

Date JUN 28 1988

*Franz W. Whitcomb Const. Co.*

Contractor

Signature

Title

*[Handwritten Signature]*  
Transportation Secretary's Signature

# STATE OF VERMONT AGENCY OF TRANSPORTATION



CONTRACT PLANS

THESE PLANS DO NOT REFLECT CHANGES MADE ON THE PROJECT AS "RECORD PLANS" WOULD.

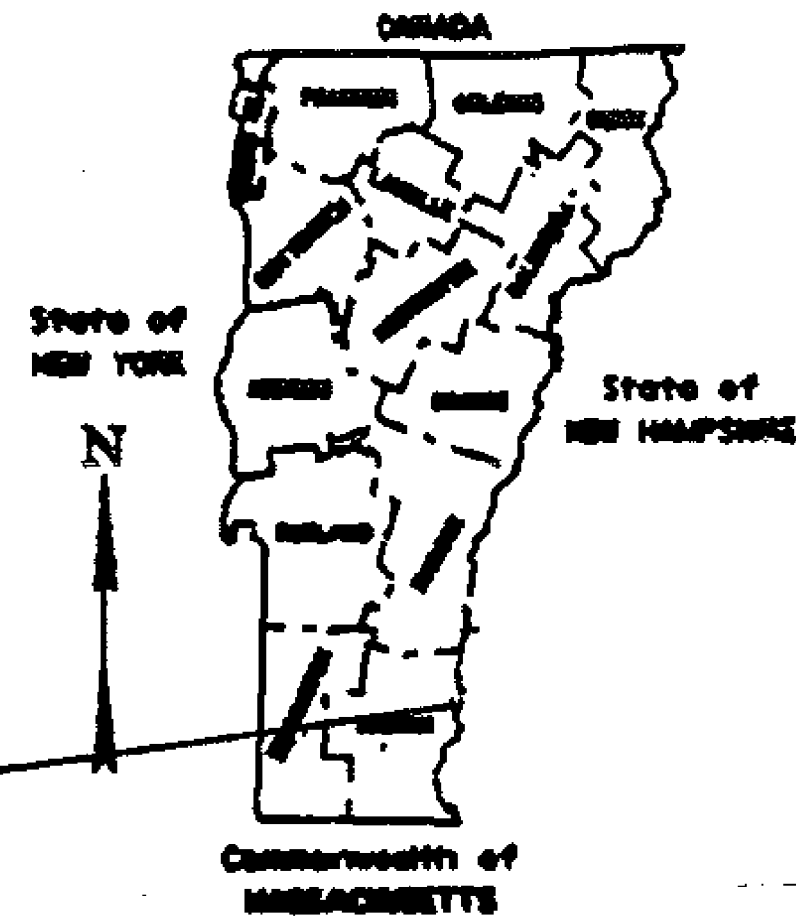
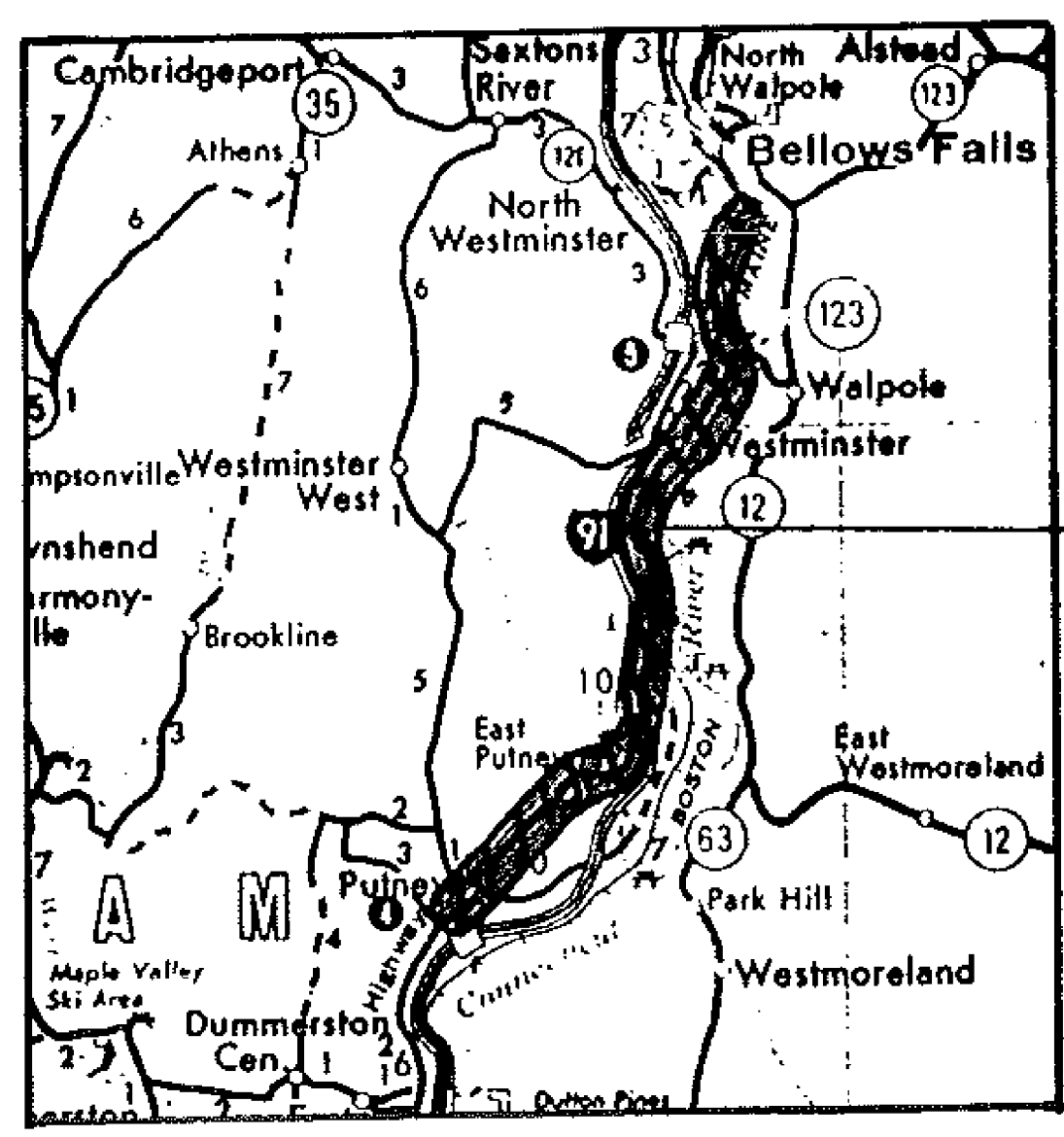
## PROPOSED IMPROVEMENT

TOWNS OF PUTNEY - WESTMINSTER

COUNTY OF WINDHAM

ROUTE NO. U.S. RT. 5

ROUTE CLASS F.A.S.



PROJECT  
HMA 2855

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 1966, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON NOVEMBER 2, 1985 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.



SCALE IN MILES

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD  
APPROVED *David B. Kelley* DATE 4/29/88  
CHIEF ENGINEER

