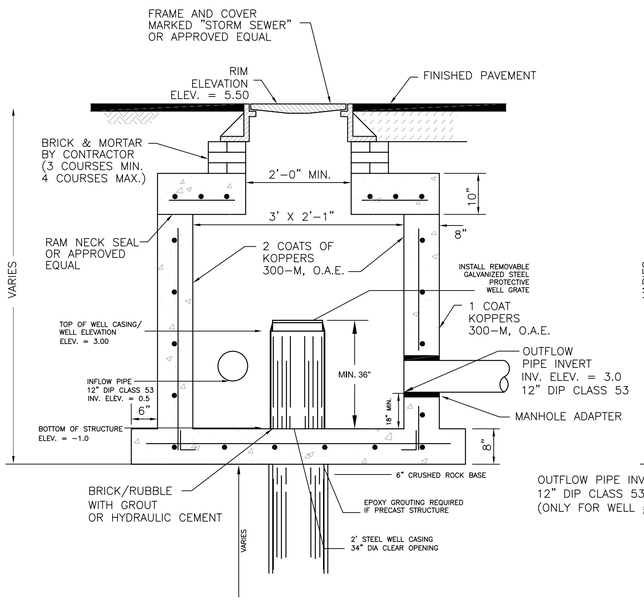
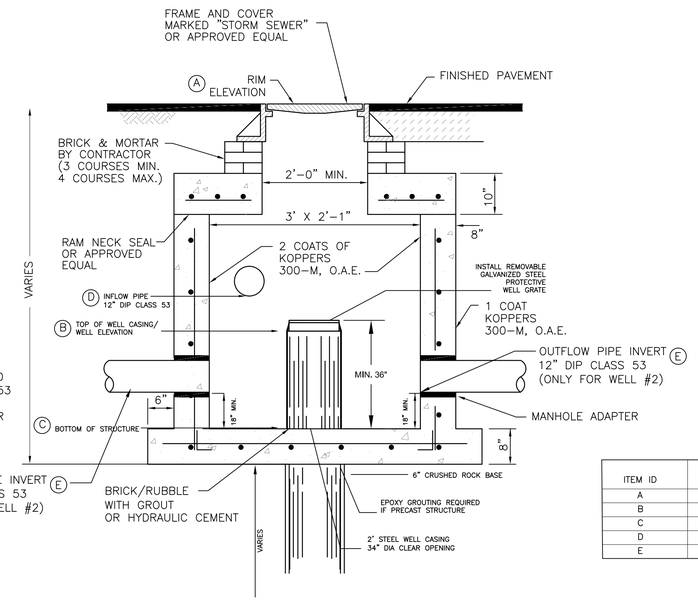


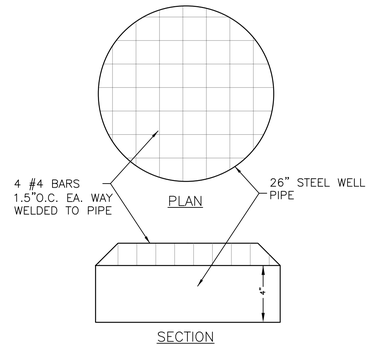
DRAINAGE WELL MANHOLE 1
TYPE C" DITCH BOTTOM INLET PER LATEST FDOT INDEX 232

N.T.S.



DRAINAGE WELL MANHOLES 2
TYPE C" DITCH BOTTOM INLET PER LATEST FDOT INDEX 232

N.T.S.



WELL SCREEN DETAIL

1. CONTRACTOR SHALL GROUT BETWEEN CONCRETE BAFFLE AND LID OF STRUCTURE TO ENSURE WATER PROOF SEAL.

2. WELL BOX REINFORCEMENT SHALL BE DESIGNED BY PRE-CASTER TO MEET FDOT STANDARDS AND SPECIFICATIONS

ITEM ID	ELEVATION (NAVD)
A	SEE PV&G PLAN FOR RIM ELEV.
B	3.50'
C	0.50'
D	2.00'
E	2.00'

DRAINAGE WELL NOTES:

1. WELL CONTRACTOR SHALL VERIFY THE DEPTH OF AN AQUIFER HAVING A MINIMUM TDS OF 10,000 PPM AND COORDINATE WITH THE ENGINEER PRIOR TO INSTALLATION OF DRAINAGE WELL.

2. (TO BE VERFIED ONSITE) DRAINAGE WELL SHALL BE DRILLED TO AN ESTIMATED DEPTH OF +/- 100 FEET TO DISCHARGE RUNOFF TO AN AQUIFER HAVING A MINIMUM TDS OF 10,000 PPM.

