PID 13385

OHIO DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI BEGIN	PROJECT TERMINI END	NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
1	COS	SR 83	(0.00 – 7.49)	0.00	9.02	9.02			

CHKD. BY SRM	DATE 7-26-91	3	OHIO		120

Sheet 5A has been Added to Plans

10

The Standard 1991 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. NONE 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 provisions for the maintenance and safety of traffic will be indicated in the proposal.

Approved Date 7-26-91 — Cash Misel, District Deputy Director of Transportation

Approved Date 8-13-91 — B.D. Hershberger, Engineer of Bridges

Approved Date _____ — Engineer of Maintenance

Approved Date 9-23-91 — Alexander H. Hyndo, Deputy Director, Operations

Approved Date _____ — Assistant Deputy Director, Program Development

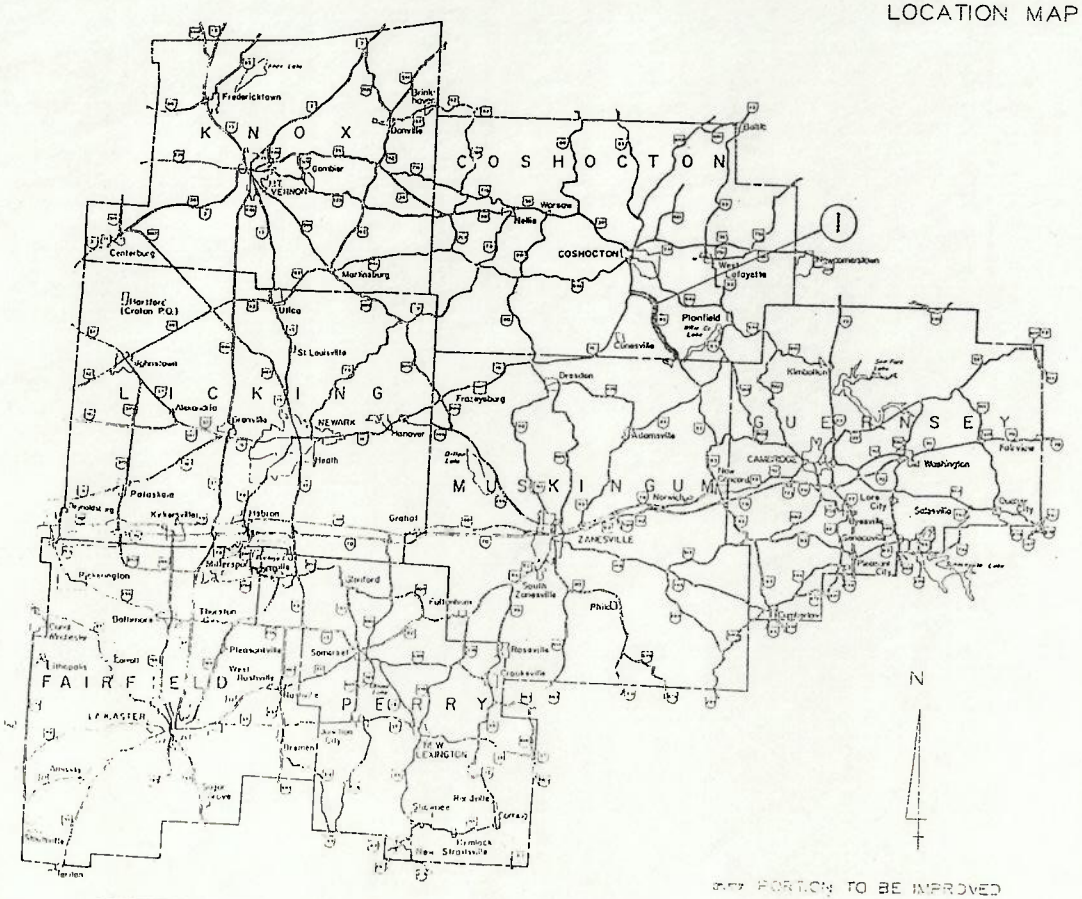
Approved Date _____ — Chief Engineer, Construction

Approved Date _____ — Chief Engineer, Design

Approved Date _____ — Assistant Director, Department of Transportation

Approved Date 9-24-91 — Director, Department of Transportation

LOCATION MAP



PART PORTION TO BE IMPROVED

STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS
BP-5	10-01-87	
BP-6	10-01-87	
MT-97.11	10-04-88	
MT-99.10	11-14-86	
MT-99.20	4-20-84	

(16) 1101 REDUCED

1101

10-00-91

RB

COS-83-0.00 CALC BY DATE CHKD. BY DATE PLAN NO. 120

GENERAL NOTES

EXTRA ASPHALT FOR PRE-LEVELING

A QUANTITY OF ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 HAS BEEN INCLUDED IN THE PLAN TO BE USED AT THE DIRECTION OF THE ENGINEER FOR PRE-LEVELING WHERE THE PAVEMENT IS LOW OR DETERIORATED. THE QUANTITIES OF ITEM 448 SHOWN BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC-20; CU.YD. (SEE TABLE BELOW)

PART	1
CU.YD.	100

RESIDENCE AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 448 ASPHALT CONCRETE HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL EXTEND 10 FEET INTO THE DRIVEWAY, MEASURED FROM THE EDGE OF THE PAVEMENT, OR PAVED BERM. THICKNESS SHALL BE APPROXIMATELY THE SAME AS THE ROADWAY PAVEMENT OR PAVED BERM. FIELD DRIVES AND OIL WELL DRIVES WILL NOT BE PAVED.

ANY GRADING OF EXISTING DRIVES, TACK OR PRIME COAT, ALL MATERIAL, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE WORK ON DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC-20 (DRIVEWAYS).

THE QUANTITIES SHOWN IN THE TABLE BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSE DESCRIBED ABOVE.

PART	1
CU.YD	53

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, TURN ARROWS, ETC., SHOWN ON THE PLAN ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.

