

CONSTRUCTION NOTES

GENERAL NOTES

- 1) THE CONTRACTOR SHALL PAY FOR ALL NECESSARY PERMITS AND FEES.
- 2) THE CONTRACTOR SHALL INVESTIGATE ON SITE AND VERIFY ALL CONDITIONS AND DIMENSIONS OF THE PROJECT AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY IN THE CONTRACT DOCUMENTS REQUIRING NOTIFICATION PRIOR TO PROCEEDING.
- 3) THE CONTRACTOR SHALL TAKE ALL NECESSARY PREVENTATIVE MEASURES TO PROTECT THE EXISTING IMPROVEMENTS. ANY DAMAGE SHALL BE REPLACED AT NO COST TO THE OWNER.
- 4) THE CONTRACTOR SHALL COORDINATE THE WORK SCHEDULE SO AS TO HAVE A MINIMUM IMPACT ON THE EXISTING TRAFFIC. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PER IDOT TRANSPORTATION STANDARD SPECIFICATIONS.
- 5) OWNER'S PROPERTY BOUNDARIES SHALL BE PROTECTED AT ALL TIMES AND THE CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ILLINOIS TO REPERMITS ALL CORNERS UPON COMPLETION OF THE PROJECT. ALL EXISTING CORNERS DAMAGED BY CONSTRUCTION OR OTHER ACTIVITY SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR.
- 6) ALL WORK SHALL CONFORM TO STATE AND LOCAL CODES AND CONFORM TO THE CITY OF LEWISTON STANDARD DRAWINGS AND STANDARD TECHNICAL SPECIFICATIONS.
- 7) SITE DISTANCES FOR ADJUTING PROPERTIES, DRIVEWAYS, AND IMPROVEMENTS MUST BE MAINTAINED.
- 8) IMPROVEMENTS IN CONSTRUCTION ON RIGHT-OF-WAY REQUIRE A STREET CLOSURE PERMIT OBTAINED AT THE CONSTRUCTION MANAGEMENT SECTION OF THE PUBLIC WORKS DEPARTMENT.
- 9) SPECIAL INSPECTION IS REQUIRED FOR SOIL CORRUPTION AND WATER MAINS.
- 10) ALL WATER AND SEWER UTILITIES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH STATE OF ILLINOIS STANDARDS FOR PUBLIC DRINKING WATER SYSTEMS.
- 11) WATER MAINS SHALL BE INSTALLED BY CONTRACTORS WITH EXPERIENCE INSTALLING PUBLIC WATER MAINS.
- 12) WATER MAINS SHALL BE LAID ONLY IN DEDICATED STREETS OR IN EASEMENTS WHO HAVE BEEN GRANTED AND ACCEPTED BY THE CITY OF LEWISTON.
- 13) WATER PIPE SHALL BE P.V.C., CLASS 200 (MINIMUM) CONFORMING TO AWWA STANDARD C300.
- 14) WATER LINE FITTING SHALL BE CAST IRON OR DUCTILE IRON CONFORMING TO AWWA STANDARD C184.
- 15) THE CONTRACTOR SHALL PROVIDE LOCATE MARK AND BURY TAPE IN PVC WATER MAIN TRENCH PER CITY OF LEWISTON STANDARD 1-8.
- 16) THURST BLOCKS SHALL CONFORM TO CITY OF LEWISTON STANDARD DETAIL 4-1.
- 17) GATE VALVES SHALL CONFORM TO AWWA C154-66 RESILIENT SEATED GATE VALVES FOR WATER AND SEWAGE SYSTEMS AND SHALL BE IRON BODY BRONZE MOUNTED, DOUBLE DISC WITH BRONZE VEEGRIND AND DRUM WELDED BOX.
- 18) THE CONTRACTOR SHALL PROVIDE 4 FT MIN. COVER ON ALL WATER LINES AND PROVIDE 18" MINIMUM VERTICAL CLEARANCE BETWEEN POTABLE WATER LINE AND NON-POTABLE WATER LINE CROSSINGS FOR ALL CROSSINGS LESS THAN 10' OF VERTICAL CLEARANCE. NON-POTABLE WATER LINE MUST BE CASED BY A LARGER DIAMETER CONCRETE PIPE FOR A HORIZONTAL DISTANCE OF TEN FEET ON BOTH SIDES OF THE CROSSING, WITH NO JOINTS, AS SHOWN ON CITY OF LEWISTON STANDARD DETAIL 4-1.
