N/A*

N/A*

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N/A#

NONE

HOL - SR-515-0.00

141016 PID - 87277

Dist 11

2/6/2014

HOL-515-0.00

446 2-LANE RESURFACING CONSTRUCTION PROJ. NO.

> PID NO.: 87277 NON-FEDERAL

CHTY	ROUTE	SECT.	PRO TER BEGIN		NET LENGTH MILES	COMMENT
HOL.	515	0.00	0.00	5,50	5.50	**

Holmesvill MILLERSBURG **82**13 **GLENMON** BRINKHAVEN BALTIC HOLMES COUNTY

LATITUDE: N 40°34'25" LONGITUDE: W 81°42'50"

EARTH DISTURBED AREAS PROJECT EARTH DISTURBED AREA: ESTIMATED CONTRACTOR EARTH DISTURBED AREA! NOTICE OF INTENT EARTH DISTURBED AREAS RAILROAD INVOLVEMENT:

*** MAINTENANCE PROJECT**

DESIGN DESIGNATION: DESIGN EXCEPTION:

N/A 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:

SIGNED LALLES I SHOW

DATE: 11/4/13

OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 11 PLANNING & ENGINEERING 2013 SPECIFICATIONS

THE STANDARD 2013 SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

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

APPROVED:

DATE: .

APPROVED: DIRECTOR, DEPARTMENT OF TRANSPORTATION

DATE: 1/-22-13

ENGINEER'S SEAL:		STANDA		SUPPLEMENTAL SPECIFICATIONS				
ADRIENNE NICOLE SLANINA E-74336	8P-3.1 8P-4.3 8P-5.1	7/19/13 7/19/13	МТ-97.10 МТ-97.11		TC-42.20 TC-52.10	10/18/13 10/18/13 10/18/13	800 832	10/18/13 10/18/13 7/19/13
ADRIENNE NICOLE SLANINA XI	BP-7.1 DM-4.3		MT-99.20 MT-101.60 MT-101.90	7/19/13	TC-52.20 TC-65.10 TC-65.11	1/18/13 4/20/12 4/20/12		
E-74336	DM-4.4	*** *** *******	MT-105.10 MT-110.10		TC-71.10 TC-73.10 TC-82.10	10/19/12 4/20/12 10/18/13	SPECIAL PRO	VISIONS
STONAL ENGINEER		*****************	*************				INVOICING	7/15/13
11 - 01.01			***************************************	***************************************				

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UTILITIES

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.

ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES PER ITEM 614 AND AS PER SCD MT-97.11. THE LENGTH OF RESTRICTED TRAFFIC LANES SHALL BE KEPT TO A MINIMUM CONSISTENT WITH THE CMS REQUIREMENTS FOR THE PROTECTION OF WORK ITEMS, WHICH NECESSITATE THE RESTRICTION. THE LIMITS AND DURATION OF LANE CLOSURES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

THE PLANING AND RESURFACING WILL PROCEED CONTINUOUSLY A MINIMUM OF FIVE (5) DAYS PER WEEK, WEATHER PERMITTING, EXCEPT FOR THE HOLIDAYS AND EVENTS LISTED BELOW. ANY OPEN PAVEMENT TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR PORTABLE BARRIER. PER SCD MT-101.90.

THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN W8-15 "GROOVED PAVEMENT" SIGNS PER CMS 614.055.

THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SIGNS W8-1 (48"x48") "BUMP" AND W8-2 (48"x48") "DIP" WITH W13-1P (24"x24") ADVISORY SPEED PLAQUE WITH SPEEDS APPROVED BY THE ENGINEER FOR ALL BUTT JOINT LOCATIONS, WHILE THE BUMP OR DIP CONDITION EXISTS.

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

MEMORIAL DAY, FOURTH OF JULY, LABOR DAY

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

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 12:00N MONDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THROUGH 12:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N FRIDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N FRIDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 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.

(CONTINUED...)



ITEM 614 - MAINTAINING TRAFFIC (CONTINUED...)

PEDESTRIAN WALKWAYS CONSTRUCTED BY THE CONTRACTOR SHALL BE KEPT FREE OF ANY OBSTRUCTIONS OR HAZARDS INCLUDING HOLES, DEBRIS AND MUD. OTHER WALKWAYS DAMAGED OR DIRTIED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED OR CLEANED. THE CONTRACTOR MUST TAKE PRECAUTIONS TO PROTECT PEDESTRIANS OR RESIDENTS (INCLUDING CHILDREN) FROM EXPOSURE TO HAZARDS RESULTING FROM THE CONSTRUCTION OPERATION BY INSTALLING CONSTRUCTION FENCE AND SIGNING AS FOLLOWS:

TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE SHALL BE PLACED AROUND THE SIDEWALK WORK AREAS. SIDEWALK CLOSED SIGN (R9-9 (30 X 18)) MOUNTED ON A TYPE 3 BARRICADE WITH TYPE A FLASHING LIGHTS SHALL BE PLACED OUTSIDE THE FENCE ON EACH SIDEWALK APPROACH AS SHOWN ON SCD MT-101.60.

FOR REPAIR OR RECONSTRUCTION WORK INVOLVING SIDEWALKS ON BOTH SIDES OF THE STREET, THE WORK SHALL BE STAGED SO THAT ONE SIDE IS COMPLETED AND OPEN TO PEDESTRIAN TRAFFIC BEFORE THE OTHER IS DISRUPTED.

TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE HAS BEEN PROVIDED HEREIN AS A TRAFFIC CONTROL DEVICE TO DIVERT AND GUIDE PEDESTRIANS WHOSE PATH WOULD OTHERWISE ENTER THE WORK AREA.

WHEN RAISED PAVEMENT MARKERS ARE TO BE INSTALLED, THE REQUIRED LANE CLOSURE SHALL REMAIN IN EFFECT UNTIL THE EPOXY IS DRY AND ALL FOREIGN MATTER OR DEBRIS CREATED BY THE INSTALLATION OF THE RPM CASTING IS REMOVED FROM THE ROADWAY.

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.

NOTIFICATION OF WORK ZONE LANE RESTRICTIONS

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST EIGHTEEN (18) DAYS PRIOR TO IMPLEMENTING ANY WORK ZONE RESTRICTIONS THAT WILL REDUCE THE WIDTH OR VERTICAL CLEARANCE OF ANY LANE ON WHICH TRAFFIC WILL BE MAINTAINED DURING CONSTRUCTION.

ITEM 446 -ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN FOLLOW SPECIFICATION 703.05 EXCEPT DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

COORDINATION OF RESURFACING AND PLANING OPERATIONS

ONCE THE PAVEMENT PLANING OPERATIONS HAVE BEGUN. IT SHALL PROCEED CONTINUOUSLY UNTIL ALL ELEMENTS OF THE WORK ASSOCIATED WITH THE PAVEMENT PLANING OPERATIONS ARE COMPLETED. THE PAVEMENT PLANING OPERATION SHALL BE COMPLETED IN A TIMELY MANNER AS DIRECTED BY THE ENGINEER. PAVING MUST START WITHIN THREE DAYS OF THE START OF THE PLANING OPERATIONS. IF PAVING THE ASPHALT CONCRETE DIRECTLY ONTO PORTLAND CEMENT, CONCRETE OR BRICK PAVEMENT, TACK THE PAVEMENT WITH RUBBERIZED ASPHALT EMULSION CONFORMING TO CMS 702.13.

ALL GRINDINGS SHALL BECOME THE PROPERTY OF THE CONTRACTOR EXCEPT WHAT IS REQUIRED TO BE USED FOR SHOULDER MATERIAL.



446 DENSITY ACCEPTANCE WITH FLAGGER CLOSING OF A 2-LANE HIGHWAY FOR PAVING **OPERATIONS**

THIS PLAN NOTE APPLIES ONLY TO A FLAGGER CLOSURE OF ONE LANE OF A 2-LANE HIGHWAY DURING PAVING OPERATIONS WHEN USING SCD MT-97.11, AND ALLOWS A PAVING OPERATION TO PROCEED CONCURRENTLY WITH THE MARKING AND CUTTING OF CORES REQUIRED FOR 446 DENSITY ACCEPTANCE.

IN ALL CASES THE CONTRACTOR SHOULD LENGTHEN THEIR LANE CLOSURES TO THE MAXIMUM PERMISSIBLE LENGTH DETAILED IN THE ABOVE REFERENCED SCD(S) TO ALLOW THE ENGINEER ADEQUATE TIME TO MARK THE REQUIRED CORE LOCATIONS AND FOR CORE CUTTING OPERATIONS.

THE CONTRACTOR WILL PROVIDE TO THE ENGINEER THE PLANNED QUANTITY THAT WILL BE PLACED FOR THE DAY'S PRODUCTION. EACH DAY'S PRODUCTION WILL BE CONSIDERED ONE LOT AND INCLUDES SHOULDERS. TEN CORES WILL BE OBTAINED BY THE CONTRACTOR FOR EACH LOT AT RANDOM LOCATIONS DETERMINED BY THE ENGINEER. THE ENGINEER WILL DIVIDE A LOT INTO FIVE EQUAL SUBLOTS AND CALCULATE TWO RANDOM CORE LOCATIONS IN EACH SUBLOT AS DESCRIBED IN C&MS 446.05.

THE ENGINEER WILL MARK THE CORE LOCATIONS AFTER THE PAVING OPERATION (INCLUDING THE FINISH ROLLER) HAS COMPLETELY PASSED THE RANDOMLY SELECTED CORE LOCATION. THE CORE DRILL OPERATION CAN BEGIN CUTTING CORES WHEN THE NEWLY PLACED SURFACE TEMPERATURE IS LESS THAN 140°F. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LANE CLOSURE DURING ALL PAVING, MARKING, AND CORING OPERATIONS PER THE REQUIREMENTS OF THE STANDARD CONSTRUCTION DRAWING USED FOR THE PAVING OPERATION.

