

JEF-7-14.32

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:

AEP OHIO POWER COMPANY
ATTN: CLARKE SAUNDERS
614-312-5807
cantondistrictppr@aep.com

THE OHIO DEPARTMENT OF TRANSPORTATION HAS UTILITY FACILITIES (HIGHWAY LIGHTING AND/OR TRAFFIC SIGNALS) WITHIN THE LIMITS OF THIS PROJECT.

IN ADDITION TO THE INFORMATION OUTLINED IN THIS CONTRACT, THE CONTRACTOR SHALL TAKE THE FOLLOWING ACTION TO PROTECT ODOT'S FACILITIES DURING CONSTRUCTION:

HIGHWAY LIGHTING AND/OR TRAFFIC SIGNALS: EVEN THOUGH ODOT IS LISTED AS A MEMBER OF THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE CONTRACTOR IS REQUIRED TO CONTACT ODOT DIRECTLY SO THAT THE ODOT UTILITIES LOCATED WITHIN THIS PROJECT ARE MARKED. THE CONTRACTOR SHALL NOTIFY THE ODOT PROJECT ENGINEER/PROJECT SUPERVISOR, FOURTEEN (14) CALENDAR DAYS IN ADVANCE OF ANY WORK, FOR THE NEED TO MARK ODOT OWNED UTILITIES.

THE ABOVE REQUIREMENTS ARE IN ADDITION TO SECTION 105.07 & 107.16 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY OTHER UTILITIES THROUGH OUPS OR DIRECTLY A MINIMUM OF FORTY-EIGHT HOURS IN ADVANCE OF ANY WORK.

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.

EXISTING PLANS

THE FOLLOWING EXISTING PLANS ARE AVAILABLE FOR REFERENCE AT THE DISTRICT 11 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, 2201 REISER AVE. S.E., NEW PHILADELPHIA, OHIO, 44663:

- JEF-7-10.83
- JEF-7-11.80
- JEF-7-13.53

IN ADDITION, THE EXISTING PLANS CAN BE FOUND ON THE DEPARTMENT'S WEBSITE AT THE FOLLOWING ADDRESS:

LINK: <ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/JEF-113626/>

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.

ALL TREE CUTTING NECESSARY FOR THIS PROJECT WILL BE COMPLETE PRIOR TO CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY STUMPS, DROPPED TREES, AND CLEARING AND GRUBBING AS PER ITEM 201. IN CONFORMANCE WITH THE ENVIRONMENTAL DOCUMENT, NO ADDITIONAL TREES SHALL BE CUT.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION. USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: ODOT CONCRETE MONUMENT

VERTICAL POSITIONING ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 18

HORIZONTAL POSITIONING REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 0.99998899

ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

SEEDING AND MULCHING

QUANTITIES TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS ARE TABULATED ON SHEET P.20.

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 P.20.

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.

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 A SHEET OF TYPE J, ASTM D4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

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.

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.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM TYPE A (449), AS PER PLAN (PG70-22M)

FOLLOW SPECIFICATION 703.05 EXCEPT DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

GRADED SHOULDERS SHALL BE RESHAPED AS PER THE REQUIREMENTS OF ITEM 617, COMPACTED AGGREGATE. GRINDINGS SHALL BE USED IN LIEU OF ITEM 617, COMPACTED AGGREGATE. THE COST FOR STORING THE GRINDINGS ON THE PROJECT AND PLACING THE GRINDINGS SHALL ALSO BE INCLUDED IN THIS ITEM.

ALL GRINDINGS SHALL ADHERE TO THE SPECIFICATIONS STATED IN C&MS 617 AND MEET GRADATIONS CONFORMING TO C&MS 703.17.

ITEM 203 - ROADWAY, MISC.: BACKSTOWING

PERFORM THIS WORK AS REQUIRED BY THE ENGINEER AND IN ACCORDANCE WITH SECTION 203 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS. THIS PROJECT WILL BE CONSTRUCTED IN AN AREA THAT HAS PREVIOUSLY BEEN MINED. SEE THE SOIL PROFILE AND GEOTECHNICAL DESIGN MEMO FOR ADDITIONAL INFORMATION. UNDERGROUND MINES MAY BE EXPOSED DURING THE EXCAVATION OF ROADWAY CUT SECTIONS. THE CONTRACTOR SHALL LOCATE THE EXISTING MINE VOIDS DURING EXCAVATION AND PLACE BACKSTOWING STONE AS DESCRIBED BELOW. THE FOLLOWING PROCEDURES SHALL BE USED IN THESE CUT SECTIONS.

