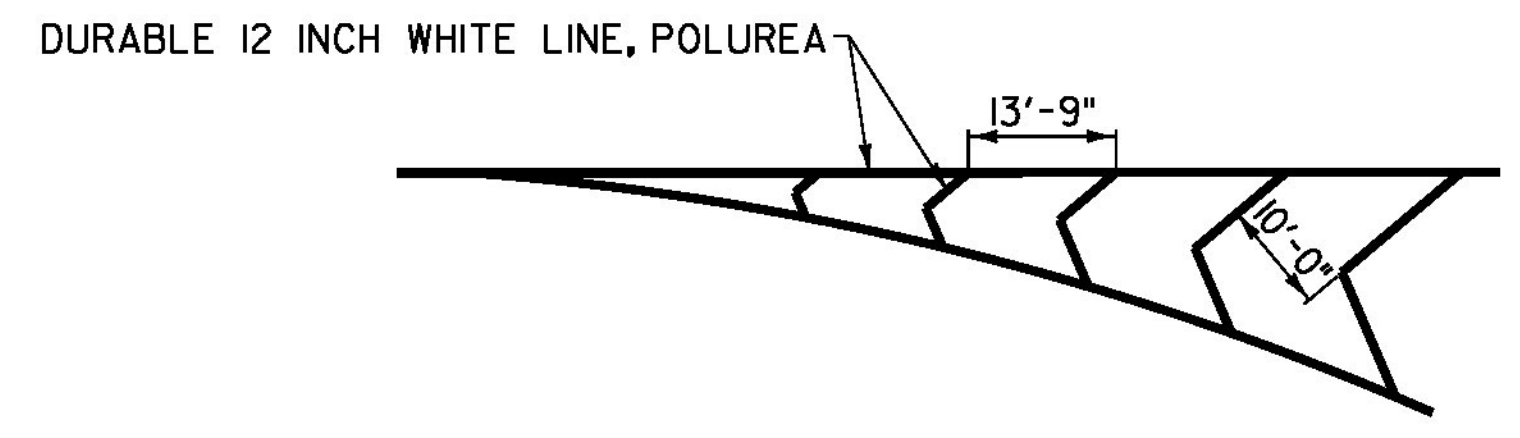
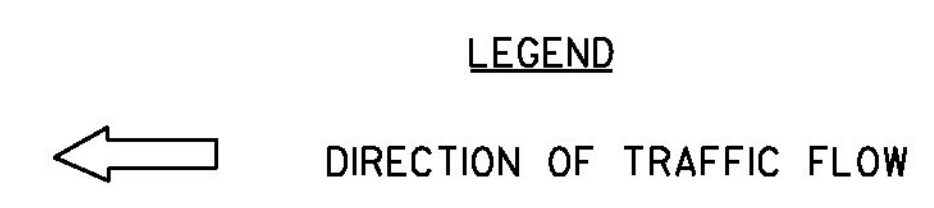
**I-89 NORTHBOUND REST AREA  
 MM 8.822**

**NOT TO SCALE**

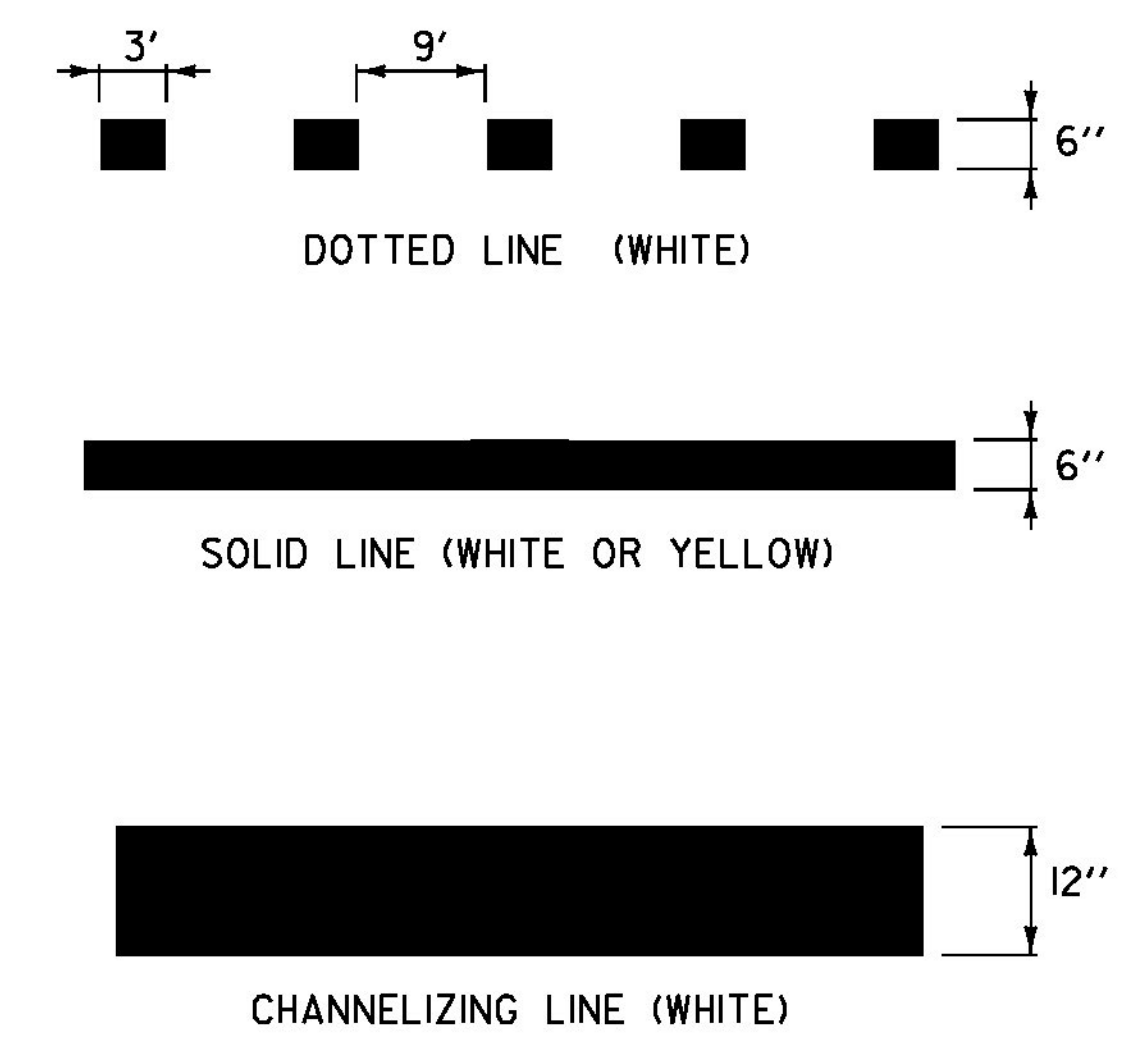
PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmg+/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET 7	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	58 OF 64



