

INDEX OF SHEETS

- 1. TITLE SHEET
- 2-4. TYPICALS
- 5. WATERBURY REST-AREA (NORTHBOUND)
- 6-8. BLANK
- 9-10. QUANTITY SHEETS
- 11. MAINLINE PAVEMENT MARKING AND GUARD RAIL DETAILS
- 12-14. PAVEMENT AND PAINTING DETAILS
- 15. CONSTRUCTION APPROACH SIGNING
- 16. TRAFFIC SIGN SUMMARY SHEET

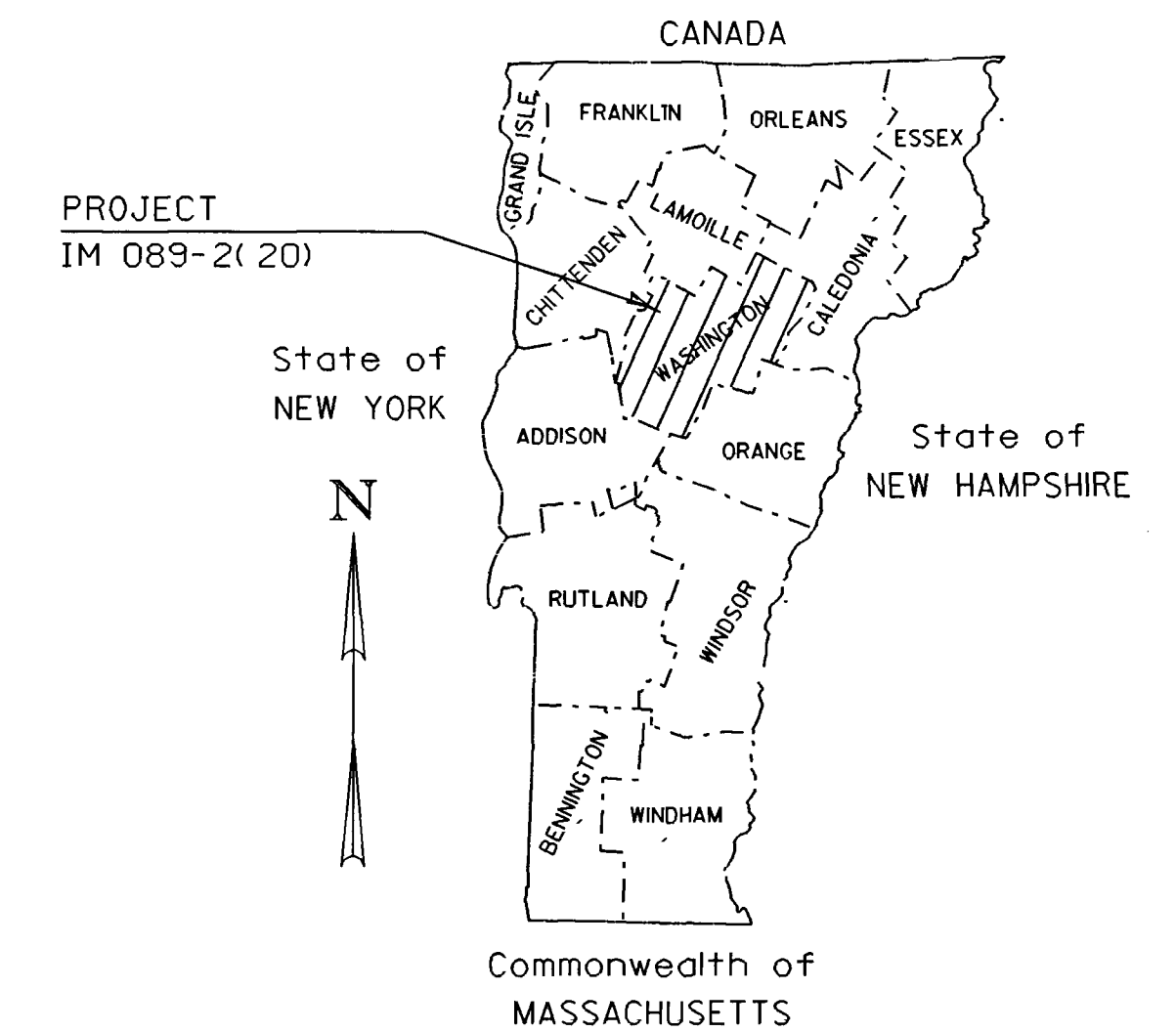
STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT TOWNS OF MONTPELIER - BOLTON COUNTIES OF CHITTENDEN & WASHINGTON INTERSTATE ROUTE 89

BEGINNING AT MM 53.00 ON BOTH NORTHBOUND AND SOUTHBOUND LANES IN THE CITY OF MONTPELIER AND EXTENDING 18.45 MILES NORTH TO MM 71.45 IN BOLTON ON THE NORTHBOUND LANE AND EXTENDING 10.67 MILES NORTH TO MM 63.67 IN WATERBURY ON THE SOUTHBOUND LANE.

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING AND RESURFACING THE NORTHBOUND AND SOUTHBOUND LANES INCLUDING THE WATERBURY NORTHBOUND REST-AREA AND ALL RAMP WITHIN THE PROJECT LIMITS, REMOVING AND RESETING ALL SUBSTANDARD HEIGHT GUARD RAIL AND REPLACING ANY DAMAGED GUARD RAIL.



STANDARDS

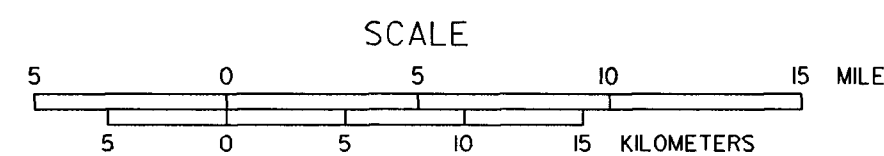
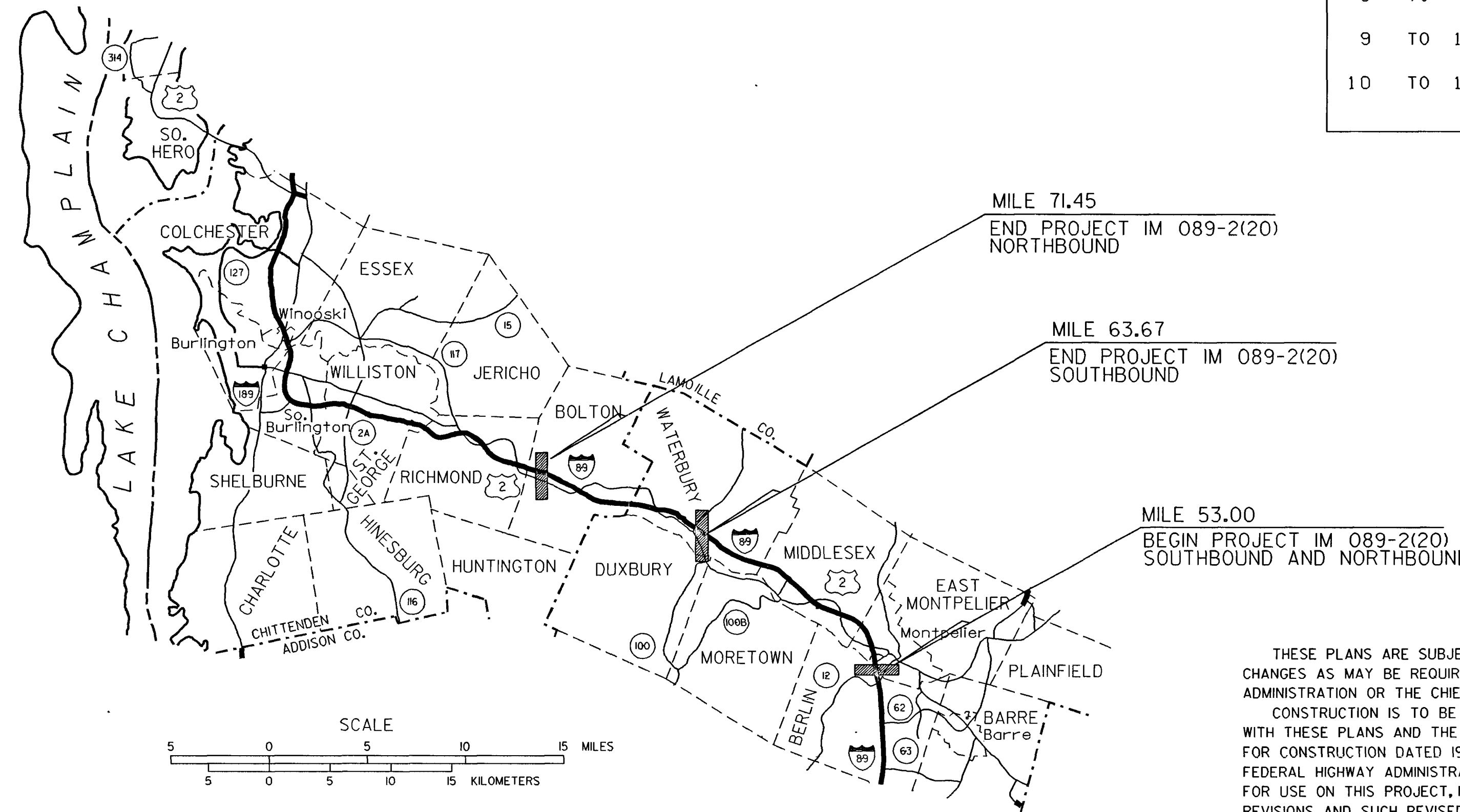
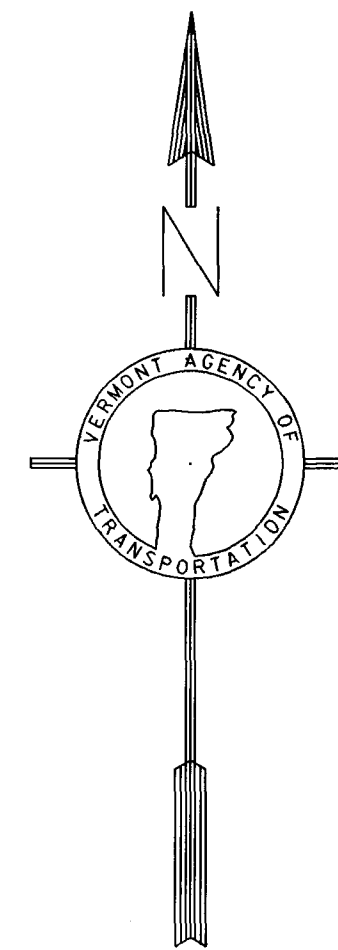
C-1	CURBS, BITUMINOUS CONCRETE SIDEWALKS, GRANITE SLOPE EDGING, VERTICAL GRANITE CURB, CAST IN PLACE CONCRETE CURB, BITUMINOUS CONCRETE CURB AND TREATED TIMBER CURB, SIDEWALK RAMPS	11-16-92
C-3		09-15-93
E-10	APPROACH SIGNS, MINOR MAINTENANCE	02-03-86 R
E-100	CONSTRUCTION APPROACH SIGNS	10-21-92 R
E-101	CONSTRUCTION SIGN DETAILS	10-21-92 R
E-102	CONSTRUCTION SIGN DETAILS	10-21-92 R
E-103	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED	10-21-92 R
E-105	TRAFFIC CONTROL FOR CONSTRUCTION VEHICLES	09-20-93
E-106	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	09-20-93
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	09-20-93 R
E-107A	BREAKAWAY BARRICADE DETAILS	09-20-93 R
E-110	MAJOR MAINTENANCE OPERATION LANE CLOSURE	09-20-93 R
E-120	STANDARD SIGN PLACEMENT-EXPRESSWAY & FREEWAY	06-21-89 R
E-143	REGULATORY SIGN DETAILS	10-30-87
E-150	WARNING SIGN DETAILS	10-30-87
E-160	FLANGED CHANNEL STEEL SIGN POST DETAIL	10-21-92
E-191	PAVEMENT MARKING DETAILS	01-23-89 R
G-1	STEEL BEAM GUARD RAIL, HEAVY DUTY STEEL BEAM GUARD RAIL, TWISTED END TERMINAL, ANCHOR FOR STEEL BEAM RAIL	10-31-85 R
G-6	CABLE GUARD RAIL W/STEEL POSTS - ANCHORS	10-31-85 R
G-15	BREAKAWAY CABLE TERMINAL W/STEEL POSTS	11-13-89 R

TRAFFIC DATA

INTERCHANGE #	1993 ADT	2003 ADT
8 TO 9	NB 11150 SB 9880	14830 13150
9 TO 10	NB 10000 SB 8870	12720 11280
10 TO 11	NB 10500	13360

INTERCHANGE #	ESAL'S (1993-2003)
8 TO 9	NB 2825000 SB 2384000
9 TO 10	NB 2918000 SB 1829000
10 TO 11	NB 3064000

V = 70 MPH



UNLESS OTHERWISE INDICATED, THE DRAWINGS AND DETAILS OF THESE PLANS ARE NOT TO SCALE.

