STATE OF OHIO DEPARTMENT OF TRANSPORTATION

MAD - 38 – 22.81

MAD - SR 38-22.81/Various
050385 PID - 16996
Dist 6 7/13/2005

SEE SHEET 2

S.R. 38: 83° 24' 30" W LONGITUDE 40° 04' 30" N LATITUDE
U.S. 40: 83° 31' 00" W LONGITUDE 39° 56' 00" N LATITUDE
S.R. 41: 83° 36' 45" W LONGITUDE 39° 44' 15" N LATITUDE
S.R. 323: 83° 26' 30" W LONGITUDE 39° 26' 30" N LATITUDE

LOC	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII		NET LENGTH MI	VILLAGE
				BEGIN	END		
1	MAD	38	(22.81)	22.81	30.02	7.21	
2	UNI	38	(0.00)	0.00	0.11	0.11	
3	MAD	40	(0.00 - 1.90)	0.00	2.00	2.00	
4	MAD	41	(1.38 - 1.66)	1.38	1.83	0.45	SOUTH SOLON
5	MAD	323	(0.00 - 15.65)	0.00	18.68	18.68	SOUTH SOLON, MIDWAY

INDEX OF SHEETS

DESIGN DESIGNATION

MAD-38 CURRENT ADT (2004)	910
DESIGN YEAR ADT(2018)	2,365
UNI-38 CURRENT ADT (2004)	910
DESIGN YEAR ADT(2018)	2,760
MAD-41 CURRENT ADT (2004)	1,470
DESIGN YEAR ADT(2018)	1,983
MAD-323 CURRENT ADT (2004)	820
DESIGN YEAR ADT(2018)	1,192
DESIGN/LEGAL SPEED	55/55

DESIGN FUNCTIONAL CLASSIFICATION: RURAL MAJOR COLLECTOR

PROJECT DESCRIPTION

RESURFACING OF 7.32 MI OF SR-38 BEGINNING AT SLM 22.81 AND GOING THROUGH THE MADISON/UNION COUNTY LINE TO THE INTERSECTION OF SR-161 2.00 MILES ON US-40, 0.45 MILES OF SR-41 IN THE CORPORATION LIMITS OF SOUTH SOLON, AND 18.68 MILES ON SR-323 GOING FROM THE SR-41 INTERSECTION TO THE SR-56 INTERSECTION.

2002 SPECIFICATIONS

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT.

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

STATE OF OHIO
GREGORY L. MCGINNIS
E-54246
REGISTERED PROFESSIONAL ENGINEER

Signed: Gregory L. McGinnis
Date: March 3, [redacted]

PLAN PREPARED BY:
O.D.O.T.
CENTRAL OFFICE
PRODUCTION

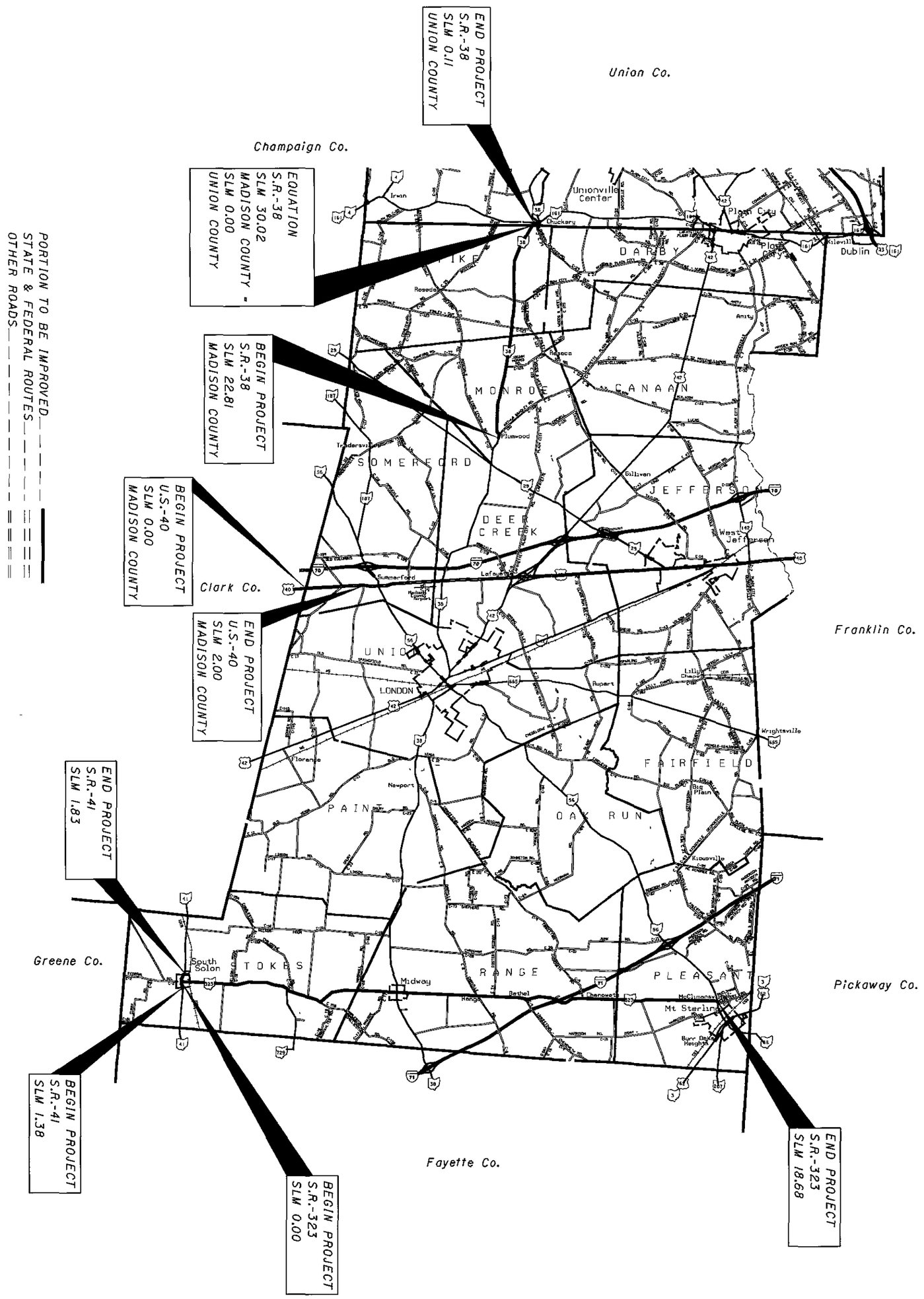
STANDARD DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7/16/04	MT-35.10	4/20/01	SS-832	4/17/04
		MT-95.30	7/16/04	SS-833	2/12/03
RM-1.1	4/18/03	MT-97.10	4/19/02	SS-841	4/19/02
		MT-97.12	4/19/02		
TC-41.20	1/19/01	MT-99.20M	1/30/95	SS-908	4/18/03
TC-52.10	4/20/01	MT-105.10	10/18/02		
TC-52.20	4/20/01	MT-105.11	10/18/02		
TC-65.10	1/21/05				
TC-65.11	1/21/05				
TC-71.10	1/21/05				

PLANS CERTIFIED BY:
NAME David R. Polaris DATE 3-8-05
DISTRICT 6
OHIO DEPT. OF TRANSPORTATION

APPROVED Jack R. Marchbanks
District Deputy Director of Transportation
DATE 3/8/05

APPROVED Gordon Proctor
Director, Department of Transportation
DATE 5-2-05

FEDERAL PROJECT NO. E036 (500)
PID NO. 16996
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
MAD-38-22.81
1/34



2/34	MAD-38-22.81	LOCATION MAP	NO SCALE	N

CONSTRUCTION INITIATION:

THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS AT 740-363-1251, EXT. 469 OR BY FAX AT 740- 369-7437 AND THE DISTRICT TRAFFIC MANAGEMENT ENGINEER AT 740-363-1251, EXT. 323, FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT TRAFFIC MANAGEMENT ENGINEER OF ANY AND ALL DELAYS AND OR CHANGES REGARDING THE CONSTRUCTION PROJECT. THE PROJECT ENGINEER WILL PROVIDE CLARIFICATION FOR ANY QUESTIONS ABOUT THIS NOTIFICATION REQUIREMENT.

COORDINATION WITH O.D.O.T.'S CENTRAL OHIO TRAFFIC MANAGEMENT PROGRAM (COTMP):

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES ON A WEEKLY BASIS. WHEN DETOURS ARE PLANNED, THIS NOTIFICATION SHALL BE AT THE PRE-CONSTRUCTION MEETING OR 30 DAYS IN ADVANCE ONCE CONSTRUCTION HAS BEGUN. LANE CLOSURES FOR 2 OR MORE WEEKS SHALL BE REPORTED 2 WEEKS IN ADVANCE OF CLOSURE. LANE CLOSURES OF LESS THAN 2 WEEKS DURATION AND MORE THAN 2 DAYS SHALL BE REPORTED AT LEAST 3 WORKING DAYS IN ADVANCE. FOR SHORT TERM LANE OR RAMP CLOSURES (2 DAYS OR LESS) NOTIFICATION SHALL BE MADE AT LEAST 1 WORKING DAY IN ADVANCE. INFORMATION SHALL INCLUDE BUT NOT BE LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT TRAFFIC AT PRESENT AND IN THE NEXT 30 DAYS. THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL WHO WILL BE RESPONSIBLE FOR PREPARING THIS REPORT AT THE PRE - CONSTRUCTION MEETING. ANY UNFORESEEN IMPACTS TO TRAFFIC SHALL BE REPORTED TO THE PROJECT ENGINEER AS SOON AS POSSIBLE. THE PROJECT ENGINEER SHALL PROVIDE THIS INFORMATION TO COTMP. ALL CONSTRUCTION ACTIVITIES THAT INTERFERE WITH TRAFFIC SHALL BE REPORTED TO COTMP. THIS INFORMATION SHALL BE PROVIDED TO COTMP AT (740) 363-1251 (EXT. 323), OR BY FAX AT (740) 363-6831. THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 101.18) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

UTILITIES:

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

Mr. Ed Haas
Team Leader (Ohio)
Columbia Gas Transmission
589 North State Road
Medina, OH 44256
330-721-4177

Mr. Bruce Taylor
Real Estate Services
The Dayton Power and Light Company
1900 Dryden Road
Dayton, OH 45439
937--331-4497

Mr. Tom Ziomek
Manager - Legal Mandate
SBC
150 East Gay Street - Room 6C
Columbus, OH 43215
614-223-7162

Mr. Kevin Rich
Engineering Supervisor
Time Warner Communications
1266 Dublin Road, PO Box 2553
Columbus, OH 43216-2553
614-481-5263

Mr. Steve R. Rawlinson
Public Improvement - Project Coordinator
Vectren
20 N. Fourth Street
Evansville, IN 44708-1724
812-491-4765

Mr. William Muether
Verizon
550 Leader Street
Marion, OH 43302
740-383-0527

Pioneer Rural Electric Cooperative
344 West US Route 36, PO Box 604
Piqua, OH 45356
937-773-2523

Ms. Karen Thompson
First Energy (Ohio Edison Company)
420 South York Street
Springfield, OH 45505
937-327-1238

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

CONVERSION OF STANDARD CONSTRUCTION DRAWINGS:

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.11 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E 380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES

PAVING AT RAILROAD CROSSING

THE CROWN SHALL BE WORKED OUT OF THE PROPOSED PAVEMENT ON EACH SIDE OF THE RAILROAD CROSSING, BEGINNING 50 FEET FROM THE NEAREST RAIL, BY RAISING THE EDGES OF THE NEW PAVEMENT TO MEET THE PLATFORM ELEVATION.

PAVEMENT RESTORATION FOR MONUMENT ASSEMBLY INSTALLATIONS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 604 MONUMENT ASSEMBLIES.

ITEM 301 ASPHALT CONCRETE BASE, PG64-22 3 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 12 INCHES AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE MONUMENT ASSEMBLIES.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

ALIGNMENT AND PROFILE

THE PROPOSED WORK ON ALL HIGHWAYS AND DRIVES IS FOR THE REPAIR AND APPLICATION OF ASPHALT CONCRETE. THE ALIGNMENT OF THE EXISTING ROADWAY WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING ROADWAY EXCEPT THAT IT WILL BE RAISED AN AMOUNT EQUAL TO THE THICKNESS OF THE ASPHALT CONCRETE COURSE AS SPECIFIED IN THIS PLAN.

CONTRACTORS EQUIPMENT - OPERATION AND STORAGE:

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTOR'S STORAGE AREA.

CONTINGENCY QUANTITIES:

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CALCULATED GLM CHECKED MDC

GENERAL NOTES

MAD-38-22.81

3/34

PAVING LIMITS

THE CONTRACTOR SHALL NOT PLACE TACK COAT OR ASPHALT MATERIALS ON ANY EXPOSED CONCRETE BRIDGE DECK EXCEPT AS NOTED IN THIS PLAN, OR ON STATE ROUTE 38. BUTT JOINTS (PER BP-3.1) SHALL BE PLACED ON BOTH SIDES OF STATE ROUTE 38 AT THE STATE ROUTE 323 INTERSECTION LOCATED WITHIN THE VILLAGE OF MIDWAY.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN:

REPAIRS SHALL CONSIST OF REMOVAL OF PAVEMENT TO DEPTH OF 4 INCHES AND PLACEMENT OF 4 INCHES OF ITEM 301-ASPHALT CONCRETE BASE, PG64-22. THE WORK SHALL BE PERFORMED PRIOR TO RESURFACING.

THE WIDTH FOR S.R. 38 IS 4'
THE WIDTH FOR S.R. 323 IS 3'

THE FOLLOWING QUANTITY FOR WORK WITHIN THE SOUTH SOLON CORPORATION LIMITS HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN: - 22 CU. YD.

