OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FHWA REGION	STATE	FEDERAL PROJECT	
5	OHIO		

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII		NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
				BEGIN	END				
1	MAD	US-40	(6.66 - 6.90B)	6.84B	7.14A	0.36			
1	MAD	US-40	(12.09 - 13.64) (14.71 - 15.54)	12.09	16.09	3.16			West Jefferson
2	FRA	US-40	(0.00 - 7.10)	0.00	7.60	7.60		Columbus	New Rome

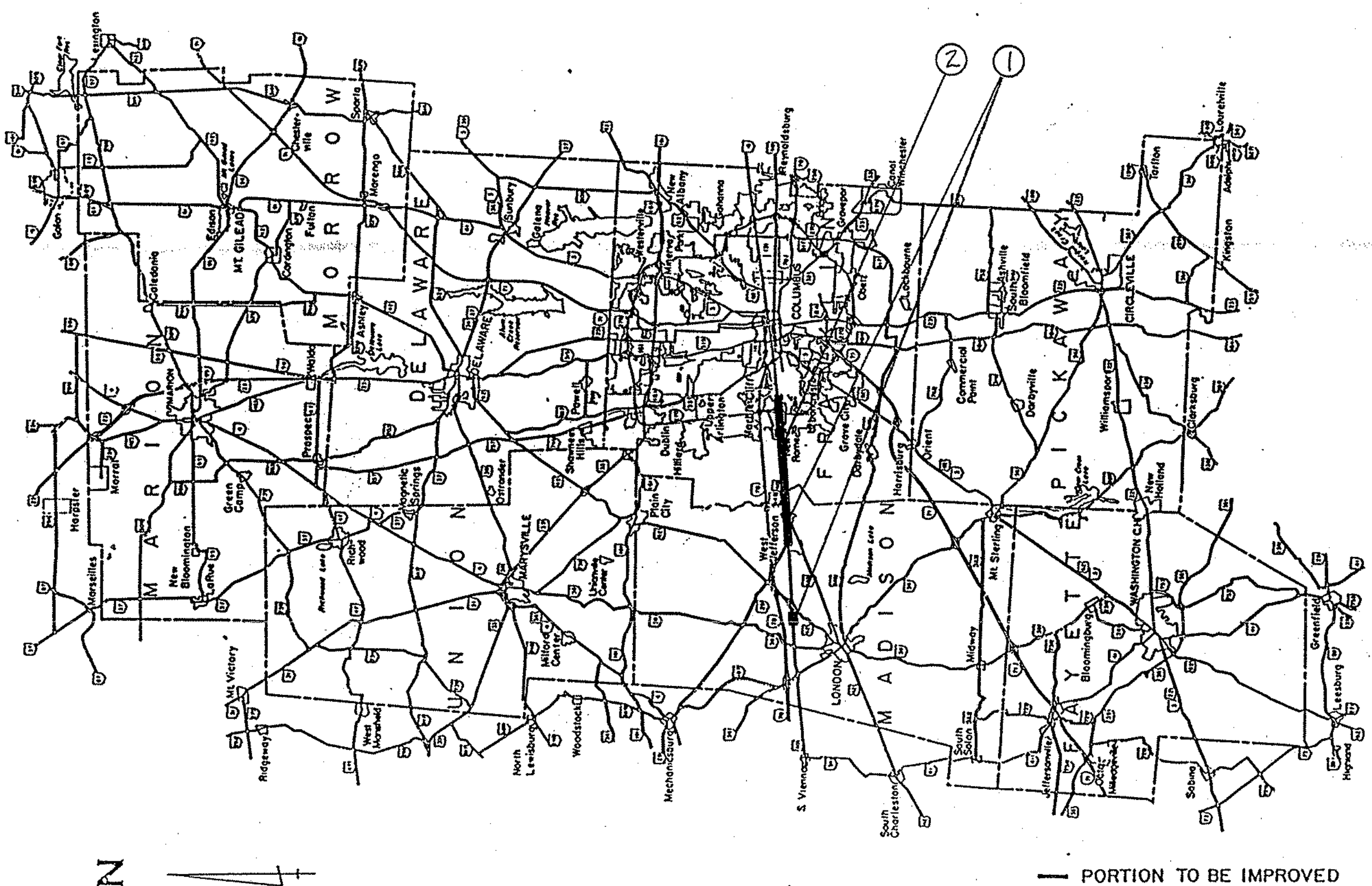
PLAN NO.

PID 13405

The Standard 19 95 Specifications of the State of Ohio, Department of Transportation, including changes and Supplemental Specifications listed in the plans and proposal shall govern these improvements.

I hereby approve these plans and declare that the making of these improvements will require the closing of the highways to traffic on Parts No. ________ and that detours will be provided by State forces. The closing to traffic of the highways will not be required on Parts No. 1 and 2 and provisions for the maintenance and safety of traffic will be as indicated in the proposal.

LOCATION MAP



39° 50' Latitude 83° 15' Longitude

10/21/95
Approved Date — District Deputy Director of Transportation

Approved Date — Administrator, Office of Structural Engineering

Approved Date — Director, Department of Transportation

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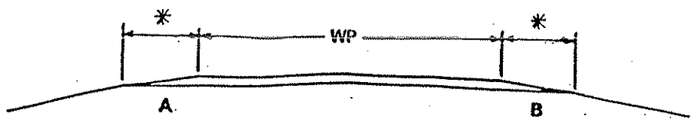
DEPARTMENT OF TRANSPORTATION
M& R 707 REV. 9-1-63

① See page 3 for Typicals 3 & 4.
* Shoulder Width.

ASPHALT CONCRETE

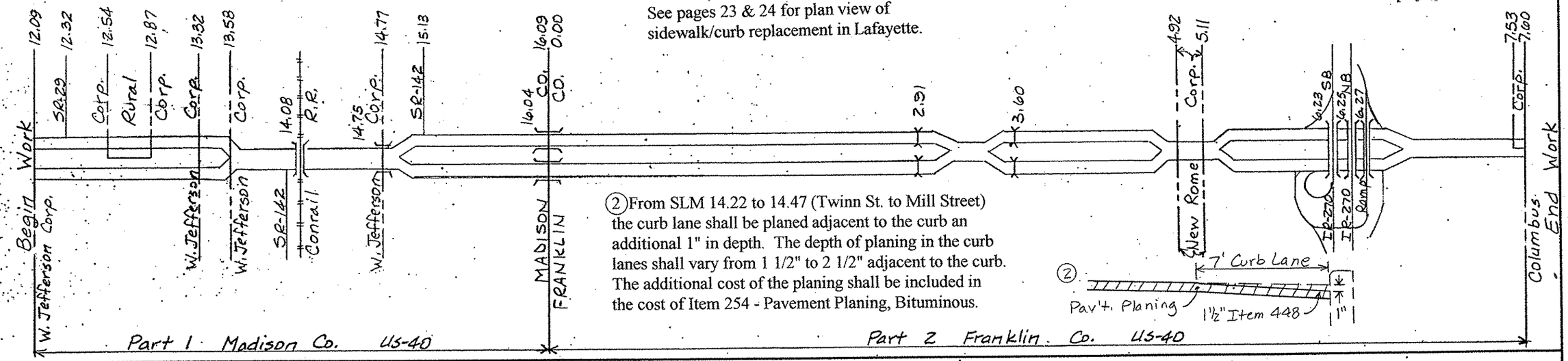
PLAN NO. 2/45

TYPICAL 1



TYPICAL 2

See pages 23 & 24 for plan view of sidewalk/curb replacement in Lafayette.



Part 1 Madison Co. US-40

Part 2 Franklin Co. US-40

② From SLM 14.22 to 14.47 (Twinn St. to Mill Street) the curb lane shall be planed adjacent to the curb an additional 1" in depth. The depth of planing in the curb lanes shall vary from 1 1/2" to 2 1/2" adjacent to the curb. The additional cost of the planing shall be included in the cost of Item 254 - Pavement Planing, Bituminous.

PAVEMENT DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN. FT.	WP FEET	TYPICAL ①	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	PROPOSED PAVEMENT 407 TACK COAT @ .0.10. gal./s.y. GALS.	407 COVER AGGR. @ ..... lbs./s.y. TONS	ASPHALT CONCRETE ITEM 448 THICK INCHES	ITEM 448 Type 1 Inter. CU. YDS.	ITEM 448 THICK INCHES	ITEM 448 Type 1 Surface CU. YDS.	ITEM ..... THICK INCHES	ITEM ..... CU. YDS.	254 Pavement Planing, Bituminous (1½") SQ. YD.	604 Catch Basin Adjusted to Grade EACH	604 Manhole Adjusted to Grade EACH	638 Valve Box Adjusted to Grade Each	202 Raised Pavement Markers Removed for Storage Each
1	US-40	12.09 - 12.45	0.36	1901	Z4&Z4	2	404	10,139			3/4	211	1¼	352							
		12.45 - 13.25	0.80	4224	Z2&Z4	2	404	21,589			3/4	450	1¼	750							
		13.25 - 13.48	0.23	1214	Z4&Z4	2	404	6,475			3/4	135	1¼	225							
		13.48 - 13.57	0.09	475	Z4&Z4	3	404	2,533			3/4	53	1¼	88							
		13.57 - 13.64	0.07	370	50	1	404	2,056			3/4	43	1¼	71							
		13.64 - 13.87	0.23	1214	66	4	404	8,903					1½	371			8,903				
		13.87 - 14.71	0.84	4435	54	4	404	26,610					1½	1109			② 26,610	2	1	4	
		14.71 - 14.85	0.14	739	54	1	404	4,434			3/4	92	1¼	154							
		14.85 - 15.54	0.69	3643	Z4&Z4	2	404	19,430			3/4	405	1¼	675				2			
		15.54 - 16.09	0.55	2904	Z4&Z4	3	404	15,488			3/4	323	1¼	538							
	Total Mainline		4.00	21,119				117,657	11,766			1712		4333			35,513				194
	Extra Areas from Page 4							10,638	1,064			160		369							
	Total Part 1		4.00	21,119				128,295	12,830			1872		4702			35,513	4	1	4	194

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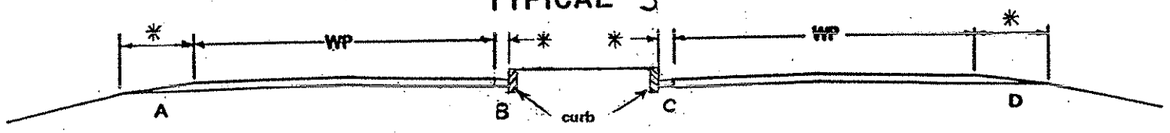
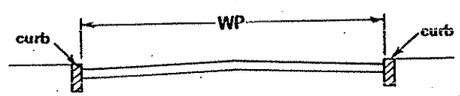
ASPHALT CONCRETE

PLAN NO. 3/45

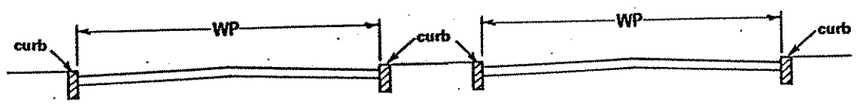
TYPICAL 3



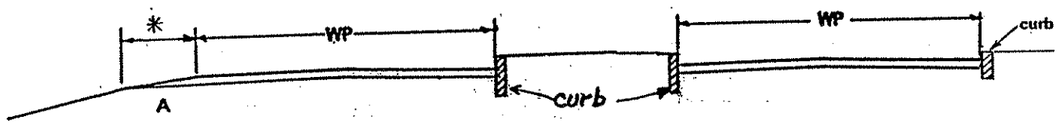
TYPICAL 4



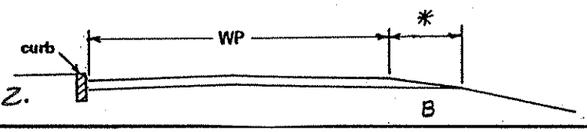
TYPICAL 5



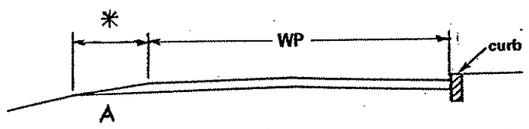
TYPICAL 6



TYPICAL 7



TYPICAL 8



* Shoulder Width.
① See page 2 for Typicals 1 & 2.

PAVEMENT DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN. FT.	WP FEET	TYPICAL ①	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	PROPOSED PAVEMENT 407 TACK COAT @ .0.1.0. gal./s.y. GALS.	407 COVER AGGR. @ ..... lbs./s.y. TONS	ASPHALT CONCRETE ITEM 448 THICK INCHES	ITEM 448 Type I Inter. CU. YDS.	ITEM 448 THICK INCHES	ITEM 448 Type I Surface CU. YDS.	ITEM ..... THICK INCHES	ITEM ..... CU. YDS.	254 Pavement Planing, Bituminous (1½") SQ. YD.	604 Catch Basin Adjusted to Grade EACH	202 Raised Pavement Marker Removed for Storage Each
2	US-40	0.00 - 0.46	0.46	2429	24Δ24	3	404	12,955			3/4	270	1¼	450				1	
		0.46 - 3.18	2.72	14,362	24Δ24	2	404	76,597			3/4	1596	1¼	2660					
		3.18 - 3.42	0.24	1267	65	4	404	9151					1½	381			9151		
		3.42 - 4.76	1.34	7075	24Δ24	2	404	37,733			3/4	786	1¼	1310					
		4.76 - 5.22	0.46	2429	65	4	404	17,543					1½	731			17,543		
		5.22 - 6.02	0.80	4224	24Δ26	6	404	23,467					1½	978			23,467		
		6.02 - 6.20	0.18	950	38Δ24	5	404	6544					1½	273			6544		
		6.20 - 6.33	0.13	686	26Δ38	5	404	4878					1½	203			4878		
		6.33 - 6.72	0.39	2059	38Δ40	6	404	17,845					1½	744			17,845		
		6.72 - 7.00	0.28	1478	105	7	404	17,243					1½	718			17,243		
		7.00 - 7.11	0.11	581	105	1	404	6778					1½	282			6778		
		7.11 - 7.34	0.23	1214	88	8	404	11,870					1½	495			11,870		
		7.34 - 7.60	0.26	1373	88	4	404	13,425					1½	559			13,425		
	Total Mainline		7.60	40,127				256,029	25,603			2652		9784			128,744		723
	Extra Areas from Page 6							16,194	1619			82		637			10,233		
	Total Part 2		7.60	40,127				272,223	27,222			2734		10,421			138,977	1	723

DEPARTMENT OF TRANSPORTATION
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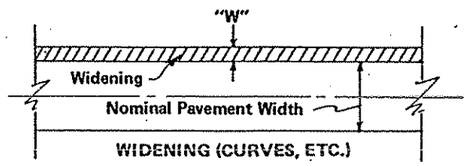
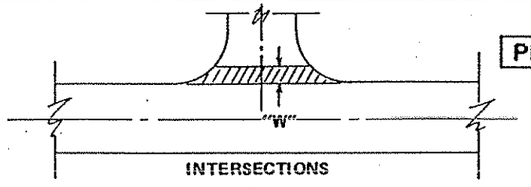


EXTRA AREA AND DEDUCTIONS



PLAN NO. 4/45

PART	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	LENGTH MILES	LENGTH LIN. FT.	WIDTH "W" IN FEET	AREA IN SQ. YDS.	PROPOSED ITEMS 407 TACK COAT @ .0.JQ. gal./s.y. Gals.	407 COVER AGGR. @ ..... lbs./s.y. Tons	ASPHALT CONCRETE THICK INCHES	CU. YDS. 448 ITEM Type I Inter.	CU. YDS. 448 ITEM Type I Surface	ASPHALT CONCRETE THICK INCHES
1	US-40	12.26	Rt. Med.	EB Lt. Turn Lane to SR-29		150	0-10	83						
		12.29	"	" " " " " "		150	10	167						
		12.32	Lt. Med.	WB Lt. Turn Lane at SR-29		160	11-0	98						
		12.32	Rt. Med.	EB Acc. Lane from SR-29		400	10	222						
		12.40	"	" " " " " "		250	10-0	139						
		12.32	Lt.	WB Rt. Turn Lane to SR-29		390	12	520						
		12.39	"	" " " " " "		100	12-0	67						
		13.23	Rt.	Extra Area		250	8	222						
		13.57	Med.	" "		369	4-0	82						
		14.80	Med.	" "		260	0-6	87						
		14.80	Rt.	" "		425	8 avg.	378						
		15.77	Rt.	" "		420	11 avg.	513						
		15.78	Lt.	" "		625	9 avg.	625						
		Various	Med.	Crossovers				2100						
		Various		Intersections				4300						
		Various		Drives				400						
	Sub-Total Extra Areas							10,003	1000		3/4	208	347	1 1/4
		14.77		Structure (Extra Width)		151	14	235	24				8	1 1/4
		14.77		" (Deduct Leveling)		151	54	(906)			3/4	-19		
		16.04		Structure (Extra Width)		257	7&7	400	40				14	1 1/4
		16.04		" (Deduct Leveling)		257	24&24	(1371)	___		3/4	-29	___	
	Sub-Total Structures							635	64			-48	22	
	Total Extra Areas & Deductions to Page 2							10,638	1064			160	369	
2	US-40	0.09	Rt.	Extra Area		600	7	467			3/4	10	16	1 1/4
		0.96	Lt. Med.	WB Lt. Turn Lane to Darby-Creek Rd.		75	10-2	50			3/4	1	2	1 1/4
		4.36	Rt.	EB Rt. Turn Lane to Galloway Rd.		80	0-10	44			3/4	1	2	1 1/4
		4.38	"	" " " " " " "		70	10	78			3/4	2	3	1 1/4
		4.39	Med.	WB Lt. " " " " "		260	10	289			3/4	6	10	1 1/4
		4.69	Rt. Med.	EB Lt. Turn Lane to Hilliard-Rome Rd.		100	0-10	56			3/4	1	2	1 1/4
		4.71	"	" " " " " " " "		300	10	333			3/4	7	12	1 1/4

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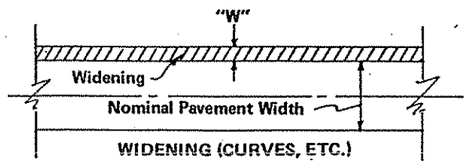
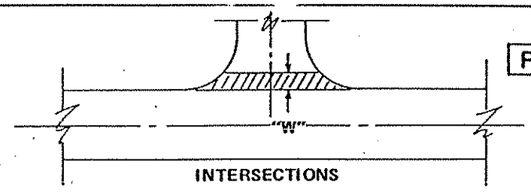


EXTRA AREA AND DEDUCTIONS



PLAN NO. 5/45

PART	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	LENGTH MILES	LENGTH LIN. FT.	WIDTH "W" IN FEET	AREA IN SQ. YDS.	PROPOSED ITEMS: 407 TACK COAT @ .0.10 gal./s.y. Gals.	407 COVER AGGR. @ ..... lbs./s.y. Tons	ASPHALT CONCRETE THICK INCHES	CU. YDS. 448 ITEM Type I Inter.	CU. YDS. 448 ITEM Type I Surface	ASPHALT CONCRETE THICK INCHES	254 Pavement Planing, Bituminous (1½")
Z	45-40	5.15	Med.	WB Lt. Turn Lane to Norton Rd.		365	14	568					24	1½	568
		5.32	Rt. Med.	EB Lt. Turn Lane to Sturbridge		180	0-12	120					5	1½	120
		5.35	"	" " " " " "		40	12	53					2	1½	53
		5.36	Lt. Med.	WB Lt. Turn Lane to Gladys		40	12	53					2	1½	53
		5.37	"	" " " " " "		180	12-0	120					5	1½	120
		5.36	Lt.	WB Rt. Turn Lane to Sturbridge		130	12	173					7	1½	173
		5.38	"	" " " " " "		150	12-0	100					4	1½	100
		5.40	Rt. Med.	EB Lt. Turn Lane to Lincoln Lodge		25	0-10	14					1	1½	14
		5.41	"	" " " " " "		245	10-14	327					14	1½	327
		5.44	Lt. Med.	WB Lt. Turn Lane to Oxley		300	12	400					17	1½	400
		5.50	Med.	EB Lt. Turn Lane at Drug World		100	12-0	83					3	1½	83
		5.52	"	WB Lt. Turn Lane to Fernhill		60	12	80					3	1½	80
		5.53	"	" " " " " "		130	12-0	87					3	1½	87
		5.52	Lt.	WB Rt. Turn Lane at Drug World		200	12	267					11	1½	267
		5.56	"	" " " " " " "		50	12-0	33					1	1½	33
		5.63	Rt.	EB Rt. Turn Lane to Murray Hill		170	0-12	113					5	1½	113
		5.66	"	" " " " " " "		160	12	213					9	1½	213
		5.63	Rt. Med.	EB Lt. Turn Lane to Murray Hill		300	12	400					17	1½	400
		5.69	Lt. Med.	WB Lt. Turn Lane to Murray Hill		160	12	213					9	1½	213
		5.72	"	" " " " " " "		150	12-0	100					4	1½	100
		5.69	Lt.	WB Rt. Turn Lane to Murray Hill		160	12	213					9	1½	213
		5.72	"	" " " " " " "		150	12-0	100					4	1½	100
		5.86	Lt.	WB Lt. Turn Lane to Lincoln Village		100	10	111					5	1½	111
		5.88	"	" " " " " " "		200	10-0	111					5	1½	111
		5.97	Rt. Med.	EB Lt. Turn Lane to Old Village		100	0-12	67					3	1½	67
		5.99	"	" " " " " "		100	12	133					6	1½	133
		6.02	Rt.	EB Rt. Turn Lane to IR-270		100	0-13	72					3	1½	72
		6.04	"	" " " " " "		384	13	555					23	1½	555
		6.00	Lt. Med.	WB Lt. Turn Lane at Old Village		100	12	133					6	1½	133
		6.02	"	" " " " " "		100	12-0	67					3	1½	67
		6.03	Rt. Med.	EB Lt. Turn Lane to Grener		100	0-10	56					2	1½	56
		6.05	"	" " " " " "		112	10	124					5	1½	124
		6.07	Med.	at Grener		117	14	182				—	8	1½	182

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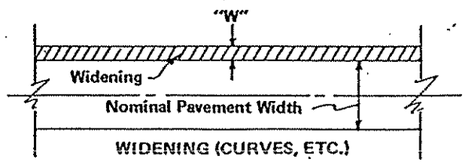
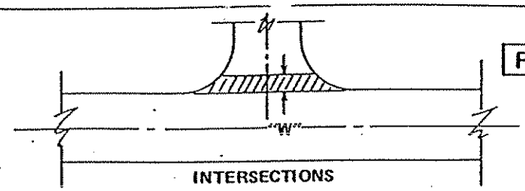


EXTRA AREA AND DEDUCTIONS



PLAN NO. 6/45

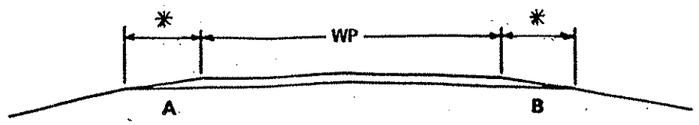
PART	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	LENGTH MILES	LENGTH LIN. FT.	WIDTH "W" IN FEET	AREA IN SQ. YDS.	PROPOSED ITEMS 407 TACK COAT @ .0.10. gal./s.y. Gals.	407 COVER AGGR. @ ..... lbs./s.y. Tons	ASPHALT CONCRETE THICK INCHES	CU. YDS. 448 ITEM Type I Inter.	CU. YDS. 448 ITEM Type I Surface	ASPHALT CONCRETE THICK INCHES	254 Pav't. Planing, Bit. (1½") Sq. Yd.	4						
2	US-40	6.10	Lt.Med.	WB Lt. Turn Lane to IR-270		514	10	571					24	1½	571							
		6.20	"	" " " " " "		150	10-0	83					3	1½	83							
		6.29	Med.	at IR-270 off ramp		82	14	128					5	1½	128							
		6.30	Rt.Med.	EB Lt. Turn Lane at Westland		124	10	138					6	1½	138							
		6.33	Med.	at Westland W. Entrance		153	14	238					10	1½	238							
		6.36	Lt.Med.	WB Lt. Turn Lane to Westland		100	10	111					5	1½	111							
		6.38	"	" " " " " "		100	10-0	56					2	1½	56							
		6.38	Rt.Med.	WB Lt. Turn Lane to Sun TV		100	0-10	56					2	1½	56							
		6.40	"	" " " " " "		200	10	222					9	1½	222							
		6.42	Med.	at Lazarus		80	14	124					5	1½	124							
		6.43	Lt.Med.	WB Lt. Turn Lane to Lazarus		325	10	361					15	1½	361							
		6.49	"	" " " " " "		117	10-0	65					3	1½	65							
		6.57	Rt.Med.	EB Lt. Turn Lane to Color Tile		180	10	200					8	1½	200							
		6.57	Lt.Med.	WB Lt. Turn Lane at W. Broad Plaza		180	10	200					8	1½	200							
		6.60	Med.	at W. Broad Plaza		100	14	156					7	1½	156							
		6.62	Lt.Med.	WB Lt. Turn Lane to W. Broad Plaza		120	10	133					6	1½	133							
		6.64	"	" " " " " " "		100	10-0	56					2	1½	56							
		6.62	Rt.Med.	EB Lt. Turn Lane to Philipi		445	10	494					21	1½	494							
		Various	Med.	Crossovers				3100			3/4	65	108	1¼								
		Various		Intersections				600			3/4	13	21	1¼								
		Various		Intersections (Planing Area)				1400					58	1½	1400							
		Various		Drives				420			3/4	9	15	1¼								
	Sub-Total Extra Areas							15,670	1567			115	618		10,233							
		MAD-40-1604		Structure (Extra Width)		256	7Δ7	398	40				14	1¼								
		"		" (Deduct Leveling)		256	24Δ24	(1365)			3/4	-28										
		FRA-40-0291		Structure (Extra Width)		27	12Δ12	72	7				3	1¼								
		"		" (Deduct Leveling)		27	24Δ24	(144)			3/4	-3										
		FRA-40-0360		Structure (Extra Width)		22	11Δ11	54	5				2	1¼								
		"		" (Deduct Leveling)		22	24Δ24	(117)			3/4	-2										
	Sub-Total Structures							524	52			-33	19									
	Total	Extra Areas and Deductions to Page 3						16,194	1619			82	637		10,233							

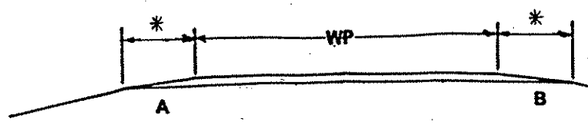
SHOULDER TREATMENT

7/45

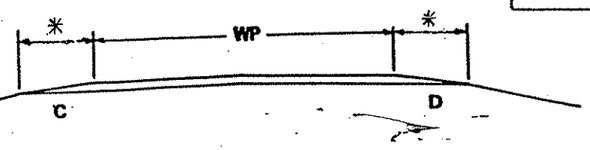
PLAN NO.

