ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS. EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

ELECTRIC **DUKE ENERGY** 2010 DANA AVE, EF324 CINCINNATI. OH 45207 ATTN: AMANDA BENEDETTI OR GORDON THOMPSON

PHONE: 513-458-3797 EMAIL: AMANDA.BENEDETTI@DUKE-ENERGY.COM GORDON.THOMPSON@DUKE-ENERGY.COM

GAS GAS

BP PIPELINE COMPANY **DUKE ENERGY** EMAIL: AGT COMM@IRTH.COM 139 E 4TH ST., ROOM 460A

CINCINNATI, OH 45202

ATTN: MARK BRANSCUM / DENISE GROSS PHONE: 513-287-2517 / 513-287-2532

EMAIL:

MARK.BRANSCUM@DUKE-ENERGY.COM DENISE.GROSS@DUKE-ENERGY.COM

TELECOM WATER

CINCINNATI BELL TELEPHONE BUTLER COUNTY WATER AND SEWER 221 E 4TH ST. 130 HIGH ST CINCINNATI. OH 45202 HAMILTON. OH 45011

ATTN: TIM SEESTEDT ATTN: JAMES GROVE PHONE: 513-565-7163 PHONE: 513-785-5175

EMAIL: EMAIL:

JAMES.GROVE@BCOHIO.US ROADPROJECTS@CINBELL.COM

EXISTING PLANS

ANY EXISTING PLANS MAY BE REQUESTED FROM ODOT DISTRICT 8.

CONSTRUCTION NOISE

> CONTRACTOR SHALL CONTROL NOISE AT CONSTRUCTION SITE IN ACCORDANCE WITH THE LOCAL REQUIREMENTS. CONSTRUCTION EQUIPMENT SHALL BE PROVIDED WITH INTAKE SILENCERS AND MUFFLERS.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT. A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201. CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201. CLEARING AND GRUBBING.

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS. NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

WHERE DESIGNATED. EXISTING ANCHOR ASSEMBLIES INCLUDING ALL POSTS AND HARDWARE SHALL BE REMOVED. THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE ENTIRE CONCRETE ANCHOR AND CONCRETE ENCASEMENT. ALL HOLES LEFT AFTER REMOVAL OF ASSEMBLIES AND POSTS SHALL BE FILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE WORK AS INDICATED ABOVE. PAYMENT SHALL BE AT THE UNIT BID PRICE.

BAT TREE CUTTING RESTRICTIONS

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN

THIS PAY ITEM SHALL INCLUDE THE COST TO FURNISH AND INSTALL ALL GUARDRAIL COMPONENTS (NORMAL AND EXTRA) OF THE 25' LONG BRIDGE TERMINAL ASSEMBLY, TYPE 4 AS SEEN ON THE PLAN INSERT SHEET.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	143 CU. YD.
659, SEEDING AND MULCHING	1,292 SQ. YD.
659, REPAIR SEEDING AND MULCHING	65 SQ. YD.
659, INTER-SEEDING	65 SQ. YD.
659, COMMERCIAL FERTILIZER	0.18 TON
659, LIME	0.27 ACRES
659, WATER	7 M. GAL.
659, MOWING	3 M. SQ.FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES. AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

COOPERATION BETWEEN CONTRACTORS:

THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WORK WITH OTHER PROJECTS IDENTIFIED BELOW. IT IS IMPERATIVE THAT THE CONTRACTORS COOPERATE FULLY WITH EACH OTHER AS OUTLINE IN SECTION 105.08 OF ODOT 2023 CONSTRUCTION AND MATERIAL SPECIFICATIONS. ALL MAINTENANCE OF TRAFFIC SHALL BE COORDINATED BETWEEN PROJECTS AND NOT BE IN CONFLICT WITH ONE ANOTHER. - PID 114270, BUT CR 22/TR 106 0.63/2.99

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES. EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL. ONLY THE EXISTING GUARDRAIL SHALL BE CUT. DRILLED. OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12. EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY 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 AT THE ENGINEER'S DIRECTION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

