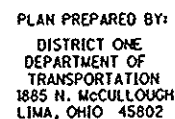


LONGITUDE 84°-41'-25"

PORTION TO BE IMPROVED



Signed _____
Date _____

80-41-20

STANDARD DRAWINGS		STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
MT-97.10	09-05-06	TC-41.10	10-19-07	800-2008	01-18-08
MT-97.12	09-05-06	TC-41.20	01-19-01	832	04-25-06
MT-99.20M	01-30-95	TC-52.10	01-19-07		
MT-105.10	10-18-02	TC-52.20	01-19-07		
MT-105.11	10-18-02	TC-65.10	01-21-05		
BP-3.1	10-19-07	TC-65.11	01-21-05		

TITLE SHEET	1
GENERAL NOTES	2-3
MAILBOX TURNOUT	4
ASPHALT CONCRETE	5
TRAFFIC CONTROL SUB-SUMMARY	6
GENERAL SUMMARY	7

THE STANDARD 2008 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII		NET LENGTH MILES	CITY/VILLAGE
				BEGIN	END		
1	VAN	SR224	(0.00-11.78)	0.00	12.23	12.23	

APPROVED

DATE 2/14/08 DISTRICT DEPUTY DIRECTOR

APPROVED

DATE 4-14-08 DIRECTOR, DEPARTMENT OF
TRANSPORTATION

TRAFFIC:

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. THE LENGTH OF RESTRICTED TRAFFIC ZONES SHALL BE KEPT TO A MINIMUM CONSISTENT WITH REQUIREMENTS FOR PROTECTION OF COMPLETED COURSES.

RAILROAD CROSSINGS & BRIDGE TREATMENT:

THE NEW SURFACE COURSE SHALL BE FEATHERED OR BUTT JOINTED TO MEET THE PROFILE AS SPECIFIED BY THE ENGINEER.

ALIGNMENT AND PROFILE:

THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. FOR THE MOST PART THE PROPOSED SURFACE WILL REMAIN THE SAME AS THE EXISTING SURFACE. THE REMAINDER OF THE MATERIAL IS TO BE USED AS DETERMINED BY THE ENGINEER TO CORRECT THE EXISTING CROSS-SLOPE, ROUGH OF WEAK PAVEMENT, RUTTED AREAS, OR APPROACHES TO INTERSECTIONS, RAILROAD CROSSINGS OR BRIDGES.

SPREADING EQUIPMENT WILL HAVE 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 FEET.

INTERMEDIATE COURSE, SPOT LEVELING AND PATCHING:

THIS MATERIAL SHALL BE PLACED IN A SEPARATE OPERATION WHERE AND AS DIRECTED BY THE ENGINEER TO CORRECT THE EXISTING CROSSLOPE OF THE PAVEMENT.

ITEM 407 TACK COAT:

THE RATE OF APPLICATION OF 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT, AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLON PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

THE CONTRACTOR SHALL NOTE THAT ADDITIONAL CLEANING AND SURFACE PREPARATIONS MAY BE REQUIRED WITHIN THE CORPORATE LIMITS OF THE MUNICIPALITIES ON THIS PROJECT. ANY AND ALL ADDITIONAL WORK SHALL BE INCIDENTAL TO 407.04 PREPARATION OF SURFACE.

EXTRA AREAS:

PRIVATE DRIVES SHALL BE FEATHERED IN APPROXIMATELY 6 FEET USING 448 ASPHALT CONCRETE. SOME DRIVES MAY REQUIRE MORE THAN 6 FEET TO ALLOW FOR AN ADEQUATE TRANSITION TO THE MAINLINE PAVEMENT. THESE TRANSITIONS WILL BE AS DIRECTED BY THE ENGINEER. THE 448 ASPHALT CONCRETE QUANTITIES FOR DRIVES, MAILBOXES, BRIDGE APPROACHES AND INTERSECTIONS ARE INCLUDED IN THE EXTRA AREA QUANTITIES.

