

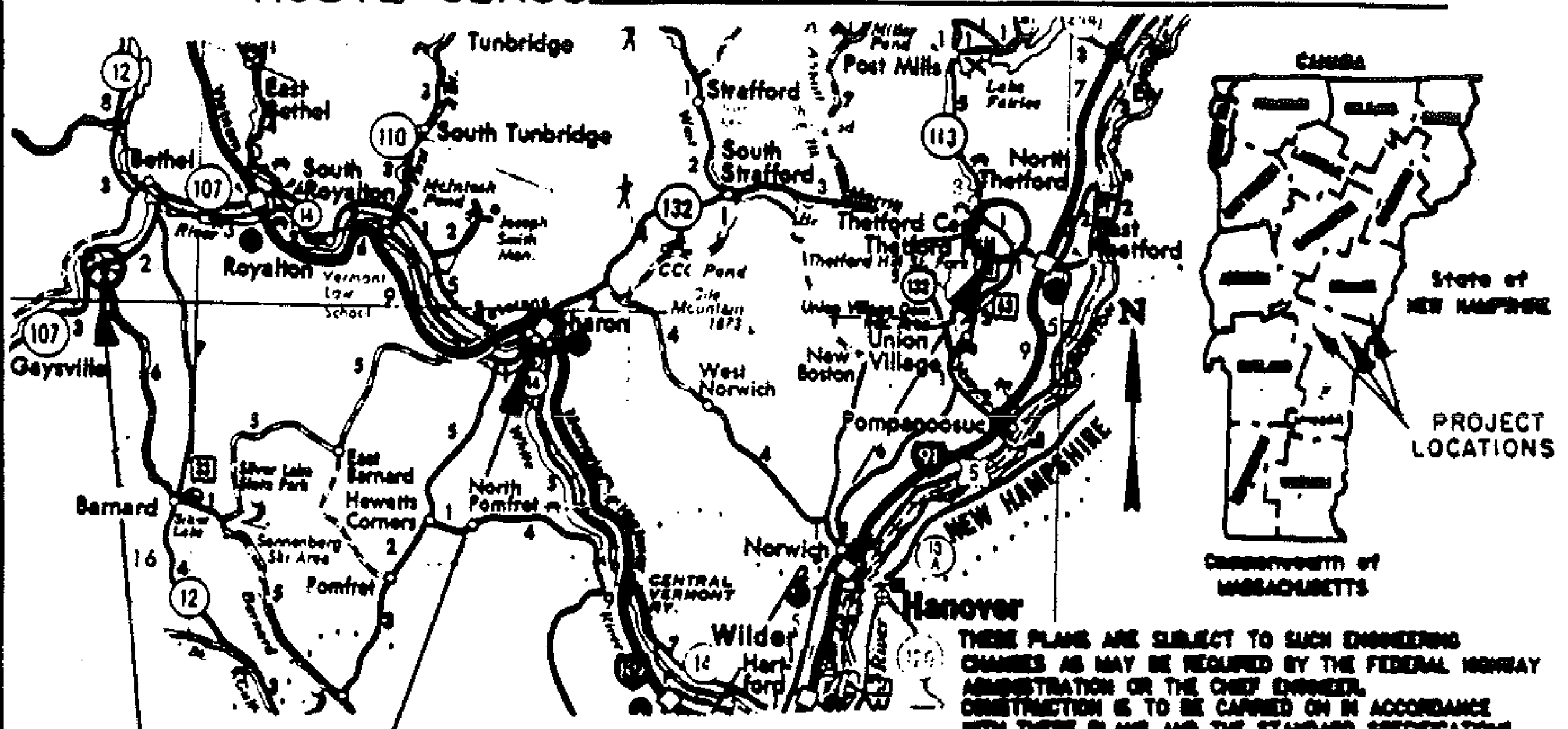
**STATE OF VERMONT
AGENCY OF TRANSPORTATION**



CONTRACT PLANS
THESE PLANS DO NOT REFLECT
CHANGES MADE ON THE PROJECT.

PROPOSED IMPROVEMENT

TOWN OF BETHEL / SHARON
COUNTY OF WINDSOR
ROUTE NO. 12, 132
ROUTE CLASS FAP / FAS



BETHEL SHARON
HMA 2918 RS: 0177(5)

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 1986, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON NOVEMBER 21, 1986 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

Date: AUG 9 1988

PIKE INDUSTRIES, INC.
Contractor

Roger D. Malt
Signature

Vice President
Title

[Signature]
Transportation Secretary's Signature

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD
APPROVED Paul D. Kelly DATE 3/22/88
CHIEF ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

HMA 2918
PROJECT NO. RS 0177(5)
SHEET 1 OF 34 SHEETS

INDEX OF SHEETS

- 1. TITLE PAGE
- 2. INDEX OF PROJECTS
- 3. COMPOSITE QUANTITIES
- 4-19. SHARON RS 0177(5)
- 20-34. BETHEL HMA 2918
- 35. STANDARD SHEET E 100 09/10/87
- 36. E 101 10/30/87
- 37. E 102 10/30/87
- 38. E 107 04/29/88R
- 39. E 107A 09/10/87
- 40. E 143 10/30/87
- 41. E 150 10/30/87
- 42. E 160 03/01/88R
- 43. E 191 09/10/87
- 44. E 29 02/03/86R

PROJECT SHARON
BETHEL

NO. RS 0177(5) HMA 2918

SHEET 2 OF 37 SHEETS

QUANTITIES

ITEM NO.	TON	CWT	TON	HR	HR	HR	HR	HR	HR	LS	LS	LF	LF	EA
40212	604.63	406.25	604.63	100.15	604.25	604.30	604.37	604.10	630.10	630.17	630.10	646.30	646.34	646.40
UNIT			3195											
LEVELING	2993													
TOP			7028											
DRIVES	9.3		21											
TURNOUTS	12		6.2											
SIDE ROADS	5		267											
ROUNDING	10.7		4.8											
TOTALS	6035	162	6333	10.0	148	62	130	542	658	1	1020	350	84	21

ITEM DESCRIPTION

EMULSIFIED ASPHALT
 BRITANNIS CONG. PMT.
 ALL FURROWS EXCAVATOR
 POWER BROOM RENTAL
 TRUCK RENTAL
 UNIFORM RENTAL
 FLAGGING
 TESTING EQUIP - BITUMINOUS
 DURABLE 8" WHITE LINE
 DURABLE 4" WHITE LINE
 DURABLE 24" STOP BAR
 DURABLE WORD MARKINGS

ITEM NO.	EA	LF	CY	LB	EA	EA	LF
707415	2	75810	147578	133	4.8	1	1220
TOTALS							

ITEM DESCRIPTION

DURABLE 8" CROSSING SYM.
 DURABLE 4" WHITE LINE
 DURABLE 4" YELLOW LINE
 TEMP. 4 CROSSING SYM.
 TEMP. 4 WHITE LINE
 TEMP. 4 YELLOW LINE
 TOPSOIL
 FLANGED CHANNEL SIGN POSTS
 REINFORCING SALIAGED SIGNS
 PAIRED RAIL HIGHWAY CROSSING
 ERECTING CHANNEL SIGN POSTS
 ERECTING SALIAGED SIGNS

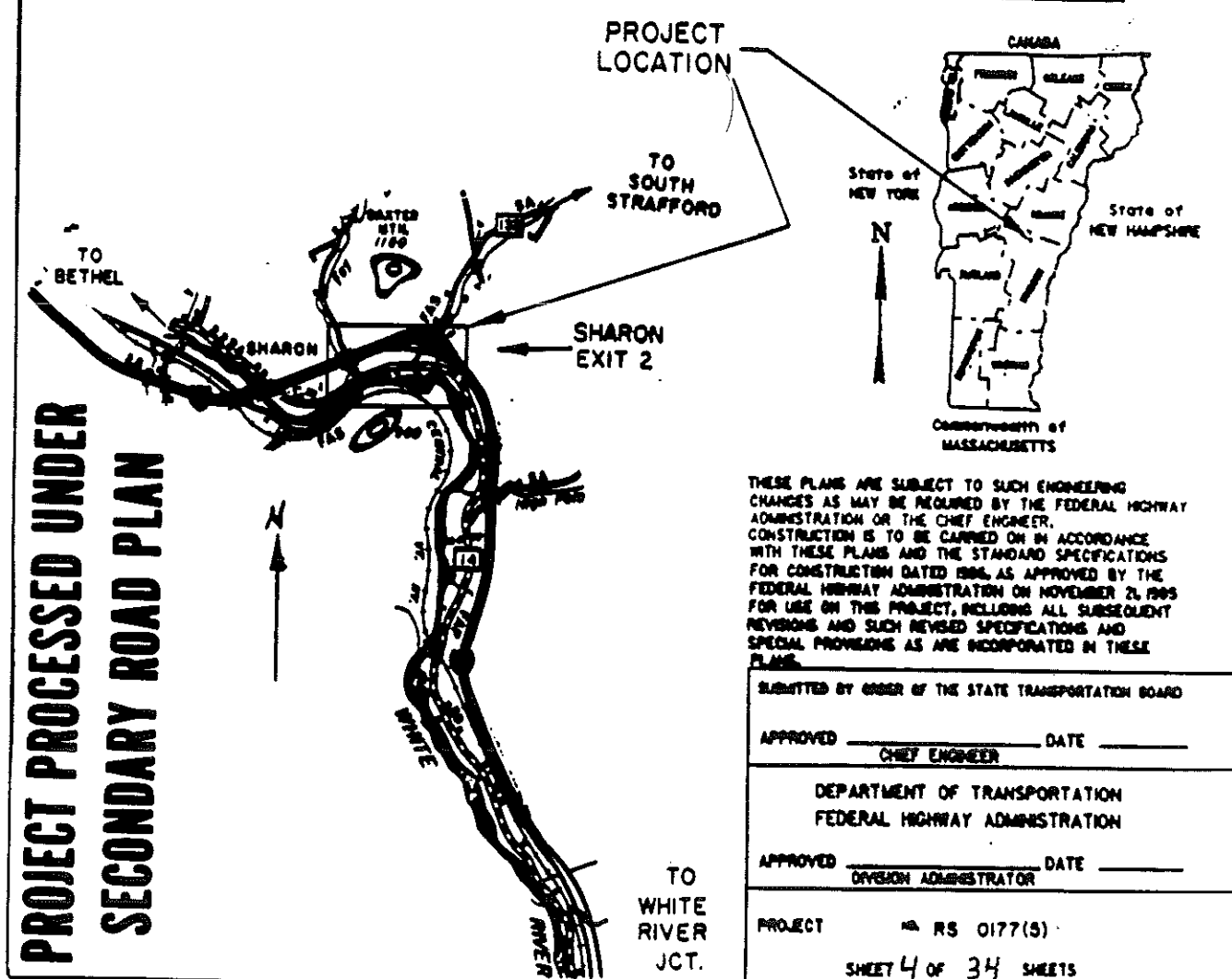
PROJECT CAVENISH WEATHERSFIELD NO. E025-1(32)S HMA 2531 SHEET 3 OF 35SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT

TOWN OF SHARON
COUNTY OF WINDSOR
ROUTE NO. VT 132
ROUTE CLASS F.A.S.