3. WELL SHALL HAVE AN UPPER CASING OF A MINIMUM OF 24 INCHES IN DIAMETER, WITH DRIVE SHOW, WHICH SHALL BE DRIVEN TO A FIRM SEAT AND GROUT SEAL AT LEAST 3 FEET BELOW THE CAP OF THE UPPERMOST ROCK FORMATION TO BE DEVELOPED, CASING ENDS SHALL BE SQUARE TO THE AXIS OF THE SECTION AND SHALL BE WELDED TOGETHER AS DRIVING PROGRESSES.

4. WELL SHALL BE AS PLUMB AND TRUE TO LINE AS GOOD WORKMANSHIP WILL PROVIDE.

5. COMPLETED WELL SHALL BE THOROUGHLY AGITATED AND DEVELOPED.

6. THE COMPLETED WELL SHALL MEET DADE COUNTY REQUIREMENTS FOR ALLOWABLE DRAWDOWN AND TEST DURATION.

7. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR CONDUCTING THE WELL TEST AND SATISFACTORILY DISPOSING OF THE WATER PUMPED FROM THE WELL. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO THE OWNER AND ENGINEER PRIOR TO THE START OF THE TEST.

8. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SECURE THE NECESSARY DERM WELL DRILLING PERMITS AND COMPLY WITH ALL THE PROVISIONS THEROF, AS WELL AS DERM CLASS II PERMIT.

9. STEEL WELL GRATE TO BE INSTALLED OVER 24" DEEP WELL. STEEL GRATE TO BE HOT DIPPED GALVANIZED AFTER FABRICATION. COST TO BE INCLUDED IN PRICE OF CASING.

DRAINAGE WELL MANHOLE NOTES:

1. SHOP DRAWINGS, SHOWING ALL DIMENSIONS AND CALCULATIONS, INCLUDING CONCRETE REINFORCEMENT, SHALL BE SUBMITTED FOR REVIEW TO THE ENGINEER OF RECORD PRIOR TO INSTALLATION.

2. THE BOTTOM SLAB SHALL BE CAST MONOLITHICALLY WITH THE LOWER WALL SECTION.

3. PROVIDE GREASE AND OIL SEPARATOR FOR CATCH BASIN BEFORE DETENTION TANK.

4. WELL DEPTH SHOULD BE CONFIRMED OR ADJUSTED BASED ON THE REASONABLE ASSURANCE REPORT AS SET BY THE DRILLER. DESIGN DEPTHS: DEEP WELL TO BE 90.0 (FEET DEEP): 80 (FEET) ENCASED AND 12.0 (FEET) OPEN FOR THE WELLS INSTALLED ON THE EAST SIDE OF THE PROPERTY AND 80.0 (FEET DEEP): 60 (FEET) ENCASED AND 12.0 (FEET) OPEN FOR THE WELLS INSTALLED ON THE WEST SIDE OF THE PROPERTY. SEE PAVING, GRADING AND DRAINAGE PLAN. CONTRACTOR IS TO VERIFY DEEP WELL CAPACITY IN GPM PER FT. HEAD BY CONDUCTION A FLOW TEST ON ALL NEW WELLS.

5. DEVELOPER OF WELL TO ASSURE 3000 P.P.M. SALINITY. THE WELL CASING SHALL PENETRATE A ZONE CONTAINING A MINIMUM OF 10,000 MG/L OF TOTAL DISSCOLVED SOLIDS (TDS).

SPECIFICATIONS - DEEP DRAINAGE WELLS:

GENERAL

THE WELL DRILLING CONTRACTOR SHALL FURNISH ALL LABOR, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) PERMITS, MATERIALS, AND EQUIPMENT REQUIRED TO CONSTRUCT, DEVELOP, AND TEST DEEP DRAINAGE WELLS IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE REGULATIONS SET FORTH BY THE JURISDICTIONAL REGULATORY AGENCIES (WHICHEVER IS MORE STRINGENT). THE WELLS SHALL BE CONSTRUCTED TO CONFORM WITH THE ELEVATIONS, NOTES, AND DETAILS SHOWN IN THE PLANS. THE CONTRACTOR SHALL DRILL THE WELLS AT THE SPECIFIED DIAMETER AS CALLED FOR, TO A DEPTH WHICH WILL PRODUCE THE MINIMUM INJECTION CAPACITY AT THE REQUIRED HEADS AS SHOWN IN THE PLANS.

WELL SHALL BE INSTALLED BY A REGISTERED WELL DRILLER WORKING UNDER THE DIRECTION OF A LICENSED WATER WELL CONTRACTOR. THE WELL COTNRACTOR SHALL BE RESPONSIBLE FOR DETERMININT THE DEPTH IN THE FIELD AS THE WELLS ARE INSTALLED. THE CONTRACTOR SHALL SUBMIT, DURING THE SHOP DRAWING SUBMITTAL PHASE, THE METHOD OF CONTAINMENT OF THE DEVELOPMENT AND TEST WATER TO THE ENGINEER FOR HIS APPROVAL.