ASPHALT CONCRETE PLACEMENT ON SHOULDERS:

THE ASPHALT CONCRETE ON THE SHOULDERS SHALL BE PLACED AT THE SAME TIME THAT THE ASPHALT CONCRETE IS PLACED ON THE ADJACENT LANES OF PAVEMENT. THE SHOULDER MATERIAL SHALL BE PLACED AT THE SAME CROSSLOPE AS THE EXISTING SHOULDER GRADES.

WEARING COURSE REMOVED:

A QUANTITY OF WEARING COURSE REMOVED HAS BEEN SUPPLIED TO BE USED AS DIRECTED BY THE ENGINEER FOR THE TRANSITION BETWEEN AREAS TO BE PLANED AND/OR AREA TO JUST RECEIVE A SURFACE COURSE. THIS QUANTITY IS TO BE USED FOR A BUTT JOINT AS PER BP-3.1 (ASPHALT CONCRETE TEMPORARY WEDGES SHALL BE PLACED PRIOR TO OPENING TO TRAFFIC AT ALL BUTT JOINTS), TO REMOVE IRREGULARITIES IN THE PAVEMENT AND TO TRANSITION FROM THE MAINLINE PAVEMENT INTO AN INTERSECTION. THESE AREAS SHALL BE RESURFACED WITHIN (7) SEVEN CALENDAR DAYS OF REMOVAL. IF THIS IS NOT DONE, LIQUIDATED DAMAGES WILL BE LEVIED AS PER SECTION 108.07 OF THE ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.

MAINTAINING TRAFFIC AT PLANED AREAS:

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO THAT TRAFFIC IS RETURNED TO AN AREA WHEN THE PLANING IS COMPLETE. THE PLANED AREA SHALL BE CLEANED TO THE SATISFACTION OF THE ENGINEER PRIOR TO PLACING TEMPORARY MARKINGS.

ALL REQUIRED WORK ZONE PAVEMENT MARKINGS SHALL BE PLACED PRIOR TO OPENING THE AREA TO TRAFFIC. NO PLANED SURFACE SHALL REMAIN OPEN TO TRAFFIC MORE THAN (7) DAYS BEFORE BEING COVERED WITH AN ASPHALT COURSE. IF THIS IS NOT DONE, LIQUIDATED DAMAGES WILL BE LEVIED AS PER SECTION 108.07 OF THE ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.

ITEM 604 MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN:

INCLUDED IN THE GENERAL SUMMARY FOR USE ON THIS PROJECT IS A CONTINGENCY QUANTITY OF 2 EACH - ITEM 604 MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN. THIS ITEM SHALL INCLUDE ALL COSTS ASSOCIATED WITH THE LABOR AND EQUIPMENT TO OBTAIN THE MONUMENT BOX RISER FROM THE ENGINEER AND INSTALL IT TO THE ENGINEER'S SATISFACTION. THE USE OF THIS ITEM SHALL BE "AS DIRECTED BY THE ENGINEER."

CONVERSION OF METRIC STANDARD DRAWINGS:

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 OF THE 2002 CONSTRUCTION AND MATERIALS SPECIFICATIONS. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE. VALUES WHERE SUITABLE.

ITEMS 251 & 253 - PARTIAL DEPTH PAVEMENT REPAIR & PAVEMENT REPAIR:

THESE ITEMS OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE PREPARED. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND CUT OR SAWED TO A NEAT LINE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT (MAXIMUM - 3.0 INCHES FOR ITEM 251 PARTIAL DEPTH REPAIR AND MORE THAN 3 INCHES AVERAGE FOR ITEM 253 PAVEMENT REPAIR). THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

THE VERTICAL FACES OF THE REPAIR AREA SHALL BE TACKED PRIOR TO PLACING THE 301 FOR ITEM 253 PAVEMENT REPAIR AND/OR 448 ASPHALT FOR ITEM 251 PARTIAL DEPTH REPAIR. THIS MATERIAL SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER SQUARE YARD OF ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR AND PER CUBIC YARD ITEM 253 PAVEMENT REPAIR.

