GENERAL NOTES FOR DIVISION OF WATER CAPITAL IMPROVEMENT PROJECTS (2022-10-01 VERSION)

1. **SPECIFICATIONS:**

THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2018 EDITION, INLCUDING ALL REVISIONS, SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL AND IN EFFECT AT THE TIME OF SIGNATURE BY THE DIRECTOR OF PUBLIC UTILITIES, SHALL GOVERN THIS IMPROVEMENT, UNLESS OTHERWISE NOTED.

ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT APPROVED MATERIALS LIST AND RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER, UNLESS OTHERWISE SHOWN ON THE PLANS OR ORDERED BY THE ENGINEER. ONLY PRODUCTS LISTED ON THE CURRENT APPROVED MATERIALS LIST WILL BE PERMITTED TO BE INSTALLED.

2. STANDARD DRAWINGS:

ALL CITY OF COLUMBUS STANDARD DRAWINGS SHALL BE CONSIDERED A PART OF THESE PLANS, UNLESS OTHERWISE NOTED.

3. WATER CONTRACTOR LICENSE 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.

4. WATER MAIN EMERGENCIES: FOR ANY EMERGENCIES THAT OCCUR AFTER NORMAL WORKING HOURS INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

5. **CITY OF COLUMBUS STREET OPENING PERMIT:**

WHEN EXCAVATING WITHIN COLUMBUS PUBLIC RIGHT OF WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CITY OF COLUMBUS BY APPLYING ONLINE AT https://portal.columbus.gov/permits/ AND REVIEW THE INFORMATION AND DIRECTIONS IN REGARDS ONLINE AT https://www.columbus.gov/publicservice/permits/. IF YOU HAVE QUESTIONS CALL: (614) 645-7497; OR EMAIL: colspermits@columbus.gov. WHEN STEEL PLATES ARE UTILIZED, CONTRACTOR SHALL ENSURE PROPER SIGNAGE IS USED INDICATING THE PLATE LOCATIONS. CONTRACTOR SHALL EMAIL THE LOCATIONS OF THE STEEL PLATES TO ROWINVESTIGATORS@columbus.gov.

6. **SAFETY REQUIREMENTS:**

THE CONTRACTOR AND SUB-CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

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7. **RIGHTS OF WAY:**

IN ADDITION TO THE DIRECT REQUIREMENTS OF THE CONTRACT SPECIFICATIONS, THE CONTRACTOR SHALL OBSERVE AND CONFORM TO THE REQUIREMENTS OF ALL RIGHTS-OF-WAY INCLUDING EASEMENTS, COURT ENTRIES, RIGHTS OF ENTRY OR ACTION FILED IN COURT IN ACCORDANCE WITH THE CODE OF THE APPLICABLE GOVERNING AGENCY. THE COST OF THE OPERATIONS, NECESSARY TO FULFILL SUCH REQUIREMENTS, SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT UNLESS SPECIFIC PROVISION IS MADE IN THE CONTRACT SPECIFICATIONS FOR SUCH COST UNDER SPECIFIC ITEMS OF THE CONTRACT.

8. EXISTING UTILITIES:

THE IDENTITY AND LOCATION OF THE EXISTING UTILITY FACILITIES KNOWN TO BE LOCATED IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE PLANS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE CITY OF COLUMBUS AND/OR THE ENGINEER ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR THE DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, PRIOR TO CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES WHETHER SHOWN ON THE PLAN OR NOT. FOR PROJECTS INCLUDING THE INSTALLATION OF 20-INCH OR LARGER DIAMETER WATER PIPE, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, DEPTH, AND MATERIAL TYPE OF ALL TIE-IN CONNECTIONS PRIOR TO ORDERING PIPE FROM THE SUPPLIER. CONTRACTOR SHALL NOTIFY THE DIVISION OF WATER ENGINEER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONSTRUCTION PLANS. COST TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS WATER MAIN ITEMS.

THE CONTRACTOR SHALL CAUSE NOTICE TO BE GIVEN TO THE OHIO UTILITIES PROTECTION SERVICE (TELEPHONE 811 OR 1-800-362-2764 TOLL FREE OR SCHEDULE ONLINE AT OUPS.ORG). THE NOTICE SHALL BE GIVEN AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.

9. **EXPOSE:**

THE CONTRACTOR SHALL EXPOSE ALL EXISTING UNDERGROUND UTILITIES, SERVICES, AND STRUCTURES SUFFICIENTLY IN ADVANCE OF LAYING THE PROPOSED WATER MAIN IN ORDER TO VERIFY THE PROPOSED LOCATION, ELEVATION, SIZE, AND MATERIAL TYPE. COST TO BE INCLUDED IN THE PRICES BID FOR THE VARIOUS WATER MAIN ITEMS.

10. EXTRA COMPENSATION:

NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR BY REASON OF COMPLIANCE WITH ANY OF THE REQUIREMENTS INDICATED ON THE PLANS, BUT PAYMENT SHALL BE DEEMED TO BE INCLUDED AMONG THE SEVERAL ITEMS, AS BID UPON, UNLESS OTHERWISE SPECIFICALLY PROVIDED.

11. **STATIONING:**

ALL STATIONING REFERS TO WATER MAIN STATIONING UNLESS OTHERWISE NOTED ON THE PLANS.

12. NON-RUBBER TIRE VEHICLES:

NON-RUBBER TIRED VEHICLES SHALL NOT BE MOVED ON PUBLIC STREETS. THE CITY ENGINEER MAY GRANT EXCEPTIONS WHEN SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING, AND ANY DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE CITY OF COLUMBUS AND THE FRANKLIN COUNTY ENGINEER WHERE COUNTY AND/OR TOWNSHIP ROADS ARE INVOLVED.

13. **TREES:**

PUBLIC TREE PRESERVATION NOTE

ALL PUBLIC TREES AND THE GROUND BELOW THEIR RESPECTIVE DRIP LINES, WHETHER SHOWN OR NOT SHOWN ON THE PLANS, ARE TO BE PRESERVED UNLESS APPROVAL TO REMOVE OR PRUNE IS GIVEN IN WRITING BY COLUMBUS RECREATION & PARKS (CRPD)/CITY FORESTER OR IF THE PUBLIC TREE REMOVAL HAS BEEN DESIGNATED ON THE APPROVED FINAL SITE COMPLIANCE PLAN. TREES APPROVED FOR REMOVAL BY EITHER OF THE CRPD/CITY FORESTER SHALL BE PAID FOR UNDER CMSC ITEM 201, CLEARING AND GRUBBING, UNLESS OTHERWISE PROVIDED FOR BY UNIT PRICE BID UNDER ITEM 201. THE CONTRACTOR SHALL PROTECT TREES NEAR OR ADJACENT TO THE WORK AREA TO AVOID DAMAGE TO ALL TREES THAT ARE TO REMAIN. ALL TREES REMOVED SHALL INCLUDE STUMP REMOVAL TO EIGHTEEN (18) INCHES BELOW GRADE. ALL CLEARING AND GRUBBING DONE ON CRPD PROPERTY, RIGHT-OF-WAY, OR ANY CITY OF COLUMBUS PROPERTY SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. HEAVY EQUIPMENT WILL NOT BE ALLOWED TO COMPACT THE SOIL OVER THE ROOT ZONE OF EXISTING PUBLIC TREES. RESTRICTED EQUIPMENT ACCESS ROUTES SHALL BE COORDINATED WITH CRPD INSPECTOR, KEITH MAY, AT (614) 645-3014 OR KAMAY@COLUMBUS.GOV BEFORE WORK IS BEGINS. TEMPORARY PAVING MATERIALS, SUCH AS PLYWOOD, LUMBER OR RUBBER MATTING, SPREAD OVER THE ROOT ZONE OF PUBLIC TREES MAY BE REQUIRED TO PREVENT COMPACTION. IF A PUBLIC TREE NEEDS TO BE REMOVED, THE CONTRACTOR SHALL PROVIDE A TREE MITIGATION PLAN TO JIM LONG AT (614) 645-2864 OR JALONG@COLUMBUS.GOV AND EMAIL AND REFER TO THE CRPD TREE MITIGATION PLAN GUIDANCE, ANSI A300 AND/OR CITY OF COLUMBUS EXECUTIVE ORDER 2015-01 FOR TREE REPLACEMENT STANDARDS.

PUBLIC TREE PROTECTION NOTE

A TREE PROTECTION PLAN WITH A DRAWING OF ANY WORK LOCATED WITHIN THE DRIP LINE OF A PUBLIC TREE SHALL BE INCLUDED IN THE APPROVED FINAL SITE COMPLIANCE PLAN (FSCP). REFER TO CRPD STANDARD DRAWING FOR TREE PROTECTION. CONSTRUCTION MATERIALS, EXCAVATION DEBRIS, FUEL, EQUIPMENT OR VEHICLES ARE NOT TO BE STOCKPILED, STORED, DUMPED OR PARKED WITHIN THE DRIP LINE OF PUBLIC TREES. ALL TREES MUST BE PROTECTED AGAINST INJURY OR DAMAGE TO BRANCHES, TRUNKS, OR ROOTS FROM CONSTRUCTION AND EXCAVATION, AS DESCRIBED IN THE "BEST MANAGEMENT PRACTICES — MANAGING TREES DURING CONSTRUCTION" A COMPANION PUBLICATION TO ANSI A300 PART 5. IF THERE IS A QUESTION WHETHER A TREE OR NOT NEEDS TO BE PROTECTED, THE CONTRACTOR MUST CONTACT THE CITY FORESTRY REPRESENTATIVE JIM LONG AT (614) 645-2864 OR JALONG@COLUMBUS.GOV. FAILURE TO CONTACT THE CITY FORESTRY REPRESENTATIVE IN ADVANCE OF CONSTRUCTION WILL RESULT IN THE CONTRACTOR REIMBURSING CITY FORESTRY FOR THE COST OF ANY AND ALL DAMAGE AS DETERMINED BY THE CURRENT ANSI A300/CITY OF COLUMBUS EXECUTIVE ORDER 2015-01 FOR TREE PROTECTION AND REPLACEMENT.

