

C:\Users\mattg\OneDrive - SDA Engineering\Documents - SDA Engineering\Cad\Eng\1136A.00 Atlantic One - Pompano Mixed Use\1136B.01 Atlantic One\WS Details.dwg, 6/10/2024, 3:59:46 PM

GENERAL WATER AND SEWER NOTES

1. THE UTILITY PROVIDING WATER AND SEWER SERVICES TO THIS PROJECT IS THE CITY OF POMPANO BEACH UTILITY DEPARTMENT.
2. ALL APPLICABLE PERMITS MUST BE OBTAINED AND ALL APPLICABLE FEES AND CHARGES MUST BE PAID PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CITY OF POMPANO BEACH ENGINEERING AND UTILITY DEPARTMENTS, AS REQUIRED, ATTENDED BY THE CONTRACTOR, DEVELOPER'S ENGINEER, AND OTHER INTERESTED PARTIES PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES ON THE SITE A CURRENT SET OF APPROVED CONSTRUCTION PLANS. THE PLANS SHALL BE MADE AVAILABLE UPON REQUEST.
5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE APPROVED PLANS. APPROVAL OF DEVELOPMENT PLANS BY THE COUNTY, FDOT, OR LOCAL IMPROVEMENT DISTRICT IN NO WAY IMPLIES VERIFICATION OF THE ACCURACY OF THOSE PLANS OR FEATURES DEPICTED THEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES AND IMPROVEMENTS FROM DAMAGE, DISRUPTION OF SERVICE, OR DESTRUCTION AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES AND UTILITIES. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND ARE BASED ON SURVEY, AS-BUILT, AND/OR UTILITY MAP INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ANY AND ALL CONFLICTS WITH EXISTING UTILITIES SHALL BE REPORTED TO THE ENGINEER.
6. THE CONTRACTOR SHALL INFORM THE CITY OF POMPANO BEACH, BROWARD COUNTY, AND/OR FDOT AT LEAST 48 HOURS IN ADVANCE OF COMMENCING CONSTRUCTION AND/OR CONNECTING TO A FACILITY LOCATED IN THEIR RESPECTIVE JURISDICTIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS OF ALL PUBLIC AND PRIVATE UTILITIES, AND FOR CALLING SUNSHINE 811 AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING OF, AND PAYMENT FOR, SUCH TESTS AS MAY BE DEEMED NECESSARY BY THE DEVELOPER'S ENGINEER, CITY OF POMPANO BEACH, BROWARD COUNTY, FLORIDA DEPARTMENT OF TRANSPORTATION, OR FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND AS CALLED FOR IN THE PLANS AND SPECIFICATIONS.
9. CONSTRUCTION SHALL BE CARRIED OUT IN STRICT COMPLIANCE WITH THOSE STANDARDS ACCEPTED BY THE CITY OF POMPANO BEACH ENGINEERING AND UTILITY DEPARTMENT.
10. THE DEVELOPER'S ENGINEER SHALL MAKE SUFFICIENT CONSTRUCTION OBSERVATIONS OF THE WORK TO ENABLE HIM TO CERTIFY THE INSTALLATION AS BEING IN GENERAL CONFORMANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS.
11. THE CONTRACTOR SHALL COORDINATE ALL TESTING WITH THE CITY OF POMPANO BEACH ENGINEERING AND UTILITY DEPARTMENT, AS REQUIRED. THE DEVELOPER'S ENGINEER SHALL BE MADE AWARE OF ALL TESTING AND SHALL BE PRESENT TO WITNESS SUCH TESTING.
12. NO DEVIATION FROM APPROVED PLANS SHALL BE PERMITTED WITHOUT THE WRITTEN CONSENT OF THE DEVELOPER'S ENGINEER AND LOCAL UTILITY.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THESE PLANS WITH ANY PAVING AND DRAINAGE PLANS IN THIS AREA.

