

# CITY OF NAPLES

## WELL HEAD IMPROVEMENTS

### WELLS 404, 409, 416, 418, & 419

#### GENERAL NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, DEPTH AND CHARACTER OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AS LISTED BELOW AND FIELD VERIFY LOCATIONS AND ELEVATIONS OF UTILITIES AT LEAST 48 HOURS IN ADVANCE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE CAUSED BY HIS OPERATIONS.

- CITY OF NAPLES (WATER, WASTEWATER, AND REUSE): (239) 213-4799
- FLORIDA POWER & LIGHT: 1-800-868-9554
- COMCAST CABLE: (239) 786-1282
- CENTURYLINK: (239) 263-6276
- SUNSHINE STATE ONE CALL: 1-800-638-4097
- IN ADDITION, PRIOR TO STARTING WORK, CONTRACTOR SHALL NOTIFY LOCAL PUBLIC SERVICE AGENCIES INCLUDING POLICE AND FIRE DEPARTMENTS.

2. EXISTING UTILITIES AND DIMENSIONS AS SHOWN ARE APPROXIMATE AND MUST BE FIELD VERIFIED BY THE CONTRACTOR. THE EXISTING UTILITIES SHOWN AND LISTED ABOVE SHALL NOT BE CONSTRUED AS BEING ALL INCLUSIVE OF UTILITIES IN THE AREA. ANY INTERRUPTION OF SERVICE SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY.

3. PIPE AND FITTINGS TO BE AS SHOWN ON THE DRAWINGS. ALL PIPING AND FITTINGS SHALL BE DUCTILE IRON PRESSURE PIPE, CLASS 150, CONFORMING TO SPECIFICATION 02630. BELOW GRADE FITTINGS SHALL BE MECHANICAL JOINT. WATER MAINS SHALL BE SOLID BLUE IN COLOR AND SHALL BE APPROVED BY THE AWWA FOR POTABLE WATER USE.

4. ALL PIPE AND FITTINGS SHALL BE PRESSURE TESTED PER SPECIFICATION SECTION 02676.

5. CONTRACTOR SHALL MAINTAIN A MINIMUM HORIZONTAL EDGE TO EDGE SEPARATION OF 10 FEET AND A MINIMUM VERTICAL WALL TO WALL SEPARATION OF 18 INCHES BETWEEN THE PROPOSED WATER MAINS AND WASTEWATER MAINS. WHEN THIS SEPARATION CANNOT BE MAINTAINED, THE WASTEWATER MAIN SHALL BE ENCASED IN CONCRETE. A MINIMUM VERTICAL WALL TO WALL SEPARATION OF 12 INCHES SHALL BE MAINTAINED FOR OTHER UTILITIES.

6. ALL PIPING SHALL HAVE 3 FEET MINIMUM COVER. CONTRACTOR SHALL PROVIDE PROPER GRADE ELEVATIONS AND ALIGNMENTS.

7. MAXIMUM PIPE DEFLECTIONS SHALL NOT EXCEED 80% OF THE MANUFACTURER'S MAXIMUM RECOMMENDATIONS.

8. ALL DISTURBED AREAS SHALL BE SODDED AND RESTORED TO MATCH EXISTING BY THE CONTRACTOR, PER SPECIFICATION 02400.

9. IF IT IS DETERMINED THAT UTILITY POLES REQUIRE HOLDING OR RELOCATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXPENSES ASSOCIATED WITH THEIR HOLDING AND/OR RELOCATION.

10. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE INSTALLATION OF THE PIPING WITHOUT DAMAGING THE EXISTING CITY, STATE OR COUNTY ROADWAY PAVEMENT (CONSTRUCTION PROCEDURES SHALL ACCOMMODATE THIS REQUIREMENT).

11. THE CONTRACTOR SHALL NOT PLACE ANY FILL MATERIALS WITHIN A WETTED DITCH OR WETLAND AREA WHEN WORKING ADJACENT TO EITHER TYPE OF AREA.

12. DEWATERING MAY BE REQUIRED IN SOME AREAS TO ACHIEVE THE NECESSARY EXCAVATION AND SUBSEQUENT CONSTRUCTION, BACKFILLING AND COMPACTING. CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY DEWATERING PERMITS. ALL DEWATERING SHALL BE IN ACCORDANCE WITH SECTION 02530 OF THE SPECIFICATIONS.

13. PRIOR TO BID PREPARATION, THE CONTRACTOR MUST BECOME FAMILIARIZED WITH THE OVERALL SITE CONDITION AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF EXPECTED ORGANIC SILT PEAT AREAS, ADEQUACY OF EXISTING MATERIALS AS FILL, DEWATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFFSITE, AND MATERIALS TO BE DISPOSED OF OFFSITE ALL OF WHICH WILL AFFECT HIS PRICING. ANY DELAY, INCONVENIENCE OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL AND THE CONTRACTOR MAY HAVE TO BRING IN MATERIALS AT NO EXTRA COST FROM OFFSITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL.

14. CHAPTER 553-851 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO EXCAVATING.

15. WORK HOURS SHALL BE BETWEEN 7:00 A.M. AND 5:00 P.M., MONDAY THROUGH FRIDAY. WORK OUTSIDE OF THESE HOURS SHALL BE APPROVED AT THE SOLE DISCRETION OF THE CITY OF NAPLES. CONNECTIONS TO EXISTING WATER MAINS TO BE MADE DURING LOW FLOW PERIOD AND MUST BE COORDINATING WITH UTILITY DEPARTMENT.

16. CONTRACTOR SHALL WORK TO MAINTAIN TWO LANES OF TRAFFIC AT ALL TIMES AND ACCESS TO EXISTING RESIDENCES SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION ON ALL ROADWAYS.

17. CONTRACTOR SHALL IMMEDIATELY RESTORE CONSTRUCTION AREAS TO THEIR ORIGINAL CONDITION, INCLUDING DRIVEWAYS, ROADWAYS, SWALES, ETC. CONSTRUCTION RESTORATION WILL BE CLOSELY MONITORED AND WILL BE PERFORMED AS CONSTRUCTION PROCEEDS, NOT AT THE CONCLUSION OF THE PROJECT.

18. BACTERIOLOGICAL SAMPLING POINTS SHALL BE DESIGNATED BY THE COLLIER COUNTY HEALTH DEPARTMENT. BEFORE ANY PORTION OF THE MAIN WATER IS TO BE PLACED IN SERVICE IT SHALL BE DISINFECTED IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA STANDARD C601; AND ITS DISINFECTION SHALL BE DEMONSTRATED BY BACTERIOLOGICAL TESTS CONDUCTED IN ACCORDANCE WITH "STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER" FOR COLI-AERGENES GROUP, BY AN APPROVED LABORATORY, ACCEPTABLE BY THE ENGINEER AND THE COUNTY HEALTH DEPARTMENT HAVING JURISDICTION AND THE STATE OF FLORIDA.

19. ALL EXPOSED DUCTILE IRON PIPE, FITTINGS AND SPECIALS SHALL BE PAINTED IN ACCORDANCE WITH THE CITY OF NAPLES SPECIFICATIONS.

20. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL APPLICABLE PERMITS AND CONSTRUCTION PLANS ON-SITE AND SHALL BE RESPONSIBLE TO ADHERE TO ALL PERMIT CONDITIONS DURING CONSTRUCTION.

21. SILT FENCING SHALL BE INSTALLED IN ALL AREAS CONTAINING ADJACENT DRAINAGE, INCLUDING CANALS OR CREEKS.

22. FOR ALL VALVES, ETC. CONTRACTOR WILL BE RESPONSIBLE FOR POURING CONCRETE IDENTIFICATION PAD AS DISPLAYED IN THE DRAWING DETAILS.

23. DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH O.S.H.A. REQUIREMENTS. THE CONTRACTOR'S SIGNATURE AFFIXED TO THE CONTRACT AGREEMENT WITH THE OWNER IS CONSIDERED CERTIFICATION OF CONFORMANCE TO SUCH REQUIREMENTS.

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THESE DRAWINGS ARE A COMBINATION OF SEVERAL REFERENCE DRAWINGS PROVIDED TO THE CITY. THESE DRAWINGS ARE TO BE USED AS REFERENCE ONLY. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL CURRENT UTILITY LOCATIONS. THE CONTRACTOR SHALL LOCATE BY POT-HOLING ALL CRITICAL UTILITIES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UNDERGROUND UTILITY. THE CONTRACTOR SHALL RETORE ALL SOD, PAVEMENT, IRRIGATION, LANDSCAPING, DRIVEWAYS, CURBING, ETC. TO EXISTING CONDITION OR BETTER.

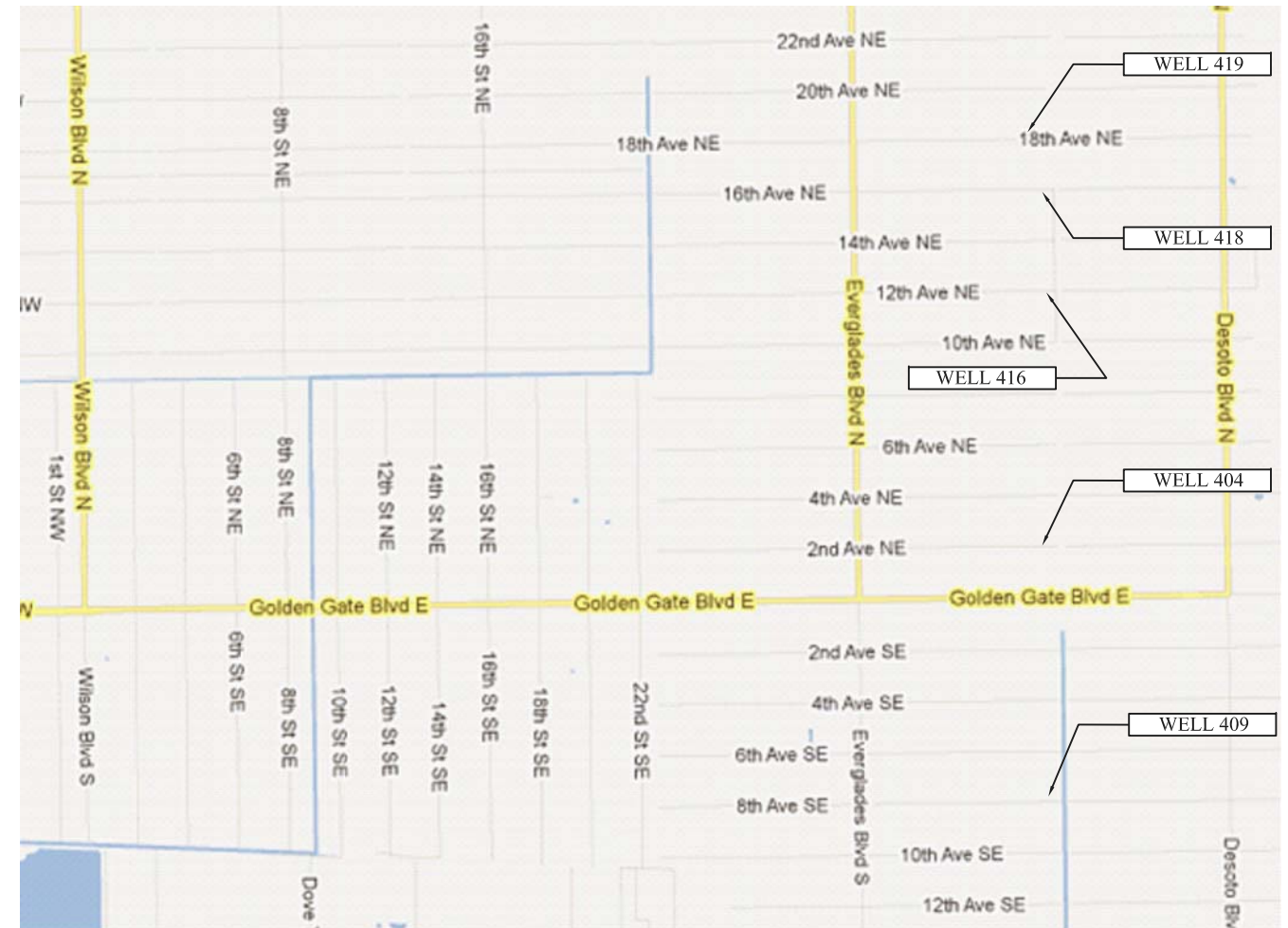
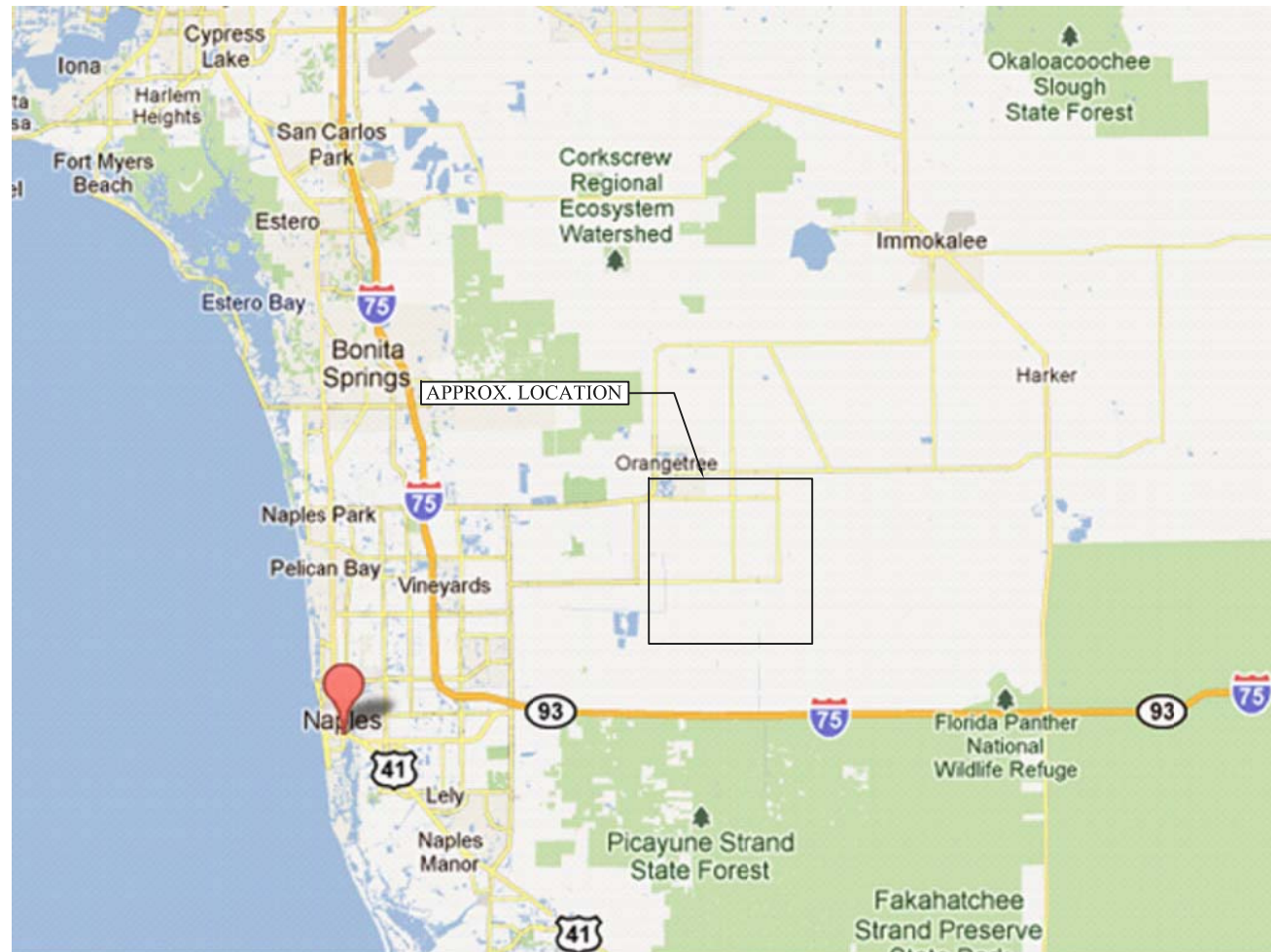
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UTILITIES DEPARTMENT

