



PROJECT NO.	SHEET NO.
12003	0

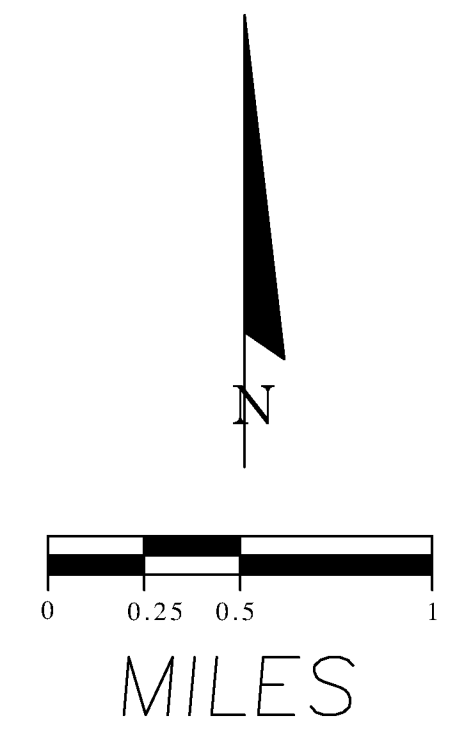
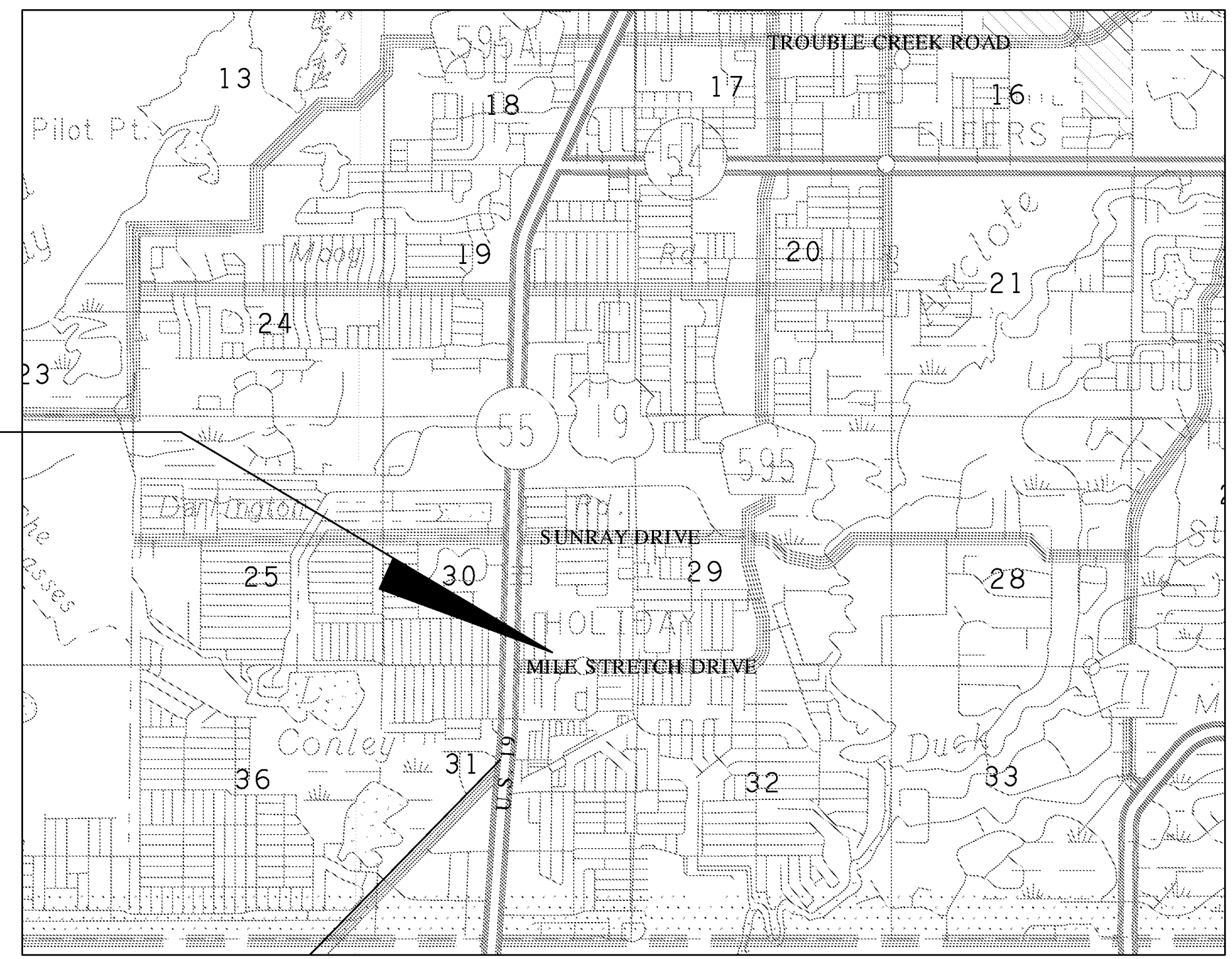
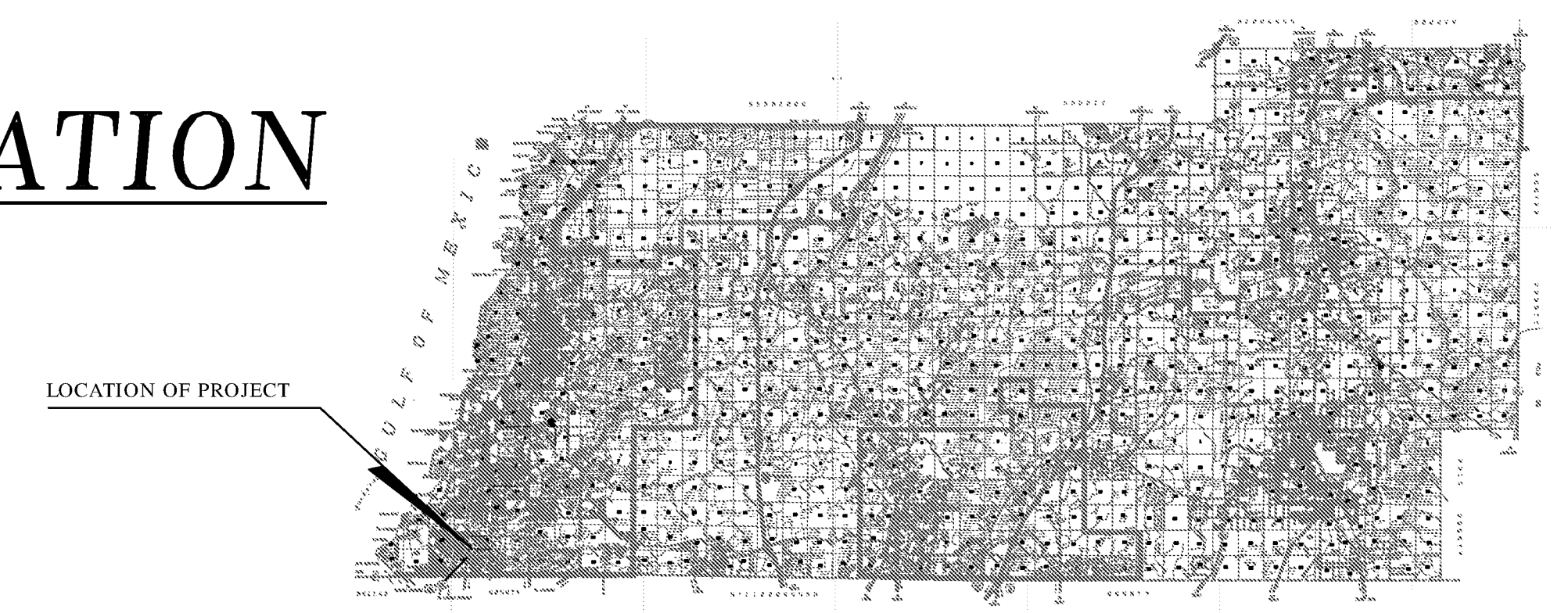
**SIMULTANEOUS SUBMITTAL OF
PRELIMINARY / CONSTRUCTION PLANS**

**PASCO COUNTY FIRE & RESCUE STATION
NO. 12
FOR**

**PASCO COUNTY FACILITIES
MANAGEMENT DEPARTMENT
7220 OSTEEN ROAD
NEW PORT RICHEY, FLORIDA 34653**

COMPONENTS OF PLAN SET:
CONSTRUCTION PLANS
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FIRE STATION NO. 12

FM 12-003

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NEW PORT RICHEY, FLORIDA 34654
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Email: Jerome.Mecham@duke-energy.com

Pasco County Traffic Operations
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Verizon Florida, LLC
1280 Cleveland Street
Clearwater, FL 33755
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Pasco County Utilities
Public Works/Utilities Building
7536 State St., Suite 118
New Port Richey, FL 34654
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30432 State Road 54
Wesley Chapel, FL 33543
T (813) 862-0522 ext. 84266 / F (813) 377-0226
Email: thomas.sansing@mybrighthouse.com

Florida Governmental Utility Authority
6915 Perrine Ranch Road
New Port Richey, FL 34655
T (727) 372-0115 / F (727) 372-2677
Email: fguaes_pasocco@govserv.com

PASCO COUNTY COMMISSIONERS

- DISTRICT 1 TED SCHRADER
- DISTRICT 2 MIKE MOORE
- DISTRICT 3 KATHRYN STARKEY
- DISTRICT 4 MIKE WELLS JR.
- DISTRICT 5 JACK MARIANO

**CONSTRUCTION PLANS
ENGINEER OF RECORD**

PAUL A. MANUEL P.E.

PLANS PREPARED BY



7026 LITTLE ROAD NEW PORT RICHEY, FL. 34654
PH: 727-849-8010 FAX: 727-849-8020
C. A. # 00009572

ATTENTION IS DIRECTED TO THE FACT THAT
THESE PLANS MAY HAVE BEEN ALTERED IN
SIZE BY REPRODUCTION. THIS MUST BE
CONSIDERED WHEN OBTAINING SCALED DATA.

REVISIONS		
DATE	BY	DESCRIPTION

"These plans have been prepared in accordance with the current version of the "Manual Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, State of Florida" and are in compliance with the standards therein except as noted on the plans. Any deviations noted on the plans substantially comply with the intent of the standards."

CONSTRUCTION PLANS
APPROVED BY: _____
DATE: _____
P.E. NO.: 51424

TECHNICAL SPECIFICATIONS

ALL SITE AND UTILITY WORK PERFORMED ON THIS PROJECT SHALL BE GOVERNED BY APPLICABLE PROVISIONS OF PASCO COUNTY AND THE PASCO COUNTY UTILITY DEPARTMENT. THE PROJECT SHALL BE CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CONSTRUCTION DRAWINGS & SPECIFICATIONS DESCRIBED HEREIN AND WITH THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE OF STREETS AND HIGHWAYS, STATE OF FLORIDA, IN THE EVENT THAT ANY ITEM IS NOT ADDRESSED IN THESE PLANS OR THE SPECIFICATIONS, THEN THE APPLICABLE PROVISIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION AND SUPPLEMENTS THERETO SHALL APPLY, EXCEPT AS OTHERWISE SPECIFICALLY APPROVED BY THE OWNER AND /OR THE ENGINEER OF RECORD.

