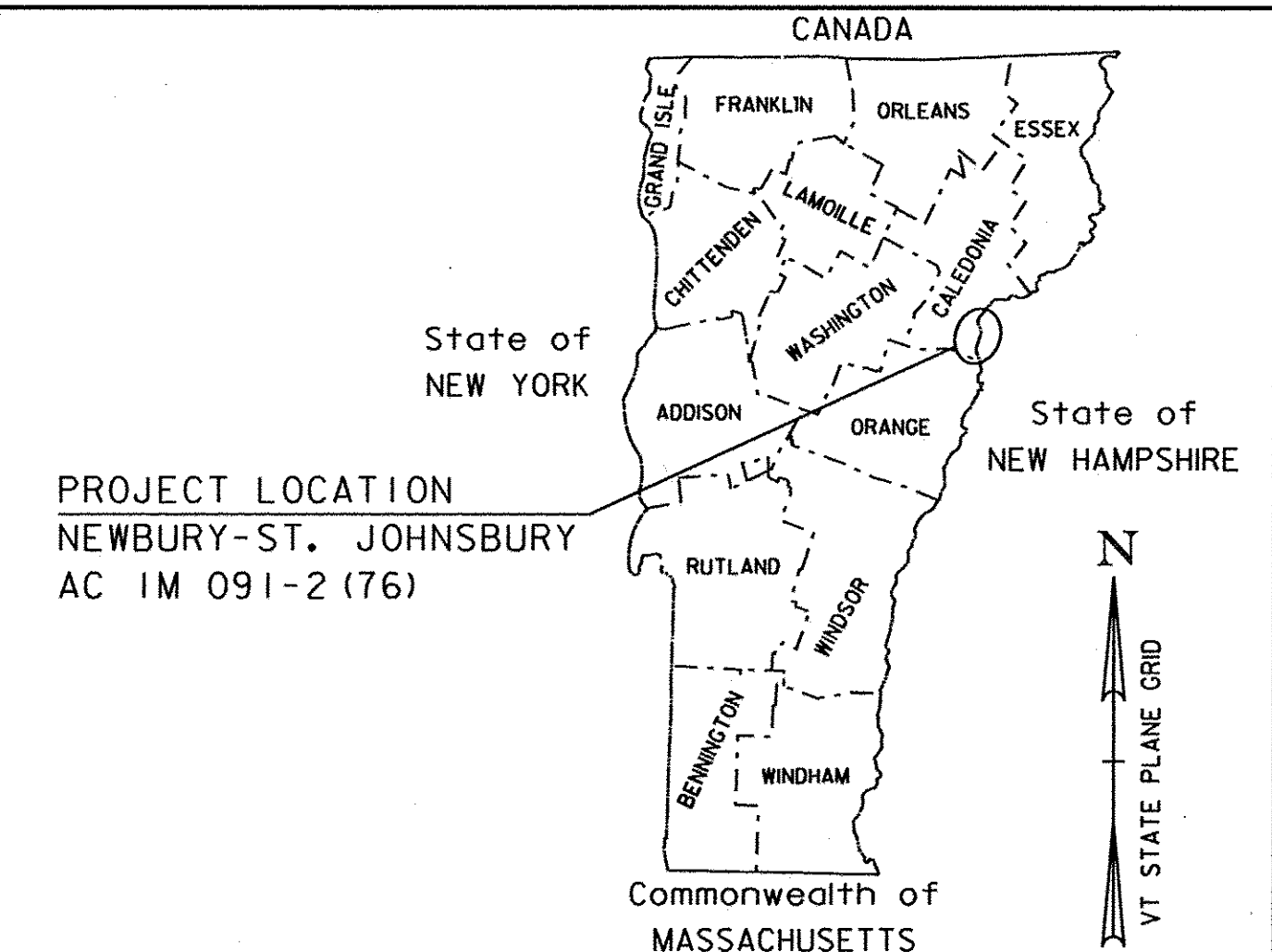


INDEX OF SHEETS  
SEE SHEET 2

# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENT TOWNS OF NEWBURY, RYEGATE, BARNET, WATERFORD & ST. JOHNSBURY COUNTIES OF ORANGE & CALEDONIA INTERSTATE ROUTE 91 (SOUTHBOUND)



SUPERPAVE BITUMINOUS CONCRETE PAVEMENT MIXTURE DESIGN CRITERIA	
	I-91 SB
DESIGN LANE/DESIGN LIFE ESAL	5,677,000
DESIGN NUMBER OF GYRATIONS	65
PERFORMANCE GRADED ASPHALT BINDER	SEE SUBSECTION 490.03(b)

### TRAFFIC DATA

LOCATION	AADT		DHV		ESALs	
	2013	2023	2013	2023	2013-2023	2013-2033
I-91 SOUTHBOUND						
BEGIN PROJECT TO EXIT 18	2400	2700	320	360	1,934,000	4,525,000
EXIT 18 TO END PROJECT	2800	3000	380	410	2,455,000	5,677,000

BEGINNING IN NEWBURY ON I-91 AT MM 110.683 IN THE SB LANE AND EXTENDING NORTHERLY A DISTANCE OF 94,369.44 FEET (17.873 MILES) TO MM 128.556

LENGTH OF ROADWAY = 94,369.44 FT = (17.873 MILES)  
LENGTH OF PROJECT = 94,369.44 FT = (17.873 MILES)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING, RESURFACING WITH A LEVELING COURSE AND WEARING COURSE, NEW PAVEMENT MARKINGS, GUARDRAIL, DRAINAGE AND OTHER RELATED HIGHWAY ITEMS.

RECORD PLANS	
CONTRACTOR:	PIKE INDUSTRIES, INC. - BERLIN, VT
RESIDENT ENGINEER:	JOHN SLADYK
CONSTRUCTION BEGAN:	APRIL 15, 2013
CONSTRUCTION COMPLETE:	NOVEMBER 8, 2013
RECORD PLANS BY:	JOHN SLADYK & JENNA HYDE
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	<i>John Sladyk</i> RESIDENT ENGINEER
DATE:	6-10-14
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.	

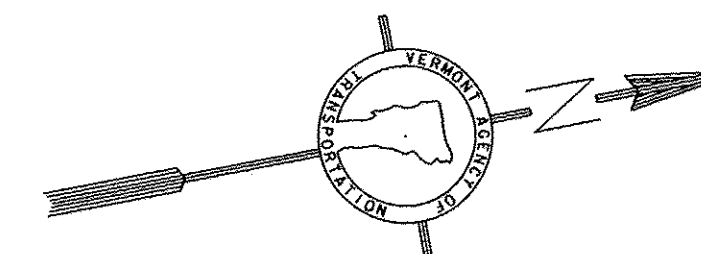
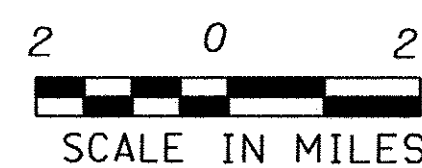
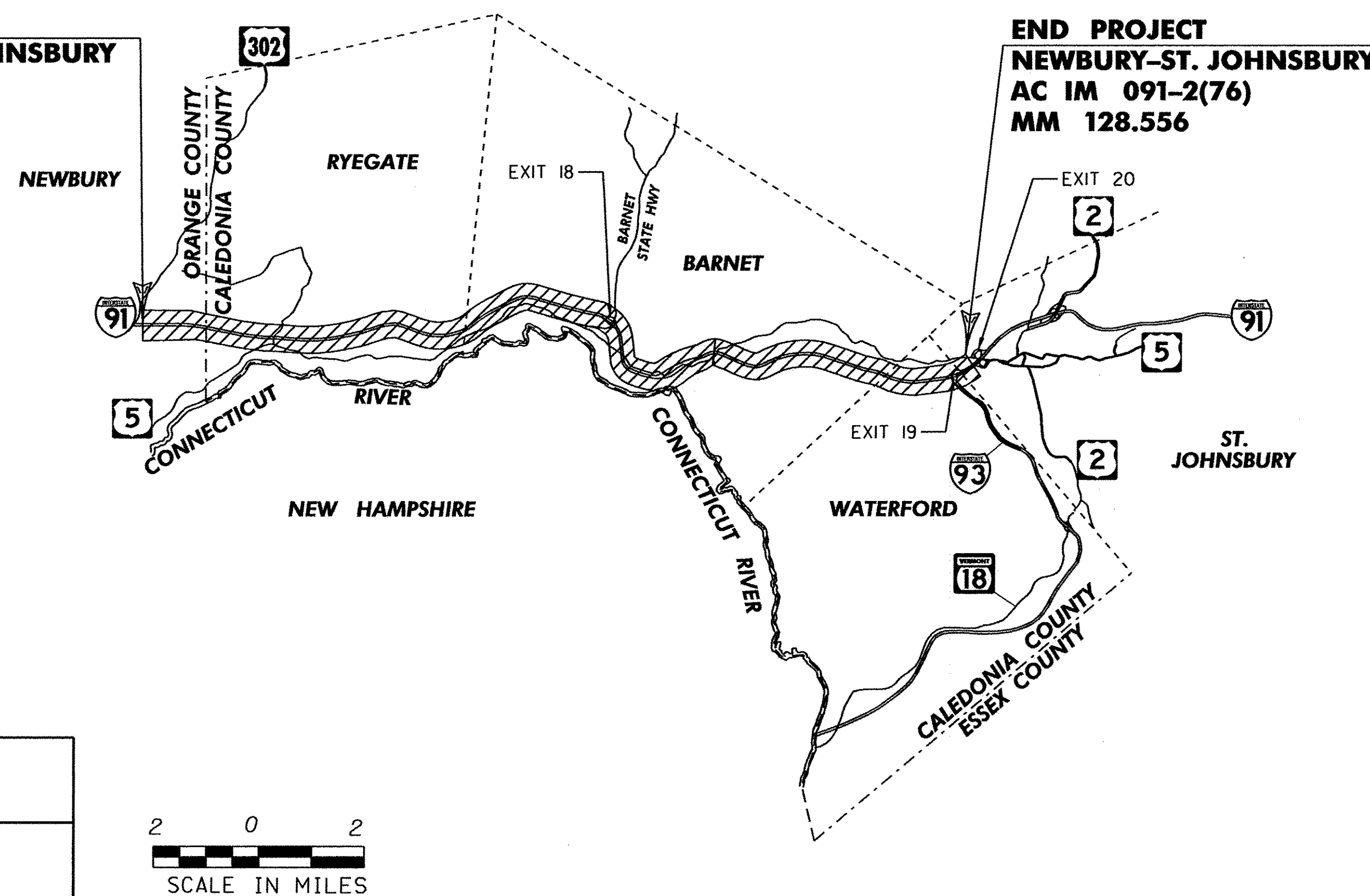
QUALITY ASSURANCE PROGRAM: LEVEL I

### CONVENTIONAL SYMBOLS

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

SURVEYED BY : CLD  
SURVEYED DATE : NOV. 2011

DATUM  
VERTICAL N/A  
HORIZONTAL N/A



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

RIGHT-OF-WAY LIMITS, IF APPLICABLE, ARE PROVIDED SOLELY FOR THE CONVENIENCE OF THE STATE AND ITS CONTRACTOR DURING THE COURSE OF THIS PAVING PROJECT. ANY REFERENCES TO OFFSETS ON THESE PLANS ARE APPROXIMATE AND SHOULD NOT BE RELIED UPON FOR ANY OTHER PURPOSES.

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.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATOR
APPROVED _____ DATE _____
DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED _____ DATE _____
PROJECT MANAGER : MICHAEL FOWLER
PROJECT NAME : NEWBURY-ST. JOHNSBURY PROJECT NUMBER: AC IM 091-2(76)
SHEET 1 OF 33 SHEETS

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## INDEX OF STANDARD PLANS

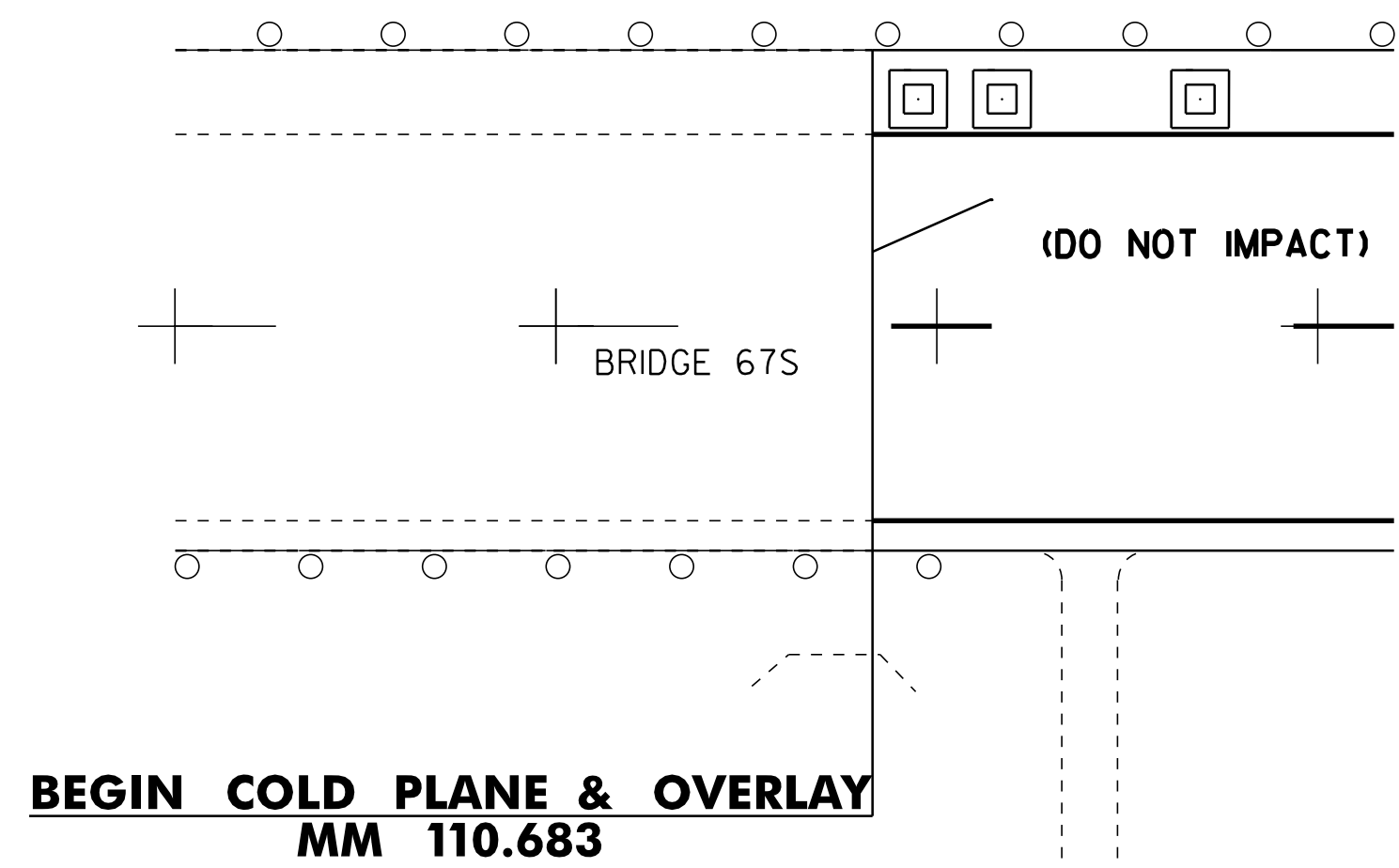
STD	DATE	DESCRIPTION
C-10	2/11/2008	CURBING
D-3	6/1/1994	TREATED GUTTERS
D-6	6/1/1994	REINFORCED CONCRETE DROP INLET W/GRATE (DITCHES)
D-9	6/1/1994	REINFORCED CONCRETE DROP INLET TOPS - VERTICAL CURB & THROAT ADAPTER
D-10	6/1/1994	REINFORCED CONCRETE DROP INLET TOPS - BITUMINOUS CONCRETE CURB & GRANITE SLOPE EDGING
D-15	6/1/1994	PRECAST REINF. CONC. CATCH BASIN W/CAST IRON GRATE, PRECAST REINF. CONC. MANHOLE W/ CAST IRON COVER, CAST IRON GRATE WITH FRAME, TYPE D - CAST IRON GRATE WITH FRAME, TYPE E
E-100	1/2/2004	CONSTRUCTION APPROACH SIGNS
E-100A	1/2/2004	SIDE ROAD CONSTRUCTION APPROACH SIGNS
E-101	5/30/2003	CONSTRUCTION SIGN DETAILS
E-102	6/30/2003	CONSTRUCTION SIGN DETAILS
E-102A	5/1/2004	CONSTRUCTION SIGN DETAILS
E-103	3/1/2004	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED
E-105	5/1/2004	TRAFFIC CONTROL FOR CONSTRUCTION VEHICLE U-TURNS ON DIVIDED HIGHWAY
E-106	3/1/2004	TRAFFIC CONTROL MISCELLANEOUS DETAILS
E-107	6/30/2003	DELINEATION, BARRICADES AND DETOURS FOR U-TURNS ON DIVIDED HIGHWAY
E-107A	6/8/2009	BREAKAWAY BARRICADE DETAILS
E-108A	6/8/2009	CONSTRUCTION ZONE LONGITUDINAL DROP OFFS FOR PAVING
E-110	8/8/1995	MAJOR MAINTENANCE OPERATION LANE CLOSURE
E-111	3/11/1997	MINOR MAINTENANCE OPERATION
E-191	2/1/1999	PAVEMENT MARKING DETAILS
E-192	10/12/2000	PAVEMENT MARKING DETAILS
E-193	8/18/1995	PAVEMENT MARKING DETAILS
F-2	6/1/1994	CHAIN LINK FENCE, TYPE I - DRIVE GATE FOR CHAIN LINK FENCE, TYPE I - WALK GATE FOR CHAIN LINK FENCE, TYPE I
G-1	1/3/2000	STEEL BEAM GUARDRAIL WITH STEEL POSTS, STEEL BEAM GUARDRAIL WITH WOOD POSTS
G-1d	1/3/2000	STEEL BEAM GUARDRAIL APPROACH AND TRAILING END TERMINAL, ANCHOR FOR STEEL BEAM RAIL, STEEL BEAM MEDIAN BARRIER
G-6	2/11/2008	CABLE GUARDRAIL (WITH STEEL POSTS) ANCHOR FOR CABLE RAIL
G-19	11/15/2002	GENERIC PLANS FOR GUARDRAIL END TERMINALS

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10-13	ITEM DETAIL SUMMARY SHEETS 1-4
14	DECOMMISSION / CAP CURB DROP INLET DETAIL SHEET
15	PAVEMENT MARKINGS DETAIL SHEET
16-18	BRIDGE/GUARDRAIL TREATMENT DETAIL SHEETS 1-3
19-20	GUARDRAIL APPROACH SECTION DETAIL SHEETS 1-2
21-22	MILLED RUMBLE STRIP DETAIL SHEETS 1-2
23	CULVERT LOCATIONS SHEET
24	DITCH CLEANING SHEET
25-27	MAINLINE LAYOUT SHEETS 1-3
28	PARKING AREA DETAIL SHEET
29	EXIT 18 ON RAMP DETAIL SHEET
30	EXIT 18 OFF RAMP DETAIL SHEET
31	EXIT 19 ON RAMP DETAIL SHEET
32	EXIT 19 OFF RAMP DETAIL SHEET
33	TEMPORARY TRAFFIC CONTROL PLAN
	BRIDGE JOINT ASPHALTIC PLUG (STRUCTURES DETAIL SD-516.10)

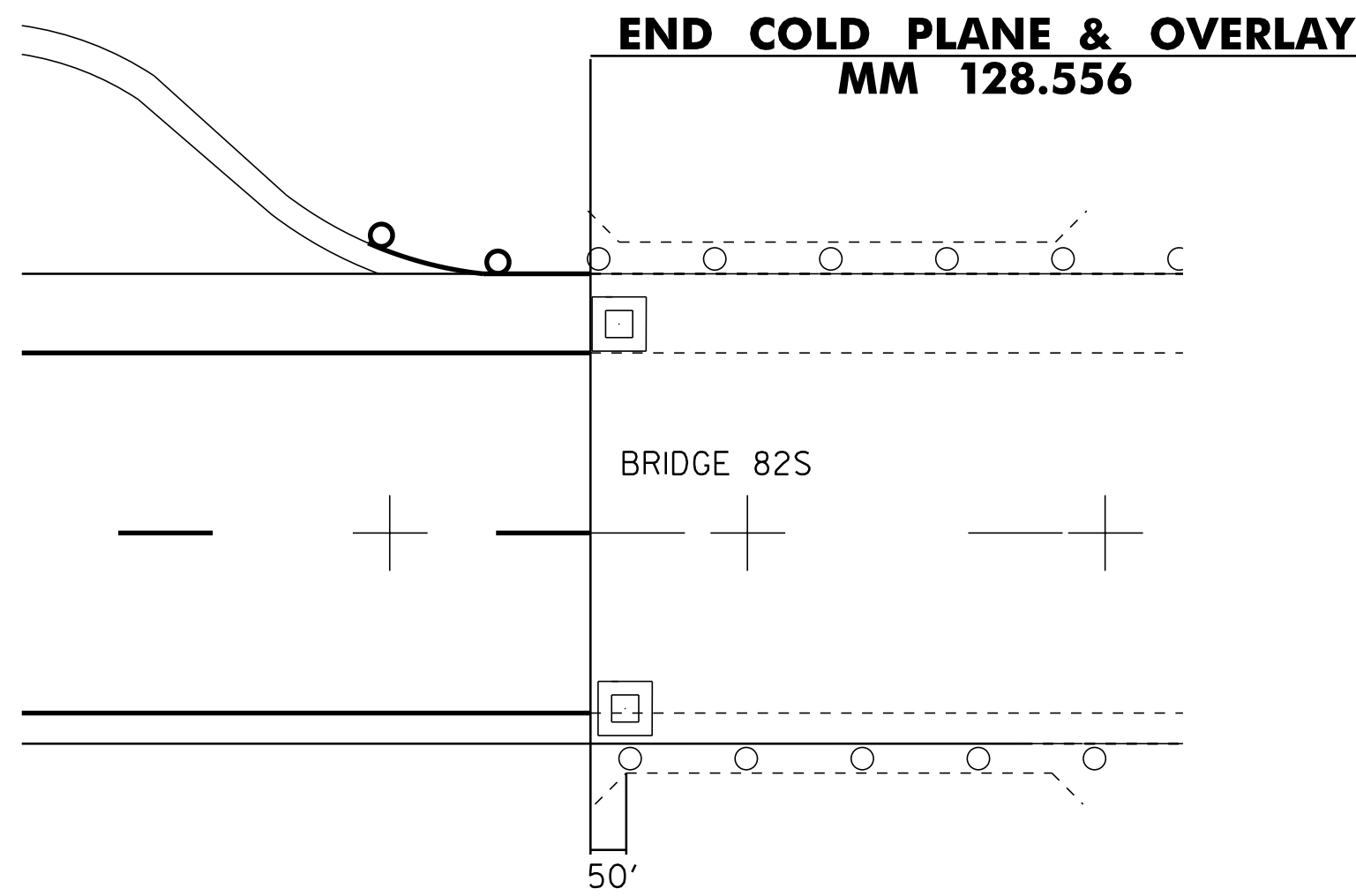
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DESIGNED BY: NULL	CHECKED BY: PTS
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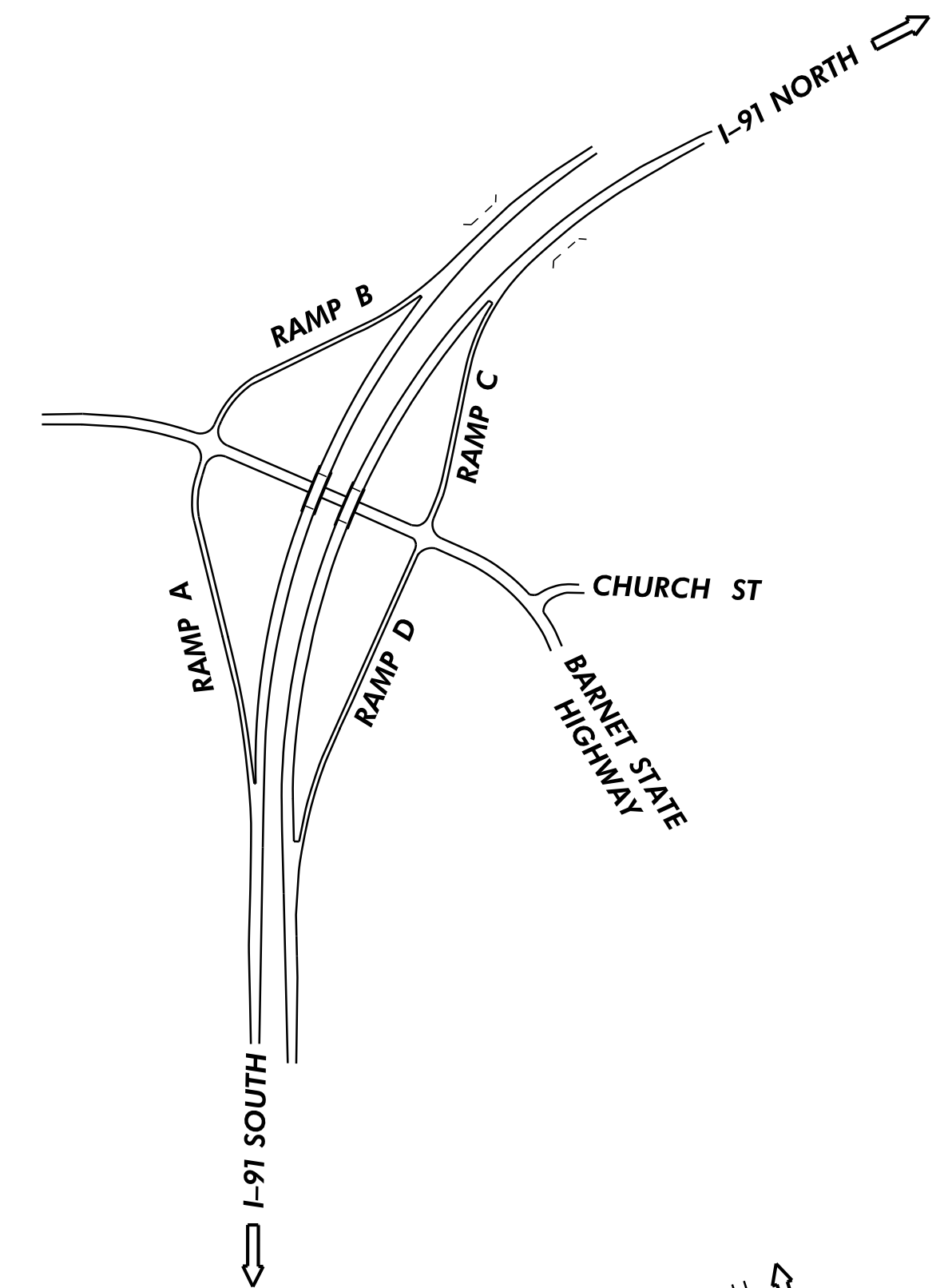
BEGIN COLD PLANE & OVERLAY  
MM 110.683