CITY OF NAPLES - UTILITIES DEPARTMENT  
**Well Head Improvements**  
 Cover, General Notes, and Index

FILE NO.  
 SHEET G-1  
 DATE: DEC 2011



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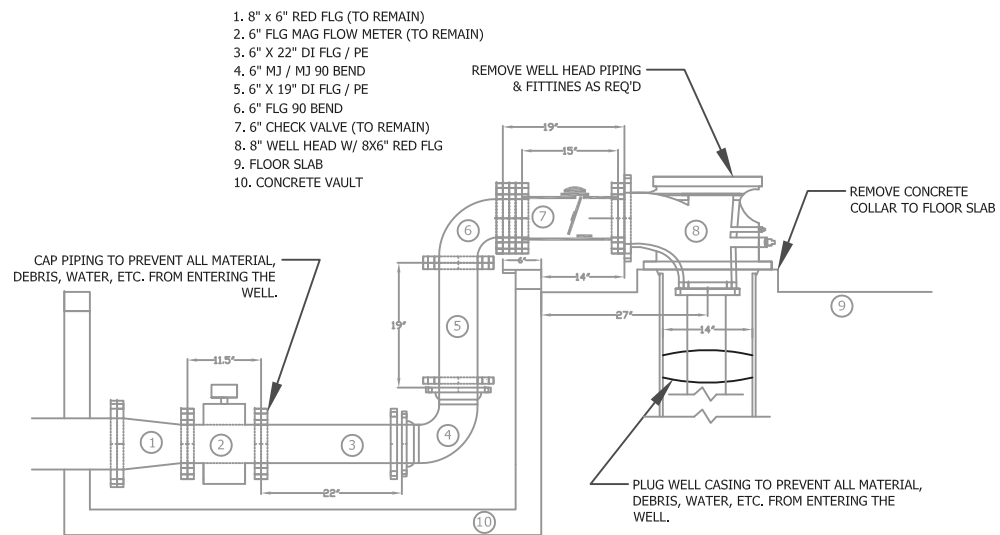
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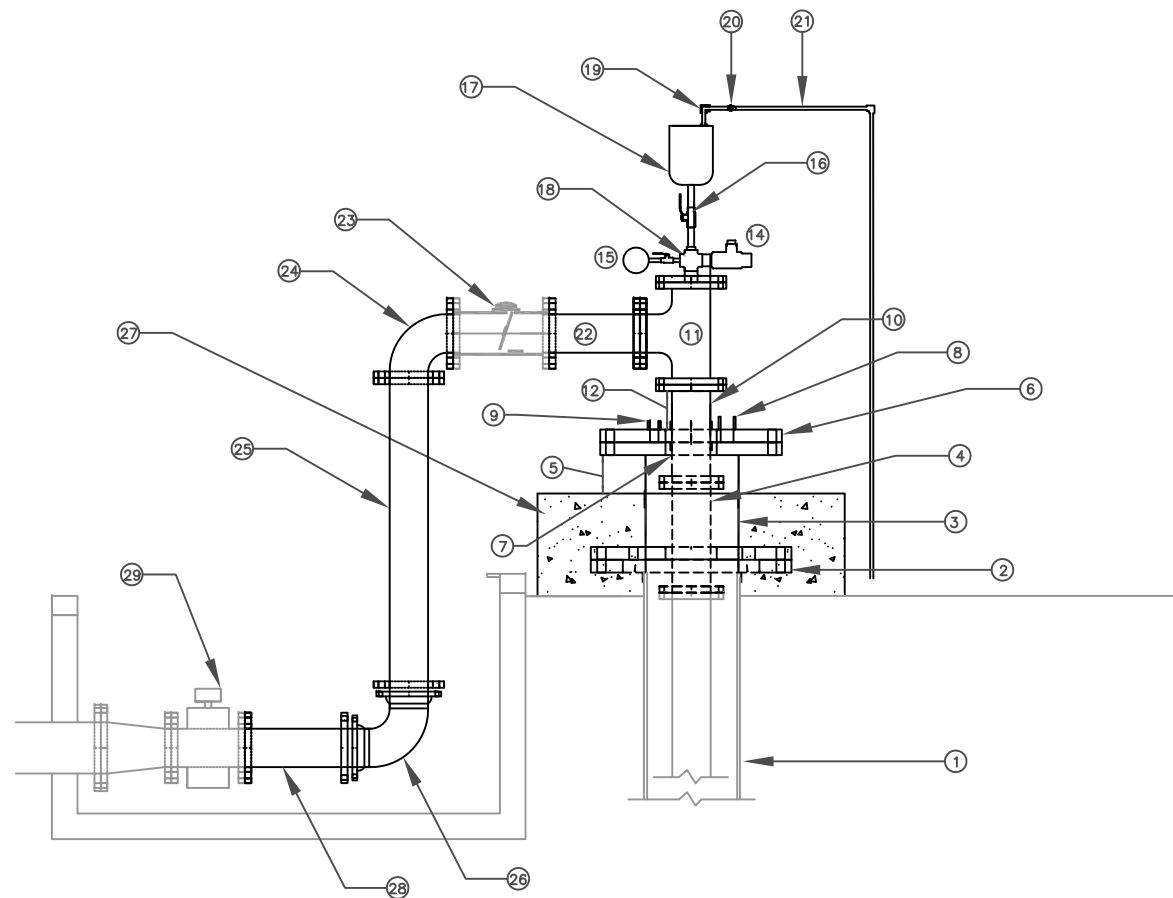
UTILITIES DEPARTMENT

CITY OF NAPLES - UTILITIES DEPARTMENT  
**Well Head Improvements  
 Location Map**

FILE NO.  
 SHEET G-2  
 DATE: DEC 2011



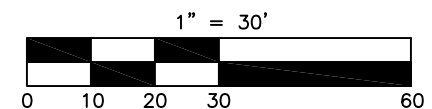
WELL 404 EXISTING/DEMO PLAN



WELL 404 PROPOSED PLAN

NOTES:

- EXISTING AND PROPOSED DIMENSIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PURCHASING MATERIAL.
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- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND STORING THE WELL PUMP AND PIPING. PUMP AND PIPING SHALL BE STORED INDOORS AND PROTECTED FROM CONTAMINATION IN ACCORDANCE WITH AWWA STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLING THE WELL PUMP AND PIPING AND DISINFECTING THE WELL AND PIPING PER AWWA STANDARDS.
- ALL NUTS, BOLTS, AND MISC. HARDWARE SHALL BE 304 STAINLESS STEEL.
- ALL PIPING, FITTINGS, VALVES, COATINGS AND APPURTENANCES INSTALLED SHALL BE NSF 61 APPROVED.
- ALL PIPING, FITTINGS, VALVES, AND APPURTENANCES SHALL BE COATED (INTERIOR AND EXTERIOR) PER THE TECHNICAL SPECIFICATIONS.