ITEM 253 - PAVEMENT REPAIR

THIS WORK SHALL CONSIST OF SAW CUTTING AND REMOVAL OF EXISTING PAVEMENT AND ALL UNSUITABLE MATERIALS TO A DEPTH OF APPROXIMATELY 10 INCHES. THE PATCH REPLACEMENT MATERIAL SHALL CONSIST OF 10 INCHES OF ITEM 301 PLACED IN TWO EQUAL LIFTS. ITEM 448 OVERLAY AND ITEM 407 TACK COAT IS PLACED ON THE TOP SURFACE, AND IS PAID FOR SEPARATELY. THESE MATERIALS ARE TO BE PROPERLY COMPACTED AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 253 - PAVEMENT REPAIR 20 CU. YD.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE:

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGE THAT MAY RESULT FROM THE PLANING OPERATION, INCLUDING CASTINGS AND BRIDGE DECK WATERPROOFING. THE DEPTH OF PLANING CLOSE TO THE CASTINGS SHALL BE AS DIRECTED, TO ACHIEVE A SMOOTH RIDING FINISHED PAVEMENT. THE PROPOSED PAVEMENT PLANING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE (CROWN) DURING THE PLANING OPERATIONS. NO PLANED PAVEMENT SHALL BE LEFT EXPOSED TO TRAFFIC FOR MORE THAN 5 CONSECUTIVE DAYS PRIOR TO THE PLACEMENT OF ITEM 448 - ASPHALT CONCRETE SURFACE COURSE TYPE 1, PG64-22. FAILURE TO COMPLY SHALL SUBJECT THE CONTRACTOR TO LIQUIDATED DAMAGES AS PER SECTION 108.07 OF CMS

ITEM 407 - 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 0.075 GALLON PER SQ. YARD. A COVER AGGREGATE SHALL BE USED IF HEAVY TRACKING OF THE TACK COAT ON TO THE EXISTING PAVEMENT SHOULD OCCUR DURING THE PAVING OPERATIONS. THE COST OF THE COVER AGGREGATE SHALL BE INCLUDED IN THE COST OF THIS ITEM.

ITEM 604 - MONUMENT ASSEMBLY:

THIS WORK SHALL CONSIST OF FURNISHING AND PLACING CENTERLINE MONUMENTS AT THE FOLLOWING INTERSECTIONS. THE TOP ELEVATION OF THE MONUMENT BOXES SHALL BE 1/2 INCH LOWER THAN THE PROPOSED PAVEMENT SURFACE ELEVATION.

1.) S.R. 323 AND TWP. RD. 67 (HICKS RD.)
2.) S.R. 323 AND CO. RD. 9 (YANKEETOWN-CHENOWELL RD.-NORTH)
3.) S.R. 323 AND CO. RD. 9 (YANKEETOWN-CHENOWELL RD.-SOUTH)
4.) S.R. 323 AND CO. RD. 8 (DANVILLE RD.-SOUTH)
5.) S.R. 323 AND CO. RD. 8 (DANVILLE RD.-NORTH)
6.) S.R. 323 AND CO. RD. 77 (PRAIRIE RD.)
7.) S.R. 323 AND CO. RD. 81 (CURRY RD.)
8.) S.R. 323 AND CO. RD. 16 (SELSOR-MOON RD.)

A REGISTERED SURVEYOR FROM DISTRICT 6 SURVEY DEPARTMENT SHALL BE RESPONSIBLE FOR REFERENCING AND VERIFYING THE LOCATIONS OF THE CENTERLINE MONUMENTS. THE CONTRACTOR SHALL NOTIFY THE SURVEY DEPARTMENT (614-363-1251 EXT. 250) 48 HOURS PRIOR TO START OF MONUMENT WORK. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL NECESSARY LABOR, MISCELLANEOUS HARDWARE, AND EQUIPMENT REQUIRED FOR PLACEMENT. PAYMENT WILL BE AT CONTRACT BID PRICE PER EACH. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 604 - MONUMENT ASSEMBLY: - 8 EACH

ITEM 604 - MONUMENT BOX ADJUSTED TO GRADE:

THIS WORK SHALL CONSIST OF ADJUSTING ALL EXISTING CENTERLINE MONUMENTS AT THE FOLLOWING INTERSECTIONS. THE TOP ELEVATION OF THE MONUMENT BOXES SHALL BE 1/2 INCH LOWER THAN THE PROPOSED PAVEMENT SURFACE ELEVATION.

1.) S.R. 38 AND CO. RD. 126 (JOSIAH-MORRIS RD.)
2.) S.R. 38 AND CO. RD. 123 (FINLEY GUY RD.)
3.) S.R. 38 AND TWP. RD. 24 (ROSEDALE-PLAIN CITY RD.)
4.) S.R. 323 AND BRIDGE OVER I-71, SLM 13.23. 6 BOXES.
5.) S.R. 323 AND TWP. RD. 79 (BETHEL RD.)
6.) S.R. 323 AND S.R. 56

THE METHOD OF ADJUSTING MONUMENT BOXES TO GRADE MUST BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING WORK. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL NECESSARY LABOR, MISCELLANEOUS HARDWARE, AND EQUIPMENT REQUIRED FOR ADJUSTMENT. PAYMENT WILL BE AT CONTRACT BID PRICE PER EACH. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 604-MONUMENT BOX ADJUSTED TO GRADE - 11 EACH

ITEM 614 - WORK ZONE MARKING SIGN:

THESE SIGNS SHALL BE PLACED TO REFLECT THE EXISTING PASSING AND NO PASSING ZONES AS DETERMINED FROM THE EXISTING CENTERLINE MARKINGS WITHIN THE PROJECT LIMITS. THESE SIGNS ARE NOT TO BE REMOVED UNTIL PERMANANT MARKINGS ARE PLACED.

OW-167-36	"NO EDGE LINES"	- 8 EACH
R-33-30	"DO NOT PASS"	-20 EACH
R-34-30	"PASS WITH CARE"	-14 EACH

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE MARKING SIGN - 42 EACH

ITEM 614 WORK ZONE CENTER LINE, CLASS II

MAD-38-22.81-30.02
SLM 22.81 TO 30.02 - 7.21 MI (SURFACE COURSE)
UNI-38-0.00-0.11
SLM 0.00 TO 0.11 - 0.11 MI (SURFACE COURSE)
MAD-323-0.00-18.68
SLM 0.00 TO 18.68 - 18.68 MI (SURFACE COURSE)
MAD-41-1.38-1.83
SLM 1.38 TO 1.83 - 0.45 MI (SURFACE COURSE)

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE CENTER LINE, CLASS II - 26.45

CALCULATED GLM
CHECKED MDC

GENERAL NOTES

MAD-38-22.81

ITEM 614 - MAINTAINING TRAFFIC:

ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES AS PER MT-97.12 BY USE OF THE EXISTING AND COMPLETED PAVEMENT. WORK ZONES SHALL BE LIMITED IN LENGTH TO THE AMOUNT OF WORK THAT CAN BE PERFORMED THAT DAY.

ON U.S. 40 TRAFFIC SHALL BE MAINTAINED AS PER MT-95.30

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

MEMORIAL DAY
INDEPENDENCE DAY
LABOR DAY
THANKSGIVING DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THE PERIOD.

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TRAFFIC
SUNDAY	12 NOON FRIDAY THRU 6 A.M. TUESDAY
MONDAY	12 NOON FRIDAY THRU 6 A.M. TUESDAY
TUESDAY	12 NOON MONDAY THRU 6 A.M. WEDNESDAY
WEDNESDAY	12 NOON TUESDAY THRU 6 A.M. THURSDAY
THURSDAY	12 NOON WEDNESDAY THRU 6 A.M. MONDAY
FRIDAY	12 NOON THURSDAY THRU 6 A.M. MONDAY
SATURDAY	12 NOON FRIDAY THRU 6 A.M. MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07. LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN, WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, TO THE DISTRICT SIX MAINTENANCE OF TRAFFIC COORDINATOR, THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN WITH CONSTRUCTION PHASING DESCRIPTIONS, BEFORE BEGINNING WORK.

ITEM 617 - WATER:

THIS ITEM SHALL BE USED AS DIRECTED BY THE ENGINEER. THIS IS AN ESTIMATED QUANTITY OF 17 M/GAL. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 617 - WATER: - 17 M/GAL

ITEM 623 - CONSTRUCTION LAYOUT STAKES, AS PER PLAN:

THIS ITEM SHALL CONSIST OF STATIONING USING 3 FT LATH STAKES. THE STAKES SHALL BE SPACED AT 100 FT INTERVALS AND SHALL EXTEND THROUGHOUT THE LENGTH OF THE PROJECT. PLACEMENT OF THE STAKES SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED OR MISSING STAKES.

CONSTRUCTION LAYOUT STAKES, AS PER PLAN WILL BE PAID FOR AT THE CONTRACT LUMP SUM BID, WHICH PRICE SHALL BE FULL COMPENSATION FOR ALL SERVICES, MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS, INCLUDING THE REMOVAL, NECESSARY TO COMPLETE THIS ITEM.

ITEM 642 - PAVEMENT MARKING, TYPE I:

THE LOCATIONS, SIZES, AND SHAPES OF PROPOSED PAVEMENT MARKINGS SHALL BE THE SAME AS EXISTING PAVEMENT MARKINGS.

ESTIMATED QUANTITIES AND APPROXIMATE LOCATIONS HAVE BEEN PROVIDED FOR THESE WORK ITEMS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND SHAPE OF THE EXISTING PAVEMENT MARKINGS BEFORE THE PAVEMENT PLANING AND RESURFACING OBLITERATES THE EXISTING PAVEMENT MARKINGS UNLESS THE PROPOSED PAVEMENT MARKINGS ARE DETAILED DIFFERENTLY FROM THE EXISTING PAVEMENT MARKINGS.

ENVIORNMENTAL COMMITMENTS:

SURFACE WATER PROTECTION

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO ANY STREAMS, DRAINAGE COURSES, OR BODIES OF WATER. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL BE NOT BE DISPOSED OF WITHIN THE FLOODPLAIN BELOW THE 100-YEAR FLOOD ELEVATION.

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT LIQUIDS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE (I.E. PAINT, SEALER, SOLVENT) FROM ENTERING STREAMS, WETLANDS OR OTHER WATERS OF THE UNITED STATES AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO THE PROJECT ENGINEER, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL GOVERNMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN UP AND REMEDIATION OF ANY SUCH SPILL.

GROUNDWATER PROTECTION

THERE ARE PUBLIC WATER SYSTEMS IN THE VICINITY OF AND WITHIN THE PROJECT THAT ARE SUPPLIED BY GROUNDWATER. IN ORDER TO MINIMIZE THE POTENTIAL TO CONTAMINATE THE PUBLIC DRINKING WATER SUPPLY, PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER. THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO THE PROJECT ENGINEER, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL GOVERNMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN UP AND REMEDIATION OF ANY SUCH SPILL.

CALCULATED GLM
CHECKED MDC

GENERAL NOTES

MAD-38-22.81

SHEET NUMBER											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	7	8	10	11	12	13		15	19						
															ROADWAY	
										1715	202	54000	1715	EACH	RPM REMOVED AND DISPOSED	
8											604	38500	8	EACH	MONUMENT ASSEMBLY	
11											604	39500	11	EACH	MONUMENT BOX ADJUSTED TO GRADE	
															EROSION CONTROL	
											832	30000	1000	EACH	EROSION CONTROL	
															PAVEMENT	
22							1359				251	01003	1381	CU YD	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN	4
20											253	02000	20	CU YD	PAVEMENT REPAIR	
		444	8682	7357	13973						254	01000	30456	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
3											301	46000	3	CU YD	ASPHALT CONCRETE BASE, PG 64-22	
		6442	651	15759	1048	1027					407	10000	24927	GALLON	TACK COAT	
		4295							35		407	14000	4330	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
		2386									448	46020	2386	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG64-22	
		2982	362	8755	776	560			45		448	47020	13435	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-22	
		954		3590		41					617	10100	4585	CU YD	COMPACTED AGGREGATE, TYPE A	
	17										617	25000	17	M GAL	WATER	
															TRAFFIC CONTROL	
										1715	621	00100	1715	EACH	RPM	
										53.98	642	00100	53.98	MILE	EDGE LINE, TYPE I	
										26.45	642	00300	26.45	MILE	CENTER LINE, TYPE I	
										111	646	10400	111	FT	STOP LINE	
										204	646	10500	204	FT	CROSSWALK LINE	
										2	646	20000	2	EACH	RAILROAD SYMBOL MARKING	
															STRUCTURES (OVER 20')	
															SEE SHEET NO. 14	
															MAINTENANCE OF TRAFFIC	
42											614	12460	42	EACH	WORK ZONE MARKING SIGN	
26.45											614	21400	26.45	MILE	WORK ZONE CENTER LINE, CLASS II	
											SPECIAL	10000300	LUMP		PREMIUM ON RAILROADS PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE	
	LUMP										614	11000	LUMP		MAINTAINING TRAFFIC	
	LUMP										623	10001	LUMP		CONSTRUCTION LAYOUT STAKES, AS PER PLAN	5
											624	10000	LUMP		MOBILIZATION	