THE FOLLOWING ARE INCORPORATED HEREIN BY REFERENCE:

- 1. PASCO COUNTY ENGINEERING SERVICES DEPARTMENT TESTING SPECIFICATIONS FOR CONSTRUCTION OF ROADS, STORM DRAINAGE AND UTILITIES 2009
2. PASCO COUNTY UTILITY DEPARTMENT STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER AND RECLAIMED WATER FACILITIES, 2009
3. FLORIDA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS 2011
4. FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2015
5. FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS 2015
6. FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009

NOTE: ON-SITE WORK TO BE IN ACCORDANCE WITH REQUIREMENTS OF DISTRICT SCHOOL BOARD OF PASCO COUNTY.

GENERAL CONSTRUCTION NOTES

- 1. ELEVATIONS SHALL BE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD83). BENCHMARK 11 689'. ALL SURVEY DATA WAS PROVIDED BY DC JOHNSON & ASSOCIATES, INC.
2. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK, PRIOR TO CONSTRUCTION
3. THE CONTRACTOR SHALL CHECK THE PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
4. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION OF EXISTING UTILITIES, WHETHER OR NOT SHOWN, ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ACTUAL FIELD LOCATIONS FROM THE RESPECTIVE UTILITY COMPANY 48 HOURS BEFORE BEGINNING WORK.

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5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION.
7. EARTHWORK CONSTRUCTION:
A. ALL EARTHWORK CONSTRUCTION SHALL BE PAID FOR BY PLAN QUANTITIES.
B. ALL FILL SUITABLE FOR CONSTRUCTION EITHER REQUIRED OR IN EXCESS TO THE PROJECT IS THE PROPERTY OF THE OWNER AND SHALL BE UTILIZED FOR THE PROJECT OR STOCKPILED ON-SITE AS DIRECTED BY THE OWNER AND / OR ENGINEER OF RECORD.
8. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS WHICH ARE FOR THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITAL TO THE OWNER'S ENGINEER.
9. AT LEAST FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE AND OTHER INFORMATION AS REQUIRED. ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER, OR WITHOUT AGENCY INSPECTOR PRESENT MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
10. BACKFILL MATERIAL SHALL BE SOLIDLY TAMPAED AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY A.A.S.H.T.O. T-99.
11. SITE WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 3,000 P.S.I. IN 28 DAYS, UNLESS OTHERWISE NOTED.
12. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. ADDITIONAL COSTS ARE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION IS TO BE ALLOWED.
13. ALL DISTURBED AREAS ARE TO BE SOODED TO FDOT STANDARDS UNLESS OTHERWISE NOTED. AREAS CALLED OUT IN THE PLANS TO BE SEEDDED AND MULCHED, THE FOLLOWING SHALL APPLY:
A. ALL AREAS WITH SLOPES EQUAL TO OR GREATER THAN 4:1 OR WITHIN 2" OF ANY PAVEMENT OR CURB SHALL BE SOODED. ALL SOODED SLOPES STEEPER THAN 4:1 SHALL BE INSTALLED WITH SOD PEGS.
B. ALL AREAS WITHIN 5' OF ANY DRAINAGE STRUCTURE OR WITHIN CITY, COUNTY AND/OR FDOT R.O.W. SHALL BE SOODED.
ALL SOODED AND SEEDDED / MULCHED AREAS SHALL BE MAINTAINED UNTIL A SATISFACTORY STAND OF GRASS, ACCEPTABLE TO THE REGULATORY AGENCY AND ENGINEER OF RECORD. ANY WASHOUTS, REGRADING, RESEEDING AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED, WILL BE PERFORMED BY THE CONTRACTOR, UNTIL THE SYSTEM IS ACCEPTED FOR MAINTENANCE BY THE REGULATORY AGENCY AND ENGINEER OF RECORD.
14. ALL SODDING, SEEDING AND MULCHING SHALL INCLUDE WATERING AND FERTILIZATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY REGULATORY AGENCIES, THE ENGINEER OF RECORD, AND THE OWNER.
15. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE.
16. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT ALL TIMES TO CONTROL FUGITIVE DUST FROM THE CONSTRUCTION SITE. THE CONTRACTOR IS ADVISED THAT THE USE OF A WATER TRUCK OR TRAILER MAY BE REQUIRED FOR THE PURPOSE OF KEEPING THE SOIL MOIST TO CONTROL FUGITIVE DUST.
17. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATIONS, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORICAL RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND THE LOCAL GOVERNING CITY AND/OR COUNTY DEPARTMENT SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON SITE.
18. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED BY THE CONTRACTOR. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY O.S.H.A. IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
19. ALL REQUIRED TEST REPORTS SHALL BE SUPPLIED BY CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER OF RECORD. THE TESTING COMPANY SHALL SUPPLY THE ENGINEER WITH A COPY OF ALL COMPLETION TESTS AND ASPHALT TESTING RESULTS. THE TESTING COMPANY SHALL CERTIFY TO THE ENGINEER OF RECORD, IN WRITING THAT ALL TESTING REQUIREMENTS REQUIRED BY THE LOCAL REGULATORY AGENCY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.), FOR THE IMPROVEMENTS AS REQUIRED BY THE ENGINEERING CONSTRUCTION DRAWINGS, HAVE BEEN SATISFIED.

PAVING, GRADING & DRAINAGE NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING UTILITIES AND WILL PROVIDE BRACING, SHIELDING OR SHORING AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. DE-WATERING SHALL BE USED AS REQUIRED.
2. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. THE CONTRACTOR IS TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.
3. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
4. ALL PAVEMENT MARKINGS SHALL BE MADE WITH THERMOPLASTIC, EXCEPT PARKING STALL DELINEATIONS, WHICH MAY BE TRAFFIC RATED PAINT. PARKING STALL DELINEATION SHALL BE 6" MIN. WIDTH.
5. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (A.S.T.M. C-76) UNLESS OTHERWISE NOTED ON PLANS.
6. P.V.C. STORM PIPE, 12" AND SMALLER SHALL CONFORM TO A.W.W.A. C-800, CLASS 150 STANDARDS UNLESS OTHERWISE NOTED.
7. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO THE CENTER OF DRAINAGE STRUCTURES. PIPE LENGTHS SHOWN, WHERE MITERED END SECTION OF PIPE, SHALL BE INCLUDED IN THE UNIT COST OF THE MITERED END.
8. ALL DIMENSIONS SHOWN WHERE CURB IS APPLICABLE ARE TO THE EDGE OF PAVEMENT.
9. ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS.
10. WHEN CONSTRUCTION IS COMPLETED, THE RETENTION/DENTION AREAS WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS AND SOODED AND / OR SEED / MULCH IN ACCORDANCE TO THE PLANS.
11. SOD SHALL BE STAKED AS NECESSARY TO PREVENT DISPLACEMENT.
12. THE CONTRACTOR SHALL PROVIDE CERTIFIED RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES, INVERTS AND LOCATIONS OF ALL STORMWATER FACILITIES INCLUDING THE STORMWATER POND, DRAINAGE STRUCTURES, BEMS & CULVERTS. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER FOR THE PURPOSE OF CERTIFYING THE STORMWATER MANAGEMENT SYSTEM.
13. ALL DRAINAGE PIPE SHALL BE CUT FLUSH WITH THE INTERIOR WALLS OF EACH DRAINAGE STRUCTURE AND GROUDED TO A SMOOTH FINISH.

PAVING, GRADING & DRAINAGE TESTING & INSPECTION REQUIREMENTS

- 1. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. THE CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION.
2. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE APPLICABLE TESTING WITH THE TESTING COMPANY. UPON COMPLETION OF THE WORK, THE TESTING COMPANY MUST SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT TESTING REQUIREMENTS HAVE BEEN MET.
4. ALL DRAINAGE PIPE SHALL BE CUT FLUSH WITH THE INTERIOR WALLS OF EACH DRAINAGE STRUCTURE AND GROUDED TO A SMOOTH FINISH.

CLEARING AND GRUBBING NOTES

- 1. CLEARING AND GRUBBING FOR PURPOSES OF THE PROJECT DESCRIBED HEREIN SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," 2015
2. ALL VEGETATION, STRUCTURES, MATERIALS DEBRIS AND FILL UNSUITABLE FOR CONSTRUCTION AND OF NO SALVAGE VALUE TO THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR.
3. EXISTING PAVEMENT SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR AT THIS EXPENSE. THE CONTRACTOR MAY (AT HIS OPTION) USE EXISTING LIMESTOCK BASE MATERIAL AS A STABILIZING ADDITIVE TO THE SUBGRADE. AT NO TIME WILL EXISTING BASE MATERIAL BE INCORPORATED WITHIN THE NEW BASE.
4. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY'S TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER.
5. ALL DELETERIOUS SUBSTANCE MATERIAL, (I.E. MUCK, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS, OR AS DIRECTED BY THE OWNER'S ENGINEER OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE REMOVED FROM THE SITE OR AS OTHERWISE DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
6. THE CONTRACTOR SHALL CLEAR AND GRUB, ONLY THOSE PORTIONS OF THE SITE, AS NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SOODED FOLLOWING CONSTRUCTION.
7. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER UNLESS OTHERWISE DIRECTED BY THE OWNER.
8. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
9. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES.
10. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE OWNER AND REQUESTING A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION.
11. NO ON-SITE BURNING SHALL BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE LOCAL FIRE MARSHALL.

EROSION CONTROL NOTES

- 1. DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
2. ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
3. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS AND EXISTING WETLANDS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

DEWATERING PLAN / NOTES

- THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING GUIDELINES WHEN CONSTRUCTION ACTIVITIES REQUIRE DEWATERING:
1. DEWATERING ACTIVITIES SHALL BE CONTAINED WITHIN THE PROJECT AREA.
2. THE PROPOSED DRAINAGE RETENTION AREAS CAN BE USED AS TEMPORARY SETTLING AREAS FOR DEWATERING ACTIVITIES. THE PROPOSED DRAINAGE RETENTION AREA(S) SHALL BE CONSTRUCTED TO A SUFFICIENT SIZE AND DEPTH TO RECEIVE WATER FROM DEWATERING ACTIVITIES. IF AT ANY TIME STAGNANT WATER WITHIN THE RETENTION AREA APPROACHES 6-INCHES OF THE PROPOSED POND TOP-OR-BANK, DEWATERING ACTIVITIES SHALL STOP UNTIL THE RETENTION VOLUME HAS RECOVERED.
3. SHEET PILE WALLS, SLURRY WALLS, OR OTHER MEANS OF LIMITING THE EXTENT OF THE WATER TABLE DRAWDOWN, BEYOND THE PROJECT AREA, SHALL BE IMPLEMENTED.
4. WATER DISCHARGE FROM SETTLING AREAS SHALL BE CLEAN AND FREE OF ANY SILT. SILT BARRIERS (I.E. SILT FENCE, HAY BALES, ROCK BAGS OR ANY COMBINATION NECESSARY TO REMOVE SEDIMENTS PRIOR TO DISCHARGE) SHALL BE INSTALLED AND MAINTAINED UNTIL ALL DEWATERING ACTIVITIES ARE COMPLETE.
5. AT NO TIME SHALL DISCHARGE FROM THE DEWATERING ACTIVITIES BE DIRECTED IN A MANNER THAT WOULD IMPACT AN EXISTING WETLAND, LAKE OR RIVER.
6. DEWATERING ACTIVITIES SHALL BE LIMITED TO TIME PERIODS THAT CONSTRUCTION ACTIVITIES REQUIRED DEWATERING. ALL IMPLEMENTED DEWATERING INFRASTRUCTURE, EQUIPMENT, ETC. SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
7. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO PASCO COUNTY ENGINEERING INSPECTIONS DEPARTMENT AT (727) 834 3670 FOR REVIEW PRIOR TO EROSION CONTROL PRE-INSPECTION MEETING.