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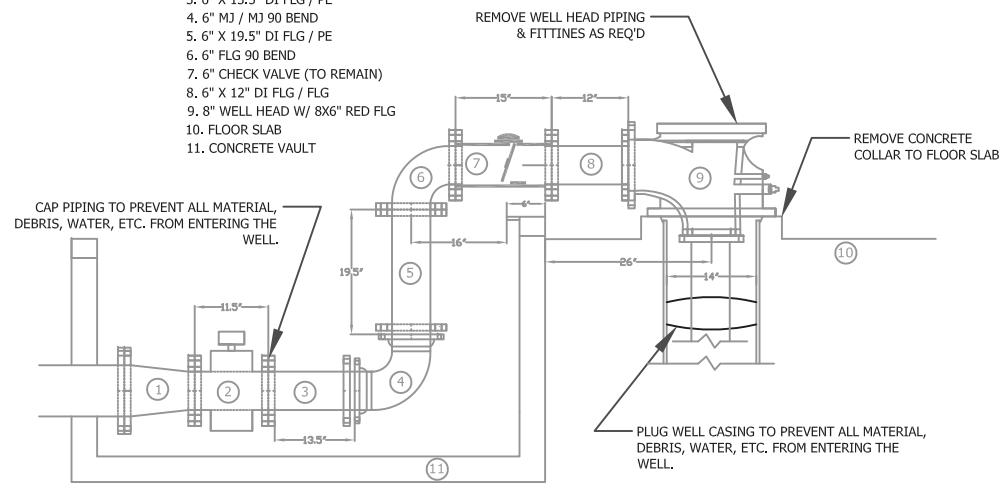
UTILITIES DEPARTMENT

CITY OF NAPLES - UTILITIES DEPARTMENT

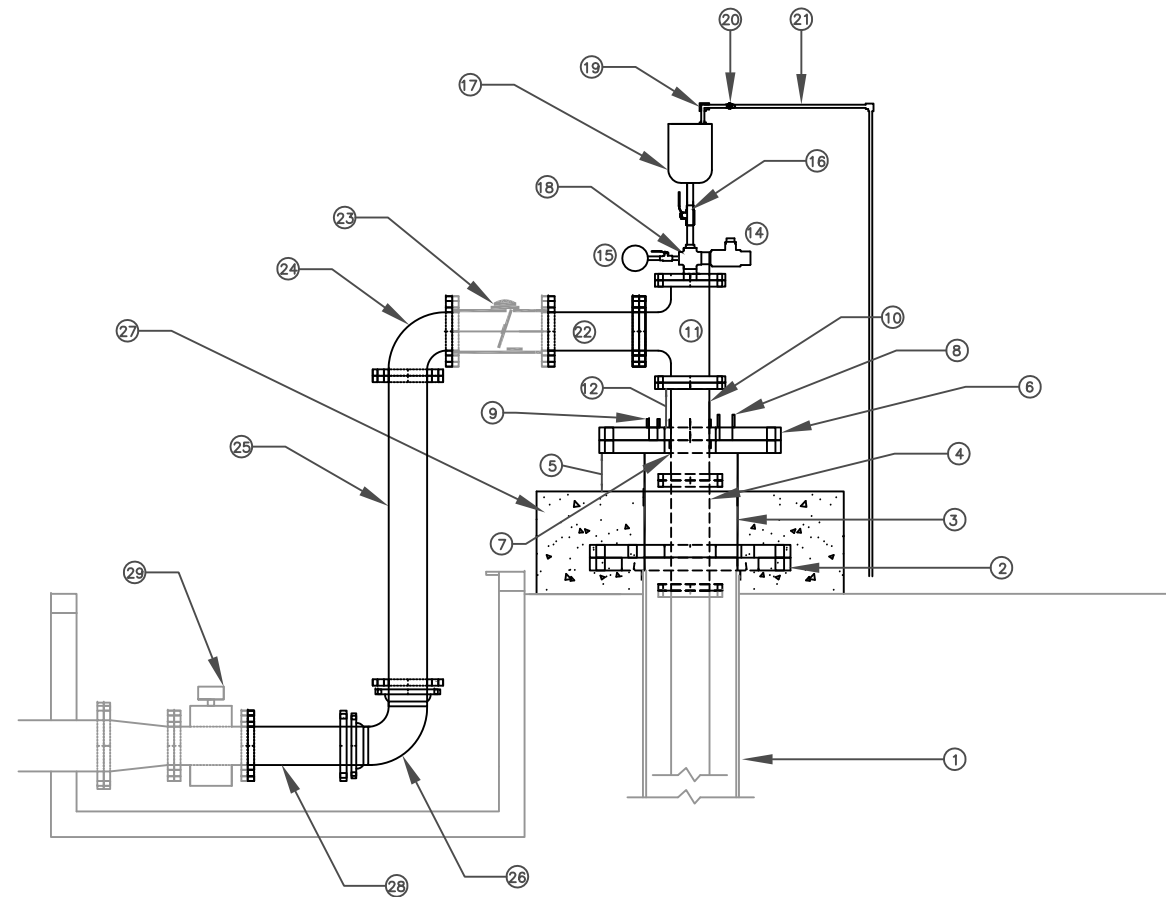
WELL 404 IMPROVEMENTS  
 2ND AVENUE NE

FILE NO.  
 SHEET C-1  
 DATE: DEC 2011

1. 8" x 6" RED FLG (TO REMAIN)
2. 6" FLG MAG FLOW METER (TO REMAIN)
3. 6" x 13.5" DI FLG / PE
4. 6" MJ / MJ 90 BEND
5. 6" x 19.5" DI FLG / PE
6. 6" FLG 90 BEND
7. 6" CHECK VALVE (TO REMAIN)
8. 6" x 12" DI FLG / FLG
9. 8" WELL HEAD W/ 8X6" RED FLG
10. FLOOR SLAB
11. CONCRETE VAULT



