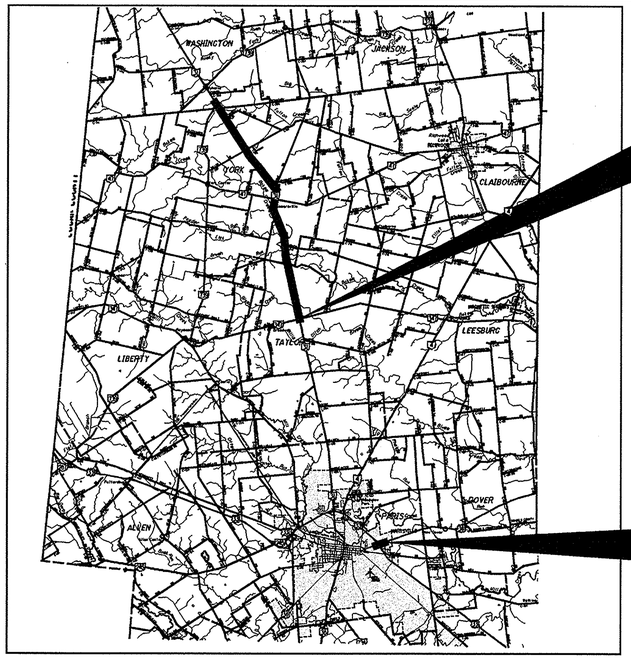


LOCATION MAP

LATITUDE: 40°9'04" LONGITUDE: -83°29'44"

SCALE IN MILES

0 1 2

PORTION TO BE IMPROVED

INTERSTATE HIGHWAY

STATE & FEDERAL ROUTES

COUNTY & TOWNSHIP ROADS

OTHER ROADS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

UNI-36/31-13.35/7.79

CITY OF MARYSVILLE

TAYLOR, YORK AND WASHINGTON TOWNSHIPS

UNION COUNTIES

LOCATION	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII BEGIN	PROJECT TERMINII END	NET LENGTH MI	MUNICIPALITY
1	UNI	US-36	(13.35 - 13.74)	13.34	13.88	0.53	MARYSVILLE
2	UNI	SR-31	(6.18)	7.79	15.63	7.84	

PROJECT DESCRIPTION

RESURFACING 0.53 MILES OF UNI US-36 AND 7.84 MILES OF UNI SR-31. ALSO VARIOUS BRIDGE WORK IN UNION COUNTY.

PROJECT EARTH DISTURBED AREA: N/A*
ESTIMATED CONTRACTOR EARTH DISTRUBED AREA: N/A*
NOTICE OF INTENT EARTH DISTURBED AREA: N/A*
* MAINTENANCE PROJECT

2010 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT 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.

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DESIGN DESIGNATION	UNI-US-36	UNI-SR-31
CURRENT ADT (2011)	14,820	4740
DESIGN YEAR ADT (2023)	17,490	5025
TRUCKS (24 HOUR B&C 2011)	1520	1375
DESIGN SPEED	35-55	35-55
LEGAL SPEED	35-55	35-55

DESIGN FUNCTIONAL CLASSIFICATION:
UNI-36: URBAN MINOR ARTERIAL
UNI-31: RURAL MINOR ARTERIAL

NHS PROJECT N/A N/A

DESIGN EXCEPTIONS NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
ODOT DISTRICT SIX PRODUCTION
400 EAST WILLIAM STREET
DELAWARE, OHIO 43015

ENGINEERS SEAL:

STATE OF OHIO
KEVIN
R
FIANT
#64877
REGISTERED
PROFESSIONAL ENGINEER

SIGNED Kevin R. Fiant

DATE 1/12/11

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL. SPECIFCATIONS	
BP-3.1	10/19/07	TC-41.20	01/19/01			800-2010	01/21/11
MT-95.30	07/17/09	TC-42.20	01/21/11			832	05/05/09
MT-97.10	10/15/10	TC-52.10	01/19/07				
MT-97.12	10/15/10	TC-52.20	01/19/07				
MT-99.20	01/16/09	TC-65.10	01/21/05				
MT-105.10	01/16/09	TC-65.11	01/21/05			SPECIAL PROVISIONS	
		TC-71.10	01/21/11				
		TC-73.10	01/19/01				
		TC-82.10	01/21/11				

PLANS CERTIFIED BY:
NAME: Jennie Green DATE: 1/12/11
DISTRICT 6
OHIO DEPT. OF TRANSPORTATION

Approved _____ District Deputy Director
Date 1/12/11

Approved _____ Director, Department of Transportation
Date 2/2/11

FEDERAL PROJECT NO. E091(295)
PID NO. 78332
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
UNI-36-13.35
1 / 26

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UNI-US-36/31-13.35/7.79
110242 PID-78332
Dist 6 4/21/2011
kfiant
7:40AM

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 MAY BE RAISED AN AMOUNT EQUAL TO THE THICKNESS OF THE RESURFACING COURSE OR COURSES SPECIFIED IN THESE PLANS.

ITEM 251 –PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN:
REPAIR AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. REPAIRS SHALL CONSIST OF REMOVING 4" OF PAVEMENT AND PLACING 4" OF ITEM 301 – ASPHALT CONCRETE BASE FOR AN AVERAGE WIDTH OF 4'. WORK SHALL BE PERFORMED PRIOR TO RESURFACING AND REPAIR AREAS ARE TO BE INCLUDED INTO GENERAL RESURFACING. THE QUANTITY SHOWN ALLOWS FOR AREAS SHOWN IN THE TABLE BELOW, AS WELL AS CONTINGENCY AREAS AS DIRECTED BY THE ENGINEER.
LOCATION 2: UNI SR 31

UNI-31-7.79-15.63

NB				SB			
Begin SLM	End SLM	Length	Location	Begin SLM	End SLM	Leng th	Location
8.20	8.28	0.08	4' at edge	8.00	8.11	0.11	4' at edge
9.27	9.58	0.31	4' at edge	8.33	8.44	0.11	4' at edge
9.78	9.87	0.09	6' at edge	8.74	8.77	0.03	4' at edge
10.39	10.52	0.13	4' at edge	9.87	9.89	0.02	4' at edge
10.65	10.69	0.04	4' at edge	10.04	10.16	0.12	4' at edge
11.16	11.23	0.07	4' at edge	10.32	10.48	0.16	4' at edge
11.92	12.06	0.14	4' at edge	10.94	11.20	0.26	4' at edge
13.47	13.58	0.11	4' at edge	11.44	11.46	0.02	4' at edge
14.13	14.16	0.03	4' at edge	11.62	11.68	0.06	4' at edge
14.28	14.33	0.05	4' at edge	12.41	12.45	0.04	4' at edge
14.81	14.83	0.02	4' at edge	14.02	14.03	0.01	4' at edge
14.97	15.2	0.23	6' at edge	14.98	15.20	0.22	4' at C/L
15.39	15.42	0.03	4' at edge	15.23	15.54	0.31	4' at edge

Total SY 6946.13 * 20% Equals 8335 SY

TOTAL: ITEM 251-PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN = 8335 S.Q.YDS.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE:
THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGE THAT MAY RESULT FROM THE PLANING OPERATION. PLANED PAVEMENT SHALL NOT BE EXPOSED TO TRAFFIC FOR MORE THAN 5 DAYS PRIOR TO PLACEMENT OF ITEM 448 - ASPHALT CONCRETE SURFACE COURSES. GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROWN DURING THE PLANING OPERATION.

ITEM 407 - TACK COAT:
THE TACK COAT OPERATION SHALL BE AS DETERMINED AT A PRE-CONSTRUCTION CONFERENCE AS PER 407.06 AND APPLICATION RATES SHALL NOT EXCEED 0.075 GALLONS PER SQUARE YARD.

ITEM 604 - MONUMENT BOX ADJUSTED TO GRADE:
THIS ITEM OF WORK WILL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO ADJUST TO GRADE THE EXISTING MONUMENT BOX TO 1/4 INCH BELOW THE PROPOSED ASPHALT ELEVATION AT THE FOLLOWING LOCATIONS.

SR. ROUTE	INTERSECTION	QUANTITY	UNIT
31	SR-347	1	EACH
31	HARMON PATRICK RD	1	EACH
31	SR-47	1	EACH
31	MILLER RD	1	EACH
31	RICHWOOD-MILLER RD	1	EACH
31	SR-737-LEFT	1	EACH
	TOTAL	6	EACH

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 604 - MONUMENT BOX ADJUSTED TO GRADE: = 6 EACH

ITEM 619 - FIELD OFFICE, TYPE A
UNDER THIS ITEM, THE CONTRACTOR SHALL PROVIDE A FIELD OFFICE MEETING ALL REQUIREMENTS OF ITEM 619 - FIELD OFFICE, TYPE A. THE FOLLOWING QUANTITY HAS BEEN PROVIDED:
ITEM 619 - FIELD OFFICE, TYPE A = 2 MONTHS

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 AND THROUGHOUT THE LENGTH OF ALL RAMPS. PLACEMENT OF THE STAKES SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED OR MISSING STAKES.
CONSTRUCTION LAYOUT STAKES, AS PER PLAN WILL BE PAID FOR AT THE CONTRACT LUMP SUM BID, WHICH SHALL BE FULL COMPENSATION FOR ALL SERVICES, MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS, INCLUDING THE REMOVAL, NECESSARY TO COMPLETE THIS ITEM.