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
DIVISION ADMINISTRATOR

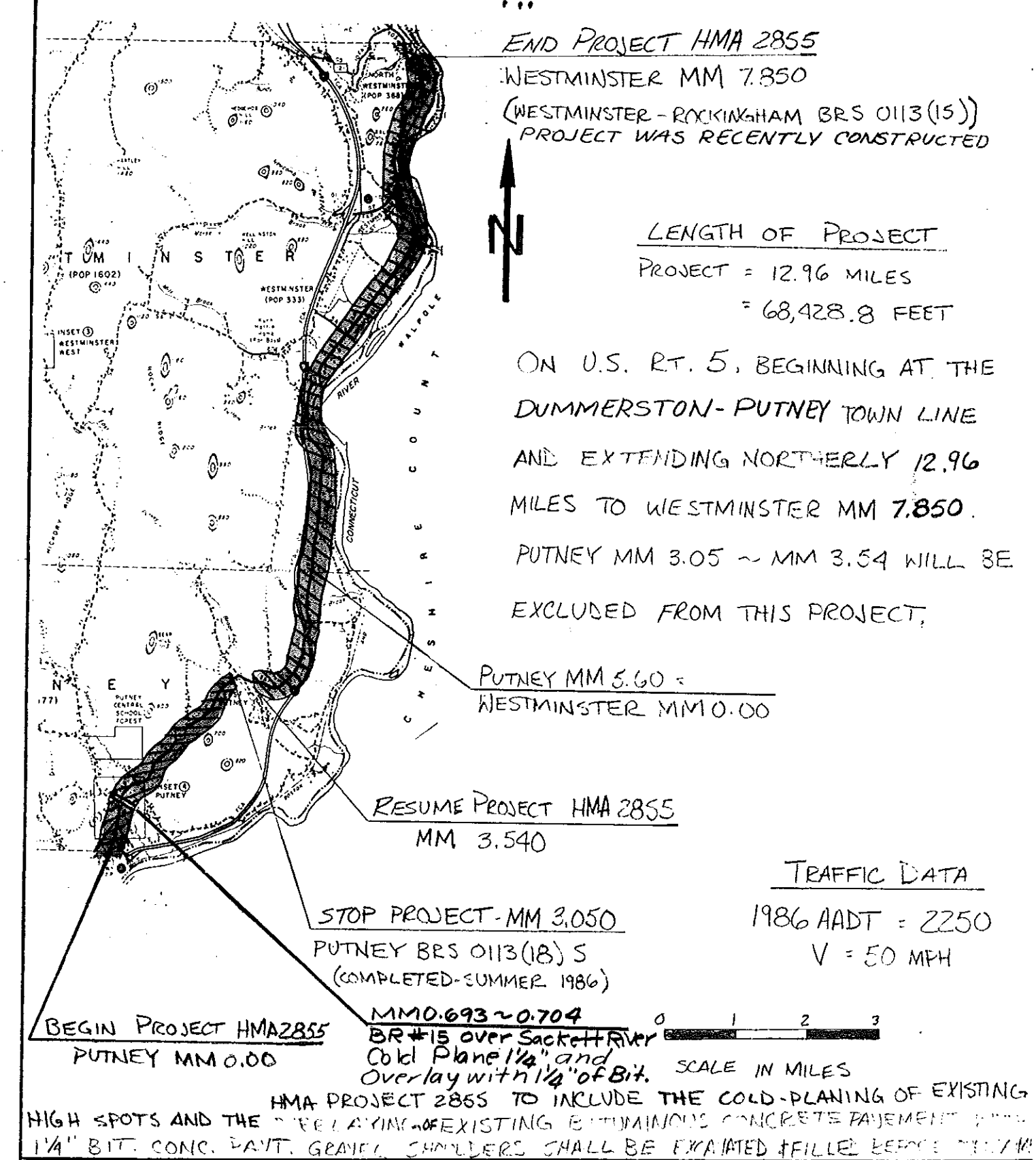
PROJECT HMA 2855  
SHEET 1 OF 33 SHEETS

FOR INDEX OF SHEETS, SEE SHT. 2

## INDEX OF SHEETS

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2. Index of Sheets
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24. Breakdown of Temporary 4" White Line
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29. E-102 Construction Sign Details 10/30/87
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33. E-191 Pavement Marking Details 9/10/87

**PROJECT DESCRIPTION AND LOCATION**



END PROJECT HMA 2855  
 WESTMINSTER MM 7.850  
 (WESTMINSTER-ROCKINGHAM BRS 0113(15))  
 PROJECT WAS RECENTLY CONSTRUCTED

LENGTH OF PROJECT  
 PROJECT = 12.96 MILES  
 = 68,428.8 FEET

ON U.S. RT. 5, BEGINNING AT THE  
 DUMMERSTON-PUTNEY TOWN LINE  
 AND EXTENDING NORTHERLY 12.96  
 MILES TO WESTMINSTER MM 7.850.  
 PUTNEY MM 3.05 -- MM 3.54 WILL BE  
 EXCLUDED FROM THIS PROJECT.

PUTNEY MM 3.60 =  
 WESTMINSTER MM 0.00

RESUME PROJECT HMA 2855  
 MM 3.540

STOP PROJECT - MM 3.050  
 PUTNEY BRS 0113(18) S  
 (COMPLETED - SUMMER, 1986)

TRAFFIC DATA  
 1986 AADT = 2250  
 V = 50 MPH

BEGIN PROJECT HMA 2855  
 PUTNEY MM 0.00  
 MMD 693 ~ 0.704  
 BR #15 OVER SACKETT HWY  
 Cold Plane 1/2" and  
 Overlay with 1/2" of B.H.  
 HMA PROJECT 2855 TO INCLUDE THE COLD-PLANING OF EXISTING  
 HIGH SPOTS AND THE REPAIR OF EXISTING 6" THICKNESS CONCRETE PAVEMENT WITH  
 1 1/2" BIT. CONC. PAVT. GRAN. CURBLES SHALL BE EXAMINED FILLER BEFORE TYP.

NO. HMA 2855

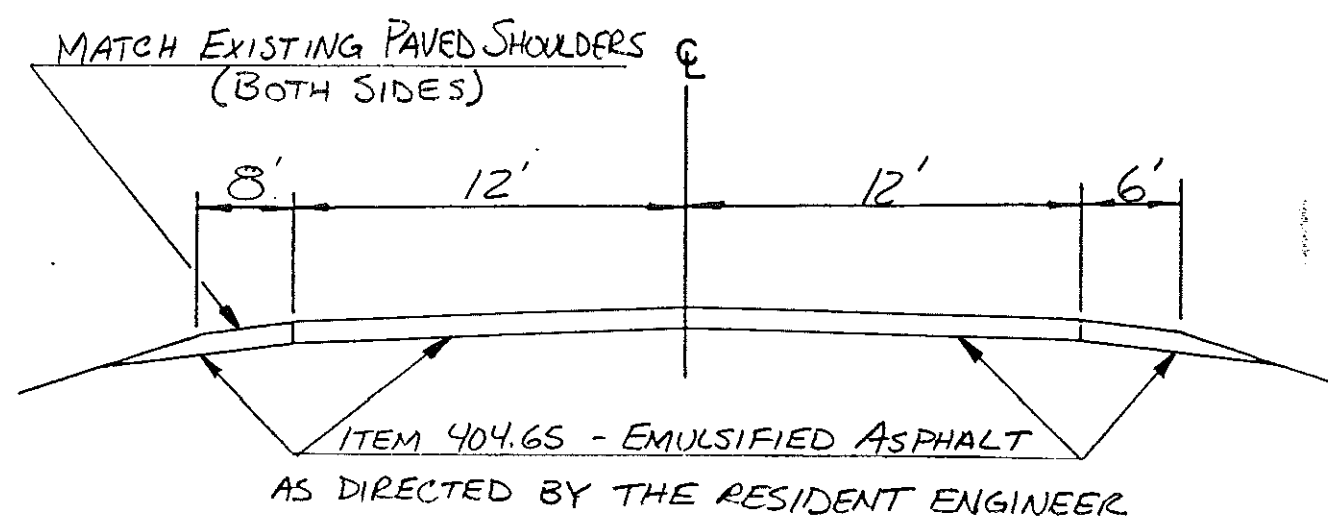
TYPICAL SECTIONS & DESIGN DATA

ITEM 406.25 - BITUMINOUS CONCRETE PAVEMENT  
TYPE IV MIX WILL BE USED FOR LEVELING UNLESS  
OTHERWISE DETERMINED BY THE RESIDENT ENGINEER.

1 1/4" WEARING COURSE, TYPE III

TYPE IV LEVELING MIX, 38' WIDE @ 518 TONS/MI.

COLD PLANING AS DIRECTED BY THE ENGINEER.



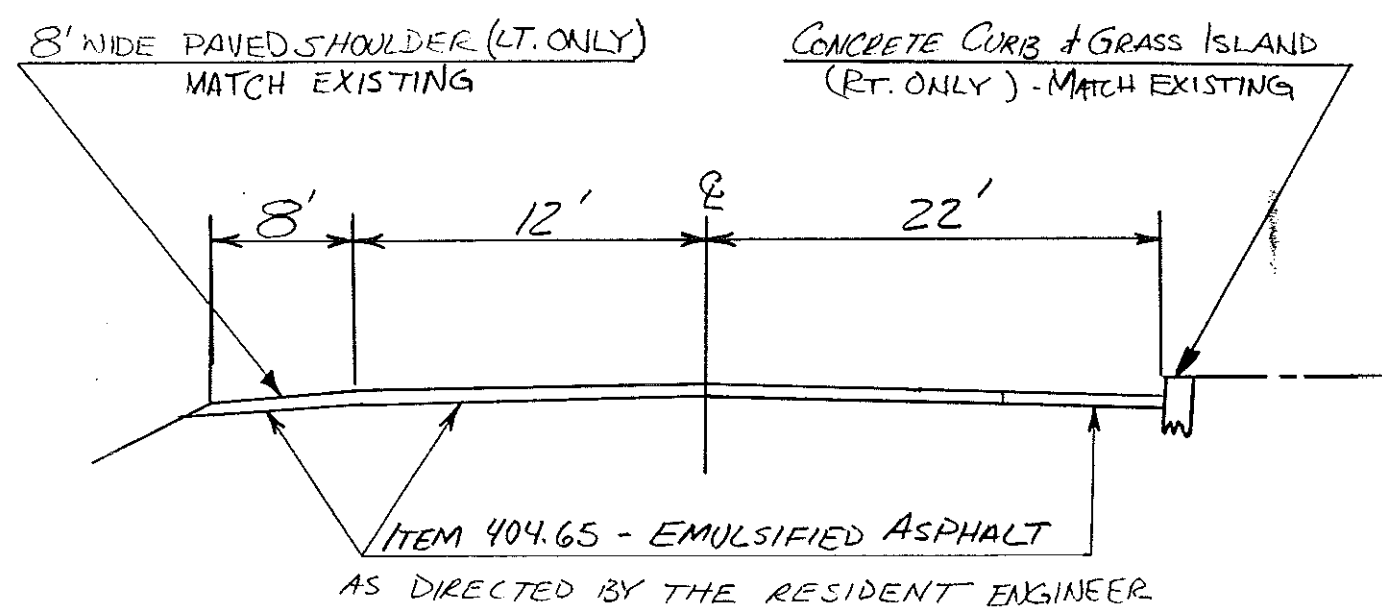
PUTNEY MM 0.00 ~ 0.160

MM 0.180 ~ 0.250

**TYPICAL SECTIONS & DESIGN DATA**

ITEM 406.25 - BITUMINOUS CONCRETE PAVEMENT  
TYPE II MIX WILL BE USED FOR LEVELING UNLESS OTHERWISE  
DETERMINED BY THE RESIDENT ENGINEER.