TYPICAL 1

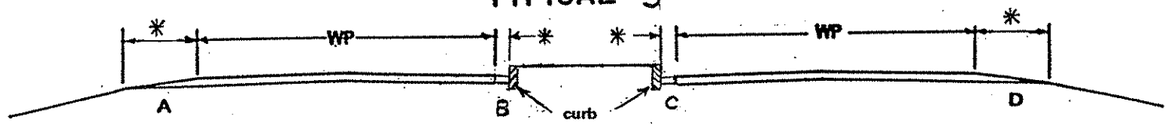


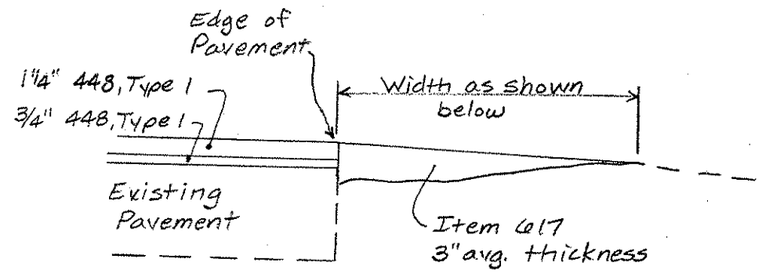


TYPICAL 2



TYPICAL 3





Aggregate Berm Detail
MAD-40: 12.09 - 13.64, 14.71 - 16.09

① 0.14 Mile x 5280' = 739'
less 151'
588' (Struc. MAD-40-1477)

② 0.55 Mile x 5280' = 2904'
less 257'
2647' (½ Struc. MAD-40-1604)

SHOULDER DATA

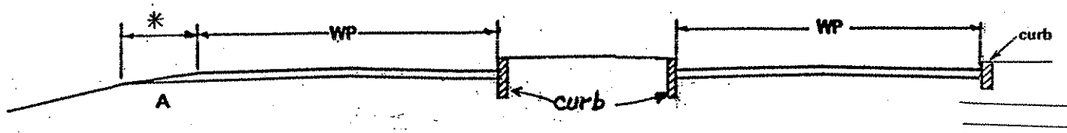
PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN. FT.	TYPICAL	EXISTING TYPE - WIDTH (ft.) A TYPE	A * WIDTH	B TYPE	B * WIDTH	C TYPE	C * WIDTH	D TYPE	D * WIDTH	AREA SQ. YDS. Item 617	AREA SQ. YDS. Item 448	407 TACK Bit. Matl. @.0.10. gal./s.y. Gals.	407 TACK Cover Aggr. @..... lbs./s.y. Tons	ASPHALT CONCRETE 448 Thick Inches	448 Intermediate, Type 1 Cu. Yds.	448 Thick Inches	448 Surface, Type 1 Cu. Yds.	617 Compacted Aggregate Sq. Yds.	617 Thick Inches	617 Cu. Yd.
1	US-40	12.09-13.48	1.39	7339	2	617	4	617	2	617	2	617	4	9785										
		13.48-13.57	0.09	475	3	617	4	404	1	404	1	617	4	422	106									
		13.57-13.64	0.07	370	1	617	4	617	4					329										
		14.71-14.85	0.14	①588	1	617	4	617	4					523										
		14.85-15.54	0.69	3643	2	617	4	617	2	617	2	617	4	4857										
		15.54-16.09	0.55	②2647	3	617	4	404	1	404	1	617	4	2353	588									
	Total	Part 1	2.93	8462										18,269	694	69		3/4	14	1 1/4	24	18,269	3	1522

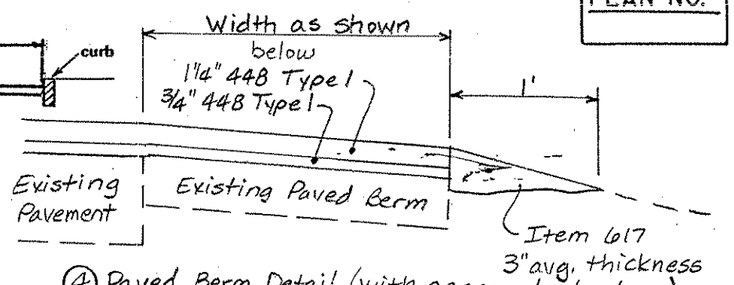
SHOULDER TREATMENT

8/45

PLAN NO.

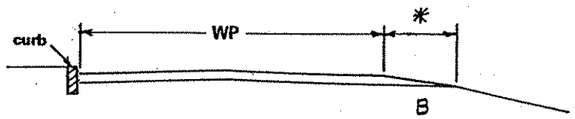
TYPICAL 6



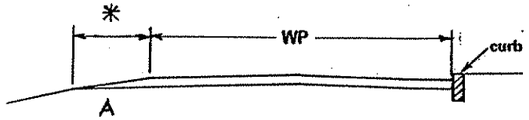


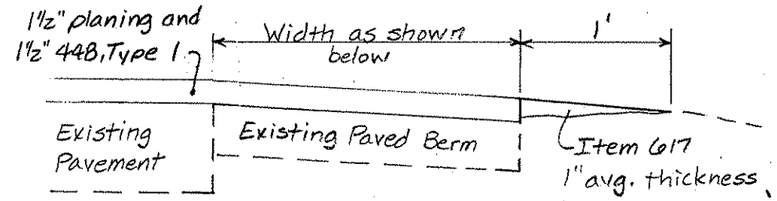
④ Paved Berm Detail (with aggregate back-up)
FRA-40 0.00 - 4.76

TYPICAL 7



TYPICAL 8





⑤ Paved Berm Detail (with aggregate back-up)
FRA-40 after SLM 4.76 (in planed area)

③ 0.46 Mile x 5280' = 2429'
less 256' (½ struc. MAD-40-1604)
2173'

See page 7 for Typicals 1, 2, and 3.

SHOULDER DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN. FT.	TYPICAL	EXISTING TYPE - WIDTH (ft.) A TYPE	A * WIDTH	B TYPE	B * WIDTH	C TYPE	C * WIDTH	D TYPE	D * WIDTH	AREA SQ. YDS.	407 TACK Bit. Matl. @ 0.10 gal./s.y. Gals.	407 TACK Cover Aggr. @ ..... lbs./s.y. Tons	ASPHALT CONCRETE 848 Thick Inches	848 Intermediate, Type 1 Cu. Yds.	848 Thick Inches	848 Surface, Type 1 Cu. Yds.	254 Pavement Planing, Bituminous (1½") Sq. Yd.	See ④ & ⑤ 617 (Backup) Compacted Aggregate Sq. Yds.	THICK INCHES	Cu. Yd.
2	US-40	0.00 - 0.46	0.46	③ 2173	3	④ 404	2	404	1	404	1	④ 404	2	1449			¾	30	1¼	50		483	3	40
		0.46 - 3.18	2.72	14,362	2	④ 404	2	④ 404	2	④ 404	2	④ 404	2	12,766			¾	266	1¼	443		6383	3	532
		3.42 - 4.76	1.34	7075	2	④ 404	2	④ 404	2	④ 404	2	④ 404	2	6289			¾	131	1¼	218		3144	3	262
		5.22 - 5.98	0.76	4013	6	⑤ 404	2	—	—					892					1½	37	892	446	1	12
		6.33 - 6.72	0.39	2059	6	⑤ 404	2	—	—					458					1½	19	458	229	1	6
		6.72 - 7.00	0.28	1478	7	—	—	⑤ 404	4					657					1½	27	657	164	1	5
		7.00 - 7.11	0.11	581	1	⑤ 404	1	⑤ 404	4					323					1½	13	323	129	1	4
		7.11 - 7.34	0.23	1214	8	⑤ 404	2	—	—					270					1½	11	270	135	1	4
	Total Part 2		6.29	32,955										23,104	2310			427		818	2600			865

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

GENERAL NOTES

9/45

PLAN NO.

Description of Work
This project shall consist of pavement repair and resurfacing with 3/4" of Item 448 intermediate course Type 1 and 1 1/4" of Item 448 surface course Type 1 in the uncurbed sections. Curbed sections will have pavement repair, pavement planing to a depth of 1 1/2" with 1 1/2" of Item 448 surface course Type 1. Existing medians shall be removed or replaced with Item 612 - Concrete Median.
The existing curb and sidewalk will be replaced in the unincorporated Village of Lafayatte.

GENERAL
The Contractor shall submit in writing a schedule of operations to the Engineer and receive approval in writing before work is started on this project.

All work shall be performed in the existing right-of-way.

All traffic control devices shall be furnished, erected, maintained, and removed by the Contractor in accordance with the Ohio Manual of Uniform Traffic Control Devices.

The contractor is not to pave over or under a bridge unless the plan has given you specific instructions to do so. This precaution is to prevent overloading a bridge deck or reducing the clearance under an underpass.

Permits
Prior to the closure of any portion of a street or highway within the City of Columbus, the contractor shall obtain and submit 'The Permit for Street Occupancy and/or Excavation' to the City Engineer for completion and issuance a minimum of five (5) working days prior to starting work. The contractor's foreman and the inspector shall each have a copy of the permit on the project site at all times. The contractor shall also furnish the Division of Construction with a copy of the permit (FAX 614 645-3298).

Alignment and Profile
The work proposed by this project is for the resurfacing of the existing pavement. The alignment of the existing pavement will not be changed, and the profile of the proposed surface will be similar to that of the existing pavement except that it will be raised an amount equal to the thickness of the resurfacing course or courses specified in the plan.

Intermediate Course, Spot Leveling, and Patching
This material shall be placed in a separate operation where and as directed by the Engineer.

Contingency Quantities
The Contractor shall not order materials or perform work listed in the General Summary for Items designated by plan note to be used "as directed by the Engineer" unless authorized by the Engineer.

Pavement Planing Restrictions
The planing of all butt joints shall be done immediately prior to the resurfacing operation. In curbed areas, the planed pavement shall not be exposed to traffic for longer than seven days prior to the resurfacing.

ITEM 254 - Patching Planed Surface
A quantity of 5,000 Sq. Yd. has been carried to the General Summary to be used as directed.

Signing
The contractor is responsible for replacement of permanent traffic control signs damaged or removed during construction.

ITEM 202 - Concrete Median Removed, as per plan
In addition to the requirements of Item 202, a full depth diamond saw cut adjacent to the face of the median to remove the existing median shall be included in the cost of the removal.

ITEM 202 - Curb Removed, as per plan
In addition to the requirements of Item 202, a full depth diamond saw cut adjacent to the face of curb to remove the existing curb shall be included in the cost of the removal.

Cooperation with Contractor
Within the limits of this project, Structure FRA-40-3.47 is scheduled to be replaced in the summer of 1996. The resurfacing in this area shall be completed after the completion of structure work. The tentative completion date for the structure is July 1, 1996.

GENERAL NOTES

Traffic Signals

The contractor shall notify the District Six Signal Supervisor (614)363-1251 two (2) full working days before any pavement grinding or digging is done within 1000 feet of any traffic signal installation. The contractor shall also notify the Signal Supervisor two (2) full working days before any new loop detectors are to be installed. District Six Traffic Section will lay out any new loop detectors.

District Traffic will test all loops and lead-ins after all grinding and digging has been completed around the signals. District will notify the project supervisor in writing, reporting how many loops, pull boxes, or the amount of loop lead-in which needs to be replaced along with the locations. After receiving the proper notification, District will meet the contractor at the job site and lay out the loops and assist them in locating existing pull boxes and loop lead-in as needed. The cost of loop detector tie-ins shall be included in the cost of the loop detector wire.

The contractor shall install 12 mid-block loops that are in addition to the existing loops.

The District Signal Supervisor shall be notified two full working days prior to the installation of these loops and District Traffic will provide the layout.

The following quantities have been provided for these purposes.

Item	Quantity	Unit	Description
625	700	Lin. Ft.	Conduit, 1", 713.04
625	700	Lin. Ft.	Trench
625	10	Each	Pullbox, 713.08, 18"
632	2,500	Lin. Ft.	Loop Detector Pavement Cutting
632	12,000	Lin. Ft.	Loop Detector Wire, Type E
632	2,500	Lin. Ft.	Loop Detector Lead-in Cable

Item 623 - Construction Layout Stakes, as per plan

This item shall consist of stationing using 36" lath stakes. The stakes shall be spaced at 200' intervals and shall extend throughout the length of the project and throughout the length of all ramps. Placement of the stakes shall be as directed by the Engineer. The contractor is responsible for replacing any damaged or missing stakes.

Construction Layout Stakes, as per plan will be paid for at the contract lump sum bid, which price shall be full compensation for all services, materials, labor, equipment, tools, and incidentals including removal necessary to complete this item.

Concrete Asphalt Placement at Curb

In the area of the additional planing depth (SLM 14.22 to 14.47, Twinn St. to Mill Street), the depth of asphalt concrete adjacent to the curb may be adjusted as directed by the Engineer. The asphalt concrete depth may be reduced in areas of low curb height to provide a more constant curb height throughout this area. The West Jefferson Service Director, Harold Walker - phone 614 879-8655, will designate locations where this adjustment may be necessary. Any additional cost with this work shall be incidental to the cost of the asphalt concrete.

DEPARTMENT OF TRANSPORTATION
MS R 712 REV. 9-1-83

MAINTENANCE OF TRAFFIC GENERAL NOTES

11
45

PLAN NO.

GENERAL

In addition to the requirements for maintaining traffic as indicated in the Ohio Manual of Uniform Traffic Control Devices and pertinent items of specifications, the following requirements shall apply:

Before work begins, the Contractor shall submit to the Engineer the names and telephone numbers of a person or persons who can be contacted 24 hours a day by the Ohio Department of Transportation and all interested police agencies. This person or persons shall be responsible for replacing necessary traffic control devices.

The District Six Office of Communications, located at 400 East William Street, Delaware, Ohio 43015 (363-1251) shall be notified of the starting date at least seven (7) days before work begins.

The spacing of drums or type II baricades shall be 25 feet in tapers,50 feet in tangent sections.

The contractor shall arrange his operations, including ingress and egress, so as to prevent any interference to the continuous flow of traffic. All vehicles, equipment, men, and their activities are restricted at all times to one side of the pavement unless otherwise approved by the Engineer.

Work Restrictions and Lane Closures

At least one lane of traffic shall be maintained in each direction at all times. The permitted hours of operation East of Galloway Rd. in Franklin County (SLM 4.39) are 7:00 PM to 6:00 AM Monday thru Thursday and 7:00 PM Friday until 6:00 AM Monday. ~~During this time all lanes shall be open to traffic~~. There are no other time restrictions on the remainder of the project.

ITEM 404 - Bituminous Concrete for Maintaining Traffic

The existing paved berm may be used to maintain traffic. Prior to using the berm for maintaining traffic, damaged sections shall be repaired with Item 404 as directed by the Engineer. In addition, deterioated mainline pavement shall be repaired using this item as directed. The cost of repairing and/or preparation work and subsequent maintaining and reconditioning shall be included in the bid price for Item 404 - Bituminous Concrete for Maintaining Traffic. An estimated quantity of 50 Cu. Yd. in Part 1 and 100 Cu. Yd. in Part 2 of Item 404 - Bituminous Concrete for Maintaining Traffic is provided for these operations.

Temporary Drainage

The contractor shall provide temporary positive drainage measures throughout the duration of the construction period.

Contractor's Equipment - Operation and Storage

The contractor's equipment shall be operated in the direction of traffic where practical. Equipment shall have at least one (1) amber flashing light. When parked along the highway, the equipment shall be located either a minimum of thirty (30) feet from the edge of pavement or behind guardrail. All other equipment, including private vehicles, shall be stored at an approved contractor's storage area.

Alternate Methods

If the Contractor so elects, he may submit alternate methods for the maintenance of traffic, provided the intent of the above provisions is followed and no additional inconvenience to the traveling public results therefrom. No alternate plan shall be placed into effect until approval has been granted, in writing, by the Director.

ITEM 614 - Work Zone Marking Signs

A quantity of 80 each Work Zone Marking Signs (80 Each "NO EDGE LINES" OW-167-36) are carried to the General Summary to be used as directed by the Engineer.

Pavement Marking Application

During the placement of thermoplastic pavement markings, a lane shall be closed as per the applicable standard drawing. The cost of these lane closures shall be included in the cost of Item 614 - Maintaining Traffic.

Floodlighting

Floodlighting for the work site for operations during night time periods shall be accomplished so that the lights do not cause glare to the drivers on the highway. To insure the adequacy of the floodlight placement, the Contractor and the Engineer shall drive through the work site each night when the lighting is in place and operative prior to commencing any work. If glare is detected, the light placement and sheilding shall be adjusted to the satisfaction of the Engineer before work proceeds. The cost of floodlighting will be included in the Lump Sum cost of Item 614 - Maintaining Traffic.

DEPARTMENT OF TRANSPORTATION
MS R 712 REV. 9-1-83

MAINTENANCE OF TRAFFIC GENERAL NOTES

12/45

PLAN NO.

ITEM SPECIAL - Law Enforcement Officer with Patrol Car
In addition to the requirements of 614 and the latest edition of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD), a uniformed Law Enforcement Officer (LEO) and official patrol car with working top mounted emergency flashing lights shall be provided for controlling traffic during the closing of one or more lanes of directional traffic and channelizing that traffic into one or two lanes.

When the period of closure is expected to last more than one working day, the LEO shall be present during the the initial first day set-up period but is not considered necessary and shall not be included for payment under LEO with patrol car during the remainder of the period of use of any given closure arrangement. A flashing arrow barricade with signs and drums as detailed is sufficient for warning at the beginning and end of such arrangements after the first day. A downstream extension of such arrangement shall not require the use of a LEO. When the beginning point of a lane closure operation is shifted substantially, or a new lane closure arrangement is initiated in another part of the project area, a LEO shall again be required.

LEOs should not be used where the OMUTCD intends that flaggers be used. The LEOs are considered to be employed by the Contractor and the Contractor shall be responsible for their actions. Although they are employed by the Contractor, the Project Engineer shall have control over their placement. The official patrol car shall be a public safety vehicle as required by the Ohio Revised Code.

The Contractor shall make arangements for these services with:
Columbus - Traffic Bureau Commander
Division of Police
120 Marconi Blvd.
(614) 645-4661
New Rome - Police Department (614) 878-3195
West Jefferson & Rural Areas - Ohio Highway Patrol (614) 466-2660

Each agency shall be notified five days prior to the need for the LEO.

Law Enforcement Officers with Patrol Car required by the traffic maintenance tasks above shall be paid for on a unit price (hourly) basis under Item Special - Law Enforcement Officer with Patrol Car. The following estimated quantities have been carried to the General Summary.

ITEM SPECIAL - Law Enforcement Officer with Patrol Car 350 Hours

The hours paid shall include minimum show-up time required by the law enforcement agency invloved.

If the Contractor wishes to utilize LEOs for flagging and traffic control other than for that required in these plans, he may do so at his own expense. Payment for the excess above the contract requirements will be included under Item 614 - Maintaining Traffic.

13/45

PLAN NO.

ITEM 251 - Partial Depth Pavement Repair, as per plan

This item shall be used to remove and replace the asphalt wearing course in areas as directed by the Engineer. After removal of the wearing course, the remaining pavement shall be inspected and then do one of the following: 1) do nothing and replace the pavement, 2) perform Item 251 - Partial Depth Pavement Repair, or 3) perform Item 253 - Pavement Repair. The width and length of the repairs shall be as directed by the Engineer.

An estimated quantity of 200 Cu. Yd. has been included in the General Summary for this operation.

ITEM 251 - Partial Depth Pavement Repair

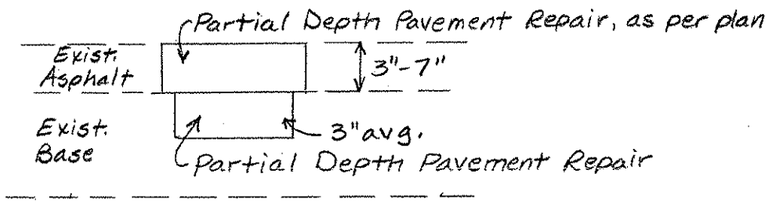
This item shall be used to repair base that has been exposed by the Item 251 - Partial Depth Pavement Repair, as per plan operation when directed by the Engineer. The width, length, and depth of the repairs shall be as directed by the Engineer.

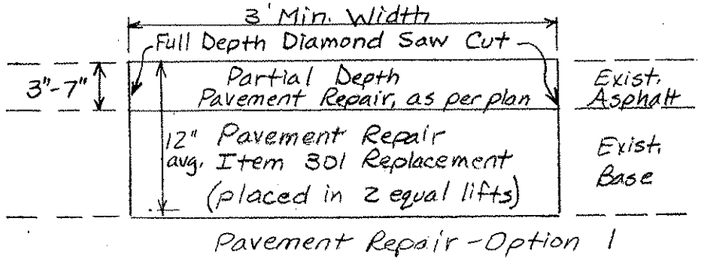
An estimated quantity of 100 Cu. Yd. has been included in the General Summary for this operation.

ITEM 253 - Pavement Repair

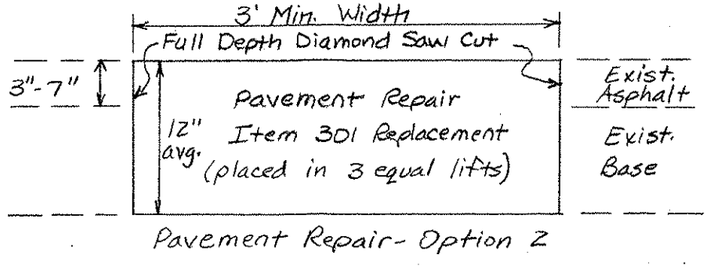
This item shall be used to repair pavement full depth in areas when directed by the Engineer. This work may be done after the Partial Depth Pavement Repair, as per plan operation or it may be done without the Partial Depth Pavement Repair, as per plan when directed by the Engineer.

Prior to the pavement removal the repair area shall be sawed full depth with a diamond saw. The minimum width is 6' and the depth shall be to the bottom of the existing pavement. An estimated quantity of 1000 Cu. Yd. has been included in the General Summary for this operation.





Pavement Repair - Option 1



Pavement Repair - Option 2

TEMPORARY PAVEMENT MARKINGS

Item 614 - Temporary Lane Line, Class I
Part 1: 8.00 Mile x 2 appliations = 16.00 Mile
Part 2: 18.21 Mile x 2 applications = 36.42 Mile

Item 614 - Temporary Center Line, Class I
Part 1: 1.21 Mile x 2 applications = 2.42 Mile
Part 2: 2.86 Mile x 2 applications = 5.72 Mile

Item 614 - Temporary Channelizing Line, Class I
Part 2: 8,201 Lin. Ft. x 2 applications = 16,402 Lin. Ft.