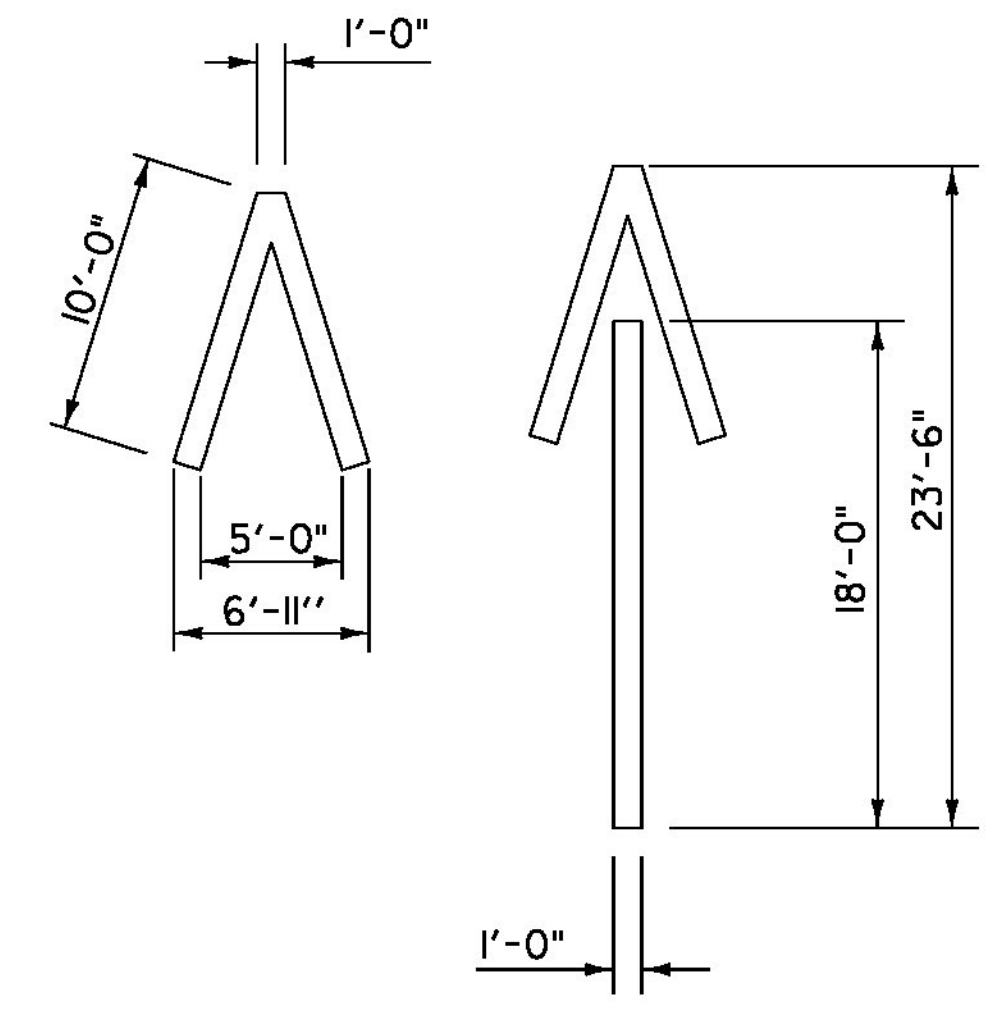
**TYPICAL MAINLINE MARKING PLAN**



**GORE MARKING DETAIL**

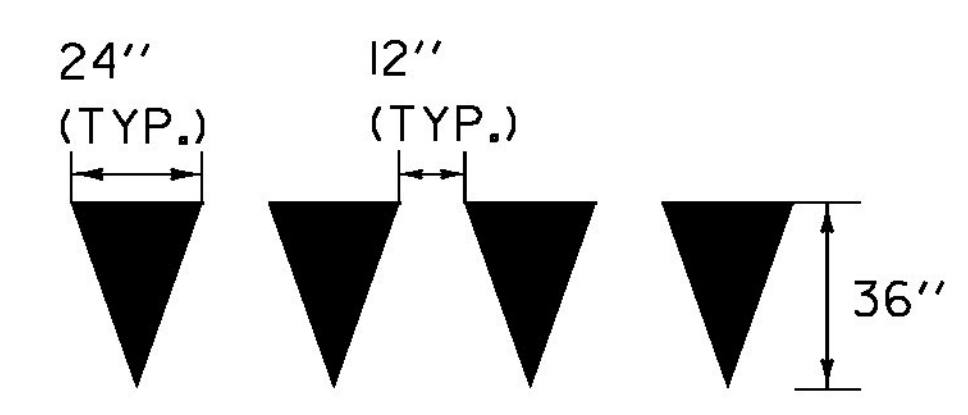


**PAVEMENT MARKING LINE DETAILS**



**WRONG WAY ARROW**

MARKINGS TO BE PLACED AT EXISTING WRONG WAY SIGN



**YIELD LINE DETAILS**

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