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 1965, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON NOVEMBER 2, 1965 FOR USE ON THE 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 _____	DATE _____
CHIEF ENGINEER	
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED _____	DATE _____
DIVISION ADMINISTRATOR	
PROJECT NO. RS 0177(5)	
SHEET 4 of 34 SHEETS	

PROJECT PROCESSED UNDER
SECONDARY ROAD PLAN

INDEX OF SHEETS

- 4. TITLE PAGE
- 5. INDEX
- 6. LOCATION, LENGTH AND DESCRIPTION
- 7. LOCATION
- 8-9. TYPICAL SECTIONS AND DESIGN DATA
- 10. PAVING LIMITS FOR TOWN ROADS AND DRIVES
- 11. PAVEMENT MARKINGS
- 12. "STOP AHEAD" DETAIL SHEET
- 13. STOP BAR APPROACH DETAIL
- 14. GUIDELINE FOR EDGE LINE APPLICATION
- 15. DURABLE EDGE LINE RADIUS LAYOUT TYPICAL
- 16-17. GUIDELINES FOR MINIMUM INTERIM PAVEMENT MARKINGS
- 18. PAVEMENT MARKING QUANTITIES
- 19. ITEM QUANTITIES

PROJECT SHARON

NO. RS 0177(5)
SHEET 5 OF 34 SHEETS

DESCRIPTION AND LOCATION

PROJECT LOCATION

Sharon at MM 0.002 and extending northeasterly along VT 132
for 0.225 mile to MM 0.227 plus a 322 ft. approach on TH 2 (FAS 0177, SA).

PROJECT LENGTH

0.286 miles (1510 feet)

PROJECT DESCRIPTION

Resurface with a leveling course and 1 1/4" bituminous
concrete wearing course overlaid to cover the entire width
of the existing paved surfaces as indicated on the plans.
Provide new pavement markings as indicated on the plans or
as directed by the engineer.

TRAFFIC DATA

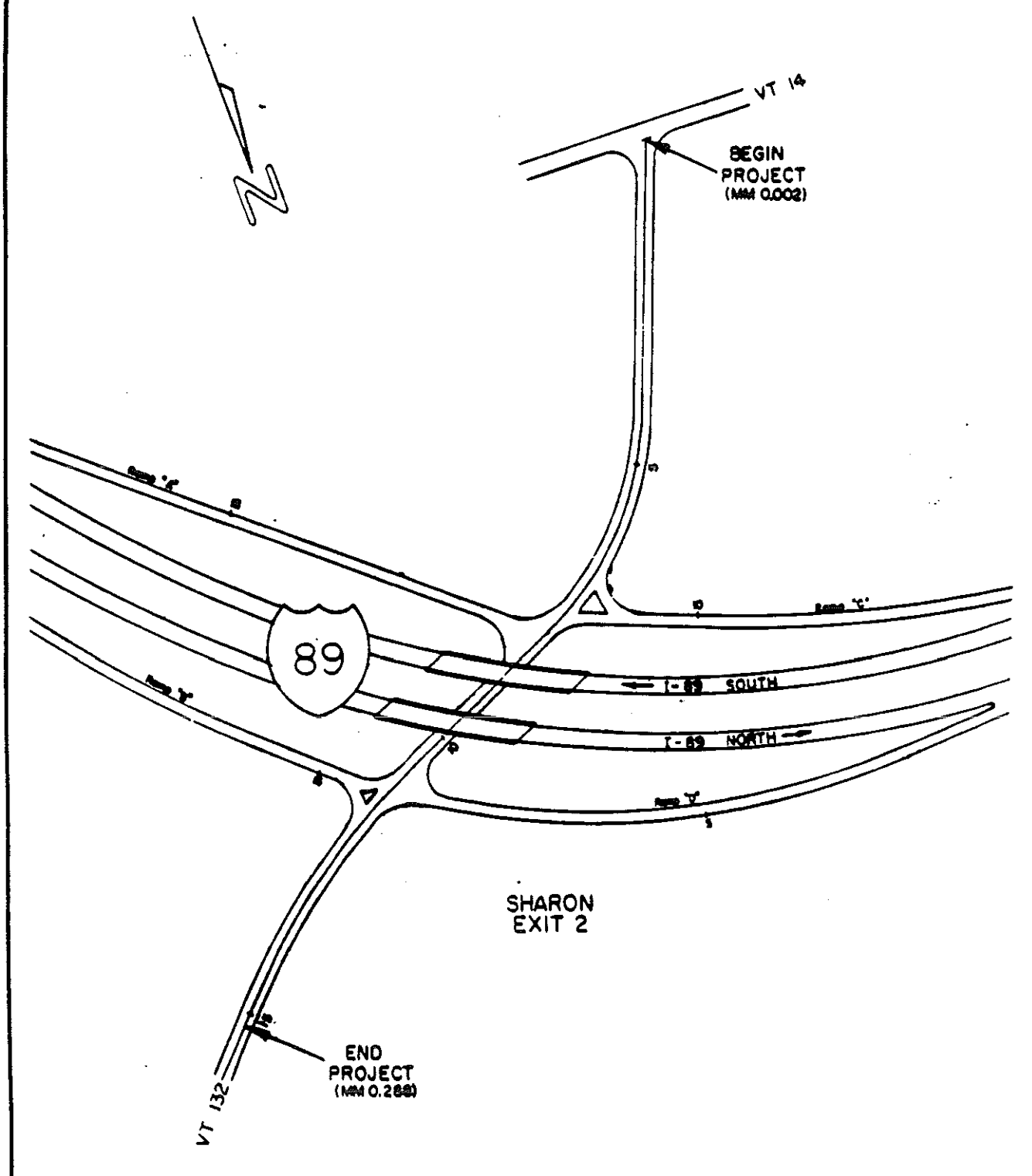
1987 AADT 2350
Posted speed limit 35 mph

PROJECT SHARON

NO. RS 0177(5)

SHEET 6 OF 37 SHEETS

DESCRIPTION AND LOCATION

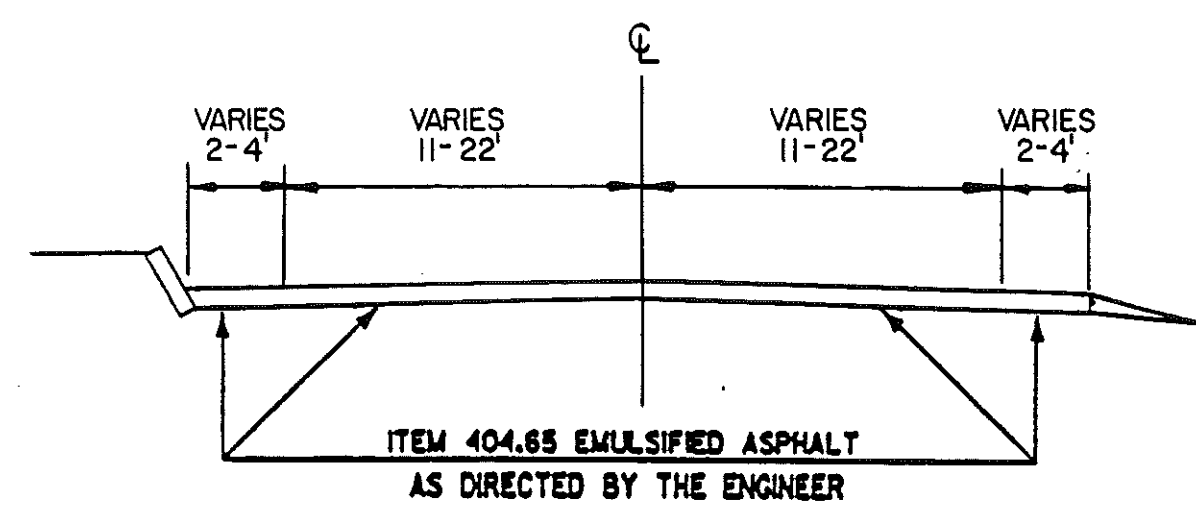


PROJECT SHARON

NO. RS 01715
SHEET 7 OF 31 SHEETS

TYPICAL SECTIONS & DESIGN DATA

BITUMINOUS CONCRETE PAVEMENT
LEVELING COURSE TYPE IV (450 TONS/MILE)
OR AS DIRECTED BY THE ENGINEER
1/4" WEARING COURSE TYPE III (1/4")

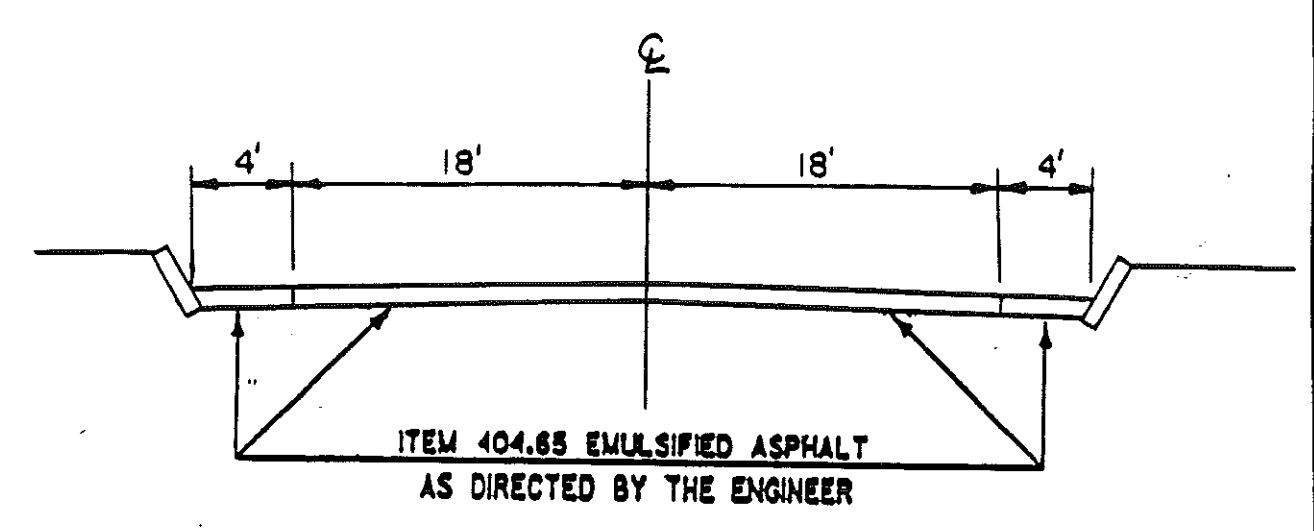


MM 0.002 TO MM 0.120
MM 0.190 TO MM 0.288

The roadway is to be overlaid to cover the entire width of the existing paved surfaces.
The contractor must duplicate the existing markings and is responsible for documenting the location of those markings prior to any paving operations.