SAFETY AND MONITORING:

1. REPORT ANY MINE OPENINGS, SUBSIDENCE OR UNUSUAL GEOLOGIC FEATURES DISCOVERED DURING CONSTRUCTION TO THE ENGINEER.
2. INFORM ALL EMPLOYEES THAT UNDER NO CIRCUMSTANCES SHALL ANYONE ENTER AN UNDERGROUND MINE
3. MINES WITH "BREATH" DUE TO CHANGING BAROMETRIC PRESSURE. OUTSIDE AIR WILL BE DRAWN INTO A MINE ON DAYS WHEN THE BAROMETRIC PRESSURE IS RISING. AIR AND ANY GASES WILL BE EXPELLED FROM A MINE ON DAYS WHEN THE BAROMETRIC PRESSURE IS DROPPING. EXPELLED GASES MAY BE OF AN EXPLOSIVE AND/OR LETHAL NATURE.
4. USE MINE GAS MONITORING EQUIPMENT WHEN EXCAVATING AT OR NEAR THE MINE ELEVATION AND DURING BACKSTOWING OPERATIONS.
5. DURING NON-WORK HOURS, SEAL OR BARRICADE EXPOSED MINE VOIDS SUFFICIENTLY TO PREVENT A PERSON FROM ENTERING THE MINE.

CONSTRUCTION:

1. IF DEEMED NECESSARY BY THE ENGINEER, PROVIDE A DRAINAGE BENCH NEAR THE BOTTOM MINE LAYER, AS DETERMINED IN THE FIELD BY THE ENGINEER. EXCAVATION DOWN TO THE BENCH ELEVATION AND EXPOSE THE MINE VOIDS. ALLOW THE EXISTING MINE TO DRAIN PRIOR TO CONTINUING WITH EXCAVATION WORK.
2. INSPECT THE MINE VOID OPENINGS. IF THERE IS FALLEN ROOF ROCK OR OTHER DEBRIS IN THE AREA WHERE THE BACKSTOWING WILL TAKE PLACE, REMOVE AS MUCH OF IT AS POSSIBLE. USE A TRACKHOE OR SOME OTHER METHOD THAT DOES NOT REQUIRE A PERSON TO ENTER THE OPENING. DO NOT REMOVE TIMBERS THAT STILL SUPPORT THE MINE ROOF.
3. PNEUMATICALLY BACKSTOW STONE A MINIMUM OF 20 FEET ALONG THE ROOF INTO EACH EXPOSED OPENING. MANIPULATE THE BACKSTOWING EQUIPMENT TO PLACE STONE BEHIND ANY ROOF PILLARS/RIBS WHICH ARE ENCOUNTERED NEAR THE CUT FACE. THE MINE ENTRIES SHALL BE BACKFILLED BY PNEUMATIC STOWING ONLY. AGGREGATE SHALL BE FREE DRAINING #4 LIMESTONE. THE CONTRACTOR IS ENCOURAGED TO USE BLAST ROCK OBTAINED FROM THE PROJECT SITE AS PART OF THE EXCAVATION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SOLID DRY DENSITY AND NATURAL MOISTURE CONTENT OF AGGREGATES TO BE USED, DETERMINED BY A TESTING LABORATORY APPROVED BY THE ENGINEER. WATER SHALL BE ADDED AT THE NOZZLE IN SUFFICIENT QUANTITY TO CONTROL DUST AND SPARKING. THE PNEUMATIC BACKFILLING SYSTEM SHALL BE CAPABLE OF PLACING THE CRUSHED ROCK AT A DENSITY OF 75 TO 95 PERCENT OF THE SOLID DENSITY OF THE ROCK. THE STOWING SYSTEM'S BLOWER UNIT SHOULD HAVE A MINIMUM AIR COMPRESSION RATING OF 1000 CFM AT 8 PSI. THE ENGINEER SHALL BE NOTIFIED AT LEAST 3 DAYS IN ADVANCE OF THE BEGINNING OF THE PNEUMATIC STOWING.