- 19) WATER LINE CONNECTIONS TO MAIN AND LATERALS SHALL BE LEFT UNCOVERED UNTIL AFTER THE CITY ENGINEER HAS INSPECTED AND APPROVED THE WORK. AFTER APPROVAL OF CONNECTION, THE TRENCH SHALL BE BACKFILLED AS SPECIFIED.
- 20) AN APPROVED BACKFLOW PREVENTION ASSEMBLY IS REQUIRED ON THE SUPPLY WATER LINE WHEN FILLING THE NEW WATER MAIN DURING UNEXPECTED AND FLUSHING. THE BACKFLOW PREVENTION ASSEMBLY AND SUPPLY PIPING MUST BE REMOVED DURING HYDROSTATIC PRESSURE TESTING.
- 21) PROPOSED WATER LINES SHALL BE HYDROSTATICALLY TESTED AS PER AWWA C600-93. TESTS SHALL BE 1 1/2 TIMES WORKING PRESSURE, WITH A MINIMUM OF 160 PSI. PRESSURE SHALL BE HELD FOR 2 HOURS WITH NO DROP IN PRESSURE. ENGINEER OF RECORD SHALL WITNESS TEST.
- 22) DISINFECTION OF WATER PIPES SHALL BE IN ACCORDANCE WITH AWWA C-651-92. ISOLATE NEW PIPE FROM EXISTING SYSTEM TO PREVENT FURTHER CROSS-CONTAMINATION. THE CITY OF LEWISTON SHALL PERFORM THE CHLORINATION AND BACTERIAL TESTING. CONTRACTOR SHALL COORDINATE WITH THE CITY.
- 23) AFTER SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE OBTAINED FROM THE NEW WATER MAIN, A SECTION OF CONNECTING PIPE MUST BE INSTALLED BETWEEN THE NEW SECTION AND THE EXISTING SYSTEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR THIS FINAL CONNECTION AND THE CITY WILL INSPECT THIS WORK. BEFORE INSTALLATION, THE INTERIORS OF ALL PIPES AND FITTINGS USED TO MAKE THE CONNECTION MUST BE SWABBED OR SPRAYED WITH A 1% HYPOCHLORITE SOLUTION.
- 24) THE CONTRACTOR IS RESPONSIBLE FOR FLUSHING AND PRESSURE TESTING THE NEW WATER MAIN. CONTACT THE PLUMBING INSPECTOR AT 745-7414 FOR A PRESSURE TEST OR THE WATER DIVISION AT 745-7461. THESE TESTS MUST BE COMPLETED AND APPROVED BEFORE THE WATER DEPARTMENT WILL BEGIN DISINFECTION PROCEDURES.
- 25) THE CONTRACTOR IS RESPONSIBLE FOR FLUSHING AND PRESSURE TESTING THE NEW WATER MAIN. CONTACT THE PLUMBING INSPECTOR AT 745-7414 FOR A PRESSURE TEST OR THE WATER DIVISION AT 745-7461. THESE TESTS MUST BE COMPLETED AND APPROVED BEFORE THE WATER DEPARTMENT WILL BEGIN DISINFECTION PROCEDURES.
- 26) THE CONTRACTOR IS RESPONSIBLE FOR FLUSHING AND PRESSURE TESTING THE NEW WATER MAIN. CONTACT THE PLUMBING INSPECTOR AT 745-7414 FOR A PRESSURE TEST OR THE WATER DIVISION AT 745-7461. THESE TESTS MUST BE COMPLETED AND APPROVED BEFORE THE WATER DEPARTMENT WILL BEGIN DISINFECTION PROCEDURES.
- 27) THE NUMBER OF WATER SAMPLES TAKEN WILL DEPEND UPON THE LENGTH AND NUMBER OF BRANCHES OF THE NEW MAIN BUT A MINIMUM OF TWO SAMPLES MUST BE TAKEN. THESE SAMPLES SHALL BE TAKEN FROM EACH END OF THE NEW WATER MAIN. TWO CONSECUTIVE SAMPLES AT LEAST TWENTY-FOUR HOURS APART MUST BE REPORTED AND DISPLAY NEGATIVE BACTERIOLOGICAL RESULTS. RESULTS FROM BACTERIOLOGICAL TESTING WILL BE AVAILABLE APPROXIMATELY 28 HOURS AFTER THE LAST SAMPLE IS TAKEN. THE CITY WILL CHARGE A FEE FOR THE CHLORINATION AND BACTERIAL TESTING.
- 28) UPON COMPLETION, CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS, COMPLETE WITH ELEVATIONS, TO THE ENGINEER OF RECORD TO BE APPROVED.

