

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:

ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 1	10 SQ. YD.
ITEM 605, AGGREGATE DRAINS	50 FT.
ITEM 611, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	25 FT.
ITEM 611, PRECAST REINFORCED CONCRETE OUTLET	5 EACH
ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS	50 FT.

SPECIFIC SERVICE AND TOURIST-ORIENTED DIRECTIONAL SIGNS REMOVAL AND RELOCATION

PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT KEVIN MCDERMOTT AT OHIO LOGOS, INC. AT (800) 860-5646 TO COORDINATE THE REMOVAL AND RELOCATION OF THE SPECIFIC SERVICE SIGNS (LOGO) AND TOURIST-ORIENTED DIRECTIONAL SIGNS (TODS) LOCATED NEAR STA. 2238+00, AS SHOWN ON PLAN SHEET P.48 . OHIO LOGOS, INC. WILL RELOCATE THE SIGN UPON COMPLETION OF CONSTRUCTION.

ITEM 203 - ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL
 TEMPORARY OVER-STEEPENED FILL WILL BE NEEDED TO CONSTRUCT PROPOSED BENCHING IN CERTAIN AREAS, AS SHOWN ON THE CROSS SECTIONS. TEMPORARY OVER-STEEPENED FILL SHALL BE CONSTRUCTED AS SET FORTH IN THE GEOTECHNICAL DESIGN MANUAL AND SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203, ROADWAY, MISC.: TEMPORARY OVER-STEEPENED FILL.

ITEM 606 - IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE TYPE 2 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE (REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS). WHEN BI-DIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS/BACKSTOPS, TRANSITIONS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

ITEM 630 - OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE INSTALLATION OF A SIGN SUPPORT, S-4, ON A NEW FOUNDATION. THE CONTRACTOR SHALL PICK UP FROM ODOT'S MAINTENANCE FACILITY AT 4730 E. DUBLIN GRANVILLE ROAD WESTERVILLE OHIO 43081 THE PROPOSED OVERHEAD SIGN SUPPORT TO BE INSTALLED AT THE LOCATION SHOWN IN THE PLANS. THE SIGN SUPPORT (TYPE TC-12.31, DESIGN 10) SHALL BE INSTALLED ON A NEW SIGN SUPPORT FOUNDATION. THE SIZE OF THE PROPOSED BOLT CIRCLE ON THE SIGN SUPPORT SHALL BE VERIFIED FOR COMPATABILITY PRIOR TO INSTALLATION ON THE SIGN FOUNDATION. THIS ITEM ALSO INCLUDES PICK UP AND INSTALLATION OF THE OVERHEAD SIGN ONTO THE SUPPORT.

PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR ITEM 630, OVERHEAD SIGN SUPPORT, INSTALLATION ONLY, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL THE ITEM.

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 G REFLECTIVE SHEETING, PER CMS 730.19.

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 (MASH 2016), 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 633 - CONTROLLER WORK PAD, AS PER PLAN

IF NECESSARY, THE CONTRACTOR SHALL REPAIR THE CONCRETE WORK PAD LOCATED AT SR-161 STA. 2219+37.32, OFFSET 90.38' LT / NOISE WALL 9 STA. 900+76.32, OFFSET 12.62' RT (SHEET P.44) IF DAMAGED DURING THE INSTALLATION OF THE NOISE WALL AND DRILLED SHAFTS. IF NECESSARY, THE CONTRACTOR SHALL GRADE THE SURROUNDING AREA SLIGHTLY IN ORDER TO INSTALL A LEVEL WORK PAD AND RESTORE SITE CONDITIONS AS APPROVED BY THE PROJECT ENGINEER. PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR ITEM 633, CONTROLLER WORK PAD, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT THE ITEM.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY: ITEM 633, CONTROLLER WORK PAD, AS PER PLAN 1 EACH

ITEM 690 - SPECIAL - UTILITY TEST HOLE (COLUMBIA GAS)

THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM (SUE LEVEL QUALITY A) THE FOLLOWING EXISTING UTILITY LOCATIONS:

1. WALL 8 AT APPROXIMATE STA. 817+88 (SEE SHEET P.43)
2. WALL 15 AT APPROXIMATE STA. 1501+78 (SEE SHEET P.58)

THE FOLLOWING PROVISIONS MUST BE FOLLOWED:

1. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE ODOT.
2. THE SUE LOCATES SHALL BE PERFORMED PRIOR TO ORDERING WALL PANELS BETWEEN DRILLED SHAFT 75 TO 79 (WALL 8) AND DRILLED SHAFT 8 TO 13 (WALL 15).
3. THE SUE LOCATE CONFIRMATION DATA SHALL BE PROVIDED TO ODOT 21 DAYS PRIOR TO ORDERING MATERIALS AND COMMENCING WORK.
4. ALL REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY AND THE OHIO UTILITY PROTECTION SERVICES MUST BE FOLLOWED DURING THE LOCATION PROCESS.
5. REFER TO THE PROJECT UTILITY NOTE FOR PRELIMINARY LOCATE INFORMATION AT THESE LOCATIONS.

ALL LABOR, MATERIAL, AND INCIDENTALS FOR THE ABOVE WORK SHALL BE PAID FOR EACH LOCATE BY ITEM 690 SPECIAL, UTILITY TEST HOLE (COLUMBIA GAS). A TOTAL OF 2 LOCATES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 - SODDING OR ITEM 659 - SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670 - SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS. UNLESS DISTURBED DURING CONSTRUCTION, AREAS OUTSIDE OF THE CONSTRUCTION LIMITS DO NOT REQUIRE PLACEMENT OF ITEM 660 OR 659/670. TREATMENT WILL BE CLAIMED USING THE ESTABLISHED EXISTING VEGETATION.

FOR THE CITY OF COLUMBUS DIVISION OF POWER

THE DIVISION OF POWER (DOP) MAY HAVE UNDERGROUND OR OVERHEAD PRIMARY POWER, SECONDARY POWER, CONDUIT SYSTEMS AND STREET LIGHTING AT THIS WORK LOCATION. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT OUPS AT 811 OR 1-800-362-2764 FORTY EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING STREET LIGHTING LOCKOUT/TAGOUT (LOTO) PROCEDURE, MIS-01, COPIES OF WHICH ARE AVAILABLE AT: <https://www.columbus.gov/WorkArea/DownloadAsset.aspx?id=2147503200>

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, THE DOP DISPATCH OFFICE SHOULD BE CONTACTED IMMEDIATELY AT (614) 645-7627. DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.

ITEM 690 SPECIAL, UTILITY TEST HOLE (CITY OF COLUMBUS DIVISION OF WATER)

THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM (SUE LEVEL QUALITY A) THE FOLLOWING EXISTING UTILITY LOCATION:

1. WALL 15 AT APPROXIMATE STA. 1502+12 (SEE SHEET P.58).

THE FOLLOWING PROVISIONS MUST BE FOLLOWED:

1. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE ODOT.
2. THE SUE LOCATES SHALL BE PERFORMED PRIOR TO ORDERING WALL PANELS BETWEEN DRILLED SHAFT 8 TO 13 (WALL 15).
3. THE SUE LOCATE CONFIRMATION DATA SHALL BE PROVIDED TO ODOT 21 DAYS PRIOR TO ORDERING MATERIALS AND COMMENCING WORK.
4. ALL REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY AND THE OHIO UTILITY PROTECTION SERVICES MUST BE FOLLOWED DURING THE LOCATION PROCESS.
5. REFER TO THE PROJECT UTILITY NOTE FOR PRELIMINARY LOCATE INFORMATION AT THIS LOCATION.