251 PARTIAL DEPTH ___50___ SQUARE YARD
PAVEMENT REPAIR

253 PAVEMENT REPAIR ___300___ CUBIC YARD

ITEM 617 COMPACTED AGGREGATE , AS PER PLAN

THIS ITEM SHALL MEET ALL REQUIREMENTS FOR ITEM 617 COMPACTED AGGREGATE WITH THE FOLLOWING EXCEPTION:

- 1) NO RECYCLED ASPHALT CONCRETE PAVEMENT SHALL BE USED IN THIS ITEM

ALL COSTS ASSOCIATED WITH THE EQUIPMENT, LABOR AND MATERIALS NECESSARY FOR SUPPLYING AND PLACING THIS ITEM SHALL BE INCLUDED IN THE PRICE BID PER CUBIC YARD FOR ITEM 617 COMPACTED AGGEGATE, AS PER PLAN.

CALCULATIONS

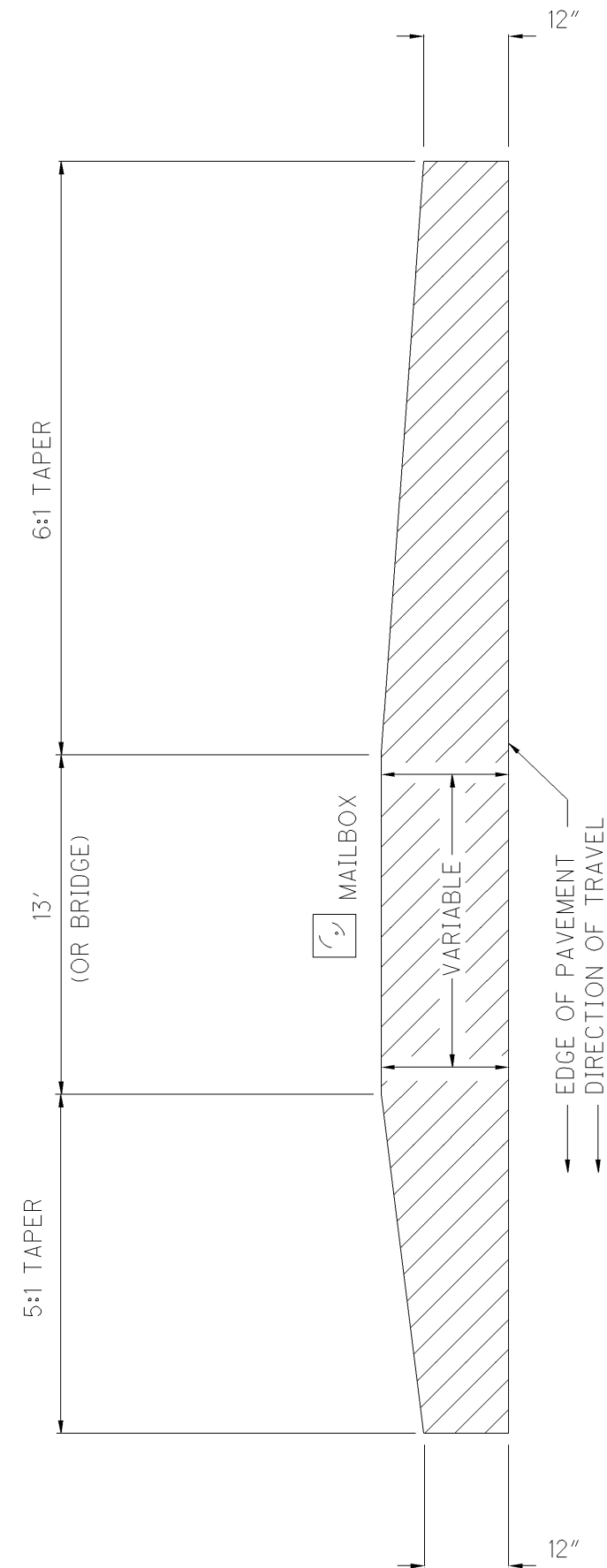
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GENERAL NOTES

