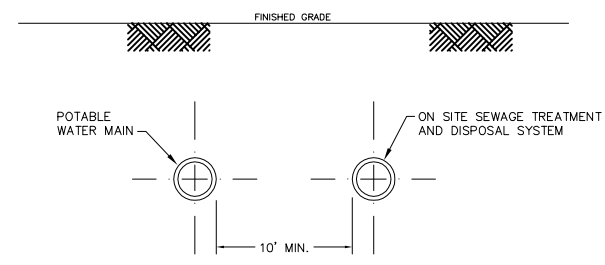


HORIZONTAL CLEARANCE

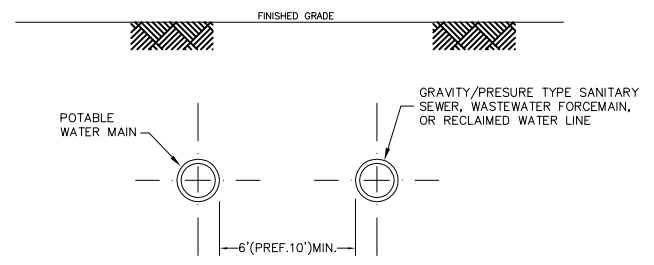


HORIZONTAL CLEARANCE

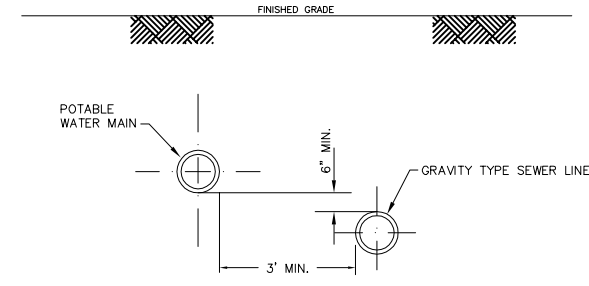
UTILITY HORIZONTAL SEPARATION

DETAIL No.III-22
REVISED SEPT. 2004

NOTE: SEE DETAIL No. III-24 FOR EXCEPTIONS
REFERENCE FLORIDA ADMINISTRATION CODE (FAC)
62-555.314 (1)(a, b & d), 8/28/03
NOT TO SCALE



HORIZONTAL CLEARANCE

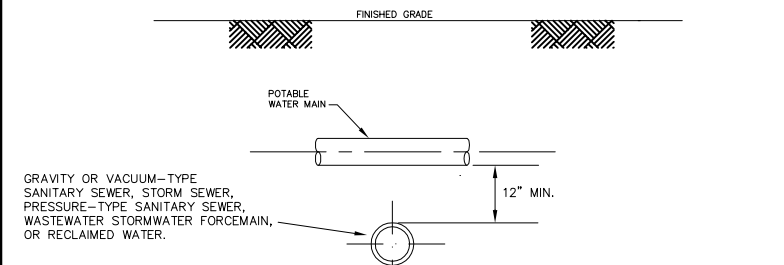


HORIZONTAL CLEARANCE

UTILITY HORIZONTAL SEPARATION

DETAIL No.III-23
REVISED SEPT. 2004

NOTE: SEE DETAIL No. III-24 FOR EXCEPTIONS
REFERENCE FLORIDA ADMINISTRATION CODE (FAC)
62-555.314 (1) (c), 8/28/03
NOT TO SCALE



Note:
1. At the utility crossings listed above, one full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, storm water force mains, or pipelines conveying reclaimed water and at least six feet from all joints in gravity or pressure-type sanitary sewers, wastewater force mains or pipeline conveying reclaimed water.
2. Prefer water main laid over the other pipelines.

Reference Florida Administration Code (FAC)
62-555.314 (2)(a,b,c), 8/28/03

UTILITY CROSSING VERTICAL SEPARATION

- EXCEPTIONS FOR ALL VERTICAL AND HORIZONTAL CLEARANCE REQUIREMENTS:
- Where it is not technically feasible or economically sensible to comply with the vertical and horizontal spacing requirements, the following exceptions shall be allowed if technical or economic justification for each exception is provided to the County's Department of Public Works Utilities Division:
 - Use pressure-rated pipe conforming to the AWWA standards for other pipeline if it is a gravity- or vacuum-type pipeline; or
 - Use welded, fused, or otherwise restrained joints for either the water main or the other pipeline; or
 - Use watertight casing pipe for either the water main or the other pipeline.
 - Where an underground water main is being laid less than the three feet horizontally from another pipeline and where an underground water main is crossing another pipeline and is being laid less than the required minimum vertical distance from the other pipeline:
 - Use pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25 inch-thick ductile iron pipe) for the water main; and
 - Use pipe or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25 inch-thick ductile iron pipe) for the other pipeline if it is new and is conveying wastewater or reclaimed water.