WATER SYSTEM NOTES

- PIPE D.I.P.

1. DUCTILE IRON WATER MAIN PIPE SHALL CONFORM TO THE REQUIREMENTS OF A.N.S.I./ A.W.W.A. C-151/A 21.51-02 AND LINED AND COATED PER A.N.S.I./A.W.W.A. C-104/A-214-03. 20" AND SMALLER PIPE SHALL BE PRESSURE CLASS 350; 24" AND LARGER, PIPE SHALL BE PRESSURE CLASS 250.

2. ALL DIP SHALL HAVE ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION AND IT SHALL BE USED ONLY IF AS DETERMINED BY THE DESIGN ENGINEER, BASED ON FIELD CONDITIONS.

3. ALL DIP SHALL BE INSTALLED IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C-600-99, OR LATEST REVISION.

4. ALL DIP POTABLE WATER PIPES SHALL BE COLOR CODED BLUE WITH BLUE STRIPES APPLIED TO THE PIPE WALL IN ACCORDANCE WITH CHAPTER 62-555.320 F.A.C. (FLORIDA ADMINISTRATIVE CODE)
- PIPE P.V.C.

5. ALL P.V.C. MAINS SHALL BE SERIES 1120, CLASS 150 (OR 18) PRESSURE PIPE, CONFORMING TO A.N.S.I./A.W.W.A. C-900-97, OR LATEST REVISION, AND SHALL HAVE PUSH ON JOINTS, AND IRON PIPE O.D.

6. ALL P.V.C. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION'S "GUIDE FOR INSTALLATION OF P.V.C. PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEM". WATER DISTRIBUTION PIPE SHALL BE OF "BLUE" COLOR. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 F.A.C. (FLORIDA ADMINISTRATIVE CODE).

7. DETECTOR TAPE ON ALL P.V.C. MAINS SHALL BE INSTALLED 18" ABOVE THE WATER MAIN.

8. ALL P.V.C. MAINS MUST HAVE #6 COPPER WIRE, SINGLE STRAND, PLACED ON TOP OF PIPE, SHALL BE ELECTRICALLY CONTINUOUS OVER THE ENTIRE LENGTH OF THE PIPE, AND FASTENED EVERY 10' WITH A #12 WIRE.

FITTINGS

9. FITTINGS SHALL BE DUCTILE IRON MEETING A.N.S.I./A.W.W.A. C153/21.00 AND SHALL BE COATED WITH 6 TO 8 MIL. THICKNESS COAL TAR EPOXY CONFORMING TO THE REQUIREMENTS OF A.N.S.I./A.W.W.A. C550-05 AND C116/A21.03.
10. RESTRAINED JOINT PIPE SHALL BE USED FOR ALL BENDS, TEES, CROSSES, PLUGS, AND FIRE HYDRANTS. THRUST BLOCKS SHALL NOT BE ALLOWED.
11. RETAINER GLANDS/MECHANICAL JOINT RESTRAINT SHALL BE USED ONLY IF AUTHORIZED BY THE ENGINEER AND SHALL CONFORM TO A.N.S.I./A.W.W.A. STANDARDS C 111/A-21.11-00, OR LATEST REVISION.
12. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITER'S LABORATORY FOR 250 P.S.I. MINIMUM WATER PRESSURE RATING.
13. GLANDS SHALL BE CLOW CORPORATION MODEL F-1058, STANDARD FIRE PROTECTION EQUIPMENT COMPANY, OR APPROVED EQUAL.