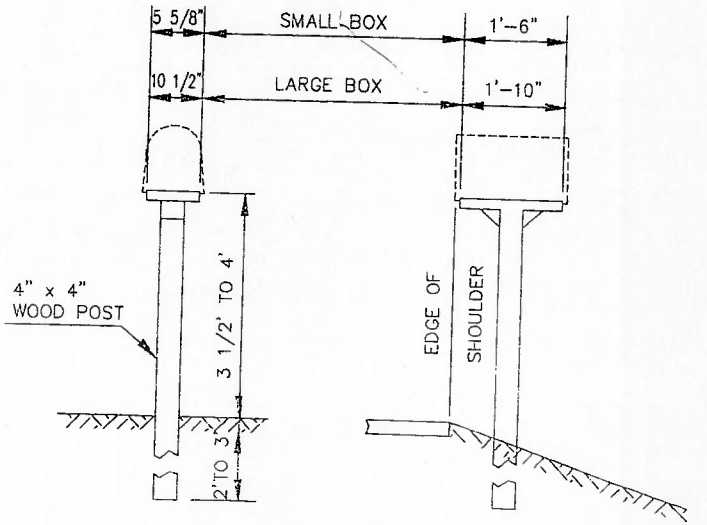
ITEM SPECIAL - MAILBOX SUPPORTS

THIS ITEM SHALL CONSIST OF REPLACING AND RESETTING DESIGNATED MAILBOX SUPPORTS WITH PRESSURE TREATED FOUR INCH (NOMINAL) TIMBER POSTS MEETING AASHTO M 133-81 AWPA P 8. MAILBOX SUPPORTS SHALL BE CONSTRUCTED AS PER THE DRAWING ON THIS SHEET. ALL MATERIAL, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE REMOVAL AND INSTALLATION OF THE EXISTING MAILBOX ON THE NEW TIMBER POSTS AND RESETTING THE MAILBOX POSTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL - MAILBOX SUPPORTS.

THE FOLLOWING QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSE.

ITEM SPECIAL - MAILBOX SUPPORTS EACH (SEE TABLE BELOW)

PART	1
EACH	4



TYPICAL MAILBOX LOCATION AND MOUNTING HEIGHT

GENERAL NOTES

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF A EACH WORK ZONE MARKING SIGNS (B EACH "NO EDGE LINES" OW-167 AND C EACH "UNMARKED NO PASSING ZONES" OW-168), D EACH "UNEVEN LANE SYMBOL" OWP-171-36 AND E EACH "UNEVEN LANE" OW-171-24) ARE CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PART	1
A	68
B	17
C	17
D	17
E	17

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN OUTS. TURN OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-6, 10-1-87.
ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURNOUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20 AS PER PLAN.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20 AS PER PLAN CU.YD. (SEE TABLE BELOW)

PART	1
CU.YD.	65

PAVED SHOULDERS

THE PAVED SHOULDER (SHOWN ON SHEET **12**) SHALL BE APPLIED IN TWO COURSES. THE FIRST BEING 1.75" OF ITEM 448 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, AC-20 AND IT SHALL BE APPLIED AT THE SAME TIME AS THE FIRST COURSE ON THE ROADWAY. THE SECOND COURSE SHALL BE 1.25" OF ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC-20 TO BE APPLIED AT THE SAME TIME AS THE FINAL COURSE ON THE ROADWAY, AS DIRECTED BY THE ENGINEER.

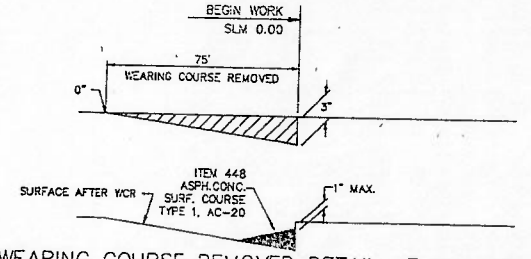
ITEM 202 WEARING COURSE REMOVED AS PER PLAN

A BUTT JOINT WILL BE REQUIRED AT THE BEGINNING (SLM 0.00 = MUS.CO. LINE) AND THE END (SLM 9.02 = SR 16) OF THIS PROJECT, DUE TO THE AMOUNT OF PROPOSED ASPHALT AND THE COMPOSITION OF THE PROPOSED INTERMEDIATE COURSE. EXTRA QUANTITIES OF ITEM 407 TACK COAT AND ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC-20 HAVE BEEN INCLUDED TO REDUCE THE DEPTH OF THE WEARING COURSE REMOVED DROP OFF (SEE DETAIL). THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSE DESCRIBED ABOVE.

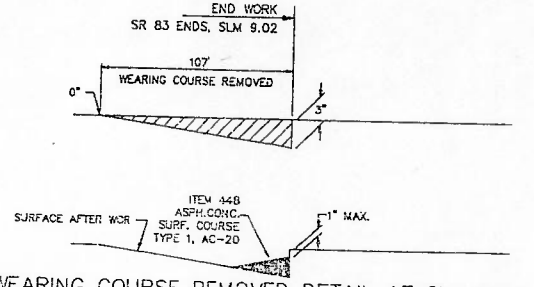
ITEM 202 WEARING COURSE REMOVED, AS PER PLAN 1713 SQ.YD.

ITEM 407 TACK COAT 13 GAL.

ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC-20 8 CU.YD.



WEARING COURSE REMOVED DETAIL AT SLM 0.00



WEARING COURSE REMOVED DETAIL AT SLM 9.02

GENERAL NOTES

SHOULDER RESTORATION

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE GRADING AND SHAPING WORK, INCLUDING LABOR AND INCIDENTALS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL – GRADER RENTAL, AND SHALL BE FOR THE ACTUAL NUMBER OF GRADER HOURS WORKED.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PAYMENT FOR ALL OF THE ABOVE REMOVAL WORK SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL – LOADER RENTAL, AND SHALL BE FOR THE ACTUAL NUMBER OF LOADER HOURS WORKED. ANY OTHER EQUIPMENT, LABOR OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED THEREIN FOR PAYMENT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE PURPOSES.

ITEM SPECIAL – GRADER RENTAL 27 HRS.

ITEM SPECIAL – LOADER RENTAL 14 HRS.

ITEM 408 BITUMINOUS PRIME COAT

AFTER COMPLETION OF PRIME COAT ANY SUBSEQUENT TREATMENT SHALL BE WHEN DIRECTED BY THE ENGINEER.

RAISED PAVEMENT MARKER REMOVED FOR STORAGE, AS PER PLAN

REMOVAL OF RAISED PAVEMENT MARKERS SHALL CONFORM WITH SECTION NO. 202.071 IN THE CONSTRUCTION AND MATERIAL SPECIFICATION MANUAL EXCEPT FOR THE FOLLOWING:

AFTER PAVEMENT MARKERS HAVE BEEN REMOVED BY THE CONTRACTOR, HE WILL THEN BE RESPONSIBLE TO TAKE THE REMOVED MARKERS TO A STATE GARAGE THAT WILL BE DESIGNATED BY THE ENGINEER. THE PROJECT ENGINEER SHALL GIVE THE DISTRICT MAINTENANCE ENGINEER 24 HOUR NOTICE PRIOR TO DELIVERY AND THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR FURNISHING ALL NECESSARY TRANSFER DOCUMENTATION WITH ALL DELIVERIES. PAYMENT FOR ALL WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE, AS PER PLAN.