WORK RESTRICTIONS

NO RESURFACING SHALL BEGIN UNTIL AUGUST 1, 2014.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE PROFILE AND ALIGNMENT OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

SURFACE COURSE COMPLETION REQUIREMENTS

ANY GIVEN LENGTH OF WORK ON WHICH RESURFACING OPERATIONS HAVE BEEN STARTED IN A CONSTRUCTION SEASON SHALL HAVE THE SURFACE COURSE PLACED THAT SAME SEASON.

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ITEM 614 - WORK ZONE PAVEMENT MARKINGS AND SIGNS

THE CONTRACTOR SHALL INSTALL ITEM 614 - WORK ZONE CENTER LINE, CLASS II OR CLASS III, 642 PAINT PRIOR TO OPENING THE LANE TO TRAFFIC, OR WHEN THE EXISTING MARKINGS HAVE BEEN COVERED OR DAMAGED, AS PER CMS 614.11.

IN THE EVENT THE CONTRACTOR CANNOT INSTALL THE WORK ZONE CENTER LINE, CLASS III, DUE TO CONDITIONS BEYOND HIS CONTROL OR WHEN CLASS II PAVEMENT MARKINGS ARE USED, AN ESTIMATED CONTINGENCY QUANTITY OF "DO NOT PASS" (R4-1) AND "PASS WITH CARE" (R4-2) SIGNS HAVE BEEN PROVIDED BELOW.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

614, WORK ZONE CENTER LINE, CLASS II, 642 PAINT

11.43 MILE

614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT
614, WORK ZONE STOP LINE, CLASS III, 642 PAINT
614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT
750 FT

THE CONTRACTOR MAY USE CLASS III WORK ZONE PAVEMENT MARKINGS ON THE ASPHALT SURFACE COURSE AS LONG AS THE FINAL PAVEMENT MARKINGS ARE PLACED WITHIN 30 DAYS. IF CLASS I MARKINGS ARE USED ON THE SURFACE, THEY MUST BE REMOVED BEFORE PLACING THE FINAL EPOXY PAVEMENT MARKINGS PER SPEC 644.04D.

THE CONTRACTOR SHALL ERECT "NO EDGE LINES" (W8-H12a) SIGNS IN ADVANCE OF ANY SECTION OF ROADWAY LACKING CMS STANDARD EDGE LINE MARKINGS, AS PER CMS 614.04.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR WORK ZONE MARKING SIGNS PER THE REQUIREMENTS ABOVE AND ITEM 614 OF THE SPECIFICATIONS.

"NO EDGE LINES" (W8-H12a) 22 EACH
"DO NOT PASS" (R4-1) 10 EACH
"PASS WITH CARE" (R4-2) 10 EACH

614, WORK ZONE MARKING SIGN 42 EACH

ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF PAVING ALL EXISTING DRIVEWAYS AND INTERSECTING PUBLIC ROADS NOT OTHERWISE INDICATED. AN AVERAGE THICKNESS EQUAL TO THE SURFACE COURSE THICKNESS SHALL BE PLACED ON THE EXISTING PAVED DRIVES AND APPROACHES, FOR AN APPROXIMATE DISTANCE OF 10 FEET FOR DRIVEWAYS AND 20 FEET FOR PUBLIC ROADS FROM THE EDGE OF PAVEMENT OR PAVED SHOULDERS, WHICHEVER IS APPLICABLE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. UP GRADE DRIVEWAY PAVING SHALL BE PLACED TO THE BEGINNING OF THE UPSLOPE OF THE DRIVEWAY, AS DIRECTED BY THE ENGINEER. ALL GRADING, TACK COAT, PRIME COAT, TOOLS, EQUIPMENT AND INCIDENTALS REQUIRED TO LAYOUT AND PAVE THE DRIVEWAYS AND INTERSECTING PUBLIC ROADS SHALL BE INCLUDED IN THE CU. YD. PRICE BID FOR ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN. THE CONTRACTOR'S ATTENTION IS DIRECTED TO CMS 107.10. ALL DRIVEWAYS SHALL BE PAVED WITHIN (5) WORKING DAYS AFTER PLACING OF THE SURFACE COURSE ON THE MAINLINE PAVEMENT. FOLLOW SPECIFICATION 703.05 EXCEPT DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 408 - PRIME COAT, AS PER PLAN

THE CONTRACTOR WILL APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER, AS PER PLAN.



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EXTRA FOR WIDENING (PAVEMENT AREA)

AN ADDITIONAL QUANTITY HAS BEEN ADDED TO THE PAVEMENT DATA SHEETS TO BE USED AS DIRECTED BY THE ENGINEER, TO COVER AREAS THAT HAVE BEEN WIDENED ON CURVES OR ON PREVIOUS MAINTENANCE ACTIVITIES BEYOND THE AVERAGE PAVEMENT WIDTH SHOWN.

SHOULDER PREPARATION

THIS WORK WILL BE IN ACCORDANCE WITH CMS ITEM 617, WITH SPECIAL ATTENTION GIVEN TO SECTION 617.04. THE WORK DONE WILL BE IN REASONABLY CLOSE CONFORMITY WITH THE LINES AND TYPICAL SECTIONS SHOWN ON THE PLANS OR AS ESTABLISHED BY THE ENGINEER.

SHIELD

THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF THE PAVEMENT OR EDGELINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

THE CONTRACTOR WILL UTILIZE MATERIAL (I.E. GRINDINGS) OBTAINED FROM THE PAVEMENT PLANING, ASPHALT CONCRETE, OPERATION. THIS MATERIAL WILL BE PLACED IN LIEU OF THE COMPACTED AGGREGATE. IF THE AMOUNT OF GRINDINGS MATERIAL IS NOT SUFFICIENT TO COVER THE COMPACTED AGGREGATE QUANTITY IN THIS PLAN, THEN ADDITIONAL MATERIAL MEETING SPECIFICATION 617 SHALL BE USED. ALL SPECIFICATIONS FOR ITEM 617 APPLY. GRINDINGS NEED TO BE OF A SIZE THAT CAN BE INCORPORATED INTO THE SHOULDERS.

ITEM 209 - PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

ITEM 642 - TRAFFIC PAINT ITEM 646 - EPOXY PAVEMENT MARKINGS

THE CONTRACTOR SHALL REPLACE THE EXISTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS WITH NEW PAVEMENT MARKINGS AT THE SAME LOCATIONS AS PER CMS 641.06. SEE SCD TC-71.10 AND TC-73.10 FOR PAVEMENT MARKING DETAILS.

ITEM 448 -ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 (SPOT LEVELING)

LONGITUDINAL AND TRANSVERSE IRREGULARITIES ARE INTERMITTENTLY PRESENT THROUGHOUT THE EXISTING PAVEMENT SURFACE, BUT THE PAVEMENT DOES NOT REQUIRE A FULL-WIDTH LEVELING COURSE. IRREGULARITIES SHALL BE FILLED WITH 448 IN A MANNER THAT WILL RESULT IN SURROUNDING PORTIONS OF THE EXISTING SURFACE REMAINING EXPOSED AFTER THE SPOT LEVELING COURSE IS PLACED. THE SPOT LEVELING COURSE SHALL BE A VARIABLE DEPTH COURSE WITH A MINIMUM THICKNESS OF O". THE MATERIAL SHALL BE PLACED IN A SEPARATE OPERATION DIRECTED BY THE ENGINEER.



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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 REQUIREMENTS 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) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).
- WHEN SPECIFIED BY THE ENGINEER.

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:

- 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 FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). 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.
- WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/ DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

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.

(CONTINUED...)

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

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 20 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

ITEM 607 - FENCE, MISC .: TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE

TEMPORARY ORANGE PLASTIC/NYLON CONSTRUCTION FENCE SHALL BE PLACED FOR THE PROTECTION OF PEDESTRIAN TRAFFIC. IT SHALL BE SECURELY FASTENED TO WOOD OR METAL POSTS AT NOT MORE THAN 6' SPACING. IT SHALL BE NOMINALLY 42" HIGH AND THE TOP EDGE SHALL NOT SAG BELOW 30". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT THE FENCE IS IN GOOD CONDITION AND PROPERLY PLACED AND MAINTAINED.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 607 - FENCE MISC.: TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE 108 FT

ITEM 632 - DETECTOR LOOP

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO HE GENERAL SUMMARY FOR THE REPLACEMENT OF THE DETECTOR LOOPS AT THE S.R. 515/39 INTERSECTION.

THE CONTRACTOR SHALL MEASURE THE SIZE AND LOCATION OF THE EXISTING DETECTOR LOOP PRIOR TO MILLING AND INSTALL THE NEW DETECTOR LOOP IN THE SAME LOCATION. UPON COMPLETION THE CONTRACTOR SHALL MEET ON SITE WITH ODOT SIGNAL ELECTRICIANS TO INSPECT AND VERIFY THE LOOPS ARE FUNCTIONING PROPERLY. THE ODOT SIGNAL ELECTRICIAN CAN BE CONTACTED AT PH. NO. 330-339-6633.

