1. MINIMUM 10 FEET HORIZONTAL DISTANCE BETWEEN WATER AND SEWER LINES.
2. MINIMUM 18 INCHES VERTICAL DISTANCE BETWEEN WATER AND SEWER LINES.
3. WHERE WATER AND SANITARY SEWER LINES CROSS, THE WATER MAIN SHALL BE 18-INCHES ABOVE THE SEWER. IF THE SEWER MUST BE ABOVE THE WATER MAIN THE SEWER SHALL BE AT LEAST 18-INCHES ABOVE AND ENCASED IN CONCRETE A MINIMUM OF 10' ON EACH SIDE OF THE WATER MAIN. JOINTS SHALL BE SPACED TO PROVIDE MAXIMUM DISTANCE FROM CROSSING.
4. WHERE SANITARY SEWER MAINS CROSS STORM DRAINS, MINIMUM 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED.
5. THE MINIMUM COVER OVER WATER AND SEWER LINES SHALL BE 4 FEET.
6. SANITARY SEWERS SHALL BE LOCATED OUTSIDE OF PAVED AREAS WHERE PRACTICAL. LOCATING SANITARY SEWERS IN PAVED AREAS WILL ONLY BE ALLOWED WHEN NO OTHER ALTERNATIVE EXISTS. BORE UNDER EXISTING ROADWAYS WHERE POSSIBLE TO PREVENT PAVEMENT DAMAGE.
7. ALL ELEVATION DATA SHALL BE REFERENCED TO MEAN SEA LEVEL (MSL) AND SURVEY HORIZONTAL DATA SHALL BE REFERENCED TO STATE-PLANE COORDINATE SYSTEM INCLUDING ALL PROPOSED MANHOLES.
8. A LEGIBLE PROJECT LOCATION MAP SHALL BE PROVIDED ON THE DRAWINGS.
9. THE COUNTY PUBLIC WORKS AND UTILITIES DEPARTMENT SHALL BE FURNISHED 6 INITIAL SETS OF PRELIMINARY DRAWINGS FOR REVIEW PRIOR TO PERMIT BEING ISSUED.
10. PLANS REQUIRING SANITARY SEWER MAIN CONSTRUCTION SHALL BE STAMPED BY PROFESSIONAL ENGINEER OR REGISTERED LAND SURVEYOR.
11. THE FOLLOWING FEES SHALL BE PAID PRIOR TO PLAN APPROVAL:
    A.) $50.00 PLAN REVIEW FEE MIN
    B.) $2.00 PER LINEAR FOOT SEWER MAIN INSPECTION FEE.
12. DRAWINGS REQUIRING WATER OR SANITARY SEWER MAIN CONSTRUCTION SHALL BEAR THE FOLLOWING NOTES:

    THE HALL COUNTY PUBLIC WORKS AND UTILITIES DEPARTMENT SHALL BE NOTIFIED 24 HOURS PRIOR TO ANY WATER OR SANITARY SEWER LINE CONSTRUCTION OR REPAIRS. ONLY CONTRACTORS APPROVED BY HALL COUNTY PUBLIC WORKS AND UTILITIES DEPARTMENT WILL BE ALLOWED TO PERFORM CONSTRUCTION OR REPAIRS CONNECTED TO SAID SANITARY SEWER MAINS. CALL THE CONSTRUCTION INSPECTOR'S OFFICE AT (770) 531-6800 PRIOR TO BEGINNING ANY CONSTRUCTION, OR TO APPLY TO BECOME AN APPROVED CONTRACTOR.

    ALL SANITARY SEWER MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH HALL COUNTY "STANDARD SPECIFICATIONS FOR SANITARY SEWERS", LATEST EDITION.

    THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A MARKED-UP SET OF DESIGN DRAWINGS SHOWING ALL "AS-BUILT CONDITIONS". THESE "RECORD DRAWINGS" SHALL BE MADE AVAILABLE TO THE DESIGNER AND THE COUNTY INSPECTOR UPON REQUEST. THE MARK-UPS SHALL BE AT THE SITE AT ALL TIMES AND SHALL BE UTILIZED TO DEVELOP FINAL RECORD DRAWINGS. FINAL ACCEPTANCE OF SEWER MAIN CONSTRUCTION WILL NOT BE GRANTED UNTIL AS-BUILT DRAWINGS HAVE BEEN RECEIVED BY HALL COUNTY PUBLIC WORKS AND UTILITIES OFFICE.