ITEM 632 LOOP DETECTOR REPLACEMENT

THIS ITEM IS SET UP TO BE USED AS DIRECTED BY THE ENGINEER IF THE EXISTING LOOP DETECTOR BECOMES DAMAGED IN ANY WAY DURING THE CONSTRUCTION OF T PROJECT. DAMAGED LOOP DETECTORS SHALL BE REPLACED AND IN OPERATION WIT 48 HOURS. DISTURBED LOOP DETECTORS SHALL BE ABANDONED IN PLACE. ~~THE PAVEMENT WILL BE CUT AFTER PLANING AND THE LOOP DETECTOR WIRE INSTALLED THE LOOP DETECTOR WIRE SHALL THEN BE COVERED WITH THE SURFACE COURSE OF PROPOSED ITEM 448~~. THE PAVEMENT WILL BE CUT AFTER THE PROPOSED INTERMEDIATE COURSE AND THE LOOP DETECTOR WIRE INSTALLED. THE LOOP DETECTOR SHALL THEN BE COVERED WITH THE PROPOSED ITEM 448 SURFACE COU EACH DETECTOR SHALL BE REPLACED AT THE SAME LOCATION. DETAILS ARE SHOW STANDARD DRAWING TC-82.10 DATED 8-29-84.

THE NEW LOOP DETECTORS SHALL BE RUN INTO THE EXISTING CONTROL BOX. ALL NECESSARY MATERIAL, LABOR AND EQUIPMENT SHALL BE INCIDENTAL TO THE PAYMENT OF THESE ITEMS. THE ESTIMATED QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 632 LOOP DETECTOR WIRE, TYPE E
1000 LIN. FT.

ITEM 632 LOOP DETECTOR PAVEMENT CUTTING
600 LIN. FT.

MAINTAINING DROP OFFS

DUE TO THE TOTAL THICKNESS OF THE PROPOSED ASPHALT OVERLAYS ON THE MAINLINE OF ROADWAY (3"), DROP OFFS FOR EXTRA AREAS, MAILBOX TURNOUTS, AGGREGATE BERMS AND DRIVES SHALL BE MAINTAINED. ~~WITH THE INTERMEDIATE COURSE OF ASPHALT ON THE MAINLINE, WHICH IS A 1.75" THICKNESS.~~ ALL OF THE PREVIOUSLY MENTIONED AREAS SHALL BE BROUGHT UP TO THE LEVEL OF THE INTERMEDIATE COURSE BEFORE THE SURFACE COURSE SHALL BEGIN. THE WORK MENTIONED ABOVE SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 448 ASPHALT DESIGNATED TO EXTRA AREAS, MAILBOX TURNOUTS, DRIVES AND ITEM 617 COMPACTED AGGREGATE, TYPE A FOR THE BERMS.

ITEM 617 COMPACTED AGGREGATE, TYPE A, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 617, ALL AGGREGATE SHALL BE 100% CRUSHED.

WORD AND SYMBOL MARKING DETAILS

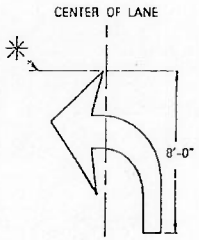
COS-83-0.00

FED. HWY. DIVISION	STATE	PROJECT	
5	OHIO		

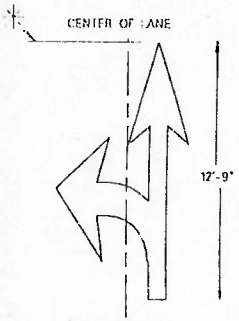
CALC. BY BW, DK
DATE 7-26-91

CHKD. BY SRM
DATE 7-30-91

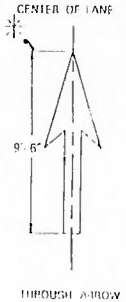
PLAN NO. 120



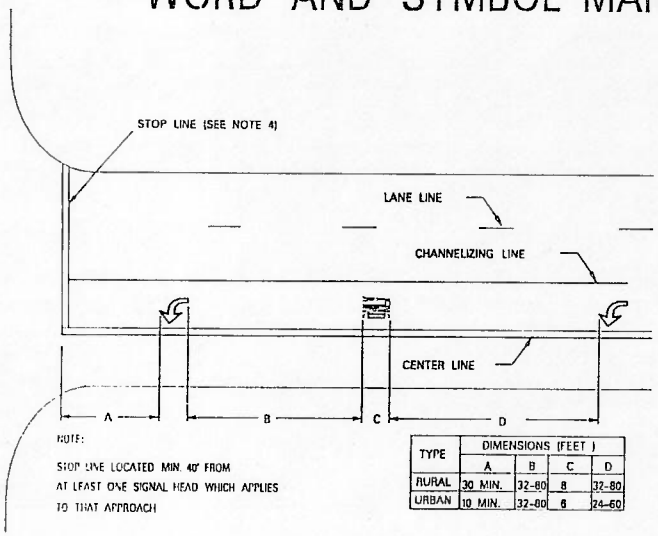
TURN ARROW
(LEFT ARROW SHOWN
RIGHT ARROW OPPOSITE)



COMBINED ARROW
(THREE HEAD DIRECTIONAL ARROWS
CAN BE ACHIEVED BY THE COMBINATION
OF TURN ARROWS)

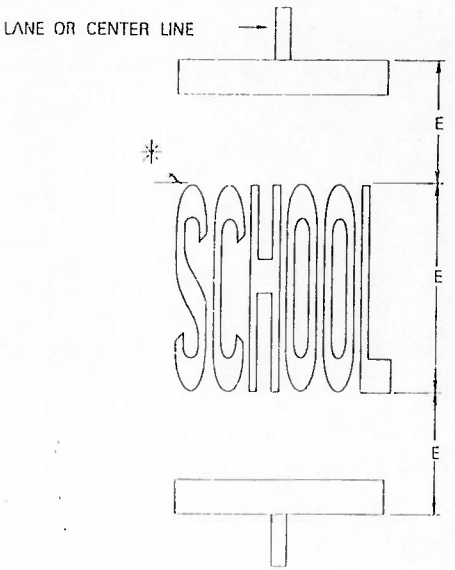


THROUGH ARROW

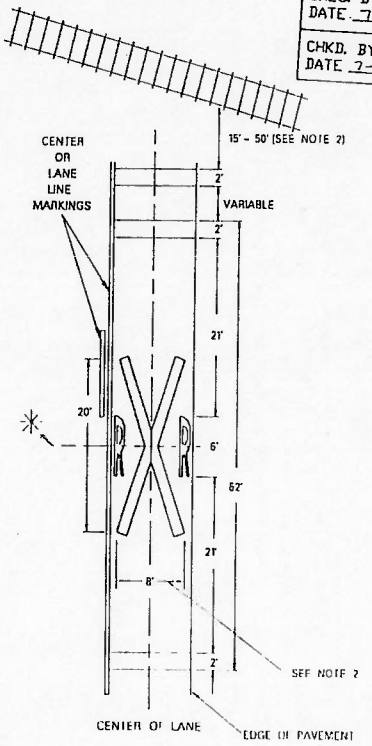


NOTE:
STOP LINE LOCATED MIN. 40' FROM
AT LEAST ONE SIGNAL HEAD WHICH APPLIES
TO THAT APPROACH

TYPE	DIMENSIONS (FEET)			
	A	B	C	D
RURAL	30 MIN.	32-80	8	32-80
URBAN	10 MIN.	32-80	8	24-60



TYPE	INCHES
	E
RURAL	96
URBAN	72



NOTES:

1. ON MULTI-LANE APPROACHES, THE TRANSVERSE LINES USED WITH THE RAILROAD SYMBOLS SHALL EXTEND ACROSS ALL APPROACH LANES AND SYMBOLS SHALL BE PLACED IN EACH APPROACH LANE.

