

STATE OF VERMONT
 AGENCY OF TRANSPORTATION

Date JUL 12 1985

THE LAKE CONSTRUCTION CORP

Contractor

A. W. Fellewley

Signature

PRESIDENT



CONTRACT PLANS

THESE PLANS DO NOT REFLECT
 CHANGES MADE ON THE PROJECT.

Title

PROPOSED IMPROVEMENT

Arthur C. Hill

RESURFACING PROJECT

Transportation Secretary's

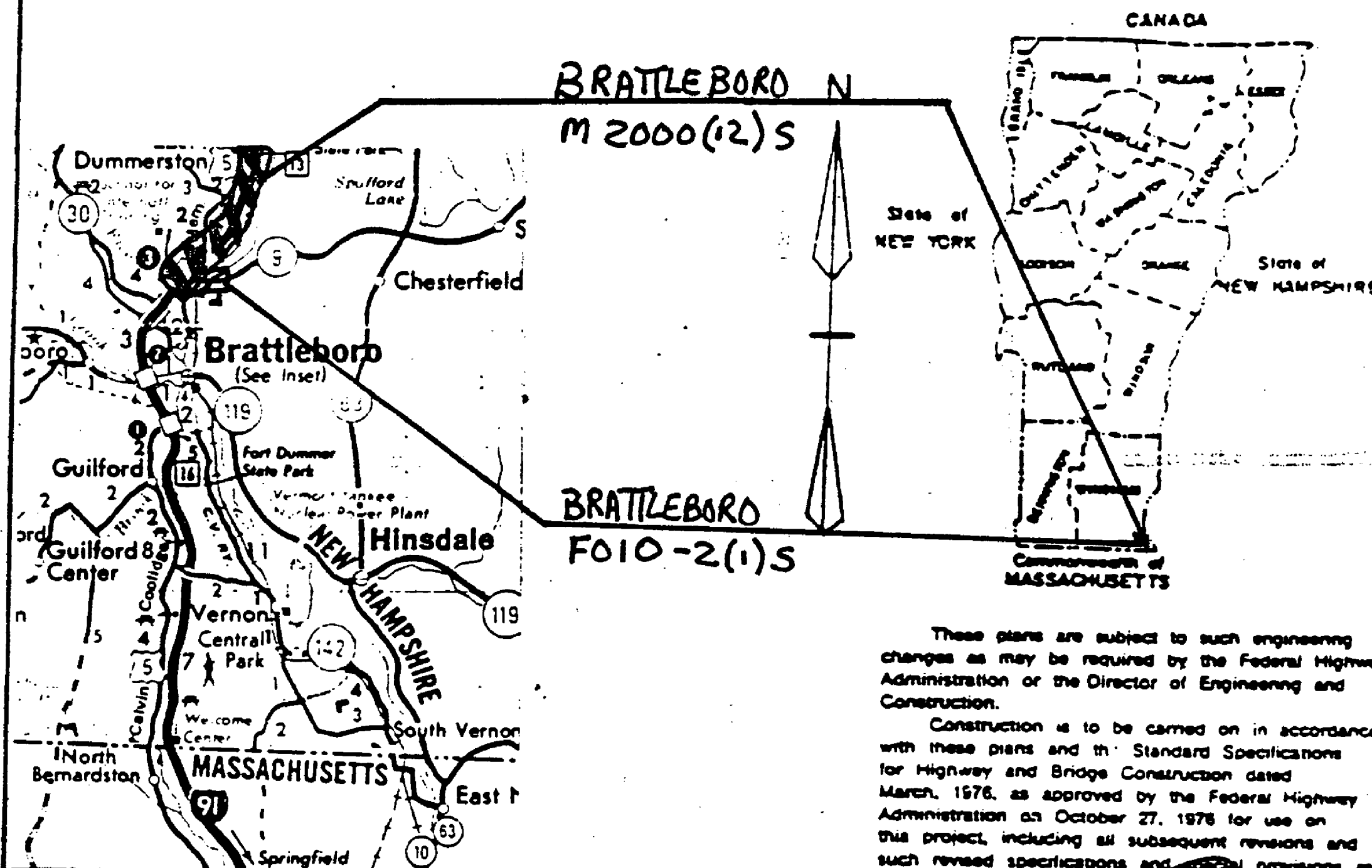
Signature

TOWN OF: BRATTLEBORO

COUNTY OF: WINDHAM

ROUTE NO: US 5 AND Vt. 9

ROUTE CLASS: FAU, FAS, FAP



PROJECT PROCESSED UNDER
 SECONDARY ROAD PLAN

These plans are subject to such engineering changes as may be required by the Federal Highway Administration or the Director of Engineering and Construction.

Construction is to be carried on in accordance with these plans and the Standard Specifications for Highway and Bridge Construction dated March, 1976, as approved by the Federal Highway Administration on October 27, 1976 for use on this project, including all subsequent revisions and such revised specifications and provisions as are incorporated in these plans.



1 INCH REPRESENTS 5 MILES

SEE SHEET 242A FOR INDEX

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD	
APPROVED <i>Frank J. Houch</i>	DATE MAY 2
DIRECTOR OF ENGINEERING AND CONSTRUCTION	
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED _____	DATE _____
DIVISION ADMINISTRATOR	

PROJECT NO. M 2000(12)S, F010-2(1)S

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PROJECT LENGTHS AND ITEM QUANTITIES

ITEM NO	ITEM DESCRIPTION	UNIT	646.21	646.35	646.36	646.60	646.62	646.64	646.65	646.66	646.68	608.25	646.61	646.75
	MOBILIZATION	LS.	LF	LF	LF	LF	LF	LF	EA.	EA.	LF	HR.	LF	LF
	BRATTLEBORO	0.88	1050	10900	12800	700	400	45	8	32	300	5	1300	300
	FOIO-2(1)S	0.12	450	2000	1900	350	235	25	4	26	250	5	800	175
	TOTALS	1.00	1500	12900	14700	1050	635	70	12	58	550	10	2100	475

COMPOSITE PROJECT BRATTLEBORO

NO. M2000(12)S, FOIO-2(1)S

SHEET 4 OF 23

GUIDELINES FOR MINIMUM INTERIM PAVEMENT MARKINGS
IN CONSTRUCTION ZONES

- A. CENTERLINE AND GORE AREA MARKINGS SHALL BE APPLIED AT THE END OF EACH WORKING DAY. THE FOLLOWING LAYOUT REQUIREMENTS SHALL BE MET:

NO PASSING BARRIER
SOLID STRIPES.

DASHED LINE
10-FOOT SOLID LINE WITH 30-FOOT GAP.

GORE AREA
(GORE AREAS TO INCLUDE 8' CHANNELIZING LINE AND DASHED LINE)
PER STANDARD SHEET E-50

- B. EDGE LINES

WHEN SPECIFIED, EDGE LINES ARE NOT REQUIRED UNTIL COMPLETION OF THE PROJECT. ON INTERSTATE PROJECTS, TEMPORARY EDGE LINES SHOULD BE APPLIED WHERE TRAFFIC VOLUMES AND SPEEDS ARE HIGH AND DELAY OF SEVERAL DAYS IS ANTICIPATED.