13. THE FOLLOWING NOTE SHALL APPEAR ON THE FINAL PLAT AND/OR AS-BUILT DRAWING:

    OWNERS DEDICATION CERTIFICATE
    HALL COUNTY, GEORGIA
    THE OWNER OF THE LAND SHOWN ON THIS PLAT AND WHOSE NAME IS SUBSCRIBED THERETO, AND IN PERSON OR THROUGH A DULY AUTHORIZED AGENT, ACKNOWLEDGES THAT THIS PLAT WAS MADE FROM AN ACTUAL SURVEY AND DEDICATED TO HALL COUNTY FOREVER, ALL SANITARY SEWERS, EASEMENTS, AND ASSOCIATED APPURTENANCES THEREON SHOWN.

    OWNER_____
    DATE _____

14. DESIGN PROFESSIONALS ARE REQUIRED TO USE THE LATEST EDITION OF THE HALL COUNTY STANDARD DETAILS WHEREVER APPLICABLE. COPIES OF THE STANDARD DETAILS ARE INCLUDED AS PART OF THIS DOCUMENT.
15. TWO SETS OF PRINTS AND ONE CD, AUTOCAD LATEST RELEASE, OF THE RECORD DRAWINGS SHALL BE FURNISHED TO THE PUBLIC WORKS AND UTILITIES DEPARTMENT AFTER CONSTRUCTION IS COMPLETED. BUILDING SERVICE STUB-OUTS SHALL BE MEASURED FROM MANHOLES AND THE LENGTH THE STUB-OUT EXTENDS FROM THE SEWER LINE SHALL BE PROVIDED. SEWER FORCE MAIN VALVES SHALL BE MEASURED FROM HYDRANTS, VALVE MONUMENTS, OR OTHER PERMANENT STRUCTURES. A MINIMUM OF THREE HORIZONTAL MEASUREMENTS PER VALVE WILL BE REQUIRED.
16. NO TREES SHALL BE LOCATED WITHIN PERPETUAL SEWER EASEMENTS. THE COUNTY'S TREE PROTECTION ORDINANCE SHALL BE CONSIDERED AND ADDRESSED BY THE PROJECT OWNERS, DESIGNERS, AND CONTRACTORS AS IS APPLICABLE.
17. CONTRACTORS ARE REQUIRED TO POSSESS A BUSINESS LICENSE TO WORK WITHIN THE APPLICABLE JURISDICTION. PROOF OF SAID LICENSE AND ALL OTHER APPLICABLE PERMITS (EROSION CONTROL, DOT, ETC) SHALL BE ON THE JOB SITE.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

REVISED: JULY 2017	HALL COUNTY PUBLIC WORKS & UTILITIES ENGINEERING DIVISION	STANDARD GN-1

SANITARY SEWER

1. A 30'-0" PERMANENT, RECORDED, EASEMENT SHALL BE REQUIRED ON ALL 8-INCH THROUGH 18-INCH DIAMETER SANITARY SEWERS WITH UP TO 20' - 0" OF COVER AND A 40' - 0" PERMANENT, RECORDED EASEMENT SHALL BE REQUIRED IF COVER IS OVER 20' - 0". A 40' - 0" PERMANENT, RECORDED EASEMENT SHALL BE REQUIRED ON ALL 24-INCH AND LARGER DIAMETER SEWERS REGARDLESS OF DEPTH OF COVER. THE SEWER SHALL BE ON THE CENTERLINE OF THE EASEMENT AND NO BUILDINGS OR OTHER STRUCTURES SHALL BE BUILT WITHIN EASEMENTS. EASEMENTS SHALL BE SHOWN ON ALL PLANS INCLUDING LANDSCAPE PLAN. ALL SANITARY SEWER EASEMENTS SHALL BE FULLY EXECUTED PRIOR TO PLAN APPROVAL.