TYPICAL SECTIONS & DESIGN DATA

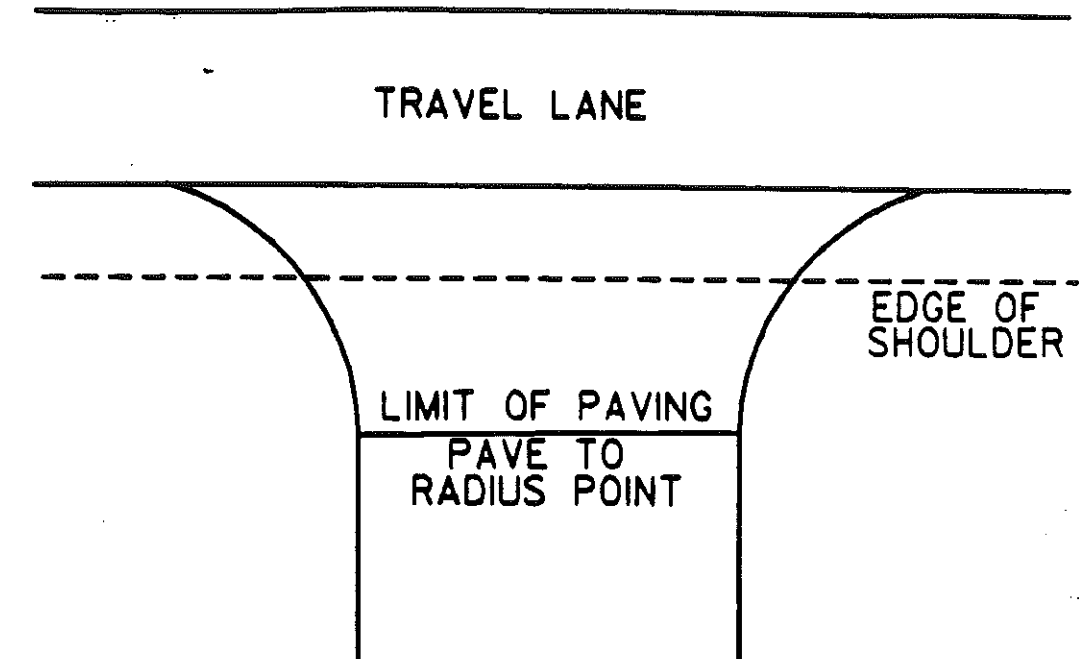
BITUMINOUS CONCRETE PAVEMENT
LEVELING COURSE TYPE IV (450 TONS/MILE)
OR AS DIRECTED BY THE ENGINEER
1 1/4" WEARING COURSE TYPE III (± 1/4")



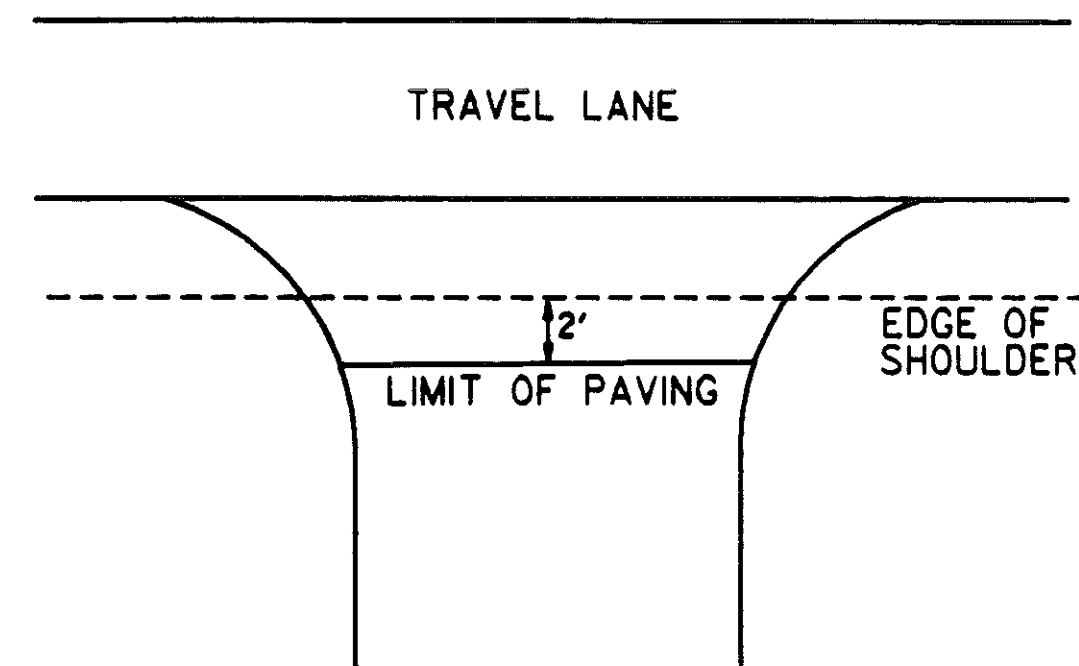
MM 0.15 TO 0.22

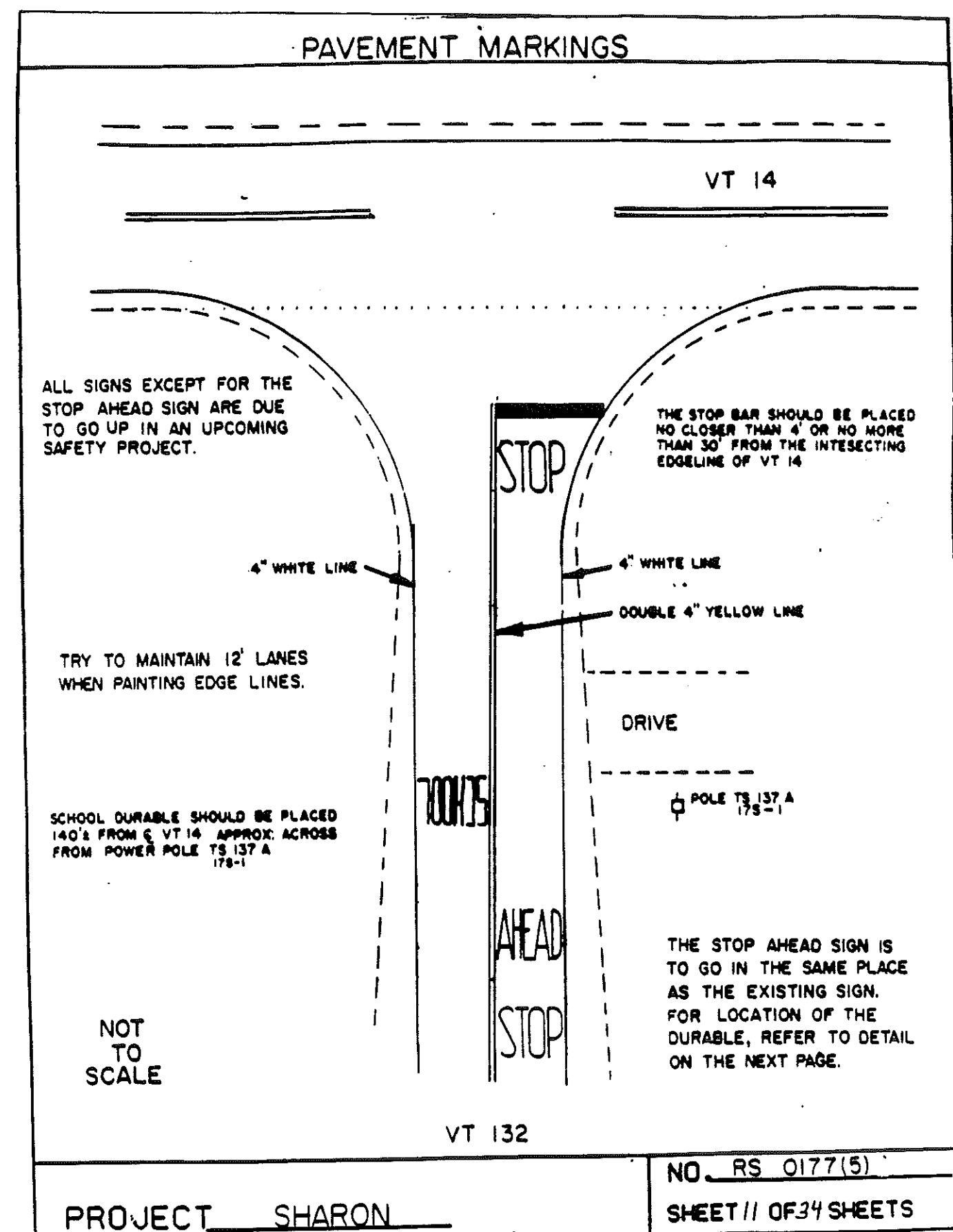
PAVING LIMITS FOR TOWN ROADS & DRIVES

PAVING LIMITS FOR TOWN ROADS



PAVING LIMITS FOR DRIVES





STOP AHEAD DETAIL SHEET

AHEAD

8'

NOTE:
SEE STANDARD E-191
FOR LETTERING DETAIL

16'

EDGE OF PAVEMENT

2' MIN.