1/4" WEARING COURSE, TYPE III  
TYPE IV LEVELING MIX, 42' WIDE @ 572 TONS/MI.  
COLD PLANING AS DIRECTED BY THE ENGINEER.



POTNEY MM 0.16 ~ MM 0.18

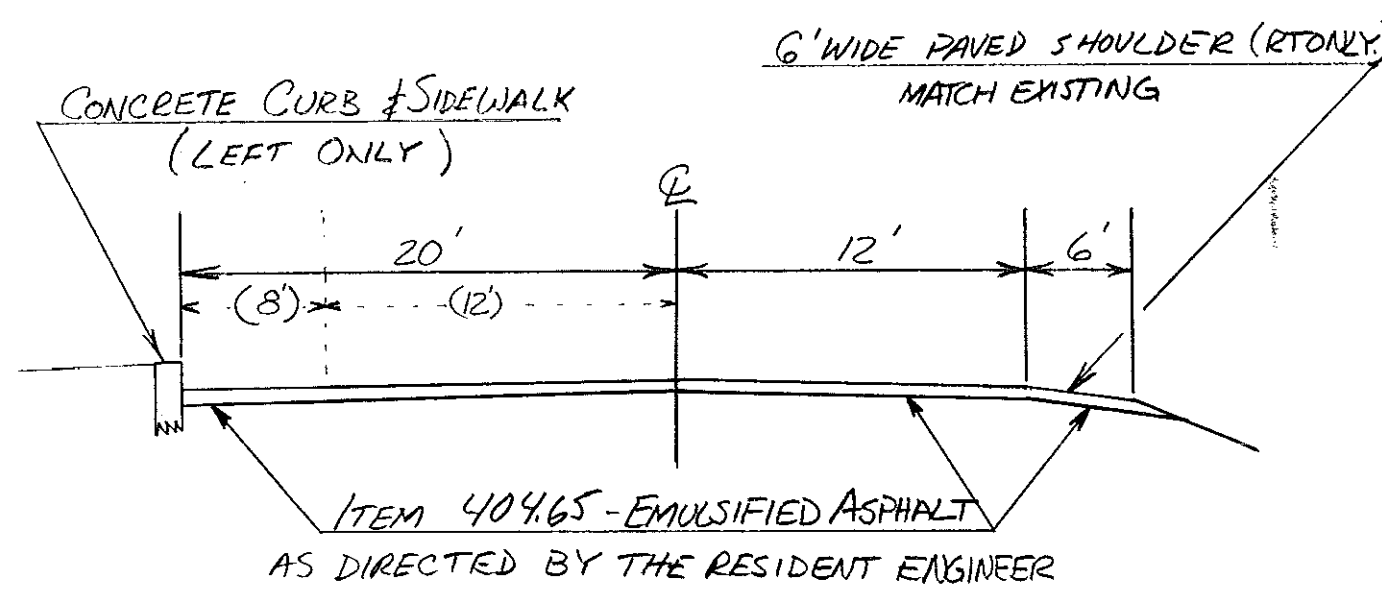
NO. HMA 2865

PROJECT POTNEY-WESTMINSTER

SHEET 5 OF 33 SHEETS

**TYPICAL SECTIONS & DESIGN DATA**

ITEM 406.25 - BITUMINOUS CONCRETE PAVEMENT  
TYPE II MIX WILL BE USED FOR LEVELING UNLESS OTHERWISE DETERMINED BY THE RESIDENT ENGINEER.  
1 1/4" WEARING COURSE, TYPE III  
TYPE IV LEVELING MIX, 30' WIDE @ 518 TONS/MILE  
COLD PLANING AS DIRECTED BY THE ENGINEER.



POTNEY MM 0.25 ~ MM 0.39

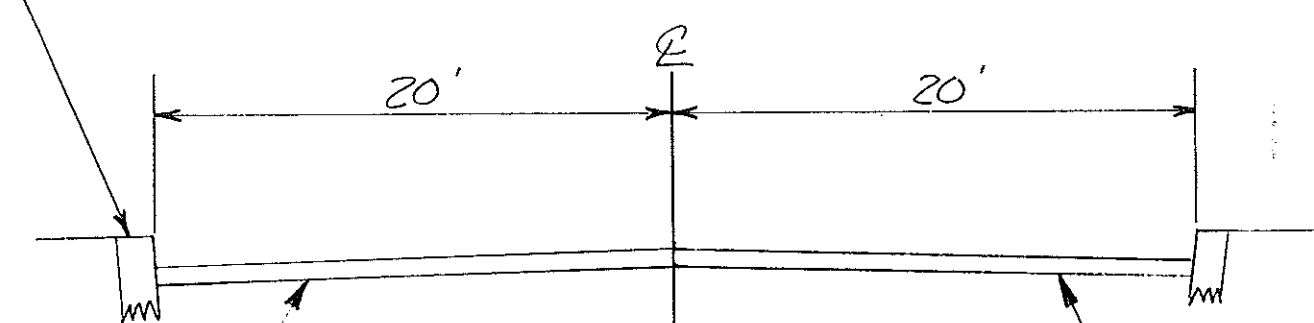
**TYPICAL SECTIONS & DESIGN DATA**

ITEM 406.25 - BITUMINOUS CONCRETE PAVEMENT  
 TYPE III MIX WILL BE USED FOR LEVELING UNLESS OTHERWISE DETERMINED BY THE RESIDENT ENGINEER.

1 1/4" WEARING COURSE, TYPE III

TYPE II LEVELING MIX, 40 CURB-CURBS @ 545 TONS/Mi.  
 COLD PLANING AS DIRECTED BY THE ENGINEER

CONCRETE CURB & SIDEWALK  
 (BOTH SIDES)



ITEM 404.65 - EMULSIFIED ASPHALT AS DIRECTED BY THE RESIDENT ENGINEER

Note:  
 Putney MM 0.693 ~ 0.704  
 Bridge No. 15 over Sackett's River  
 Cold Plane 1 1/4" off the existing deck  
 and Repave with 1 1/4" of Bit. Conc. Pave, TYPE III  
 See Sht 22 of 33

Putney MM 0.39 ~ MM 0.70

NO. HMA 2855

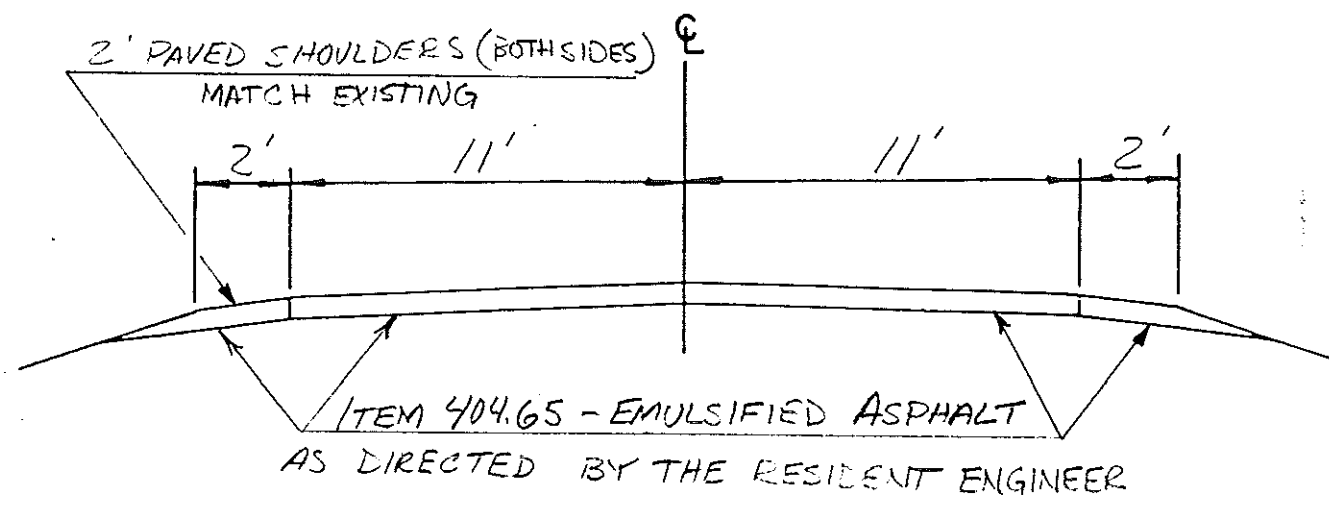
PROJECT PUTNEY - WESTMINSTER

SHEET 7 OF 33 SHEETS

TYPICAL SECTIONS & DESIGN DATA

ITEM 406.25 - BITUMINOUS CONCRETE PAVEMENT  
TYPE IV MIX WILL BE USED FOR LEVELING UNLESS  
OTHERWISE DETERMINED BY THE RESIDENT ENGINEER.