2. DEVELOPMENTS REQUIRING INSTALLATION OF PUBLIC SEWER MAINS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE REQUIRED TO SIGN AND RECORD A "FACILITIES DEDICATION" FORM PRIOR TO PLAN APPROVAL.

3. PROPOSED SANITARY SEWER FLOWS SHALL BE SUBMITTED PRIOR TO PLAN APPROVAL TO DETERMINE IF ALL DOWNSTREAM WASTEWATER FACILITIES INCLUDING WASTEWATER TREATMENT PLANT, GRAVITY SANITARY SEWER LINES, AND WASTEWATER PUMPING STATIONS SHALL HAVE ADEQUATE CAPACITY FOR FUTURE WASTEWATER FLOWS FROM PROPOSED DEVELOPMENT.

4. ALL STREAM BUFFER ENCROACHMENT VARIANCES SHALL BE OBTAINED FROM GEORGIA ENVIRONMENTAL PROTECTION DIVISION AND/OR U.S. ARMY CORPS OF ENGINEERS PERMIT PRIOR TO PLAN APPROVAL.

5. MINIMUM SLOPE FOR 8-INCH AND LARGER GRAVITY SANITARY SEWER PIPE SHALL BE 0.50%, THE MAXIMUM SLOPE SHALL BE 15.0%.

6. GRAVITY SANITARY SEWER PIPE MATERIAL SHALL BE SDR 26 PVC UNLESS DEPTH OF COVER IS 20' OR GREATER, LESS THAN 4', OR THE SEWER IS TO BE LAID IN FILL AREA. IN THESE CASES, THE PIPE SHALL BE DUCTILE IRON, CLASS 50 WITH POLYBOND PLUS OR PROTECTO 401 INTERIOR COATING.

7. BEDDING FOR SANITARY SEWERS SHALL BE CLASS B OR GREATER.

8. SANITARY SEWAGE FORCE MAINS SHALL BE DUCTILE IRON PIPE, CLASS 50 WITH POLYBOND PLUS OR PROTECTO 401 INTERIOR COATING

9. SERVICE LATERAL PIPE MATERIAL SHALL BE SDR 26 PVC, AS REQUIRED.

10. CLEANOUTS SHALL BE PLACED ON ALL BUILDING SERVICE LATERALS AT THE POINT AT WHICH COUNTY MAINTENANCE TERMINATES. THIS POINT SHALL BE THE CURB LINE, THE PROPERTY LINE, THE RIGHT OF WAY LINE, OR THE EASEMENT LINE AS APPLICABLE. CLEANOUTS SHALL BE 6-INCH AND HAVE A BRASS CAP. CLEAN-OUTS SHALL NOT BE PLACED IN PAVEMENT AREAS IF AT ALL POSSIBLE. IF IN GRASSED AREAS A 12"X12" SQUARE CONCRETE COLLAR 6" DEEP SHALL BE PLACED AROUND THE BRASS CAP AND BE EXPOSED.

11. ALL SERVICE LINES SHALL BE CONNECTED TO GRAVITY SEWER PIPE IF AT ALL POSSIBLE. IF CONNECTION TO MANHOLE IS REQUIRED, THEN, THE INVERT OF BUILDING SERVICE LINES SHALL BE PLACED AT OR ABOVE THE CROWN OF THE COUNTY SEWER BUT NOT TO EXCEED 2 FEET ABOVE THE CROWN OF THE COUNTY SEWER.

12. THE MINIMUM DIAMETER OF SANITARY SEWER PIPE SHALL BE 8-INCHES WITH THE EXCEPTION OF BUILDING SERVICE LATERALS THAT MAY BE 6-INCHES.

13. MANHOLES SHALL BE PLACED AT ALL CHANGES IN DIRECTION AND GRADE OF SANITARY SEWERS. MANHOLES SHALL BE SPACED SUCH THAT THE DISTANCE BETWEEN MANHOLES DOES NOT EXCEED 350 FEET. THE MINIMUM ANGLE BETWEEN LINES ENTERING AND EXITING A MANHOLE IS 90 DEGREES.