**INTERSTATE 91 SB**  
**BEGIN AC IM 091-2(76)**

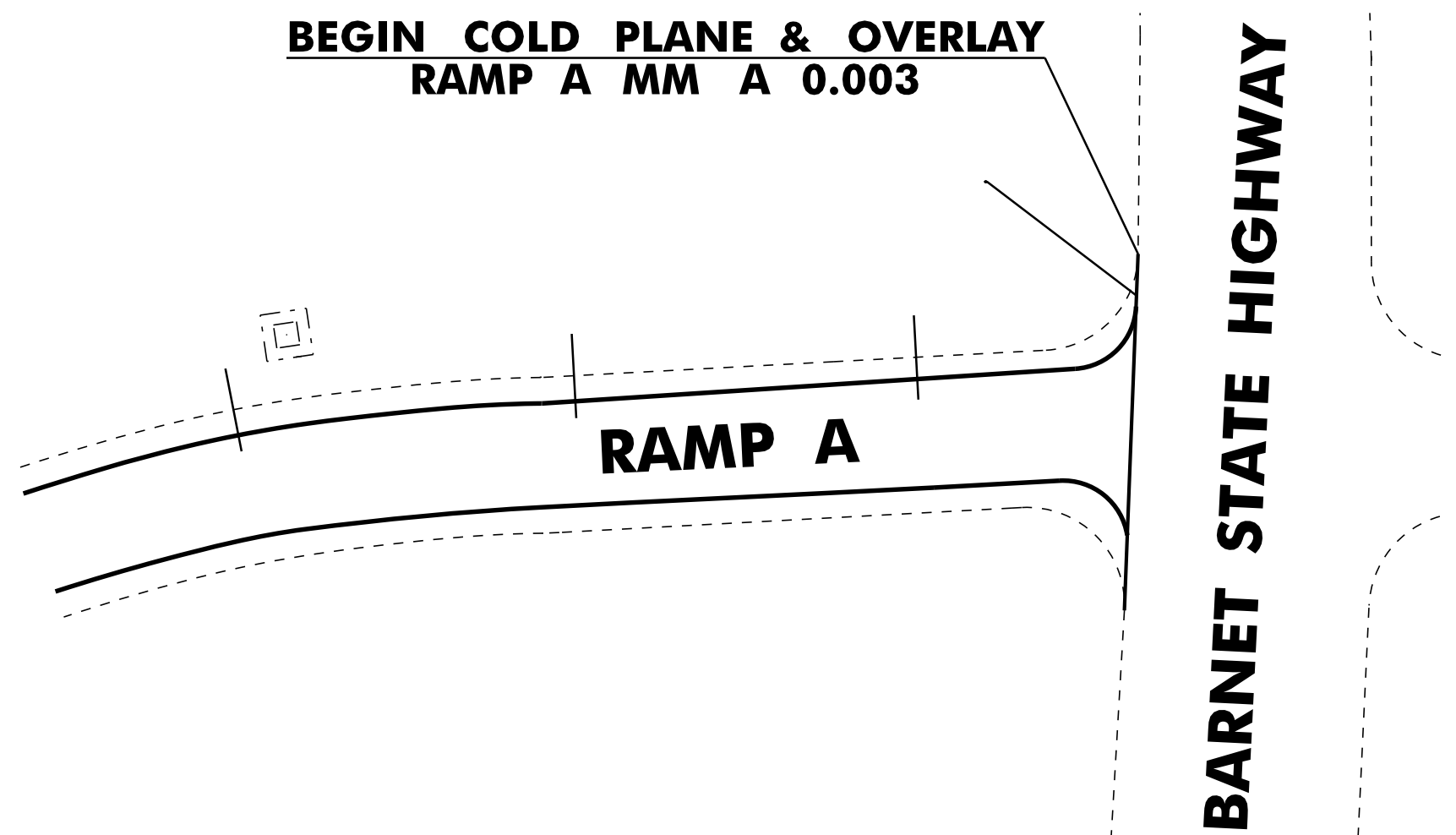


END COLD PLANE & OVERLAY  
MM 128.556

**INTERSTATE 91 SB**  
**END AC IM 091-2(76)**

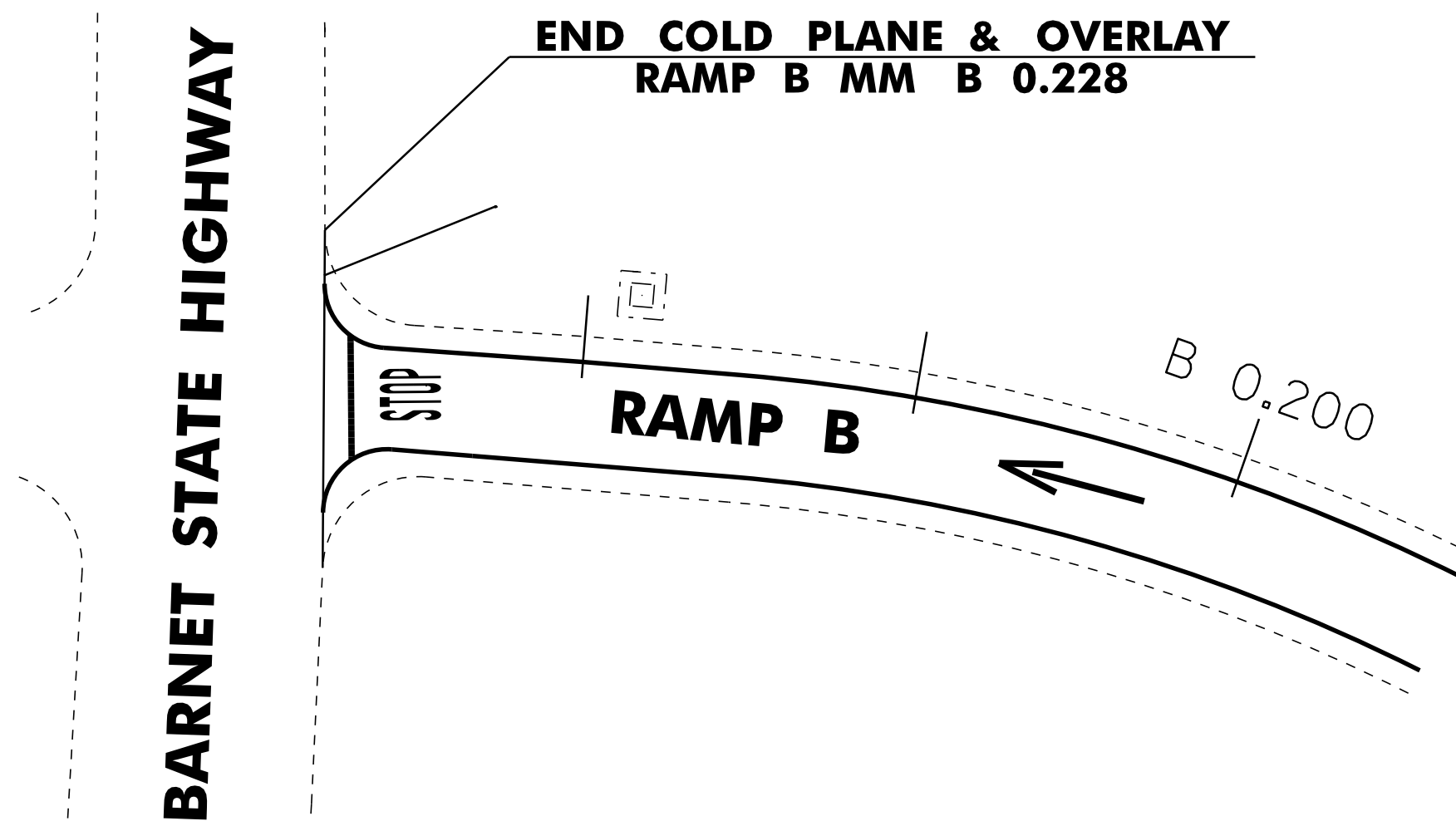


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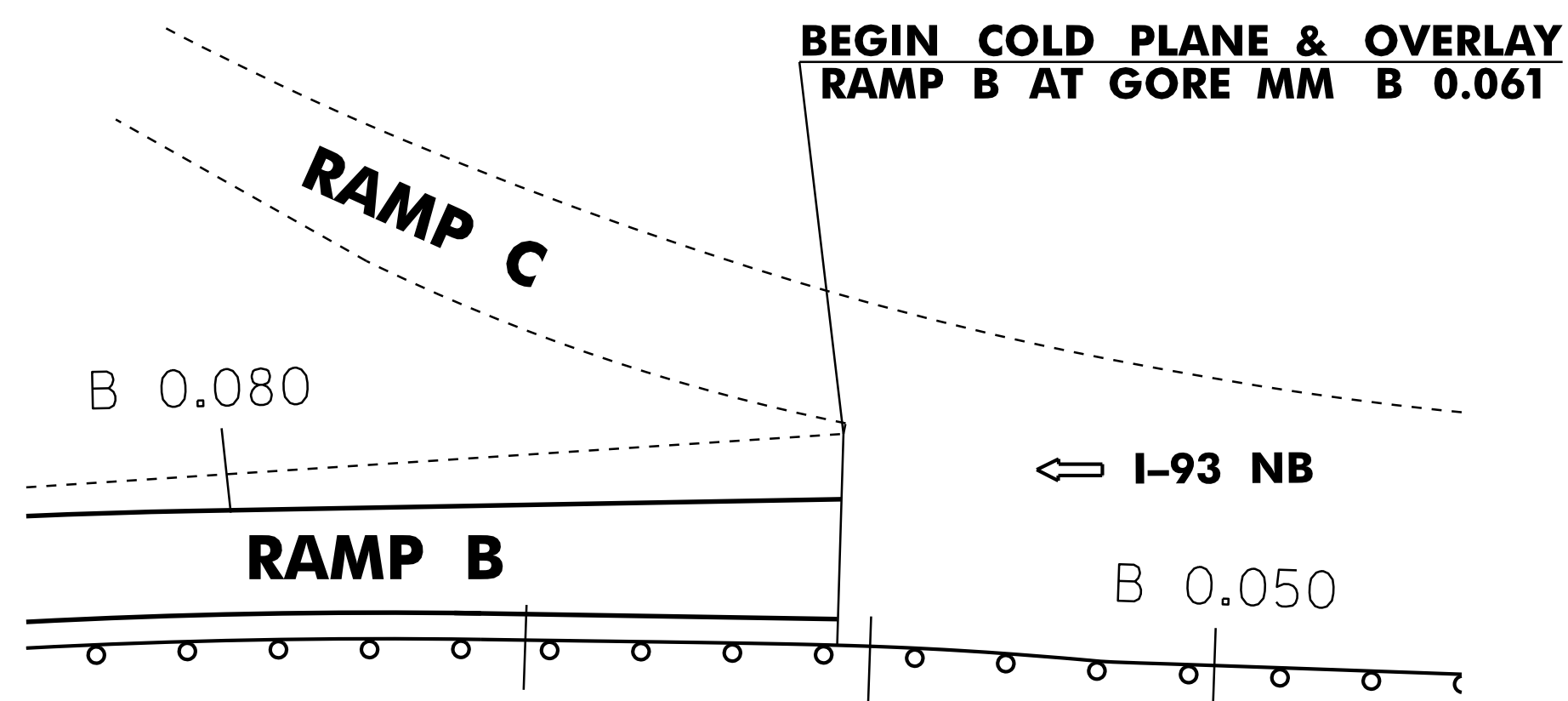
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**EXIT 18 - RAMP A**  
**SOUTHBOUND ON RAMP**



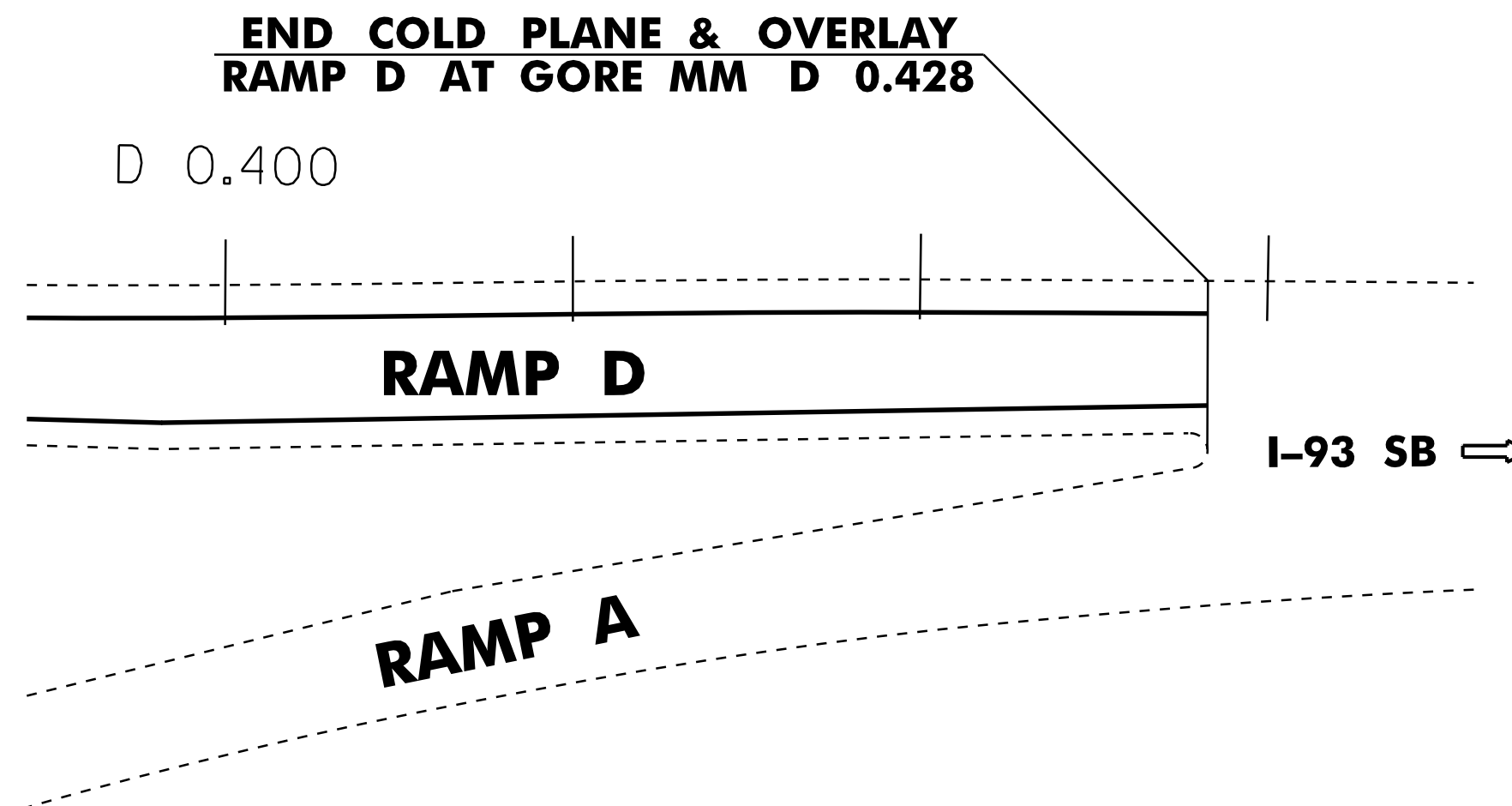
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**EXIT 18 - RAMP B**  
**SOUTHBOUND OFF RAMP**



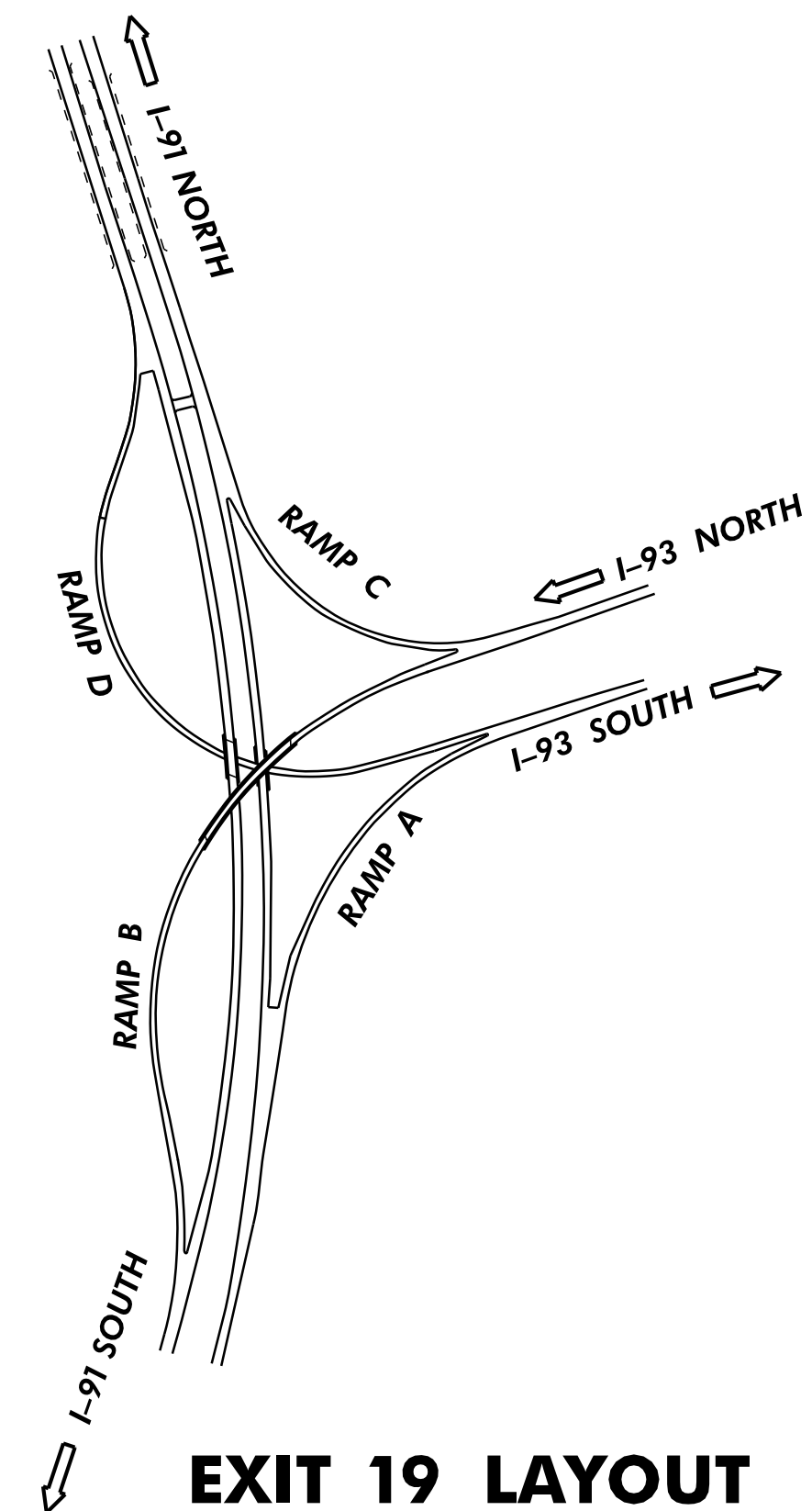
BEGIN COLD PLANE & OVERLAY  
RAMP B AT GORE MM B 0.061

**EXIT 19 - RAMP B**  
**SOUTHBOUND ON RAMP**



END COLD PLANE & OVERLAY  
RAMP D AT GORE MM D 0.428

**EXIT 19 - RAMP D**  
**SOUTHBOUND OFF RAMP**



**EXIT 19 LAYOUT**

**TIE SHEET**

PROJECT NAME: NEWBURY-ST. JOHNSBURY  
PROJECT NUMBER: AC IM 091-2(76)

FILE NAME: 06a046  
PROJECT LEADER: PTS  
DESIGNED BY: NULL  
IPARM FILE NAME: 06A046\_03

PLOT DATE: 29-JUL-2014 16:40  
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CHECKED BY: PTS  
SHEET 3 OF 33

NOT TO SCALE

## GENERAL NOTES

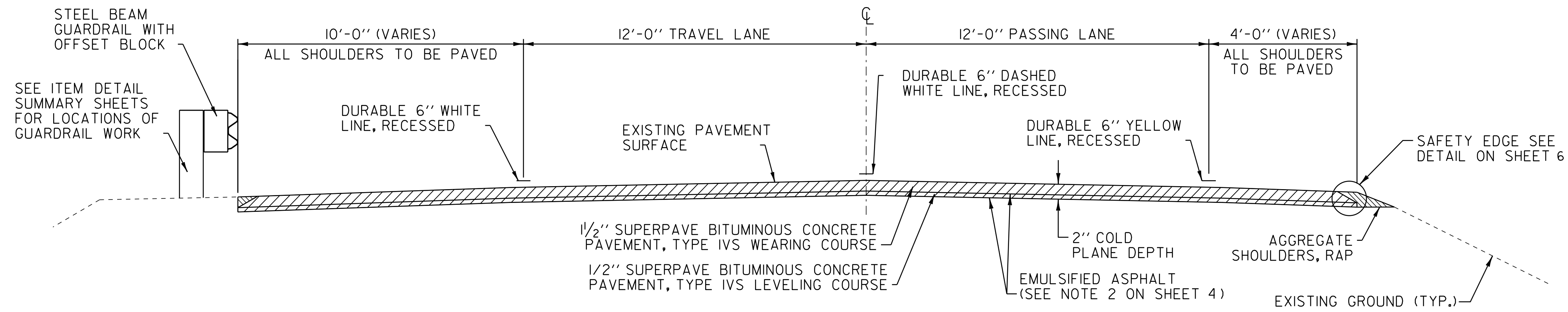
1. THE WEARING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE LEVELING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. ALL LIQUID ASPHALT USED IN BITUMINOUS CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH SUBSECTION 490.03(b).
2. ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-IH OR CRS-IH) SHALL BE APPLIED ON ALL COLD PLANED SURFACES AT A RATE OF 0.080 GAL/SY OR AS DIRECTED BY THE ENGINEER. SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-IH OR CRS-IH) SHALL BE APPLIED BETWEEN PAVED SURFACES AT A RATE OF 0.025 TO 0.040 GAL/SY.
3. SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 1/4 INCH (TOTAL PAVEMENT THICKNESS EXCLUDING LEVELING).
4. COLD PLANING TO BE COMPLETED ACCORDING TO THE TYPICAL OR AS NOTED OTHERWISE ON THE PLANS. A FULL-DEPTH BUTT JOINT SHALL BE CONSTRUCTED AT ALL APPROACHES AS DIRECTED BY THE ENGINEER. ALL BUTT JOINTS SHALL BE SAW CUT, INCIDENTAL TO ITEM 210.10, COLD PLANING, BITUMINOUS PAVEMENT. THE CONTRACTOR SHALL USE CAUTION WHEN COLD PLANING AND PAVING OPERATIONS OCCUR ADJACENT TO EXISTING DROP INLETS OR CATCH BASINS. ANY DAMAGE WHICH OCCURS TO THESE DRAINAGE STRUCTURES AS A RESULT OF THESE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE OF VERMONT. IN AREAS OF RUTTING, THE COLD PLANE DEPTH SHOULD BE MEASURED FROM THE HIGH POINTS OF THE ROADWAY SECTION.
5. 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 VAOT 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.
6. ALL DI'S AND CB'S TO BE REHABILITATED AS SHOWN ON THE PLANS AND PAID FOR UNDER ITEM 604.412 OR 604.415 REHAB. DI, CB OR MH CLASS I OR II. THE STRUCTURE SHALL BE RAISED OR REHABILITATED SUCH THAT THE NEW GRATE ELEVATION IS LEVEL WITH THE SURROUNDING TERRAIN. TYPE B GRATES SHALL BE USED FOR ALL REHABILITATED DI'S AND CB'S IN PAVEMENT ADJACENT TO BITUMINOUS CURBING. DRAINAGE STRUCTURES CALLING FOR REHAB HAVE BEEN DISTRIBUTED BETWEEN ITEMS 604.412 AND 604.415. FOR ESTIMATING PURPOSES THE DISTRIBUTION IS AS FOLLOWS: ITEM 604.412, 80%, ITEM 604.415, 20%.
7. ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING AND POT HOLE REPAIR SHALL BE PERFORMED FOLLOWING COLD PLANING AND PRIOR TO PAVING. 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). ALL BRIDGE DECKS WITHIN THE PROJECT LIMITS SHALL ALSO RECEIVE SURFACE PREPARATION PRIOR TO PAVING. AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED TO COVER ALL COSTS ASSOCIATED WITH THIS WORK.
8. ALL EDGES OF PAVEMENT (EXCEPT IN CURBED SECTIONS) SHALL CONFORM TO THE SAFETY EDGE DETAIL. ALL EDGES OF PAVEMENT AND ALL CURB AT GUARDRAIL LOCATIONS SHALL BE BACKED UP FULL HEIGHT WITH COLD PLANE GRINDINGS AS DIRECTED BY THE ENGINEER AND WILL BE PAID FOR UNDER ITEM 402.13, AGGREGATE SHOULDERS, RAP.
9. ALL BITUMINOUS CONCRETE PAVEMENT WORK WHICH COULD INVOLVE SOME HAND-WORK (SUCH AS AROUND DROP INLETS) SHALL BE PAID FOR AT THE CONTRACT PRICE FOR ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT.
10. AREAS ADJACENT TO THE SHOULDER WHERE EXISTING GUARDRAIL IS BEING RETAINED THAT HAVE BUILT-UP EXCESS MATERIAL ARE TO BE GRADED IN ORDER TO ALLOW THE SHOULDER TO DRAIN AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 203.40 SHOULDER BERM REMOVAL.
11. AREAS ADJACENT TO THE SHOULDER WHERE NO GUARDRAIL EXISTS THAT HAVE BUILT UP EXCESS MATERIAL ARE TO BE GRADED IN ORDER TO ALLOW THE SHOULDER TO DRAIN AS DIRECTED BY THE ENGINEER AND SHALL BE PAID UNDER THE APPROPRIATE RENTAL ITEMS.
12. ESTIMATED QUANTITIES OF ITEM 608.25 ALL PURPOSE EXCAVATOR RENTAL, TYPE I, ITEM 608.37 TRUCK RENTAL AND ITEM 608.40 LOADER RENTAL, TYPE I HAVE BEEN INCLUDED FOR THE PROVISION OF CONSTRUCTING GUARDRAIL FLARES. 25 CUBIC YARDS OF ITEM 203.30 EARTH BORROW HAS BEEN INCLUDED TO PROVIDE FOR FLARE CONSTRUCTION. THE GUARDRAIL FLARES SHALL BE CAPPED WITH AN ESTIMATED 3 INCH DEPTH OF DITCHING MATERIAL OR ITEM 651.35 TOPSOIL UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ITEM 653.20 TEMPORARY EROSION MATTING, SHALL BE PLACED ON SLOPES GREATER THE 1:6 CREATED BY THE GUARDRAIL FLARE. THE QUANTITIES REFLECT 25 SY OF ITEM 653.20 TEMPORARY EROSION MATTING FOR EACH NEW GUARDRAIL FLARE.
13. AN ESTIMATED QUANTITY OF ITEM 619.17 YIELDING MARKER POSTS HAS BEEN INCLUDED TO DELINEATE PIPE INLETS, PIPE OUTLETS AND DROP INLETS LOCATED OUTSIDE OF THE PAVEMENT SURFACE OR AS DIRECTED BY THE ENGINEER.
14. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID THE ACCUMULATION OF DEBRIS IN THE DRAINAGE STRUCTURES AND EXPANSION JOINTS. THE CONTRACTOR SHALL EXAMINE THESE FEATURES ON A REGULAR BASIS TO ENSURE THAT DEBRIS HAS NOT ACCUMULATED. ANY DEBRIS WHICH IS PRESENT SHALL BE REMOVED PRIOR TO THE COMPLETION OF THE PROJECT BY THE CONTRACTOR AT NO COST TO THE STATE.
15. STEEL BEAM GUARDRAIL WITH STEEL POSTS SHALL BE USED ON THIS PROJECT. 3'-7" OF BACKING IS REQUIRED BEHIND THE FACE OF GUARDRAIL WITH 6' POSTS.
16. ESTIMATED QUANTITIES OF ITEM 613.10 STONE FILL, TYPE I AND ITEM 649.31 GEOTEXTILE UNDER STONE FILL HAVE BEEN INCLUDED TO USE AS DIRECTED BY THE ENGINEER.
17. THE CONTRACTOR SHALL MAINTAIN COLD PLANE AND PAVING DEPTHS THAT DO NOT REDUCE THE CLEARANCE HEIGHTS OF THE ROADWAY AND SHOULDERS UNDER ALL OVERPASS BRIDGES. THESE HEIGHTS SHALL BE RECORDED BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RE-MEASURED AFTER PAVING OPERATIONS ARE COMPLETE. IF IT IS DETERMINED THAT A REDUCTION IN CLEAR HEIGHT HAS OCCURRED THE CONTRACTOR SHALL REESTABLISH THE ORIGINAL CLEAR HEIGHT AT NO ADDITIONAL EXPENSE TO THE STATE.
18. ASPHALTIC PLUG-TYPE JOINT SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS, (SEE BRIDGE JOINT ASPHALTIC PLUG (STRUCTURES DETAIL SD-516.10)).

BARNET:	BRIDGE 69S	113.132	40 FT	PLUG JOINT
BARNET:	BRIDGE 69S	113.150	40 FT	PLUG JOINT
BARNET:	BRIDGE 70S	118.194	42 FT	PLUG JOINT
BARNET:	BRIDGE 70S	118.211	42 FT	PLUG JOINT
BARNET:	BRIDGE 71S	120.473	38 FT	PLUG JOINT
BARNET:	BRIDGE 71S	120.494	38 FT	PLUG JOINT
BARNET:	BRIDGE 74S	121.156	70 FT	PLUG JOINT
BARNET:	BRIDGE 76S	122.590	40 FT	PLUG JOINT
BARNET:	BRIDGE 76S	122.609	40 FT	PLUG JOINT
BARNET:	BRIDGE 78S	123.458	40 FT	PLUG JOINT
19. THE SOUTHBOUND ALIGNMENT STATIONING SHALL BE ESTABLISHED BY USING THE MILE MARK 128 PLAQUE AT (MM 128.00). THE PROJECT WILL BEGIN AT THE NORTHERLY EXPANSION JOINT OF BRIDGE 67S AND MEASURING NORTHERLY TO 50 FEET SOUTH OF THE SOUTHERN FINGER PLATE JOINT ON BRIDGE 82S (MM 128.556).