WATER NOTES

- 1) ALL WATER SYSTEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH IDAPA AND ALL STATE CODES FOR PUBLIC DRINKING WATER SYSTEMS MUST BE FOLLOWED COUPLED WITH THE CITY OF LEWISTON WATER STANDARDS.
- 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE CITY OF LEWISTON WITH EXPERIENCE INSTALLING PUBLIC WATER MAINS AND APPROVED BY THE CITY OF LEWISTON.
- 3) MAIN WATER LINES MUST BE LOCATED AND PLACED SO AS TO AVOID EASEMENTS EXCEPT WHEN NECESSITATED BY LAND EASEMENTS. EASEMENTS SHALL BE A MINIMUM OF 20'. WATER LINES SHALL BE OFFSET IN THE EASEMENT.
- 4) WATER PIPE SHALL BE P.V.C., CLASS 150 (MINIMUM) CONFORMING TO AWWA STANDARD C300.
- 5) WATER LINE FITTINGS SHALL BE CAST IRON OR DUCTILE IRON CONFORMING TO AWWA STANDARD C184.
- 6) PRESSURE REDUCING VALVES ARE REQUIRED ON ALL SERVICE LINES.
- 7) SERVICE LINES TO THE METERS SHALL BE 1" G.P.T. DEVELOPER SHALL INSTALL THE SERVICE LINE AND METER SETTING TO INCLUDE ALL MATERIALS EXCEPT THE METER WHICH SHALL BE PROVIDED BY THE CITY. METERS SHALL BE PLACED TO AVOID CONFLICT WITH OTHER UTILITIES DRIVEWAY LOCATIONS, AND SHALL BE IN THE RIGHT OF WAY.
- 8) BACKFLOW ASSEMBLIES ARE REQUIRED ON ALL IRRIGATION SYSTEMS AND OTHER IDENTIFIED HAZARDOUS SUCH AS IDOVA BACKFLOW ASSEMBLIES SHALL BE INSTALLED AS PER STANDARDS AND SHALL BE ACCESSIBLE TO PERMIT TESTING.
- 9) HYDRANTS SHALL BE SPACED AT A MAXIMUM OF 500' IN RESIDENTIAL AREAS AND 400' IN COMMERCIAL AREAS. ALL HYDRANTS SHALL HAVE VALVES ON THE HYDRANT BRANCH LINE. HYDRANTS SHALL HAVE TWO, 2" X 1/2" PORTS AND ONE 4" STEAMER PORT. ALL HYDRANTS SHALL BE THURST BLOCKED OR RETAINED AND ALL FITTINGS SHALL BE THURST BLOCKED. THURST BLOCKS SHALL CONFORM TO CITY OF LEWISTON STANDARD DETAIL 4-1.
- 10) FIRE HYDRANTS SHALL CONFORM TO AWWA C552 AND SHALL BE WATERPROOF PAKER OR MULLER CENTURION. HYDRANTS SHALL BE LOCATED TO THE CITY OF LEWISTON STANDARD DETAIL 4-1.
- 11) HYDRANTS USED FOR THIS PROJECT SHALL BE PROVIDED WITH A 5" INCH INTERNAL HYDRANT STORZ ADAPTOR. ALL NOZZLES SHALL BE PROVIDED WITH THE STORZ BOLD CAP WITH SUCTION SEAL AND AIRCRAFT FASTENER.
- 12) PRESSURE REDUCING PITS MAY BE REQUIRED DUE TO ELEVATION, DIFFERENT PRESSURE ZONE, ETC.
- 13) GATE VALVES SHALL CONFORM TO AWWA C154-66 RESILIENT SEATED GATE VALVES FOR WATER AND SEWAGE SYSTEMS AND SHALL BE IRON BODY BRONZE MOUNTED, DOUBLE DISC WITH BRONZE VEEGRIND AND DRUM WELDED BOX.
- 14) VALVES SHALL BE PLACED ON ALL BRANCHES OF TRENCH OR CROSSINGS. A VALVE IS REQUIRED AT A MINIMUM OF EVERY 1000' OF MAIN WATER LINE.