PASCO COUNTY COMMENT REVISIONS:
1. ADDED PASCO COUNTY DEWATERING NOTE.

GENERAL UTILITY NOTES

- 1. NO CONNECTION TO THE EXISTING UTILITY LINES SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE LOCAL GOVERNING UTILITY DEPARTMENT.
2. ALL AREAS DISTURBED BY THIS CONSTRUCTION SHALL BE SOODED WITH BAMA AND / OR MATCH EXISTING GRASS TYPE.
ALL UTILITY LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE PIPE ALIGNMENT. IN THE CASE OF GRAVITY SEWERS, THE TAPE SHALL BE SECURED TO EACH MANHOLE. FOR CONDUIT TAPE SHALL BE INSTALLED DURING BACK FILLING 12" BELOW FINAL GRADE DIRECTLY OVER THE PIPE. THE TAPE SHALL HAVE A METALLIC DETECTABLE STRIP SANDWICHED BETWEEN 2 LAYERS OF POLYETHYLENE .2" WIDE STRIPPING WITH A THICKNESS OF 5.5 MILS.
• (BLUE TAPE) FOR WATER LINES, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION WATER LINE BELOW,"
• (GREEN TAPE) FOR FORCE MAINS, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, SEWAGE FORCE MAIN BELOW,"
• (GREEN TAPE) FOR SANITARY SEWER LINES, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, SEWER MAIN BELOW,"
• (PURPLE TAPE) FOR RECLAIMED WATER LINES, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION RECLAIMED WATER LINE BELOW"
3. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION OF EXISTING UTILITIES, WHEN SHOWN, ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ACTUAL FIELD LOCATIONS FROM THE RESPECTIVE UTILITY COMPANY 48 HOURS BEFORE BEGINNING ANY WORK. SUNSHINE STATE CALL -- 1-800-432-4770
4. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DOCUMENTS REFERENCED HEREIN. ANY METHODS, PROCEDURE, STANDARDS, EQUIPMENT, OR MATERIALS WHICH ARE NOT COVERED OR SPECIFIED BY THE APPLICABLE PROVISIONS OF THE GOVERNING MUNICIPALITY WATER/SEWER STANDARDS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND F.D.O.T. UTILITIES SPECIFICATIONS, THE MOST STRINGENT SHALL APPLY.
5. ALL UTILITIES WILL BE INSTALLED UNDERGROUND.

WATER/SEWER CLEARANCE REQUIREMENTS:

- VERTICAL CLEARANCE AT CROSSINGS:
SANITARY SEWERS, STORM SEWERS AND STRUCTURES, RECLAIMED WATER MAINS, OR FORCE MAINS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 12" INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS WILL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS, WHERE THE MINIMUM 12 INCH SEPARATION CANNOT BE MAINTAINED, ONE OF THE FOLLOWING METHODS OF PROTECTION SHALL BE UTILIZED:
I. THE PROPOSED PIPE SHALL BE CONSTRUCTED OF PRESSURE RATED PVC PIPE (MEETING THE AWWA C-900 OR C-905 SPECIFICATION) AND SHALL BE PRESSURE TESTED AT 150 PSF TO ASSURE TIGHTNESS PRIOR TO BACKFILLING.
II. EITHER THE WATER MAIN OR THE OTHER PIPE SHALL BE ENCASED IN A WATERHOUSI CARRIER PIPE. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE F.D.E.P. FOR USE IN WATER MAIN CONSTRUCTION.
III. USE WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR OTHER PIPELINE.
IV. 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)
V. UNDERGROUND WATER MAINS SHALL BE A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET, AND PREFERABLY TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED WADIUM-TYPE SANITARY SEWER.
VI. UNDERGROUND WATER MAINS SHALL BE A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRVITY 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.
VII. UNDERGROUND WATER MAINS SHALL BE A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.008(2), F.S., AND RULE 64E-6.002, F.A.C.
VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER, OR RECLAIMED WATER PIPES:
I. UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRVITY OR WADIUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX (6) INCHES, AND PREFERABLY TWELVE (12) INCHES, ABOVE OR AT LEAST TWELVE (12) INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
II. 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 TWELVE (12) INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
III. 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 WADIUM-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 (6) 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.
HORIZONTAL SEPARATION BETWEEN PARALLEL LINES:
SANITARY SEWERS, STORM SEWERS AND STRUCTURES, RECLAIMED WATER MAINS, OR FORCE MAINS SHALL BE INSTALLED AT LEAST 6 FEET FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 6 FT. SEPARATION, THE FOLLOWING METHODS OF PROTECTION SHALL BE UTILIZED:
I. THE PROPOSED PIPE SHALL BE CONSTRUCTED OF PRESSURE RATED PVC PIPE (MEETING THE AWWA C-900 OR C-905 SPECIFICATION) AND SHALL BE PRESSURE TESTED AT 150 PSF TO ASSURE TIGHTNESS PRIOR TO BACK FILLING.
II. EITHER THE WATER MAIN OR THE OTHER PIPE SHALL BE ENCASED IN A WATERHOUSI CARRIER PIPE. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE F.D.E.P. FOR USE IN WATER MAIN CONSTRUCTION.
III. USE WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR OTHER PIPELINE.
IV. 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)
C. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MAINS:
NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
A. WATER MAIN 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 THE WATER MAIN SHALL BE CONSTRUCTED WITH A CONFLICT MANHOLE AS FOLLOWS:
I. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATER TIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAN AND THE MANHOLE.
II. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATER TIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
III. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.
N. GRABBING SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.

SANITARY SEWER NOTES

- 1. ALL SANITARY SEWER MAINS & LATERAL SHALL HAVE A MINIMUM OF 36" OF COVER BASED ON FINAL GRADING.
2. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
3. ALL PVC GRAVITY SEWER MAINS AND SERVICE LATERALS SHALL CONFORM TO ASTM-D-3034, SDR35; FOR DEPTHS OF 0-12 FEET, SDR28 FOR DEPTHS OF 12-18 FEET AND DUCTILE IRON FOR DEPTHS BELOW 18 FEET. (SEE NOTE 7 BELOW) WITH PVC SLIP JOINT FITTING IN ACCORDANCE WITH ASTM SPECIFICATIONS SECTION D2321 AND SHALL BE SOLID GREEN PIPE WITH WHITE LETTERS. PIPES INSTALLED AT DEPTHS OF LESS THAN 4" SHALL BE AWWA C-900 (CLASS 100), DR-25 PVC OR C-905 (CLASS 165), PVC DR-25.
4. ALL DUCTILE IRON PIPE SHALL BE CLASS SO IN ACCORDANCE WITH ANS/AWWA C150/A21.50 AND PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING AND SHALL BE CEMENT MORTAR LINED, STANDARD THICKNESS, IN ACCORDANCE WITH ANS/AWWA C104/A21.4.
5. ALL FITTINGS LARGER THAN 3" SHALL BE DUCTILE IRON IN ACCORDANCE WITH AWWA C-110 WITH A PRESSURE RATING OF 350 P.S.I. JOINTS SHALL BE MECHANICAL JOINTS IN ACCORDANCE WITH AWWA C-111. FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED IN ACCORDANCE WITH AWWA C-104.
6. ALL PVC FORCE MAINS 4" THROUGH 12" SHALL BE AWWA C-900 (CLASS 100), DR-25 PVC AND 14" THROUGH 24" SHALL BE AWWA C-905 (CLASS 125), DR-25; WITH AWWA APPROVED DUCTILE IRON MECHANICAL JOINT FITTINGS. THE PIPE SHALL BE SOLID GREEN WITH WHITE OR BLACK LETTERING.
7. ALL PVC PIPE AND FITTINGS 3" AND SMALLER SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELDED SLEEVE JOINTS.
8. ALL GATE VALVES 3" OR LARGER SHALL BE RESILIENT SEAT OR RESILIENT WEDGE MEETING THE REQUIREMENTS OF AWWA C509
9. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
10. PIPE LENGTHS SHOWN ARE APPROXIMATE AND SHOWN TO THE EDGE OF THE MANHOLES.
11. MATERIALS AND CONSTRUCTION METHODS FOR SEWER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF, AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL SANITARY SEWER SERVICE MAIN EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE LOCAL REGULATORY AGENCY.

WATER SYSTEM NOTES

- 1. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER BASED ON FINAL GRADING.
2. ALL WATER SYSTEM WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
3. ALL DUCTILE IRON PIPE SHALL BE CLASS SO IN ACCORDANCE WITH ANS/AWWA C150/A21.50 AND PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING AND SHALL BE CEMENT MORTAR LINED, STANDARD THICKNESS, IN ACCORDANCE WITH ANS/AWWA C104/A21.4.
4. ALL FITTINGS LARGER THAN 3" SHALL BE DUCTILE IRON IN ACCORDANCE WITH A.W.W.A. C-110 WITH A PRESSURE RATING OF 350 P.S.I. JOINTS SHALL BE MECHANICAL JOINTS IN ACCORDANCE WITH AWWA C-111. FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED IN ACCORDANCE WITH AWWA C-104.
5. ALL PVC POTABLE WATER MAINS 4" THROUGH 12" SHALL BE AWWA C-900 (CLASS 150), DR 18 PVC, AND 14" THROUGH 24" AWWA C-905 (CLASS 165), DR-25 PVC; WITH AWWA APPROVED DUCTILE IRON MECHANICAL JOINT FITTINGS. THE PIPE SHALL BE SOLID BLUE WITH WHITE OR BLACK LETTERING.
6. ALL PVC FIRE MAINS 4" THROUGH 12" SHALL BE AWWA C-900 (CLASS 200), DR 14 PVC WITH AWWA APPROVED DUCTILE IRON MECHANICAL JOINT FITTINGS. THE PIPE SHALL BE SOLID BLUE WITH WHITE OR BLACK LETTERING.
7. ALL PVC PIPE AND FITTINGS 3" AND SMALLER SHALL BE SCHEDULE 40 P.V.C. WITH SOLVENT WELDED SLEEVE TYPE JOINTS.
8. ALL GATE VALVES 3" OR LARGER SHALL BE RESILIENT SEAT OR RESILIENT WEDGE MEETING THE REQUIREMENTS OF AWWA C509
9. ALL FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF AWWA C502 AND SHALL BE APPROVED BY THE LOCAL UTILITY AND FIRE MARSHAL.
10. THE CONTRACTOR IS TO INSTALL TEMPORARY BLOW-OFFS AT THE END OF WATER SERVICE LATERALS TO ASSURE ADEQUATE FLUSHING AND DISINFECTION.
11. MATERIALS AND CONSTRUCTION METHODS FOR WATER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF, AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL POTABLE WATER SERVICE MAIN EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE LOCAL REGULATORY AGENCY.