ITEM 632, DETECTOR LOOP

ITEM 632, LOOP DETECTOR LEAD-IN CABLE

2 EACH
20 FT

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ITEM SPECIAL, ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE BRIDGE STRUCTURE SCHEDULED FOR REHABILITATION WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURE.
A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE ADDRESS BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

MR. JIM VERES OHIO EPA, NEDO 2110 E. AURORA ROAD TWINSBURG, OHIO 44087

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER. INFORMATION REQUIRED ON THE FORM WILL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED. COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT THE ODOT DISTRICT 11 OFFICE, 2201 REISER AVENUE, NEW PHILADELPHIA, OHIO 44663.

BASIS FOR PAYMENT - THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM SPECIAL, ASBESTOS NOTIFICATION.

04-NOV-2013 7:48AM

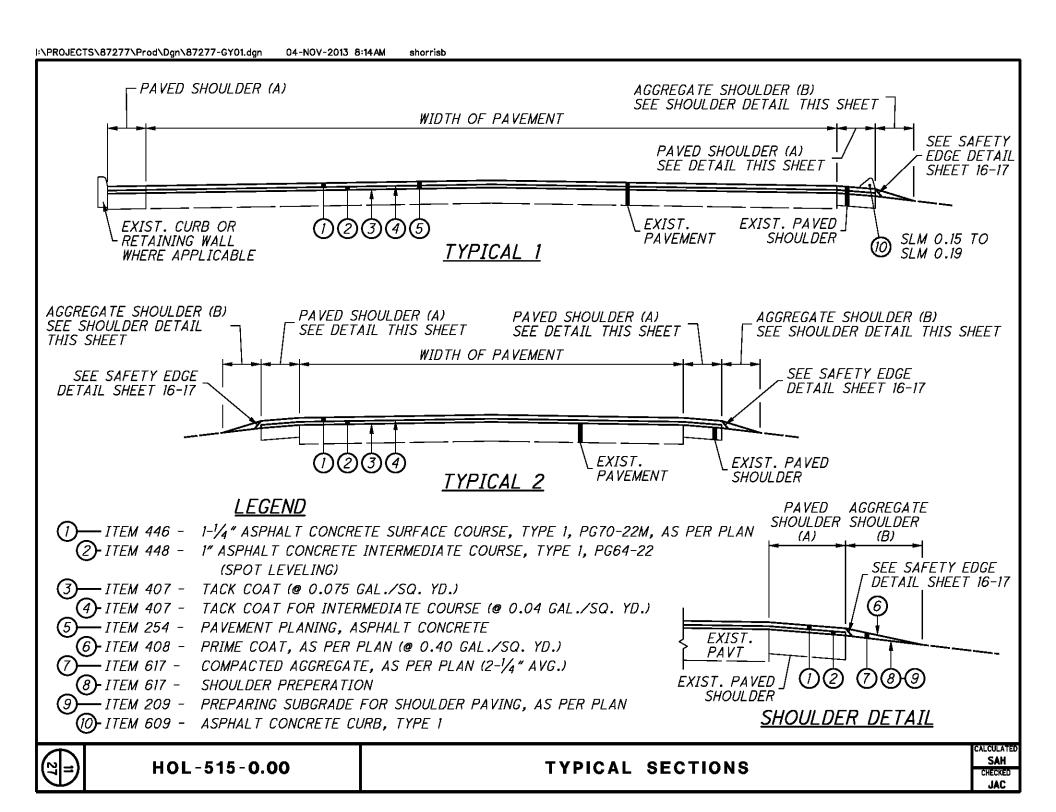
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3	5	8	9	B	14	5	17	18	19	20	22	24	27	FUNDING OL/NFA/AY	ITEM	EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET No.
																			ROAD#AY	
												2		2	202	23010	2	SQ YD	PAVEMENT REMOVED, ASPHALT	
				2961										2961	202	23500	2961		WEARING COURSE REMOVED	
				004								135		135	202	30000	135		WALK REMOVED	
				264		_						18		282	202	32000	282	FT	CURB REMOVED	
						10.84								10.84	209	72051	10.84	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	6
		108												108	607	98000	108		FENCE, MISC.:TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE	
										7		160		160 7	608	52000 69050000	160		CURB RAMP	20.21
						-		-		7					SPECIAL	09050000	7	EACH	MAILBOX SUPPORT	20-21
																			EROSION CONTROL	
														1000	832	30000	1000	EACH	EROSION CONTROL	
									660					660	605	31100	660	FT	DRAINAGE AGGREGATE DRAINS	1
						\vdash		_	000					000	803	31100	880		AUGREGATE DRAINS	
																			PAVEMENT	
									330					330	253	01000	330		PAVEMENT REPAIR	
				6619										6619	254	01000	6619	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	-
					5518	1053		22						6593	407	10000	6593	GALLON	TACK COAT	
						563								3504	407	14000	3504		TACK COAT FOR INTERMEDIATE COURSE	
						5004								5004	408	10001	5004	GALLON	PRIME COAT, AS PER PLAN	5
					0557	400	70							717.0	440	47000	717.0	011 110	ACRUAL T GOVERNET CURRENCE COURSE TYPE I DOZG ONL 16 DER OLIV	-
					2553	488 389	79	10						3130 2433	446 448	47029 46020	3130 2433		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 (SPOT LEVELING)	3
					253	303								253	448	48021	253		ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-22 (DRIVEWAYS), AS PER PLAN	5
				264										264	609	10000	264	FT	ASPHALT CONCRETE CURB, TYPE I	
						783 12509								783 12509	617 617	10101 20000	783 12509		COMPACTED AGGREGATE, AS PER PLAN SHOULDER PREPARATION	6
						12303								12509	011	20000	12503	30 10	SHOULUER PREPARATION	
																			TRAFFIC CONTROL	
													740	740	621	00100	740		RPM	
		•											740	740	621	54000	740		RAISED PAVEMENT MARKER REMOVED	.
		2 20						-						2 20	632 632	26500 65200	2 20	FT	DETECTOR LOOP LOOP DETECTOR LEAD-IN CABLE	.
															- UJZ	00200				
													250	250	642	00400	250	FT	CHANNELIZING LINE, 8", TYPE 1	
													43	43	642	00500	43		STOP LINE, TYPE 1	
						_	_				_	_	87 4	87 4	642 642	00700 01300	87 4		TRANSVERSE/DIAGONAL LINE, TYPE LANE ARROW, TYPE	
													-	7	042	0,500		LACH	LARE ARROW, TITE I	
													11.00	11.00	646	10000	11.00		EDGE LINE, 4"	
													5.54	5.54	646	10200	5.54	MILE	CENTER LINE	
						-	-	-			_								CTOUNTINES (20/ AND AVED) - UAL-SIS-AA78 (SEN TRAGERA)	
			LUMP											LUMP	SPECIAL	69072000	LUMP		STRUCTURES (20' AND OVER) - HOL-515-0078 (SFN 3802620) ASBESTOS NOTIFICATION	9
			LOIM								64			64	846	00100	64	FT	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	22-23
									-					65	674	****		110:10	MAINTENANCE OF TRAFFIC	
	42	20		 		-	-	-	-		-	-	 	20 42	614 614	11110 12460	20 42		LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE WORK ZONE MARKING SIGN	1
	11.43							 					-	11.43	614	21500	11.43		WORK ZONE CENTER LINE, CLASS II, 642 PAINT	
	11.43													11.43	614	21550	11.43	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
	750													750	614	23680	750	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	
\vdash	129			-		\vdash	_	-	-		_	<u> </u>	-	129	614	26610	129	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
	\vdash		-	\vdash	 	\vdash	\vdash	\vdash		\vdash	\vdash	\vdash	\vdash		 					
LUMP														LUMP	614	11000	LUMP		MAINTAINING TRAFFIC	2-3
	لبا											_		LUMP	624	10000	LUMP		MOBILIZATION	000.0
	_ I																		■CA	ALCULATE

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GENERAL SUMMARY

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BR. NO. HOL-515-0078 (SFN 3802566) -

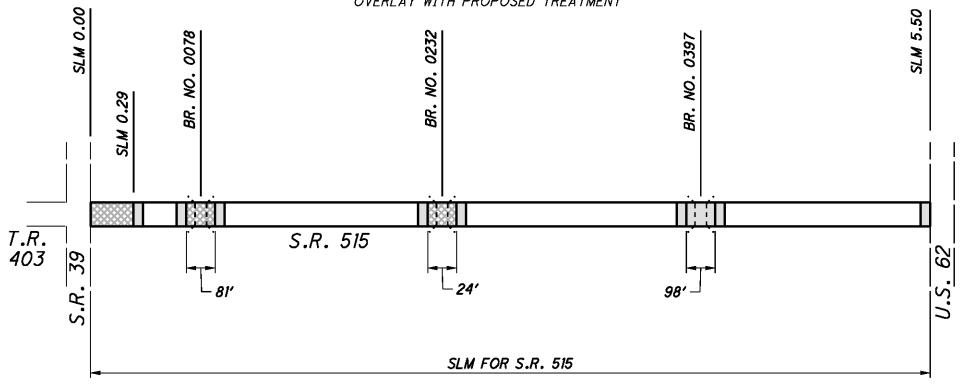
1-1/4" PLANING OVERLAY WITH PROPOSED TREATMENT

POLYMER MODIFIED ASPHALT CONCRETE EXPANSION JOINT SYSTEM (SEE SHEET 22-23)

BR. NO. HOL-515-0232 (SFN 3802590) -2-1/4" PLANING

OVERLAY WITH PROPOSED TREATMENT

BR. NO. HOL-515-0397 (SFN 3802620) -WEARING COURSE REMOVED (REMOVE ASPHALT TO TOP OF CONCRETE) OVERLAY WITH PROPOSED TREATMENT