14. **SAWING PAVEMENT:**

ALL EROSION AND SEDIMENT CONTROLS SHALL BE IN-PLACE PRIOR TO SAW CUTTING THE PAVEMENT. WHERE NECESSARY TO DISTURB PAVEMENTS OR DRIVES, THE PAVEMENT SHALL BE SAW CUT TO FULL DEPTH OF PAVEMENT AND IN NEAT STRAIGHT LINES NO MORE THAN 1/8" WIDE. IF THE PAVEMENT IS DAMAGED BEYOND THE ORIGINAL SAW CUT DURING CONSTRUCTION, THE PAVEMENT SHALL BE RE-CUT TO NEAT LINES. COST TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS PAVEMENT REPLACEMENT ITEMS.

SAW CUTTING WILL BE PERMITTED IN ADVANCE OF THE REQUIRED EXCAVATION WORK UNDER THE CONDITION THAT THE CONTRACTOR ASSUMES THE RISK THAT THE ALIGNMENT MAY CHANGE AS A RESULT OF AN UNFORESEEN CONIDTION OR FIELD ORDER. CONTRACTOR WILL RECEIVE NO ADDITIONAL COMPENSATION IF IT IS NECESSARY TO RESAW PAVEMENT DUE TO AN ALIGNMENT CHANGE. WITH THE EXCEPTION OF SAW CUTTING LINES, DISTURBING OR REMOVING THE PAVEMENT WILL NOT BE PERMITTED PRIOR TO THE EXCAVATION WORK.

ALL PUBLIC AGENCIES AND PRIVATE CONTRACTORS PERFORMING PAVEMENT-CUTTING OPERATIONS ON CITY OF COLUMBUS STREETS AND ROADWAYS SHALL PROTECT THE ENVIRONMENT FROM DISCHARGES CREATED BY THEIR PAVEMENT CUTTING OPERATIONS. NOTE THAT COLUMBUS CITY CODE 1145 PROHIBITS NON-STORMWATER DISCHARGE INTO THE CITY OF COLUMBUS SEWER SYSTEM, CURB INLETS AND ANY PART OF ITS MS4 (MUNICIPAL SEPARATE STORM SEWER SYSTEM).

THE REQUIREMENT INCLUDES, BUT IS NOT LIMITED TO, WET OR DRY SAW-CUTTING, JACK HAMMERING, EXCAVATION EQUIPMENT USE, ETC. THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR WORK CREWS SHALL RECOVER AND DISPOSE OF DETRITUS, POLLUTED WATERS, OR OTHER SUCH DISCHARGES RESULTING FROM THEIR PAVEMENT CUTTING OPERATIONS AND PROTECT ALL STORM SEWER INLETS FROM RECEIVING ANY DISCHARGES FROM THE CONSTRUCTION OPERATIONS. THE AGENCY OR CONTRACTOR RESPONSIBLE FOR EACH PAVEMENT CUTTING ACTIVITY SHALL BE SOLELY LIABLE FOR NOTICE OF VIOLATIONS (NOV/S) AND FINES ISSUED BY CITY OF COLUMBUS AND/OR STATE OF OHIO AUTHORITIES.

EQUIPMENT, MATERIALS AND METHODS SHALL BE PROVIDED BY THE RESPONSIBLE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR TO WORK CREWS PERFORMING THE PAVEMENT CUTTING ACTIVITY AND MADE AVAILABLE TO WORK CREWS FOR USE IN CLEANING UP DISCHARGES RESULTING FROM SUCH CUTTING ACTIVITIES AND PREVENTING RUNOFF. ALL WORK CREWS SHALL BE TRAINED TO EXERCISE AND EMPLOY EQUIPMENT, MATERIALS, AND ENVIRONMENTAL PROTECTIVE MEASURES TO PREVENT POLLUTED DISCHARGES FROM ENTERING THE CITY OF COLUMBUS STORM SEWER SYSTEM AND WATERS OF THE STATE OF OHIO.

THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT THE INLET PROTECTION IS ADEQUATE. THE MOST STRINGENT PROJECT PLANS, NOTES AND/OR DRAWINGS, INCLUDING A STORMWATER POLLUTION PREVENTION PLAN (SWP3) OR SPILL PREVENTION/REMEDIATION PLAN, SHALL APPLY TO ALL PAVEMENT CUTTING, SAWING OR EXCAVATION OPERATIONS.

15. TEMPORARY PAVEMENT:

ALL STREETS AND DRIVEWAYS CUT BY THE CONTRACTOR SHALL BE PROVIDED WITH TEMPORARY PAVEMENT ON THE SAME DAY THAT ORIGINAL PAVEMENT IS CUT. IN GENERAL, STREETS SHALL BE PROVIDED WITH TEMPORARY PAVEMENT PER ITEM 615 AND STANDARD DRAWING 2161, EXCEPT AS HEREIN MODIFIED. LIMITING LINES FOR MEASUREMENT OF TEMPORARY PAVEMENT SHALL BE THE DIAMETER OF THE WATER MAIN PLUS TWO FEET (D+2'). PRIVATE DRIVEWAYS SHALL BE TEMPORARILY REPLACED WITH A MINIMUM OF 8 INCHES OF CRUSHED STONE OR GRAVEL AS PER ITEM 815. TRENCH SHALL BE BACKFILLED TO THE TOP OF THE PAVEMENT SUBGRADE USING GRANULAR MATERIAL MEETING THE REQUIREMENTS OF ITEMS 304.02 OR 703.11. PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID FOR ITEMS 615 AND 815.

16. **CURBS AND SIDEWALKS:**

SIDEWALK SHALL BE REMOVED FROM EXISTING JOINTS AND REPLACED AS PER STANDARD DRAWING 2300. CURB OR CURB AND GUTTER WILL BE REMOVED PER STANDARD DRAWING 1441 AND REPLACED PER ITEM 609 AND STANDARD DRAWINGS 2000 AND 2010. UNLESS AN APPROVED ALTERNATE PEDESTRIAN ACCESS ROUTE DETOUR IS PROVIDED, THE CONTRACTOR SHALL REPLACE SIDEWALK PANELS WITH SMOOTH, CONTINUOUS HARD SURFACES WITHIN 48 HOURS OF REMOVING TO MAINTAIN ADA ACCESS AS PER THE OHIO MUTCD. ALL WORK REQUIRED TO INSTALL TEMPORARY SIDEWALK SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE CITY. ALL COSTS FOR REMOVAL AND REPLACEMENT OF SIDEWALKS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 608. IF AN APPROVED ALTERNATE PEDESTRIAN ACCESS ROUTE IS PROVIDED, SIDEWALKS MAY BE TEMPORARILY BACKFILLED WITH STONE/GRAVEL. CONTRACTOR SHALL MATCH THE FINISH OF THE EXISTING CONCRETE WHEN INSTALLING NEW SIDEWALK. COST FOR REMOVAL AND REPLACEMENT OF CURB SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 801 (FOR REPAIRS DUE TO MAIN LINE OR HYDRANT INSTALLATION) AND ITEM 805 (FOR REPAIRS DUE TO WATER TAPS/WATER SERVICE LINE TRANSFERS), UNLESS OTHERWISE DENOTED ON THE PLANS. ANY CURB OR SIDEWALK

THAT IS DISTURBED OR DAMAGED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE PAID AS A RESULT.

17. RESTORATION LIMITS FOR WATER MAIN WORK:

THE CONTRACTOR IS REQUIRED TO RESTORE ALL DISTURBED AREAS OF THE PROJECT AS INDICATED IN THE PLANS, STANDARD DRAWINGS, AND SPECIFICATIONS. PAYMENT FOR THE RESTORATION OF THE AREAS LISTED BELOW SHALL BE PER THE APPROPRIATE BID ITEM. ANY AREAS DISTURBED OUTSIDE OF THE DESIGNATED PAYMENT LIMITS SHALL BE RESTORED AT NO ADDITIONAL COST TO THE CITY. RESTORATION PLAN QUANTITIES WERE DEVELOPED UTILIZING THE FOLLOWING RESTORATION LIMITS:

VALVE BOX REMOVAL – 5-FT X 5-FT AREA FIRE HYDRANT REMOVAL – 5-FT X 5-FT AREA CUT AND PLUG OF EXISTING WATER MAIN – 5 FT. X 5 FT. AREA SHORT WATER TAP TRENCH INSTALLATION

- (D+2)-FT FOR ASPHALT, GRAVEL, AND BRICK/PAVERS (PAVEMENT AND DRIVEWAY REPAIR)
- (D+2)-FT FOR GRASS AREAS
- NEAREST JOINT (TBD BY ENGINEER) FOR CONCRETE PAVEMENT AND DRIVEWAY REPAIR
- ASSUME 5-FT X 5-FT PANEL AREA FOR SIDEWALK REPAIR. PAYMENT TO BE MADE AT ACTUAL PANEL DIMENSIONS.