EQUIPMENT

THE CONTRACTOR SHALL PROVIDE ONE COMPLETE DRILLING UNIT CAPABLE OF TRIPLE-WALL AND DUAL-WALL REVERSE CIRCULATION ROTARY DRILLING USING AN OPEN-CENTER TRI-CONE BIT FOR CONTINUOUS RECOVERY OF GEOLOGIC SAMPLE. THE INTERIOR DIAMETER OF THE INNER PIPE SHALL BE FOUR (4) INCHES OR MORE.

THE DRILL PIPE REQUIRED IS A DUAL-WALLED PIPE IN WHICH AIR CIRCULATES DOWNWARD BETWEEN THE WALLS OF THE INNER AND OUTER PIPES AND UP THROUGH THE INNER PIPE TO THE SURFACE. THE DRILL BIT SHALL BE A SPECIFICALLY DESIGNED TRI-CONE BIT HAVING A NOMINAL FOUR (4) INCH INSIDE DIAMETER OPENING TO PERMIT CONTINUOUS GEOLOGIC SAMPLING OF ROCKS AND SEDIMENTS. GEOLOGIC SAMPLES WILL BE RECOVERED THROUGH THE BIT AN DCARRIED UP IN THE INNER PIPE TO THE SURFACE BY REVERSE AIR CIRCULATION AND TRANSFERRED INTO A CYCLONE TO REDUCE THE VELOCITY OF THE CUTTINGS FOR SAMPLING. THE CONTRACTOR SHALL FURNISH ALL DRILL PIPE AND BITS USED. THE CYCLONE, AND COLLECTING TUBS OR BUCKETS AND ALL ASSOCIATED SAMPLING EQUIMENT USED FOR THIS CONTRACT.

THE CONTRACTOR SHALL PROVIDE ALL TOOLS, SUPPLIES, DRILLING EQUIPMENT, ACCESSORIES, WATER FOR DRILLING, SHOVELS, POWER LIGHTING, PUMPS, PACKERS, CONTROLS, DISCHARGE PIPES, COMPRESSOR, EXPERIENCED PERSONEL, AND ALL OTHER ITEMS NECESSARY TO CONDUCT EFFICIENT AND SATISFACTORY DRILLING, SAMPLING, TESTING, AND COMPLETINO OF WELL OPERATIONS, AS SPECIFIED IN THIS CONTRACT. THE DRILLING UNIT SHALL BE IN GOOD CONDITION AND WITH THE CAPACITY TO DRILL A HOLE TO A DEPHT OF 200 FEET USING TRIPLE-WALL AND DUAL-WALL DRILL PIPE WITH AN OPEN-CENTER TRI-CONE BIT. THE AIR COMPRESSOR ON THE RIG MUST BE OF SUFFICIENT CAPACITY TO RECOVER DRILL CUTTINGS AS REQUIRED FOR ACCURATE SAMPLING OF GEOLOGIC MATERIAL. THE OCNTRACTOR SHALL PROVIDE AT ALL TIMES A THROROGHLY EXPERIENCE, COMPETETN, AND LICENSED DRILLER DURING ALL OPERATIONS AT THE DRILL SITE.

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BETALLELUZ JONES GROUP
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EXPEDITING DEVELOPMENT
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FLORIDA CERTIFICATE OF AUTHORIZATION # 27431

PROJECT NUMBER: 23106

DRAWN BY: AH | DESIGN BY: AH | CHECK BY: LAB

ORIGINAL DRAWING DATE: 01/04/2023

REVISIONS:

PROJECT NAME:

TOWNHOMES
CANAL
DRIVE
POMPANO

LOCATION:

3233 - 3237 CANAL DRIVE
POMPANO BEACH, FL 33062

FOR:

MR. SERGE MICHAUD
3018 NE 20TH COURT
FT. LAUDERDALE, FL 33305

PLAN STATUS:
SUBMITTAL SET:
FOR AGENCY REVIEW
AND APPROVAL

LUIS ALBERTO BETALLELUZ JR. LICENSE No. 65892 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY: LUIS A. BETALLELUZ, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ELECTRONIC COPIES

DATE: DEC. 7, 2023

LUIS A. BETALLELUZ, JR., P.E. FL. P.E.# 65892
(NOT VALID WITHOUT SIGNATURE AND PROPER SEAL)

SHEET NAME:

DRAINAGE WELL DETAILS

SHEET NUMBER: C 7.0

DRC
PZ23-12000054
07/03/2024

E:\UNIDRIVE - TBJG\DATA\PROJECTS\23106 - 3233-3237 POMPANO TH\DWG\PLANS 2013-10-11