## **GENERAL NOTES SHEET**

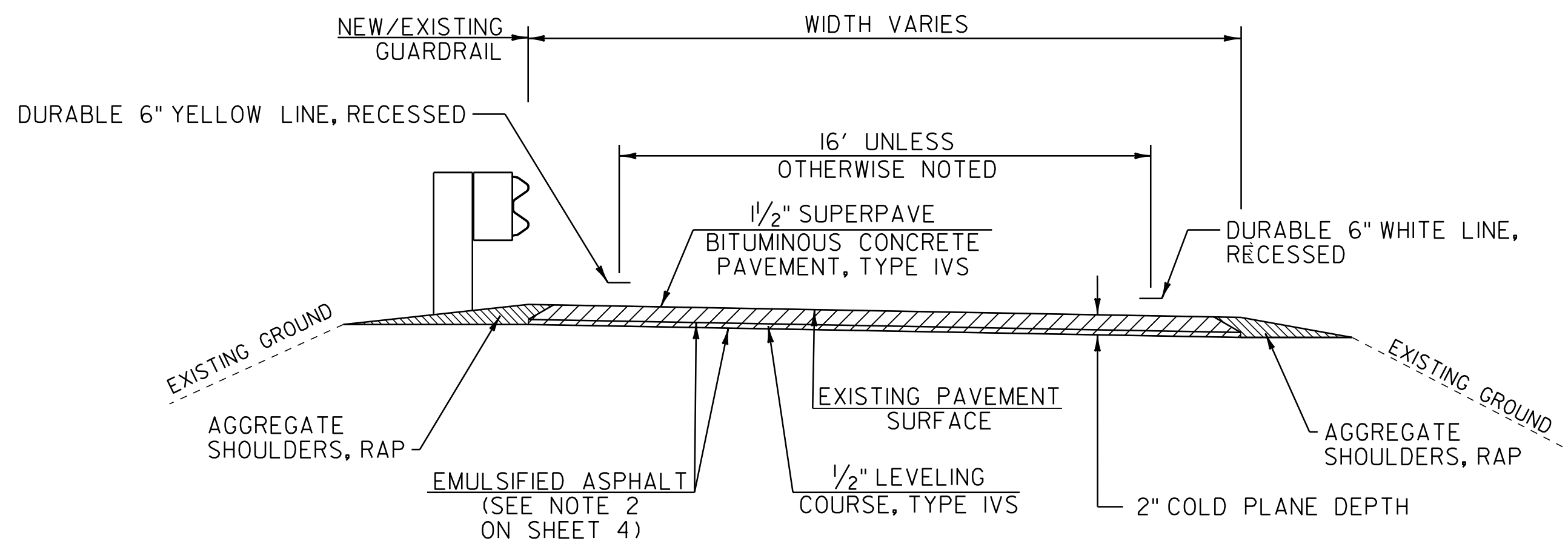
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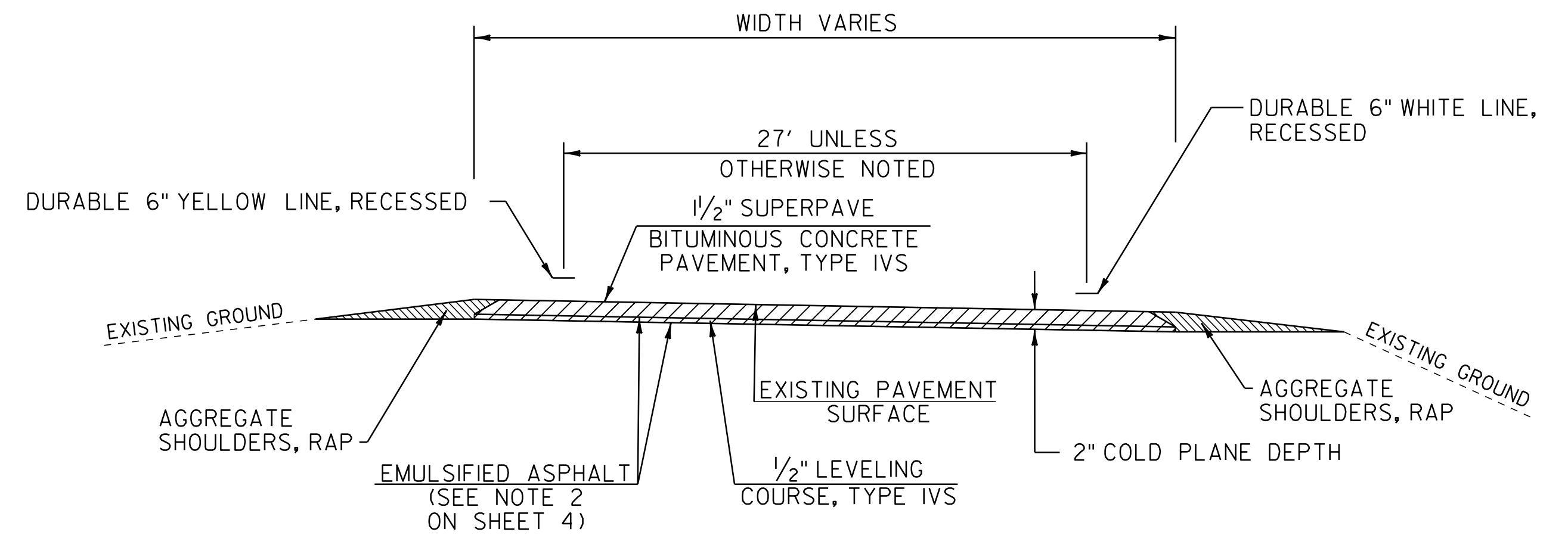


**SOUTHBOUND MAINLINE TYPICAL SECTION**

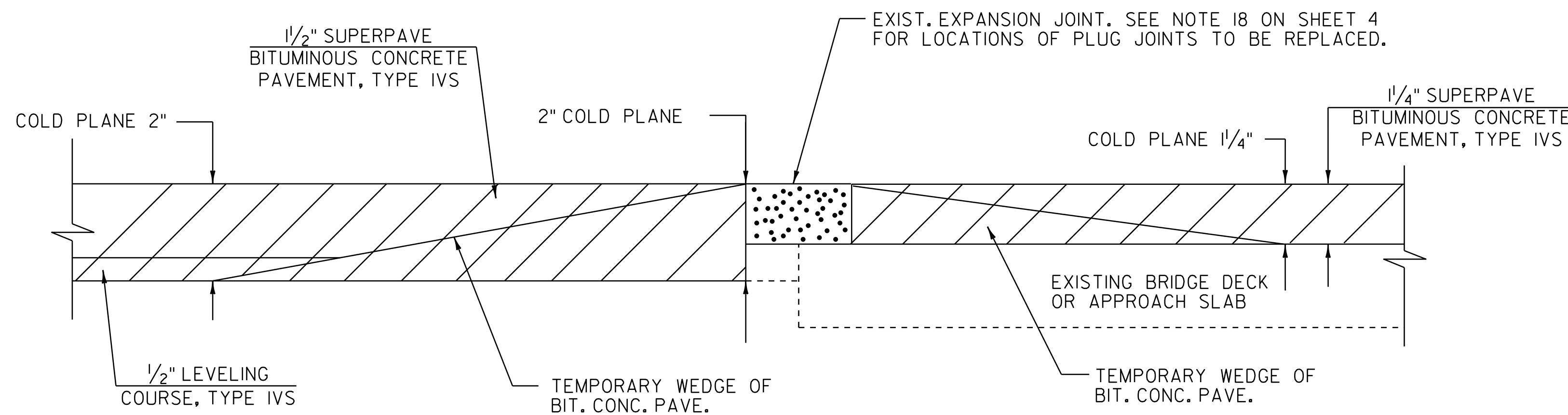
MM 110.683 TO MM 128.556



**RAMP PAVEMENT TYPICAL**



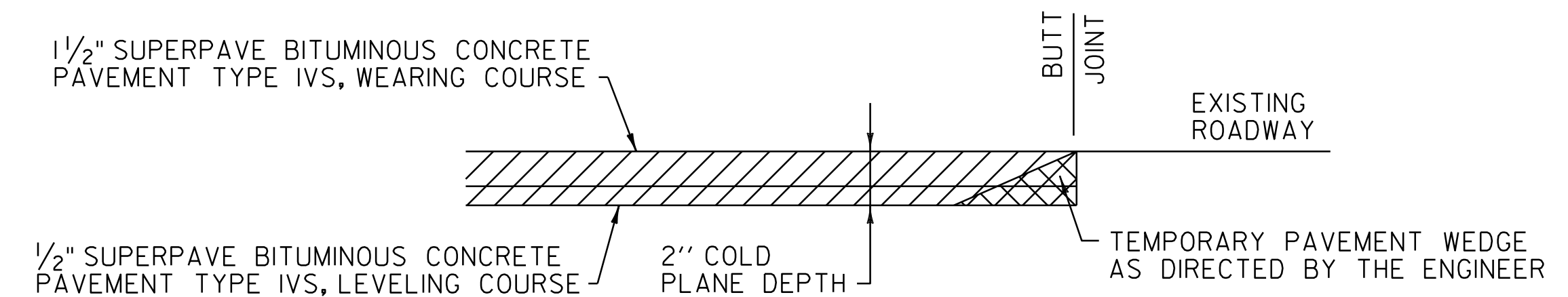
**PARKING AREA TYPICAL**



**BRIDGE APPROACH & COLD PLANE DETAIL**

LOCATIONS

BRIDGE 69S MM 113.132 MM 113.150	BRIDGE 74S MM 121.128 MM 121.156	BRIDGE 78S MM 123.407 MM 123.458
BRIDGE 70S MM 118.194 MM 118.211	BRIDGE 76S MM 122.590 MM 122.609	BRIDGE 81S MM 128.287 MM 128.310
BRIDGE 71S MM 120.473 MM 120.494	BRIDGE 77S MM 123.198 MM 123.304	BRIDGE 81-B-1 MM B 0.158 MM B 0.236



**TYPICAL APPROACH AREA DETAIL**

NEWBURY: MM 110.683 - BEGIN AC IM 091-2(76)  
ST. JOHNSBURY: MM 128.556 - END AC IM 091-2(76)

EXIT 18  
RAMP A MM A 0.003  
RAMP B MM B 0.228

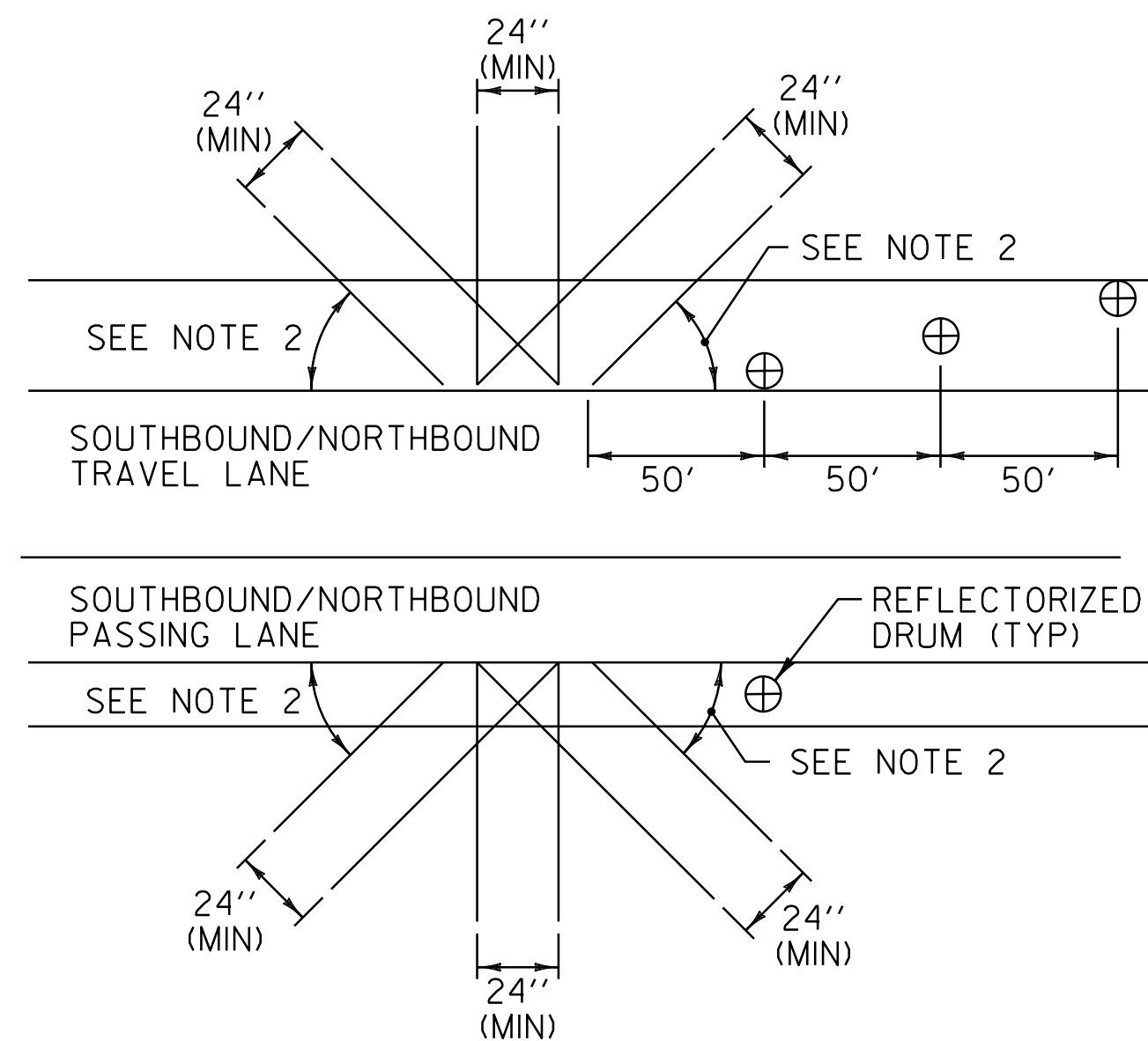
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RAMP D MM D 0.428

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PROJECT NUMBER: AC IM 091-2(76)

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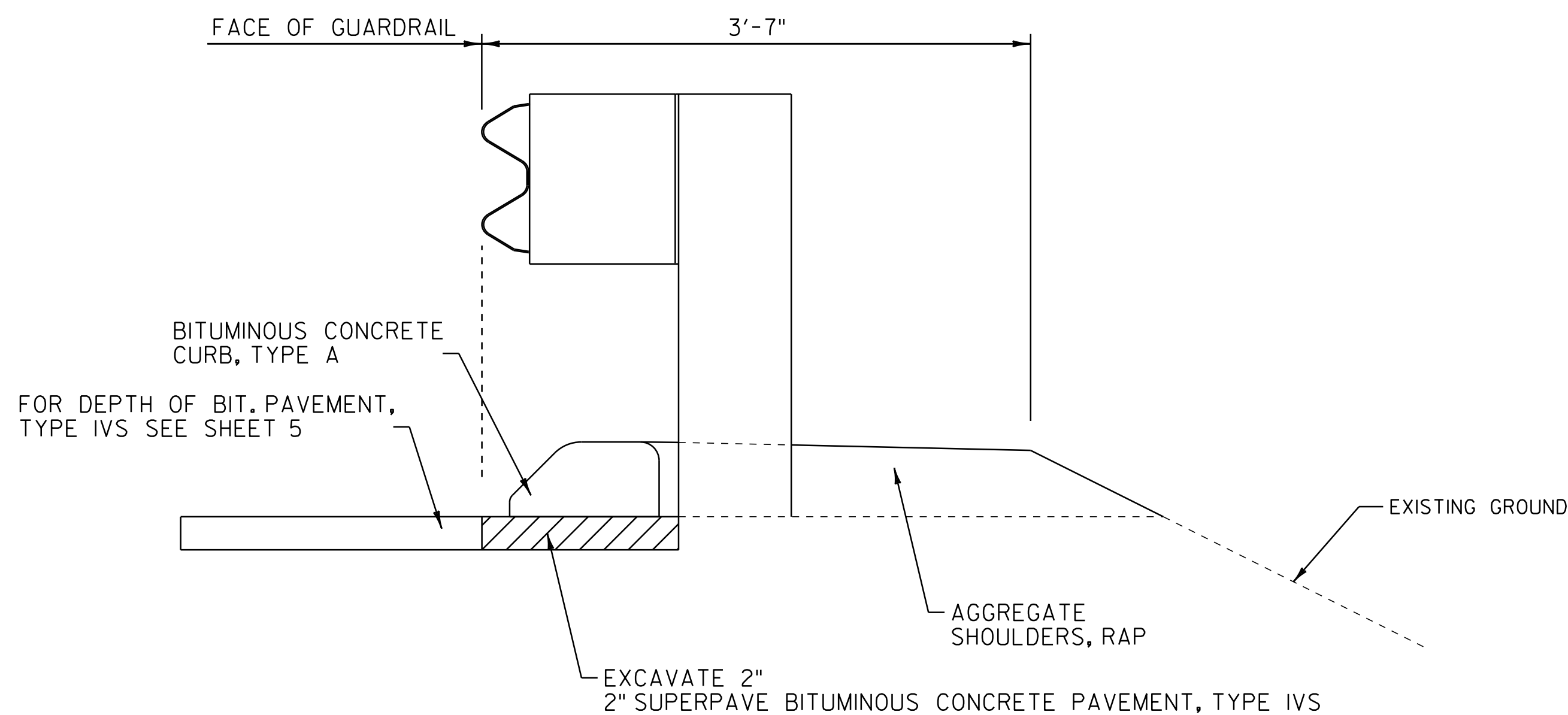
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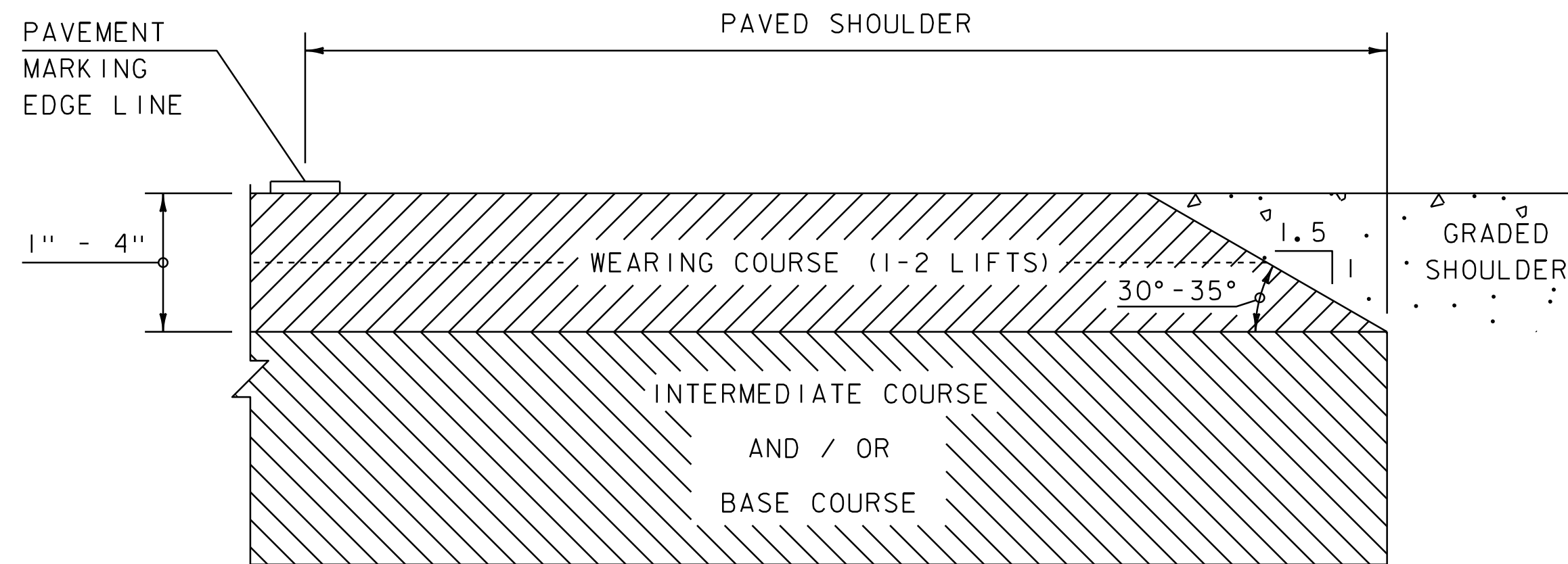
**BLEEDER DETAIL**

BLEEDER DETAIL NOTES

1. BLEEDERS ARE TO BE CUT WHILE COLD PLANING AT LOCATIONS SPECIFIED BY THE ENGINEER.
2. ANGLE BLEEDERS TO BEST ACCEPT WATER FLOW.
3. CUT ALL BLEEDERS TO THE DEPTH OF COLD PLANING AND GRADE TO DRAIN. PAYMENT INCIDENTAL TO ITEM 210.10, COLD PLANING, BITUMINOUS PAVEMENT.
4. BLEEDERS ARE TO BE FILLED DURING PAVING WITH ITEM 490.30, SUPERPAVE BITUMINOUS CONCRETE PAVEMENT OR AS DIRECTED BY THE ENGINEER.
5. REFLECTORIZED DRUMS MUST BE PLACED AS SHOWN TO WARN MOTORISTS OF THE GAP IN THE SHOULDER. PAYMENT SHALL BE INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL AS DIRECTED BY THE ENGINEER.
6. BLEEDERS SHALL NOT BE REQUIRED IF THE COLD PLANED AREAS ARE PAVED BACK THE SAME DAY AS DIRECTED BY THE ENGINEER.



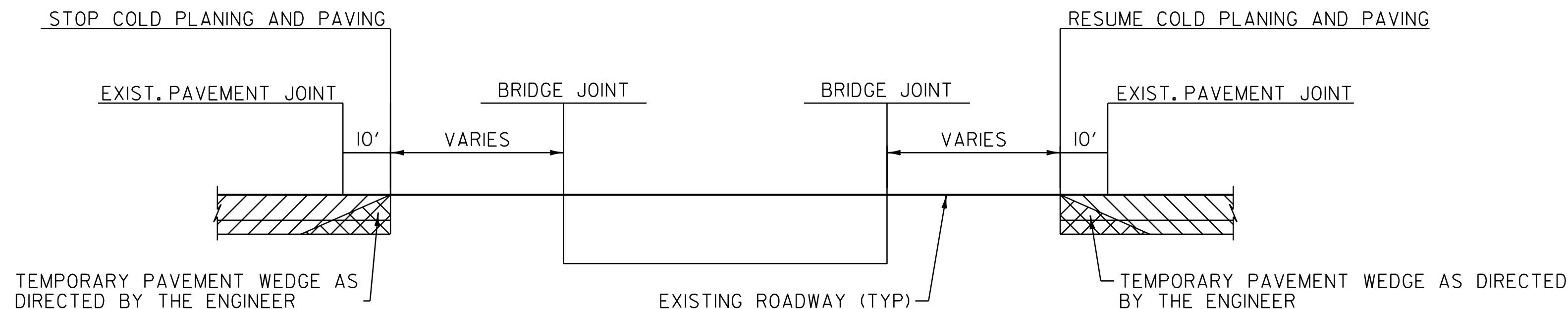
**BITUMINOUS CONCRETE CURB, TYPE A DETAIL**



**SAFETY EDGE DETAIL**

SAFETY EDGE DETAIL NOTE

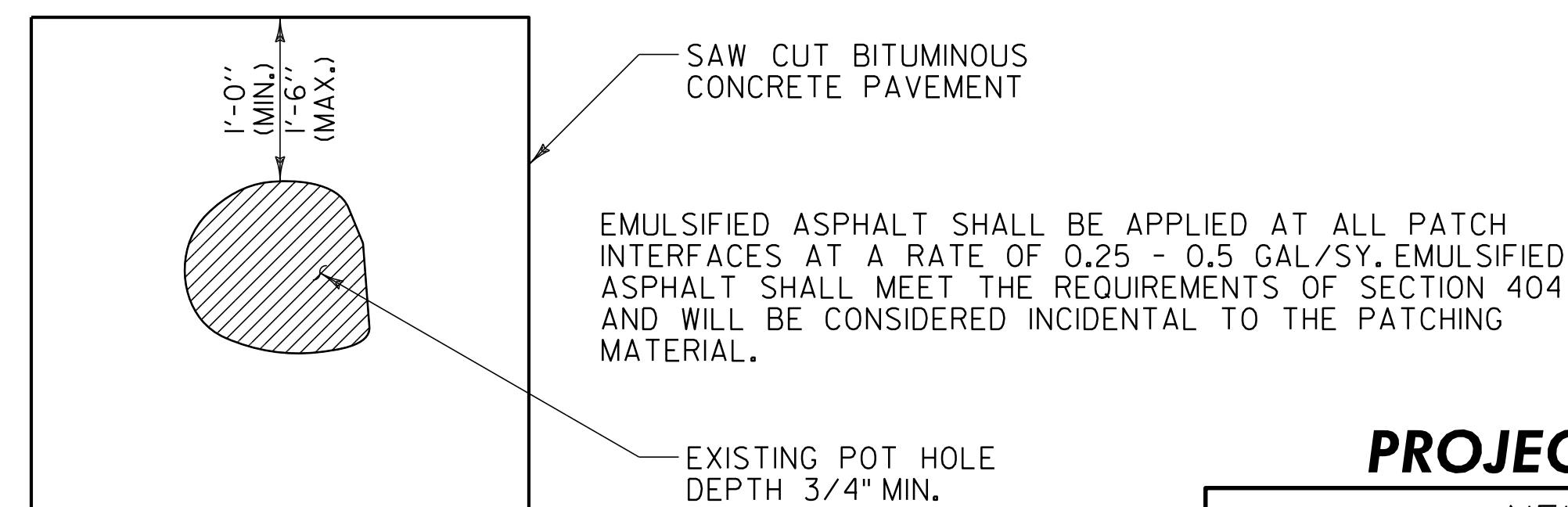
LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.



BRIDGE NO.	STOP COLD PLANING AND PAVING	RESUME COLD PLANING AND PAVING
BR 81 S	MM 128.268	MM 128.329
BR 81-B-1	MM B 0.139	MM B 0.255

**BRIDGE APPROACH STOP /RESUME WORK DETAIL**

**TYPICAL - POT HOLE REPAIR**



**PROJECT TYPICAL SHEET 2**

PROJECT NAME: NEWBURY-ST. JOHNSBURY  
 PROJECT NUMBER: AC IM 091-2(76)

FILE NAME: 06a046  
 PROJECT LEADER: PTS  
 DESIGNED BY: NLL  
 IPARM FILE NAME: 06A046\_06

PLOT DATE: 29-JUL-2014 16:46  
 DRAWN BY: JLS  
 CHECKED BY: PTS  
 SHEET 6 OF 33

NOT TO SCALE

# QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				
							ROADWAY	TRAINING	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
							1600				1600		CY	EARTH BORROW	203.30	40
							28800				28800		LF	SHOULDER BERM REMOVAL	203.40	50
							1				1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	-
							425000				425000		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	110
							152000				152000		LF	MILLED RUMBLE STRIPS	213.10	130
							60				60		CY	SUBBASE OF CRUSHED GRAVEL, FINE GRADED	301.26	-
							7900				7900		TON	AGGREGATE SHOULDERS, RAP	402.13	85
							1				1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-
							49500				49500		TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	490.30	135
							1				1		LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-
							1				1		LU	MAT DENSITY PAY ADJUSTMENT (N.A.B.I.)	490.32	-
							1				1		LU	SURFACE TOLERANCE PAY ADJUSTMENT (N.A.B.I.)	490.33	-
							1				1		LU	LONGITUDINAL JOINT COMPACTION PAY ADJUSTMENT (N.A.B.I.)	490.34	-
									440		440		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	10
									50		50		CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST.
							150				150		LF	12" CSP .064 (2-2/3 X 1/2)	601.0005	10
							13				13		EACH	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS I	604.412	-
							3				3		EACH	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II	604.415	-
							250				250		HR	POWER GRADER RENTAL	608.15	EST.
							200				200		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	EST.
							410				410		HR	POWER BROOM RENTAL, TYPE I	608.30	EST.
							400				400		HR	TRUCK RENTAL	608.37	EST.
							100				100		HR	LOADER RENTAL, TYPE I	608.40	EST.
							2600				2600		CY	STONE FILL, TYPE I	613.10	1.5
							1200				1200		LF	BITUMINOUS CONCRETE CURB, TYPE A	616.305	15
							2650				2650		LF	REMOVAL OF EXISTING CURB	616.41	34.5
							280				280		EACH	YIELDING MARKER POSTS	619.17	EST.
							120				120		LF	CHAIN-LINK FENCE, 6 FEET	620.12	10
							6				6		EACH	BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 6 FEET	620.21	-
							12500				12500		LF	CABLE GUARDRAIL	621.17	196
							480				480		EACH	CABLE GUARDRAIL J-BOLT, GALVANIZED	621.173	EST.
							10				10		EACH	CABLE GUARDRAIL SPLICE UNIT	621.174	EST.
							2000				2000		LF	REPLACEMENT OF GUARDRAIL CABLE	621.175	EST.
							10750				10750		LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20	25
							1200				1200		EACH	STEEL BEAM GUARDRAIL DELINEATOR	621.218	30
							28				28		EACH	MANUFACTURED TERMINAL SECTION, FLARED	621.50	-
							25				25		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	-
							7				7		EACH	ANCHOR FOR CABLE RAIL	621.65	-
							2				2		EACH	GUARDRAIL APPROACH SECTION, GALVANIZED TYPE I	621.70	-
							1				1		EACH	GUARDRAIL APPROACH SECTION, GALVANIZED TYPE II	621.71	-

DETAILED SUMMARY OF QUANTITIES		
QUANTITY	UNIT	ITEMS
		COLD PLANING, BITUMINOUS PAVEMENT
398307	SY	1-9I SB
8360	SY	PARKING AREA
6207	SY	INTERCHANGE 18
12016	SY	INTERCHANGE 19
424890	SY	SUBTOTAL
110	SY	ROUNDING
425000	SY	TOTAL
		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
34762	TON	1-9I SB, TYPE IVS, WEARING COURSE
11617	TON	1-9I SB, TYPE IVS, LEVELING COURSE
731	TON	PARKING AREA, TYPE IVS, WEARING COURSE
244	TON	PARKING AREA, TYPE IVS, LEVELING COURSE
543	TON	INTERCHANGE 18, TYPE IVS, WEARING COURSE
181	TON	INTERCHANGE 18, TYPE IVS, LEVELING COURSE
1037	TON	INTERCHANGE 19, TYPE IVS, WEARING COURSE
226	TON	INTERCHANGE 19, TYPE IVS, LEVELING COURSE
15	TON	1-9I SB, TYPE IVS BENEATH BITUMINOUS CURB
9	TON	1-9I SB, TYPE IIS CAPPED DI'S
49365	TON	SUBTOTAL
135	TON	ROUNDING
49500	TON	TOTAL
		PROJECT NAME: NEWBURY-ST. JOHNSBURY
		PROJECT NUMBER: AC IM 091-2(76)
		FILE NAME: 06a046
		PROJECT LEADER: PTS
		DESIGNED BY: NULL
		IPARM FILE NAME: 06A046_07
		PLOT DATE: 29-JUL-2014 16:46
		DRAWN BY: JLS
		CHECKED BY: PTS
		SHEET 7 OF 33