Item 253 - Pavement Repair Locations

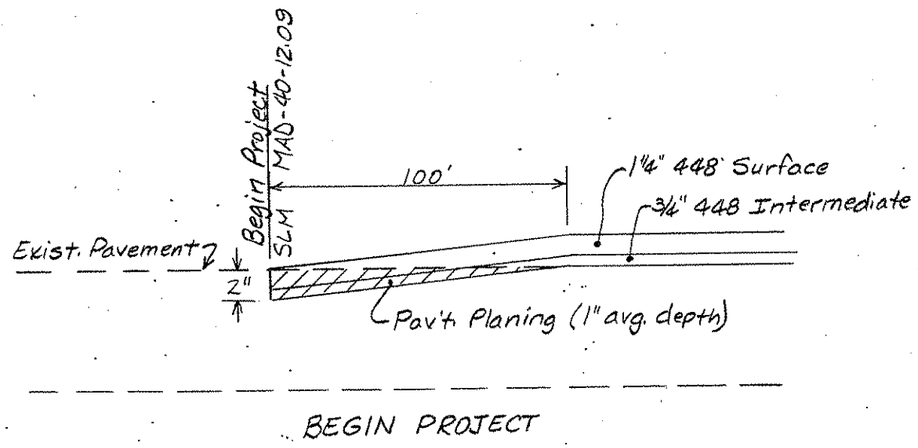
SLM	Westbound	Eastbound
12.09-13.00	13	10
13.00-14.00	8	20
14.00-15.00	8	8
15.00-16.09	22	12
Part 1 Total	51	50
0.00-1.00	14	8
1.00-2.00	30	8
2.00-3.00	14	8
3.00-4.00	30	16
4.00-5.00	25	11
5.00-6.00	16	35
6.00-7.00	6	6
7.00-7.60	2	2
Part 2 Total	137	94

Part 1: 101 Joints x 6' width x 12' x 12" avg. depth = 269 Cu. Yd.
Additional Quantities to be used as directed = 31 Cu. Yd.
Total Part 1 to General Summary = 300 Cu. Yd.

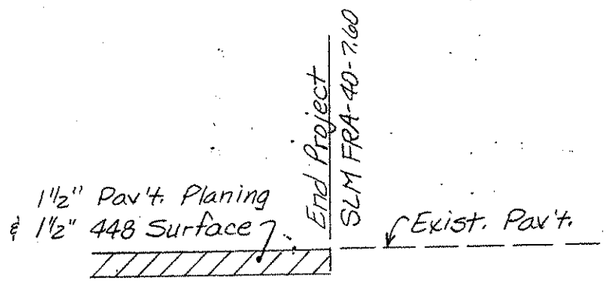
Part 2: 231 Joints x 6' width x 12' x 12" avg. depth = 616 Cu. Yd.
Additional Quantities to be used as directed = 84 Cu. Yd.
Total Part 2 to General Summary = 700 Cu. Yd.

DEPARTMENT OF TRANSPORTATION
MA R 712 REV. 9-1-83

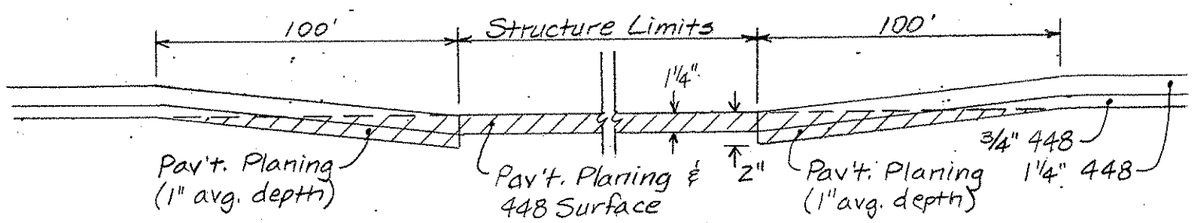
PAVEMENT PLANING DETAILS



BEGIN PROJECT



END PROJECT



PLANING AT STRUCTURES
MAD-40- 1477, 1604
FRA-40 - 0291, 0360

ITEM 254 - Pavement Planing, Bituminous

This item shall be used on the areas listed below to remove the existing asphalt concrete at paving termini, on the approaching and trailing ends of structures, and under overhead structures. The average depth of the planing is as detailed on this page. The spot planing shall be done immediately prior to the resurfacing at these locations.

Additional planing quantities are on pages 2 and 3. These areas shall not be exposed to traffic for more than five days prior to resurfacing. Temporary pavement markings have been provided for planed areas.

Part 1:

Location	Side	Length	Avg. Width	Sq. Yd.
12.09 (Begin Work)	Rt.& Lt.	100'	24'/24'	533
Struc. 1477 (leading)	Rt.& Lt.	100'	68'	756
Struc. 1477	Rt.& Lt.	151'	68'	1,141
Struc. 1477 (trailing)	Rt.& Lt.	100'	68'	756
Struc. 1604 (leading)	Rt.& Lt.	100'	24'/24'	533
Struc. 1604	Rt.& Lt.	257'	31'/31'	1,770
Total Part 1				5,489

Part 2:

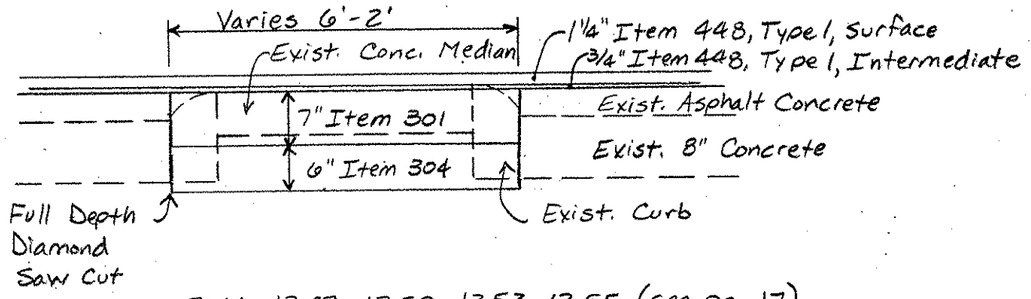
Location	Side	Length	Avg. Width*	Sq. Yd.
Struc. 1604	Rt.& Lt.	256'	31'/31'	1,764
Struc. 1604 (trailing)	Rt.& Lt.	100'	27'/27'	600
Struc. 0291 (leading)	Rt.& Lt.	100'	27'/27'	600
Struc. 0291	Rt.& Lt.	27'	36'/36'	216
Struc. 0291 (trailing)	Rt.& Lt.	100'	27'/27'	600
Struc. 0360 (leading)	Rt.& Lt.	100'	27'/27'	600
Struc. 0360	Rt.& Lt.	22'	35'/35'	171
Struc. 0360 (trailing)	Rt.& Lt.	100'	27'/27'	600
Total Part 2				5,151

* includes paved shoulders

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

MEDIAN DETAILS

Curb / Median Removal

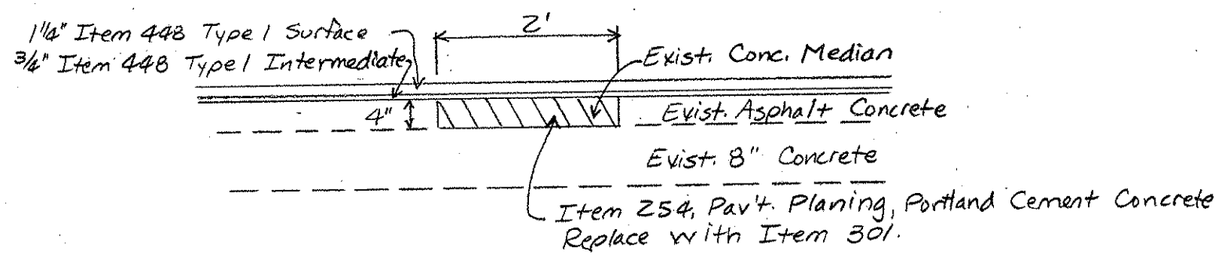


SLM 13.47-13.50, 13.52-13.55 (see pg. 17)

Median Removal/Replacement Quantities

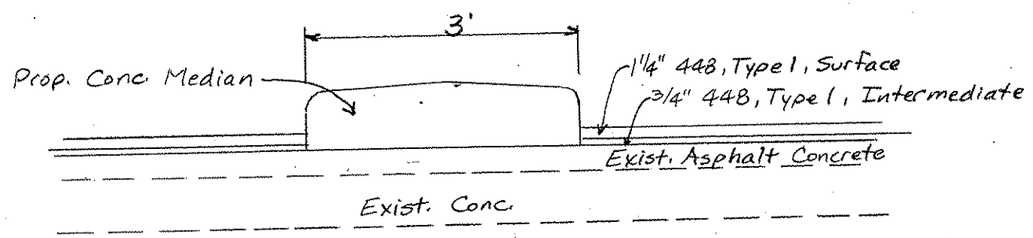
	Part 1	Part 2
Item 202 - Curb Removed, as per plan =	684 Lin. Ft.	3,661 Lin. Ft.
Item 202 - Concrete Median Removed, as per plan =	1,103 Sq. Yd.	1,549 Sq. Yd.
Item 203 - Excavation =	270 Cu. Yd.	1,094 Cu. Yd.
Item 254 - Planing, Portland Cement Concrete =	43 Sq. Yd.	
Item 301 - Bituminous Aggregate Base =	227 Cu. Yd.	573 Cu. Yd.
Item 304 - Aggregate Base =	189 Cu. Yd.	448 Cu. Yd.
Item 448 - Asphalt Concrete Intermed., Type 1 =	11 Cu. Yd.	6 Cu. Yd.
Item 448 - Asphalt Concrete Surface, Type 1 =	18 Cu. Yd.	34 Cu. Yd.
Item 604 - Manhole Adjusted to Grade =		6 Each
Item 612 - Concrete Median =	743 Sq. Yd.	2,538 Sq. Yd.

Median Removal



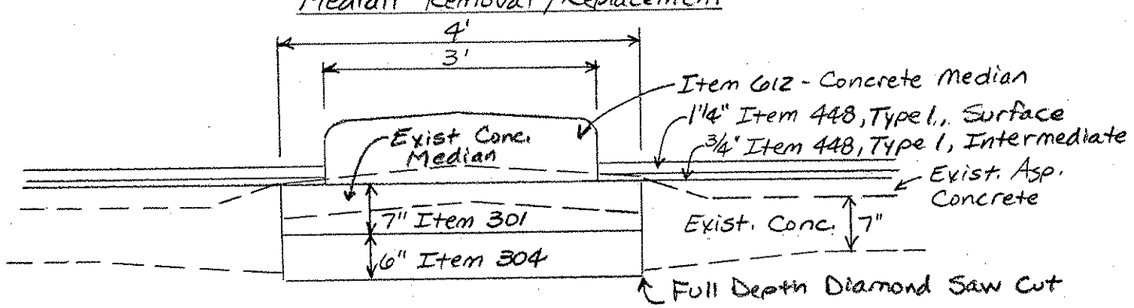
SLM 13.55-13.56, 13.58-13.59, 13.59, 13.60-13.62 (see pg. 17)

Median Placement at Crossovers



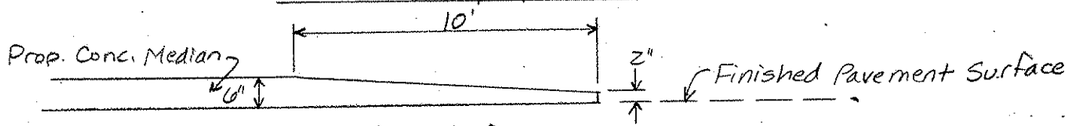
SLM 0.12-0.14, 0.28-0.29, 0.33-0.34 (see pg. 18)

Median Removal/Replacement



SLM 15.56-15.70, 15.71-15.80, 15.81-15.84
15.87-15.95, 15.96-16.04; 0.07-0.12,
0.14-0.22, 0.23-0.28, 0.29-0.33,
0.34-0.39, 0.41-0.46 (see pg. 18)

End Median Detail for Median Removal/Replacement



End Median Detail for Median Shown at Left

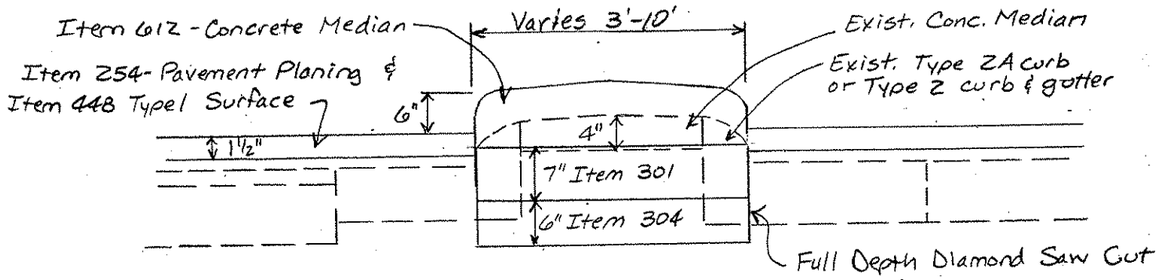
DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

MEDIAN DETAILS

16/45

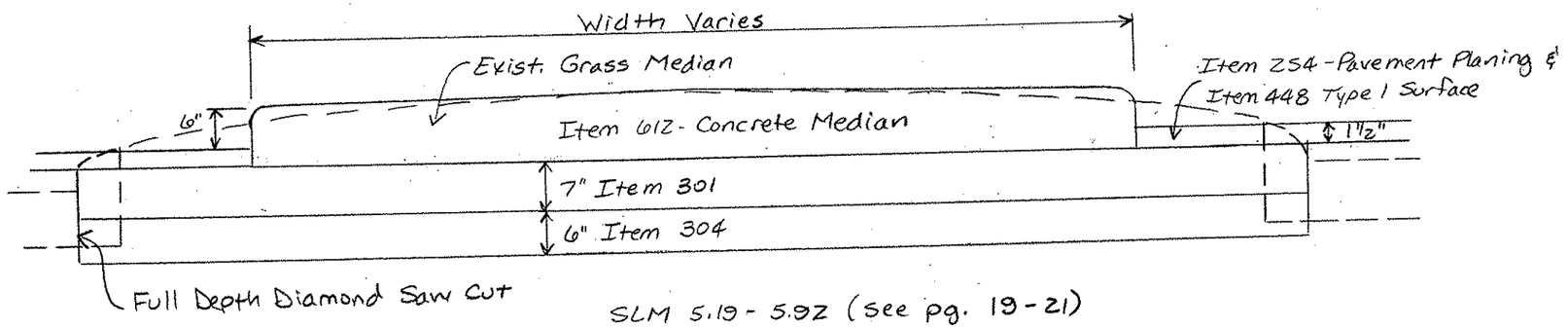
PLAN NO.

Curb/ Median Removal
Median Replacement



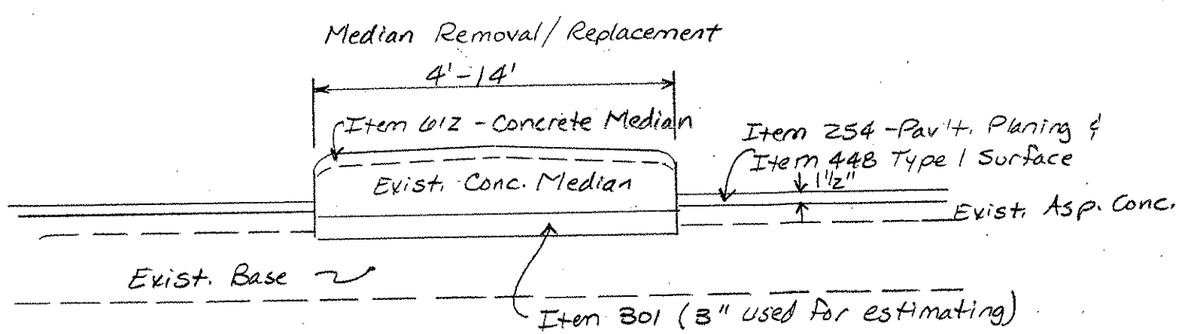
SLM 5.28 - 5.59 (see pg. 19 & 20)

Grass Median Removal
Median Replacement



SLM 5.19 - 5.92 (see pg. 19 - 21)

Median Removal / Replacement



SLM 6.02 - 6.32 (see pg. 21 & 22)

DEPARTMENT OF TRANSPORTATION
M.S.R 712 REV. 9-1-83

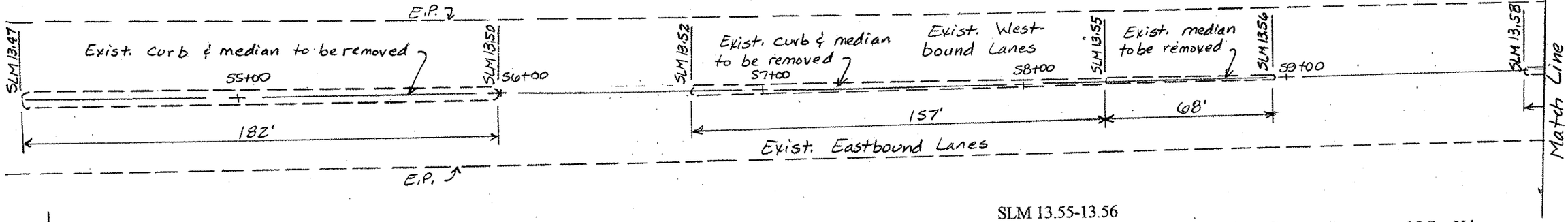
Concrete Median Removal SLM 13.47 to 13.62

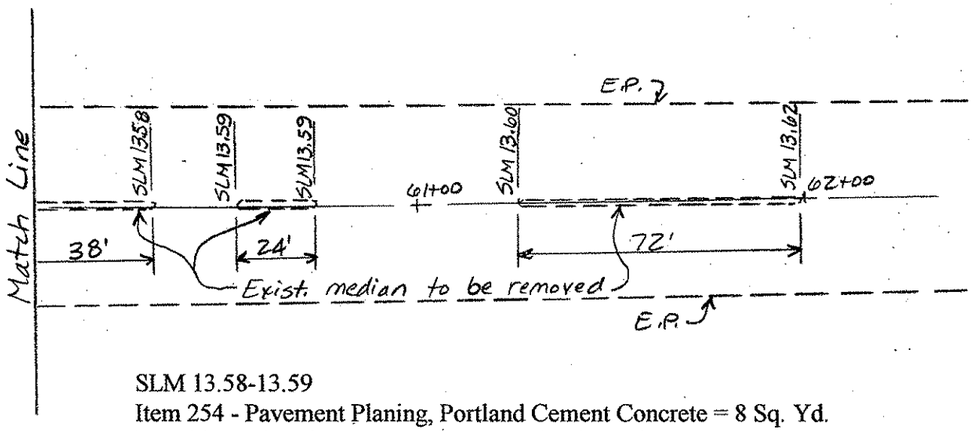
17
45

PLAN NO.

SLM 13.47-13.50
Item 202 - Curb Removed, as per plan = 369 Lin. ft.
Item 202 - Concrete Median Removed, as per plan = 81 Sq. Yd.
Item 203 - Excavation = 16 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 20 Cu. Yd.
Item 304 - Aggregate Base = 17 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 2 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 4 Cu. Yd.

SLM 13.52-13.55
Item 202 - Curb Removed, as per plan = 315 Lin. ft.
Item 202 - Concrete Median Removed, as per plan = 31 Sq. Yd.
Item 203 - Excavation = 6 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 9 Cu. Yd.
Item 304 - Aggregate Base = 8 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.





SLM 13.55-13.56
Item 254 - Pavement Planing, Portland Cement Concrete = 15 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 2 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.

SLM 13.58-13.59
Item 254 - Pavement Planing, Portland Cement Concrete = 8 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 1 Cu. Yd.

SLM 13.59
Item 254 - Pavement Planing, Portland Cement Concrete = 4 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 1 Cu. Yd.

SLM 13.60-13.62
Item 254 - Pavement Planing, Portland Cement Concrete = 16 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 2 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

PLAN NO.

Concrete Median Replacement (SLM 15.56 to 0.46) (see pg. 15)
The existing concrete median shall be replaced per the details provided. Estimated quantities are listed below to accomplish this, including quantities to close 3 existing gaps in the median from SLM 0.12 to 0.14, 0.28 to 0.29, and 0.33 to 0.34.

SLM 15.56-15.70
Item 202 - Concrete Median Removed, as per plan = 326 Sq. Yd.
Item 203 - Excavation = 82 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 63 Cu. Yd.
Item 304 - Aggregate Base = 54 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 2 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 3 Cu. Yd.
Item 612 - Concrete Median = 245 Sq. Yd.

SLM 15.71-15.80
Item 202 - Concrete Median Removed, as per plan = 223 Sq. Yd.
Item 203 - Excavation = 56 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 43 Cu. Yd.
Item 304 - Aggregate Base = 37 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.
Item 612 - Concrete Median = 167 Sq. Yd.

SLM 15.81-15.84
Item 202 - Concrete Median Removed, as per plan = 73 Sq. Yd.
Item 203 - Excavation = 18 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 14 Cu. Yd.
Item 304 - Aggregate Base = 12 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 612 - Concrete Median = 55 Sq. Yd.

SLM 15.87-15.95
Item 202 - Concrete Median Removed, as per plan = 174 Sq. Yd.
Item 203 - Excavation = 43 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 34 Cu. Yd.
Item 304 - Aggregate Base = 29 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.
Item 612 - Concrete Median = 130 Sq. Yd.

SLM 15.96-16.04
Item 202 - Concrete Median Removed, as per plan = 195 Sq. Yd.
Item 203 - Excavation = 49 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 38 Cu. Yd.
Item 304 - Aggregate Base = 32 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.
Item 612 - Concrete Median = 146 Sq. Yd.

SLM 0.07-0.12
Item 202 - Concrete Median Removed, as per plan = 127 Sq. Yd.
Item 203 - Excavation = 32 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 25 Cu. Yd.
Item 304 - Aggregate Base = 21 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 612 - Concrete Median = 95 Sq. Yd.

SLM 0.12-0.14 (existing gap to be closed)
Item 612 - Concrete Median = 36 Sq. Yd.

SLM 0.14-0.22
Item 202 - Concrete Median Removed, as per plan = 179 Sq. Yd.
Item 203 - Excavation = 45 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 35 Cu. Yd.
Item 304 - Aggregate Base = 30 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.
Item 612 - Concrete Median = 134 Sq. Yd.

SLM 0.23-0.28
Item 202 - Concrete Median Removed, as per plan = 109 Sq. Yd.
Item 203 - Excavation = 27 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 21 Cu. Yd.
Item 304 - Aggregate Base = 18 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 612 - Concrete Median = 82 Sq. Yd.

SLM 0.28-0.29 (existing gap to be closed)
Item 612 - Concrete Median = 25 Sq. Yd.

SLM 0.29-0.33
Item 202 - Concrete Median Removed, as per plan = 74 Sq. Yd.
Item 203 - Excavation = 19 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 14 Cu. Yd.
Item 304 - Aggregate Base = 12 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 612 - Concrete Median = 56 Sq. Yd.

SLM 0.33-0.34 (existing gap to be closed)
Item 612 - Concrete Median = 21 Sq. Yd.

SLM 0.34-0.39
Item 202 - Concrete Median Removed, as per plan = 133 Sq. Yd.
Item 203 - Excavation = 33 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 26 Cu. Yd.
Item 304 - Aggregate Base = 22 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 612 - Concrete Median = 100 Sq. Yd.

SLM 0.41-0.46
Item 202 - Concrete Median Removed, as per plan = 108 Sq. Yd.
Item 203 - Excavation = 27 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 21 Cu. Yd.
Item 304 - Aggregate Base = 18 Cu. Yd.
Item 448 - Asphalt Concrete, Intermediate, Type 1 = 1 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 612 - Concrete Median = 81 Sq. Yd.