EXISTING CURB BOX REMOVAL (WHEN LOCATION IS DIFFERENT THAN TIE-IN LOCATION)

- 5-FT X 5-FT FOR ASPHALT, GRAVEL, BRICK/PAVERS
- NEAREST JOINT (TBD BY ENGINEER) FOR CONCRETE PAVEMENT AND DRIVEWAY REPAIR
- ASSUME 5-FT X 5-FT PANEL AREA FOR SIDEWALK REPAIR. PAYMENT TO BE MADE AT ACTUAL PANEL DIMENSIONS.
- 5-FT X 5-FT AREA FOR GRASS AREAS

LONG WATER TAP BORE PITS - 5-FT X 5-FT AREA

18. BACKFILL:

ALL CLEANUP AND BACKFILL OPERATIONS SHALL BE DONE WITHIN 300' OF PIPE LAYING OPERATIONS DURING THE WEEK. ON THE WEEKENDS, BACKFILL SHALL BE WITHIN 20' OF THE END OF THE LAST PIPE LAID.

DURING NON-CONSTRUCTION HOURS, ALL EXCAVATIONS SHALL BE FILLED, PLATED OR PROTECTED (BARRELS AND FENCING) IN SUCH A MANNER AS TO POSITIVELY SEPARATE VEHICLES OR PEDESTRIANS FROM THE WORK.

19. LONG AND SHORT WATER TAP INSTALLATIONS/WATER SERVICE LINE TRANSFERS:

WHERE LONG WATER SERVICE LINE TRANSFERS ARE SPECIFIED, I.E., WATER SERVICE LINES ARE ON THE OPPOSITE SIDE OF THE STREET FROM THE PROPOSED WATER MAIN, THE TAPS SHALL BE INSTALLED BY TRENCHLESS METHODS UNLESS OTHERWISE APPROVED BY THE ENGINEER. WHEN WATER TAPS ARE INSTALLED BY TRENCHLESS METHODS AND CROSS AN EXISTING STORM AND/OR SANITARY SEWER, THE CONTRACTOR SHALL VERIFY THE CONDITION OF THE SEWER(S) BY VIDEO INSPECTION METHODS FOLLOWING THE TAP INSTALLATIONS. COSTS ASSOCIATED WITH THE VIDEO INSPECTION WORK SHALL BE INCLUDED IN THE COST OF THE BID ITEM FOR ITEM SPECIAL — VIDEO INSPECTION OF SEWERS. FOR WATER SERVICE LINE TRANSFERS SPECIFIED AS SHORT, THE TAPS MAY BE INSTALLED BY OPEN-CUT METHODS. ALL WORK REQUIRED TO INSTALL THE WATER TAPS AND PERFORM THE WATER SERVICE LINE TRANSFERS SHALL REMAIN WITHIN THE RIGHT-OF-WAY. THE CONTRACTOR SHALL FLUSH EACH WATER TAP PRIOR TO MAKING THE SERVICE LINE TRANSFER.

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20. WATER SERVICE LINE TRANSFER AND WATER MAIN ABANDONMENT:

WHERE INDICATED ON PLANS, THE EXISTING WATER MAINS SHALL BE ABANDONED AND EXISTING WATER SERVICE LINES OFF THESE MAINS, INDICATED ON THE PLANS AND SHOWN BY HOUSE NUMBER, SHALL BE TRANSFERRED TO THE NEW WATER MAIN. CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING WATER TAPS PRIOR TO BEGINNING THE TAP INSTALLATIONS ON THE NEW MAIN. THE CONTRACTOR MUST KEEP RECORDS OF THE MATERIAL OF THE EXISTING TAP (CITY OWNED SIDE) AND SERVICE (PRIVATE SIDE) AND SUBMIT THEM TO THE CONSTRUCTION ADMINISTRATOR BY THE END OF THE PROJECT. FERRULE BOXES SHALL BE PROVIDED FOR ALL CURB BOXES LOCATED WITHIN TRAVELED AREAS AS PER ITEM 805. FERRULE BOXES WILL BE PAID FOR UNDER ITEM 805 — C.I. FERRULE VALVE BOX AND COVER. PRIOR TO ABANDONMENT OF EXISTING WATER MAINS, THE PROPOSED NEW WATER MAINS SHALL BE TESTED AND CHLORINATED AND THEN THE EXISTING WATER SERVICE LINES, INDICATED ON THE PLANS AND SHOWN BY HOUSE NUMBER, SHALL BE TRANSFERRED TO THE NEW WATER MAINS. THE CONTRACTOR SHALL FLUSH EACH WATER TAP PRIOR TO MAKING THE SERVICE LINE TRANSFER. THE CONTRACTOR SHALL MAINTAIN WATER SERVICE TO ALL WATER CUSTOMERS AFFECTED BY TRANSFER OF SERVICE. PAYMENT FOR THE WATER SERVICE LINE TRANSFER WILL NOT BE MADE UNTIL FINAL GRADING AND RESTORATION HAS OCCURRED.

ALL OTHER EXISTING TAPS SHOWN ON THE PLANS AND NOT INDICATED AS WATER SERVICE LINE TRANSFERS SHALL BE ABANDONED IN PLACE.

EXCAVATION PITS LOCATED OUTSIDE OF THE PAVEMENT FOR WATER TAP AND CURB BOX INSTALLATION SHALL BE BACKFILLED IMMEDIATELY. BACKFILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS AND STANDARD DRAWINGS. ALL OTHER SPOILS SHALL BE HAULED OFF SITE. CONTRACTOR IS NOT PERMITTED TO LEAVE THESE PITS OPEN, NOR WILL THE CONTRACTOR BE PERMITTED TO MOUND DIRT ADJACENT TO THE PIT. STEEL PLATES, PLYWOOD, AND/OR OTHER BARRICADES ARE NOT AN ACCEPTABLE ALTERNATE FOR BACKFILLING. TEMPORORY SEEDING AND MULCHING PER ITEM 207 MUST BE PERFORMED WITHIN SEVEN (7) DAYS FROM THE TIME THE GROUND IS DISTURBED. THE PITS SHALL BE RE-EXCAVATED WHEN THE WATER SERVICE LINE TRANSFER IS TO BE MADE. THE PIT SHALL THEN BE BACKFILLED IMMEDIATELY AFTER PERFORMING THE WATER SERVICE LINE TRANSFER. THE AREA MUST BE SEEDED AND MULCHED PER ITEM 659 WITHIN SEVEN (7) DAYS OF THE TRANSFER. TO ENSURE THAT ALL EXISTING WATER SERVICE LINES ARE TRANSFERRED TO THE NEW WATER MAIN, NO WATER MAIN SHALL BE ABANDONED UNTIL ALL AFFECTED WATER SERVICE LINES HAVE BEEN TRANSFERRED; THE NEW WATER MAIN IS PUT IN SERVICE; AND THE EXISTING WATER MAIN TO BE ABANDONED HAS BEEN SHUT DOWN FOR 24 HOURS.

WATER SERVICE LINE TRANSFERS ARE NOT PERMITTED ON FRIDAYS (OR THURSDAYS IF CONTRACTOR IS ONLY WORKING MONDAY THROUGH THURSDAY) UNLESS THE CONTRACTOR CAN CONFIRM THAT THE CUSTOMER HAS WATER. THIS INCLUDES VERBAL CONFIRMATION WITH THE CUSTOMER AND SHOULD BE ORGANIZED PRIOR TO MAKING THE WATER TAP TRANSFER. ON FRIDAYS (OR THURSDAYS IF CONTRACTOR IS ONLY WORKING MONDAY THROUGH THURSDAY), CONFIRMING WATER SERVICE LINE TRANSFER BY MEANS OF A HOSE BIB ONLY IS NOT PERMITTED. ALL WATER SERVICE LINE TRANSFERS SHALL BE PERFORMED BETWEEN THE HOURS OF 9:00 A.M. AND 5:00 P.M, UNLESS OTHERWISE APPROVED BY THE DIVISION OF WATER ENGINEER.

ALL VISIBLE VALVES BOXES, FIRE HYDRANTS, AND CURB BOXES ON THE WATER MAIN TO BE ABANDONED, WHICH WILL NO LONGER BE IN SERVICE, SHALL BE REMOVED. FIRE HYDRANTS SHALL BE DELIVERED TO THE DIVISION OF WATER AT 910 DUBLIN ROAD, COLUMBUS, OHIO. (FOR FIRE HYDRANTS LOCATED WITHIN TOWNSHIP LIMITS, REVISE PREVIOUS SENTENCE OR ADD SENTENCE TO STATE THE DELIVERY ADDRESS OF THE TOWNSHIP OFFICES). ALL WATER MAINS TO BE ABANDONED SHALL BE MADE WATERTIGHT. THE COST TO ABANDON THE EXISTING WATER MAIN, REMOVE ABANDONED VALVE AND CURB BOXES, REMOVE HYDRANTS,

AND DELIVER HYDRANTS TO THE DIVISION OF WATER IS TO BE INCLUDED IN THE PRICE BID UNDER ITEM 801. THE REQUIRED SURFACE RESTORATION SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM(S).

21. **HYDROSTATIC TESTING:**

ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 801.16 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.