2. THE RAILROAD SYMBOL SHALL BE LOCATED SO THAT THE W-94, "RAILROAD ADVANCE WARNING SIGN", IS WITHIN THE TWO TRANSVERSE BOUNDRY LINES OF THE RAILROAD SYMBOL. THE STOP LINE SHALL BE LOCATED FOR BEST SIGHT DISTANCE WITHIN 15 FEET TO 50 FEET OF THE NEAR EDGE OF THE TRACKS. STOP LINES SHALL BE PERPENDICULAR TO THE CENTER LINE OF THE ROADWAY. WIDTH OF "X" MAY VARY ACCORDING TO LANE WIDTH.

3. ON MULTI-LANE APPROACHES, THE TRANSVERSE LINES USED WITH THE WORD "SCHOOL" SHALL EXTEND ACROSS ALL APPROACH LANES WITH A SINGLE WORD "SCHOOL" CENTERED ACROSS THE APPROACH LANES ON TWO LANE ROADWAYS, THE TRANSVERSE LINES SHALL EXTEND ACROSS THE ROADWAY WITH THE WORD "SCHOOL" CENTERED ACROSS THE ROADWAY CENTER OR LANE LINES SHALL NOT PASS THROUGH THE "SCHOOL" MARKING

4. THE STOP LINE SHOULD BE PLACED WHERE CROSS-CORNER VISION IS MAXIMUM, IN NO CASE MORE THAN 30 FEET OR LESS THAN 4 FEET FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY. FOR NORMAL INTERSECTIONS A MAXIMUM DISTANCE OF 10 FEET IS RECOMMENDED.

   IF A MARKED CROSSWALK IS PRESENT, THE STOP LINE SHOULD BE PLACED 4 FEET IN ADVANCE OF AND PARALLEL TO THE NEAREST CROSSWALK.

5. FOR TRAFFIC PAINT AND POLYESTER APPLICATION, TEMPLATE GAPS SHALL BE FILLED WITH MARKING MATERIAL IN ACCORDANCE WITH 641.03. FOR EXTRUDED THERMOPLASTIC MATERIAL, THESE GAPS MAY REMAIN UNFILLED IN ACCORDANCE WITH 644.03.

6. USE STANDARD DIMENSIONS CONFORMING TO REQUIREMENTS OF OMUTCD SECTION 3D.40 THROUGH 3D.43 INCLUSIVE. (THAT IS THE 1977 METRIC EDITION STANDARD ALPHABET HIGHWAY SIGNS AND PAVEMENT MARKING WITH ERRATA

INDICATES STATION REFERENCE POINT

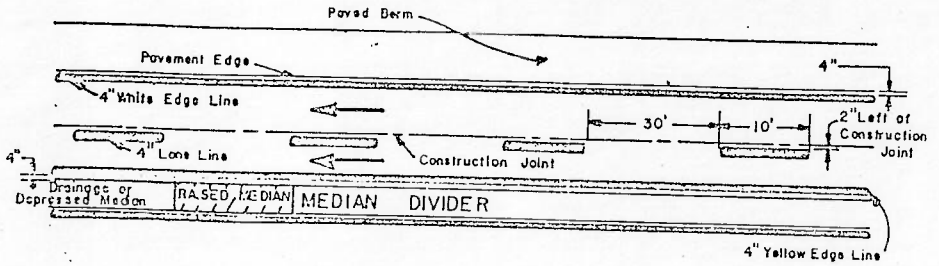
PAVEMENT MARKING TYPICAL DETAILS

CALC. BY [illegible] DATE 2-24-91
CHKD. BY SRM DATE 7-30-91

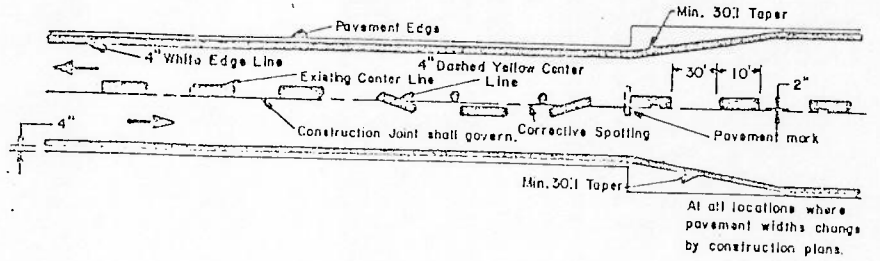
FED.RD DIV	STATE	PROJECT	
5	OHIO		

PLAN NO. 120

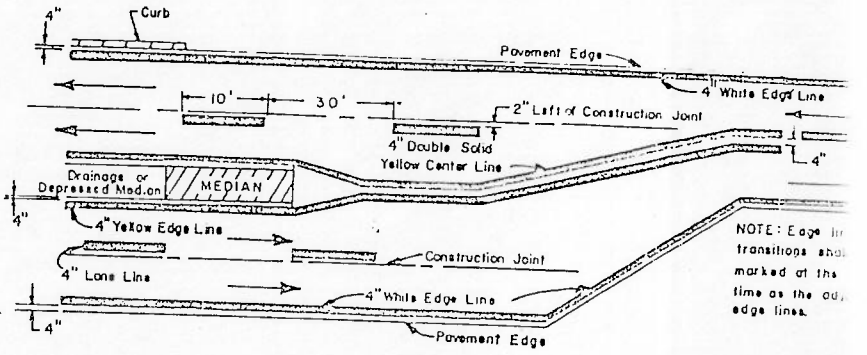
FREEWAY & EXPRESSWAY MAINLINE MARKINGS



TWO LANE MARKINGS



MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKIN



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.

