OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY SKP DATE 8-8-91
CHKD. BY SKP DATE 8-23-91

FHWA REGION	STATE	FEDERAL PROJECT	PLAN NO.
5	OHIO		147

1/23

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII BEGIN	PROJECT TERMINII END	NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
1	PER	SR 188	(0.00-3.86)	0.00	4.20	4.20			
2	PER	SR 188	(4.20-4.36)	4.20	4.48	0.28			THORNVILLE
3	PER	SR 204	(0.00)(3.15)(9.39)	0.00	9.53	8.40			
4	PER	SR 204	(2.16-2.89)	2.16	3.15	0.99			THORNVILLE
5	PER	SR 204	(9.25)(9.53-9.67)	9.25	10.06	0.81			GLENFORD
6	PER	SR 668	(23.01)	23.01	26.84	3.63			
7	LIC	SR 668	(0.00-1.04)	0.00	2.73	2.73			

1087

SHEET 5A HAS BEEN ADDED

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.

1087(91)

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. 1-7 and provisions for the maintenance and safety of traffic will be indicated in the proposal.

Approved Date 8-8-91 — Cash Miel — District Deputy Director of Transportation

LC Approved Date 9-9-91 — R.D. Hankbumi PFE — Engineer of Bridges

Approved Date _____ — Engineer of Maintenance

Approved Date 9-30-91 — Alexander H. Hyndo — Deputy Director, Operations

Approved Date _____ — Assistant Deputy Director, Program Development

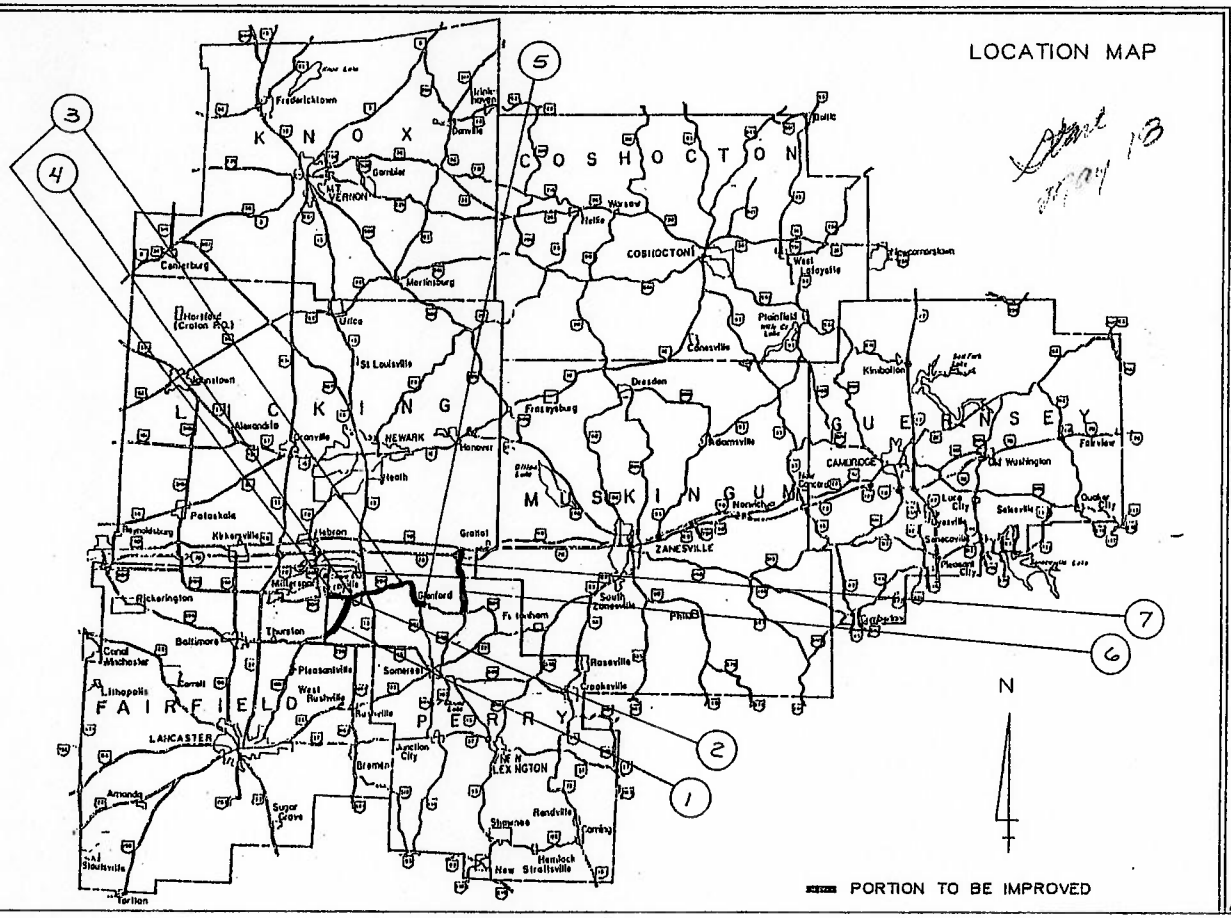
Approved Date _____ — Chief Engineer, Construction

Approved Date _____ — Chief Engineer, Design

Approved Date _____ — Assistant Director, Department of Transportation

Approved Date 9-30-91 — James H. Kemp — Director, Department of Transportation

LOCATION MAP



STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-5	10-01-87	814	1-21-88
BP-6	10-01-87	915	1-21-88
MT-97.11	10-04-89		
MT-99.10	11-14-86		
MT-99.20	4-29-88		
MT-97.10	4-29-88		

1087(91)

12-17-91

RB

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) ARE CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PART	1	2	3	4	5	6	7
A	20	2	30	2	4	14	8
B	10	1	15	1	2	7	4
C	10	1	15	1	2	7	4

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	2	3	4	5	6	7
CU.YD.	52	—	105	—	12	35	6

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.

PAVED SHOULDERS

THE PAVED SHOULDER (SHOWN ON SHEET 19) SHALL BE APPLIED IN TWO COURSES. THE FIRST BEING 1" OF ITEM 448 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, AC-20 AND IT SHALL BE APPLIED AT THE SAME TIME AS THE FIRST COURSE OF ASPHALT 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 OF ASPHALT ON THE ROADWAY, AS DIRECTED BY THE ENGINEER.

MANHOLES, CATCH BASINS, AND WATER VALVE BOXES ADJUSTED TO GRADE

SEWER MANHOLES, CATCH BASINS AND WATER VALVE BOXES THAT ARE TO BE ADJUSTED TO GRADE ARE LISTED BELOW. THESE NUMBERS ARE TAKEN FROM FIELD COUNTS. HOWEVER, THE ACTUAL NUMBER THAT ARE TO BE ADJUSTED TO GRADE WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION, PAYMENT SHALL BE FOR THE ACTUAL NUMBERS OF EACH ITEM THAT ARE ADJUSTED TO GRADE AS DETERMINED BY THE ENGINEER.

GAS VALVE BOXES AND TELEPHONE COMPANY MANHOLES AND ANY OTHER UTILITIES ENCOUNTERED ON THE PROJECT SHALL BE ADJUSTED TO GRADE BY THE RESPECTIVE OWNERS.

PART	WATER VALVE	MANHOLES	CATCH BASIN
2	2 EACH	1 EACH	2 EACH
4	3 EACH	4 EACH	6 EACH
5			1 EACH

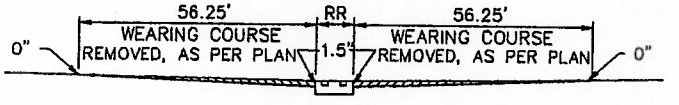
ITEM 408 BITUMINOUS PRIME COAT

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

BUTT JOINTS AT RAILROAD

A QUANTITY OF WEARING COURSE REMOVED, AS PER PLAN HAS BEEN CALCULATED TO BE USED FOR BUTT JOINTS AT BOTH SIDES OF THE RAILROAD TRACKS AT SLM 23.36. SEE THE DETAIL BELOW FOR LENGTHS OF REMOVAL; FOR FURTHER INFORMATION SEE DRAWING BP-5, 10-1-87.
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 202 WEARING COURSE REMOVED, AS PER PLAN 225 S.Y. (PART 6)



BUTT JOINT DETAIL AT RAILROAD
SLM 23.26

PART 6

GENERAL NOTES

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY SKB DATE 2-22-97
CHKD. BY [illegible] DATE 2-23-97

PLAN NO. 147

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.

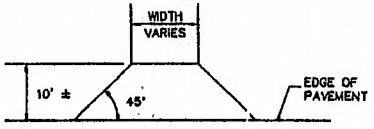
ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PAYMENT FOR ALL OF THE ABOVE REMOVAL WORK SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL – LOADER RENTAL, AND 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.

	PART 1	2	3	4	5	6	7	
ITEM SPECIAL – GRADER RENTAL	13	1	25	2	1	11	8	HOUR
ITEM SPECIAL – LOADER RENTAL	6	1	13	1	1	5	4	HOUR

RESIDENCE AND COMMERICAL 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 AND/OR PAVED BERM. FIELD DRIVES OR 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 THE WORK ON DRIVES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC-20 (DRIVEWAYS).

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSE DESCRIBED ABOVE.



PART 1	2	3	4	5	6	7	
31	9	53	28	28	18	11	CU.YD.

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 SPECIFICATIONS 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.

UTILITIES NOTIFICATION

COOPERATION WITH THE FOLLOWING UTILITY COMPANIES SHALL BE AS DESCRIBED IN SECTION 105.06 OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS.

