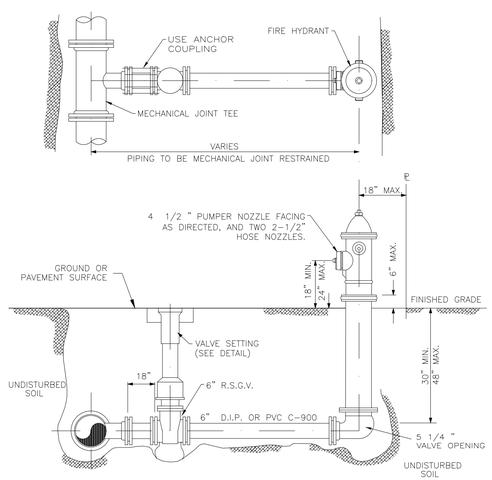



NOTES:

1. BACKFILL MATERIALS SHALL CONSIST OF CLEAN EARTH FILL COMPRISED OF SAND, SAND AND CLAY, GRAVEL, CRUSHED ROCK OR OTHER MATERIALS FROM GROUPS A-1, A-2 OR A-3, AASHTO CLASSIFICATION, FREE FROM ORGANIC MATTER AND VEGETATION, DEBRIS LARGE CLODS OF EARTH OR STONES, UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS, LARGE ROCK AND ROOTS SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR.
2. THE PIPE SHALL BE FULLY SUPPORTED ALONG ENTIRE LENGTH.
3. THE PIPE TRENCH SHALL REMAIN DRY DURING PIPE LAYING OPERATIONS.
4. ALL TRENCH WORK SHALL CONFORM TO LATEST STANDARDS AS SET FORTH BY THE FLORIDA TRENCH SAFETY ACT AND OR OSHA.
5. FOUR INCH WIDE DETECTABLE TAPE SHALL BE PLACED APPROXIMATELY 12"-18" BELOW FINISHED GRADE AND DIRECTLY ABOVE ALL PRESSURE PIPING. TAPE, WORDING AND COLOR SHALL CONFORM TO CITY STANDARDS.
6. BACKFILL SHALL BE COMPACTED IN 6" LAYERS WITH MECHANICAL TAMPERS FOR THE FULL WIDTH OF THE TRENCH AND UP TO THE BOTTOM OF THE ROADWAY BASE. PARTICULAR ATTENTION MUST BE GIVEN TO THE ADEQUATE COMPACTION OF THE HAUNCHES OF THE PIPE. THE BACKFILL SHALL BE COMPACTED TO 98% AASHTO T-180/ASTM D 1557 TAKEN AT THE SPRING LINE, AT ONE FOOT ABOVE THE CROWN OF THE PIPE, AND EVERY FOOT VERTICALLY THEREAFTER.
7. BASE MATERIAL SHALL BE THE SAME TYPE AS THE MATERIALS REMOVED.
8. SURFACE REPLACEMENT SHALL BE F.D.O.T. MIX TO MATCH EXISTING PAVEMENT, WITH A THICKNESS EQUAL TO THE EXISTING OR 2" WHICHEVER IS GREATER.
9. PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED BUTT JOINTS, HEATED, RAKED AND SPRAYED WITH A REJUVENATING AGENT. THE PATCH AREA SHALL BE A SMOOTH PLANE SUCH THAT A STRAIGHT EDGE PLACED ACROSS THE PATCH, PARALLEL TO THE TRAFFIC FLOW AND EXTENDING TO UNDISTURBED PAVEMENT SHALL SHOW NO MORE THAN 1/4" IRREGULARITY IN ANY 15 FT. SECTION. ANY IRREGULARITY SHALL BE CORRECTED IN ACCORDANCE WITH F.D.O.T. SPECIFICATIONS.
10. "COLD PATCH" SHALL BE USED FOR TEMPORARY REPAIRS ONLY, AND FOR A PERIOD NOT TO EXCEED 30 DAYS.
11. TRAFFIC LANE CLOSURES, MOT PLANS AND ROADWAY REPAIRS MATERIALS SHALL BE PER DIRECTION OF ROAD OWNER. CONTRACTOR TO INQUIRE WITH OWNER ABOUT REQUIREMENTS PRIOR TO BID.
12. 3M LOCATOR BALLS SHALL BE INSTALLED AT EACH FITTING IN THE PIPE LINE CHANGING DIRECTION AND AT EACH CONNECTION.
13. 3M LOCATORS TO BE PROVIDED BY DEVELOPER AS SPECIFIED BY O.U.A.