**WELL 409 EXISTING/DEMO PLAN**



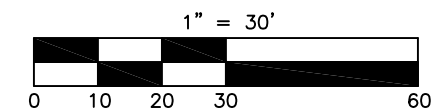
**WELL 409 PROPOSED PLAN**

**NOTES:**

1. EXIST 14" BLACK STEEL CASING PIPE
2. 14" BLACK STEEL 150LB ANSI WELDED SLIP-ON FLANGE
3. 14" 150LB 304 STAINLESS STEEL ANSI DRILLED SPOOL PIECE
4. REINSTALL EXIST WELL DISCHARGE PIPING. PROVIDE 6"x17" 304 SS 150LB DUCTILE IRON ANSI SPOOL PIECE
5. 6" CLEARANCE
6. 14" 150LB 304 STAINLESS STEEL ANSI DRILLED FLANGE
7. CONTINUOUS WELD 6" WELL DISCHARGE SPOOL PIECE BOTH SIDES OF FLANGE
8. 2" FULL THROUGH-HOLE WITH 2" THREADED/WELDED HUB & STAINLESS STEEL SCREEN (FULL HOLE DIAMETER MUST CLEAR FLANGES & CASINGS)
9. 1" FULL THROUGH-HOLE WITH 1" THREADED/WELDED HUB (3 EA) & STAINLESS STEEL SCREEN (FULL HOLE DIAMETER MUST CLEAR FLANGES & CASINGS)
10. 6" 150LB 304 STAINLESS STEEL SPOOL PIECE
11. 6" FLANGED D.I. TEE
12. 8" CLEARANCE
13. 6X2" COMPANION FLANGE W/ 2" (HIGH) NIPPLE
14. 2" BRASS BALL VALVE (NPT THREADED) W/ 2" THREADED MALE BANJO FITTING & CAP
15. PRESSURE GAGE WITH 3/8" BRASS BALL VALVE (NPT THREADED)
16. 1" BRASS 1/2" TURN BALL VALVE (NPT THREADED) W/ 1" BRASS PIPING IN/OUT
17. 1" A.R.I. D-040 COMBINATION AIR RELEASE VALVE
18. 2" BRASS CROSS W/ PLUG AND TAP FOR PRESSURE GAGE
19. 1/2" SCHED 80 PVC 90 SLIP/SLIP (TYP), PROVIDE FITTINGS AS REQUIRED
20. 1/2" SCHED 80 PVC PIPE UNION
21. 1/2" SCHED 80 PVC PIPE PIPED TO EXISTING DRAIN
22. 6"x14" 150LB DI FLG/FLG SPOOL PIECE
23. EXISTING 6" CHECK VALVE
24. 6" 90° BEND FLG/FLG
25. 6"x50" (APPROX) FLG/PE DI SPOOL PIECE WITH RESTRAINED HARNESS ADAPTOR
26. 6" 90° BEND MJ/MJ
27. 3000 PSI CONCRETE WELL HEAD COLLAR 24"x24" MIN, 12-16" TALL MEASURED OFF EXISTING FLOOR SLAB. #5@12" EW AND #5@12" EW DOWELED INTO EXISTING FLOOR SLAB MIN 6".
28. 6"x18" FLG/PE DI SPOOL PIECE WITH RESTRAINED HARNESS ADAPTOR
29. EXISTING 6" FLG MAG FLOW METER

**NOTES:**

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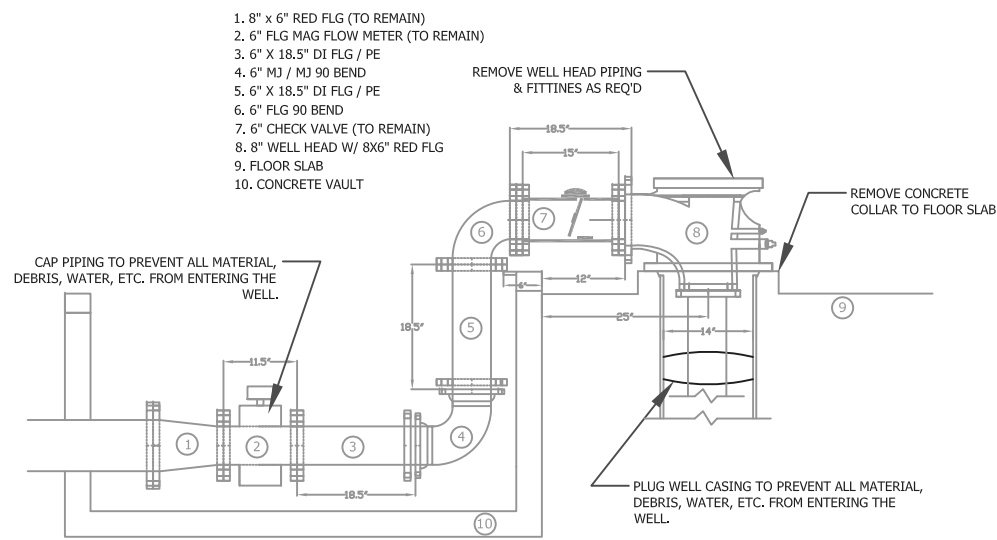


UTILITIES DEPARTMENT

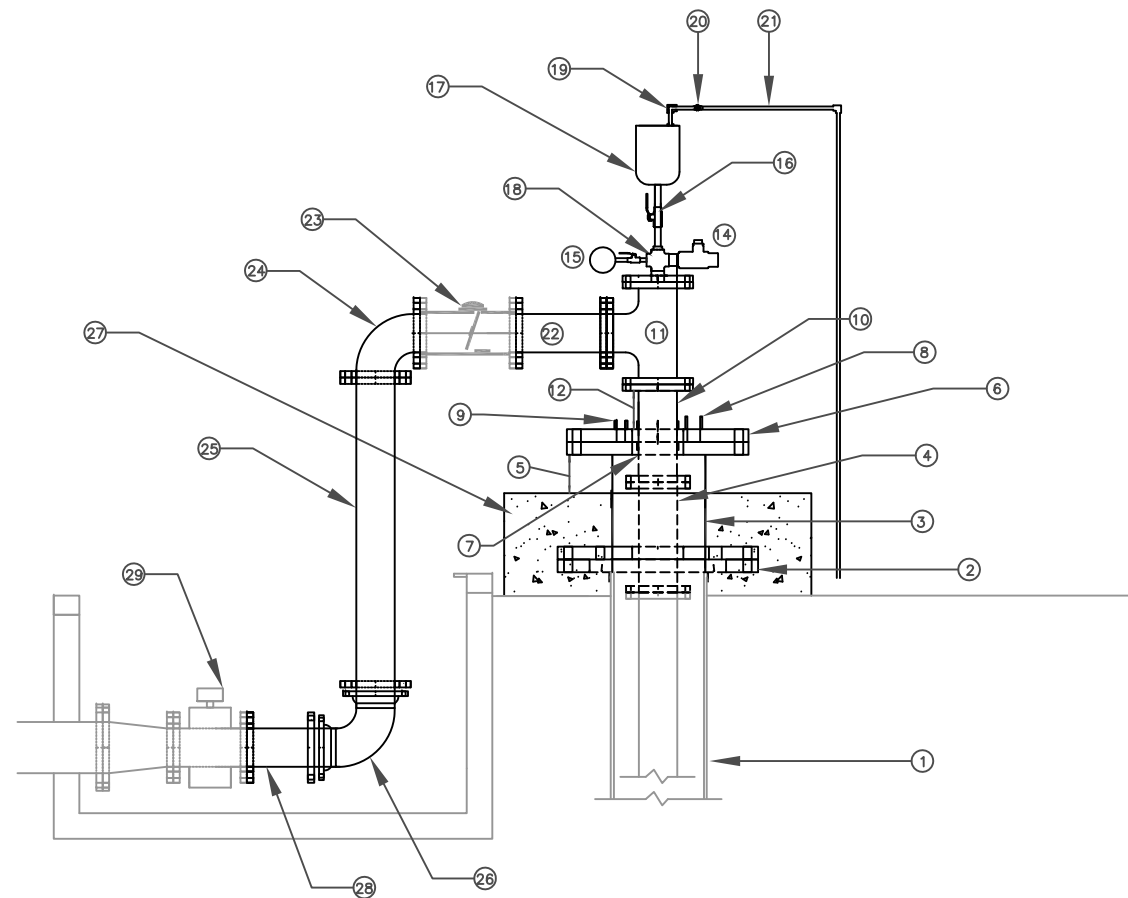
CITY OF NAPLES - UTILITIES DEPARTMENT

**WELL 409 IMPROVEMENTS  
8TH AVENUE SE**

FILE NO.  
SHEET C-2  
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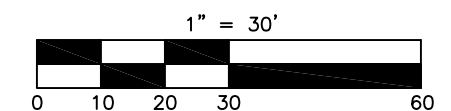
WELL 416 EXISTING/DEMO PLAN