[illegible] OF TRANSP.
PAVEMENT MARKING
TYPICAL DETAILS

QUANTITIES INCLUDE CL. AROUND OUTSIDE OF PAINTED ISLAND

CENTER LINE SUB-SUMMARY

COS-83-0.00

CHKD. BY [illegible]
DATE 2-3-91

PLAN NO. 120

COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	CENTER LINES QUANTITIES TOTAL MILES	CENTER LINES QUANTITIES EQUIVALENT SOLID LINE	PARTICIPATION TYPE IRG	FG	RSG	NON FED STATE	REMARKS
COS	SR 83	0.00	9.02	9.02	13.667				PART 1	MUS. CO. LINE TO SR 16
	~~SR 83~~	~~8.87~~	~~8.96~~	~~0.09~~	~~0.09~~				~~PART 1~~	~~USED FOR TRANSVERSE LINE SEE SHEET 9~~
TOTALS				~~9.11~~ 9.02	~~13.876~~ 13.667					

EDGE LINE SUB-SUMMARY

COS-83-0.00

CHKD. BY SRM
DATE 7-10-91

PLAN NO. 120

CO.	ROUTE	S.L.M.		WHITE EDGE LINE QU.			YELLOW EDGE LINE QU.			PARTICIPATION TYPE				EDGE LINE TOTAL MILES	REMARKS
		FROM	TO	TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP	IRG	FG	RSG	NON FED STATE		
COS	SR 83	0.00	9.02	18.04	9.02								PART 1	18.04	MUS. CO. LINE TO SR 16

DEPARTMENT OF TRANSPORTATION
M&R707 REV. 9-1-83

PAVEMENT MARKING SUB-SUMMARY

CALC. BY [illegible] DATE 7-24-87
CHKD. BY SCA DATE 7-24-87

COS-83-0.00
PLAN NO. 120

644 THERMOPLASTIC

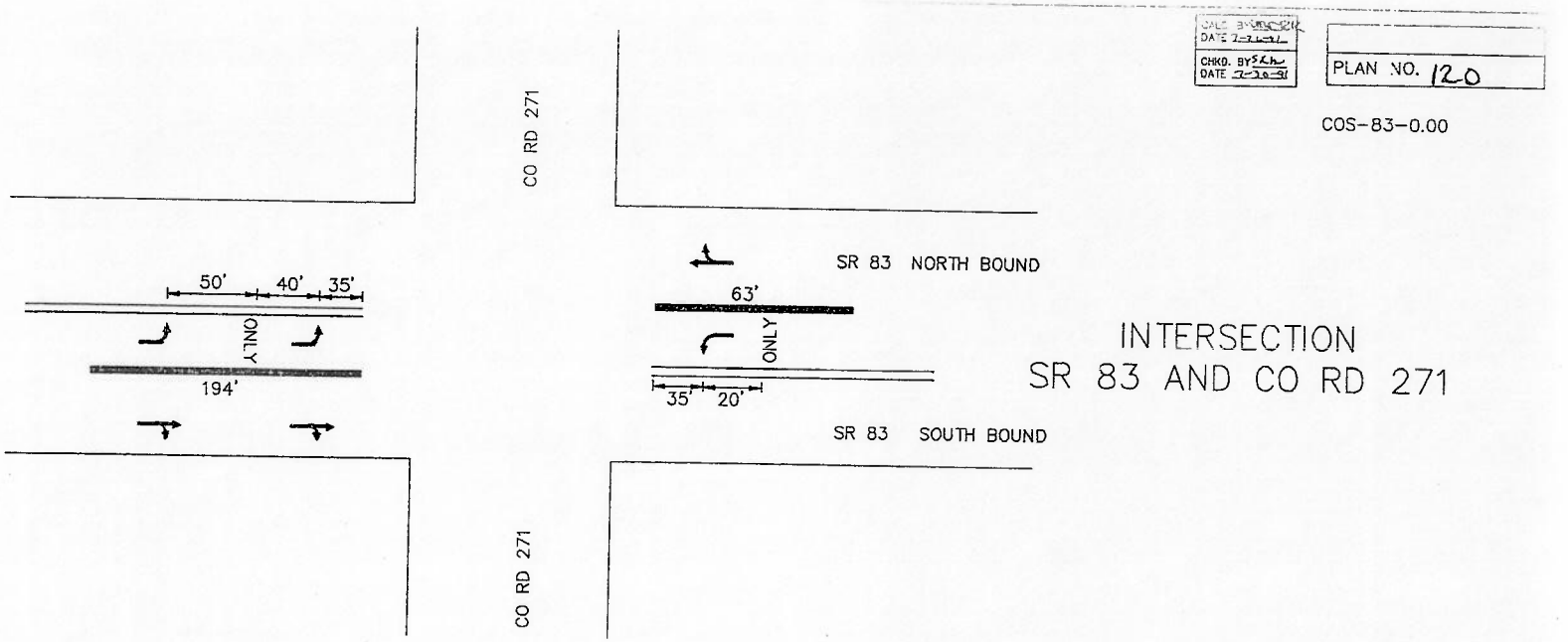
CO.	ROUTE	SIDE	24" TRANSVERSE LINES WHITE LIN.FT.	24" TRANSVERSE LINES YELLOW LIN.FT.	STOP LINE 24" LIN.FT.	12" CROSSWALK LINES WHITE LIN.FT.	WORD ON PAVEMENT ONLY 96" EACH	WORD ON PAVEMENT SCHOOL 96" EACH	LANE ARROWS TURN LEFT EACH	LANE ARROWS TURN RIGHT EACH	LANE ARROWS THRU EACH	LANE ARROWS COMB. EACH	RAILROAD SYMBOL ON PAVEMENT EACH	DOTTED LINES WHITE LIN.FT.	DOTTED LINES YELLOW LIN.FT.	8" CHANNEL LINE LIN.FT.	REMARKS
COS	TR 15	LT			29												
	CO RD 410	RT			15												PLACE 25' FROM ℄ SR
	TR 276	RT			15												PLACE 63' FROM ℄ SR
	CO RD 429	LT			18												PLACE 30' FROM ℄ SR
	CO RD 275	LT			14												PLACE 37' FROM ℄ SR
	ROAD	LT			9												PLACE 31' FROM ℄ SR
	TR 476	LT			7												PLACE 26' FROM ℄ SR
	TR 278	LT			9												PLACE 30' FROM ℄ SR
	TR 146	RT			26												PLACE 30' FROM ℄ SR
	CO RD 277	LT			10												PLACE 28' FROM ℄ SR
	TR 450	RT			8												PLACE 25' FROM ℄ SR
	CO RD 7	RT			10												PLACE 75' FROM ℄ SR
	CO RD 91	LT			10												PLACE 95' FROM ℄ SR
	CO RD 91	LT			12												PLACE 28' FROM ℄ SR
	OTSEGO RD.	RT			20												PLACE 25' FROM ℄ SR
	TR 270	LT			30												PLACE 52' FROM ℄ SR
	SR 83 BEFORE CR 271						1		1								PLACE 34' FROM ℄ SR
	INDUSTRIAL PARK RD.	RT			13											63	SEE SHEET 9
	INDUSTRIAL PARK RD.	LT			15												PLACE 52' FROM ℄ SR
	SR 83 AFTER CR 271						1		2								PLACE 57' FROM ℄ SR
	SR 83 @ SR 16			356	35		2		1	1						194	SEE SHEET 9
																200	SEE SHEET 9
COS	TOTALS PART 1			356	305		4		4	2		3				457	