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

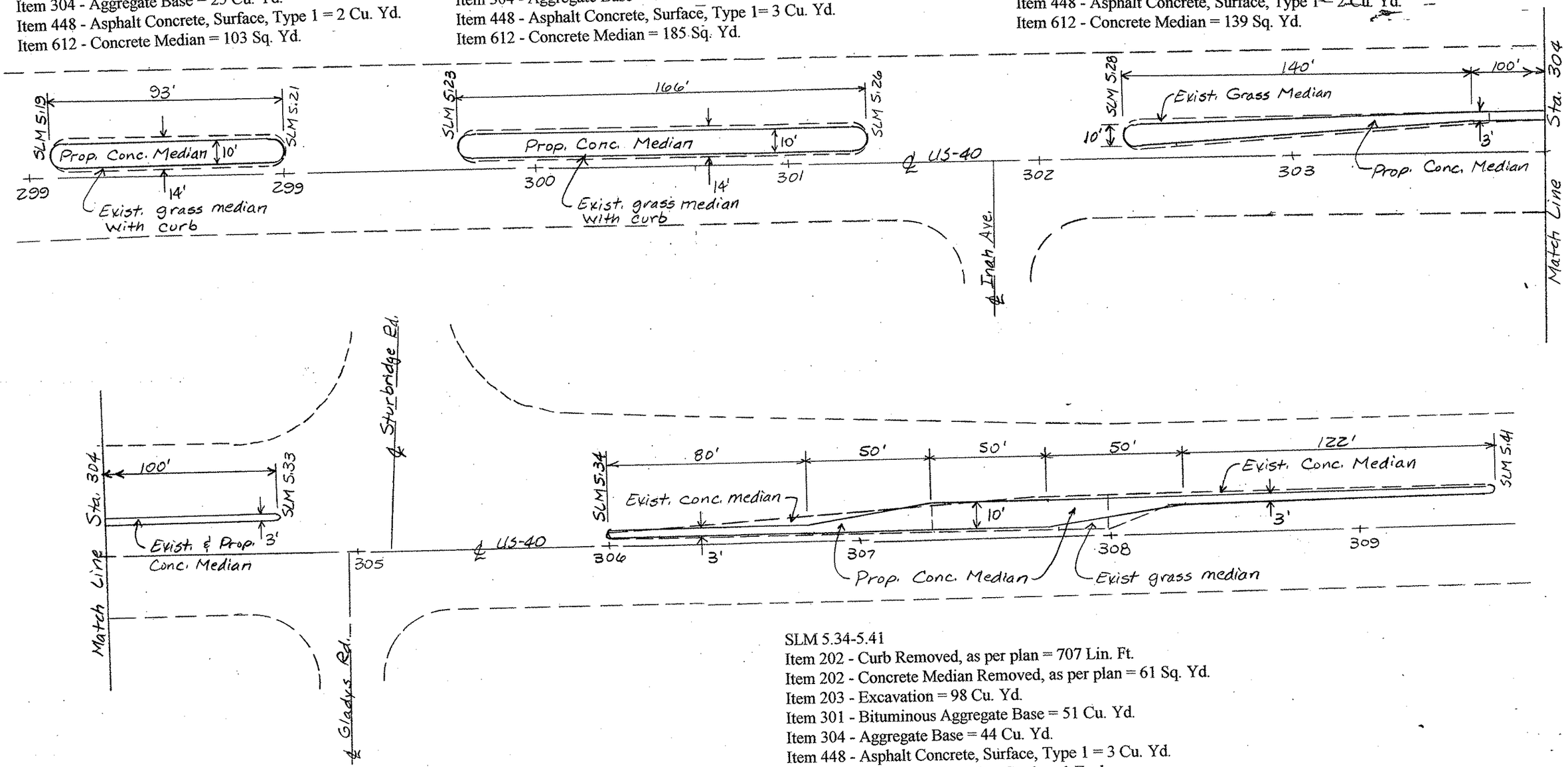
CONCRETE MEDIAN REMOVAL/REPLACEMENT

PLAN NO.

SLM 5.19-5.21
Item 202 - Curb Removed, as per plan = 202 Lin. Ft.
Item 203 - Excavation = 99 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 29 Cu. Yd.
Item 304 - Aggregate Base = 25 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.
Item 612 - Concrete Median = 103 Sq. Yd.

SLM 5.23-5.26
Item 202 - Curb Removed, as per plan = 348 Lin. Ft.
Item 203 - Excavation = 175 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 51 Cu. Yd.
Item 304 - Aggregate Base = 44 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1= 3 Cu. Yd.
Item 612 - Concrete Median = 185 Sq. Yd.

SLM 5.28-5.33
Item 202 - Curb Removed, as per plan = 487 Lin. Ft.
Item 202 - Concrete Median Removed, as per plan = 24 Sq. Yd.
Item 203 - Excavation = 82 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 38 Cu. Yd.
Item 304 - Aggregate Base = 32 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.
Item 612 - Concrete Median = 139 Sq. Yd.

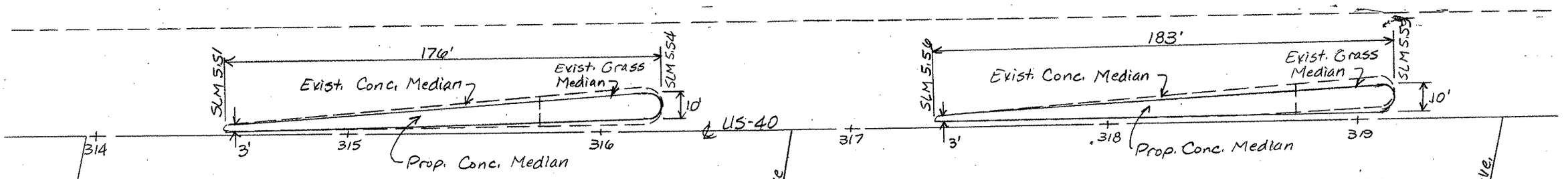


SLM 5.34-5.41
Item 202 - Curb Removed, as per plan = 707 Lin. Ft.
Item 202 - Concrete Median Removed, as per plan = 61 Sq. Yd.
Item 203 - Excavation = 98 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 51 Cu. Yd.
Item 304 - Aggregate Base = 44 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 3 Cu. Yd.
Item 604 - Manhole Adjusted to Grade = 1 Each
Item 612 - Concrete Median = 195 Sq. Yd.

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

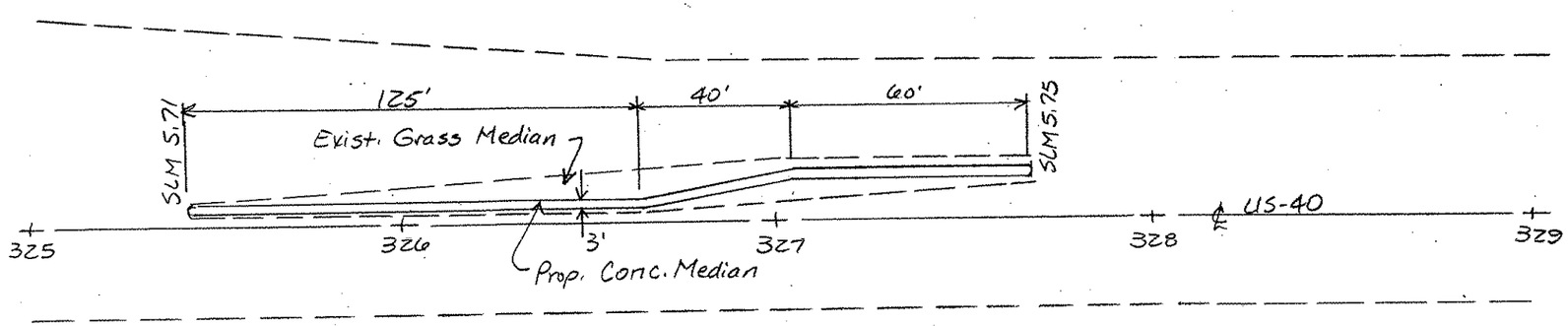
CONCRETE MEDIAN REMOVAL / REPLACEMENT

PLAN NO.



SLM 5.51-5.54
Item 202 - Curb Removed, as per plan = 362 Lin. Ft.
Item 202 - Concrete Median Removed, as per plan = 71 Sq. Yd.
Item 203 - Excavation = 63 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 33 Cu. Yd.
Item 304 - Aggregate Base = 28 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 2 Cu. Yd.
Item 604 - Manhole Adjusted to Grade = 1 Each
Item 612 - Concrete Median = 127 Sq. Yd.

SLM 5.56-5.59
Item 202 - Curb Removed, as per plan = 375 Lin. Ft.
Item 202 - Concrete Median Removed, as per plan = 51 Sq. Yd.
Item 203 - Excavation = 61 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 32 Cu. Yd.
Item 304 - Aggregate Base = 28 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 604 - Manhole Adjusted to Grade = 1 Each
Item 612 - Concrete Median = 132 Sq. Yd.

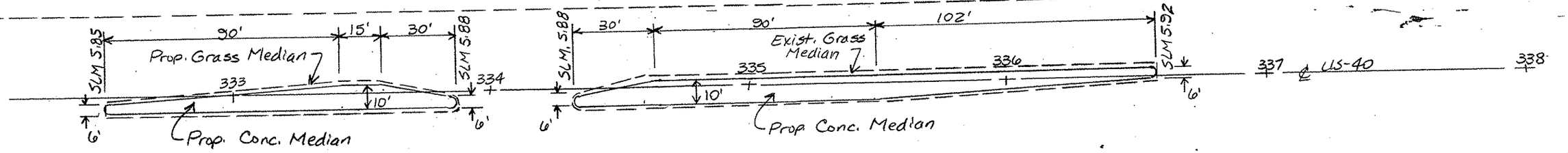


SLM 5.71-5.75
Item 202 - Curb Removed, as per plan = 450 Lin. Ft.
Item 203 - Excavation = 100 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 44 Cu. Yd.
Item 304 - Aggregate Base = 38 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 6 Cu. Yd.
Item 604 - Manhole Adjusted to Grade = 1 Each
Item 612 - Concrete Median = 75 Sq. Yd.

DEPARTMENT OF TRANSPORTATION
M.S.R 712 REV. 9-1-83

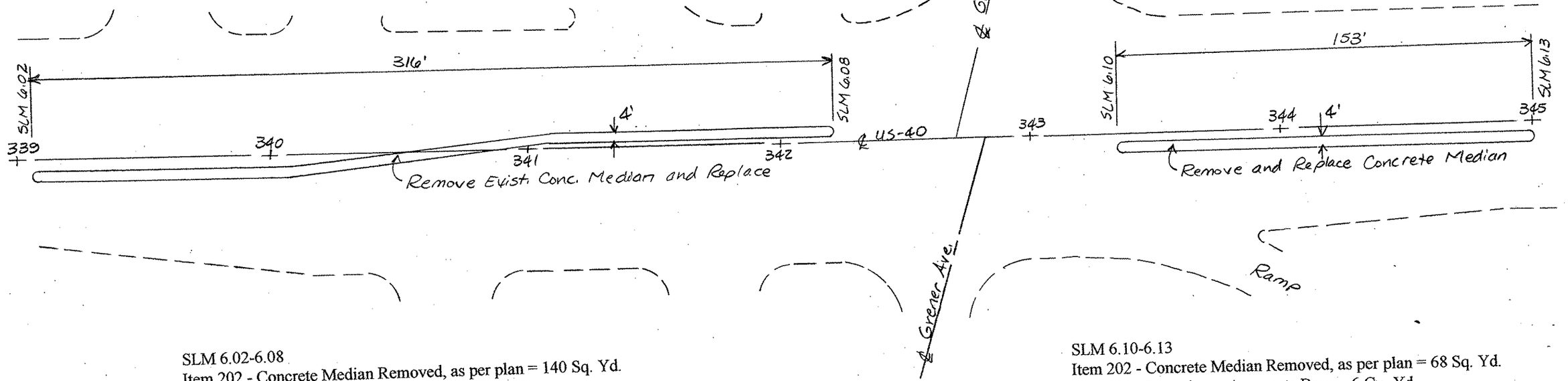
CONCRETE MEDIAN REMOVAL/REPLACEMENT

PLAN NO.



SLM 5.85-5.88
Item 202 - Curb Removed, as per plan = 270 Lin. Ft.
Item 203 - Excavation = 63 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 27 Cu. Yd.
Item 304 - Aggregate Base = 24 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 1 Cu. Yd.
Item 604 - Manhole Adjusted to Grade = 1 Each
Item 612 - Concrete Median = 123 Sq. Yd.

SLM 5.88-5.92
Item 202 - Curb Removed, as per plan = 460 Lin. Ft.
Item 203 - Excavation = 170 Cu. Yd.
Item 301 - Bituminous Aggregate Base = 74 Cu. Yd.
Item 304 - Aggregate Base = 64 Cu. Yd.
Item 448 - Asphalt Concrete, Surface, Type 1 = 7 Cu. Yd.
Item 604 - Manhole Adjusted to Grade = 1 Each
Item 612 - Concrete Median = 217 Sq. Yd.



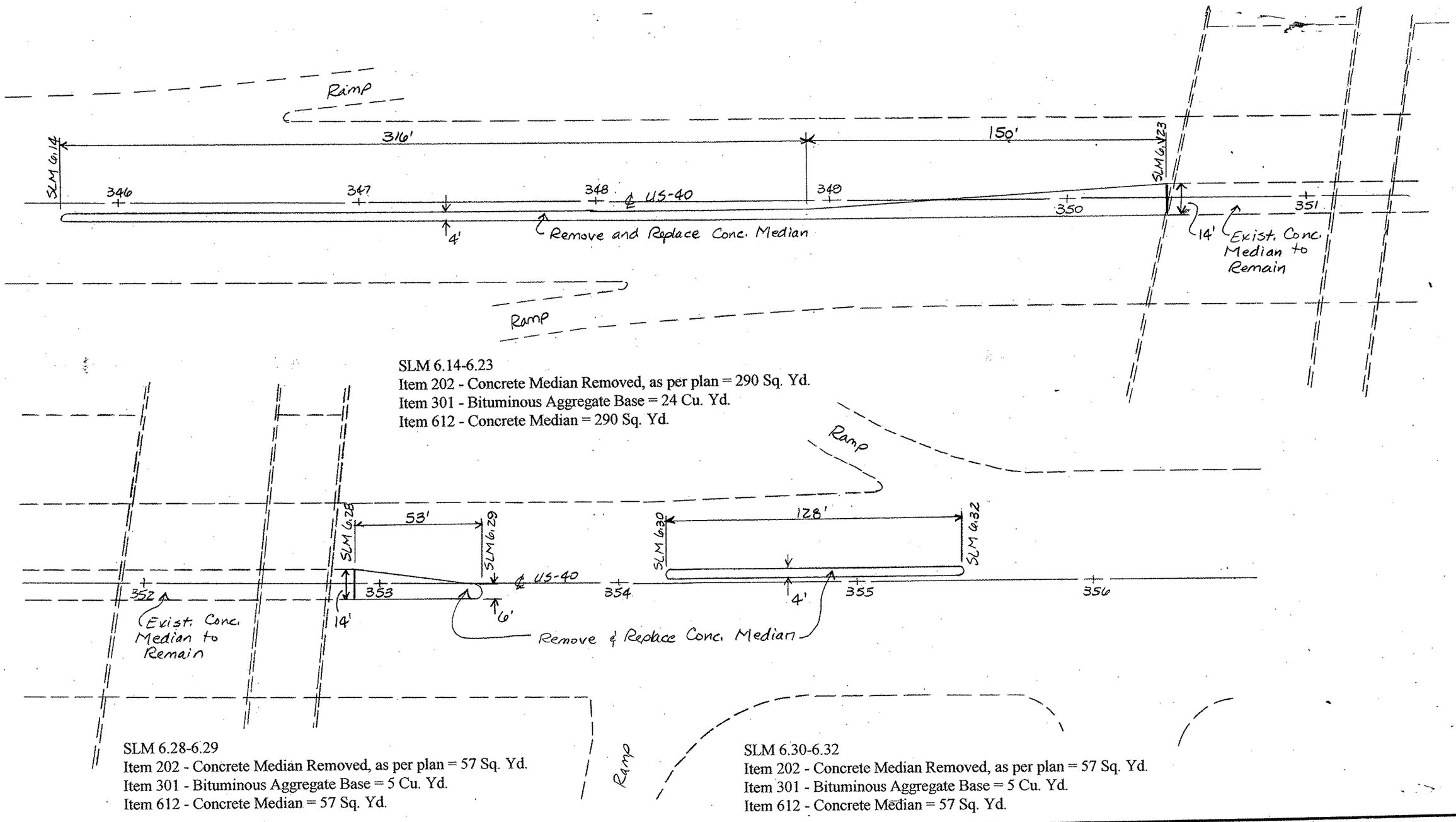
SLM 6.02-6.08
Item 202 - Concrete Median Removed, as per plan = 140 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 12 Cu. Yd.
Item 612 - Concrete Median = 140 Sq. Yd.

SLM 6.10-6.13
Item 202 - Concrete Median Removed, as per plan = 68 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 6 Cu. Yd.
Item 612 - Concrete Median = 68 Sq. Yd.

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

CONCRETE MEDIAN REMOVAL/REPLACEMENT

PLAN NO.



SLM 6.14-6.23
Item 202 - Concrete Median Removed, as per plan = 290 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 24 Cu. Yd.
Item 612 - Concrete Median = 290 Sq. Yd.

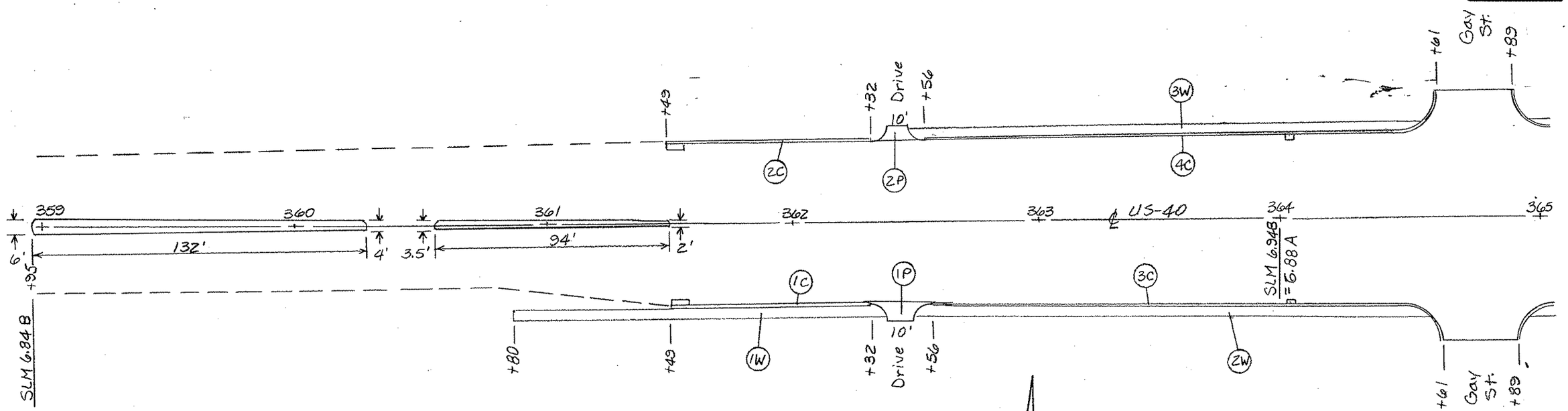
SLM 6.28-6.29
Item 202 - Concrete Median Removed, as per plan = 57 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 5 Cu. Yd.
Item 612 - Concrete Median = 57 Sq. Yd.

SLM 6.30-6.32
Item 202 - Concrete Median Removed, as per plan = 57 Sq. Yd.
Item 301 - Bituminous Aggregate Base = 5 Cu. Yd.
Item 612 - Concrete Median = 57 Sq. Yd.

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

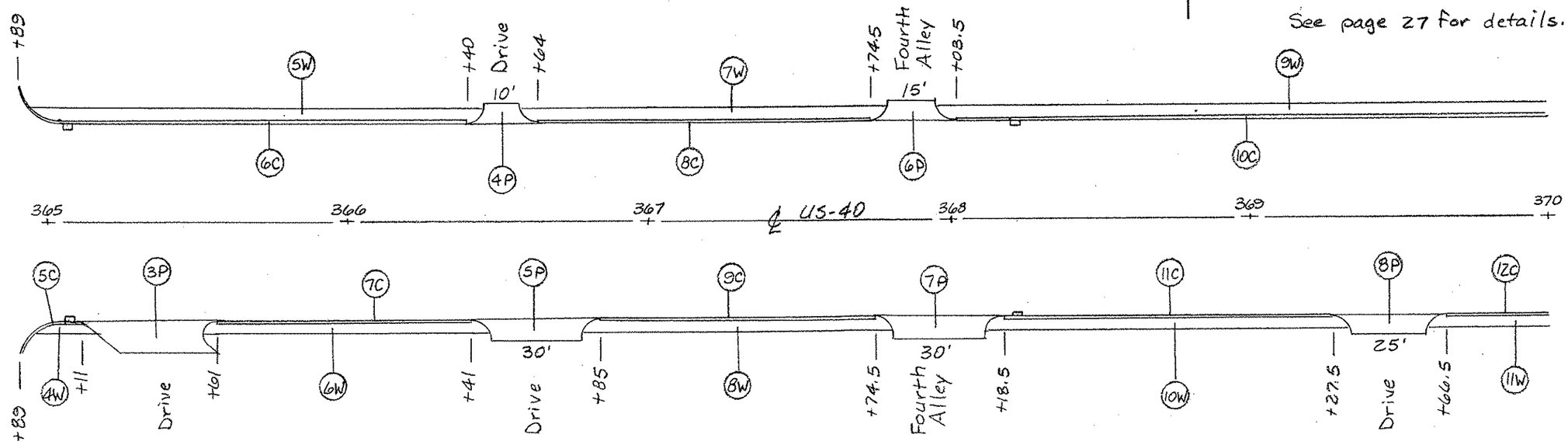
SIDEWALK / CURB REPLACEMENT
Unincorporated Village of Lafayette
Madison County

PLAN NO.



See pages 25 & 26 for notes & quantities.

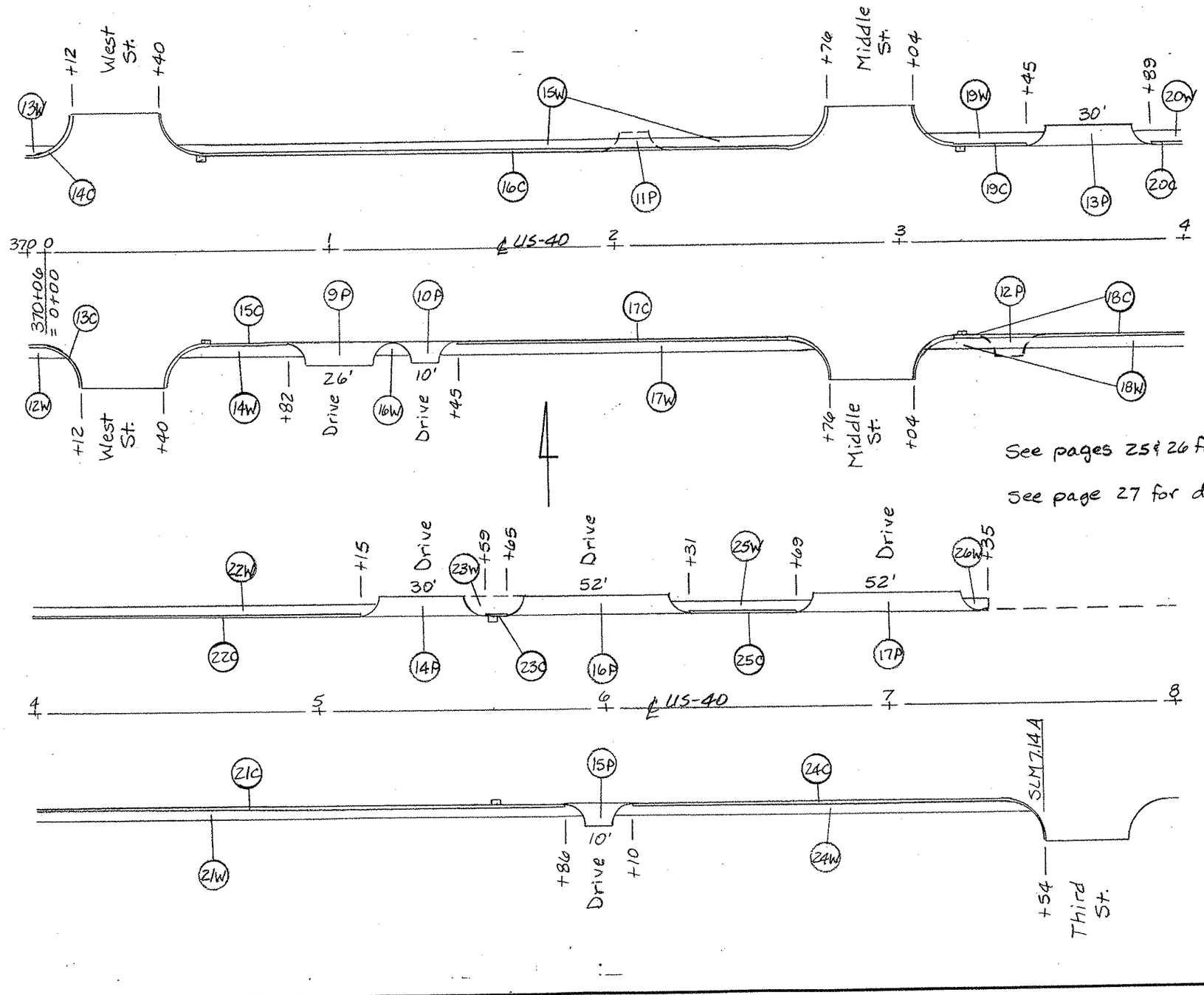
See page 27 for details.



DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

SIDEWALK/CURB REPLACEMENT
Unincorporated Village of Lafayette
Madison County

PLAN NO.



See pages 25 & 26 for notes & quantities.

See page 27 for details.

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

SIDEWALK / CURB REPLACEMENT

25/45

PLAN NO.