WATER SYSTEM TESTING AND INSPECTION REQUIREMENTS

- 1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND WATER DEPARTMENT INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
2. CONTRACTOR TO PERFORM CHLORINATION. BACTERIOLOGICAL SAMPLING SHALL BE BY THE LOCAL PUBLIC HEALTH UNIT AND/OR LOCAL UTILITY. CONTRACTOR SHALL OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM. COPIES OF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER.
3. A HYDROSTATIC TEST CONSISTING OF PRESSURE TEST AND LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY-INSTALLED WATER DISTRIBUTION SYSTEM PRESSURE PIPES AND APPURTENANCES. THESE TESTS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF A.W.W.A. C600 FOR DUCTILE IRON PIPES AND C605 FOR PVC PIPES.
4. ALL SAMPLING IS TO BE PERFORMED BY THE CONTRACTOR AND SUBMITTED TO A DHS CERTIFIED LAB FOR TESTING.
5. ALL NEWLY-INSTALLED WATER DISTRIBUTION SYSTEMS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651 - DISINFECTING WATER MAINS.

SANITARY SEWER NOTES

- 1. ALL SANITARY SEWER MAINS & LATERAL SHALL HAVE A MINIMUM OF 36" OF COVER BASED ON FINAL GRADING.
2. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
3. ALL PVC GRAVITY SEWER MAINS AND SERVICE LATERALS SHALL CONFORM TO ASTM-D-3034, SDR35; FOR DEPTHS OF 0-12 FEET, SDR28 FOR DEPTHS OF 12-18 FEET AND DUCTILE IRON FOR DEPTHS BELOW 18 FEET. (SEE NOTE 7 BELOW) WITH PVC SLIP JOINT FITTING IN ACCORDANCE WITH ASTM SPECIFICATIONS SECTION D2321 AND SHALL BE SOLID GREEN PIPE WITH WHITE LETTERS. PIPES INSTALLED AT DEPTHS OF LESS THAN 4" SHALL BE AWWA C-900 (CLASS 100), DR-25 PVC OR C-905 (CLASS 165), PVC DR-25.
4. ALL DUCTILE IRON PIPE SHALL BE CLASS SO IN ACCORDANCE WITH ANS/AWWA C150/A21.50 AND PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING AND SHALL BE CEMENT MORTAR LINED, STANDARD THICKNESS, IN ACCORDANCE WITH ANS/AWWA C104/A21.4.
5. ALL FITTINGS LARGER THAN 3" SHALL BE DUCTILE IRON IN ACCORDANCE WITH AWWA C-110 WITH A PRESSURE RATING OF 350 P.S.I. JOINTS SHALL BE MECHANICAL JOINTS IN ACCORDANCE WITH AWWA C-111. FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED IN ACCORDANCE WITH AWWA C-104.
6. ALL PVC FORCE MAINS 4" THROUGH 12" SHALL BE AWWA C-900 (CLASS 100), DR-25 PVC AND 14" THROUGH 24" SHALL BE AWWA C-905 (CLASS 125), DR-25; WITH AWWA APPROVED DUCTILE IRON MECHANICAL JOINT FITTINGS. THE PIPE SHALL BE SOLID GREEN WITH WHITE OR BLACK LETTERING.
7. ALL PVC PIPE AND FITTINGS 3" AND SMALLER SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELDED SLEEVE JOINTS.
8. ALL GATE VALVES 3" OR LARGER SHALL BE RESILIENT SEAT OR RESILIENT WEDGE MEETING THE REQUIREMENTS OF AWWA C509
9. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
10. PIPE LENGTHS SHOWN ARE APPROXIMATE AND SHOWN TO THE EDGE OF THE MANHOLES.
11. MATERIALS AND CONSTRUCTION METHODS FOR SEWER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF, AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL SANITARY SEWER SERVICE MAIN EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE LOCAL REGULATORY AGENCY.

SANITARY SEWER TESTING & INSPECTION REQUIREMENTS

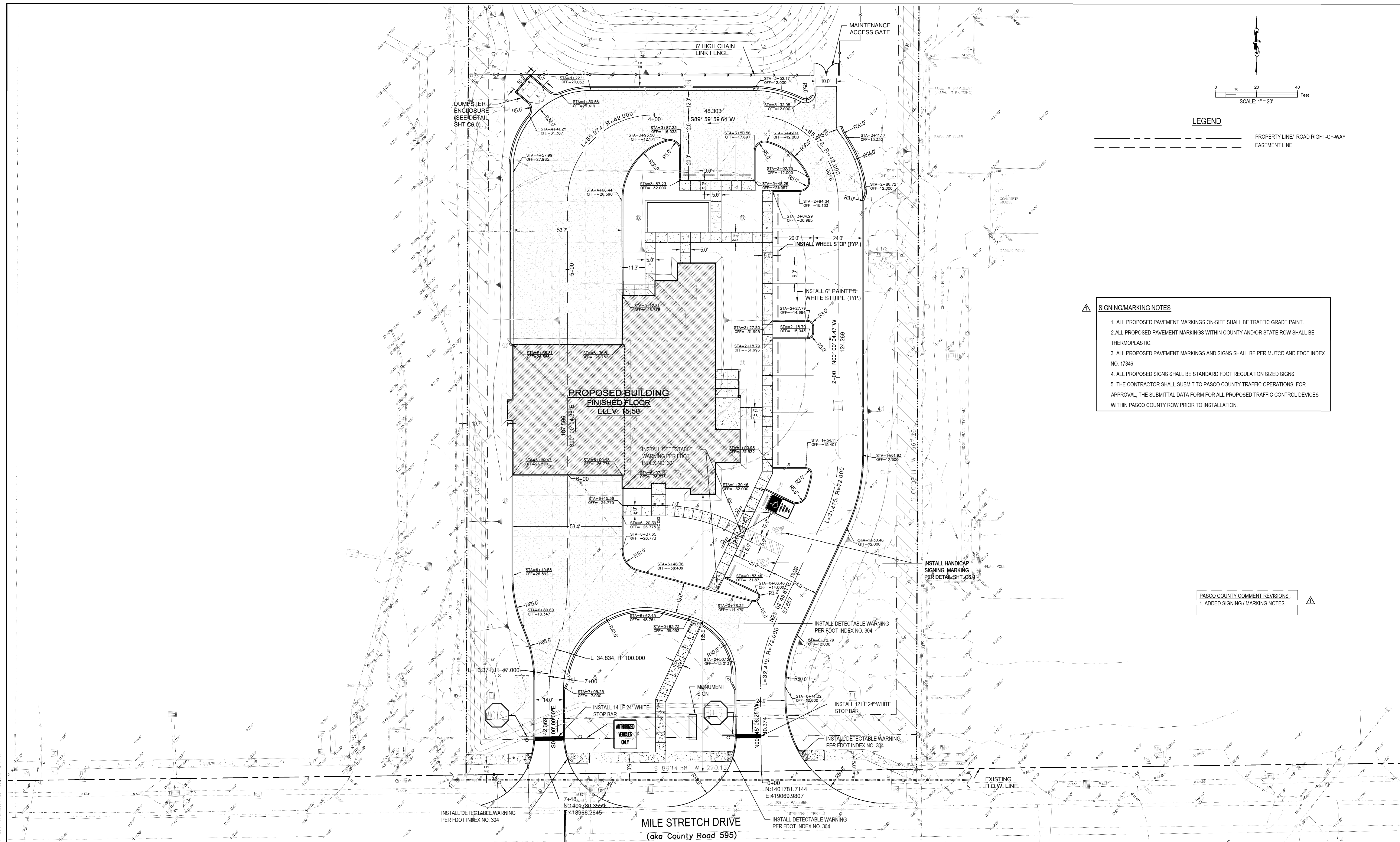
- 1. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
2. CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
3. ALL FORCE MAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

REUSE SYSTEM TESTING AND INSPECTION REQUIREMENTS

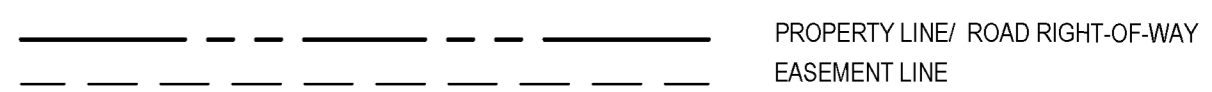
- PRESSURE TESTING
1. A HYDROSTATIC TEST CONSISTING OF A PRESSURE TEST AND A LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY-INSTALLED REUSE DISTRIBUTION SYSTEM PRESSURE PIPES AND APPURTENANCES. THESE TESTS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF A.W.W.A. C600 FOR DUCTILE IRON PIPES, C605 FOR PVC PIPES AND SHALL BE PERFORMED IN ACCORDANCE WITH THE GOVERNING WATER DEPARTMENT SPECIFICATIONS.
2. THE CONTRACTOR SHALL NOTIFY AND SCHEDULE THE ATTENDANCE OF THE OWNER'S ENGINEER AND THE GOVERNING WATER DEPARTMENT'S INSPECTORS DURING THE PRESSURE TESTS.
3. ALL COMPONENTS OF THE REUSE WATER SYSTEM, INCLUDING FITTINGS, CONNECTIONS AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER.
4. MATERIALS AND CONSTRUCTION METHODS FOR REUSE DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF, AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL REUSE SERVICE MAIN EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE LOCAL REGULATORY AGENCY.