EXISTING MAILBOXES AND MAILBOX POSTS:
GREAT CARE SHALL BE TAKEN TO PREVENT DAMAGE TO ANY OF THE EXISTING MAILBOXES OR MAILBOX POSTS DURING THE PAVING OPERATIONS. ANY MAILBOX OR MAILBOX POST WHICH BECOMES DAMAGED BY THE CONTRACTOR'S PAVING OPERATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

PAVEMENT MARKING:
THE LOCATIONS, SIZES AND SHAPES OF PROPOSED PAVEMENT MARKINGS WILL BE THE SAME AS EXISTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THE EXISTING PAVEMENT MARKINGS BEFORE THE PAVEMENT PLANING AND RESURFACING OBLITERATES THEM. ANY PAVEMENT MARKING WHICH IS PLACED AT THE WRONG LOCATION SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

ITEM 632 - DETECTOR LOOP, AS PER PLAN:
THE LOCATIONS, SIZES AND SHAPES OF PROPOSED LOOP DETECTORS WILL BE THE SAME AS EXISTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THE EXISTING LOOP DETECTORS LISTED IN THE PLAN BEFORE THE PAVEMENT PLANING DESTROYS THEM. ALL LOOP WIRE SHALL BE IDENTIFIED WITH A PLASTIC TAG (WBLT, EBRT, ETC.) AT THE SPLICE POINT OR AT ENTRANCE TO THE CONTROL CABINET. WHEN A PULLBOX IS NOT USED, THE SOLDERED SPLICE SHALL BE MADE IN AN ANCHOR BASE, STRAIN POLE OR A CONDUIT RISER SPECIFIED BY THE PROJECT ENGINEER, EXCEPT WHERE A CONTROLLER CABINET IS MOUNTED ON THAT POLE IN WHICH CASE THE LOOP WIRE SHALL BE ROUTED DIRECTLY INTO THE CABINET. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER, PRIOR TO THE COMMENCEMENT OF WORK, A COPY OF THE IMSA CERTIFICATION PAPERS FOR ALL SIGNAL TECHNICIANS WORKING ON THIS PROJECT. ALL DETECTOR LOOPS SHALL BE REPLACED AND FUNCTIONAL WITHIN 48 HOURS OF BEING REMOVED. THE CONTRACTOR SHALL ALSO PROTECT ANY INLET OR CATCH BASIN FROM FOREIGN MATERIAL OR CONSTRUCTION DEBRIS ENTERING THE INLET OR CATCH BASIN WHILE CUTTING DETECTOR LOOPS.

ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHOWN IN THE PLANS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS CURRENTLY CALLED FOR IN THE PLANS. THE STOP LINE DETECTOR LOOPS SHALL NOT BE WIRED TO ANY OTHER LOOPS AND SHALL HAVE ITS OWN DETECTOR CHANNEL. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT.

ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10.

ALL STOP LINE DETECTION SHALL BE TESTED FOR A BICYCLE TARGET AND ALL DILEMMA DETECTION ZONES SHALL BE TESTED FOR A MOTORCYCLE TARGET.

ITEM 632 - LOOP DETECTOR TIE IN:
THIS ITEM SHALL BE USED TO CONNECT AND SPLICE THE PROPOSED LOOP DETECTORS TO THE APPROPRIATE EXISTING LEAD IN CABLE INSIDE THE PULL BOX.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR LOOP DETECTOR WORK.

LOCATION 1: US-36
ITEM 632 - LOOP DETECTOR = 7 EACH
ITEM 632 - LOOP DETECTOR TIE IN = 7 EACH

TOTAL:
ITEM 632 - LOOP DETECTOR = 7 EACH
ITEM 632 - LOOP DETECTOR TIE IN = 7 EACH

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 | CHECKED

GENERAL NOTES

UNI-36-13.35

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WATER QUALITY 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 A 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.

THE WORK ASSOCIATED WITH THIS PROJECT IS BEING PERFORMED WITHIN THE SOURCE WATER PROTECTION AREA FOR THE CITY OF MARYSVILLE. IT IS ESSENTIAL THAT ALL ACTIVITIES ASSOCIATED WITH THIS WORK BE PERFORMED IN A MANNER CONSISTENT WITH BEST WATERSHED MANAGEMENT PRACTICES INCLUDING, BUT NOT LIMITED TO: AREAS OF DISTURBED GROUND SHALL HAVE APPROPRIATE EROSION AND SEDIMENT CONTROLS. IF HAZARDOUS/TOXIC MATERIALS INCLUDING BUT NOT LIMITED TO FUELS, OILS, BITUMEN'S PAINTS, SEALANTS, OR OTHER CHEMICALS, ARE STORED ON SITE, THEY SHALL BE STORED IN A DOUBLE-CONTAINMENT MANNER. ALL EQUIPMENT REPAIRS, MAINTENANCE, AND MECHANICAL WORK THAT COULD RESULT IN THE RELEASE OF HAZARDOUS/TOXIC MATERIALS SHALL BE PERFORMED IN AN APPROPRIATELY CONTAINED AREA, PREFERABLY OFF SITE OR AN APPROPRIATE OFF-SITE FACILITY. IN THE EVENT THAT ANY HAZARDOUS/TOXIC MATERIALS INCLUDING, BUT NOT LIMITED TO FUELS, OILS, BITUMEN'S PAINTS, SEALANTS, OR OTHER CHEMICALS ARE SPILLED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY EMERGENCY SERVICES BY CALLING 911, THE OHIO EPA @ (800) 282-9378 AND THE CITY OF MARYSVILLE WATER SUPERINTENDENT AT 937-645-1133. THE CONTRACTOR SHOULD BE PREPARED TO PROVIDE DETAILED INFORMATION RELATIVE TO THE TYPE AND QUANTITY OF MATERIAL THAT HAS BEEN SPILLED AS WELL AS THE EXACT LOCATION AND THE EXACT TIME AT WHICH THE SPILL OCCURRED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INFORMING ALL SUBCONTRACTORS AND OTHER AGENTS OF THESE RESPONSIBILITIES, PRECAUTIONS, AND PROHIBITIONS.

NOISE PROTECTION:
IN AN EFFORT TO MINIMIZE NOISE DURING CONSTRUCTION, ALL CONSTRUCTION EQUIPMENT OPERATION MUST CONFORM TO ANY AND ALL PERTINENT LOCAL NOISE ORDINANCES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE IF THERE ARE ANY PERTINENT LOCAL NOISE ORDINANCES, AND, IF THERE ARE ANY, TO ENSURE THAT THEY ARE COMPLIED WITH THROUGHOUT THE CONSTRUCTION OF THE PROJECT.

UNDERGROUND UTILITIES:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE ANY UNDERGROUND UTILITIES MARKED.
OHIO UTILITY PROTECTION SERVICE 1-800-362-2764
NON-MEMBERS MUST BE CALLED DIRECTLY.

UTILITIES OWNERSHIP:
THE UTILITIES AND THEIR PERSPECTIVE OWNERS LISTED BELOW MAY BE LOCATED WITHIN THE PROJECT WORK AREAS.

COLUMBIA GAS OF OHIO
1600 DUBLIN ROAD - EW 2
COLUMBUS, OH 43215
614.481.1057

THE DAYTON POWER AND LIGHT COMPANY
1900 DRYDEN ROAD
DAYTON, OH 45439
937.331.4497

CITY OF MARYSVILLE STORM SEWER & DRAINAGE
125 EAST 6TH STREET
MARYSVILLE, OH 43040
937-642-6015

TIME WARNER CABLE
3760 INTERCHANGE DRIVE
COLUMBUS, OH 43204
614.255.6349/614.348.2994

UNION RURAL ELECTRIC COOPERATIVE, INC.
15461 US 36 E
P. O. BOX 393
MARYSVILLE, OH 43040-4239
937.642.1826

CENTURYLINK
127 NORTH MAIN STREET
BELLEFONTAINE, OH 43311
937.599.9378

FRONTIER COMMUNICATIONS
1300 COLUMBUS SANDUSKY ROAD
MARION, OH 43302
740.382.0551

LEVEL 3 COMMUNICATIONS
226 NORTH FIFTH - SUITE 100
COLUMBUS, OH 43215
614.324.4444/614.256.5377

TIME WARNER CABLE
3760 INTERCHANGE DRIVE
COLUMBUS, OH 43204
614.255.6349/614.348.2994

UNION RURAL ELECTRIC COOPERATIVE, INC.
15461 US 36 E
P. O. BOX 393
MARYSVILLE, OH 43040-4239
937.642.1826

CENTURYLINK
127 NORTH MAIN STREET
BELLEFONTAINE, OH 43311
937.599.9378

OHIO EDISON COMPANY
420 SOUTH YORK STREET
SPRINGFIELD, OH 45505
937.327.1283

UTILITIES OWNERSHIP (CONTINUED):
KDL
3701 COMMUNICATIONS WAY
EVANSVILLE, OH 47715
812.253.2197

OHIO DEPARTMENT OF TRANSPORTATION
400 EAST WILLIAM STREET
DELAWARE, OH 43015
740.833.8332

CITY OF MARYSVILLE WATER
455 NORTH MAPLE ST.
MARYSVILLE, OH 43040
937-644-9858

CITY OF MARYSVILLE SEWER
12901 BEECHER GAMBLE RD.
MARYSVILLE, OH 43040
937-642-1036

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GENERAL NOTES

UNI-36-13.35

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NOTIFICATION OF CONSTRUCTION INITIATION

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT D06.PIO@DOT.STATE.OH.US AND THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT D06.MOT@DOT.STATE.OH.US OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES, INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHOULD LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME FRAME TABLE

ITEM	DURATION OF CLOSURE	NOTIFICATION DUE TO DISTRICT 6 COMMUNICATIONS OFFICE
RAMP AND ROAD CLOSURES	>= 2 WEEKS	14 BUSINESS DAYS PRIOR TO CLOSURE
	> 12 HOURS AND < 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES/RESTRICTIONS	>= 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

PUBLIC OUTREACH AND NOTIFICATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT 6 PUBLIC INFORMATION OFFICE AT (740) 833-8260 TO COORDINATE EFFORTS TO NOTIFY ADJACENT RESIDENTS AND BUSINESSES OF THE UPCOMING RESURFACING PROJECT. ADVANCE NOTIFICATION SHALL OCCUR NO LATER THAN FOURTEEN (14) DAYS PRIOR TO THE FIRST DAY OF WORK.

PUBLIC OUTREACH AND NOTIFICATION IS REQUIRED FOR THE UNI-36 PORTION OF THE PROJECT ONLY.

ITEM 614 - MAINTAINING TRAFFIC:

TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS AT EACH LOCATION.

UNI-36 (LOCATION 1):

ON THE FOUR LANE SECTION OF UNI-36 ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED. LANE CLOSURES SHALL BE IN ACCORDANCE WITH STANDARD DRAWING MT-95.30. TURN LANES ADJACENT TO THE CLOSED LANE SHALL ALSO BE CLOSED (I.E. CENTER TURN LANE IS TO BE CLOSED WHEN INSIDE THRU LANE IS CLOSED). ON THE TWO LANE SECTION OF UNI-36 ONE LANE OF TRAFFIC, BOTH DIRECTIONS, IS TO BE MAINTAINED BY USE OF STANDARD DRAWING MT-97.12. RAMPS TO US 33 SHALL REMAIN OPEN AT ALL TIMES.

UNI-31 (LOCATION 2):

ONE LANE OF TRAFFIC, BOTH DIRECTIONS, IS TO BE MAINTAINED BY USE OF STANDARD DRAWING MT-97.10 OR MT-97.12 AS APPLICABLE.