WELL 416 PROPOSED PLAN

1. EXIST 14" BLACK STEEL CASING PIPE
2. 14" BLACK STEEL 150LB ANSI WELDED SLIP-ON FLANGE
3. 14" 150LB 304 STAINLESS STEEL ANSI DRILLED SPOOL PIECE
4. REINSTALL EXIST WELL DISCHARGE PIPING. PROVIDE 6"x17" 304 SS 150LB DUCTILE IRON ANSI SPOOL PIECE
5. 6" CLEARANCE
6. 14" 150LB 304 STAINLESS STEEL ANSI DRILLED FLANGE
7. CONTINUOUS WELD 6" WELL DISCHARGE SPOOL PIECE BOTH SIDES OF FLANGE
8. 2" FULL THROUGH-HOLE WITH 2" THREADED/WELDED HUB & STAINLESS STEEL SCREEN (FULL HOLE DIAMETER MUST CLEAR FLANGES & CASINGS)
9. 1" FULL THROUGH-HOLE WITH 1" THREADED/WELDED HUB (3 EA) & STAINLESS STEEL SCREEN (FULL HOLE DIAMETER MUST CLEAR FLANGES & CASINGS)
10. 6" 150LB 304 STAINLESS STEEL SPOOL PIECE
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13. 6x2" COMPANION FLANGE W/ 2" (HIGH) NIPPLE
14. 2" BRASS BALL VALVE (NPT THREADED) W/ 2" THREADED MALE BANJO FITTING & CAP
15. PRESSURE GAGE WITH 3/8" BRASS BALL VALVE (NPT THREADED)
16. 1" BRASS 1/2" TURN BALL VALVE (NPT THREADED) W/ 1" BRASS PIPING IN/OUT
17. 1" A.R.I. D-040 COMBINATION AIR RELEASE VALVE
18. 2" BRASS CROSS W/ PLUG AND TAP FOR PRESSURE GAGE
19. 1/2" SCHED 80 PVC 90 SLIP/SLIP (TYP), PROVIDE FITTINGS AS REQUIRED
20. 1/2" SCHED 80 PVC PIPE UNION
21. 1/2" SCHED 80 PVC PIPE PIPED TO EXISTING DRAIN
22. 6"x14" 150LB DI FLG/FLG SPOOL PIECE
23. EXISTING 6" CHECK VALVE
24. 6" 90° BEND FLG/FLG
25. 6"x50" (APPROX) FLG/PE DI SPOOL PIECE WITH RESTRAINED HARNESS ADAPTOR
26. 6" 90° BEND MJ/MJ
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29. EXISTING 6" FLG MAG FLOW METER

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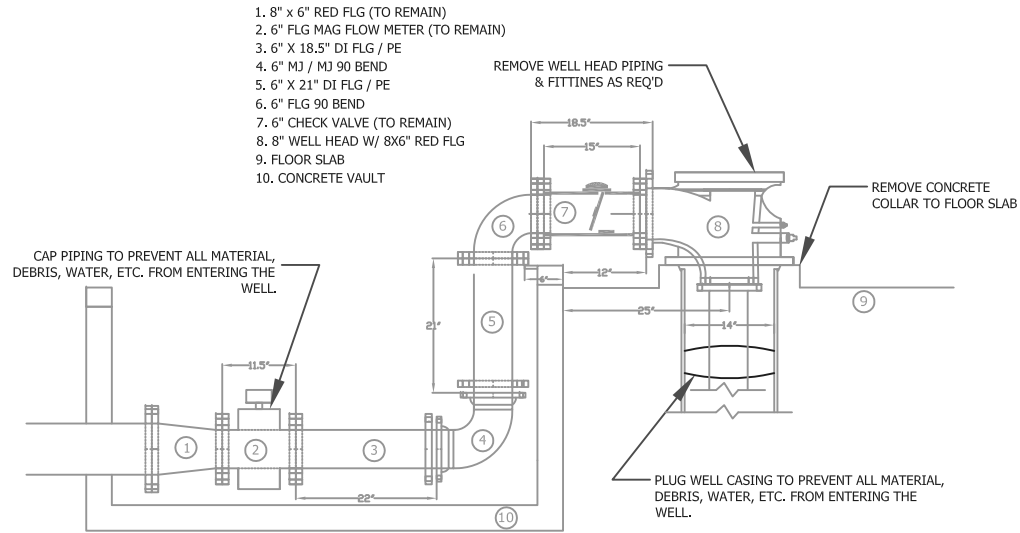


UTILITIES DEPARTMENT

CITY OF NAPLES - UTILITIES DEPARTMENT

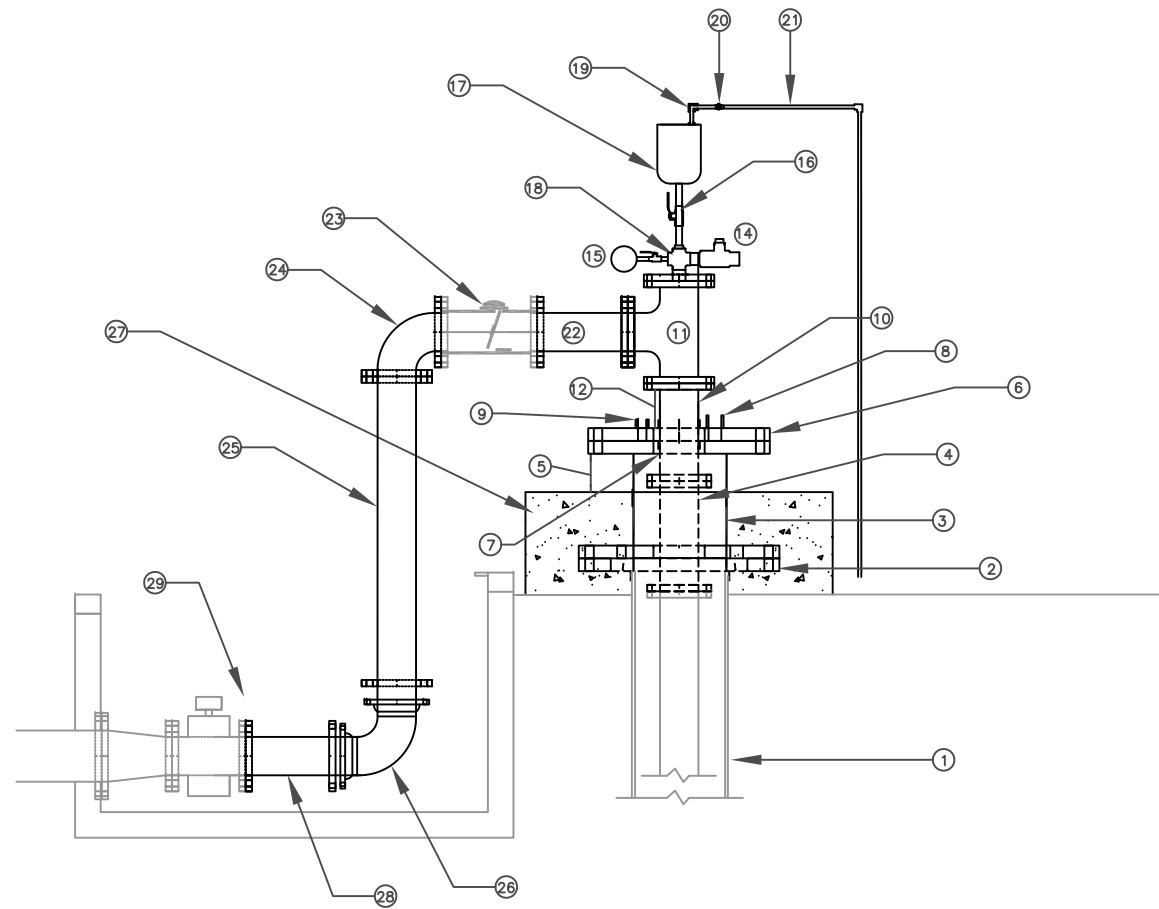
WELL 416 IMPROVEMENTS  
12TH AVENUE NE

FILE NO.  
SHEET C-3  
DATE: DEC 2011



WELL 418 EXISTING/DEMO PLAN

1. 8" x 6" RED FLG (TO REMAIN)
2. 6" FLG MAG FLOW METER (TO REMAIN)
3. 6" x 18.5" DI FLG / PE
4. 6" MJ / MJ 90 BEND
5. 6" x 21" DI FLG / PE
6. 6" FLG 90 BEND
7. 6" CHECK VALVE (TO REMAIN)
8. 8" WELL HEAD W/ 8X6" RED FLG
9. FLOOR SLAB
10. CONCRETE VAULT