COLUMBIA GAS TRANSMISSION CORP.
SUNBERRY WOODS OFFICE PARK
P.O. BOX 6164
4111 EXECUTIVE PARKWAY
WESTERVILLE, OHIO 43081

ATTN: MARK BRODT
(614) 895-5033

OHIO BELL TELEPHONE CO.
150 E. GAY ST., ROOM 6F
COLUMBUS, OHIO 43215

ATTN: DAVE ACKISON, ENGR.
(614) 223-8535

COLUMBIA GAS OF OHIO
942 W. GOODALE BLVD.
P.O. BOX 2586
COLUMBUS, OHIO 43212

ATTN: CHRISTINE POPELLA
MYRON HOSKINS
(614) 460-2240

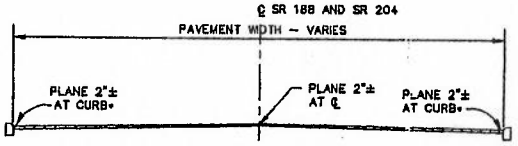
NATIONAL GAS AND OIL CORP.
1500 GRANVILLE RD.
P.O. DRAWER AF
NEWARK, OHIO 43055-0693

ATTN: DAVE DETTY
(614) 344-2102

GENERAL NOTES

ITEM 254 – PAVEMENT PLANING, BITUMINOUS (PARTS 2 AND 4)

THE AREAS DESIGNATED ON THIS SHEET SHALL BE PLANED AS DIRECTED BY THE ENGINEER. FEATHERING AT EACH END OF THE PLANED AREAS SHALL BE AT A RATE OF 1 INCH IN 25 FEET. INTERSECTING STREETS AND DRIVEWAYS WITHIN THE PLANED AREAS SHALL BE PLANED AT A RATE OF 1 INCH IN 10 FEET. THE ENGINEER WILL DECIDE AT THE TIME OF CONSTRUCTION WHICH DRIVES SHALL BE PLANED. PLANING DEPTHS AND LOCATIONS SHOWN ARE APPROXIMATE, FINAL PLANING DEPTHS AND LOCATIONS SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
BOTH SIDES OF PAVEMENT THAT IS BEING PLANED SHALL BE BROUGHT UP TO THE SAME ENDING POINT AT THE END OF EACH CONSTRUCTION DAY; ALSO, PLANING AT THE END OF EACH DAY SHALL FEATHER UP SO THAT NO MORE THAN A 1" BUMP SHALL EXIST. THE NEXT DAY THAT PLANING WORK IS RESUMED THE DEPTH SPECIFIED IN THE PLAN OR BY THE ENGINEER SHALL BE RESUMED FROM PREVIOUS DESIGNATED DEPTHS.
EXTREME CAUTION SHALL BE USED WHEN PLANING DUE TO THE BRICK UNDER THE EXISTING ASPHALT. IT IS PREFERRED THAT THE PLANING OPERATION DOES NOT EXPOSE THE BRICK, IF BRICK IS EXPOSED THE PLANING DEPTH SHALL BE DECREASED.
WHEN PLANING IN THE THORNVILLE AREA EXTREME CAUTION SHALL BE USED WHEN PLANING AROUND MANHOLES, WATER VALVES, CATCH BASINS, ETC.
THE INTENT OF THE PLANING ON THIS PROJECT IS TO ACHIEVE MORE CURB HEIGHT FOR MAXIMUM DRAINAGE OF ROADWAYS.
AFTER THE PLANING OPERATION HAS BEEN PERFORMED ON ALL DESIGNATED AREAS AND PATCHING OF PLANED SURFACE HAS BEEN ACCOMPLISHED THE ENTIRE ROADWAY WIDTH SHALL BE OVERLAID WITH ~~####~~ THE DESIGNATED THICKNESSES OF ASPHALT AS SHOWN ON THE ASPHALT CONCRETE DATA SHEETS; PLANING QUANTITIES ARE ALSO SHOWN ON THOSE SHEETS IN THERE RESPECTIVE AREAS (SHTS. 16 AND 17).
PAYMENT WILL BE FOR THE ACTUAL AMOUNT OF SQ. YDS. OF PLANING AS MEASURED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.



PLANING DETAIL

* NOTE: SOME AREAS ON SR 188 DO NOT HAVE CURB – THOSE AREAS SHALL BE PLANED IF DESIGNATED TO DO SO ON SHT. 16 OR AS DIRECTED BY THE ENGINEER.

ITEM 254 – PATCHING PLANED SURFACE

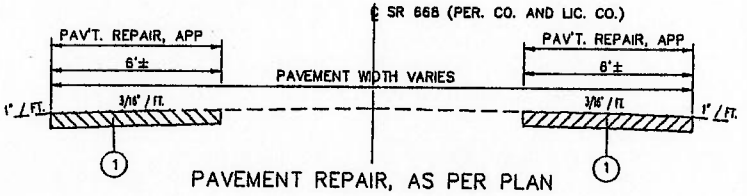
A QUANTITY OF SURFACE PATCHING HAS BEEN ADDED TO THE PLAN TO REPLACE UNSOUND PAVEMENT RESULTING FROM PLANING. AREAS TO RECEIVE THIS TREATMENT SHALL BE DETERMINED BY THE ENGINEER.
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSE DESCRIBED ABOVE.

ITEM 254 PATCHING PLANED SURFACE 230 SQ.YD. (PART 2) 290 SQ.YD. (PART 4)

ITEM 253 – PAVEMENT REPAIR, AS PER PLAN

QUANTITIES FOR PAVEMENT REPAIR HAVE BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER WHERE THE EXISTING PAVEMENT IS DETERIORATED. FINAL LOCATIONS OF PAVEMENT REPAIR SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 6". REPLACEMENT MATERIAL WILL BE 6" OF ITEM 301, BITUMINOUS AGGREGATE BASE (PLACED AND COMPACTED IN TWO LAYERS OF EQUAL THICKNESS). ALL EXCAVATION NEEDED TO ACHIEVE THE PROPER SLOPES FOR DRAINAGE ON BERMS SHALL BE PAID FOR UNDER ITEM 253, PAVEMENT REPAIR, AS PER PLAN. AFTER ALL PAVEMENT REPAIR HAS BEEN ACCOMPLISHED, THE ENTIRE SURFACE INCLUDING BERMS WILL BE OVERLAID WITH 1" OF ITEM 448 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, THEN 1.25" OF ITEM 448 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1.
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN 250 C.Y. (PART 6) 110 C.Y. (PART 7)



PAVEMENT REPAIR, AS PER PLAN

(1) 301 – 6" BITUMINOUS AGGREGATE BASE (PLACED AND COMPACTED IN TWO LAYERS OF EQUAL THICKNESS)

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY SGB DATE 8-22-01
CHKD. BY SAM DATE 8-23-01

PLAN NO. 147

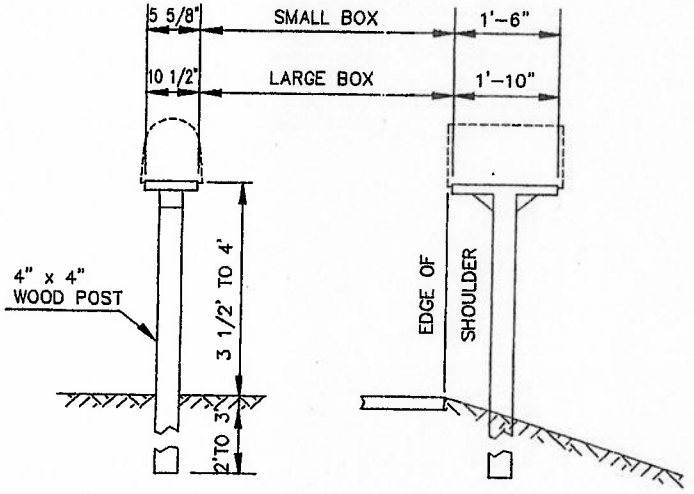
GENERAL NOTES

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	2	3	4	5	6	7
CU.YD.	7	—	14	—	—	3	2



TYPICAL MAILBOX LOCATION AND MOUNTING HEIGHT

EXTRA ASPHALT FOR PRE-LEVELING

A QUANTITY OF ITEM 448 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, AC-20 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, INTERMEDIATE COURSE, TYPE 1, AC-20 CU.YD. (SEE TABLE BELOW)

PART	1	2	3	4	5	6	7
CU.YD.	100	5	125	5	5	180	150

PAVEMENT MARKING TYPICAL DETAILS

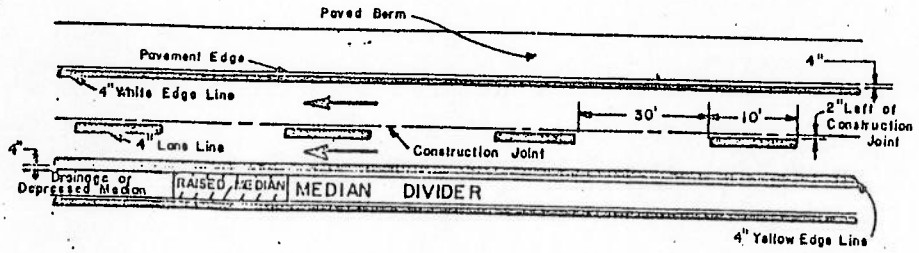
FED. RD. DIV.	STATE	PROJECT	
5	OHIO		

5A
23

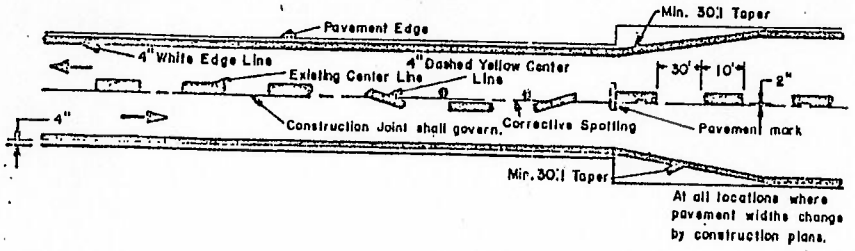
CALC. BY SKO
DATE 8-30-91
CHKD. BY SAM
DATE 8-22-91

PLAN NO. 147
PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

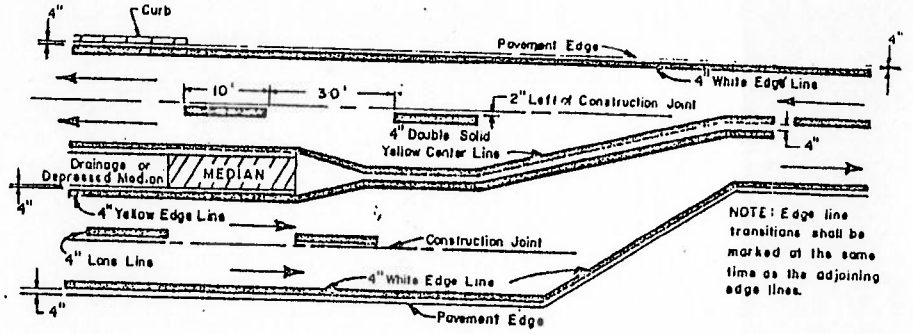
FREEWAY & EXPRESSWAY MAINLINE MARKINGS



TWO LANE MARKINGS



MULTILANE DIVIDED & UNDIVIDED HIGHWAY 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.

DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING TYPICAL DETAILS
DATE 11/80

5B-2

WORD AND SYMBOL MARKING DETAILS

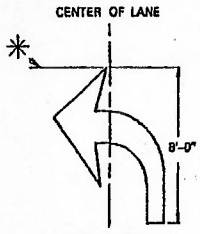
CALC. BY SKB	
DATE 8-7-91	
CHKD. BY JRM	
DATE 8-23-91	

FED RD DIVISION	STATE	PROJECT	
6	OHIO		

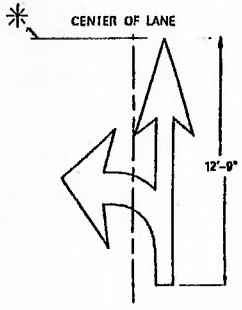
6/23

PLAN NO. 147

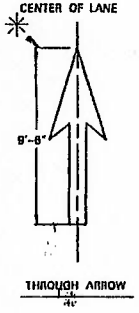
PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00



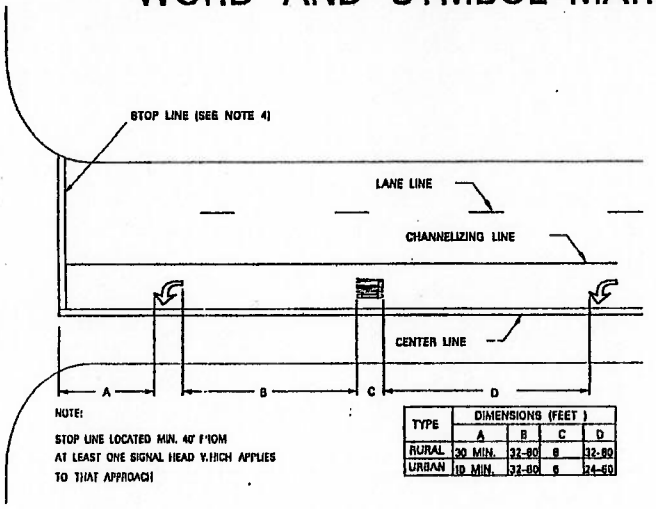
TURN ARROW
(LEFT ARROW SHOWN
RIGHT ARROW OPPOSITE)



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

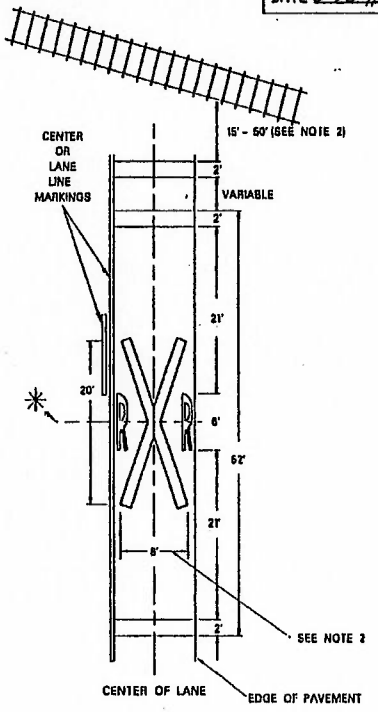


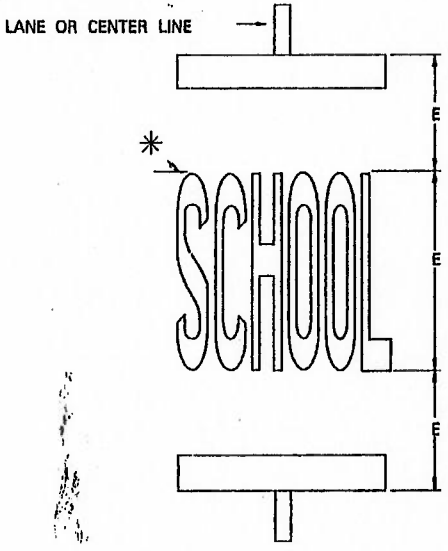
THROUGH ARROW



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	6	32-80
URBAN	10 MIN.	32-80	6	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 641.03.

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

✳ INDICATES STATION REFERENCE POINT

CENTER LINE SUB-SUMMARY

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY JKB DATE 8-22-97
CHKD. BY SKM DATE 8-23-97

PLAN NO. 147

COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	642 CENTER LINES QUANTITIES: TOTAL MILES	642 CENTER LINES QUANTITIES: EQUIVALENT SOLID LINE	PARTICIPATION TYPE: IRG	PARTICIPATION TYPE: FG	PARTICIPATION TYPE: RSG	PARTICIPATION TYPE: NON FED STATE		REMARKS
PER	SR 188	0.00	4.20	4.20	7.569				PART 1		FAI. CO. LINE TO THORNVILLE SCL
PER	SR 188	4.20	4.48	0.28	0.564				PART 2		THORNVILLE SCL TO SR 204
PER	SR 204	0.00	2.16	2.16	3.914				PART 3		FAI. CO. LINE TO THORNVILLE WCL
PER	SR 204	3.15	9.25	6.10	11.053				PART 3		THORNVILLE ECL TO GLENFORD WCL
PER	SR 204	9.39	9.53	0.14	1.102				PART 3		GLENFORD ECL TO GLENFORD WCL
TOTALS				8.40	16.069				PART 3		
PER	SR 204	2.16	3.15	0.99	1.657				PART 4		THORNVILLE WCL TO THORNVILLE ECL
PER	SR 204	9.25	9.39	0.14	0.280				PART 5		GLENFORD WCL TO GLENFORD ECL
PER	SR 204	9.53	10.06	0.47	0.149				PART 5		GLENFORD WCL TO GLENFORD ECL (DEDUCT 0.06 MI. FOR EQUATION)
TOTALS				0.61	0.429				PART 5		
PER	SR 668	23.01	26.64	3.63	6.268				PART 6		SR 204 TO LIC. CO. LINE
LIC	SR 668	0.00	2.73	2.73	5.434				PART 7		PER CO. LINE TO US 40

EDGE LINE SUB-SUMMARY

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY [illegible] DATE 8-22-01
CHKD. BY [illegible] DATE 8-23-01

PLAN NO. 147

8/23

CO.	ROUTE	S.L.M. FROM	S.L.M. TO	WHITE EDGE LINE QU. TOTAL MILES	WHITE EDGE LINE QU. HIGHWAY	WHITE EDGE LINE QU. RAMP	YELLOW EDGE LINE QU. TOTAL MILES	YELLOW EDGE LINE QU. HIGHWAY	YELLOW EDGE LINE QU. RAMP	PARTICIPATION TYPE IRG	PARTICIPATION TYPE FG	PARTICIPATION TYPE RSG	PARTICIPATION TYPE NON FED STATE	EDGE LINE TOTAL MILES	REMARKS
PER	SR 188	0.00	4.20	8.40	4.20								PART 1	8.40	FAI. CO. LINE TO THORNVILLE SCL
PER	SR 188	4.20	4.35	0.30	0.15								PART 2	0.30	THORNVILLE WCL TO SOUTH ST
PER	SR 188	4.35	4.42	0.07	0.07								PART 2	0.07	SOUTH ST. TO FIRST ST.
TOTALS				0.37	0.22									0.37	
PER	SR 204	0.00	2.16	4.32	2.16								PART 3	4.32	FAI. CO. LINE TO THORNVILLE WCL
PER	SR 204	3.15	9.25	12.20	6.10								PART 3	12.20	THORNVILLE ECL TO GLENFORD WCL
PER	SR 204	9.39	9.53	0.28	0.14								PART 3	0.28	BETWEEN GLENFORD ECL AND GLENFORD WCL
TOTALS				16.80	8.40								PART 3	16.80	
PER	SR 204	2.16	2.39	0.46	0.23								PART 4	0.46	THORNVILLE WCL TO BEGINNING OF CURB (ALLEY)
PER	SR 204	2.58	3.15	1.14	0.57								PART 4	1.14	END OF CURB (PARK DR) TO THORNVILLE ECL
TOTALS				1.60	0.80								PART 4	1.60	
PER	SR 204	9.25	9.39	0.28	0.14								PART 5	0.28	GLENFORD WCL TO GLENFORD ECL
PER	SR 204	9.53	9.61B	0.16	0.08								PART 5	0.16	GLENFORD WCL TO EQUATION
PER	SR 204	9.67A	10.06	0.78	0.39								PART 5	0.78	EQUATION TO GLENFORD ECL
TOTALS				1.22	0.61								PART 5	1.22	
PER	SR 668	23.01	26.64	7.26	3.63								PART 6	7.26	SR 204 TO LIC. CO. LINE
LIC	SR 668	0.00	2.73	5.46	2.73								PART 7	5.46	PER CO. LINE TO US 40