DRAWN BY SCK DATE 7-24-91
CHKD. BY SAH DATE 7-24-91

PLAN NO. 120

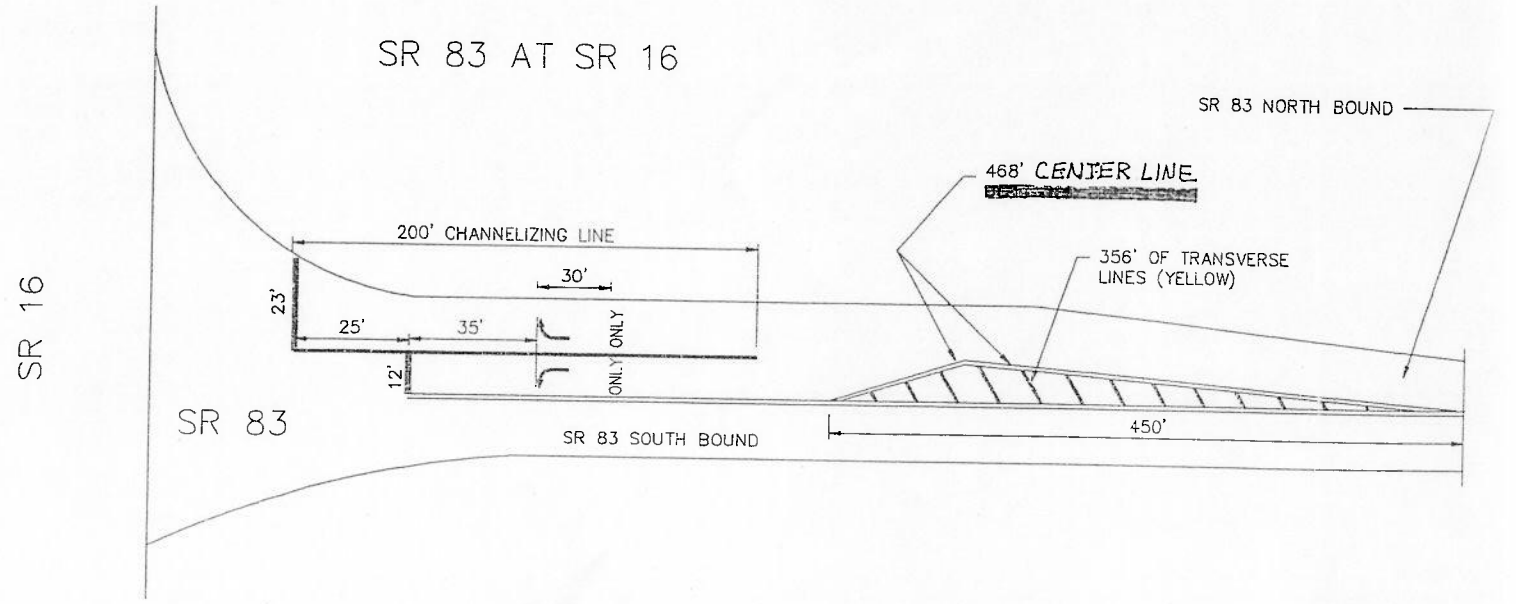
COS-83-0.00

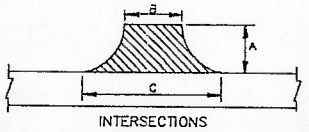
NOT TO SCALE



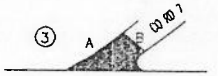
INTERSECTION SR 83 AND CO RD 271

SR 83 AT SR 16





INTERSECTIONS



SR 83

SR 83

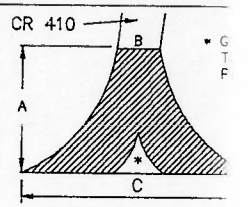
EXTRA AREA AND DEDUCTIONS

CALC. BY DBS DATE 7-30-97
CHKD. BY SKL DATE 7-30-97

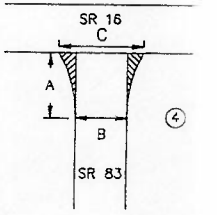
PLAN NO. 120

COS-83-0.00

PART	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS A IN FEET	INTERSECTIONS B IN FEET	INTERSECTIONS C IN FEET	AREA IN SQ. YD.	PROPOSED ITEMS 407 TACK COAT @ 0.05 gal./s.y. GAL.	407 COVER AGGR. @ 1 lbs./s.y. TON	202 WEARING COURSE REMOVED AS PER PLAN 3" SQ.YD.	ASPHALT CONCRETE CU. YD. ITEM 403	ASPHALT CONCRETE CU. YD. ITEM 448 SURFACE COURSE TYPE 1 AC-20	THICK INCHES	EXISTING SURFACE	408 BITUMINOUS PRIME COAT @ 0.40 gal./s.y. GAL.
1	SR 83	COS	LT	TR 15	60	20	108	427	21				36	3.00	ASPH	
			RT	CO RD 410 ①	52	26	126	439	22				37	3.00	ASPH	
			RT	TR 276	43	30	70	239	12				20	3.00	ASPH	
			LT	CO RD 429	63	20	112	462	23				39	3.00	ASPH	
			LT	CO RD 275	31	27	86	195					16	3.00	GRAVEL	78
			LT	ROAD	21	15	44	69	3				6	3.00	ASPH	
			LT	TR 476	20	15	44	66	3				6	3.00	ASPH	
			LT	TR 278	23	22	59	104	5				9	3.00	ASPH	
			RT	TR 146	47	21	100	316	16				26	3.00	ASPH	
			LT	CO RD 277	25	16	51	93	5				8	3.00	ASPH	
			RT	TR 450 ②	201	17		190	10				16	3.00	ASPH	
			RT	CO RD 7 ③	269	25		374	19				31	3.00	ASPH	
			LT	CO RD 91	32	17	57	132	7				11	3.00	ASPH	
			LT	CO RD 91	30	18	54	120	6				10	3.00	ASPH	
			RT	CO RD 91 (OTSEGO AVENUE)	56	26	124	467	23				39	3.00	ASPH	
			LT	TR 270	61	24	120	488	24				41	3.00	ASPH	
			LT	CO RD 271	61	24	120	488	24				41	3.00	ASPH	
			RT	CO RD 271	80	24	147	760	38				63	3.00	ASPH	
				SR 83 @ SR 16 ④	107	36	213	1052	53				88	3.00	ASPH	
		TOTALS		CARRIED TO SHEET 11				6481	314				543			78