LEGEND

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

ITEM 202 - WEARING COURSE REMOVED BUTT JOINT OR FEATHER PER BP-3.1

NOTE: WEARING COURSE REMOVED INCLUDES MAINLINE

PAVEMENT AND PAVED SHOULDERS

HOL-515-0.00



ROUTE T	G POINT O LOG INT (SLM)	LEN	IGTH	WIDTH OF PAVEMENT AND PAVED SHOULDER	TYPICALS	EXISTING TYPE PAVEMENT	T AREA	JRSE 20 0			54	609 1
S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.15 S.R. 515 0.15 S.R. 515 0.15 S.R. 515 0.2	O LOG NT (SLM)		IGTH	H OF PAVEMEN	PICALS	VG TYPE MENT	T AREA	JRSE)	ИЕД	77	E	RETE
S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.1 S.R. 515 0.1 S.R. 515 0.2	M TO	1		WID 7 AND 1	7.7	EXISTIN PAVE	PAVEMENT AREA	WEARING COURSE REMOVED	CURB REMOVED	PA VEMENT PLANING, ASPHALT CONCRETE		ASPHALT CONCRETE CURB, TYPE I
S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.1 S.R. 515 0.1 S.R. 515 0.2		MILES	FT	FT			S.Y.	SQ. YD.	FT.	SQ. YD.	5Q. YD.	FT.
S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.1 S.R. 515 0.1 S.R. 515 0.2												
S.R. 515 0.0 S.R. 515 0.0 S.R. 515 0.1 S.R. 515 0.1 S.R. 515 0.2	0 0 05	0.05	204	40	7	ACDUALT	1477				1477	<u> </u>
S.R. 515 0.0 S.R. 515 0.1 S.R. 515 0.1 S.R. 515 0.2		0.05	264 211	<i>49</i> <i>37</i>	1	ASPHALT ASPHALT	1437 867				1437 867	
S.R. 515 0.1 S.R. 515 0.1 S.R. 515 0.2		0.05	264	34	1	ASPHALT	997				997	
S.R. 515 0.13 S.R. 515 0.2		0.05	264	34	1	ASPHALT	997		264		997	264
S.R. 515 0.2	9 0.23	0.04	211	35	1	ASPHAL T	821	306			821	
S.R. 515 0.2	3 0.26	0.03	158	29	1	<i>ASPHALT</i>	509	254			509	
	6 0.29	0.03	158	24	1	ASPHALT	421	210			421	
S.R. 515 BR N	NO. 0078	3	81	32	2	ASPHALT	288	560		288		
S.R. 515 BR N	NO. 0232	?	24	26	2	ASPHALT	69	4 55			69	
S.R. 515 BR N	NO. 0397	7	98	26	2	ASPHALT	283	738				
	1000.					7,01,111,12,	200	, 55				
S.R. 515 5.4	9 5.50	0.01	53	26	2	ASPHAL T	153	228				
PAVED PUBLIC STREE	ETS		80	24		ASPHALT	213	210			213	
		SUBT	OTAL							288	6331	
TOTALS	0.400			IERAI	SIII	MAARY		2961	264	_	6331 6 19	264

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	PAVEMENT DATA															
					7		ΝŢ		4	407		446	448			
ROUTE	LOG F TO I POINT	LOG (SLM)	LENGTH MILES FT		WIDTH OF PAVEMENT	TYPICALS	EXISTING TYPE PAVEMENT	PAVEMENT AREA	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.04	IN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN	IN	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 (SPOT LEVELING)	IN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS), AS PER PLAN
	FROM	TO	MILES	FT	FT		E	S.Y.	GAL.	GAL.		CU. YD.		CU. YD.		CU. YD.
S.R. 515	0.00	0.05	0.05	264	40	1	ASPHAL T	1173	88	47	1-1/4	41	1	.3.3		
S.R. 515	0.05	0.09	0.04	211	31	1	ASPHALT	727	55	29	1-1/4	25 68	1	33 20 55		
S.R. 515 S.R. 515	0.09	0.23	0.14	739	24	1	ASPHAL T	1971	148	29 79	1-1/4	68	1	55		
S.R. 515	0.23	0.29	0.06	317	20	1	<i>ASPHALT</i>	704	53 4585	28	1-1/4	24 2123	1	20		
S.R. 515	0.29	5.50	5.21	27509	20	2	ASPHAL T	61131	4585	2445	1-1/4	2123	1	1698		
ACCRECA	TE DON	<u> </u>		2060	10	-		2200							2	127
								2289 1811	-						2 1-1/4	127 63
							100							2	6	
PAVED PUBLIC ROADS 740 20 164							1644							1-1/4	57	
MAILBOX TURNOUTS 63 EA.x20 S.Y. 126							1260	95	50	1-1/4	44	1	35			
EXTRA WI				10%				6580	494	<i>263</i>	1-1/4	228	1	183		
<i>TO1</i>	TALS	CARR	IED 7	TO GE	NER.	AL	SUMMAR	Y	<i>5518</i>	2941		2553		2044		<i>253</i>

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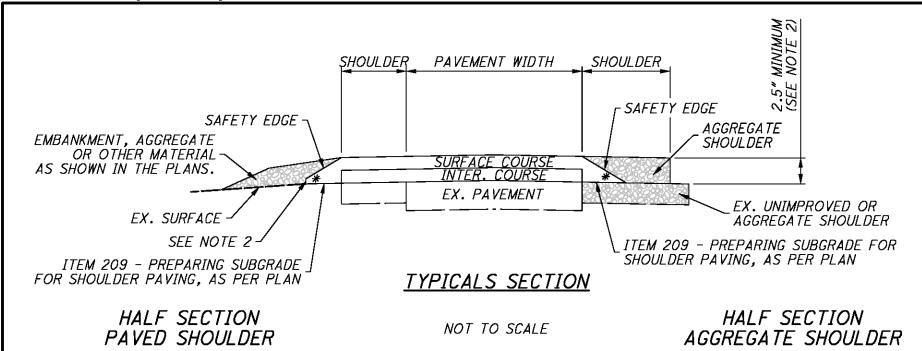
PAVEMENT QUANTITIES

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" " " Labora (C. L.) " " Laboragi"	01 1101 2010 0 201111	0

	SHOULDER DATA																			
							£7.)				209	2	107	408	4	46	4	148	6	17
ROUTE		POINT LOG (SLM)	LEN	IGTH	TYPICAL	LE	FT		SHT	SHOULDER AREA	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE © O.04 GAL/S.Y.	PRIME COAT, AS PER PLAN @ 0.40 GAL./S.Y.	`		ASPHALT CONCRETE INTERMEDIATE	COURSE, TYPE I, PG64-22 (SPOT LEVELING)	COMPACTED AGGREGATE, AS PER PLAN (2-1/4" AVG.)	SHOUL DER PREPERA TION
	FROM	TO	MILES	FT		Α	В	Α	В	S.Y.	MILES	GAL.	GAL.	GAL.		CU.YD.	IN	CU.YD.	CU.YD.	SQ. YD.
S.R. 515	0.00	0.05	0.05	264	1	2	0	7	2	264 59	0.1	20	11	24	1-1/4	9	1	7	4	59
S.R. 515	0.05	0.09	0.04	211	1	2	0	4	2	141 47	0.08	11	6	19	1-1/4	5	1	4	3	47
						6		4		293	0.00	22	12	7.5	1-1/4	10	1	8		77
S.R. 515	0.09	0.14	0.05	264	/		0		2	59	0.1			24					4	59
S.R. 515	0.14	0.19	0.05	264	1	6	0	4	0	293 0		22	12		1-1/4	10	1	8		
S.R. 515	0.19	0.23	0.04	211	1	6		5		258		19	10		1-1/4	9	1	7		
3.71. 070	0.70	0.23	0.07			_	0	7	2	47	0.08	10		19	1 1/4		,		3	47
S.R. 515	0.23	0.26	0.03	158	1	6	0	3	0	158 0		12	6		1-1/4	5	1	4		
S.R. 515	0.26	0.29	0.03	158	1	2		2		70		5	3		1-1/4	2	1	2	_	
			-				2	2	2	70 1080	0.06	81	43	28	1 1/4	38	1	30	4	70
S.R. 515	0.29	0.75	0.46	2429	2	2	2	2	2	1080	0.92	01	43	432	1-1/4	38	'	30	68	1080
6 5 515	0.75		0.00	7.7		6	_	6		423	0.02	32	17	152	1-1/4	15	1	12	- 00	7000
S.R. 515	0.75	0.81	0.06	317	2		2		2	141	0.12			56					9	141
S.R. 515	0.81	2.29	1.48	7814	2	2		2		3473		260	139		1-1/4	121	1	96		
5.77. 070	0.07	2.20	7.70	, 0, ,		_	2		2	3473	2.96	4-7	_	1389					217	3473
S.R. 515	2.29	2.34	0.05	264	2	2	2	4	2	176 117	0.10	13	7	47	1-1/4	6	1	5	7	117
C D 515	2.74	<i>E 50</i>	7 10	10005		2		2		7416	0.10	556	297	71	1-1/4	258	1	206	f	111
S.R. 515	2.34	5.50	3.16	16685	2		2		2	7416	6.32			2966					464	7416
TOTA	4L5 (CARR	IED	TO G	ENE	RA	L S	UM	MA	RY	10.84	1053	563	5004		488		389	783	12509

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SHOULDER QUANTITIES



NOTES:

- 1. SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
- 2. CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE
 OVERLAY THICKNESS OR 2.5" WHICHEVER IS GREATER, NOT TO
 EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6". CONSTRUCT A
 NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS
 GREATER THAN 6".
- 3. BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.

* 30° PREFERRED (40° MAX.)