PERMITTED HOURS OF WORK:

UNI-36 (LOCATION 1): 9:00 PM - 6:00 AM
UNI-31 (LOCATION 2): NO RESTRICTIONS

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING SPECIAL EVENTS):

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED EVENTS:

- HONDA HOMECOMING (LATE JULY - COORDINATE WITH CITY OF MARYSVILLE)

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 OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTOR'S STORAGE AREA.

ITEM 614 - WORK ZONE MARKING SIGN:

LOCATION 1: UNI SR 36: LOCATION 2: UNI SR 31
THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED:

W8-H12a	"NO EDGE LINES"	= 38 EACH
R4-1-36	"DO NOT PASS"	= 32 EACH
ITEM 614	WORK ZONE MARKINGS SIGN	= 70 EACH

ITEM 614 - WORK ZONE CENTER LINE, CLASS II:

THE FOLLOWING QUANTITY HAS BEEN PROVIDED:
LOCATION 1: UNI US 36:
SLM 13.35 - 13.88 = 0.53 MI. X 2 APPLICATION = 1.06 MILE.
TOTALS:
LOCATION 2: UNI SR 31:
SLM 7.79 - 15.63 = 7.84 MI. X 1 APPLICATION = 7.84 MILE.
ITEM 614 - WORK ZONE CENTER LINE, CLASS II: = 8.9 MILE.

TRAFFIC CONTROL FOR LONG LINE PAVEMENT MARKING OPERATIONS AS PER PLAN:

TRAFFIC CONTROL FOR ALL 740.02, TYPE 1, "2 MIN OR LESS DRY TIME" TRAFFIC PAINT SHALL BE THE SAME AS 740.02, TYPE 1 "LONGER THAN 2 MIN DRY" TRAFFIC PAINT. IN ADDITION TO THE REQUIREMENTS IN 614.12 AND SCD MT-99.20 THE CONTRACTOR SHALL PROTECT ALL 740.02, TYPE 1 (REGARDLESS OF DRY TIME) CENTER LINE, EDGE LINE AND CHANNELIZING LINE TRAFFIC PAINT MARKINGS WITH CONES AND WET PAINT SIGNS AND LANE LINE TRAFFIC PAINT MARKINGS WITH LANE CLOSURES, CONES AND WET PAINT SIGNS. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE 642 PRICE PER MILE FOR CENTER LINE, EDGE LINE, CHANNELIZING LINE AND LANE LINE MARKINGS.

ADDITIONAL NOTES ON NEXT PAGE

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MOT NOTES

UNI-36-13.35

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ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENT OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS ON UNI-36 PORTION OF PROJECT ONLY:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE = 60 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

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MOT NOTES

UNI-36-13.35

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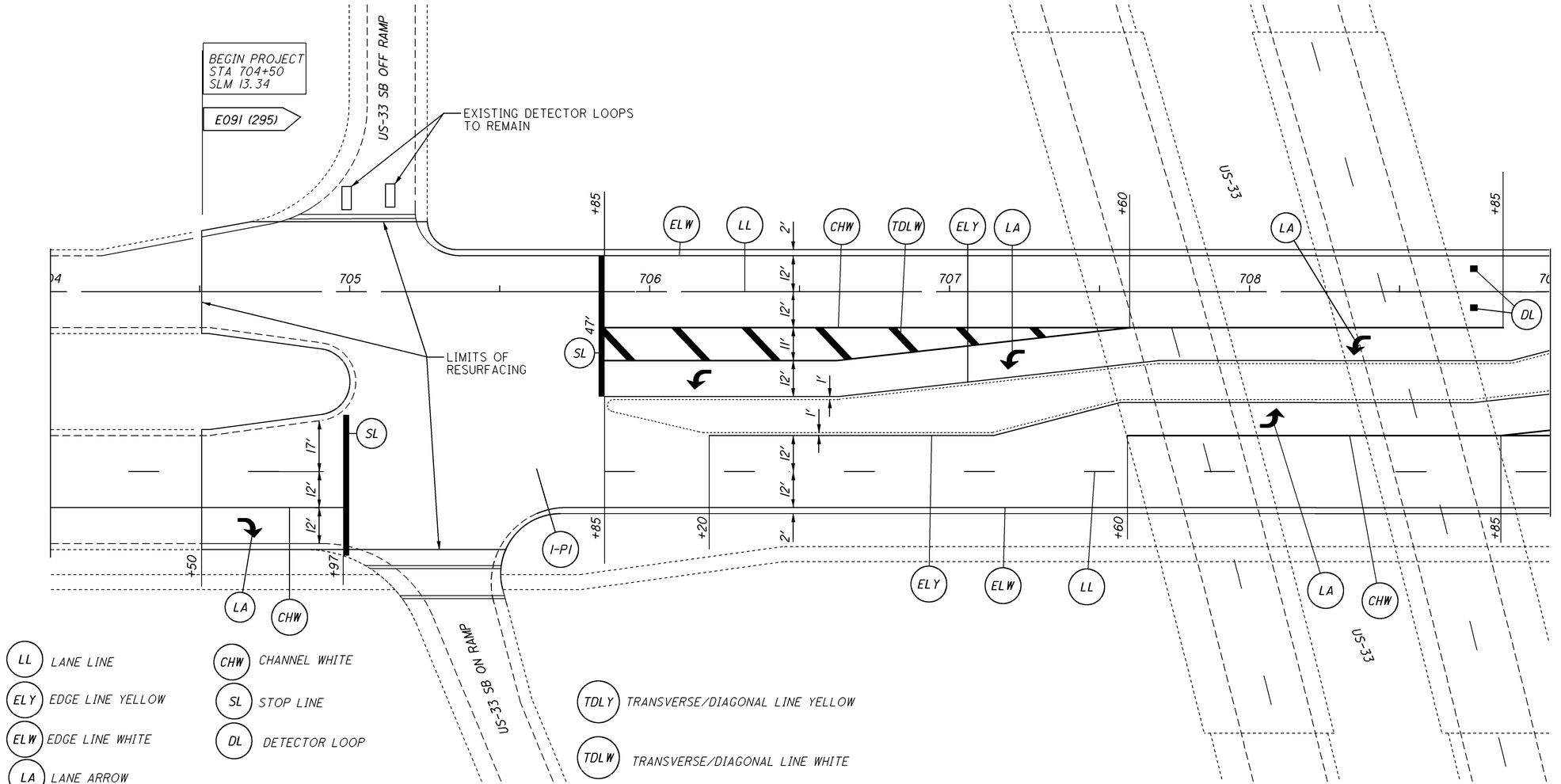
SHEET NUMBER															PARTICIPATION		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
2	4	5	7	8	9	10	11	12	13	14	15	16	17	18	URBAN 80 FEDERAL 20 LOCAL	RURAL 80 FEDERAL 20 STATE						
																					ROADWAY	
														28		28	203	10000	28	CU YD	EXCAVATION	
														660		660	204	10000	660	SQ YD	SUBGRADE COMPACTION	
6																6	604	39500	6	EACH	MONUMENT BOX ADJUSTED TO GRADE	
																					EROSION CONTROL	
															100	900	832	30000	1000	EACH	EROSION CONTROL	
																					PAVEMENT	
8,335																8,335	251	01001	8,335	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN	2
			4,066	4,277	4,605	3,807	2,148	1,689	2,850						20,592	2,850	254	01000	23,442	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
			305	321	345	286	161	127	8,348	49				55	1,545	8452	407	10000	9,997	GALLON	TACK COAT	
									109,608	657						110,265	422	10000	110,265	SQ YD	SINGLE CHIP SEAL	
			169	178	192	159	90	70	4,638	37				58	858	4733	442	20000	5,591	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (448)	
									559							559	617	10100	559	CU YD	COMPACTED AGGREGATE	
																					TRAFFIC CONTROL	
												609			2	607	621	00100	609	EACH	RPM	
												370			2	368	621	54000	370	EACH	RAISED PAVEMENT MARKER REMOVED	
7															7		632	26500	7	EACH	DETECTOR LOOP	
7															7		632	27200	7	EACH	LOOP DETECTOR TIE IN	
											15.68					15.68	642	00090	15.68	MILE	EDGE LINE	
											7.84					7.84	642	00290	7.84	MILE	CENTER LINE	
											1.70				1.70		644	00100	1.70	MILE	EDGE LINE	
											0.64				0.64		644	00200	0.64	MILE	LANE LINE	
											0.11				0.11		644	00300	0.11	MILE	CENTER LINE	
											2,676				2,676		644	00400	2,676	FT	CHANNELIZING LINE	
											233				206	27	644	00500	233	FT	STOP LINE	
											384				384		644	00600	384	FT	CROSSWALK LINE	
											550				550		644	00700	550	FT	TRANSVERSE/DIAGONAL LINE	
											15				15		644	01300	15	EACH	LANE ARROW	
													5			5	SPECIAL	64440000	5	EACH	AIR SPEED ZONE MARKING	17
																					MAINTENANCE OF TRAFFIC	
		60													60		614	11110	60	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	70														10	60	614	12460	70	EACH	WORK ZONE MARKING SIGN	
	8.90														1.06	7.84	614	21400	8.90	MILE	WORK ZONE CENTER LINE, CLASS II	
																					STRUCTURES OVER 20'	
																					UNI-31-0819 (SFN# 8000476)	25
																					UNI-31-0995 (SFN# 8000506)	25
	LUMP																614	11000	LUMP		MAINTAINING TRAFFIC	
2																	619	16000	2	MONTH	FIELD OFFICE, TYPE A	
LUMP																	623	10001	LUMP		CONSTRUCTION LAYOUT STAKES, AS PER PLAN	2
																	624	10000	LUMP		MOBILIZATION	

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GENERAL SUMMARY

UNI-36-13.35

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FOR PAVEMENT MARKING QUANTITES SEE SHEET 15/26

LOCATION							DESIGN	REMARKS				
								254	407	442		
LOCATION	COUNTY	ROUTE	BEG STA	BEG STA	BEG SLM	END SLM	TYPICAL	PAVEMENT AREA (CAD MEASURED)	PAVEMENT PLANING ASPHALT CONCRETE (1.5")	TACK COAT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	
										0.075 GAL PER SY	AVG DEPTH	VOLUME
								SQ YD	SY	GAL	IN	CY
I-PI	UNI	36	704+50	709+00	13.34	13.43	1	4,066	4,066	305	1.5	169
TOTALS CARRIED TO GENERAL SUMMARY									4,066	305		169