SR 83



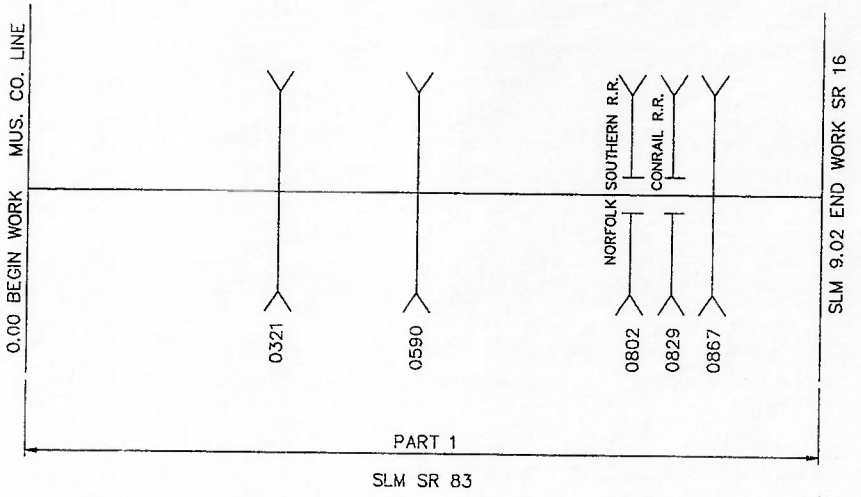
DEPARTMENT OF TRANSPORTATION
M&R707 REV. 9-1-83

ASPHALT CONCRETE

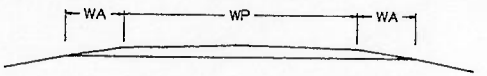
COS-83-0.00

CALC. BY DRW/DS DATE 1-14-91
CHKD. BY SKA DATE 1-30-91

PLAN NO. 120



TYPICAL 1



BRIDGE TREATMENT

COS-83-0321	30.42'X 30.08'	SEE SHEET 13
COS-83-0590	39'X 31.5'	SEE SHEET 13
COS-83-0802	138.52'X 42.5'	SEE SHEET 13
COS-83-0829	155.06'X 42.5'	SEE SHEET 13
COS-83-0867	485.5X 42.5'	SEE SHEET 13

(1) BRIDGE LENGTH X PAVEMENT WIDTH (2) FIELD MEASURED (3) AVERAGE

PAVEMENT DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN. FT.	WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	PROPOSED PAVEMENT 407 TACK COAT @ 0.05 gal./s.y. GALS.	407 COVER AGGR. lbs./s.y. TONS	ASPHALT CONCRETE ITEM 448 THICK INCHES AVG.	ITEM 448 INTERMEDIATE COURSE, TYPE 2 AC-20 CU.YDS.	ITEM 448 THICK INCHES	ITEM 448 SURFACE COURSE, TYPE 1 AC-20 CU.YDS.	ITEM ____ THICK INCHES CU.YDS.	202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE, AS PER PLAN EACH	408 BITUMINOUS PRIME COAT GAL	614 TEMPORARY CENTER LINE CLASS II MILE
1	SR 83	0.00-8.66	8.66	45725	24(2)	1	404	121933	6097		1.75	5927	1.25	4234				17.32
		8.66-8.71	0.05	264	30(2)(3)	1	404	880	44		1.75	43	1.25	31				0.1
		8.71-8.76	0.05	264	36(2)	1	404	1056	53		1.75	51	1.25	37				0.1
		8.76-8.81	0.05	264	30(2)(3)	1	404	880	44		1.75	43	1.25	31				0.1
		8.31-8.87	0.06	317	24	1	404	845	42		1.75	41	1.25	29				0.12
		8.87-8.93	0.06	317	30(2)(3)	1	404	1057	53		1.75	51	1.25	37				0.12
		8.93-9.02	0.09	475	36(2)	1	404	1900	95		1.75	92	1.25	66				0.18
(1)		DEDUCT FOR BRIDGES						(2586)	(129)			(126)		(90)				
		EXTRA AREAS SEE SHEET 10						6481	314					543			78	
	EXTRA TACK COAT FOR LONGITUDINAL JOINT								138									
	TOTALS	PART 1	9.02	47626				132446	6751			6122		4918		850	78	18.04

DEPARTMENT OF TRANSPORTATION
M & R 684 REV.9-1-79

PAVED SHOULDERS

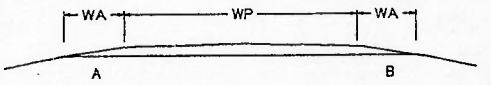
COS-83-0.00

FED. REGION	STATE	PROJECT	
5	OHIO	1	

CALC. BY PEW, DK DATE 7-26-91
CHKD. BY SRM DATE 7-30-91

PLAN 12C

TYPICAL 1



PAVED SHOULDER DATA *AS PER PLAN

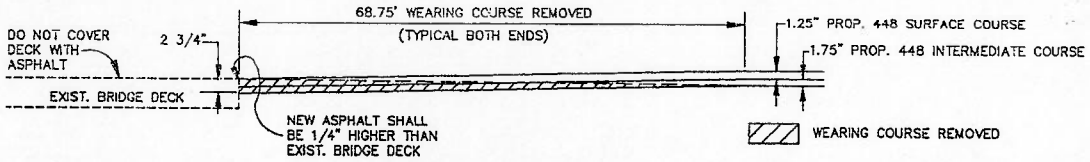
PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH UN.FT.	TYPICAL	PROPOSED WIDTH (FT.) A	B	C	D	SHOULDER AREA SQ.YDS.	203 LINEAR GRADING DEPTH INCHES	**STA.	448 INTERMEDIATE COURSE TYPE 2 AC-20 AVG. THICK INCHES	CU.YDS.	448 SURFACE COURSE TYPE 1 AC-20 THICK INCHES	CU.YDS.	408 PRIME Bit. Matl. @..... gal./s.y. GALS.	409 SEAL Bit. Matl. @..... gal./s.y. GALS.	Aggr. @..... c.y./s.y. CU.YDS.	617 COMPACTED AGGREGATE TYPE B* 2'X 3.5" AVER. THICKNESS TO BACK UP PAVED BERM CU.YDS.	617 WATER MGAL.	407 TACK COAT @ 0.05 gal./sq.yd. GALS.	COVER AGGREGATE @ 7 lbs./s.y. TON	40- ASPH CONC AVE THICK CU.
1	SR 83	0.00-9.02	9.02	47626	1	2	2			21167			1.75	1029	1.25	735				2058		1059		
	TOTAL	PART 1	9.02	47626						21167				1029		735				2058	19	1059		