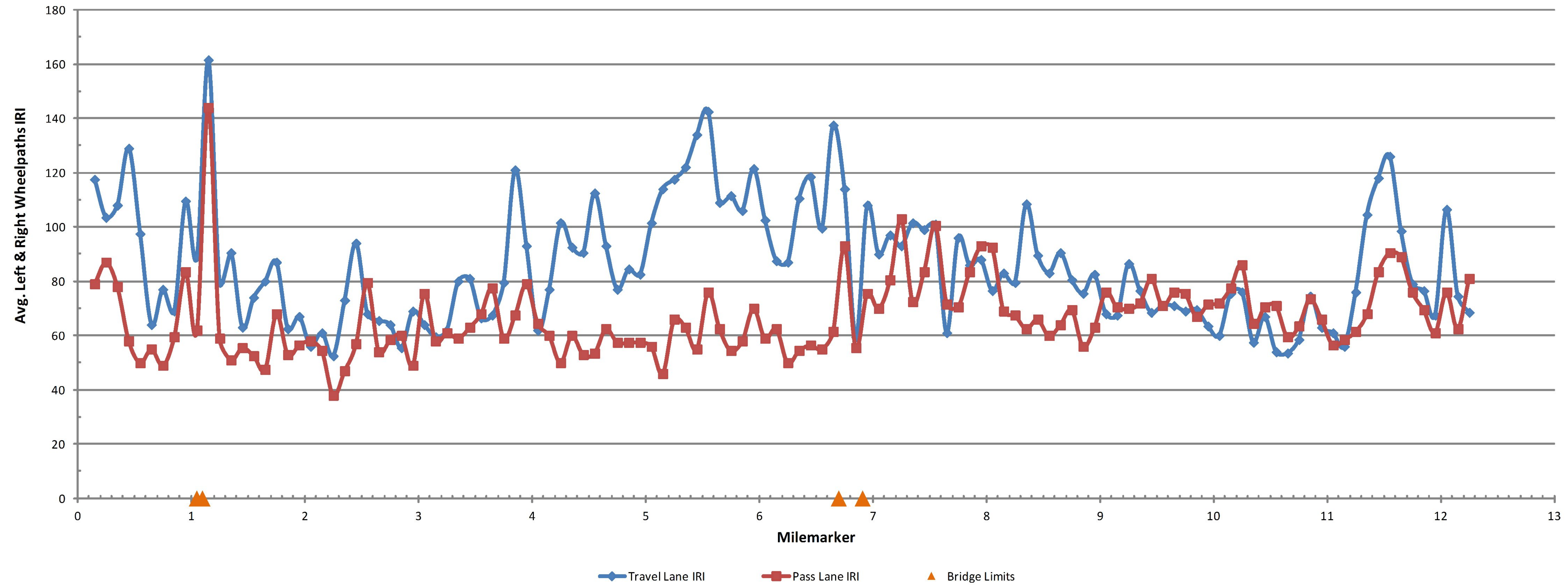
NOT TO SCALE

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmg+/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
PAVEMENT MARKING DETAIL SHEET	8
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
DATE:	06-JUN-2014
SHEET	59 OF 64