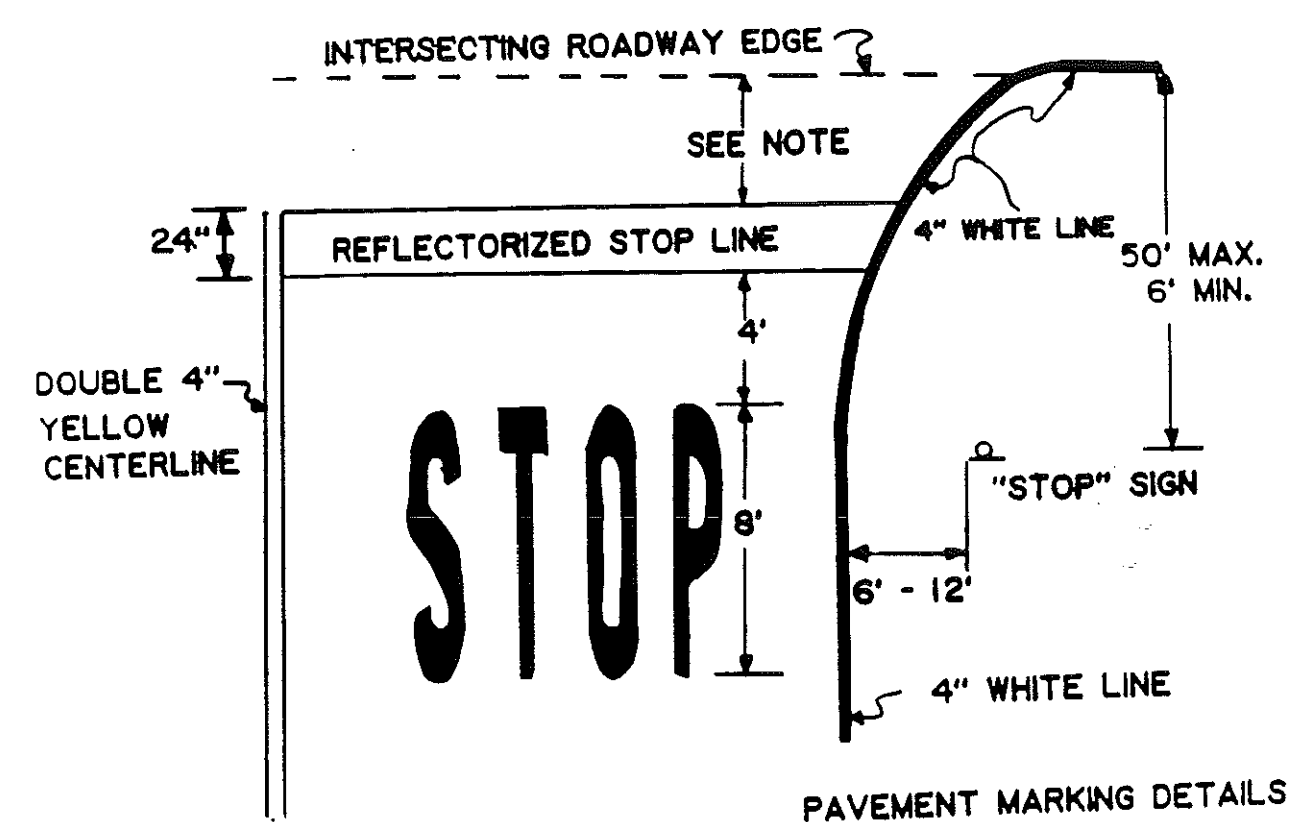
16'

STOP

8'

SHARON

RS 0177(5)
SHEET 12 OF 34 SHEETS



PAVEMENT MARKING DETAILS

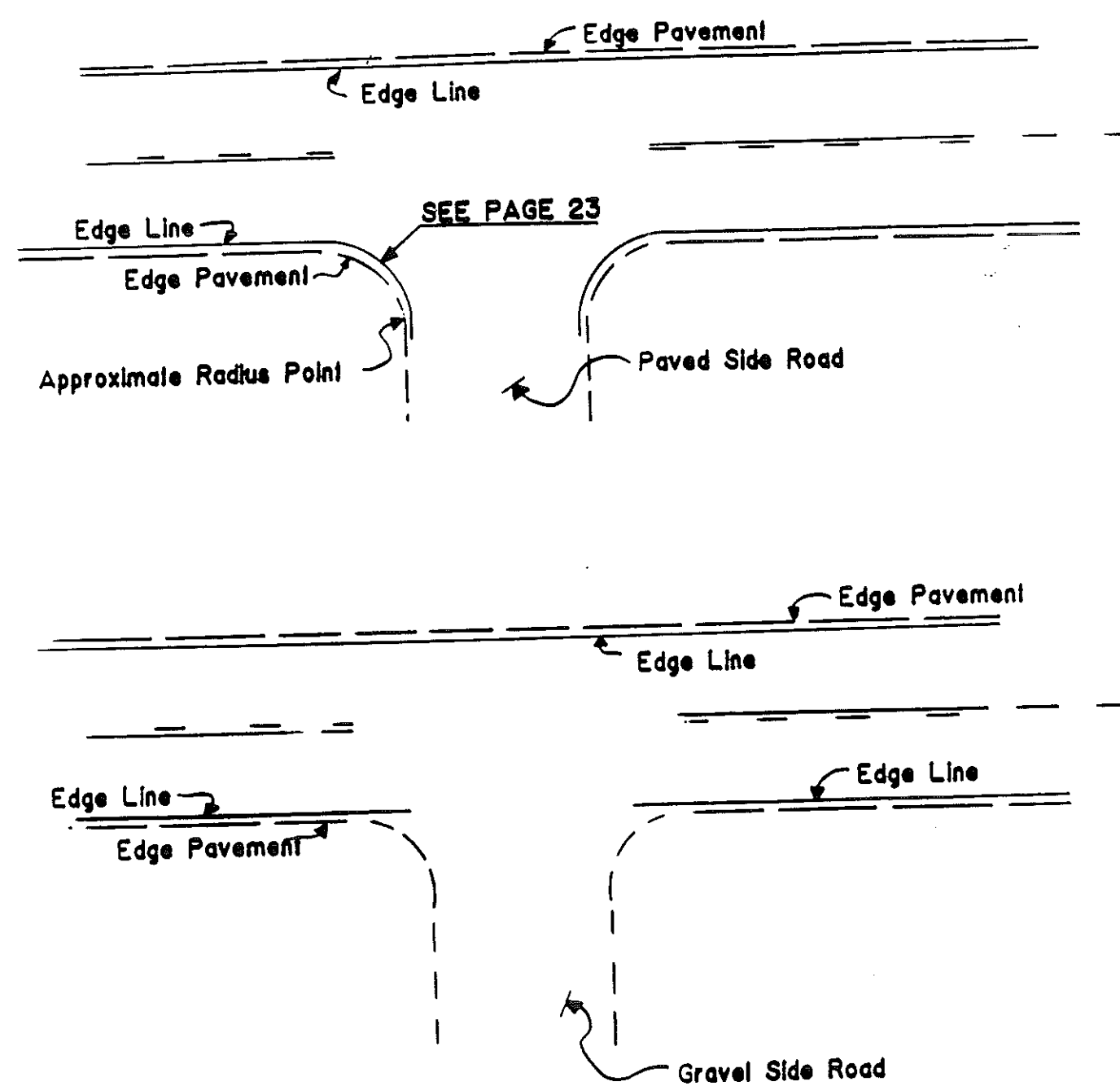
NOTE: The "desired stopping point" is the location based on site conditions that best allows the stopped vehicle to view the approaching traffic, in no case more than 30 feet or less than 4 feet from the nearest edge of the intersecting roadway.

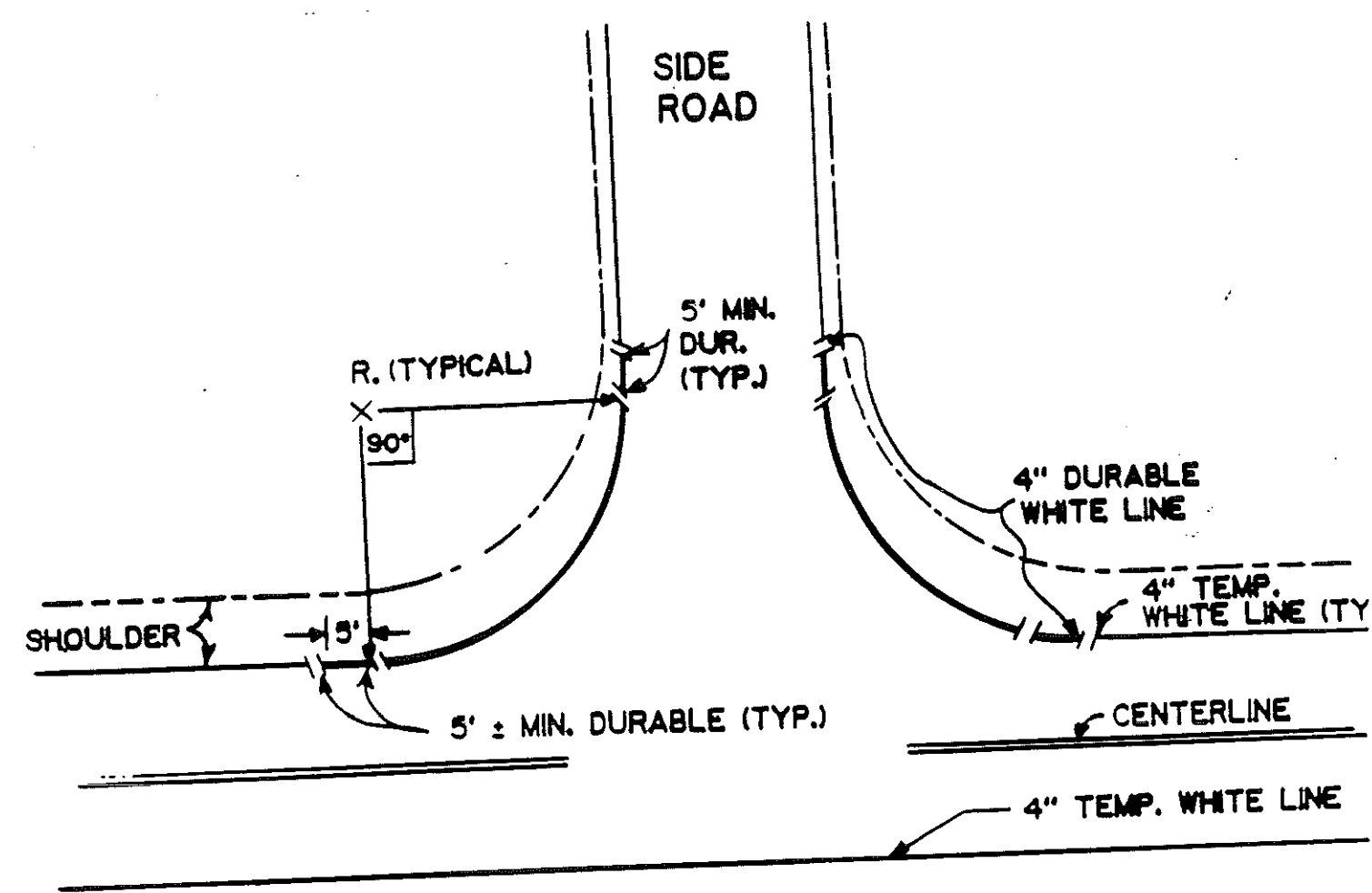
NOT TO SCALE

GUIDELINE FOR EDGELINE APPLICATION
ON 2-LANE, 2-WAY HIGHWAY

Edgelines shall be applied to the right and left of centerline on highways that have a traffic volume in excess of 1000 vehicles per day. Edgelines should be maintained at a constant distance from the centerline unless pavement width increases to allow wider lanes.

