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STATE OF VERMONT DEPARTMENT OF HIGHWAYS PROPOSED IMPROVEMENT

TOWNS OF MIDDLESEX, WATERBURY
WASHINGTON COUNTY
INTERSTATE ROUTE 89
MONTPELIER-BURLINGTON ROAD

BEGINNING AT A POINT APPROXIMATELY 4.622 MILES WESTERLY OF
THE MONTPELIER MIDDLESEX T/V AND EXTENDING WESTERLY
5.128 MILES

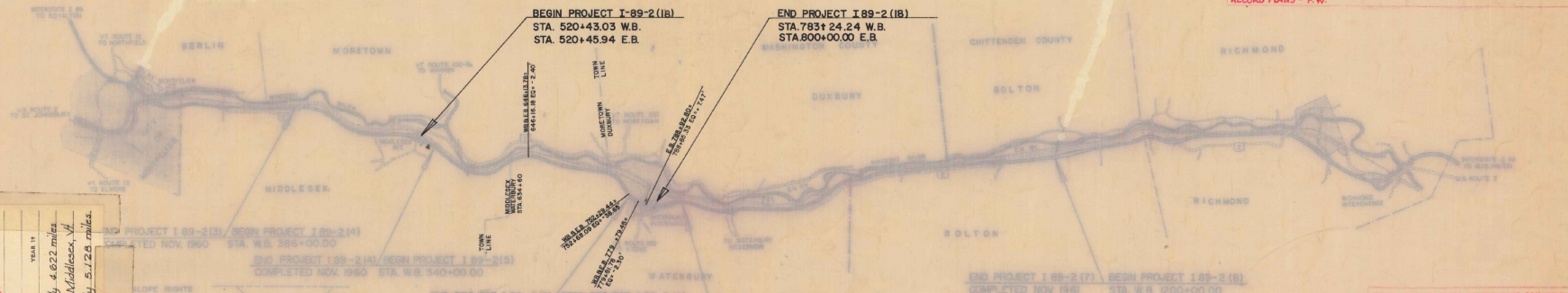
LENGTH OF ROADWAY 26,702.52 FT. 5.057 MILES
LENGTH OF BRIDGES 37550 FT. 0.071 MILES
LENGTH OF PROJECT 27,078.02 FT. 5.128 MILES

ADT (1980) = 8,625
DHV (1980) = 1,030
D (%) = 53% (NB)
T (%) = 7%

MIDDLESEX - WATERBURY I 89-2 (18)
RESURFACING ONLY

CONTRACTOR - L.M. PIKE & SON, INC. CONTRACT DATED 9-26-69
RESIDENT ENGINEER - R. Woodward STARTED 9-26-69
INSPECTOR COMPLETED 9-26-69
RECORD PLANS - P.W.

BEGIN PROJECT I 89-2 (18)
STA. 520+43.03 W.B.
STA. 520+45.94 E.B.
END PROJECT I 89-2 (18)
STA. 783+24.24 W.B.
STA. 800+00.00 E.B.



FOR RIGHT OF WAY DETAILS
SEE RIGHT OF WAY PLANS FOR THE PROJECT

THESE PLANS ARE SUBJECT TO SUCH REVISIONS AS MAY BE
REQUIRED BY THE BOARD OF PUBLIC ROADS OR THE COMMISSIONER
OF HIGHWAYS.
CONSTRUCTION IS TO BE LIMITED TO THAT ACCORDING WITH
THESE PLANS AND THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE
CONSTRUCTION, 1968 EDITION, AS AMENDED BY THE BOARD OF
PUBLIC ROADS ON OCTOBER 15, 1968, INCLUDING ALL SUBSEQUENT
APPROVED REVISIONS AND SUCH REVISIONS SPECIFICATIONS AND SPECIAL
PROVISIONS AS ARE RECOMMENDED IN THESE PLANS.

NOTE: ANY FURTHER INFORMATION CONCERNING
FINAL QUANTITIES, AMOUNTS OR OTHER DETAILS
RELATIVE TO THIS PROJECT MAY BE FOUND IN
EITHER THE FIELD BOOKS OR THE ESTIMATE
FILE.