14. OUTSIDE DROP CONNECTIONS SHALL BE CONSTRUCTED AT MANHOLES ON ALL INFLUENT SEWERS WHERE THE INVERT ELEVATION IS GREATER THAN 2 FEET ABOVE THE INVERT ELEVATION OF THE EFFLUENT SEWER. OUTSIDE DROPS SHALL NOT EXCEED 10 VERTICAL FEET. SLOPE OF INCOMING PIPE INTO OUTSIDE DROP MANHOLE MAY NOT EXCEED 10%.

15. SEWAGE PUMPING STATIONS WILL NOT BE PERMITTED UNLESS THE DEVELOPER CAN DEMONSTRATE EXTREME HARDSHIP WOULD RESULT IF THE STATION WERE DENIED. PUMPING STATIONS WILL BE DISCOURAGED AND THEREFORE, ONLY PERMITTED ON A CASE BY CASE BASIS. ALL PUMPING STATIONS SHALL BE LOCATED ABOVE THE 100 YEAR FLOOD PLAIN AND OUT OF STORM DRAINAGE FLOW PATHS.

16. ALL SEWAGE PUMPING STATIONS SHALL HAVE AN AUXILIARY POWER SOURCE. ADDITIONALLY, THEY SHALL BE PROVIDED WITH A REMOTE OPERATION/ALARM SYSTEM COMPATIBLE WITH THE COUNTY'S EXISTING SYSTEM AND A POTABLE WATER SERVICE WITH A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTER.

17. PLANS AND PROFILES SHOWING ALL UTILITY AND PIPELINE CROSSINGS AS WELL AS EXISTING AND PROPOSED GRADES SHALL BE PROVIDED FOR ALL SANITARY SEWERS. BUILDING SERVICES ARE EXEMPT.

18. SEWER MAINTENANCE ACCESS SHALL BE MAINTAINED ON ALL SANITARY SEWER EASEMENTS. MAINTENANCE ACCESS IS DEFINED AS ALIGNMENT GRADES, SOIL COMPACTION AND CROSS SLOPES THAT WILL ALLOW A SEWER JET TRUCK (WEIGHING APPROXIMATELY 50,000 LBS.) TO NAVIGATE EASILY. MAXIMUM GRADE SHALL NOT EXCEED 20% AND EASEMENT CONTOUR LINES SHALL BE SHOWN ON GRADING PLANS. MINIMUM OF 2' CONTOUR INTERVALS SHALL BE USED.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

STANDARD WATER & SEWER SEPARATION STATEMENT

LOCATION OF PUBLIC WATER SYSTEM MAINS

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS

(a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.

(b) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

(c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY- TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

(d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM".

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(a) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 18 INCHES, ABOVE OR AT LEAST 18 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(b) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(c) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (a) AND (b) 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, STORMWATER 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 PIPELINES CONVEYING RECLAIMED WATER.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

PRETREATMENT

1. PROJECTS REQUIRING PRE-TREATMENT SHALL BEAR THE FOLLOWING NOTE: "PRIOR TO INSTALLING THE PRE-TREATMENT DEVICE, CONTACT THE ENGINEERING INSPECTORS OFFICE AT 770-531-6800."

2. SAND TRAPS AND OIL SEPARATORS WITH SAMPLE STATION MANHOLES SHALL BE INSTALLED IN ALL SANITARY SEWER SERVICE LINES FROM SERVICE STATIONS, GARAGES, CAR WASHES, AND SIMILAR OPERATIONS. DOMESTIC SEWAGE SHALL NOT PASS THROUGH SAND TRAPS OR OIL SEPARATORS.

3. GREASE TRAPS AND SAMPLE STATION MANHOLES SHALL BE INSTALLED IN PROCESS WASTE LINES OF ALL SANITARY SEWER SERVICE LINES FOR COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL ESTABLISHMENTS WITH COMMERCIAL TYPE FOOD PREPARATION AREAS.

4. IF DUMPSTER PAD DRAINS ARE TO BE TIED TO THE SANITARY SEWER, A GREASE TRAP AND SAMPLE STATION MANHOLE SHALL BE PLACED BETWEEN THE PAD AND THE COUNTY SEWER. DOMESTIC WASTEWATER SHALL BE EXCLUDED FROM THE TRAP. FOOD PROCESS WASTE STREAMS MAY UTILIZE THE SAME TRAP IF SIZED APPROPRIATELY.