CALCULATED GLM
CHECKED MDC

GENERAL SUMMARY

MAD-38-22.81

6/34

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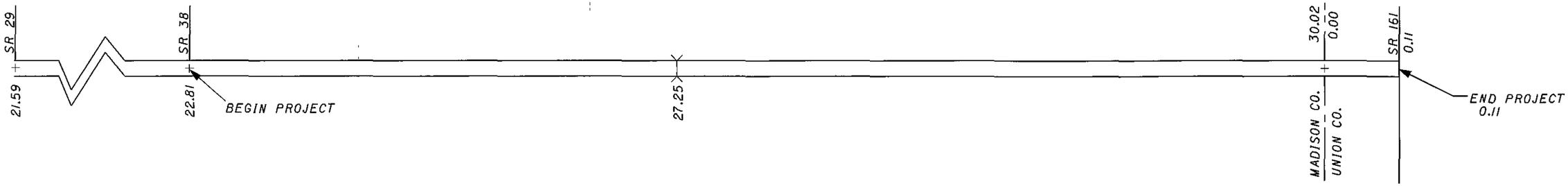
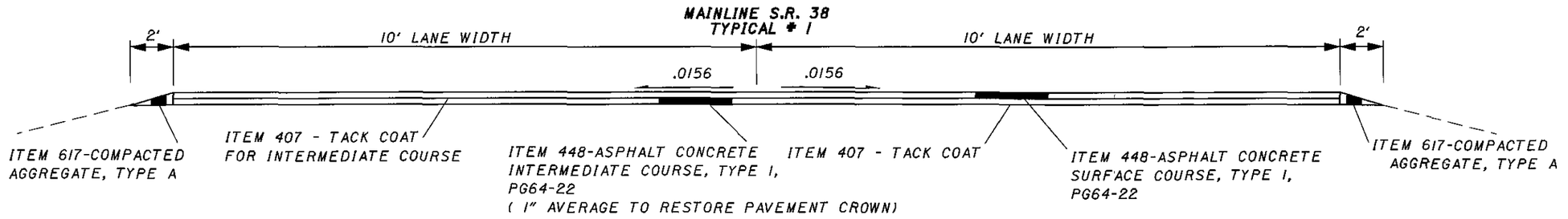
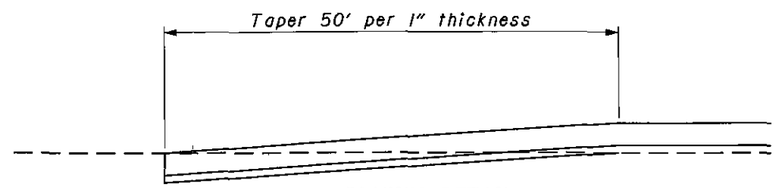






PLANING DETAIL

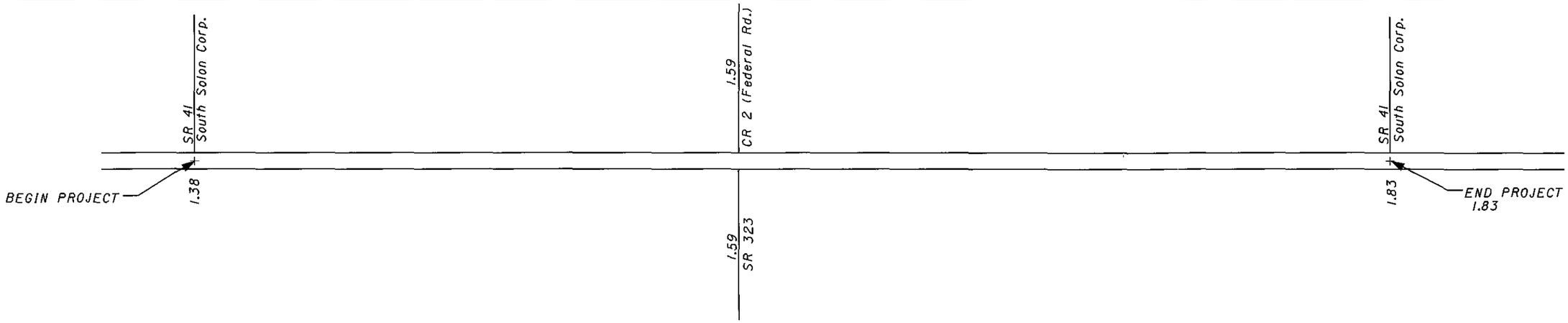
LOCATION							DESIGN		SURFACE PAVEMENT								REMARKS
									254		407	407	448		448		617		
COUNTY	ROUTE	LOG BEG	LOG END	LENGTH		TYPICAL	AVERAGE PAVEMENT WIDTHS	AREA	PAVEMENT PLANING, ASPHALT CONCRETE		TACK COAT FOR INTERM COURSE 0.05 GAL/SY	TACK COAT 0.075 GAL/SY	AC INTERM COURSE TYPE I PG64-22		AC SURF COURSE TYPE I PG64-22		COMPACT AGG TYPE A		
									AVG DEP				AVG THK		AVG THK		AVG THK		
		MI	MI	MI	FT		FT	SY	IN	SY	GAL	GAL	IN	CY	IN	CY	IN	CY	
MAD	38	22.81	30.02	7.21	38069	1	20	84598	1.50	222	4230	6345	1.00	2350	1.25	2937	2.00	940	PROVIDE BUTT JOINT BP-3.1
UNI	38	0.00	0.11	0.11	581	1	20	1291	1.50	222	65	97	1.00	36	1.25	45	2.00	14	
TOTALS CARRIED TO GENERAL SUMMARY										444	4295	6442		2386		2982		954	

CALCULATED GLM
CHECKED MDC

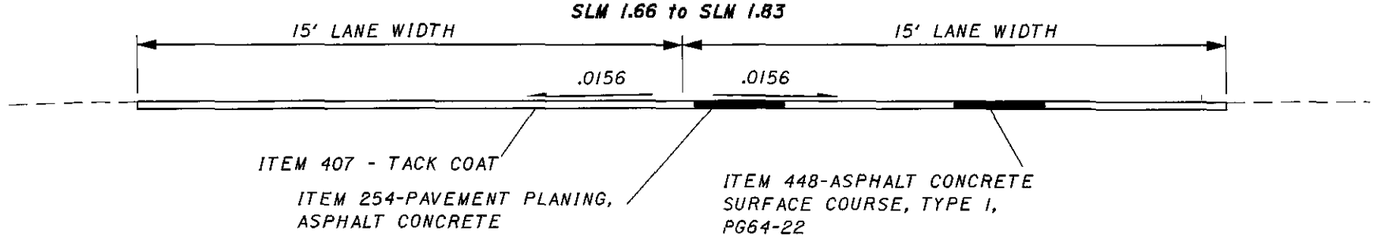
PAVEMENT SUBSUMMARY AND DETAILS

S.R. 38

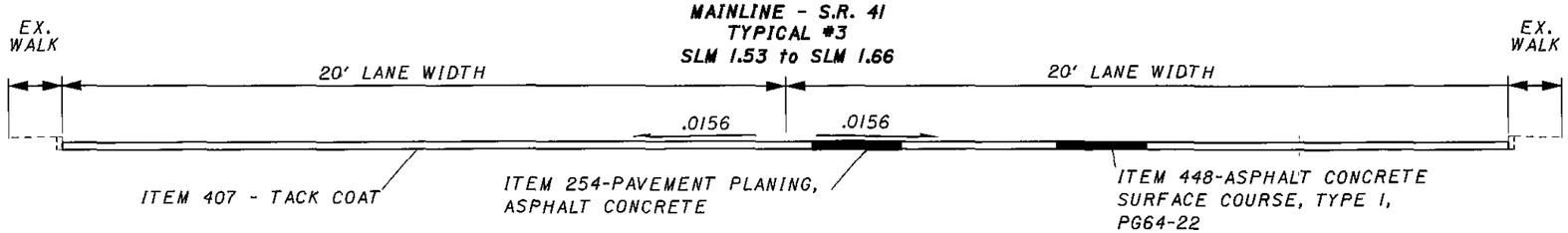
MAD-38-22.81



MAINLINE - S.R. 41
TYPICAL #2
SLM 1.38 to SLM 1.53
SLM 1.66 to SLM 1.83



MAINLINE - S.R. 41
TYPICAL #3
SLM 1.53 to SLM 1.66



LOCATION							DESIGN		SURFACE PAVEMENT									REMARKS
									254							407	448	
COUNTY	ROUTE	LOG BEG	LOG END	LENGTH		TYPICAL	AVERAGE PAVEMENT WIDTHS	AREA	PAVEMENT PLANING, ASPHALT CONCRETE							TACK COAT 0.075 GAL/SQ Y	AC SURF COURSE TYPE I			
									AVG DEP								AVG THK			
		MI	MI	MI	FT		FT	SY	IN	SY						GAL	IN	CY		
MAD	41	1.38	1.53	0.15	792	2	30	2640	1.50	2640						198	1.50	110		PROVIDE BUTT JOINT BP-3.1
MAD	41	1.53	1.66	0.13	686	3	40	3049	1.50	3049						229	1.50	127		
MAD	41	1.66	1.83	0.17	898	2	30	2993	1.50	2993						224	1.50	125		
TOTALS CARRIED TO GENERAL SUMMARY										8682						651		362		

CALCULATED GLM
CHECKED MDC

PAVEMENT SUBSUMMARY AND DETAILS

S.R. 41

MAD-38-22.81

8
34

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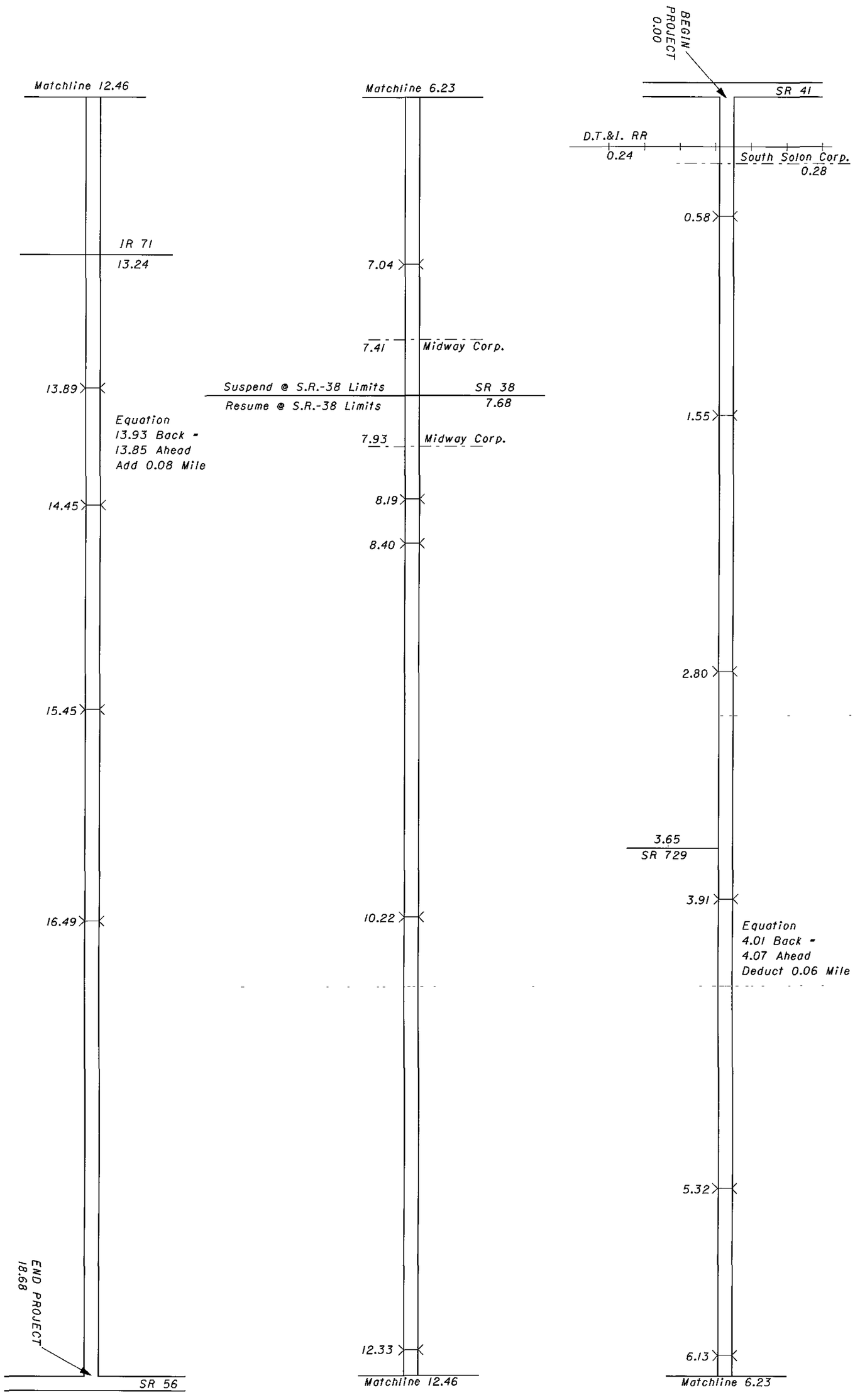