PERMANENT PAVEMENT MARKINGS

THE CONTRACTOR SHALL REFERENCE ALL PAVEMENT MARKINGS INCLUDING AUXILIARY PAVEMENT MARKINGS BEFORE THE START OF THE RESURFACING OPERATION. THIS WILL BE NECESSARY TO ASSURE CORRECT PLACEMENT OF MARKINGS IN ORIGINAL LOCATIONS. FOR CENTER LINE MARKINGS, THE CONTRACTOR SHALL INSTALL THE PASSING/NO PASSING ZONE MARKINGS ACCORDING TO THE CURRENT CENTER LINE LOGS AVAILABLE AT http://www.dot.state.oh.us/Divisions/Operations/Traffic/miscellaneous/ Pages/CenterlinePassingandNoPassingZoneLogs.aspx PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAVEMENT MARKING ITEM.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

601, TIED CONCRETE BLOCK MAT WITH	4 SQ. YD.
TYPE 1 UNDERLAYMENT	
605, 6" UNCLASSIFIED PIPE UNDERDRAINS	40 FT.
611, 6" CONDUIT, TYPE F	80 FT.
611, PRECAST REINFORCED CONCRETE OUTLET	8 EACH

ITEM 442 - ANTI-SEGREGATION EQUIPMENT

PROVIDE ANTI-SEGREGATION EQUIPMENT FOR ALL COURSES UNIFORM THICKNESS IN ACCORDANCE WITH THE CMS 401.12. THE QUANTITY FOR THIS ITEM IS IN CUBIC YARDS AND IS EQUAL TO THE AMOUNT OF INTERMEDIATE AND SURFACE COURSES ON THE MAINLINE AND RAMPS (EXCLUDING SHOULDERS).

SOLE SOURCE AQUIFER

THIS PROJECT IS LOCATED OVER A PORTION OF THE GREATER MIAMI SOLE SOURCE AQUIFER. USE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. DO NOT STORE FUELS, TOXIC/HAZARDOUS MATERIALS. AND CHEMICALS NEAR DRAINAGE WAYS. DITCHES. OR STREAMS. MAINTAIN A SPILL KIT ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. IMMEDIATELY MITIGATE ANY EVENT. SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY, SPILLS OF FUELS, OILS, CHEMICALS OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. REPORT ALL SPILLS OR EVENTS TO THE BUTLER COUNTY TREATMENT PLAN AT (513) 887-3686 AND MIDDLETOWN WATER TREATMENT PLAN (513) 727-5320. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), CONTACT BUTLER CO EMERGENCY MGMT. AT (513) 785-5810 OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL.

ASBESTOS ABATEMENT

AN ASBESTOS SURVEY FOR SFN 0900133, SFN 0900214 AND SFN 0900184 SCHEDULED FOR RENOVATION WORK WAS CONDUCTED ON 5/17/2023 BY A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST. THE ASBESTOS SURVEY DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS.

ELECTRONIC SUBMISSION

THE CONTRACTOR SHALL SUBMIT ELECTRONICALLY TO OEPA A COMPLETED NOTIFICATION OF DEMOLITION & RENOVATION FORM (NDRF) AND APPLICABLE FEES ALONG WITH THE ASBESTOS SURVEY REPORT. THE COMPLETED NDRF MUST BE SUBMITTED TO OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION AND RENOVATION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AN ELECTRONIC COPY OF THE NDRF (IN PDF FORM) FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND ONE HARD COPY TO THE PROJECT ENGINEER.

(GO TO THE OEPA EBUSINESS CENTER AND SUBMIT THE NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT)

HARD COPY SUBMISSION:

THE CONTRACTOR MAY ELECT TO SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS SURVEY REPORT TO THE FOLLOWING:

ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049 COLUMBUS. OHIO 43216-1049

OR

ASBESTOS PROGRAM OHIO EPA, DAPC 50 W TOWN ST, SUITE 700 COLUMBUS, OHIO 43215

IF THE CONTRACTOR ELECTS TO SUBMIT A HARD COPY TO OEPA THEY ARE RESPONSIBLE FOR RETAINING A HARD COPY OF THE NDRF FOR SUBMISSION TO THE DISTRICT ENVIRONMENTAL STAFF AND A HARD COPY TO THE PROJECT ENGINEER.