- 15) THE CONTRACTOR SHALL PROVIDE 4 FT MIN. COVER ON ALL WATER LINES AND PROVIDE 18" MINIMUM VERTICAL CLEARANCE BETWEEN POTABLE WATER LINE AND NON-POTABLE WATER LINE CROSSINGS. FOR ALL CROSSINGS LESS THAN 10' OF VERTICAL CLEARANCE, NON-POTABLE OR POTABLE LINE MUST BE CASED IN A LARGER DIAMETER CONCRETE PIPE FOR A HORIZONTAL DISTANCE OF TEN FEET ON BOTH SIDES OF THE CROSSING, WITH NO JOINTS, AS SHOWN ON CITY OF LEWISTON STANDARD DETAIL 4-1.
- 16) PROPOSED WATER LINES SHALL BE HYDROSTATICALLY TESTED AS PER AWWA C600-93. TESTS SHALL BE 1 1/2 TIMES THE HIGHEST WORKING PRESSURE, WITH A MINIMUM OF 160 PSI. PRESSURE SHALL BE HELD FOR 2 HOURS WITH NO DROP IN PRESSURE. ENGINEER OF RECORD SHALL WITNESS TEST.
- 17) THE CONTRACTOR SHALL BE RESPONSIBLE FOR FLUSHING AND PRESSURE TESTING THE NEW WATER MAIN. CONTACT THE PLUMBING INSPECTOR AT 745-7414 FOR A PRESSURE TEST OR THE WATER DIVISION AT 745-7461. THESE TESTS MUST BE COMPLETED BEFORE THE WATER LINE CAN BE CONNECTED TO THE CITY SYSTEM. THIS CREATES A MINIMUM OF 48 HOURS AFTER CHLORINATION BEFORE THE LINE CAN BE CONNECTED. THE WATER DIVISION, TO MAINTAIN THE INTEGRITY OF THE SYSTEM, SHALL WITNESS THE FINAL TEST. THE CITY WILL CHARGE A FEE FOR CHLORINATION AND BACTERIAL TESTING.
- 18) DISINFECTION OF WATER PIPES SHALL BE IN ACCORDANCE WITH AWWA C-651-92. ISOLATE NEW PIPE FROM EXISTING SYSTEM TO PREVENT FURTHER CROSS-CONTAMINATION. ENGINEER OF RECORD SHALL WITNESS TEST.
- 19) A FIRE INSPECTOR SHALL WITNESS A FIRE LINE PRESSURE TEST. FIRE LINE TESTS SHALL BE AT 200 PSI.
- 20) THE WATER DIVISION WILL ONLY TAP FIRE LINE CONNECTIONS AND THE OWNER WILL FURNISH ALL MATERIALS AND LABOR INCLUDING THURST BLOCKING. FIRE LINES WILL REQUIRE BACKFLOW DETECTOR OR CHECK ASSEMBLY.
- 21) THE CONTRACTOR SHALL PROVIDE LOCATE MARK AND BURY TAPE IN PVC WATER MAIN TRENCH PER CITY OF LEWISTON STANDARD 1-8.
- 22) IF COMBUSTIBLE BUILDING MATERIALS ARE USED (INCLUDING FRAMING) THE WATER SUPPLY (INCLUDING MAINS AND HYDRANTS) SHALL BE DESIGNED, INSTALLED, TESTED AND APPROVED BY THE FIRE DEPARTMENT PRIOR TO STOCKING COMBUSTIBLE BUILDING MATERIALS.
- 23) WATER SUPPLY SYSTEMS FOR PHASED CONSTRUCTION SHALL PROVIDE REQUIRED FIRE FLOW AT ALL PHASES.
- 24) TREES, PLANTS, TREES AND/OR SHRUBS SHALL NOT BE PLACED OR KEPT NEAR FIRE HYDRANTS, FIRE DEPARTMENT INLET CONNECTIONS OR FIRE PROTECTION SYSTEM CONTROL VALVES IN A MANNER THAT WOULD PREVENT SUCH EQUIPMENT FROM BEING IMMEDIATELY ACCESSIBLE BY THE FIRE DEPARTMENT. IFC 608.3.4
- 25) WATER LINE CONNECTIONS TO MAINS AND LATERALS SHALL BE LEFT UNCOVERED UNTIL AFTER THE CITY ENGINEER HAS INSPECTED AND APPROVED THE WORK. AFTER APPROVAL OF CONNECTION, THE TRENCH SHALL BE BACKFILLED AS SPECIFIED.