SAFETY EDGE

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELEY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

TRANSTECH SYSTEMS, INC. 1594 STATE STREET SCHENECTADY, NY 12304 1-800-724-6306 WWW.TRANSTECHSYS.COM

CARLSON SAFETY EDGE END GATE 18425 50TH AVENUE EAST TACOMA, WA 98446 253-875-8000

ADVANT-EDGE PAVING EQUIPMENT LLC P.O. BOX 9163 NISKAYUNA, NY 12309-0163 518-280-6090 WWW.ADVANTEDGEPAVING.COM TROXLER ELECTRONIC LABORATORIES, INC. 3008 E. CORNWALLIS RD. RESEARCH TRIANGLE PARK, NC 27709 1-877-TROXLER WWW.TROXLERLABS.COM

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

ESTIMATED QUANTITIES

ITEM 446 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN

0.038 X 5.50 X 5280 ÷ 27 X 2 = 81.74 DEDUCT: 0.038 X 0.29 X 5280 ÷ 27 = 2.16 0.038 X 203 ÷ 27 X 2 = 0.57 TOTAL = 79.01 USE 79 CU. YD.

NOTE:

THE AVERAGE OF 0.038 SQ. FT. IS BASED ON A TOTAL ASPHALT OVERLAY THICKNESS OF 2.5" AND A 30° ANGLE FOR THE SAFETY EDGE.

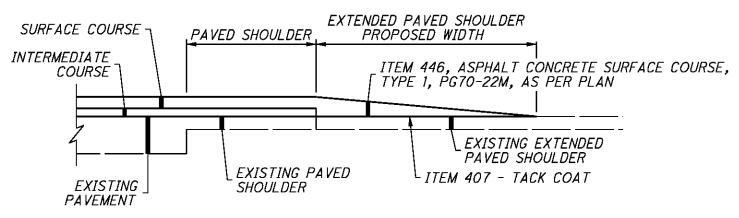
(SLM 0.00 TO SLM 0.29 RIGHT SIDE ONLY)

(203' OMITTED FOR HOL-515-0078, HOL-515-0232 & HOL-515-0397 BRIDGE LIMITS)



SAH

	EXTENDED PAVED SHOULDER DATA													
					Н	+		407		446				
ROUTE	LOG F TO I POINT	LOG	SIDE	TYPICALS	MEASURED LENGTH	PROPOSED WIDTH	PROPOSED AREA	TACK COAT @ 0.075 GAL./S.Y.	A VERAGE THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN		REMARKS		
	FROM	ΤΟ			FT	FT	S.Y.	GAL.	IN	CU. YD.				
S.R. 515	0.94	0.96	LT	1	170	3	57	4	1-1/4	2		ERB'S TARP		
S.R. 515	2.58	2.60	LT	1	100	3	33	2	1-1/4	1		TRAIL BATTERY & SOLAR		
S.R. 515	3.62	3.64	LT	1	100	3	33	2	1-1/4	1		ANTIQUE STORE		
S.R. 515	3.72	3.76	RT	1	180	3	60	5	1-1/4	2		TROYERS TRAIL BOLOGNA STORE		
S.R. 515	4.02	4.06	RT	1	230	3	77	6	1-1/4	3		PARKING AREA		
S.R. 515							43	3	1-1/4	1		PARKING AREA		
TOTAL	OTAL CARRIED TO GENERAL SUMMARY 22 10													



FOR SHOULDER AND PAVEMENT BUILD-UP, SEE SHEET 11

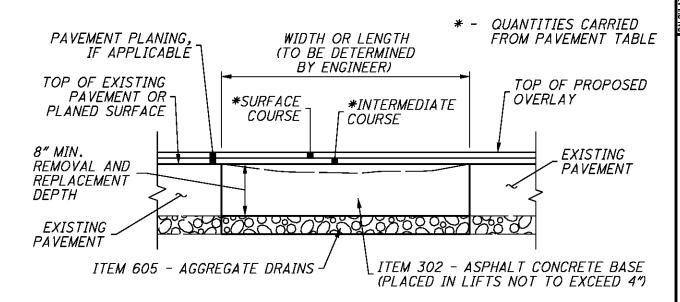
TYPICAL 1 - EXTENDED PAVED SHOULDER TYPICAL (WITH EXISTING PAVED SHOULDER)



HOL-515-0.00

EXTENDED PAVED SHOULDER DATA

SAH CHECKED



PAVEMENT REPAIR TYPICAL

ITEM 253 - PAVEMENT REPAIR

THIS ITEM SHALL MEET THE REQUIREMENTS OF ITEM 253, PAVEMENT REPAIR, AND THE ABOVE TYPICAL SECTION.

THE ESTIMATED QUANTITIES ARE TO BE CONSIDERED APPROXIMATE. A FINAL FIELD REVIEW WILL BE PERFORMED BY ODOT PRIOR TO CONSTRUCTION AND FINAL LOCATIONS WILL BE GIVEN TO THE CONTRACTOR PRIOR TO CONSTRUCTION.

IF NEEDED, AN AGGREGATE DRAIN SHALL BE INSTALLED IN ACCORDANCE WITH CMS 605.07.

ALL PAVEMENT REPAIRS ARE TO BE COMPLETED PRIOR TO THE PAVING OPERATIONS.

THE ESTIMATED QUANTITIES FROM THIS SHEET HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DETERMINE THE SIZE AND LOCATION OF EACH PAVEMENT REPAIR. FINAL PAYMENT FOR THESE ITEMS SHALL BE FOR THE ACCEPTED QUANTITY COMPLETED IN PLACE.

ESTIMATED QUANTITIES

ITEM 253 - PAVEMENT REPAIR ITEM 605 - AGGREGATE DRAINS (TOTALS CARRIED TO GENERAL SUMMARY) 330 CU YD 660 FT

ITEM SPECIAL - MAILBOX SUPPORT

DESCRIPTION:

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER SUPPLIED MAILBOX, AT LOCATIONS SPECIFIED IN THE PLAN OR OTHERWISE ESTABLISHED BY THE ENGINEER.

MATERIALS:

WOOD POST SHALL BE NOMINAL 4"X4" SQUARE OR 41/2"
DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POST
SHALL BE NOMINAL PIPE SIZE 2" I.D. AND CONFORM TO
AASHTO M 181. HARDWARE (PLATES, SCREWS, BOLTS, ETC.)
SHALL BE COMMERCIAL - GRADE GALVANIZED STEEL.

SETTING POSTS:

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

MOUNTING BOXES:

SUPPORT HARDWARE SHALL ACCOMMODATE A SINGLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST. AS DIRECTED BY THE ENGINEER. IN MULTIPLE MAILBOX SITUATIONS (2 OR MORE) THE "* - GROUPED MAILBOX INSTALLATION" SHALL BE USED. RATHER THAN SINGLE SUPPORTS. THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS. BOLTS, PLATES AND WASHERS) AS NECESSARY TO ACCOMMODATÉ THE COMPLETE INSTALLATION. IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER. THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND INSTALL IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED DURING THE OPERATION, AND THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POSTMASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

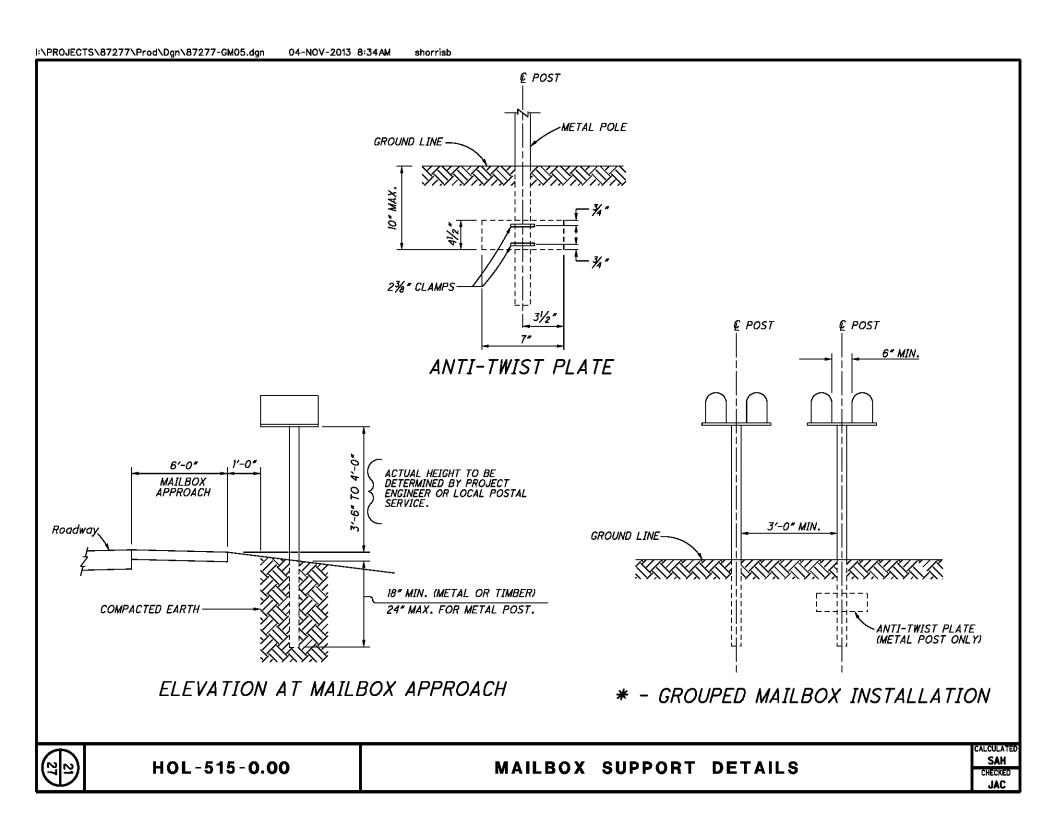
BASIS OF PAYMENT:

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY. MAILBOX SUPPORTS COMPLETE IN PLACE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER EACH, ITEM SPECIAL, MAILBOX SUPPORT.