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

CONVENTIONAL SIGNS

COUNTY LINE	---
TOWN LINE	- - - -
LIMITS OF ACCESS	○ ○ ○ ○
POINT OF ACCESS	X
FENCE LINE	- x - x -
STONE WALL	○ ○ ○ ○ ○ ○
TRAVELED WAY	— — — — —
GUARD RAIL	○ ○ ○ ○ ○ ○
RAILROAD	— + — + — + —
SURVEY LINE	+ + + + +
CULVERT	— — — — —
POWER POLE	⊕
TELEPHONE POLE	⊕
TREES	⊕
CONTROL OF ACCESS	///
PROPERTY LINE	— — — — —
R.O.W. TAKING LINE	— — — — —
SLOPE RIGHTS	○ SR △
TOP OF CUT	△
TOE OF SLOPE	○

RECORD PLANS

CONTRACTOR: F. W. WHITCOMB,
 RESIDENT ENGINEER: R. KERR
 CONSTRUCTION BEGAN: Sept. 26, 1994
 CONSTRUCTION COMPLETED: Oct. 2, 1995
 RECORD PLANS BY: R. KERR

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

BY [Signature] RESIDENT ENGINEER
 DATE 2/3/98

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

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE CHIEF ENGINEER. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON MARCH 15, 1990 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD	
APPROVED: <u>[Signature]</u> DATE <u>2/3/98</u>	DIRECTOR OF ENGINEERING
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED: <u>[Signature]</u> DATE <u>6-30-94</u>	DIVISION ADMINISTRATOR
PROJECT	Montpelier-Bolton IM 089-2(20)
SHEET 1 OF 16 SHEETS	

NORTHBOUND AND SOUTHBOUND MAINLINE TYPICAL SECTIONS AND PAVEMENT MARKINGS

(SHOWN IN DIRECTION OF TRAVEL)

SEEDING FORMULA RURAL AREAS

% 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 TREFLOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

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

SEED- TO BE APPLIED PER SEEDING FORMULA 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 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.

TRAVEL, PASSING, ACCELERATION & DECELERATION LANES:

$\frac{3}{4}$ " OPEN GRADED ASPHALT FRICTION COURSE (409.25)
 $\frac{1}{2}$ " BITUMINOUS CONCRETE PAVEMENT, TYPE III (406.25)
 $2\frac{1}{2}$ " BITUMINOUS CONCRETE PAVEMENT, TYPE I (406.25)
 EMULSIFIED ASPHALT TO BE APPLIED UNDER ALL LIFTS OF PAVEMENT (EXCEPT OPEN GRADED ASPHALT FRICTION COURSE UNLESS TYPE III HAS BEEN EXPOSED TO TRAFFIC OVER THE WINTER MONTHS) @ 0.015 GAL/S.Y. OR AS DIRECTED BY THE ENGINEER (404.65)
 $2\frac{1}{2}$ " COLD PLANING-BITUMINOUS PAVEMENT (210.10)

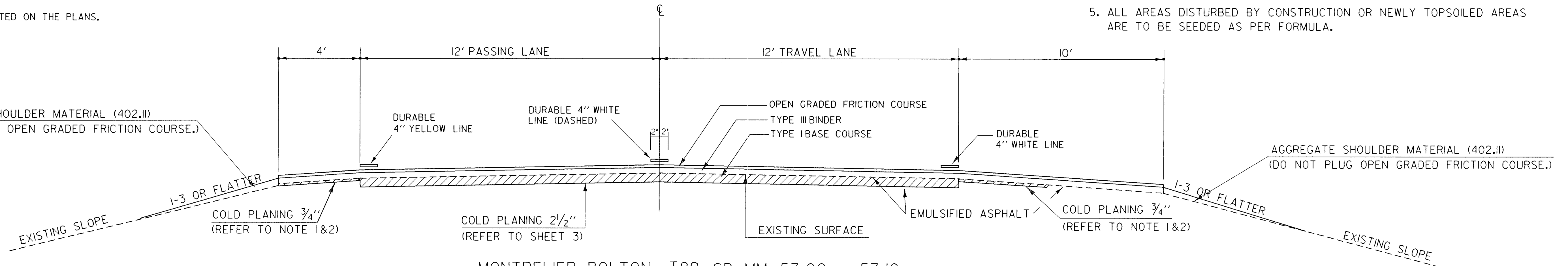
SHOULDER: $\frac{3}{4}$ " OPEN GRADED ASPHALT FRICTION COURSE (409.25)
 $\frac{1}{2}$ " BITUMINOUS CONCRETE PAVEMENT, TYPE III (406.25)
 EMULSIFIED ASPHALT TO BE APPLIED UNDER ALL LIFTS OF PAVEMENT @ 0.015 GAL/S.Y. OR AS DIRECTED BY THE ENGINEER (404.65)
 LEVEL AS REQUIRED

MATERIAL TOLERANCES:

PAVEMENT $\pm \frac{1}{4}$ "

- NOTES:
1. NORTHBOUND FROM MM 53.00 TO 58.71 COLD PLANE PASSING AND TRAVEL LANES TO A DEPTH OF $\frac{3}{4}$ " (TRANSITION COLD PLANING FROM $2\frac{1}{2}$ " TO $\frac{3}{4}$ " IN 100'). COLD PLANE 4' SHOULDER TO A DEPTH OF $\frac{3}{4}$ " AND COLD PLANE FIRST 4' OF 10' SHOULDER TO A DEPTH OF $\frac{3}{4}$ ".
 2. SOUTHBOUND FROM MM 53.10 TO 58.69 COLD PLANE PASSING AND TRAVEL LANES TO A DEPTH OF $\frac{3}{4}$ " (TRANSITION COLD PLANING FROM $2\frac{1}{2}$ " TO $\frac{3}{4}$ " IN 100'). COLD PLANE 4' SHOULDER TO A DEPTH $\frac{3}{4}$ " AND COLD PLANE FIRST 2' OF THE 10' SHOULDER TO A DEPTH OF $\frac{3}{4}$ ".
 3. REFER TO SHEET 3 AND 4 FOR PAVING/COLD PLANING DETAILS.
 4. AN ESTIMATED QUANTITY OF TOPSOIL IS INCLUDED FOR THE PROJECT FOR TREATMENT OF AREAS DISTURBED BY CONSTRUCTION IF DEEMED NECESSARY BY THE ENGINEER.
 5. ALL AREAS DISTURBED BY CONSTRUCTION OR NEWLY TOPSOILED AREAS ARE TO BE SEEDED AS PER FORMULA.

AGGREGATE SHOULDER MATERIAL (402.11)
(DO NOT PLUG OPEN GRADED FRICTION COURSE.)



MONTPELIER BOLTON I89: SB MM 53.00 ~ 53.10
 SB MM 53.10 ~ 58.69 (REFER TO NOTE 2 FOR COLD PLANING DETAILS)
 SB MM 58.69 ~ 63.67
 NB MM 53.00 ~ 58.71 (REFER TO NOTE 1 FOR COLD PLANING DETAILS)
 NB MM 58.71 ~ 71.45

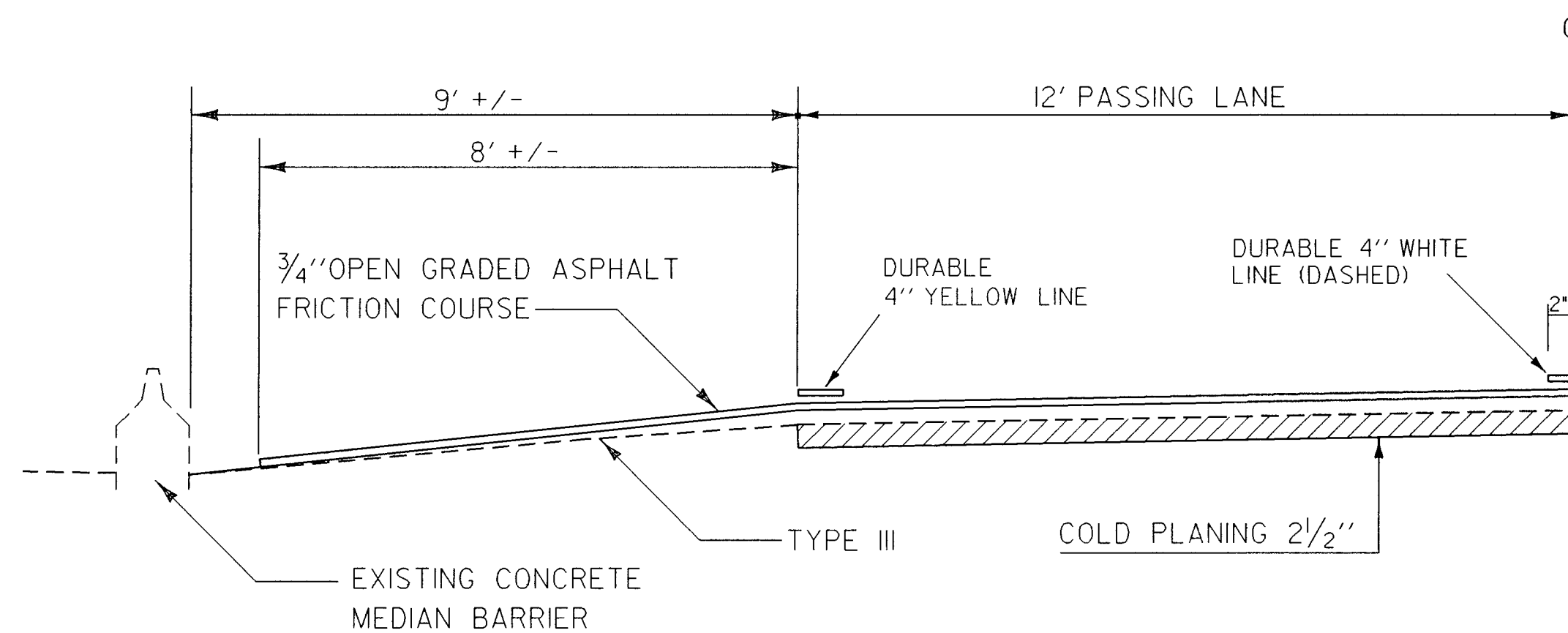
NORTHBOUND MEDIAN BARRIER SHOULDER TYPICAL

(MM 67.00 ~ 68.67)

INSIDE SHOULDER: $\frac{1}{2}$ " BITUMINOUS CONCRETE PAVEMENT TYPE III @ EDGE OF MAINLINE AND TAPERING DOWN TO 0" AT FACE OF BARRIER.

$\frac{3}{4}$ " OPEN GRADED ASPHALT FRICTION COURSE ENDING AT A POINT 1'-0" FROM FACE OF BARRIER.

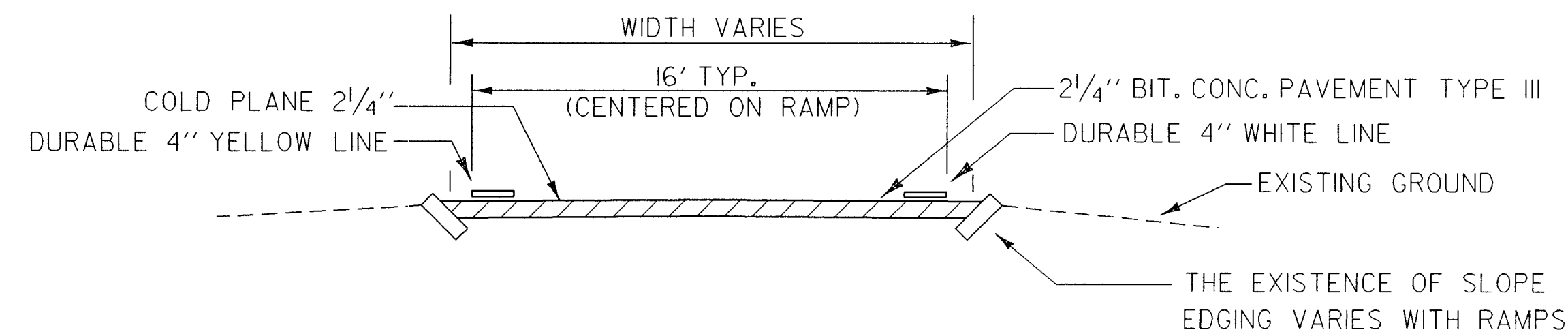
EMULSIFIED ASPHALT TO BE APPLIED @ 0.015 GAL/S.Y. OR AS DIRECTED BY THE ENGINEER.