1 1/4" WEARING COURSE, TYPE III  
TYPE III LEVELING, 26" WIDE @ 354 TONS/100.  
COLD PLANING AS DIRECTED BY THE ENGINEER.

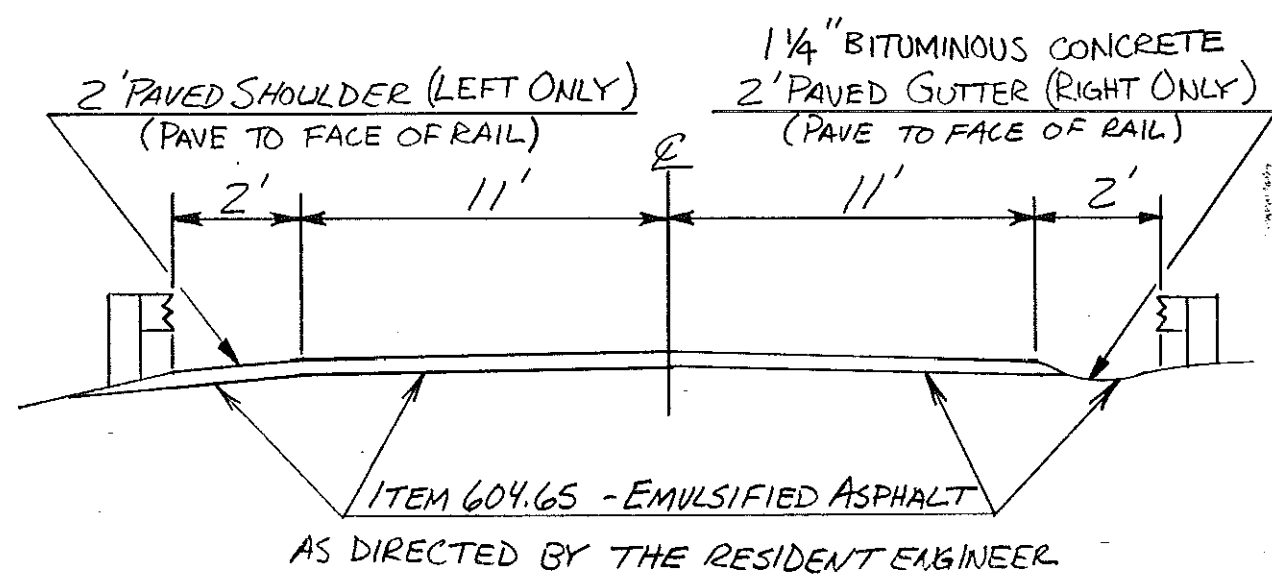


POTNEY MM 0.70 ~ MM 0.79

**TYPICAL SECTIONS & DESIGN DATA**

ITEM 406.25 - BITUMINOUS CONCRETE PAVEMENT  
TYPE IV MIX WILL BE USED FOR LEVELING UNLESS OTHERWISE DETERMINED BY THE RESIDENT ENGINEER.

1 1/4" WEARING COURSE, TYPE III  
TYPE II LEVELING MIX, 26' WIDE @ 354 TONS/MI.  
COLD PLANING AS DIRECTED BY THE ENGINEER.