DIRECTIONAL DRILLING OPERATIONS

- 1. PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) HANDED, STORED, JOINED AND INSTALLED IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS AND THE SPECIFICATIONS HEREIN.
2. PRE-EXCAVATE PIPE ENTRY AND RECEIVING AREAS TO PROVIDE A GRADUAL ENTRY OF THE PIPE. WITHDRAW STRESS TO THE TOPE OR RISERS AND TO ALLOW FREE MOVEMENT INTO THE BORE HOLE AT N ACCEPTABLE DEPTH. CAREFULLY GUIDE PIPE IN SUCH MANNER AS TO AVOID DEFORMATION OF OR DAMAGE TO THE PIPE.
3. IF UNEXPECTED SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING THE BORE, THE PROCEDURE SHALL BE STOPPED. THE INSTALLATION SHALL NOT CONTINUE UNTIL APPROVAL HAS BEEN GIVEN BY THE ENGINEER.
4. EVERY EFFORT SHALL BE MADE TO MAINTAIN PIPE INSTALLATION TO A DEPTH DEEP ENOUGH TO AVOID CONFLICTS AND FRACING, WHERE DEEPER OR SHALLOWER INSTALLATIONS ARE SHOWN ON THE PLANS, OR REQUIRED BY THE COUNTY OR NECESSITATED BY EXISTING CONDITIONS, THE CONTRACTOR SHALL MAKE SUCH ADJUSTMENTS WITHOUT ADDITIONAL COST TO THE COUNTY.
5. THE PIPE SHALL BE INSTALLED IN A MANNER THAT DOES NOT CAUSE UPHEAVAL, SETTLEMENT, CRACKING, MOVEMENT OR DISTORTION OF SURFACE FACILITIES.
6. THE SYSTEM MUST BE REMOTELY STEERABLE AND PERMIT ELECTRONIC MONITORING OF TUNNEL DEPTH AND LOCATION. THE SYSTEM MUST BE ABLE TO CONTROL THE DEPTH AND DIRECTION OF THE PIPE AND MUST BE ACCURATE TO A WINDOW OF +/- 2 INCHES.
7. EQUIPMENT SHALL BE FITTED WITH A PERMANENT ALARM SYSTEM CAPABLE OF DETECTING AN ELECTRIC CURRENT. THE SYSTEM SHALL HAVE AN AUDIBLE ALARM TO WARN THE OPERATOR IF THE DRILL HEAD CONTACTS ELECTRIFIED CABLES.
8. ALL NON-METALLIC PIPE SHALL BE INSTALLED WITH 2 INSULATED 10 GAUGE COPPER LOCATING WIRES ATTACHED AT 10:00 AND 2:00 O'CLOCK. WIRES SHALL BE ATTACHED USING MINIMUM 2" WIDE DUCT TAPE. TAPE SHALL BE AT 4 TO 5 FEET SPACING.
9. IN THE CASE OF A PULL BACK WHERE THE BORE WILL BE ABANDONED, THE CONTRACTOR SHALL INJECT AN APPROVED GROUT INTO THE ANGULAR SPACE. THIS ACTION WILL BE IN CONJUNCTION WITH THE REMOVAL OF DEBRIS FROM THE TOPE OR RISERS TO ALLOW FREE MOVEMENT OF THE BORE HOLE AT N ACCEPTABLE DEPTH.
10. CONTRACTOR SHALL PERFORM ALL DIRECTIONAL DRILL WORK AT LEAST 25 FEET FROM WETLAND LIMITS.
11. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED TO AVOID WETLAND IMPACTS. MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, SEDIMENT BARRIERS, HAY BALES AND SOD.
12. A VAC TRUCK SHALL BE ONSITE DURING ALL DRILL



LEGEND



- SIGNING/MARKING NOTES**
1. ALL PROPOSED PAVEMENT MARKINGS ON-SITE SHALL BE TRAFFIC GRADE PAINT.
 2. ALL PROPOSED PAVEMENT MARKINGS WITHIN COUNTY AND/OR STATE ROW SHALL BE THERMOPLASTIC.
 3. ALL PROPOSED PAVEMENT MARKINGS AND SIGNS SHALL BE PER MUTCD AND FDOT INDEX NO. 17346
 4. ALL PROPOSED SIGNS SHALL BE STANDARD FDOT REGULATION SIZED SIGNS.
 5. THE CONTRACTOR SHALL SUBMIT TO PASCO COUNTY TRAFFIC OPERATIONS, FOR APPROVAL, THE SUBMITTAL DATA FORM FOR ALL PROPOSED TRAFFIC CONTROL DEVICES WITHIN PASCO COUNTY ROW PRIOR TO INSTALLATION.

PASCO COUNTY COMMENT REVISIONS:
1. ADDED SIGNING / MARKING NOTES.