MIDDLESEX - WATERBURY

DEPARTMENT OF TRANSPORTATION BUREAU OF PUBLIC ROADS	
APPROVED	DATE
DIVISION ENGINEER	DATE
PROJECT	DATE
I 89-2 (18)	DATE
SHEET	1 OF 14

APPROVED	DATE	APPROVED	DATE	APPROVED	DATE	APPROVED	DATE
R.P. Nielsen	7/1/69	R. Woodward	2/6/69	L.M. Pike	7/1/69	C.H. Stickney	7/1/69
DATE	7/1/69	DATE	2/6/69	DATE	7/1/69	DATE	7/1/69

PROJECT MIDDLESEX - WATERBURY I 89-2 (18) RESURFACING	
CONTRACTOR	L.M. PIKE & SON, INC.
LOCATION	Laconia, N.H.
LOCATION	Beginning at a point approximately 4.622 miles west of the Montpelier, Vt. - Middlesex, Vt. Town Line, & extending westerly 5.128 miles.
LENGTH	5.128 MI.
YEAR	1969

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- 8-9. Blank
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11. D-3 Treated Gutters 7/19/67 R
12. E-31 Rep. Aid Construction Identification Signs 8/21/67 R
13. E-32 Road Construction Approach Signs 1/ 5/67
14. E-34 On-Project Construction Signs 6/ 2/67 R

Dated 11 August 1969
L. M. Pike & Son, Inc. & Affiliated Co's
 Say 678
Lacoste, R. B. Jr. & Son, Inc.
 Contractor
John T. Kelly
 Commissioner of Highways

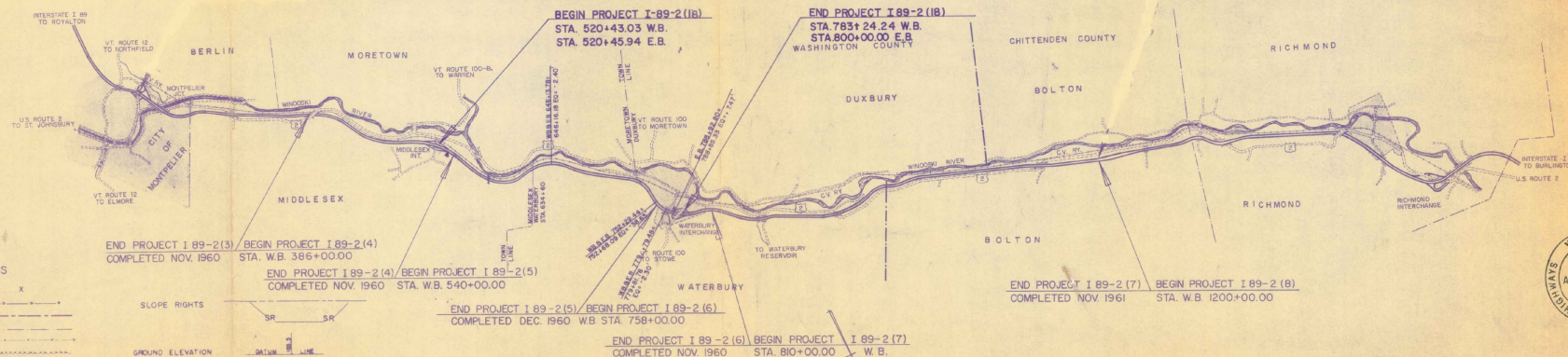
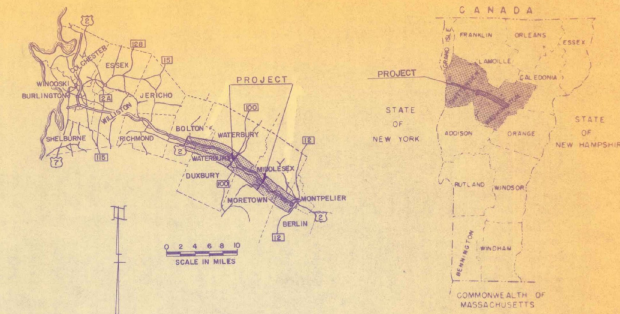
STATE OF VERMONT DEPARTMENT OF HIGHWAYS PROPOSED IMPROVEMENT