Treatment of intersecting side roads shall be as shown below:





Edgelines for paved side road intersections shall have a durable edgeline radius with a 5' minimum tangent section on each end as shown.

DURABLE EDGELINE RADIUS LAYOUT TYPICAL

Guidelines for Minimum Interim Pavement Markings
For Construction Zones

A. Definition - Interim markings are markings that are placed prior to the application of pavement markings as specified in the project plans. The costs associated with the interim markings including material costs, placement costs, and removal costs shall be subsidiary to the specified pavement markings.

B. Interim markings shall consist of tape or temporary raised pavement markers (RPM's). Interim paint may be used on any pavement course except final wearing course.

The tape shall be the type that can be paved over or of a type easily removed if placed on the final pavement surface. Interim tape markings or RPM's will be offset and removed prior to the application of the specified markings and shall be applied as described below:

C. Centerline and gore area markings shall be applied at the end of each working day. The following layout requirements shall be met:

No Passing Zone
Solid Stripes - Double yellow removable pavement marking tape lines spaced 4" apart.

or

Raised Pavment Markers - In no case shall temporary raised pavement markers be used for more than three calendar days before the application of the specified markings. Raised pavement markers (removable) when used, shall be placed on 5' centers with every 4th marker being reflectorized. The raised pavement markings shall be supplemented with black on orange "No Passing" signs placed at the beginning of the no passing zone and every 1000' thereafter throughout the no passing zone. All temporary raised pavement markers shall be removed immediately upon placement of specified markings. All costs associated with "No Passing" signs and their installation shall be subsidiary to the specified pavement markings.

Dashed Line
10-Foot solid line with 30-foot gap.

or

For markings to be used for three days or less
- 4 foot solid line with 36 foot gap to be removed immediately upon the application of the specified markings.

or

4 retro-reflective RPM's on three foot centers with a 30 foot gap to be removed immediately upon the application of the specified markings.

Gore Area
Gore areas to include 8 inch channelizing line and 4" dashed line
See Standard Sheet E-191.

- D. Edge Lines
~~When specified, edge lines are not required until completion of the project. Edge lines should be applied where traffic volumes are high and/or a delay of several days is anticipated. In these instances, paint or RPM's can be used as the interim marking material to be paid under the appropriate bid item. RPM's should be retro-reflective temporary markers on 4-5" spacing pattern and the same color as the line they are substituting for.~~
- E. 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.

QUANTITIES

ITEM DESCRIPTION		AGGREGATE SHOULDER											
		EMULSIFIED ASPHALT			BRANDS CONCRETE PAVEMENT			GRADE CITY OF 1.29 MI			PORTLAND CEMENT RENTAL		
		TRUCK RENTAL			CONCRETE BRICK RENTAL			TRUCK RENTAL			UNIFORMED TRAFFIC DEVICES		
		TESTING EQUIPMENT - BIT			N. APPROXIMATE			N. APPROXIMATE			N. APPROXIMATE		
ITEM NO.	602.12	404.45	404.25	604.40	604.15	604.25	604.30	604.35	604.40	604.45	604.50	604.55	604.60
UNIT	TON	CWT	TON	EA	HR	HR	HR	HR	HR	HR	HR	HR	LS
DRIVES				5									
APPROACHES				5									
LEVELING COURSE				130									
TOP COURSE				470									
TOTAL	7	9	610	1	3	3	3	3	3	3	3	30	30 (0.50)

ITEM DESCRIPTION		MOBILIZATION											
		GRADE 2" WHITE LINE			GRADE 2" WHITE LINE			GRADE 2" WHITE LINE			GRADE 2" WHITE LINE		
		GRADE 2" WHITE LINE			GRADE 2" WHITE LINE			GRADE 2" WHITE LINE			GRADE 2" WHITE LINE		
		GRADE 2" WHITE LINE			GRADE 2" WHITE LINE			GRADE 2" WHITE LINE			GRADE 2" WHITE LINE		
ITEM NO.	635.10	636.30	636.30	636.40	636.40	636.40	636.40	636.40	636.40	636.40	636.40	636.40	636.40
UNIT	LS	LF	EA	LF	EA	LF	EA	LF	EA	LF	EA	LF	EA
LEVELING COURSE													
TOP COURSE													
TOTAL	0.55	40	16	25	2400	5400	6	9	48	1			

SHARON

RS 0177(5)

SHEET 19 OF 38 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION



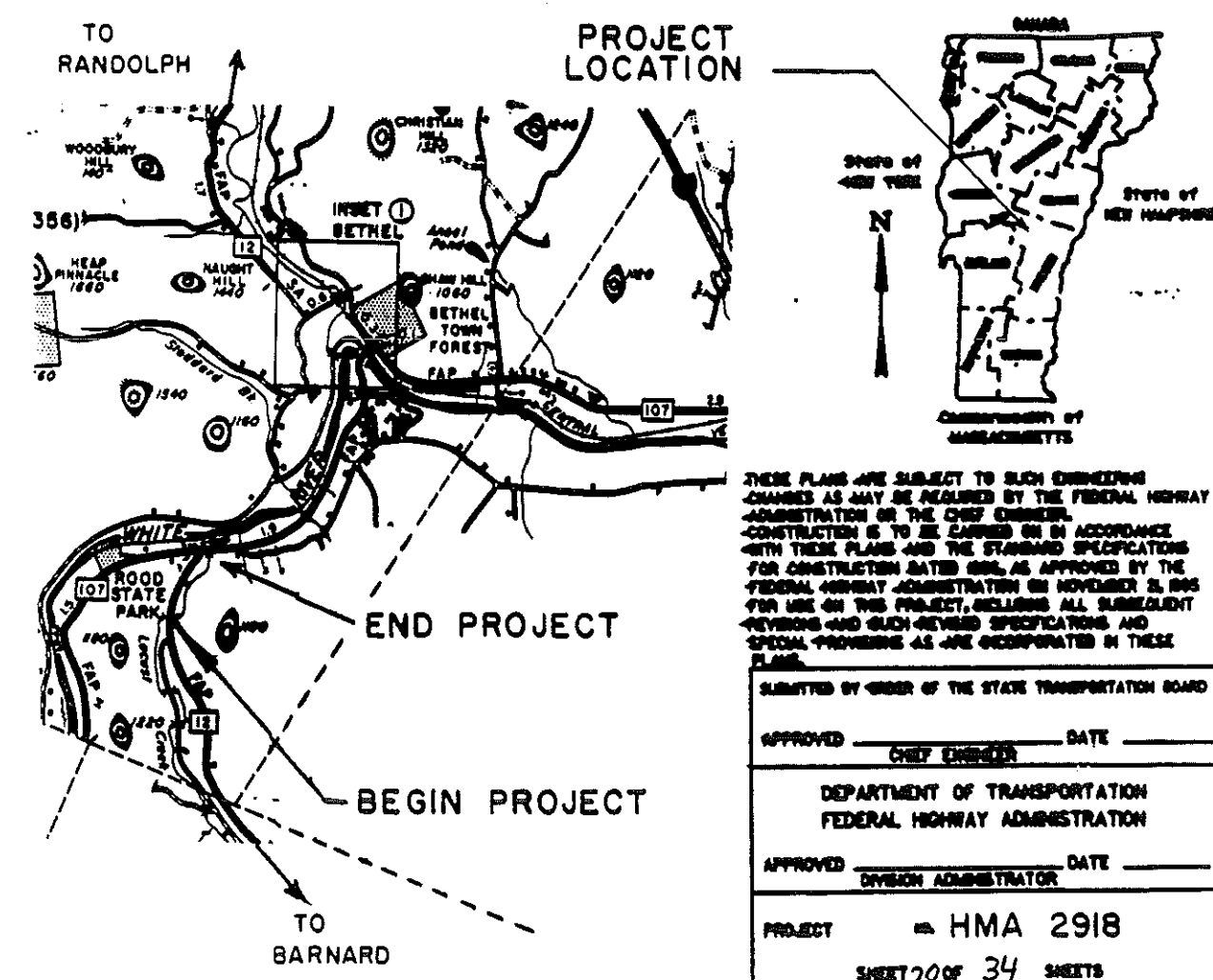
PROPOSED IMPROVEMENT

TOWN OF BETHEL

COUNTY OF WINDSOR

ROUTE NO. VT 12

ROUTE CLASS F.A.P.



THESE PLANS ARE SUBJECT TO SUCH ENGINEERING
CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY
ADMINISTRATION OR THE STATE ENGINEER.
CONSTRUCTION IS TO BE ACCORDANCE
WITH THESE PLANS AND THE STANDARD SPECIFICATIONS
FOR CONSTRUCTION DATED 1964, AS APPROVED BY THE
FEDERAL HIGHWAY ADMINISTRATION OR DIVISION 5, 600
FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT
REVISED AND CORRECTED SPECIFICATIONS AND
SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE
PLANS.