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SINGLE - MAILBOX TURNOUT & BRIDGE APPROACHES

* IF THERE IS A DISTANCE OF 100 FEET OR LESS BETWEEN MAILBOXES: APPROCHES SHALL BE PAVED THRU TO LAST MAILBOX. THIS AREA SHALL REPRESENT LOCATION OF BRIDGE (VARIABLE LENGTH, NO WORK) FOR BRIDGE APPROACHES.

** IF THERE IS A DISTANCE OF 50 FEET OR LESS BETWEEN DRIVEWAY AND MAILBOX: APPROACH SHALL BE PAVED THRU TO MAILBOX.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING OF MATERIALS FROM ALL STONE DRIVEWAYS AND MAILBOX APPROACHES TO A DEPTH OF 2 INCHES BELOW EXISTING PAVEMENT. EXCAVATED MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN RESPONSIBILITY OUTSIDE THE LIMITS OF THE HIGHWAY RIGHT OF WAY.

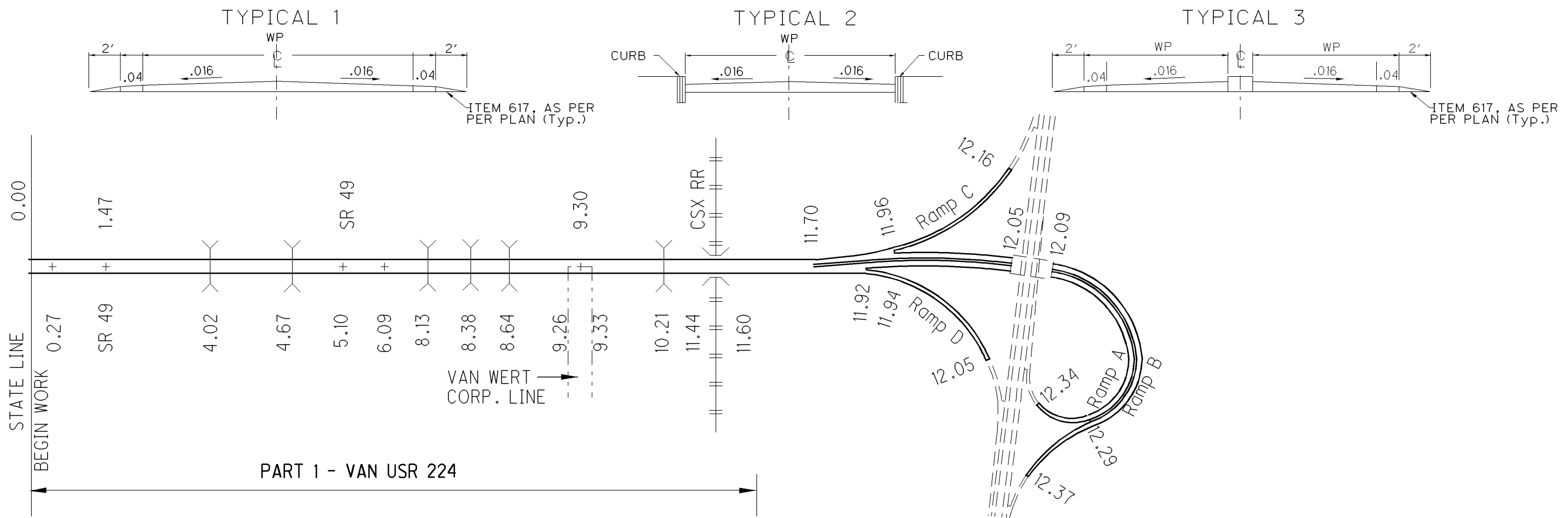
WHEN UNSTABLE MATERIAL IS ENCOUNTERED, EXCAVATION OF THIS MATERIAL SHALL BE TO A DEPTH OF 6 INCHES BELOW EXISTING PAVEMENT ELEVATION. AN ESTIMATED QUANTITY OF 304 AGGREGATE BASE HAS BEEN SET UP FOR BACKFILL OF THESE AREAS.