POTNEY MM 0.99 ~ 1.04

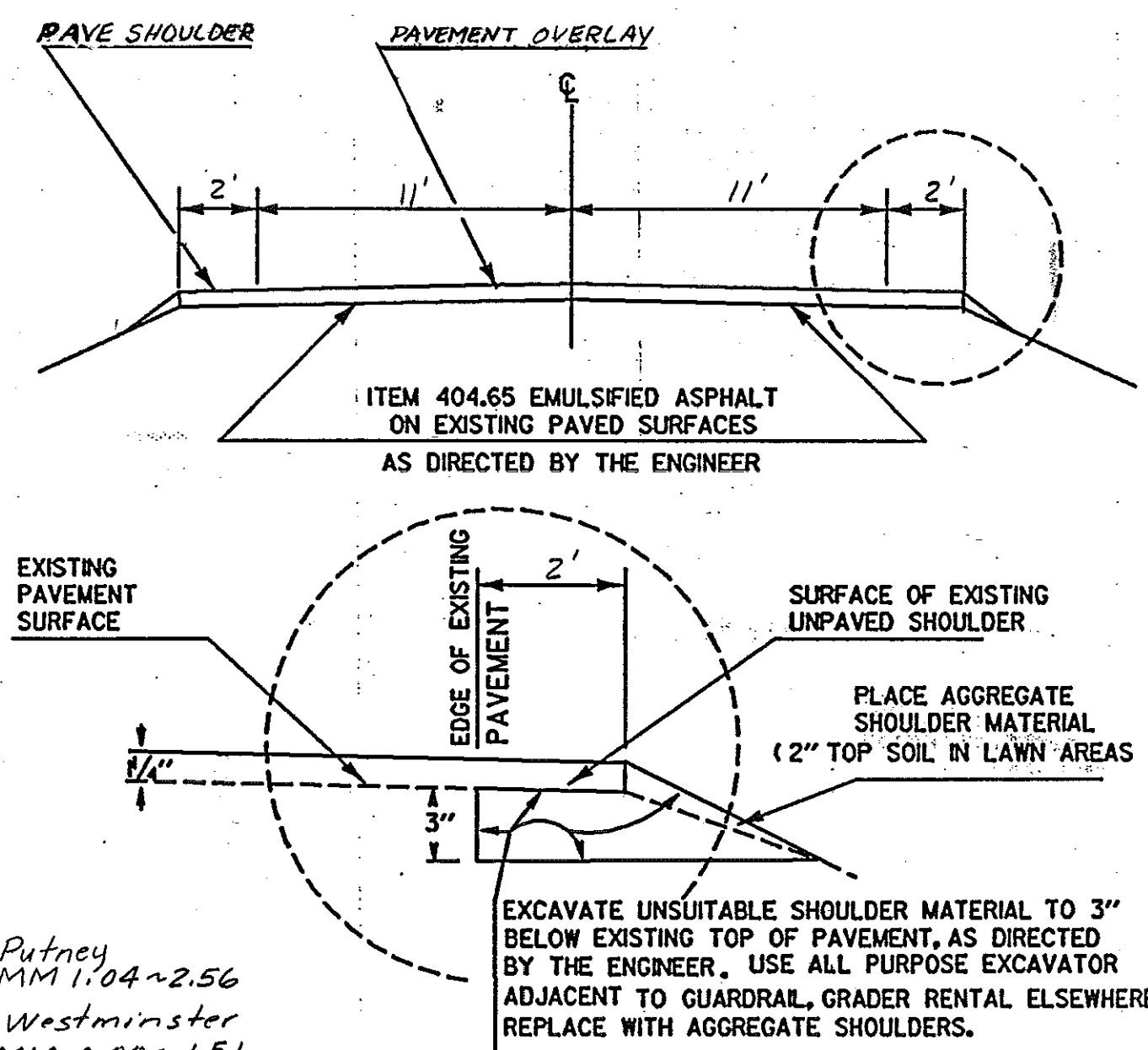
NO. HMA 2855

PROJECT POTNEY - WESTMINSTER

SHEET 9 OF 33 SHEETS

**TYPICAL SECTIONS & DESIGN DATA**

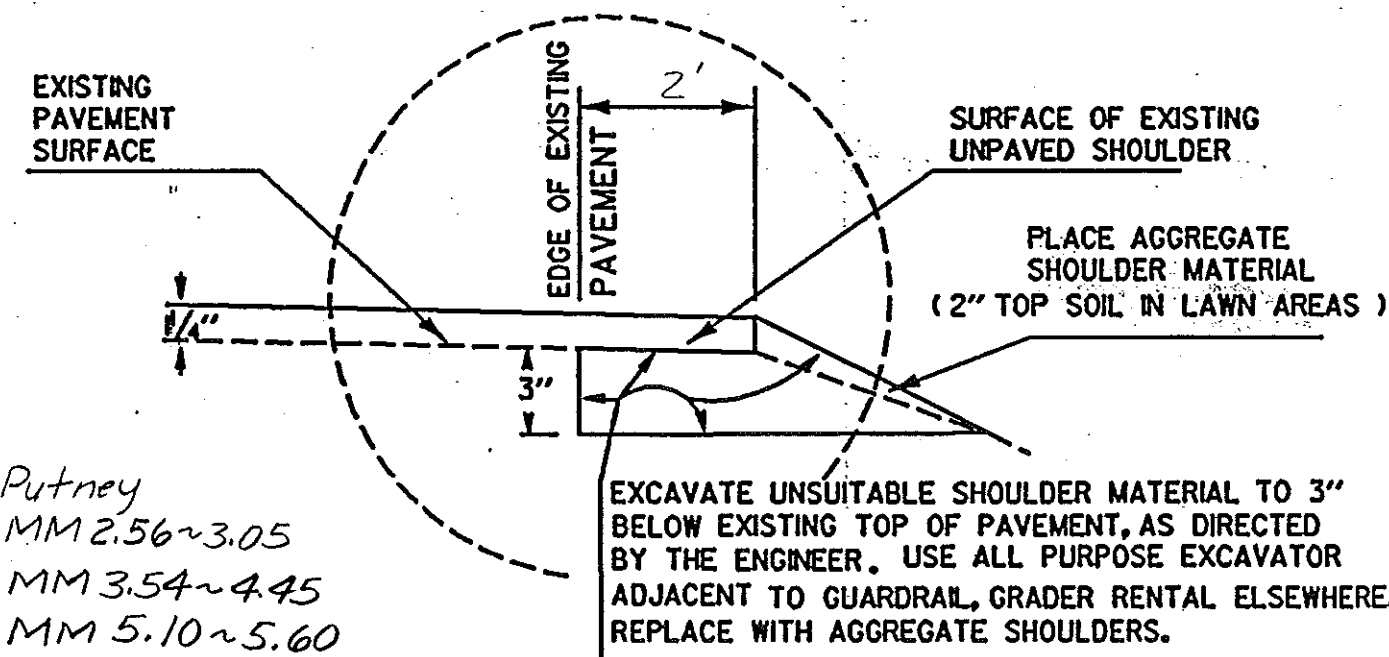
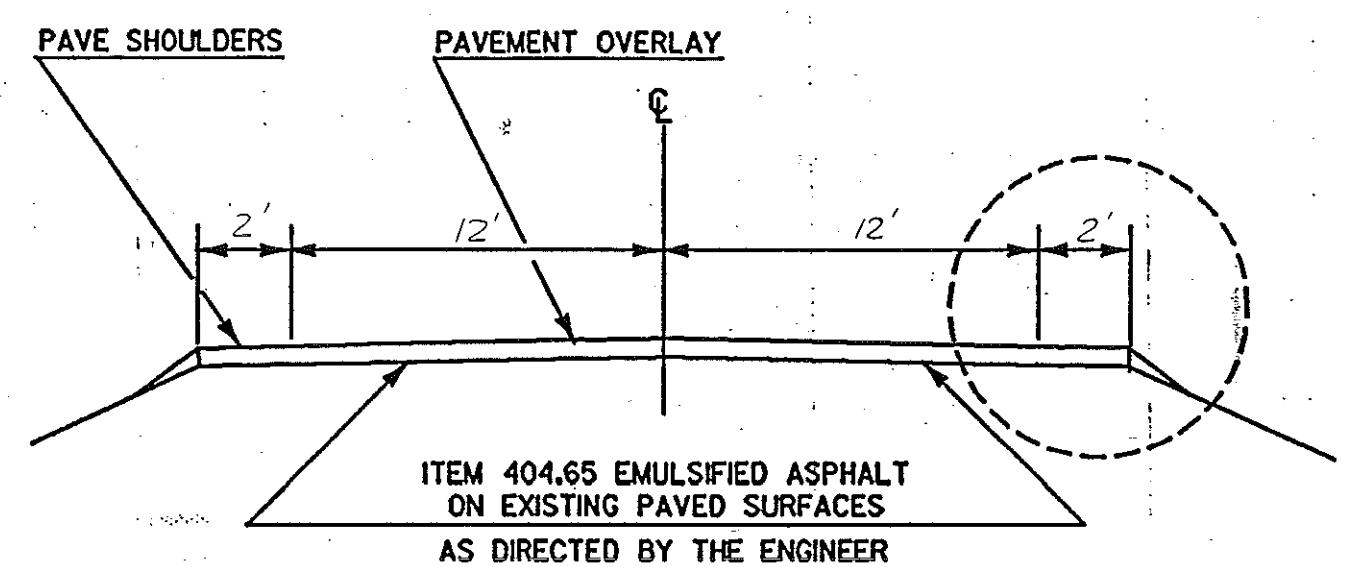
COLD PLANING AS DIRECTED BY THE ENGINEER  
 ITEM 406.25 BITUMINOUS CONCRETE PAVEMENT  
 AGGREGATE SHOULDERS ( $\pm 1/2"$ )  
 LEVELING COURSE TYPE IV (354 TONS/MILE)  
 1 1/4" WEARING COURSE TYPE III ( $\pm 1/4"$ )  
 AS DIRECTED BY THE ENGINEER



Putney  
 MM 1.04 ~ 2.56  
 Westminster  
 MM 0.00 ~ 1.51

**TYPICAL SECTIONS & DESIGN DATA**

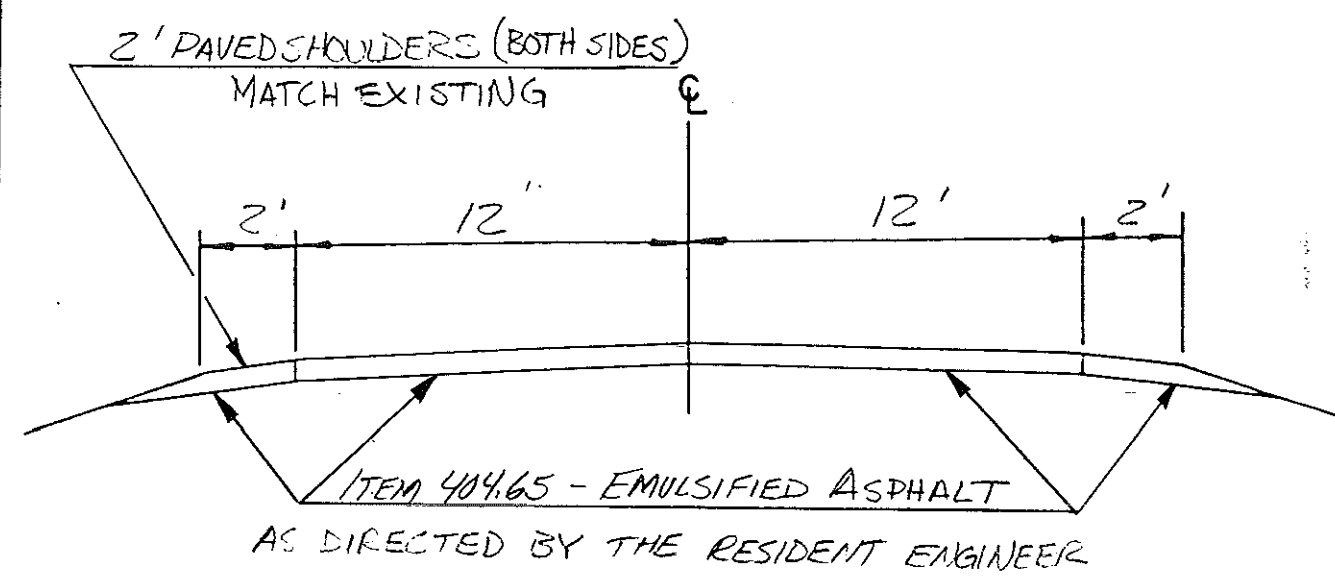
COLD PLANING AS DIRECTED BY THE ENGINEER  
 ITEM 406.25 BITUMINOUS CONCRETE PAVEMENT  
 AGGREGATE SHOULDERS ( $\pm 1/2"$ )  
 LEVELING COURSE TYPE IV (382 TONS/MILE)  
 1 1/4" WEARING COURSE TYPE III ( $\pm 1/4"$ )  
 AS DIRECTED BY THE ENGINEER



Putney  
 MM 2.56 ~ 3.05  
 MM 3.54 ~ 4.45  
 MM 5.10 ~ 5.60

TYPICAL SECTIONS & DESIGN DATA

ITEM 406.25 - BITUMINOUS CONCRETE PAVEMENT  
TYPE IV MIX WILL BE USED FOR LEVELING UNLESS  
OTHERWISE DETERMINED BY THE RESIDENT ENGINEER.  
COLD PLANING AS DIRECTED BY THE ENGINEER.  
1/4" WEARING COURSE, TYPE III  
TYPE IV LEVELING MIX, 28' WIDE @ 382 TONS/MI.