### I 89 NB Hartford-Sharon IM SURF ( 46 ) Preconstruction IRI

Profiled 9/30/2013

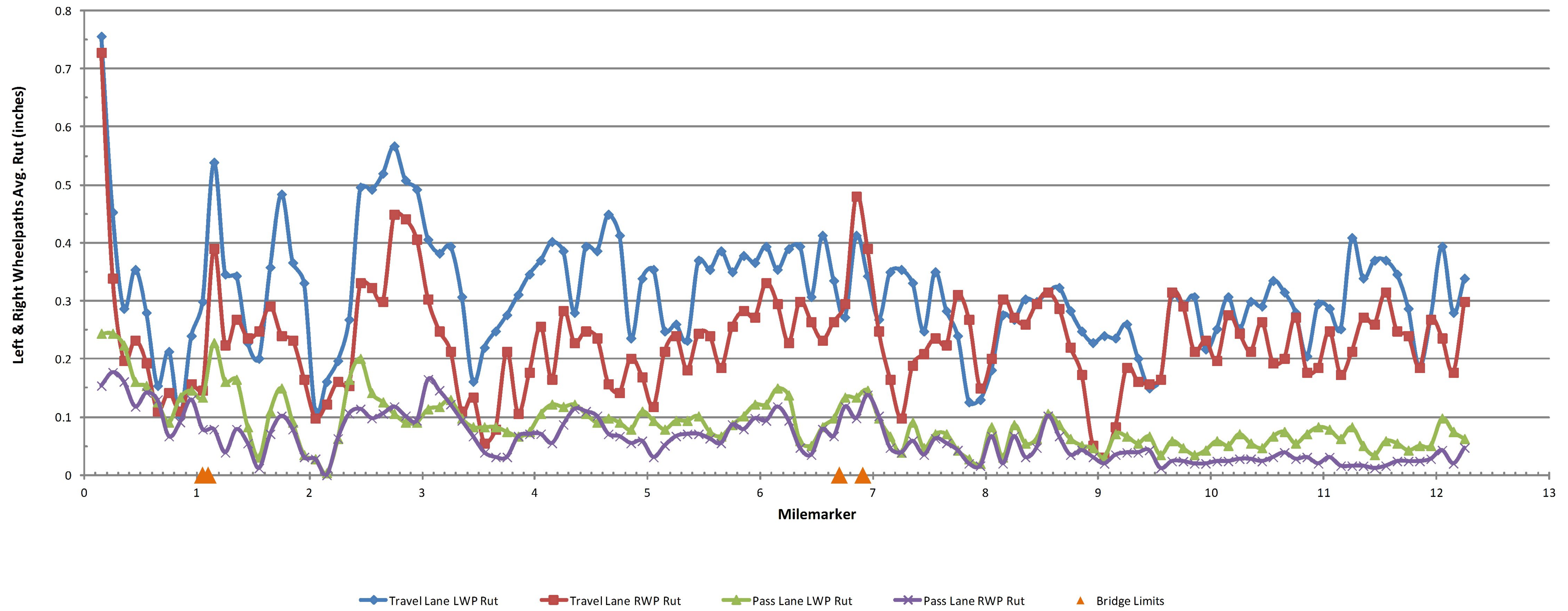
Travel Lane Avg. IRI = 85.8 Pass Lane Avg. IRI = 66.8



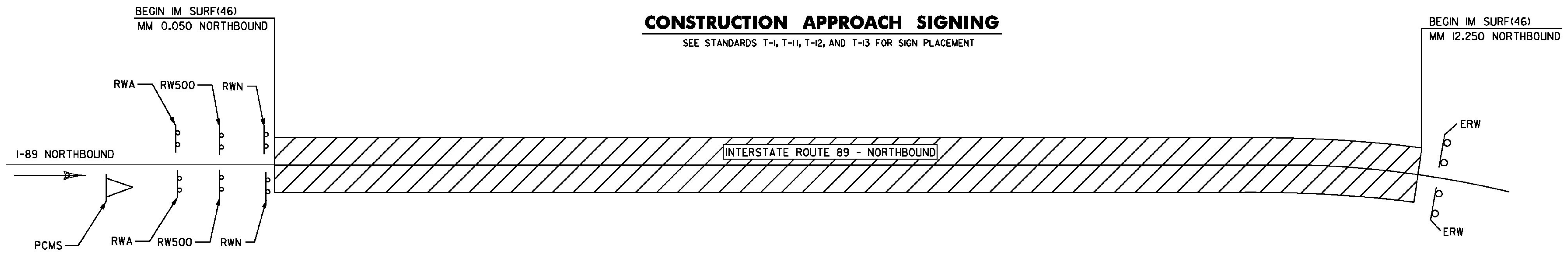
PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmg+/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
ROUGHNESS DATA INFORMATION SHEET NB	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	60 OF 64

### I 89 NB Hartford-Sharon IM SURF ( 46 ) Preconstruction Ruts

Profiled 9/30/2013



PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmg+/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
RUTTING DATA INFORMATION SHEET NB	
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.
SHEET	61 OF 64



**CONSTRUCTION APPROACH SIGNING**

SEE STANDARDS T-1, T-11, T-12, AND T-13 FOR SIGN PLACEMENT

TOWN/STATE HIGHWAY NAME	ROAD WORK AHEAD	END ROAD WORK	ROAD WORK 500'	ROAD WORK NEXT 12 MILES	PCMS*
I-89 NORTHBOUND					*
BEGINNING OF PROJECT	2		2	2	*
END OF PROJECT		2			*
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>*8</b>

\*PCMS-SEE LOCATION LISTING

**\*PROPOSED LOCATIONS FOR PORTABLE CHANGEABLE MESSAGE SIGNS**

- I-89 NB (LOCATED IN NEW HAMPSHIRE PRIOR TO INTERCHANGE 20 IN LEBANON)
- I-89 NB ON-RAMP AT INTERCHANGE 20 IN LEBANON
- I-89 NB AT BEGINNING OF PROJECT
- I-91 NB PRIOR TO RAMP B TO I-89 NB
- I-91 SB PRIOR TO RAMP H TO I-89 NB
- I-89 SB OFF-RAMP C (PRIOR TO RAMP E LEADING TO I-91SB)
- U. S. ROUTE 4 EAST OF QUECHEE INTERCHANGE
- U. S. ROUTE 4 WEST OF QUECHEE INTERCHANGE