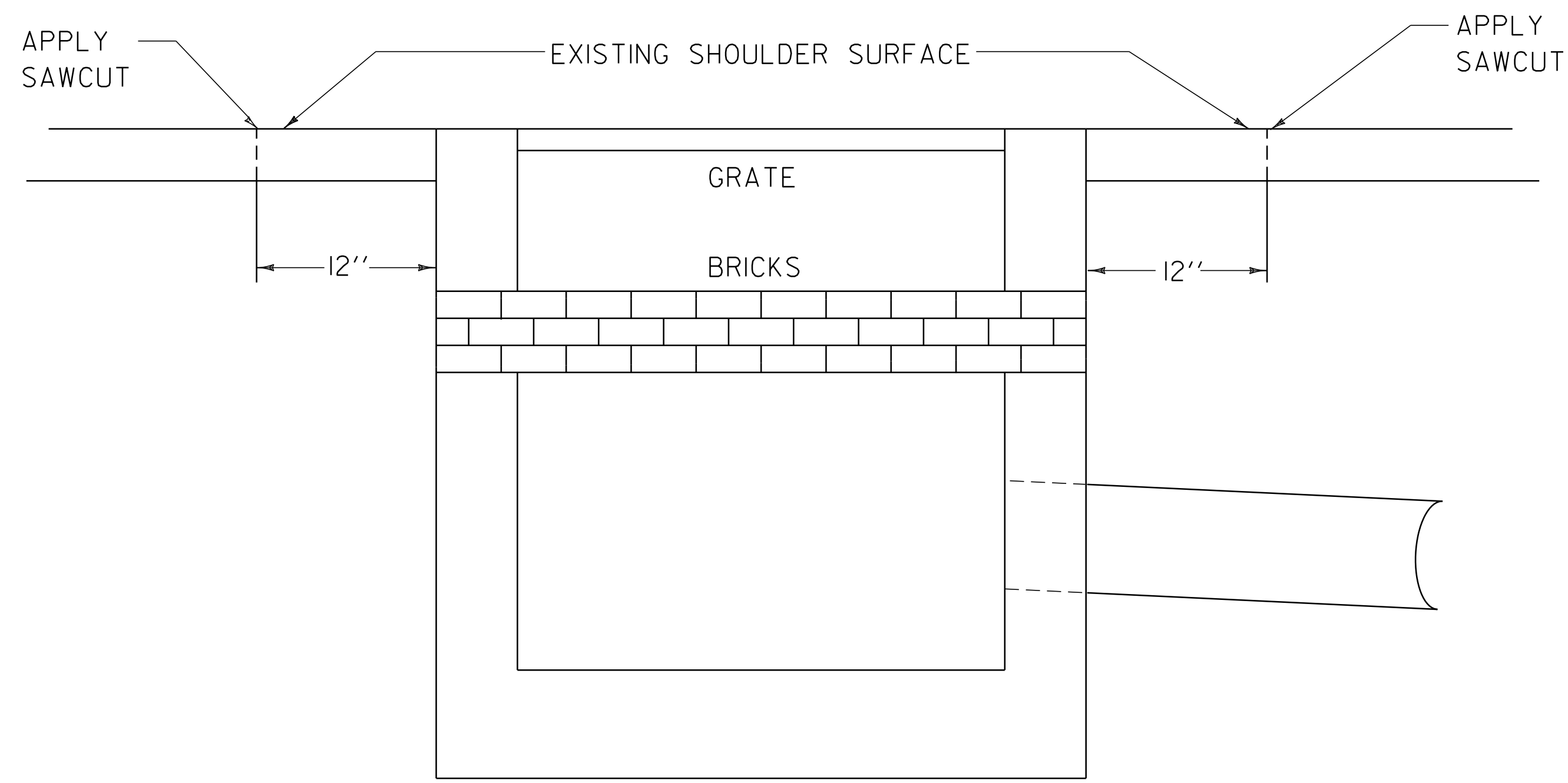


LOCATION			DRAIN			CURB		GUARDRAIL													MISC.	REMARKS		
MM	MM	POS.	601.0005	604.412	604.415	616.305	616.41	621.17	621.173	621.174	621.175	621.20	621.50	621.60	621.65	621.70	621.71	621.75	621.76	621.77	621.80		676.10	900.620
			(LF)	(EACH)	(EACH)	(LF)	(LF)	CABLE GUARDRAIL (LF)	(EA)	(EA)	(LF)		M. T. S. FLARED	(EA)	(EA)	(EA)	(EA)	(LF)	(EA)	(EA)	(LF)		(EA)	(EACH)
	BRIDGE 80																							
126.702	126.709	LT										39.5		I								37.5	I	
126.709	126.787	LT																						
126.787	126.825	LT																						
	BRIDGE 80																							
126.751	126.846	RT																				500.0		
126.751	126.869	RT	35.0									589.5	I	I									2	
126.941	126.948	LT										39.5		I								37.5	I	
126.948	127.828	LT																						
127.828	127.866	LT																						
127.020	127.061	LT										215.0												
127.525	127.646	LT										640.0												
127.955	128.031	LT																						
	BRIDGE 81																							
128.142	128.274	LT																				697.0		
128.141	128.274	LT										702.0		I									I	
128.274	128.355	LT																						
	BRIDGE 81																							
128.276	128.314	RT																						
128.314	128.359	RT																						
128.359	128.366	RT																				37.5		
128.359	128.378	RT										62.5	I										I	
128.510	128.555	LT																				237.5		
128.510	128.555	LT										239.5		I									I	
EXIT 18 RAMP B																							2	
B 0.059	B 0.146	RT																						
EXIT 19 RAMP B																								
B 0.111	B 0.152	RT																				216.5		
B 0.104	B 0.142	RT										162.5	I										I	
B 0.142	B 0.152	RT																						
BRIDGE 81-B-1																								
B 0.152	B 0.239	RT																						
B 0.239	B 0.464	RT																						
EXIT 19 RAMP B				2	1																			
B 0.032	B 0.152	LT																				634.0		
B 0.024	B 0.142	LT										587.5	I										I	
B 0.142	B 0.152	LT																						
BRIDGE 81-B-1																								
B 0.152	B 0.242	LT																						
B 0.242	B 0.268	LT																						
B 0.242	B 0.244	LT																						
B 0.244	B 0.268	LT										127.0		I									I	
B 0.101	B 0.152	LT																						
B 0.242	B 0.253	LT										270.0												
												60.0												
EXIT 19 RAMP D																								
D 0.297	D 0.363	RT																				362.0		
D 0.297	D 0.363	RT										327.0	I	I									2	
D 0.337	D 0.376	LT																				206.0		
D 0.336	D 0.376	LT										177.0	I	I									2	
SUBTOTAL SHEET 10			35.0	11	2	0.0	1069.5	4800.0	477	10	2000.0	2287.0	9	6	2	0	0	3075	535	186	6328.5	12	69	
SUBTOTAL SHEET 11			35.0	0	0	0.0	0.0	4752.0	0	0	0.0	3372.5	8	5	0	0	0	1040.0	0	0	8106.5	18	0	
SUBTOTAL SHEET 12			35.0	0	0	0.0	1546.0	2752.0	0	0	0.0	2012.0	5	6	5	0	0	300.0	0	0	4654.0	18	0	
SUBTOTAL SHEET 13			35.0	2	1	1185.0	0.0	0.0	0	0	0.0	3053.5	6	8	0	2	1	5058.5	0	0	3101.5	14	2	
PROJECT SUBTOTALS			140.0	13	3	1185.0	2615.5	12304.0	477	10	2000.0	10725.0	28	25	7	2	1	9473.5	535	186	22190.5	62	71	
ROUNDINGS			10.0	0	0	15.0	34.5	196.0	3	0	0.0	25.0	0	0	0	0	0	26.5	5	14	9.5	8	0	
PROJECT TOTALS			150.0	13	3	1200.0	2650.0	12500.0	480	10	2000.0	10750.0	28	25	7	2	1	9500.0	540	200	22200.0	70	71	

**ITEM DETAIL SUMMARY SHEET 4**

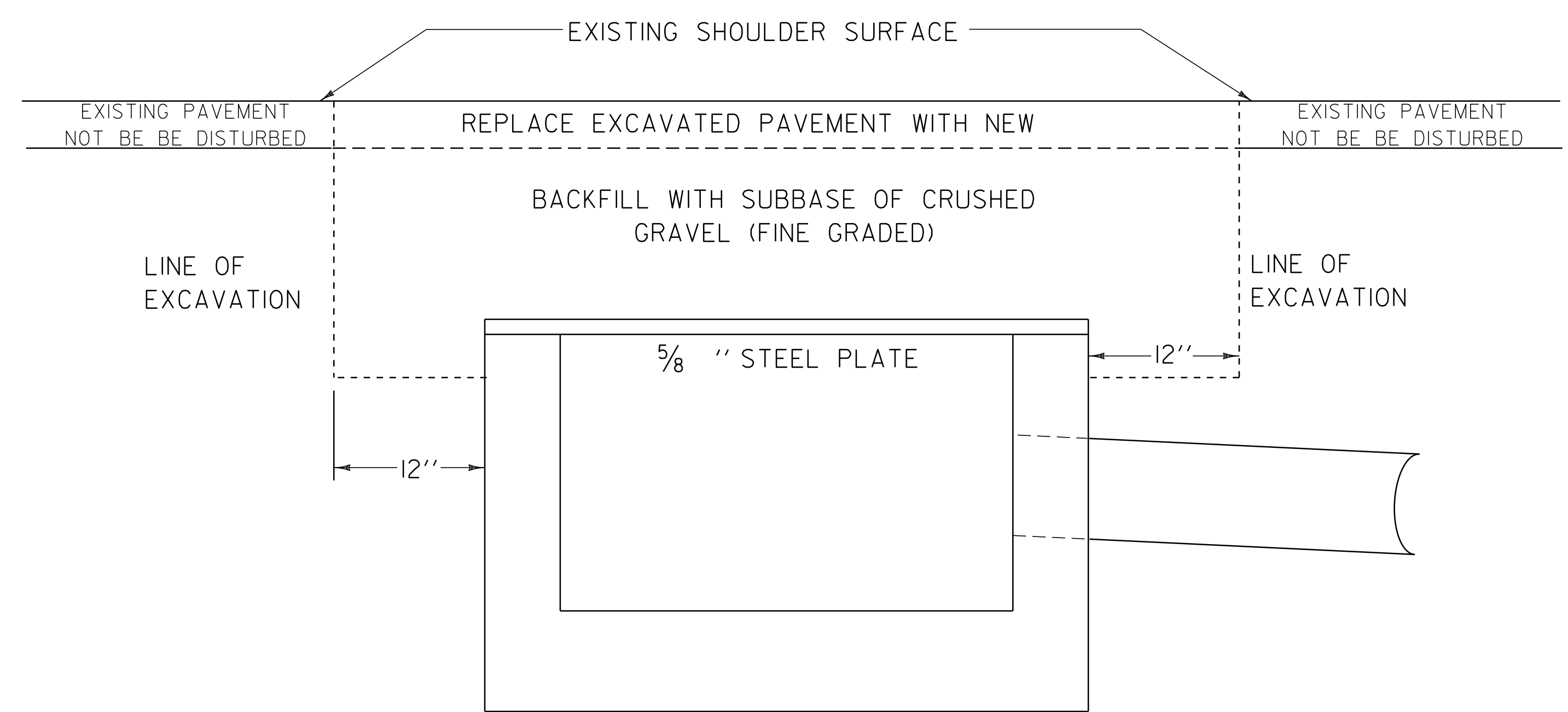
PROJECT NAME: NEWBURY-ST. JOHNSBURY  
PROJECT NUMBER: AC IM 091-2(76)  
FILE NAME: 06a046 PLOT DATE: 29-JUL-2014 16:44  
PROJECT LEADER: PTS DRAWN BY: JLS  
DESIGNED BY: NULL CHECKED BY: PTS  
IPARM FILE NAME: 06A046\_I3 SHEET 13 OF 33

1



EXISTING CURB DROP INLET

2



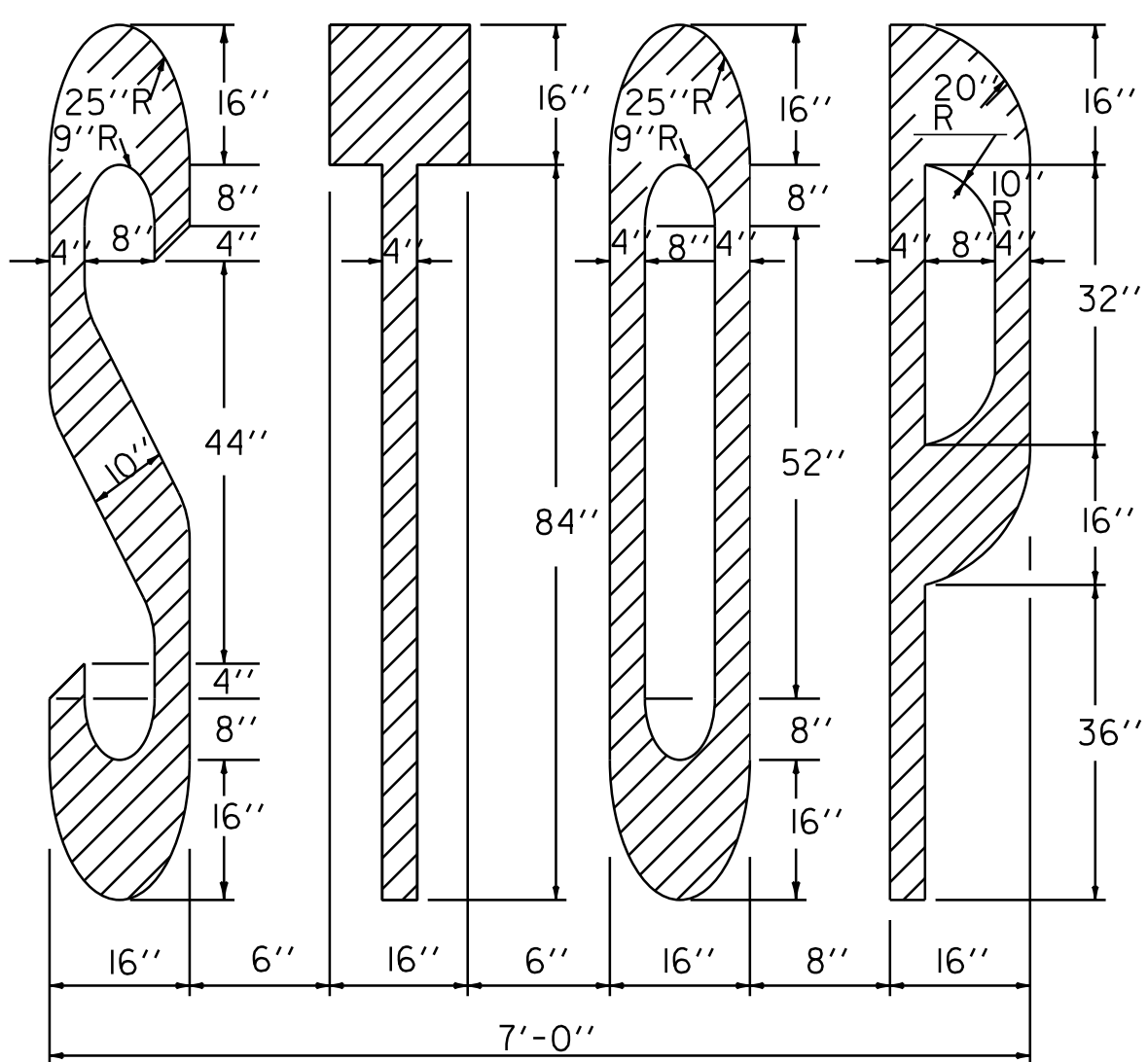
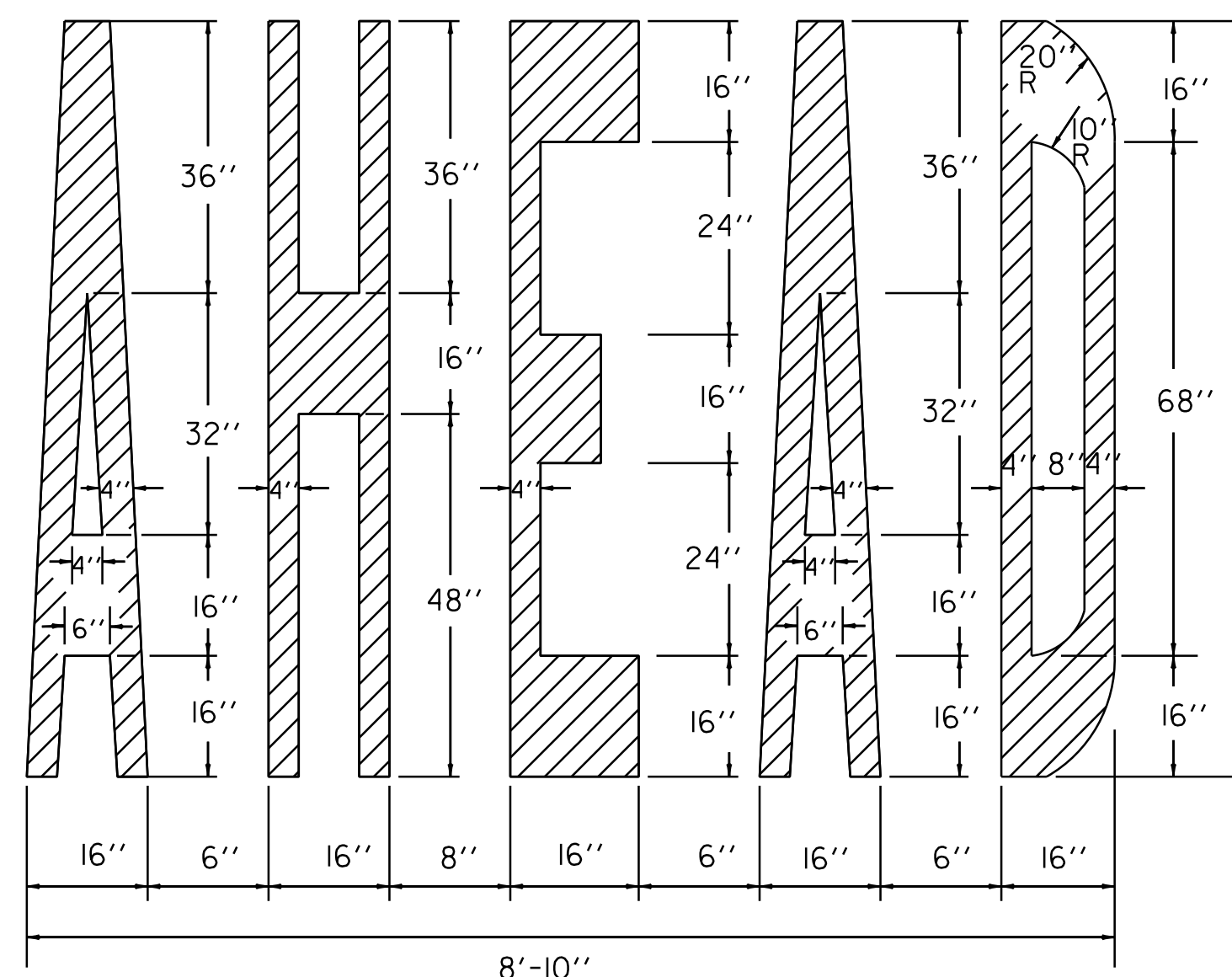
PROPOSED TREATMENT OF CURB DROP INLET

SAWCUT EXISTING SHOULDER TO MINIMIZE DAMAGE TO ADJACENT PAVEMENT. EXCAVATE TO DEPTH REQUIRED & REMOVE TOP AND BRICKS FROM DI. PLACE STEEL PLATE ON DI AND BACKFILL WITH ITEM 301.26. EXCAVATED BITUMINOUS PAVEMENT SHALL BE REPLACED WITH NEW BITUMINOUS CONCRETE PAVEMENT, TYPE II. APPLICATION OF SAWCUT, REMOVAL AND DISPOSAL OF TOP AND BRICKS, FURNISHING STEEL PLATE, AND REQUIRED EXCAVATION SHALL BE PAID AS ONE EACH OF ITEM 900.620 SPECIAL PROVISION (DECOMMISSION/CAP CURB DROP INLET).

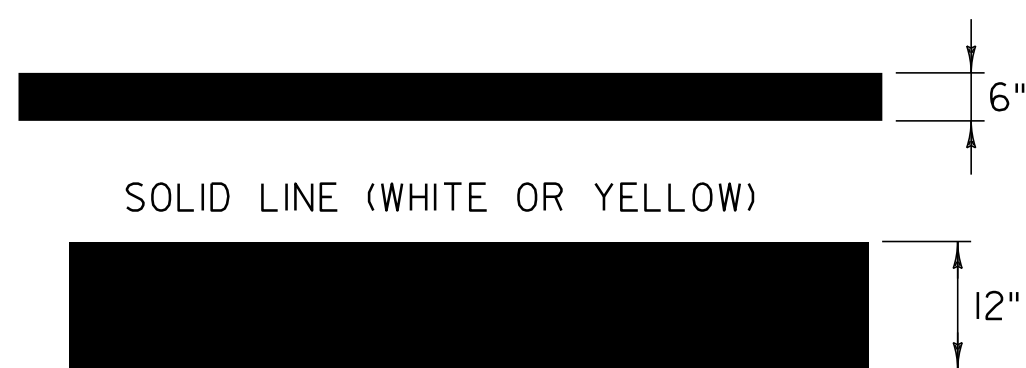
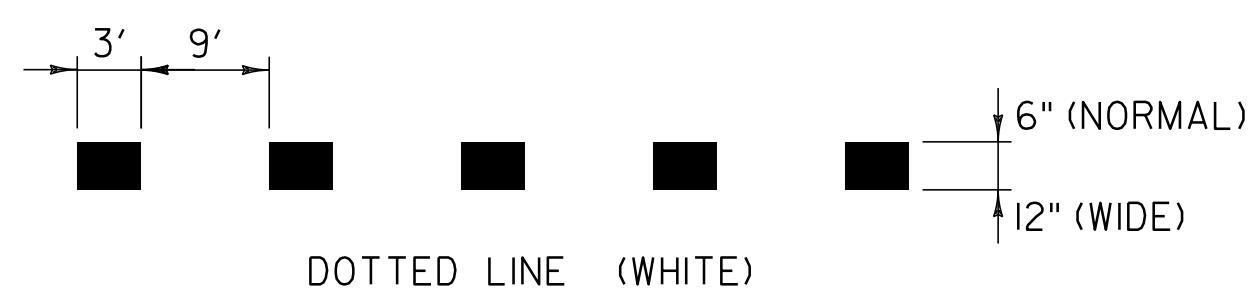
NOT TO SCALE

**CAP CURB DROP INLET DETAIL SHEET**

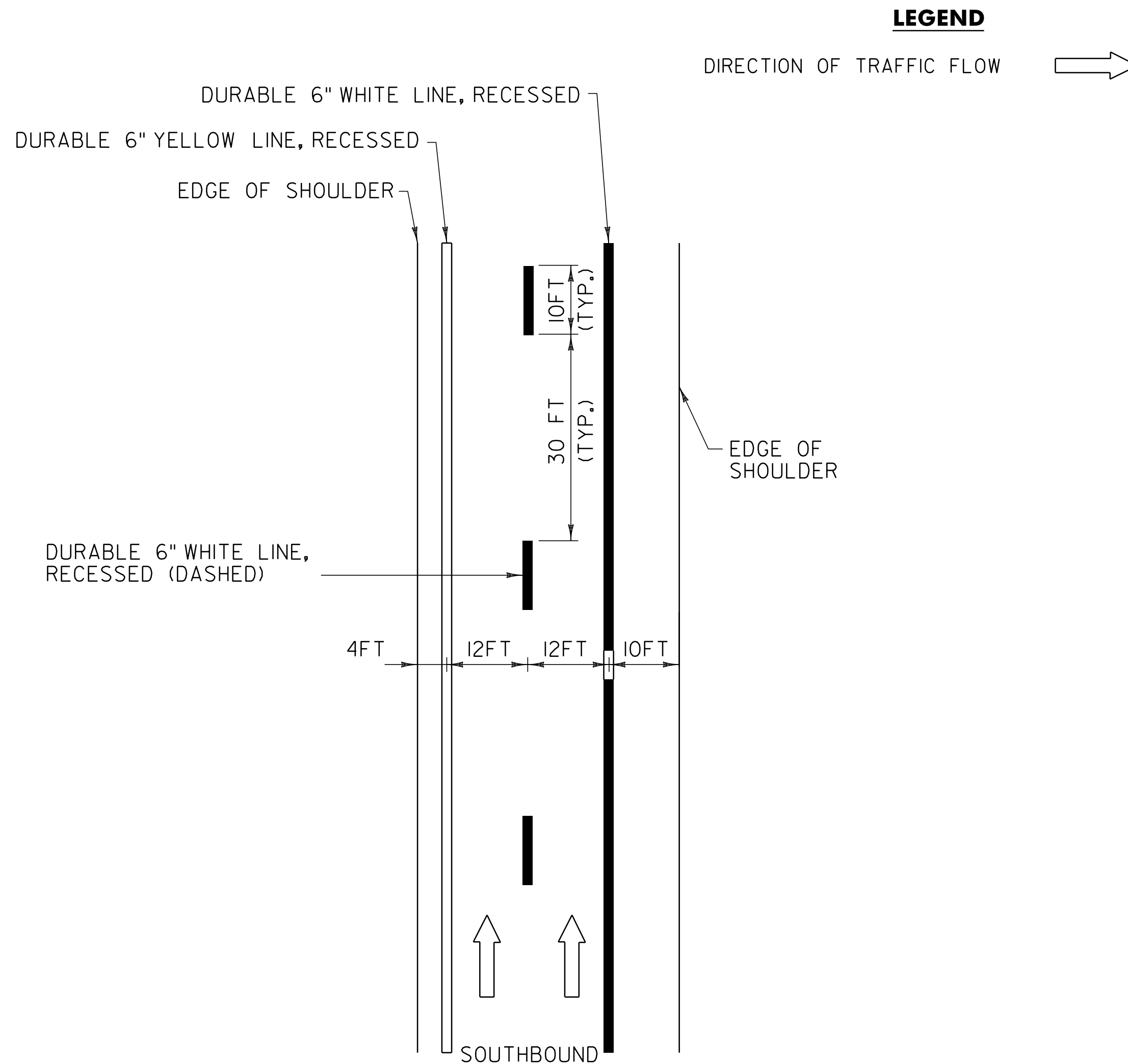
PROJECT NAME: NEWBURY-ST. JOHNSBURY	
PROJECT NUMBER: AC IM 091-2(76)	
FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT LEADER: PTS	DRAWN BY: VTRANS
DESIGNED BY: VTRANS	CHECKED BY: VTRANS
IPARM FILE NAME: 06A044_I4	SHEET 14 OF 33