22. EXISTING PLUGS, CAPS, ETC.:

PLUGS AND CAPS REMOVED FROM EXISTING WATER MAINS SHALL BE DELIVERED TO THE WATER SERVICES CENTER, 910 DUBLIN ROAD, COLUMBUS, OHIO, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS DELIVERY.

23. FIRE HYDRANT REPLACED OR RELOCATED:

NO EXISTING FIRE HYDRANTS TO BE REPLACED OR RELOCATED SHALL BE REMOVED, OR TAKEN OUT OF SERVICE, UNTIL THE NEW WATER MAINS ARE IN SERVICE AND THE NEW FIRE HYDRANTS ARE ACCEPTED BY THE DIVISION OF FIRE. THE CONTRACTOR SHALL CONTACT THE DIVISION OF FIRE AT 645-7641 EXT. 75658 TO SCHEDULE THE INSPECTION OF THE NEW FIRE HYDRANTS. FOR FIRE HYDRANTS OWNED BY A TOWNSHIP, CONTRACTOR SHALL COORDINATE WITH THE TOWNSHIP FIRE DEPARTMENT REGARDING INSPECTION.

THE DIVISION OF WATER WILL PROVIDE THE CONTRACTOR "OUT OF SERVICE" RINGS THAT SHALL BE PLACED ON ALL NEW HYDRANTS TO CLEARLY IDENTIFY THEM AS INACTIVE. <u>AFTER WRITTEN NOTIFICATION OF ACCEPTANCE HAS BEEN RECEIVED AND FINAL WATER MAIN CONNECTIONS HAVE OCCURRED</u>, THE CONTRACTOR SHALL REMOVE THE "OUT OF SERVICE" RINGS FROM THE NEW FIRE HYDRANTS. ONCE A WATER MAIN IS ABANDONED, THE "OUT OF SERVICE" RINGS SHALL BE PLACED ON THE ABANDONED FIRE HYDRANTS UNTIL THE HYDRANT IS COMPLETELY REMOVED. ALL "OUT OF SERVICE" RINGS SHALL BE RETURNED TO THE DIVISION OF WATER. ALL COORDINATION AND WORK REQUIRED TO TEST AND ACCEPT NEW FIRE HYDRANTS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 809.

24. SIGNS, FENCES, DRAINAGE STRUCTURES, CASTINGS, ETC.:

ALL PUBLIC SIGNS, FENCES, DRAINAGE STRUCTURES, CASTINGS, OR OTHER PHYSICAL FEATURES DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR. UNLESS OTHERWISE PROVIDED IN THE CONTRACT, THE COST OF ALL SUCH WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS WATER MAIN ITEMS.

25. REPLACEMENT OF DRAIN TILE/UNDERDRAIN AND STORM SEWERS:

ALL DRAIN TILE/UNDERDRAIN AND STORM SEWERS DAMAGED, DISTURBED OR REMOVED AS A RESULT OF THE CONTRACTORS OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS EXISTING. REPLACED DRAIN TILE SHALL BE LAID ON COMPACTED GRANULAR BEDDING. COST TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS WATER MAIN ITEMS.

26. **SEEDING AND MULCHING:**

IN GENERAL, GRASSY AREAS WITHIN STREET OR HIGHWAY RIGHT-OF-WAY WILL BE CONSIDERED URBAN IN CHARACTER AND SEEDED AS PER ITEM 659, CLASS 1 LAWN MIXTURE. USE OF WOOD FIBER MULCH IS REQUIRED FOR FINAL MULCHING, AND STRAW OR COMPOST MULCH WILL NOT BE PERMITTED. THE CONTRACTOR WILL ONLY BE PAID ONE TIME FOR EACH LOCATION OF FINAL SEEDING AND MULCHING. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY ADDITIONAL FINAL SEEDING AND MULCHING REQUIRED. PER STANDARD DRAWING L-6309 B & D, PLACEMENT OF 6-INCHES OF TOPSOIL IS TO BE INCLUDED IN THE PRICE BID FOR ITEM 659 SEEDING AND MULCHING.

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27. MAINTAINING MAIL SERVICE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING MAIL SERVICE IN THE CONSTRUCTION AREA. PRIOR TO DISTURBING ANY MAIL BOXES THE CONTRACTOR SHALL CONTACT THE POSTAL AUTHORITIES AND SHALL TEMPORARILY RELOCATE MAILBOXES IN ACCORDANCE WITH THE REQUIREMENTS THEREFORE. THE CONTRACTOR SHALL RESTORE MAILBOXES TO THEIR ORIGINAL CONDITION AND LOCATION. COST TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS WATER MAIN ITEMS.

28. TRACKING OF MUD:

ANY MUD TRACKED OR DEPOSITION OF BUILDING MATERIALS OR DEBRIS UPON PUBLIC RIGHT-OF-WAY SHALL BE CLEANED OFF IMMEDIATELY. ANY WORK DONE BY THE CITY TO CLEAN STREETS AS A RESULT OF NEGLIGENCE BY THE CONTRACTOR SHALL BE AT THE CONTRACTOR'S EXPENSE.

29. SEWER LINES(REVISED WHEN DESIGNING AROUND SANITARY SEWER LATERALS):

ALL EXISTING SEWER LINES MAY OR MAY NOT BE SHOWN ON THE PLAN. INDIVIDUAL SERVICE LINES ARE NOT SHOWN AND SHOULD BE LOCATED BY THE CONTRACTOR PRIOR TO COMMENCING ANY WORK. IN CASE OF ANY CONFLICT BETWEEN THE PROPOSED WATER MAINS AND/OR TAPS AND THE EXISTING SANITARY MAINS AND/OR SERVICES, THE WATER MAINS SHALL BE RAISED OR LOWERED, AS DIRECTED BY THE DIVISION OF WATER, WATER ENGINEERING.

LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL SEWER LINES, SERVICES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IF A FACILITY IS DAMAGED BY THE CONTRACTOR, ALL REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE CITY OF COLUMBUS' CONSTRUCTION AND MATERIAL SPECIFICATIONS, AT THE CONTRACTOR'S EXPENSE.

MAINTAIN EIGHTEEN (18) INCHES VERTICAL AND TEN (10) FEET HORIZONTAL SEPARATION BETWEEN ANY SANITARY OR STORM SEWER PIPING AND ALL PROPOSED WATER MAINS.

THE CITY OF COLUMBUS WILL ONLY LOCATE AND MARK MAIN LINE SEWERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL SERVICE LATERALS WHETHER SHOWN ON THE PLAN OR NOT. ANY DAMAGE TO MAIN SEWER LINES OR SERVICE LATERALS IS THE RESPONSIBILITY OF THE CONTRACTOR. WHEN A SEWER MAIN/SERVICE (STORM OR SANITARY) IS DAMAGED DURING CONSTRUCTION, PLEASE NOTIFY THE INSPECTOR AND PERFORM THE REPAIR PER DOSD STANDARDS. ALL REPAIRS MUST BE PERFORMED BY A LICENSED SEWER CONTRACTOR. THE INSPECTOR SHALL SUBMIT THE "RECORD ONLY" PERMIT TO DOSD (DOTTIE FRANEY, DAFRANEY@COLUMBUS.GOV, THE NEXT BUSINESS DAY. THE CONTRACTOR WILL NOT BE REQUIRED TO PAY A FEE FOR THE PERMIT.

IN CERTAIN AREAS INDICATED ON THE PLANS, SANITARY SEWER LATERALS MAY BE IN CONFLICT WITH THE WATER MAIN INSTALLATION. THE WATER MAIN PROFILES SHOWN HAVE ACCOUNTED FOR THESE POTENTIAL CONFLICTS BASED ON THE INFORMATION AVAILABLE, AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL LOCATE THE SANITARY SERVICE LINES AT LEAST 100 FEET AHEAD OF HIS WORK TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS. THESE LOCATIONS SHALL BE REPORTED TO THE DIVISION OF WATER ENGINEER TO DETERMINE IF ADJUSTMENTS SHALL BE MADE TO THE WATER MAIN PROFILE.

30. **FOR THE DIVISION OF POWER:**

THE DIVISION OF POWER (DOP) MAY HAVE UNDERGROUND AND OVERHEAD PRIMARY, SECONDARY, 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

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DIRECTION OF DOP PERSONNEL AND 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 FROM DOP.

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.

31. MAINTAINING TRAFFIC:

UNLESS OTHERWISE PROVIDED FOR IN THE CONTRACT, THE COST OF ALL WORK ASSOCIATED WITH MAINTAINING TRAFFIC NOTES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614- MAINTAINING TRAFFIC.

(SEE ATTACHED TEMPORARY AND PERMANENT TRAFFIC CONTROL NOTES. ADD NOTES THAT APPLY.)

32. **CONSTRUCTION SEQUENCING:**

THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION AS TO MINIMIZE THE NUMBER OF TIMES THAT CUSTOMERS ARE WITHOUT WATER SERVICE. THE MAXIMUM NUMBER OF SERVICE INTERRUPTIONS TO ANY ONE CUSTOMER DURING THE CONSTRUCTION OF THE PROJECT SHALL BE TWO (2). THE SERVICE INTERRUPTION SHALL LAST NO LONGER THAN 4 HOURS UNLESS APPROVED IN WRITING BY THE CITY. THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS, BUT NOT MORE THAN 72 HOURS, PRIOR TO ANY DISRUPTION OF WATER SERVICE.