TOWNS OF MIDDLESEX, WATERBURY
 WASHINGTON COUNTY
 INTERSTATE ROUTE 89
 MONTPELIER-BURLINGTON ROAD

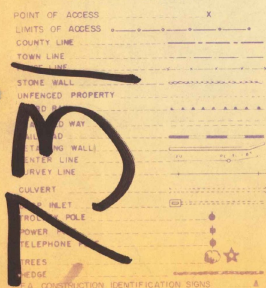
BEGINNING AT A POINT APPROXIMATELY 4.622 MILES WESTERLY OF
 THE MONTPELIER MIDDLESEX T/LAND EXTENDING WESTERLY
 5.128 MILES.

LENGTH OF ROADWAY 26,702.52 FT. 5.057 MILES
 LENGTH OF BRIDGES 37550 FT. 0.071 MILES
 LENGTH OF PROJECT 27,078.02 FT. 5.128 MILES

ADT (1960) = 8,625
 DHV (1960) = 1,030
 D (%) = 53% (NB)
 T (%) = 7%



CONVENTIONAL SIGNS



SLOPE RIGHTS

GROUND ELEVATION

GRADE ELEVATION
 CURVE DATA
 DEFLECTION OF ANGLE
 DEGREE OF CURVE
 RADIUS OF CURVE
 TANGENT DISTANCE
 LENGTH OF CURVE
 EXTERNAL DISTANCE
 POINT OF INTERSECTION
 POINT OF CURVE
 POINT OF TANGENT
 POINT ON TANGENT
 POINT ON SUB-TANGENT
 R.C.W. LIMITS

FOR RIGHT OF WAY DETAILS,
 SEE RIGHT OF WAY PLANS FOR THIS PROJECT.