- C. TEMPORARY MARKINGS MAY CONSIST OF PAINT, TAPE OR RAISED PAVEMENT MARKERS (RPM'S). THE TAPE SHALL BE A RETRO-REFLECTIVE FILM ON A CONFORMABLE METALLIC BACKING THAT CAN BE PAVED OVER. TAPE MAY BE USED ON THE FINAL SURFACE COURSE IF IT WILL NOT INTERFERE WITH THE FINAL MARKING APPLICATION. TEMPORARY TAPE MARKINGS WILL BE OFFSET AND REMOVED WHEN PROJECT IS FINISHED AND FINAL CENTERLINE PAINTED. THE TAPE SHALL BE THE TYPE THAT IS REMOVABLE INTACT AND NOT SEPERATE AT ANY TIME. THE RPM'S SHALL HAVE A SELF-ADHESIVE BACKING EASILY REMOVED BEFORE PAVING AND SHALL CONFORM TO THE FOLLOWING LAYOUT PATTERN:

NO PASSING BARRIER
NO RPM'S ALLOWED.

DASHED LINE
FOUR RETRO-REFLECTIVE RPM'S ON 3 1/2 FOOT CENTERS WITH A 30' GAP.

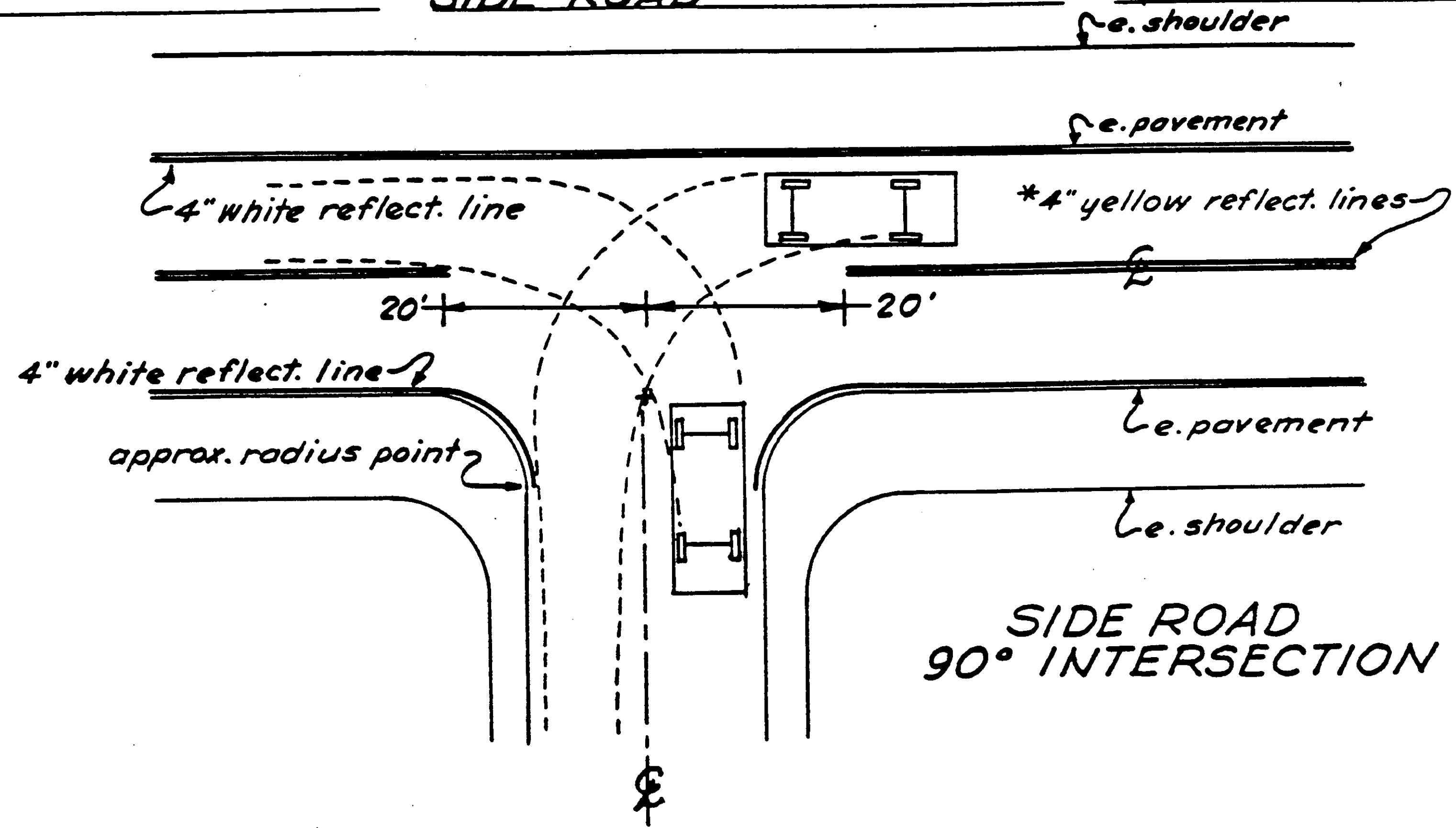
SOLID LINE - EDGE LINES
INTERSTATE MEDIAN SIDE-RETRO-REFLECTIVE RPM'S ON 4 TO 5 FOOT CENTER.
DRIVERS RIGHT SIDE-RPM'S NOT ALLOWED.

- D. WHEN PAINT IS USED FOR TEMPORARY MARKING, AN ALTERNATE MATERIAL SUCH AS TAPE OR RPM'S SHALL BE ON HAND IN THE EVENT RAIN PREVENTS THE PAINT APPLICATION FROM BEING COMPLETED. ALL PAINT SHALL BE REFLECTORIZED.
- E. PAYMENT FOR PAINT AND TAPE SHALL BE COMPUTED ON A LINEAR FOOT BASIS AS IF PAINT WAS USED. PAYMENT FOR THE RPM'S SHALL BE COMPUTED AS IF AN EQUIVALENT PAINT LINE WAS USED. (FOR EXAMPLE, DASHED LINE PAID AS 10 FEET OF PAINT, SOLID LINE PAID AS THE TOTAL DISTANCE COVERED WITH THE MARKERS).
- F. PRIOR TO ACCEPTANCE, THE PAVEMENT MARKINGS SHALL BE COMPLETED FOR THE ENTIRE PROJECT BY THE CONTRACTOR AS DETAILED ON THE PLANS OR DIRECTED BY THE RESIDENT ENGINEER.