NOTE:
REFER TO MAINLINE TYPICAL FOR TRAVEL LANE AND OUTSIDE SHOULDER DETAILS.

RAMP PAVEMENT TYPICAL

(SHOWN IN DIRECTION OF TRAVEL)



NOTES: $2\frac{1}{4}$ " BITUMINOUS CONCRETE PAVEMENT, TYPE III (406.25)
 $2\frac{1}{4}$ " COLD PLANING BITUMINOUS PAVEMENT (210.10)
 EMULSIFIED ASPHALT TO BE APPLIED @ 0.015 GAL/S.Y. OR AS DIRECTED BY THE ENGINEER.

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ON CARD 15

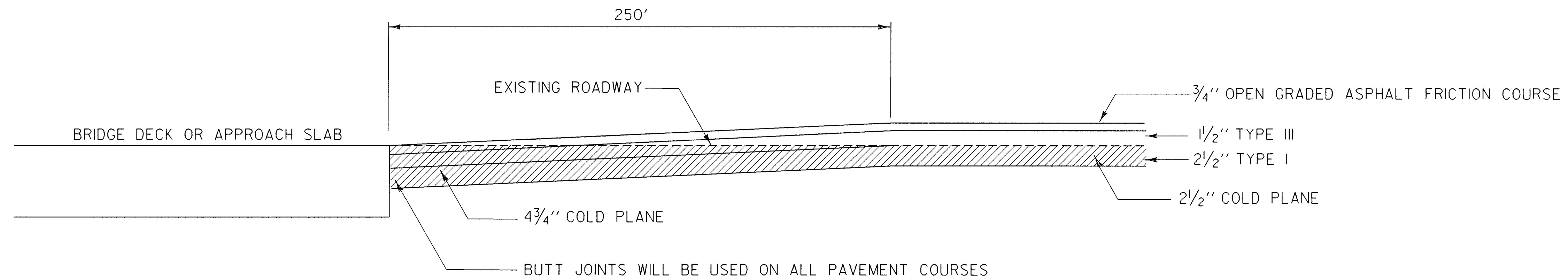
TYPICAL SECTIONS

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	P.J. ROSS	DATE	1-94
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DESIGN FILE NO.	/sqda/92all3/dall3a.dgn		
IPARM FILE	dall3+0Li	DATE PLOTTED	11-APR-1997
PROJ. NAME	Montpelier-Bolton		
PROJ. NO.	IM 089-2(20)		
SHEET	2	OF	16 SHEETS

N.T.S.

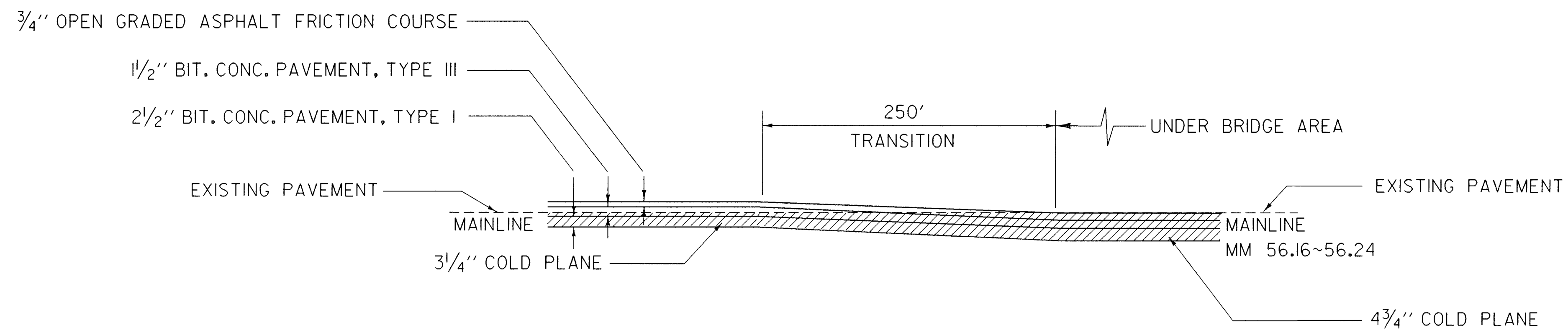
BRIDGE APPROACH AND BUTT JOINT DETAIL

(APPROACH DETAIL - NORTHBOUND & SOUTHBOUND MAINLINE)



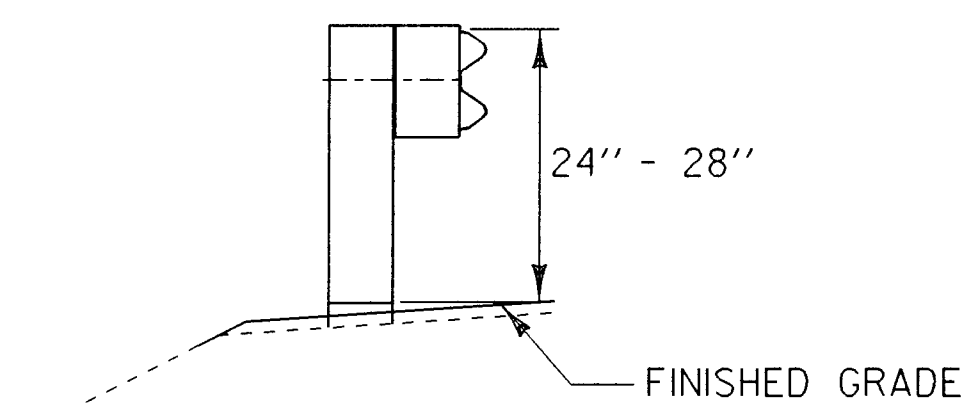
PAVEMENT TRANSITION DETAIL

(COLD PLANE TRANSITION AT BRIDGE #44 FROM MM 56.16~56.24)



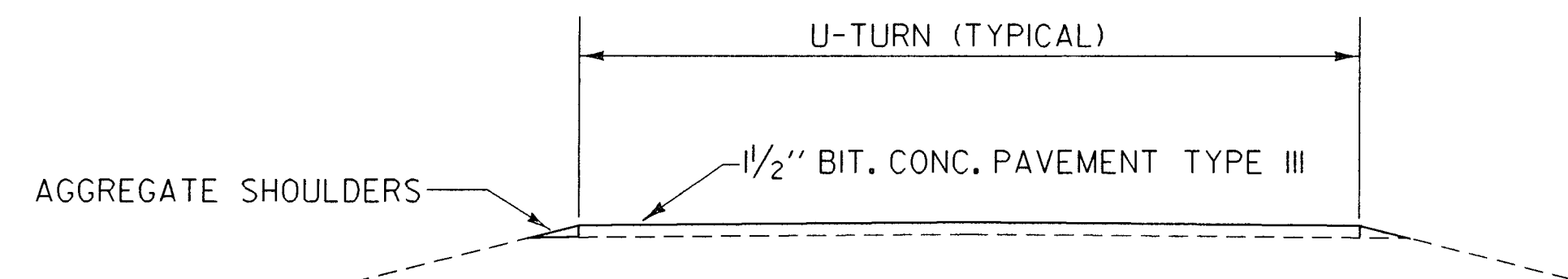
NOTES: COLD PLANING TRANSITION AREA WILL BE PLANED FROM 3 1/4" TO 4 3/4" IN 250' TO MATCH EXISTING ELEVATION OF MAINLINE PAVEMENT.

GUARD RAIL HEIGHT TYPICAL



- NOTES:
1. STEEL BEAM GUARD RAIL WILL BE REMOVED AND RESET IF HEIGHT IS NOT WITHIN ALLOWABLE TOLERANCE OF 24" TO 28" ABOVE FINISHED GRADE.
 2. THE RESET HEIGHT WILL BE 27" WHICH IS CONSISTENT WITH STANDARD G-1.

U-TURN PAVEMENT TYPICAL



- U-TURN LOCATIONS:
- MM 52.50
 - MM 54.91
 - MM 58.33
 - MM 59.49
 - MM 61.34
 - MM 62.65

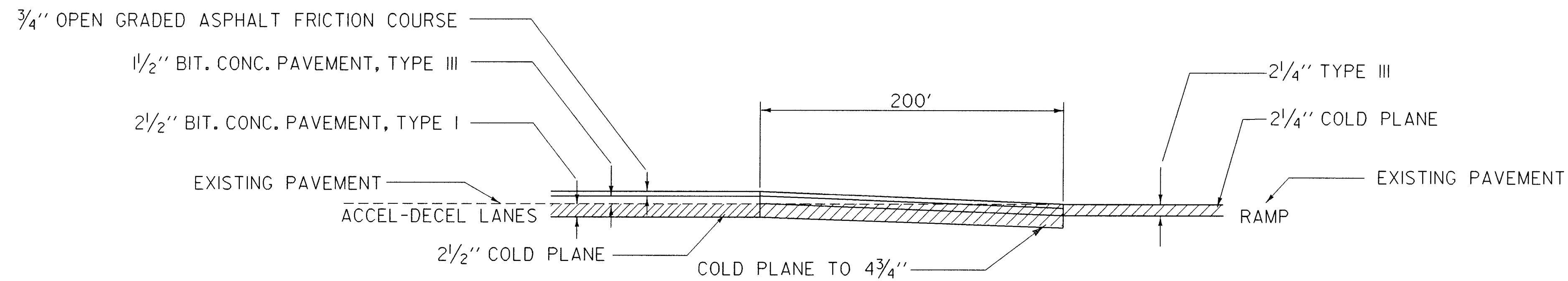
ARCHIVED
ON CAD 13

DETAILS

SURVEYED BY	N/A	DATE	
DRAWN BY	P.J. Ross	DATE	2/94
SQUAD LEADER	Portolupi		
DESIGN FILE NO.	/usr/const/92all3/call3ab		
IPARM FILE	dall3+02.i	DATE PLOTTED	11-APR-1997
PROJ. NAME	Montpelier-Bolton		
PROJ. NO.	IM 089-2(20)		
SHEET	3	OF	16 SHEETS

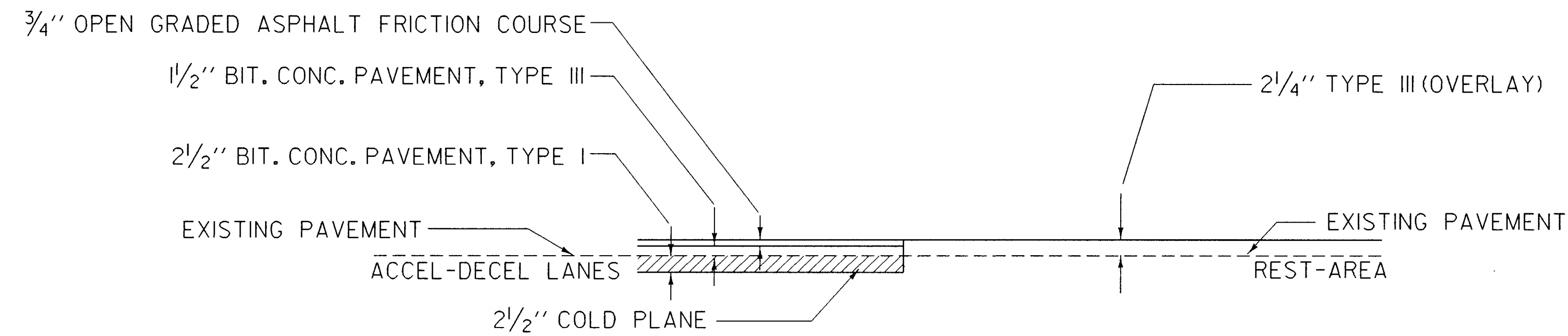
N. T. S.