VALVES

14. TAPPING VALVES SHALL BE MUELLER H667 OR APPROVED EQUAL.
15. TAPPING SLEEVES SHALL BE MUELLER H615 OR APPROVED EQUAL.
16. GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH MALLEABLE HAND WHEELS. NO SUBSTITUTIONS ALLOWED.
17. GATE VALVES 4" OR LARGER SHALL MEET A.W.W.A. C-500-02 SPECIFICATION (LATEST REVISION). VALVES SHALL BE MUELLER CO. OR APPROVED EQUAL.
18. ALL VALVES SHALL BE FURNISHED WITH EXTENSION TYPE CAST IRON VALVE BOXES OF PROPER LENGTH FOR PIPE DEPTH. ALL BOXES SHALL CONFORM WITH A.W.W.A. SPECIFICATIONS WITH A SHAFT OF NO LESS THAN 5 INCHES AND HAVE THE WORD "WATER" CAST IN THE COVER. BASE OF VALVE BOX SHALL HAVE A FLARED SECTION TO FIT OVER STUFFING BOX OF VALVE.

HYDRANTS

19. FIRE HYDRANTS SHALL BE BREAKAWAY MUELLER CO. CENTURION MODEL #A-423, OR METROPOLITAN 250 EDDY COMPRESSION TYPE F.H. OR APPROVED EQUAL.
20. FIRE HYDRANTS SHALL BE INSTALLED WITH THE CENTER OF THE NOZZLE 18" ABOVE FINISHED GRADE.
21. DEAD-END WATER MAINS 6" OR LARGER SHALL TERMINATE WITH A FIRE HYDRANT.

PLACEMENT

22. THE MINIMUM DEPTH OF COVER OVER WATER MAINS IS 36" EXCEPT WHERE SHOWN DIFFERENTLY ON PLANS.
23. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED. BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND THE PIPE AS SHOWN ON THE PLANS AND/OR CITY OF POMPANO BEACH CONSTRUCTION STANDARDS AND SPECIFICATIONS. ROCKS OR STONES LARGER THAN 3/4" DIAMETER FOUND IN THE TRENCH SHALL BE REMOVED FOR A DEPTH OF AT LEAST 6" BELOW THE BOTTOM OF THE PIPE.
24. PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.

SEPARATION

25. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
- 25.1. 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 REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- 25.2. 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.
- 25.3. 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.
- 25.4. 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 "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.
26. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.
- 26.1. 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 SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- 26.2. 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 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- 26.3. 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 REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
27. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE.
28. EFFECTIVE AUGUST 28, 2003, 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 THIS IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH, AN EXCEPTION MUST BE OBTAINED FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION PER CHAPTER 62-555.314 F.A.C.

TESTING, DISINFECTION

29. PIPE SHALL BE TESTED UNDER CONSTANT PRESSURE OF 200 P.S.I. FOR A MINIMUM TEST PERIOD OF 2 HOURS AND SHALL NOT EXCEED THE LEAKAGE REQUIREMENTS AS PER A.N.S.I./A.W.W.A. SPECIFICATIONS OF C-600-05 LEAKAGE FORMULA:
 $Q = (SD \sqrt{P}) / 148,000$
Q = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
D = DIAMETER OF THE PIPE TESTED, IN INCHES.
S = TOTAL LENGTH OF PIPE TESTED, IN FEET.
P = AVERAGE TEST PRESSURE, IN POUNDS PER SQUARE INCH.
30. THE CITY OF POMPANO BEACH UTILITY DEPARTMENT OR THE CONTRACTOR WILL TAKE ALL BACTERIOLOGICAL TESTS, TO BE SCHEDULED VIA CITY INSPECTOR OR CONTRACTOR IF OTHERWISE SPECIFIED IN CONTRACT DETAILED SPECIFICATION AND/OR AUTHORIZED BY THE ENGINEER OF RECORD. BACTERIOLOGICAL TESTS MAY BE PERFORMED BY A CERTIFIED ENVIRONMENTAL TESTING LABORATORY.