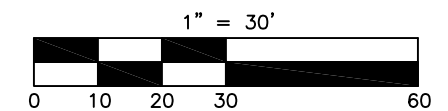


WELL 418 PROPOSED PLAN

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3. 14" 150LB 304 STAINLESS STEEL ANSI DRILLED SPOOL PIECE
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15. PRESSURE GAGE WITH 1/2" BRASS BALL VALVE (NPT THREADED)
16. 1" BRASS 1/4" TURN BALL VALVE (NPT THREADED) W/ 1" BRASS PIPING IN/OUT
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21. 1/2" SCHED 80 PVC PIPE PIPED TO EXISTING DRAIN
22. 6"x14" 150LB DI FLG/FLG SPOOL PIECE
23. EXISTING 6" CHECK VALVE
24. 6" 90° BEND FLG/FLG
25. 6"x52" (APPROX) FLG/PE DI SPOOL PIECE WITH RESTRAINED HARNESS ADAPTOR
26. 6" 90° BEND MJ/MJ
27. 3000 PSI CONCRETE WELL HEAD COLLAR 24"x24" MIN, 12-16" TALL MEASURED OFF EXISTING FLOOR SLAB. #5@12" EW AND #5@12" EW DOWELED INTO EXISTING FLOOR SLAB MIN 6".
28. 6"x16.5" FLG/PE DI SPOOL PIECE WITH RESTRAINED HARNESS ADAPTOR
29. EXISTING 6" FLG MAG FLOW METER

NOTES:

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3. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND STORING THE WELL PUMP AND PIPING. PUMP AND PIPING SHALL BE STORED INDOORS AND PROTECTED FROM CONTAMINATION IN ACCORDANCE WITH AWWA STANDARDS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLING THE WELL PUMP AND PIPING AND DISINFECTING THE WELL AND PIPING PER AWWA STANDARDS.
5. ALL NUTS, BOLTS, AND MISC. HARDWARE SHALL BE 304 STAINLESS STEEL.
6. ALL PIPING, FITTINGS, VALVES, COATINGS AND APPURTENANCES INSTALLED SHALL BE NSF 61 APPROVED.
7. ALL PIPING, FITTINGS, VALVES, AND APPURTENANCES SHALL BE COATED (INTERIOR AND EXTERIOR) PER THE TECHNICAL SPECIFICATIONS.



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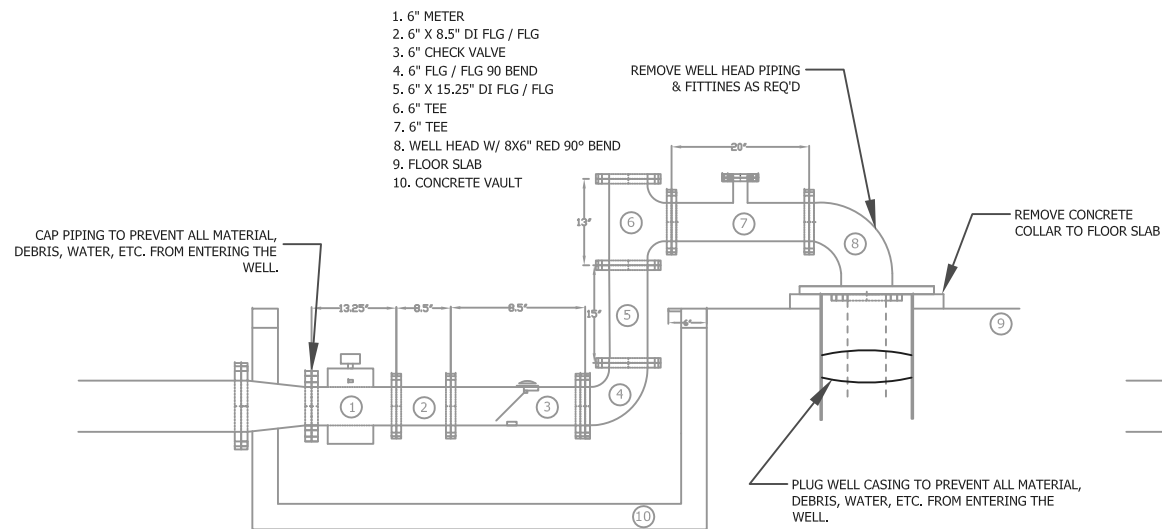