PUTNEY MM 4.45 ~ MM 5.10  
WESTMINSTER MM 1.51 ~ MM 7.85

ITEM DESCRIPTION	LENGTH			WIDTH			DEPTH			LEAVING COVER			KAGGEGATE SKIDLERS			KAGGEGATE SKIDLERS			EMULSIFIED ASPHALT			BRUNNEN COARSE GRAVEL			DRAINAGE CONC. PAVEMENT			DRAIN BROOM PAVEMENT			CLASSIFIED EARTHWORK			FLAGGED FOR DEVICES			TOPSOIL		
	FT.	IN.	TONS	FT.	IN.	TONS	FT.	IN.	TONS	CY.	TONS	CHT.	TONS	CHT.	TONS	TONS	HR.	EA.	HR.	EA.	HR.	EA.	HR.	EA.	HR.	EA.	HR.	EA.	HR.	EA.	HR.	EA.	HR.	EA.	HR.	EA.			
UNIT																																							
LOCATION																																							
UNIT NO.	09/180	24	1.25								4.44																												
UNIT NO.	09/180	14	1.25																																				
UNIT NO.	09/175	34	1.25																																				
UNIT NO.	105.6	8	1.25																																				
UNIT NO.	105.6																																						
UNIT NO.	367.6	24	1.25								1.94																												
UNIT NO.	367.6	14	1.25																																				
UNIT NO.	789.2	32	1.25																																				
UNIT NO.	789.2	6	1.25								3.89																												
UNIT NO.	789.2																																						
SHEET 13 TOTALS											10.88																												

PROJECT FINNEY - ASSISTANT NO. HMA 2855 SHEET 13 OF 33 SHTS.

ITEM DESCRIPTION	LENGTH				PROJECT LENGTHS AND ITEM QUANTITIES				ITEM QUANTITIES				
	FT.	FT.	IN.	TONS	TONS	CHT.	TONS	TONS	EA.	HR	HR	L.S.	CY.
ITEM NUMBER				402.11	402.12	401.65	406.25	406.25	404.10	408.30	405.00	405.10	451.35
UNIT				TONS	TONS	TONS	TONS	TONS	EA. <td>HR</td> <td>HR</td> <td>L.S. <td>CY.</td> </td>	HR	HR	L.S. <td>CY.</td>	CY.
LOCATION													
M10.37-M10.70	163.6'	40'	1.25	—	—	9.76	—	505.2					ROADWAY
	163.6'		5.15	—	—	169.0	—	169.0					LEVELING
M10.70-M10.89	153.2	22	1.25	—	—	5.51	—	259.9					ROADWAY
	153.2	4	1.25	—	—	47.3	—	47.3					ROADBELLS
	153.2		36.4	—	—	102.7	—	102.7					LEVELING
M10.89-M11.01	269.0	22	1.25	—	—	0.95	—	44.8					ROADWAY
	269.0	4	1.25	—	—	4.1	—	4.1					ROADBELLS
	269.0		35.4	—	—	17.7	—	17.7					LEVELING
M11.01-M12.56	805.6	22	1.25	—	—	24.42	—	1362.4					ROADWAY
	805.6	4	1.25	—	—	35.9	—	247.7					SHOULDER C.
	805.6		35.4	—	—	538.4	—	538.4					LEVELING
SHEET 14 TOTALS				359	34.41	—	3298.9						

PROJECT POITNEY - WESTMINSTER NO. AMA 2855 SHEET 14 OF 33 SHTS.

ITEM DESCRIPTION		LENGTH		WIDTH		DEPTH		LEAVING COURSE		AGGREGATE SIZES		EMULSIFIED ASPHALT		BULKING WEIGHT		DRAINAGE		GRADE		MARKING	
ITEM NUMBER	UNIT	FT.	IN.	TONS	CY.	TONS	CY.	TONS	CY.	TONS	CY.	TONS	CY.	TONS	CY.	EA.	HR.	L.S.	HR.	L.S.	CY.
MM 2.50-3.05		2807.2	24	125				8.91						479.1							
		2807.2	4	125										79.9							
		2807.2		382										187.2							
MM 3.50-4.45		4801.8	24	125				1595						881.8							
		4801.8	4	125										148.3							
		4801.8		382										347.6							
MM 4.75-5.10		3492.0	24	125				1329						635.6							
		3492.0	4	125										105.9							
		3492.0		382										248.3							
MM 5.10-5.60		2649.0	24	125				8.76						488.9							
		2649.0	4	125										81.5							
		2649.0		382										197.0							
<b>SHEET 15 TOTALS</b>				<b>449</b>	<b>14.59</b>									<b>3883.1</b>							

PROJECT PATNEY - WESTMINSTER NO. HMA 2855 SHEET 15 OF 33 SHTS.

ITEM DESCRIPTION	PROJECT LENGTHS AND ITEM QUANTITIES									
	FT.	IN.	TONS	CU. YD.	TONS	CU. YD.	TONS	CU. YD.	TONS	CU. YD.
ITEM NUMBER	402.11	442.12	409.63	406.25	406.25	404.10	403.10	403.10	403.10	403.10
UNIT	FT.	IN.	TONS	CU. YD.	TONS	CU. YD.	TONS	CU. YD.	TONS	CU. YD.
LOCATION	1972.8	24	1.25	24	1.25	24	1.25	24	1.25	24
WAD. 10-1-67	1972.8	4	1.25	357	—	246.1	—	246.1	—	246.1
	1972.8	—	354	—	—	534.5	—	534.5	—	534.5
MM. 15-385	1972.8	24	1.25	24	1.25	24	1.25	24	1.25	24
	1972.8	4	1.25	—	—	1033.2	—	1033.2	—	1033.2
	1972.8	—	382	—	—	242.19	—	242.19	—	242.19
SPUR IN. 14.13										
E. INTERSECTION 853										
				10	3.00	—	50	—	50	—
<b>SHEET 16 TOTALS</b>				<b>3167</b>	<b>156.92</b>	<b>—</b>	<b>11838.2</b>			

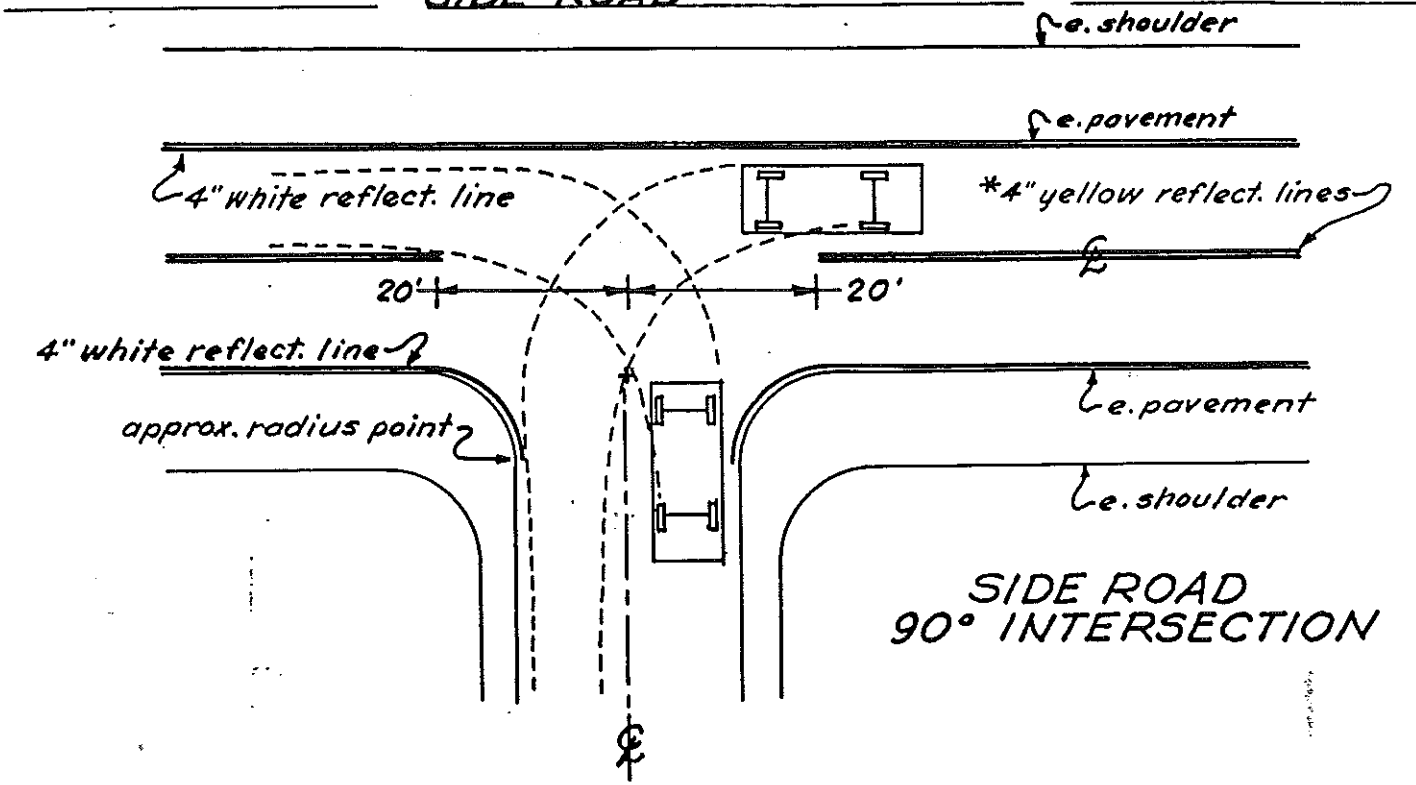
PROJECT BITNEY - MEDWAY NO. MM 2855 SHEET 16 OF 33 SHTS.

