DRC
PZ25-12000048
05/20/2026

GENERAL PIPELINE NOTES

1. ALL MATERIALS, INSTALLATION, TESTING AND SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE BROWARD COUNTY WATER AND WASTEWATER SERVICES (BCWWS) "MINIMUM STANDARDS", BROWARD COUNTY ENGINEERING DIVISION STANDARDS AND THE TECHNICAL SPECIFICATIONS (WHEN APPLICABLE). WHERE DISCREPANCIES, OMISSIONS OR MODIFICATIONS EXIST BETWEEN THE PLANS, THE SPECIFICATIONS AND THE STANDARDS, THE PLANS SHALL GOVERN.

2. LOCATION OF EXISTING UNDERGROUND UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY LOCATION AND DEPTH OF ALL PERTINENT UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.

3. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI A21.51/AWWA C151–91 WITH WALL THICKNESS CLASS 350 FOR 4" – 24", CLASS 250 FOR 30" AND ABOVE AND SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI A21.4/AWWA C104–90. EPOXY LININGS SHALL BE USED FOR FORCE MAINS AND GRAVITY SEWERS.

   PIPE, FITTINGS AND APPURTENANCES IN METER VAULTS SHALL BE FLANGED. ALL FLANGED DUCTILE IRON PIPE SHALL BE CLASS 53.

   PVC NON–PRESSURE PIPE (GRAVITY SEWER PIPE) SHALL CONFORM TO ASTM D3034 WITH A MINIMUM WALL THICKNESS OF SDR 26.

4. MINIMUM COVER FOR DUCTILE IRON PIPE SHALL BE 30" OR 36", WHERE SPECIFIED.

5. ALL PRESSURE MAINS SHALL BE HYDROSTATICALLY PRESSURE TESTED FOR A PERIOD OF NOT LESS THAN 2 HOURS AT 150 PSI WITH AN ALLOWABLE LEAKAGE NOT TO EXCEED THE FORMULA,

   $$Q = LD\sqrt{P} / 148{,}000$$

   IN WHICH –Q– EQUALS QUANTITY OF MAKEUP WATER IN GALLONS/HOUR,
   –L– EQUALS LENGTH OF PIPE IN FEET,
   –D– EQUALS NOMINAL DIAMETER OF PIPE IN INCHES,
   –P– EQUALS AVERAGE TEST PRESSURE DURING TEST IN LBS/SQ IN
   ALL TESTING SHALL BE MADE IN ACCORDANCE WITH ANSI/AWWA C600–05 (HYDROSTATIC TESTS) AND C651–05 (WATER MAIN BACTERIOLOGICAL TESTS).

6. COMPLETE "AS–BUILT" INFORMATION RELATIVE TO MAINTENANCE ACCESS STRUCTURES, VALVES, FITTINGS, LENGTH OF PIPE AND THE LIKE, SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE WORK. ALL ELEVATIONS SHALL BE TAKEN BY AN INDEPENDENT REGISTERED SURVEYOR AND INCLUDED IN THE "AS–BUILT" INFORMATION FURNISHED BY THE CONTRACTOR. FINAL APPROVAL OF THE PROJECT IS SUBJECT TO THE FINAL REVIEW AND APPROVAL OF THE "AS–BUILT" INFORMATION FURNISHED TO THE REGULATORY AGENCIES AND BCWWS.

7. ALL MECHANICAL JOINTS SHALL BE RESTRAINED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND IN COMPLIANCE WITH AWWA STANDARDS.

8. DUCTILE IRON PIPE MAY BE INSTALLED WITH LESS THAN 30" OF COVER, WHEN APPROVED BY BCWWS ONLY. COVER OVER PIPE MUST CONSIST OF ROAD LIME ROCK THAT EXTENDS FROM ROADWAY SUB–BASE OR FINISHED GRADE DOWN TO SPRINGLINE OF PIPE IN A TRENCH WITH 12" OF LIME ROCK ON EITHER SIDE OF THE PIPE.

9. WHERE AN EXISTING WATER OR FORCE MAIN REQUIRES DEFLECTION TO CONNECT WITH

   OR PASS BY PROPOSED PIPE, THE AMOUNT OF DEFLECTION PER PIPE JOINT SHALL CONCUR WITH THE STANDARD UTILITY CROSSING DETAIL. THE LENGTH OF EXISTING PIPE TO BE DEFLECTED SHALL BE APPROVED BY THE ENGINEER.