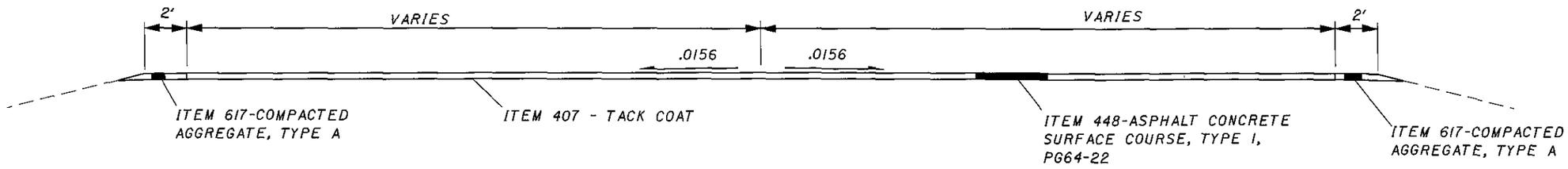
MAD-38-22.81

PAVEMENT DETAILS

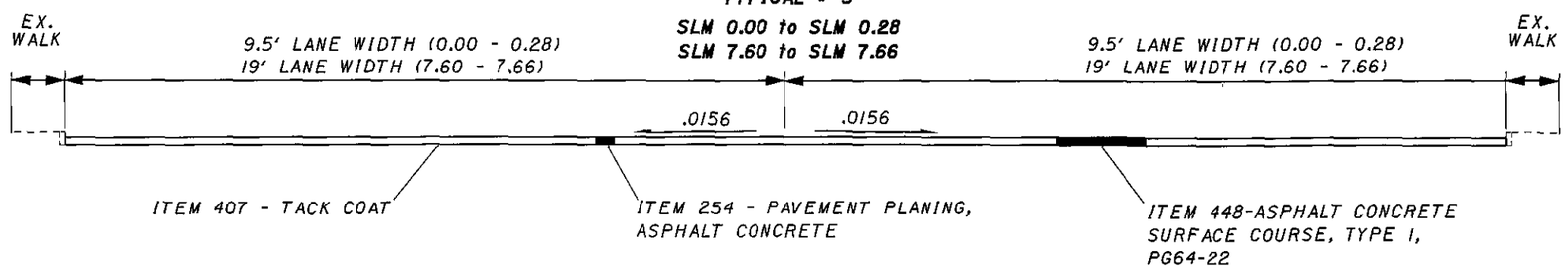
CALCULATED GLM
CHECKED MDC

MAINLINE - S.R. 323
TYPICAL # 4

SLM 0.28 to SLM 3.43 (19')	SLM 7.93 to SLM 13.01 (19')
SLM 3.43 to SLM 4.07 (20')	SLM 13.01 to SLM 13.85 (20')
SLM 4.07 to SLM 7.41 (19')	SLM 13.85 to SLM 15.33 (19')
SLM 7.41 to SLM 7.60 (19')	SLM 15.33 to SLM 15.65 (20')
SLM 7.66 to SLM 7.93 (19')	SLM 15.65 to SLM 18.68 (19')



MAINLINE - S.R. 323
TYPICAL # 5
SLM 0.00 to SLM 0.28
SLM 7.60 to SLM 7.66



FOR PLANING DETAIL SEE SHEET 7

*PLANING INSIDE SOUTH SOLON CORP. LIMITS

**PLANING INSIDE MIDWAY CORP. LIMITS

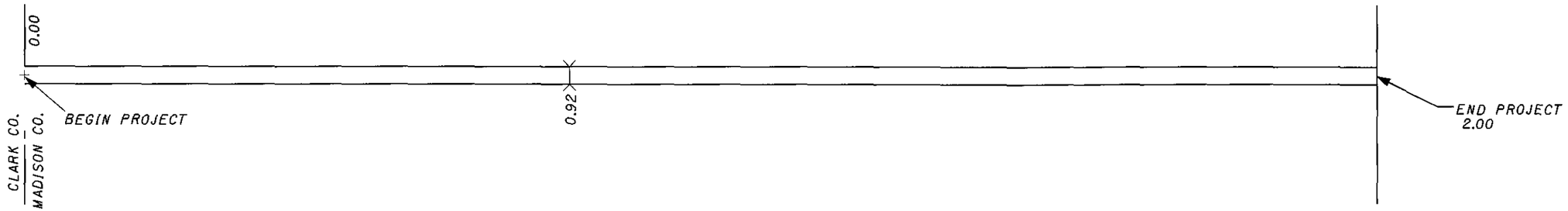
LOCATION							DESIGN		SURFACE PAVEMENT										REMARKS
									254							407	448		617		
COUNTY	ROUTE	LOG BEG	LOG END	LENGTH		TYPICAL	AVERAGE PAVEMENT WIDTHS	AREA	PAVEMENT PLANING, ASPHALT CONCRETE							TACK COAT 0.075 GAL/SQ Y	AC SURF COURSE TYPE I		COMPACT AGG TYPE A		
									AVG DEP								AVG THK		AVG THK		
		MI	MI	MI	FT		FT	SY	IN	SY						GAL	IN	CY	IN	CY	
MAD	323	0.00	0.28	0.28	1478	5	19	28082	1.50	3120						234	1.50	130		-	BUTT JOINT
MAD	323	0.28	3.43	3.15	16632	4	19	316008	1.50	475						2633	1.50	1463	3.00	616	BUTT JOINTS @ RR/0280
MAD	323	3.43	4.07	0.58	3062	4	20	61240	1.50	667						510	1.50	284	3.00	113	BUTT JOINTS @ 0385/0391
MAD	323	4.07	7.41	3.34	17635	4	19	335065								2792	1.50	1551	3.00	653	
MAD	323	7.41	7.60	0.19	1003	4	19	19057	1.50	158						159	1.50	88	3.00	37	
MAD	323	7.60	7.66	0.06	317	5	38	12046	1.50	1338						100	1.50	56		-	
MAD	323	7.66	7.93	0.27	1426	4	19	27094	1.50	158						226	1.50	125	3.00	53	
MAD	323	7.93	13.01	5.08	26822	4	19	509618	1.50	633						4247	1.50	2359	3.00	993	BUTT JOINTS @ 1022/1233
MAD	323	13.01	13.85	0.84	4435	4	20	88700								739	1.50	411	3.00	164	
MAD	323	13.85	15.33	1.56	8237	4	19	156503	1.50	317						1304	1.50	725	3.00	305	BUTT JOINTS @ 1445
MAD	323	15.33	15.65	0.32	1690	4	20	33800	1.50	333						282	1.50	156	3.00	63	BUTT JOINTS @ 1545
MAD	323	15.65	18.68	3.03	15998	4	19	303962	1.50	158						2533	1.50	1407	3.00	593	
TOTALS CARRIED TO GENERAL SUMMARY										7357						15759		8755		3590	

CALCULATED GLM
DESIGNED MDC

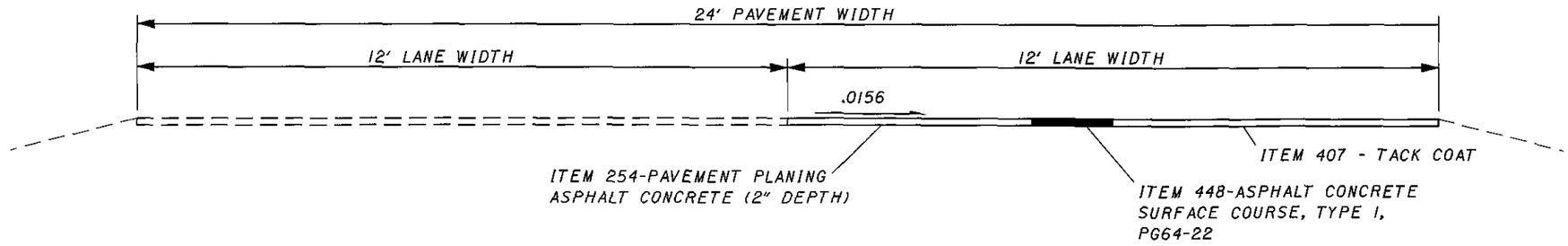
S.R. 323 PAVEMENT SUBSUMMARY AND DETAILS

MAD-38-22.81

10/34



EASTBOUND CENTERLINE - U.S. 40
TYPICAL # 6



LOCATION							DESIGN		SURFACE PAVEMENT								REMARKS
									254			407			448		
COUNTY	ROUTE	LOG BEG	LOG END	LENGTH		TYPICAL	AVERAGE PAVEMENT WIDTHS	AREA	PAVEMENT PLANING, ASPHALT CONCRETE			TACK COAT 0.075 GAL/SQ Y			AC SURF COURSE TYPE I PG64-22		
									AVG DEP						AVG THK		
		MI	MI	MI	FT		FT	SY	IN	SY		GAL			IN	CY	
MAD	38	0.00	2.00	2.00	10560	6	12	14080	2.00	14080		1056			2.00	782	PROVIDE BUTT JOINT BP-3.1
MAD	38	0.92	0.93		80		12	106.7	2.00	106.7		8			2.00	6	DEDUCT FOR STRUCTURE @ 0.92
TOTALS CARRIED TO GENERAL SUMMARY										13973		1048				776	

CALCULATED GLM
CHECKED MDC

U.S. 40 PAVEMENT SUBSUMMARY AND DETAILS

MAD-38-22.81

1 = 34

*AREAS CALCULATED UTILIZING CADD TOOLS *DEPTH = 1.25" ON S.R. 38, DEPTH = 1.50" ON S.R. 41 AND S.R. 323

LOCATION						PAVEMENT WIDTH				QUANTITIES					REMARKS
LOCATION	COUNTY	ROUTE	SLM	SLM	TYPICAL	LENGTH	SHOULDER (WB)	PAVEMENT (WP)	*AREA		407 TACK COAT 0.075 GAL. PER SQ. YD.	448 ASPHALT SURFACE COURSE TYPE I PG64-22 *DEPTH	617 COMPACT AGG. TYPE A 2"DEPTH		
						FT.	FT.	FT.	SQ. FT.		GAL.	CU. YD.	CU. YD.		
1	MAD	38	22.81	30.02	1		2	20	278		67.2	37.3			29 EACH EXISTING MAILBOX APPROACHES
									409		92.0	42.6	10.0		27 EACH GRAVEL DRIVEWAYS
									210		31.5	14.6			18 EACH ASPHALT DRIVEWAYS
									210		3.5	1.6			2 EACH CONCRETE DRIVEWAYS
															PROVIDE BUTT JOINTS (BP-3.1)
									600		25.0	11.6			5 EACH, THREE WAY INTERSECTIONS
									1200		20.0	9.3			2 EACH, FOUR WAY INTERSECTIONS
1	UNI	38	0.00	0.11	1		2	20	278		2.3	1.3			1 EACH EXISTING MAILBOX APPROACH
									210		1.8	1.0			1 EACH ASPHALT DRIVEWAY
2	MAD	41	1.38	1.83	2										NO EXISTING MAILBOX APPROACHES
									409		10.2	5.7	1.1		3 EACH GRAVEL DRIVEWAYS
									210		36.8	20.4			21 EACH ASPHALT DRIVEWAYS
									210		1.8	1.0			1 EACH CONCRETE DRIVEWAY
															PROVIDE BUTT JOINTS (BP-3.1)
									600		5.0	8.3			3 EACH, THREE WAY INTERSECTIONS
3	MAD	323	0.00	18.68	4		2	20	278		231.7	128.7			100 EACH EXISTING MAILBOX APPROACHES
									409		272.7	151.5	29.6		80 EACH GRAVEL DRIVEWAYS
									210		138.3	76.8			79 EACH ASPHALT DRIVEWAYS
									210		1.8	1.0			1 EACH CONCRETE DRIVEWAY
															PROVIDE BUTT JOINTS (BP-3.1)
									600		85.0	47.2			17 EACH, THREE WAY INTERSECTIONS
							SUB TOTALS				1026.6	559.9	40.7		
							TOTALS CARRIED TO GENERAL SUMMARY				1027	560	41		

CALCULATED GLM CHECKED MDC

INTERSECTION/DRIVE SUBSUMMARY

MAD-38-22.81

12/34

PAVEMENT REPAIR		ITEM 251
BEGIN SLM	END SLM	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN
		SQ. YD.
EASTBOUND		
MAD-323-0.28		
1.57	1.58	17.6
2.08	2.11	52.8
2.30	2.32	35.2
2.56	2.57	17.6
2.88	2.90	35.2
3.06	3.08	35.2
3.16	3.20	70.4
3.68	3.69	17.6
3.98	4.01	52.8
5.54	5.55	17.6
6.24	6.27	52.8
7.20	7.21	17.6
7.74	7.75	17.6
8.86	8.88	35.2
9.47	9.50	52.8
9.62	9.64	35.2
10.06	10.09	52.8
10.30	10.32	35.2
10.54	10.57	52.8
10.60	10.62	35.2
11.51	11.53	35.2
11.94	11.95	17.6
12.00	12.02	35.2
12.50	12.51	17.6
12.65	12.67	35.2
12.80	12.82	35.2
12.89	12.91	35.2
14.33	14.35	35.2
14.58	14.61	52.8
14.73	14.76	52.8
14.83	14.84	17.6
15.65	15.69	70.4
15.81	15.87	105.6
15.95	16.01	105.6
16.25	16.26	17.6
16.47	16.50	52.8
17.66		2.0
17.72		1.3
17.86		1.8
17.95		2.0
18.00		1.3
18.14		1.8
18.28		1.3
18.55		1.8
WESTBOUND		
0.98	1.04	105.6
2.23	2.24	17.6
2.56	2.58	35.2
3.38	3.40	35.2
5.22	5.23	17.6
6.96	6.97	17.6
8.62	8.65	52.8
8.87	8.88	17.6
9.00	9.02	35.2
9.47	9.50	52.8
9.71	9.72	17.6
10.00	10.05	88.0
10.30	10.34	70.4
11.07	11.11	70.4
11.37	11.40	52.8
12.35	12.38	52.8