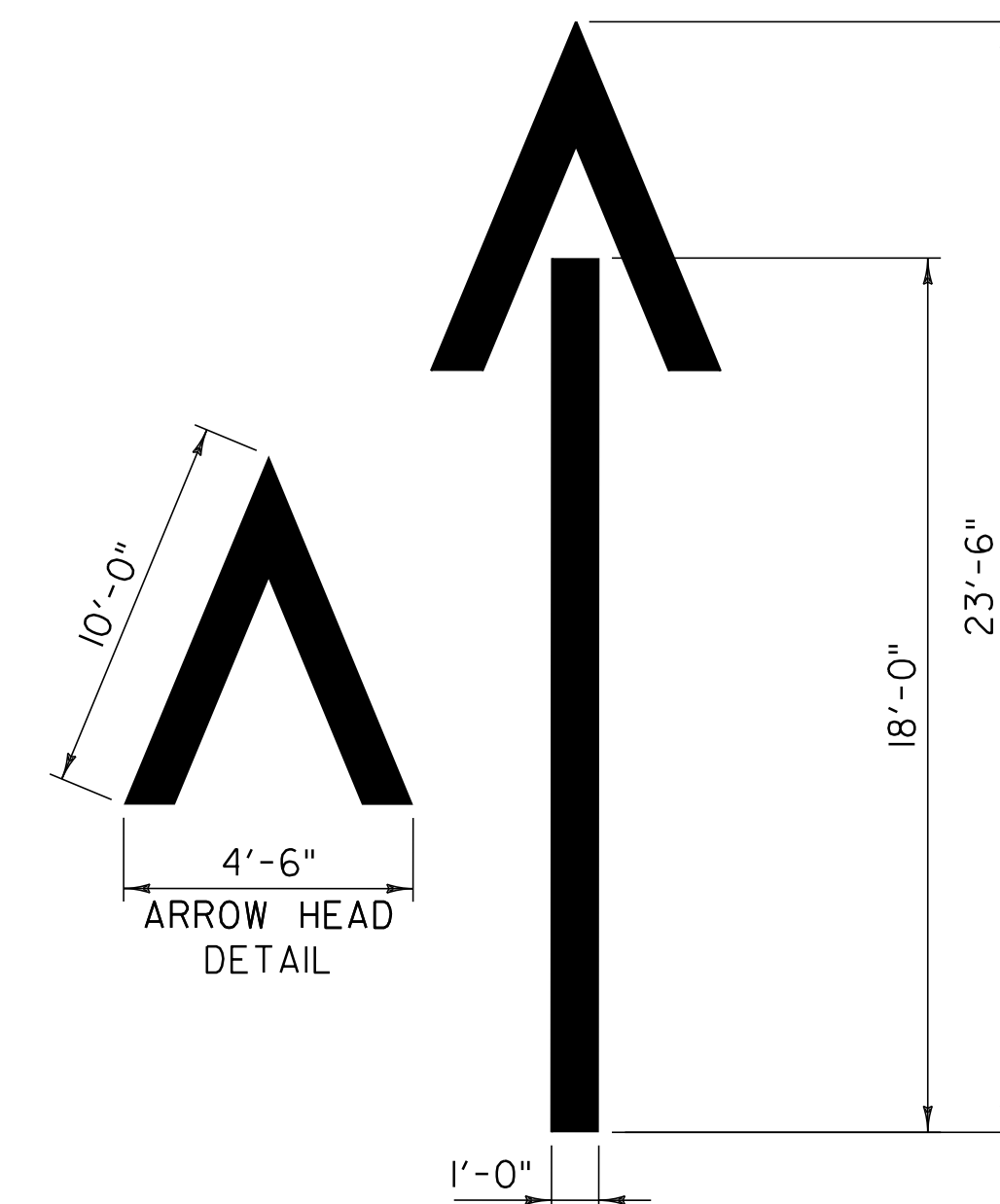
**PAVEMENT MARKING DETAILS**



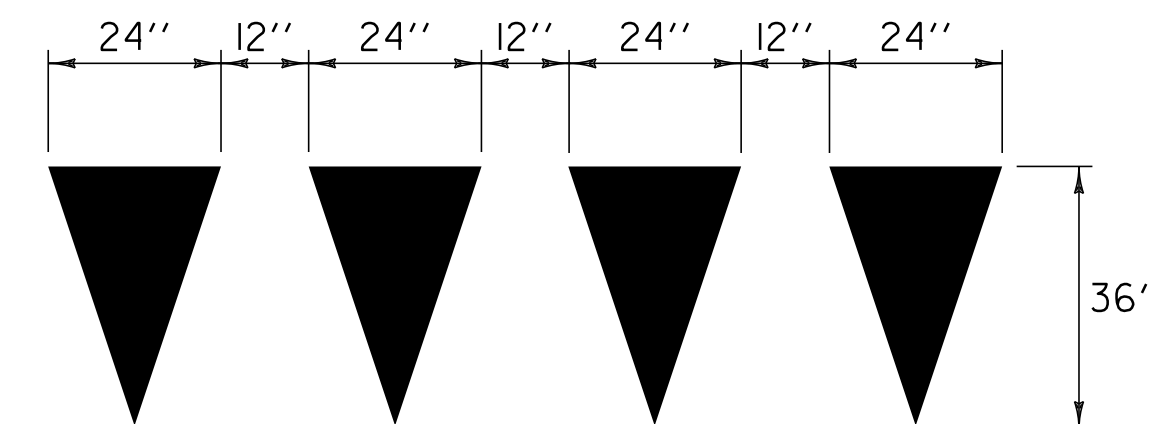
**PAVEMENT MARKING LINE DETAILS**



**TYPICAL MAINLINE MARKING PLAN**



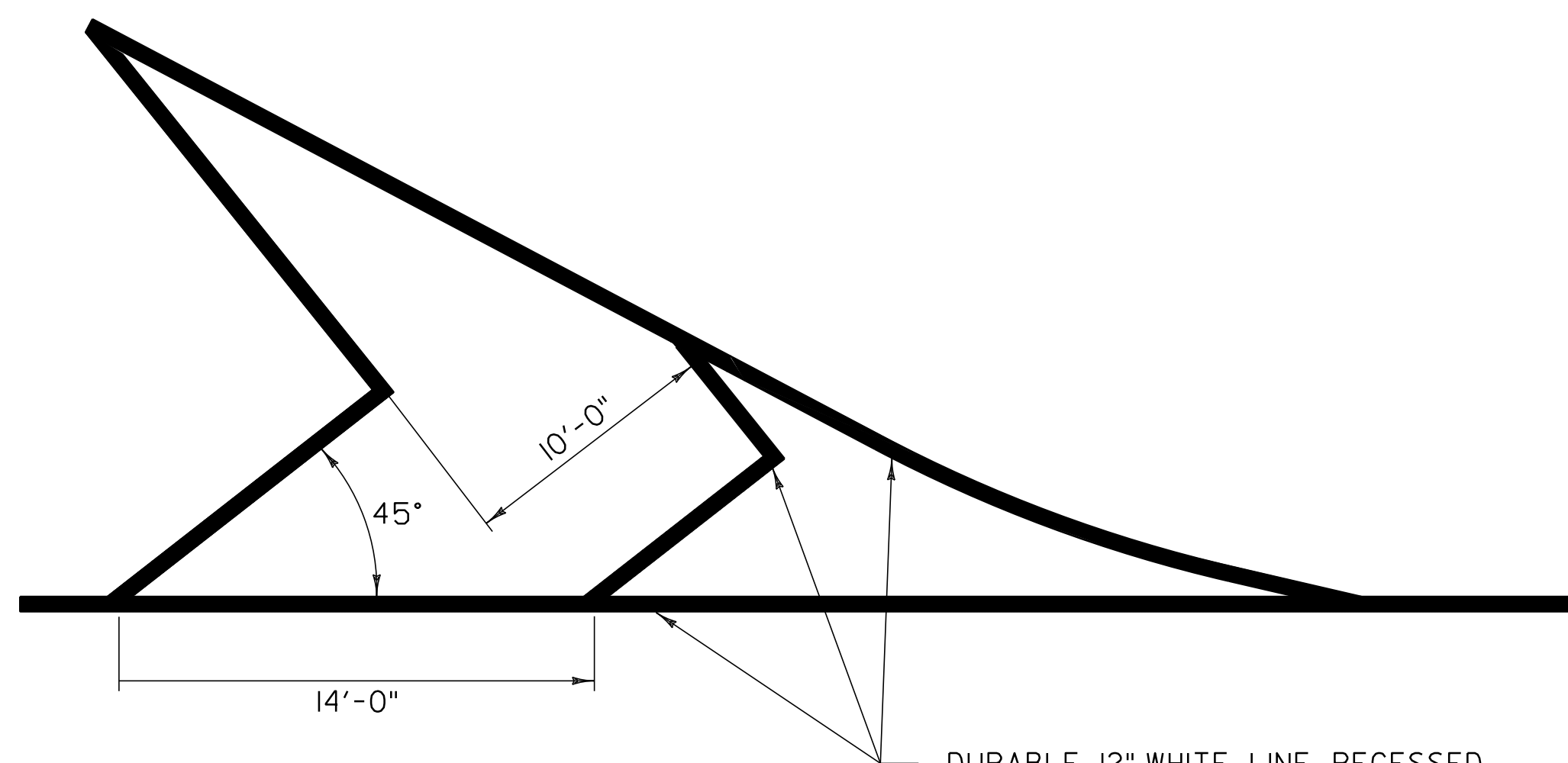
**WRONG WAY ARROW**



**YIELD LINE DETAILS**

NOTE

1. EACH TRIANGLE SHALL BE PAID AS ONE EACH LETTER OR SYMBOL



**GORE MARKING DETAIL**

DURABLE 12" WHITE LINE, RECESSED POLYUREA, OR EPOXY PAINT

NOT TO SCALE

**PAVEMENT MARKINGS DETAIL SHEET**

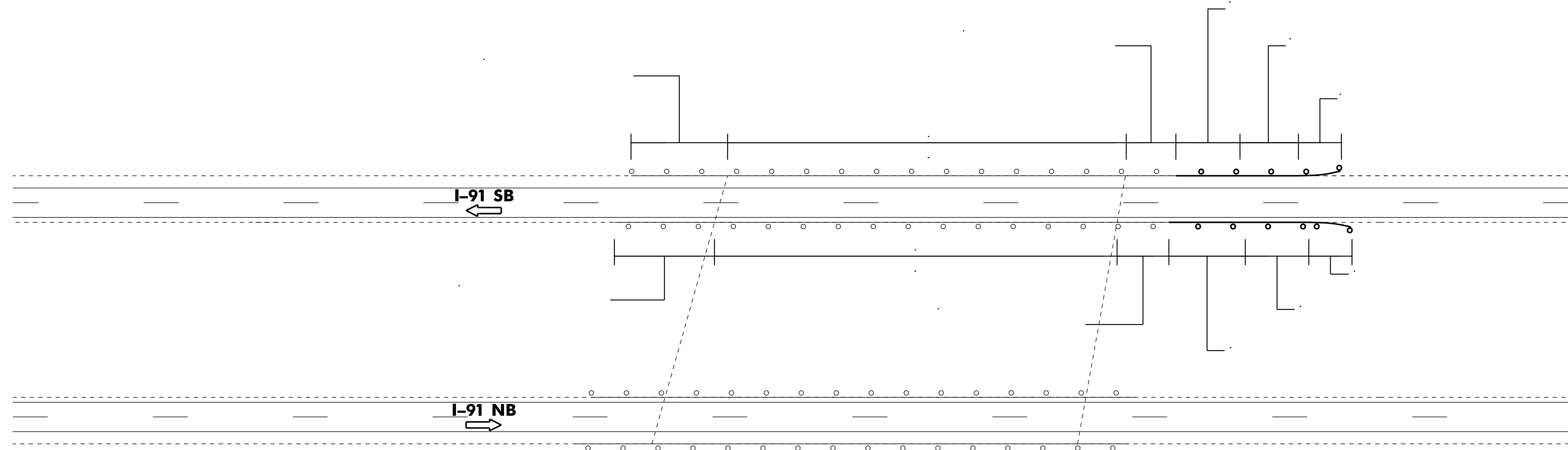
PROJECT NAME: NEWBURY-ST. JOHNSBURY  
PROJECT NUMBER: AC IM 091-2(76)

FILE NAME: 06a046  
PROJECT LEADER: PTS  
DESIGNED BY: NLL  
IPARM FILE NAME: 06A046\_I5

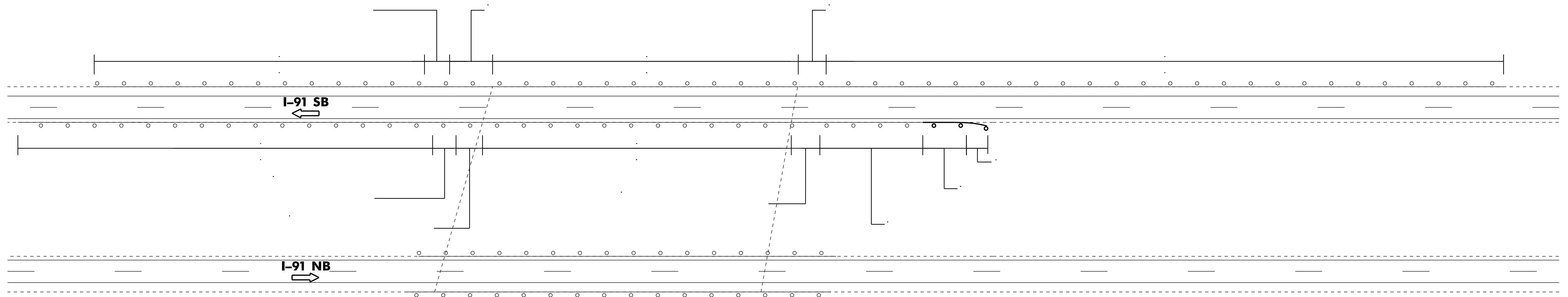
PLOT DATE: 29-JUL-2014 16:46  
DRAWN BY: JLS  
CHECKED BY: PTS  
SHEET 15 OF 33

**GUARDRAIL TREATMENT - BRIDGE 69 S**

**NOTE**



**GUARDRAIL TREATMENT - BRIDGE 70 S**



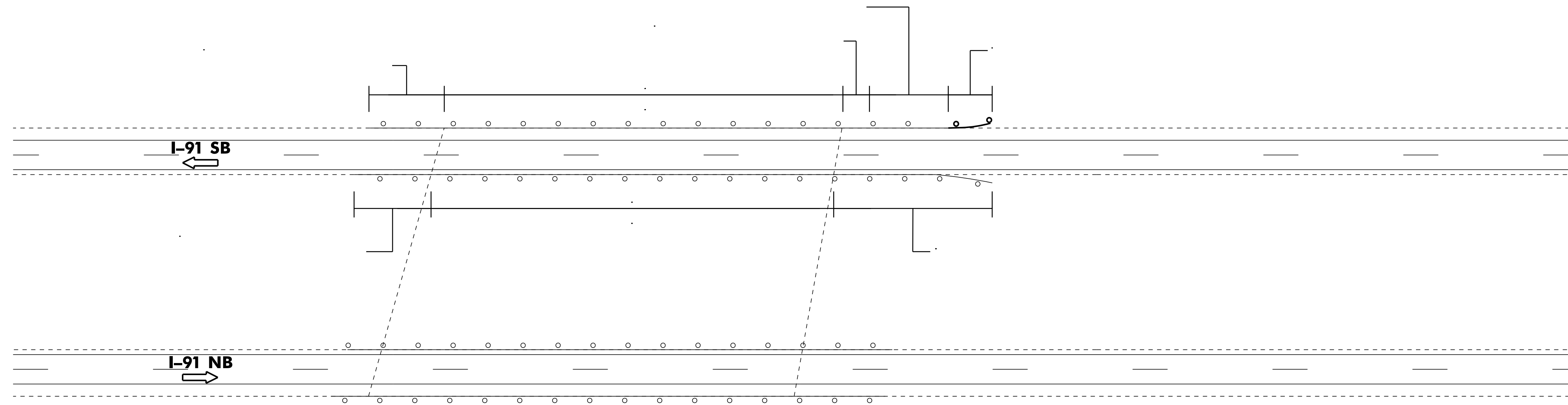
**BRIDGE /GUARDRAIL  
TREATMENT DETAIL SHEET 1**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	DRAWN BY: JLS
FILE NAME: 06a046	CHECKED BY: PTS
DESIGNED BY: NULL	SHEET 16 OF 33
IPARM FILE NAME: 06A046_I6	

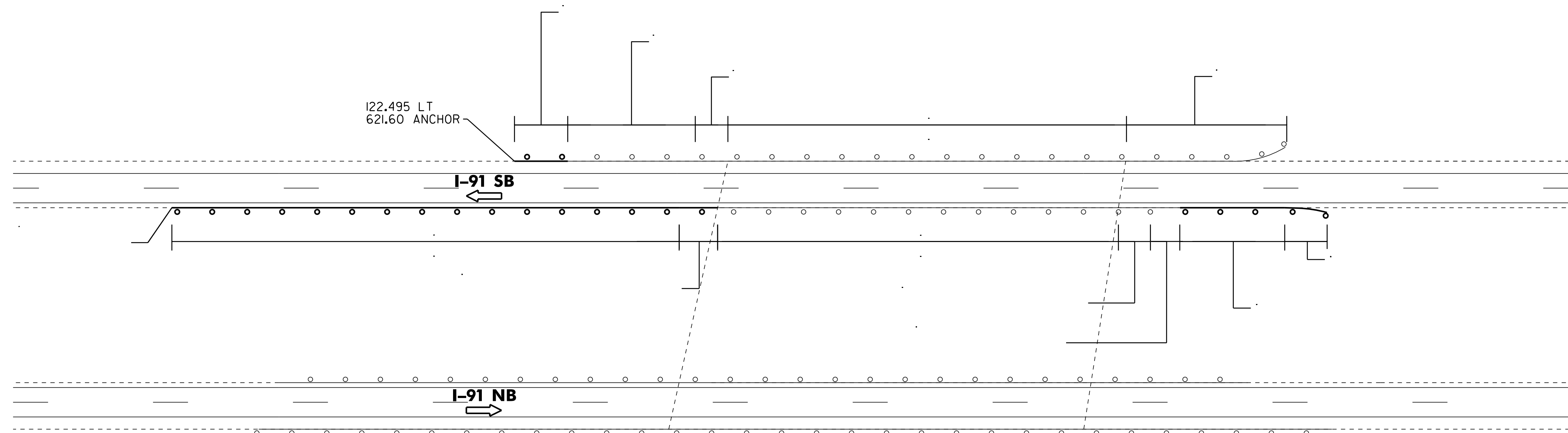
NOT TO SCALE

**GUARDRAIL TREATMENT - BRIDGE 71 S**

**NOTE**



**GUARDRAIL TREATMENT - BRIDGE 76 S**



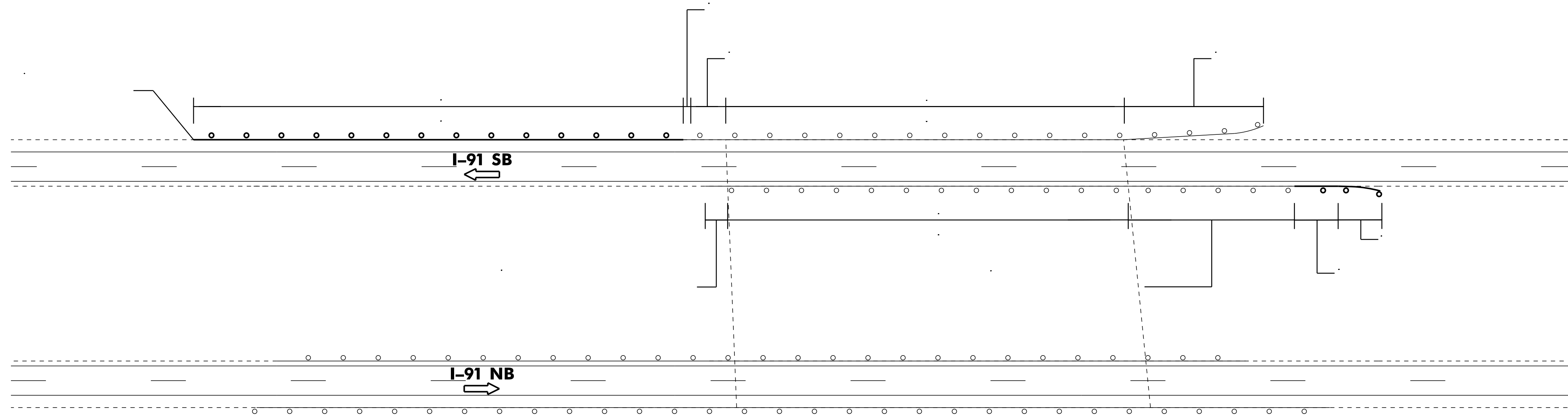
**BRIDGE /GUARDRAIL  
TREATMENT DETAIL SHEET 2**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	DRAWN BY: JLS
FILE NAME: 06a046	CHECKED BY: PTS
DESIGNED BY: NULL	SHEET 17 OF 33
IPARM FILE NAME: 06A046_I7	

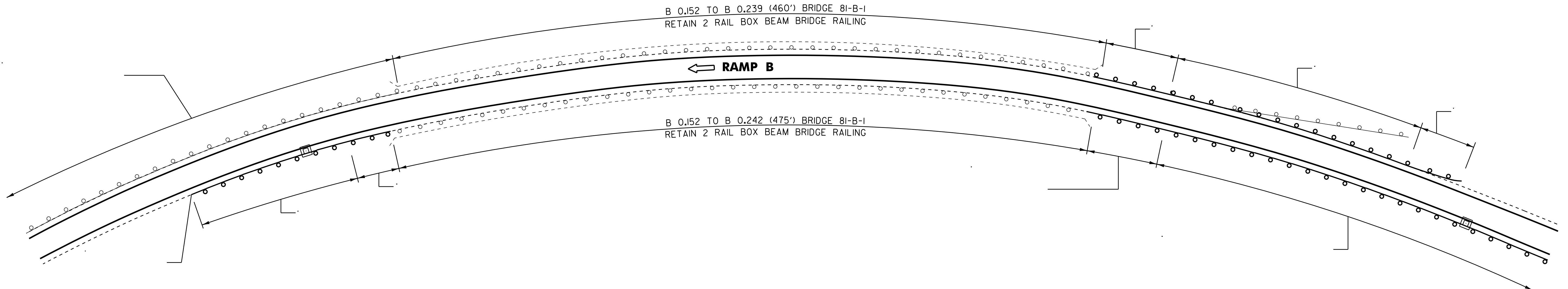
NOT TO SCALE

**GUARDRAIL TREATMENT - BRIDGE 81 S**

**NOTE**



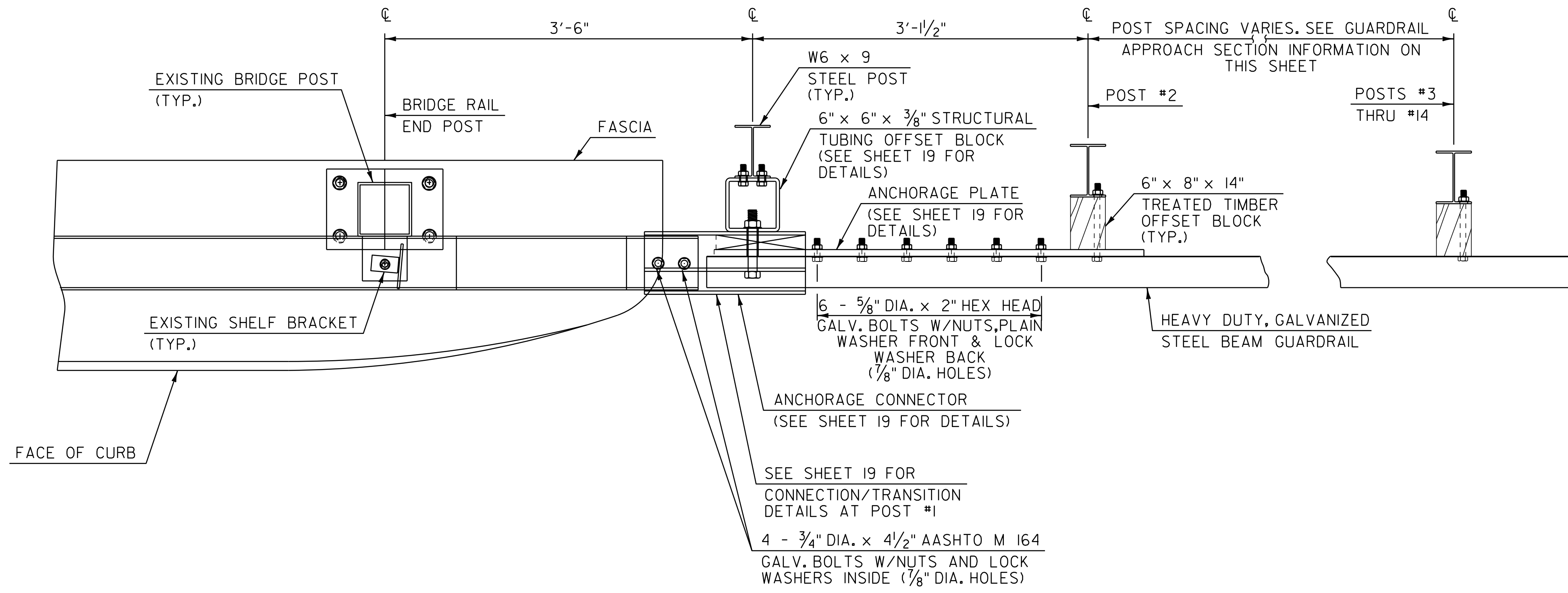
**GUARDRAIL TREATMENT - BRIDGE 81-B-1**



**BRIDGE /GUARDRAIL  
TREATMENT DETAIL SHEET 3**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	DRAWN BY: JLS
FILE NAME: 06a046	CHECKED BY: PTS
DESIGNED BY: NULL	SHEET 18 OF 33
IPARM FILE NAME: 06A046_I8	

NOT TO SCALE

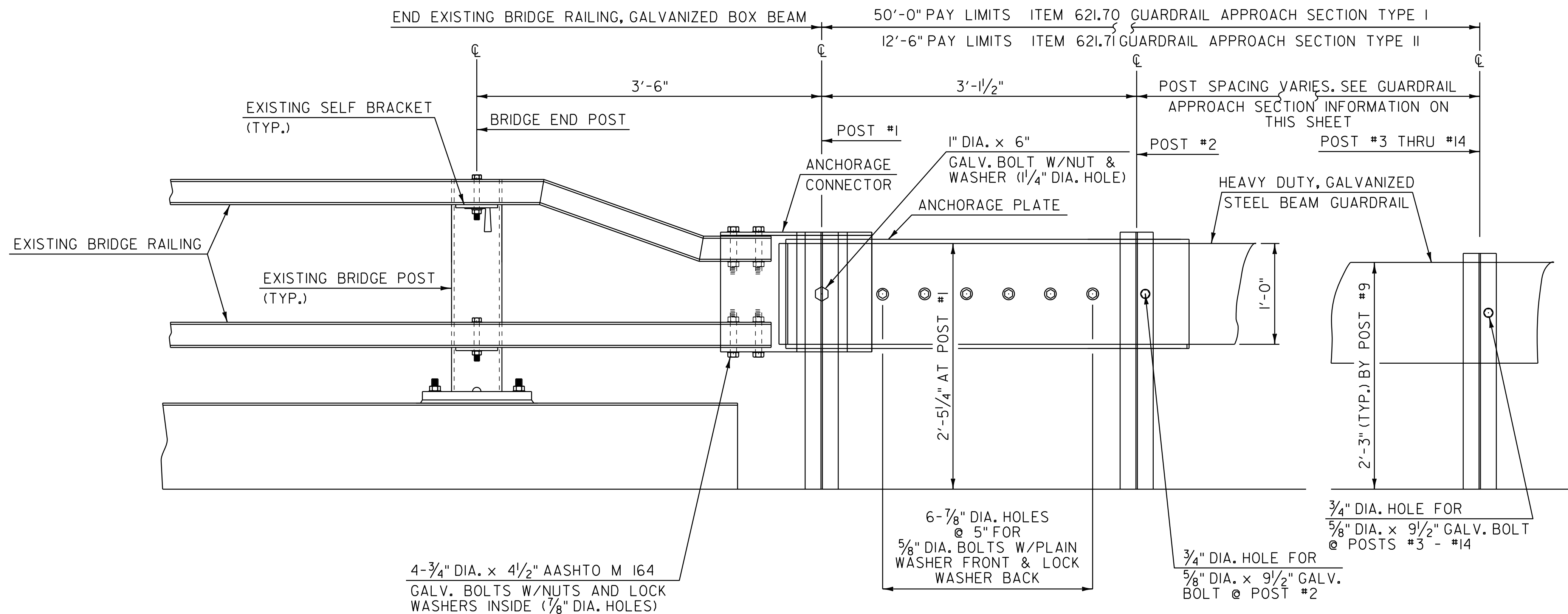


**PLAN**

**ITEM 621.70  
GUARDRAIL  
APPROACH SECTION,  
TYPE I**

POST NO.	SPACING
1	3'-1 1/2"
2	3'-1 1/2"
3	3'-1 1/2"
4	3'-1 1/2"
5	3'-1 1/2"
6	3'-1 1/2"
7	3'-1 1/2"
8	3'-1 1/2"
9	3'-1 1/2"
10	4'-2"
11	4'-2"
12	4'-2"
13	6'-3"
14	6'-3"

50'-0" PAY LIMIT GUARDRAIL APPROACH SECTION, TYPE I



**ELEVATION**

**ITEM 621.71  
GUARDRAIL  
APPROACH SECTION,  
TYPE II**

POST NO.	SPACING
1	3'-1 1/2"
2	4'-8 1/4"
3	4'-8 1/4"
4	4'-8 1/4"

12'-6" PAY LIMIT GUARDRAIL APPROACH SECTION, TYPE II

**GUARDRAIL APPROACH SECTION DETAIL**

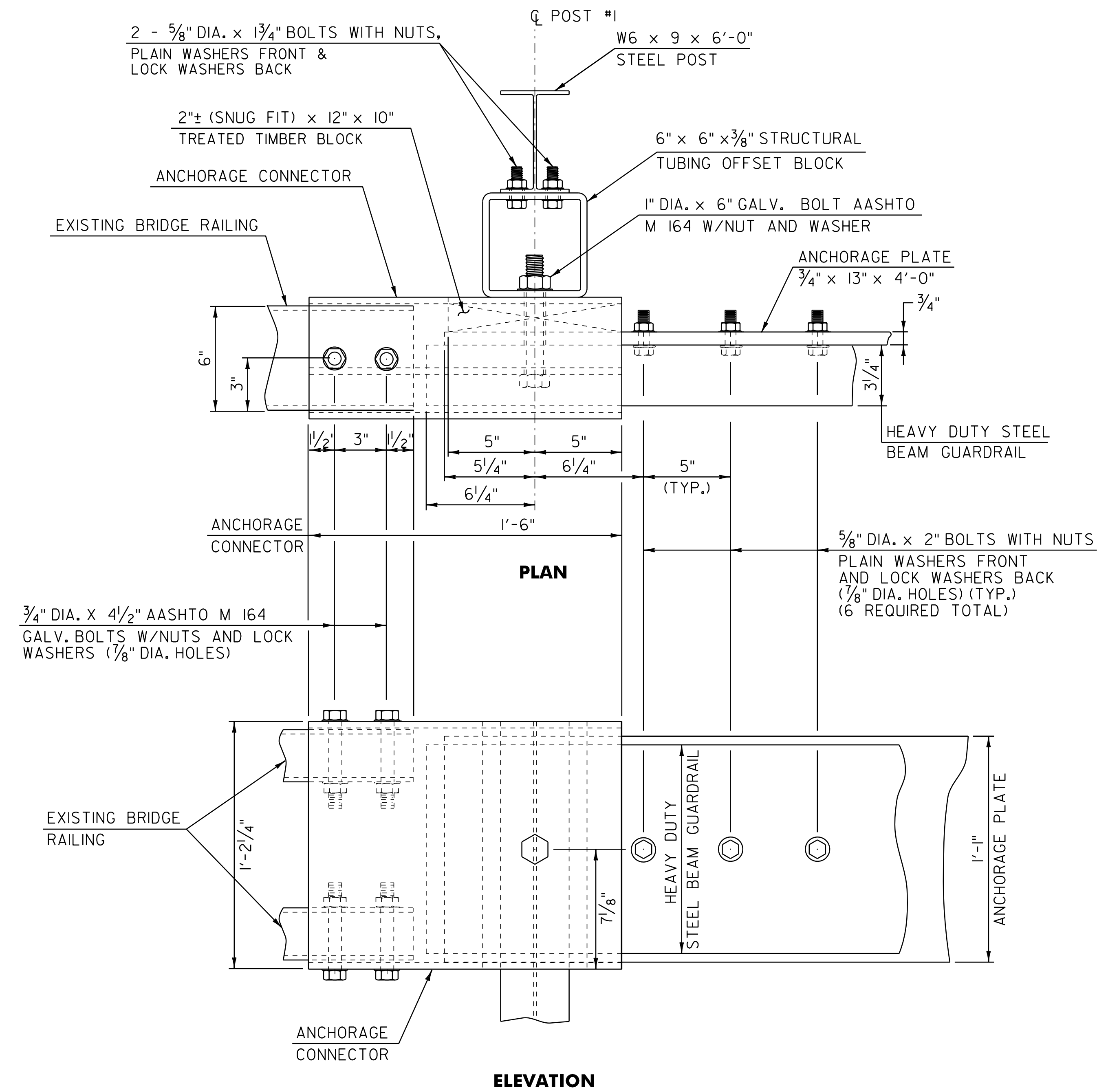
**GUARDRAIL APPROACH SECTION  
DETAIL SHEET 1**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:40
PROJECT NUMBER: AC IM 091-2(76)	PROJECT LEADER: PTS	DRAWN BY: JLS
	DESIGNED BY: NLL	CHECKED BY: PTS
	IPARM FILE NAME: 06A046_I9	SHEET 19 OF 33