CONNECTION

32. ALL CONNECTIONS TO EXISTING MAINS SHALL BE MADE UNDER THE DIRECTION OF THE CITY OF POMPANO BEACH ENGINEERING AND UTILITY DEPARTMENT.
33. THERE SHALL BE NO CONNECTION TO AN EXISTING WATER MAIN UNTIL PRESSURE AND BACTERIOLOGICAL TESTS HAVE BEEN CONDUCTED AND THE RESULTS ARE APPROVED AND ACCEPTED BY THE CITY OF BOYNTON BEACH UTILITY DEPARTMENT.

SERVICE CONNECTIONS

34. ALL METER SERVICE CONNECTIONS SHALL BE BRONZE FROM PLUG VALVE. NO GATE VALVES ARE TO BE USED (2" OR LESS).
35. SERVICE SADDLES SHALL BE DUCTILE IRON WITH STAINLESS STEEL STRAPS. SADDLES SHALL BE DOUBLE STRAP TYPE. ALL SERVICE SADDLES SHALL CONFORM TO A.N.S.I./A.W.W.A. C 111/A-21.11-00 AND A.S.T.M. A588.
36. ALL SERVICE LINES SHALL BE COPPER TUBING, TYPE "K", OR PLASTICIZED POLYETHYLENE 3408, A.S.T.M. D-2737, S.D.R. 9, 200 P.S.I.