PLAN SHEET UNI-36
STA. 704+00 TO STA. 709+00

UNI-36-13.35

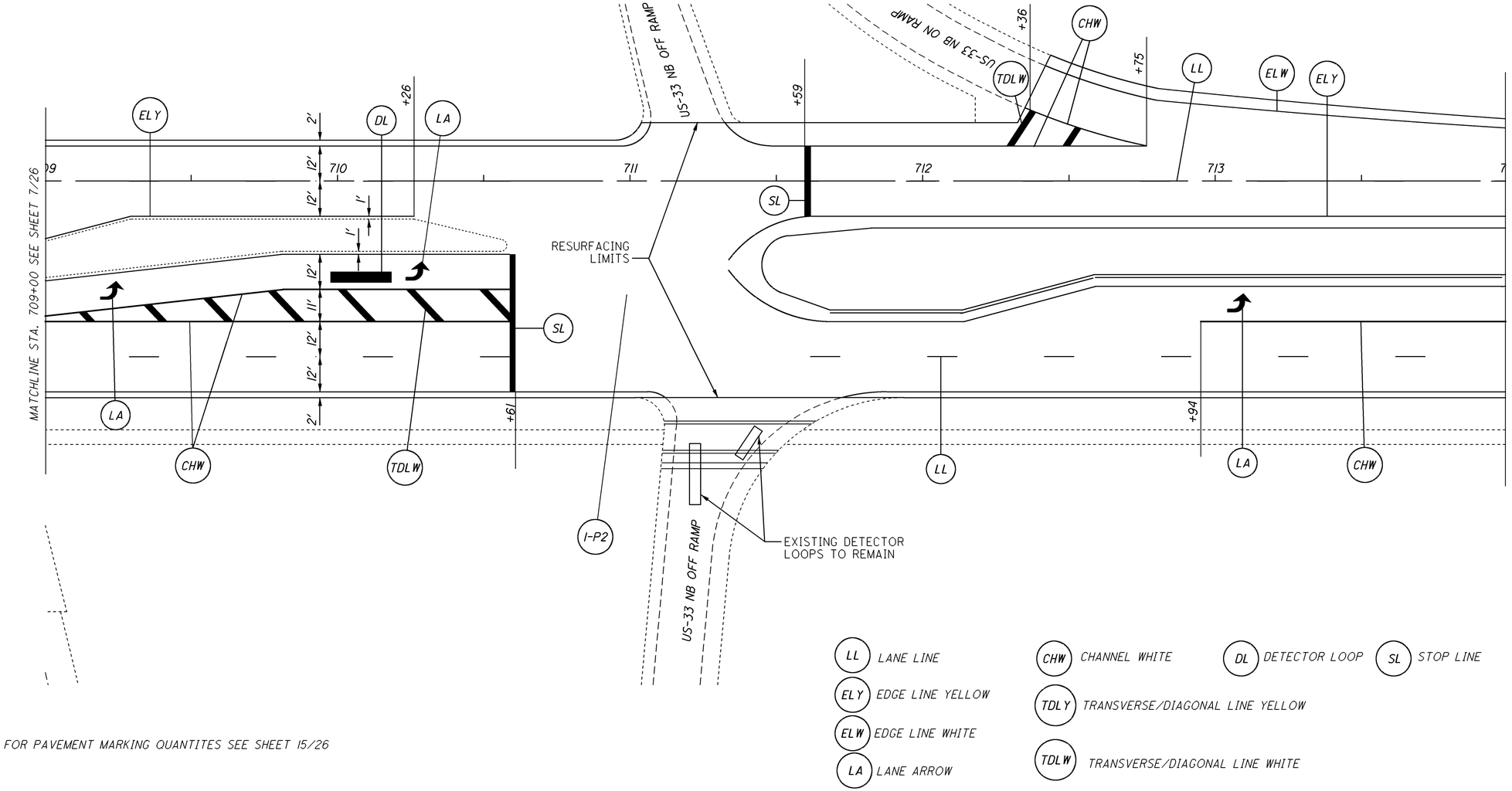
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FOR PAVEMENT MARKING QUANTITES SEE SHEET 15/26

LOCATION							DESIGN		REMARKS				
LOCATION	COUNTY	ROUTE	BEG STA	BEG STA	BEG SLM	END SLM	TYPICAL	PAVEMENT AREA (CAD MEASURED)	254 PAVEMENT PLANING ASPHALT CONCRETE (1.5")	407 TACK COAT	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)		
										0.075 GAL PER SY	AVG DEPTH	VOLUME	
								SQ YD	SY	GAL	IN	CY	
I-P2	UNI	36	709+00	714+00	13.42	13.52	1	4,277	4,277	321	1.5	178	
TOTALS CARRIED TO GENERAL SUMMARY									4,277	321		178	

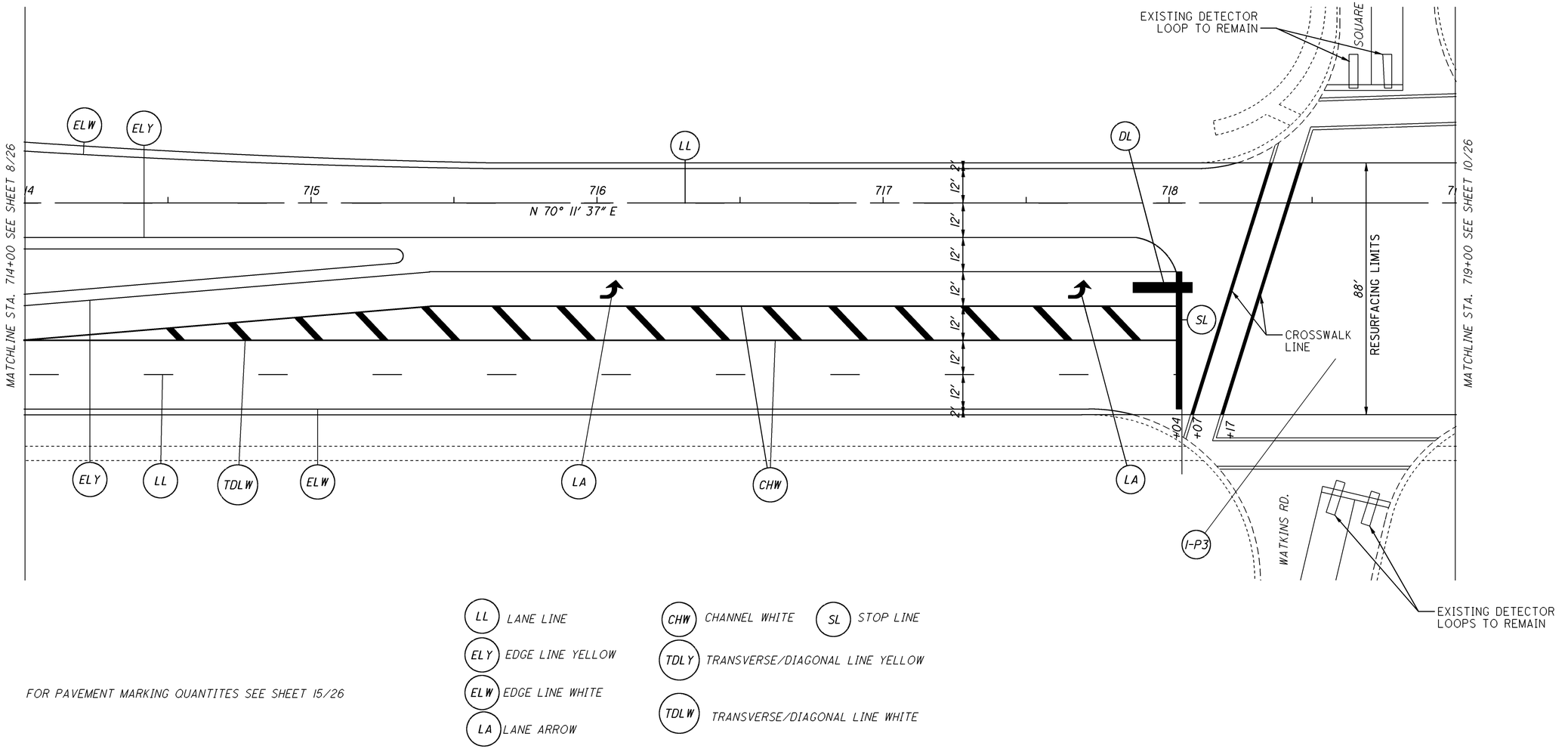
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PLAN SHEET UNI-36
STA. 709+00 TO STA. 714+00

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FOR PAVEMENT MARKING QUANTITES SEE SHEET 15/26

LL LANE LINE
ELY EDGE LINE YELLOW
ELW EDGE LINE WHITE
LA LANE ARROW
CHW CHANNEL WHITE
SL STOP LINE
TDLY TRANSVERSE/DIAGONAL LINE YELLOW
TDLW TRANSVERSE/DIAGONAL LINE WHITE

LOCATION							DESIGN		REMARKS				
LOCATION	COUNTY	ROUTE	BEG STA	BEG STA	BEG SLM	END SLM	TYPICAL	PAVEMENT AREA (CAD MEASURED)	254 PAVEMENT PLANING ASPHALT CONCRETE (1.5")	407 TACK COAT	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)		
										0.075 GAL PER SY	AVG DEPTH	VOLUME	
								SQ YD	SY	GAL	IN	CY	
I-P3	UNI	36	714+00	719+00	13.52	13.62	1	4,605	4,605	345	1.5	192	
TOTALS CARRIED TO GENERAL SUMMARY									4,605	345		192	