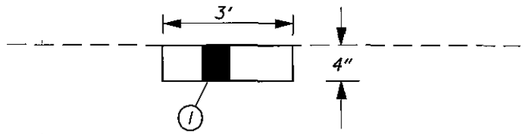
* CONTINUED NEXT COLUMN

* CONTINUED FROM BELOW

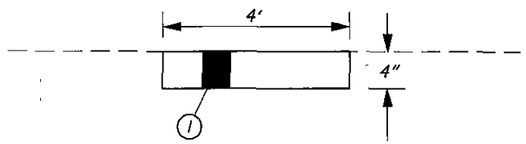
PAVEMENT REPAIR		ITEM 251
BEGIN SLM	END SLM	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN
		SQ. YD.
WESTBOUND		
MAD-323-0.28		
12.49	12.51	35.2
12.57	12.58	17.6
12.69	12.71	35.2
12.89	12.91	35.2
12.94	12.96	35.2
13.33	13.34	17.6
13.43	13.45	35.2
13.47	13.48	17.6
13.53	13.55	35.2
13.63	13.64	17.6
14.51	14.54	52.8
15.24	15.26	35.2
15.39	15.40	17.6
15.50	15.53	52.8
16.22	16.23	17.6
16.72	16.74	35.2
16.78	16.79	17.6
17.37	17.39	35.2
17.43	17.44	17.6
17.47	17.52	88.0
17.56	17.59	52.8
17.81	17.82	17.6
17.89	17.96	123.2
TOTALS		3058
ADD 20%		612
TOTALS (SQ. YD.)		3670
TOTALS (CU. YD.)		408

3670 X (4/12)/3 = 408 CY

S.R. 323 PAVEMENT REPAIR DETAIL



S.R. 38 PAVEMENT REPAIR DETAIL



(1) ITEM 301 - ASPHALT CONCRETE BASE, PG64-22

PAVEMENT REPAIR		ITEM 251
BEGIN SLM	END SLM	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN
		SQ. YD.
NORTHBOUND		
MAD-38-22.81		
UNI-38-0.00		
23.20	23.78	1361.1
24.15	24.40	586.7
24.47	24.49	46.9
24.61	24.72	258.1
24.75	24.90	352.0
25.18	25.21	70.4
25.30	25.33	70.4
25.39	25.43	93.9
25.65	25.73	187.7
25.87	25.94	164.3
26.09	26.14	117.3
26.17	26.50	774.4
26.55	26.63	187.7
27.07	27.30	539.7
27.46	27.61	352.0
28.00	28.07	164.3
28.44	28.50	140.8
29.55	29.60	117.3
29.62	29.66	93.9
29.85	29.88	70.4
SOUTHBOUND		
24.10	24.12	46.9
24.44	24.49	117.3
25.09	25.14	117.3
25.95	25.98	70.4
26.03	26.08	117.3
26.51	26.55	93.9
26.97	27.00	70.4
27.12	27.19	164.3
28.51	28.57	140.8
28.95	29.07	281.6
29.17	29.24	164.3
TOTALS		7133.8
ADD 20%		1426.8
TOTALS (SQ. YD.)		8560.6
TOTALS (CU. YD.)		951

(END SLM - BEGIN SLM)x5280 x WIDTH/9 = SQ. YD.

SQ. YD. x 9 = SQ. FT. x (4/12)/27 = CU. YD.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN 408 + 951 = 1359 CU. YD.

CALCULATED GLM CHECKED MDC

ESTIMATED QUANTITIES

MAD-38-22.81

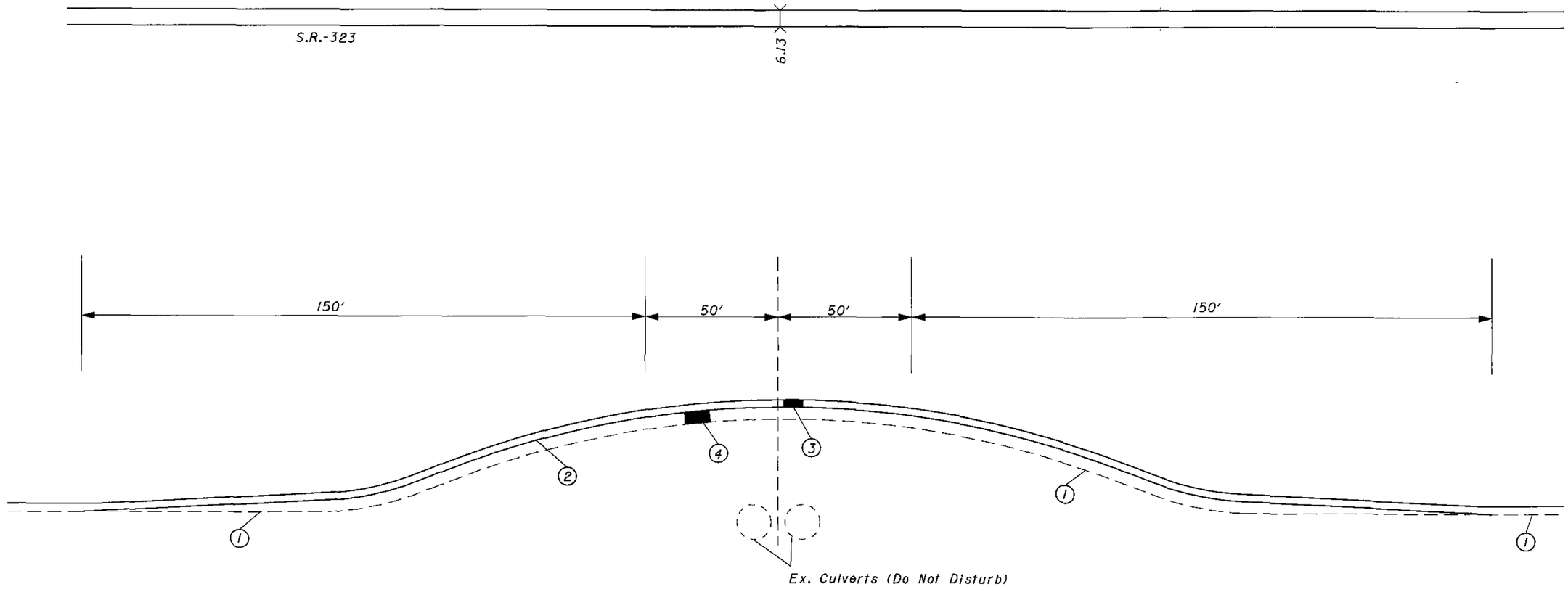
MAD-38-2725 4900626	MAD-323-0280 4903935	MAD-323-0385 4904176	MAD-323-0391 4903994	MAD-323-0704 4904060	MAD-323-0840 4904095	MAD-323-1022 4904117	MAD-323-1233 4904141	MAD-323-1445 4904206	MAD-323-1545 4904230		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
															STRUCTURES (OVER 20')	
150				150	121						SPECIAL	51631200	421	FT	SAWING AND SEALING BITUMINOUS CONCRETE JOINTS	17
	74		72								SPECIAL	51631300	146	FT	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	18
	61		100			8	8	31	33		SPECIAL	51912300	241	SQ YD	PATCHING CONCRETE BRIDGE DECK, TYPE B	PN
	306	1247	500			77	358	311	332		841	10000	3131	SQ YD	TREATING OF CONCRETE SURFACES WITH SRS	

CALCULATED GLM
CHECKED MDC

ESTIMATED BRIDGE QUANTITIES

MAD-38-22.81

14
34



ASPHALT WEDGE QUANTITIES		
	407	448
OVER STRUCTURE	TACK COAT FOR INTERMEDIATE COURSE	3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
	GAL	CU. YD.
MAD-323-0323	35	45
TOTALS	35	45

TOTALS CARRIED TO GENERAL SUMMARY

ASPHALT WEDGE CALCULATION:

ITEM 448: 100' x 19.5' x (3"/12) = 487.5 CU. FT.

2 x 150' x 19.5' x (1.5"/12 AVG.) = 731.3 CU. FT.

1218.8/27

= 45 CU. YD.

ITEM 407: 400' x 19.5' x (0.04 GAL./SQ. YD.) = 35 GAL.

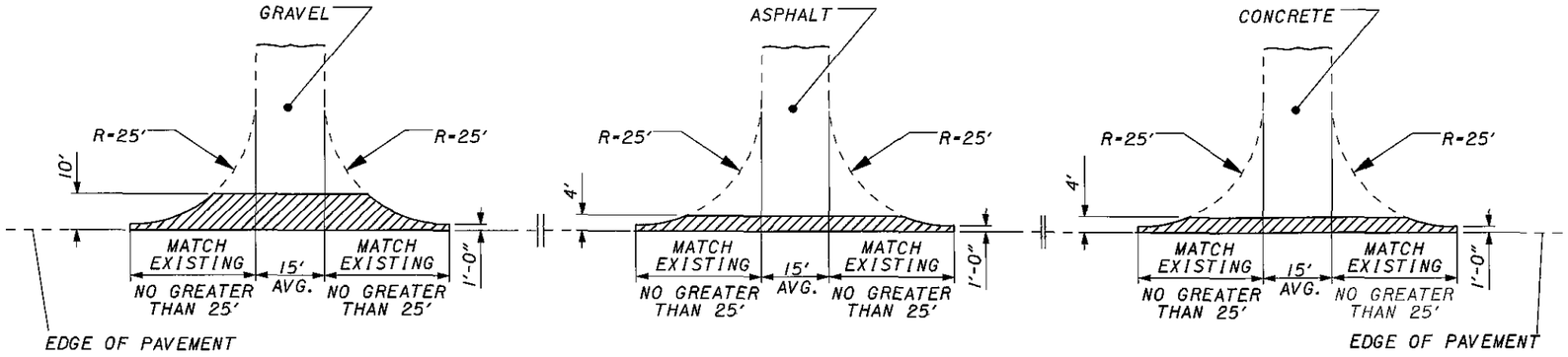
LEGEND

(1) ITEM 407 - TACK COAT (APPLIED AT A RATE OF 0.075 GAL./SQ.YD.) - QUANTITY INCLUDED IN MAINLINE CALCULATIONS
(2) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (APPLIED AT A RATE OF 0.04 GAL./SQ.YD.)
(3) ITEM 448 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 - QUANTITY INCLUDED IN MAINLINE CALCULATIONS
(4) ITEM 448 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (PLACE IN TWO LIFTS OF 1-1/2" EACH)

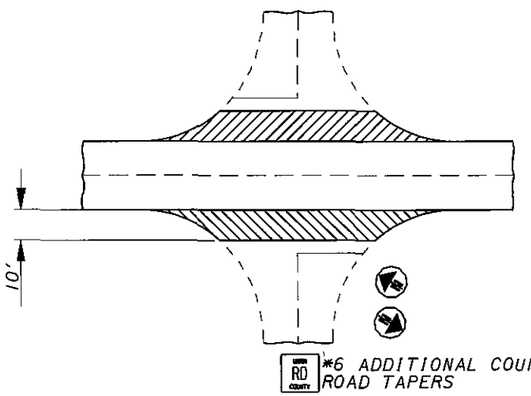
CALCULATED GLM
CHECKED MDC

PAVING DETAIL OVER CULVERT AT SLM 6.13

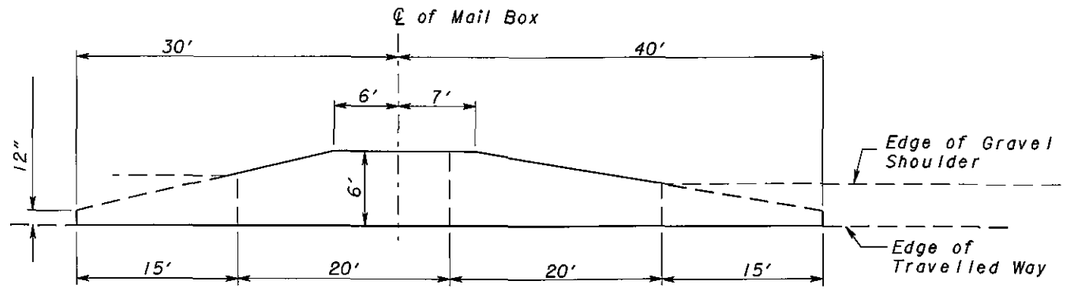
MAD-38-22.81



DRIVEWAY APPROACH DETAILS



TYPICAL INTERSECTION DETAILS



TYPICAL MAIL BOX APPROACH

CALCULATED GLM CHECKED MDC

INTERSECTION/DRIVE DETAILS

MAD-38-22.81

16/34

ITEM SPECIAL-SAWING AND SEALING BITUMINOUS CONCRETE JOINTS

1) DESCRIPTION:

THIS WORK SHALL CONSIST OF CUTTING AND SEALING TRANSVERSE JOINTS IN THE NEW BITUMINOUS CONCRETE OVERLAY OF BRIDGES. BITUMINOUS CONCRETE JOINTS SHALL BE CONSTRUCTED DIRECTLY OVER, AND IN LINE WITH, THE EXISTING UNDERLYING TRANSVERSE ABUTMENT AND APPROACH SLAB JOINTS.

2) MATERIALS:

THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ITEM 705.04, JOINT SEALANTS, HOT-POURED, FOR CONCRETE AND ASPHALT PAVEMENTS. ACCEPTABLE ALTERNATE MATERIALS ARE:

A SILICONE SEALANT MEETING FEDERAL SPECIFICATIONS TT-S-001543A CLASS A (ONE-PART SILICONE SEALANTS) AND TT-S-00230C CLASS A (ONE-COMPONENT SEALANTS), SUCH AS THOSE MANUFACTURED BY GENERAL ELECTRIC, SILICONE PRODUCTS DIVISION, 4015 EXECUTIVE PARK DRIVE, CINCINNATI, OHIO 45242 (513-243-1953) OR DOW CORNING, 400 TECHNE CENTER, SUITE 103, MILFORD, OHIO 45150 (513-831-3586); OR SOF-SEAL, A COLD-APPLIED, LOW-MODULUS, TWO-COMPONENT POLYMERIC COMPOUND HORIZONTAL SEALANT AS MANUFACTURED BY W.R. MEADOWS, INC., P.O. BOX 543, ELGIN, ILLINOIS 60121 (800-342-5976).