RAMP TO ACCEL-DECEL LANE COLD PLANE TRANSITION DETAIL



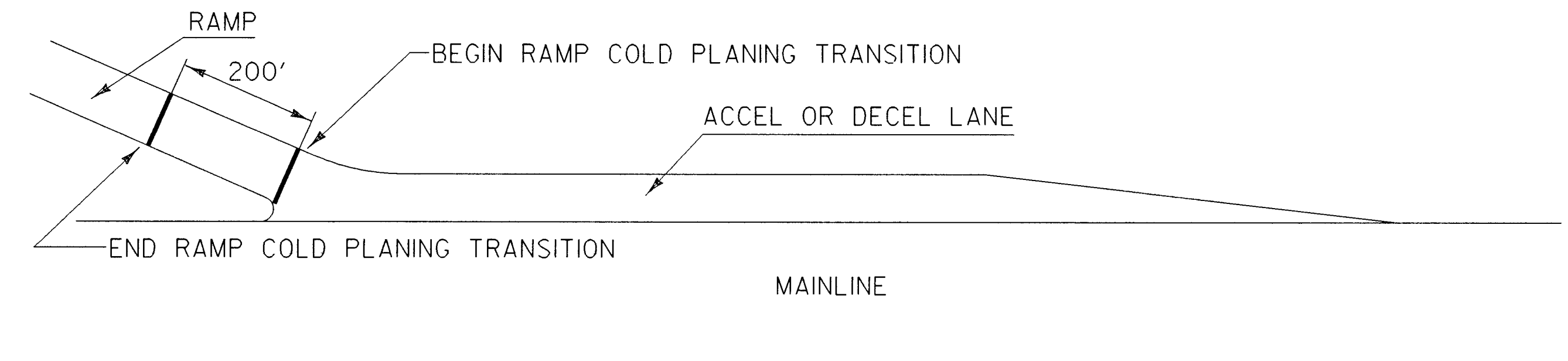
NOTE: COLD PLANING TRANSITION AREA WILL BE PLANED FROM 2 1/2"~4 3/4" TO MATCH ACCEL-DECEL LANE PAVEMENT (IN THE CASE WHERE OPEN GRADED ASPHALT FRICTION COURSE IS NOT PLACED IN THE SAME SEASON, COLD PLANE TRANSITION SHOULD BE MODIFIED TO 2 1/2"~4" IN 200'. THE NEXT SEASON OPEN GRADED ASPHALT FRICTION COURSE WILL BE BUTTED INTO THE RAMP.) (REFER TO PLAN VIEW BELOW)

ACCEL-DECEL LANE TO REST-AREA BUTT JOINT DETAIL

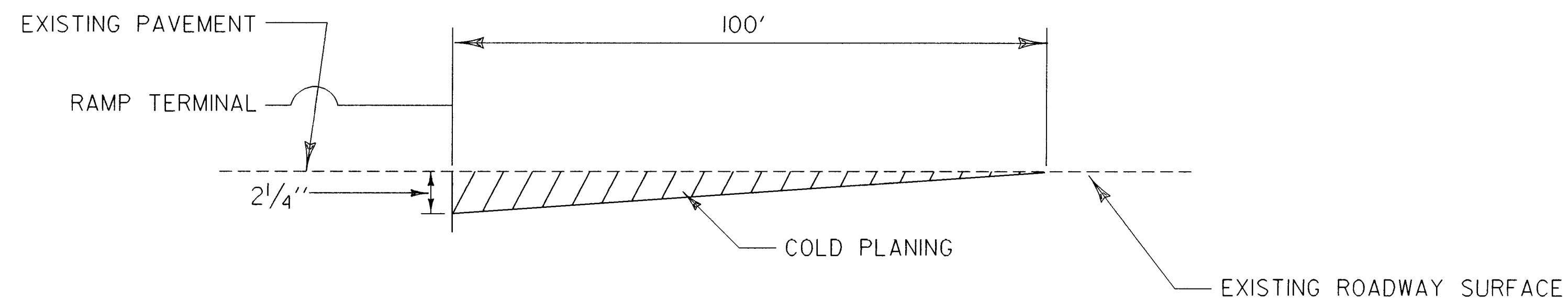


NOTE: COLD PLANE BUTT JOINT LOCATION IS SHOWN ON THE LAYOUT SHEET.

RAMP TO ACCEL-DECEL LANE DETAIL



RAMP COLD PLANE DETAIL



**APPROVED
ON CARD**

DETAILS

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DRAWN BY	P.J. ROSS	DATE	1-94
SQUAD LEADER	Portolupi		
DESIGN FILE NO.	/sqda/92dl13/dal13a.dgn		
IPARM FILE	dal13+03.i	DATE PLOTTED	11-APR-1997
PROJ. NAME	Montpelier-Bolton		
PROJ. NO.	IM 089-2(20)		
SHEET	4	OF	16 SHEETS

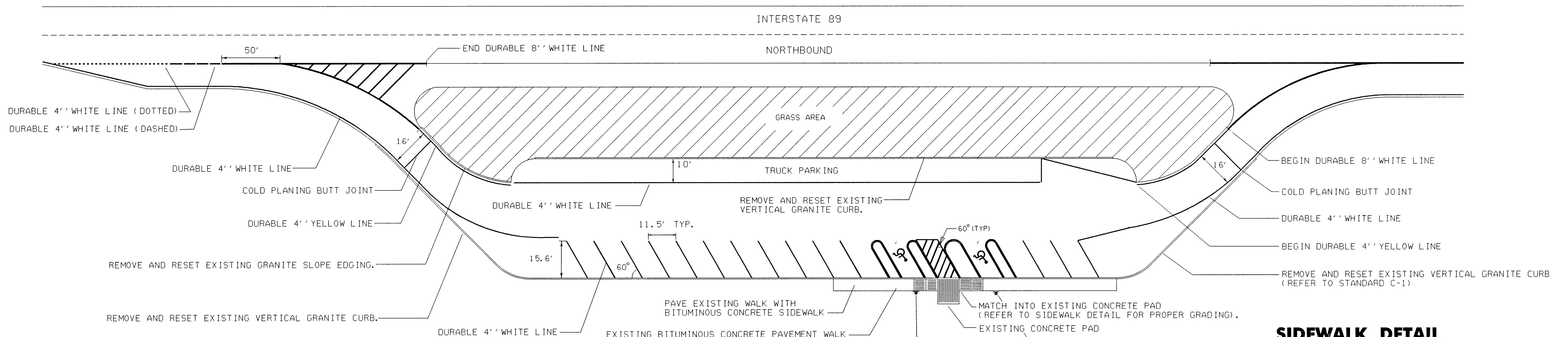
N.T.S.

I-89 NORTHBOUND WATERBURY REST-AREA

(PAVEMENT MARKINGS, PAVEMENT AND SIDEWALK UPGRADE DETAILS)

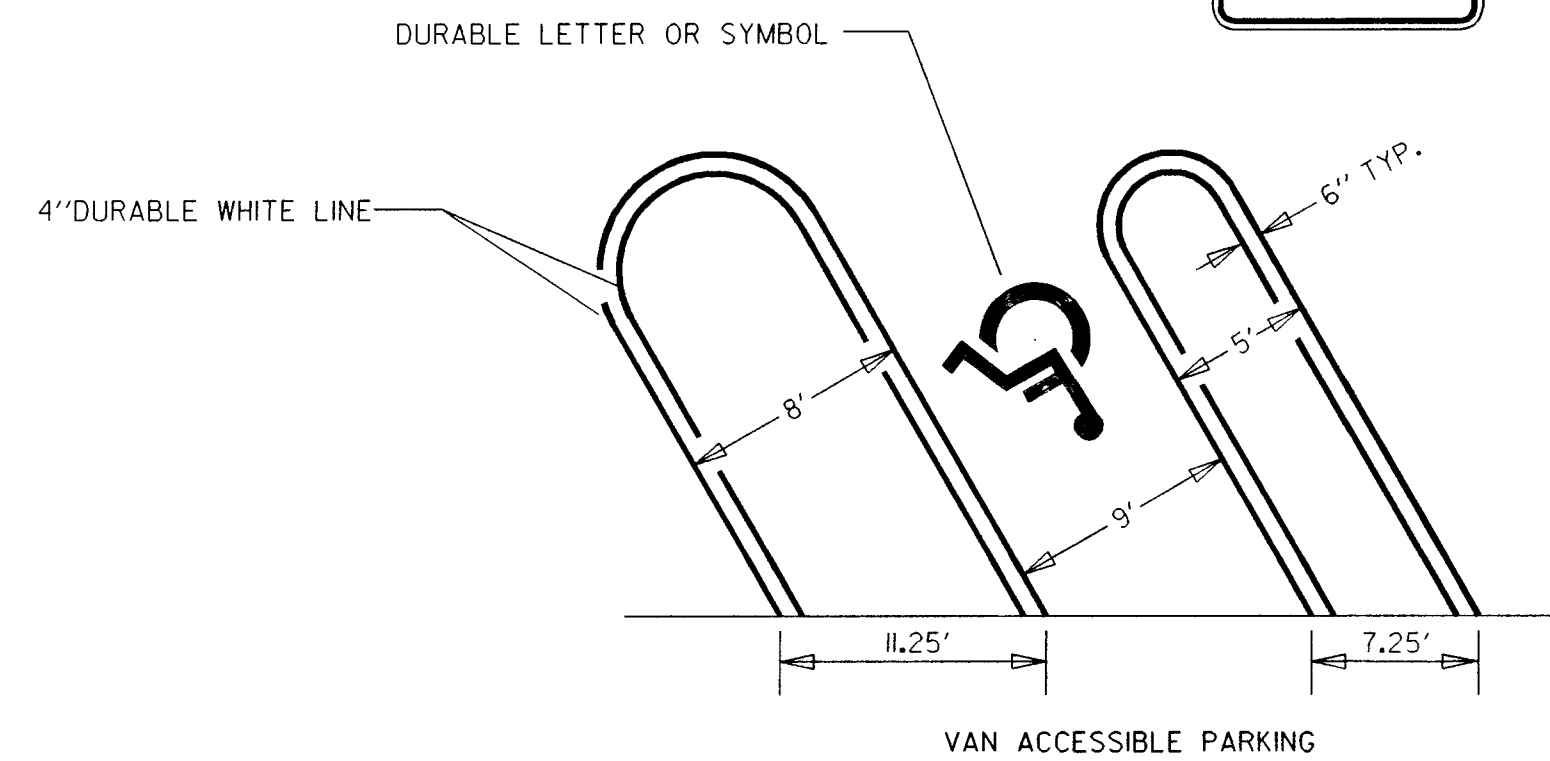
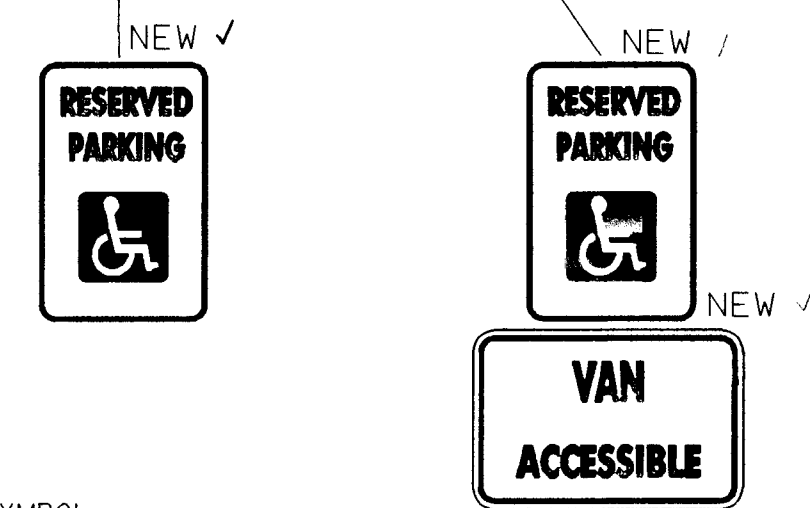
REST-AREA MAINLINE: 2 1/4" OVERLAY OF BITUMINOUS CONCRETE PAVEMENT, TYPE III.