THE CONTRACTOR IS REQUIRED TO OBTAIN PERMITTING INCIDENTAL TO TRAFFIC CONTROL PLAN FROM THE NEW HAMPSHIRE STATE DEPARTMENT OF TRANSPORTATION FOR THE PLACEMENT OF AN MUTCD COMPLIANT CONSTRUCTION WARNING SIGN PACKAGE AND FOR THE PLACEMENT OF PORTABLE MESSAGE SIGNS WITHIN THE STATE OF NEW HAMPSHIRE. THE CONTACT PERSON FOR THIS WORK IS AS FOLLOWS:

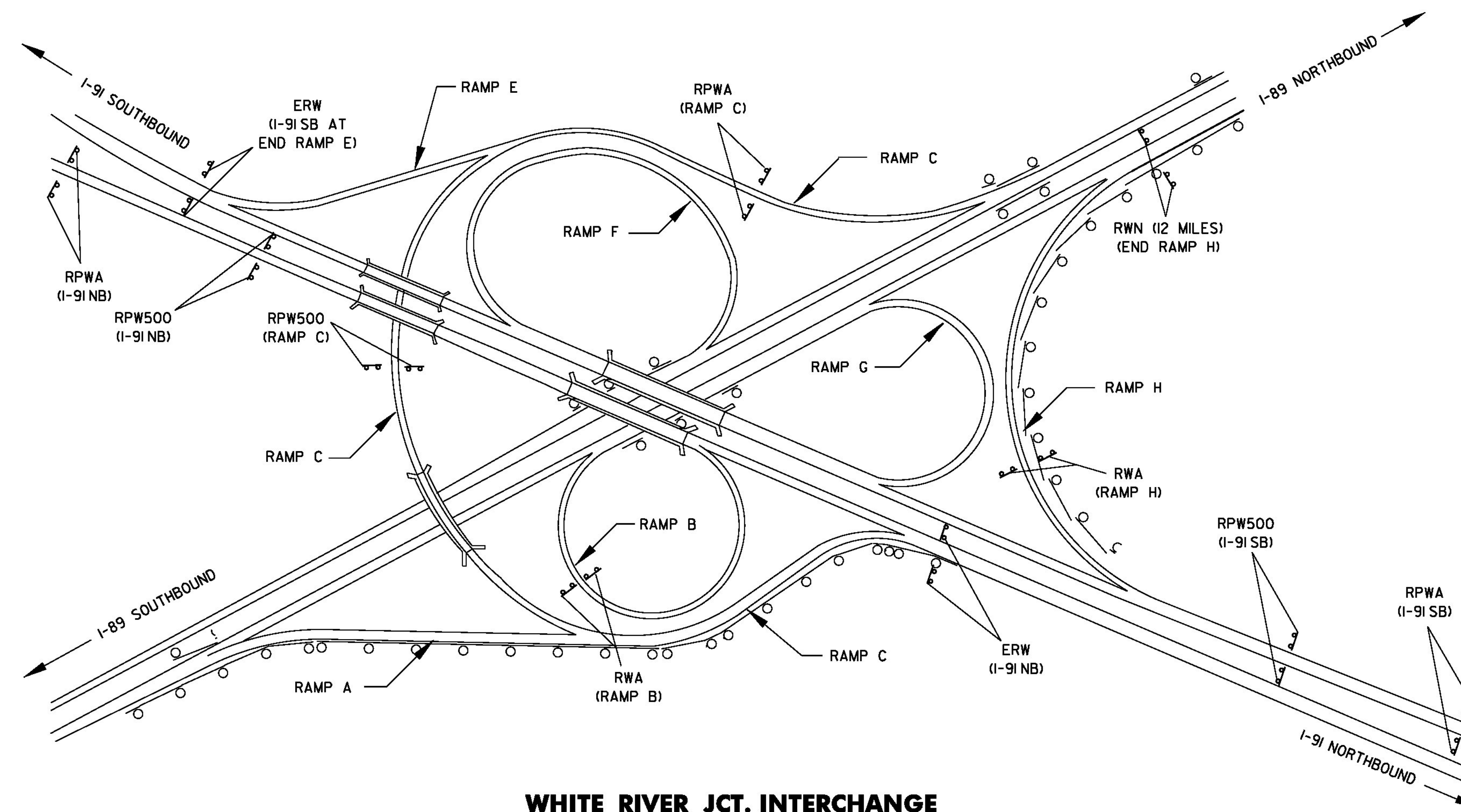
ALAN HANSCOM, DISTRICT #2 ADMINISTRATOR  
 INTERSTATE I-89 EXIT # 16  
 P.O. BOX 232  
 LEBANON, NH 03766  
 (603) 448-2654

- LEGEND**
- RWA = ROAD WORK AHEAD
  - RW500 = ROAD WORK IN 500 FEET
  - RWN = ROAD WORK NEXT (XX MILES)
  - ERW = END ROAD WORK
  - RPWA = RAMP WORK AHEAD
  - SRWA = SIDE ROAD WORK AHEAD
  - SRW500 = SIDE ROAD WORK 500 FEET
  - = PORTABLE CHANGEABLE MESSAGE SIGN
  - = WORK AREA
  - = DIRECTION OF TRAFFIC FLOW

SEE VAOT STANDARDS T-1, T-10, T-11 AND T-13 FOR SIGN PLACEMENT. CONSTRUCTION APPROACH SIGNING SHALL BE PLACED AS NOT TO INTERFERE WITH EXISTING TRAFFIC CONTROL DEVICES. SEE COMPOSITE TRAFFIC NOTES SHEET.