Quantities from pages 23 & 24

Ref. No.	Station From	Station To	Side	202 Pavement Removed Sq. Yd.	202 Walk Removed Sq. Ft.	202 Curb Removed, as per plan Lin. Ft.	452 6" Plain Concrete Pavement Sq. Yd.	608 4" Concrete Walk Sq. Ft.	608 Curb Ramp, Type 2 Each	609 Curb, Type 6 Lin. Ft.
1C	361+49	362+32	Rt.			83				83
2C	361+49	362+32	Lt.			83				83
3C	362+56	364+61	Rt.			214				214
4C	362+56	364+61	Lt.			214				214
5C	364+89	365+11	Rt.			31				31
6C	364+89	366+40	Lt.			160				160
7C	365+61	366+41	Rt.			80				80
8C	366+64	367+74.5	Lt.			110.5				110.5
9C	366+85	367+74.5	Rt.			89.5				89.5
10C	368+03.5	370+00	Lt.			196.5				196.5
11C	368+18.5	369+27.5	Rt.			109				109
12C	369+66.5	370+00	Rt.			33.5				33.5
13C	370+00	370+12	Rt.			27				27
14C	370+00	370+12	Lt.			27				27
15C	0+40	0+82	Rt.			51				51
16C	0+40	2+76	Lt.			230				254
17C	1+45	2+76	Rt.			140				140
18C	3+04	4+00	Rt.			81				105
19C	3+04	3+45	Lt.			50				50
20C	3+89	4+00	Lt.			11				11
21C	4+00	5+86	Rt.			186				186
22C	4+00	5+15	Lt.			115				115
23C	5+59	5+65	Lt.			6				6
24C	6+10	7+54	Rt.			153				153
25C	6+31	6+69	Lt.			38				38
Total						2519				2567

Quantities from pages 23 & 24

Ref. No.	Station From	Station To	Side	202 Pavement Removed Sq. Yd.	202 Walk Removed Sq. Ft.	202 Curb Removed, as per plan Lin. Ft.	452 6" Plain Concrete Pavement Sq. Yd.	608 4" Concrete Walk Sq. Ft.	608 Curb Ramp, Type 2 Each	609 Curb, Type 6 Lin. Ft.
1P	362+44		Rt.	11			11			7
2P	362+44		Lt.	11			11			7
3P	365+47		Rt.	44			44			7
4P	366+52		Lt.	11			11			7
5P	366+63		Rt.	26			26			7
6P	367+89		Lt.	14			14			7
7P	367+96.5		Rt.	26			26			7
8P	369+47		Rt.	22			22			7
9P	1+02		Rt.	22			22			7
10P	1+33		Rt.	11			11			7
11P	2+08		Lt.	11						
12P	3+34		Rt.	11						
13P	3+67		Lt.	26			26			7
14P	5+37		Lt.	26			26			7
15P	5+58		Rt.	11			11			7
16P	5+98		Lt.	43			43			7
17P	7+02		Lt.	43			43			7
Total				369			347			105

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

SIDEWALK/CURB REPLACEMENT

26/45

PLAN NO.

Quantities from pages 23 & 24

Ref. No.	Station From	Station To	Side	202 Pavement Removed	202 Walk Removed	202 Curb Removed, as per plan	452 6" Plain Concrete Pavement	608 4" Concrete Walk	608 Curb Ramp, Type 2	609 Curb, Type 6
				Sq. Yd.	Sq. Ft.	Lin. Ft.	Sq. Yd.	Sq. Ft.	Each	Lin. Ft.
1W	360+80	362+38	Rt.		624			624	1	
2W	362+50	364+56	Rt.		803			803	2	
3W	362+50	364+56	Lt.		803			803	2	
4W	364+94	365+17	Rt.		67			67	2	
5W	364+94	366+46	Lt.		587			587	2	
6W	365+58	366+47	Rt.		343			343	2	
7W	366+58	367+80.5	Lt.		474			474	2	
8W	366+79	367+80.5	Rt.		390			390	2	
9W	367+97.5	370+00	Lt.		802			802	1	
10W	368+12.5	369+34.5	Rt.		468			468	2	
11W	369+60.5	370+00	Rt.		150			150	1	
12W	370+00	0+07	Rt.		39			39	1	
13W	370+00	0+07	Lt.		39			39	1	
14W	0+45	0+88	Rt.		151			151	2	
15W	0+45	2+71	Lt.		814			878	2	
16W	1+15	1+27	Rt.		32			32	2	
17W	1+39	2+71	Rt.		507			507	2	
18W	3+09	4+00	Rt.		287			351	1	
19W	3+09	3+51	Lt.		147			147	2	
20W	3+83	4+00	Lt.		60			60	1	
21W	4+00	5+92	Rt.		760			760	1	
22W	4+00	5+21	Lt.		476			476	1	
23W	5+53	5+71	Lt.		56			56	2	
24W	6+04	7+45	Rt.		559			559	2	
25W	6+25	6+75	Lt.		240			240	2	
26W	7+29	7+35	Lt.		16			16	1	
Total					9694			9822	42	

SIDEWALK AND CURB REPLACEMENT QUANTITIES

ITEM 604 - Inlet Reconstructed to Grade
Locations: 361+52 Rt.&Lt., 364+03 Rt.&Lt., 365+07 Rt.&Lt., 368+22 Rt.&Lt., 0+58 Rt&Lt., 3+22 Rt.&Lt. and 5+62 Rt.&Lt. Total = 14

ITEM 202 - Curb Removed, as per plan
In addition to the requirements of Item 202, a full depth diamond saw cut adjacent to the face of curb to remove the existing curb shall be included in the cost of the removal.

ITEM 653 - Topsoil Furnished and Placed, as per plan
This item shall be used to repair disturbed earth adjacent to the sidewalk replacement. This item shall include the cost of seeding and mulching, water, and fertilizer as per Item 659. A quantity of 10 Cu. Yd. has been carried to the General Summary.

The following additional quantities have been provided to be used as directed. These items shall be used as necessary for the preparation and completion of the sidewalk, drive, and curb work.

Item 202 - Walk Removed	50 Sq. Ft.
Item 304 - Aggregate Base	10 Cu. Yd.
Item 448 - A C Inter. Type 2	10 Cu. Yd.
Item 448 - A C Sur. Type 1	5 Cu. Yd.
Item 608 - 4" Concrete Walk	50 Sq. Ft.
Item 609 - Curb, Type 6	50 Lin. Ft.

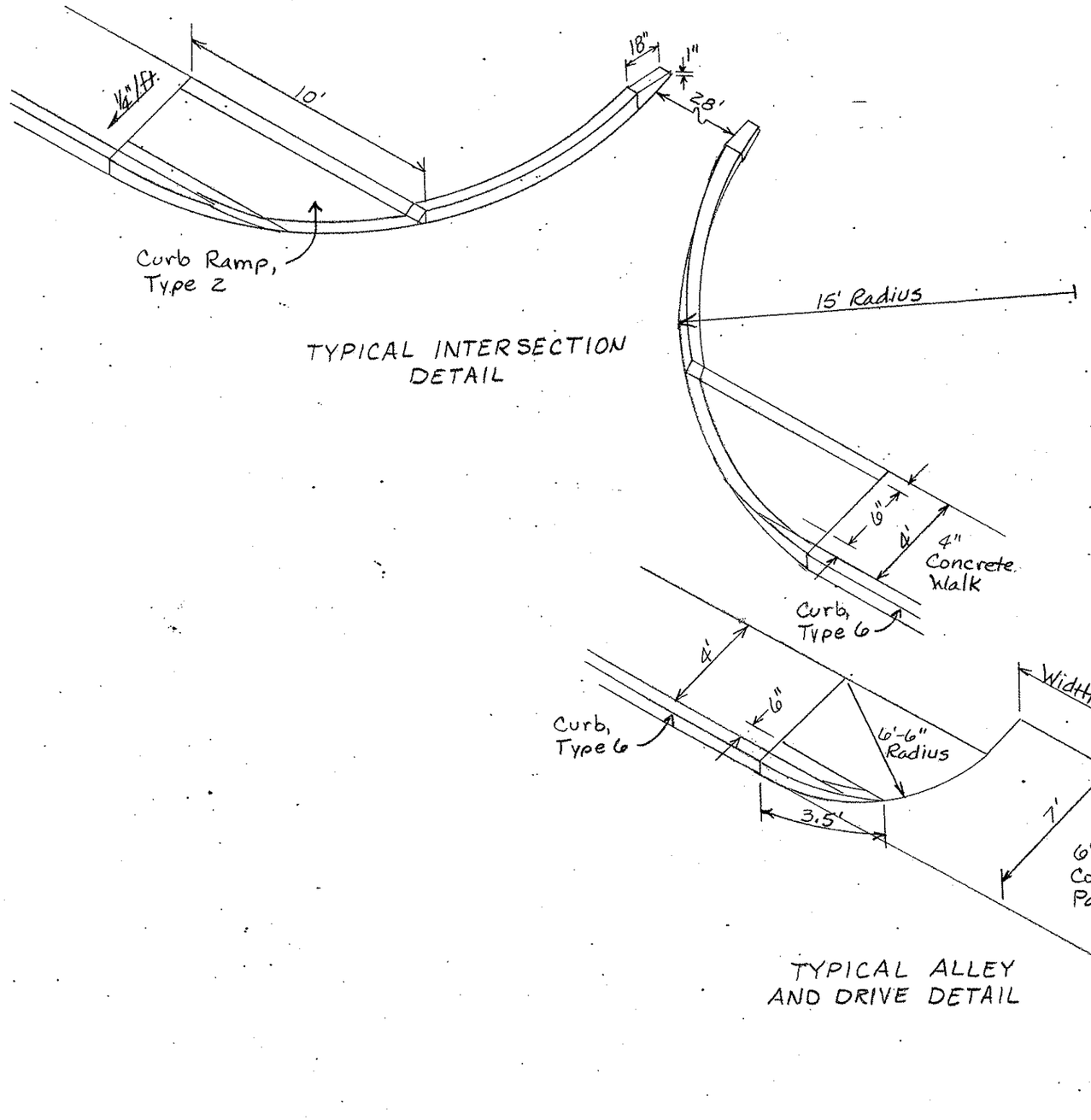
Curb/Sidewalk Replacement
The proposed curb and sidewalk shall be placed at the same elevation as the existing. Item 623 - Construction Layout Stakes have been provided for this purpose.

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

SIDEWALK AND CURB REPLACEMENT DETAILS

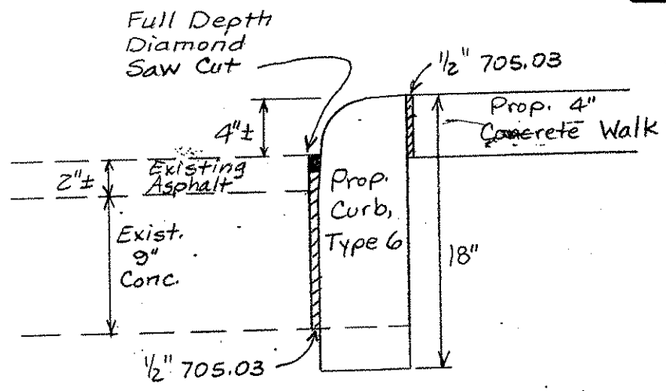
27/45

PLAN NO.



TYPICAL INTERSECTION DETAIL

TYPICAL ALLEY AND DRIVE DETAIL



CURB DETAIL

PAVEMENT MARKING SUB-SUMMARY

FHWA REGION	STATE	PROJECT	
5	OHIO		

28/45

PLAN NO.

① WB lanes are 11' from SLM 12.45 to 13.25.
② 12' width from S.L.M. 13.64 to 13.87.

ITEM 644

PART	LOCATION	S.L.M. FROM	S.L.M. TO	CENTER LINE TOTAL MILE	CENTER LINE DASHED MILE	CENTER LINE SOLID MILE	LANE LINE TOTAL MILE	LANE LINE DASHED MILE	LANE LINE SOLID MILE	EDGE LINE TOTAL MILE	EDGE LINE WHITE MILE	EDGE LINE YELLOW MILE	CHANNELIZING LINE LIN. FT.	CROSSWALK LINE LIN. FT.	STOP LINE LIN. FT.	72" WORD ON PAV'T. ONLY EACH	LANE ARROW LEFT EACH	LANE ARROW RIGHT EACH	LANE ARROW THRU EACH	TRANSVERSE LINE WHITE L.F.	TRANSVERSE LINE YELLOW L.F.	LANE WIDTH	NO. OF LANES
1	US-40	12.09	13.64				3.10	3.10		6.20	3.10	3.10										12'①	4
		13.64	14.85	1.21		2.42	2.42	2.42		4.84	2.42	2.42										10'②	4
		14.85	16.09				2.48	2.48		4.96	2.48	2.48										12'	4
	Inwood Rd.	13.29								0.08		0.16	100			1	2				306		
	Bridge St.	14.18												108									
	Twin St.	14.22												240	54								
	West St.	14.27												216									
	Walnut St.	14.32												216	54								
	Center St.	14.37												216									
	Chester St.	14.42												216	54								
	Mill St./Heath La.	14.47												216									
Total	Part 1			1.21		2.42	8.00	8.00		16.08	8.00	8.16	100	1428	162	1	2				306		
2	US-40	0.00	3.18				6.39	6.39		12.78	6.39	6.39										12'	4
		3.18	3.42	0.24		0.48	0.48	0.48		0.48	0.48											12'	4
		3.42	4.76				2.68	2.68		5.36	2.68	2.68										12'	Var.
		4.76	5.22	0.46		0.92	0.92	0.92														12'	Var.
		5.22	5.72				1.00	1.00		2.00	1.00	1.00										12'	Var.
		5.72	6.00	0.56	0.56	0.56	0.56	0.56		0.56	0.56											12'	Var.
		6.00	6.14				0.42	0.42		0.56	0.28	0.28										12'	Var.
		6.14	6.19				0.10	0.10		0.20	0.10	0.10										12'	Var.
		6.19	6.41				0.66	0.66		0.88	0.44	0.44										12'	Var.
		6.41	6.72				1.24	1.24		1.24	0.62	0.62										12'	Var.
		6.72	6.80	0.16		0.32	0.32	0.32		0.16	0.16											12'	Var.
		6.80	6.84	0.04		0.08	0.16	0.16		0.08	0.08											12'	Var.
		6.84	7.19	0.70		1.40	1.75	1.75		0.70	0.70											12'	Var.
		7.19	7.48	0.58	0.58	0.58	1.16	1.16		0.58	0.58											12'	Var.
		7.48	7.53	0.05		0.10	0.15	0.15		0.10	0.10											12'	Var.
		7.53	7.60	0.07		0.14	0.14	0.14		0.14	0.14												
	Galloway Rd.	4.39											170		70	1	2						
	Hilliard-Rome Rd.	4.76											480	320	73	2	6						
	Pasadena/Prairie	4.94												130	52								
	Buena Vista/East	5.07												130	63								
	Norton Rd.	5.15											334	130	66	1	2			98			
	Gladys/Sturbridge	5.36											140		88		2	1					

Continued on Next Page

PAVEMENT MARKING SUB-SUMMARY

FHWA REGION	STATE	PROJECT	
5	OHIO		

29/45

PLAN NO.

ITEM 644

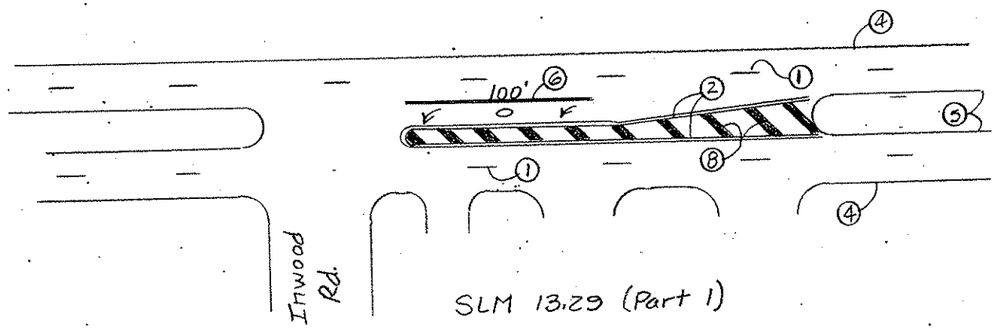
PART	LOCATION	S.L.M. FROM	S.L.M. TO	CENTER LINE TOTAL MILE	CENTER LINE DASHED MILE	CENTER LINE SOLID MILE	LANE LINE TOTAL MILE	LANE LINE DASHED MILE	LANE LINE SOLID MILE	EDGE LINE TOTAL MILE	EDGE LINE WHITE MILE	EDGE LINE YELLOW MILE	CHANNEL-IZING LINE LIN. FT.	CROSSWALK LINE LIN. FT.	STOP LINE LIN. FT.	72" WORD ON PAV'T. ONLY EACH	LANE ARROW LEFT EACH	LANE ARROW RIGHT EACH	LANE ARROW LEFT/THRU EACH	TRANSVERSE LINE WHITE L.F.	TRANSVERSE LINE YELLOW L.F.	LANE WIDTH	NO. OF LANES
Z cont.	Oxley Rd.	5.44											410		76	2	4			34	42		
	Fernhill Ave.	5.52											290			2	2	2					
	Woodlawn	5.60											25				1						
	Murray Hill Rd.	5.69											640		76	4	4	4					
		5.85															2						
	Lincoln Village Plaza	5.86											40										
	Old Village Rd.	5.98											425		89	3	2	3					
	Grener Ave.	6.07											727			4	4	1					
	Ramp to Z70N&S	6.10											170										
	Ramp Z70S to 40W	6.14					0.08	0.08					130										
	Ramp from Z70N	6.31													65								
	Ramp 40W to Z70N	6.33											170										
	Westland	6.34											410		99	3	2	2					
	Lazarus	6.42											525	212	100	2	4						
	W. Broad Plaza	6.61											390		96	2	3						
	Georgesville Rd.	6.72											745		100	2	4						
	W. of G.M. Gate #2	6.88											260			1	2		2		1585		
	G.M. Gate #2	6.95											350		87	2	4				340		
	G.M. Gate #1	7.05													92				2		476		
	K-Mart	7.12											335		112	1	3						
		7.26															2						
	Broadlawn Ave.	7.38											190	354	92	1	4						
	Wilson Rd.	7.53											1080	440	100	4	6	1					
Total Part Z				2.86	1.14	4.58	18.21	18.21		25.82	14.31	11.51	8436	1716	1596	37	65	14	4	132	2443		

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

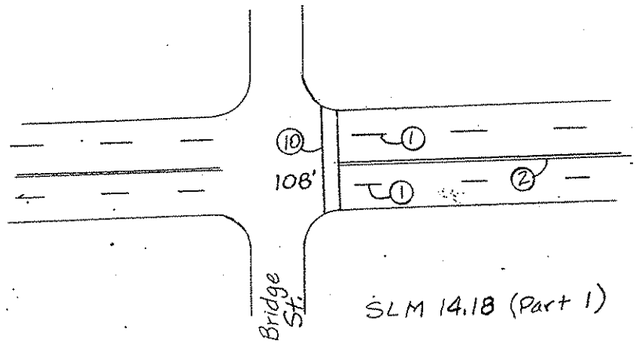
PAVEMENT MARKING DETAILS

30/45

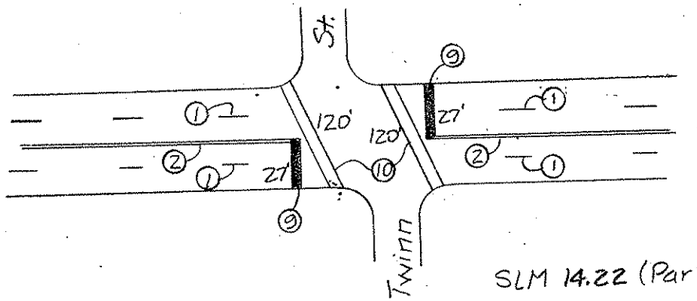
PLAN NO.



SLM 13.29 (Part 1)



SLM 14.18 (Part 1)



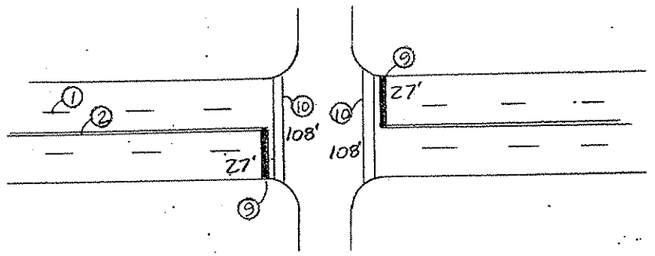
SLM 14.22 (Part 1)

① Lane Line
② Double Solid Centerline
③ Single Solid Centerline/ Single Dashed Centerline
④ White Edge Line
⑤ Yellow Edge Line
⑥ Channelizing Line
⑦ White Transverse Line
⑧ Yellow Transverse Line
⑨ Stop Line
⑩ Crosswalk Line
O Only

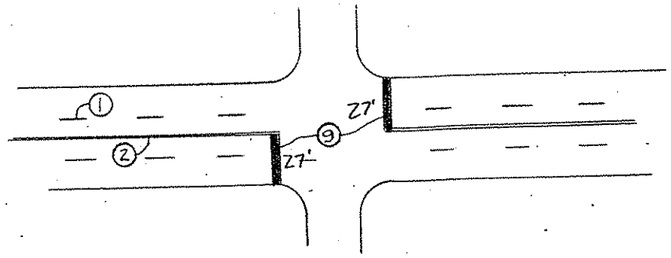
DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

PAVEMENT MARKING DETAILS

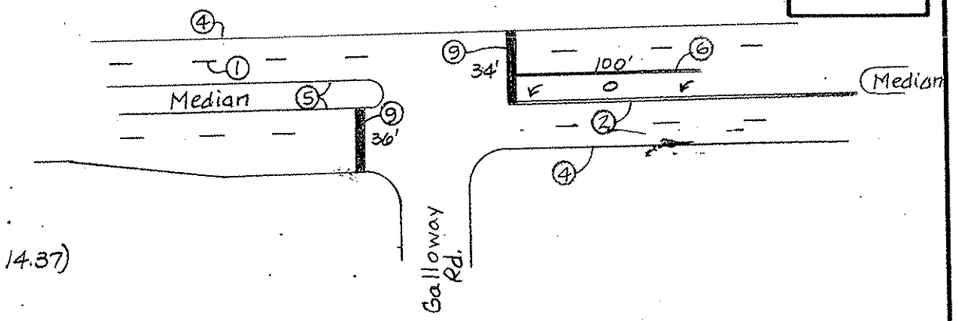
PLAN NO.