AN ESTIMATED QUANTITY OF 408 PRIME COAT HAS BEEN SET UP TO BE USED IN THE AREAS OF EXCAVATION.

AN ADDITIONAL QUANTITY OF 448 ASPHALT CONCRETE PG64-22 HAS BEEN SET UP TO BE USED IN THOSE AREAS EXCAVATED FOR DRIVEWAYS, MAILBOX AND BRIDGE APPROACHES.

ALL WORK, MATERIALS, EXCEPT 304 AND 408, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE ABOVE DESCRIBED WORK SHALL BE INCIDENTAL TO THE PLACEMENT OF THE 448 ASPHALT CONCRETE PG64-22.

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PAVEMENT DATA

ROUTE	FROM	TO	DISTANCE		PAVT WIDTH		TYPICAL SECTION	EXIST PAVT. TYPE	PAVT AREA	407		408	448	448	202	254	254	304	617
										TACK COAT	TACK COAT FOR INTERM	PRIME COAT	ASPHALT CONCRETE SURFACE COURSE TYPE 1	ASPHALT CONCRETE INTERM COURSE TYPE 1	WEARING COURSE REMOVED	PAVT PLANING	PATCHING PLANED SURFACES	AGGREGATE BASE	COMPACTED AGGREGATE
					FROM	TO				0.075 GAL/SY	0.075 GAL/SY	0.4 GAL/SY	THICKNESS 1 1/4"	THICKNESS 1/2"	THICKNESS 1"	THICKNESS 1 1/4"	0.2% OF PLANED AREA		2 @ 2 FT 2 INCH AVG. THICKNESS
	SLM	SLM	MILES	FEET	FEET				SQ YD	GAL	GAL	GAL	CU YD	CU YD	SQ YD	SQ YD	SQ YD	CU YD	CU YD
USR 224	0.00	9.25	9.25	48840.0	30.0	30.0	1	404	162800	12210			5653			162800	326		1205.93
	9.25	11.60	2.35	12408.0	44.0	44.0	1	404	60661	4550			2106			60661	121		306.37
	11.60	11.70	0.10	528.0	44.0	62.4	1	404	3121	234			108			3121	6		13.04
EB LANE	11.70	11.85	0.15	792.0	34.0	32.0	3	404	2904	218			101			2904	6		9.78
	11.85	11.92	0.07	369.6	12.0	12.0	3	404	493	37			17			493	1		
WB LANE	11.70	11.90	0.20	1056.0	25.5	34.0	3	404	3491	262			121			3491	7		13.04
	11.90	11.96	0.06	316.8	17.0	17.0	3	404	598	45			21			598	1		
RAMP A	11.92	12.05	0.13	686.4	20.0	20.0	3	404	1525	114			53			1525	3		8.47
	12.05	12.09	0.04	211.2	STRUCTURE														
	12.09	12.29	0.20	1056.0	20.0	20.0	3	404	2347	176			81			2347	5		13.04
RAMP B	12.29	12.34	0.05	264.0	20.0	22.0	1	404	616	46			21			616	1		6.52
	11.96	12.05	0.09	475.2	20.0	20.0	3	404	1056	79			37			1056	2		5.87
	12.05	12.09	0.04	211.2	STRUCTURE														
RAMP C	12.09	12.29	0.20	1056.0	20.0	20.0	3	404	2347	176			81			2347	5		13.04
	12.29	12.37	0.08	422.4	22.0	22.0	1	404	1033	77			36			1033	2		10.43
	11.90	11.96	0.06	316.8	17.0	26.0	3	404	757	57			26			757	2		3.91
RAMP D	11.96	12.16	0.20	1056.0	22.0	22.0	1	404	2581	194			90			2581	5		26.07
	11.85	11.92	0.07	369.6	20.0	44.0	3	404	1314	99			46			1314	3		4.56
	11.92	11.94	0.02	105.6	26.0	22.0	1	404	282	21			10			282	1		2.61
TOTALS	11.94	12.05	0.11	580.8	22.0	22.0	1	404	1420	106			49			1420	3		14.34
				71122					249345	18701			8658			249345	499		1657