THE CONTRACTOR IS REQUIRED TO SUBMIT A SEQUENCE OF CONSTRUCTION TO THE CITY AT THE PRECONSTRUCTION CONFERENCE. THIS SEQUENCE OF CONSTRUCTION SHOULD ALSO DETAIL THE CONTRACTOR'S PLANS FOR TESTING AND CHLORINATION OF NEW MAINS INCLUDING THE SOURCE OF WATER AND LOCATION/SIZE OF TEMPORARY CHLORINATION AND BLOW-OFF TAPS. THE CITY SHALL HAVE THE RIGHT TO APPROVE, REJECT OR MODIFY THE CONSTRUCTION SEQUENCE TO ENSURE THAT THE INTERRUPTIONS ARE HELD TO A MINIMUM. NOTE: THE CITY MAY TAKE UP TO 10 WORKING DAYS TO RESPOND TO THIS SUBMITTAL.

33. **WATER MAIN CONNECTIONS:**

ONLY ONE CONNECTION TO AN EXISTING WATER MAIN IS PERMITTED BEFORE DISINFECTION OF A NEW WATER MAIN HAS BEEN COMPLETED. ALL OTHER CONNECTIONS MUST BE MADE AFTER THE MAIN HAS BEEN DISINFECTED. WHEN A 3-INCH OR LARGER TAP IS TO OCCUR ON A 20-INCH OR LARGER WATER MAIN, THE CONTRACTOR SHALL NOTIFY THE DIVISION OF WATER OPERATIONS CONTROL CENTER AT (614)-645-7168 TWENTY-FOUR (24) HOURS IN ADVANCE OF PERFORMING THE TAP.

34. **COTA:**

TWO WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ZACH SUNDERLAND OF THE CENTRAL OHIO TRANSIT AUTHORITY (COTA) AT 614-308-4236, FAX — 614-275-5933, OR EMAIL — <u>SUNDERLANDZJ@COTA.COM</u> TO COORDINATE PROPER BUS MOVEMENTS THROUGH AND AROUND THE JOBSITE DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE TEMPORARY RELOCATION OR REMOVAL OF COTA SIGNS AND/OR BUS STOP LOCATIONS.

35. FIRE HYDRANT PAINT COLOR:

ALL FIRE HYDRANTS TO BE INSTALLED IN THE CITY OF COLUMBUS SHALL BE PAINTED WITH THE COLOR "SAFETY ORANGE". THE FIRE HYDRANTS SHALL BE PROVIDED WITH TWO COATS IN A GLOSS ENAMEL OF THE "SAFETY ORANGE" COLOR FOR THE ENTIRE HYDRANT. THE TOPS OF THE FIRE HYDRANTS ARE NO LONGER REQUIRED TO BE PAINTED BLACK. AFTER INSTALLATION OF FIRE HYDRANTS, THE CONTRACTOR IS RESPONSIBLE TO APPLY TOUCH UP PAINT TO ANY DAMAGE TO THE FACTORY APPLIED HYDRANT PAINT. HYDRANTS WILL NOT BE ACCEPTED UNTIL ANY PAINT DAMAGE FROM SHIPPING OR INSTALLATION HAS BEEN REPAIRED. USE HYDRANT TOUCH UP PAINT IN ACCORDANCE WITH THE APPROVED MATERIALS LIST. THIS GENERAL NOTE SHALL SUPERSEDE THE CURRENT PAINT DESCRIPTION SPECIFIED IN ITEM 809.02 IN THE 2018 CMSC SPECIFICATIONS. FOR FIRE HYDRANT PAINT COLOR.

36. **HYDRANT USAGE**:

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. THE CONTRACTOR MUST COORDINATE WITH THE DOW PROJECT ENGINEER WHICH HYDRANT IS BEING REQUESTED FOR USE AND GAIN WRITTEN APPROVAL PRIOR TO SUBMITTING THE HYDRANT PERMIT. THE HYDRANT PERMIT IS OBTAINED ONLINE BY ACCESSING HTTP://PORTAL.COLUMBUS.GOV/PERMITS/. 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. COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

FOR FIRE HYDRANTS WITHIN THE TOWNSHIP, WRITTEN PERMISSION MUST BE OBTAINED FROM THE TOWNSHIP. THIS WRITTEN PERMISSION MUST BE PROVIDED TO THE CITY OF COLUMBUS PERMIT OFFICE WHEN APPLYING FOR A FIRE HYDRANT PERMIT WITHIN A TOWNSHIP.

37. FIRE HYDRANT MAINTENANCE:

THE BARREL OF ANY FIRE HYDRANT USED BETWEEN THE DATES OF SEPTEMBER 15 AND APRIL 15 SHALL BE PUMPED DRY TO THE FOOT VALVE OF THE HYDRANT OR A MINIMUM OF 5 FEET BELOW SURFACE OF EXISTING GROUND, BY THE CONTRACTOR, IMMEDIATELY AFTER EACH TIME THE HYDRANT IS OPERATED.

38. BRASS FITTINGS:

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.

39. **FRANKLIN COUNTY NOTIFICATION:**

THE CONTRACTOR SHALL NOTIFY THE FRANKLIN COUNTY ENGINEER, TELEPHONE (614) 462-3072, FORTY-EIGHT (48) HOURS IN ADVANCE OF COMMENCING ANY WORK. (ONLY USE THIS NOTE IF THERE IS WORK LOCATED OUTSIDE THE CITY OF COLUMBUS IN FRANKLIN COUNTY RIGHT-OF-WAY.)

40. FRANKLIN COUNTY PERMIT:

ALL WORK OUTSIDE THE CITY OF COLUMBUS, WITHIN THE FRANKLIN COUNTY ROAD RIGHT-OF-WAY, IS SUBJECT TO THE INSPECTION AND APPROVAL OF THE FRANKLIN COUNTY ENGINEER. THE CONTRACTOR SHALL SECURE A WRITTEN PERMIT FROM THE FRANKLIN COUNTY ENGINEER ((614)-525-3063), 970 DUBLIN ROAD, COLUMBUS, OHIO 43215, 48 HOURS IN ADVANCE OF STARTING ANY WORK WITHIN THE COUNTY RIGHT-OF-WAY. THE CONTRACTOR SHALL PROVIDE THE FRANKLIN COUNTY ENGINEER'S OFFICE A RIGHT-OF-WAY RESTORATION SURETY FOR THE PERMIT AND A 24-HOUR TELEPHONE NUMBER TO BE USED IN CASE OF AN EMERGENCY. WHEN STEEL PLATES ARE UTILIZED, CONTRACTOR SHALL ENSURE PROPER SIGNAGE IS USED INDICATING THE PLATE LOCATIONS. CONTRACTOR SHALL REPORT STEEL PLATE LOCATIONS TO THE FRANKLIN COUNTY ENGINEER'S OFFICE AT 614-525-3072. (ONLY USE THIS NOTE IF THERE IS WORK LOCATED OUTSIDE THE CITY OF COLUMBUS IN FRANKLIN COUNTY RIGHT-OF-WAY.)

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41. BIKE PATHS:

ANY OR ALL ACTIVITIES THAT MAY BE ADJACENT TO OR COULD POTENTIALLY DISTURB A CITY BIKE PATH OR HAVE ANY IMPACTS TO NORMAL BIKE PATH FLOW MUST CONTACT THE RECREATION AND PARKS DEPT. GREENWAYS PLANNER AT BRWESTALL@COLUMBUS.GOV OR 614-645-2441 AND PROPERTY MANAGER, TINA MOHN AT TMMOHN@COLUMBUS.GOV OR 614-645-3395, PRIOR TO ANY WORK COMMENCING. CONTRACTOR MUST PROVIDE A MINIMUM OF 2 WEEKS COORDINATION TIME FOR ONSITE MEETINGS, SIGNAGE PLACEMENT, RESTORATION PLANNING, DISTURBANCE AND/OR CLEARING LIMIT REVIEW. UNLESS SPECIFICALLY NOTED ON THESE PLANS, ACCESS TO OR USE OF ANY CITY BIKE PATH OR AREA ADJACENT TO A BIKE PATH IS NOT GRANTED OR IMPLIED. (ONLY USE THIS NOTE IF THE WORK WILL IMPACT OR POTENTIALLY IMPACT ANY BIKE PATHS WITHIN OR ADJACENT TO THE PROJECT LIMITS.)

42. CONTRACTOR SUBMITTALS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE FOLLOWING SUBMITTALS EITHER AT THE PRE-CONSTRUCTION MEETING OR PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: DUE AT PRE-CONSTRUCTION MEETING

- PROJECT SCHEDULE
- SUB-CONTRACTOR AND SUPPLIER LIST
- EMERGENCY CONTACTS LIST
- STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

DUE PRIOR TO BEGINNING CONSTRUCTION

- CONSTRUCTION SEQUENCING PLAN
- ALL PERTINENT MATERIALS AS LISTED ON THE DIVISION OF WATER'S APPROVED MATERIALS LIST. FOR
 PROJECTS IN WHICH MATERIALS MUST MEET AMERICAN IRON & STEEL (AIS) REQUIREMENTS, THE
 CONTRACTOR SHALL SUBMIT A CERTIFIED LETTER FROM THE VENDOR STATING THAT THE MATERIALS
 BEING SUPPLIED MEET THE AIS REQUIREMENT. THE LETTER SHALL CONTAIN THE PROJECT NAME, LIST OF
 PRODUCTS, LOCATION OF WHERE THE PRODUCT WAS MANUFACTURED, A REFERENCE TO MEETING AIS
 REQUIREMENTS, AND A SIGNATURE FROM A REPRESENTATIVE OF THE VENDOR.
- ANY SPECIAL MATERIALS OR ITEMS REQUIRED BY THE PROJECT SPECIFICATIONS (HORIZONTAL DIRECTIONAL DRILLING ITEMS, CURED IN PLACE PIPING ITEMS, TEMPORARY WATER MAIN ITEMS, ETC.)