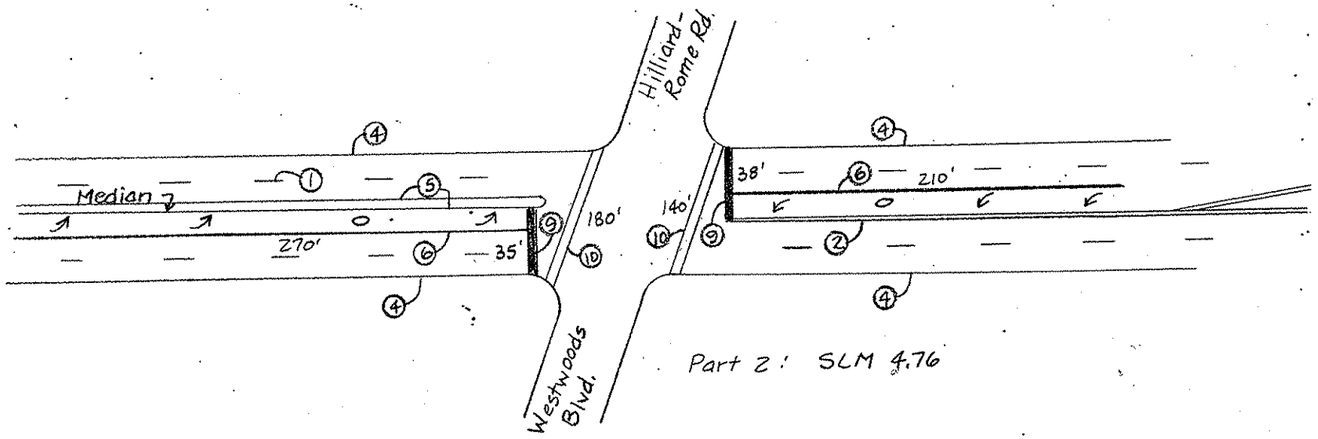
Part 1 : Walnut St. (SLM 14.32) & Chester St. (SLM 14.42)



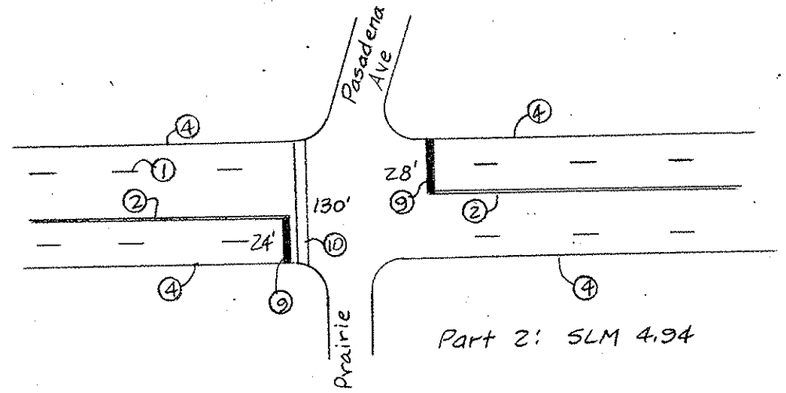
Part 1: West St. (SLM 14.27), Center St. (SLM 14.37) & Mill St. (SLM 14.47)



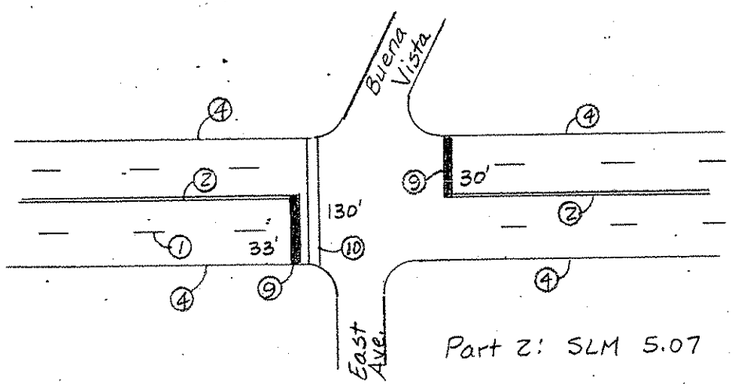
Part 2: SLM 4.39



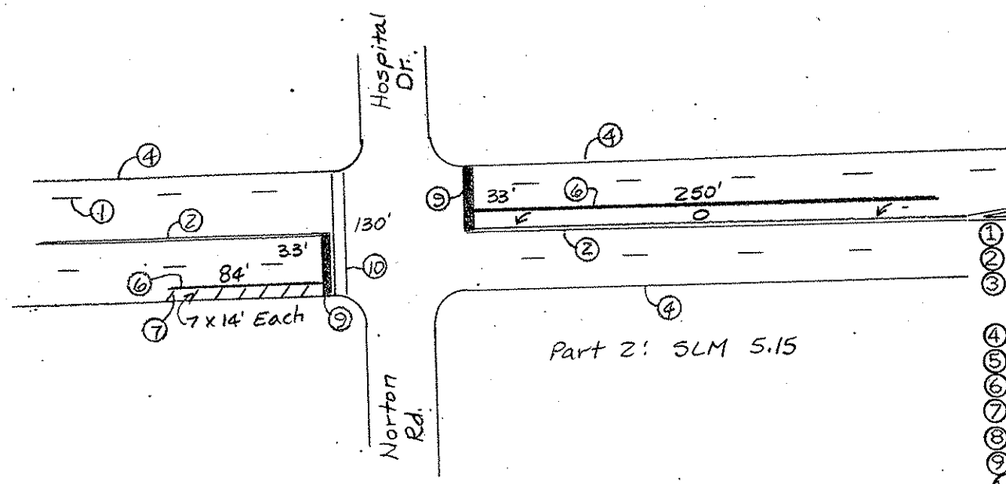
Part 2: SLM 4.76



Part 2: SLM 4.94



Part 2: SLM 5.07



Part 2: SLM 5.15

① Lane Line
② Double Solid Centerline
③ Single Solid Centerline/ Single Dashed Centerline
④ White Edge Line
⑤ Yellow Edge Line
⑥ Channelizing Line
⑦ White Transverse Line
⑧ Yellow Transverse Line
⑨ Stop Line
⑩ Crosswalk Line
O Only

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

PAVEMENT MARKING DETAILS

PLAN NO.

Sturbridge Rd.
Grass Median
Conc. Median
60'
38'
50'
40'
40'
Gladys St.
Part 2: SLM 5.36

Median
225'
135'
38'
Lincoln Lodge
Oxley Rd

38'
50'
Part 2: SLM 5.44

1 Lane Line
2 Double Solid Centerline
3 Single Solid Centerline/ Single Dashed Centerline
4 White Edge Line
5 Yellow Edge Line
6 Channelizing Line
7 White Transverse Line
8 Yellow Transverse Line
9 Stop Line
10 Crosswalk Line
O Only

Drug World
75'
40'
175'
Median
Fernhill Ave.
Part 2: SLM 5.52

Median
25'
Woodlawn
Part 2: SLM. 5.60

160'
160'
160'
160'
38'
Murray Hill Rd.
Part 2: SLM 5.69

Old Village Rd.
80'
39'
50'
90'
255'
Median
130'
130'
Part 2:
S.L.M. 5.98

Grener Ave.
Part 2:
SLM 6.07

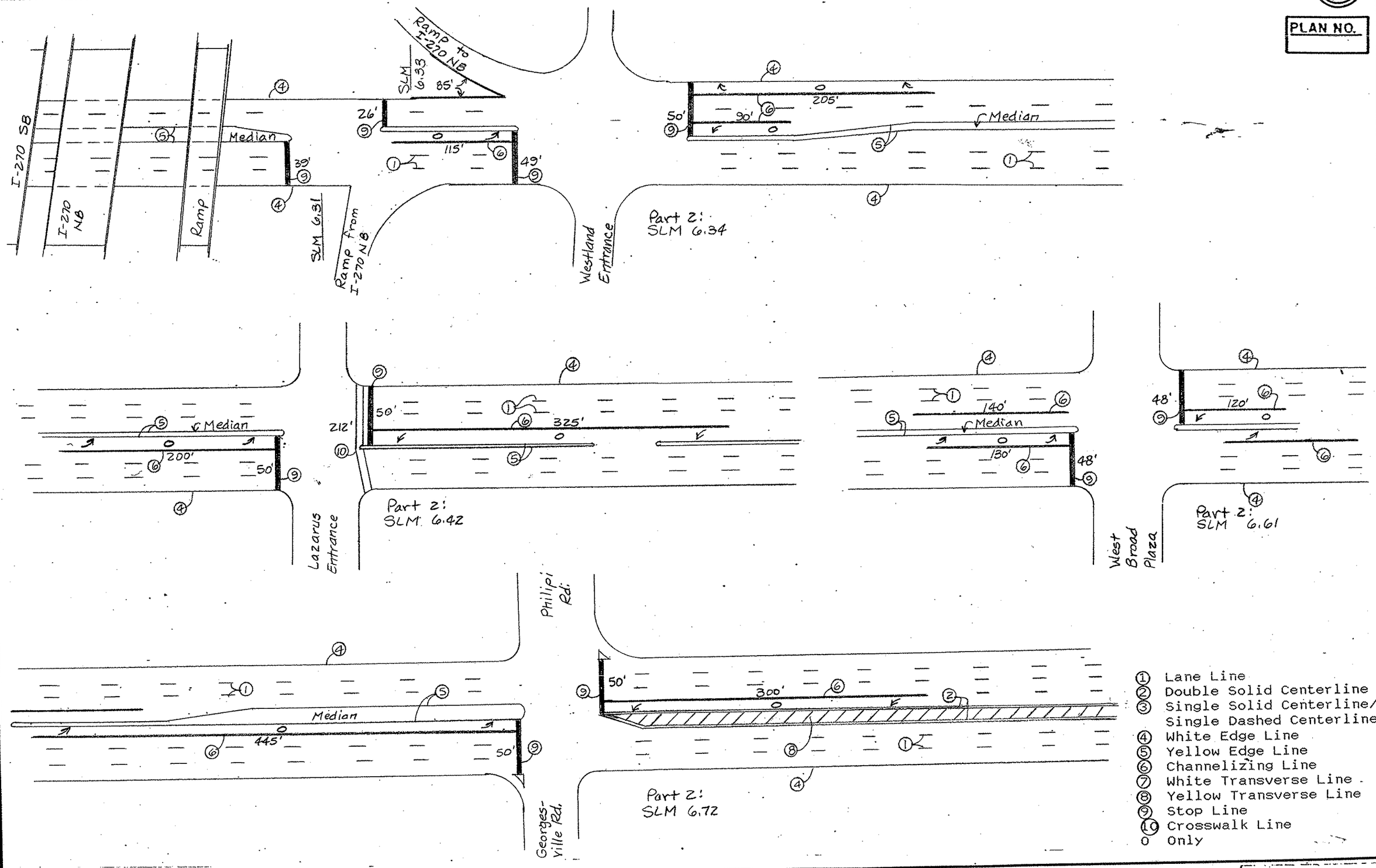
SLM 6.14
130'
Ramp from I-270 SB
467'
Median
Median
85'
85'
Ramp to I-270 NB & SB
Ramp to I-270 NB & SB
Ramp from I-270 SB
SLM 6.10

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

PAVEMENT MARKING DETAILS

33/45

PLAN NO.



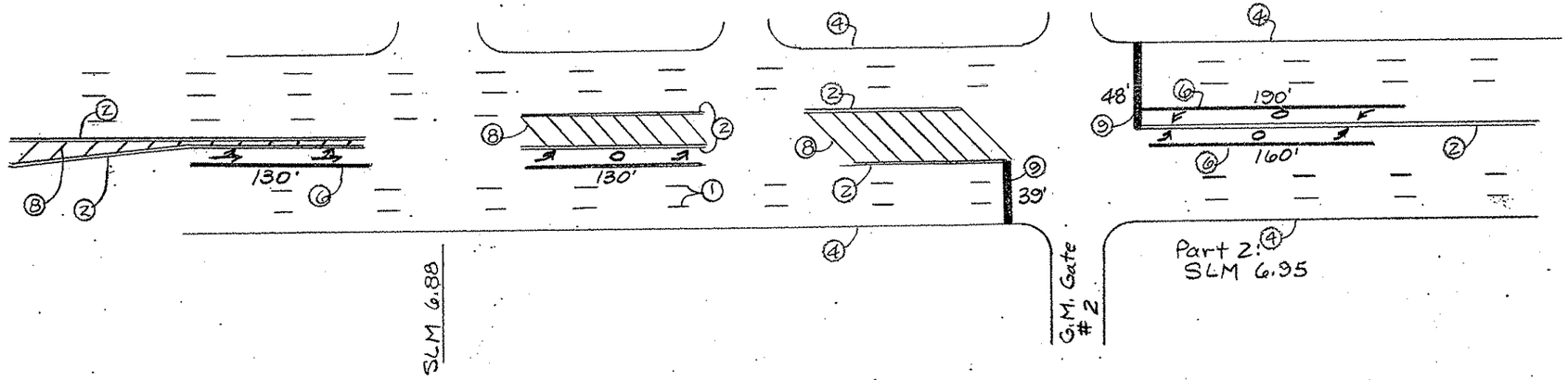
① Lane Line
② Double Solid Centerline
③ Single Solid Centerline/ Single Dashed Centerline
④ White Edge Line
⑤ Yellow Edge Line
⑥ Channelizing Line
⑦ White Transverse Line
⑧ Yellow Transverse Line
⑨ Stop Line
⑩ Crosswalk Line
O Only

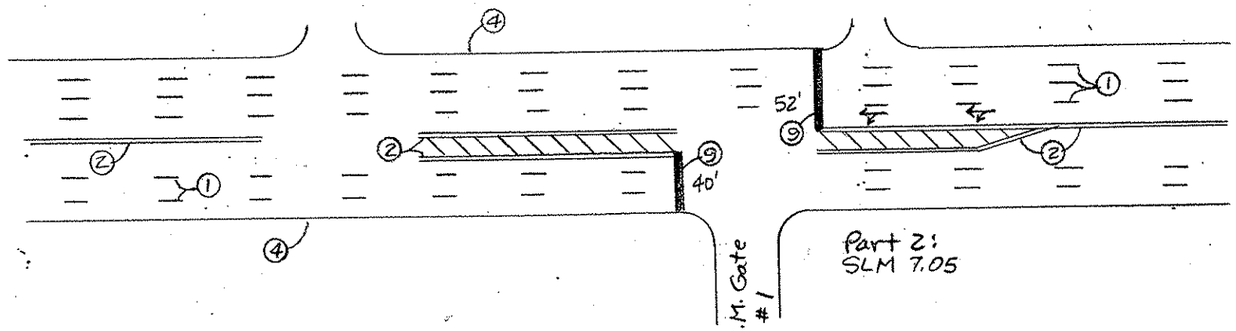
DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

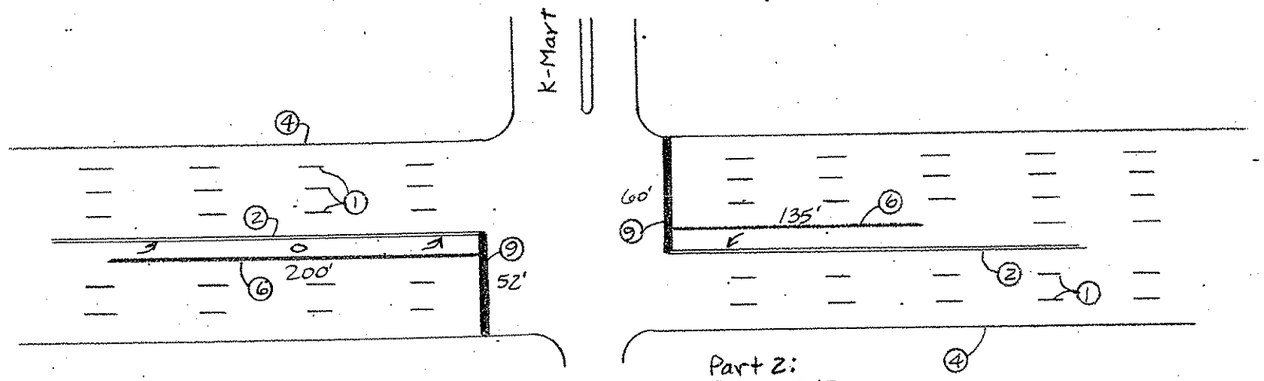
PAVEMENT MARKING DETAILS

34
45

PLAN NO.







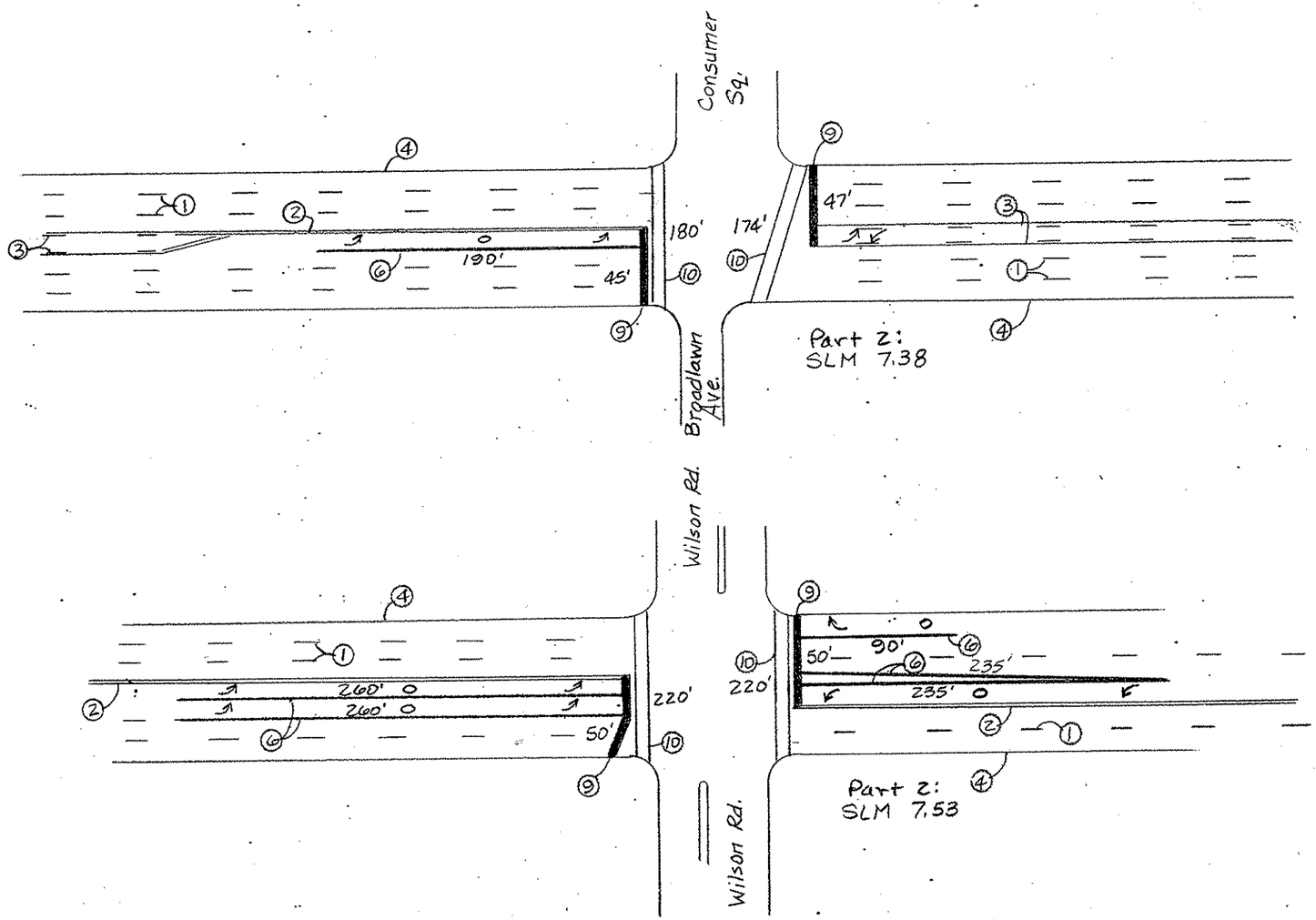
1 Lane Line
2 Double Solid Centerline
3 Single Solid Centerline/ Single Dashed Centerline
4 White Edge Line
5 Yellow Edge Line
6 Channelizing Line
7 White Transverse Line
8 Yellow Transverse Line
9 Stop Line
10 Crosswalk Line
O Only

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

PAVEMENT MARKING DETAILS

35
45

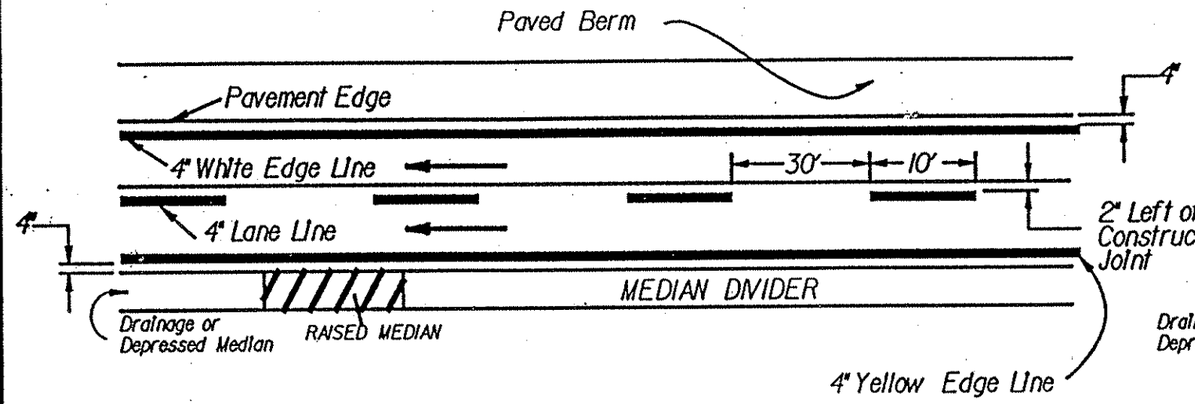
PLAN NO.



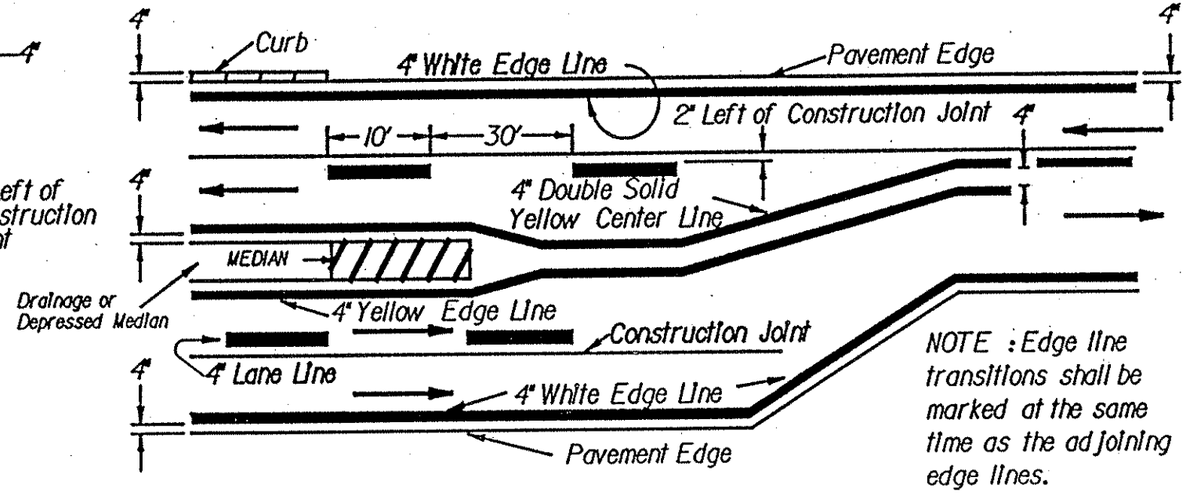
① Lane Line
② Double Solid Centerline
③ Single Solid Centerline/
Single Dashed Centerline
④ White Edge Line
⑤ Yellow Edge Line
⑥ Channelizing Line
⑦ White Transverse Line
⑧ Yellow Transverse Line
⑨ Stop Line
⑩ Crosswalk Line
O Only

PLAN NO.

FREEWAY & EXPRESSWAY MAINLINE MARKINGS

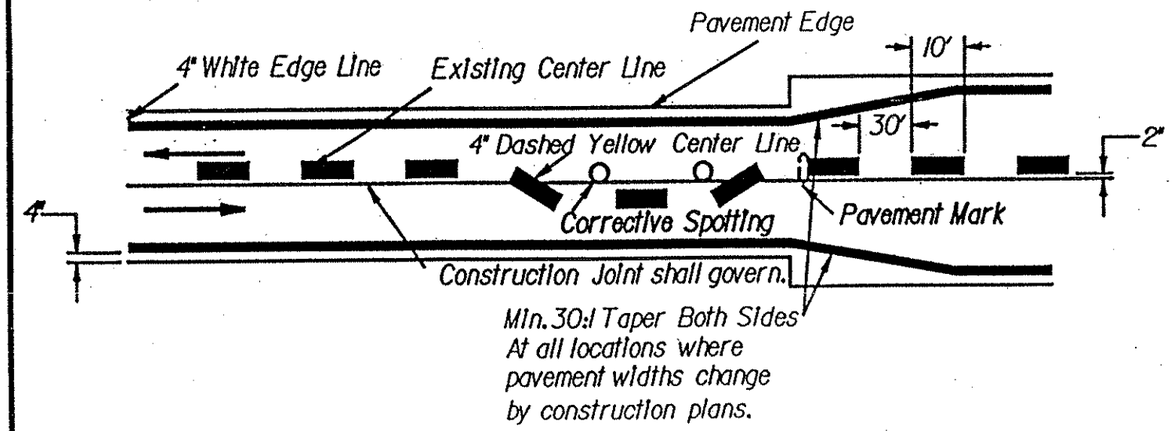


MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKINGS



NOTE : Edge line transitions shall be marked at the same time as the adjoining edge lines.

TWO LANE MARKINGS



NOTES:

1. The distance from the pavement edge to the nearside edge of the edgeline may be increased with the approval of the engineer in order to maintain uniform lane width.

2. See TC-72.20 for entrance and exit ramp markings.

3. The cycle length for dashed lines shall be 40 feet plus or minus 6 inches. The minimum length of dash shall be sufficiently long to maintain a 3:1 ratio between length of gap and length of dash.