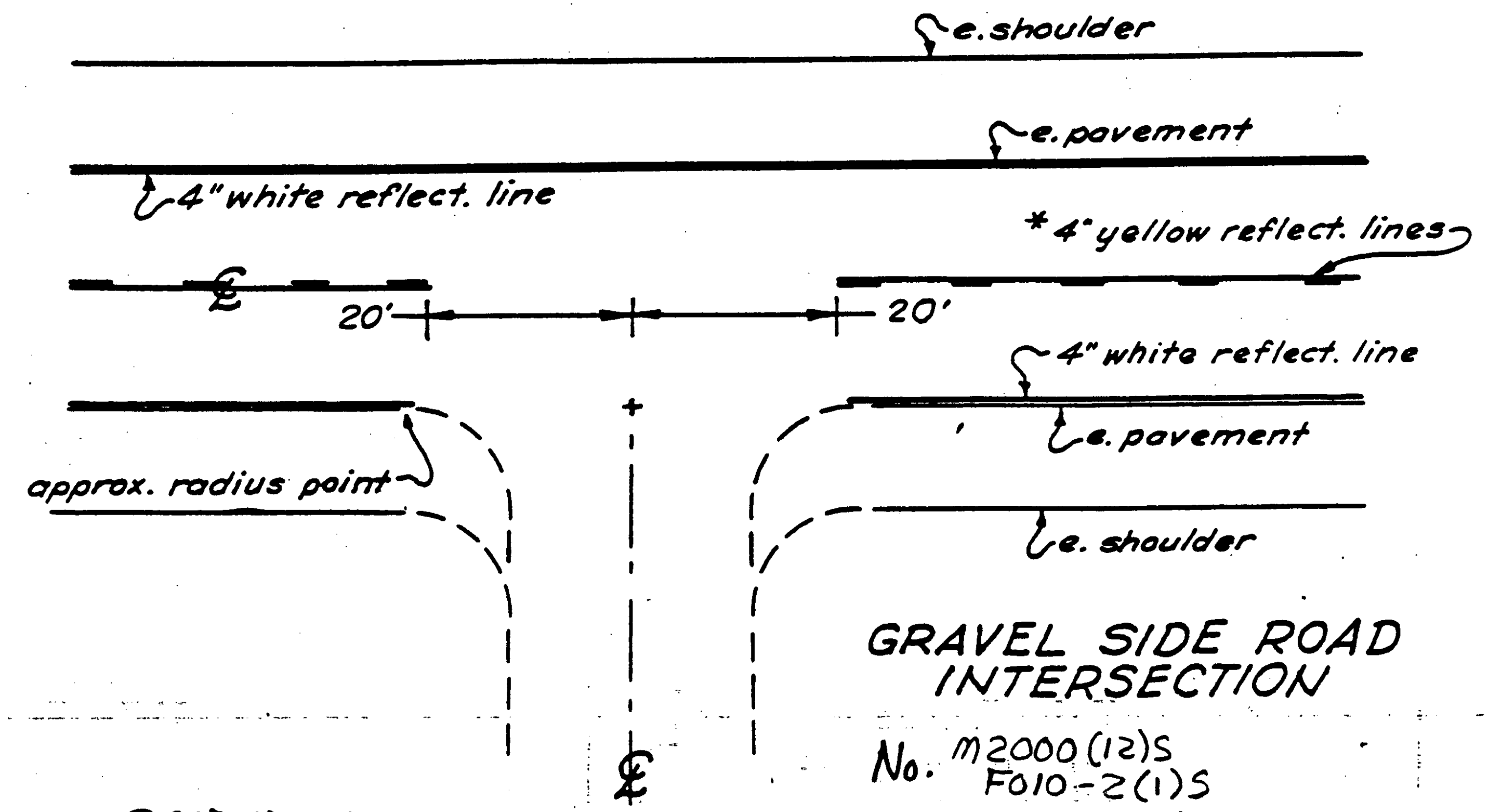
REVISED
02/11/85

PROJECT: BRATTLEBORO

No. M 2000(12)S, F 10-2(C)S
SHEET 6 OF 23 SHEETS

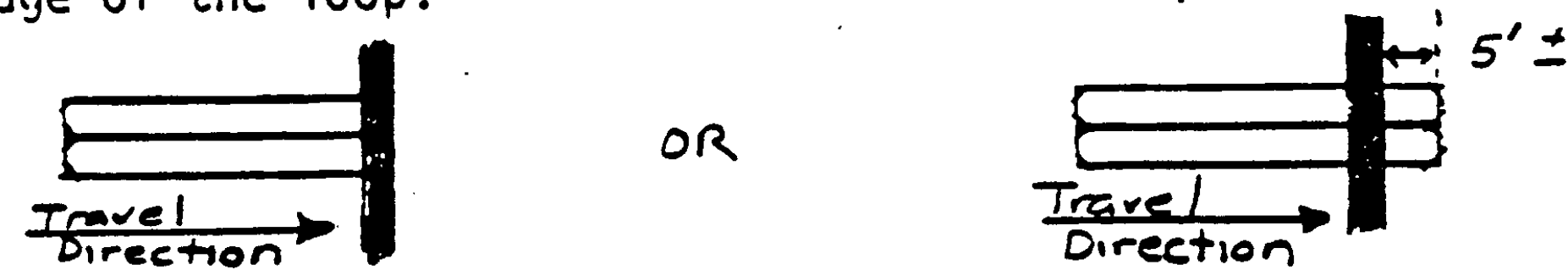


* Centerline treatment shall consist of a minimum of 400 feet of solid line in advance of the intersection and shall be paired with either a solid or dashed line depending on sight distance availability in the opposing lane.



APPLICATION NOTES

1. Edge lines shall be placed 1'-0" from curb.
2. Lane widths based on available roadway width. Preference shall be given to thru lanes with a preferred width of 12'. Left and right turn lanes may be between 10'-12' in width.
3. Exclusive turn lanes (left or right) - Turn lane lanes shall be solid and extend back from the stopbar an adequate distance to store turning vehicles. Generally, the lane line will extend back to the point of full lane width. The edge line taper rate should be 15:1 (minimum). In urban areas an 80' minimum is required. In both rural and urban areas a 200' taper is desirable. An estimate of length required can be determined by dividing the average hourly turning volume by the number of cycles per hour. Multiply the result by 25' per vehicle and then multiply by 1.5 to 2.0. Existing geometry may restrict turn lane length.
4. Turn arrows shall be placed at the begin and end of the left or right turn lane and in the middle if the lane length exceeds 200'.
5. Turn arrows placed at the end of the lane with the stop bar shall be placed with a 4' gap between the stop bar and arrow.
6. There shall be a 4' gap between turn arrows and word markings.
7. When word markings are used at the beginning of a turn lane the markings shall begin at the start of the solid white lane line.
8. The word marking STOP shall be placed with a 4' gap between the marking and the stop bar.
9. Gore markings shown are only approximate. Marking shall be as detailed on Standard Sheet E-50.
10. Stopbars shall be located no closer than 40' from the nearest signal face and no further than 120' from the furthest face. At intersections where there are existing vehicle detector loops, care should be taken in locating the stop bar. In most cases the stopbar should be at or just behind the front edge of the loop.