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

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

PAVEMENT MARKING SUB-SUMMARY

CALC. BY [illegible] DATE 8-30-91
CHKG. BY [illegible] DATE 2-23-91

PLAN NO. 147

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 72" EACH	WORD ON PAVEMENT ONLY 96" EACH	WORD ON PAVEMENT SCHOOL 72" 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
PART 1	SR 188																		
	NEW SALEM RD	LT			10														PLACE AS DIRECTED
	TR 88	RT			33														PLACE 21' FROM CL SR 188
	HIGH POINT RD	RT			16														PLACE 19' FROM CL SR 188
	HIGH POINT RD	LT			10														PLACE 16' FROM CL SR 188
	TR 82	LT			13														PLACE 15' FROM CL SR 188
	TR 81	LT			15														PLACE 16' FROM CL SR 188
	TR 15	RT			13														PLACE 14' FROM CL SR 188
	TR 390	LT			17														PLACE 16' FROM CL SR 188
	RIDENOUR RD	RT			24														PLACE 20' FROM CL SR 188
	TR 80	LT			16														PLACE 16' FROM CL SR 188
RT 1	TOTALS				167														
PART 2	ALLEY	LT			6	24													PLACE AS DIRECTED
	W. SOUTH ST	LT			13	50													PLACE AS DIRECTED
	E. SOUTH ST	RT			16	66													PLACE AS DIRECTED
	FIRST ST	RT			9	36													PLACE AS DIRECTED
	FIRST ST	LT			11	26													PLACE AS DIRECTED
	SR 188 @ SR 204	CL			11	70													SEE SHEET 12
PART 2	TOTALS				66	272													
PART 3	CUSTER POINT RD	LT			20														PLACE 19' FROM CL SR 204
	NEW SALEM RD	RT			15														PLACE 14' FROM CL SR 204
	TR 426	RT			11														PLACE 16' FROM CL SR 204
	ZARTMAN RD	LT			12														PLACE 17' FROM CL SR 204
	THORNVILLE																		
	SR 204 @ SR 13	CL			18														PLACE 31' FROM CL SR 13
	SR 204 @ SR 13	CL			20														PLACE 25' FROM CL SR 13
	BLACKBIRD LANE	LT			7														PLACE AS DIRECTED
	BLACKBIRD LANE	LT			7														PLACE 96' FROM CL SR 204
	LONESOME RD	RT			35														PLACE 17' FROM CL SR 204
	TR 37	LT			11														PLACE 17' FROM CL SR 204
	TR 37	RT			10														PLACE 22' FROM CL SR 204
	TR 21	RT			15														PLACE 18' FROM CL SR 204
	YOST RD	LT			19														PLACE 21' FROM CL SR 204
	INDIAN RD	LT			9														PLACE 22' FROM CL SR 204
	INDIAN RD	LT			17														PLACE 26' FROM CL SR 204
	TR 22	RT			36														PLACE 23' FROM CL SR 204
	SR 757 - MILL ST	RT			20														PLACE 19' FROM CL SR 204
PART 3	TOTALS				282														
	PART 4 IS ON NEXT SHEET																		

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

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

PAVEMENT MARKING SUB-SUMMARY

CALC. BY SKB DATE 8-2024
CHKD. BY SRD DATE 8-23-4

PLAN NO. 149

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 72" EACH	WORD ON PAVEMENT ONLY 96" EACH	WORD ON PAVEMENT SCHOOL 72" 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
PART 4	ALLEY	LT			6	24													PLACE AS DIRECTED
	ALLEY	LT			6	22													PLACE AS DIRECTED
	FIRST ST	LT			7	26													PLACE AS DIRECTED
	FIRST ST	RT			6	22													PLACE AS DIRECTED
	LAKEVIEW – N. WEST ST	RT			9	42													PLACE AS DIRECTED
	LAKEVIEW – N. WEST ST	LT			10	60													PLACE AS DIRECTED
	ALLEY	LT			7	28													PLACE AS DIRECTED
	ALLEY	RT			9	36													PLACE AS DIRECTED
	ON SR 204 BEFORE MAIN ST				12	70													SEE SHEET 12
	SR 188	RT	SEE PART 2																
	MAIN ST	LT			9	68													SEE SHEET 12
	ON SR 204 AFTER MAIN ST				10	68													SEE SHEET 12
	ALLEY	RT			6	26													PLACE AS DIRECTED
	ALLEY	LT			7	28													PLACE AS DIRECTED
	CHURCH ST	RT			10	54													SEE SHEET 12
	CHURCH ST	LT			10	80													SEE SHEET 12
	ON SR 204 @ SLM 2.53±								1										SEE SHEET 12
	ALLEY	LT			10	40													SEE SHEET 12
	ALLEY	RT			9	34													SEE SHEET 12
	ON SR 204					80													SEE SHEET 12
	PARK DR	RT			11	60													SEE SHEET 12
	ALLEY	LT			7	28													SEE SHEET 12
	ALLEY	RT			6	22													SEE SHEET 12
	ON SR 204 @ SLM 2.66±								1										SEE SHEET 12
	MAPLE ST	LT			15	58													SEE SHEET 12
	ALLEY	LT			8	32													PLACE AS DIRECTED
	ALLEY	RT			6	20													PLACE AS DIRECTED
	ALLEY	RT			12	48													PLACE AS DIRECTED
	ALLEY	LT			9	36													PLACE AS DIRECTED
	ALLEY	RT			18	72													PLACE AS DIRECTED
	ARLINGTON AVE	RT			8														PLACE 18' FROM CL SR 204
PART 4	TOTALS				243	1184			2										
PART 5	MAIN ST.	RT			20														PLACE 29' FROM CL SR 204
	MAIN ST	RT			23														PLACE 25' FROM CL SR 204
	GEORGE ICE RD	LT			19														PLACE 22' FROM CL SR 204
	ALLEY	LT			14	56													PLACE AS DIRECTED
	PEARL ST	LT			10	40													SEE SHEET 12
	ON SR 204 @ SLM 9.65±								1										SEE SHEET 12
	ON SR 204					48													SEE SHEET 12
	ON SR 204 @ SLM 9.80±								1										SEE SHEET 12
	TR 411	LT			14														PLACE 29' FROM CL SR 204
	TR 411A	LT			8														PLACE 20' FROM CL SR 204
PART 5	TOTALS				108	144			2										

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

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

PAVEMENT MARKING SUB-SUMMARY

CALC. BY J.K.O. DATE 8-30-91
CHKD. BY J.R.M. DATE 8-23-91

PLAN NO. 147

644 THERMOPLASTIC

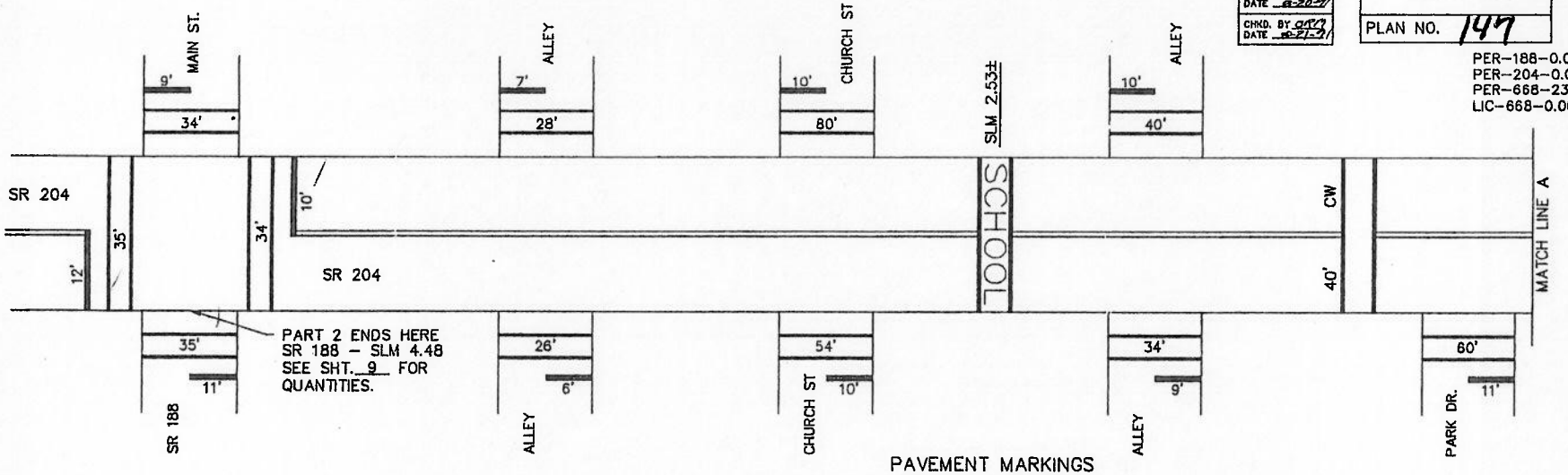
CO.	ROUTE	SIDE	24" TRANSVERSE LINES WHITE LIN.FT.	24" TRANSVERSE LINES YELLOW LIN.FT.	STOP LINE 24" LIN.FT.	12" CROSSWALK LINES WHITE LIN.FT.	WORD ON PAVEMENT ONLY 72" EACH	WORD ON PAVEMENT ONLY 96" EACH	WORD ON PAVEMENT SCHOOL 72" EACH	WORD ON PAVEMENT SCHOOL 96" EACH	LANE ARROWS TURN LEFT EACH	LANE 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
PART 6	SR 668 @ SR 204	CL			15														PLACE 17' FROM CL SR 204
	ON SR 668 AT SLM 23.36														2				SEE SHEET 3
	TR 65	LT			6														PLACE 53' FROM CL SR 668
	TR 65	LT			9														PLACE AS DIRECTED
	SNOOK RD	RT			10														PLACE 42' FROM CL SR 668
	CR 64	LT			8														PLACE 34' FROM CL SR 668
	TR 447	RT			11														PLACE 25' FROM CL SR 668
PART 6	TOTALS				59										2				
PART 7	LAUREL HILL RD	LT			21														PLACE 19' FROM CL SR 668
	LAUREL HILL RD	RT			20														PLACE 19' FROM CL SR 668
	I-70 EXIT RAMP	LT			50														PLACE 19' FROM CL SR 668
	TR 805A	RT			15														PLACE 23' FROM CL SR 668
	ALLEY	LT			11														PLACE 20' FROM CL SR 668
	ALLEY	RT			12														PLACE 19' FROM CL SR 668
	SR 668 @ US 40	CL			18														PLACE 26' FROM CL US 40
PART 7	TOTALS				147														