SANITARY SEWER SYSTEM NOTES

1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478 AND 84-. ALL PRECAST MANHOLES SHALL BEAR THE STAMP OF A CERTIFIED ENGINEERING TESTING LABORATORY, SIGNED AND DATED, CERTIFYING THAT THEY MEET THE REQUIREMENTS OF ASTM C-478 FOR CONCRETE STRENGTH, STEEL REINFORCEMENT AREA AND PLACEMENT, AND APPEARANCE WHEN MANUFACTURED. MANHOLES MUST BE INSPECTED BY THE UTILITY PRIOR TO INSTALLATION.
2. MINIMUM WALL AND BASE THICKNESS FOR PRECAST MANHOLES SHALL BE 8 INCHES. BASE SECTIONS SHALL BE MONOLITHIC.
3. CONCRETE FOR PRECAST MANHOLES OR CAST IN PLACE MANHOLES SHALL HAVE NOT LESS THAN 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. CEMENT SHALL BE TYPE II ACID RESISTANT.
4. REINFORCING STEEL FOR MANHOLES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 AND A-305, LATEST REVISION. SPLICES SHALL HAVE A MINIMUM LAP OF 24 BAR DIAMETERS. MINIMUM COVER OVER REINFORCING STEEL SHALL BE 3 INCHES. GRADE 60 STEEL SHALL BE USED FOR THE TOP AND BOTTOM SLABS.
5. ALL OPENINGS IN PRECAST MANHOLES SHALL BE CAST AT THE TIME OF MANUFACTURE.
6. PRECAST MANHOLE SHOP DRAWINGS SHALL BE SUBMITTED TO THE UTILITY AND TO THE DEVELOPER'S ENGINEER AND APPROVED PRIOR TO FABRICATION.
7. ALL OUTSIDE SURFACES OF MANHOLES, WETWELLS AND VALVE PITS SHALL BE FULLY COATED WITH A MIN. OF 8 MILS OF KOPPER'S 300M OR APPROVED EQUAL. ALL INTERIOR SURFACES OF MANHOLES, WETWELLS AND VALVE PITS SHALL HAVE MAINSTAY COATING AS FOLLOWS: - 1/2" MIN., SPRAY APPLICATION OF MAINSTAY ML-72, MICROSLICA CEMENT MORTAR OR APPROVED EQUAL. - A MIN. APPLICATION OF 100 MIL, SPRAY APPLICATION OF MAINSTAY DS-5, ULTRA HIGH BUILD EPOXY COATING OR APPROVED EQUAL.
8. ALL MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE AND SHALL REST ON A FIRM, CAREFULLY GRADED SUBGRADE, WHICH SHALL PROVIDE UNIFORM BEARING UNDER THE BASE.
9. MANHOLE SECTIONS SHALL BE JOINTED WITH A MASTIC COMPOUND PROVIDING A WATER TIGHT BOND. THE REMAINING SPACE SHALL BE FILLED WITH CEMENT MORTAR AND FINISHED SO AS TO PRODUCE A SMOOTH CONTINUOUS SURFACE INSIDE AND OUTSIDE THE WALL SECTIONS. ALL EXTERIOR MANHOLE JOINTS SHALL THEN BE SEALED WITH A NEOPRENE SLEEVE, AS MANUFACTURED BY INFISHIELD, INC., OR APPROVED EQUAL.
10. ALL CONCRETE AND MORTAR USED IN MANHOLE CONSTRUCTION SHALL HAVE TYPE II CEMENT.
11. ALL SPACES AROUND PIPES ENTERING OR LEAVING MANHOLES SHALL BE COMPLETELY FILLED WITH EMBECO MORTAR (NON-METALLIC) OR BONSAI (NON-SHRINKING).
12. SANITARY MANHOLES AND LIDS SHALL BE CAPABLE OF WITHSTANDING AASHTO H-20 LOADING.
13. ALL GRAVITY SEWER PIPE SHALL BE PVC OR DUCTILE IRON. PVC PIPE SHALL CONFORM TO ASTM D-03034, SDR 26, LATEST REVISION, WITH MAXIMUM 13 FOOT LENGTHS AND PUSH-ON RUBBER GASKET JOINTS. DUCTILE IRON GRAVITY PIPE SHALL CONFORM TO THE SAME SPECIFICATIONS AS DUCTILE IRON PIPE (DIP) FORCE MAIN.
14. THE MINIMUM DESIGN SLOPES FOR GRAVITY SEWERS AS FOLLOWS: FOR PVC: 8" - 0.31% 10" - 0.24% 12" - 0.10% FOR DIP: 8" - 0.36% 10" - 0.28% 12" - 0.22%
15. THE CONTRACTOR SHALL TEST THE COMPLETED SEWER LINE TO DETERMINE ALIGNMENT AND TIGHTNESS OF THE JOINTS. TESTING SHALL BE LAMPED AND MUST SHOW A FULL CIRCLE OF LIGHT. INFILTRATION AND EXFILTRATION TESTING SHALL BE CONDUCTED. LEAKAGE SHALL NOT EXCEED 100 GALLONS PER INCH DIAMETER PER MILE PER DAY.
16. CLEAN OUTS SHALL BE INSTALLED AT MAXIMUM 100 FOOT INTERVALS ON ALL SEWER SERVICES EXCEEDING 100 FEET IN LENGTH.
17. ALL FORCE MAIN PIPE SHALL BE EPOXY-LINED DUCTILE IRON PIPE (DIP) OR PVC C-900. ALL PIPE 8 INCHES AND LARGER SHALL BE CLASS 50 OR BETTER. FOUR (4) AND SIX (6) INCH DIAMETER DUCTILE IRON PIPE SHALL BE CLASS 52 OR BETTER. ALL PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C151/A21.51-86 AND SHALL BE ASPHALT COATED OUTSIDE PER ANSI/AWWA C104/A21.4-90.
18. ALL FITTINGS FOR FORCE MAINS SHALL BE CAST IRON OR DUCTILE IRON CONFORMING TO THE REQUIREMENTS OF ANSI/AWWA C110/A21.10-82.
19. ALL DUCTILE IRON PIPE (DIP) FORCEMAINS SHALL BE INSTALLED WITH A MINIMUM CLEAR COVER OF 30 INCHES.
20. WHEN PVC C-900 IS USED FOR FORCE-MAINS, A 14-GAUGE MULTISTRAND COPPER WIRE SHALL BE INSTALLED THE LENGTH OF THE PIPE. ALL PVC C-900 FORCEMAINS SHALL BE INSTALLED WITH A MINIMUM CLEAR COVER 36".
21. INSTALLATION AND TESTING OF FORCE MAINS SHALL BE DONE IN ACCORDANCE WITH THE CITY OF POMPANO BEACH STANDARDS AND SPECIFICATIONS.
22. CONNECTING TO THE EXISTING SYSTEM: ALL CONNECTIONS TO EXISTING FORCE MAINS OR GRAVITY SEWER SHALL BE MADE UNDER THE DIRECTION OF THE CITY OF POMPANO BEACH ENGINEERING AND UTILITY DEPARTMENT. FORCE MAIN VALVES SEPARATING THE MAINS BEING INSTALLED FROM THE EXISTING MAINS SHALL BE OPERATED BY OR UNDER THE DIRECTION OF THE UTILITIES DEPARTMENT REPRESENTATIVE ONLY.