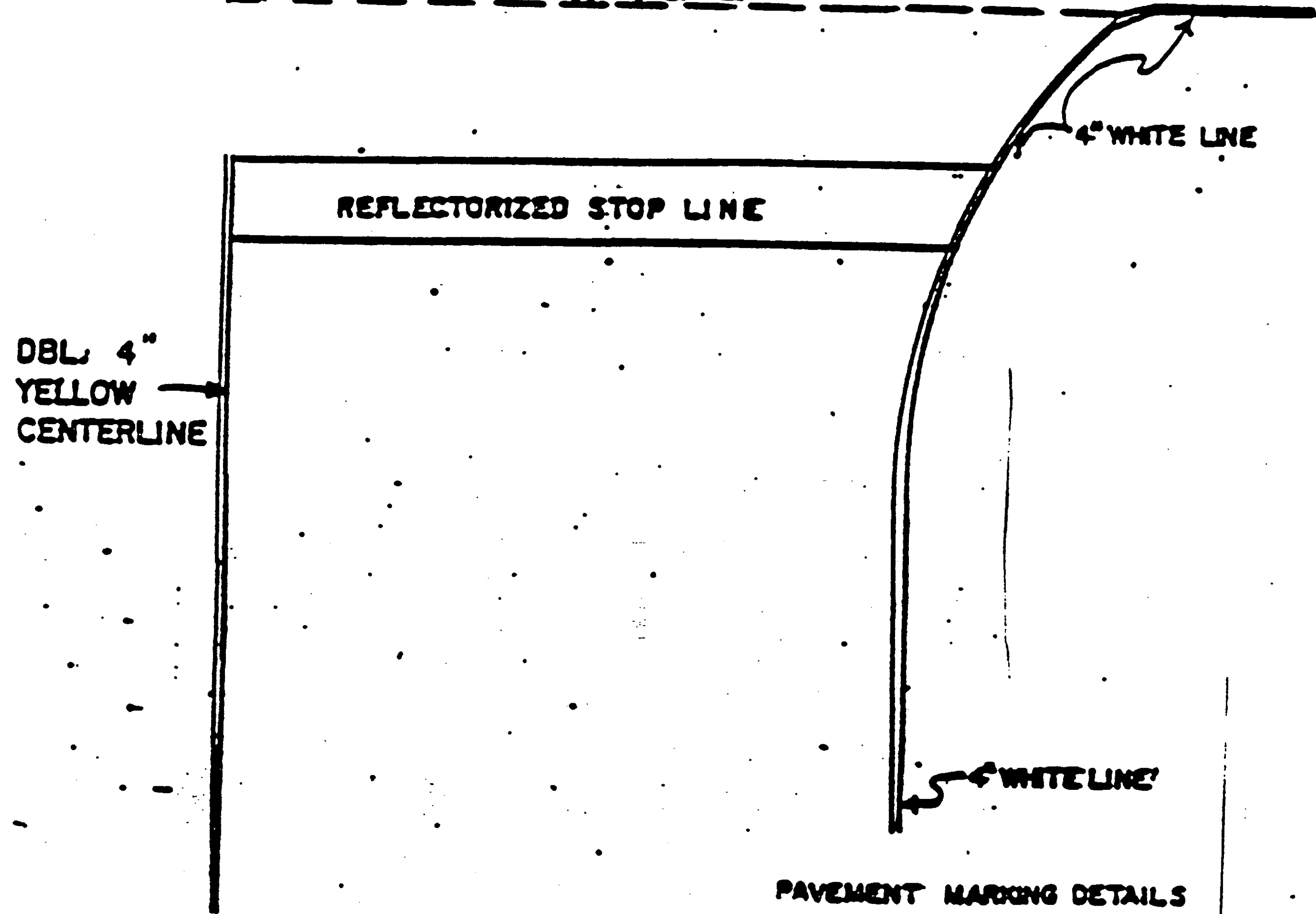
If loop locations are not known, contact either the Maintenance Division or Traffic Design for information.

11. Dotted line extensions (lane lines and/or centerline) may be used at some intersections to emphasize turning paths.

DETAILS

With Signal

INTERSECTING ROAD EDGE LINE



NOTE :

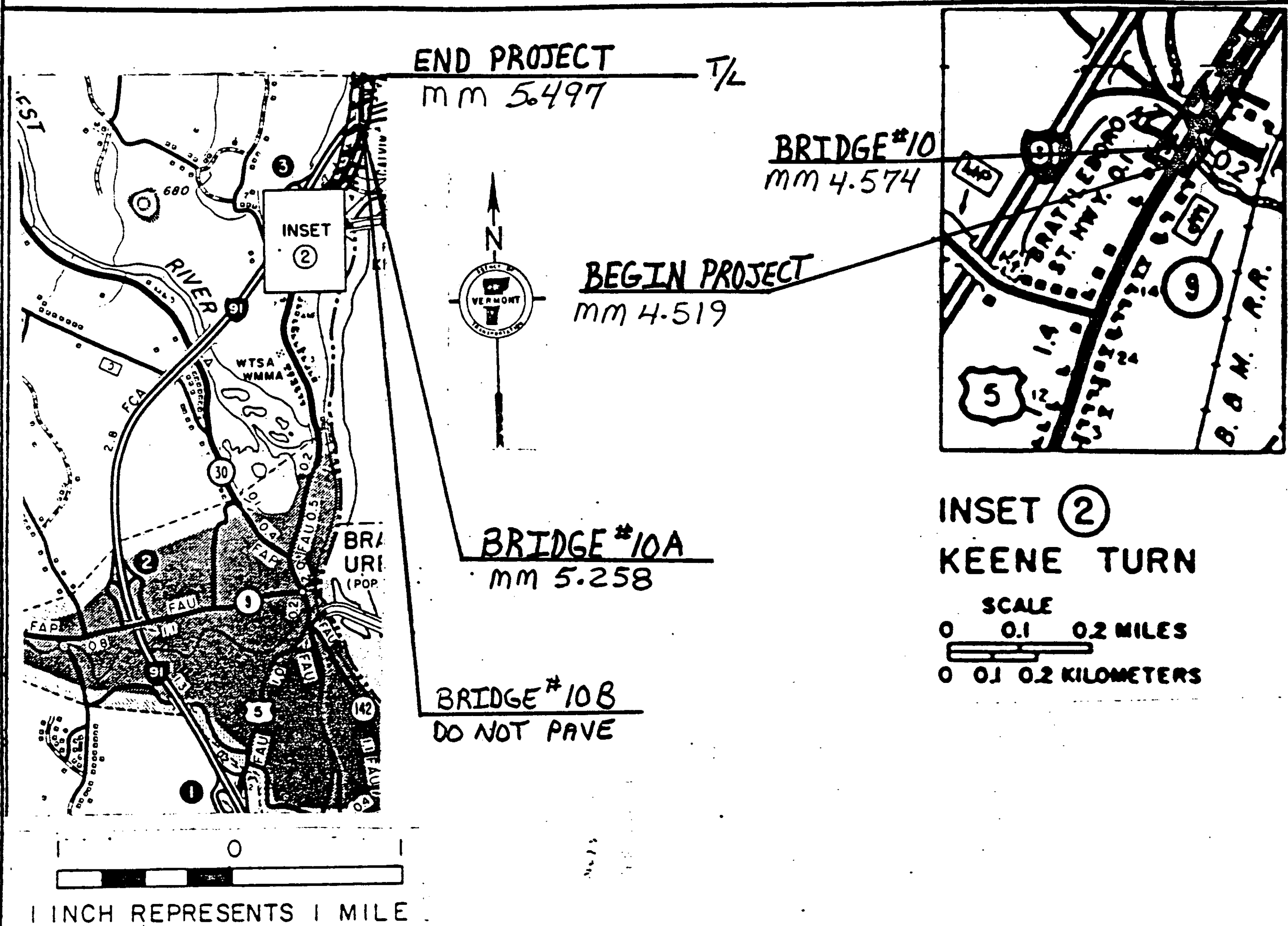
THE STOP BAR SHALL BE PLACED
A MINIMUM OF 40' FROM THE
NEAREST TRAFFIC SIGNAL.