PAVEMENT MARKING TYPICAL DETAILS

Rev. 5/9/94

38-2

LOCATION SUB – SUMMARY FOR RESURFACING

FED RD DIVISION	STATE	PROJECT	
5	OHIO		

37/45

PLAN NO.: RPM –

Detail	
1	Mainline Undivided
1	Typical Spacing

Detail	
2	Tapered Acceleration Lane
3	Deceleration Lane
4	Parallel Acceleration Lane
5	Multilane Divided / Expressway

Detail	
6	Stop Approach
7	One Lane Approach w / lt turn lane
8	Thru Approach
9	Two Lane Approach w / lt turn lane

Detail	
10	4 Lane Divided to 2 Lane Transition
11	4 Lane Undivided to 2 Lane Transition
12	Two Lane Narrow Bridge
13	Two Way Left Turn
14	One Lane Bridge
15	Horizontal Curve

Detail	
16	Horizontal Curve Alternate
17	Stop Approach Alternate
GAP	Centerline at 80 Ft. Typical

Location Number	Location: County	Location: Route	Location: S L M Section From	Location: S L M Section To	DETAIL	R P M Installation Only As Per Plan	R P M As Per Plan	Prismatic Retro-Reflector Colors: One-Way White	One-Way Yellow	Two-Way White / White	Two-Way Yellow / Yellow	Two-Way White / Red		Remarks
PT-1	Madison	US-40	14.77	16.09	5,9		194	18				176		West Jefferson to Franklin County
PT-2	Franklin	US-40	0.00	3.18	5		420					420		Madison County to
			3.18	3.42	1		32					32		
			3.42	4.18	5		100					100		→ Galloway Rd.
			4.18	4.39			106	33	12			61		
			4.39	4.76			294	74	98		12	110		Galloway Rd to Hilliard-Rome Rd.
			4.76	4.94			174	71	12		31	60		Hilliard-Rome Rd. to Pasadena/Prairie
			4.94	5.07			121	46			29	46		Pasadena/Prairie to Buena Vista/East
			5.07	5.15			89	34			21	34		Buena Vista/East to Norton
			5.15	5.36			209	85	42		14	68		Norton to Gladys/Sturbridge
			5.36	5.44			131	57	42			32		Gladys/Sturbridge to Oxley/Lincoln Lodge
			5.44	5.52			92	39			21	32		Oxley/Lincoln Lodge to Fernhill/Drugworld
			5.52	5.69			203	88	42		17	56		Fernhill/Drugworld to Murry hill
			5.69	5.98			249	111			50	88		Murry hill to old Village.
			5.98	6.31			413	142	132			139		old Village to Ramp from 270 NB
			6.31	6.34			58	23	14			21		Ramp to Westland
			6.34	6.42			139	59	32			48		Westland to Lazarus
			6.42	6.61			278	94	60			124		Lazarus to West Broad Plaza
			6.61	6.72			184	64	40			80		West Broad Plaza to Georgesville/Philipi
			6.72	6.95			306	90	72			144		Georgesville/Philipi to GM Gate #2
			6.95	7.05			167	57	8		18	84		GM Gate #2 to GM Gate #1
			7.05	7.12			140	41	12		12	75		GM Gate #1 to K-Mart
			7.12	7.38			315	97			46	172		Kmart to Consumer Sq.
			7.38	7.53			226	78	40		20	98		Consumer Sq. to Wilson
COUNTY & SHEET SUB TOTALS						Part 2 total	4446	1383	658		291	2114		

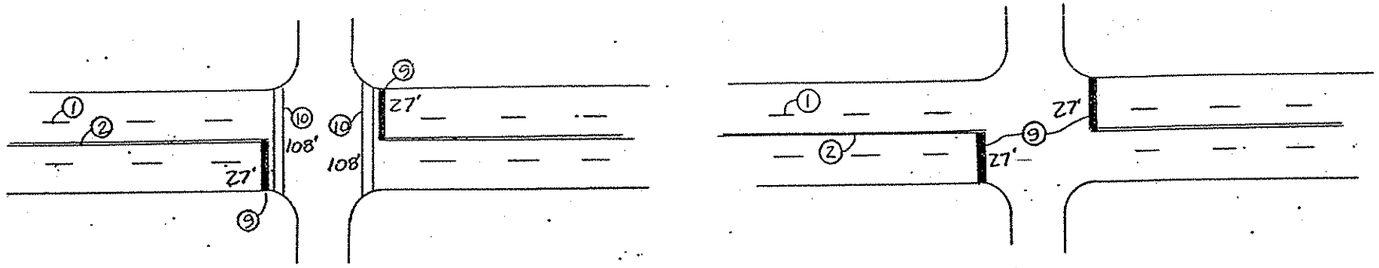
DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

RPM DETAILS

38/45

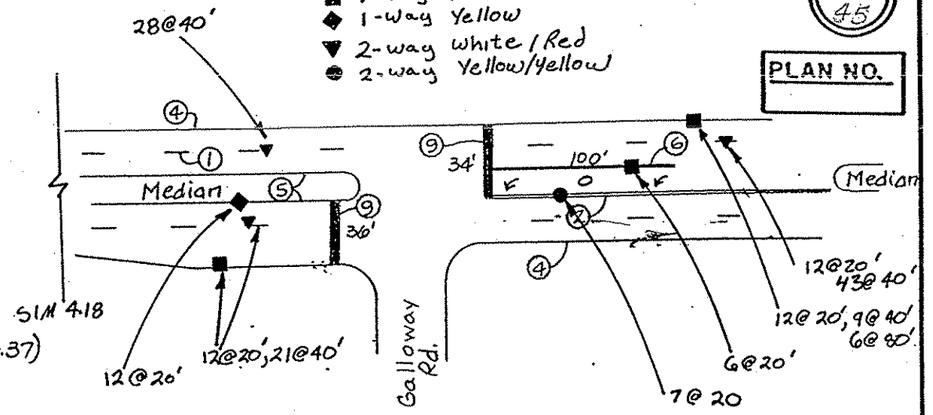
PLAN NO.

RPM KEY
- 1-Way White
- 1-Way Yellow
- 2-way White / Red
- 2-way Yellow/Yellow

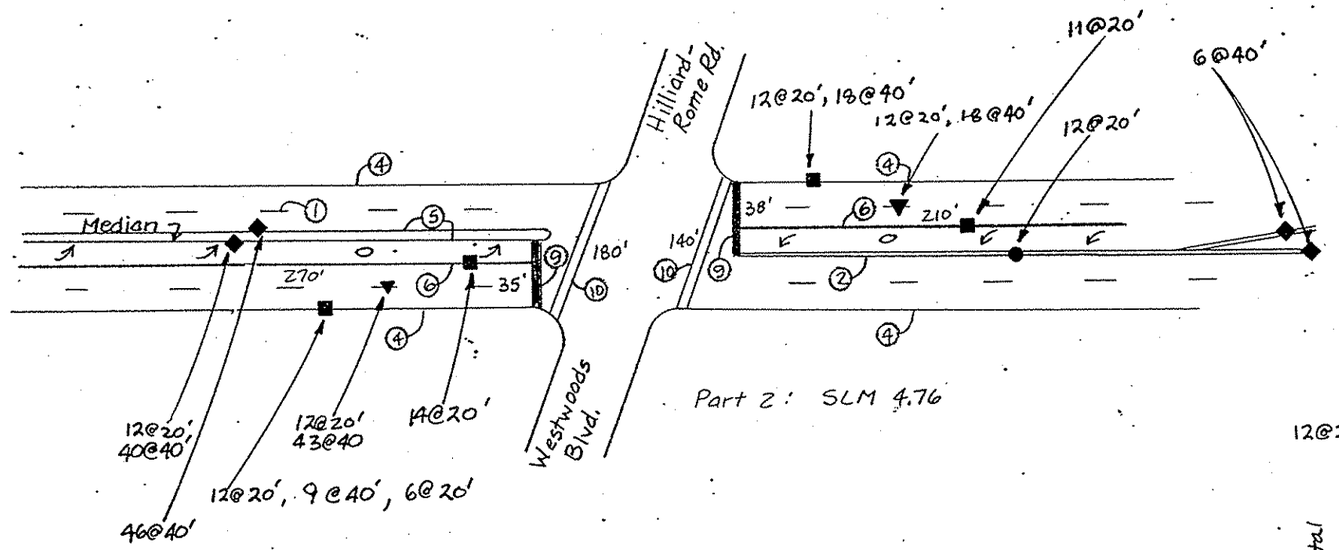


Part 1: Walnut St. (SLM 14.32) & Chester St. (SLM 14.42)

Part 1: West St. (SLM 14.27), Center St. (SLM 14.37) & Mill St. (SLM 14.47).



Part 2: SLM 4.39



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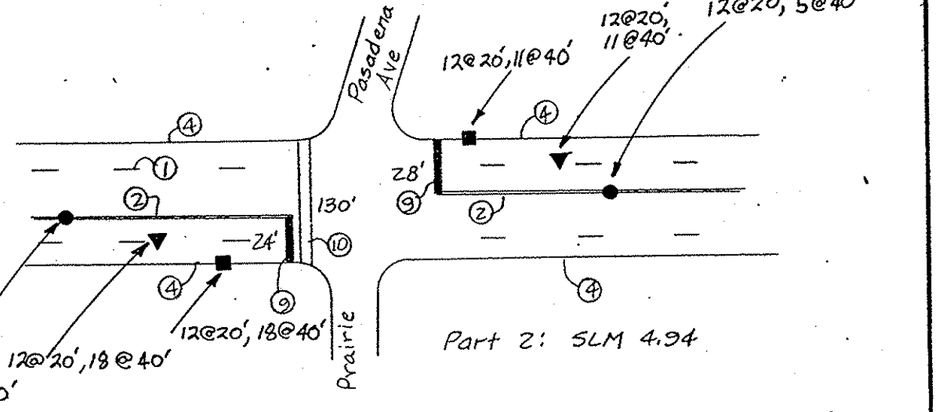
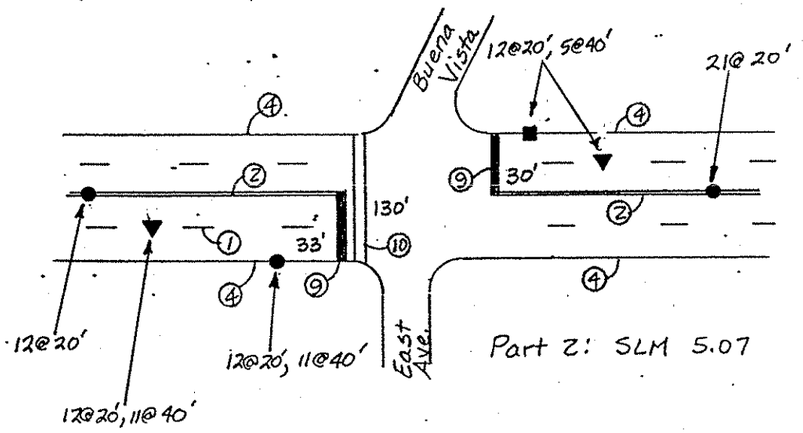
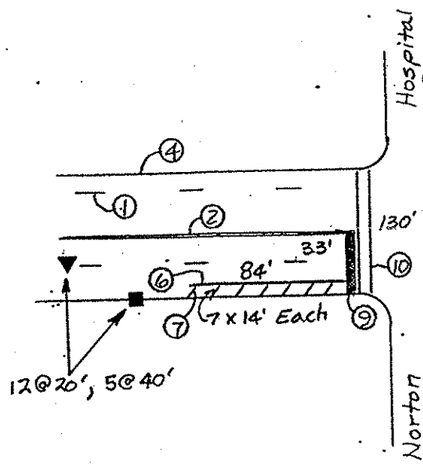
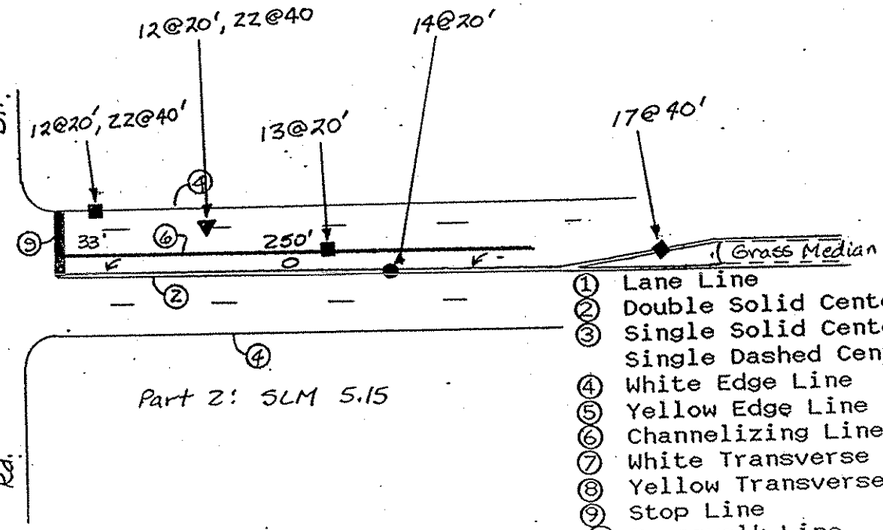


Part 2: SLM 4.94



Part 2: SLM 5.07





Part 2: SLM 5.15

1. Lane Line
2. Double Solid Centerline
3. Single Solid Centerline/ Single Dashed Centerline
4. White Edge Line
5. Yellow Edge Line
6. Channelizing Line
7. White Transverse Line
8. Yellow Transverse Line
9. Stop Line
10. Crosswalk Line

O Only

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

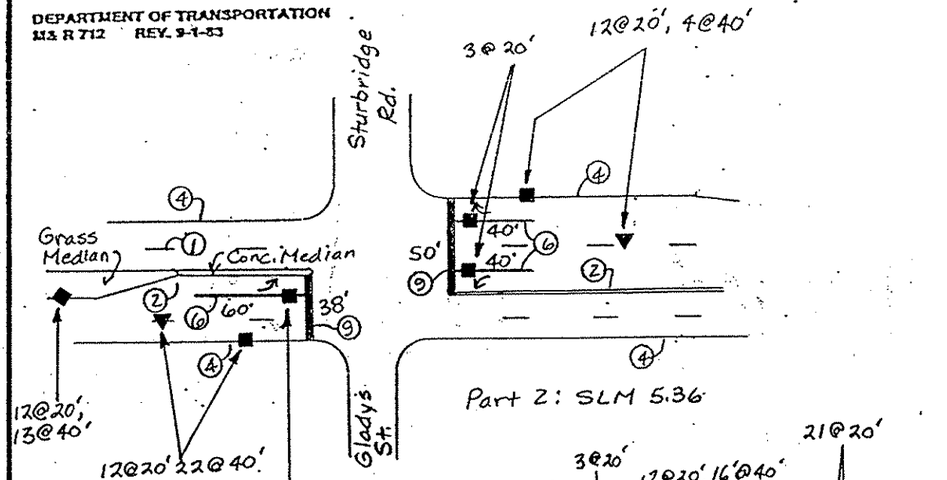
RPM DETAILS

39/45

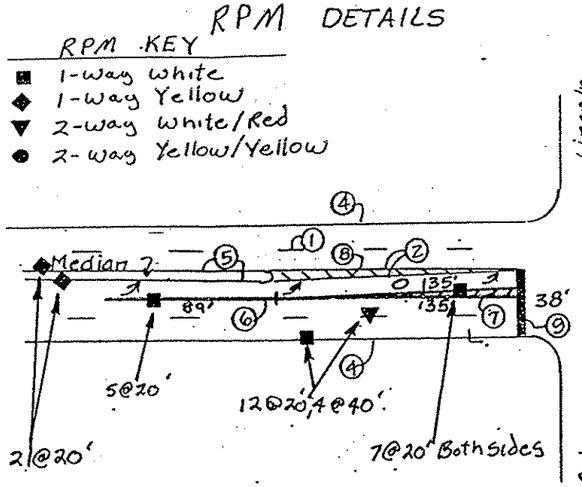
PLAN NO.

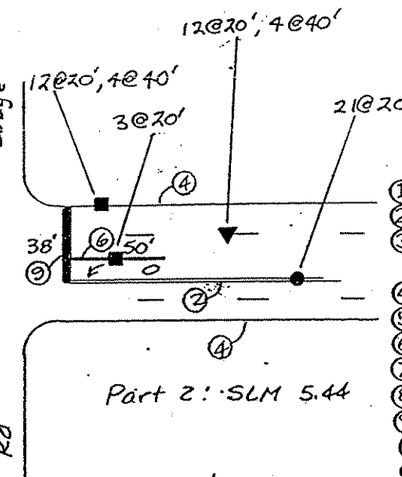
RPM KEY
- ■ 1-Way White
- ◆ 1-Way Yellow
- ▼ 2-Way White/Red
- ● 2-Way Yellow/Yellow

① Lane Line
② Double Solid Centerline
③ Single Solid Centerline/ Single Dashed Centerline
④ White Edge Line
⑤ Yellow Edge Line
⑥ Channelizing Line
⑦ White Transverse Line
⑧ Yellow Transverse Line
⑨ Stop Line
⑩ Crosswalk Line
O Only

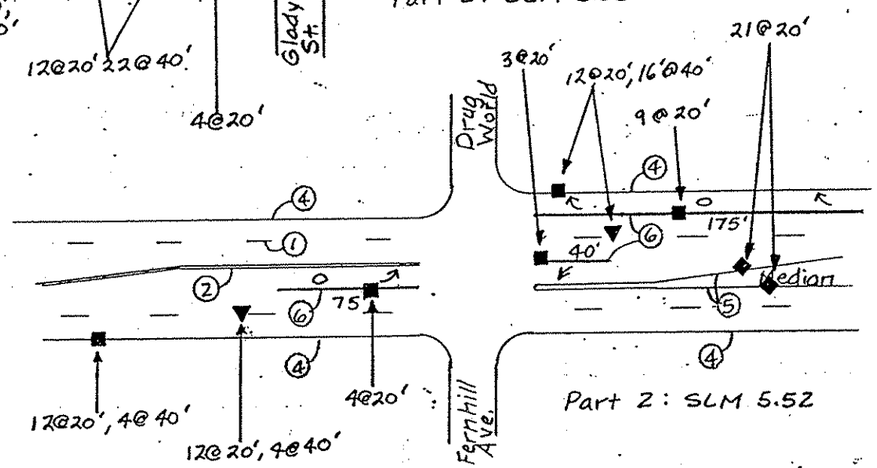


Part 2: SLM 5.36

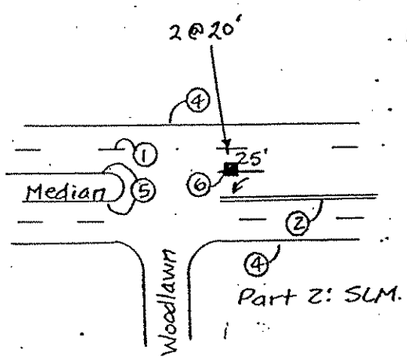




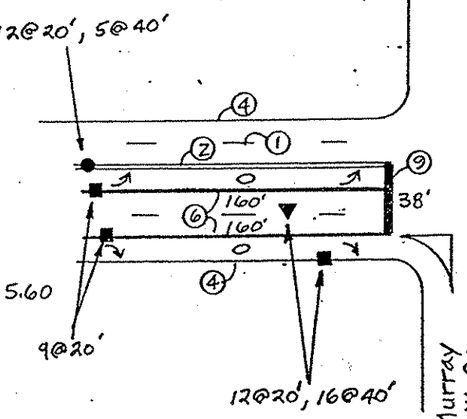
Part 2: SLM 5.44

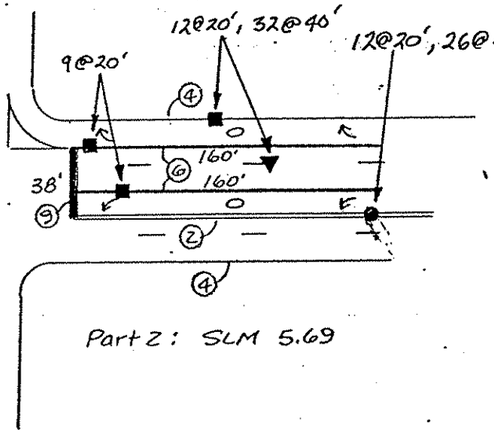


Part 2: SLM 5.52

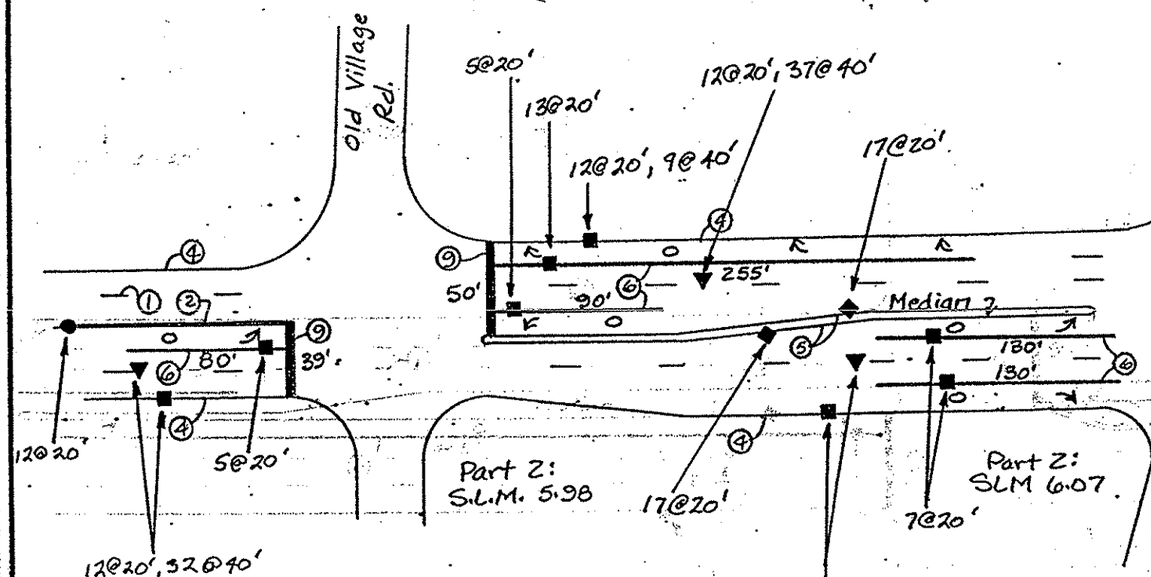


Part 2: SLM. 5.60



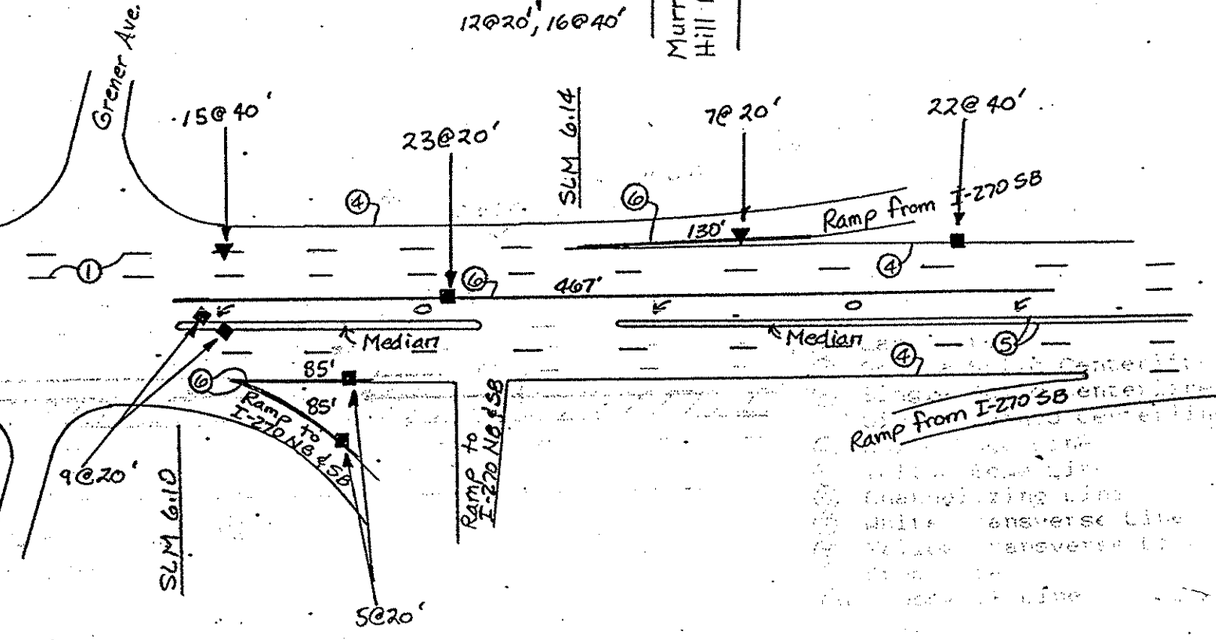


Part 2: SLM 5.69



Part 2: S.L.M. 5.98

Part 2: SLM 6.07



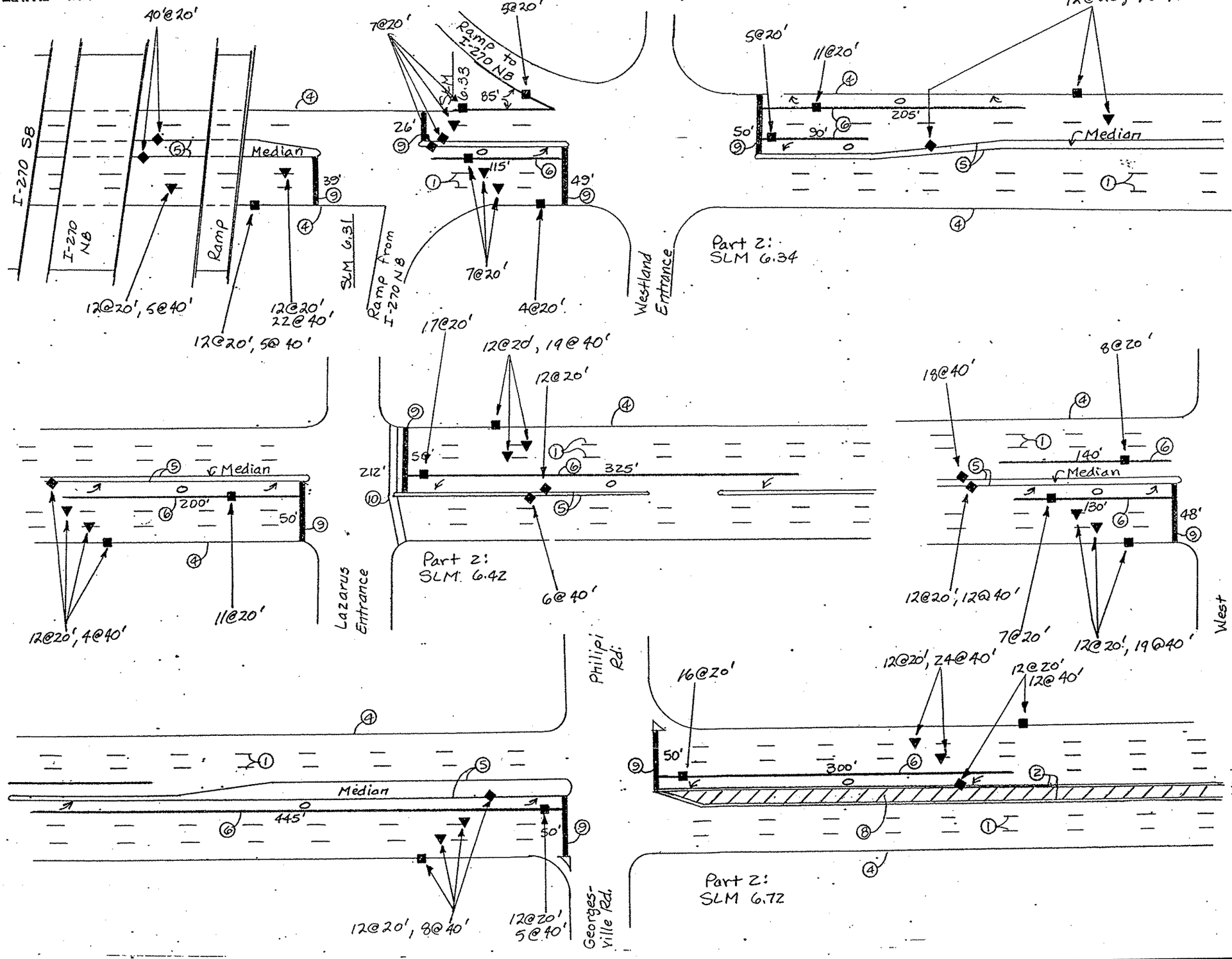
DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

RPM DETAILS

40
45

PLAN NO.