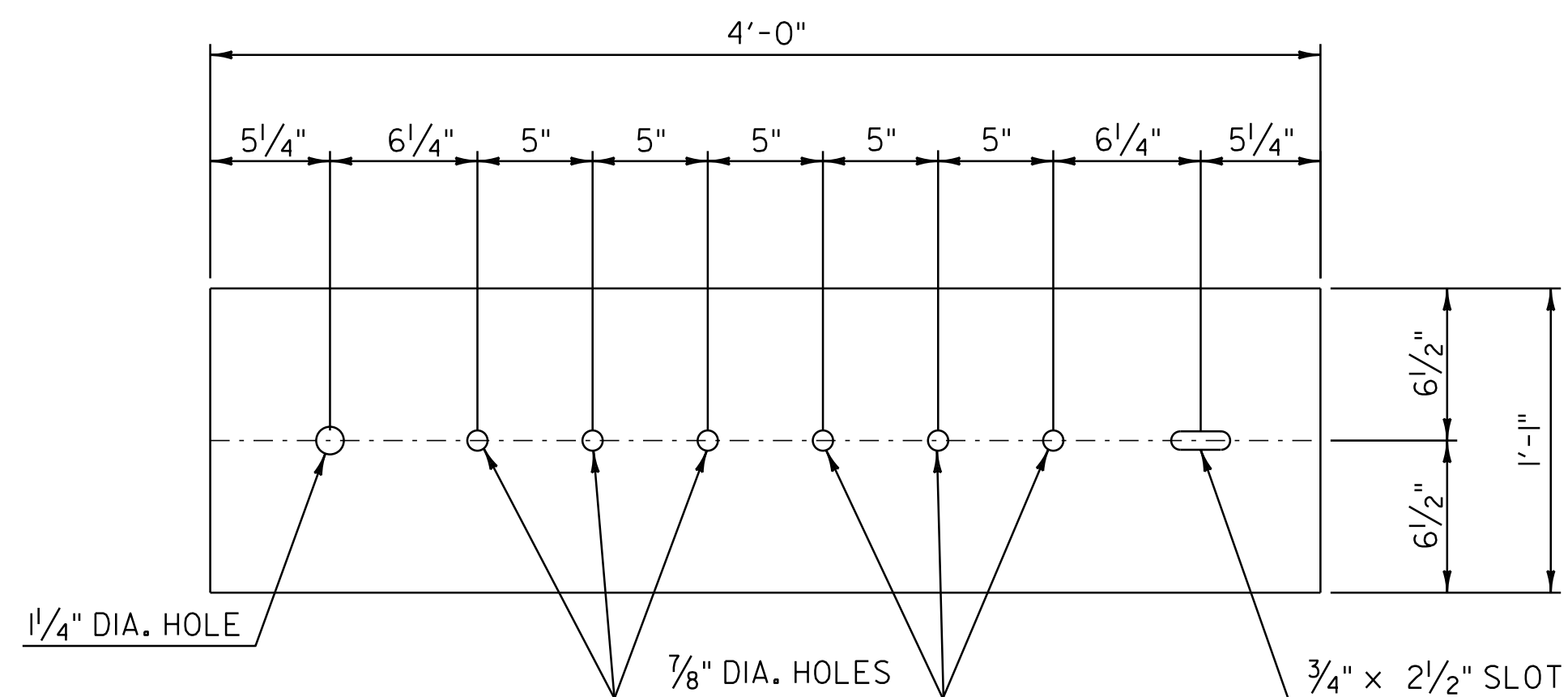
NOT TO SCALE

**NOTES**

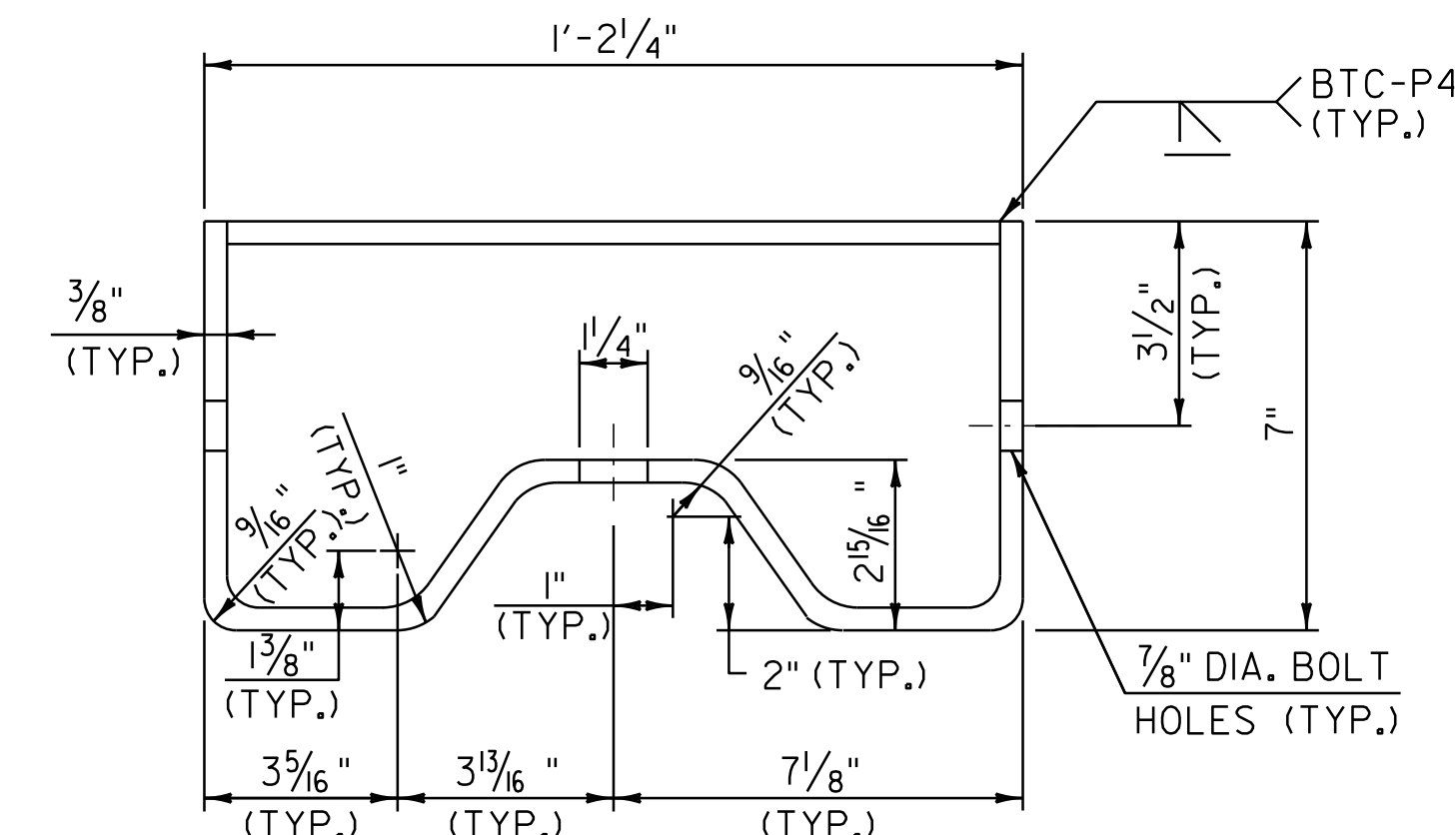
1. REFER TO STANDARD G-1 FOR ADDITIONAL RAIL DETAILS.
2. ALL POSTS FOR HEAVY DUTY STEEL BEAM GUARDRAIL SHALL BE STEEL IN ACCORDANCE WITH SECTION 728 "GUARDRAIL, GUIDE POSTS AND BARRIERS" UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.
3. APPROACH RAIL SPLICES SHALL LAP IN DIRECTION OF TRAFFIC FLOW.
4. ANCHORAGE CONNECTOR AND ANCHORAGE PLATE SHALL BE AASHTO M 270, GRADE 250 GALVANIZED TO AASHTO M III AFTER FABRICATION.
5. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE VERMONT STANDARD SPECIFICATION 728.03 (c) (1) (2).
6. STRUCTURAL TUBING OFFSET BLOCK SHALL CONFORM TO VERMONT STANDARD SPECIFICATION 728.01 (c).
7. APPROACH RAILING SHALL BE HEAVY DUTY STEEL BEAM FOR 50'-0" FROM THE Q OF POST #1 FOR TYPE I AND 12'-6" FROM THE Q OF POST #1 FOR TYPE II.
8. ALLOWABLE DIMENSIONAL TOLERANCE FOR BENT SECTIONS IS  $\pm 1/16"$ .
9. THE UNIT PRICES BID FOR EITHER TYPE OF GUARDRAIL APPROACH SECTION SHALL INCLUDE ANCHORAGE CONNECTOR, ANCHORAGE PLATE, HEAVY DUTY STEEL BEAM GUARDRAIL, POSTS, OFFSET BLOCKS, BLOCKING, BOLTS, AND ALL NECESSARY HARDWARE.



**CONNECTION DETAILS AT POST #1**

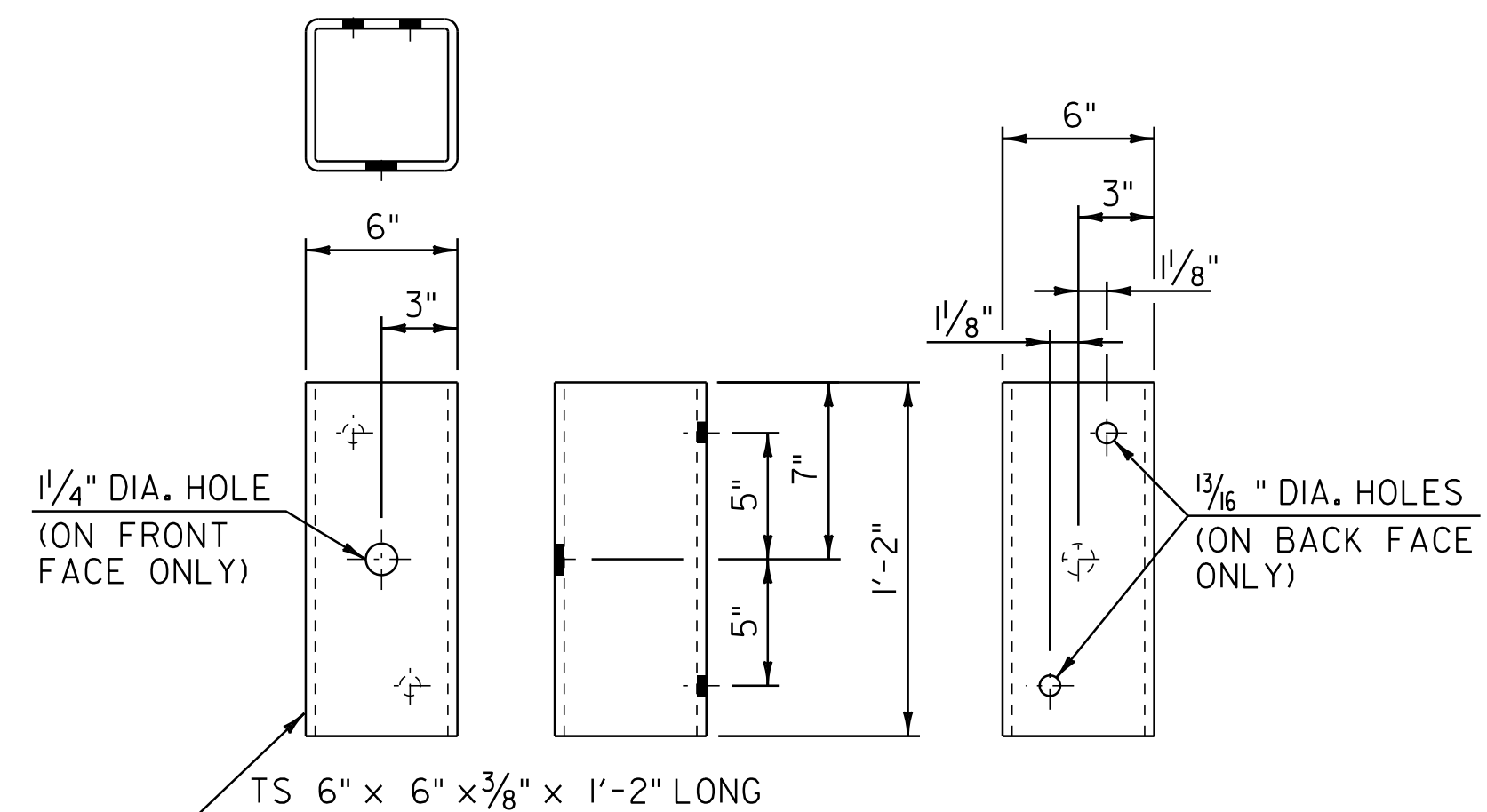


**ANCHORAGE PLATE DETAIL**



**ANCHORAGE CONNECTOR DETAIL**

(SEE NOTE 8)



**STRUCTURAL TUBING OFFSET BLOCK DETAILS**

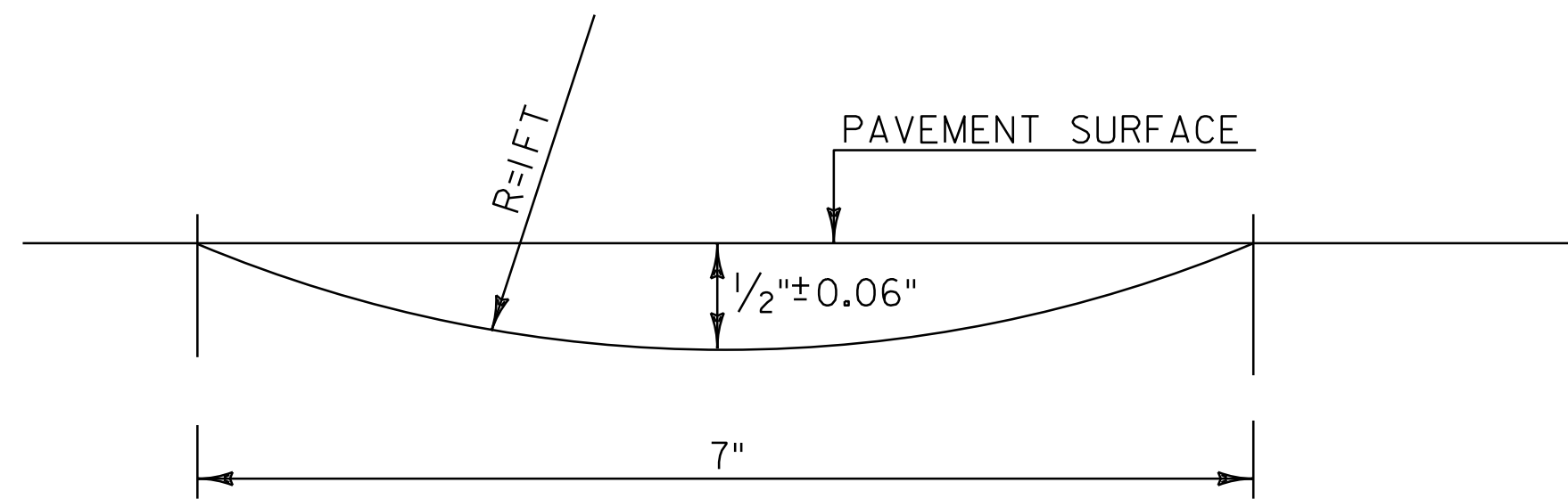
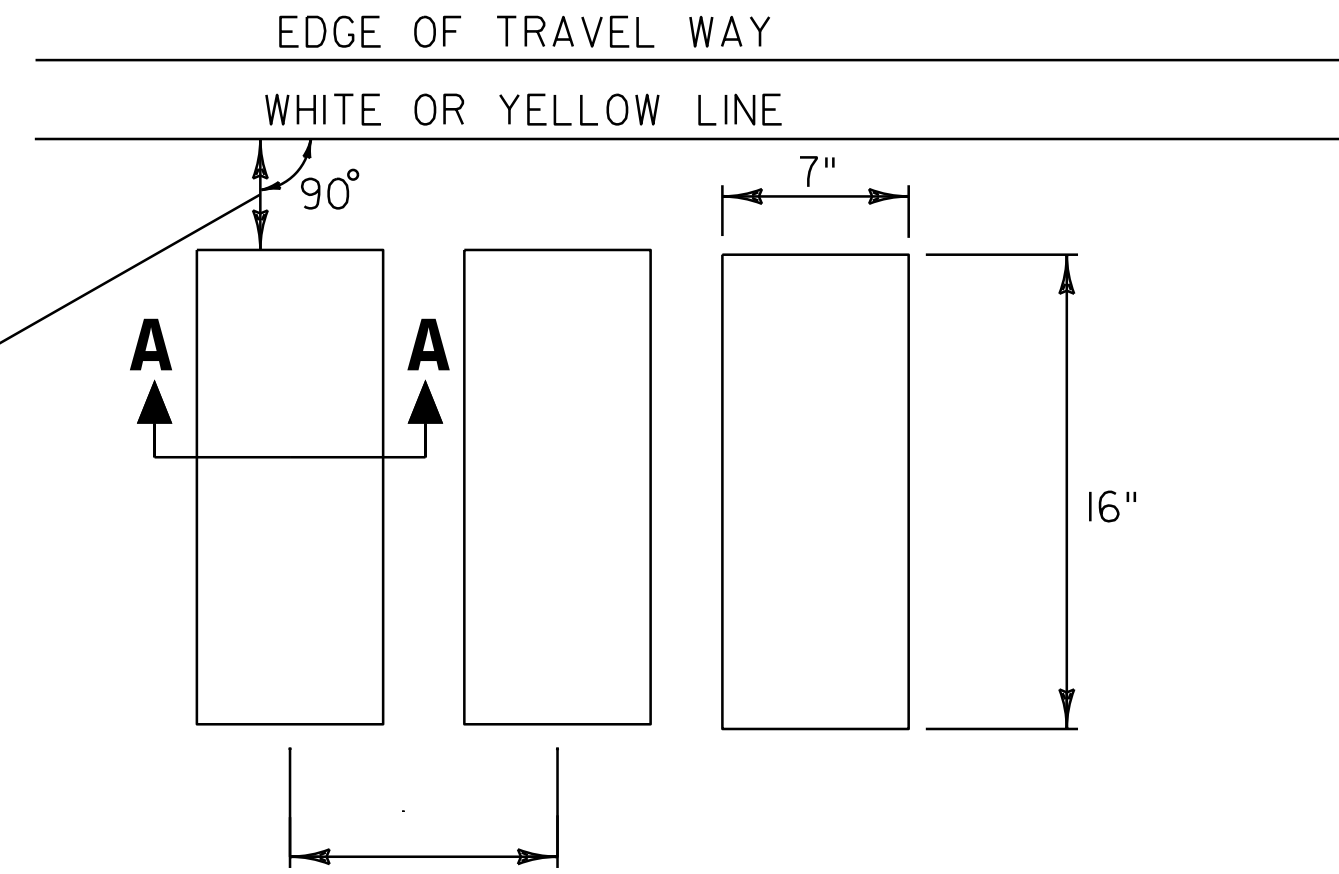
(OCCURS AT POST #1 WHEN USING APPROACH RAIL UTILIZING STEEL POSTS)

**GUARDRAIL APPROACH SECTION  
DETAIL SHEET 2**

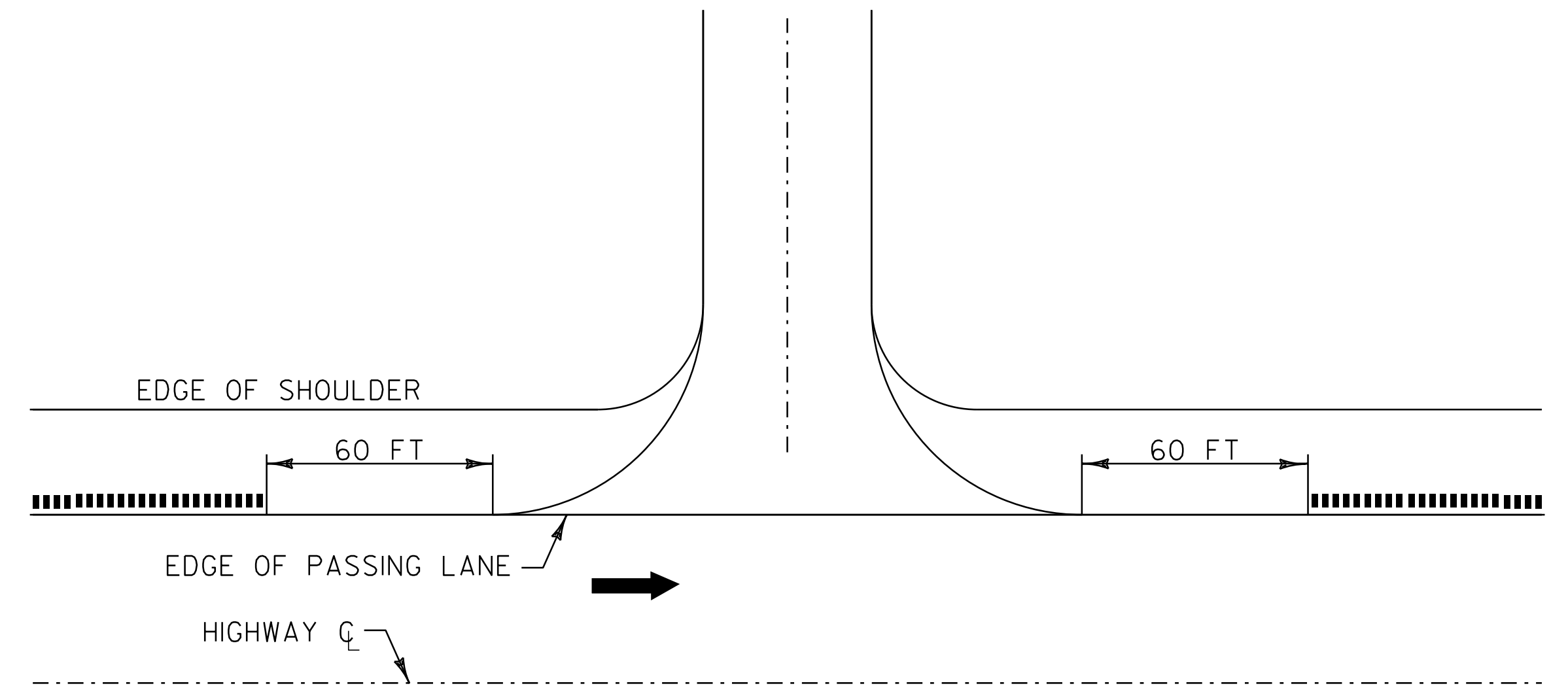
PROJECT NAME:	NEWBURY-ST. JOHNSBURY	FILE NAME:	06a046	PLOT DATE:	29-JUL-2014 16:40
PROJECT NUMBER:	AC IM 091-2(76)	PROJECT LEADER:	PTS	DRAWN BY:	JLS
		DESIGNED BY:	NLL	CHECKED BY:	PTS
		IPARM FILE NAME:	06A046_20		SHEET 20 OF 33

NOT TO SCALE

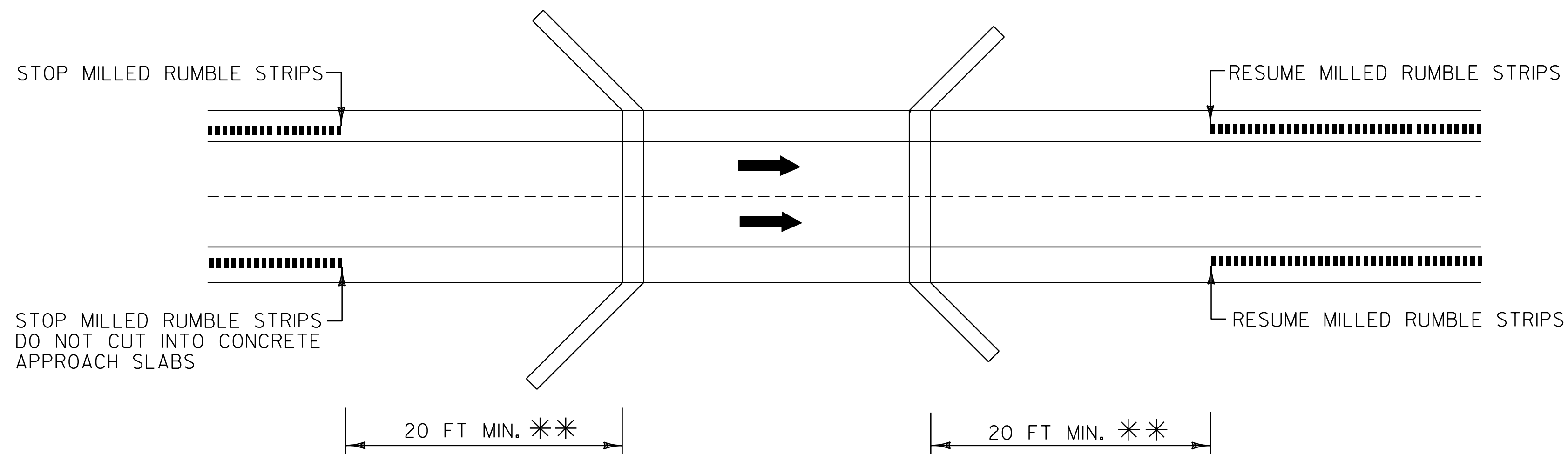
30" FOR ALL SHOULDERS 6' OR WIDER.  
 6" FOR ALL SHOULDERS LESS THAN  
 6' WIDE WITH NO GUARDRAIL.  
 MILLED RUMBLE STRIPS WILL NOT BE  
 REQUIRED IN GUARDRAIL AREAS WHERE  
 THE SHOULDER IS LESS THAN 6' WIDE.



**SECTION A-A**  
**TYPICAL MILLING DETAIL**



**U-TURN DETAIL**



\*\* BRIDGE RAIL WILL DETERMINE MINIMUM DISTANCE IN SOME CASES.

**BRIDGE DETAIL**

**LEGEND**

- DIRECTION OF TRAFFIC FLOW
- MILLED RUMBLE STRIPS

NOT TO SCALE

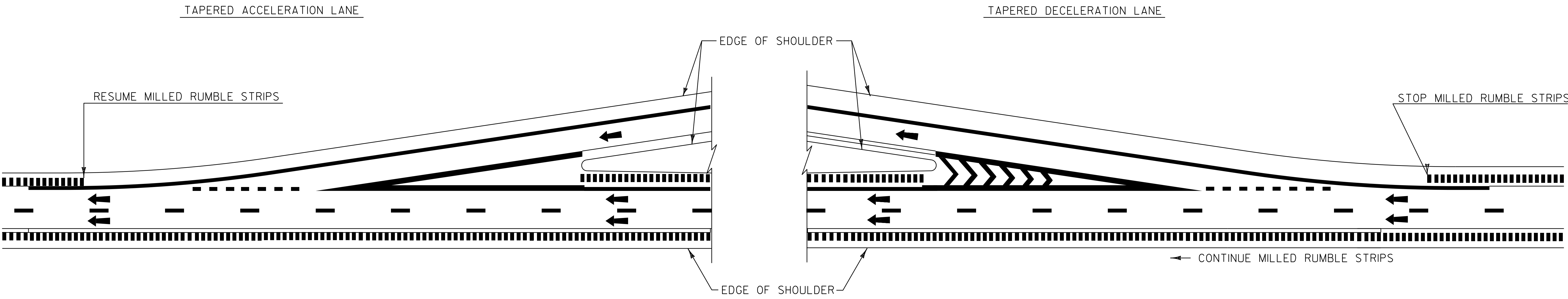
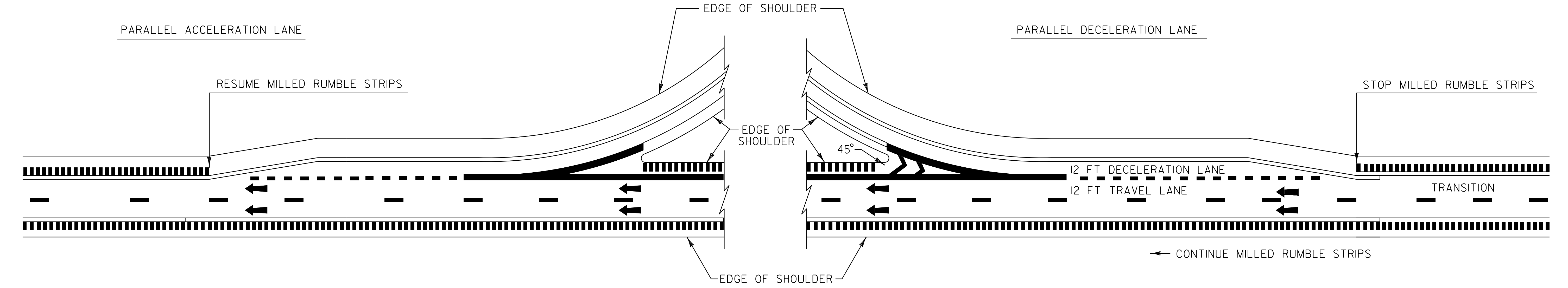
**MILLED RUMBLE STRIP DETAIL SHEET 1**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	PROJECT LEADER: PTS	DRAWN BY: JLS
	DESIGNED BY: NULL	CHECKED BY: PTS
	IPARM FILE NAME: 06A046_21	SHEET 21 OF 33