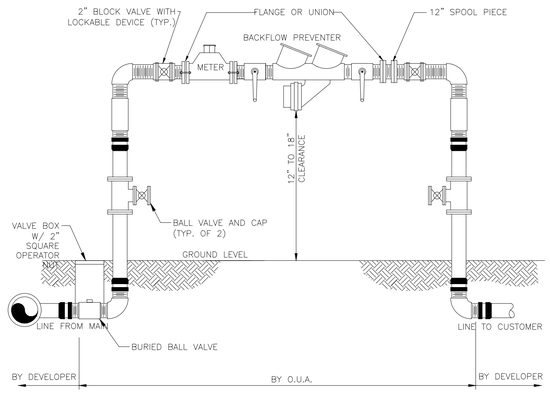
TRENCH REPAIR DETAILS PAVED AREAS | 10/15 | OUA #13C | N.T.S. | NEWLINES




NOTES:

1. HYDRANT SHALL BE INSTALLED PLUMB AND TRUE.
2. THE MODEL COLOR TO BE SAFETY YELLOW, HYDRANT SHALL BE PER OUA REQUIREMENTS.
3. VALVE SHALL BE PLACED ADJACENT TO MAIN, TIED TO TEE.
4. ANCHOR TEES ARE PERMITTED.
5. ALL HYDRANTS SHALL BE TEE'D OFF MAINS.
6. HYDRANTS SHALL NOT BE PLACED IN SIDEWALKS, ROADWAYS OR BIKEPATHS.
7. MEGALUGS ON ALL FITTINGS.
8. HYDRANTS SHALL BE BAGGED UNTIL SYSTEM IS PLACED IN SERVICE.

TYPICAL FIRE HYDRANT ASSEMBLY | 10/15 | OUA #11 | N.T.S. | NEWLINES




NOTES:

1. ALL PIPING IS METER SIZE.
2. ALL PIPING IS BRASS WITH THREADED FITTINGS.
3. THIS DETAIL IS ALSO APPLICABLE TO 5/8" x 3/4" AND 1" SERVICE WHERE A BACKFLOW PREVENTION DEVICE IS REQUIRED, EXCEPT THAT METER WILL BE INSTALLED IN METER BOX.
4. METERS AND BACKFLOW PREVENTERS ARE TO BE PURCHASED FROM OUA.

1 1/2 " AND 2" METER/BACKFLOW ASSEMBLY (ABOVE GROUND) | 10/15 | OUA #3 | N.T.S. | NEWLINES

ALL CONCRETE TO BE CLASS 'B' 3500 PSI
(UNLESS OTHERWISE NOTED)

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

| OTHER PIPES | HORIZONTAL SEPERATION | CROSSING (1) | JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED) |
|---|---|---|---|
| STORM SEWER, STORMWATER FORCE MAIN, RECLAIM WATER (2) | WATER MAIN<br>3 FT. MINIMUM | WATER MAIN<br>12 INCHES IS THE MINIMUM EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED | ALTERNATE 3 FT. MINIMUM<br>WATER MAIN |
| VACUUM SANITARY SEWER | WATER MAIN<br>10 FT. PREFERRED<br>3 FT. MINIMUM | WATER MAIN<br>12 INCHES PREFERRED<br>6 INCHES MINIMUM | ALTERNATE 3 FT. MINIMUM<br>WATER MAIN |
| GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCEMAIN RECLAIM WATER (4) | WATER MAIN<br>10 FT. PREFERRED<br>6 FT. MINIMUM (3) | WATER MAIN<br>12 INCHES IS THE MINIMUM EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED | ALTERNATE 6 FT. MINIMUM<br>WATER MAIN |
| ON-SITE SEWAGE TREATMENT & DISPOSAL | 10 FT. MINIMUM | --- | --- |

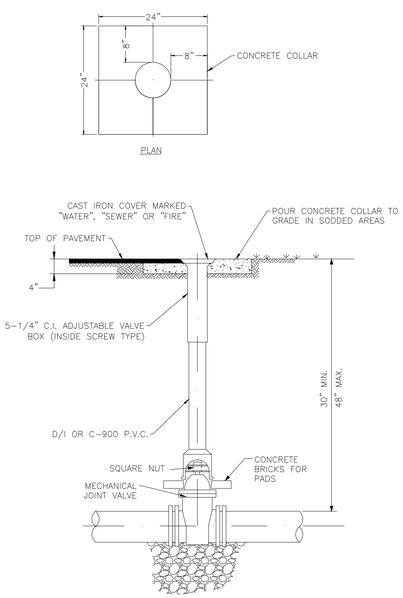
FAC RULE 62-555.314 NOTES:

1. WATERMAIN TO CROSS OVER CONFLICT PIPES WHEREVER POSSIBLE, MAINTAINING 30 INCHES COVER AND 6 INCHES SEPARATION AS MINIMUMS. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MIN. SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPER 62-610, F.A.C.
3. 3 FT FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

NOTES:

A. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE WITH 6 INCHES VERTICAL SEPARATION AND MAINTAIN 30 INCHES COVER TO FINISHED GRADE.
B. FITTINGS SHALL BE RESTRAINED WITH MECHANICAL RESTRAINTS (MEGALUG), IN ACCORDANCE WITH OUA STANDARD DETAILS.
C. THE DEFLECTION TYPE CROSSING IS PREFERRED.
D. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
E. MECHANICALLY RESTRAIN ALL FITTINGS, AS PER MANUFACTURERS RECOMMENDATION AND OUA STANDARD DETAILS.

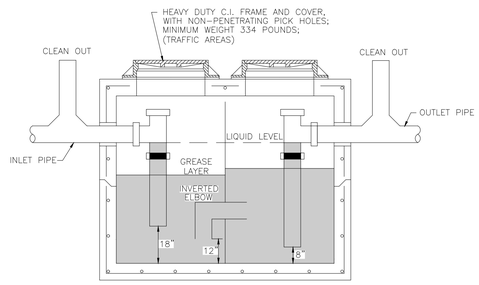
WATER MAIN – SANITARY SEWER CONFLICT | 10/15 | OUA #16 | N.T.S. | NEWLINES




NOTE:

VALVE NUT EXTENSION IS REQUIRED ON ALL VALVES WITH MORE THAN 36" OF COVER. EXTEND NUT TO WITHIN 18" OF VALVE BOX RIM. PROVIDE SOLID BRICK PAD FOR VALVE BOX TO SIT ON.

TYPICAL VALVE SETTING | 10/15 | OUA #12 | N.T.S. | NEWLINES




NOTES:

1. ALL PIPING SHALL BE A MINIMUM OF 4"
2. PIPING SHALL BE INSTALLED USING A CONCRETE MANHOLE ADAPTER.
3. SANITARY "T" OUTLET SHALL BE INSTALLED 4" INSIDE OF WALL.
4. TANK SHALL BE A MINIMUM OF 1000 GALLONS.
5. TANK SHALL BE TRAFFIC BEARING AND CONCRETE SHALL COMPLY WITH ASTM C 478, LATEST REVISION.
6. WALLS & BOTTOM SLABS SHALL BE MINIMUM 4" THICK REINFORCED CONCRETE.
7. TOP SLAB SHALL BE A MINIMUM 6" THICK REINFORCED CONCRETE.
8. SECTIONS SHALL BE JOINED AND SEALED WITH MINIMUM 1 29/64 " "RAM-NEK" SEALER OR EQUIVALENT TO FORM A WATER TIGHT SEAL.
9. RISER JOINTS SHALL COMPLY WITH ASTM C 443, LATEST REVISION.
10. TANK SIZING SHALL BE PER O.U.A. REQUIREMENTS.
11. COVER TO BE SEATED OR USE RAIN GUARDS.
12. NO DOMESTIC WASTE THROUGH GREASE TRAP.

GREASE, OIL AND SAND INTERCEPTER | 10/15 | OUA #49 | N.T.S. | NEWLINES

| | | | |
|---|---|---|---|
| 4/20/26 | REVISED GRADING PER FDOT MODIFICATIONS | TL | PDC |
| 1/08/26 | REVISED PER WWTP SITE | TL | GL |
| 8/29/23 | REVISED PER CONTRACTOR COMMENTS | TL | PDC/JQ |
| 8/2/23 | REVISED WETLAND GRADIENT AND IMPERMEABLE BARRIERS COMMENTS | TL | PDC |
| 7/5/23 | REVISED PER SFWMD LETTER COMMENTS DATED 6/26/23 | TL | PDC/CC |
| 4/25/23 | REVISED AS PER COUNTY LETTER DATED 4/25/23 | SLD | JCS/AA |
| DATE | DESCRIPTION | ENGINEER | CAD |

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# UTILITIES NOTES & DETAILS

## PHASE 1 - COMMERCIAL AREAS

LOCATED IN SECTIONS 34&35, TOWNSHIPS 38&39 SOUTH, RANGE 34 EAST, GLADES COUNTY, FLORIDA

NEWLINES LAND CONSULTANTS
STEVEN L. DOBBS, P.E.
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00029206
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| | |
|---|---|
| PROJECT No. | 21534 |
| DRAWN BY | YB/MB |
| SCALE | NTS |
| DATE | 4/28/2026 |
| SHEET No. | 17 OF 21 |

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