PAYMENT:

ALL LABOR, EQUIPMENT AND MATERIAL NEEDED TO ACCOMPLISH THIS WORK SHALL BE INCLUDED FOR PAYMENT UNDER:
ITEM 203 – ROADWAY, MISC.: BACKSTOWING 4500 CU YD

GENERAL NOTES

DESIGN AGENCY

Palmer
ENGINEERING
3745 MEDINA RD.
SUITE A
MEDINA, OH 44256
330-952-1464

DESIGNER
DAM

REVIEWER
MAM 06/10/22

PROJECT ID
113626

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ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 50 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM, AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER, OR OVERLAPPING A PAIR OF CROSSOVERS. THE SYSTEM SHALL BE AS SHOWN ON TRAFFIC SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, AND CERTIFIED DRAWING REQUIREMENT OF 625.06, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

POLES WHICH ARE NOT PROTECTED BY GUARDRAIL OR PORTABLE BARRIER SHALL BE LOCATED OUTSIDE THE CLEAR ZONE, AND SHOULD BE LOCATED AT LEAST 30 FEET (PREFERABLY 40 FEET) FROM THE EDGE OF PAVEMENT WHEN POSSIBLE. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM. SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

AN EXISTING WORK ZONE LIGHTING SYSTEM IS PRESENT FROM STATION 744+50± TO STATION 780+00± ON BOTH THE SOUTBOUND AND NORTHBOUND SIDES OF S.R. 7. REMOVE THE EXISTING WORK ZONE LIGHTING SYSTEM IN ITS ENTIRETY SUBSEQUENT TO RESTORING S.R. 7 TRAFFIC TO ITS PERMANENT CONFIGURATION.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM, AS PER PLAN THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER

TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 56 SIGN MONTH ASSUMING 2 PCMS SIGNS FOR 28 MONTHS

ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM NOVEMBER 1 THROUGH MARCH 31.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

RESURFACING OF THE TRANSITION AREAS SHALL BE PERFORMED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED TO THE ENTIRE PROJECT. PRIOR TO APPLICATION OF THE SURFACE COURSE ON THE PROJECT, THE EXISTING PAVEMENT WITHIN THE TRANSITION AREA SHALL BE REMOVED TO A DEPTH NECESSARY TO REACH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PAVEMENT, AS DETERMINED BY THE ENGINEER.

ESTIMATED QUANTITIES ARE TABULATED ON THE SUB-SUMMARIES INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY FOR:

ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THE RESURFACING WORK:
ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2" 1517 SY
ITEM 407, TACK COAT 129 GAL
ITEM 442, 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG70-22M 63 CY

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

ESTIMATED QUANTITIES FOR THIS WORK ARE TABULATED ON THE SUBSUMMARIES INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY FOR:

ITEM 614, BARRIER REFLECTOR, TYPE 1, ONE WAY
ITEM 614, OBJECT MARKER, TWO WAY
ITEM 614, OBJECT MARKER, TWO WAY

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.

ESTIMATED QUANTITIES FOR THIS WORK ARE TABULATED ON THE SUBSUMMARIES INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY FOR:

ITEM 614, BARRIER REFLECTOR, TYPE 2, ONE WAY
ITEM 614, OBJECT MARKER, ONE WAY

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEMS.

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY

Palmer
ENGINEERING
3745 MEDINA RD.
SUITE A
MEDINA, OH 44256
330-952-1464

DESIGNER
DAM

REVIEWER
MAM 06/10/22

PROJECT ID
113626

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ITEM 202, REMOVAL MISC.: EXISTING PORTABLE CONCRETE BARRIER REMOVED AND RETURNED

PORTABLE CONCRETE BARRIER IS IN PLACE FROM APPROXIMATE STA. 748+70 TO APPROXIMATE STA. 779+50. ALL EXISTING BARRIER AND THE EXISTING ATTENUATOR IS PROPERTY OF JAMES WHITE CONSTRUCTION COMPANY. THE BARRIER AND ATTENUATOR SHALL BE REMOVED DURING PHASE 3 AND RETURNED TO THE CONTRACTOR AT THE BELOW LOCATION:

JAMES WHITE CONSTRUCTION COMPANY
4156 FREEDOM WAY
WEIRTON, WV 26062
(304) 748-8181

CONTACT LOU ALMONTE PHONE:(304)748-8181, EXT. 224
EMAIL lalmonte@jameswhiteconstruction.com TO ARRANGE RETURN OF THE PORTABLE CONCRETE BARRIER.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER FOOT FOR ITEM 202 – REMOVAL MISC.: EXISTING PORTABLE CONCRETE BARRIER REMOVED AND RETURNED AND SHALL INCLUDE THE COST OF REMOVAL OF PORTABLE BARRIER AND ATTENUATOR ALONG WITH HAULING TO AND UNLOADING AT THE ABOVE SITE.