PROJECT BRATTLEBORD

NO. m2000 (12) S, F010-2(1) S

SHEET 9 OF 23 SHEETS

PROJECT DESCRIPTION AND LOCATION



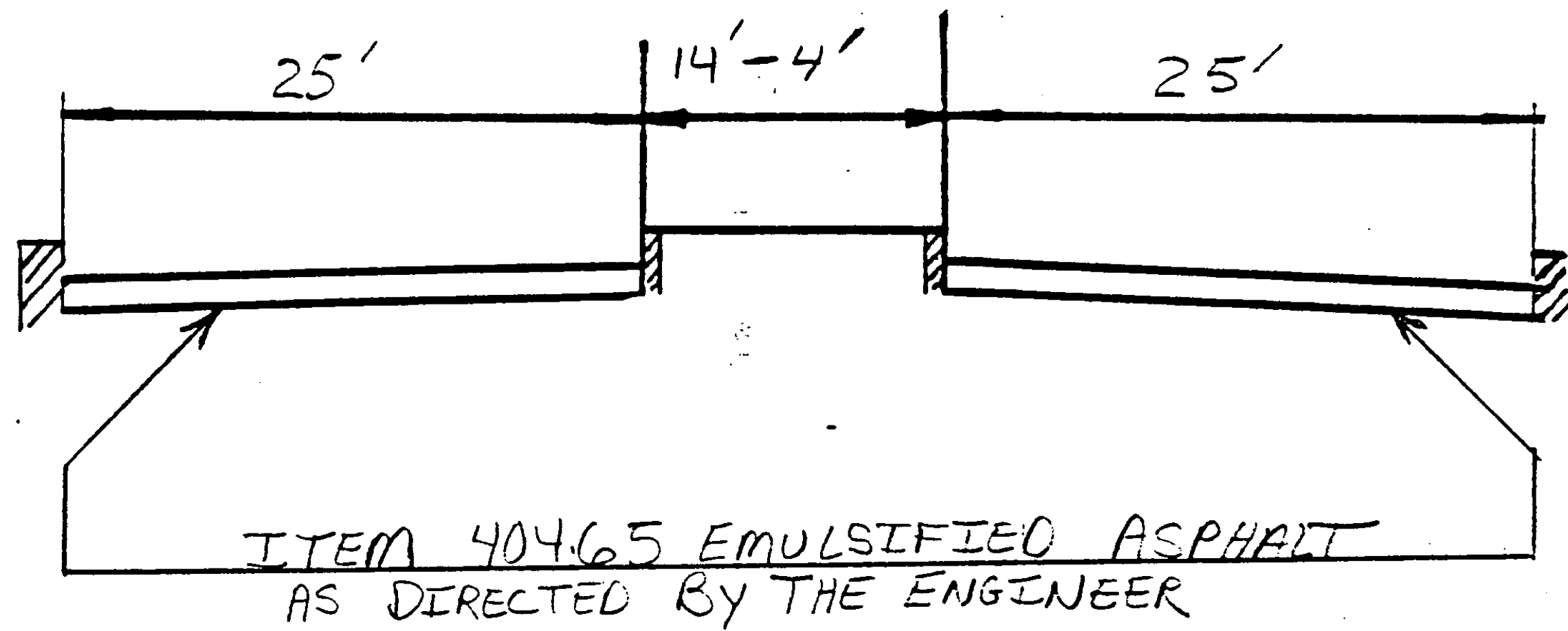
IN BRATTLEBORO, beginning at a point on US 5 approximately 300 feet south of the bridge over Sargent Brook (mm 4.519) and extending northerly 0.978 miles to the BRATTLEBORO - DUMMERSTON T/L mm 5.497.

TRAFFIC DATA
1982 ADT 10,430
V = 40 MPH

LENGTH OF PROJECT: 0.978 mi.
5164 ft.

TYPICAL SECTIONS & DESIGN DATA

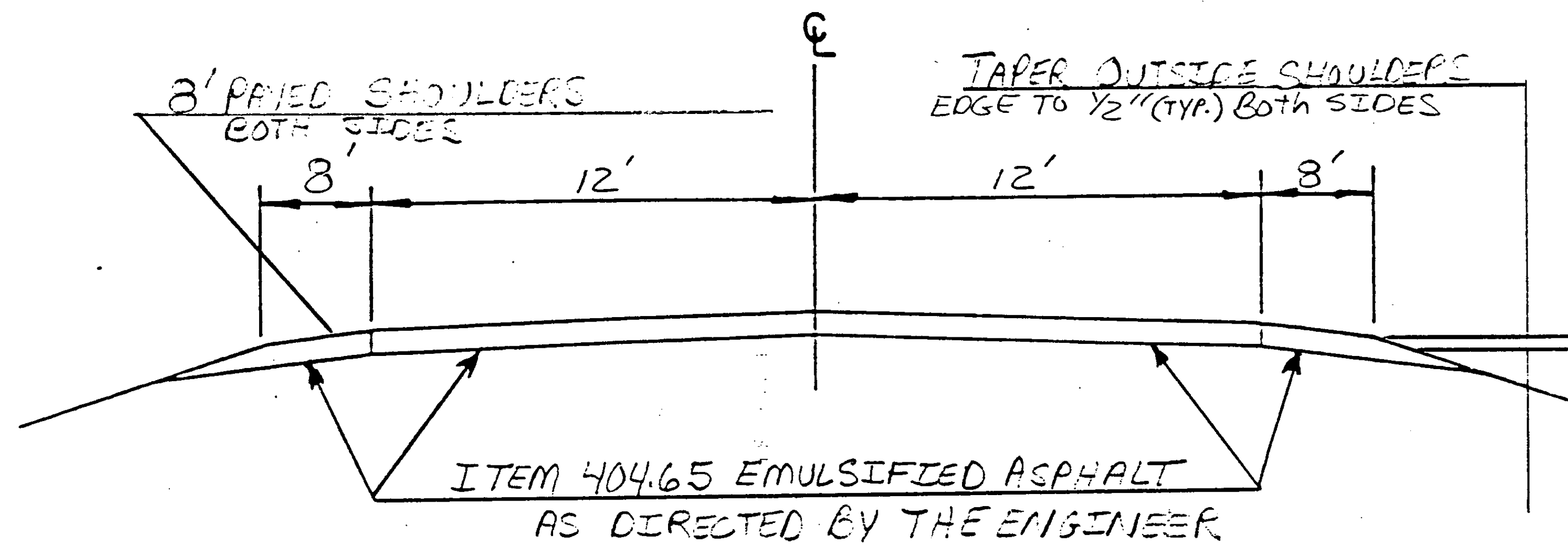
ITEM 406.25 BITUMENOUS CONCRETE PAVEMENT
LEVELING COURSE, TYPE III OR IV (50' WIDE @ 563 TONS/M²)
AS DIRECTED BY THE ENGINEER
1 1/2" WEARING COURSE, TYPE III