RPM KEY
- One Way White
- One Way Yellow
- 2-Way Red/White
- 2-Way Yellow/Yellow

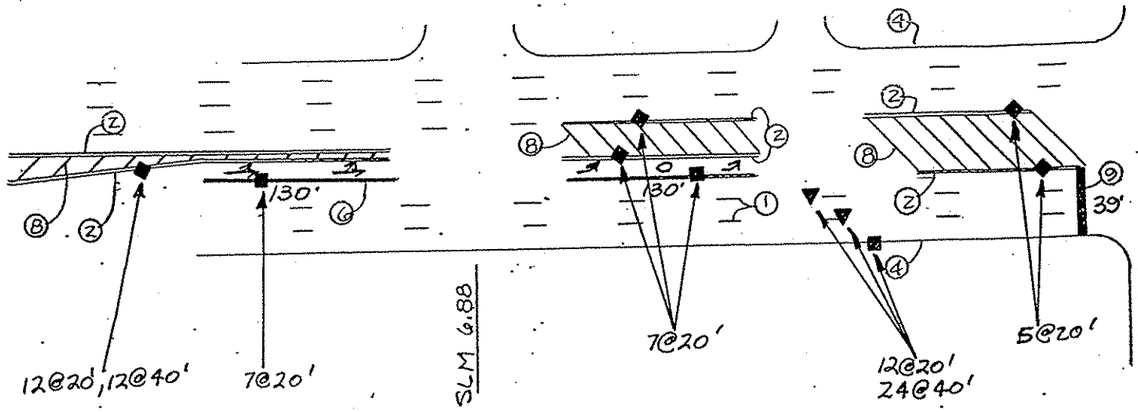


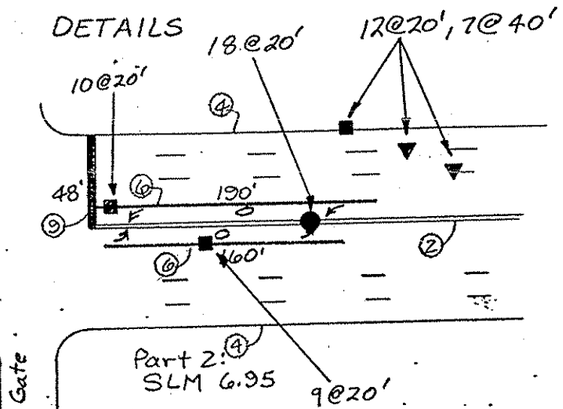
① Lane Line
② Double Solid Centerline
③ Single Solid Centerline/ Single Dashed Centerline
④ White Edge Line
⑤ Yellow Edge Line
⑥ Channelizing Line
⑦ White Transverse Line
⑧ Yellow Transverse Line
⑨ Stop Line
⑩ Crosswalk Line
O Only

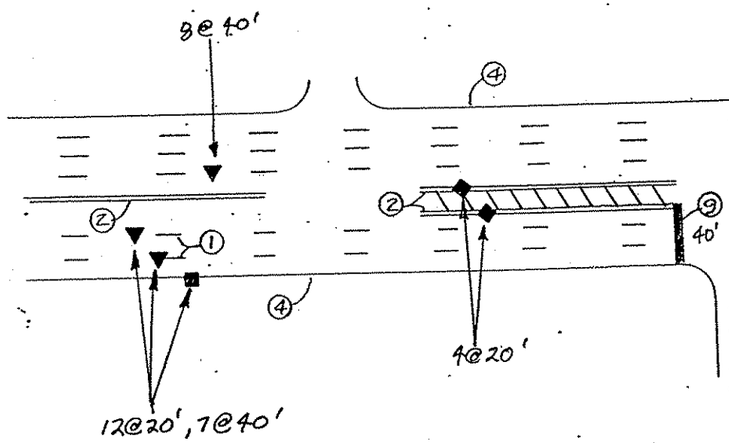
DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

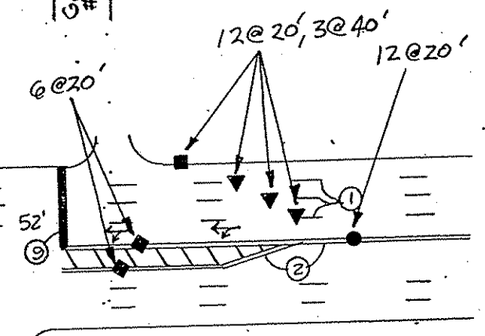
RPM DETAILS

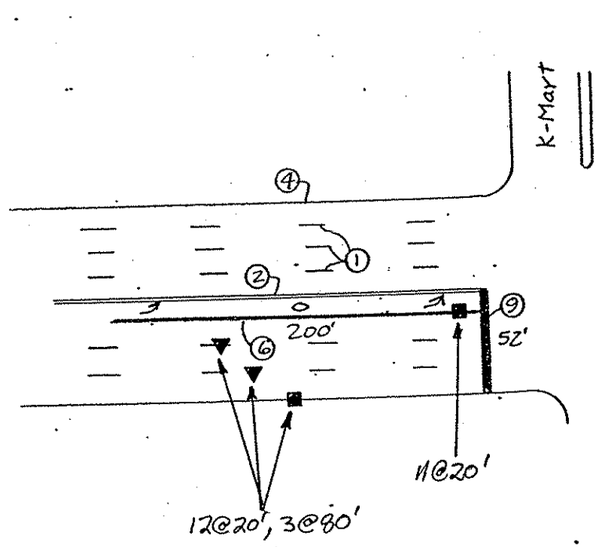
PLAN NO.

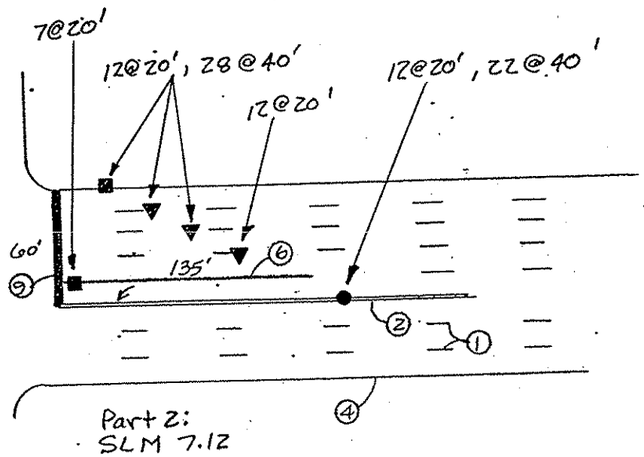












RPM KEY
- ■ 1-way white
- ◆ 1-way yellow
- ▼ 2-way white/Red
- ● 2-way yellow/yellow

1. Lane Line
2. Double Solid Centerline
3. Single Solid Centerline/ Single Dashed Centerline
4. White Edge Line
5. Yellow Edge Line
6. Channelizing Line
7. White Transverse Line
8. Yellow Transverse Line
9. Stop Line
10. Crosswalk Line

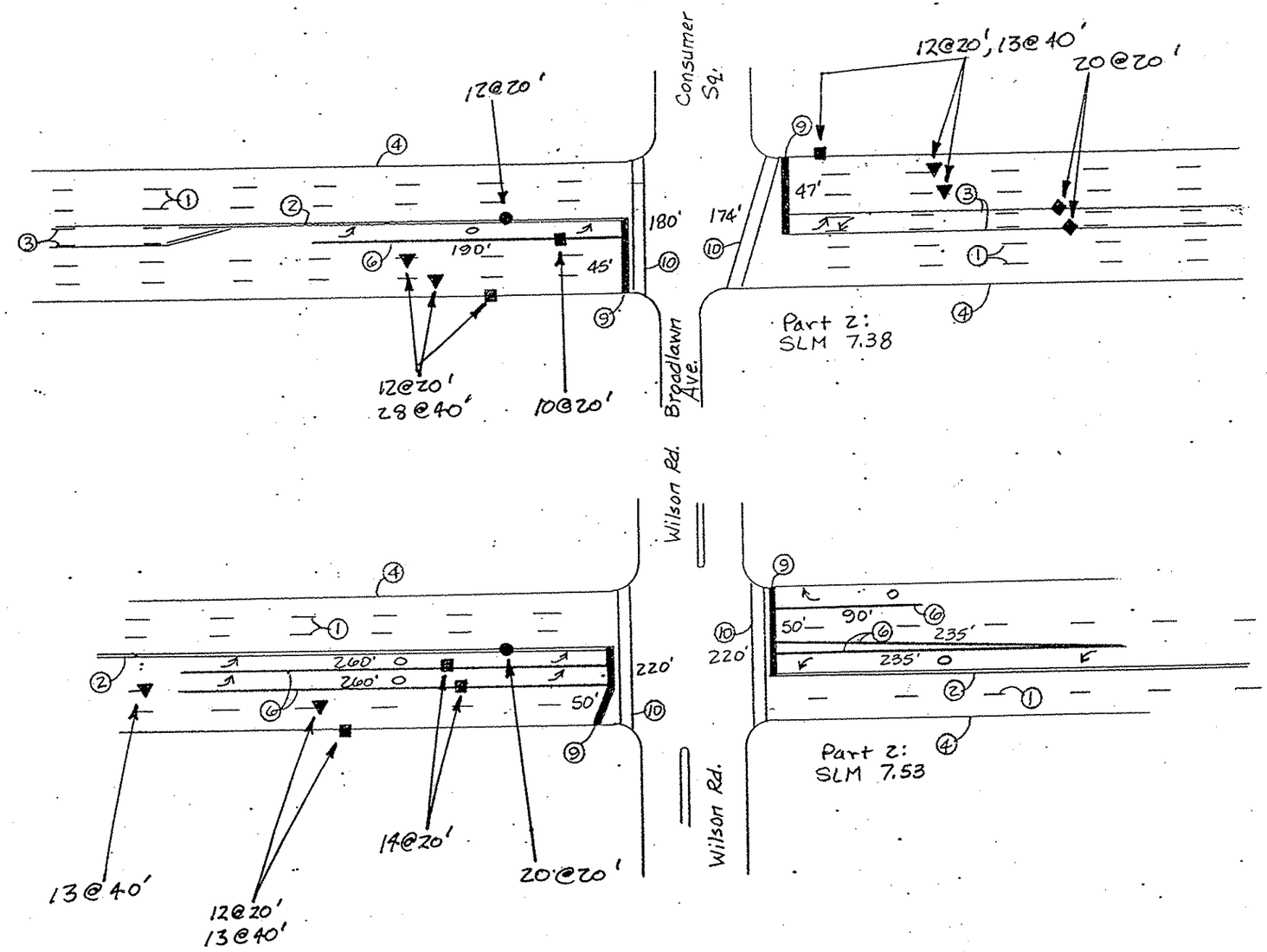
O Only

DEPARTMENT OF TRANSPORTATION
M3 R 712 REV. 9-1-83

RPM DETAILS

42
45

PLAN NO.



RPM KEY

- 1-way White
- 1-way Yellow
- 2-way White/Red
- 2-way Yellow/Yellow

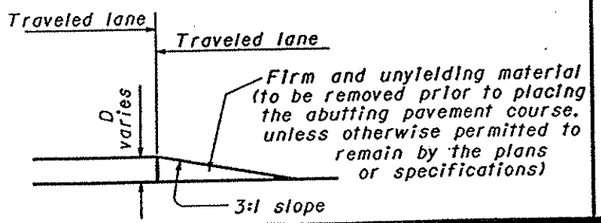
① Lane Line
② Double Solid Centerline
③ Single Solid Centerline/ Single Dashed Centerline
④ White Edge Line
⑤ Yellow Edge Line
⑥ Channelizing Line
⑦ White Transverse Line
⑧ Yellow Transverse Line
⑨ Stop Line
⑩ Crosswalk Line
O Only

GENERAL NOTES

1. It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified hereon, they shall be included for payment in the lump sum bid for Item 614 - Maintaining Traffic.
2. While the need for certain advisory signing is noted hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
3. In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown hereon may be required.
4. The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
5. Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC-9.2 and Item 622.
6. When drums are specified for a dropoff condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.
7. When OW-15I (Low Shoulder) signs or OW-17I (Uneven Lanes) and OWP-17I signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the dropoff condition extends more than one-half mile, additional signs should be erected at intervals of one mile or less.
8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
9. Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" and approval is granted by the Project Engineer.
10. Pavement Repairs (or similar work):
    a. Lengths greater than 60 feet - utilize appropriate treatment from Condition I.
    b. Lengths of 60 feet or less - repairs shall be effected in accordance with 255.08. Drums may be used as a separator adjacent to the traveled lane.

OPTIONAL WEDGE TREATMENT
(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.
2. OW-17I and OWP-17I signs required.

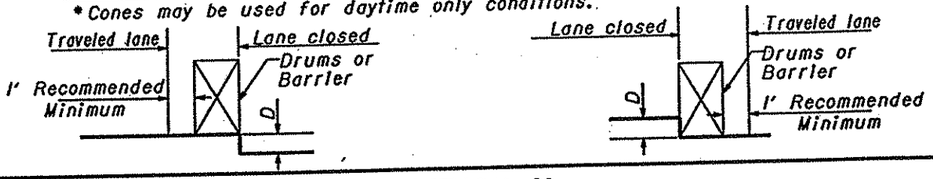


CONDITION I
DROPOFFS BETWEEN TRAVELED LANES

1. These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

D (In.)	Treatment
≤1½	Erect OW-17I and OWP-17I signs.
>1½-3	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
>3-5	Lane closure utilizing drums as shown below.
>5	Lane closure utilizing portable concrete barrier as shown below.

*Cones may be used for daytime only conditions.

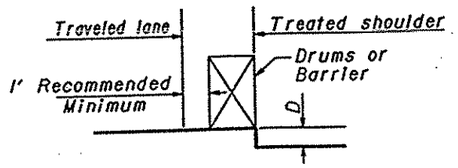


CONDITION II
DROPOFFS WITHIN GRADED SHOULDER AREA

1. The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
2. The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials, or concrete). For the purposes herein, its maximum width shall be considered to be twelve (12) feet.

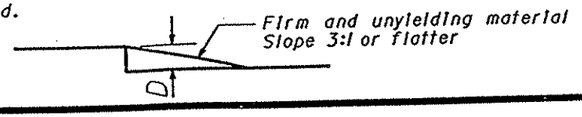
D (In.)	Treatment
≤1½	1) If edgelines are present, no treatment necessary OR 2) Erect OW-17I and OWP-17I signs.
>1½-5	1) If min. lane width* requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
>5-12 Daylight only	If min. lane width* requirements can be met, maintain lanes utilizing drums as shown below.
>5-24	1) If min. lane width* requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums.
>24	Lane closure utilizing portable concrete barrier as shown below.

*Minimum lane widths shall be 10' unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

1. This treatment may not be used within a bituminous shoulder where a hot longitudnal joint per 401.15 is required.
2. OW-15I signs required.

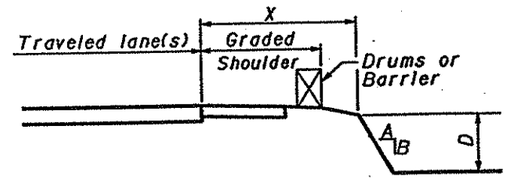


CONDITION III
DROPOFFS BEYOND GRADED SHOULDER OR BACK OF CURB

1. See Note 2 under Condition II.
2. Use Chart A or B below, as applicable.

CHART A

USE FOR: 1. Uncurbed Facilities.
2. Curbed Facilities, where:
   a. Curbs are less than 6" in height.
   b. Curbs are 6" or greater in height and the legal speed is greater than 40 mph.

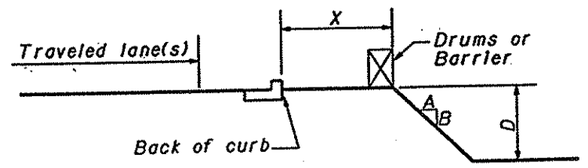


X (Ft.)	D (In.)	A/B	Treatment Required Day	Treatment Required Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	≤3	Steeper than 3:1	None	None
4-12	>3-≤12	Steeper than 3:1	Drums	Drums
4-12	>12	Steeper than 3:1	Drums	Barrier
>12-20	≤12	Steeper than 3:1	None	None
>12-20	>12-≤24	Steeper than 3:1	Drums	Drums
>12-20	>24	Steeper than 3:1	Drums	Barrier
>20-30	≤24	Steeper than 3:1	None	Drums
>20-30	>24	Steeper than 3:1	Drums	Barrier
>30	Any	Any	None	None

(a) Use treatment specified under Condition II.

CHART B

USE FOR: Curbed facilities, where the curb is 6" or greater in height and the legal speed is 40 mph or less.



X (Ft.)	D (In.)	A/B	Treatment Required Day	Treatment Required Night
0-10	≤12	Any	None	Drums
0-10	>12	Any	Drums	Drums
>10	Any	Any	None	None

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF LOCATION AND DESIGN

DROPOFFS IN WORK ZONES

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

GENERAL SUMMARY

PLAN NO.

ITEM	Pg. 2	Pg. 3	Pg. 7	Pg. 8	Pg. 9	Pg. 11	Pg. 13	Pg. 14	Pg. 15	Pg. 25	Pg. 26	ITEM NUMBER	ITEM EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION
202										369		202	23000	369	Sq.Yd.	Pavement Removed
202											9744	202	30000	9744	Sq.Ft.	Walk Removed
202									2652			202	30501	2652	Sq.Yd.	Concrete Median Removed, as per plan
202									4345	2519		202	32001	6864	Lin.Ft.	Curb Removed, as per plan
202	194	723										202	54100	917	Each	Raised Pavement Marker Removed for ~~Storage~~
203									1364			203	12000	1364	Cu.Yd.	Excavation, not including Embankment Construction
251							100					251	01002	100	Cu.Yd.	Partial Depth Pavement Repair
251							200					251	01003	200	Cu.Yd.	Partial Depth Pavement Repair, as per plan
253							1000					253	02000	1000	Cu.Yd.	Pavement Repair
254	35,513	138,977		2600				10,640				254	01000	187,730	Sq.Yd.	Pavement Planing, Bituminous
254									43			254	01010	43	Sq.Yd.	Pavement Planing, Portland Cement Concrete
254					5000							254	01600	5000	Sq.Yd.	Patching Planed Surface
301									800		10	301	10002	810	Cu.Yd.	Bituminous Aggregate Base, AC-20
304									637			304	20000	637	Cu.Yd.	Aggregate Base
404						150						404	35000	150	Cu.Yd.	Bituminous Concrete for Maintaining Traffic
407	12,830	27,222	69	2310								407	10000	42,431	Gallon	Tack Coat
448	1872	2734	14	427					17			448	14000	5064	Cu.Yd.	Asphalt Concrete, Intermediate Course, Type 1, AC-20
448											10	448	15000	10	Cu.Yd.	Asphalt Concrete, Intermediate Course, Type 2, AC-20
448	4702	10,421	24	818					52		5	448	16000	10,022	Cu.Yd.	Asphalt Concrete, Surface Course, Type 1, AC-20
452										347		452	10000	347	Sq.Yd.	6" Plain Concrete Pavement
604	4	1										604	09000	5	Each	Catch Basin Adjusted to Grade
604											14	604	20800	14	Each	Inlet Reconstructed to Grade
604	1								6			604	34500	7	Each	Manhole Adjusted to Grade
608											9872	608	10000	9872	Sq.Ft.	4" Concrete Walk
608											42	608	51000	42	Each	Curb Ramp, Type 2
609										2672	50	609	26000	2722	Lin.Ft.	Curb, Type 6
612									3281			612	42000	3281	Sq.Yd.	Concrete Median
617			1522	865								617	10100	2387	Cu.Yd.	Compacted Aggregate, Type A
617												617	25000	10	M.Gal.	Water

DEPARTMENT OF TRANSPORTATION
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GENERAL SUMMARY

PLAN NO.

ITEM	Pg. 2	Pg. 10	Pg. 11	Pg. 12	Pg. 13	Pg. 26	Pg. 28	Pg. 29	Pg. 37			ITEM NUMBER	ITEM EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION
614				350								614	11100	350	Hour	Law Enforcement Officer with Patrol Car
614			80									614	12460	80	Each	Work Zone Marking Sign
614					52.42							614	20000	52.42	Mile	Temporary Lane Line, Class I
614					8.14							614	21000	8.14	Mile	Temporary Center Line, Class I
614					16,402							614	23000	16,402	Lin. Ft.	Temporary Channelizing Line, Class I
621									4640			621	00100	4640	Each	Raised Pavement Marker
625		700										625	25100	700	Lin. Ft.	Conduit, 1", 713.04
625		700										625	29000	700	Lin. Ft.	Trench
625		10										625	30700	10	Each	Pullbox, 713.08, 18"
632		2500										632	27500	2500	Lin. Ft.	Loop Detector Pavement Cutting
632		12,000										632	64900	12,000	Lin. Ft.	Loop Detector Wire, Type E
632		2500										632	65200	2500	Lin. Ft.	Loop Detector Lead-in Cable
638	4											638	10800	4	Each	Valve Box Adjusted to Grade
644							16.08	25.82				644	00100	41.90	Mile	Edge Line
644							8.00	18.21				644	00200	26.21	Mile	Lane Line
644							1.21	2.86				644	00300	4.07	Mile	Center Line
644							100	8436				644	00400	8536	Lin. Ft.	Channelizing Line
644							162	1596				644	00500	1758	Lin. Ft.	Stop Line
644							1428	1716				644	00600	3144	Lin. Ft.	Crosswalk Line
644							306	2575				644	00700	2881	Lin. Ft.	Transverse Line
644							2	83				644	01300	85	Each	Lane Arrow
644							1	37				644	01400	38	Each	Word on Pavement, 72"
653					10							653	10001	10	Cu. Yd.	Topsoil Furnished and Placed, as per plan
614												614	11000	Lump	Lump	Maintaining Traffic
619												619	15010	Lump	Lump	Field Office, Type B
623		Lump										623	10001	Lump	Lump	Construction Layout Stakes, as per plan
624												624	10000	Lump	Lump	Mobilization