3) CONSTRUCTION DETAILS:

A) GENERAL: THE CONTRACTOR SHALL CONDUCT HIS OPERATION SO THAT THE CUTTING, CLEANING AND SEALING OF TRANSVERSE JOINTS IS A CONTINUOUS OPERATION THAT WILL BE PERFORMED AS SOON AS PRACTICAL AFTER THE PAVING, BUT NO LATER THAN FOUR (4) DAYS AFTER PLACEMENT OF THE ASPHALT CONCRETE SURFACE COURSE. TRAFFIC SHALL NOT BE ALLOWED TO KNEAD TOGETHER OR DAMAGE JOINT CUT PRIOR TO SEALING.

B) CUTTING OF TRANSVERSE JOINTS: THE CONTRACTOR SHALL SAW OR ROUT TRANSVERSE JOINTS TO THE DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET. THE CUT JOINTS SHALL LIE DIRECTLY ABOVE EACH TRANSVERSE JOINT.
THE BLADE OR BLADES SHALL BE OF SUCH SIZE THAT THE FULL WIDTH AND DEPTH OF THE CUT CAN BE MADE WITH ONE PASS. DRY OR WET CUTTING WILL BE ALLOWED. JOINTS SHALL EXTEND THE FULL WIDTH OF THE BRIDGE.

C) CLEANING JOINTS: DRY SAWED JOINTS SHALL BE THOROUGHLY CLEANED WITH A SUFFICIENT AMOUNT OF COMPRESSED AIR TO REMOVE ANY DIRT, DUST, OR DELETERIOUS MATTER. WET SAWED JOINTS SHALL BE WASHED CLEAN OF ALL CUTTINGS BY FLUSHING WITH A JET OF WATER AND WITH OTHER TOOLS AS NECESSARY. AFTER FLUSHING, THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR. WHEN THE SURFACES ARE THOROUGHLY CLEAN AND DRY, AND JUST PRIOR TO PLACING THE JOINT SEALER, COMPRESSED AIR HAVING A PRESSURE OF AT LEAST 90 PSI SHALL BE USED TO BLOW OUT THE JOINT AND REMOVE ALL TRACES OF DUST.

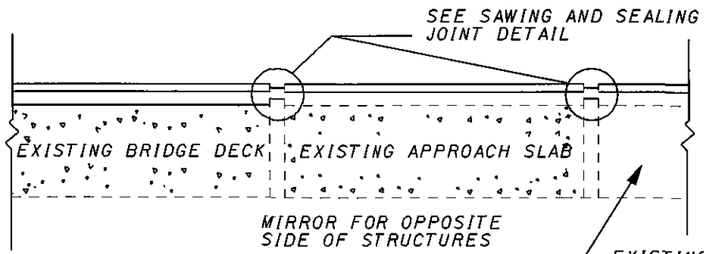
IN THE EVENT FRESHLY CUT JOINTS BECOME CONTAMINATED BEFORE THEY ARE SEALED, THEY SHALL BE RE-CLEANED OF ALL FOREIGN MATERIAL BY HIGH PRESSURE WATER JET.

D) SEALING JOINTS: THE JOINT SHALL BE THOROUGHLY DRY WHEN THE SEALANT IS PLACED. AFTER CLEANING AND DRYING, A BOND-BREAKER MATERIAL SHALL BE APPLIED TO THE BOTTOM OF THE GROOVE.

HOT-POURED JOINT SEALANT MATERIAL SHALL BE HEATED IN A KETTLE OR MELTER CONSTRUCTED AS A DOUBLE BOILER, WITH THE SPACE BETWEEN THE INNER AND OUTER SHELLS FILLED WITH OIL OR OTHER HEAT TRANSFER MEDIUM. POSITIVE TEMPERATURE CONTROL AND MECHANICAL AGITATION SHALL BE PROVIDED. HEATING MUST BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. JOINT SEALER MATERIAL SHALL NEVER BE KEPT HEATED AT THE POURING TEMPERATURE FOR MORE THAN FOUR (4) HOURS AND SHALL NEVER BE REHEATED. SEALER LEFT IN THE APPLICATOR AT THE END OF A DAY'S WORK SHALL NOT BE USED.

HOT-POURED SEALANT SHALL BE APPLIED IMMEDIATELY THROUGH A NOZZLE, WHICH MUST PROJECT INTO THE SAWED JOINT, FILLING FROM THE BOTTOM UP. THE SEALANT SHALL COMPLETELY FILL THE JOINT IN SUCH A MANNER THAT, AFTER COOLING, THE LEVEL OF THE SEALANT WILL NOT BE HIGHER THAN 1/8" BELOW THE PAVEMENT SURFACE. ANY DEPRESSION IN THE COOLED SEAL GREATER THAN 1/4" SHALL BE BROUGHT UP TO THE SPECIFIED LIMIT BY FURTHER ADDITION OF HOT-POURED SEALANT. CARE SHALL BE TAKEN IN THE SEALING OF THE JOINTS SO THAT THE FINAL APPEARANCE WILL PRESENT A NEAT FINE LINE.

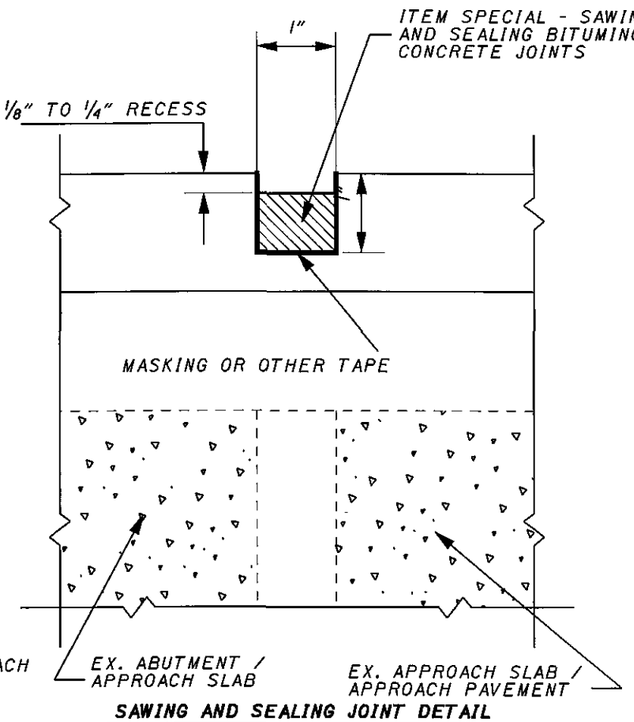
THE COLD APPLIED SEALANT MATERIALS (POLYURETHANE, SILICONE, AND POLYMERIC COMPOUNDS) SHALL BE INSTALLED AS PER MANUFACTURERS' RECOMMENDATIONS, EXCEPT AS MODIFIED BY THIS DRAWING. THE SEALANT SHALL BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS 40 DEGREES F OR HIGHER. TRAFFIC SHALL NOT BE ALLOWED ON THE JOINT FOR ONE HOUR AFTER APPLICATION OF THE SEALANT.



EXPANSION JOINT DETAIL

4) METHOD OF MEASUREMENT:
THE QUANTITY TO BE PAID FOR UNDER THIS ITEM WILL BE THE NUMBER OF LINEAR FEET OF JOINTS SAWED AND SEALED AS PER THE ABOVE REQUIREMENTS.

5) BASIS OF PAYMENT:
THE UNIT PRICE PER LINEAR FOOT FOR ITEM SPECIAL - "SAWING AND SEALING BITUMINOUS CONCRETE JOINTS" SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK, INCLUDING THE FURNISHING AND PLACING OF THE JOINT SEALER MATERIAL.



SAWING AND SEALING JOINT DETAIL

BRIDGE TREATMENT QUANTITIES

STRUCTURE	STRUCTURE FILE NUMBER	DETAIL	SPECIAL: SAWING AND SEALING BITUMINOUS CONCRETE JOINTS
			51631200
			FT
MAD-38-2725	4900626	1	150.0
MAD-323-0704	4904060	1	150.0
MAD-323-0840	4904095	1	121.0
TOTAL			421.0

TOTAL CARRIED TO ESTIMATED QUANTITIES ON SHEET 14

CALCULATED GLM CHECKED MDC

SAWING AND SEALING BITUMINOUS CONCRETE JOINTS

MAD-38-22.81

17
34

GENERAL NOTES AND DETAILS FOR POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

ITEM SPECIAL - POLYMER-MODIFIED ASPHALT EXPANSION JOINT SYSTEM

THIS ITEM WILL BE USED TO SEAL THE EXPANSION/CONTRACTION JOINTS AS PER THESE DETAILS AND THE MANUFACTURER'S REQUIREMENTS USING A POLYMER-MODIFIED ASPHALT SYSTEM. THE PRIME CONTRACTOR WILL OBTAIN THE SERVICES OF ONE OF THE FOLLOWING APPROVED APPLICATORS WHO WILL FURNISH AND INSTALL THE NEW BRIDGE EXPANSION JOINT SYSTEM AFTER ALL PAVING ON THE AFFECTED BRIDGE(S) HAS BEEN COMPLETED.

PAVETECH INTERNATIONAL
4660 DUKE DRIVE
SUITE 390
MASON, OH 45040
TEL: (513) 770-3122

LINEAR DYNAMICS, INC.
79 MONTGOMERY ST.
MONTGOMERY, PA 17752
TEL: (570) 547-1621

WATSON-BOWMAN ACME
95 PINEVIEW DR.
AMHERST, NY 14228
TEL: (716) 691-7566 OR
TEL: (800) 253-9226

MATERIALS:

BRIDGING PLATE:

MILD STEEL 1/8" OR 1/4" THICK PLATE, 8" WIDE OR 18 GAUGE ALUMINUM, 8" WIDE.

BINDER:

TYPE:	POLYMER MODIFIED ASPHALT
SOFTENING POINT:	180 DEGREES F. MIN.
FLOW:	3 mm. MAX. AT 140 DEGREES F.
PENETRATION:	9 mm. MAX. AT 77 DEGREES F. 1 mm. MIN AT 0 DEGREES F. ASTM D 3407
DUCTILITY:	40 cm. MIN. ASTM D 113
RESILIENCE:	60% MIN. AT 77 DEGREES F.
TENSILE ADHESION:	700% MIN.
SPECIFIC GRAVITY:	1.10 ± 0.05
POURING TEMP:	350 - 390 DEGREES F.

AGGREGATE:

TYPE:	CRUSHED, DOUBLE WASHED, AND DRIED GRANITE OR BASALT
GRADATION	THE GRADATION OF THE AGGREGATE VARIES BY MANUFACTURER AND WILL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS FOR THE SYSTEM BEING USED ON THIS PROJECT.

BACKER ROD:

THE BACKER SHALL BE A CLOSED CELL FOAM EXPANSION JOINT FILLER CAPABLE OF WITHSTANDING THE PLACEMENT TEMPERATURE OF THE POLYMER MODIFIED ASPHALT.

NOTE: PRIOR TO PLACEMENT OF ANY PORTION OF THE JOINT SYSTEM, THE PROJECT ENGINEER MUST HAVE CERTIFIED TEST DATA MEETING ALL THE MINIMUM REQUIREMENTS OF ALL THE MATERIALS OF THE JOINT SYSTEM.

INSTALLATION PROCEDURES:

SAWING AND SURFACE PREPARATION:

AFTER ALL PAVING OPERATIONS ARE COMPLETE, THE OVERLAY IS TO BE TRANSVERSELY SAW CUT FULL DEPTH NO LESS THAN TWO INCHES DEEP (20" CENTERED OVER JOINT OPENING, UNLESS OTHERWISE NOTED). REMOVE ALL MATERIAL, INCLUDING WATER-PROOFING MATERIAL, BETWEEN SAW CUTS. THOROUGHLY CLEAN AND DRY EXPOSED CONCRETE, STEEL, AND CUT SURFACES USING COMPRESSED AIR AND A HOT COMPRESSED AIR (HCA) LANCE. THE LANCE MUST PRODUCE A FLAME RETARDED AIR STREAM TEMPERATURE OF 3000 DEGREES F. AT A VELOCITY OF 3,000 FEET PER SECOND WITH 15 PSIG CHAMBER PRESSURE. IF THERE IS AN INTERRUPTION DUE TO WEATHER OR OTHER CAUSES, THE OPERATION WILL BE REPEATED WITH THE HCA LANCE IMMEDIATELY BEFORE THE BINDER COAT OPERATION. ALSO, 6 INCHES OF THE ROAD SURFACE ON EITHER SIDE OF THE JOINT WILL BE DRIED SO THAT A SUITABLE SURFACE FOR BITUMEN ADHESION IS OBTAINED.

SEALING OF EXPANSION JOINT: (PRE-STRESSED BOX OR CONCRETE SLAB)

THE EXPANSION JOINT GAP IS TO BE SEALED AND A BRIDGING PLATE CENTERED ALONG IT. A VERY NARROW GAP WILL BE SEALED BY POURING HOT BINDER INTO THE GAP. GAPS OF 1/8" OR MORE WILL FIRST BE FILLED WITH AN APPROPRIATELY SIZED BACKER ROD. THE BACKER ROD WILL BE INSTALLED SO THAT IT IS BETWEEN 1/8" AND 1-1/8" BELOW THE TOP OF THE EXISTING GAP. THE GAP WILL THEN BE FILLED WITH BINDER.