43. ITEM SPECIAL - SEDIMENT AND EROSION CONTROL:

IN ADDITION TO THE INFORMATION LISTED IN ITEM 207 OF THE CMSC, THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PREPARING AND COMPLYING WITH A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). APPEARING ON THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE A CERTIFICATION (SIGNATURE AND SEAL) BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF OHIO, THAT THE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 6.2 OF THE CITY'S EROSION AND SEDIMENT CONTROL REGULATION (ADOPTED JUNE 1, 1994). LAND DISTURBANCE AREAS LESS THAN ONE ACRE AND NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT ARE NOT REQUIRED TO SUBMIT TO THE CITY OF COLUMBUS A FULL SCALE EROSION AND SEDIMENT CONTROL PLAN FOR APPROVAL. HOWEVER, THE PROPOSED LAND DISTURBING ACTIVITIES MUST COMPLY WITH ALL OF THE PROVISIONS OF THE DIVISION OF SEWERAGE AND DRAINAGE EROSION AND SEDIMENT CONTROL REGULATION.

ALL LAND DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE CITY OF COLUMBUS TO DETERMINE COMPLIANCE WITH CITY STANDARDS AND REGULATIONS. FAILURE TO COMPLY WITH THESE REGULATIONS MAY SUBJECT THE SITE TO ENFORCEMENT ACTION BY THE CITY. QUESTIONS REGARDING EROSION AND SEDIMENT CONTROL MAY BE REFERRED TO THE STORMWATER MANAGEMENT OFFICE AT 645-6311.

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ON-SITE CONTACT:	
PHONE:	
FAX:	
E-MAIL:	
SITE IS TRIBUTARY TO :	(NEAREST NAMED WATERCOURSE)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, INSPECTING, MAINTAINING, AND REMOVING ALL TEMPORARY EROSION AND SEDIMENT CONTROLS FOR THE WORK AS REQUIRED BY GOVERNING LOCAL, STATE AND FEDERAL AGENCIES AS WELL AS ITEM 207 OF THE CMSC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF ALL PERMIT FEES ASSOCIATED WITH THE EROSION AND SEDIMENT CONTROLS. ALL EXPENDITURES REQUIRED FOR THIS WORK SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT PRICE FOR ITEM SPECIAL – SEDIMENT AND EROSION CONTROL. IF NO SPECIFIC ITEM FOR EROSION CONTROL IS LISTED IN THE CONTRACT DOCUMENTS, THEN THE COST SHALL BE INCLUDED IN THE VARIOUS WATER MAIN ITEMS.

44. ITEM SPECIAL - PERMANENT PAVEMENT:

UNLESS OTHERWISE SHOWN ON THE PLANS, OR WHEN ORDERED BY THE ENGINEER, PERMANENT PAVEMENT REPLACEMENT SHALL BE PROVIDED, FOR ALL STREETS CUT BY THE CONTRACTOR, AS SPECIFIED UNDER ITEM 259 AND STANDARD DRAWING 1441, EXCEPT AS HEREIN MODIFIED. A QUANTITY OF 0.15 GALLONS OF TACK COAT SHALL BE APPLIED PER SQUARE YARD OF PAVEMENT RESURFACING (IF APPLICABLE TO THE PROJECT). LIMITING LINES FOR MEASUREMENT OF PERMANENT PAVEMENT SHALL BE THE DIAMETER OF THE WATER MAIN PLUS TWO FEET (D+2') FOR WATER MAINS LESS THAN 36 INCHES IN DIAMETER. FOR WATER MAINS 36 INCHES IN DIAMETER OR LARGER, LIMITING LINES FOR MEASUREMENT OF PERMANENT PAVEMENT SHALL BE THE DIAMETER OF THE WATER MAIN PLUS FOUR FEET (D+4'). TRENCH SHALL BE BACKFILLED TO THE TOP OF THE PAVEMENT SUBGRADE USING GRANULAR MATERIAL MEETING THE REQUIREMENTS OF ITEMS 304.02 OR 703.11. ALL PERMANENT PAVEMENT MARKINGS (STRIPING, RAISED PAVEMENT MARKERS, ETC.) DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR. UNLESS OTHERWISE PROVIDED IN THE CONTRACT, THE COST OF ALL SUCH WORK, WITH THE EXCEPTION OF HEAT WELDING, SHALL BE INCLUDED IN THE PRICE BID FOR ITEM SPECIAL – PERMANENT PAVEMENT. PAYMENT FOR HEAT WELDING PROCESS SHALL BE PAID FOR AS A SEPARATE BID ITEM UNDER ITEM SPECIAL – HEAT WELDING.

FOR PAVEMENT REPLACEMENT OUTSIDE OF CITY OF COLUMBUS LIMITS AND WITHIN FRANKLIN COUNTY R/W, ADD THE FOLLOWING SENTENCES TO THE ITEM SPECIAL – PERMANENT PAVEMENT NOTE:

ALL PAVEMENT REPLACEMENT LOCATED OUTSIDE OF THE CITY OF COLUMBUS LIMITS AND WITHIN FRANKLIN

COUNTY RIGHT-OF-WAY SHALL BE PER CITY OF COLUMBUS STANDARD DRAWING 1441, THE GENERAL NOTE FOR ITEM SPECIAL — PERMANENT PAVEMENT, AND THE FOLLOWING EXCEPTIONS:

PAVEMENT REPLACEMENT IN A FLEXIBLE PAVEMENT SECTION SHALL MATCH THE EXISTING MATERIAL TYPE AND THICKNESSES (MINIMUM OF 9" PAVEMENT SECTION). CONCRETE IS NOT PERMITTED AS A REPLACEMENT MATERIAL WITHIN A FLEXIBLE PAVEMENT SECTION. THE REQUIRED OVERLAY THICKNESS SHALL BE 1.5 INCHES OF ITEM 441 ASPHALT CONCRETE IN ALL AREAS OF RESURFACING.

45. **ITEM SPECIAL – HEAT WELDING:**

WHERE REQUIRED BY THE PLANS AND SPECIFICATIONS, CONTRACTOR SHALL PERFORM HEAT WELDING AS PER STANDARD DRAWING 1441. PAYMENT WILL BE MADE ON A SQUARE YARDAGE BASIS.

46. **ITEM SPECIAL – SURVEY COORDINATES:**

"ITEM SPECIAL – SURVEY COORDINATES" SHALL INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO OBTAIN HORIZONTAL AND VERTICAL (NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION) SURVEY COORDINATES FOR THE WATER MAIN IMPROVEMENTS. THE SURVEY COORDINATES SHALL BE OBTAINED FOR THE COMPLETED WATER MAIN CONSTRUCTION AND SHALL INCLUDE ALL VALVES, TEES, CROSSES, BENDS, HORIZONTAL DEFLECTIONS, PLUGS, REDUCERS, TAPPING SLEEVES, FIRE HYDRANTS, AIR RELEASES, CURB STOPS, TRACER WIRE BOXES, AND CASING PIPE TERMINI. ADDITIONAL SURVEY COORDINATES ARE REQUIRED ON THE WATER MAIN EVERY 200 FEET WHERE NO FITTING OR OTHER WATER MAIN STRUCTURE IS BEING INSTALLED WITHIN THAT LENGTH OF THE IMPROVEMENT.

ALL SURVEY COORDINATES SHALL BE REFERENCED TO THE APPLICABLE COUNTY ENGINEER'S MONUMENTS, AND SHALL BE BASED ON THE **NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE (NSRS2011) ADJUSTMENT**, WITH FURTHER REFERENCE MADE TO THE OHIO STATE PLANE SOUTH COORDINATE SYSTEM (GRID), SOUTH ZONE, WITH **ELEVATIONS BASED ON NAVD 88 DATUM**. ALL COORDINATES (NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION) SHALL BE REFERENCED TO THE NEAREST HUNDREDTH (N XXXXXXXXX, E XXXXXXXXX, C/L ELEV. XXX.XX). ALL SURVEY COORDINATES SHALL BE ACCURATE TO WITHIN 1.0 FOOT HORIZONTAL AND A TENTH OF A FOOT (0.10) OR LESS VERTICAL.

THE COORDINATES SHALL BE DOCUMENTED TO THE ENGINEER IN DIGITAL SPREADSHEET FORM AND SHALL INCLUDE THE APPLICABLE ITEM, STATION, NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION. **COORDINATES SHALL BE SUBMITTED TO THE ENGINEER ON A BI-WEEKLY BASIS.** COORDINATES SHALL ALSO BE REQUIRED TO BE SUBMITTED TO THE DIVISION OF WATER AS PART OF THE REQUEST FOR CHLORINATION.

LUMP SUM PAYMENT IS FULL COMPENSATION FOR ALL WORK INVOLVED IN OBTAINING AND DOCUMENTING THE SURVEY COORDINATES AS DESCRIBED IN THIS SPECIFICATION.