CALC. BY SMB DATE 8-20-91
CHKD. BY GRC DATE 8-21-91

PLAN NO. 147

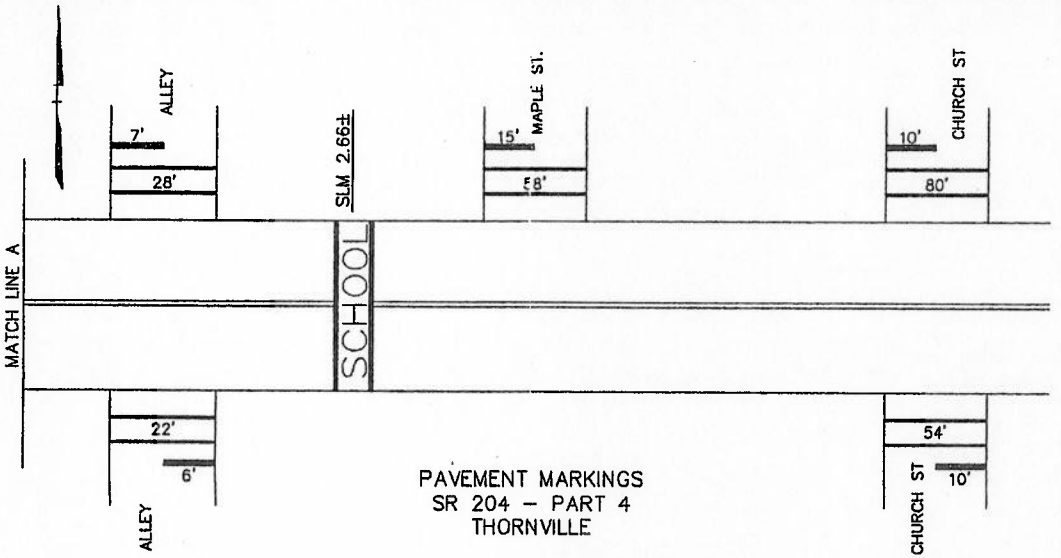
12/23

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00



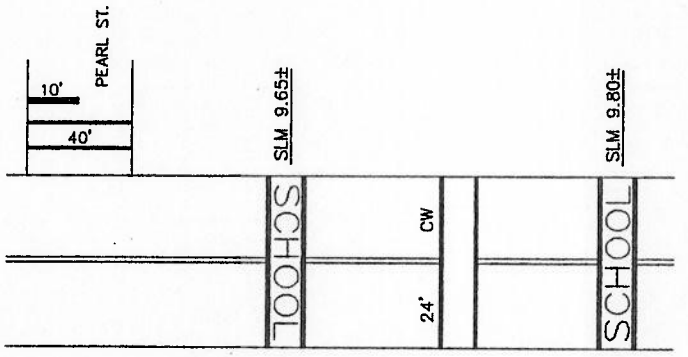
PAVEMENT MARKINGS
SR 204 – PART 4
THORNVILLE

SEE SHT. 10 FOR QUANTITIES



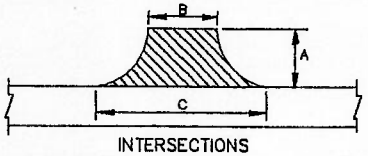
PAVEMENT MARKINGS
SR 204 – PART 4
THORNVILLE

SEE SHT. 10 FOR QUANTITIES

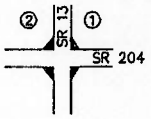


PAVEMENT MARKINGS
SR 204 – PART 5
GLENFORD

SEE SHT. 10 FOR QUANTITIES



INTERSECTIONS



EXTRA AREA AND DEDUCTIONS

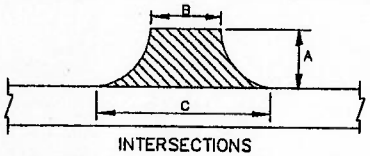
PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY: SKG DATE 8/20/91
CHKD. BY: SKG DATE 8/23/91

PLAN NO. 147

13/23

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	ASPHALT CONCRETE THICK INCHES	ASPHALT CONCRETE CU. YD. 448 INTERMEDIATE COURSE, TYPE 1, AC-20	ASPHALT CONCRETE CU. YD. 449 SURFACE COURSE, TYPE 1, AC-20	ASPHALT CONCRETE THICK INCHES	EXISTING SURFACE	408 BITUMINOUS PRIME COAT @ 0.40 gal./s.y. GAL.	254 PAVEMENT PLANING, BITUMINOUS SQ.YD.			
1	SR 188		LT	NEW SALEM RD.	98	26	96	664	33				42	2.25	ASPHALT					
			RT	TR 88	162	12	156	1512	76				95	2.25	ASPHALT					
			RT	HIGH POINT RD	34	18	46	121	6				8	2.25	ASPHALT					
			LT	HIGH POINT RD	34	16	44	113	6				7	2.25	ASPHALT					
			LT	TR 82	41	13	40	121					8	2.25	GRAVEL	48				
			LT	TR 81	42	18	44	145					9	2.25	GRAVEL	58				
			RT	TR 15	66	11	57	249	12				16	2.25	ASPHALT					
			LT	TR 390	30	17	55	120	6				8	2.25	ASPHALT					
			RT	RIDENOUR RD	55	18	92	336	17				21	2.25	ASPHALT					
			LT	TR 80	47	16	60	198	10				12	2.25	ASPHALT					
1	TOTALS			(CARRIED TO SHEET 16)				3579	166				226			106				
2	SR 188	(THORNVILLE)	LT	ALLEY	20	12		27	1				1	1.5	ASPHALT		27			
			LT	W. SOUTH ST.	26	21	37	84	4				3	1.5	ASPHALT		84			
			RT	E. SOUTH ST.	33	32	127	292	15				12	1.5	ASPHALT		292			
			RT	FIRST ST	27	18	23	62	3				3	1.5	ASPHALT		62			
			LT	FIRST ST	25	13	26	54	3				2	1.5	ASPHALT		54			
2	TOTALS			(CARRIED TO SHEET 16)				519	26				21				519			
3	SR 204		LT	CUSTER POINT RD	53	20	110	383	19				24	2.25	ASPHALT					
			RT	NEW SALEM RD	37	20	63	171	9				11	2.25	ASPHALT					
			RT	TR 426	31	15	37	90	4				6	2.25	ASPHALT					
			LT	ZARTMAN RD	28	17	56	114	6				7	2.25	ASPHALT					
				THORNVILLE																
			CL	SR 204 AT SR 13 ①	57	23	94	225	11				14	2.25	ASPHALT					
			CL	SR 204 AT SR 13 ②	68	25	100	283	14				18	2.25	ASPHALT					
			LT	BLACKBIRD LANE	92	14	68	419	21				26	2.25	ASPHALT					
			LT	ROAD	111	15	84	611	31				38	2.25	ASPHALT					
			RT	LONESOME RD	54	19	145	492	25				31	2.25	ASPHALT					
			LT	TR 37	33	15	37	95	5				6	2.25	ASPHALT					
			RT	TR 37	34	14	46	113					7	2.25	GRAVEL	45				
			RT	TR 21	24	18	47	87	4				5	2.25	ASPHALT					
			LT	YOST RD	52	18	69	251	13				16	2.25	ASPHALT					
			LT	INDIAN RD	105	17	83	583	29				36	2.25	ASPHALT					
			LT	ROAD	31	16	66	141	7				9	2.25	ASPHALT					
			RT	TR 22	67	16	91	398	20				25	2.25	ASPHALT					
			RT	MILL ST - SR 757	60	20	90	367	18				23	2.25	ASPHALT					
3	TOTALS			(CARRIED TO SHEET 17)				4823	236				302			45				



INTERSECTIONS

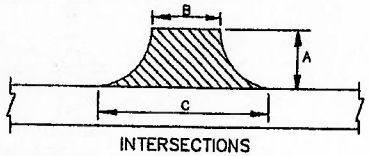
EXTRA AREA AND DEDUCTIONS

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

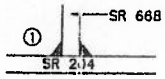
CALC. BY SMG DATE 8-20-91
CHKD. BY SMM DATE 8-23-91

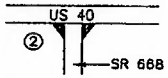
PLAN NO. 147

PART	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS A IN FEET	B IN FEET	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	ASPHALT CONCRETE THICK INCHES	CU. YD. ITEM 403	CU. YD. 448 INTERMEDIATE COURSE, TYPE 1, AC-20	THICK INCHES	EXISTING SURFACE	408 BITUMINOUS PRIME COAT @ 0.40 gal./s.y. GAL.	254 PAVEMENT PLANING, BITUMINOUS SQ.YD.			
4	SR 204	THORNVILLE	LT	ALLEY	20	12	23	39	2				2	2.25	ASPHALT					
			LT	ALLEY	28	11	17	44	2				3	2.25	ASPHALT					
			LT	FIRST ST	22	10	17	33	2				2	2.25	ASPHALT					
			RT	FIRST ST	28	11	24	54	3				3	2.25	ASPHALT					
			RT	LAKEVIEW - N. WEST ST	23	21	37	74	4				5	2.25	ASPHALT					
			LT	LAKEVIEW - N. WEST ST	26	20	52	104	5				7	2.25	ASPHALT					
			LT	ALLEY	28	14	38	81	4				3	1.5	ASPHALT		81			
			RT	ALLEY	27	12	21	50	2				2	1.5	ASPHALT		50			
			RT	SR 188 (SEE PART 2)																
			LT	MAIN ST	34	40	43	157	8				7	1.5	ASPHALT		157			
			RT	ALLEY	29	11	11	35	2				1	1.5	ASPHALT		35			
			LT	ALLEY	26	15	15	43	2				2	1.5	ASPHALT		43			
			RT	CHURCH ST	25	21	29	69	3				3	1.5	ASPHALT		69			
			LT	CHURCH ST	37	22	21	88	4				4	1.5	ASPHALT		88			
			LT	ALLEY	21	17	19	42	2				2	1.5	ASPHALT		42			
			RT	ALLEY	24	16	23	52	3				2	1.5	ASPHALT		52			
			RT	PARK DR	38	23	37	127	6				5	1.5	ASPHALT		127			
			LT	ALLEY	37	12	46	119	6				5	1.5	ASPHALT		119			
			RT	ALLEY	28	9	27	56	3				2	1.5	ASPHALT		56			
			LT	MAPLE ST	35	52	50	198	10				12	2.25	ASPHALT					
			LT	ALLEY	24	16	32	64	3				4	2.25	ASPHALT					
			RT	ALLEY	22	10	20	37	2				2	2.25	ASPHALT					
			RT	ALLEY	24	12	26	51	3				3	2.25	ASPHALT					
			LT	ALLEY	16	10	34	39	2				2	2.25	ASPHALT					
			RT	ALLEY	26	24	57	117	6				7	2.25	ASPHALT					
			RT	ARLINGTON AVE	17	17	37	51	3				3	2.25	ASPHALT					
4	TOTALS			(CARRIED TO SHEET 17)				1824	92				93				919			
5	SR 204	GLENFORD	RT	MAIN ST	37	21	76	199	10				12	2.25	ASPHALT					
			RT	MAIN ST	64	22	86	384	19				16	1.5	ASPHALT					
			LT	GEORGE ICE RD	43	21	68	213	11				9	1.5	ASPHALT					
			LT	ALLEY	10	16	30	26	1				1	1.5	ASPHALT					
			LT	PEARL ST	10	10	18	16	1				1	1.5	ASPHALT					
			LT	TR 411 - E. HIGH ST	73	17	87	422	21				18	1.5	ASPHALT					
			LT	ROAD	28	35	68	160	8				7	1.5	ASPHALT					
			LT	TR 411A	38	14	49	133	7				6	1.5	ASPHALT					
5	TOTALS			(CARRIED TO SHEET 17)				1553	78				70							