BOND BREAKER:

SPREAD BINDER OVER SURFACE AREA WHERE THE METAL BRIDGING PLATE WILL BE PLACED. CENTER THE BRIDGING PLATE OVER THE EXISTING JOINT AND BED INTO THE HOT BINDER. BUTT JOINT THE BRIDGING PLATES TO ACCOMODATE THE ENTIRE JOINT LENGTH. SPIKE HOLES WILL BE DRILLED AT 1 FOOT INTERVALS ALONG THE LONGITUDINAL CENTERLINE OF THE PLATES. SECURE BRIDGING PLATE WITH NAILS OR SPIKES. SEAL BUTT JOINTS WITH HOT BINDER AND ALLOW BINDER TO SETUP BEFORE NEXT OPERATION. WHEN ALUMINUM BRIDGING PLATES ARE USED, ONLY THE BINDER IS REQUIRED TO SECURE THE INDIVIDUAL PLATES.

BINDER COAT:

SEAL ALL PREPARED, EXPOSED SURFACES OF THE JOINT WITH BINDER. POUR THE HOT BINDER OVER THE FLOOR AREA OF THE JOINT AND SPREAD TO COAT ALL EXPOSED SURFACES. THE BINDER WILL BE A MINIMUM OF 1/32" THICK ON THE BOTTOM OF THE JOINT CAVITY, WITH POOLS OF GREATER THICKNESS WHERE SURFACE IRREGULARITIES EXIST. THE BINDER APPLICATION TEMPERATURE WILL BE BETWEEN 350 AND 390 DEGREES F. THE BINDER WILL NOT BE ALLOWED TO BE HEATED ABOVE 410 DEGREES F. NOR ALLOWED TO EXCEED 390 DEGREES F. FOR MORE THAN 1 HOUR. A DOUBLE JACKETED OIL MELTER WILL BE USED TO HEAT THE BINDER. THE MELTER WILL BE EQUIPPED WITH A CONTINUOUS AGITATION SYSTEM, TEMPERATURE CONTROLS, AND A CALIBRATED THERMOMETER. ALSO A SYSTEM FOR ACCURATELY MEASURING THE WEIGHTS OF THE BINDER AND THE AGGREGATE WILL BE REQUIRED.

BUILD-UP OF JOINT LAYERS:

AGGREGATE PREPARATION:

HEAT THE AGGREGATE TO A TEMPERATURE OF 275 TO 325 DEGREES F., WITH A SUITABLE ROTATING DRUM WITH ATTACHED HEAT SOURCE OR A HOT COMPRESSED AIR LANCE, TO REMOVE DUST AND MOISTURE.

AGGREGATE PROPORTION AND LAYER THICKNESS:

MIX THE AGGREGATE WITH THE BINDER SUCH THAT THE MINIMUM AGGREGATE CONTENT BY WEIGHT WILL BE 68%. THE HEATED AGGREGATE AND BINDER WILL BE COMBINED IN LAYERS, UNLESS PATENTED INSTALLATION REQUIRES DIFFERENTLY, NOT LESS THAN 3/4 OF AN INCH NOR EXCEEDING 2-1/2 INCHES. THE THICKNESS OF EACH LAYER CAN BE VARIED WITHIN THESE LIMITS, TO ACHIEVE THE REQUIRED JOINT THICKNESS (MIN. 2 INCHES). THE OBJECTIVE IS TO COAT EACH STONE AND FILL THE VOIDS WHILE AVOIDING AN EXCESS OF BINDER. THIS WILL ACHIEVE THE MAXIMUM CONTENT OF STONE CONSISTENT WITH ALL STONES BEING COATED WITH BINDER. RAKE THE MIXTURE TO MIX AND LEVEL.

THE TOP LAYER THICKNESS WILL VARY BETWEEN 1/2 INCH AND ONE (1) INCH. IN PREPARING THE TOP LAYER, THE RATIO OF AGGREGATE TO BINDER WILL BE APPROXIMATELY 6:1 BY WEIGHT. OVERFILL THE TOP LAYER AND COMPACT TO THE LEVEL OF THE ADJACENT SURFACES USING A ROLLER OR VIBRATORY PLATE COMPACTOR. IMMEDIATELY AFTER COMPLETION OF THE COMPACTION, POUR SUFFICIENT BINDER OVER THE JOINT TO FILL THE SURFACE VOIDS AND COAT THE SURFACE STONE. DUST THE FINISHED JOINT WITH A FINE, DRY AGGREGATE TO PREVENT TACKINESS.

MAINTENANCE OF TRAFFIC:

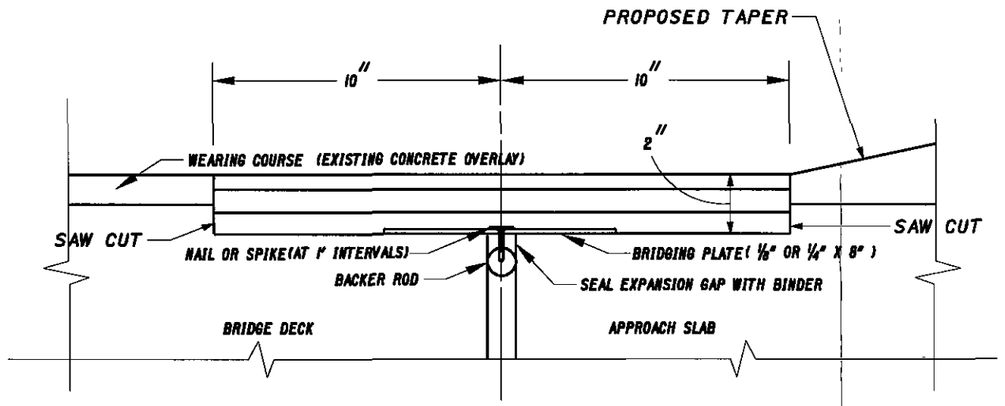
IF NECESSARY TO FACILITATE TRAFFIC MAINTENANCE, THE JOINT WILL BE INSTALLED IN TWO (2) HALF-WIDTH PHASES. DURING PHASE 1 APPROXIMATELY HALF OF THE TOTAL JOINT WILL BE INSTALLED. DURING PHASE 2, A MINIMUM OF TWO (2) INCHES OF THE PHASE 1 JOINT WILL BE REMOVED, AT OR NEAR THE CENTERLINE, WITH THE REMAINDER OF THE JOINT INSTALLED. IN ALL CASES, OPERATIONS WILL BE SCHEDULED SO THAT ALL LANES CAN BE OPEN TO TRAFFIC DURING ALL NON-WORKING HOURS.

TESTING:

CERTIFICATION WILL BE SUPPLIED FOR EACH PROJECT SHOWING BINDER COMPLIANCE WITH REQUIRED PROPERTIES. A ONE QUART SAMPLE OF BINDER WILL BE RETRIEVED FROM EACH BRIDGE FOR FURTHER TESTING BY THE O.D.O.T OFFICE OF MATERIALS MANAGEMENT.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT:

THE DEPARTMENT WILL MEASURE THE JOINT BY THE NUMBER OF FEET AND WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS: ITEM SPECIAL, FEET, POLYMER MODIFIED ASPHALT EXPANSION JONT SYSTEM.



CONCRETE SLAB JOINT

DESIGNED MAM
DRAWN MAM
CHECKED GLM
PREPARED MDC
DATE REVISED 10-29-96 10-17-03

POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

MAD-38-22.81

18
34

ITEM 202 - RPM REMOVED AND DISPOSED

THE REMOVED RPM'S ARE THE PROPERTY OF THE CONTRACTOR.

RPM DETAIL	DESCRIPTION	STAND. DWG.
1*	THROUGH APPROACH	TC-65.12
2	TYPICAL CENTER LINE	TC-65.10

LOCATION						REFLECTOR TYPE					TOTAL		LONG LINES				AUXILIARY MARKINGS								
						EXISTING TO BE REMOVED					202	621	642				646								
PART	COUNTY	ROUTE	LOG BEG	LOG END	TYPICAL	WHITE		YELLOW YELLOW			RPM REMOVED AND DISPOSED	RPM YELLOW YELLOW	CENTER LINE TYPE 1	EDGE LINE TYPE 1			CHANL LINE	STOP LINE	CROSS WALK LINE	RAILROAD SYMBOL	ARROWS					WORD ON PAVE 96"
						RIGHT EDGE LINE		CENTER LINE						WHT	YEL						LT	LT/ STR	STR	RT STR	RT	
			MI	MI		40'		20'	40'	80'	EACH	EACH	MI	MI	MI		LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH
1	MAD	38	22.81	30.02	1					475	475	475	7.21	14.42					22							
	UNI	38	0.00	0.11	1					7	7	7	0.11	0.22				11								
2	MAD	40	0.00	2.00	2									2.00												
3	MAD	41	1.38	1.53	2					10	10	10	0.15	0.30												
	MAD	41	1.53	1.66	3								0.13	--				40								
	MAD	41	1.66	1.83	2					11	11	11	0.17	0.34												
4	MAD	323	0.00	7.60	4					502	502	502	7.60	15.20				20	120	2						
	MAD	323	7.60	7.93	5								0.33	--				29	62							
	MAD	323	7.93	18.68	4					710	710	710	10.75	21.50				11								
TOTALS CARRIED TO THE GENERAL SUMMARY											1715	1715	26.45	53.98				111	204	2						

CALCULATED GLM CHECKED MDC

RPM AND PAVEMENT MARKING SUBSUMMARY

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038 Direction: North From: 0.000 *LEAVE FAY CO AT 1334*
Length: 29.910 To: 29.910 *ENTER UNI CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
	23.000					
			22.900		22.908 HIGH ST RT RT	
0.627						
					22.628 C0132 ARTHUR BRADLEY RT	
				0.693		
					22.514 BEG SCHOOL ZONE	
					22.431 ENTER PLUMWOOD	
					22.431	↑ 45mph
	22.373					
					22.263 BRIDGE	
	22.243					
			22.207			
0.186						
			22.077			
	22.057				22.057 C0011 ROSEDALE MILFORD LT	
				0.077		
			22.000			

Sheet total equivalent length of solid line: 1.687 Accum. total: 25.755

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038 Direction: North From: 0.000 *LEAVE FAY CO AT 1334*
Length: 29.910 To: 29.910 *ENTER UNI CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					23.912 MILE POST = 024	
	23.848					
0.142						
	23.706					
			23.670			
				0.145		
			23.525			
					23.159 LEAVE PLUMWOOD	
					23.159	↑ 45mph
	23.080					
0.080					23.056 END SCHOOL ZONE	
	23.000					

Sheet total equivalent length of solid line: 0.617 Accum. total: 26.372

CALCULATED GLM
DRAWN MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038
Length: 29.910
Direction: North
From: 0.000 *LEAVE FAY CO AT 1334*
To: 29.910 *ENTER UNI CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
				24.975	C0126 JOSIAH MORRIS RT	
				24.904	MILE POST = 025	

Sheet total equivalent length of solid line: 0.250 Accum. total: 26.622

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038
Length: 29.910
Direction: North
From: 0.000 *LEAVE FAY CO AT 1334*
To: 29.910 *ENTER UNI CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
				25.866	MILE POST = 026	

Sheet total equivalent length of solid line: 0.250 Accum. total: 26.872

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038 Direction: North From: 0.000 *LEAVE FAY CO AT 1334*
Length: 29.910 To: 29.910 *ENTER UNI CO AT 0000*

Length | Left | C/L | Right | Length | Control Points | Scale: 1.00 mile/page

27.000

0.108

26.892

26.884 MILE POST = 027

26.316 C0123 FINLEY GUY

Sheet total equivalent length of solid line: 0.358 Accum. total: 27.230

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038 Direction: North From: 0.000 *LEAVE FAY CO AT 1334*
Length: 29.910 To: 29.910 *ENTER UNI CO AT 0000*

Length | Left | C/L | Right | Length | Control Points | Scale: 1.00 mile/page

27.896 MILE POST = 028

27.614

0.215

27.399

27.406

0.178

27.228

27.228 T0024 ROSEDALE PLAIN CITY

27.185

27.151 BRIDGE

0.128

27.057

27.013

0.013

Sheet total equivalent length of solid line: 0.782 Accum. total: 28.012

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038 Direction: North From: 0.000 *LEAVE FAY CO AT 1334*
Length: 29.910 To: 29.910 *ENTER UNI CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale 1.00 mile/page
					28.836 MILE POST = 029	
	28.741					
0.149						
	28.593		28.563			
				0.169		
	28.394					

Sheet total equivalent length of solid line: 0.587 Accum. total: 28.579

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0038 Direction: North From: 0.000 *LEAVE FAY CO AT 1334*
Length: 29.910 To: 29.910 *ENTER UNI CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					29.910 ENTER UNI CO AT 0000	
					29.839 MILE POST = 030	
0.170	29.389					
	29.219		29.157			
				0.107		
			29.050			

Sheet total equivalent length of solid line: 0.505 Accum. total: 29.084

CALCULATED GLM CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - UNI Co - FINAL
No Passing Zone Log (UNI)

Route: 0038R
Length: 9.785
Direction: North
From: 0.000 *LEAVE MAD CO*
To: 9.785 *S0031RMAIN*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					0.596	LEAVE CHUCKERY
				0.406		
0.293					0.299	S0161R RT
				0.289	0.293	C0059 LOMBARD RT
					0.208	Bridge
				0.284		
				0.113	0.111	S0161R
					0.000	ENTER CHUCKERY
				0.005	0.000	LEAVE MAD CO

Sheet total equivalent length of solid line: 0.783 Accum. total: 0.783

ODOT Dist 6 - Madison Co - FINAL
No Passing Zone Log (MAD)

Route. 0041
Length: 3.831
Direction: North
From: 0.000 *LEAVE FAY CO AT 2917*
To: 3.831 *ENTER CLA CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
	2.000				1.944	↑ 55mph
			1.923		1.920	HIGH RT
					1.828	LEAVE SOUTH SOLON
0.492						
	1.518				1.581	S0323R
				0.923		
					1.375	↑ 35mph
	1.373				1.374	ENTER SOUTH SOLON
					1.305	HIGH RT
0.250					1.245	BRIDGE
	1.123					
			1.000		1.044	MILE POST = 001