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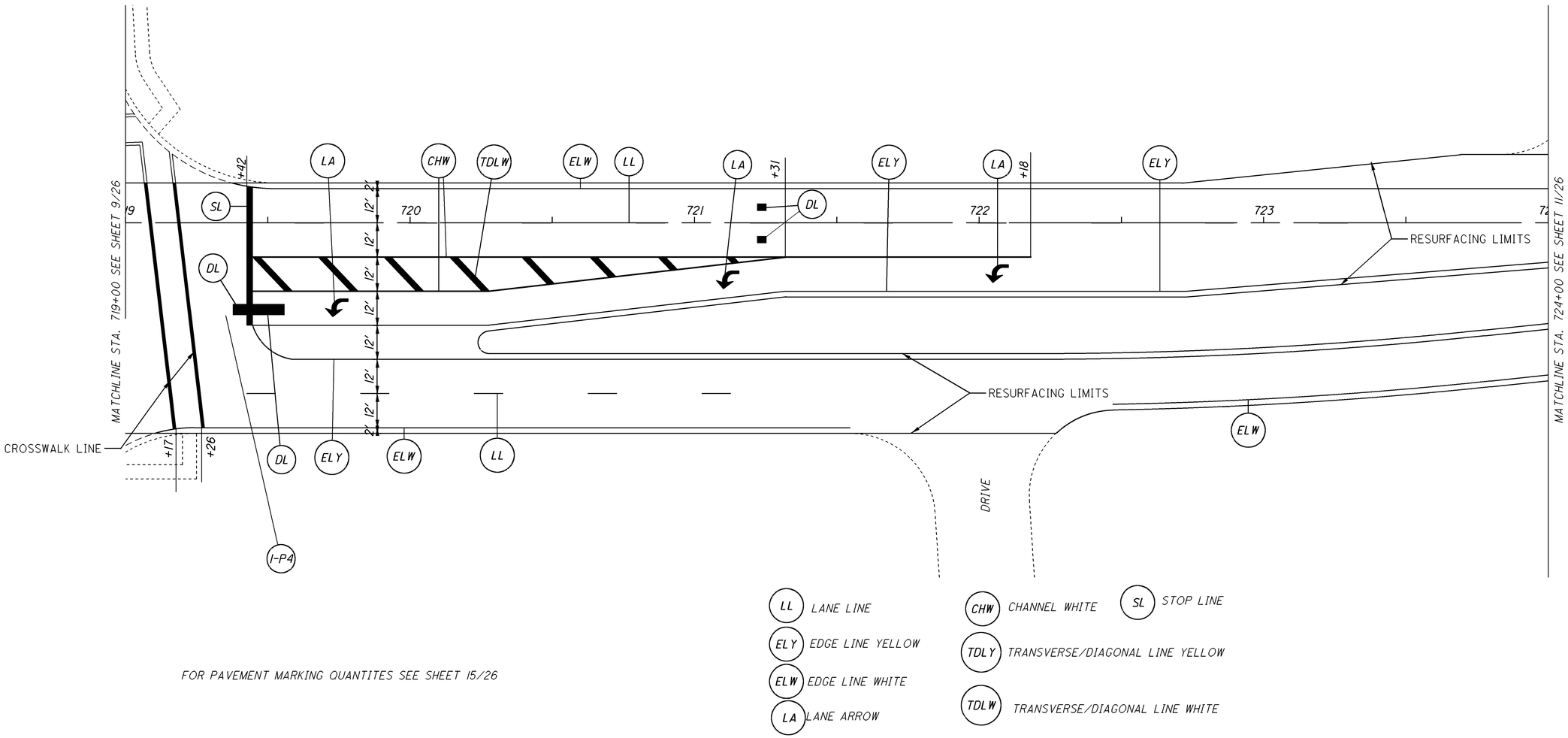
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PLAN SHEET UNI-36
STA 714+00 TO STA 719+00

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FOR PAVEMENT MARKING QUANTITES SEE SHEET 15/26

LL LANE LINE
ELY EDGE LINE YELLOW
ELW EDGE LINE WHITE
LA LANE ARROW
CHW CHANNEL WHITE
TDLY TRANSVERSE/DIAGONAL LINE YELLOW
TDLW TRANSVERSE/DIAGONAL LINE WHITE
SL STOP LINE

LOCATION							DESIGN	REMARKS				
								254	407	442		
LOCATION	COUNTY	ROUTE	BEG STA	BEG STA	BEG SLM	END SLM	TYPICAL	PAVEMENT AREA (CAD MEASURED)	PAVEMENT PLANING ASPHALT CONCRETE (1.5")	TACK COAT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	
										0.075 GAL PER SY	AVG DEPTH	VOLUME
								SQ YD	SY	GAL	IN	CY
I-P4	UNI	36	719+00	724+00	13.62	13.71	1	3,807	3,807	286	1.5	159
TOTALS CARRIED TO GENERAL SUMMARY									3,807	286		159

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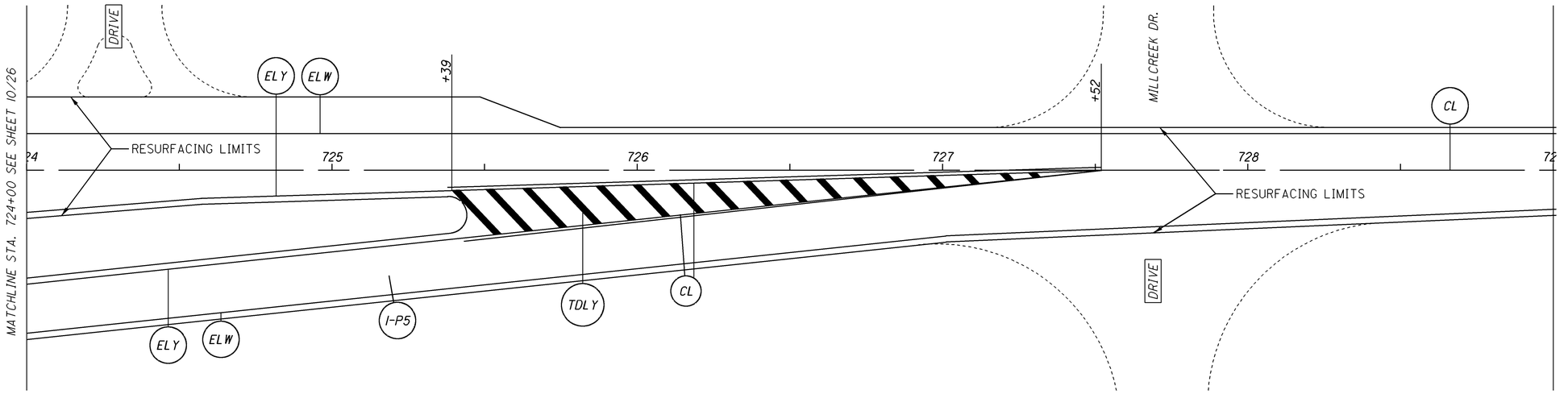
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PLAN SHEET UNI-36
STA. 719+00 TO STA. 724+00

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FOR PAVEMENT MARKING QUANTITES SEE SHEET 15/26

- LA — LANE ARROW
- ELY — EDGE LINE YELLOW
- ELW — EDGE LINE WHITE
- CL — CENTER LINE
- CHW — CHANNEL WHITE
- TDLY — TRANSVERSE/DIAGONAL LINE YELLOW
- TDLW — TRANSVERSE/DIAGONAL LINE WHITE

LOCATION							DESIGN		REMARKS			
									254	407	442	
LOCATION	COUNTY	ROUTE	BEG STA	BEG STA	BEG SLM	END SLM	TYPICAL	PAVEMENT AREA (CAD MEASURED)	PAVEMENT PLANING ASPHALT CONCRETE (1.5")	TACK COAT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	
										0.075 GAL PER SY	AVG DEPTH	VOLUME
								SQ YD	SY	GAL	IN	CY
I-P5	UNI	36	724+00	729+00	13.62	13.81	1	2,148	2,148	161	1.5	90
TOTALS CARRIED TO GENERAL SUMMARY									2,148	161		90

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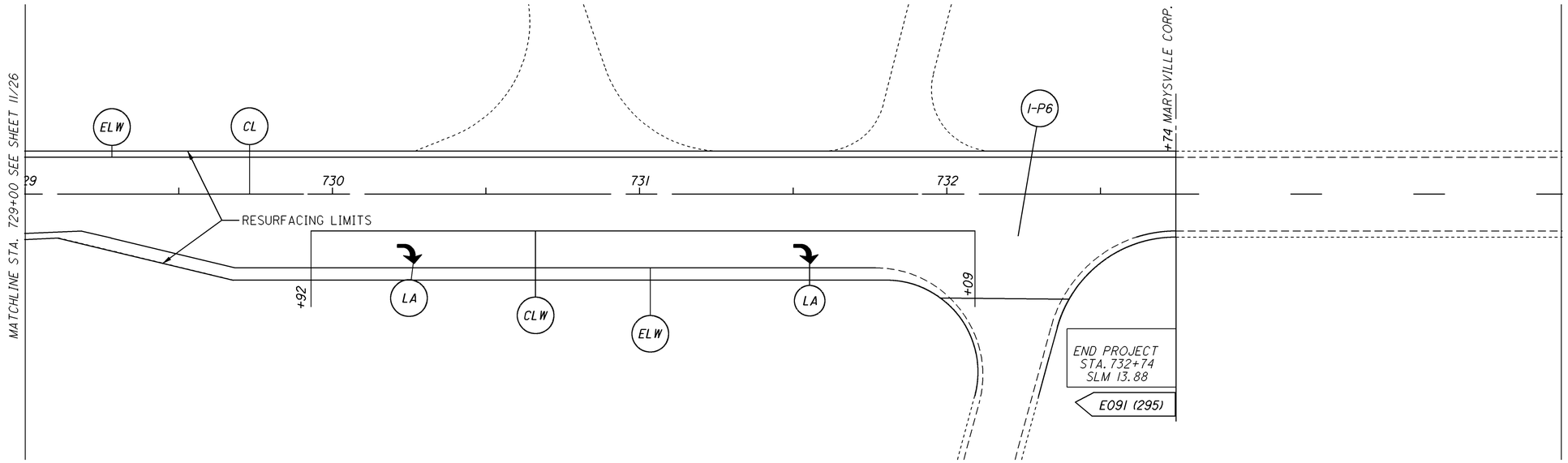
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PLAN SHEET UNI-36
STA. 724+00 TO STA. 729+00

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LL LANE LINE
CL CENTER LANE
ELY EDGE LINE YELLOW
LA LANE ARROW
ELW EDGE LINE WHITE
CLW CHANNELIZING LINE

FOR PAVEMENT MARKING QUANTITES SEE SHEET 15/26

LOCATION							DESIGN		254	407	442		REMARKS
LOCATION	COUNTY	ROUTE	BEG STA	BEG STA	BEG SLM	END SLM	TYPICAL	PAVEMENT AREA (CAD MEASURED)	PAVEMENT PLANING ASPHALT CONCRETE (1.5")	TACK COAT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)		
										0.075 GAL PER SY	AVG DEPTH	VOLUME	
								SQ YD	SY	GAL	IN	CY	
I-P6	UNI	36	729+00	732+74	13.62	13.87	1	1,689	1,689	127	1.5	70	
TOTALS CARRIED TO GENERAL SUMARRY									1,689	127		70	