# TYPICAL MILLED RUMBLE STRIP DETAIL AT INTERCHANGES



## NOTE

1. THIS TYPICAL MAY BE MODIFIED AT THE DISCRETION OF THE ENGINEER IF ACTUAL FIELD CONDITIONS NECESSITATE SUCH ACTIONS.



NOT TO SCALE

### LEGEND

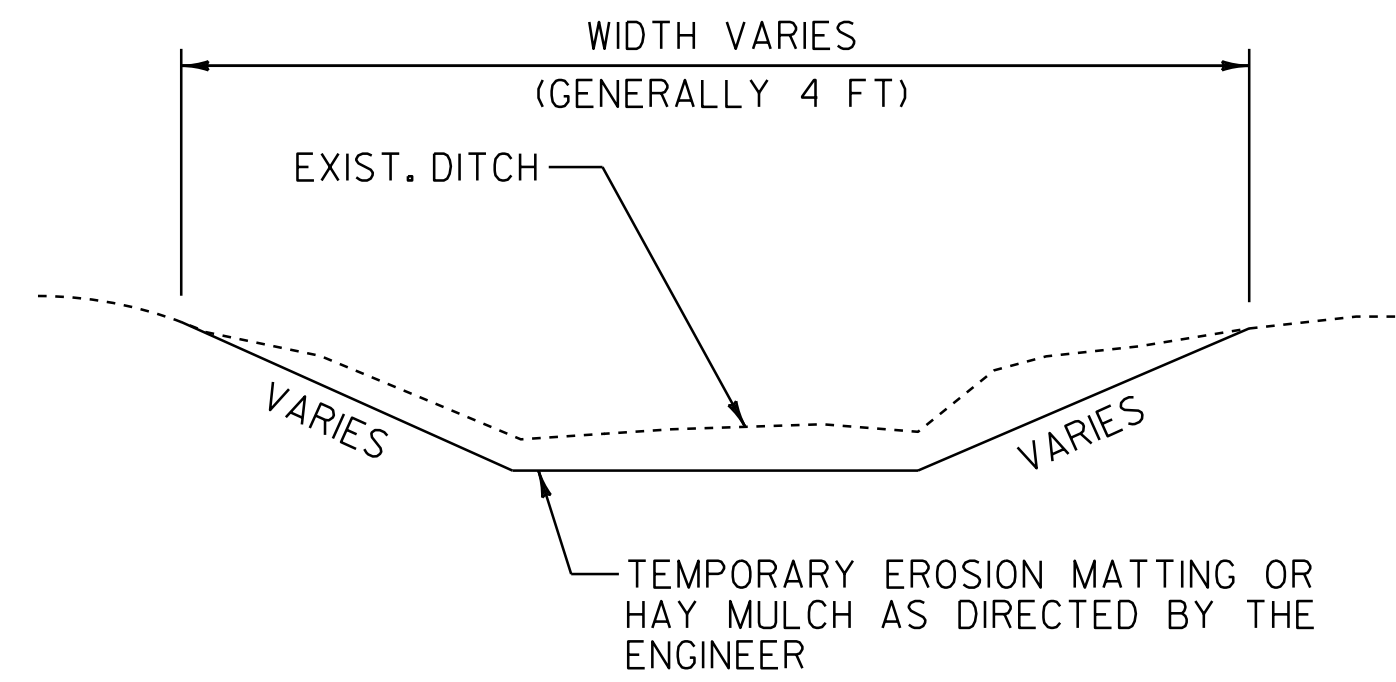
-  DIRECTION OF TRAFFIC FLOW
-  MILLED RUMBLE STRIPS

## MILLED RUMBLE STRIP DETAIL SHEET 2

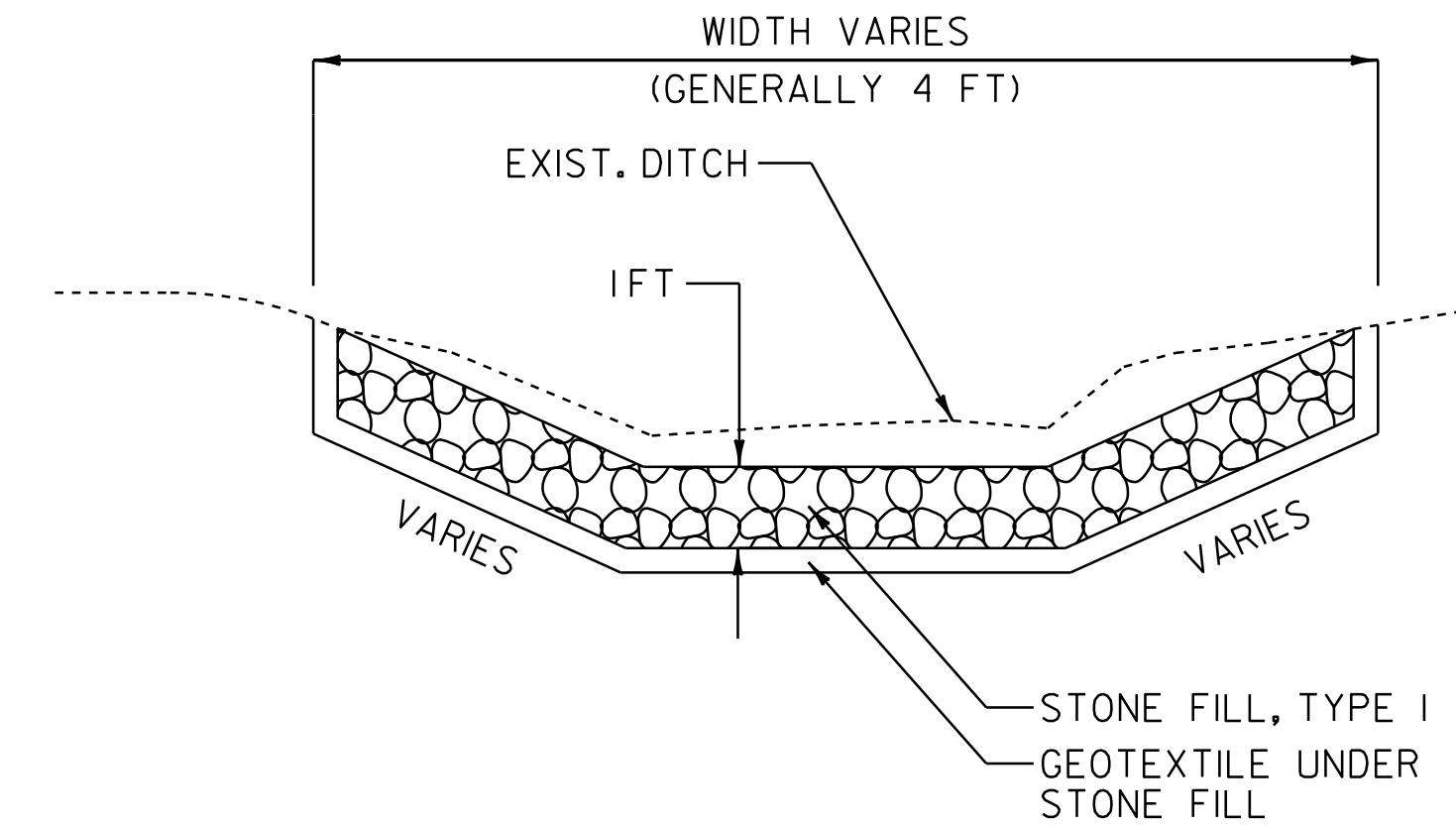
PROJECT NAME: NEWBURY-ST. JOHNSBURY	
PROJECT NUMBER: AC IM 091-2(76)	
FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT LEADER: PTS	DRAWN BY: JLS
DESIGNED BY: NULL	CHECKED BY: PTS
IPARM FILE NAME: 06A046_22	SHEET 22 OF 33



LOCATION				FEET OF DITCHING		MISC. ITEMS					REMARKS
SITE	MM	MM	POS.	PERCENT GRADE		613.10	613.11	649.31	651.15	653.20	
				1-2.5	2.5-10	STONE FILL, TYP. I	STONE FILL, TYP. II	GEOT. UNDER STONE FILL	SEED	TEMP. EROS. MATT.	
						LF	LF	CY	CY	SY	
NEWBURY-ST. JOHNSBURY SOUTHBOUND:											
1	110.683	128.556	LT/RT	1000	200	29.6		135	6	444	AS DIRECTED BY THE ENGINEER
2	112.413	112.640	LT		1199	177.6		801			
3	113.085	113.104	LT		100	14.8		68			
4	113.085	113.104	RT		100	14.8		68			
5	114.404	114.457	LT		280	41.5		188			
6	116.207	116.320	LT		597	88.4		399			
7	117.266	117.503	LT		1251	185.3		835			
8	118.427	118.591	LT		866	128.3		579			
9	119.950	120.140	RT		1003	148.6		670			
10	119.950	120.140	LT		1003	148.6		670			
11	120.680	120.780	LT		528	78.2		353			
12	122.400	122.560	RT		845	125.2		565			
13	125.540	125.600	RT		317	47.0		213			
14	123.000	123.120	RT		634	93.9		424			
15	123.465	123.550	LT		449	66.5		301			
16	124.750	124.800	LT		264	39.1		177			
17	126.300	126.380	LT		422	62.5		283			
18	126.690	126.714	LT		127	18.8		86			
19	126.714	126.790	RT		401	59.4		269			
20	127.400	127.800	LT		2112	312.9		1409			
21	128.150	128.306	LT		824	122.1		551			
22	128.250	128.860	LT		106	15.7		72			
23	128.250	128.860	LT		3221	477.2		2149			
24	EXIT 18		LT		525	77.8		351			
24	EXIT 19		LT		167	24.7		113			
FOR CONSTRUCTING ITEM 621.50 MANUFACTURED TERMINAL SECTION, FLARED									21	700	
FOR CONSTRUCTING ITEM 621.60 ANCHOR FOR STEEL BEAM RAIL									2	625	
<b>PROJECT SUBTOTALS</b>						<b>2598.5</b>	<b>11729</b>	<b>29</b>	<b>1769</b>		
<b>ROUNDINGS</b>						<b>1.5</b>	<b>21</b>	<b>1</b>	<b>31</b>		
<b>PROJECT TOTALS</b>						<b>2600</b>	<b>11750</b>	<b>30</b>	<b>1800</b>		



**DITCH DETAIL < 2.5 PERCENT**



**DITCH DETAIL > 2.5 PERCENT**

**NOTES**

- GRADES LESS THAN 1 PERCENT SHALL USE ITEM 651.15, SEED AND ITEM 651.25, HAY MULCH. GRADES BETWEEN 1 AND 2.5 PERCENT SHALL USE ITEM 651.25, HAY MULCH OR ITEM 653.20, TEMPORARY EROSION MATTING AS DIRECTED BY THE ENGINEER. GRADES OVER 2.5 PERCENT SHALL USE ITEM 649.31, GEOTEXTILE UNDER STONE FILL AND ITEM 613.10, STONE FILL TYPE I AS DIRECTED BY THE ENGINEER.
- PIPE INLET AND OUTLET AREAS AND DITCH CLEANING THROUGHOUT THE PROJECT SHALL BE PERFORMED AT LOCATIONS INDICATED ON THIS SHEET AND AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE UNDER THE APPLICABLE EQUIPMENT RENTAL ITEM(S).

**SEEDING FORMULA**

RATE: DOUBLE IF HYDROSEEDING

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREeping RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

**SEEDING NOTES**

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON THE EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

**DITCH CLEANING SHEET**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	PROJECT LEADER: PTS	DRAWN BY: JLS
	DESIGNED BY: NULL	CHECKED BY: PTS
	IPARM FILE NAME: 06A046_24	SHEET 24 OF 33

NOT TO SCALE

**INTERSTATE ROUTE 91 SB**  
**BEGIN PROJECT**  
**NEWBURY-ST. JOHNSBURY**  
**AC IM 091-2(76)**  
**(MM 110.683)**

BEGIN COLD PLANE AND OVERLAY

TEMPORARY 6" WHITE LINE, PAINT  
 DURABLE 6" WHITE LINE, RECESSED OPTION  
 110.683 TO 116.600 SOLID LT  
 110.683 TO 116.600 DASHED CL  
 TEMPORARY 6" YELLOW LINE, PAINT  
 DURABLE 6" YELLOW LINE, RECESSED OPTION  
 110.683 TO 116.600 SOLID RT

REHAB. DROP INLETS,  
 CATCH BASINS, OR MANHOLES,  
 CLASS I OR CLASS II  
 110.695 LT (DI)  
 110.717 LT (DI)  
 110.769 LT (DI)  
 110.833 LT (DI)

SPECIAL PROVISION  
 (DECOMMISSION/CAP CURB DROP INLET)  
 112.473 LT (DI) 114.393 LT (DI)  
 112.550 LT (DI) 114.437 LT (DI)  
 112.607 LT (DI) 114.777 LT (DI)  
 112.662 LT (DI) 114.815 LT (DI)  
 112.730 LT (DI) 116.101 LT (DI)  
 113.121 RT (DI) 116.139 LT (DI)  
 113.121 LT (DI) 116.177 LT (DI)  
 114.202 LT (DI) 116.215 LT (DI)  
 114.259 LT (DI) 116.271 LT (DI)  
 116.328 LT (DI)

REMOVAL OF EXISTING CURB  
 CABLE GUARDRAIL  
 CABLE GUARDRAIL J-BOLT, GALVANIZED  
 CABLE GUARDRAIL SPLICE UNIT  
 REPLACEMENT OF GUARDRAIL CABLE  
 STEEL BEAM GUARDRAIL, GALVANIZED  
 MANUFACTURED TERMINAL SECTION, FLARED  
 ANCHOR FOR STEEL BEAM RAIL  
 ANCHOR FOR CABLE RAIL  
 REMOVE AND RESET GUARDRAIL  
 REPLACE GUARDRAIL POST ASSEMBLY  
 REPLACE GUARDRAIL BEAM UNIT  
 REMOVAL AND DISPOSAL OF GUARDRAIL  
 DELINEATOR WITH STEEL POST  
 SEE ITEM DETAIL SUMMARY SHEETS

NEWBURY  
 RYEGATE  
 ORANGE CO.  
 CALEDONIA CO.

111

112

SOUTHBOUND I-91

113

MATCH LINE MM 113.60

MATCH LINE MM 113.60

114

SOUTHBOUND I-91

115

116

MATCH LINE MM 116.60

MM 115.17

MM 115.651

27

PAVEMENT CORES IN (SHOULDERS)

#	MM	DEPTH	PCC
1	110.68	3.75"	NO
2	111.00	3.25"	NO
3	111.50	4.25"	NO
4	112.00	3.75"	NO
5	112.50	3.50"	NO
6	112.95	4.00"	NO
7	113.50	6.00"	NO
8	114.00	5.00"	NO
9	114.50	5.75"	NO
10	115.00	4.50"	NO
11	115.45	4.75"	NO
12	116.00	4.50"	NO
13	116.50	4.25"	NO

LEGEND

- = EXISTING GUARDRAIL
- = PROPOSED GUARDRAIL
- = DI

**MAINLINE LAYOUT 1**

PROJECT NAME: NEWBURY-ST. JOHNSBURY  
 PROJECT NUMBER: AC IM 091-2(76)

FILE NAME: 06a046  
 PROJECT LEADER: PTS  
 DESIGNED BY: NULL  
 IPARM FILE NAME: 06A046\_25

PLOT DATE: 29-JUL-2014 16:44  
 DRAWN BY: JLS  
 CHECKED BY: PTS  
 SHEET 25 OF 33

NOT TO SCALE

TEMPORARY 6" WHITE LINE, PAINT  
 DURABLE 6" WHITE LINE, RECESSED OPTION  
 116.600 TO 122.700 SOLID LT  
 116.600 TO 122.700 DASHED CL

TEMPORARY 6" YELLOW LINE, PAINT  
 DURABLE 6" YELLOW LINE, RECESSED OPTION  
 116.600 TO 122.700 SOLID RT

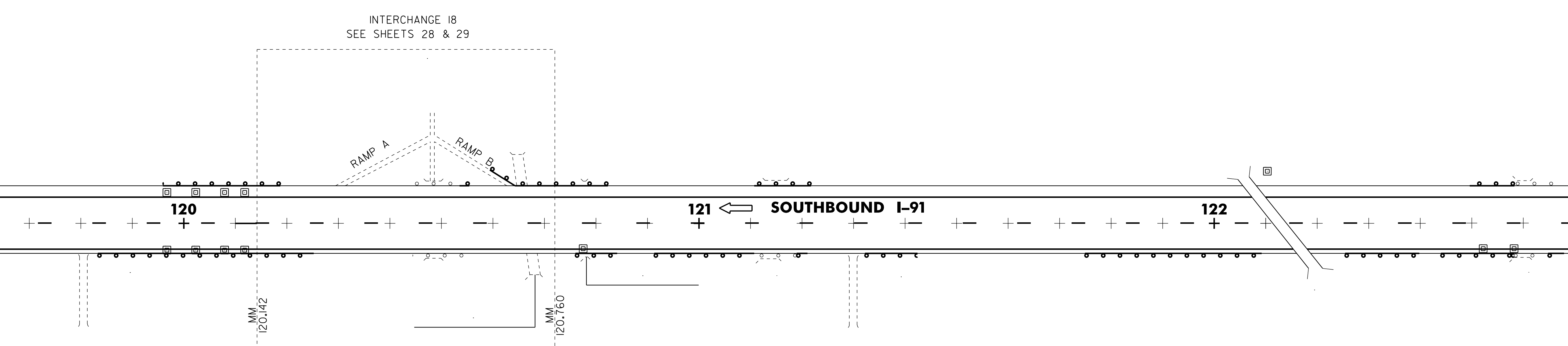
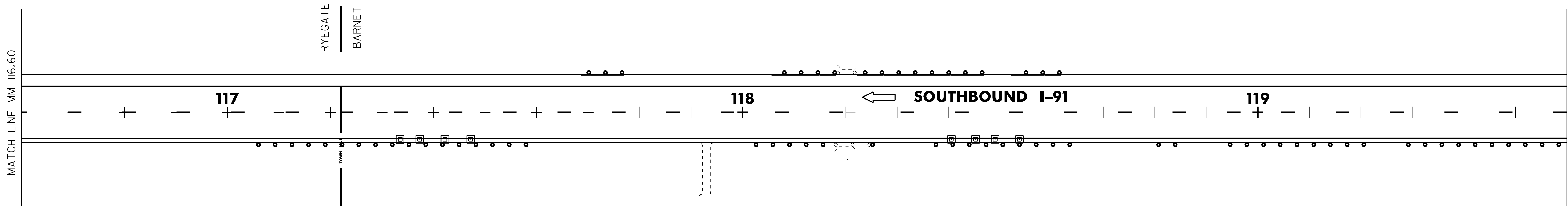
REHAB. DROP INLETS,  
 CATCH BASINS, OR MANHOLES,  
 CLASS I OR CLASS II  
 122.103 LT (DI)

CHAIN-LINK FENCE, 6 FEET  
 BRACING ASSEMBLY FOR  
 CHAIN-LINK FENCE, 6 FEET  
 120.774 TO 120.780 LT & RT  
 (30') BRIDGE 73S

SPECIAL PROVISION  
 (DECOMMISSION/CAP CURB DROP INLET)

117.335 RT (DI)	119.967 RT (DI)
117.373 RT (DI)	120.023 LT (DI)
117.422 RT (DI)	120.023 RT (DI)
117.472 RT (DI)	120.079 LT (DI)
118.405 RT (DI)	120.079 RT (DI)
118.452 RT (DI)	120.118 LT (DI)
118.490 RT (DI)	120.118 RT (DI)
118.537 RT (DI)	120.775 RT (DI)
119.967 LT (DI)	122.522 RT (DI)
	122.582 RT (DI)

CABLE GUARDRAIL  
 CABLE GUARDRAIL J-BOLT, GALVANIZED  
 CABLE GUARDRAIL SPLICE UNIT  
 REPLACEMENT OF GUARDRAIL CABLE  
 STEEL BEAM GUARDRAIL, GALVANIZED  
 MANUFACTURED TERMINAL SECTION, FLARED  
 ANCHOR FOR STEEL BEAM RAIL  
 ANCHOR FOR CABLE RAIL  
 REMOVE AND RESET GUARDRAIL  
 REPLACE GUARDRAIL POST ASSEMBLY  
 REPLACE GUARDRAIL BEAM UNIT  
 REMOVAL AND DISPOSAL OF GUARDRAIL  
 DELINEATOR WITH STEEL POST  
 SEE ITEM DETAIL SUMMARY SHEETS



PAVEMENT CORES IN (SHOULDERS)

#	MM	DEPTH	PCC
14	117.00	5.00"	NO
15	117.50	5.00"	NO
16	118.00	5.75"	NO
17	118.50	4.25"	NO
18	119.00	4.25"	NO
19	119.50	4.75"	NO
20	120.00	3.75"	NO
21	120.55	5.00"	NO
22	120.95	4.00"	NO
23	121.50	4.25"	NO
24	122.00	3.75"	NO
25	122.45	4.00"	NO

LEGEND  
 = EXISTING GUARDRAIL  
 = PROPOSED GUARDRAIL  
 = DI

NOT TO SCALE

**MAINLINE LAYOUT 2**

PROJECT NAME: NEWBURY-ST. JOHNSBURY  
 PROJECT NUMBER: AC IM 091-2(76)

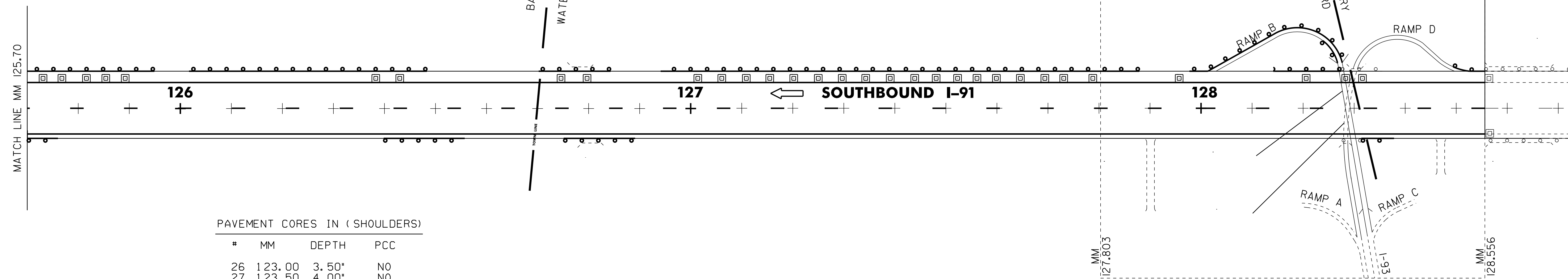
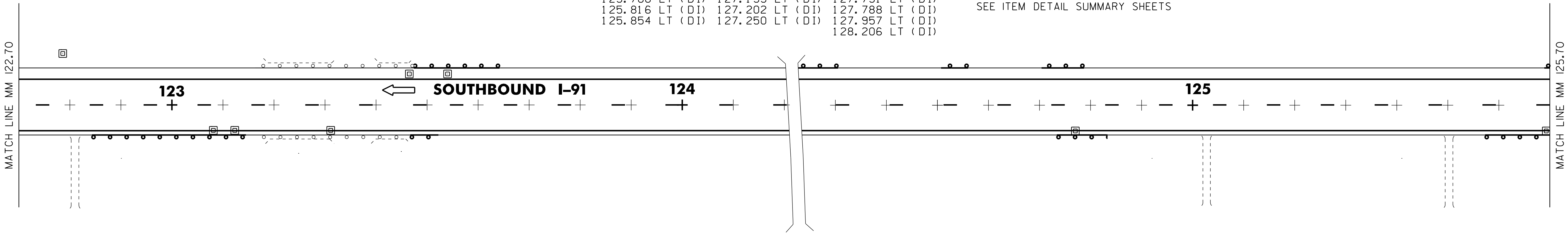
FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT LEADER: PTS	DRAWN BY: JLS
DESIGNED BY: NLL	CHECKED BY: PTS
IPARM FILE NAME: 06A046_26	SHEET 26 OF 33

TEMPORARY 6" WHITE LINE, PAINT  
 DURABLE 6" WHITE LINE, RECESSED OPTION  
 122.700 TO 128.556 SOLID LT  
 122.700 TO 128.556 DASHED CL  
 TEMPORARY 6" YELLOW LINE, PAINT  
 DURABLE 6" YELLOW LINE, RECESSED OPTION  
 122.700 TO 128.556 SOLID RT

REHAB. DROP INLETS,  
 CATCH BASINS, OR MANHOLES,  
 CLASS I OR CLASS II  
 122.786 LT (DI)  
 123.540 LT (DI)  
 127.061 LT (DI)  
 127.561 LT (DI)  
 127.599 LT (DI)  
 127.646 LT (DI)  
 128.283 LT (DI)  
 128.317 LT (DI)

CHAIN-LINK FENCE, 6 FEET  
 BRACING ASSEMBLY FOR  
 CHAIN-LINK FENCE, 6 FEET  
 126.787 TO 126.796 LT (50') BRIDGE 80S  
 SPECIAL PROVISION  
 (DECOMMISSION/CAP CURB DROP INLET)  
 123.081 RT (DI) 125.892 LT (DI) 127.297 LT (DI)  
 123.123 RT (DI) 126.383 LT (DI) 127.343 LT (DI)  
 123.309 RT (DI) 126.430 LT (DI) 127.391 LT (DI)  
 123.465 LT (DI) 126.746 LT (DI) 127.439 LT (DI)  
 124.770 RT (DI) 126.797 LT (DI) 127.481 LT (DI)  
 125.693 RT (DI) 127.014 LT (DI) 127.523 LT (DI)  
 125.731 LT (DI) 127.109 LT (DI) 127.694 LT (DI)  
 125.768 LT (DI) 127.155 LT (DI) 127.731 LT (DI)  
 125.816 LT (DI) 127.202 LT (DI) 127.788 LT (DI)  
 125.854 LT (DI) 127.250 LT (DI) 127.957 LT (DI)  
 128.206 LT (DI)

BITUMINOUS CONCRETE CURB, TYPE A  
 REMOVAL OF EXISTING CURB  
 CABLE GUARDRAIL  
 CABLE GUARDRAIL J-BOLT, GALVANIZED  
 CABLE GUARDRAIL SPLICE UNIT  
 REPLACEMENT OF GUARDRAIL CABLE  
 STEEL BEAM GUARDRAIL, GALVANIZED  
 MANUFACTURED TERMINAL SECTION, FLARED  
 ANCHOR FOR STEEL BEAM RAIL  
 ANCHOR FOR CABLE RAIL  
 REMOVE AND RESET GUARDRAIL  
 REPLACE GUARDRAIL POST ASSEMBLY  
 REPLACE GUARDRAIL BEAM UNIT  
 REMOVAL AND DISPOSAL OF GUARDRAIL  
 DELINEATOR WITH STEEL POST  
 SEE ITEM DETAIL SUMMARY SHEETS



PAVEMENT CORES IN (SHOULDERS)

#	MM	DEPTH	PCC
26	123.00	3.50"	NO
27	123.50	4.00"	NO
28	124.00	3.50"	NO
29	124.50	3.75"	NO
30	125.00	3.75"	NO
31	125.50	3.50"	NO
32	126.00	4.50"	NO
33	126.50	4.25"	NO
34	127.00	4.00"	NO
35	127.45	4.75"	NO
36	128.05	4.50"	NO
37	128.40	5.50"	NO

LEGEND  
 = EXISTING GUARDRAIL  
 = PROPOSED GUARDRAIL  
 = DI

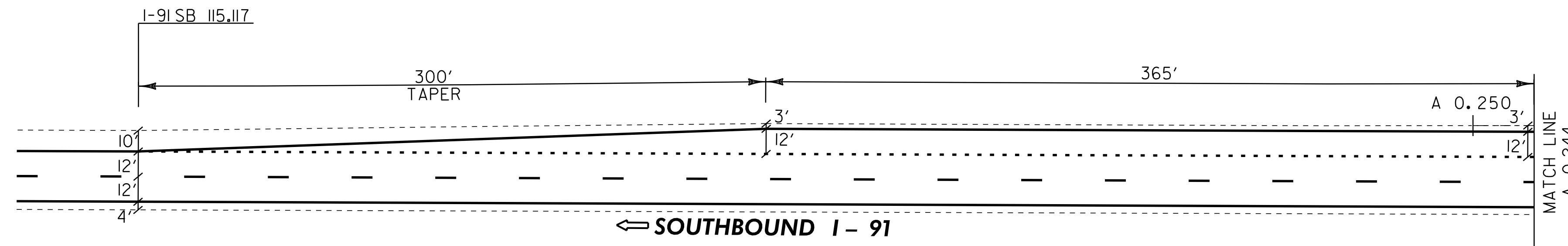
**INTERSTATE ROUTE 91 SB  
 END PROJECT  
 NEWBURY-ST. JOHNSBURY  
 AC IM 091-2(76)  
 (MM 128.556)**  
 END COLD PLANE AND OVERLAY

INTERCHANGE 19  
 SEE SHEETS 30 & 31

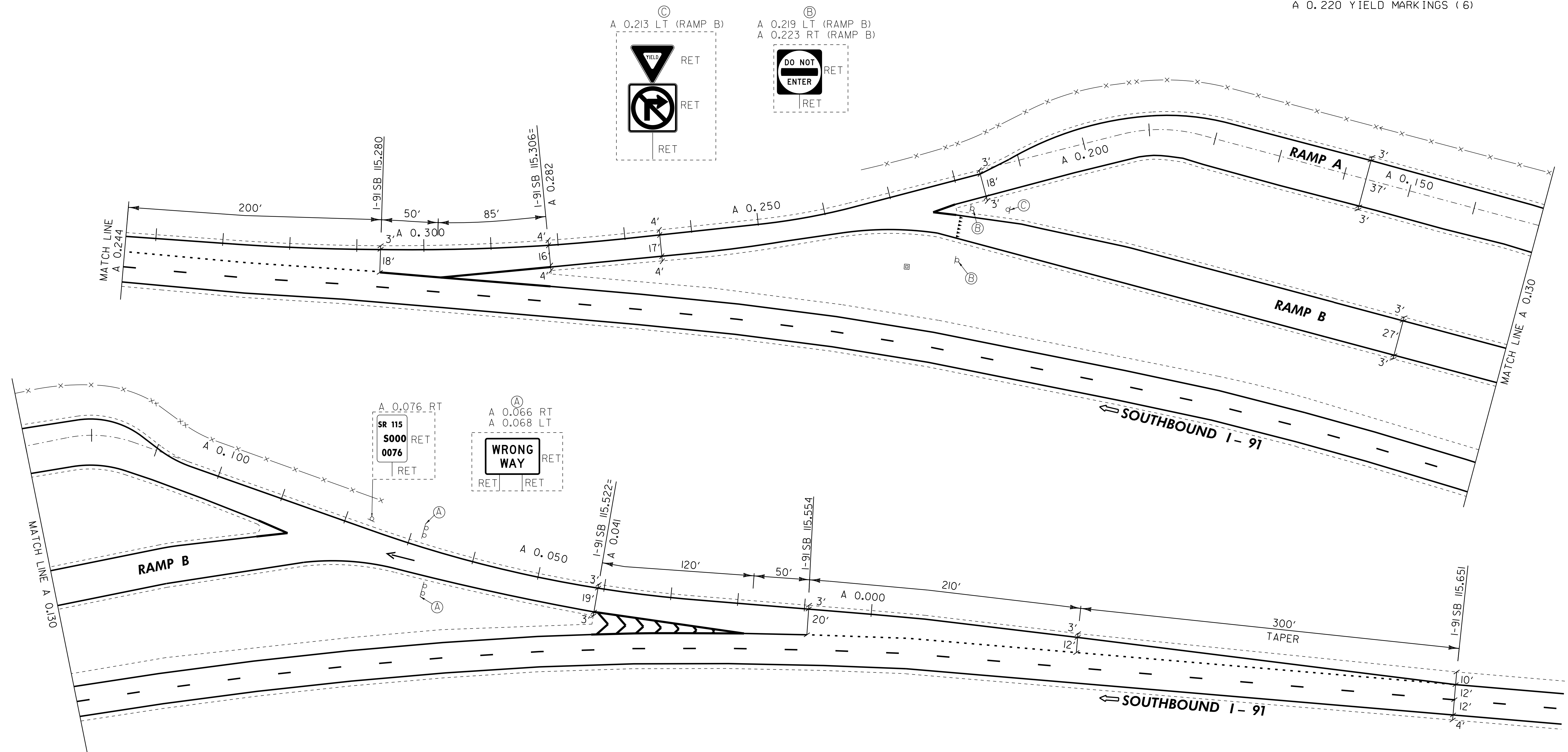
**MAINLINE LAYOUT 3**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	PROJECT LEADER: PTS	DRAWN BY: JLS
	DESIGNED BY: NULL	CHECKED BY: PTS
	IPARM FILE NAME: 06A046_27	SHEET 27 OF 33