ITEM DESCRIPTION	PROJECT LENGTHS			AND ITEM QUANTITIES									
	LENGTH	MWIDTH	DEPTH	LEAVING COURSE	AGGREGATE SPOULDERS	EMULSIFIED ASPHALT	RTMAKING MACHINE	POWER ROOM ZEMENT	CLASS OF ELEMENTS	FLANGES	MOULDFUNCTION	PROJL	BAR STEEL
ITEM NUMBER	FT.	IN.	TONS	CY	TONS	CHT	TONS	EA	HR	L.S.	CY	SY	(L.S.)
UNIT	TONS	EA	TONS	CHT	TONS	CHT	TONS	EA	HR	L.S.	CY	SY	TONS
LOCATION	4021142	10	40163	40625	40625	40625	40625	4021142	10	40163	40625	40625	40625
PROJECT TOTALS								104	15	1655	1770	1	10
SHEET 13				10.00			810.0						
SHEET 14			359	32.94			3298.9						
SHEET 15			449	11.67			3888.4						
SHEET 16			367	15.92			1828.2						
FOUNDING			25	0.67			19.8	6					
GRAND TOTAL			1200	255			9985.0	110	15	1655	1770	1	10

PROJECT POITNEY-WESTMINSTER NO. HMA 2855 SHEET 17 OF 33 SHTS.

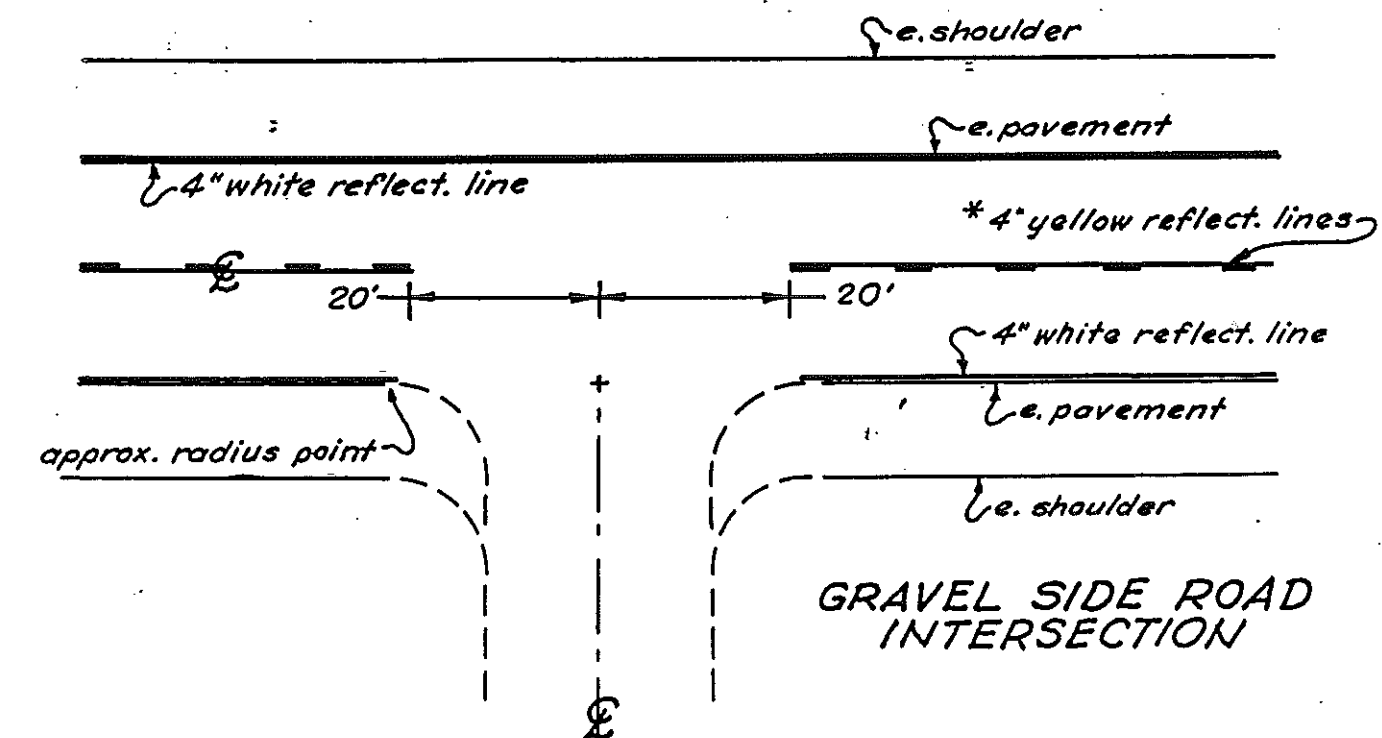


BY: \_\_\_\_\_ DATE: 2/4/88 SUBJECT: MAINLINE PAVEMENT SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 CHKD. BY: \_\_\_\_\_ DATE: \_\_\_\_\_ MARKING AT INTERSECTING SIDE ROAD JOB NO. \_\_\_\_\_



SIDE ROAD  
90° INTERSECTION

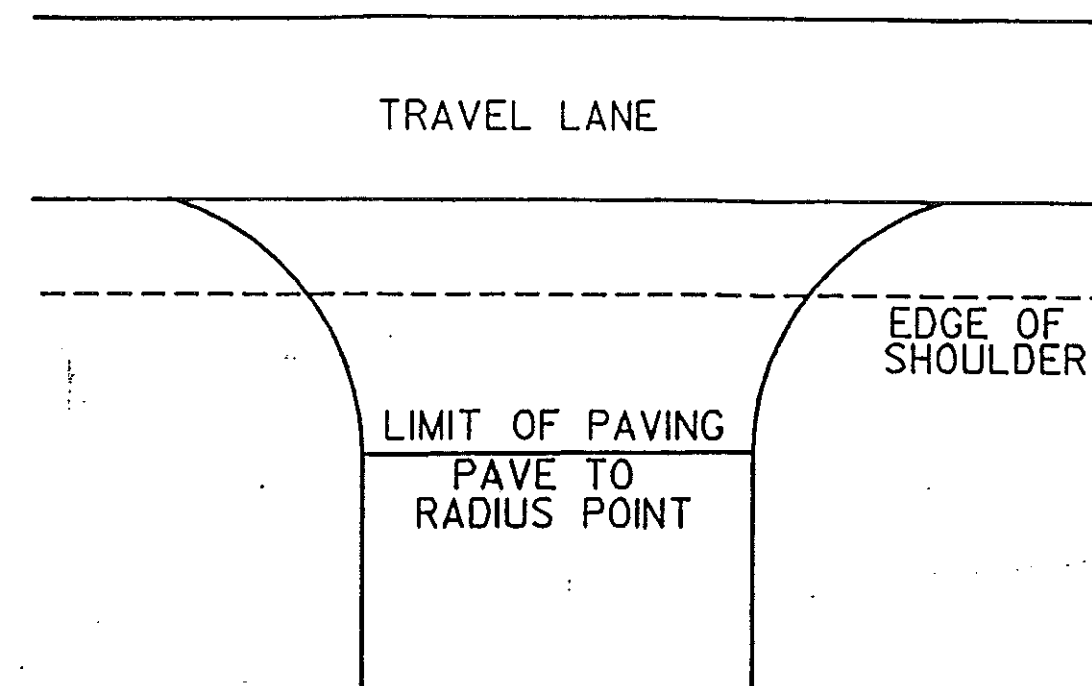
\* Centerline treatment shall consist of a minimum of 400 feet of solid line in advance of the intersection and shall be paired with either a solid or dashed line depending on sight distance availability in the opposing lane.