5. RAINWATER SHALL BE PREVENTED FROM ENTERING THE SANITARY SEWER AT ALL DUMPSTER PAD LOCATIONS AND DETAILED ON THE DRAWINGS.

6. GREASE TRAP AND OIL SEPARATOR DETAILS SHALL BE SHOWN ON THE PROJECT DRAWINGS AND SHALL BE APPROVED PRIOR TO INSTALLATION.

7. OIL SEPARATORS SHALL BE SIZED TO HANDLE TWO (2) TIMES THE AVERAGE FLOW RATE FOR THE PROJECT.

8. GREASE TRAPS SHALL BE ADEQUATELY SIZED FOR THE FLOW OF THE PROJECT. MINIMUM SIZE ALLOWED SHALL BE 1500 GALLONS.

9. SAMPLE STATION MANHOLES MAY BE REQUIRED ON ALL COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL SANITARY SEWER SERVICES. DOMESTIC SEWAGE SHALL NOT PASS THROUGH THE SAMPLE STATION MANHOLES.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

STANDARD WATER & SEWER SEPARATION STATEMENT

CONTINUED:

(5) EXCEPTIONS:

WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THE REQUIREMENTS IN SUBSECTION (1) OR (2) ABOVE, THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THESE REQUIREMENTS IF SUPPLIERS OF WATER OR CONSTRUCTION PERMIT APPLICANTS PROVIDE TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH EXCEPTION AND PROVIDE ALTERNATIVE CONSTRUCTION FEATURES THAT AFFORD A SIMILAR LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION. ACCEPTABLE ALTERNATIVE CONSTRUCTION FEATURES INCLUDE THE FOLLOWING:

a. WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUN HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE:

1. USE OF PRESSURE–RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS FOR THE OTHER PIPELINE IF IT IS A GRAVITY OR VACUUM–TYPE PIPELINE:
2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE: OR
3. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.

b. WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN 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:

1. USE OF 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) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER WATER MAIN; AND
2. USE OF 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) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

STANDARD WATER & SEWER SEPARATION STATEMENT

LOCATION OF PUBLIC WATER SYSTEM MAINS. FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.

(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

(C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED, THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY- TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST EIGHTEEN INCHES ABOVE THE TOP OF THE SEWER.

(D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM".

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST EIGHTEEN INCHES, ABOVE OR AT LEAST 18 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(C) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) 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, STORMWATER 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 PIPELINES CONVEYING RECLAIMED WATER.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

STANDARD WATER & SEWER SEPARATION STATEMENT

CONTINUED:

SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.

WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT IN ACCORDANCE WITH PART V OF THIS CHAPTER AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:

WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE:

USE OF PRESSURE–RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS, FOR THE OTHER PIPELINE IF IT IS A GRAVITY– OR VACUUM– TYPE PIPELINE; (2) USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE; OR (3) USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.

WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN 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:

(1) USE OF 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) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER

(2) USE OF 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) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

NOTES:

1. STANDARD STRUCTURE BOTTOMS 4'–0" DIAMETER AND SMALLER AND 3'–6" SQUARE ARE DESIGNATED TYPE P. LARGER STANDARD STRUCTURE BOTTOMS ARE DESIGNATED TYPE J. RISERS ARE PERMITTED FOR ALL STRUCTURES.
2. WALLS OF CIRCULAR STRUCTURES CONSTRUCTED IN PLACE MAY BE OF NON–REINFORCED CONCRETE OR BRICK OR REINFORCED CONCRETE. PRECAST AND RECTANGULAR STRUCTURES SHALL BE CONSTRUCTED OF REINFORCED CONCRETE ONLY.
3. WALL THICKNESS AND REINFORCEMENT ARE FOR EITHER REINFORCED CAST–IN–PLACE OR PRECAST CONCRETE UNITS EXCEPT THAT PRECAST CIRCULAR UNITS MAY BE FURNISHED WITH WALLS IN ACCORDANCE WITH EITHER A.S.T.M. C478 (UP TO 96" DIAMETER) OR A.S.T.M. C76, CLASS III, B WALL, MODIFIED WHERE THE ELLIPTICAL STEEL CAGE AREA IS PLACED IN THE CENTER ONE–THIRD OF THE WALL.
4. TOP AND FLOOR SLAB THICKNESS AND REINFORCEMENT ARE FOR PRECAST AND CAST IN PLACE CONSTRUCTION. TOP AND BOTTOM SLABS SHALL BE OF CLASS II CONCRETE. SPECIFIED IN A.S.T.M. CONCRETE AS C478 (4000 PSI) MAY BE USED IN LIEU OF CLASS I AND CLASS II CONCRETE IN PRECAST ITEMS MANUFACTURED IN PLANTS WHICH ARE UNDER THE "STANDARD OPERATING PROCEDURES" FOR THE INSPECTION OF PRECAST DRAINAGE PRODUCTS.
5. ALL REINFORCEMENT SHOWN IS A.S.T.M. A615/A615M GRADE 60 STEEL, SMOOTH OR DEFORMED. EQUIVALENT AREA GRADE 40 STEEL OR GRADE 65 KSI WELDED WIRE FABRIC MAY BE SUBSTITUTED.
6. STRUCTURE BOTTOMS MAY BE USED IN CONJUNCTION WITH CURB INLET TOPS AND ANY MANHOLE OR JUNCTION BOX UNLESS OTHERWISE SHOWN IN THE PLANS OR OTHER STANDARD DRAWINGS. RECTANGULAR STRUCTURE BOTTOMS MAY BE USED IN CONJUNCTION WITH ANY DITCH BOTTOM INLET UNLESS OTHERWISE SHOWN IN THE PLANS OR OTHER STANDARD DRAWINGS.
7. RECTANGULAR STRUCTURES MAY BE ROTATED AS DIRECTED BY THE ENGINEER IN ORDER TO FACILITATE CONNECTIONS BETWEEN THE STRUCTURE WALLS AND STORM SEWER PIPES.
8. EXCEPT WHEN ACI HOOKS ARE SPECIFICALLY REQUIRED, REINFORCEMENT TOP AND SLAB SHALL BE STRAIGHT EMBEDMENT.
9. ALL STEEL BARS SHALL HAVE 1–1/2" MINIMUM COVER UNLESS OTHERWISE SHOWN EXCEPT FOR PRECAST CIRCULAR UNITS MANUFACTURED UNDER ASTM C76 OR ASTM C478. HORIZONTAL STEEL IN RECTANGULAR STRUCTURES SHALL BE LAPPED A MINIMUM OF 24 BAR DIAMETERS.
10. THE CORNER FILLETS SHOWN ARE NECESSARY FOR RECTANGULAR STRUCTURES USED WITH CIRCULAR RISERS AND INLET THROATS AND USED ON SKEW WITH RECTANGULAR RISERS, INLET AND INLET THROATS. FILLETS WILL BE REQUIRED IN LIEU OF THE BOTTOM SLAB OF THE 3'–6" SQUARE RISER WHEN USED WITH THE CIRCULAR BOX. EACH FILLET SHALL BE REINFORCED WITH 2–#5 BARS.
11. INLET THROATS, RISERS, OR MANHOLE TOPS SHALL BE SECURED TO STRUCTURES AS SHOWN ON THE MANHOLE TOP DETAIL.
12. STRUCTURES WITH DEPTHS OVER 14' ARE TO BE CHECKED FOR FLOATATION BY DESIGNER.
13. FOR SQUARE OR RECTANGULAR PRECAST DRAINAGE STRUCTURES, EITHER DEFORMED OR SMOOTH WELDED WIRE FABRIC MAY BE USED PROVIDED:
    A) THE SMOOTH WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A–185, AND DEFORMED WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A–497.
    B) WIDTH AND LENGTH OF THE UNIT IS FOUR TIMES THE SPACING OF THE CROSS WIRES.
    C) WIRE FABRIC SHALL BE CONTINUOUS AROUND THE BOX, SPLICED AT QUARTER POINT(S) WITH OVERLAP OF NOT LESS THAN THE SPACING OF THE CROSS WIRES PLUS 2".
14. HORIZONTAL STEEL IN THE WALLS OF RECTANGULAR STRUCTURES SHALL BE LAPPED A MINIMUM OF 24 BAR DIAMETER.
15. WELDING OF SPLICES AND LAPS IS PERMITTED. THE REQUIREMENTS AND RESTRICTIONS PLACED ON WELDING IN AASHTO M–259 SHALL APPLY.
16. REBAR STRAIGHT END EMBEDMENT OR PERIPHERAL REINFORCEMENT MAY BE USED IN LIEU OF ACI STANDARD HOOKS FOR TOP AND BOTTOM SLABS EXCEPT WHEN HOOKS ARE SPECIFICALLY CALLED FOR IN PLANS OR STANDARD DRAWINGS.
17. CONCRETE AS SPECIFIED IN ASTM C–478, (4000 PSI) MAY BE USED IN LIEU OF CLASS I AND CLASS II CONCRETE IN PRECAST ITEMS MANUFACTURED IN PLANTS WHICH ARE UNDER THE 'STANDARD OPERATING PROCEDURES FOR THE INSPECTION OF PRECAST DRAINAGE PRODUCTS'.
18. MAXIMUM OPENING FOR PIPE SHALL BE THE PIPE OUTSIDE DIAMETER PLUS 6". MORTAR USED TO SEAL THE PIPE INTO THE OPENING WILL BE OF SUCH A MIX THAT SHRINKAGE WILL NOT CAUSE LEAKAGE INTO OR OUT OF THE STRUCTURE.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