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD

APPROVED _____ DATE _____

CHEF ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED _____ DATE _____

DIVISION ADMINISTRATOR

PROJECT HMA 2918

SHEET 20 OF 34 SHEETS

INDEX OF SHEETS

- 20. TITLE PAGE
- 21. INDEX
- 22. LOCATION, LENGTH AND DESCRIPTION
- 23. LOCATION
- 24. TYPICAL SECTIONS AND DESIGN DATA
- 25. PAVING LIMITS FOR TOWN ROADS AND DRIVES
- 26. SIGN REPLACEMENT
- 27. WORD MARKING LAYOUT DETAIL
- 28. STOP BAR APPROACH DETAIL
- 29. GUIDELINE FOR EDGE LINE APPLICATION
- 30. DURABLE EDGE LINE RADIUS LAYOUT TYPICAL
- 31-32. GUIDELINES FOR MINIMUM INTERIM PAVEMENT MARKINGS
- 33. PAVEMENT MARKING QUANTITIES
- 34. ITEM QUANTITIES

DESCRIPTION AND LOCATION

PROJECT LOCATION

Beginning in the town of Bethel at HM 1.062 and extending northerly along VT 12 for 0.321 miles to HM 1.393

PROJECT LENGTH

0.321 miles (1694 feet)

PROJECT DESCRIPTION

Resurface with a leveling course and 1-1/4" bituminous overlay. Provide paved shoulders and new pavement markings as indicated on the plans or as directed by the engineer.