47. ITEM SPECIAL - PROJECT IDENTIFICATION SIGNS:

THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN XXXXX (X) SIGNS AT THE LOCATIONS LISTED BELOW. ALL COSTS FOR PROJECT IDENTIFICATION SIGNS SHALL BE INCLUDED IN ITEM SPECIAL – PROJECT IDENTIFICATION SIGNS.

THE SIGNS SHALL BE PLACED TO FACE TRAFFIC IN THE PUBLIC RIGHT-OF-WAY, SUCH AS THE TREE LAWN OR AREA NEAR THE CURB, WHERE THE SIGN WOULD BE MOST VISIBLE. SIGNS SHALL BE PLACED SUCH AS NOT TO BLOCK THE VISIBILITY OF OTHER SIGNS. SIGNS SHALL BE INSTALLED A MINIMUM OF 2 WEEKS PRIOR TO CONSTRUCTION. PROVIDE SIGNS AT THE LOCATIONS INDICATED IN THE PLAN PER STANDARD DRAWING L-1002.

48. <u>ITEM SPECIAL – TEMPORARY SEEDING AND MULCHING:</u>

THE CONTRACTOR SHALL PROVIDE TEMPORARY SEEDING AND MULCHING AS PER ITEM 207.03 AND WITHIN SEVEN (7) DAYS OF DISTURBANCE. THE EXCAVATIONS SHALL BE GRADED PRIOR TO PLACING THE TEMPORARY SEED AND MULCH. DURING THE MONTHS OF DECEMBER THROUGH FEBRURARY, CONTRACTOR SHALL PLACE MULCH AT A MINIMUM, BUT TEMPORARY SEEDING IS NOT REQUIRED. THE CONTRACTOR WILL ONLY BE REIMBURSED ONE TIME FOR EACH LOCATION OF TEMPORARY SEEDING AND MULCHING. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY ADDITIONAL TEMPORARY SEEDING AND MULCHING REQUIRED. PAYMENT WILL BE MADE ON A SQUARE YARDAGE BASIS.

49. CONSTRUCTION MANAGEMENT INFORMATION SYSTEMS (CMIS):

THE CONSTRUCTION MANAGEMENT INFORMATION SYSTEMS (CMIS) IS A WEB BASED ELECTRONIC CONSTRUCTION MANAGEMENT SYSTEM THAT HAS BEEN DESIGNED SPECIFICALLY FOR THE CITY OF COLUMBUS. THE CONTRACTOR

SHALL UTILIZE THE CMIS AS PART OF THIS CONTRACT FOR ITEMS SUCH AS, BUT NOT LIMITED TO, SUBMITTALS, QUANTITY REVIEWS, DAILY INSPECTION REPORT REVIEWS, PAY APPLICATIONS, REQUESTS FOR INFORMATION, CHANGE ORDERS, REQUESTS FOR PROPOSALS, AND OTHER SUCH ITEMS THAT ARE INCLUDED IN THE CONSTRUCTION PROCESS. THE CONTRACTOR IS REQUIRED TO ATTEND TRAINING ON THE CMIS PRIOR TO BEGINNING ANY CONTRACT WORK AND SHALL COORDINATE WITH THE CITY TO SCHEDULE ANY TRAINING SESSIONS.

50. AMERICAN IRON AND STEEL (AIS) REQUIREMENTS, IF APPICABLE:

FOR PROJECTS IN WHICH MATERIALS MUST MEET AMERICAN IRON & STEEL (AIS) REQUIREMENTS, THE CONTRACTOR SHALL SUBMIT A CERTIFIED LETTER FROM THE VENDOR STATING THAT THE MATERIALS BEING SUPPLIED MEET THE AIS REQUIREMENT. THE LETTER SHALL CONTAIN THE PROJECT NAME, LIST OF PRODUCTS, LOCATION OF WHERE THE PRODUCT WAS MANUFACTURED, A REFERENCE TO MEETING AIS REQUIREMENTS, AND A SIGNATURE FROM A REPRESENTATIVE OF THE VENDOR. ALL LETTERS MUST BE RECEIVED PRIOR TO INSTALLATION.

51. REPAIRS TO DAMAGED POLYETHYLENE ENCASEMENT

IF DURING EXCAVATION, THE POLYETHYLENE ENCASEMENT ON THE EXISTING WATER MAIN BECOMES DAMAGED, THE CONTRACTOR SHALL REPAIR THE POLYETHYLENE ENCASEMENT PER MANUFACTURER'S SPECIFICATIONS AND DOW STANDARD DRAWINGS L-1003 AND L-1004, AT THEIR OWN EXPENSE. ENSURE THAT THE ENTIRE EXPOSED AREA IS COVERED WITH NEW POLYETHYLENE ENCASEMENT AND SECURELY TAPED, PRIOR TO BACKFILLING.

52. NEW VALVE BOX ADJUSTMENTS

RISER RINGS WILL <u>NOT BE PERMITTED</u> ON ANY NEWLY INSTALLED VALVE BOXES TO BRING VALVES TO FINAL GRADE. THE CONTRACTOR SHALL ENSURE THAT THE BOXES ARE INSTALLED AT THE CORRECT GRADE FOR FINAL PAVING OPERATIONS AND THAT THEIR PAVING CONTRACTOR INSTALLS PAVEMENT CORRECTLY AT LIDS DURING PAVING OPERATIONS. VALVE LIDS ARE NOT PERMITTED TO SET ABOVE FINAL GRADE AND SHALL BE A MAXIMUM OF 1/4" BELOW FINAL GRADE.

53. TRENCH DEWATERING

CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF THE OHIO ADMINISTRATIVE CODE CHAPTER 3745-83-02 WATER DISRUPTION OF SERVICE RULE. EXCAVATE PITS SUFFICIENTLY BELOW THE AREA TO BE CONNECTED TO IN ORDER TO MAINTAIN WATER LEVELS BELOW THE WATER MAIN. IF WATER FROM THE PIT ENTERS THE EXISTING MAIN, CONTACT DIVISION OF WATER IMMEDIATELY. ENSURE THAT SUFFICIENTLY SIZED PUMPE ARE UTILIZED TO REMOVE WATER FROM THE TRENCH AND BACKUP PUMPS ARE KEPT ON SITE FOR REDUNDANCY.

54. HAND SWABBING AND CHLORINATIONS

ANY SECTION OF WATER MAIN THAT IS LONGER THAN 20 FEET IN LENGTH SHALL BE CHLORINATED. HAND SWABBING METHODS WILL ONLY BE PERMITTED FOR SECTION LESS THAN OR EQUAL TO 20 FEET IN LENGTH. USE UNSCENTED HOUSEHOLD BLEACH FOR HAND SWABBING OF PIPE AND FITTINGS. PLEASE NOTE THAT CUT-IN-TEES, SLEEVES AND ANY OTHER REQUIRED FITTINGS OR PIPING SHALL BE TAKEN INTO ACCOUNT AND ARE INCLUDED IN THE TOTAL LENGTH OF THE SECTION (CUT TO CUT).

55. PIPING AND FITTINGS FOR CONNECTIONS AND ABANDONMENTS

ALL PIPING AND FITTINGS ASSOCIATED WITH CONNECTIONS TO EXISTING WATER MAINS AND/OR ABANDONMENTS OF EXISTING WATER MAINS SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 801, UNLESS OTHERWISE NOTED. THIS WORK WILL NOT BE QUANTIFIED SEPARATELY, AND NO ADDITIONAL PAYMENT WILL BE MADE FOR PERFORMING THIS WORK.

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56. ITEM SPECIAL – VIDEO INSPECTION OF SEWERS

WHEN WATER TAPS ARE INSTALLED BY TRENCHLESS METHODS AND CROSS AN EXISTING STORM AND/OR SANITARY SEWER, THE CONTRACTOR SHALL VERIFY THE CONDITION OF THE SEWER(S) BY VIDEO INSPECTION METHODS FOLLOWING THE TAP INSTALLATIONS. THE PURPOSE IS TO CONFIRM WHETHER ANY DAMAGES OCCURRED TO THE SEWER DURING TAP INSTALLATION. SEWERS THAT ARE DEEP, AND WHERE NO POTENTIAL DAMAGES ARE EXPECTED, ARE NOT REQUIRED TO UNDERGO VIDEO INSPECTION. HOWEVER, THESE LOCATIONS SHALL BE COORDINATED WITH THE CONSTRUCTION ADMINISTRATOR AND THE DIVISION OF WATER TO ENSURE THAT ALL PARTIES ARE IN AGREEMENT.

ADHERENCE TO THE DIVISION OF SEWEREAGE AND DRAINAGE'S "SPEC SECTION SS-5 – SEWER VIDEO RECORDING AND INSPECTION" IS <u>NOT</u> REQUIRED. THE INSPECTOR SHALL BE PRESENT TO WITNESS THE VIDEO INSPECTION. COSTS ASSOCIATED WITH THE VIDEO INSPECTION WORK SHALL BE INCLUDED IN THE COST OF THIS BID ITEM AND PAID FOR ON A LINEAR FOOT BASIS. IF BLOCKAGES IN THE SEWER PREVENT ADEQUATE VIDEO INSPECTION FROM OCCURRING, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION ADMINISTRATOR AND SUBMIT A COST TO CLEAN THE SEWER PRIOR TO VIDEO INSPECTION. IF DAMAGES ARE FOUND TO BE PRESENT DUE TO THE TAP INSTALLATION, DOW WILL NOT REIMBURSE THE CONTRACTOR FOR THE CLEANING OR THE VIDEO INSPECTION SERVICES FOR THAT LOCATION. A CONTINGENCY QUANTITY HAS BEEN INCLUDED FOR THIS ITEM AND SHALL BE UTILIZED AS DIRECTED BY THE ENGINEER.