10. ALL PIPE DENOTED "ABANDON, PLUG AND GROUT" SHALL BE EMPTIED, FLUSHED OUT AND COMPLETELY FILLED WITH GROUT. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE LOCAL, FEDERAL AND STATE ENVIRONMENTAL REQUIREMENTS.

11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, QUANTITIES AND DETAILS SHOWN ON THE DRAWINGS, SUPPLEMENTARY DRAWINGS, SCHEDULES OR OTHER DATA RECEIVED FROM THE ENGINEER AND SHALL NOTIFY HIM OF ALL OMISSIONS, ERRORS, CONFLICTS, AND DISCREPANCIES FOUND THEREIN. FAILURE TO DISCOVER OR TO CORRECT ERRORS, CONFLICTS OR DISCREPANCIES SHALL NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR UNSATISFACTORY WORK, FAULTY CONSTRUCTION OR IMPROPER OPERATION RESULTING THEREFROM, NOR FROM RECTIFYING SUCH CONDITION, AT HIS OWN EXPENSE.

12. WHERE THE PROPOSED WATER OR FORCE MAIN IS IN CONFLICT WITH OTHER EXISTING OR PROPOSED UTILITIES, THE NEW MAIN SHALL BE DEFLECTED AT PIPE JOINTS IN ACCORDANCE WITH THE STANDARD UTILITY CROSSING DETAIL. THE SPECIAL UTILITY CROSSING DETAIL WITH BENDS SHALL ONLY BE USED WHEN APPROVED BY THE ENGINEER.

13. WHENEVER A MATERIAL, ARTICLE OR PIECE OF EQUIPMENT IS IDENTIFIED IN THE PROJECT MANUAL, INCLUDING DRAWINGS AND SPECIFICATIONS, BY REFERENCE TO MANUFACTURERS' OR VENDORS' NAMES, TRADE NAMES, CATALOG NUMBERS OR OTHERWISE, IT IS INTENDED MERELY TO ESTABLISH A STANDARD, UNLESS IT IS FOLLOWED BY WORDS INDICATING THAT NO SUBSTITUTION IS PERMITTED BECAUSE OF FORM, FIT, FUNCTION AND QUALITY. ANY MATERIAL, ARTICLE, OR EQUIPMENT OF OTHER MANUFACTURERS AND VENDORS WHICH WILL PERFORM OR SERVE THE REQUIREMENTS OF THE GENERAL DESIGN WILL BE CONSIDERED EQUALLY ACCEPTABLE, PROVIDED THE MATERIALS, ARTICLE OR EQUIPMENT SO PROPOSED IS, IN THE OPINION OF THE ENGINEER, EQUAL IN SUBSTANCE, QUALITY AND FUNCTION.

14. COMPLIANCE TO "TRENCH SAFETY ACT" IS REQUIRED FOR ALL EXCAVATIONS IN EXCESS OF 5 FEET DEEP.

15. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY:

SUNSHINE STATE 1 CALL _____ 1–800–432–4770

BCWWS NETWORK _____ 831–0838

BCWWS INSPECTOR _____ 831–0913

ADDITIONAL NOTES:

1. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 36 INCHES FOR PVC AND 30 INCHES FOR DIP.

2. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320, FAC.

3. NO BENEFICIAL USE SHALL BE MADE OF THE PROPOSED WATER MAINS TO BE INSTALLED PER THIS PERMIT WITHOUT WRITTEN APPROVAL FROM DOH BROWARD COUNTY HEALTH DEPARTMENT.

BCWWS PROJ. NO. _____ – DWG NO. _____–__–___

HOLLAND ENGINEERING
CIVIL ENGINEERING SOLUTIONS
301 SW 7th Street
Fort Lauderdale, Florida 33315
Phone: 954.367.0371
Certificate of Authorization 7325

SUSAN C. HOLLAND
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE No. 41831

SUSAN C. HOLLAND LICENSE No 41831 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed & sealed by Susan C. Holland, P.E. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Susan C Holland
Digitally signed by Susan C Holland
Date: 2026.03.13 10:16:05 -04'00'

WAREHOUSE ADDITION
FOR
POMPANO 1150 LLC
1150 SW 30TH AVE
POMPANO BEACH, FL 33069

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	2/11/26	HS	SCH	DRC COMMENTS

DRAWN BY:	HS
CHECKED BY:	SCH
DATE:	09/04/25
SCALE:	N.T.S.

SHEET TITLE

BCWWS UTILITY NOTES

NO. OF SHEETS: 8

SHEET NO.: C-8

PROJECT NO. 25-21

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