MONUMENT ASSEMBLY

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AS DESCRIBED ON SHEET NO. 14.

DESIGN AGENCY WOOLPERT 4454 IDEA CENTER BLVD DAYTON, OH 45430

DESIGNER

MWZ REVIEWER PJP 07/17/23 ROJECT ID

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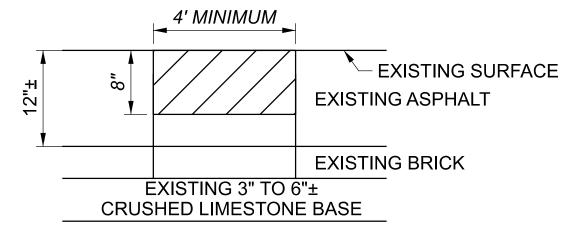
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MAINTAINING ITS DURING CONSTRUCTION

THE CONTRACTOR SHALL MAINTAIN ALL PREEXISTING OR NEWLY INSTALLED PERMANENT ITS/TRAFFIC DEVICES AND INFRASTRUCTURE DURING CONSTRUCTION ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809.

ITEM 253 - PAVEMENT REPAIR (A)

THIS OPERATION SHALL BE PERFORMED BEFORE PAVEMENT PLANING OF ROADWAY.



EXISTING DETERIORATED ASPHALT SHALL BE REMOVED TO A MAXIMUM DEPTH OF 8" OR AS DIRECTED BY THE ENGINEER. THIS WORK CONSISTS OF REMOVAL OF THE EXISTING PAVEMENT IN AREAS EXHIBITING DETERIORATION AT THE SURFACE. APPLYING TACK COAT, AND PLACING AND COMPACTING ITEM 301 - ASPHALT CONCRETE BASE. THE 301 SHALL BE COMPACTED PER CMS 401.15 AND IN APPROXIMATELY EQUAL LAYERS. THE LOCATION AND SIZE OF THE REPAIR SHALL BE DETERMINED BY THE ENGINEER.

IF BRICK IS ENCOUNTERED. DO NOT DISTURB. THE PROJECT ENGINEER SHALL ADVISE ON REPAIR AND MATERIALS.

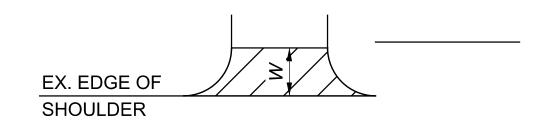
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

253, PAVEMENT REPAIR (A) 200 CY

ITEM 254 - PAVEMENT PLANING

THE PAVEMENT PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE INTERMEDIATE COURSE PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$8,700 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

INTERSECTIONS AND DRIVES



INTERSECTION AND DRIVES

INTERSECTION AND DRIVES QUANTITIES ARE INCLUDED IN THE ASPHALT CONCRETE QUANTITIES. INTERSECTION QUANTITIES HAVE BEEN ESTIMATED AT 15' MEASURED FROM EDGE OF PAVED SHOULDER. DRIVE QUANTITIES HAVE BEEN ESTIMATED AT 3' MEASURED FROM EDGE OF PAVED SHOULDER.

PERFORM WORK PER SPECIFIED OFFSET LIMITS UNLESS THERE IS A JOINT PRESENT CLOSER TO THE EDGE OF PAVED SHOULDER. IN WHICH CASE END WORK AT SAID JOINT.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS. IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR. TOOLS. EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM. INCLUDING ALL RELATED TRANSITIONS. REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED. AS REQUIRED BY THE MANUFACTURER.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING. AS PER PLAN

PRIOR TO THE START OF ROADWAY OPERATIONS. THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE ROADWAY. IN A MANNER SATISFACTORY TO THE ENGINEER. THE PAVEMENT SHALL BE REFERENCED IN 1000 FEET INCREMENTS. OR IN INCREMENTS ACCEPTABLE TO THE ENGINEER. IN A SEMIPERMANENT CONDITION.