APPROVED DISTRICT ENGINEER
 DATE 4/1/69

APPROVED DISTRICT ENGINEER
 DATE 4/1/69

APPROVED BRIDGE ENGINEER
 DATE 7/1/69

APPROVED DISTRICT ENGINEER
 DATE 7/1/69

APPROVED DISTRICT ENGINEER
 DATE 7/1/69

APPROVED DISTRICT ENGINEER
 DATE 7/1/69

MIDDLESEX - WATERBURY

DEPARTMENT OF TRANSPORTATION
 BUREAU OF PUBLIC ROADS

APPROVED
 DIVISION ENGINEER
 DATE
 PROJECT I 89- NO. 2 (10)
 SHEET 1 OF 14 SHEETS



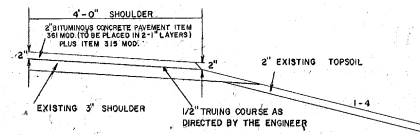
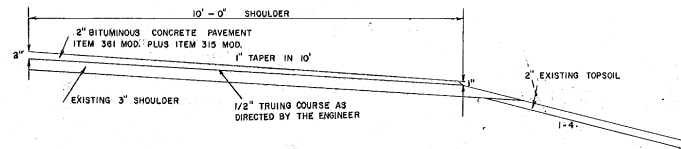
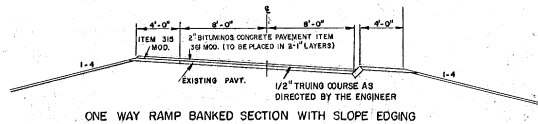
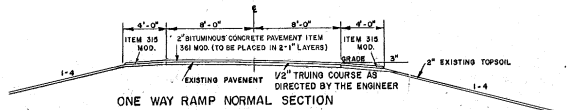
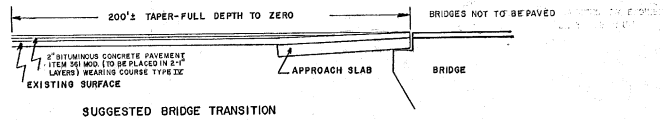
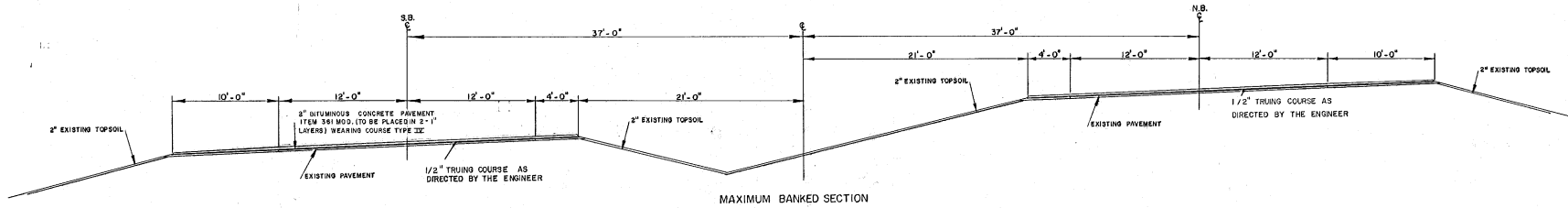
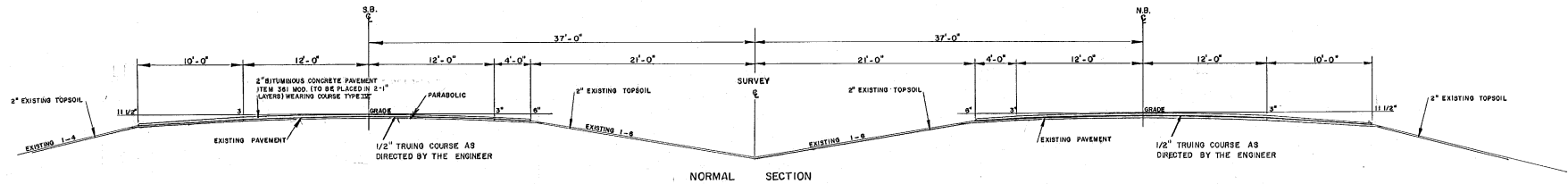
THESE PLANS ARE SUBJECT TO SUCH REVISIONS AS MAY BE
 REQUIRED BY THE BUREAU OF PUBLIC ROADS OR THE COMMISSIONER
 OF HIGHWAYS.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH
 THESE PLANS AND THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE
 CONSTRUCTION DATED APRIL 1964, AS APPROVED BY THE BUREAU OF
 PUBLIC ROADS ON OCTOBER 12, 1964, INCLUDING ALL SUBSEQUENT
 APPROVED REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL
 PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

TYPICAL SECTIONS

2-(1¹/₂) BITUMINOUS CONCRETE PAVEMENT OVERLAY, ITEM 361 MOD. WEARING COURSE TYPE IX (1¹/₄" FOR TOTAL THICKNESS)
W/ TRUING COURSE - 1/2" AVERAGE DEPTH, ITEM 361 MOD. WEARING COURSE TYPE IX
(FOR SHOULDER COMPOSITION SEE SKETCH AT LOWER RIGHT.)

PERMISSIBLE TOLERANCES APPLY TO THICKNESS ONLY



MIDDLESEX - WATERBURY

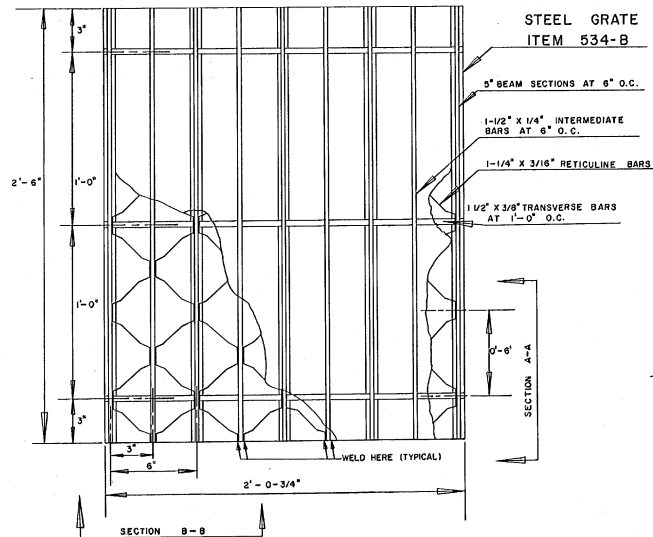
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FROM: I No. 89-2(08)