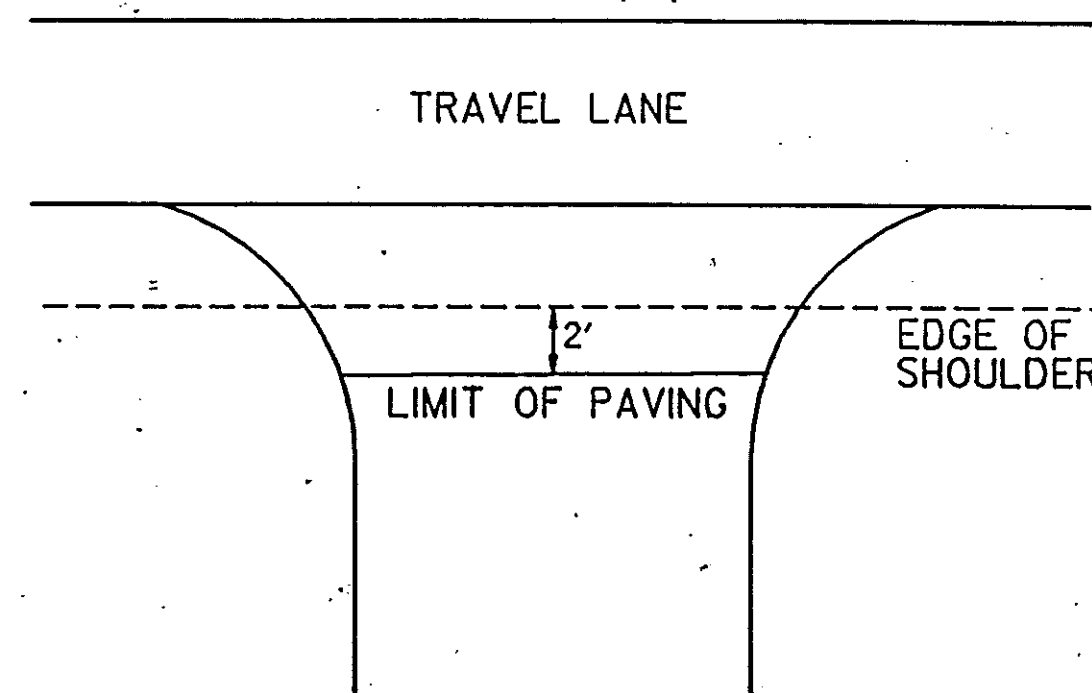
GRAVEL SIDE ROAD  
INTERSECTION

PAVING LIMITS FOR TOWN ROADS & DRIVES

PAVING LIMITS FOR TOWN ROADS



PAVING LIMITS FOR DRIVES



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 cost associated with the interim markings including material cost, 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).

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 specific 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 Payment 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

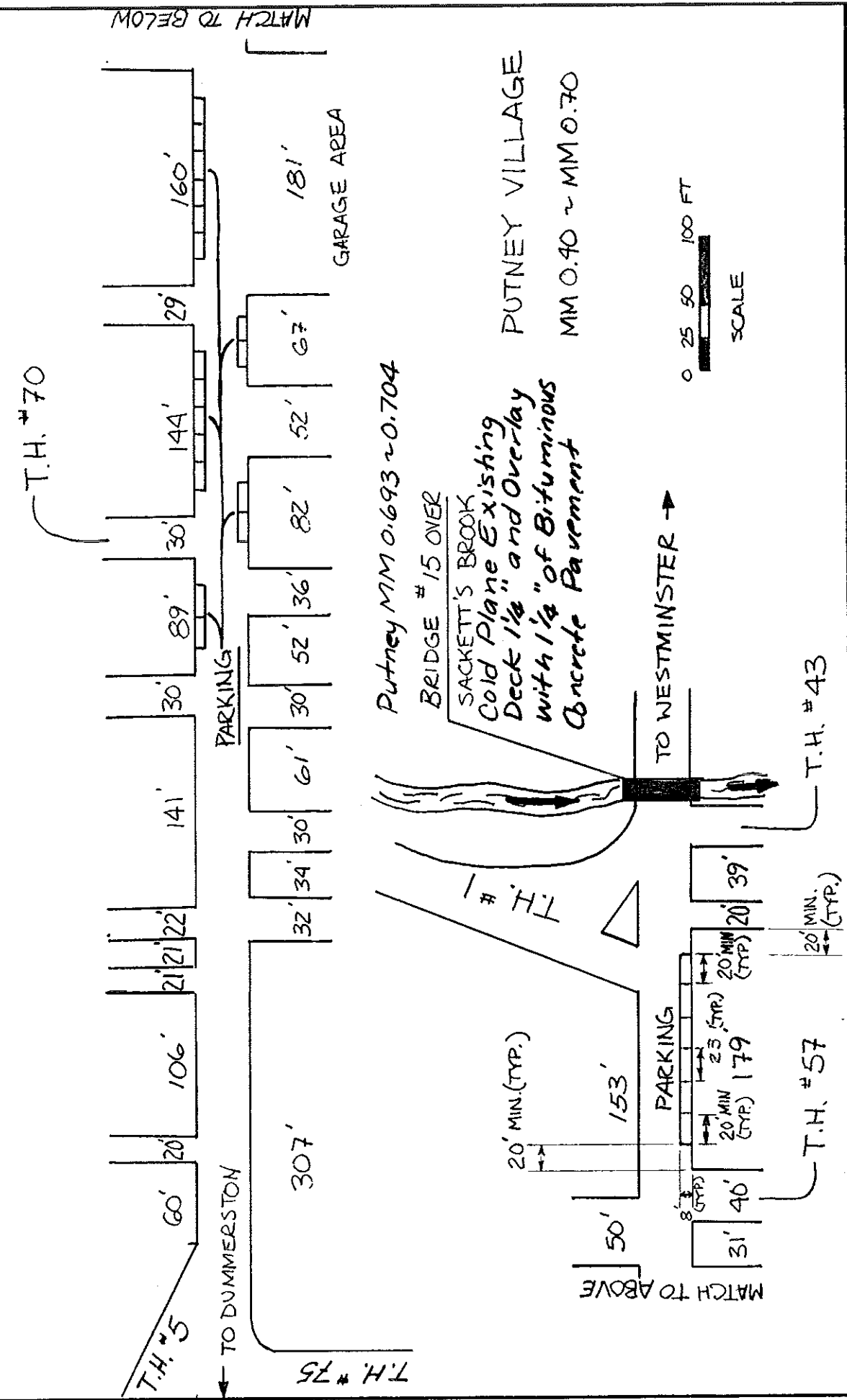
4 retro-reflective RPM's on three foot centers with a 30 foot gap to be removed immediately upon the application of the specified markings.

Gore Area  
Gore areas to include 8 inch channelizing line and dashed line.  
Per 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 during periods of several days to anticipate in these instances, paint or RMI's can be used as the interim marking material to be paid under the appropriate bid item. Marking material to be 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.

PARKING AREA DETAIL SHEET



0 25 50 100 FT  
SCALE

PROJECT PUTNEY - WESTMINSTER NO. H/M 2855 SHT. 22 OF 33 SHTS.

PROJECT <sup>Purkey - Westminster</sup> ROUTE <u>US 5</u> PROJECT # <u>HMA 2855</u>							
TEMPORARY 4' YELLOW LINE							
MILE	MILE	LT.	RT.	QTY. LEFT	QTY. RT.	TOTAL	
0.00	3.85	Solid	Solid	16104	16104	32208	
3.54	3.90	Solid	Solid	1900	1900	3800	
3.90	4.02	Solid	Dash	634	158	792	
4.02	5.46	Solid	Solid	7603	7603	15206	
5.46	5.61	Solid	Dash	792	198	990	
0.000	0.10	Solid	Dash	528	132	660	
0.10	0.14	Solid	Solid	211	211	422	
0.14	0.24	Dash	Solid	132	528	660	
0.24	0.26	Dash			26	26	
0.26	0.35	Solid	Dash	475	119	594	
0.35	0.41	Solid	Solid	317	317	634	
0.41	0.53	Dash	Solid	158	634	792	
0.53	2.69	Solid	Solid	11405	11405	22810	
2.69	2.83	Solid	Dash	739	185	924	
2.83	4.24	Solid	Solid	7445	7445	14890	
4.24	4.42	Solid	Dash	950	238	1188	
4.42	4.45	Dash			40	40	
4.45	4.57	Dash	Solid	158	634	792	
4.57	4.61	Solid	Solid	211	211	422	
4.61	4.76	Solid	Dash	792	198	990	
4.76	4.85	Dash			119	119	
4.85	5.02	Dash	Solid	224	898	1122	
5.02	8.24	Solid	Solid	17002	17002	34004	
					Sub Total	134,085	
					Assume 35 TH's @ 40' x 2 =	- 2800	
					Leveling Course + Cold Patching (50%)	+ 196,928	
						331,013	

TEMPORARY 4" WHITE LINE

MILE	MILE	LT.	RT.	QTY. LEFT	QTY. RT.	TOTAL
0.000	3.05	EL	EL	16,104	16,104	32,208
3.54	5.61			10,930	10,930	21,860
Westminster	2.24	EL	EL	43,507	43,507	87,014
0.000						
					Sub total	141,082
1 Durable 4" White Line - Parking Spaces = 750'						
Durable Letter In Word Markings:						
Pitney - M.M. 0.81 Rt = "SCHOOL" M.M. 0.16 Rt "STOP"						
" M.M. 1.00 Lt = "SCHOOL" M.M. 0.23 Rt "YIELD"						
Westminster - M.M. 3.80 Rt = "SCHOOL"						
" M.M. 3.67 Lt = "SCHOOL" = 53 ea.						
Temporary 24" Stop Bar = Est 35 @ 11' = 385'						
Durable 24" Stop Bar = Est 35 @ 11 ea. = 385'						
mm. 44 12" White Line = X-walk, outside Lines Only (LF) = 80'						
mm. 44 Durable Crosswalk w/ Diagonals (Pitney) M Final Course = 40'						
Depending on paving limits on side roads, Durable						
"STOP" wording may be added at the discretion of						
The Resident Engineer and paid for under Item 646.44.						