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1. ALL OPENINGS IN MANHOLES & STRUCTURES SHALL BE SEALED WITH WATERPROOF NON-SHRINK GROUT, EXCEPT AS OTHERWISE INDICATED IN THE PLANS OR SPECIFICATIONS. NO BOOTS.

2. ALL VALVE BOXES, MANHOLE FRAMES AND COVERS ARE TO BE FLUSH WITH PROPOSED FINISHED GRADES OF WALKS, PAVEMENTS, SWALES, ETC. THEY SHALL HAVE CONCRETE PADS POURED IN UNPAVED AREAS, IN ACCORDANCE WITH VALVE, AIR RELEASE & MANHOLE SETTING DETAILS.

3. ALL PIPE SIZES 12" AND SMALLER TO BE DUCTILE IRON CLASS 50. LARGER THAN 12" ARE TO BE DUCTILE IRON CLASS 51. ALL PIPE GREATER THAN 24" TO BE GUAGED.

4. PRESSURE AND LEAKAGE TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE ENGINEER OR AN APPOINTED REPRESENTATIVE.

5. THE CONTRACTOR WILL PROVIDE ALL NECESSARY APPARATUS INCLUDING A PUMP, MEASURING DEVICE, PIPING CONNECTIONS, FITTINGS AND THE NECESSARY LABOR TO CONDUCT THE TEST.

6. THE TEST SHALL BE A MINIMUM 2 HOUR DURATION. DURING THE TEST, THE PIPE BEING TESTED SHALL BE MAINTAINED AT A PRESSURE OF NOT LESS THAN 150 psi FOR WATER MAINS AND 100 psi FOR FORCE MAINS. THERE SHALL NOT BE A LOSS OR GAIN OF MORE THAN 5 psi DURING THE TEST.

7. LEAKAGE IS DEFINED AS THE QUANTITY OF WATER ADDED TO THE PIPE AFTER THE TESTING PERIOD. NO PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE EXCEEDS THE QUANTITIES SPECIFIED IN AWWA C-600 SECTION 4.2.

8. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE PROPOSED TESTING PATTERN TO FOLLOW. THIS SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER TO THE CITY PRIOR TO TESTING. UNLESS APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL NOT TEST MORE THAN 1,500' OF THE PIPE IN A SINGLE TEST, AND ALL SERVICES MUST BE INSTALLED.

9. THE PUBLIC UTILITIES DEPARTMENT SHALL BE GIVEN A MINIMUM OF 48 HOURS NOTICE TO ENABLE THE UTILITY DEPARTMENT'S REPRESENTATIVE TO BE PRESENT FOR OBSERVATIONS.