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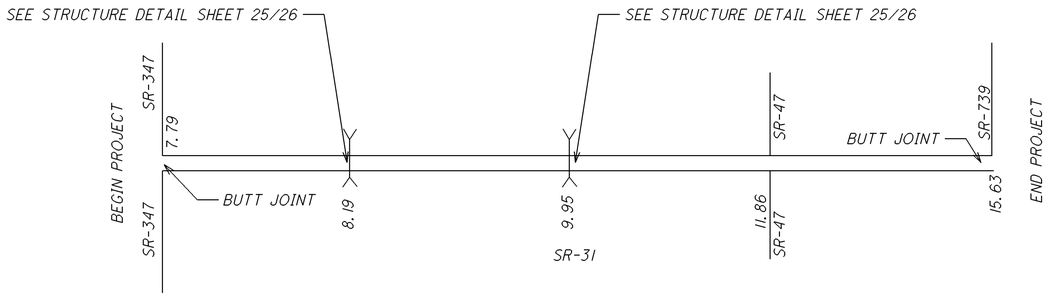
HORIZONTAL SCALE IN FEET
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PLAN SHEET UNI-36
STA. 729+00 TO STA. 732+74

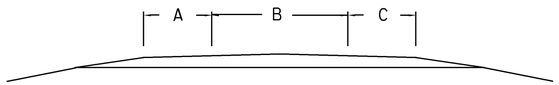
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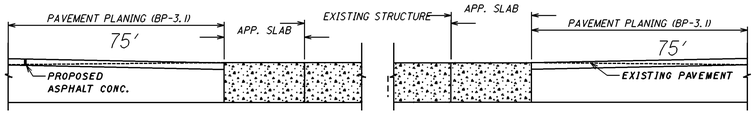
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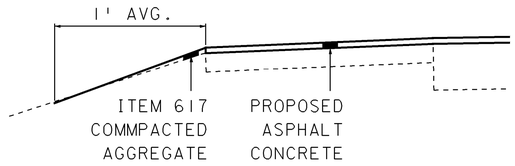
TYPICAL 1





BUTT JOINT STRUCTURES UNI-31-0819, 0995 (SEE DETAILS SHEET 25)

SHOULDER DETAIL



LOCATION							SURFACE COURSE								REMARKS
									254	407	442	442		617	
LOCATION	COUNTY	ROUTE	START LOG POINT	END LOG POINT	LENGTH	TYPICAL	PAVEMENT WIDTH			PAVEMENT AREA	PAVEMENT PLANING ASPHALT CONCRETE (0-1.5")	TACK COAT	SINGLE CHIP SEAL	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (448)		COMPACTED AGGREGATE AVG. 2" DEEP 1' WIDE	
							A	B	C			0.075 GAL PER SY		AVG DEPTH			
			SLM	SLM	MI FT		FT	FT	FT	SY	SY	GAL	SY	IN	CY	CY	
2	UNI	31	7.79	15.63	7.84 41395	1	1.0	22.0	1.0	110,387	400	8279	110,387	1.5	4599	511	BEGIN/END PROJECT WITH BUTT JOINT-75' LONG
2	UNI	31	8.19		85	1		24.0		227		-17	-227		-9		DEDUCT FOR STRUCTURE (SEE SHEET 25)
2	UNI	31	9.95		207	1		24.0		552		-41	-552		-23		DEDUCT FOR STRUCTURE (SEE SHEET 25)
2	UNI	31	8.19		150			24.0		400	400						PLANING AT STRUCTURE 0819 APPROACHES
2	UNI	31	9.95		150			24.0		400	400						PLANING AT STRUCTURE 0995 APPROACHS
2	UNI	31								40		3		1.5	2		ASPHALT DRIVES
2	UNI	31														48	86 GRAVEL DRIVE
2	UNI	31								1650	1650	124		1.5	69		INTERSECTION (11 SIDE ROADS)
TOTALS CARRIED TO GENERAL SUMMARY											2850	8348	109,608		4638	559	

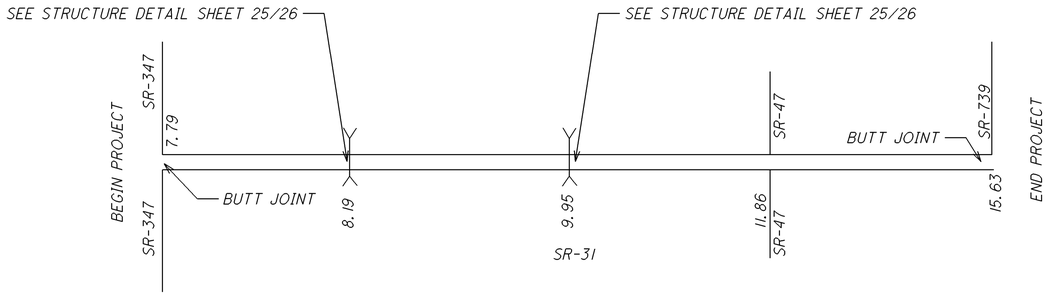
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PAVEMENT SUBSUMMARY AND DETAILS UNI-SR-31

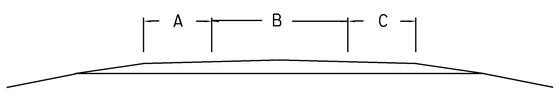
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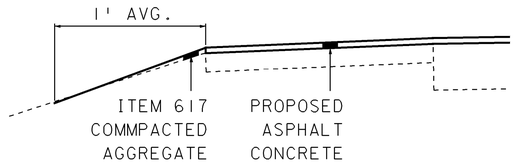
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TYPICAL 1



SHOULDER DETAIL



LOCATION								SURFACE COURSE										REMARKS
															407	422	442	
LOCATION	COUNTY	ROUTE	START LOG POINT	END LOG POINT	LENGTH		SIDE	PAVEMENT WIDTH						PAVEMENT AREA	TACK COAT	SINGLE CHIP SEAL	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (442)	
								A	B	C	D	E	F		0.075 GAL PER SY		AVG DEPTH	
			SLM	SLM	MI	FT		FT	FT	FT	FT	FT	FT	SY	GAL	SY	IN	CY	
2	UNI	SR-31	11.79	11.82	0.03	158	R	8.0		8.0				282	21	282	1.5	16	SOMERSVILLE
2	UNI	SR-31	11.85	11.89	0.04	211	L	8.0		8.0				375	28	375	1.5	21	SOMERSVILLE
TOTAL CARRIED TO GENERAL SUMMARY															49	657		37	

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PAVEMENT SUBSUMMARY AND DETAILS UNI-SR-31

UNI-36-13.35

LOC	COUNTY	ROUTE	LOG BEG	LOG END	LENGTH		SIDE	DESCRIPTION	LONG LINE MARKINGS 642					LONG LINE MARKINGS 644					AUXILIARY MARKINGS 644								
									CENTER LINE		EDGE LINE		LANE LINE	CENTER LINE		EDGE LINE		LANE LINE	TRANSVERSE/DIAGONAL LINE		CHANNELIZING LINE	STOP LINE	CROSS-WALK	LANE ARROWS				
										EQUIV SOLID LINE	WHITE	YELLOW			EQUIV SOLID LINE	WHITE	YELLOW		WHITE	YELLOW				LT	LT/ THRU	THRU	RT/ THRU	RT
			SLM	SLM	MI	FT			MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH
I-P1	UNI	US-36	13.34	13.43	0.09	475		MAIN LINE (URBAN)								0.18	0.13	0.18	77		680	88	32	4				1
I-P2	UNI	US-36	13.42	13.52	0.10	528		MAIN LINE (URBAN)								0.20	0.10	0.20	77		506	71		3				
I-P3	UNI	US-36	13.52	13.61	0.09	475		MAIN LINE (URBAN)								0.18	0.09	0.18	165		808	47	176	2				
I-P4	UNI	US-36	13.62	13.71	0.09	475		MAIN LINE (URBAN)								0.18	0.18	0.08	77		465		176	3				
I-P5	UNI	US-36	13.71	13.80	0.09	475		MAIN LINE (URBAN)						0.03	0.17	0.20	0.12			154								
I-P6	UNI	US-36	13.80	13.87	0.07	369		MAIN LINE (URBAN)						0.08	0.16	0.14					217							2
2	UNI	SR 31	7.79	15.63	7.84	41395		MAIN LINE (RURAL)	7.84	4.99	15.68																	
2	UNI	SR 31	15.63				L	STOP LINE														27						
TOTALS CARRIED TO GENERAL SUMMARY									7.84		15.68			0.11		1.08	0.62	0.64	396	154	2,676	233	384	12				3
																			550									

CALCULATED | CHECKED

PAVEMENT MARKING SUBSUMMARY

UNI-36-13.35

15
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DETAIL		DETAIL	
GAP	TYPICAL CENTER LINE	7	ONE LANE BRIDGE
1	THRU APPROACH	8	STOP APPROACH
2	HORIZONTAL CURVE	9	TWO WAY LEFT TURN LANE
3	HORIZONTAL CURVE ALTERNATE	10	APPROACH W/LEFT TURN LANE
5	4 LANE UNIDIVIDED TO 2 LANE TRANSITION	11	HORIZONTAL CURVE W/RADIUS LESS THAN 1250'
6	MULTILANE DIVIDED-CONTROLLED ACCESS	12	HORIZONTAL CURVE W/RADIUS LESS THAN 820'

LOCATION							REFLECTOR TYPE													TOTAL		REMARKS
							ONE WAY				TWO WAY									621	621	
			START LOG POINT	END LOG POINT	SIDE	DETAIL	RIGHT EDGE LINE		LANE LINE	LEFT EDGE LINE	RIGHT EDGE LINE	RIGHT EDGE LINE	CHANNEL-IZING LINE		LANE LINE	LEFT EDGE LINE	CENTER LINE			RAISED PAVEMENT MARKER REMOVED	RPM	
			SLM	SLM			40	80	120	80	40	80	40	80	80	80	20	40	80	EACH	EACH	
1	UNI	US-36	13.620	13.880		GAP													2		2	
2	UNI	SR-31	7.79	7.96		1		16											22		38	1/2 THRU APPROACH AT SR -347
2	UNI	SR-31	7.96	10.54		GAP													170		170	
2	UNI	SR-31	10.54	10.60		GAP													4		4	
2	UNI	SR-31	10.60	11.50		GAP													60		60	
2	UNI	SR-31	11.50	11.61		12												15			15	
2	UNI	SR-31	11.61	11.69		GAP													5		5	
2	UNI	SR-31	11.69	12.03		1		16											22		38	AT SR-47
2	UNI	SR-31	12.03	12.07		GAP													3		3	
2	UNI	SR-31	12.07	12.24		12												23			23	
2	UNI	SR-31	12.24	15.46		12													213		213	
2	UNI	SR-31	15.46	15.63		GAP		16											22		38	1/2 THRU APPROACH AT SR -739
1	UNI	US-36	13.62	13.88																2		BEGIN TO END LOCATION 1
2	UNI	SR-31	7.79	15.63																368		BEGIN TO END LOCATION 2
TOTALS CARRIED TO GENERAL SUMMARY																				370	609	