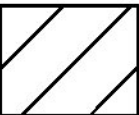

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgf/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
CONSTRUCTION APPROACH SIGNING SHEET 1	SHEET 62 OF 64



**WHITE RIVER JCT. INTERCHANGE**

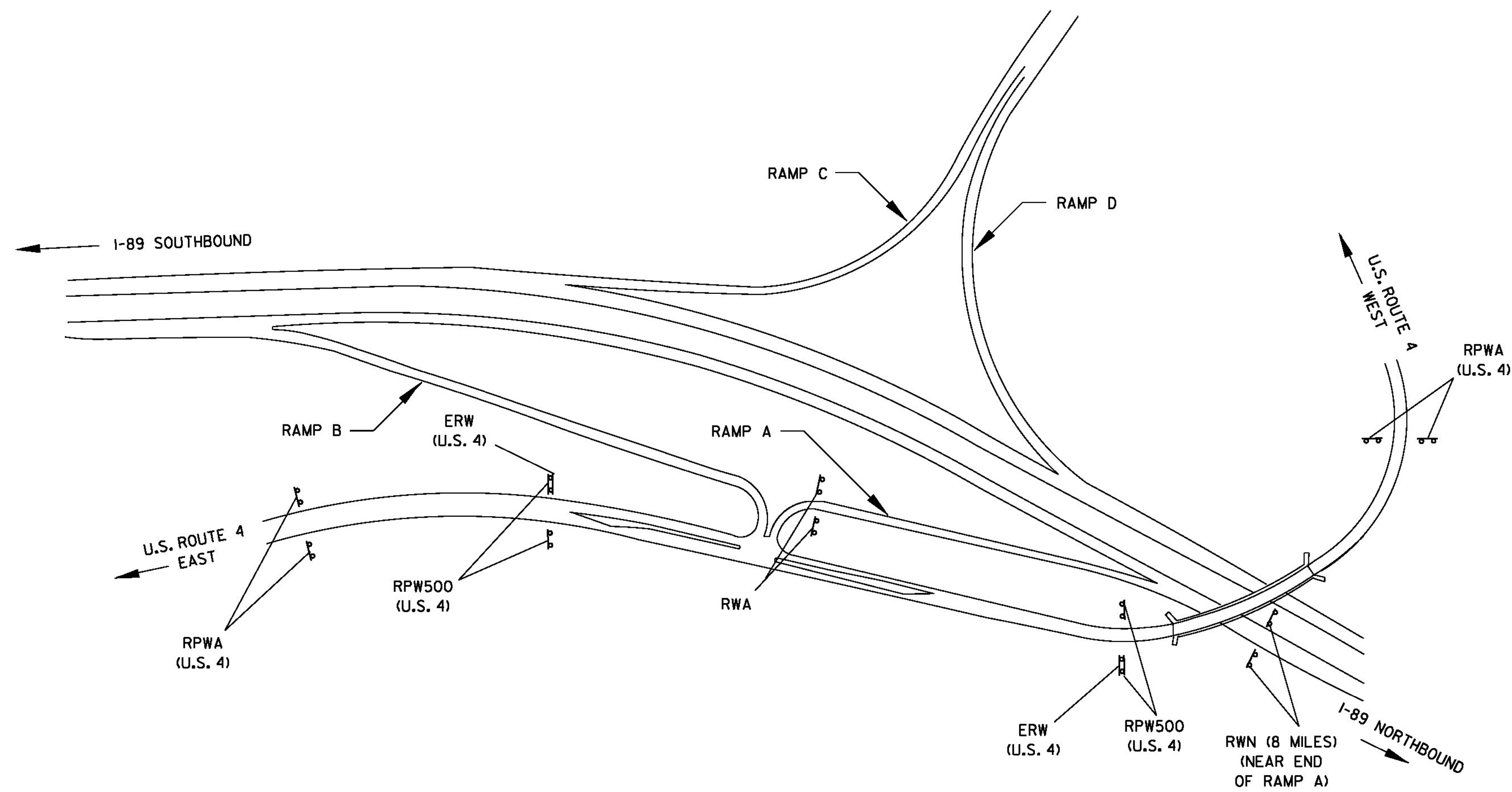
LOCATION	RWA	ERW	RWN	RPWA	RPW500
I-91 NORTHBOUND		2		2	2
I-91 SOUTHBOUND		2		2	2
RAMP B	2				
RAMP C				2	2
RAMP H	2		2		
TOTALS	4	4	2	6	6

- LEGEND**
- RWA = ROAD WORK AHEAD
  - RW500 = ROAD WORK IN 500 FEET
  - RWN = ROAD WORK NEXT (XX MILES)
  - ERW = END ROAD WORK
  - RPWA = RAMP WORK AHEAD
  - SRWA = SIDE ROAD WORK AHEAD
  - SRW500 = SIDE ROAD WORK 500 FEET
  -  = PORTABLE CHANGEABLE MESSAGE SIGN
  -  = WORK AREA
  -  = DIRECTION OF TRAFFIC FLOW

SEE VAOT STANDARDS T-1, T-10, T-11 AND T-13 FOR SIGN PLACEMENT.  
 CONSTRUCTION APPROACH SIGNING SHALL BE PLACED AS NOT TO  
 INTERFERE WITH EXISTING TRAFFIC CONTROL DEVICES.  
 SEE COMPOSITE TRAFFIC NOTES SHEET.