DATE:	DRAWN BY:	CHKD BY:
04-21-2016	HPB	
REV. BY:	REV. NO.	REVISION
		PASCO COUNTY SITE COMMENTS

REUSE OF DOCUMENT
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COASTAL DESIGN CONSULTANTS
CA # 00009572

PASCO COUNTY FACILITIES MANAGEMENT DEPARTMENT
TASK # FM 12-003

CLIENT:
PASCO COUNTY FACILITIES MANAGEMENT DEPARTMENT
TASK # FM 12-003

PAUL A. MANUEL, P.E.
P.E. NO. 51424

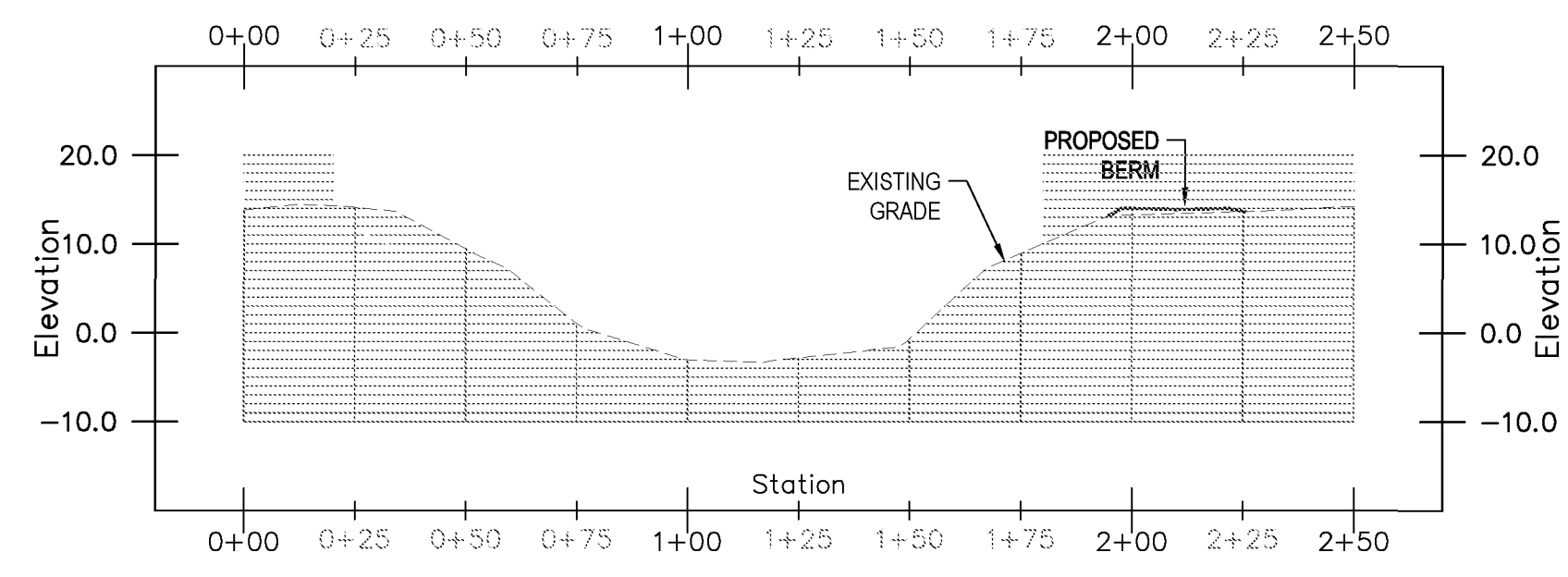
HORIZONTAL CONTROL PLAN

SHEET NAME:
HORIZONTAL CONTROL PLAN

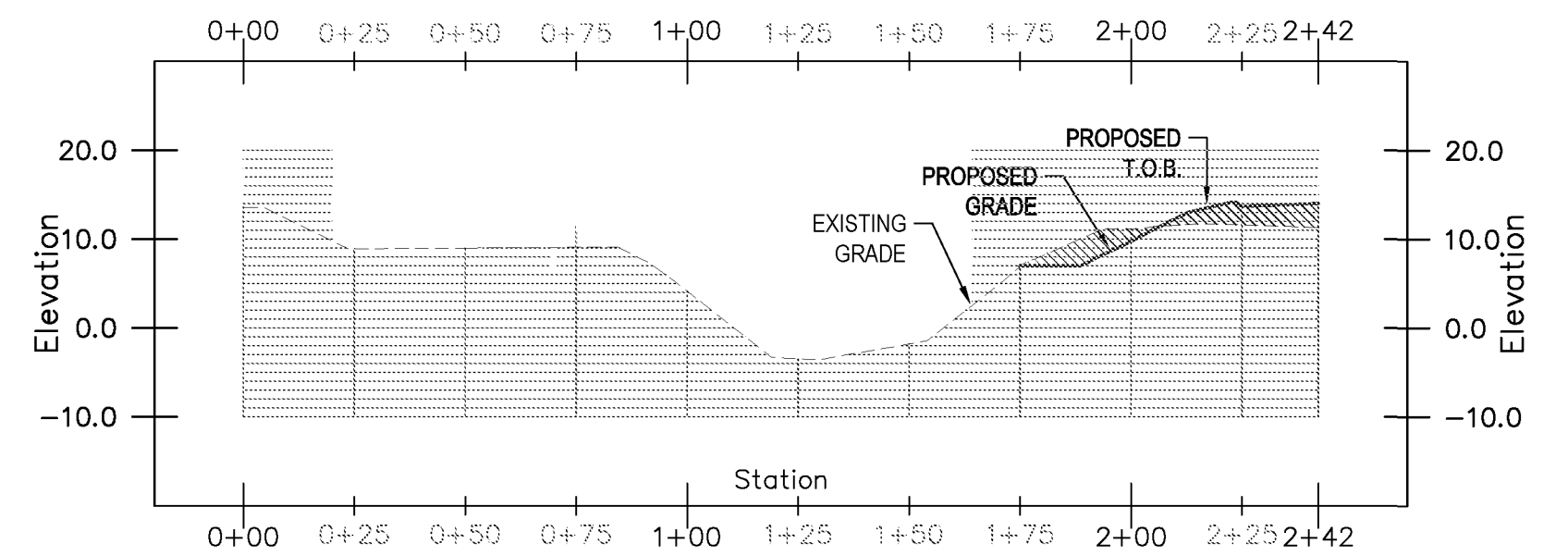
PROJECT NAME:
PASCO COUNTY FIRE & RESCUE STATION NO. 12
PASCO COUNTY, FLORIDA

JOB No.: 12003
SHEET

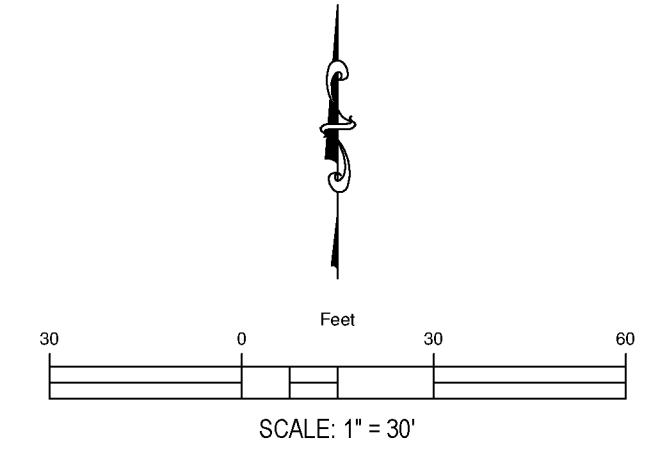
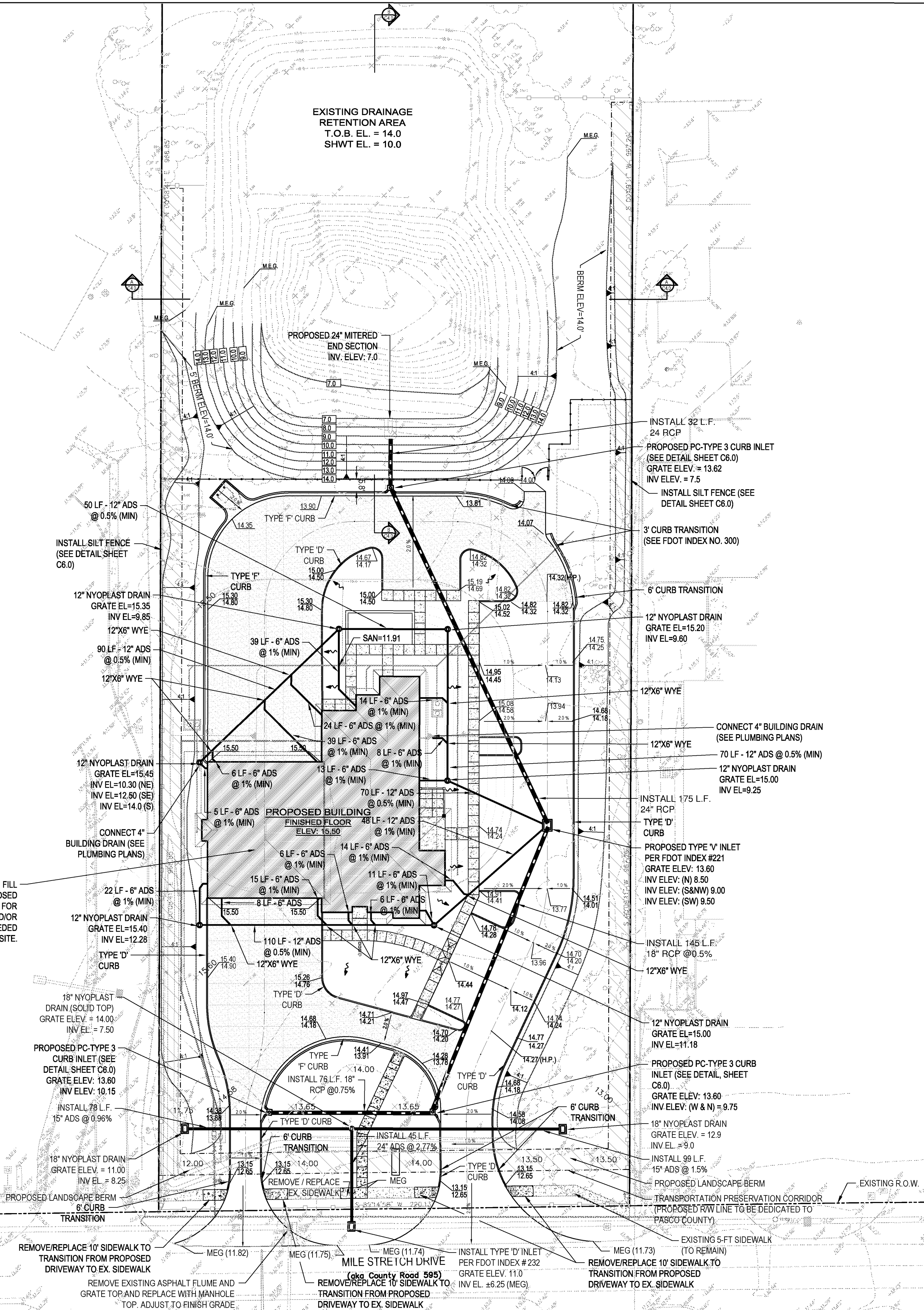
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CROSS SECTION A-A
Horizontal Scale:1:40
Vertical Scale:1:20



CROSS SECTION B-B
Horizontal Scale:1:40
Vertical Scale:1:20



LEGEND

- PROPERTY LINE/ ROAD RIGHT-OF-WAY
- JURISDICTIONAL WETLAND LINE
- JURISDICTIONAL WETLAND BUFFER LINE
- EROSION CONTROL
- PROPOSED E.O.P./GROUND ELEVATION
- PROPOSED TOP OF CURB/SIDEWALK ELEVATION
- SURFACE RUN-OFF DIRECTION
- CHANNELIZED-FLOW DIRECTION
- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT

PASCO COUNTY GRADING AND DRAINAGE NOTES:

1. ON-SITE RUNOFF IS DESIGNED TO CONVEY RUNOFF TO THE ON-SITE DRAINAGE RETENTION AREAS.
2. ON-SITE DRAINAGE HAS BEEN DESIGNED TO ATTENUATE THE PRECONDITION RUNOFF FROM THE PROJECT SITE AND SHALL NOT ADVERSELY EFFECT THE ADJACENT PROPERTIES. OFF-SITE DRAINAGE THAT FLOWED ON-SITE IN THE PRECONDITION SHALL NOT BE IMPEDED BY THE CONSTRUCTION OF THE ON-SITE IMPROVEMENTS.
3. IT IS THE OWNERS RESPONSIBILITY TO INSPECT AND MAINTAIN THE STORMWATER MANAGEMENT SYSTEM ON A REGULAR BASIS.
4. NO ON-SITE BURNING IS ALLOWED WITHOUT PRIOR APPROVAL FROM THE PASCO COUNTY FIRE MARSHALL.
5. ALL FIRST FLOOR ELEVATIONS SHALL BE A MINIMUM OF 1' ABOVE THE BASE FLOOD ELEVATION AS REQUIRED BY THE L.D.C. SECTION 701.
6. ALL INTERNAL TO EXTERNAL SIDEWALK CONNECTIONS ARE TO BE ADA COMPLIANT.
7. ANY OFF SITE DISTURBANCE SHALL BE RESTORED TO THE PRE OR BETTER CONDITION.
8. AS APPLICABLE, THE OWNER/DEVELOPER WILL PROVIDE COPIES OF THE REQUIRED PERMITS FROM THE RESPECTIVE GOVERNING AGENCIES, PRIOR TO ISSUANCE OF THE SDP.

PASCO COUNTY SINKHOLE NOTES:

- SHOULD ANY NOTICEABLE SOIL SLUMPING OR SINKHOLE FORMATION BECOME EVIDENT, THE DEVELOPER SHALL IMMEDIATELY NOTIFY THE COUNTY, TAMPA BAY WATER, AND THE SWPMD AND ADOPT ONE (1) OR MORE OF THE FOLLOWING PROCEDURES AS DETERMINED TO BE APPROPRIATE BY THE COUNTY AND SWPMD:
- A. IF THE SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT BEFORE OR DURING CONSTRUCTION ACTIVITIES, STOP ALL WORK (EXCEPT FOR MITIGATION ACTIVITIES) IN THE AFFECTED AREA AND REMAIN STOPPED UNTIL THE COUNTY AND SWPMD APPROVE RESUMING CONSTRUCTION ACTIVITIES.
 - B. TAKE IMMEDIATE MEASURES TO ENSURE NO SURFACE WATER DRAINS INTO THE AFFECTED AREAS.
 - C. VISUALLY INSPECT THE AFFECTED AREAS.
 - D. EXCAVATE AND BACKFILL OR GROUT, AS REQUIRED, TO FILL THE AFFECTED AREA AND PREVENT FURTHER SUBSIDENCE.
 - E. USE SOIL REINFORCEMENT MATERIALS IN THE BACKFILLING OPERATION WHEN APPROPRIATE.
 - F. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER RETENTION AREA, MAINTAIN A MINIMUM DISTANCE OF TWO (2) FEET FROM THE BOTTOM OF THE RETENTION POND TO THE SURFACE OF THE LIMEROCK OR KARST CONNECTION.
 - G. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA AND THE ABOVE METHODS DO NOT STABILIZE THE COLLAPSE, RELOCATE THE RETENTION AREA.

PASCO COUNTY COMMENT REVISIONS:
1. ADDED PASCO COUNTY SINKHOLE NOTES.

EXISTING +/- 4,700 CY STOCKPILE OF CLEAN FILL MATERIAL TO BE USED FOR GRADING OF PROPOSED SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL EXCESS FILL MATERIAL AND/OR THE IMPORT OF ADDITIONAL FILL MATERIAL NEEDED TO CONSTRUCT THE SITE.

DATE:	DRAWN BY:	CHKD BY:
04-21-2016	HPB	
REV. BY:	REV. NO.	REVISION
		PASCO COUNTY SITE COMMENTS

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CA # 00009572

PASCO COUNTY FACILITIES MANAGEMENT DEPARTMENT
TASK # FM 12-003

CLIENT:
PAUL A. MANUEL, P.E.
P.E. NO. 51424

SHEET NAME:
GRADING, DRAINAGE & PAVING PLAN

PROJECT NAME:
**PASCO COUNTY FIRE & RESCUE STATION NO. 12
PASCO COUNTY, FLORIDA**

JOB No.: **12003**
SHEET

C4.0

PASCO COUNTY UTILITY NOTES:

- FIRE FLOW DEMAND: 1,000 GPM @ 20 PSI, MINIMUM.
- ALL FIRE HYDRANTS SHALL BE FLOW-TESTED AND COLOR-CODED BASED ON FLOW RESULTS.
- ALL UTILITY SYSTEM-DESIGN MATERIALS AND WORKMANSHIP SHALL COMPLY WITH STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER, AND RECLAIMED WATER FACILITIES SPECIFICATIONS, LATEST EDITION.
- CONNECTIONS INTO AN EXISTING COUNTY-OWNED SYSTEM SHALL BE VIA WET TAP. WET TAPS SHALL BE PERFORMED EXCLUSIVELY BY THE UTILITIES SERVICES BRANCH AT THE DEVELOPER'S EXPENSE. EXCAVATION, BACKFILL, AND SURFACE RESTORATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. MATERIAL FOR WET TAPS LARGER THAN TWO INCHES SHALL BE PROVIDED AND INSTALLED BY THE PROJECT CONTRACTOR.
- CONTRACTOR'S RESPONSIBILITIES REGARDING WET TAPS TWO INCHES AND LARGER SHALL BE AS FOLLOWS:
 - 2" ONLY - THIS EXCAVATED TRENCH MUST BE DRY OR THE TRENCH WILL REQUIRE ROCK AND A PUMP TO BE IN PLACE. THE MINIMUM DISTANCE FROM THE FACE OF THE VALVE TO THE WALL OF THE TRENCH IS TO BE SIX FEET.
 - 3" AND LARGER - THE CONTRACTOR WILL SUPPLY A TAPPING SADDLE BEING EPOXY COATED, A TAPPING VALVE WITH MECHANICAL JOINT AND THE EQUIPMENT TO PROVIDE, AND CONDUCT A PRESSURE TEST. COUNTY PERSONNEL WILL WITNESS THE PRESSURE TEST WHICH MUST BE AT 150 PSI FOR DURATION OF THIRTY MINUTES.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE EXCAVATION BEFORE ANY COUNTY PERSONNEL WILL ENTER AN EXCAVATED AREA. IF THE TRENCH IS FOUR FEET IN DEPTH OR DEEPER, IT WILL REQUIRE A TRENCH BOX OR SLOPING, AND A LADDER ACCORDING TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.
 - THE TAPPING VALVE WILL REQUIRE A BLOCKING DEVICE MADE OF SUITABLE MATERIAL OR DEVICE. THIS BLOCKING DEVICE OR MATERIAL WILL BE PLACED UNDER THE VALVE AND REMAIN IN PLACE UNTIL THE TAP MACHINE IS REMOVED AND THE TAP IS COMPLETED.
 - NOTE: IF THE CONTRACTOR HAS NOT FULFILLED HIS RESPONSIBILITIES, AS STATED ABOVE, PRIOR TO THE ARRIVAL OF PASCO COUNTY UTILITIES OPERATIONS AND MAINTENANCE TAPPING CREW, THERE WILL BE AN ADDITIONAL CHARGE OF \$95.00.
- THE UTILITIES SERVICES BRANCH SHALL NOT OWN OR MAINTAIN ON-SITE WATERLINES, SEWER LINES, OR FACILITIES, UNLESS OTHERWISE APPROVED BY THE UTILITIES SERVICES BRANCH.