FOR MAILBOX SUPPORT DETAILS, SEE SHEET 21.

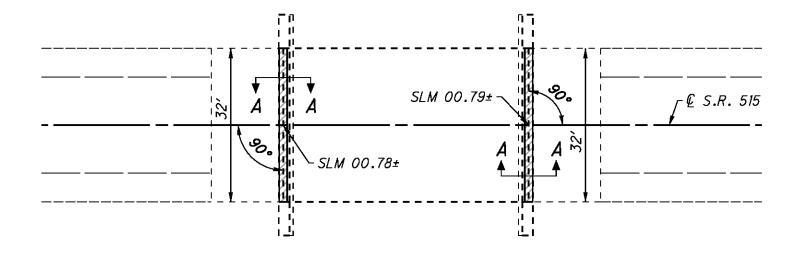
1	ITEM SPECIAL - MAILBOX SUPPORT * - GROUPED MAILBOX INSTALLATION											
ROUTE	LOG POINT (SLM)	SIDE	EXISTING SUPPORT	OUANTITY								
S.R. 515	0.70	RT	3 BOXES/WOOD SUPPORTS	* 2								
S.R. 515	0.96	RT	2 BOXES/WOOD SUPPORTS	* 1								
S.R. 515	1.43	RT	6 BOXES/WOOD SUPPORTS	* 3								
S.R. 515	2.35	RT	2 BOXES/WOOD SUPPORTS	* 1								
TOTAL	CARRIE	D TO	O GENERAL SUMMARY	7								

CALCULATED SAH



STRUCTURE NO.: HOL-515-0078 (SFN - 3802620)

FOR SECTION A-A, SEE SHEET 23



ESTIMATED QUANTITIES

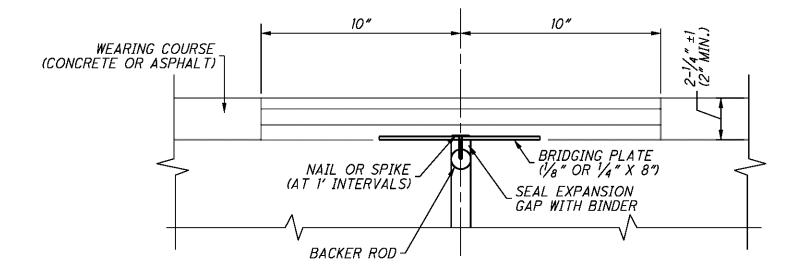
SLM 00.78 REAR JOINT 32 FT SLM 00.79 FORWARD JOINT 32 FT

> TOTAL 64 FT

TOTALS CARRIED TO GENERAL SUMMARY.



CALCULATED SAH



SECTION A-A

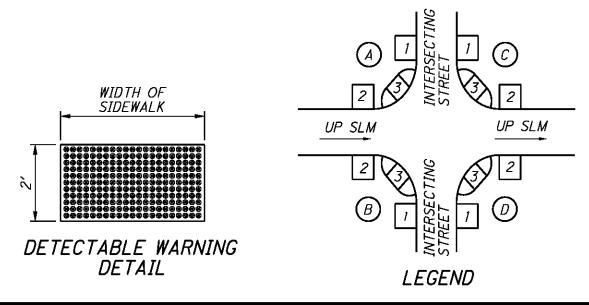
TYPICAL PRESTESSED BOX BEAM OR CONCRETE SLAB JOINT



POYMER MODIFIED ASPHALT CONCRETE EXPANSION JOINT SYSTEM DETAILS

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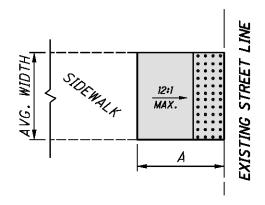
					202		608			1.	
ROUTE	SLM	INTERSECTING PUBLIC ROAD	LOCATION (SEE LEGEND)	WALK REMOVED	PAVEMENT REMOVED, ASPHALT	CURB REMOVED	CURB RAMP	CURB RAMP TYPE	DIMENSION A	AVG. WIDTH OF WALK	REMARKS
				SQ. FT.	SQ. YD.	FT.	SQ. FT.		FT.	FT	
S.R. 515	0.00	S.R. 39	B-2	20			20	1	5	4	
S.R. 515	0.00	S.R. 39	D-3	20			20	1	5	4	
S.R. 515	0.23	OLDE PUMP ST.	B-1		2		20	4	5	4	
S.R. 515	0.23	OLDE PUMP ST.	D-3	75		18	80	3	8	10	
S.R. 515	0.23	OLDE PUMP ST.	C-2	20			20	2	5	4	
TOTALS	CARRIED	TO GENERAL SUI	MMARY	135	2	18	160				



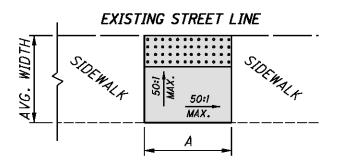


SIDEWALK & CURB RAMP DETAILS

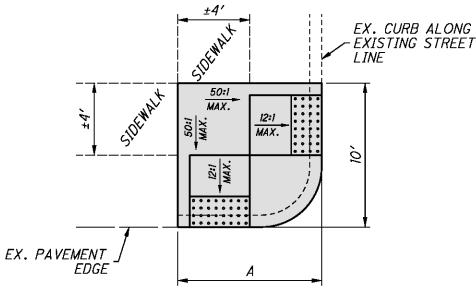
FOR ADDITIONAL DETAILS AND NOTES, SEE SCD BP-7.1



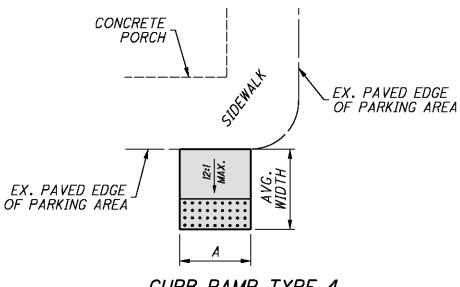
CURB RAMP TYPE 1



CURB RAMP TYPE 2



CURB RAMP TYPE 3



CURB RAMP TYPE 4

COUNTY: HOL

ROUTE: S.R. 515 SECTION: SLM 0.00



LEGEND

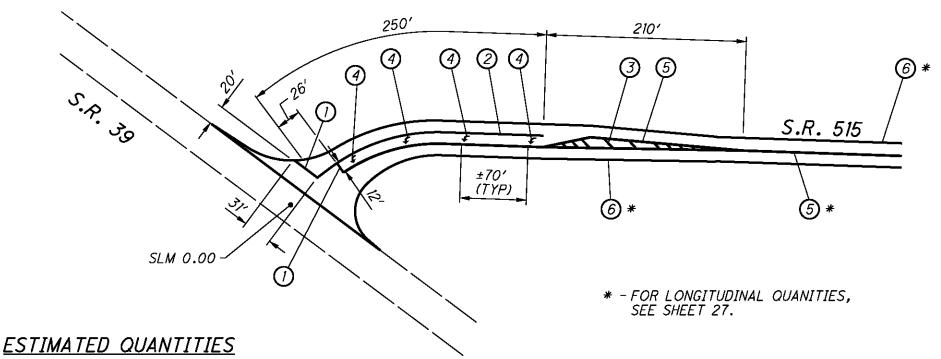
1) STOP LINE

(2)- CHANNELIZING LINE, 8" (3)— TRANSVERSE/DIAGONAL LINE

(4)- LANE ARROW

(5)— CENTER LINE

6)- EDGE LINE



ITEM 642 - STOP LINE, TYPE 1

ITEM 642 - CHANNELIZING LINE 8", TYPE 1

ITEM 642 - TRANSVERSE/DIAGONAL LINE, TYPE 1

ITEM 642 - LANE ARROW, TYPE 1

ITEM 646 - CENTER LINE

43 FT.

250 FT.

4 EACH

60.04 MILE

TOTALS CARRIED TO TRAFFIC CONTROL SUB-SUMMARY SHEET 27.



SAH

I:\PROJECTS\87277\Prod\Dgn\87277-TQ01.dgn	04-NOV-2013	R:39AM	shorrisb
IN INCOLO IS 107277 THOU TOUTOTE 77 TOU LUGIT	07 110 7 2010	O.D.S.AMI	311011130

SHEET NO.	ROUTE	POINT (STR	IT TO LOG RAIGHT LINE EAGE)		RPM		VEMENT EMOVED	TYPE 1	LINE, 8", 1	DIAGONAL PE 1	TYPE 1	. (WHITE)	INE
			i	I	RPM		RAISED PAVEMENT MARKER REMOVED	STOP LINE, TYPE I	CHANNELIZING LINE, 8", TYPE 1	TRANSVERSE/ DIAGONAL LINE, TYPE I	LANE ARROW,	EDGE LINE, 4" (WHITE)	CENTER LINE
				SPACING	YELLOW/ YELLOW	WHITE/ RED	RA M,	ST	ST	TRAN.	TRAN	EDGE	
		TO	FROM	FT.	EACH	EACH	EACH	FT.	FT.	SQ. YD.	EACH	MILE	MILE
;	S.R. 515	0.00	5.50	40	727		727	<u> </u>				11.00	5.50
			ļ!										
26	S.R. 515	0.	00	40	6	7	13	43	250	87	4		0.04
	011.11			1	-	·							
							 						
		UBTOTAL			733	7							
TOTALS			IERAL SUI	MANADY	74	•	740	43	250	87	4	11.00	5.54

SPECIAL PROVISION

CONTRACTOR INVOICING

FOR

CRS: HOL-515-0.00

PID: 87277

PROJ: (201_)-___

DATED: 07/15/2013

SPECIAL PROVISION: CONTRACTOR INVOICING

General:

The Contractor will be paid estimates upon submission of an invoice, quantity documentation, and certification to the Engineer that the work was performed in accordance with the contract. The Contractor shall use the forms within the Special Provision, as appropriate, for documentation of the quantity of work to be invoiced.