INTERSECTIONS





EXTRA AREA AND DEDUCTIONS

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY SKG DATE 8-20-97
CHKD. BY RM DATE 8-21-97

PLAN NO. 147

15/23

PART	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS A IN FEET	B IN FEET	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	ASPHALT CONCRETE THICK INCHES	CU. YD. ITEM 403	CU. YD. 448 SURFACE COURSE, TYPE 1, AC-20	THICK INCHES	EXISTING SURFACE	408 BITUMINOUS PRIME COAT @ 0.40 gal./s.y. GAL.	254 PAVEMENT PLANING, BITUMINOUS SQ. YD.			
6	SR 668		CL	SR 668 AT SR 204 ①	55	20	80	184	9				12	2.25	ASPHALT					
			LT	TR 65	48	12	40	139	7				9	2.25	ASPHALT					
			LT	ROAD	78	17	73	390	20				24	2.25	ASPHALT					
			RT	SNOOK RD	58	19	63	264					17	2.25	GRAVEL	106				
			LT	CR 64	38	18	62	169	8				11	2.25	ASPHALT					
			RT	TR 447	37	18	58	156	8				10	2.25	ASPHALT					
6	TOTALS			(CARRIED TO SHEET 18)				1302	52				83			106				
7	SR 668		LT	LAUREL HILL RD	38	19	60	167					10	2.25	GRAVEL	67				
			RT	LAUREL HILL RD	39	18	54	156					10	2.25	GRAVEL	62				
			LT	EXIT RAMP FROM I-70	54	36	98	402	20				25	2.25	ASPHALT					
			LT	ENTRANCE RAMP TO I-70	73	34	108	576	29				36	2.25	ASPHALT					
			RT	TR 805A	34	17	42	111	6				7	2.25	ASPHALT					
			LT	ALLEY	43	11	42	127	6				8	2.25	ASPHALT					
			RT	ALLEY	32	13	34	84	4				5	2.25	ASPHALT					
			CL	SR 668 AT US 40 ②	45	20	64	110	6				7	2.25	ASPHALT					
7	TOTALS			(CARRIED TO SHEET 18)				1733	71				108			129				

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

ASPHALT CONCRETE

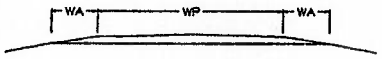
PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY JKB DATE 6-20-91
CHKD. BY [illegible] DATE 6-29-91

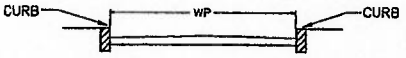
PLAN NO. 147

16/23

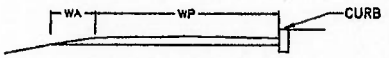
TYPICAL 1

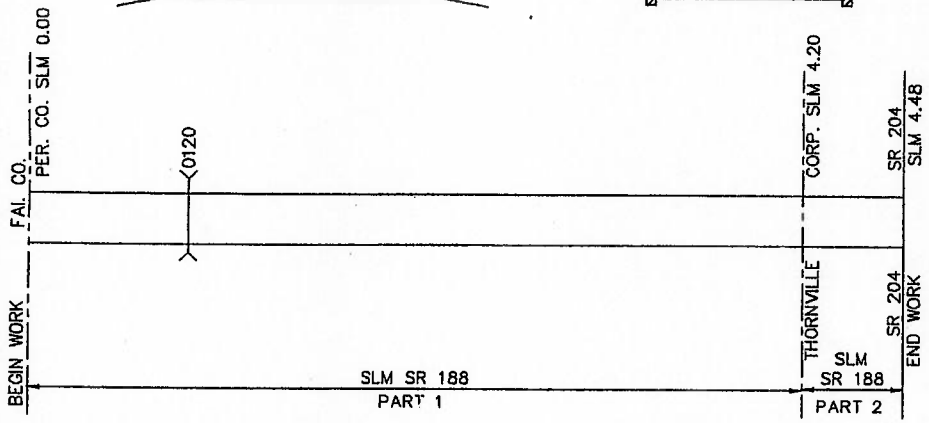


TYPICAL 2



TYPICAL 3





BRIDGE DEDUCTIONS
PART 1
PER-188-0120 18.25' X 27.33' SEE SHEET 21

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

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 1, AC-20 CU.YDS.	ITEM 448 THICK INCHES	ITEM 448 SURFACE COURSE, TYPE 1, AC-20 CU.YDS.	ITEM ____ THICK INCHES CU.YDS.	614 TEMPORARY CENTER LINE, CLASS 1 (FOR PLANED AREAS) MILE	614 TEMPORARY CENTER LINE, CLASS II MILE	408 BITUMINOUS PRIME COAT GAL.	254 PAVEMENT PLANING, BITUMINOUS SQ.YD.	202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE AS PER PLAN EACH
1	SR 188	0.00-3.86	3.86	20381	18	1	404	40762	2038		1.0	1132	1.25	1415			7.72			
		3.86-4.20	0.34	1795	24	1	404	4787	239		1.0	133	1.25	166			0.68			
	EXTRA AREAS FROM SHEET 13							3579	166					226				106		
	EXTRA TACK COAT FOR LONGITUDINAL JOINT								64											
	BRIDGE DEDUCTIONS (1)							(37)	(2)			(1)		(1)						
1	TOTALS		4.20	22176				49091	2505			1264		1806			8.40	106		384
2	SR188	4.20-4.23	0.03	158	24	1	404	421	21				1.50	18			0.03			
		4.23-4.27	0.04	211	27(2)	2	404	633	32				1.50	26		0.04	0.04		633	
		4.27-4.35	0.08	422	24	1	404	1125	56				1.50	47		0.08	0.08		1125	
		4.35-4.37	0.02	106	35(2)	3	404	412	21				1.50	17		0.02	0.02		412	
		4.37-4.38	0.01	53	28(2)	1	404	165	8				1.50	7		0.01	0.01		165	
		4.38-4.43	0.05	264	30(2)	3	404	880	44				1.50	37		0.05	0.05		880	
		4.43-4.48	0.05	264	36(2)	2	404	1056	53				1.50	44		0.05	0.05		1056	
	EXTRA AREAS FROM SHEET 13							519	26					21					519	
	EXTRA TACK COAT FOR LONGITUDINAL JOINT								5											
2	TOTALS		0.28	1478				5211	266					217		0.25	0.28		4790	26

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

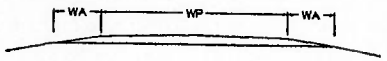
ASPHALT CONCRETE

PER-188-0.00
PER-203-0.00
PER-668-23.01
LIC-668-0.00

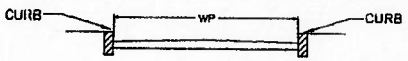
CALC. BY SKT DATE 8-20-91
CHKD. BY JRM DATE 8-23-91

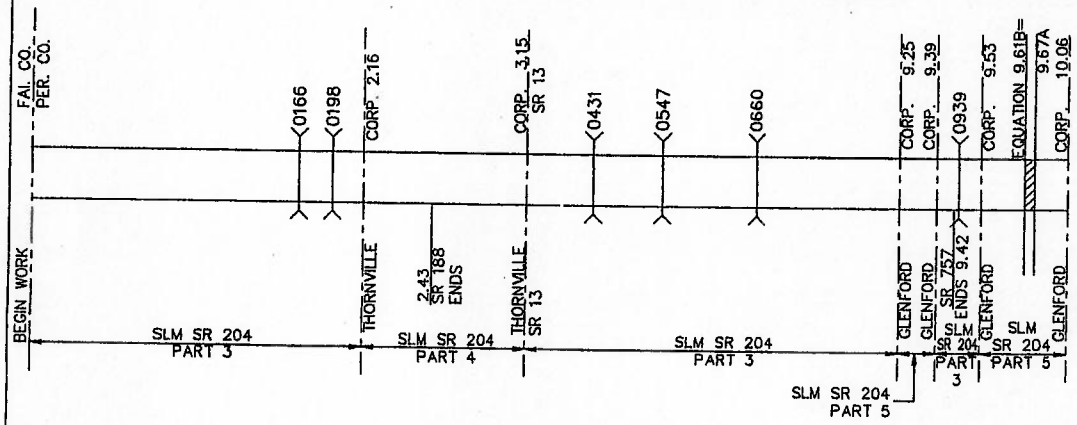
PLAN NO. 147

TYPICAL 1



TYPICAL 2





BRIDGE DEDUCTIONS

PART 3

PER-204-0166	37.72' X 30.0'	SEE SHEET	21
PER-204-0198	66.67' X 30.0'	SEE SHEET	21
PER-204-0431	45.25' X 26.0'	SEE SHEET	21
PER-204-0547	14.17' X 33.0'	SEE SHEET	21
PER-204-0660	20.0' X 27.5'	SEE SHEET	21
PER-204-0943	131.5' X 36.0'	SEE SHEET	21