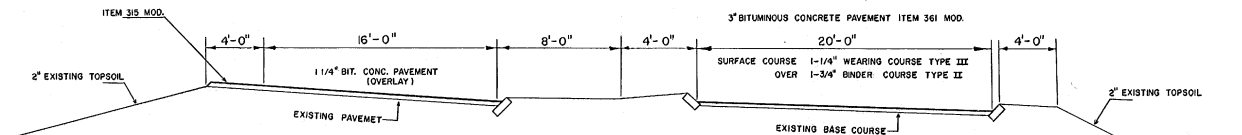
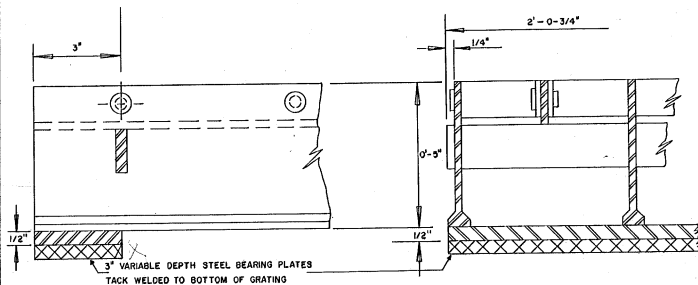
SHEET 2 OF 14

TYPICALS

CHANGING ELEVATION OF C.B. OR MANHOLE ITEM 533 MOD.



TOP VIEW

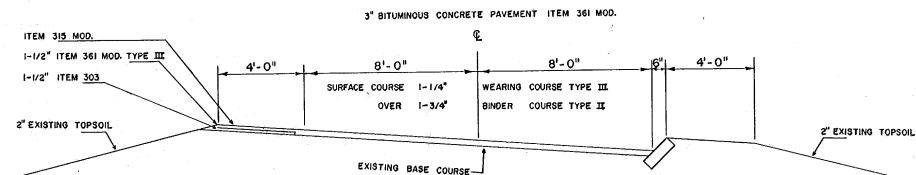


MONTPELIER INTERCHANGE
2 WAY RAMP

STA. "C" & "D" 19+50 - 30+18

STA. "H" 0+18 - 4+0

NOT PART OF THIS PROJECT



MONTPELIER INTERCHANGE
RAMP "C"

STA. 16+00 - 19+50

NOT PART OF THIS PROJECT

MIDDLESEX - WATERBURY

SURVEYED BY _____ DATE _____
 DRAWN BY _____ DATE _____
 CHECKED BY _____ DATE _____
 FROM I NO. 89-2(18)
 SHEET 3 OF 14

QUANTITY SHEET

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

MIDDLESEX - WATERBURY PROJECT NO. I 89-2 (18)

SUMMARY SHEET NO. 1 OF 1 19 69

APPROXIMATE SUMMARY OF QUANTITIES							
NON GOVT. PART	R. O. W.	BRIDGE	ROADWAY	QUANTITIES SQUARED TOTAL	UNIT	ITEMS	ITEM NO.
			25	25	hr.	All Purpose Excavator Rental Est.	124
			50	50	hr.	Power Broom Rental Est.	127
			16,700	16,700	gal.	Tack Coat III (Dble. Tack Coat Bit. Mat. w/P. St. and St. Grits Seal, Prime Coat, Ref. Tar, and Dbl. Seal Ct. Cull. Asph.) Mod.	315
			8,400	8,400	gal.	Emulsified Asphalt Type RS-1	319
			29,400	29,400	gal.	Slurry Seal (Fina. Surface)	324-A
			32,400	32,400	ton	Bituminous Concrete Pavement (Mod.)	361
			20	20	sq.	Changing Elevations of Catch Basins or Manholes Mod. Est.	533
20				20	ton	Bituminous Concrete Surface for Gutters and Traffic Islands (Mod.) Est.	554
20				20	ton	Bituminous Concrete Curb Est.	555
			100	100	man/hr	Uniformed Traffic Officers Est.	598
			1	1	L.S.	Field Office - Asphalt Plants	599-C