ACCELERATION &
DECELERATION LANES: RAMPS WILL BE COLD PLANED AS SHOWN ON TYPICAL SHEET 4
(REST-AREA ACCEL/DECEL LANE BUTT JOINT DETAIL)

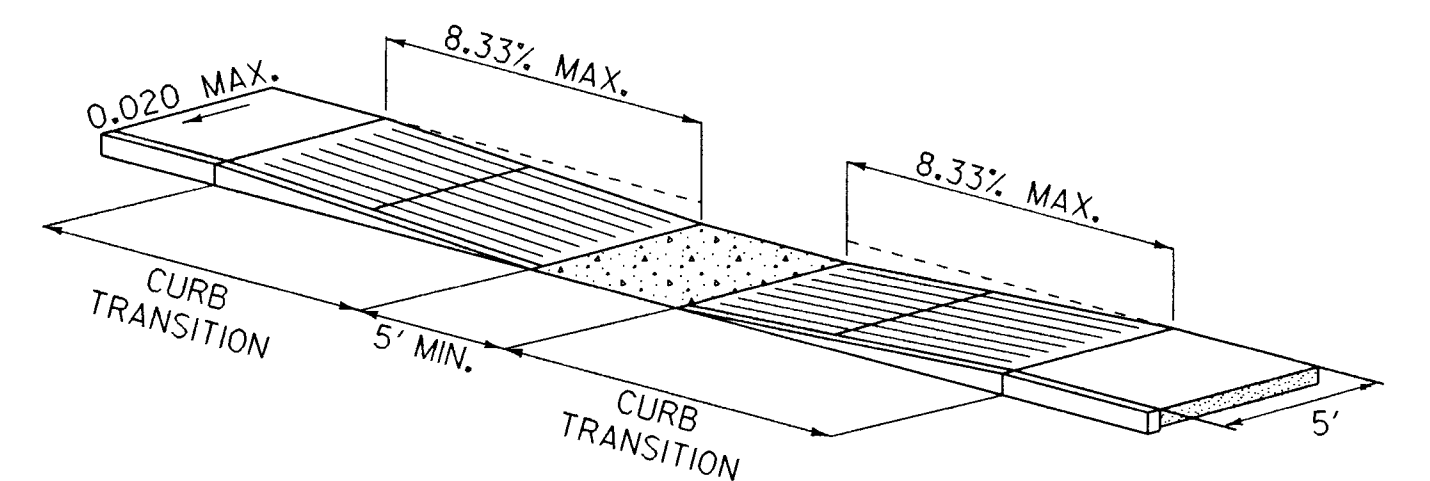


NOTE: REMOVAL OF EXISTING SIDEWALK IS ALL COMMON EXCAVATION.

NOTE: REMOVED TWO SIGNS AT THIS LOCATION



SIDEWALK DETAIL



NOTE: CONCRETE SIDEWALK WILL HAVE EXPOSED AGGREGATE SURFACE.

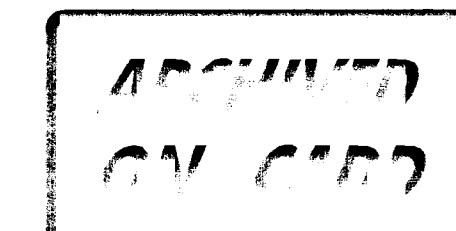
REST AREA DETAIL

SURVEYED BY: N/A DATE: N/A
DRAWN BY: P.J. ROSS DATE: 4-92
SQUAD LEADER: Portolupi
DESIGN FILE NO.: /sqda/92all3/dall3a.dgn
iparm FILE: dall3+04.iparm DATE: PLOTTED 11-APR-1997

PROJ. NAME: Montpelier-Bolton

PROJ. NO.: IM 089-2(20)

SHEET 5 OF 16 SHEETS



N.T.S.

QUANTITY SHEET

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

SUMMARY OF ESTIMATED QUANTITIES

	FINAL	EROSION CONTROL	EMPLOYEE TRAINEESHIP	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
	1.3			15	15	CY	COMMON EXCAVATION	203.15	-
	486097			487600	487600	SY	COLD PLANING-BIT. PAVEMENT	210.10	-
	0			12	12	CY	SUBBASE OF GRAVEL	301.15	EST.
	4665.46			6000	6000	CY	AGGREGATE SHOULDERS, TRUCK MEASURE	402.11	EST.
	2485.6			2850	2850	CWT	EMULSIFIED ASPHALT	404.65	-
	113405.62			115400	115400	TON	BITUMINOUS CONCRETE PAVEMENT	406.25	-
	112661.86			1	1	LS	PRICE ADJUSTMENT ASPHALT CEMENT N. A. B. I.	406.50	-
	29460.97			27500	27500	TON	OPEN GRADED ASPHALT FRICTION COURSE	409.25	-
	4			10	10	EA	CHANGING ELEV. OF DI'S, CB'S OR MANHOLES	604.40	EST.
	5			10	10	EA	CAST IRON GRATE WITH FRAME, TYPE B	604.46	EST.
	23.5			1	1	HR	ALL PURPOSE EXCAVATOR RENTAL N. A. B. I.	608.25	EST.
	97			260	260	HR	POWER BROOM RENTAL	608.30	EST.
	0			1	1	HR	TRUCK RENTAL N. A. B. I.	608.37	EST.
	12			1	1	HR	LOADER RENTAL TYPE II N. A. B. I.	608.41	EST.
	0			20	20	LF	GRANITE SLOPE EDGING	616.20	EST.
	8			200	200	LF	VERTICAL GRANITE CURB	616.21	EST.
	890			880	880	LF	REMOVING AND RESETTING CURB	616.40	EST.
	0			25	25	LF	REMOVAL OF EXISTING CURB (MODIFIED)	616.41	EST.
	11.83			12	12	SY	PORTLAND CEMENT CONC. SIDEWALK 5' (EXPOSED AGGREGATE SURFACE)	618.10	-
	8			6	6	TON	BITUMINOUS CONCRETE SIDEWALK	618.15	-
	12362.5			8750	8750	LF	REMOVING AND RESETTING GUARD RAIL	621.75	12.5
	17			20	20	EA	REPLACE GUARD RAIL POST ASSEMBLY	621.76	EST.
	41			10	10	EA	REPLACE GUARD RAIL BEAM UNIT	621.77	EST.
	487.5			125	125	LF	REMOVAL AND DISPOSAL OF GUARD RAIL	621.80	EST.
	0			1600	1600	HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.
	3919			3200	3200	HR	FLAGGERS	630.15	EST.
	1			1	1	LS	FIELD OFFICE-ENGINEERS	631.10	-
	1			1	1	LS	TESTING EQUIPMENT - BITUMINOUS	631.17	-
	1.49			1	1	LS	FIELD OFFICE TELEPHONE N. A. B. I.	631.25	-
	727		1560		1560	HR	EMPLOYEE TRAINEESHIP	634.10	EST.
	1			1	1	LS	MOBILIZATION	635.10	EST.
	1			1	1	LS	TRAFFIC CONTROL	641.10	EST.
	1702			1600	1600	HR	TRAFFIC OFFICERS W/FLASHING LIGHT	641.35	EST.
	40173			212800	212800	LF	4' WHITE LINE	646.20	23
	33057			165600	165600	LF	4' YELLOW LINE	646.21	11
	0			1550	1550	LF	8' WHITE LINE	646.22	-
	204050			212800	212800	LF	DURABLE 4' WHITE LINE	646.40	23
	163102			165600	165600	LF	DURABLE 4' YELLOW LINE	646.41	11

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
COLD PLANING - BITUMINOUS PAVEMENT		
176469	SY	SOUTHBOUND MAINLINE
279876	SY	NORTHBOUND MAINLINE
12677	SY	EXIT 8, RAMPS(A, B, C, D) & ACCEL/DECEL LANES
9437	SY	EXIT 9, RAMPS(A, B, C, D) & ACCEL/DECEL LANES
6806	SY	EXIT 10, RAMPS(B, C, H) & ACCEL/DECEL LANES
2222	SY	REST-AREA ACCEL/DECEL LANES
113	SY	ROUNDING
487600	SY	TOTAL
BITUMINOUS CONCRETE PAVEMENT		
33382	TON	SOUTHBOUND MAINLINE
57722	TON	NORTHBOUND MAINLINE
19931	TON	SHOULDERS
1536	TON	EXIT 8, RAMPS(A, B, C, D) & ACCEL/DECEL LANES
1179	TON	EXIT 9, RAMPS(A, B, C, D) & ACCEL/DECEL LANES
850	TON	EXIT 10, RAMPS(B, C, H) & ACCEL/DECEL LANES
715	TON	REST-AREA & ACCEL/DECEL LANES
40	TON	U-TURNS
45	TON	ROUNDING
115400	TON	TOTAL
EMULSIFIED ASPHALT		
562	CWT	SOUTHBOUND MAINLINE
971	CWT	NORTHBOUND MAINLINE
1192	CWT	SHOULDERS
16	CWT	EXIT 8, RAMPS(A, B, C, D) & ACCEL/DECEL LANES
12	CWT	EXIT 9, RAMPS(A, B, C, D) & ACCEL/DECEL LANES
9	CWT	EXIT 10, RAMPS(B, C, H) & ACCEL/DECEL LANES
10	CWT	REST-AREA & ACCEL/DECEL LANES
2	CWT	U-TURNS
76	CWT	ROUNDING
2850	CWT	TOTAL

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
OPEN GRADED ASPHALT FRICTION COURSE		
6259	TON	SOUTHBOUND MAINLINE
10824	TON	NORTHBOUND MAINLINE
9966	TON	SHOULDERS
356	TON	ACCEL/DECEL LANES
95	TON	ROUNDING
27500	TON	TOTAL

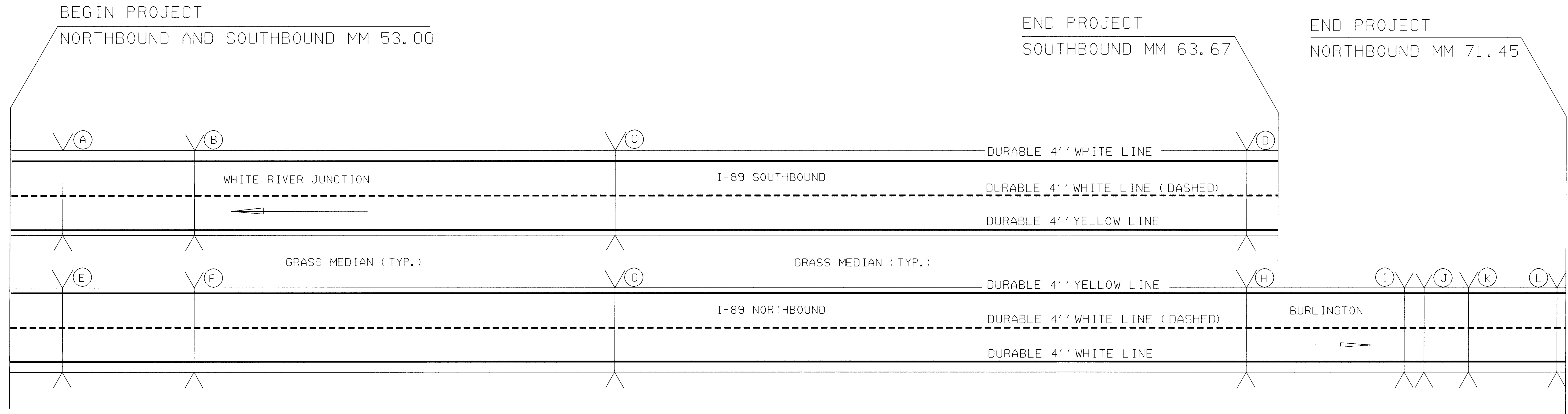
**APPROVED
CIVIL ENGINEER**

SURVEYED BY N/A DATE N/A
 DRAWN BY N/A DATE N/A
 SQUAD LEADER Portalupi
 DESIGN FILE NO. /sqda/92all3/dall3a.dgn
 IPARM FILE dall3asl.i DATE PLOTTED 11-APR-1997
 PROJ. NAME Montpelier-Bolton
 PROJ. NO. IM 089 - 2(20)
 SHEET 9 OF 16 SHEETS

PAVEMENT MARKING, GUARDRAIL AND BRIDGE DETAILS

MAINLINE

APPROX. NORTH



REM. AND RESET. GUARD RAIL **REMOVING AND RESETTING GUARD RAIL**

SOUTHBOUND:		SOUTHBOUND:	
MM 54.05-54.05 RT	12.5 LF	MM 58.73 ~ 58.85 RT	650.0 LF
MM 56.73-56.95 RT	1175 LF	MM 56.18 ~ 56.24 LT	300.0 LF
MM 57.33-58.00 RT	3587.5 LF		
MM 58.74-58.75 RT	37.5 LF		
MM 59.07-59.08 RT	25 LF		
MM 59.22-59.23 RT	25 LF		
NORTHBOUND:		NORTHBOUND:	
MM 54.75-54.79 RT	379 LF	MM 53.78 ~ 54.01 RT	1250.0 LF
MM 57.33-57.95 RT	3312.5 LF	MM 54.75 ~ 54.79 RT	212.5 LF
MM 58.87-59.17 RT	1487.5 LF	MM 54.80 ~ 54.94 RT	625.0 LF
MM 59.37-59.57 RT	950 LF	MM 56.18 ~ 56.23 LT	362.5 LF
MM 63.58-63.63 RT	275 LF	MM 58.46 ~ 58.59 RT	337.5 LF
MM 65.14-65.15 RT	12.5 LF	MM 58.66 ~ 58.71 RT	125.0 LF
MM 66.68-66.70 RT	75 LF	MM 58.87 ~ 59.17 RT	1575.0 LF
MM 66.72-66.73 RT	37.5 LF	MM 60.60 ~ 60.69 RT	450.0 LF
MM 69.16-69.18 RT	125 LF	MM 63.35 ~ 63.37 RT	162.5 LF
MM 70.42-70.54 RT	600 LF	MM 63.35 ~ EXIT RAMP RT	462.5 LF
MM 70.62-70.68 RT	250 LF	MM 63.35 ~ EXIT RAMP LT	450.0 LF
		MM 63.58 ~ 63.63 LT	275.0 LF
		MM 63.78 ~ 63.79 LT	325.0 LF
		MM 70.42 ~ 70.54 RT	625.0 LF
		MM 70.53 ~ 70.55 LT	112.5 LF
		MM 70.60 ~ 70.64 LT	175.0 LF
		MM 70.60 ~ 70.65 RT	262.5 LF

NOTES:
 REMOVE AND RESET IN THE SAME LOCATION, BUT AT A HEIGHT CONSISTENT WITH STANDARD SHEET G-1.
 REFER TO SHEET 3 FOR HEIGHT TOLERANCES, GUARD RAIL HEIGHT TYPICAL.