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

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 1 CU.YDS.	ITEM 448 THICK INCHES	ITEM 448 SURFACE COURSE, TYPE 1 CU.YDS.	ITEM ___ THICK INCHES	ITEM ___ CU.YDS.	614 TEMPORARY CENTER LINE, CLASS I (FOR PLANED AREAS) MILE	614 TEMPORARY CENTER LINE, CLASS II MILE	408 BITUMINOUS PRIME COAT GAL.	254 PAVEMENT PLANING, BITUMINOUS SQ.YD.	202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE AS PER PLAN EACH
3	SR 204	0.00-2.16	2.16	11405	18	1	404	22810	1141		1.0	634	1.25	792				4.32			
		3.15-3.27	0.12	634	21(2)	1	404	1479	74		1.0	41	1.25	51				0.24			
		3.27-9.25	5.98	31574	20	1	404	70164	3508		1.0	1949	1.25	2436				11.96			
		9.39-9.53	0.14	739	20	1	404	1642	82		1.0	46	1.25	57				0.28			
EXTRA AREAS FROM SHEET 13								4823	236					302					45		
EXTRA TACK COAT FOR LONGITUDINAL JOINT									128												
BRIDGE DEDUCTIONS (1)								(677)	(34)			(19)		(24)							
3	TOTALS		8.40					100241	5135			2651		3614				16.80	45		1078
4	SR 204	2.16-2.39	0.23	1214	20	1	404	2698	135		1.0	75	1.25	94				0.46			
		2.39-2.45	0.06	317	36	2	404	1268	63				1.50	53			0.06	0.06		1268	
		2.45-2.50	0.05	264	37	2	404	1085	54				1.50	45			0.05	0.05		1085	
		2.50-2.56	0.06	317	34	2	404	1198	60				1.50	50			0.06	0.06		1198	
		2.56-2.58	0.02	106	40	2	404	471	24				1.50	20			0.02	0.02		471	
		2.58-3.15	0.57	3010	20	1	404	6689	335		1.0	186	1.25	232				1.14			
EXTRA AREAS FROM SHEET 14								1824	92					93						919	
EXTRA TACK COAT FOR LONGITUDINAL JOINT									16												
4	TOTALS		0.99	5228				15233	779			261		587			0.19	1.79		4941	
5	SR 204	9.25-9.39	0.14	739	20	1	404	1642	82		1.0	46	1.25	57				0.28			
		9.53-9.61B	0.08	422	20	1	404	938	47				1.50	39				0.08			
		9.67A-9.93	0.26	1373	20	2	404	3051	153				1.50	127				0.26			
		9.93-10.06	0.13	686	20	1	404	1524	76				1.50	64				0.13			
EXTRA AREAS FROM SHEET 14								1553	78			70									
EXTRA TACK COAT FOR LONGITUDINAL JOINT									11												
5	TOTALS		0.61	3220				8708	447			116		287				0.75			

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

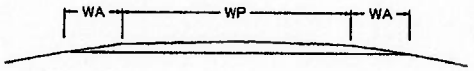
ASPHALT CONCRETE

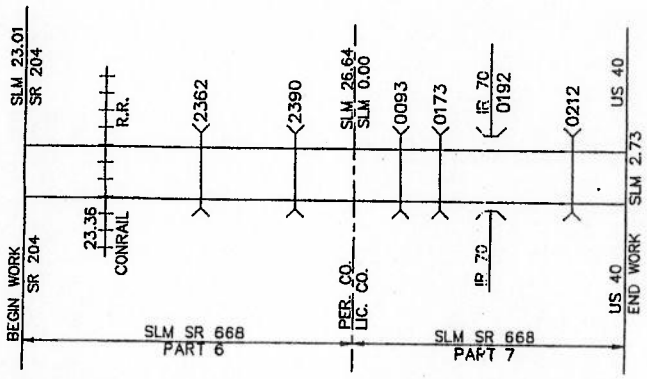
PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY SWG DATE 8-23-91
CHKD. BY SLM DATE 8-23-91

PLAN NO. 147

TYPICAL 1





BRIDGE DEDUCTIONS

PART 6
PER-668-2362 131.79' X 26.5' SEE SHEET 21
PER-668-2391 22.83' X 24.0' SEE SHEET 21

PART 7
LIC-668-0093 99.1' X 28.5' SEE SHEET 21
LIC-668-0173 41.16' X 32.0' SEE SHEET 21
LIC-668-0192 224.09' X 24.0' SEE SHEET 21

(1) BRIDGE LENGTH X PAVEMENT WIDTH

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 1 CU. YDS.	ITEM 448 THICK INCHES	ITEM 448 SURFACE COURSE, TYPE 1 CU. YDS.	ITEM ___ THICK INCHES	ITEM ___ CU. YDS.	614 TEMPORARY CENTER LINE, CLASS II MILE	408 BITUMINOUS PRIME COAT GAL.	202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE, AS PER PLAN EACH
6	SR 668	23.01-26.64	3.63	19166	18	1	404	38332	1917		1.0	1065	1.25	1331			7.26		
EXTRA AREAS FROM SHEET 15								1302	52					83				106	
EXTRA TACK COAT FOR LONGITUDINAL JOINT									55										
BRIDGE DEDUCTIONS (1)								(309)	(15)			(9)		(11)					
6	TOTALS		3.63	19166				39325	2009			1056		1403			7.26	106	66
7	SR 668	0.00-0.81	0.81	4277	18	1	404	8554	428		1.0	238	1.25	297			1.62		
		0.81-1.04	0.23	1214	20	1	404	2699	135		1.0	75	1.25	94			0.46		
		1.04-2.73	1.69	8923	18	1	404	17846	892		1.0	496	1.25	620			3.38		
EXTRA AREAS FROM SHEET 15								1733	71					108				129	
EXTRA TACK COAT FOR LONGITUDINAL JOINT									42										
BRIDGE DEDUCTIONS (1)								(751)	(38)			(21)		(26)					
7	TOTALS		2.73	14414				30081	1530			788		1093			5.46	129	339

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

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

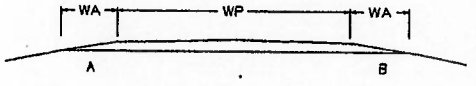
19/23

PLAN NO. 147

CALC. BY SKG DATE 8-20-91
CHKD. BY SRM DATE 8-23-91

PAVED SHOULDERS

TYPICAL 1



PAVED SHOULDER DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN.FT.	TYPICAL	PROPOSED WIDTH (FT.) A	B	C	D	SHOULDER AREA SQ.YDS.	448 ASPHALT CONCRETE THICK INCHES	448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, AC-20 CU.YD.	448 ASPHALT CONCRETE THICK INCHES	448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20 CU.YD.	301 BITUMINOUS AGGREGATE BASE AVG. THICK INCHES	301 BITUMINOUS AGGREGATE BASE CU.YDS.	408 PRIME Bit. Matl. @..... gal./s.y. GALS.	409 SEAL Bit. Matl. @..... gal./s.y. GALS.	409 SEAL Aggr. @..... c.y./s.y. CU.YDS.	617 COMPACTED AGGREGATE, TYPE A 2'X 2.75" AVER. THICKNESS TO BACK UP PAVED BERM CU.YDS.	617 WATER M.GAL.	407 TACK COAT @ 0.05 gal./sq.yd. GALS.	407 COVER AGGREGATE @ 7 lbs./s.y. TON	404 ASPHALT CONCRETE AVER. THICKNESS CU.YDS.	NOTES
1	SR 188	0.00-4.20	4.20	22176	1	2	2			9856	1.0	274	1.25	342						753	7	493				
2	SR 188	4.20-4.23	0.03	158	1	2	2			70	1.0	2	1.25	2						5	1	4				
3	SR 204	0.00-2.16	2.16	11405	1	2	2			5069	1.0	141	1.25	176						387		253				
		3.15-9.25	6.10	32208	1	2	2			14315	1.0	398	1.25	497						1094		716				
		9.39-9.53	0.14	739	1	2	2			328	1.0	9	1.25	11						25		16				
3	TOTALS		8.40	44352						19712		548		684						1506	14	985				
4	SR 204	2.16-2.39	0.23	1214	1	2	2			540	1.0	15	1.25	19						41		27				
		2.89-3.15	0.26	1373	1	2	2			610	1.0	17	1.25	21						47		31				
4	TOTALS		0.49	2587						1150		32		40						88	1	58				
5	SR 204	9.25-9.39	0.14	739	1	2	2			328	1.0	9	1.25	11						25		16				
		9.53-9.618	0.08	422	1	2	2			188	1.0	5	1.25	7						14		9				
		9.93-10.06	0.13	686	1	2	2			305	1.0	8	1.25	11						23		15				
5	TOTALS		0.35	1847						821		22		29						62	1	40				

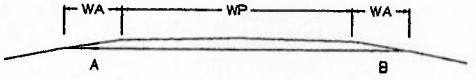
SHOULDER TREATMENT

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

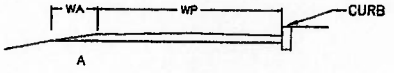
CALC. BY SKB DATE 8-27-91
CHKD. BY SKM DATE 8-27-91