57. LEAD TAPS ENCOUNTERED

IF A LEAD WATER TAP IS ENCOUNTERED AND IS NEITHER DAMAGED NOR PART OF A PLANNED RELOCATION/REPLACEMENT, THE CONTRACTOR SHALL REPORT THE PRESENCE OF THE LEAD TAP TO THE DIVISION OF WATER DISTRIBUTION MAINTENANCE GROUP AT 614-645-7788.

58. **LEAD OR GALVANIZED TAPS DAMAGED**

IF A LEAD OR GALVANIZED TAP IS EITHER DAMAGED DURING CONSTRUCTION OR IS PART OF A PLANNED WATER TAP RELOCATION/REPLACEMENT, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS:

- 1. IF DAMAGED, IMMEDIATELY CONTACT LEW FLEMISTER, DIVISION OF WATER, (614-645-7028), TO REQUEST THE SHUT OFF OF THE EXISTING CURB STOP. IF LEW CANNOT BE REACHED, CONTACT THE DOW DISTRIBUTION ENGINEERING OFFICE AT 614-645-7677 TO REQUEST THE SHUT OFF. AS A FINAL OPTION OR ANY TIME AFTER 5:00 PM (AND ON WEEKENDS), CALL THE DOW DISTRIBUTION MAINTENANCE DISPATCH OFFICE AT 614-645-7788 AND ENTER "5" AT THE PROMPT. IN CALL CASES, PLEASE MAKE SURE CONTACT IS MADE WITH SOMEONE AT DOW TO INFORM THEM OF THE SITUATION.
- 2. CONTRACTOR SHALL EXPOSE THE OWNER'S SIDE OF THE WATER SERVICE TO CONFIRM THE MATERIAL. THE INSPECTOR SHALL BE PRESENT FOR THIS.
- 3. If THE CUSTOMER'S PRIVATE SERVICE MATERIAL IS **LEAD**, STOP WORK AND NOTIFY THE DIVISION OF WATER DISTRIBUTION ENGINEERING OFFICE (614-645-7677) IMMEDIATELY. IF THE MATERIAL IS **NOT LEAD**, THE CONTRACTOR SHALL REPLACE THE LEAD OR GALVANIZED TAP (FROM EXISTING CORPORATION STOP TO CURB STOP) AND REINSTATE SERVICE TO THE CUSTOMER. **PARTIAL REPAIRS OF THE LEAD OR GALVANIZED TAP ARE NOT PERMITTED.**
- 4. REFER TO DIVISION OF WATER STANDARD DRAWINGS L-7102C AND L-9901 FOR INFORMATION ON WATER TAP RELOCATIONS, PLACING NEW CURB STOPS, AND RELOCATING CURB BOXES.

59. ITEM SPECIAL – VIDEO INSPECTION OF BRICK SEWER MAIN

A CONTINGENCY QUANTITY HAS BEEN INCLUDED FOR THIS ITEM AND SHALL BE UTILIZED AS DIRECTED BY THE ENGINEER. THE FOLLOWING REQUIREMENTS APPLY REGARDING WATER MAIN INSTALLATION NEAR BRICK SEWER MAINS:

1. IF THE NEW WATER MAIN <u>CROSSES</u> A BRICK SEWER MAIN, THEN THE <u>CONTRACTOR SHALL PERFORM A PRE-INSTALLATION AND POST-INSTALLATION VIDEO INSPECTION OF THE SEWER TO CONFIRM IF DAMAGE</u>

- OCCURRED. IF THERE IS DAMAGE CAUSED FROM INSTALLATION, THE CONTRACTOR SHALL REPAIR THE SEWER AT NO COST TO THE CITY.
- IF THE NEW WATER MAIN IS INSTALLED PARALLEL TO AND WITHIN 6 FEET (OUT TO OUT) OF A BRICK SEWER MAIN, THEN THE <u>CONTRACTOR SHALL PERFORM A PRE-INSTALLATION AND POST-INSTALLATION VIDEO</u> INSPECTION OF THE SEWER TO CONFIRM IF DAMAGE OCCURRED. IF THERE IS DAMAGE CAUSED FROM INSTALLATION, THE CONTRACTOR SHALL REPAIR THE SEWER AT NO COST TO THE CITY.
- 3. ADHERENCE TO THE DIVISION OF SEWEREAGE AND DRAINAGE'S "SPEC SECTION SS-5 SEWER VIDEO RECORDING AND INSPECTION" IS <u>NOT</u> REQUIRED. THE INSPECTOR SHALL BE PRESENT TO WITNESS THE VIDEO INSPECTION. COSTS ASSOCIATED WITH THE VIDEO INSPECTION WORK SHALL BE INCLUDED IN THE COST OF THIS BID ITEM AND PAID FOR ON A LINEAR FOOT BASIS. IF BLOCKAGES IN THE SEWER PREVENT ADEQUATE VIDEO INSPECTION FROM OCCURRING, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION ADMINISTRATOR AND SUBMIT A COST TO CLEAN THE SEWER PRIOR TO VIDEO INSPECTION.

60. CURB BOX TAPING AND CURB STOP ACCESIBILITY CHECK

TO PREVENT DEBRIS FROM ENTERING, THE BOTTOM 6-INCHES OF ALL CURB BOXES SHALL BE WRAPPED WITH PVC OUTER WRAP TAPE, AS INCLUDED IN THE APPROVED MATERIALS LIST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL NEWLY INSTALLED CURB STOPS FOR ACCESSIBILITY. THIS WORK SHALL BE PERFORMED AFTER PERFORMING THE WATER SERVICE LINE TRANSFER AND AFTER BACKFILL/FINAL RESTORATION OPERATIONS. THE CHECK SHALL BE WITNESSED AND DOCUMENTED BY THE INSPECTOR. THE CURB STOP SHALL HAVE THE KEY PLACED UPON IT TO MAKE SURE IT IS ACCESSIBLE, BUT THE CONTRACTOR SHALL NOT TURN THE CURB STOP. THE CURB BOX SHALL ALSO BE FREE OF DEBRIS, AND THE LID TO THE BOX SHALL BE TO GRADE. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED IN THE VARIOUS WATER MAIN ITEMS.

61. PVC PIPING – PERMITTED LOCATIONS OF INSTALLATION

THE CHART BELOW IDENTIFIES LOCATIONS IN WHICH PVC PIPING IS PERMITTED FOR USE ON THIS PROJECT:

STREET NAME	DESCRIPTION OF LIMITS	SIZE OF WATER MAIN	LINEAR FOOTAGE OF PIPE

THE INSTALLATION OF PVC PIPING IS <u>NOT</u> PERMITTED IN THE "DOWNTOWN" DISTRICT COMMUNITY, AS DEFINED BY THE CITY OF COLUMBUS CODE OF ORDINANCES, CODE 3359.03. IT IS ALSO <u>NOT</u> PERMITTED FOR INSTALLATION ON ANY "PRIORITY 1" (HIGH TRAFFIC VOLUME) ARTERIAL STREETS, AS DEFINED BY THE COLUMBUS DEPARTMENT OF PUBLIC SERVICE PER THE FOLLOWING LINK: <u>HTTPS://www.columbus.gov/publicservice/snow-and-ice-control/</u>. PVC PIPE MAY ONLY BE USED AS AN ALTERNATE FOR 6 AND 8-INCH DUCTILE IRON WATER MAINS, AND SHALL NOT BE USED FOR HYDRANT LEADS OR WATER TAPS.

62. **PVC PIPING - CONTINUITY TESTING**

CONTINUITY TESTING SHALL BE PERFORMED FOR ANY TRACER WIRE INSTALLED ON THE PVC PIPE. AFTER INSTALLATION OF THE TRACER WIRE, TESTING OF THE TRACER WIRE SHALL BE PERFORMED WITH A LOW FREQUENCY TRACER SIGNAL. TRACER WIRE SHALL BE INSTALLED AS PER 801.07. CONTINUITY TESTING SHALL BE WITNESSED AND DOCUMENTED BY THE INSPECTOR. THE TRACER WIRE TEST REPORT SHALL BE SUBMITTED TO THE DOW ENGINEER, AND SHALL ALSO BE INCLUDED IN ANY CHLORINATION REQUEST SUBMITTALS.

63. PVC PIPING – SUBMIT CHANGES FOR APPROVAL

THESE DESIGN PLANS HAVE ASSUMED DUCTILE IRON AS THE BASELINE PIPE MATERIAL FOR DESIGN. ALL FITTINGS, DELFECTIONS, AND OTHER DESIGN ELEMENTS ARE BASED OFF OF THE DUCTILE IRON STANDARDS. IF PVC PIPING IS TO BE UTILIZED IN THE PERMITTED LOCATIONS FOR CONSTRUCTION, A FORMAL PLAN REVISION SHALL BE SUBMITTED TO DOW FOR REVIEW AND APPROVAL REGARDING ANY CHANGES TO THE DESIGN PLANS.