ALL LABOR, MATERIAL, AND INCIDENTALS TO COMPLETE THE ABOVE WORK SHALL BE PAID FOR EACH LOCATE BY ITEM 690 SPECIAL, UTILITY TEST HOLE (CITY OF COLUMBUS DIVISION OF WATER). A TOTAL OF 1 LOCATE HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG70-22M

LOCATE LOGITUDINAL JOINTS IN THE SURFACE COURSE SUBJECT TO THE FOLLOWING REQUIREMENTS:

FOR PAVEMENT SECTIONS WITH 2 LANES IN A SINGLE DIRECTION, PLACE A SINGLE COLD LOGITUDINAL JOINT BETWEEN THE 2 LANES.

FOR PAVEMENT SECTIONS WITH 3 OR 4 LANES IN A SINGLE DIRECTION, (PG 70-22M ONLY) PLACE A SINGLE COLD LOGITUDINAL JOINT BETWEEN THE SECOND AND THIRD LANE FROM THE MEDIAN.

FOR PAVEMENT SECTIONS WITH 5 OR 6 LANES IN A SINGLE DIRECTION, (PG 70-22M ONLY) PLACE 2 COLD LOGITUDINAL JOINTS. THE FIRST WILL BE PLACED BETWEEN THE SECOND AND THIRD LANE FROM THE MEDIAN. THE SECOND WILL BE PLACED BETWEEN THE FOURTH AND FIFTH LANE FROM THE MEDIAN.

WHEN LANES BECOME IN CONTACT WITH THE STRIPED GORE, THEY ARE CONSIDERED TO BE ON THE RAMP AND COUNTED SEPARATELY FROM THE MAINLINE.

A COLD LOGITUDINAL JOINT IS PERMITTED BETWEEN THE MAINLINE AND SHOULDER FOR THIS PROJECT. THIS INCLUDES ONE JOINT ALONG ONE OF THE TWO LINES THAT MAKE UP THE STRIPED GORE. ITEM 872 VRAM QUANTITIES DO NOT INCLUDE THE STRIPED GORE LOCATIONS AND IS NOT TO BE PLACED THERE.

CITY OF COLUMBUS DIVISION OF WATER GENERAL NOTES

THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2018 EDITION AND ALL REVISIONS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN, UNLESS OTHERWISE NOTED.

ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.

FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.

IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER MAIN SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

NO PERSON SHALL BEGIN CONSTRUCTION OR INSTALLATION OF A PUBLIC WATER MAIN UNTIL PLANS HAVE BEEN APPROVED BY THE STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA).

THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE (645-7330). THE CONTRACTOR SHALL ADHERE TO ALL RULES & REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. PERMITS MAY BE OBTAINED BY ACCESSING [HTTP://PORTAL.COLUMBUS.GOV/PERMITS/](http://portal.columbus.gov/permits/). COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

WHERE NEW CONDUIT IS PROPOSED TO CROSS AN EXISTING OR PROPOSED WATER MAIN OR WATER TAP/SERVICE LINE, A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONDUIT AND THE WATER MAIN OR TAP/SERVICE LINE. A MINIMUM OF 3-FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) IS REQUIRED AT LOCATIONS WHERE THE CONDUIT IS PARALLEL TO THE WATER MAIN AND AT LOCATIONS OF WATER MAIN THRUST BLOCKS.

A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) SHALL BE MAINTAINED BETWEEN ALL EXISTING WATER MAINS AND FOUNDATIONS FOR POLES, PULL BOXES, PUSH BUTTON PEDESTALS, AND ANY OTHER MISCELLANEOUS ELECTRICAL STRUCTURE.

CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY FIBER WORK
 IF THE PROJECT INCLUDES ANY FIBER OPTIC CABLE INSTALLATION - OR MAINTENANCE - THE FIBER WORK MUST ADHERE TO THE DEPARTMENT OF TECHNOLOGY FIBER SPECIFICATIONS DOCUMENT. (LATEST EDITION)

ITEM 607 - FENCE, MISC.: WHITE SPLIT RAIL FENCE

THE CONTRACTOR SHALL BE REQUIRED TO INSTALL PROPOSED FENCE THAT MATCHES THE EXISTING SPLIT RAIL FENCE STYLE, MATERIAL, AND COLOR THAT CURRENTLY EXISTS ON THE PROJECT SITE.