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS
		ITEM 315
		Tack Coat III (Dble. Tack Coat Bit. Mat. w/P. St. and St. Grits Seal, Prime Ct. Ref Tar, and Dble. Seal Coat Cut Asphalt) Mod.
15,678	gal.	Mainline Shoulders
364	gal.	Middlesex Interchange Shoulders
442	gal.	Waterbury Interchange Shoulders
116	gal.	U-Turns
100	gal.	Rounding
16,700	gal.	TOTAL
		ITEM 361
		Bituminous Concrete Pavement Mod.
29,901	ton	Mainline Includes Shoulders
38	ton	Approach Slabs
18	ton	U-Turns
954	ton	Middlesex Interchange Ramps A & D
1479	ton	Waterbury Interchange Ramps A,B,D & E
10	ton	Rounding
32,400	ton	TOTAL

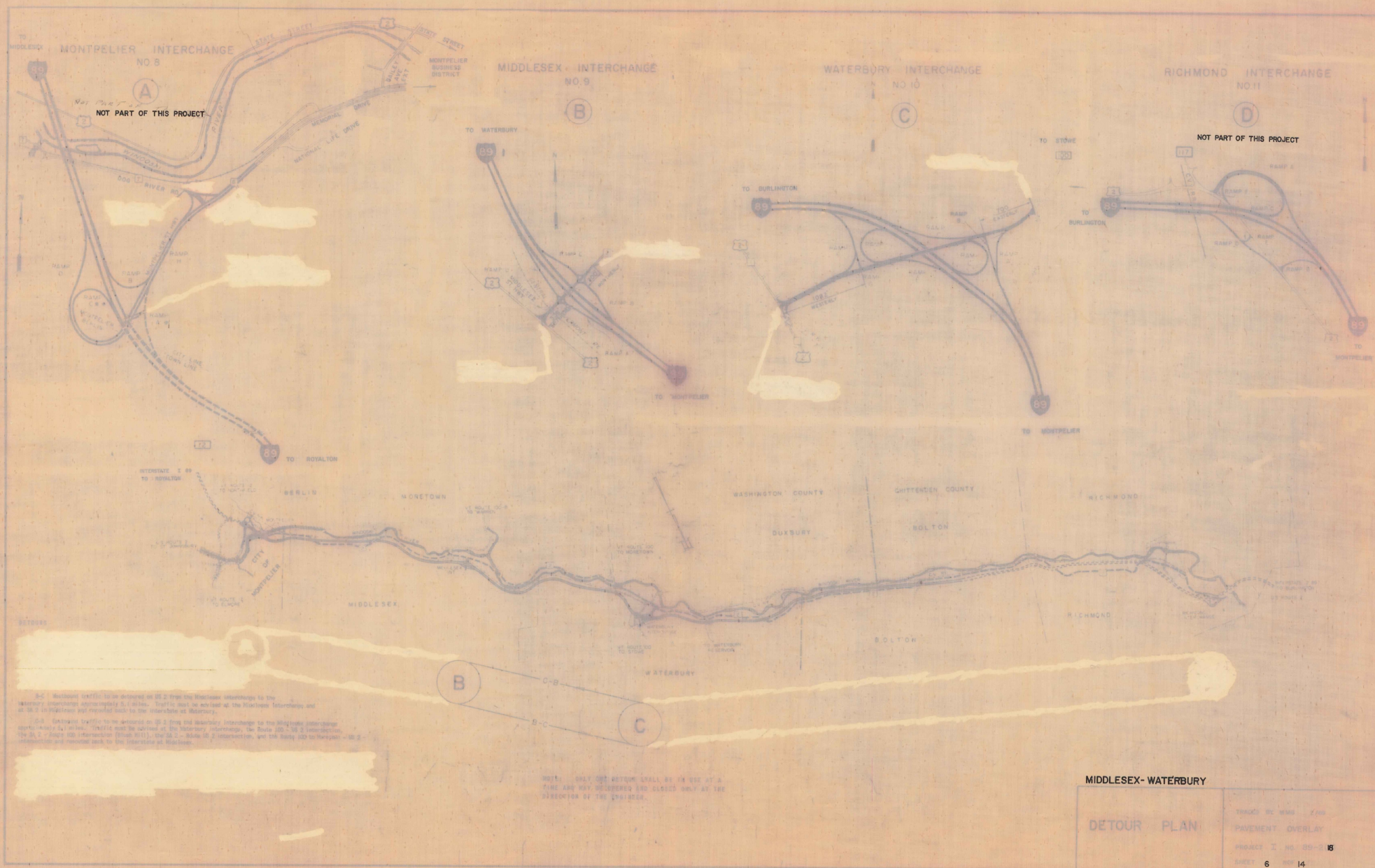
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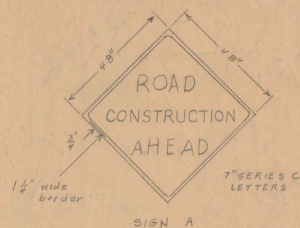
TYPE OF CONSTRUCTION									
STATIONS		PAVEMENT WIDTHS			EQUATIONS				
FROM	TO	24"	VARIABLE 24'-30"	VARIABLE 24'-42"	+	-	BRIDGE	APPROACH SLABS	
WESTBOUND									
520+19.02	520+83.02								20.00
520+59.02	523+19.02			250.00					
523+13.02	646+13.78	12,300.75							
646+13.78	646+16.18					2.50			
646+16.18	752+29.44		10,613.25						
752+29.44	752+68.09					38.65			
752+68.09	772+52.95		1,984.76						
772+52.95	772+83.00								30.15
772+83.00	776+56.00						375.00		
776+56.00	776+79.50								23.50
776+79.50	778+29.40		150.00						