BRIDGE DETAILS (BRIDGES ARE NOT TO BE PAVED OR COLD PLANED)

SOUTHBOUND:	
A. BRIDGE #42 S-MM	53.40
B. BRIDGE #43 S-MM	54.80
C. BRIDGE #45 S-MM	58.71
D. BRIDGE #46 S-MM	63.53
NORTHBOUND:	
E. BRIDGE #42 N-MM	53.40
F. BRIDGE #43 N-MM	54.80
G. BRIDGE #45 N-MM	58.71
H. BRIDGE #46 N-MM	63.53
I. BRIDGE #48 N-MM	65.24
J. BRIDGE #49 N-MM	65.37
K. BRIDGE #50 N-MM	66.64
L. BRIDGE #51 N-MM	70.58

WATERBURY INTERCHANGE #10 (RAMP A):
 BRIDGE #46A
 NOTE: REFER TO SHEET 3 FOR BRIDGE BUTT JOINT DETAIL.

CHANGING ELEVATION OF DI'S, CB'S, OR MH'S.

SB MM 57.81 RT
SB MM 57.90 RT
NB MM 67.45 LT
NB MM 68.44 LT

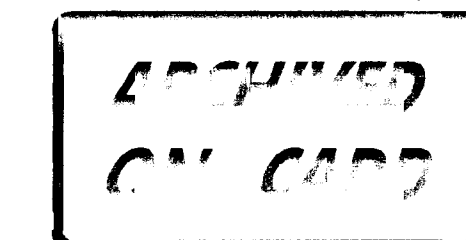
PAVEMENT MARKING DETAILS

SOUTHBOUND:		NORTHBOUND:	
DURABLE 4' WHITE LINE	MM 53.00~63.67 (12' RT) (SOLID)	DURABLE 4' WHITE LINE	MM 53.00~63.67 (12' RT) (SOLID)
DURABLE 4' YELLOW LINE	MM 53.00~63.00 (CL) (DASHED)	DURABLE 4' WHITE LINE (DASHED)	MM 53.00~63.00 (CL) (DASHED)
DURABLE 4' YELLOW LINE	MM 53.00~63.00 (CL) (DASHED)	DURABLE 4' YELLOW LINE	MM 53.00~63.00 (CL) (DASHED)
DURABLE 4' YELLOW LINE	MM 53.00~63.67 (12' LT) (SOLID)	DURABLE 4' YELLOW LINE	MM 53.00~63.67 (12' LT) (SOLID)
SOUTHBOUND:	TEMPORARY 4' WHITE LINE	NORTHBOUND:	TEMPORARY 4' WHITE LINE
MM 53.00~63.67 (12' RT) (SOLID)	MM 53.00~63.67 (12' RT) (SOLID)	MM 53.00~63.67 (12' RT) (SOLID)	MM 53.00~63.67 (12' RT) (SOLID)
MM 53.00~63.00 (CL) (DASHED)	MM 53.00~63.00 (CL) (DASHED)	MM 53.00~63.00 (CL) (DASHED)	MM 53.00~63.00 (CL) (DASHED)
TEMPORARY 4' YELLOW LINE	MM 53.00~63.67 (12' LT) (SOLID)	TEMPORARY 4' YELLOW LINE	MM 53.00~63.67 (12' LT) (SOLID)

NOTE: IF OPEN GRADED ASPHALT FRICTION COURSE IS NOT PLACED IN THE SAME SEASON AS OTHER PAVEMENT COURSES THEN PAINT WILL BE USED THROUGH THE WINTER.

DATUM

VERTICAL	N/A
HORIZONTAL	N/A



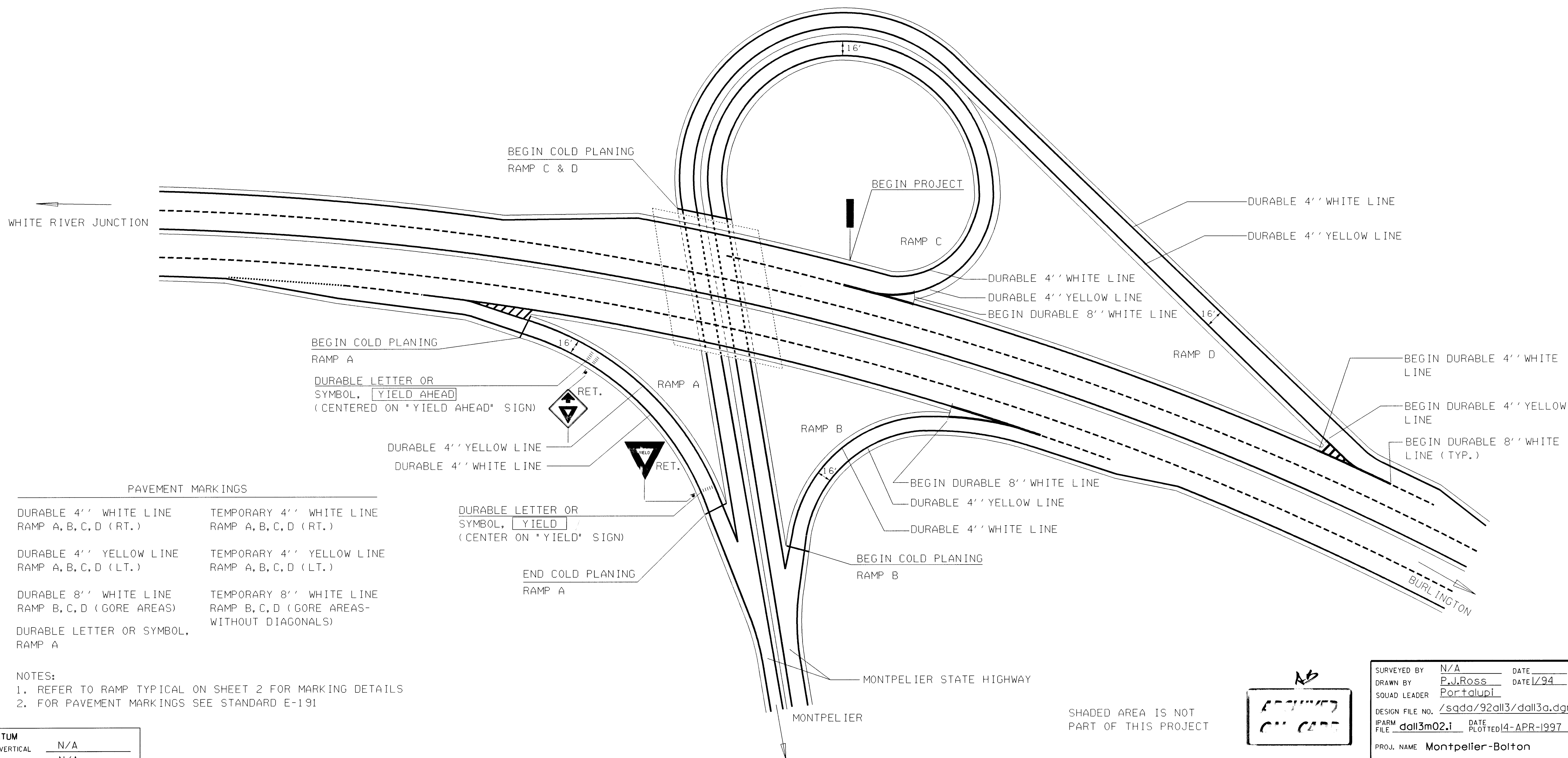
N. T. S.

**MAINLINE
 DETAIL SHEET**

SURVEYED BY	N/A	DATE	
DRAWN BY	P.J. Ross	DATE	2/94
SQUAD LEADER	Portaluji		
DESIGN FILE NO.	/sqda/92all3/dall3a.dgn		
IPARM FILE	dall3m01.i	DATE PLOTTED	11-APR-1997
PROJ. NAME	Montpelier-Bolton		
PROJ. NO.	IM 089-2(20)		
SHEET	11	OF	16 SHEETS

PAVEMENT MARKING DETAIL

FOR MONTPELIER INTERCHANGE NO. 8



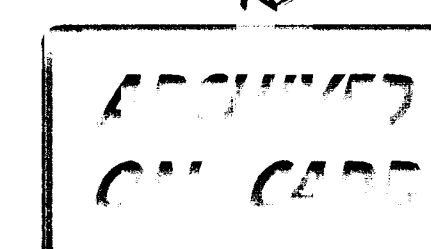
PAVEMENT MARKINGS

DURABLE 4" WHITE LINE RAMP A, B, C, D (RT.)	TEMPORARY 4" WHITE LINE RAMP A, B, C, D (RT.)
DURABLE 4" YELLOW LINE RAMP A, B, C, D (LT.)	TEMPORARY 4" YELLOW LINE RAMP A, B, C, D (LT.)
DURABLE 8" WHITE LINE RAMP B, C, D (GORE AREAS)	TEMPORARY 8" WHITE LINE RAMP B, C, D (GORE AREAS- WITHOUT DIAGONALS)
DURABLE LETTER OR SYMBOL, RAMP A	