CALCULATED | CHECKED

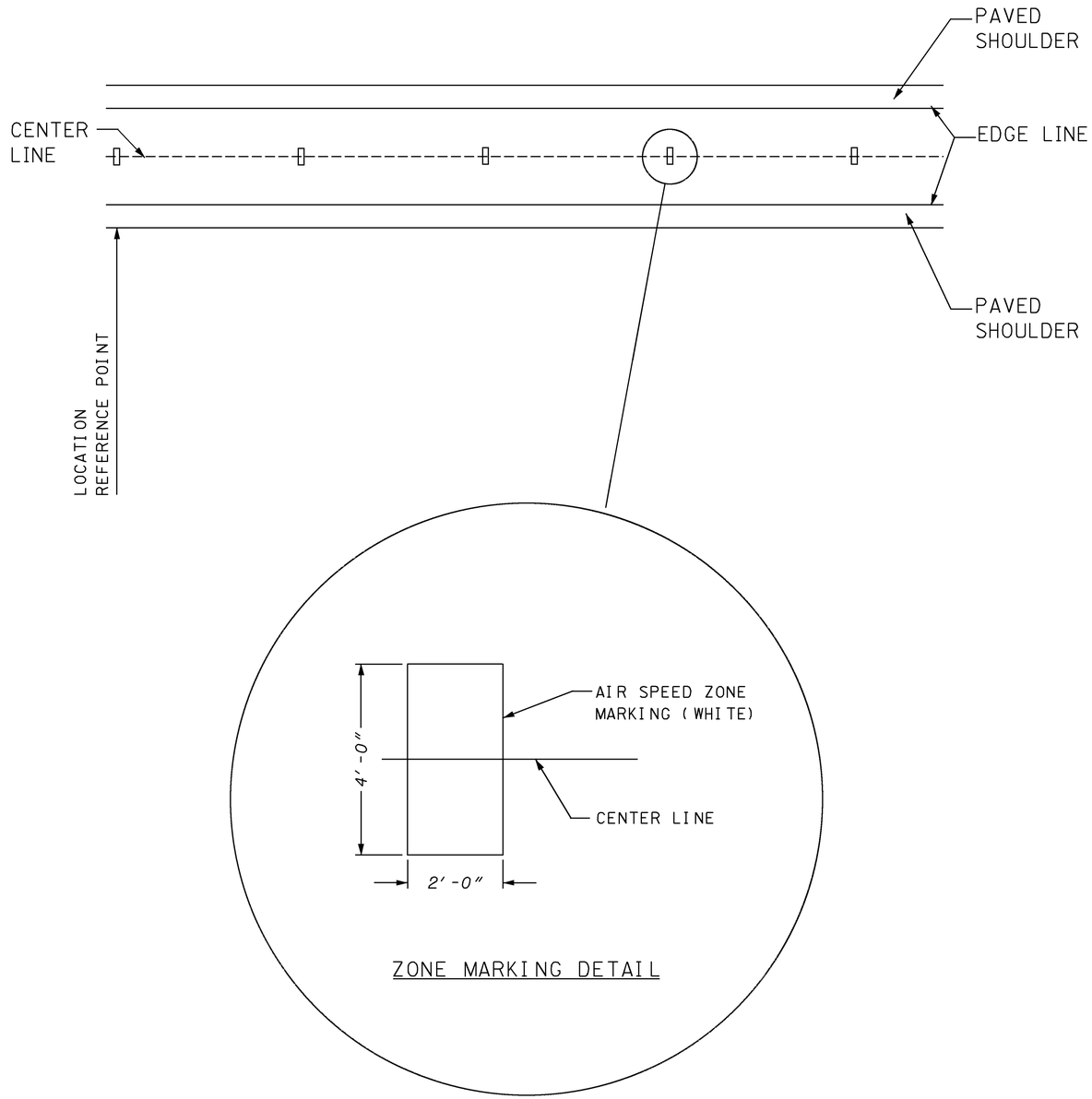
RAISED PAVEMENT MARKERS SUBSUMMARY

UNI-36-13.35

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ZONE MARKING DETAIL

NOTES:

1. ON 2-LANE ROADWAYS, THE MARKINGS EVENLY STRADDLE THE CENTER LINE.
2. EACH AIR SPEED ZONE SHALL CONSIST OF WHITE 24" X 48" TRANSVERSE PAVEMENT MARKINGS.
3. THE MARKINGS SHALL BE LAID OUT BY THE DISTRICT 6 REGISTERED SURVEYOR. THE CONTRACTOR SHALL NOTIFY THE DISTRICT SURVEYOR ONE WEEK PRIOR TO APPLYING THE MARKINGS.

AIR SPEED ZONES							
							644
							SPECIAL
LOCATION	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH	SIDE	AIR SPEED ZONE MARKING
			SLM	SLM	MI		EACH
1	UNI	31	12.30	13.30	1.00	CL	5
TOTAL CARRIED TO GEN. SUMMARY							5

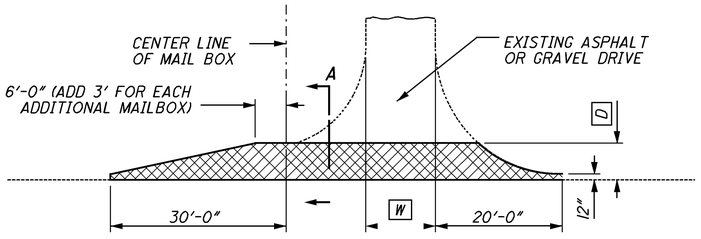
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AIR SPEED ZONE DETAIL

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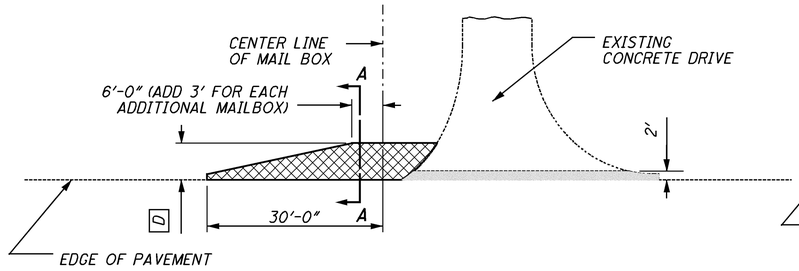


TYPICAL APPROACH #1
COMBINED DRIVEWAY & MAIL BOX APPROACH

MAIL BOX POSITIONED PAST DRIVE SHOWN. MIRROR FOR MAILBOX PRECEDING DRIVE.

THE EXISTING MAIL BOX POSITION SHALL REMAIN. DIMENSION [D] SHALL NOT EXCEED 6'.

[W] = WIDTH OF EXISTING DRIVEWAY.

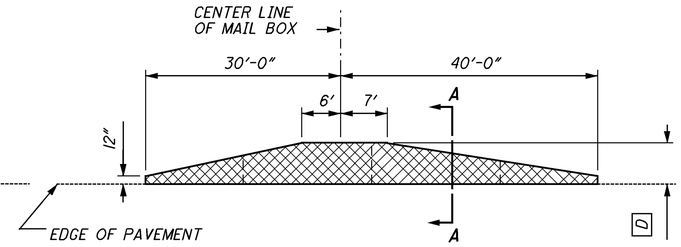


TYPICAL APPROACH #2
COMBINED DRIVEWAY & MAIL BOX APPROACH

MAIL BOX POSITIONED PAST DRIVE SHOWN. MIRROR FOR MAILBOX PRECEDING DRIVE.

THE EXISTING MAIL BOX POSITION SHALL REMAIN. DIMENSION [D] SHALL NOT EXCEED 6'.

[W] = WIDTH OF EXISTING DRIVEWAY.

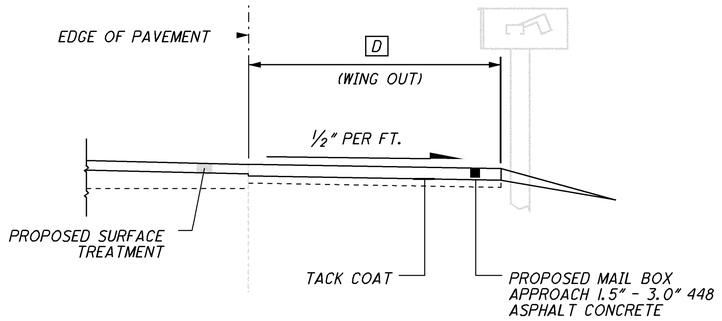


TYPICAL APPROACH #3
TYPICAL MAIL BOX APPROACH

THE EXISTING MAIL BOX POSITION SHALL REMAIN. DIMENSION [D] SHALL NOT EXCEED 6'.

*FOR TYPICAL MAIL BOX APPROACH AND OTHER ADDITIONAL INFORMATION SEE STA. DWG. BP 4.1 (10/18/07)

[W] = WIDTH OF EXISTING DRIVEWAY.



SECTION A-A
MAILBOX APPROACH DETAIL

IT MAY BE NECESSARY FOR THE CONTRACTOR TO PAVE AN INTERMEDIATE LAYER OF 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-22 PRIOR TO THE "WING OUT" IN ORDER TO MEET LIFT REQUIREMENTS.

