

WATER MAINS

WATER MAINS:

1. WATER MAINS SHALL BE DUCTILE IRON , 8" MINIMUM DIAMETER, CONFORMING TO AWWA C-151, CLASS 53, WITH FITTINGS CONFORMING TO AWWA 104.
2. COVER SHALL BE 4'-6" MINIMUM AND 6'-0" MAXIMUM, OR AS APPROVED BY THE ENGINEER.
3. HORIZONTAL DISTANCE BETWEEN WATER LINES AND SANITARY SEWERS SHALL BE 10' MINIMUM, MEASURED INSIDE-TO-INSIDE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
4. WATERLINE CROSSING OVER ANY SEWER SHALL HAVE A MINIMUM 18" VERTICAL CLEARANCE BETWEEN THE PIPES. SEWER SHALL BE CENTERED EQUIDISTANT BETWEEN WATERLINE JOINTS. WHEN WATERLINE CROSSES UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER IS REQUIRED.
5. FITTINGS SHALL BE DUCTILE IRON, MECHANICAL JOINT.
6. FIRE HYDRANTS SHALL BE MANUFACTURED BY ONE OF THE FOLLOWING:
 - A. MUELLER SUPER CENTURION 200, OR
 - B. DARLING B-84-B, OR
 - C. CLOW MEDALLION, OR
 - D. DRESSER M&H STYLE 929 RELIANT.
7. FIRE HYDRANTS SHALL CONFORM TO THE FOLLOWING:
 - A. 5 .25" MAIN VALVE OPENING.
 - B. ONE 5" PUMPER WITH STORZ CONNECTION.
 - C. TWO 2.5" HOSE CONNECTIONS.
 - D. DAYTON STANDARD THREAD TYPE.
 - E. PENTAGON CAP AND OPERATING NUT SHAPE.
 - F. 1.5" TOP AND 1.5" BOTTOM OPERATING NUT.
 - G. LEFT OPEN (COUNTER-CLOCKWISE).
 - H. FINISH PAINT COLOR SHERWIN-WILLIAMS B54W102 INDUSTRIAL ENAMEL, MDTN.
 - I. 4'-6" BURY.
 - J. 6" MECHANICAL JOINT SHOE CONNECTION WITH DRAIN PORT (WATER TO DRAIN FROM BARREL WHEN HYDRANT IN CLOSED POSITION).
8. FIRE HYDRANTS SHALL HAVE THE PUMPER OPENING FACING THE STREET OR PARKING LOT WITH THE STORZ CONNECTOR INTEGRAL.
9. CENTERLINE OF THE PUMPER CONNECTION SHALL HAVE A CLEARANCE OF 18'-21" FROM FINISH GRADE.
10. FIRE HYDRANTS SHALL BE LOCATED NO CLOSER THAN 2' NOR MORE THAN 5' FROM THE BACK OF CURB OR EDGE OF PAVEMENT TO THE PUMPER CONNECTION.
11. FIRE HYDRANTS SHALL BE LOCATED AT THE DEAD END OF ALL WATER MAINS.
12. FIRE HYDRANTS SHALL BE INSTALLED WITH ANCHORING TEES AND ANCHORING PIPE. THE HYDRANT WATCH VALVE SHALL BE INSTALLED AT THE TEE, APPROXIMATELY 3' FROM THE HYDRANT, OR AS DIRECTED BY THE ENGINEER.
13. PLACE #57 WASHED GRAVEL AROUND BARREL DRAIN HOLES.
14. WATER VALVES 12" AND UNDER SHALL BE DUCTILE IRON, RESILIENT WEDGE GATE VALVE TYPE WITH MECHANICAL JOINTS.
15. WATER VALVES LARGER THAN 12" SHALL BE DUCTILE IRON, BUTTERFLY VALVE TYPE WITH MECHANICAL JOINTS.
16. WATER VALVES SHALL OPEN LEFT (COUNTER-CLOCKWISE).
17. WATER VALVES SHALL BE MANUFACTURED BY MEULLER, AMERICAN DARLING, CLOW, KENNEDY OR M&H.
18. RESTRAINTS SHALL BE CLASS 'C' CONCRETE THRUST BLOCKS OR MEGALUGS, AS MANUFACTURED BY EBAA.
19. PIPE BEDDING SHALL BE 4" MINIMUM OF #67 CRUSHED GRAVEL OR #8 CRUSHED GRAVEL, WHEN APPROVED BY THE ENGINEER. LIMESTONE AGGREGATE IS PROHIBITED.
20. NO SERVICE CONNECTIONS SHALL BE MADE TO THE WATER MAIN UNTIL THE MAIN HAS BEEN INSPECTED, HYDROSTATICALLY TESTED, DISINFECTED, PURITY TESTED AND RELEASED FOR TAPS.
21. SEE ENGINEERING STANDARDS FOR BACKFILL AND TRENCH DETAIL REQUIREMENTS.

WATER MAIN NOTES

DWG NO: **WT-1.1**

NOTE 1: DRAWING VALID ONLY WHEN USED AS SHOWN AND IN CONJUNCTION WITH OTHER FAIRBORN ENGINEERING SPECIFICATIONS AND/OR DETAILS. THIS DRAWING REPRESENTS MINIMUM STANDARDS. ANY MODIFICATIONS TO THIS DETAIL SHALL FIRST BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.

NOTE 2: CALL THE FOLLOWING AGENCIES AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATION:
O.U.P.S. AT 8-1-1 AND O.A.G.P.U.P.S. AT (800) 925-0988

ISSUE DATE: **03/14/2017**

ENG'R: **MAJ**

APPROVED: **DPO**

SCALE: **NONE**

FILE:



FAIRBORN
 A CITY IN MOTION

ENGINEERING DIVISION

44 W. HEBBLE AVENUE FAIRBORN, OHIO 45324
 PH: (937) 754-3055 FX: (937) 879-7395

REV NO.	REV DATE	REV DESCRIPTION	REV NO.	REV DATE	REV DESCRIPTION