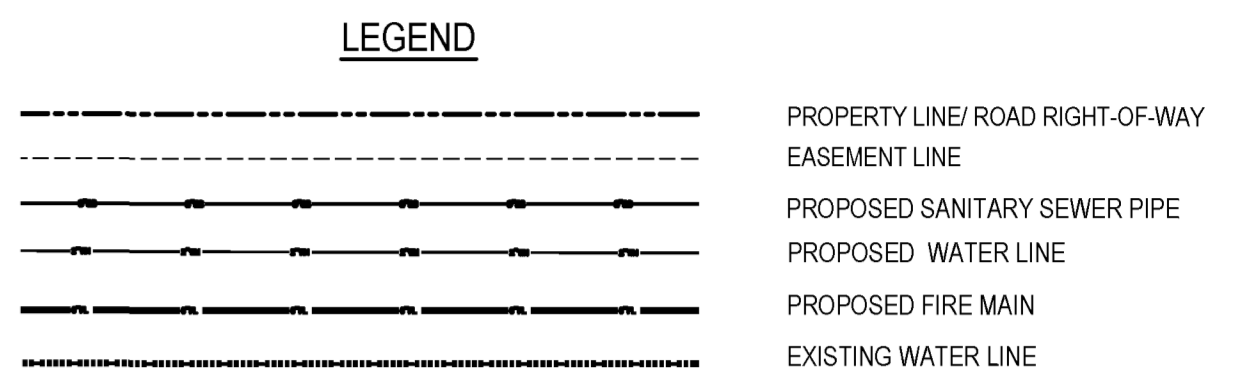
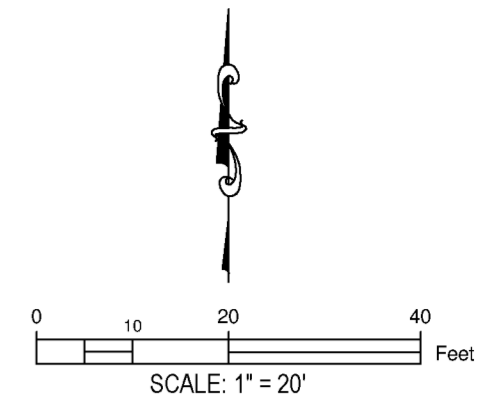
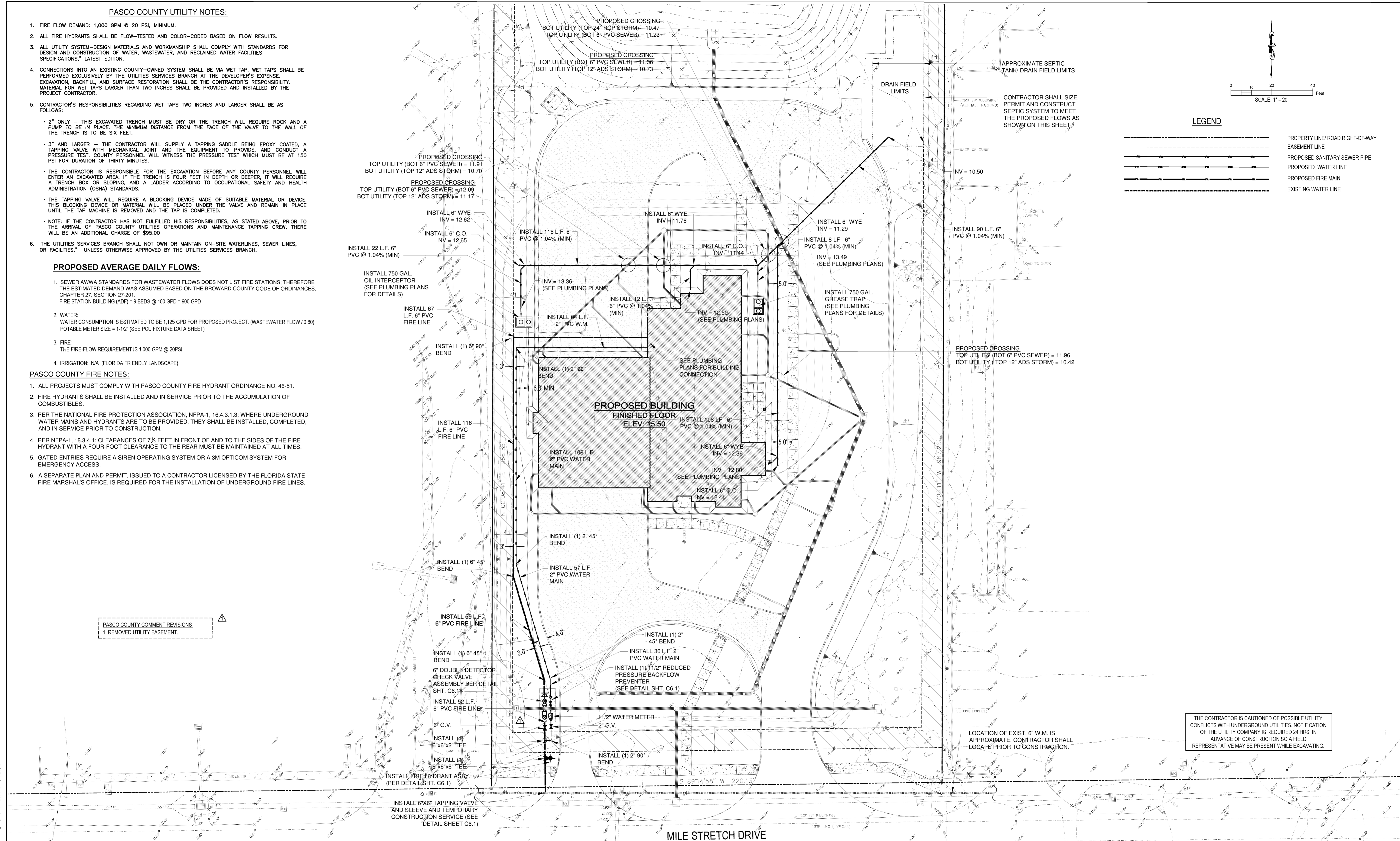
PROPOSED AVERAGE DAILY FLOWS:

- SEWER AWWA STANDARDS FOR WASTEWATER FLOWS DOES NOT LIST FIRE STATIONS; THEREFORE THE ESTIMATED DEMAND WAS ASSUMED BASED ON THE BROWARD COUNTY CODE OF ORDINANCES, CHAPTER 27, SECTION 27-201.
FIRE STATION BUILDING (ADF) = 9 BEDS @ 100 GPD = 900 GPD
- WATER: WATER CONSUMPTION IS ESTIMATED TO BE 1,125 GPD FOR PROPOSED PROJECT. (WASTEWATER FLOW / 0.80) POTABLE METER SIZE = 1-1/2" (SEE PCU FIXTURE DATA SHEET)
- FIRE: THE FIRE-FLOW REQUIREMENT IS 1,000 GPM @ 20PSI
- IRRIGATION: NA (FLORIDA FRIENDLY LANDSCAPE)

PASCO COUNTY FIRE NOTES:

- ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
- FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
- PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1, 16.4.3.1.3: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION.
- PER NFPA-1, 18.3.4.1: CLEARANCES OF 7 1/2 FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A FOUR-FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.
- GATED ENTRIES REQUIRE A SIREN OPERATING SYSTEM OR A 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS.
- A SEPARATE PLAN AND PERMIT, ISSUED TO A CONTRACTOR LICENSED BY THE FLORIDA STATE FIRE MARSHAL'S OFFICE, IS REQUIRED FOR THE INSTALLATION OF UNDERGROUND FIRE LINES.

PASCO COUNTY COMMENT REVISIONS
1. REMOVED UTILITY EASEMENT.



THE CONTRACTOR IS CAUTIONED OF POSSIBLE UTILITY CONFLICTS WITH UNDERGROUND UTILITIES. NOTIFICATION OF THE UTILITY COMPANY IS REQUIRED 24 HRS. IN ADVANCE OF CONSTRUCTION SO A FIELD REPRESENTATIVE MAY BE PRESENT WHILE EXCAVATING.

DATE:	DRAWN BY:	CHK'D BY:	
04/01/2016	HPB		
DATE	REV. BY	REV. NO.	REVISION
04/01/2016	HPB	1	PASCO COUNTY COMMENT

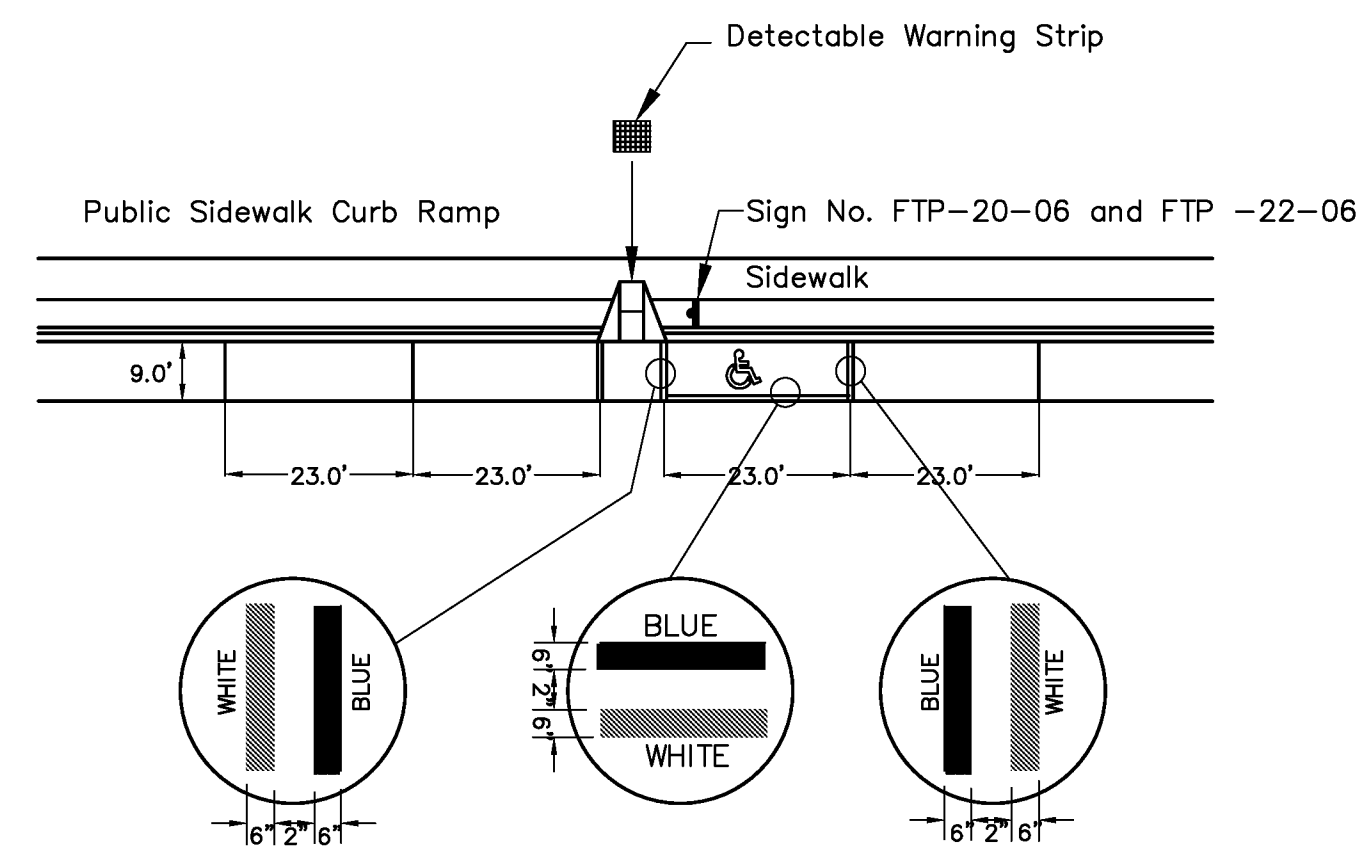
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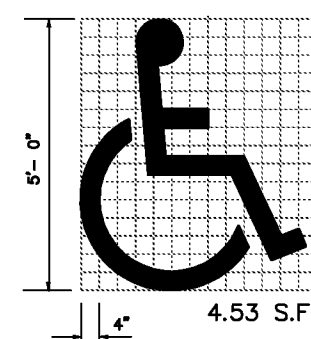
CLIENT: PASCO COUNTY FACILITIES MANAGEMENT DEPARTMENT
TASK # FM 12-003