NOT TO SCALE



- TEMPORARY 6" WHITE LINE, PAINT  
 DURABLE 6" WHITE LINE, RECESSED OPTION  
 A 0.041 TO A 0.282 (RAMP A) SOLID RT  
 A 0.092 TO A 0.221 (RAMP B) SOLID LT  
 115.117 TO 115.280 DOTTED LT  
 115.554 TO 115.651 DOTTED LT
- TEMPORARY 6" YELLOW LINE, PAINT  
 DURABLE 6" YELLOW LINE, RECESSED OPTION  
 A 0.041 TO A 0.071 (RAMP A) SOLID LT  
 A 0.071 TO A 0.225 (RAMP B) SOLID LT  
 A 0.092 TO A 0.221 (RAMP A) SOLID LT  
 A 0.225 TO A 0.282 (RAMP A) SOLID LT
- TEMPORARY 12" WHITE LINE, PAINT  
 DURABLE 12" WHITE LINE, RECESSED OPTION  
 A 0.019 TO A 0.041 SOLID LT  
 A 0.019 TO A 0.041 SOLID LT (GORE STRIPES)  
 A 0.088 TO A 0.092 SOLID LT (RAMP A)  
 A 0.088 TO A 0.092 SOLID LT (RAMP B)  
 A 0.221 TO A 0.224 SOLID LT (RAMP A)  
 A 0.221 TO A 0.224 SOLID LT (RAMP B)  
 A 0.282 TO A 0.298 SOLID LT (RAMP A)  
 115.280 TO 115.306 SOLID LT  
 115.522 TO 115.554 SOLID LT
- TEMPORARY LETTER OR SYMBOL, PAINT  
 DURABLE LETTER OR SYMBOL OPTION  
 A 0.070 WRONG WAY ARROW  
 A 0.220 YIELD MARKINGS (6)



LEGEND

	#	MM	DEPTH	PCC	
	1	115.40	6.00"	NO	PARKING AREA (TRUCKS)
	2	115.40	7.25"	NO	PARKING AREA (AUTOS)

NOT TO SCALE

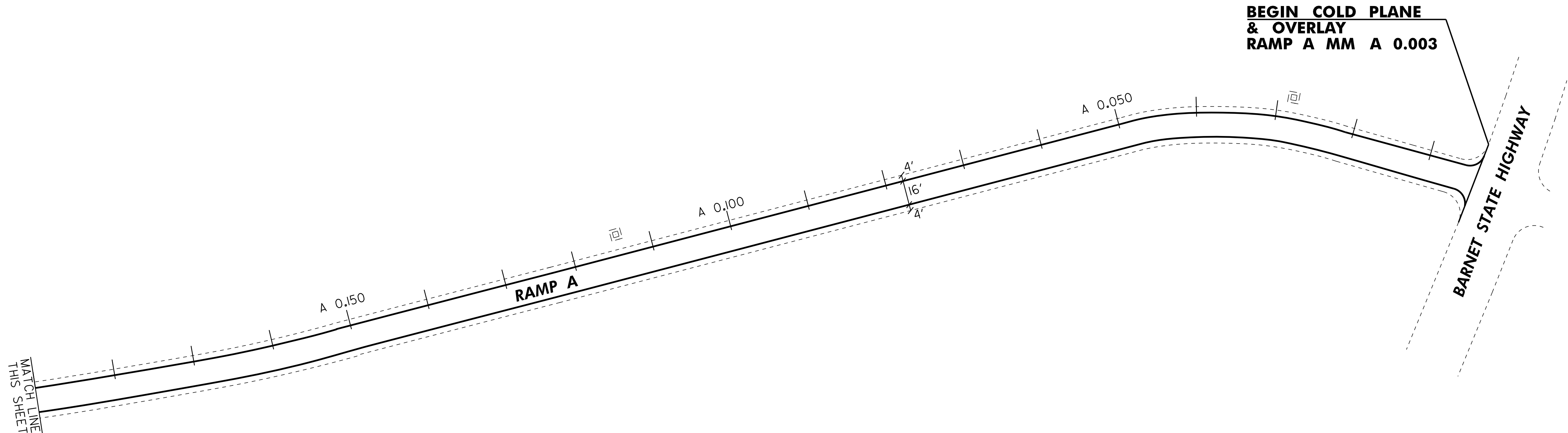
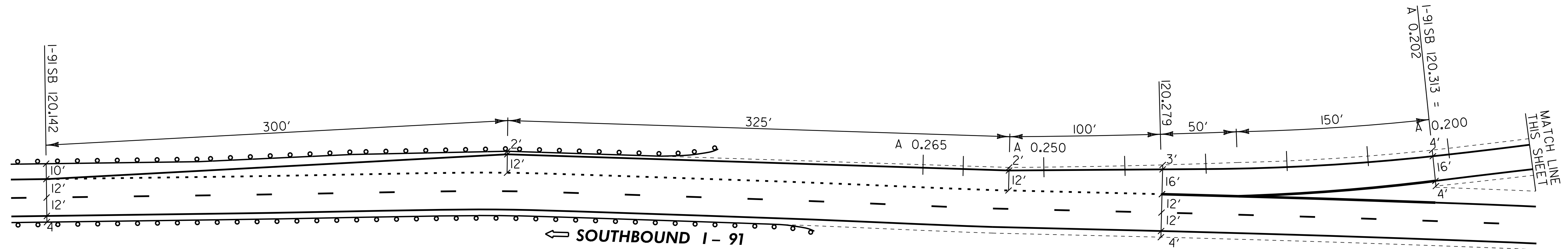
**PARKING AREA DETAIL SHEET**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	PROJECT LEADER: PTS	DRAWN BY: JLS
	DESIGNED BY: NLL	CHECKED BY: PTS
	IPARM FILE NAME: 06A046_28	SHEET 28 OF 33

TEMPORARY 6" WHITE LINE, PAINT  
 DURABLE 6" WHITE LINE, RECESSED OPTION  
 A 0.003 TO A 0.202 SOLID RT  
 120.142 TO 120.279 DOTTED LT

TEMPORARY 6" YELLOW LINE, PAINT  
 DURABLE 6" YELLOW LINE, RECESSED OPTION  
 A 0.003 TO A 0.202 SOLID LT

TEMPORARY 12" WHITE LINE, PAINT  
 DURABLE 12" WHITE LINE, RECESSED OPTION  
 A 0.202 TO A 0.230 SOLID LT  
 120.279 TO 120.313 SOLID LT



**EXIT 18 ON RAMP DETAIL SHEET**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	
PROJECT NUMBER: AC IM 091-2(76)	
FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT LEADER: PTS	DRAWN BY: JLS
DESIGNED BY: NLL	CHECKED BY: PTS
IPARM FILE NAME: 06A046_29	SHEET 29 OF 33

- LEGEND**
- = EXISTING GUARDRAIL
  - = PROPOSED GUARDRAIL
  - = DI

NOT TO SCALE

TEMPORARY 6" WHITE LINE, PAINT  
 DURABLE 6" WHITE LINE, RECESSED OPTION

B 0.059 TO B 0.228 SOLID RT  
 120.655 TO 120.760 DOTTED LT

TEMPORARY 6" YELLOW LINE, PAINT  
 DURABLE 6" YELLOW LINE, RECESSED OPTION

B 0.059 TO B 0.228 SOLID LT

TEMPORARY 12" WHITE LINE, PAINT  
 DURABLE 12" WHITE LINE, RECESSED OPTION

B 0.040 TO B 0.059 SOLID LT  
 B 0.040 TO B 0.059 SOLID LT (GORE STRIPES)  
 120.626 TO 120.655 SOLID LT

TEMPORARY 24" STOP BAR, PAINT  
 DURABLE 24" STOP BAR OPTION

B 0.227

TEMPORARY LETTER OR SYMBOL, PAINT  
 DURABLE LETTER OR SYMBOL OPTION

B 0.152 LT STOP  
 B 0.158 LT AHEAD  
 B 0.204 LT WRONG WAY ARROW  
 B 0.225 LT STOP

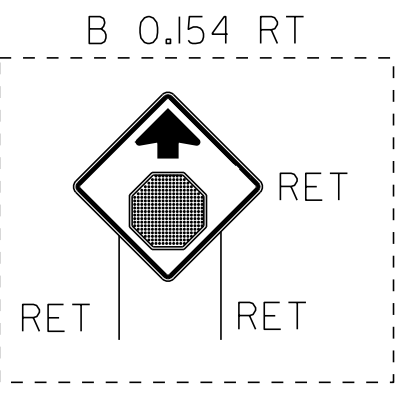
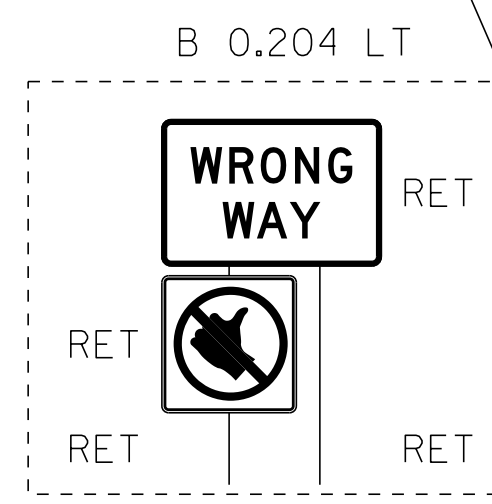
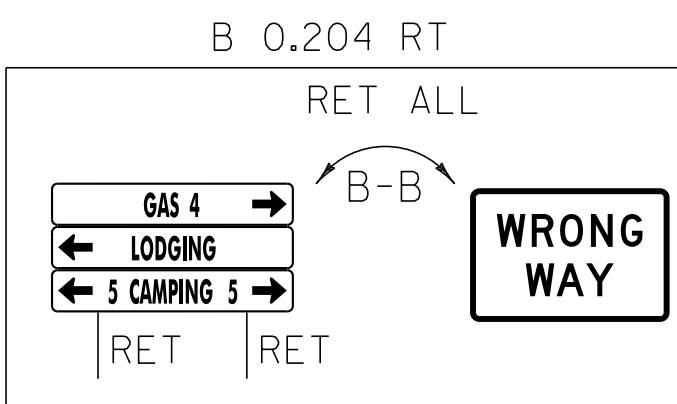
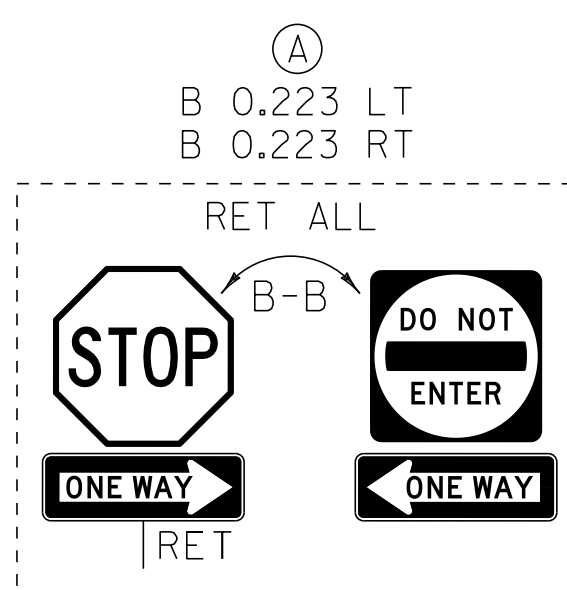
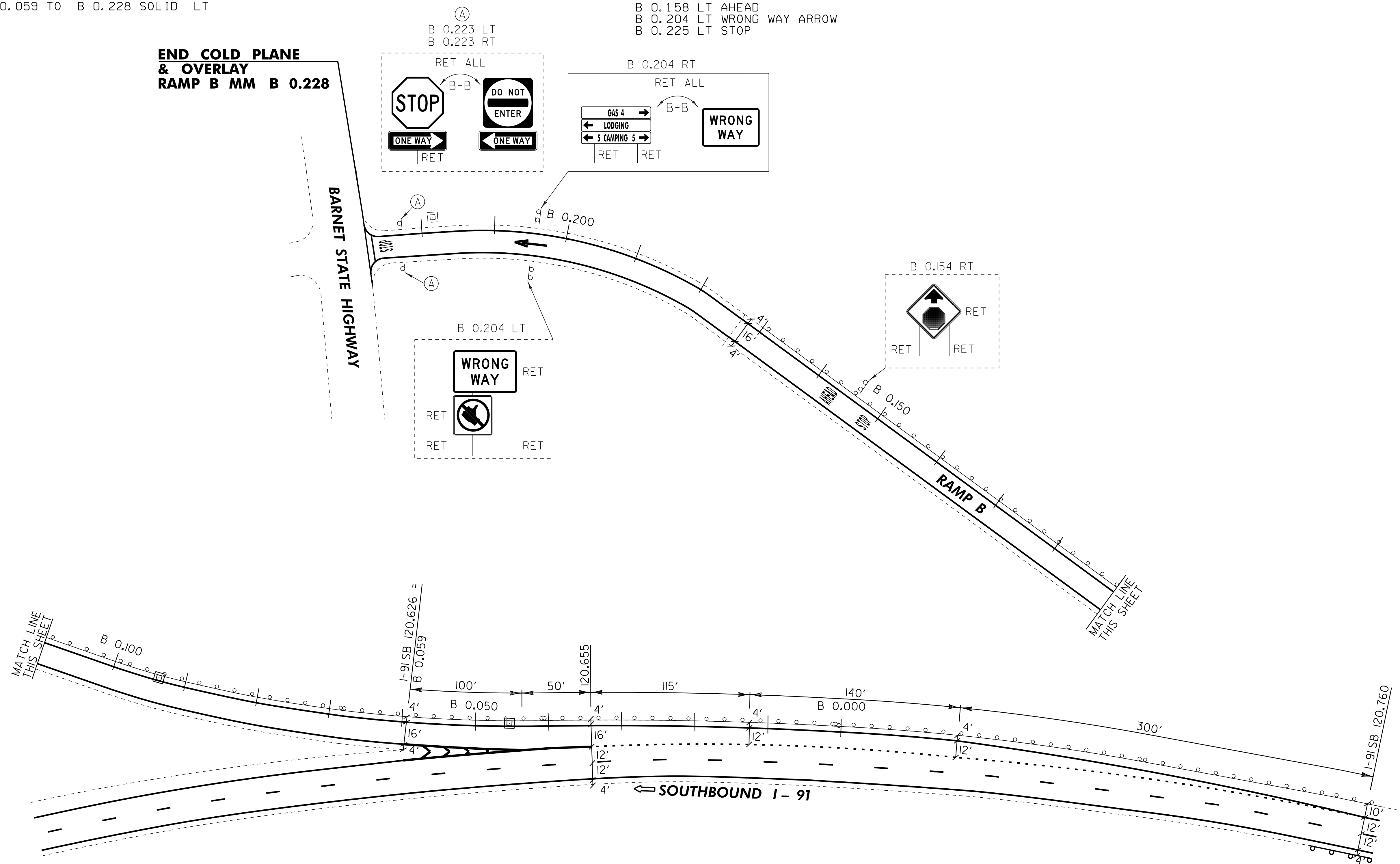
STEEL BEAM GUARDRAIL, GALVANIZED  
 ANCHOR FOR STEEL BEAM RAIL  
 REMOVAL AND DISPOSAL OF GUARDRAIL  
 DELINEATOR WITH STEEL POST

SEE ITEM DETAIL SUMMARY SHEETS

SPECIAL PROVISION  
 (DECOMMISSION/CAP CURB DROP INLET)

B 0.045 RT  
 B 0.094 RT

**END COLD PLANE  
 & OVERLAY  
 RAMP B MM B 0.228**



**LEGEND**

	= EXISTING GUARDRAIL
	= PROPOSED GUARDRAIL
	= DI

NOT TO SCALE

**EXIT 18 OFF RAMP DETAIL SHEET**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT NUMBER: AC IM 091-2(76)	DESIGNED BY: NULL	CHECKED BY: PTS
	IPARM FILE NAME: 06A046_30	SHEET 30 OF 33



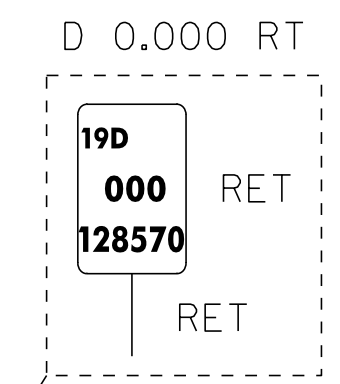
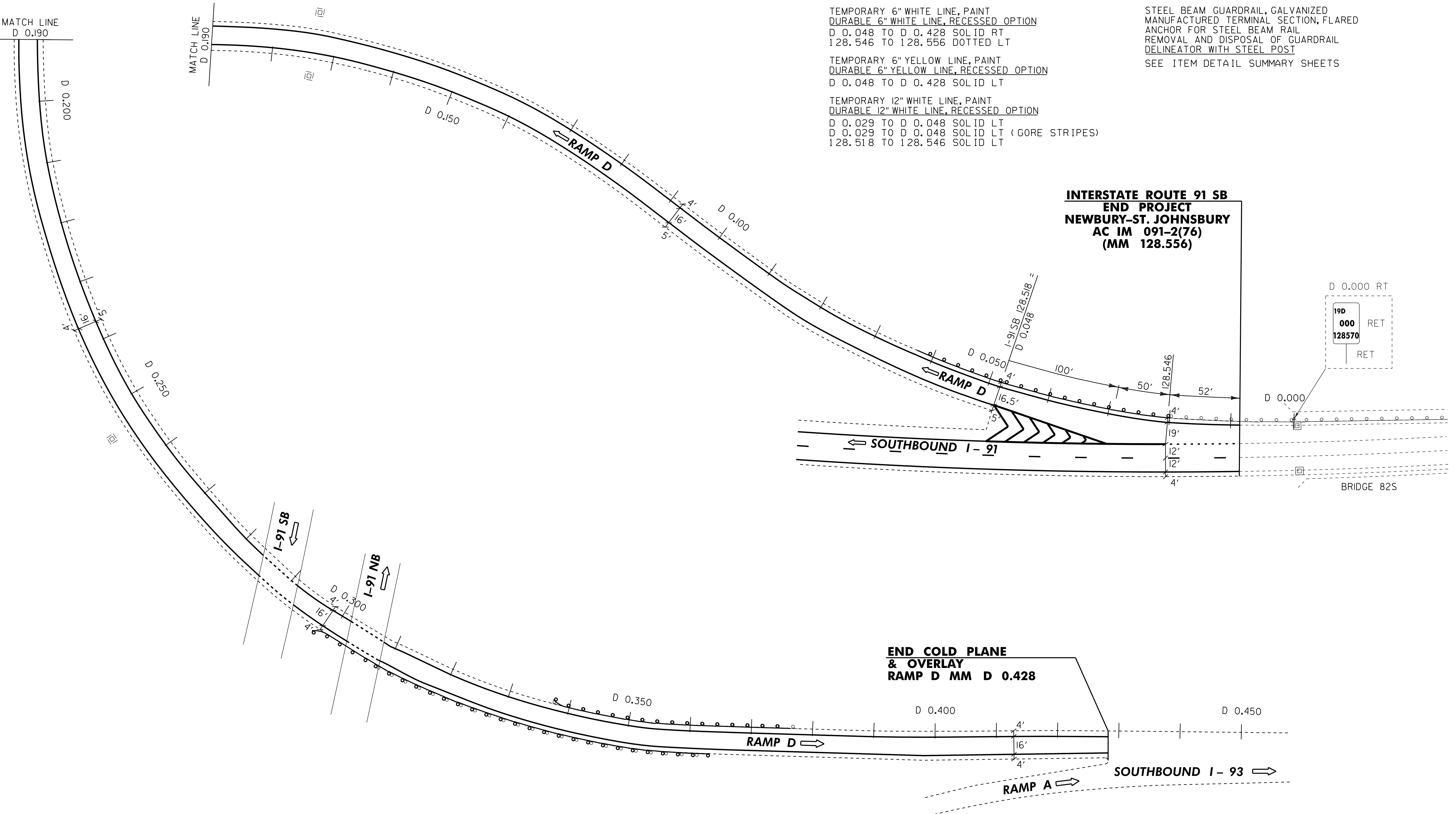
TEMPORARY 6" WHITE LINE, PAINT  
 DURABLE 6" WHITE LINE, RECESSED OPTION  
 D 0.048 TO D 0.428 SOLID RT  
 128.546 TO 128.556 DOTTED LT

TEMPORARY 6" YELLOW LINE, PAINT  
 DURABLE 6" YELLOW LINE, RECESSED OPTION  
 D 0.048 TO D 0.428 SOLID LT

TEMPORARY 12" WHITE LINE, PAINT  
 DURABLE 12" WHITE LINE, RECESSED OPTION  
 D 0.029 TO D 0.048 SOLID LT  
 D 0.029 TO D 0.048 SOLID LT (GORE STRIPES)  
 128.518 TO 128.546 SOLID LT

STEEL BEAM GUARDRAIL, GALVANIZED  
 MANUFACTURED TERMINAL SECTION, FLARED  
 ANCHOR FOR STEEL BEAM RAIL  
 REMOVAL AND DISPOSAL OF GUARDRAIL  
 DELINEATOR WITH STEEL POST  
 SEE ITEM DETAIL SUMMARY SHEETS

**INTERSTATE ROUTE 91 SB  
 END PROJECT  
 NEWBURY-ST. JOHNSBURY  
 AC IM 091-2(76)  
 (MM 128.556)**



**END COLD PLANE  
 & OVERLAY  
 RAMP D MM D 0.428**

- LEGEND**
- = EXISTING GUARDRAIL
  - = PROPOSED GUARDRAIL
  - = DI

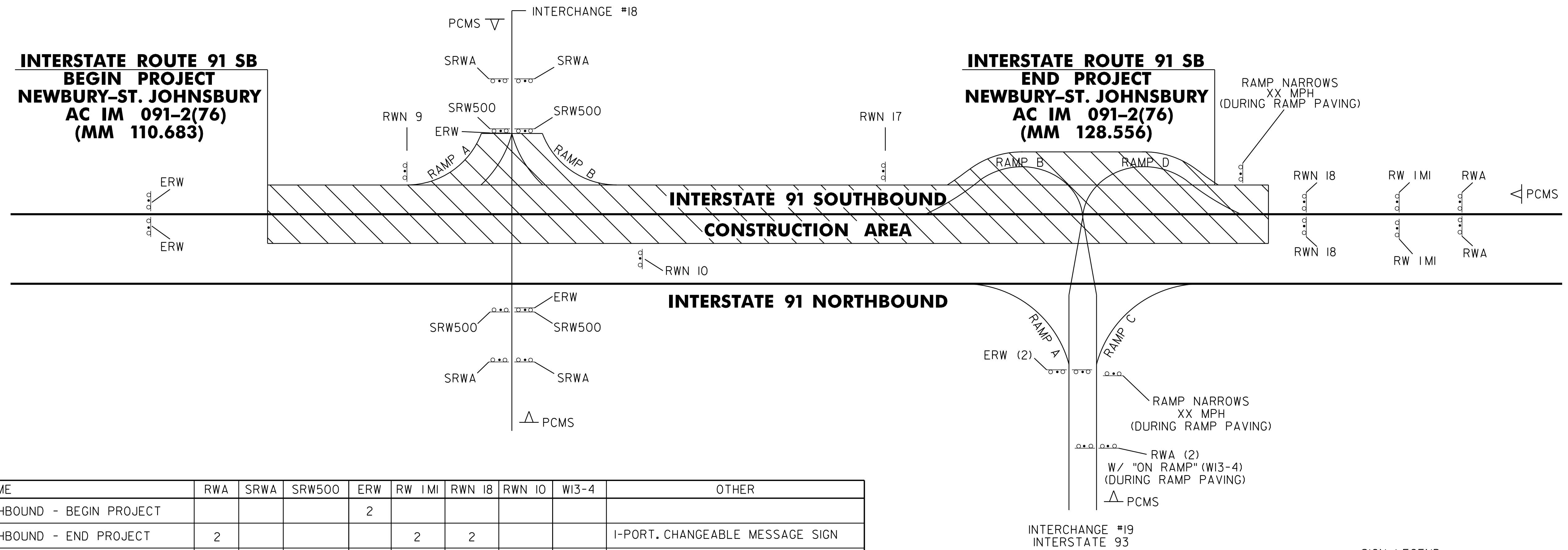
NOT TO SCALE

**EXIT 19 OFF RAMP DETAIL SHEET**

PROJECT NAME: NEWBURY-ST. JOHNSBURY	
PROJECT NUMBER: AC IM 091-2(76)	
FILE NAME: 06a046	PLOT DATE: 29-JUL-2014 16:46
PROJECT LEADER: PTS	DRAWN BY: JLS
DESIGNED BY: NLL	CHECKED BY: PTS
IPARM FILE NAME: 06A046_32	SHEET 32 OF 33

**INTERSTATE ROUTE 91 SB  
BEGIN PROJECT  
NEWBURY-ST. JOHNSBURY  
AC IM 091-2(76)  
(MM 110.683)**

**INTERSTATE ROUTE 91 SB  
END PROJECT  
NEWBURY-ST. JOHNSBURY  
AC IM 091-2(76)  
(MM 128.556)**



HIGHWAY NAME	RWA	SRWA	SRW500	ERW	RW 1MI	RWN 18	RWN 10	W13-4	OTHER
INTERSTATE 91 SOUTHBOUND - BEGIN PROJECT				2					
INTERSTATE 91 SOUTHBOUND - END PROJECT	2				2	2			I-PORT. CHANGEABLE MESSAGE SIGN
INTERCHANGE #18		4	4	2			1		2-PORT. CHANGEABLE MESSAGE SIGNS
INTERCHANGE #19 (INTERSTATE 93)	2			2				2	I-PORT. CHANGEABLE MESSAGE SIGN
<b>TOTALS</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>4-PORT. CHANGEABLE MESSAGE SIGNS</b>

**CONSTRUCTION APPROACH SIGNING**

**SIGN LEGEND**

RWA	= ROAD WORK AHEAD
RW 1MI	= ROAD WORK 1 MILE
SRWA	= SIDE ROAD WORK AHEAD
SRW500	= SIDE ROAD WORK 500 FT
SRW2500	= SIDE ROAD WORK 2500 FT
ERW	= END ROAD WORK
RWN 10	= ROAD WORK NEXT 10 MILES
RWN 18	= ROAD WORK NEXT 18 MILES
W13-4	= ON RAMP SIGN
	= PORTABLE CHANGEABLE MESSAGE SIGN

**NOTES**

1. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH STANDARD E-103. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10, TRAFFIC CONTROL.
2. PORTABLE CHANGEABLE MESSAGE SIGNS WILL BE PROVIDED FOR USE ALONG THIS PROJECT AND ARE TO BE USED AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL POSITION PORTABLE CHANGEABLE MESSAGE SIGNS WARNING MOTORISTS OF THE EXPECTED ROADWAY CONDITIONS AHEAD. THE MESSAGE TO BE DISPLAYED SHALL BE SUBMITTED TO THE ENGINEER IN ADVANCE FOR APPROVAL. MESSAGES SHOULD BE UPDATED PERIODICALLY TO DESCRIBE THE WORK ACTIVITY OCCURRING SO THAT THE PCMS CONTINUES TO COMMAND THE ATTENTION OF MOTORISTS. THE COST OF PROVIDING THESE MESSAGE SIGNS SHALL BE PAID UNDER ITEM 641.15, PORTABLE CHANGEABLE MESSAGE SIGN.
3. THE BID PRICE FOR ITEM 641.10, TRAFFIC CONTROL, SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, PORTABLE FLASHING ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING AND REMOVING OF THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED IN THE UNIT BID PRICE.
4. THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC DEVICES ARE ERECTED OR PLACED, OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED, THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT, OR REPAIR SHALL CONFORM WITH SUCH STANDARDS.
5. INSTALLATION OF CONSTRUCTION ZONE SIGNING SHALL NOT BLOCK EXISTING SIGN ASSEMBLIES. A MINIMUM OF 200 FEET SHALL BE MAINTAINED BETWEEN ANY EXISTING SIGN AND THE CONSTRUCTION SIGNS.
6. ON VTRANS STANDARD E-103, SIGN W4-2 MAY BE REPLACED WITH W9-2.
7. ALL TEMPORARY SPEED LIMIT SIGNS (R2-1) SHALL INCLUDE "WORK ZONE" SIGN (G20-5aP).
8. SEE VTRANS STANDARD E-100 FOR ADDITIONAL SIGN PLACEMENT DETAILS.
9. CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
10. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VTRANS STANDARDS AND SPECIAL PROVISIONS.
11. DIAMOND SHAPED SIGNS SHALL BE 48" X 48" WITH BLACK TEXT AND BORDER ON A RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
12. RETROREFLECTIVE SHEETING SHALL BE MINIMUM TYPE III OR VIII AS NOTED ON VAOT STANDARD E-100 AND IN THE SPECIAL PROVISIONS.
13. ALL TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON STANDS OR POSTS THAT COMPLY WITH NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP 350).
14. WHERE TEMPORARY SIGNS ARE PLACED BEHIND GUARDRAIL, THEY SHALL BE ADJUSTED SUCH THAT THE BOTTOM OF SIGN IS ABOVE THE TOP OF GUARDRAIL.
15. AS THE PAVING OPERATION MOVES, FLAGGER SIGNS SHALL BE MOVED ACCORDINGLY. AT NO TIME SHOULD THE FLAGGER SYMBOL SIGN BE MORE THAN 1000 FEET FROM THE FLAGGER STATION. FLAGGER SIGNS SHALL BE COVERED OR TURNED AWAY FROM TRAFFIC WHEN FLAGGING OPERATIONS CEASE FOR LONGER THAN 15 MINUTES.
16. BARRELS AND CONES SHALL BE USED TO CLEARLY DEFINE THE TRAVEL SPACE AND PROVIDE SEPARATION FROM THE WORK SPACE ALONG ITS ENTIRE LENGTH.
17. FOR LANE CLOSURES GREATER THAN 1/2 MILE LONG, PLACE ONE TYPE III BARRICADE ACROSS THE CLOSED LANE AT 1500 FOOT INTERVALS.

**TEMPORARY TRAFFIC CONTROL PLAN**

PROJECT NAME:	NEWBURY-ST. JOHNSBURY
PROJECT NUMBER:	AC IM 091-2(76)
FILE NAME:	06a046
PROJECT LEADER:	PTS
DESIGNED BY:	NLL
IPARM FILE NAME:	06A046_33
PLOT DATE:	29-JUL-2014 16:44
DRAWN BY:	JLS
CHECKED BY:	PTS
SHEET	33 OF 33