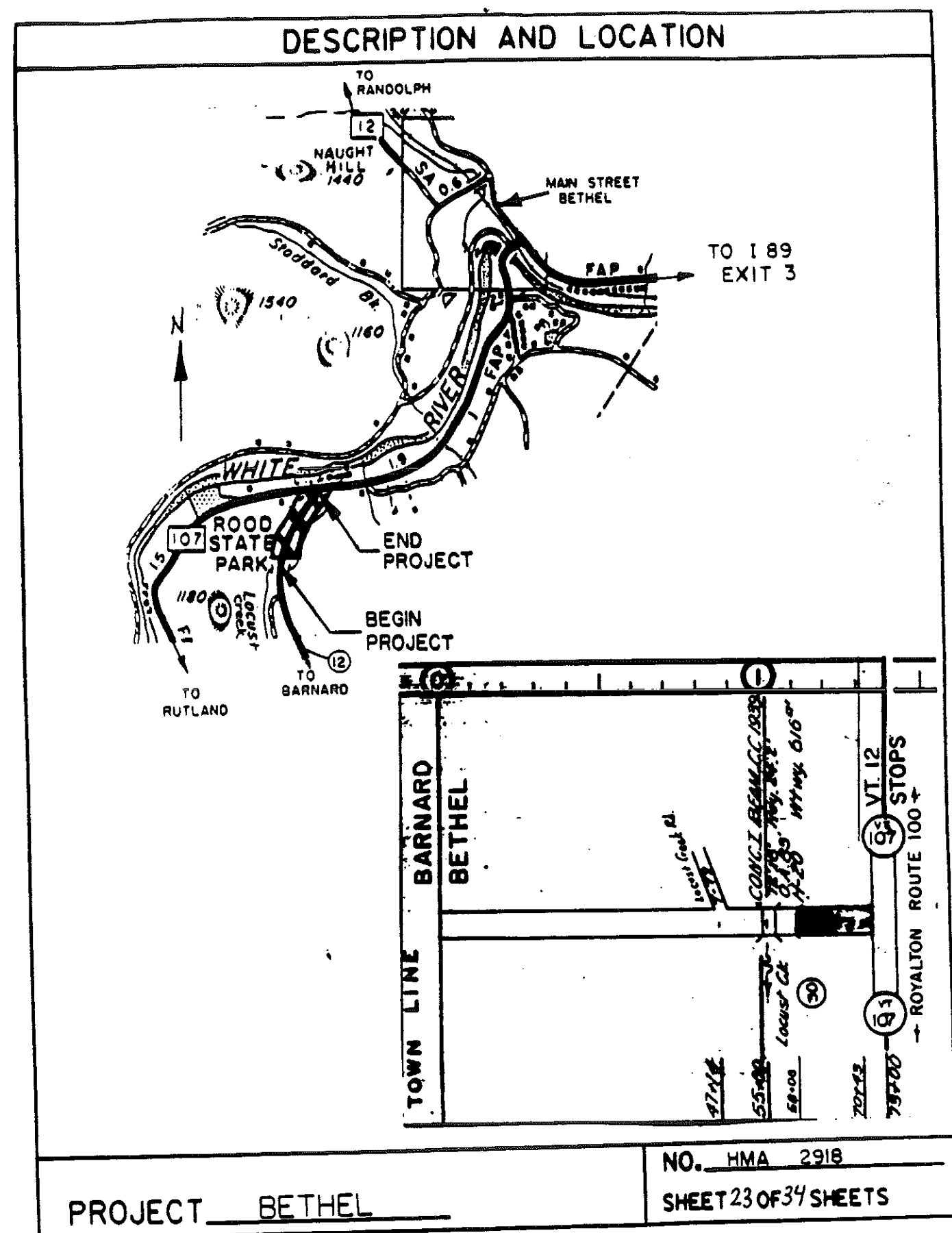
TRAFFIC DATA

1987 AADT 1120
Posted speed limit 50 MPH

PROJECT BETHEL

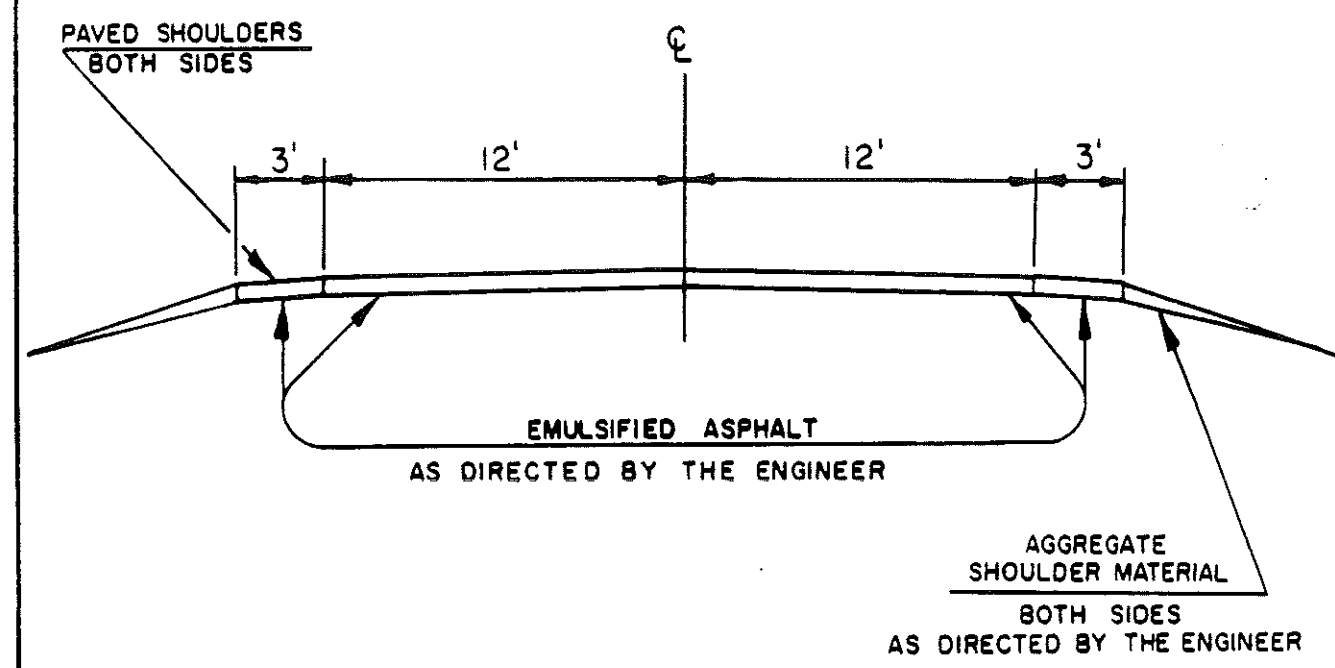
NO. HMA 2918

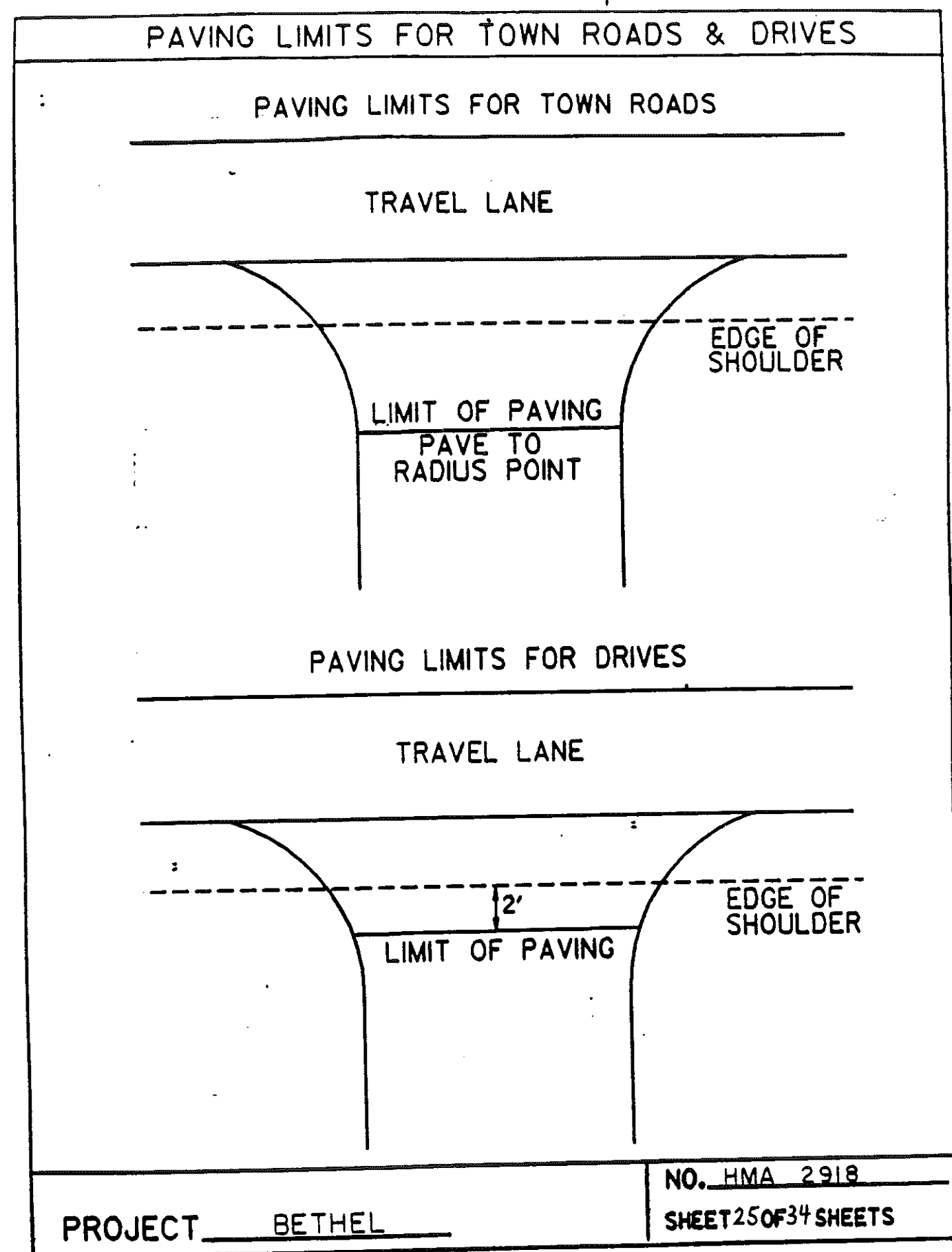
SHEET 22 OF 34 SHEETS

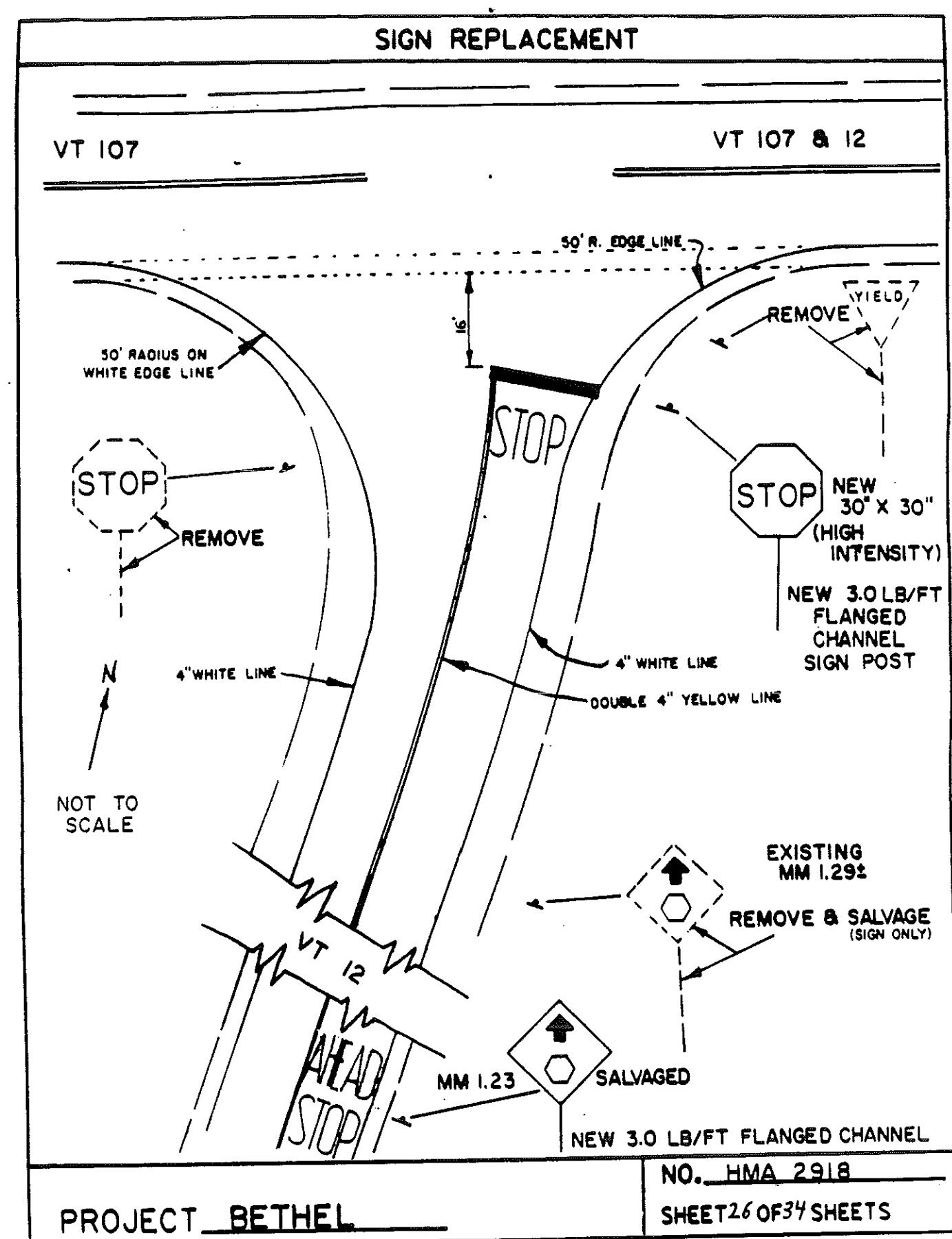


TYPICAL SECTIONS & DESIGN DATA

BITUMINOUS CONCRETE PAVEMENT
LEVELING COURSE TYPE IV (340 TONS/MILE)
1 1/4" WEARING COURSE, TYPE III (± 1/4")
SHOULDERS 1 1/4" OF TYPE III (± 1/4")







AHEAD

NOTE:
SEE STANDARD E-191
FOR LETTERING DETAIL.

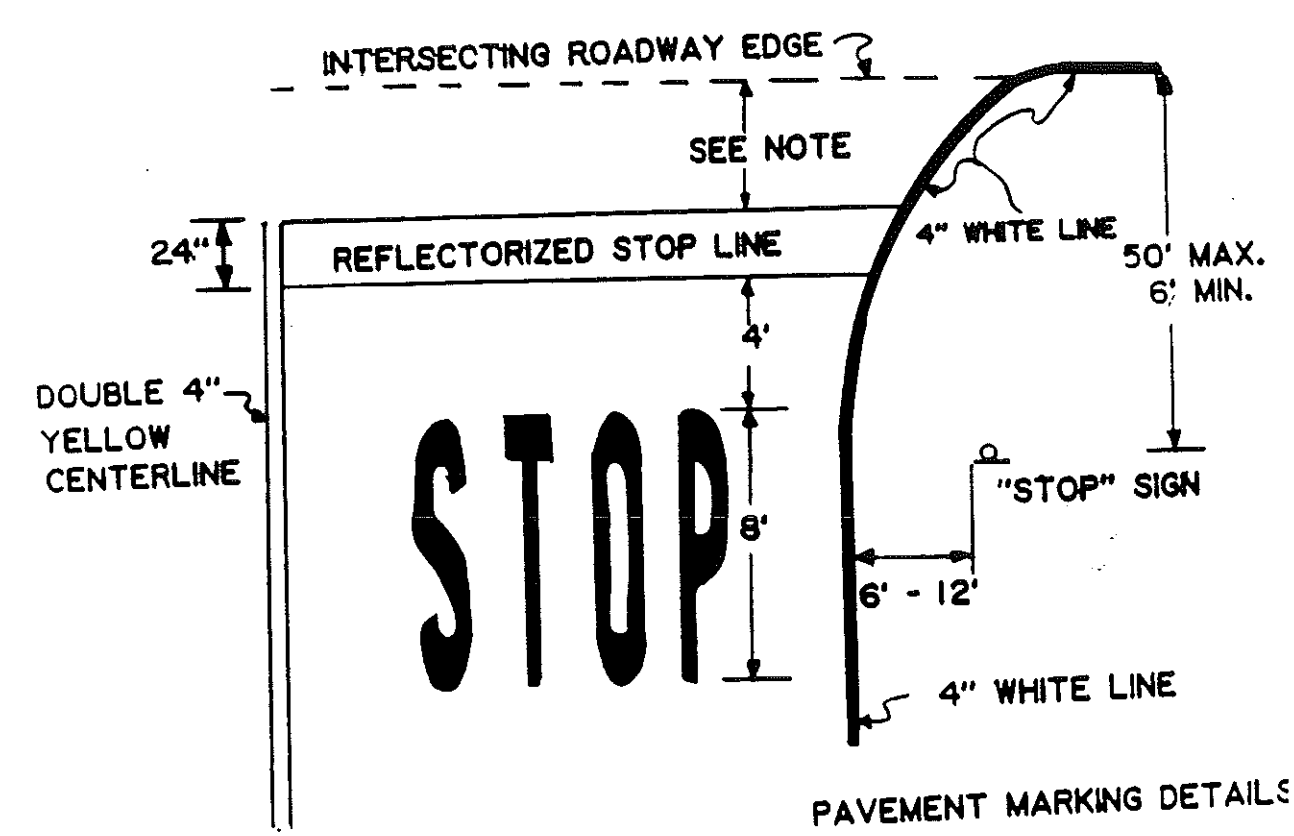
8'
16'
16'

STOP AHEAD SIGN

STOP

WORD MARKING LAYOUT DETAIL

Same For:
"SIGNAL"
"YIELD"