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING CATCH BASINS TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

611. CATCH BASIN ADJUSTED TO GRADE 56 EACH

ITEM 611 - MANHOLE ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING MANHOLES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

19 EACH 611. MANHOLE ADJUSTED TO GRADE

MANHOLES AND VALVES ADJUSTED TO GRADE (PRIVATELY OWNED)

ALL MANHOLES AND VALVES ENCOUNTERED IN AREAS THAT REQUIRE GRADE ADJUSTMENT WILL BE ADJUSTED PRIOR TO THE APPLICATION OF THE SURFACE COURSE BY THE UTILITY OWNER. CONTACT THE UTILITY OWNER 2 WEEKS PRIOR TO WHEN THE ADJUSTMENTS ARE TO BE COMPLETED.

ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING MONUMENT ASSEMBLY TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

623. MONUMENT ASSEMBLY ADJUSTED TO GRADE 10 EACH

ITEM 638 - VALVE BOX ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING VALVE BOXES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

638, VALVE BOX ADJUSTED TO GRADE 13 EACH

DETECTION MAINTENANCE

IF VEHICLE DETECTION BECOMES UNEXPECTEDLY DISABLED. REQUIRES MODIFICATION, OR IS SCHEDULED TO BE TEMPORARILY REMOVED DURING THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER.

IF THE LOSS OF VEHICLE DETECTION IS KNOWN PRIOR TO THE START OF CONSTRUCTION. IT SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING. AT SUCH TIME, THE DISTRICT TRAFFIC ENGINEER SHALL ADVISE THE PROJECT ENGINEER AND CONTRACTOR ON THE APPROPRIATE ACTION TO RECTIFY ANY LOSS OF VEHICLE DETECTION. THIS MAY INCLUDE PLACING THE TRAFFIC SIGNAL ON MINIMUM OR MAXIMUM RECALL. MODIFYING THE MINIMUM GREEN TIMES. AND REMOVING THE MALFUNCTIONING DETECTION FROM SERVICE. WHERE NON-INTRUSIVE DETECTION (I.E. VIDEO, RADAR) ALREADY EXISTS, THE CONTRACTOR SHALL INSURE THAT DETECTION IS OPERATING AND MAINTAINED BY RECONFIGURING THE DETECTION UNITS ACCORDINGLY DURING ALL CONSTRUCTION PHASES. THIS IS TO AVOID THE SIGNAL FROM MAXING OUT THE EFFECTED SIGNAL PHASE AND CREATING UNNECESSARY DELAYS.

LOCATIONS WHERE NON-INTRUSIVE DETECTION IS PROPOSED AND THE EXISTING VEHICLE DETECTION IS TO BE ABANDON. THE NON-INTRUSIVE VEHICLE DETECTION SHALL BE INSTALLED. CONFIGURED AND MADE FULLY FUNCTIONAL PRIOR TO THE EXISTING DETECTION BEING DISABLED. THE CONTRACTOR SHALL CONTINUE TO MAINTAIN AND MODIFY THE DETECTION UNTIL FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL. THIS IS TO ENSURE VEHICLE DETECTION REMAINS FULLY FUNCTIONAL THROUGHOUT CONSTRUCTION.

ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN

THE FIELD OFFICE NEEDS TO START ON 1/1/2025 WITH A DURATION OF 18 MONTHS. THE FIELD OFFICE SHOULD HAVE A MINIMUM OF 1800 SF. IN ADDITION TO THE REQUIREMENTS OF ITEM 619, THE CONTRACTOR SHALL PROVIDE INTERNET SERVICE WITH MINIMUM. SPEED OF 200 MBPS. BI-WEEKLY CLEANING SERVICE. AND DUMPSTER WITH NECESSARY SERVICE. _____

ITEM 809 - STOP-LINE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT TO REPLACE EXISTING STOP LINE INDUCTANCE LOOPS ON AN APPROACH AT AN EXISTING SIGNALIZED INTERSECTION. THIS PAY ITEM SHALL INCLUDE THE FOLLOWING:

ITEM 809 - STOP-LINE RADAR DETECTION, AS PER PLAN (CONTINUED)

POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.

ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS. NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.

THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM. AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER. SIGNAL PLANS WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING.

SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.

THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.

> A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).

THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

THE INSTALLATION AND SETUP OF THE RADAR DETECTOR UNIT PRIOR TO MILLING OPERATION SO THAT THERE IS NO LOSS OF DETECTION DURING CONSTRUCTION.