BRATTLEBORO MM. 4.519 ~ MM 4.652

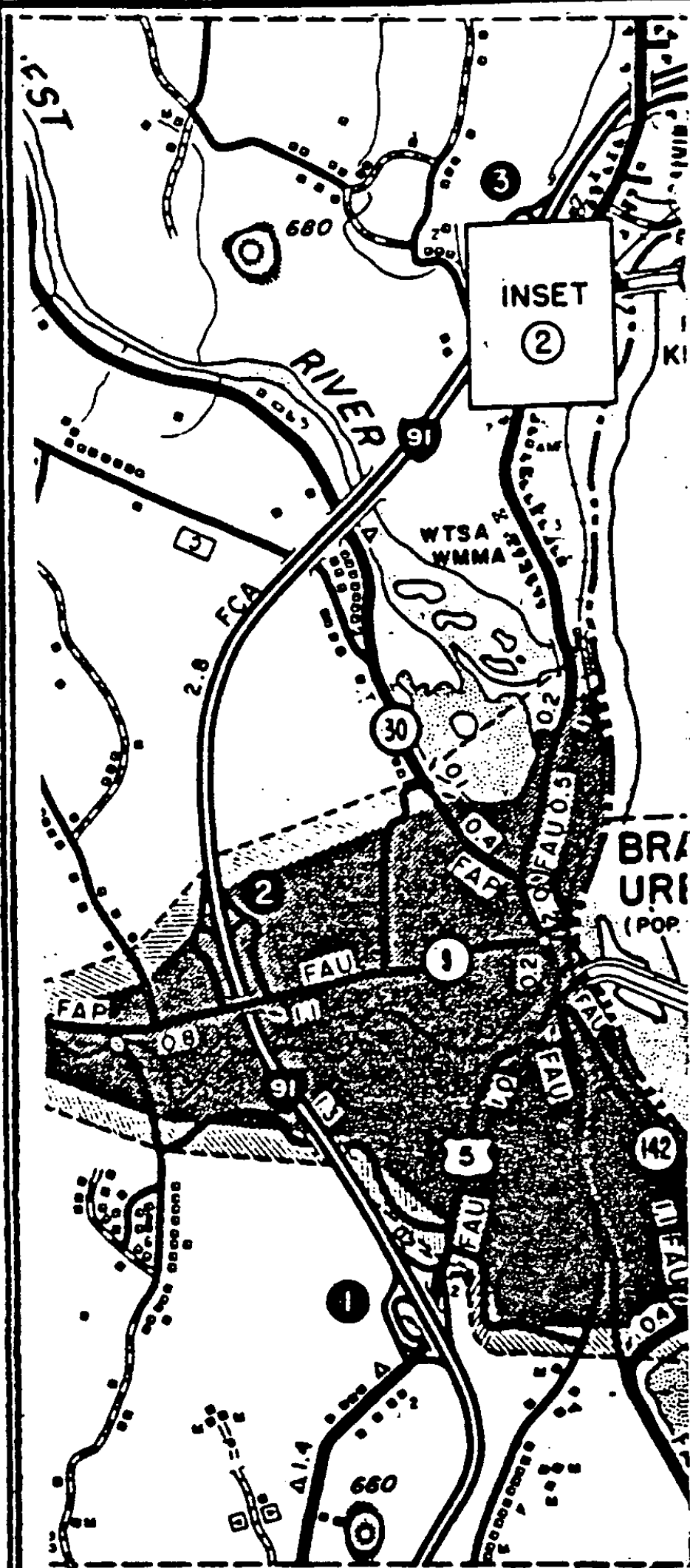
TYPICAL SECTIONS & DESIGN DATA

ITEM 406.25 BITUMINOUS CONCRETE PAVEMENT
LEVELING COURSE, TYPE III OR IV (24' WIDE @ 273 TONS/mi)
AS DIRECTED BY THE ENGINEER
1 1/2" WEARING COURSE, TYPE III



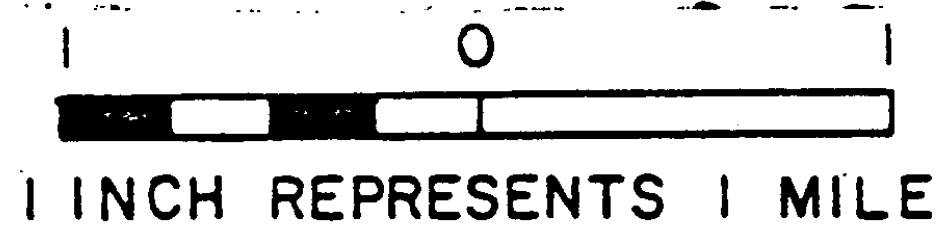
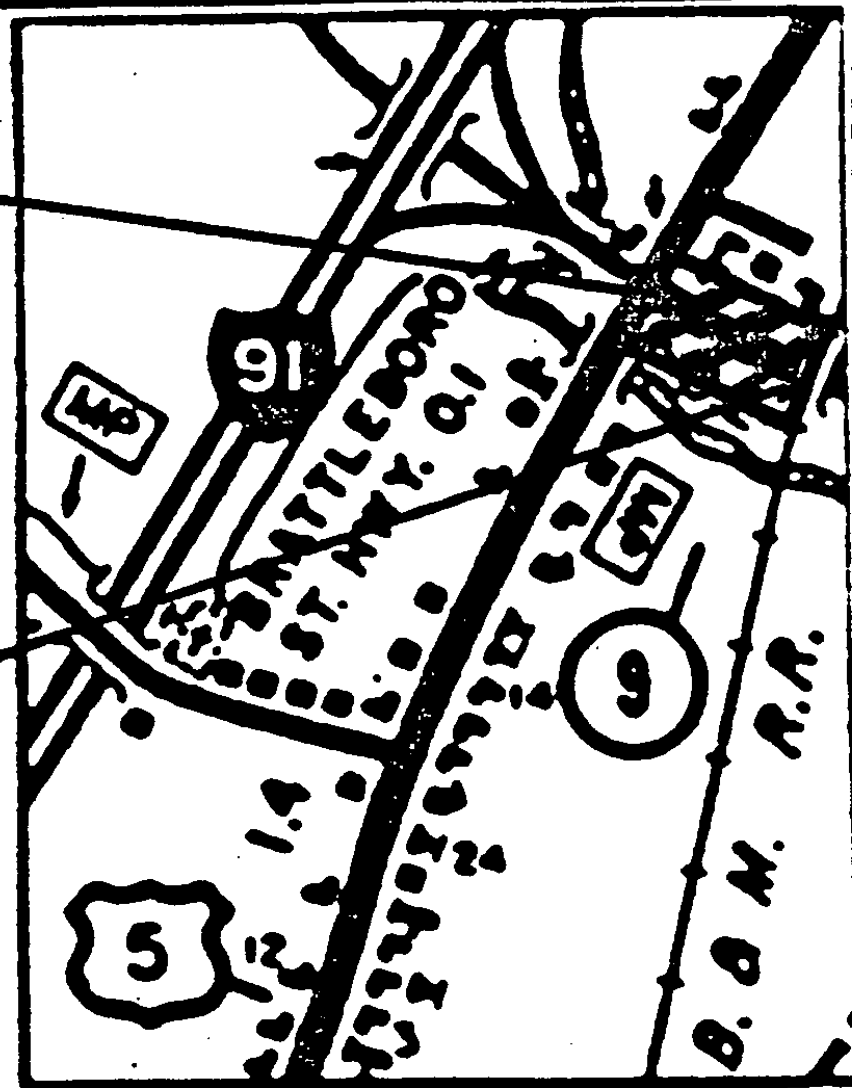
BRATTLEBORO MM 4.652 ~ MM 5.497