CITY OF LEWISTON'S NEW WATER MAIN CONSTRUCTION PROCEDURES:

- 1) NEW WATER MAINS THAT ARE INSTALLED, WHETHER EXPANDING A DISTRIBUTION SYSTEM OR ADDING A FIRE LINE, MUST BE PHYSICALLY SEPARATED FROM THE EXISTING SYSTEM UNTIL SATISFACTORY FLUSHING, PRESSURE TESTING, DISINFECTION, AND BACTERIOLOGICAL SAMPLING HAS BEEN COMPLETED. THE NEW WATER MAIN MUST BE CONSIDERED CONTAMINATED AND THE CHLORINE CONCENTRATION USED FOR DISINFECTION (MINIMUM 25 mg/L) MASKS THE WATER NON-POTABLE.
- 2) THE CITY WILL PERFORM THE TAP ONLY FOR THESE NEW WATER MAIN CONNECTIONS AT A RATE DETERMINED ON EACH INDIVIDUAL TAP. THE CONTRACTOR TO COMPLETE THIS WORK WILL FURNISH ALL MATERIALS, LABOR AND SUPPLIES.
- 3) AN APPROVED BACKFLOW PREVENTION ASSEMBLY IS REQUIRED ON THE SUPPLY WATER LINE WHEN FILLING THE NEW WATER MAIN DURING DISINFECTION AND FLUSHING. THIS PREVENTS THE NEW MAIN'S CONSTRUCTION WATER ENTERING THE EXISTING SYSTEM. THE BACKFLOW PREVENTION ASSEMBLY AND SUPPLY PIPING MUST BE REMOVED DURING HYDROSTATIC PRESSURE TESTING.
- 4) AFTER SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE OBTAINED FROM THE NEW WATER MAIN, A SECTION OF CONNECTING PIPE MUST BE INSTALLED BETWEEN THE NEW SECTION AND THE EXISTING SYSTEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR THIS FINAL CONNECTION AND THE CITY WILL INSPECT THIS WORK. BEFORE INSTALLATION, THE INTERIORS OF ALL PIPES AND FITTINGS USED TO MAKE THE CONNECTION MUST BE SWABBED OR SPRAYED WITH A 1% HYPOCHLORITE SOLUTION.
- 5) THE CONTRACTOR IS RESPONSIBLE FOR FLUSHING AND PRESSURE TESTING THE NEW WATER MAIN. CONTACT THE PLUMBING INSPECTOR AT 745-7414 FOR A PRESSURE TEST OR THE WATER DIVISION AT 745-7461. THESE TESTS MUST BE COMPLETED AND APPROVED BEFORE THE WATER DEPARTMENT WILL BEGIN DISINFECTION PROCEDURES.
- 6) UPON COMPLETION AND APPROVAL OF THE PRESSURE TEST BY THE PROJECT INSPECTOR, WHICH SHALL BE A PROFESSIONAL ENGINEER INSPECTING ALL WATER MAIN PROJECTS AND WHICH SHALL BE A FIRE DEPARTMENT INSPECTOR AND A CITY PLUMBING INSPECTOR FOR ALL FIRE LINE CONNECTIONS, THE INSPECTOR WILL NOTIFY THE CITY ENGINEERING DIVISION. THE ENGINEERING DIVISION WILL THEN NOTIFY THE CITY WATER DIVISION TO PROCEED WITH THE COORDINATION FOR THE DISINFECTION AND SAMPLING OF THE NEW WATER MAIN. NOTE: NO NOZZLES OR FIRE HYDRANT SHALL BE USED IN COLLECTION OF SAMPLES. A COMBINATION BLOW-OFF AND SAMPLING TAP IS REQUIRED. THE DISINFECTION AND BACTERIOLOGICAL TESTING OF THE NEW MAIN SHALL ADHERE TO AWWA STANDARDS (AWWA C651-93).
- 7) THE NUMBER OF WATER SAMPLES TAKEN WILL DEPEND UPON THE LENGTH AND NUMBER OF BRANCHES OF THE NEW MAIN BUT A MINIMUM OF TWO SAMPLES MUST BE TAKEN. THESE SAMPLES SHALL BE TAKEN FROM EACH END OF THE NEW WATER MAIN. TWO CONSECUTIVE SAMPLES AT LEAST TWENTY-FOUR HOURS APART MUST BE REPORTED AND DISPLAY NEGATIVE BACTERIOLOGICAL RESULTS. RESULTS FROM BACTERIOLOGICAL TESTING WILL BE AVAILABLE APPROXIMATELY 28 HOURS AFTER THE LAST SAMPLE IS TAKEN. THE CITY WILL CHARGE A FEE FOR CHLORINATION AND BACTERIAL TESTING.

CONSTRUCTION NOTES

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