

NOTES:

1. CONSTRUCTION OF IMPROVEMENTS SHALL BE IN ACCORDANCE WITH OAK LODGE WATER SERVICES (OLWS a.k.a. DISTRICT) DEVELOPER EXTENSION AGREEMENT (as applicable), DISTRICT STANDARD DETAILS AND THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, MOST CURRENT EDITION, AS ISSUED BY THE OR. STATE DEPT. OF TRANSPORTATION.
2. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED PRIOR TO CONSTRUCTION AND 48 HOURS ADVANCE NOTIFICATION OF THE LOCAL MUNICIPALITY, OLWS AND ALL AFFECTED UTILITY COMPANIES PRIOR TO THE ACTUAL START OF WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE PROVISIONS OF THE ROAD OPENING PERMIT AS ISSUED BY CLACKAMAS COUNTY.
4. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY, LOCATE AND PROTECT ALL UTILITIES WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING ANY UTILITIES DAMAGED DURING CONSTRUCTION. SHOW THESE UTILITIES ON THE AS-BUILTS. IF A UTILITY IS DAMAGED, CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANY IMMEDIATELY.
5. ALL MAINS, SERVICES, VALVES, FITTINGS, AND OTHER APPURTENANCES MUST BE INSPECTED BY A DISTRICT REPRESENTATIVE BEFORE BURIAL.
6. WATER MAIN TRENCH SECTION AND ALL EXCAVATED AREAS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE STANDARD DETAILS, WITH SECTION 01140.40 OF THE STANDARD SPECIFICATIONS, AND WITH CLACKAMAS COUNTY ROAD OPENING PERMIT. COMPACTION TESTING SHALL BE REQUIRED DURING BACKFILLING OPERATIONS WITHIN ALL ROADWAYS AND AT THE DISCRETION OF THE DISTRICT. IF TRENCH BACKFILL DOES NOT MEET COMPACTION REQUIREMENTS, CONTRACTOR SHALL EXCAVATE, RECOMPACT AND RETEST MATERIAL AT CONTRACTOR'S EXPENSE.
7. RESTORATION OF DAMAGED ROAD SURFACING SHALL BE IN ACCORDANCE WITH CLACKAMAS COUNTY'S REQUIREMENTS. ALL OTHER AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR AS DIRECTED BY THE DISTRICT. THIS INCLUDES SHOULDERS, LANDSCAPING, WALLS, FENCES, DRIVEWAYS, AND OTHER IMPROVEMENTS.
8. THE WATER MAIN SHALL BE INSTALLED WITH A MINIMUM OF 36" OF COVER. INSTALLATION OF MAIN WITH GREATER THAN 48" OF COVER SHALL BE ACCEPTABLE ONLY UNDER THE DIRECTION OF THE DISTRICT.
9. ALL VALVES AND FITTINGS MUST BE MECHANICALLY RESTRAINED BY MEGALUG OR ROMAGRIP JOINT RESTRAINING GLANDS. ALL BELL AND SPIGOT JOINTS MUST BE RESTRAINED BY FIELD LOK GASKETS OR APPROVED EQUAL.
10. A SANITARY GAP MUST BE PROVIDED BETWEEN THE EXISTING AND NEW WATER SYSTEMS. CONNECTION TO THE EXISTING WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR ONLY AFTER COMPLETING OF AN ACCEPTABLE HYDROSTATIC PRESSURE TEST AND THE PIPELINE IS DISINFECTED AND RECEIPT OF APPROVAL OF WATER QUALITY TEST RESULTS FROM THE TESTING LAB.
11. CONTRACTOR SHALL PERFORM PRESSURE TEST AT 180psl OR 1.5 TIMES THE NORMAL WORKING PRESSURE, WHICHEVER IS HIGHER, INCLUDING ON HYDRANTS AND SERVICE LINES. MAINLINE SHALL BE TESTED IN SECTIONS OF NO MORE THAN 1,500 FEET. PRESSURE SHALL BE MAINTAINED FOR 1 HOUR MINIMUM. ANY LEAKAGE IS UNACCEPTABLE.