PROJECT DESCRIPTION AND LOCATION

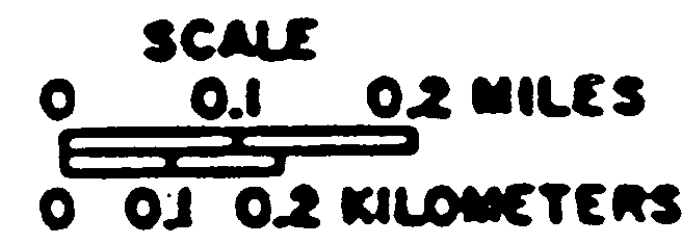


BEGIN PROJECT
MM 7.055

END PROJECT
MM 7.186



INSET ②
KEENE TURN



In BRATTLEBORO, beginning at a point on Vt. 9 (mm 7.055) the jct. of US 5, Vt. 9, and BRATTLEBORO ST. HWY., and extending easterly for 0.131 miles to the B & M R.R. bridge over Vt. 9 (mm 7.186)

TRAFFIC DATA

1982 ADT 6630

V = 40 MPH

LENGTH OF PROJECT: 0.131 miles
632 Feet

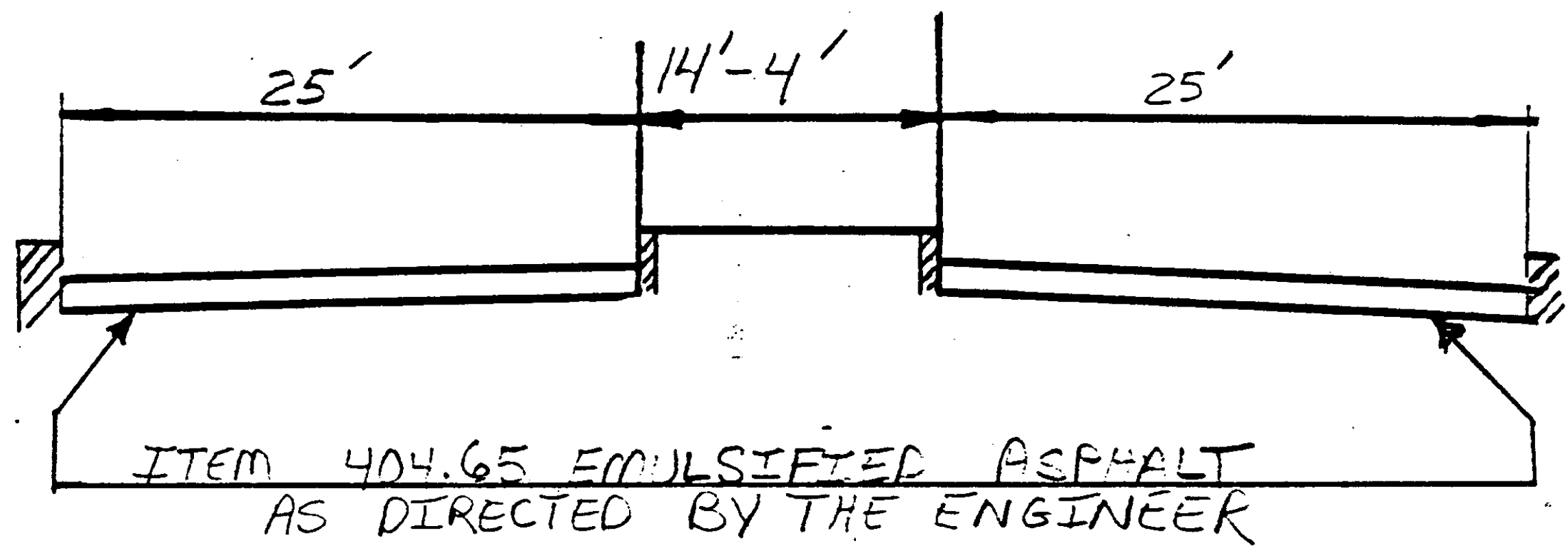
PROJECT BRATTLEBORO

NO. F010-2(1)S

SHEET 15 OF 23 SHEETS

TYPICAL SECTIONS & DESIGN DATA

ITEM 406.25 BITUMINOUS CONCRETE PREPARED
LEVELING COURSE, TYPE III OR IV (50' WIDE @ 568 TONS/mi)
AS DIRECTED BY THE ENGINEER
1 1/2" WEARING COURSE, TYPE III