UTILITIES DEPARTMENT

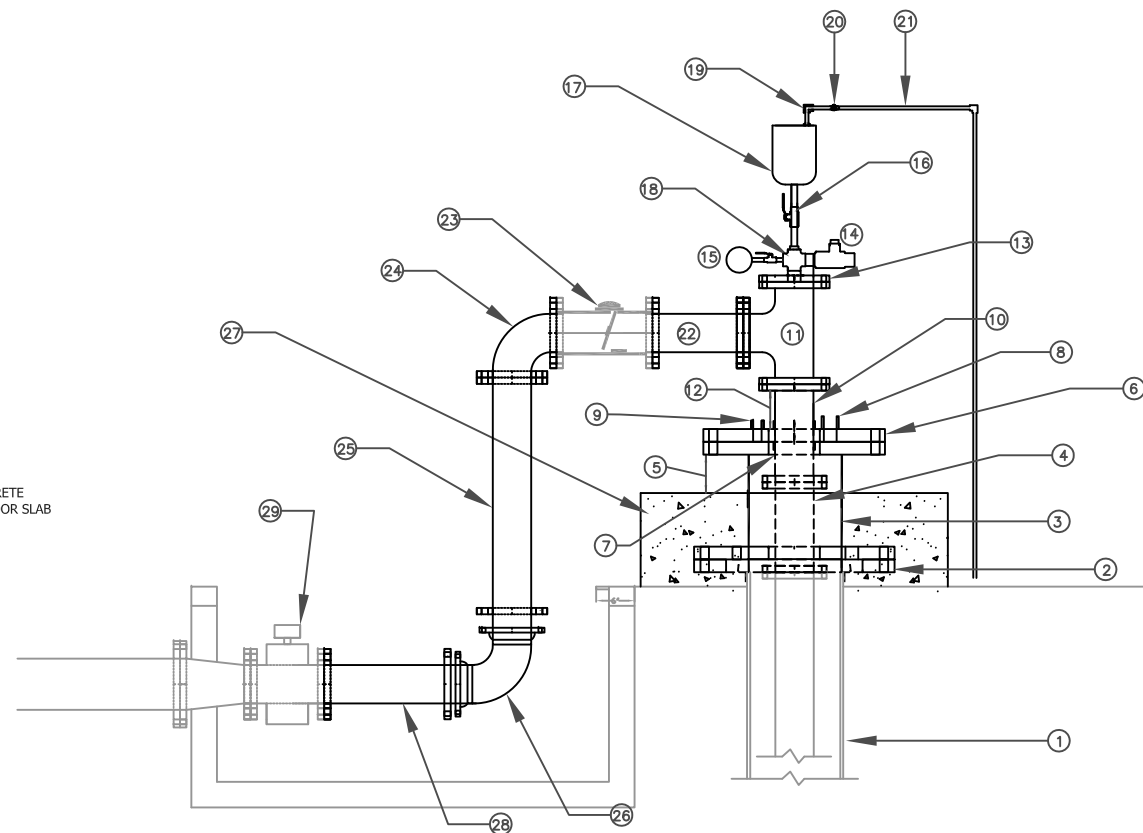
CITY OF NAPLES - UTILITIES DEPARTMENT

WELL 418 IMPROVEMENTS  
16TH AVENUE NE

FILE NO.  
SHEET C-4  
DATE: DEC 2011



WELL 419 EXISTING/DEMO PLAN

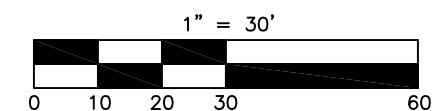


WELL 419 PROPOSED PLAN

1. EXIST 14" BLACK STEEL CASING PIPE
2. 14" BLACK STEEL 150LB ANSI WELDED SLIP-ON FLANGE
3. 14" 150LB 304 STAINLESS STEEL ANSI DRILLED SPOOL PIECE
4. REINSTALL EXIST WELL DISCHARGE PIPING. PROVIDE 6"x17" 304 SS 150LB DUCTILE IRON ANSI SPOOL PIECE
5. 6" CLEARANCE
6. 14" 150LB 304 STAINLESS STEEL ANSI DRILLED FLANGE
7. CONTINUOUS WELD 6" WELL DISCHARGE SPOOL PIECE BOTH SIDES OF FLANGE
8. 2" FULL THROUGH-HOLE WITH 2" THREADED/WELDED HUB & STAINLESS STEEL SCREEN (FULL HOLE DIAMETER MUST CLEAR FLANGES & CASINGS)
9. 1" FULL THROUGH-HOLE WITH 1" THREADED/WELDED HUB (3 EA) & STAINLESS STEEL SCREEN (FULL HOLE DIAMETER MUST CLEAR FLANGES & CASINGS)
10. 6" 150LB 304 STAINLESS STEEL SPOOL PIECE
11. 6" FLANGED D.I. TEE
12. 8" CLEARANCE
13. 6X2" COMPANION FLANGE W/ 2" (HIGH) NIPPLE
14. 2" BRASS BALL VALVE (NPT THREADED) W/ 2" THREADED MALE BANJO FITTING & CAP
15. PRESSURE GAGE WITH 3/8" BRASS BALL VALVE (NPT THREADED)
16. 1" BRASS 1/2" TURN BALL VALVE (NPT THREADED) W/ 1" BRASS PIPING IN/OUT
17. 1" A.R.I. D-040 COMBINATION AIR RELEASE VALVE
18. 2" BRASS CROSS W/ PLUG AND TAP FOR PRESSURE GAGE
19. 1/2" SCHED 80 PVC 90 SLIP/SLIP (TYP), PROVIDE FITTINGS AS REQUIRED
20. 1/2" SCHED 80 PVC PIPE UNION
21. 1/2" SCHED 80 PVC PIPE PIPED TO EXISTING DRAIN
22. 6"x14" 150LB DI FLG/FLG SPOOL PIECE
23. OWNER PROVIDED 6" CHECK VALVE
24. 6" 90° BEND FLG/FLG
25. 6"x52" (APPROX) FLG/PE DI SPOOL PIECE WITH RESTRAINED HARNESS ADAPTOR
26. 6" 90° BEND MJ/MJ
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29. OWNER PROVIDED 6" FLG MAG FLOW METER

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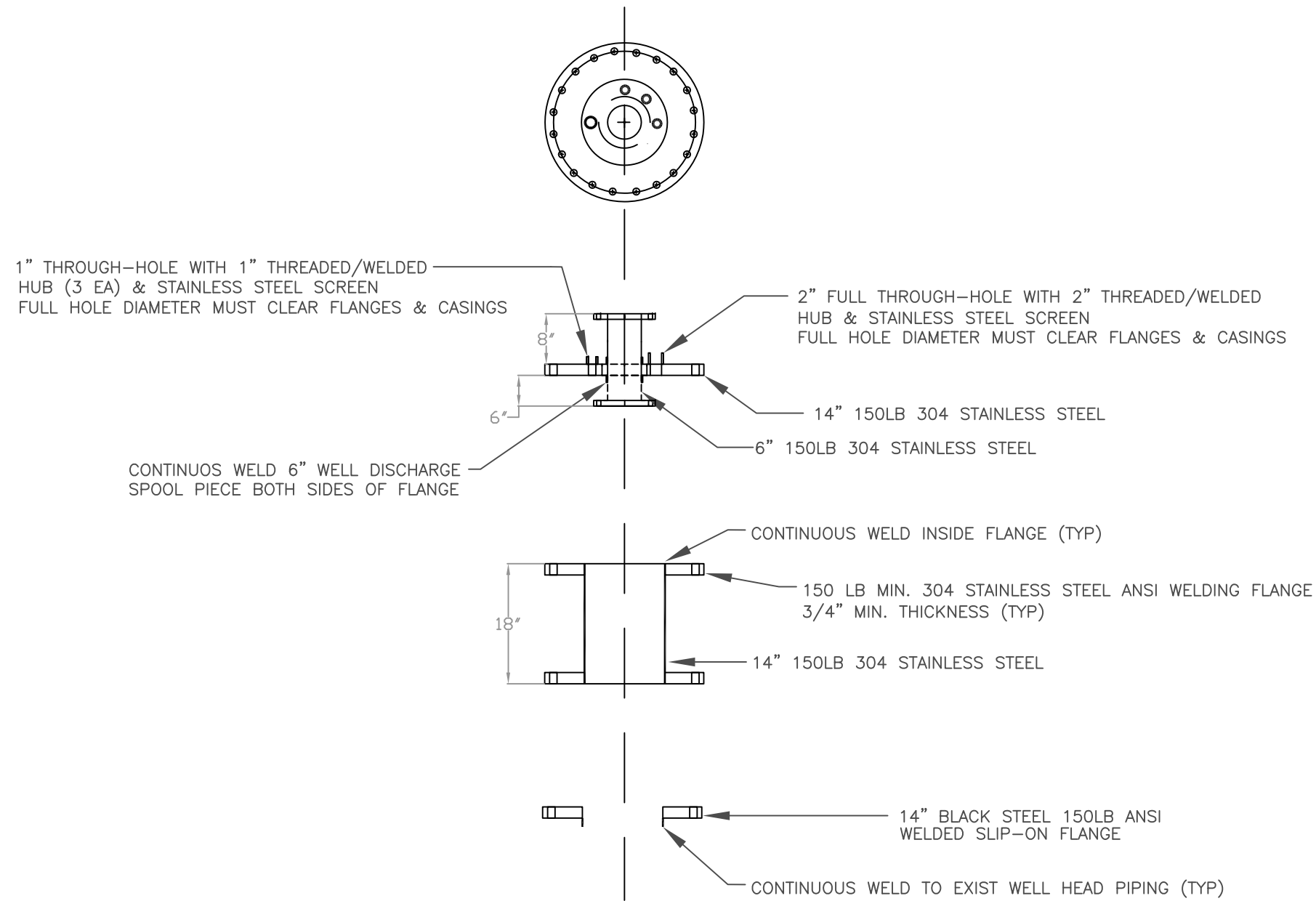


UTILITIES DEPARTMENT

CITY OF NAPLES - UTILITIES DEPARTMENT

WELL 419 IMPROVEMENTS  
18TH AVENUE NE

FILE NO.  
SHEET C-5  
DATE: DEC 2011



NOT TO SCALE

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UTILITIES DEPARTMENT

CITY OF NAPLES - UTILITIES DEPARTMENT  
**Well Head Improvements**  
**Well Head Detail**

FILE NO.  
 SHEET D-1  
 DATE: DEC 2011