C&MS section 109.01 Measurement of Quantities and C&MS section 109.09 Estimates is modified by this Special Provision to require the contractor to provide quantity measurements and documentation, certification, and contractor invoicing in order to receive payment for contract work on this project.

The Department will perform quality assurance reviews on a minimum of 10% of the total project reference items to include, but not limited to, the higher cost, higher risk bid items pre-selected by the Engineer to validate the Contractor's invoices. The Department shall perform the performance inspection documentation, as required.

C&MS Modifications:

109.01 Measurement of Quantities. All references to Department performed measurements in this contract are changed to Contractor performed measurements. Measure the quantities of Work and calculate invoiced amounts based on the method of measurement and basis of payment provisions provided in these Specifications. When the following units of measure are specified, measure quantities as described below unless otherwise specified in the Contract Documents. The accuracy of individual pay item estimate payments will be one decimal more accurate than the unit of measure denoted for the pay item.

Lump Sum. Not measured. Describes payment as reimbursement for all resources necessary to complete the Work. When a complete structure or structural unit is specified as the unit of measurement, the unit will include all necessary fittings and accessories.

Each. Measured by the number of individual items of Work completed.

Foot (Meter). Measured parallel to the longitudinal base or foundation upon which items are placed, or along the longitudinal surface of the item. Measured vertically to the nearest 0.1 foot (0.01 m), with a minimum vertical measurement of 1 foot (0.10 m), at each unit.

Square Yard or Square Foot (Square Meter). Measured by a two-dimensional area method on the surface of the item.

Cubic Yard (Cubic Meter). Measured by a three-dimensional volume method. Measure all "loose material" or material "measured in the vehicle" by the cubic yard (cubic meter). Haul material "measured in the vehicle" in approved vehicles and measure in the vehicle at the point of delivery. For this purpose, use approved vehicles of any type or size satisfactory to the Engineer, provided the vehicle's bed is of such type that the actual contents are readily and accurately determined. Unless all approved vehicles on a job are of uniform capacity, each approved vehicle must bear a legible identification mark indicating the specific approved capacity. The Inspector may reject all loads not hauled in such approved vehicles.

Cubic Yard (Cubic Meter) for Asphalt Concrete. Measure as specified in 401.21.

Acre (Hectare). Measured by a two-dimensional area method on the surface to the nearest 0.1 acre (0.05 ha).

Pound (Kilogram). Measured by actual item net weight avoirdupois (mass).

Ton (Metric Ton). The term "ton" means the short ton consisting of 2000 pounds avoirdupois. The term "metric ton" means 1000 kilograms. Weigh all materials that are proportioned by weight on accurate and approved scales that are operated by competent, qualified personnel at locations approved by the Engineer. However, car weights will not be acceptable for materials to be passed through mixing plants. If trucks are used to haul material being paid for by

weight, weigh the empty truck at least once daily and as the Engineer directs and only if the weight of the truck is used in determining the ticket weight. Place a plainly legible identification mark on each truck bearing the weight of the truck.

For Work on a tonnage basis, file with the Engineer receipted freight bills for railroad shipments and certified weight-bills when materials are received by any other method, showing the actual tonnage used. For Work on a volume basis, itemize evidence of the volume used.

Gallon (Liter). Measured by actual item liquid volume. Measure the following materials by the gallon (liter) at the following temperatures:

Temperatures	Items
60 °F (16 °C)	Creosote for Priming Coat, Creosote
	Oil, Creosote Solutions for
	Timber Preservatives,
	Asphalt Primer for Water-proofing,
	and Liquefier
100 °F (38 °C)	RC, MC Asphalt Emulsions, CBAE,
	Primer 20, and Primer 100
300 °F (149 °C)	Asphalt Binder

Measure tank car outage of asphalt material at its destination before any material has been removed from the tank car according to Supplement 1060.

Convert the net weight of asphalt material shipments to gallons (liters) at the specified pay temperature according to Supplement 1060.

Convert the gallons (liters) at the measured temperature to gallons (liters) of asphalt material at the specified pay temperature according to Supplement 1060.

Thousand Board Feet, MBF (Cubic Meter). Measure timber by MBF (cubic meter) actually incorporated in the structure. Base the measurement on nominal widths, thicknesses, and the extreme length of each piece.

Standard Manufactured Items. When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by size, unit weight, section dimensions, etc., such identification will be to nominal weights or dimensions set by the industry.

109.02 Measurement Units. Measure quantities using either English or metric units as indicated in the Contract Documents. Use the Tables 109.02-1 and 109.02-2 to convert units when required. If Tables 109.02-1 and 109.02-2 do not provide a required factor, then use the appropriate factor provided in the IEEE/ASTM SI 10.

109.09 Estimates. If satisfactory progress is being made, the Contractor will receive monthly payments equaling the Work and materials in place. The monthly payment is approximate, and all partial estimates and payments are subject to correction in the Final Estimate and payment. Payment for Work and materials shall not, in any way, prevent later rejection when defective Work or material is discovered, or constitute acceptance under 109.11 or 109.12.

The Department will not pay an estimate until the Contractor submits an invoice, quantity documentation, and certifies to the Engineer that the work for which payment is being made was performed in accordance with the contract. The invoice and certification will be made on forms provided by the Department.

Submit quantity documentation, including but not limited to, the applicable drawings, sketches, diagrams, measurements, calculations, tickets, and cost analyses to substantiate the invoiced quantities. Use forms provided by the Department or Engineer approved equal. Submit invoiced quantities and payment amounts in accordance with the Construction and Materials Specifications Method of Measurement and Basis of Payment sections for the item of work being presented for payment. The Department will perform quality assurance reviews on a minimum of 10% of the total project reference items to include, but not limited to, the higher cost, higher risk bid items pre-selected by the

Engineer to validate the contractor's invoices. The Department will perform progressive quality assurance reviews corresponding to the project estimate periods and project finalization for the entirety of the pre-selected reference items designated by the Engineer to validate quantities presented for payment. The Engineer will determine any increase in the quality assurance review reference item sample size for validation above the requisite 10%, or the pre-selected bid items if greater than 10%, based on the accuracy, correctness, and completeness of the invoiced quantities and quantity documentation determined during the course of the quality assurance reviews. The Department's quality assurance reviews of the invoiced quantities do not relieve the contractor of the quantity documentation, invoicing, and compliance certification contract requirements.

The Department may pay estimates twice each month if the Engineer concludes the amount of work performed is sufficient.

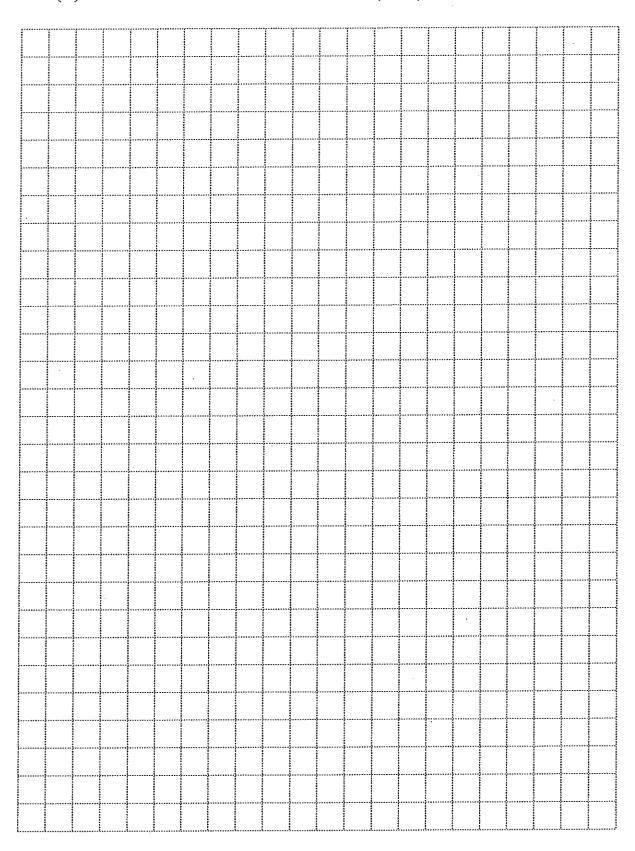
No estimate or payment shall be construed as acceptance of defective Work or improper materials.

The Department will not pay the adjusted final estimate until the Contractor remedies all defective Work and accepted Work damaged by the Contractor's operations.

Interest will be paid in accordance with ORC 126.30 when warranted.