SLM	SLM	MAILBOXES	203 EXCAVATION	204 SUBGRADE COMPACTION	407 TACK COAT 0.075 GAL. PER SQ. YD.	442 ASPHALT CONCRETE SURFACE COURSE 12.5 MM, TYPE A (448) INTERMEDIATE COURSE 1.5"DEPTH	442 ASPHALT CONCRETE SURFACE COURSE 1.52 MM, TYPE A (448) 1.5"DEPTH	REMARK
			CU. YD.	SQ. YD.	GAL.	CU. YD.	CU. YD.	
7.79	15.63	2			5		2	SINGLE LIFT REQUIRED. (ESTIMATED QUANTITIES)
7.79	15.63	22	28	660	50	28	28	A TWO LIFTS REQUIRED. (ESTIMATED QUANTITIES)
			28	660	55	58		

CALCULATED RDK | CHECKED

MAILBOX TYPICAL SECTION

UNI-36-13.35

18
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Route: **0031R**
Length: **20.239**
Direction: **North**
From: **0.000** ***S0038RFIFTH***
To: **20.239** ***ENTER HAR CO AT 0000***

Length	Left	C/L	Right	Length	Control Points	Scale: **1.00 mile/page**
					7.928 Mile Post = 008	
					7.722 S0347R	
					7.108 Bridge	
					7.000 T0209 MARTIN WELCH RT	

Sheet total equivalent length of solid line: 0.250 Accum. total: 7.713

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Route: **0031R**
Length: **20.239**
Direction: **North**
From: **0.000** ***S0038RFIFTH***
To: **20.239** ***ENTER HAR CO AT 0000***

Length	Left	C/L	Right	Length	Control Points	Scale: **1.00 mile/page**
					8.472	
0.165					8.307	
					8.248	
				0.111		
					8.137	
					8.111 Bridge	

Sheet total equivalent length of solid line: 0.526 Accum. total: 8.239

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NO PASSING ZONE LOG

UNI-36-13.35

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

Route: 0031R
Length: 20.239
Direction: North
From: 0.000 *S0038RFIFTH*
To: 20.239 *ENTER HAR CO AT 0000*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
					9.905 Mile Post = 010
	9.864				9.863 Bridge
			9.721	0.328	
0.290					
	9.536				9.530 T0218 PATRICK BRUSH RUN
			9.431		

Sheet total equivalent length of solid line: 0.822 Accum. total: 9.061

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

Route: 0031R
Length: 20.239
Direction: North
From: 0.000 *S0038RFIFTH*
To: 20.239 *ENTER HAR CO AT 0000*

Scale: 1.00 mile/page

Length	Left	C/L	Right	Length	Control Points
	10.947				10.923 Mile Post = 011
0.095					
	10.852				
			10.720	0.095	
	10.653				
			10.625		
0.157					
	10.496				
			10.463	0.122	
	10.356				
			10.341		
0.209					
			10.185		
	10.147			0.108	10.142 C0214 HARMON PATRICK RT
			10.077		

Sheet total equivalent length of solid line: 1.016 Accum. total: 10.077

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NO PASSING ZONE LOG

UNI-36-13.35

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Route: 0031R
Length: 20.239
Direction: North
From: 0.000 *S0038RFIFTH*
To: 20.239 *ENTER HAR CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
			12.000		11.973	↑ 55mph
				0.156		
					11.896 Mile Post = 012	
			11.844			
					11.758 S0047R	
	11.640					
					11.606 ENTER SOMERSVILLE	
0.183						
					11.519	↑ 45mph
			11.490			
	11.457					
				0.203		
			11.287			
					11.269 C0222 YEARSLEY LT	

Sheet total equivalent length of solid line: 0.784 Accum. total: 10.861
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Route: 0031R
Length: 20.239
Direction: North
From: 0.000 *S0038RFIFTH*
To: 20.239 *ENTER HAR CO AT 0000*

Length	Left	C/L	Right	Length	Control Points	Scale: 1.00 mile/page
					12.906 T0294 BITLER LT	
					12.904 Mile Post = 013	
			12.297			
0.265						
			12.117			
				0.117		
			12.032		12.032 C0299 OSBORNE RT	

Route: 0031R
Length: 20.239
Direction: North
From: 0.000 *S0038RFIFTH*
To: 20.239 *ENTER HAR CO AT 0000*

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

13.904 Mile Post = 014

13.682 C0307 MILLER

Sheet total equivalent length of solid line: 0.250 Accum. total: 11.722

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Route: 0031R
Length: 20.239
Direction: North
From: 0.000 *S0038RFIFTH*
To: 20.239 *ENTER HAR CO AT 0000*

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

14.879 Mile Post = 015
14.864 C0278 RICHWOOD MILLER RT

Sheet total equivalent length of solid line: 0.250 Accum. total: 11.972

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NO PASSING ZONE LOG

UNI-36-13.35

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

Route: **0031R**
Length: **20.239**
Direction: **North**
From: **0.000** ***S0038RFIFTH***
To: **20.239** ***ENTER HAR CO AT 0000***

Scale: **1.00 mile/page**

Length	Left	C/L	Right	Length	Control Points
					15.864 Mile Post = 016
					15.823 C0339 TURNER
					15.804 ENTER BYHALIA
					15.777 ↑ 45mph
	15.738				
			15.590		
0.336					
					15.496 S0739R LT
				0.339	
	15.402				
			15.251		

Sheet total equivalent length of solid line: 0.878 Accum. total: 12.850

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NO PASSING ZONE LOG

UNI-36-13.35

Route: 0036R
Length: 18.878
Direction: East
From: 0.000 *LEAVE CHP CO*
To: 18.878 *ENTER DEL CO*

Scale: 0.50 mile/page

Length	Left	C/L	Right	Length	Control Points
0.012	13.488		13.500		
					13.458 RAMPS FOR US 33
	13.441				
0.049					
	13.392				
					13.020 EXIT RAMP US 36

Sheet total equivalent length of solid line: 0.122 Accum. total: 7.310

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Route: 0036R
Length: 18.878
Direction: East
From: 0.000 *LEAVE CHP CO*
To: 18.878 *ENTER DEL CO*

Scale: 0.50 mile/page

Length	Left	C/L	Right	Length	Control Points
					13.980 Mile Post = 014
					13.839 LEAVE MARYSVILLE
					13.768 MILL CREEK DR LT
	13.763		13.763		
0.039				0.039	
	13.724		13.724		13.725 END DIVIDED HIGHWAY
			13.658		
				0.049	
			13.609		
					13.596 SQUARE DR LT
					13.596 WATKINS RD RT
	13.585				
0.085					
	13.500		13.500		

Sheet total equivalent length of solid line: 0.543 Accum. total: 7.853

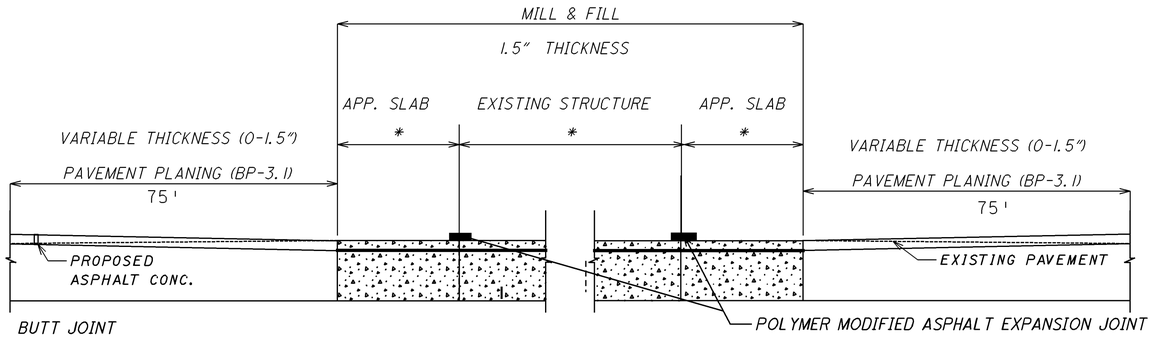
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NO PASSING ZONE LOG

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STRUCTURE UNI-31-0819, 0995

NOTES:

1) EXISTING STRUCTURE AND APPROACH SLAB WIDTH

2) EXISTING STRUCTURE WEARING SURFACE IS ASPHALT

* SEE TABLE

STRUCTURE NO.	BRIDGE LENGTH	BRIDGE WIDTH	APP. SLAB LENGTH
0819	45	40	20
0995	157	44	25

RURAL	RURAL					
UNI-31-0819 SFN# (8000476)	UNI-31-0995 SFN# (8000506)	ITEM	EXT.	UNIT	DESCRIPTION	SHEET NO.
378	1012	254	01000	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
28	76	407	10000	GALLON	TACK COAT	
16	42	442	20000	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM,TYPE A (448)	
80	88	SPECIAL	51631300	FT	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	26

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STRUCTURE ESTIMATED QUANTITIES

UNI-36-13.35

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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.

PRODUCT NAME	SUPPLIER	ADDRESS	PHONE NO.
THORMA-JOINT	DYNAMIC SURFACE APPLICATIONS, LTD	373 VILLAGE RD. PENNSDALE, PA 17756	(570)546-6041
MATRIX 502	CRAFCO INC.	420 N. ROOSEVELT AVE. CHANDLER, AZ 85226	(800)528-8242
EXPANDEX JOINT SYSTEM	WATSON-BOWMAN ACME	95 PINEVIEW DR. AMHERST, NY 14228	(716)691-7566
APJ ASPHALTIC PLUG EXPANSION JOINT	WYOMING EQUIPMENT SALES	281 SIXTH STREET P.O. BOX 287 WEST WYOMING, PA 18644	(570)693-2810

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:

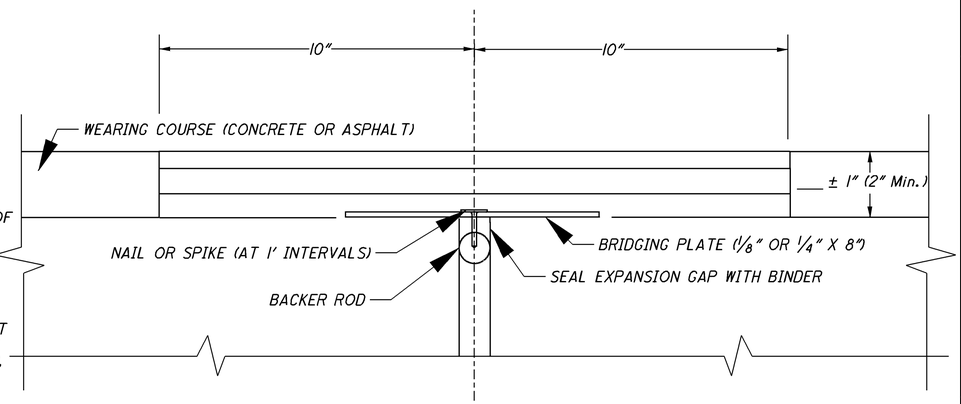
IF NECESSARY TO FACILITATE TRAFFIC MAINTENANCE, THE JOINT WILL BE INSTALLED IN TWO (2) HALF-WIDTH PHASES. DURING PHASE 1 APPROXIMATELY HALF OF THE TOTAL JOINT WILL BE INSTALLED. DURING PHASE 2, A MINIMUM OF TWO (2) INCHES OF THE PHASE 1 JOINT WILL BE REMOVED, AT OR NEAR THE CENTERLINE, WITH THE REMAINDER 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.



TYPICAL PRESTRESSED BOX BEAM OR CONCRETE SLAB JOINT

OFFICE OF STRUCTURAL ENGINEERING

CHECKED / REVIEWED

DESIGNED

PLAN INSERT SHEET

POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

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