PLAN NO. 147

TYPICAL 1



TYPICAL 2



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. MATERIAL @ 0.10 gal./s.y. GAL.	407 TACK COVER AGGR. @ 1 lb./s.y. TON	617 WATER M.GAL.	617 COMPACTED AGGREGATE, TYPE A 2.75" AVERAGE THICKNESS CU. YD.	617 SHOULDER PREPARATION SQ.YD.
2	SR 188	4.27–4.35	0.08	422	1	617	2'	617	2'					188				14	188
		4.35–4.37	0.02	106	2	617	2'							24				2	24
		4.37–4.38	0.01	53	1	617	2'	617	2'					24				2	24
		4.38–4.43	0.05	264	2	617	2'							59				5	59
2	TOTALS		0.16	845										295			1	23	295
6	SR 668	23.01–26.64	3.63	19166	1	617	2'	617	2'					8518			6	651	8518
7	SR 668	0.00–2.73	2.73	14414	1	617	2'	617	2'					6406			5	489	6406

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

NOTE: FOR ADDITIONAL INFORMATION SEE DWG. BP-5, 10-1-87

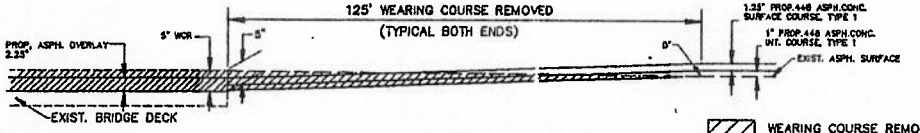
BRIDGE DECK TREATMENT

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY: [illegible] DATE [illegible]
CHKD. BY: [illegible] DATE [illegible]

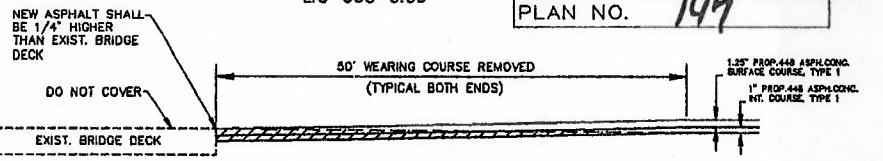
OHIO
FHWA REGION 5

PLAN NO. 149



WEARING COURSE REMOVED DETAIL
BRIDGE NO. PER-188-0120

WEARING COURSE REMOVED



BUTT JOINT DETAIL
BRIDGE NO'S.

WEARING COURSE REMOVED

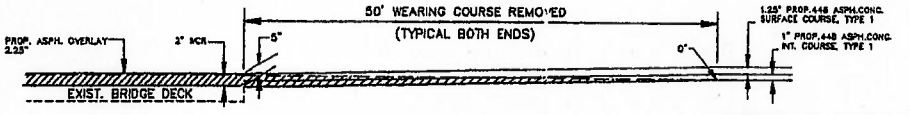
PART 3
PER-204-0166
PER-204-0198
PER-204-0660
PER-204-0943

PART 6
PER-668-2362
PER-668-2391

PART 7
LIC-668-0192

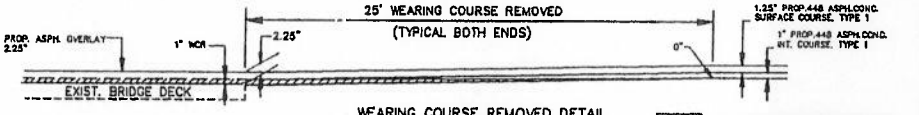
* INCLUDES PAVED BERMS ** APPROACHES ONLY - INCLUDES PAVED BERMS BRIDGE DECK DATA # APPROACHES ONLY

PART	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	BRIDGE DECK AREA	202 WEARING COURSE REMOVED DEPTH ____"	BRIDGE DECK REPAIR ☐ SS-845 LATEX MODIFIED CONCRETE ☐ SS-850 DENSE CONCRETE: ____" THICK OVERLAY	VARIABLE THICKNESS OVERLAY	FULL-DEPTH REPAIR	SPECIAL: PATCHING TYPE	PATCHING SQ.YD.	STEEL DRIP STRIP	DECK WATERPROOFING: MEMBRANE WATERPROOFING SHEET TYPE 1	MEMBRANE WATERPROOFING	516 VERT. EXT. OF STR. EXP. JOINTS	ASPHALT CONCRETE THICK INS.	448 SURFACE COURSE, TYPE 1 AC-20	407 TACK COAT @ 0.05 GAL./S.Y.	614 TEMPORARY CENTER LINE, CLASS I (FOR WCR AREAS)
		LIN.FT.	LIN.FT.	SQ.YDS.	SQ.YDS.	SQ.YDS.	CU.YDS.	CU.YDS.	TYPE	SQ.YD.	SQ.FT.	SQ.YDS.	SQ.YDS.	LIN.FT.		CU.YDS.	GAL.	MILE
1	PER-188-0120	18.25	27.08	54.91	666*										2.25	3	3	0.05
3	PER-204-0166	37.72	30.0	125.73	244**													0.02
	PER-204-0198	66.67	30.0	222.23	244**													0.02
	PER-204-0431	45.33	26.0	130.72	397*										2.25	8	7	0.03
	PER-204-0547	14.17	33.0	51.96											2.25	3	3	
	PER-204-0660	20.0	27.5	61.11	267**													0.02
	PER-204-0943	131.6	36.0	526.40	267**													0.02
3	TOTALS			1118.15	1419											11	10	0.11
6	PER-668-2362	131.79	26.5	388.05	200#													0.02
	PER-668-2391	22.83	24.0	46.83	200#													0.02
6	TOTALS			434.88	400													0.04
7	LIC-668-0093	99.1	28.5	313.82	425										2.25	20	16	0.03
	LIC-668-0173	41.16	32.0	146.35	246										2.25	9	7	0.02
	LIC-668-0192	224.09	24.0	597.57	200#													0.02
7	TOTALS			1057.74	871											29	23	0.07



WEARING COURSE REMOVED DETAIL
BRIDGE NO. PER-201-0431

WEARING COURSE REMOVED



WEARING COURSE REMOVED DETAIL
BRIDGE NO'S.
LIC-668-0093
LIC-668-0173

WEARING COURSE REMOVED

PTMR679 (STAND)

GENERAL SUMMARY

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

CALC. BY SKB DATE 8-20-91
CHKD. BY SRM DATE 8-23-91

PLAN NO. 147

ITEM	PART 1	PART 2	PART 3	PART 4	PART 5	PART 6	PART 7		ITEM	ITEM EXT. NO.	GRAND TOTAL PARTS 1 - 7	UNIT	DESCRIPTION
202	666		1419			400	871		202	23500	3356	SQ.YD.	WEARING COURSE REMOVED
202						225			202	23501	225	SQ.YD.	WEARING COURSE REMOVED, AS PER PLAN
202	384	26	1078			66	339		202	54101	1893	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE, AS PER PLAN
SPECIAL	13	1	25	2	1	11	8		SPECIAL	20363000	61	HOUR	GRADER RENTAL
SPECIAL	6	1	13	1	1	5	4		SPECIAL	20363500	31	HOUR	LOADER RENTAL
253						250	110		253	02001	360	CU.YD.	PAVEMENT REPAIR, AS PER PLAN
254		4790		4941					254	01000	9731	SQ.YD.	PAVEMENT PLANING, BITUMINOUS
254		230		290					254	01600	520	SQ.YD.	PATCHING PLANED SURFACE
407	3001	270	6130	837	487	2009	1553		407	10000	14287	GALLON	TACK COAT
408	106		45			106	129		408	10000	386	GALLON	BITUMINOUS PRIME COAT
448	2151	219	4309	627	316	1403	1122		448	16000	10147	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20
448	52		105		12	35	6		448	16001	210	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20, AS PER PLAN
448	1638	7	3324	298	143	1236	938		448	14000	7584	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, AC-20
448	31	9	53	28	28	18	11		448	16000	178	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20 (DRIVEWAYS)
604		2		6	1				604	09000	9	EACH	CATCH BASIN ADJUSTED TO GRADE
604		1		4					604	34500	5	EACH	MANHOLE ADJUSTED TO GRADE
614	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		614	11000	LUMP	LUMP	MAINTAINING TRAFFIC

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 30'.

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 SKB
DATE 8-20-91
CHKD. BY [illegible]
DATE 8-20-91

GENERAL SUMMARY

PER-188-0.00
PER-204-0.00
PER-668-23.01
LIC-668-0.00

PLAN NO. 147

ITEM	PART 1	PART 2	PART 3	PART 4	PART 5	PART 6	PART 7		ITEM	ITEM EXT. NO.	GRAND TOTAL PARTS 1 – 7	UNIT	DESCRIPTION
614	20	2	30	2	4	14	8		614	12460	80	EACH	WORK ZONE MARKING SIGN
614	0.05	0.25	0.11	0.19		0.04	0.07		614	21000	0.71	MILE	TEMPORARY CENTER LINE, CLASS I
614	8.40	0.28	16.80	1.79	0.75	7.26	5.46		614	21400	40.74	MILE	TEMPORARY CENTER LINE, CLASS II
617	753	28	1506	88	62	651	489		617	10100	3577	CU.YD.	COMPACTED AGGREGATE, TYPE A
617		295				8518	6406		617	20000	15219	SQ.YD.	SHOULDER PREPARATION
617	7	2	14	1	1	6	5		617	25000	36	M.GAL.	WATER
619	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		619	15000	LUMP	LUMP	FIELD OFFICE, TYPE A
624	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP		624	10000	LUMP	LUMP	MOBILIZATION
642	8.40	0.37	16.80	1.60	1.22	7.26	5.46		642	00102	41.11	MILE	EDGE LINE, TYPE 2
642	4.20	0.28	8.40	0.99	0.61	3.63	2.73		642	00302	20.84	MILE	CENTER LINE, TYPE 2
644	167	66	282	243	108	59	147		644	00500	1072	LIN.FT.	STOP LINE
644		272		1184	144				644	00600	1600	LIN.FT.	CROSSWALK LINE
644						2			644	01000	2	EACH	RAILROAD SYMBOL MARKING
644				2	2				644	01100	4	EACH	SCHOOL SYMBOL MARKING, 72"
SPECIAL	7		14			3	2		SPECIAL	69050000	26	EACH	MAILBOX SUPPORT
814		2		3					814	10800	5	EACH	VALVE BOX ADJUSTED TO GRADE