778+29.40	779+79.48	150.00							
779+79.48	779+81.78					2.50			
779+81.78	783+24.24	392.96							
WESTBOUND TOTALS (Adjusted for equations)				26,237.56					
EASTBOUND									
520+45.39	520+65.94								20.00
520+65.94	523+65.94			300.00					
523+65.94	646+13.78	12,247.54							
646+13.78	646+16.18					2.50			
646+16.18	752+29.44		10,613.25						
752+29.44	752+68.09					38.65			
752+68.09	771+53.70		1,885.81						
771+53.70	773+03.70		150.00						
773+03.70	773+35.00								31.50
773+35.00	777+13.00						375.00		
777+13.00	777+37.50								35.50
777+37.50	779+79.48	231.38							
779+79.48	779+81.78					2.50			
779+81.78	783+02.40	911.02							
783+02.40	783+85.33					7.50			
783+85.33	800+00.00		1,119.57						
EASTBOUND TOTALS (Adjusted for equations)				27,318.18					
PROJECT LENGTH (Ave. both lanes)				27,079.62					
TOTALS									
LENGTH OF PROJECT									
STATIONS		FEET		MILES		REMARKS			
		26,702.52 375.50		5.057 .071		Roadway (Ave. both lanes) Bridge (Ave. both lanes)			
TOTALS		27,078.02		5.128		Project (Ave. both lanes)			

MIDDLESEX -
WATERBURY

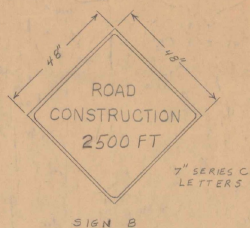
I 89-2 (18)

No. Sheet 4 of 14 Filed Sheets

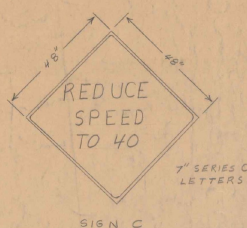




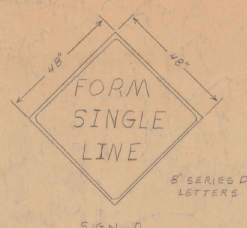
SIGN A
Black text on reflectorized yellow background.