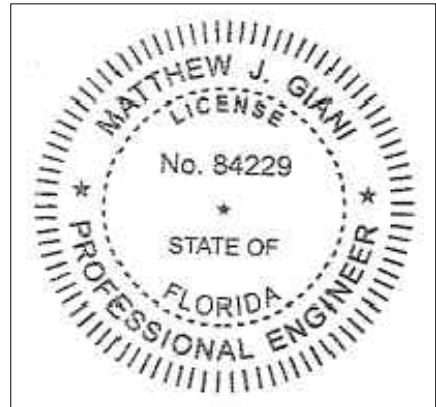
CITY OF POMPANO BEACH UTILITY DEPARTMENT NOTES:

HOW TO RETIRE OLD LATERALS:

- IF THE EXISTING MAIN IS CLAY PIPE AND HAS A CIPP LINER CURRENTLY INSTALLED (INSTALL A SECTIONAL LINER IN THE MAIN OVER THE OLD LATERAL THUS ELIMINATING THE LATERAL).
- IF THE EXISTING MAIN IS CLAY PIPE (DIG DOWN CUT OLD CLAY PIPE, SLEEVE BACK IN WITH PVC AND CITY APPROVED COUPLINGS).
- IF THE EXISTING MAIN IS CLAY PIPE AND YOU ARE REQUIRED TO RETIRE MULTIPLE LATERALS FOR A PROJECT (IT MAY BE CHEAPER FOR THE CONTRACTOR TO INSTALL A CITY APPROVED CIPP LINER FROM MANHOLE TO MANHOLE AND NOT CUT OUT THE LATERALS THAT THEY ARE RETIRING).
- IF THE EXISTING MAIN IS PVC PIPE (REMOVE THE LATERAL PIPE FROM THE PVC WYE FITTING AND INSTALL A PLUG INTO THE WYE. INSTALL A GREEN LOCATING MARKING BALL AT THE LATERAL LOCATING, NO DEEPER THAN 4 FT. BELOW GRADE).

This item has been digitally signed and sealed by Matthew J. Gianti on the date on the digital seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



DRC
PZ24-12000011
07/17/2024

REVISIONS

NO.	DATE	BY	DESCRIPTION

SDA ENGINEERING
ENGINEERING • SURVEYING • PLANNING

ENGINEERING AUTH. NO. 5634 SURVEYING LIC. NO. LB-6456
3410 N. Andrews Avenue Ext. • Pompano Beach, Fl. 33064
PH: 954-943-9433 • FAX: 954-783-4754

DRAWN BY: MJG

CHECKED BY: JFD

DESIGNED BY: MJG

APPROVED BY: S.D.A.

SCALE: N.T.S.

ATLANTIC ONE
MIXED-USE DEVELOPMENT
POMPANO BEACH, BROWARD COUNTY, FLORIDA

WATER AND SEWER DETAILS

SEALED

FOR THE FIRM, BY:

Matth
ew J
Gianti

Digitally signed by Matthew J Gianti
Date: 2024.06.10
C1A3B3B3.04'00'
FLC P.E. No. 84229

DATE: JUNE 2024

JOB NO. 1136B.01

SHEET CE9