10. TAPS SHALL NOT BE MADE CLOSER THAN 8" OR TWICE THE PIPE DIAMETER, WHICHEVER IS GREATER.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

1. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A BITUMASTIC COATING (2 COATS, 9 MILS EACH COAT DFT).

2. "RAMNEK" OR EQUAL AT ALL RISER JOINTS. NO MANHOLE OR LIFT STATIONS. 1/2" THICK WITH WIDTH AT LEAST HALF THE WALL THICKNESS OF NON-SHRINK WATER PROOF GROUT ON INSIDE AND OUTSIDE, OR TYPE II CEMENT.

3. ALL WETWELLS, MANHOLES WITH FORCE MAIN ENTERING AND VALVES VAULT SHALL BE COATED WITH 2 DIFFERENT COLOR COATS OF COAL TAR EPOXY ON OUTSIDE. THE INSIDE SHALL BE COATED WITH SPECTRA SHIELD LINING SYSTEM (U.S. PATENT #5618616) BY: CONCRETE CONSERVATION, INC., JACKSONVILLE, FL 32241-4354 TELEPHONE: (904) 268-4951

4. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" MINIMUM.

5. TYPE 316 STAINLESS STEEL SHALL BE USED IN THE WETWELL FOR BRACKETS, GUIDE RAILS AND ALL OTHER HARDWARE. FLANGE BOLTS SHALL BE GRADE 8 STEEL.

6. WETWELL SHALL BE CONSTRUCTED OF 6'-0" MAXIMUM LONG SECTIONS OF REINFORCED POURED IN PLACED OR PRECAST CONCRETE, IN ACCORDANCE WITH THE SPECIFICATIONS. WHENEVER POSSIBLE, NO OPENING SHALL BE WITHIN 12" OF THE END OF ANY SECTION.

7. PUMP ACCESS HATCH CONFIGURATION & DIMENSIONS SHALL BE CONFIRMED WITH EQUIPMENT SUPPLIER. DIMENSIONS SHOWN ARE MINIMUM VALUES ONLY.

8. PIPING, VALVES AND FITTINGS IN VALVE VAULT AREA SHALL BE SUFFICIENTLY SUPPORTED WITH POURED CONCRETE PEDESTALS.

9. STAINLESS STEEL WEDGE OR EPOXY ANCHORS TO BE USED.

10. INTERNAL DIAMETER OF WETWELL SHALL BE 6' MINIMUM. THE DEPTH OF WETWELL SHALL BE SIZED TO ALLOW PUMPS TO HAVE NO MORE THAN 6 STARTS PER HOUR EACH. THE INTERNAL DEPTH OF THE WETWELL SHALL BE 20' MAXIMUM.

11. CONTRACTOR SHALL PROVIDE ALL AS-BUILTS WITH POWER SUPPLY SHOWN, FROM SOURCE TO METER.

12. DIRECTIONALLY SLOPE EXPANSION JOINTS.

13. TOP OF WETWELL AND BOTTOM OF ELECTRICAL PANEL MUST BE PLACED AT AN ELEVATION 2 FEET MINIMUM GREATER THAN THE 100 YEAR FLOOD PLAN.

14. SITE PLAN FOR LIFT STATION IS FOR CONFORMITY ONLY. ENGINEER OF RECORD MUST SIZE WETWELL, VALVE VAULT & ELECTRIC PANEL. MINIMUM REQUIREMENTS FOR SITE ARE:

    A. DRIVEWAY APPROACH MUST BE 25' MINIMUM FOR A SERVICE TRUCK TO PARK COMPLETELY OUT OF THE TRAFFIC LANES PRIOR TO OPENING GATE AND TO ENTER STATION PROPERLY.

    B. THERE MUST BE A MINIMUM OF 4' CLEARANCE BETWEEN THE OPEN DOORS OF THE WETWELL AND VALVE VAULT, WETWELL AND ELECTRIC PANEL, ELECTRICAL PANEL AND FENCE. FENCE AND OPEN DOORS OF VALVE VAULT, ELECTRIC PANEL AND EDGE OF DRIVEWAY GATE, EDGE OF DRIVEWAY GATE AND OPPOSITE FENCE LINE.

GENERAL NOTES
(APPLICABLE TO MOST PUBLIC UTILITY DEPT. PROJECTS)

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