DEPARTMENT OF TRANSPORTATION
M&R 679 REV.9-1-79

BRIDGE DECK TREATMENT

OHIO
FHWA REGION 5
PLAN NO. 120

COS-83-0.00

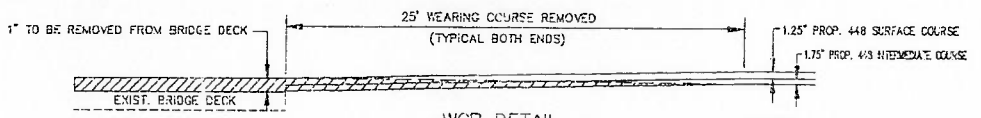


* BUTT JOINT DETAIL

COS-83-0802
COS-83-0829
COS-83-0867

* INCLUDES PAVED BERMS — BRIDGE DECK DATA — ** APPROACHES ONLY-INCLUDES PAVED BERMS

PART	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS) LIN.FT.	WIDTH LIN.FT.	BRIDGE DECK AREA SQ.YDS.	202 WEARING COURSE REMOVED SQ.YDS.	BRIDGE DECK REPAIR ☐ SS-845 LATEX MODIFIED CONCRETE ☐ SS-850 DENSE CONCRETE: ____" THICK OVERLAY SQ.YDS.	VARIABLE THICKNESS OVERLAY CU.YDS.	FULL-DEPTH REPAIR CU.YDS.	SPECIAL: PATCHING TYPE	PATCHING SQ.YD.	STEEL DRIP STRIP SQ.FT.	DECK WATERPROOFING: MEMBRANE WATERPROOFING SHEET TYPE 1 SQ.YDS.	MEMBRANE WATERPROOFING SQ.YDS.	ASPHALT CONCRETE: 448 INTERMEDIATE COURSE TYPE 2 AC-20 CU.YD.	THICK INS.	THICK INS.	448 SURFACE COURSE TYPE 1 CU.YDS.	407 TACK COAT @0.05 GAL/SQYD GAL	614 TEMPORARY CENTER LINE CLASS 1 (FOR WCR AREAS) MILE
1	COS-83-0321	30.42	30.08	101.7	257*									5	1.75	1.25	4	5	0.01
	COS-83-0590	39	31.5	136.5	292*									7	1.75	1.25	5	7	0.02
	COS-83-0802	138.52	42.5	654	428**														0.03
	COS-83-0829	155.06	42.5	732	428**														0.03
	COS-83-0867	486.5	42.5	2293	519**														0.03
1	TOTALS			3917	1924									12			9	12	0.12



WCR DETAIL
COS-83-0590
COS-83-0321

FHWA679 (STAND)

GENERAL SUMMARY

COS-83-0.00

CALC. BY DBL DK DATE 7-24-97

CHKD. BY SEK DATE 7-30-97

PLAN NO. 120

14 15

ITEM	PART 1	PART 2	PART 3	PART 4	PART 5	PART 6	PART 7	PART 8	ITEM	ITEM EXT. NO.	GRAND TOTAL PART 1	UNIT	DESCRIPTION
202	850								202	54101	850	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE, AS PER PLAN
202	1924								202	23500	1924	SQ.YD.	WEARING COURSE REMOVED
202	1713								202	23501	1713	SQ.YD.	WEARING COURSE REMOVED, AS PER PLAN
SPECIAL	27								SPECIAL	20363000	27	HOUR	GRADER RENTAL
SPECIAL	14								SPECIAL	20363500	14	HOUR	LOADER RENTAL
407	7835								407	10000	7835	GALLON	TACK COAT
408	78								408	10000	78	GALLON	BITUMINOUS PRIME COAT
448	7163								448	15000	7163	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, AC-20
448	53								448	16000	53	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (DRIVEWAYS), AC-20
448	5770								448	16000	5770	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20
448	65								448	16001	65	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20, AS PER PLAN
614	LUMP								614	11000	LUMP	LUMP	MAINTAINING TRAFFIC
614	68								614	12460	68	EACH	WORK ZONE MARKING SIGN
614	18.04								614	214000	18.04	MILE	TEMPORARY CENTER LINE, CLASS 2
614	0.12								614	21000	0.12	MILE	TEMPORARY CENTER LINE, CLASS 1
617	19								617	25000	19	MGAL.	WATER
617	2058								617	10101	2058	CU.YD.	COMPACTED AGGREGATE, TYPE A, AS PER PLAN

GENERAL NOTES

TRAFFIC:
Traffic shall be maintained at all times. The length of restricted traffic zones shall be kept to a minimum consistent with the specification requirements for protection of completed courses.

RAILROAD CROSSINGS:
The new surface course shall be feathered or butt jointed to meet the rail grades as specified.

TACK COAT:
The tack coat operation shall be as determined at a pre-construction conference as per 407.05, and application rates shall not exceed 0.10 gal. per sq. yd.
In addition to the requirements of 407.05 the tack coat shall be applied immediately ahead of the paving operation or as otherwise determined by the Project Engineer.

INTERMEDIATE COURSE, SPOT LEVELING AND PATCHING:
This material shall be placed in a seperate operation where and as directed by the Engineer.

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 these plans.

Spreading equipment shall be capable of having an automatic profile control device added to be used when directed by the Engineer. The minimum length of the ski for this device shall be ☒ 30ft.

CONTROL OF ONE WAY TRAFFIC:
In addition to the requirements of the Ohio Manual of Uniform Traffic Control Devices and Material Specifications the following requirements shall apply.
Communications between flaggers shall be by two-way radio during the paving operations.
Payment for the above shall be included in item 614, Maintaining Traffic.

COVER AGGREGATE:
Cover aggregate shall conform to 703.06.

BRIDGES:
The proposed depth of asphalt resurfacing shall be altered to match the proposed depth of the treatment on the structures. The resurfacing thickness shall be adjusted as required at the approximate rate of 25 ft. per inch of difference in thickness unless otherwise directed by the Engineer.

CALC. BY DEW DATE 7-16-91
CHKD. BY [illegible] DATE 7-22-91

GENERAL SUMMARY

COS-83-0.00

PLAN NO. 120

ITEM	PART 1	PART 2	PART 3	ITEM	ITEM EXT. NO.	GRAND TOTAL PART	UNIT	DESCRIPTION
619	LUMP			619	15000	LUMP	LUMP	FIELD OFFICE, TYPE A
632	~~1000~~			632	64900	1000	LIN.FT.	LOOP DETECTOR WIRE, TYPE E
632	~~600~~			632	27500	600	LIN.FT.	LOOP DETECTOR PAVEMENT CUTTING
642	18.04			642	00102	18.04	MILE	EDGELINE, TYPE 2
642	~~9.02~~			642	00302	9.02	MILE	CENTERLINE, TYPE 2
644	356			644	00700	356	LIN.FT.	TRANSVERSE LINES
644	305			644	00500	305	LIN.FT.	STOP LINE
644	4			644	01410	4	EACH	WORD ON PAVEMENT, 96"
644	8			644	01300	8	EACH	LANE ARROW
644	457			644	00400	457	LIN.FT.	CHANNELIZING LINE
SPECIAL	4			SPECIAL	69050000	4	EACH	MAILBOX SUPPORT

GENERAL SUMMA