* NOTE: ESTIMATED QUANTITIES
NOTE: DRAWINGS NOT TO SCALE
NOTE: ALL TOTALS CARRIED TO GENERAL SUMMARY
NOTE: MAILBOX, DRIVES AND INTERSECTION QUANTITIES ARE INCLUDED IN THE EXTRA AREAS

† = VARIABLE
[MB] = MONUMENT BOX

ASPHALT CONCRETE

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CALCULATED
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DETAIL	
1	MAINLINE UNDIVIDED
1	TYPICAL SPACING

DETAIL	
2	TAPERED ACCELERATION LANE
3	DECELERATION LANE
4	PARALLEL ACCELERATION LANE
5	MULTILANE DIVIDED/EXPRESSWAY

DETAIL	
6	STOP APPROACH
7	ONE LANE APPROACH W/IT TURN LANE
8	THRU APPROACH
9	TWO LANE APPROACH W/IT TURN LANE

DETAIL	
10	4 LANE DIVIDED TO 2 LANE TRANSITION
11	4 LANE UNDIVIDED TO 2 LANE TRANSITION
12	TWO LANE NARROW BRIDGE
13	ONE LANE BRIDGE
14	TWO WAY LEFT TURN
15	HORIZONTAL CURVE

DETAIL	
16	HORIZONTAL CURVE ALTERNATE
17	STOP APPROACH ALTERNATE
GAP	CENTERLINE AT 80 FT. TYPICAL

ROUTE	FROM	TO	DISTANCE		621			642			647	
					RPM REMOVED	RPM		EDGE LINE	CENTERLINE	LANE LINE	CHANNELIZING LINE	TRANSVERSE LINE
			MILES	FEET	EACH	EACH		MILE	MILE	MILE	FT	FT
	SLM	SLM										
USR 224	0.00	9.25	9.25	48840.0	611	611		18.50	9.25			
	9.25	11.60	2.35	12408.0	155	155		4.70	2.35			
	11.60	11.70	0.10	528.0	7	7		0.20	0.10			
EB LANE	11.70	11.85	0.15	792.0				0.30		0.15		
	11.85	11.92	0.07	369.6				0.14			739	166
WB LANE	11.70	11.90	0.20	1056.0				0.40				
	11.90	11.96	0.06	316.8				0.12		0.04	317	
RAMP A	11.92	12.05	0.13	686.4				0.26				
	12.05	12.09	0.04	211.2				0.08				
	12.09	12.29	0.20	1056.0				0.40				
	12.29	12.34	0.05	264.0				0.10				
RAMP B	11.96	12.05	0.09	475.2				0.18				
	12.05	12.09	0.04	211.2				0.08				
	12.09	12.29	0.20	1056.0				0.40				
	12.29	12.37	0.08	422.4				0.16				
RAMP C	11.90	11.96	0.06	316.8				0.12				
	11.96	12.16	0.20	1056.0				0.40				
RAMP D	11.85	11.92	0.07	369.6				0.14				
	11.92	11.94	0.02	105.6				0.04				
	11.94	12.05	0.11	580.8				0.22				
TOTALS				71122	772	772		26.94	11.70	0.19	1056	166