Reference Florida Administration Code (FAC)
62-555.314 (5) (a & b), 8/28/03

DETAIL No.III-24
REVISED SEPT. 2004
NOT TO SCALE

REFERENCE FLORIDA ADMINISTRATION CODE (FAC)
62-555.314 (1)(a,b,c), 8/28/03

ALL BORES LARGER THAN 6" TOTAL (FOR EXAMPLE 2-4 INCH, 7 INCH, 3-3 INCH) MUST BE APPROVED BY THE STATE UTILITY ENGINEER, UNLESS THE DISTRICT MAINTENANCE OR CONSTRUCTION OFFICE CAN ESTABLISH COMPLIANCE BASED ON THE FOLLOWING CONDITIONS:

- THE UTILITY BORE DEPTH WILL EQUAL OR EXCEED 10 TIMES THE BORE SIZE WHEN THE UTILITY WILL BE INSTALLED UNDER FDOT PAVEMENT, OR
- WHEN INSTALLATIONS ARE OUTSIDE OF THE PAVEMENT AREA, THE OFFSET PARALLEL TO THE PAVEMENT MUST BE AT LEAST 3.5 TIMES THE BORE SIZE, OR
- THE SOILS BLOW COUNT IS AT LEAST 30 BLOWS PER FOOT BASED ON STANDARD PENETRATION TESTS IN THE AREA OF INSTALLATION.
- NEW BORE INSTALLATIONS MUST MAINTAIN AT LEAST 3.5 TIMES THE BORE SIZE CLEARANCE FROM VITRIFIED CLAY PIPE SANITARY AND ANY GAS LINES.
- PERMIT MUST DEMONSTRATE THE LOCATION (VERTICAL AND HORIZONTALLY) AND TYPE OF ALL UTILITIES WITHIN AT LEAST 3.5 TIMES THE BORE SIZE IN THE IMMEDIATE VICINITY OF THE PROPOSED WORK BY THE PERMITTEE.

IF THE PERMITTEE CAN COMPLY WITH THE ABOVE, THERE IS NO NEED FOR THE STATE UTILITY ENGINEER TO REVIEW THE PERMIT. IF COMPLIANCE CAN NOT BE ACHIEVED, BEFORE A REVIEW CAN BE CONDUCTED, INFORMATION REGARDING THE SOILS IN THE AREA OF THE INSTALLATION MUST BE ACQUIRED. THIS MUST INCLUDE BLOW COUNTS AT LEAST THROUGH A DEPTH OF 10 TIMES THE BORE OR 2 FEET INTO A STRATA PROVIDING A BLOW COUNT OF 30 OR MORE. IF A BLOW COUNT OF 30 IS REACHED AT A DEPTH OF 4 FEET THEN THE SOILS DATA NEED ONLY PROCEED TO A DEPTH OF 6 FEET. AS AN OPTION TO ACQUIRING GEOTECH SERVICES, THE PERMITTEE MAY USE FDOT SOILS DATA FROM OLD FDOT PLANS WHEN AVAILABLE. IT IS THE PERMITTEES RESPONSIBILITY TO ACQUIRE THIS INFORMATION, AND NOT THE FDOT TO DO THE RESEARCH.

DO NOT SEND ANY PERMITS TO THE STATE UTILITY ENGINEER TO SIGN OFF ON. WHEN THE PERMITS ENGINEER GETS THE REQUIRED DATA, HE OR SHE SHOULD CALL TO EXPLAIN THE SITUATION. THE SITUATION MAY BE ADDRESSED OVER THE PHONE AND THE DISTRICT SUPPLIED WITH AN APPROVAL OR CONDITIONAL RESPONSE VERBALLY. THE DISTRICT WILL RECEIVE WRITTEN FOLLOW UP BY E-MAIL WITHIN 48 HOURS IF IT IS REQUESTED.

FDOT DIRECTIONAL BORING REQUIREMENTS

DETAIL No.III-25

SURVEY BY:
F.B. NO.:
PGS.:
DESIGN BY:
PROJECT ENGR.:
CHECKED BY:
DATE:

CITRUS COUNTY
DEPARTMENT OF WATER RESOURCES
UTILITIES DIVISION

1300 S. LECANTO HWY.
LECANTO, FLORIDA 34461
(352) 527-7650

NO.	DATE	REVISION	APP'D. BY
0	7/23/04	ORIGINAL ISSUE DATE	

AUTHORIZED BY:

DATE _____

REGISTERED ENGINEER NO. _____
STATE OF FLORIDA
DATE _____

TYPICAL DETAILS

SCALE: _____
DATE: _____
PLAN SET: _____
FILE NAME: _____
SEC xx TWP:xx RGE:xx
SHEET **DT-5**