PAVEMENT MARKING DETAILS

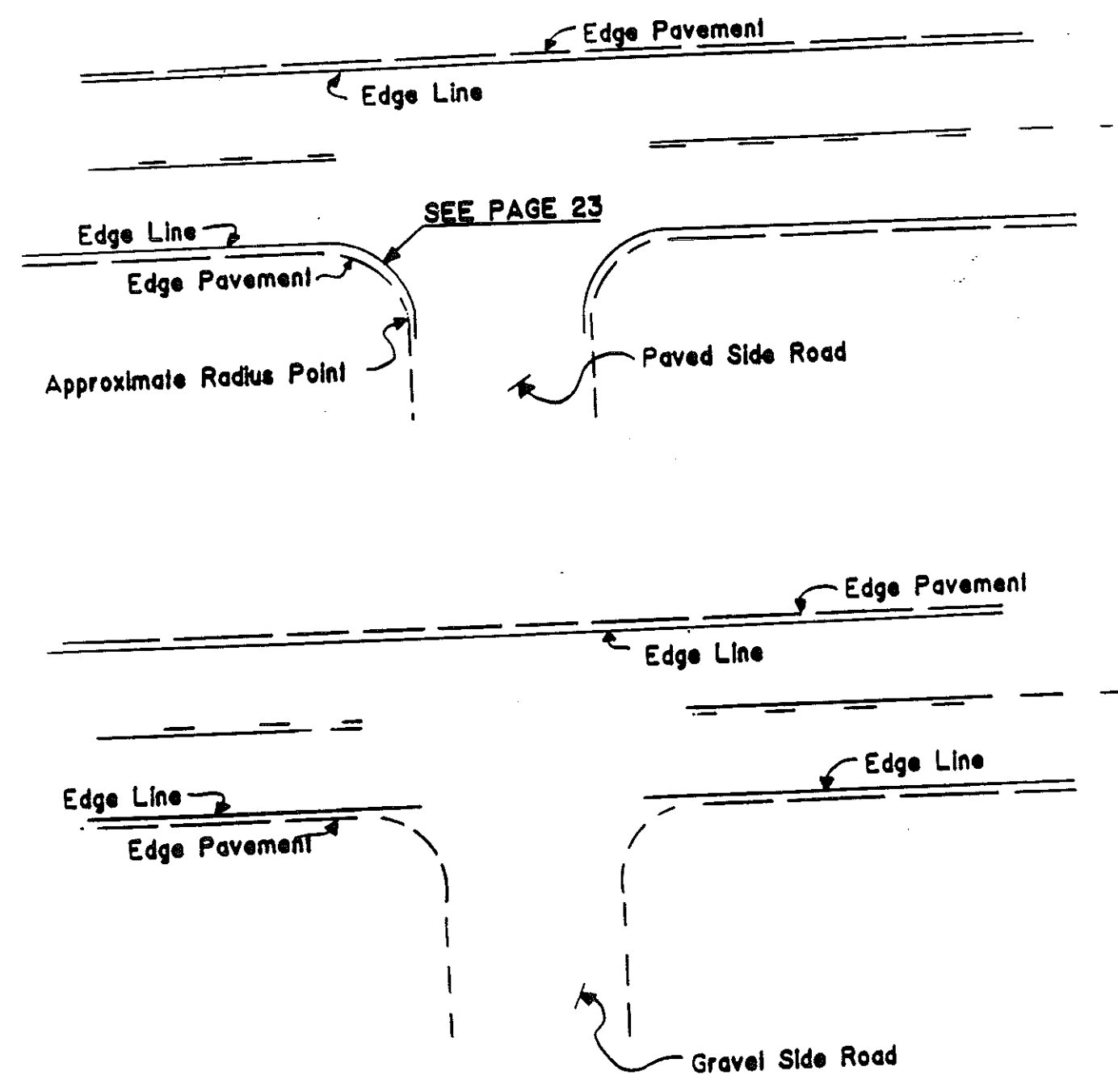
NOTE: The "desired stopping point" is the location based on site conditions that best allows the stopped vehicle to view the approaching traffic, in no case more than 30 feet or less than 4 feet from the nearest edge of the intersecting roadway.

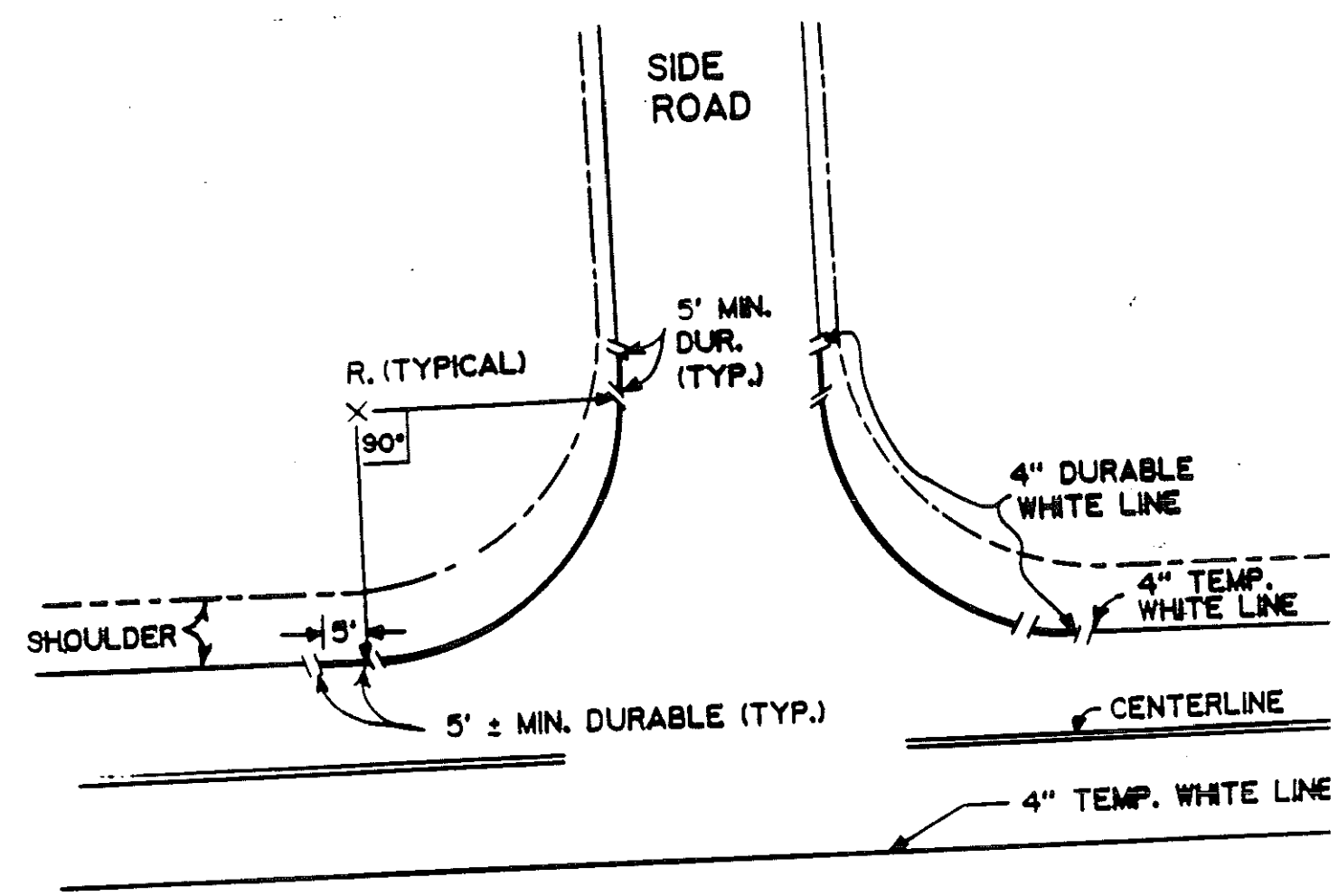
NOT TO SCALE

GUIDELINE FOR EDGELINE APPLICATION ON 2-LANE, 2-WAY HIGHWAY

Edgelines shall be applied to the right and left of centerline on highways that have a traffic volume in excess of 1000 vehicles per day. Edgelines should be maintained at a constant distance from the centerline unless pavement width increases to allow wider lanes.

Treatment of intersecting side roads shall be as shown below:





Edgelines for paved side road intersections shall have a durable edgeline radius with a 5' minimum tangent section on each end as shown.

DURABLE EDGELINE RADIUS LAYOUT TYPICAL

Guidelines for Minimum Interim Pavement Markings
For Construction Zones

A. Definition - Interim markings are markings that are placed prior to the application of pavement markings as specified in the project plans. The costs associated with the interim markings including material costs, placement costs, and removal costs shall be subsidiary to the specified pavement markings.

B. Interim markings shall consist of tape or temporary raised pavement markers (RPM's). Interim paint may be used on any pavement course except final wearing course.

The tape shall be the type that can be paved over or of a type easily removed if placed on the final pavement surface. Interim tape markings or RPM's will be offset and removed prior to the application of the specified markings and shall be applied as described below:

C. Centerline and gore area markings shall be applied at the end of each working day. The following layout requirements shall be met:

No Passing Zone
Solid Stripes - Double yellow removable pavement marking tape lines spaced 4" apart.

or

Raised Pavement Markers - In no case shall temporary raised pavement markers be used for more than three calendar days before the application of the specified markings. Raised pavement markers (removable) when used, shall be placed on 5' centers with every 4th marker being reflectorized. The raised pavement markings shall be supplemented with black on orange "No Passing" signs placed at the beginning of the no passing zone and every 1000' thereafter throughout the no passing zone. All temporary raised pavement markers shall be removed immediately upon placement of specified markings. All costs associated with "No Passing" signs and their installation shall be subsidiary to the specified pavement markings.

Dashed Line
10-Foot solid line with 30-foot gap.

or

For markings to be used for three days or less
- 4 foot solid line with 36 foot gap to be removed immediately upon the application of the specified markings.

or

4 retro-reflective RPM's on three foot centers with a 30 foot gap to be removed immediately upon the application of the specified markings.

Gore Area
Gore areas to include 8 inch channelizing line and 4" dashed line
See Standard Sheet E-191.

- D. Edge Lines
~~When specified, edge lines are not required until completion of the project. Edge lines should be applied where traffic volumes are high and/or a delay of several days is anticipated. In these instances, paint or RPW's can be used as the interim marking material to be paid under the appropriate bid item. RPW's should be retro-reflective temporary markers on a 6" spacing pattern and the same color as the line they are substituting for.~~
- E. 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.

QUANTITIES

ITEM DESCRIPTION		AGGREGATE STAIRS		CONCRETE		FORMWORK		REINFORCEMENT		PAINT		ELECTRICAL		MECHANICAL		PLUMBING		FITTINGS		GENERAL		OTHER	
ITEM NO.	402.12	404.65	406.25	608.15	608.25	608.30	608.37	620.10	630.15	631.17	635.10	646.30	646.40	646.44	646.50								
UNIT	TON	CMT	TON	HR	HR	HR	HR	HR	LS	LS	LF	LF	EA	EA	LF								
LEVELING COURSE		112																					
TOP COURSE		498																					
TOTALS	10	8	540	4	4	3	4	24	28	0.50	0.45	1.80	18	13	3500								

ITEM DESCRIPTION		TEMP. 4 YELLOW LINE		TRAFFIC SIGNS TYPE A		TRAFFIC SIGNS TYPE B		TRAFFIC SIGNS TYPE C		TRAFFIC SIGNS TYPE D		TRAFFIC SIGNS TYPE E		TRAFFIC SIGNS TYPE F		TRAFFIC SIGNS TYPE G		TRAFFIC SIGNS TYPE H		TRAFFIC SIGNS TYPE I		TRAFFIC SIGNS TYPE J	
ITEM NO.	646.51	651.35	675.24	675.31	675.50	675.63																	
UNIT	LF	CY	SF	LB	EA	EA																	
LEVELING		3100																					
TOP COURSE		3100																					
TOTALS	6200	7	6,225	90	3	1																	

PROJECT BETHEL NO. HMA 2918 SHEET 31 OF 34 SHEETS