- NOTES:
 1. REFER TO RAMP TYPICAL ON SHEET 2 FOR MARKING DETAILS
 2. FOR PAVEMENT MARKINGS SEE STANDARD E-191

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

SHADED AREA IS NOT PART OF THIS PROJECT

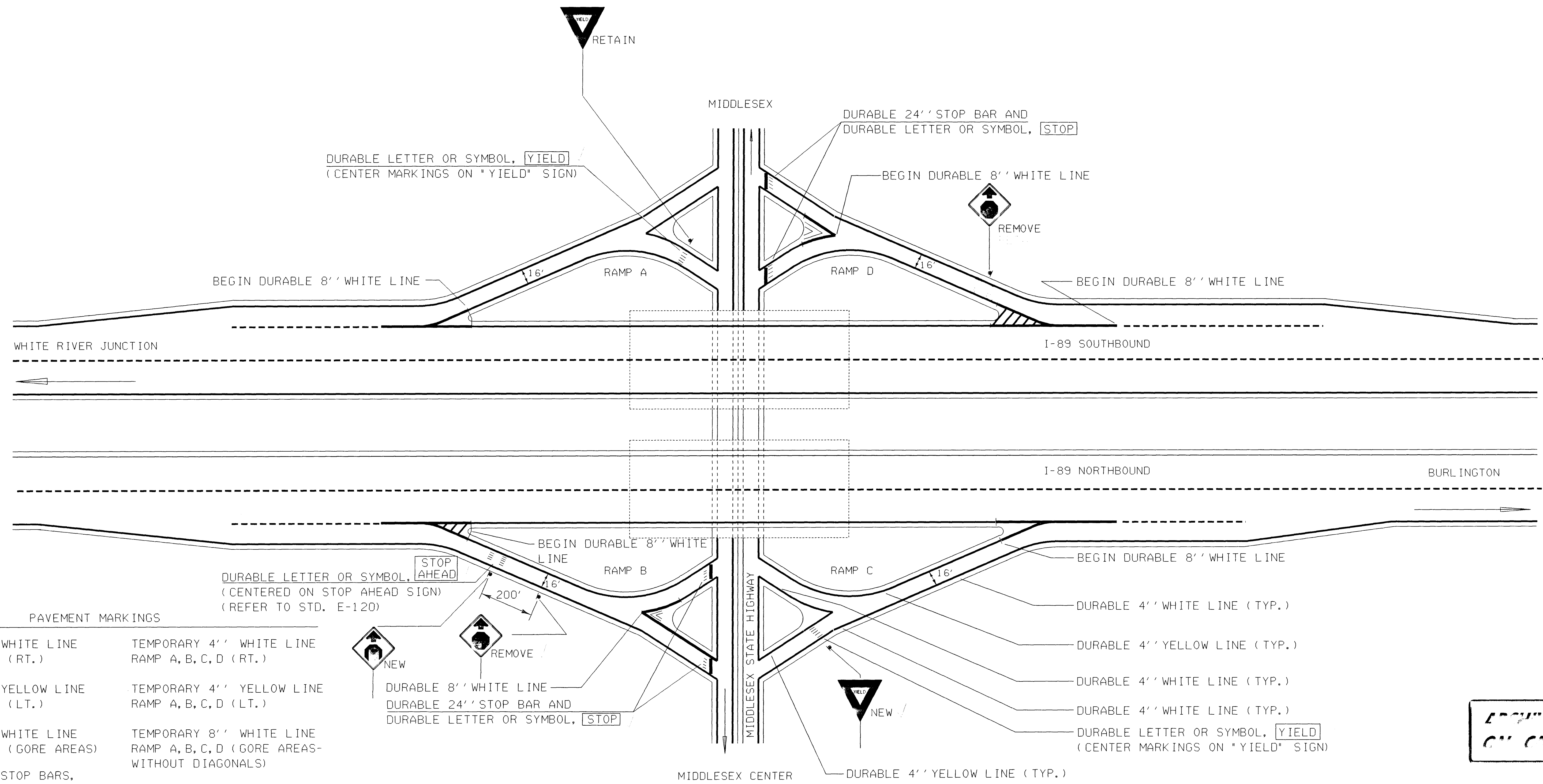


N. T. S.

SURVEYED BY	N/A	DATE	
DRAWN BY	P.J. Ross	DATE	1/94
SQUAD LEADER	Portolupi		
DESIGN FILE NO.	/sqda/92all3/dall3a.dgn		
IPARM FILE	dall3m02.i	DATE PLOTTED	14-APR-1997
PROJ. NAME	Montpelier-Bolton		
PROJ. NO.	IM 089-2(20)		
SHEET	12	OF	16 SHEETS

PAVEMENT AND MARKING DETAIL

FOR MIDDLESEX INTERCHANGE NO. 9



PAVEMENT MARKINGS

DURABLE 4" WHITE LINE
RAMP A, B, C, D (RT.)

TEMPORARY 4" WHITE LINE
RAMP A, B, C, D (RT.)

DURABLE 4" YELLOW LINE
RAMP A, B, C, D (LT.)

TEMPORARY 4" YELLOW LINE
RAMP A, B, C, D (LT.)

DURABLE 8" WHITE LINE
RAMP A, B, C, D (GORE AREAS)

TEMPORARY 8" WHITE LINE
RAMP A, B, C, D (GORE AREAS-
WITHOUT DIAGONALS)

24" DURABLE STOP BARS,
RAMP B, D

DURABLE LETTER OR SYMBOL,
RAMP A, B, C, D

NOTE:

- REFER TO RAMP TYPICAL ON SHEET 2 FOR MARKING DETAILS
- FOR PAVEMENT MARKINGS SEE STANDARD E-191

NOTES:

COLD PLANING AND PAVEMENT WILL END AT THE END RAMP B&D,
AND WILL BEGIN AT BEGINNING OF RAMP A&C.

DATUM
VERTICAL N/A
HORIZONTAL N/A

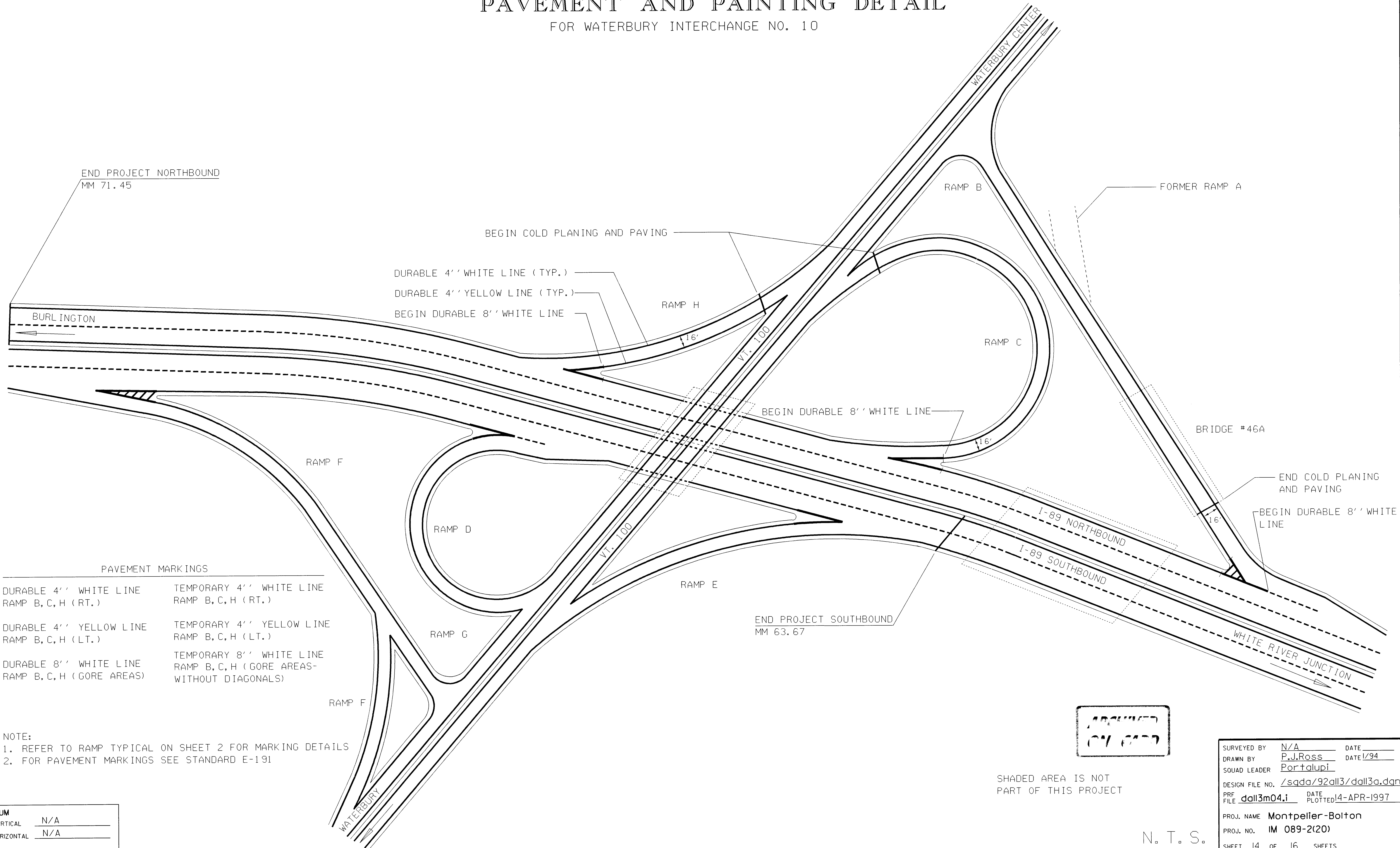
SHADED AREA IS NOT
PART OF THIS PROJECT

SURVEYED BY	<u>N/A</u>	DATE	<u> </u>
DRAWN BY	<u>P.J. Ross</u>	DATE	<u>1/94</u>
SQUAD LEADER	<u>Portugal</u>		
DESIGN FILE NO.	<u>/sqda/92all3/dall3a.dgn</u>		
IPARM FILE	<u>dall3m03.i</u>	DATE PLOTTED	<u>14-APR-1997</u>
PROJ. NAME	<u>Montpelier-Bolton</u>		
PROJ. NO.	<u>IM 089-2(20)</u>		
SHEET	<u>13</u>	OF	<u>16</u> SHEETS

N. T. S.

PAVEMENT AND PAINTING DETAIL

FOR WATERBURY INTERCHANGE NO. 10



END PROJECT NORTHBOUND
MM 71.45

BEGIN COLD PLANING AND PAVING

DURABLE 4'' WHITE LINE (TYP.)

DURABLE 4'' YELLOW LINE (TYP.)

BEGIN DURABLE 8'' WHITE LINE

BURLINGTON

RAMP H

RAMP B

FORMER RAMP A

RAMP C

BEGIN DURABLE 8'' WHITE LINE

BRIDGE #46A

END COLD PLANING AND PAVING

BEGIN DURABLE 8'' WHITE LINE

RAMP F

RAMP D

RAMP E

I-89 NORTHBOUND
I-89 SOUTHBOUND

WHITE RIVER JUNCTION

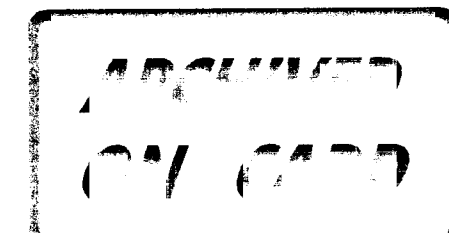
END PROJECT SOUTHBOUND
MM 63.67

PAVEMENT MARKINGS

DURABLE 4'' WHITE LINE RAMP B, C, H (RT.)	TEMPORARY 4'' WHITE LINE RAMP B, C, H (RT.)
DURABLE 4'' YELLOW LINE RAMP B, C, H (LT.)	TEMPORARY 4'' YELLOW LINE RAMP B, C, H (LT.)
DURABLE 8'' WHITE LINE RAMP B, C, H (GORE AREAS)	TEMPORARY 8'' WHITE LINE RAMP B, C, H (GORE AREAS- WITHOUT DIAGONALS)

- NOTE:
- REFER TO RAMP TYPICAL ON SHEET 2 FOR MARKING DETAILS
 - FOR PAVEMENT MARKINGS SEE STANDARD E-191

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A



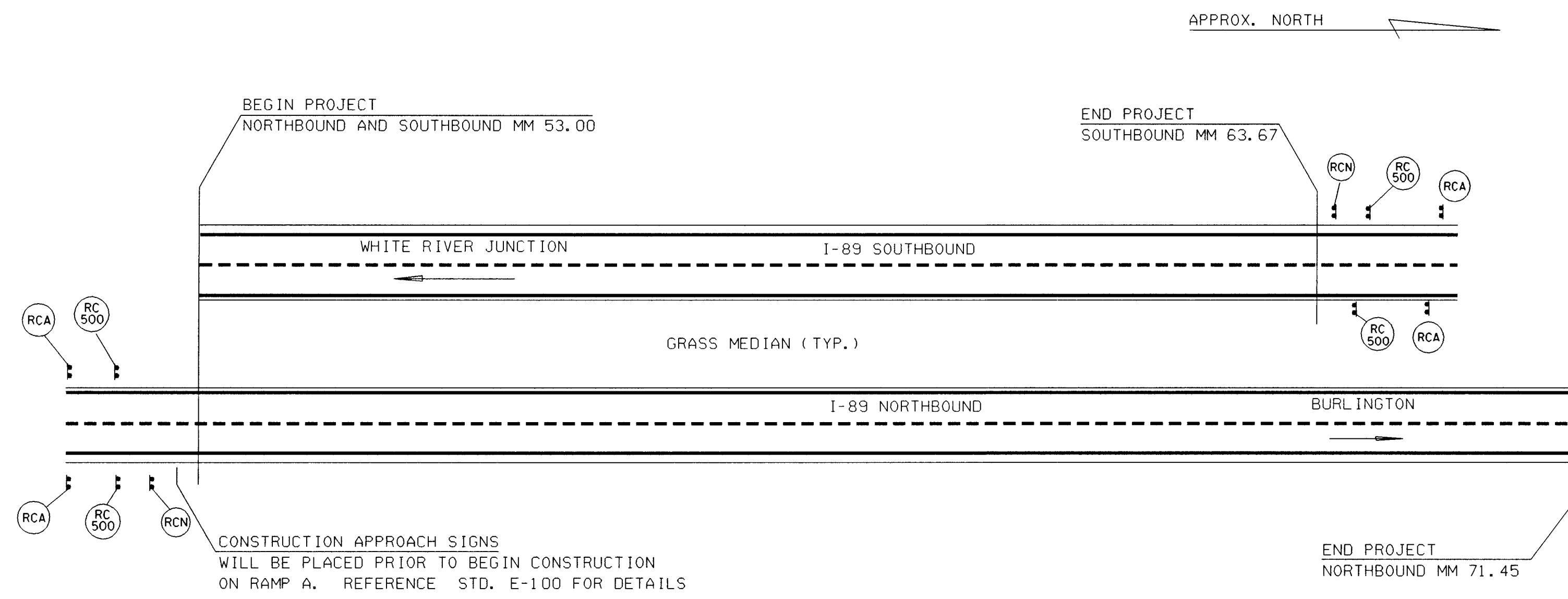
SHADED AREA IS NOT PART OF THIS PROJECT

SURVEYED BY	N/A	DATE	
DRAWN BY	P.J. Ross	DATE	1/94
SQUAD LEADER	Portolupi		
DESIGN FILE NO.	/sqda/92all3/dall3a.dgn		
PRF FILE	dall3m04.i	DATE PLOTTED	14-APR-1997
PROJ. NAME	Montpelier-Bolton		
PROJ. NO.	IM 089-2(20)		
SHEET	14	OF	16 SHEETS