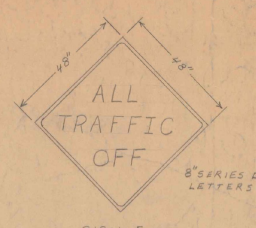
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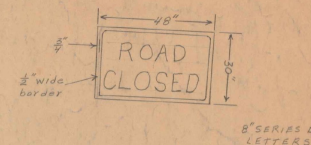
SIGN C
Black text on reflectorized yellow background.



SIGN D
Black text on reflectorized yellow background.



SIGN E
Black text on reflectorized yellow background.



SIGN F
Black text on reflectorized white background.

NOTES

The road construction signs indicated on this sheet are to be erected as indicated below, at all interstate exits where traffic is required to leave and detour for this project.

Standard class I barricades are to be erected at all appropriate entrance ramps to prevent traffic from entering the construction area.

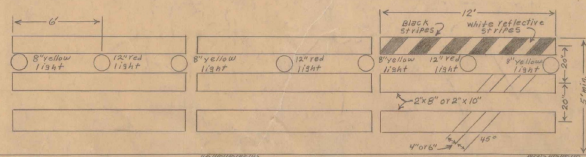
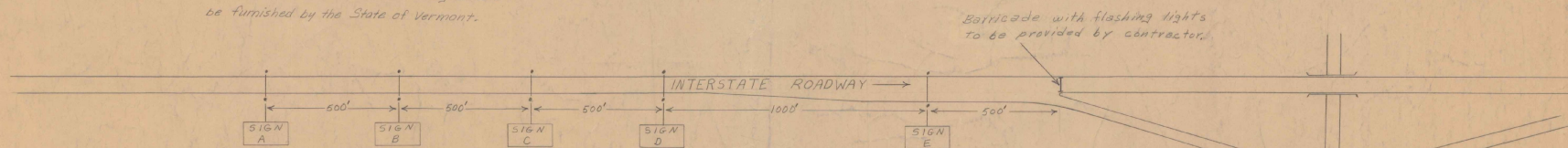
For additional information regarding location, materials, installation, etc. see standard sheets E-32 and E-34.

All other directional detour signs will be furnished by the State of Vermont.

GENERAL

The cost of furnishing, erecting, maintaining and removing all construction approach signs shall be born by the contractor without additional compensation. (See standard specifications, Division I, Article 707, Public Convenience and Safety.) In all phases of construction approach signing, the requirements set forth in the Manual on Uniform Traffic Control Devices shall be met. (See standard specifications, Division I, Section 7, Article 708, Barricades, Warning and Detour Signs.)

These signs conform with the national standards set forth in the Uniform Manual on Traffic Control Devices (1961 edition) for construction and maintenance operations. They are intended for the protection of the travelling public as well as the contractor's forces. On high speed expressways it is essential that the condition of the signs and the method of displaying them be given maximum consideration.



Standard Class I Barricade With Lights

This barricade to be erected at all exit points (see interchange layout above) where traffic is required to leave the interstate. All boards are to be striped as indicated on top board of right hand barricade and all barricades are to be constructed to the same dimensions. The lights are to be alternated red and yellow with the yellow lights flashing, and shall comply with the standard specifications for flashing beacons (see standard specifications, Division II, section 7, article 704). The contractor shall obtain 110 to 115 volts of A.C. power from a power company.

To be mounted on standard class I barricades at appropriate entrance ramps.

MIDDLESEX-WATERBURY

CONSTRUCTION
WARNING
SIGNS
TRAFFIC DETOURED

DRAWN BY: G.H.M. DATE: 8-62
CHECKED BY: DATE: 8-62
PROJ. I NO. 89-2 (16)
SHEET 7 14

* (ALLAS) RESURFACE

1969

Middlesex - Waterbury

I-89-2 (18)

Vermont Agency of
Transportation
PHASE 1-INTERSTATE
#122302-01
INITIALS ☐
HANGER 144
DONE

1969