**NOT TO SCALE**

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM SURF(46)
FILE NAME:	I3a638/pvtmgt/p3a638_wrk.dgn
PROJECT LEADER:	J. HARRINGTON
DESIGNED BY:	PVT. MGT.
CONSTRUCTION APPROACH SIGNING SHEET 2	SHEET 63 OF 64
PLOT DATE:	06-JUN-2014
DRAWN BY:	PVT. MGT.
CHECKED BY:	PVT. MGT.



**QUECHEE INTERCHANGE**

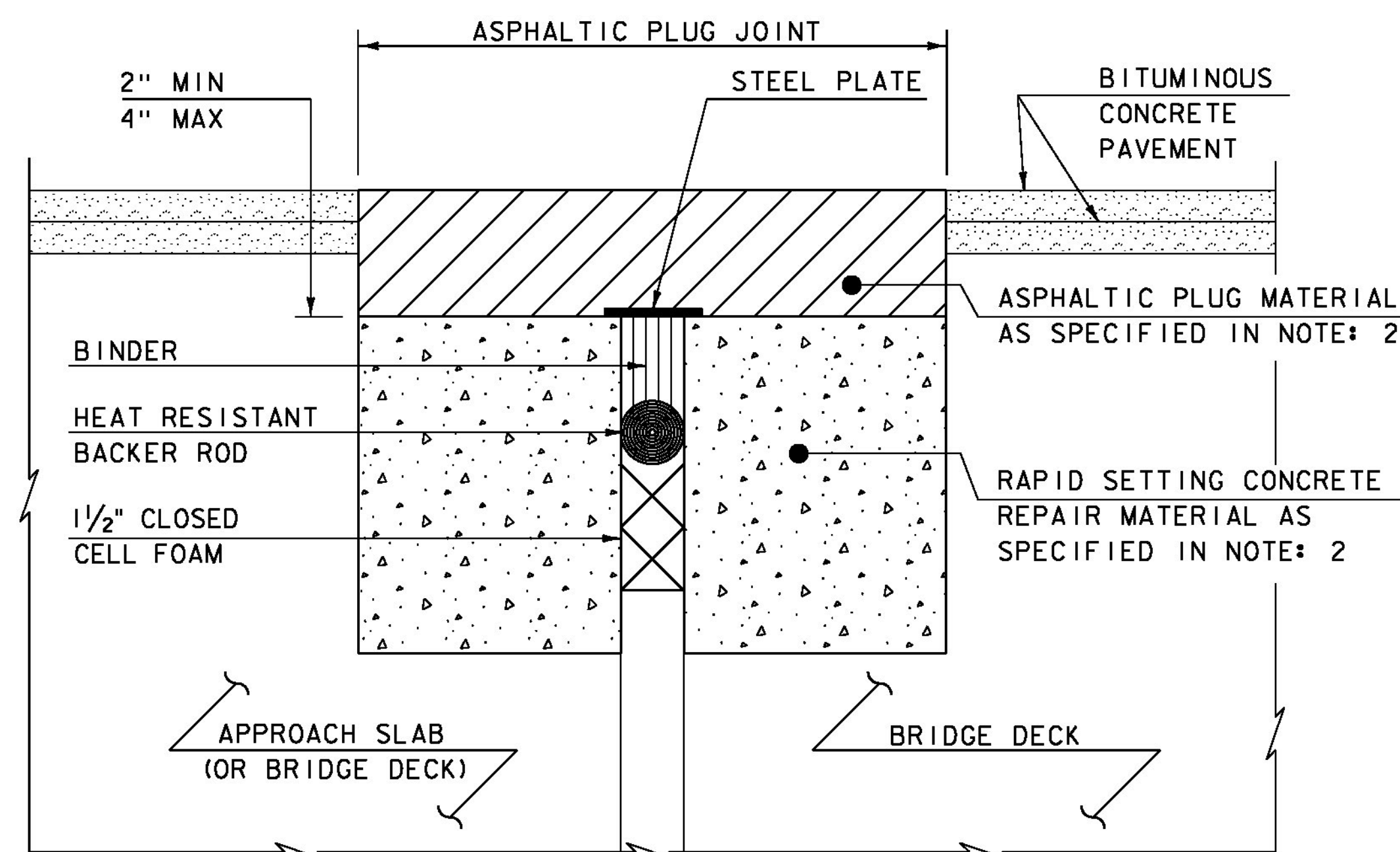
LOCATION	RWA	RWN	ERW	RPWA	RPW500
RAMP A	2	2			
U.S. ROUTE 4			2	4	4
TOTALS	2	2	2	4	4

- LEGEND**
- RWA = ROAD WORK AHEAD
  - RW500 = ROAD WORK IN 500 FEET
  - RWN = ROAD WORK NEXT (XX MILES)
  - ERW = END ROAD WORK
  - RPWA = RAMP WORK AHEAD
  - SRWA = SIDE ROAD WORK AHEAD
  - SRW500 = SIDE ROAD WORK 500 FEET
  - = PORTABLE CHANGEABLE MESSAGE SIGN
  - = WORK AREA
  - = DIRECTION OF TRAFFIC FLOW

SEE VAOT STANDARDS T-1, T-10, T-11 AND T-13 FOR SIGN PLACEMENT.  
 CONSTRUCTION APPROACH SIGNING SHALL BE PLACED AS NOT TO  
 INTERFERE WITH EXISTING TRAFFIC CONTROL DEVICES.  
 SEE COMPOSITE TRAFFIC NOTES SHEET.