UNLASHING AND RELASHING OF THE SIGNAL SPAN TO INSTALL THE NECESSARY CABLING.

DISCONNECT ALL LOOP LEAD-IN CABLE AND REMOVE AND DISPOSE OF IT FROM ALL PULL BOXES, CONDUITS, AND THE CABINET AFTER IT IS CONFIRMED THAT THE RADAR UNITS ARE WORKING. EXISTING PULL BOXES AND CONDUITS SHALL REMAIN IN PLACE.

PAYMENT FOR ITEM 809. STOP-LINE RADAR DETECTION. AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT. COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

ADA WAIVER

AN APPROVED ADA DESIGN WAIVER IS REQUIRED ON THIS PROJECT. THE FOLLOWING FEATURES LISTED BELOW CANNOT FEASIBLY BE CONSTRUCTED TO MEET ADA GUIDELINES.

ADA DESIGN WAIVER

ADA FEATURE	APPROVAL DATE	SHEET NUMBERS
RMP0014384 RMP0014385 RMP0014386 RMP0014387	03/02/2023 03/02/2023 03/06/2023 03/02/2023	85 85 85 85
	33. 32. 2323	

ESIGN AGENCY WOOLPERT

4454 IDEA CENTER BLVD DAYTON, OH 45430 DESIGNER MWZ REVIEWER

PJP 07/17/23 ROJECT ID 107695 14 169

WORK ZONE SPEED ZONES (WZSZs) (CONTINUED)

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS						
	WITH POSITIVE PROTECTION		<u>WITHOUT</u> POSITIVE PROTECTION			
ORIGINAL POSTED SPEED LIMIT	WORKERS PRESENT		WORKERS PRESENT	WORKERS <u>NOT</u> PRESENT		
70	60	65	55	65		
65	55	60	50	60		
60	55	60	50	60		
55	50	55	45	55		

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

ITEM 808 - DIGITAL SPEED LIMIT (DSL) SIGN 108 SIGN MONTHS ASSEMBLY, ASSUMING:

- 5 DSL ASSEMBLIES FOR 12 MONTHS (PHASE 1)
- 2 DSL ASSEMBLIES FOR 3 MONTHS (PHASE 2)
- 2 DSL ASSEMBLIES FOR 3 MONTHS (PHASE 3)
- 6 DSL ASSEMBLIES FOR 6 MONTHS (RESURFACING)

PATCHING RUMBLE STRIPES

THE CONTRACTOR SHALL MILL 2 INCHES BY 2 FEET WIDE OF THE EXISTING ASPHALT SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPES ALONG SR-4 IN THE AREA WHERE TRAFFIC IS SHIFTED. THE CONTRACTOR SHALL THEN COAT ALL MILLED SURFACES HORIZONTAL AND VERTICAL WITH APPROVED AC LIQUID. NEXT, THE CONTRACTOR SHALL PLACE 2 INCHES OF (ITEM 441 -(ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22.

NEXT, THE CONTRACTOR SHALL PLACE ITEM 614 - WORK ZONE EDGE LINE PAVEMENT MARKINGS.

THIS WORK IS TO BE PERFORMED AT THE FOLLOWING LOCATIONS:

SR-4 SB OUTSIDE SHOULDER - 382+51 TO 431+08 SR-4 SB MEDIAN SHOULDER - 385+60 TO 427+40

PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE AT THE CONTRACT UNIT PRICE OF ITEM 614 - MAINTAINING TRAFFIC, MISC.: RUMBLE STRIPE MILLED/FILLED. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT TO REMOVE EXISTING PAVEMENT, PLACE SURFACE COURSE, PLACE WORK ZONE PAVEMENT MARKINGS AND INCIDENTALS TO PERFORM THE ABOVE WORK.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 614 - MAINTAINING TRAFFIC, MISC.: RUMBLE STRIPE MILLED/FILLED 9,037 FT

DESIGN AGENCY

WOOLPERT 4454 IDEA CENTER BLVD. DAYTON, OH 45430

DESIGNER MWZ REVIEWER PJP 07/17/23 PROJECT ID

> 107695 20 169