12. A PIPE PLUG SHALL BE USED ON EACH JOINT DURING INSTALLATION TO PROTECT AGAINST FLOODING OF THE PIPE.
13. NO OTHER UTILITIES SHALL BE INSTALLED WITHIN 36" HORIZONTALLY OF ANY ACTIVE WATER LINE UNLESS OTHERWISE PRE-APPROVED BY THE DISTRICT.
14. CONTRACTOR SHALL POTHOLE A SUFFICIENT DISTANCE AHEAD TO VERIFY DEPTH OF ALL EXISTING WATER MAINS AND CROSSING UTILITIES PRIOR TO CONSTRUCTION AND CONNECTIONS AND TO ANTICIPATE ANY NECESSARY CHANGES IN FITTINGS OR ALIGNMENT.
15. A PROPOSED CONSTRUCTION DRAWING MUST BE SUBMITTED TO THE DISTRICT BEFORE WATER SERVICE WILL BE PROVIDED.
16. DEFLECTION AT PIPE AND FITTING JOINTS WILL BE ALLOWED UP TO 3.0" (11" OVER 18') OR AS RECOMMENDED BY MANUFACTURER, WHICHEVER IS LESS.
17. CONTRACTOR SHALL ONLY DISPOSE OF WASTE MATERIAL AT SITES APPROVED BY CLACKAMAS COUNTY. STOCKPILE MATERIALS ONLY ON DISTRICT APPROVED SITES.
18. **HATCH NOTE:** ALL VAULT HATCHES 2'x2' OR LARGER SHALL BE HINGED, SPRING ASSIST OPENING, INCLUDE RECESSED PADLOCK HASP, DRAINABLE FRAME (C OR U CHANNEL WITH PIPE CONNECTION), H2O RATED MINIMUM, ALUMINUM OR GALVANIZED STEEL. IF HATCH WILL BE LOCATED IN A TRAVELED AREA (ROAD OR DRIVEWAY), SUBMIT MANUFACTURER'S STATEMENT THAT HATCH IS RATED FOR CONTINUOUS AND DELIBERATE H2O TRAFFIC SERVICE. HATCHES SHALL BE CAST INTO VAULT LID OR RISER.
19. ALL PIPE 3" AND LARGER SHALL BE DUCTILE IRON (DI) MINIMUM CLASS 52 (12" AND SMALLER), EXCEPT WHERE TRENCH BACKFILL AND LOADING DICTATE A STRONGER CLASS PIPE OR IN AREAS WHERE PRESSURE EXCEEDS 150 PSI. ALL HYDRANT RUNS AND PIPING INSTALLED WITH MEGA-LUG TYPE JOINT RESTRAINTS SHALL BE DUCTILE IRON PIPE CLASS 52, NO EXCEPTIONS. PIPING INSTALLED WITHIN VAULTS OR OTHER EXPOSED AREAS SHALL BE DUCTILE IRON CLASS 53.
20. CASINGS SHALL BE NEW STEEL, HDPE OR PVC; MATERIAL AND WALL THICKNESS AT THE DISCRETION OF THE DISTRICT. PIPE THROUGH CASINGS SHALL BE SUPPORTED WITH RUNNERS SPACED NO FARTHER THAN 8 FEET APART. RUNNERS SHALL BE MANUFACTURED PRODUCTS (PSI, CALPICO, OR APPROVED EQUAL), NO BLOCKS AND STRAPS. CASING ENDS SHALL BE CAPPED WITH MANUFACTURED CASING END SEALS.
21. WATER MAINS AND SERVICES MUST BE INSTALLED A MINIMUM CLEAR DISTANCE OF 5 FEET HORIZONTALLY FROM SANITARY SEWERS.
22. CONTRACTORS WORKING WITHIN THE RIGHT OF WAY OR ON EXISTING DISTRICT INFRASTRUCTURE SHALL BE LICENSED, BONDED AND HAVE EXPERIENCE INSTALLING PUBLIC DOMESTIC WATER SYSTEMS AND BE PREPARED TO PRESENT EXAMPLES OF 5 SUCH PROJECTS UPON REQUEST BY THE DISTRICT.



**WATER SYSTEM STANDARD DRAWING**

WATER SYSTEM CONSTRUCTION NOTES

| NO. | REVISIONS  | DATE       | BY  |
|-----|------------|------------|-----|
| 1   | MISC NOTES | 02/18/2020 | HSO |
| 2   |            |            |     |
| 3   |            |            |     |
| 4   |            |            |     |

DRAWING NO.

401

DATE: 9/12/2017

SCALE: NTS