PROJECT NAME: HARTFORD-SHARON  
 PROJECT NUMBER: IM SURF(46)  
 FILE NAME: I3a638/pvtmg+/p3a638\_wrk.dgn PLOT DATE: 06-JUN-2014  
 PROJECT LEADER: J. HARRINGTON DRAWN BY: PVT. MGT.  
 DESIGNED BY: PVT. MGT. CHECKED BY: PVT. MGT.  
 CONSTRUCTION APPROACH SIGNING SHEET 3 SHEET 64 OF 64

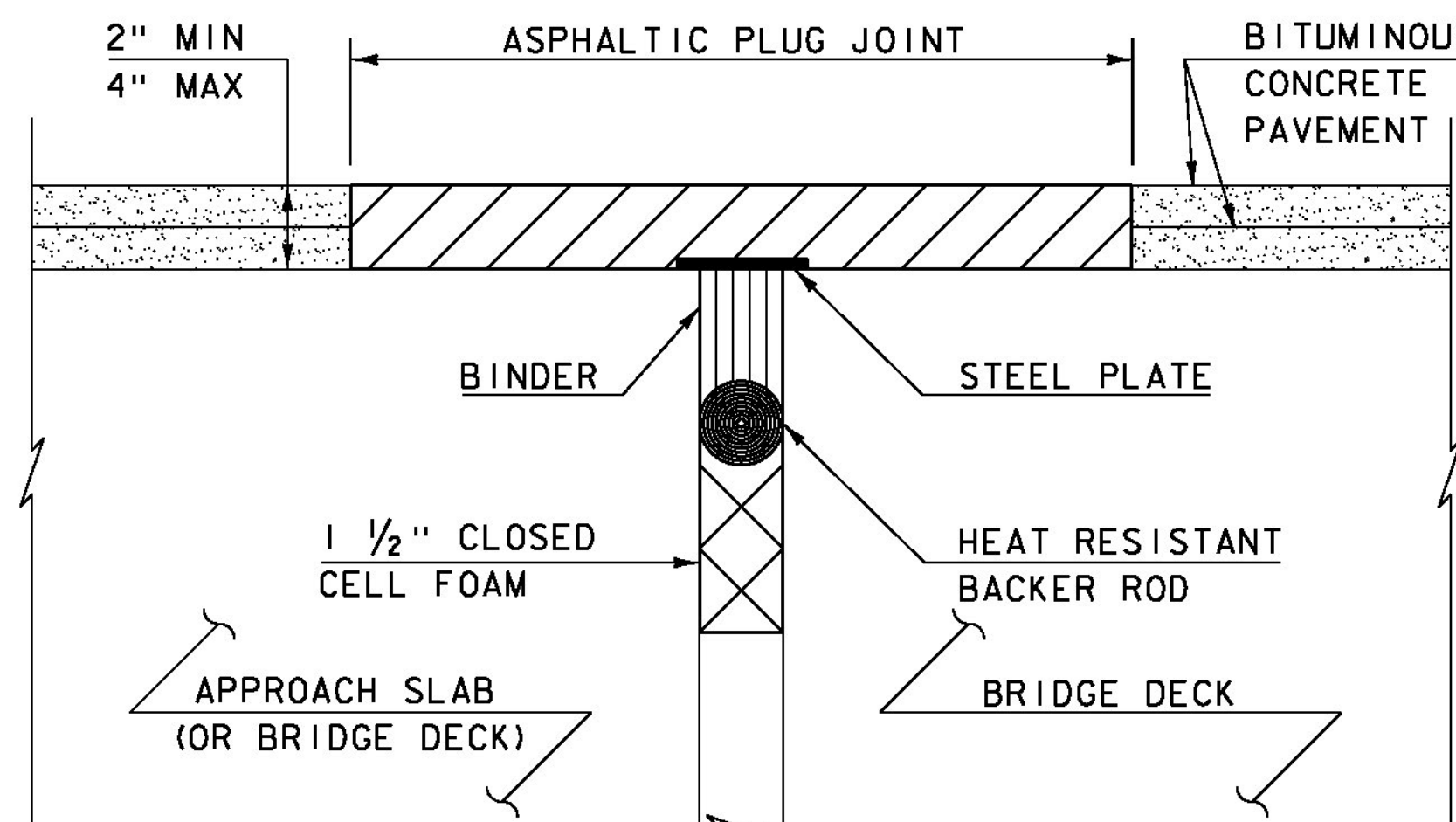
**NOT TO SCALE**



**ASPHALTIC PLUG-TYPE JOINT DETAIL - REHAB**

NOTES: (NOT TO SCALE)

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 COARSE 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)

**INSTALLATION: ASPHALTIC PLUG JOINT NOTES**

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**