ITEM 614, MAINTAINING TRAFFIC, MISC.: EXISTING WORK ZONE LIGHTING SYSTEM REMOVED AND RETURNED

AN EXISTING WORK ZONE LIGHTING SYSTEM CONSISTING OF WOODEN UTILITY POLES, OVERHEAD WIRING, LUMINAIRE AND A POLE MOUNTED DISCONNECT APPURTENANCE IS IN PLACE ON BOTH THE EAST AND WEST SIDES OF S.R. 7 FROM APPROXIMATE STA. 744+00 TO APPROXIMATE STA. 781+00. SUBSEQUENT TO THE COMPLETION OF PHASE 3, THE ABOVE DESCRIBED ITEMS SHALL BE REMOVED AND RETURNED TO THE DISTRICT 11 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION AT 2201 REISER AVE., S.E., NEW PHILADELPHIA, OHIO 44663.

PRIOR TO COMMENCING THIS WORK, THE CONTRACTOR SHALL CONTACT THE DISTRICT 11 UTILITY ENGINEER TO ARRANGE FOR THE DE-ENERGIZATION OF THE SYTEM.

CONTACT JEREMY CESSNA PHONE: (330) 339-6633, EMAIL Jeremy.Cessna@dot.ohio.gov TO ARRANGE FOR THE DE-ENERGIZATION AND THE RETURN OF THE SYSTEM.

PAYMENT WILL BE MADE AT THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, MISC.: EXISTING WORK ZONE LIGHTING SYSTEM REMOVED AND RETURNED AND SHALL INCLUDE THE COST COORDINATION, REMOVAL OF THE SYSTEM ALONG WITH HAULING TO AND UNLOADING AT THE ABOVE LOCATION.

ITEM 614, MAINTAINING TRAFFIC, MISC.: TEMPORARY REINFORCED EARTH WALL

THE CONTRACTOR SHALL DESIGN AND CONSTRUCT A TEMPORARY REINFORCED EARTH WALL ALONG THE LENGTH OF THE WORK ZONE, STA. 745+50 TO STA. 762+00, LT. TO PROTECT PAVEMENT AND TRAFFIC FROM FALLING ROCK AND DEBRIS DURING CONSTRUCTION ACTIVITIES. THE EARTH WALL SHALL BE 12' HIGH AND 10' DEEP WITH NEARLY VERTICAL FACES. THE DESIGN SHALL BE SUBMITTED AS PER 501.05. **AND HAVE TWO REGISTERED ENGINEERS' SEAL AND SIGNATURE.**

ALL EQUIPMENT, MATERIALS AND LABOR TO PERFORM THE WORK ABOVE SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, MISC.: TEMPORARY REINFORCED EARTH WALL.

EXISTING WORK ZONE PAVEMENT MARKINGS

PRIOR TO THE BEGINNING OF PHASE 1, THE CONTRACTOR SHALL REPLACE THE EXISTING WORK ZONE PAVEMENT MARKINGS TO REMAIN DURING DURING THE REMAINDER OF THE CONSTRUCTION.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR WORK ZONE PAVEMENT MARKINGS TO PERFORM THE WORK DESCRIBED ABOVE:

ITEM 614, WORK ZONE EDGE LINE, 6", 807 PAINT 2.58 MILE
ITEM 614, WORK ZONE DOTTED LINE, 6", 807 PAINT 1060 FT

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 C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL 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 AND AT ANY TIME WHEN COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL 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 AS APPROVED BY THE ENGINEER:

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.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE.

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.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

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. 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 THAT 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 2000 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 A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

DESIGN AGENCY

Palmer
ENGINEERING
3745 MEDINA RD.
SUITE A
MEDINA, OH 44256
330-952-1464

DESIGNER

DAM

REVIEWER

MAM 06/10/22

PROJECT ID

113626

SHEET TOTAL

P.10 111