BRATTLEBORO MM 7.055 ~ MM 7.150

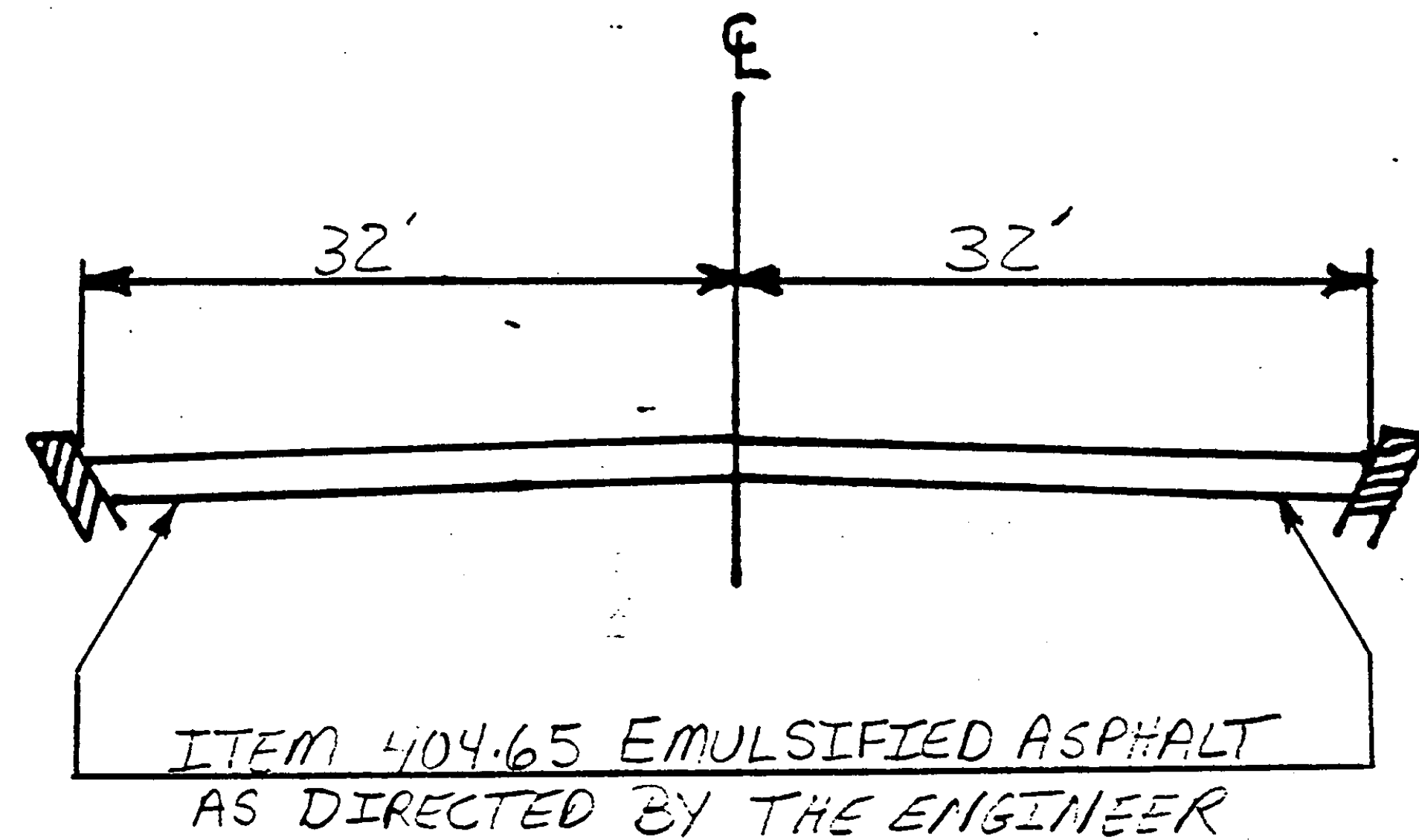
PROJECT BRATTLEBORO

NO. F 010-2(1)S

SHEET 16 OF 23 SHEETS

TYPICAL SECTIONS & DESIGN DATA

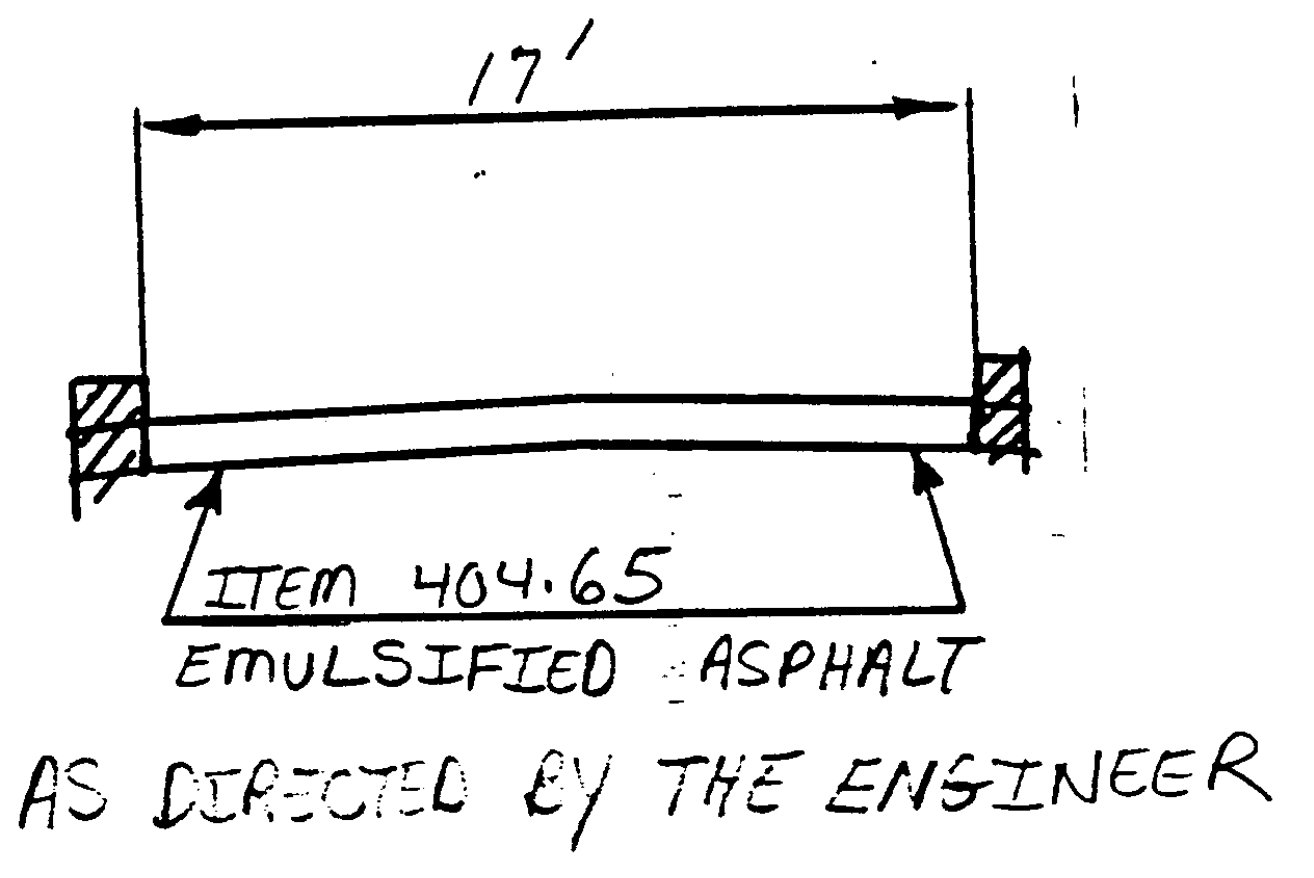
ITEM 406.25 BITUMINOUS CONCRETE PAVEMENT
LEVELING COURSE, TYPE III OR IV (64' WIDE @ 7.27 TONS/mi)
AS DIRECTED BY THE ENGINEER
1 1/2" WEARING COURSE, TYPE III



BRATTLEBORO mm 7.150 ~ mm 7.186

TYPICAL SECTIONS & DESIGN DATA

ITEM 406.25 BITUMINOUS CONCRETE PREPARED
LEVELING COURSE, TYPE III OR IV (17' WIDE @ 193 TONS/mi)
AS DIRECTED BY THE ENGINEER
1 1/2" WEARING COURSE, TYPE III



BRATTLEBORO TWO RAMP ON AND OFF FOR V.9

PROJECT LENGTHS AND ITEM QUANTITIES

ITEM DESCRIPTION

OPTION
 GRAVEL SHOULDERS
 EMULSIFIED ASPHALT
 POWER BROOM RENTAL
 UNIFORMED TRAFFIC OFFICERS
 FLAGPERSONS
 TOPSOIL

ITEM NO	UNIT	FT.	FT.	IN.	TONS	MI	OVERLAY DEPTH		LEVELING COURSE		GRAVEL SHOULDERS		EMULSIFIED ASPHALT		POWER BROOM RENTAL		UNIFORMED TRAFFIC OFFICERS		CY	
							402.10	402.11	404.65	406.25	608.30	604.40	630.10	630.15	630.10	630.15	630.10	630.15		
							TON	CWT	TON	HR	EA.	HR.	HR.	HR.	HR.	HR.	HR.	HR.	HR.	
	LOCATION	502	50	1 1/2	568			3	227	1	7	14	14							653.10
	BRATTLEBORO VA. 9 MAY 7.0 55 MM 7.150								54											
	BRATTLEBORO VA. 9 MAY 7.150 MM 7.186	190	64	1 1/2	727			2	113	1	0	7	7							
	RAMPS (EST.)	[450]	17	1 1/2	193			1	72	1	1	5	5							
									17											
	PROJECT																			
	ROUNDINGS							5	9	1	45	2	2	2	2	3				
								1	1	1	1	1	1	1	1	1				
	TOTALS	692		1/2				5	10	7	555	5	8	30	30	5				

PROJECT BRATTLEBORO

NO. F010-2(1)5

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