Sheet total equivalent length of solid line: 1.741 Accum. total: 2.675

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600 Direction: East
From: 0.000 S0041RWASHINGTON
To: 18.600 S0056RLONDON CIRCLEVILLE

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					0.578	BRIDGE
	0.409					
0.173						
					0.280	↑ 55mph
					0.278	LEAVE SOUTH SOLON
			0.256		0.246	INDIANA & OHIO CENTRAL R R
	0.236				0.235	RAILROAD LT
				0.153		
			0.103			
					0.077	HIGH
0.057	0.064					
	0.007				0.000	↑ 35mph
					0.000	S0041RWASHINGTON

Sheet total *equivalent length of solid line.* 0.626 Accum. total: 0.526

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600 Direction: East
From: 0.000 S0041RWASHINGTON
To: 18.600 S0056RLONDON CIRCLEVILLE

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
	2.000				1.995	MILE POST = 002
0.089						
	1.911					
			1.873			
				0.174		
					1.761	C0016 SELSOR MOON LT
			1.699			
					1.437	T0080 MOON RT
	1.329					
0.126						
	1.203					
			1.144			
				0.110		
			1.034			
					1.002	MILE POST = 001

Sheet total equivalent length of solid line: 0.749 Accum. total: 1.375

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Direction: East From: 0.000 S0041RWASHINGTON
Length: 18.600 To: 18.600 S0056RLONDON CIRCLEVILLE

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
	3.000				
0.114					
	2.886		2.870		
				0.134	
					2.797 BRIDGE
	2.736		2.736		
			2.559		
0.521					
	2.215			0.498	
	2.050		2.061		
0.050	2.000				

Sheet total equivalent length of solid line: 1.461 Accum total: 2.856

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Direction: East From: 0.000 S0041RWASHINGTON
Length: 18.600 To: 18.600 S0056RLONDON CIRCLEVILLE

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
	3.932				
					3.892 BRIDGE
					3.836 C0015ACHARLESTON CHILLICOTHE LT
			3.770		
					3.633 S0729RSLAUGHTER RT
0.741					
	3.191			0.740	
	3.051				
0.051	3.000		3.030		3.028 MILE POST = 003

Sheet total equivalent length of solid line: 1.632 Accum. total: 4.488

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Direction: East
Length: 16.600

From: 0.000 *S0041RWASHINGTON*
To: 16.600 *S0056RLONDON CIRCLEVILLE*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
	5.000					
			4.859		4.859 C0015BCHARLESTON CHILLICOTHE RT	
0.333						
	4.667			0.326		
			4.533			
	4.451					
0.096					4.409 T0086 FRALICK LT	
	4.355					
			4.298	0.105		
			4.193			
					4.027 MILE POST = 004	

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Direction: East
Length: 16.600

From: 0.000 *S0041RWASHINGTON*
To: 16.600 *S0056RLONDON CIRCLEVILLE*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					5.959 MILE POST = 006	
0.114	5.964					
	5.850					
			5.798			
				0.122		
			5.676			
	5.558					
0.151						
	5.397					
			5.381			
				0.172		
			5.209			
0.034	5.034					
	5.000				5.017 MILE POST = 005	

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Direction: East
Length: 18.600

From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points	
			6.990	0.010		
					6.956	BRIDGE
					6.932	MILE POST = 007
					6.325	C0088 MINSHALL LT

Sheet total equivalent length of solid line: 0.260 Accum. total: 6.663

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Direction: East
Length: 18.600

From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points	
	7.944				7.920	MILE POST = 008
					7.838	MOUND RT
					7.833	LEAVE MIDWAY
			7.783			
0.360						
				0.312		
	7.584				7.584	S0038R
			7.471			
	7.436					
			7.356		7.332	↑ 35mph
					7.332	ENTER MIDWAY
0.293						
				0.356		
	7.143				7.139	C0077 PRAIRIE RT
			7.000			

Sheet total equivalent length of solid line: 1.468 Accum. total: 8.131

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600 Direction: East
From: 0.000 S0041RWASHINGTON
To: 18.600 S0056RLONDON CIRCLEVILLE

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					8.891 MILE POST = 009	
	8.752					
0.095						
	8.657					
			8.546			
	8.506			0.095		
			8.453			
0.336						
			8.337		8.291 Bridge	
	8.170			0.325		
			8.012			

Sheet total equivalent length of solid line: 1.046 Accum. total: 9.177

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600 Direction: East
From: 0.000 S0041RWASHINGTON
To: 18.600 S0056RLONDON CIRCLEVILLE

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					9.883 MILE POST = 010	
			9.421			
0.100						
			9.321		9.314 T0076 DORN RT	
			9.244	0.095		
			9.149			

Sheet total equivalent length of solid line: 0.445 Accum. total: 9.622

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600
Direction: East
From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
					10.910 C0074 FOSTER REDMAN LT
					10.872 MILE POST = 011
	10.490				
0.095					10.439 T1050 RANGE STREET RT
	10.395				
			10.299		10.374 C0008 DANVILLE RT
				0.095	10.313 C0008 DANVILLE LT
			10.204		
					10.194 ENTER RANGE
					10.112 Bridge

Sheet total equivalent length of solid line: 0.440 Accum. total: 10.062

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600
Direction: East
From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
	12.000		12.000		
0.141					
	11.859			0.312	11.841 MILE POST = 012
			11.688		

Sheet total equivalent length of solid line: 0.668 Accum. total: 10.730

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Length: 18.600 Direction: East

From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
			13.000		
				0.104	
			12.896		
					12.809 MILE POST = 013
	12.615				
0.193					
			12.454		
	12.422				
				0.206	
	12.232		12.248		
					12.201 BRIDGE
0.232					
			12.066	0.066	
	12.000		12.000		12.019 C0009 YANKEETOWN CHENOWETH RT

Sheet total equivalent length of solid line: 1.027 Accum. total: 11.757

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323 Length: 18.600 Direction: East

From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
0.002	13.998				
					13.830 MILE POST = 014
	13.875				
			13.847		
0.851				0.947	
					13.143 I0071R Bridge (Hwy Over Hwy)
					13.110 BRIDGE
					13.023 T0079 BETHEL LT
	13.024		13.000		

Sheet total equivalent length of solid line: 1.744 Accum. total: 13.501

CALCULATED GLM
CHECKED MDC

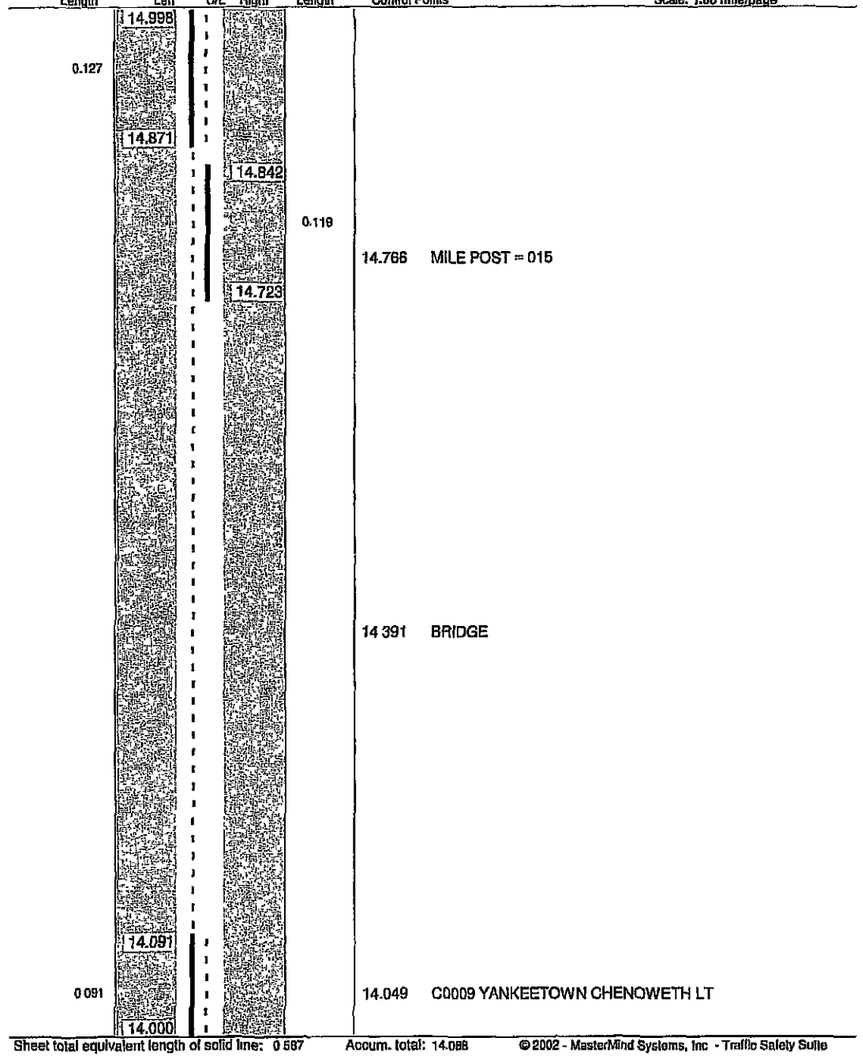
PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600
Direction: East
From. 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

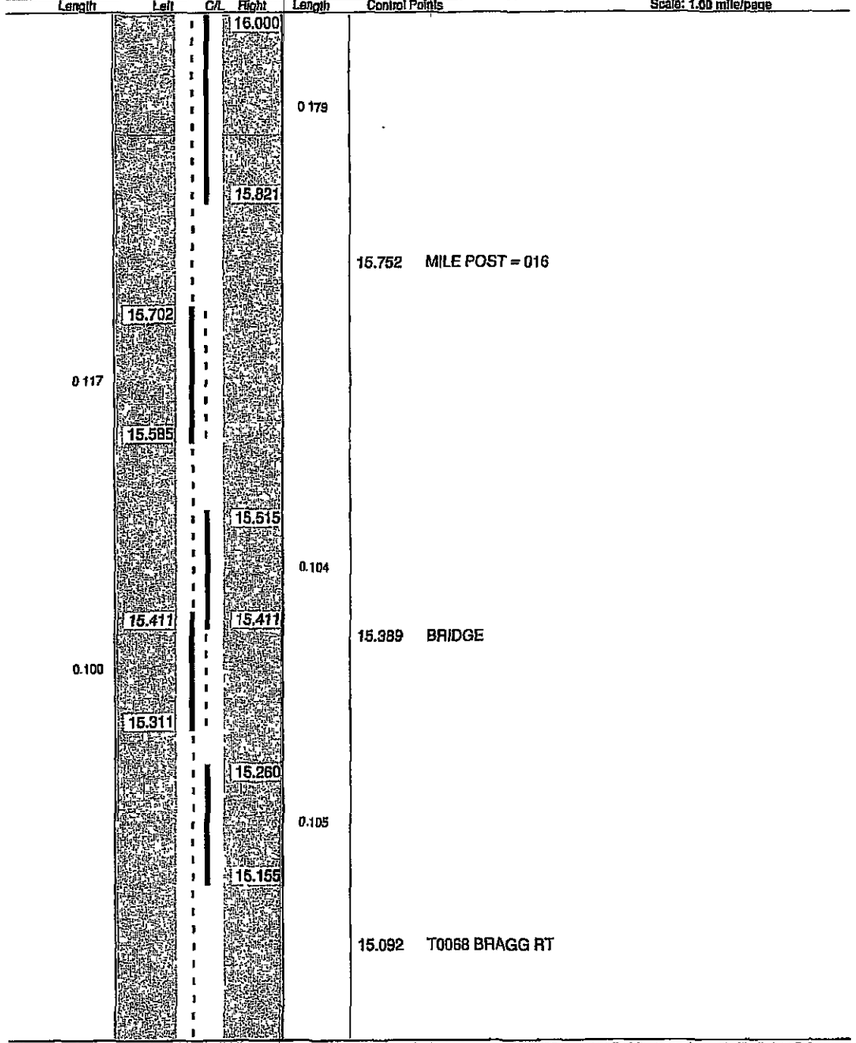


Sheet total equivalent length of solid line: 0.587 Accum. total: 14.088

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600
Direction: East
From. 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*



Sheet total equivalent length of solid line: 0.655 Accum. total: 14.943

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 16.600 Direction: East

From: 0.000 *S0041RWASHINGTON*
To: 16.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
					16.744 MILE POST = 017
	16.667				
0.095					
	16.572				
			16.454		
	16.416			0.095	
			16.359		
			16.245		
0.410					
				0.245	
	16.006		16.000		16.023 T0067 HICKS

Sheet total equivalent length of solid line: 1.021 Accum. total: 15.964

ODOT Dist 6 - Madison Co - FINAL

No Passing Zone Log (MAD)

Route: 0323
Length: 18.600 Direction: East

From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
					17.738 MILE POST = 018

Sheet total equivalent length of solid line: 0.250 Accum. total: 16.214

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

ODOT Dist 6 - Madison Co - FINAL
No Passing Zone Log (MAD)

Route: 0323
Length: 18.600 Direction: East

From: 0.000 *S0041RWASHINGTON*
To: 18.600 *S0056RLONDON CIRCLEVILLE*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
				18.600	S0056RLONDON CIRCLEVILLE
			18.596	0.057	
			18.539		

Sheet total equivalent length of solid line: 0.206 Accum total: 18.420

CALCULATED GLM
CHECKED MDC

PAVEMENT MARKING DETAILS

MAD-38-22.81

34
34