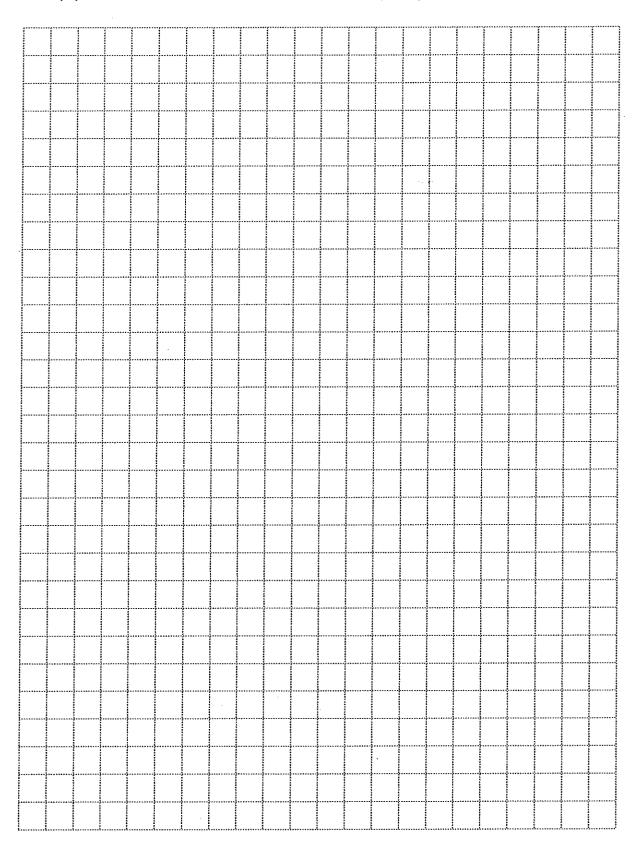
Project No:			Cou	County/Route/Section: Item & Description:							
Ref. No:			Item								
			··········				1				
Stati	on Location		Plan	n Plan	Plan	Field					
From	То	Side	Sheet	Ref.	Quantity	Quantity	Unit				
Describe		<u> </u>									
Location											
	- 1 /0 / 1100										
Calculation/Ske	tch/Additional	Remark	<u>s:</u>								
•											
pecial Notes:											
					· ,						
Prepared By:				-68444	Date:						
Checked By:					Date:						

CA-D-1A (ci) Field Calculation and Measurement (back)



Project No:	Cou	County/Route/Section: Item & Description:									
Ref. No:	Item										
Statio	on Location		Plan	Plan		Plan			Field		
From			Sheet	Ref.		Quantity		Quantity		Uni	
Describe Location											
Calculation/Sket	ch/Additiona	l Remarks:						1			
		3 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8									
				, ,							
Special Notes:								-			-
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CA-D-1B (ci) Field Calculation and Measurement (back)



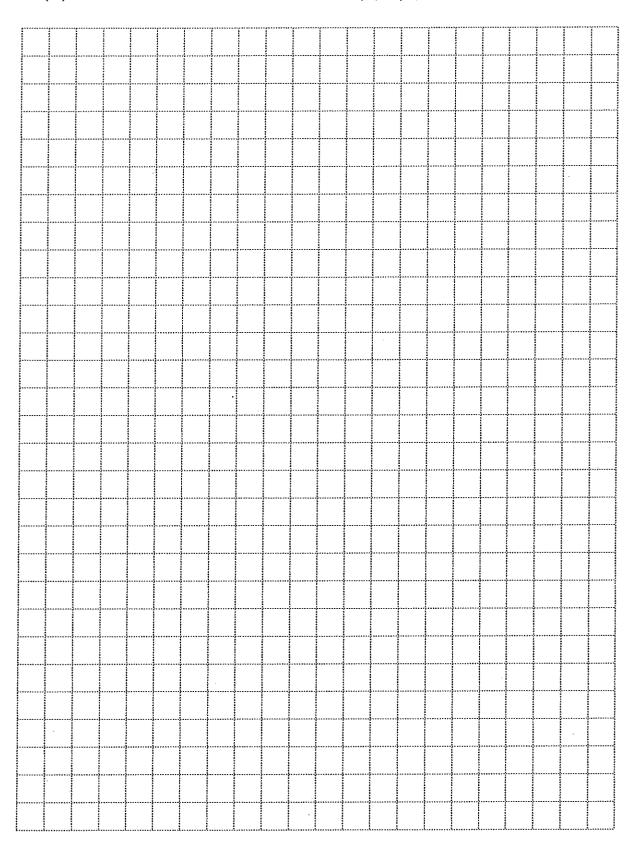
CA-D-2 (ci) Field Calculation and Measurement

Project No:	County/Route/Section:

			Ref. #:		Ref. #:		Ref. #:		Ref. #:	
			Item:		Item:		Item:		Item:	
	Location		item.		Heim.				,	
			Unit:		Unit:		Unit:		Unit:	
Date	Station or	L/R	Plan	Measured	Plan	Measured	Plan	Measured	Plan	Measured
Date	Plan Page		Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
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				337 102 10 101						
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	TO	TALS								

Special Notes:	
Prepared By:	Date:
Checked By:	Date:

CA-D-2 (ci) Field Calculation and Measurement (back)



SPECIAL PROVISION: CONTRACTOR INVOICING



State of Ohio Department of Transportation

Contractor Signature Authorization Progress Payments

Project Number:	C	ounty/Route/Section:				
PID:	Fed	Federal Project Number:				
Contractor:						
I, (Printhe Prime Contractor's Comp	nt Name), pany),	(Print Title)	(Must be an Officer of			
do hereby acknowledge that all Contractor Progress Paym						
This authorization shall rema	in in effect for the du	ration of this project, or	until revoked.			
Contractor signature	Title	 Date				

SPECIAL PROVISION: CONTRACTOR INVOICING



State of Ohio Department of Transportation

Contractor Signature Authorization Change Orders

Project Number:		County/Route/Section:	
PID:	F	ederal Project Number:	
Contractor:			
I, (Print the Prime Contractor's Compa	Name), ny),	(Print Title)	(Must be an Officer o
do hereby authorize			
with authority to sign his/her na	e), ame to all change	(Print Title) order documents pertain	ing to this project.
This authorization shall remain	in effect for the c	duration of this project, or	until revoked.
Contractor signature (Officer)	Title	Date	<u>.</u>
Contractor signature (Project Representative)	Title	Date	and the second s



State of Ohio Department of Transportation

Contractor Signature Authorization Certified Payrolls

Project I	Number:	County/Route/Section:	
	PID:	Federal Project Number:	
Col	ntractor:		
	(Print Name),	(Print Title)	(Must be an Officer of
the Prime Contrac	tor's Company),		
do hereby authoriz	ze		
	(Print Name)	(Print Title)	
with authority to si	gn his/her name to al	(Print Title) I certified payroll documents perta	ining to this project.
·	-	·	
This authorization	shall remain in effect	for the duration of this project, or	until revoked.
Contractor signatu (Officer)	re Title	 Date	
Contractor signatu (Project Represen		Date	

7/15/2013

SPECIAL PROVISION: CONTRACTOR INVOICING

Instructions:

Project Number:

Show the project number on the contract.

PID:

Show the PID

Federal Proi Number:

Show the Federal Project number County/Route/Section: Show the County Route and Section

Contractor:

Show the prime Contractor's full company name, as denoted in the signed contract.

The first sentence should denote the printed or typed Name and Title of the Contractor's principle management authority and be an officer of the Company, and should be the person who signs contracts.

The second sentence should denote the printed or typed Name and Title of the Contractor's project representative who will have direct personal knowledge of the daily operation on the project.

The Contractor personnel will provide signatures on the third and fourth lines.

Only the duly authorized Contractor personnel are approved to sign the progress payment, change orders, certified payrolls and final certifications.

Ohio Department of Transportation Project Invoice CA-D-11(i)

Project Number:	ber:		C-R-S:	Estimate Number:	ָ ֭֭֡֝֞֝	11111	PID:	
Contractor Submission Date:	ubmission D	ate:	Estimate Date:	ODOT Acceptance Date:	ince Date:		Contractor:	
Reference	ltem	Station or Log P	oint Location (Include Plan Sub-	Plan Sub- summary	Invoiced	Unit of		hvoicod
Number	Number	Summary	Summary Designation, as applicable)	Quantity*	Quantity	Measure	Unit Price	Amount
							7,000	
			The state of the s					

Attach "Contractor Invoice and Progress Payment Certification" Form CA-D-11(ci) and the associated quantity measurements and calculations for each invoiced item, as applicable.

^{*}As applicable.



State of Ohio Department of Transportation

Contractor Invoice and Progress Payment Certification

Project Number: PID:	County/Route/Section: Federal Project Number:
Contractor:	
Estimate Number:	Estimate Date:
verify based on personal knowled tems represented by this invoice Contract Documents. Pursuant to C&MS 109.09 as modithe Contractor acknowledges full, for the contractor acknowledges full for the contractor acknowledges full for the contractor acknowledges full full for the contractor acknowledges full for the contractor acknowledges full for the contractor acknowledges full full full full for the contractor acknowledges full full full full full full full ful	cer of the Prime Contractor for the referenced Project, hereby the constructed in reasonably close conformity with the field by the contract provisions, execution of this document by fair and timely compensation for the work represented by this in to the foregoing is listed below. The Contractor certifies that all subcontractors and material from this Progress Payment in accordance with C&MS 107.21
Ref. No Item Quantity	Reason for exception

SPECIAL PROVISION: CONTRACTOR INVOICING

Instructions:

Project Number:

Show the project number on the contract.

PID:

Show the PID

Federal Proj Number:

Show the Federal Project number County/Route/Section: Show the County Route and Section

Contractor:

Show the prime Contractor's full company name.

Estimate Number: Estimate Date:

Show the estimate number that this certification corresponds to. Show the estimate date that this certification corresponds to.

The first sentence should denote the printed or typed name of an officer of the company.

The same officer of the company will provide the signature, title and dates on the form.

Only an officer of the company (as acknowledged by the form CA-D-10) is approved to sign the Contractor Progress Payment Certification.