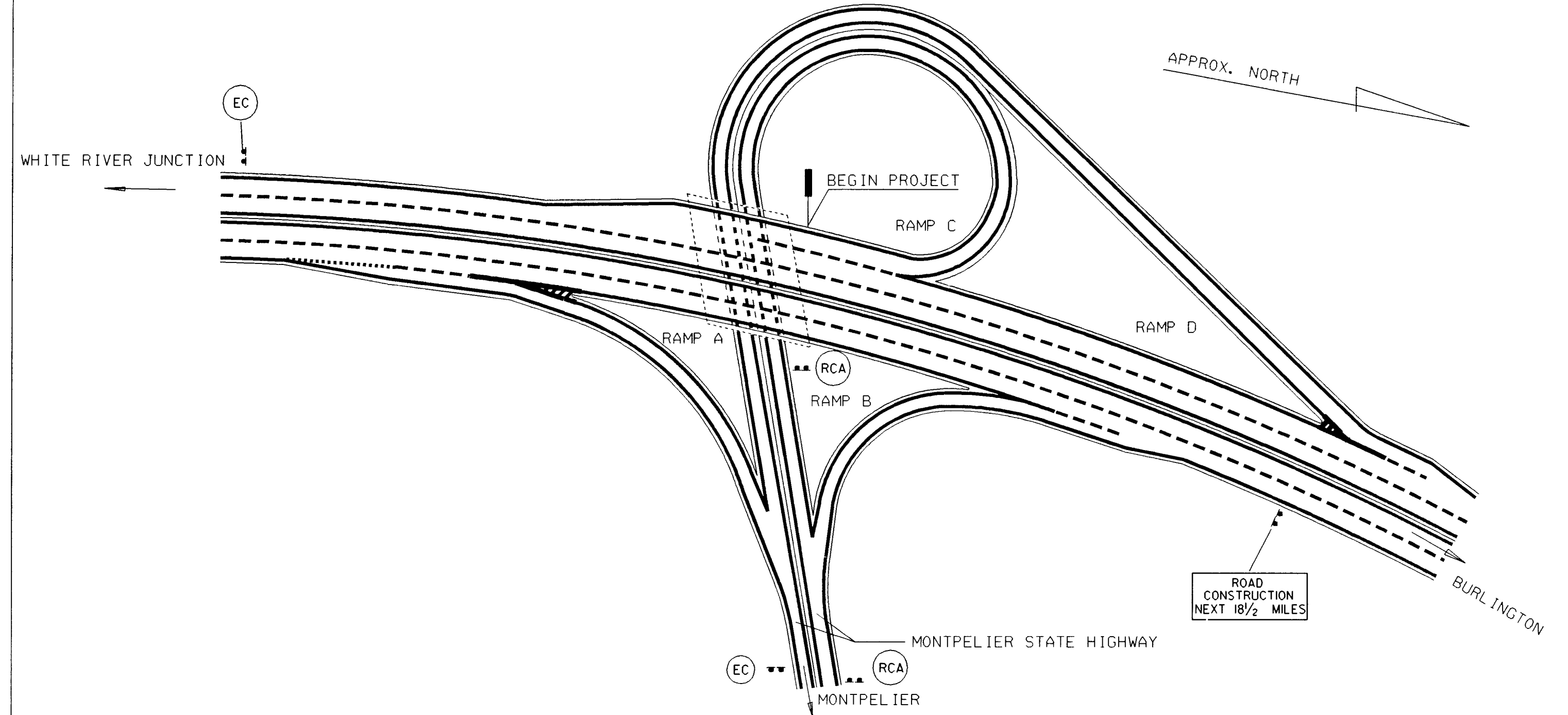
N. T. S.

CONSTRUCTION APPROACH SIGNING

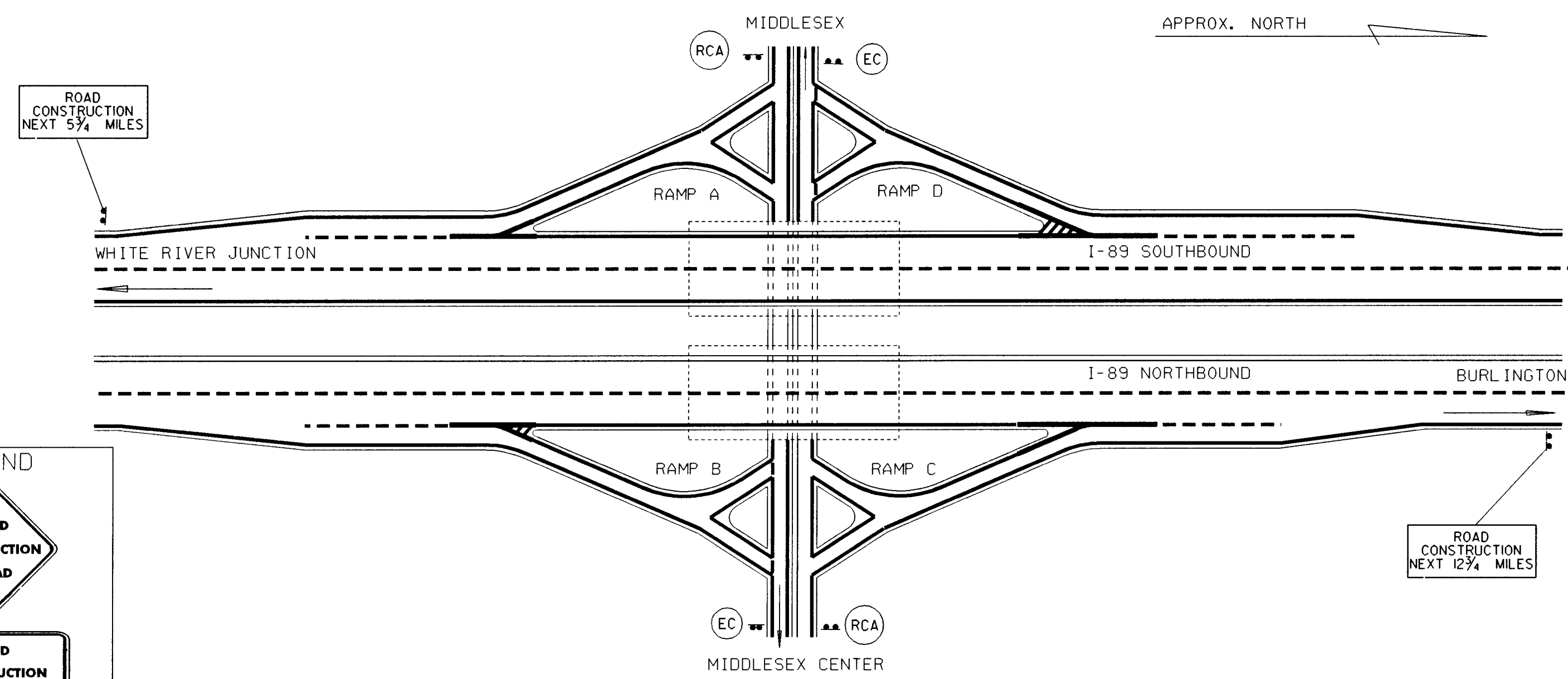
MAINLINE*



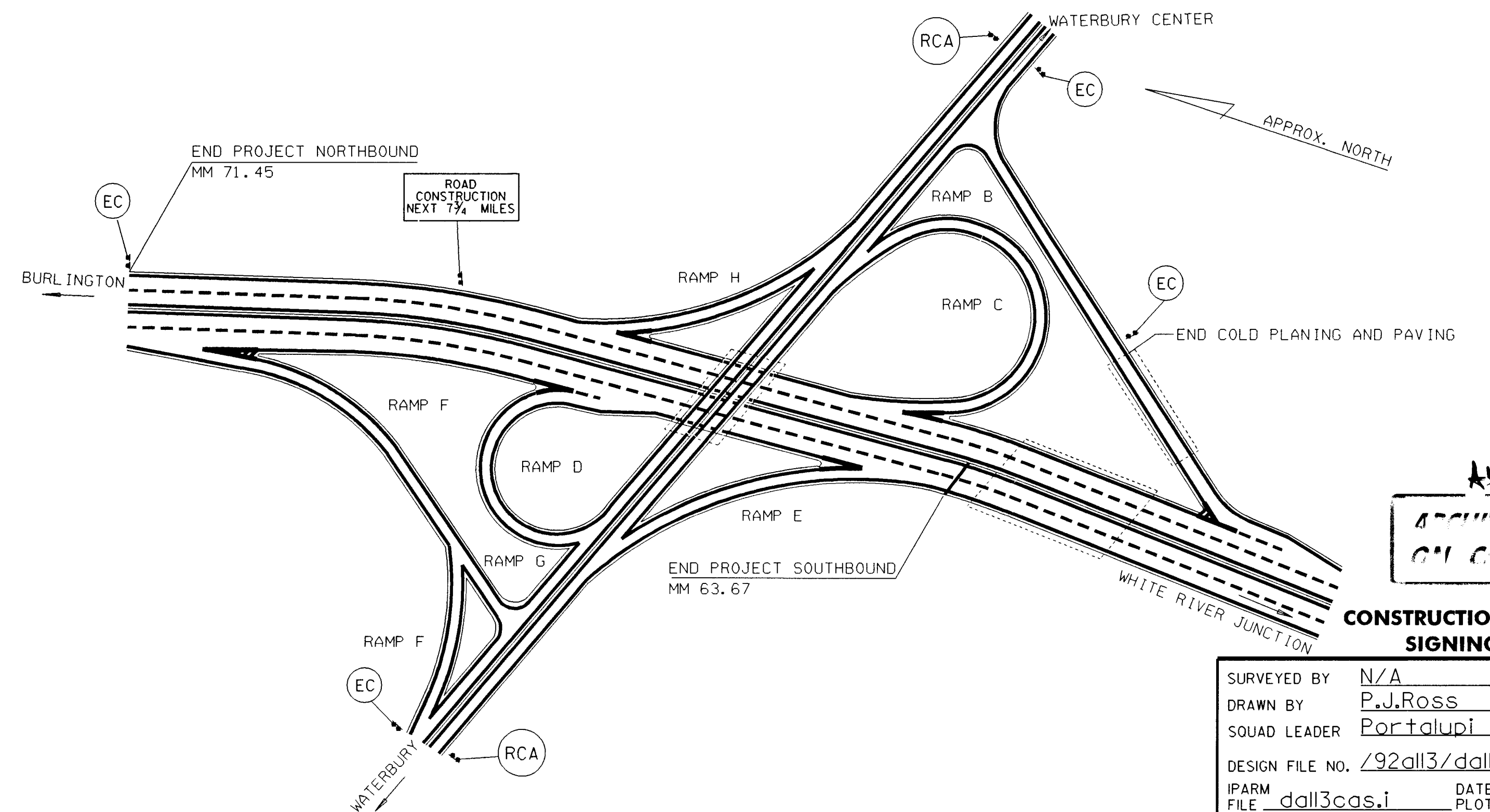
MONTPELIER INTERCHANGE*



MIDDLESEX INTERCHANGE*



WATERBURY INTERCHANGE*



LEGEND

- RCA = ROAD CONSTRUCTION AHEAD
- EC = END CONSTRUCTION
- RCN = ROAD CONSTRUCTION NEXT X MILES
- RC500 = ROAD CONSTRUCTION 500 FT

* REFER TO STANDARD E-100

N. T. S.

APPROVED
01/01/97

CONSTRUCTION APPROACH SIGNING SHEET	
SURVEYED BY	N/A
DRAWN BY	P.J. Ross
SQUAD LEADER	Portalupe
DESIGN FILE NO.	/92all3/dall3cas.dgn
IPARM FILE	dall3cas.i
DATE	14-APR-1997
PROJ. NAME	Montpelier-Bolton
PROJ. NO.	IM 089-2(20)
SHEET	15 OF 16 SHEETS

*1985
FAMING
ISS

I-88 MONTPELIER
BOLTON ZA 087-21207