SHEET NAME: UTILITY PLAN
PROJECT NAME: PASCO COUNTY FIRE & RESCUE STATION NO. 12 PASCO COUNTY, FLORIDA

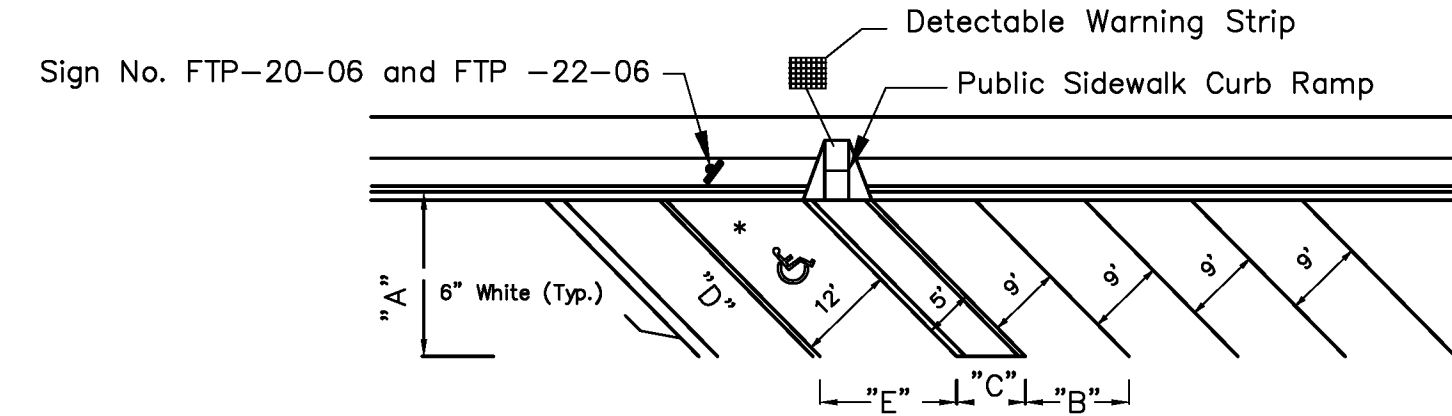
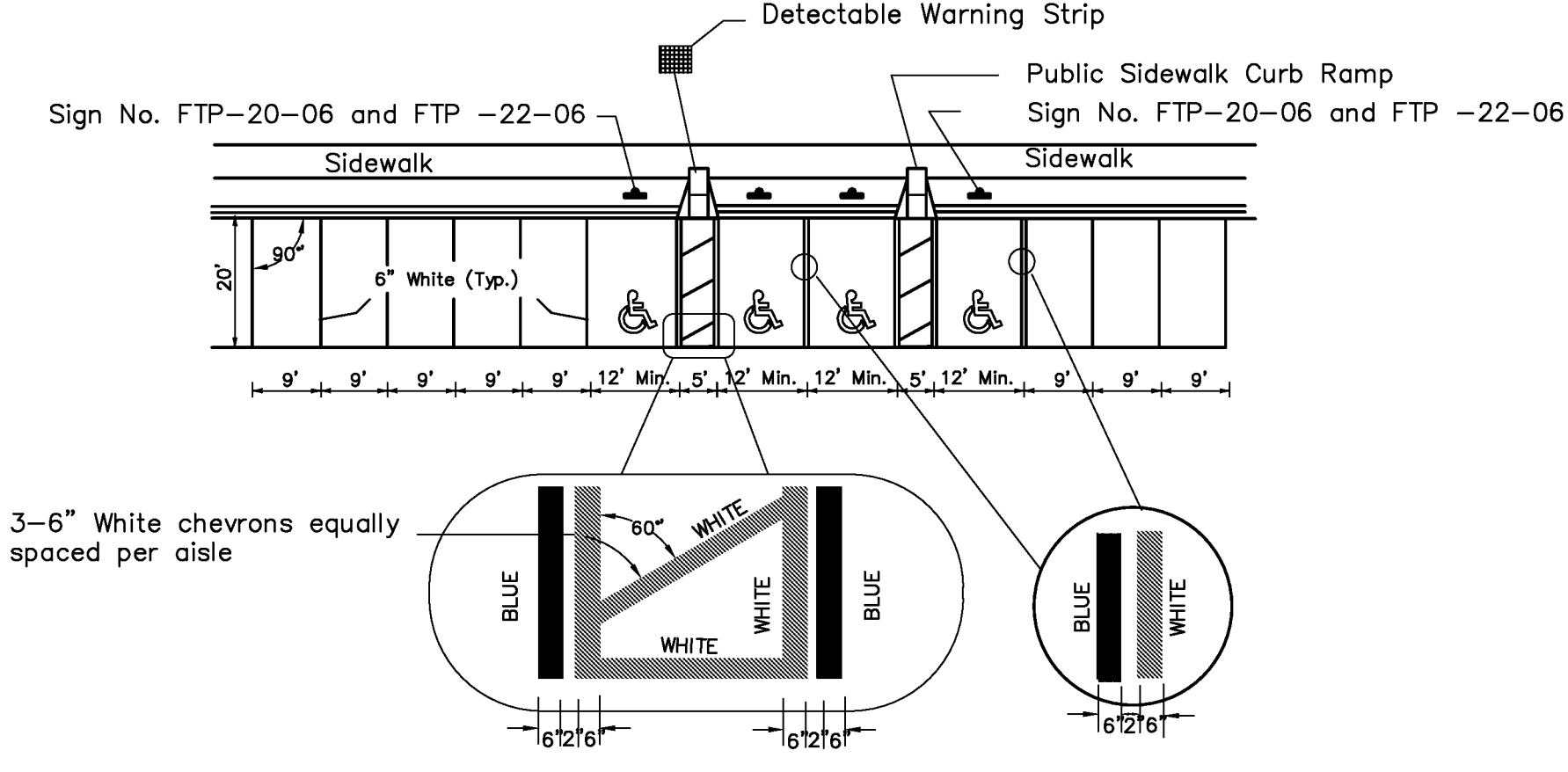
JOB No.: 12003
SHEET
C5.0



- NOTE**
- 1) ALL LETTERS TO BE 1" SERIES "C", BLACK AND SHALL CONFORM TO FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS", (LATEST EDITION)
 - 2) TOP PORTION OF SIGN TO HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
 - 3) BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND BORDER.
 - 4) ONE SIGN REQUIRED FOR EACH PARKING SPACE.
 - 5) HEIGHT OF SIGN BOTTOM SHALL BE 7" ABOVE GROUND IN ACCORDANCE WITH FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS" (LATEST EDITION).



'UNIVERSAL SYMBOL OF ACCESSIBILITY'
N.T.S.



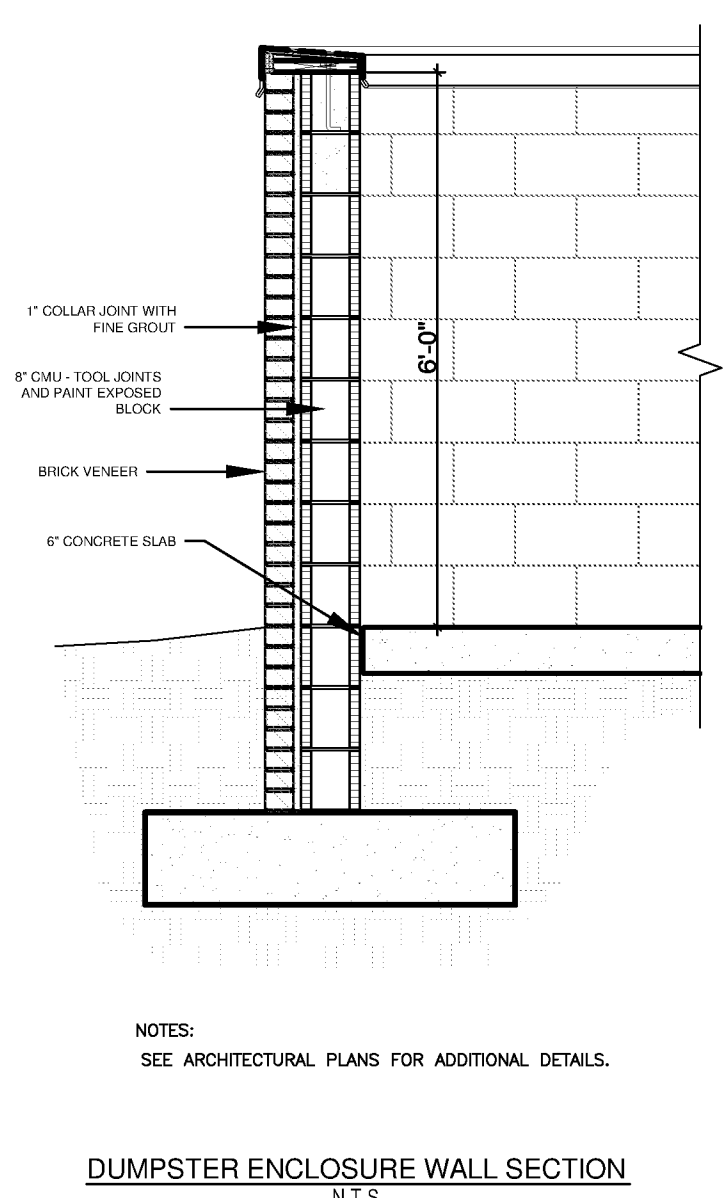
FOR ACCESSIBLE MARKING-SEE ABOVE

DIMENSIONS					
ANGLE	"A"	"B"	"C"	"D"	"E"
45°	20'-0"	12'-9"	7'-1"	28'-3"	17'-0"
60°	21'-0"	10'-5"	5'-9"	24'-3"	13'-10"

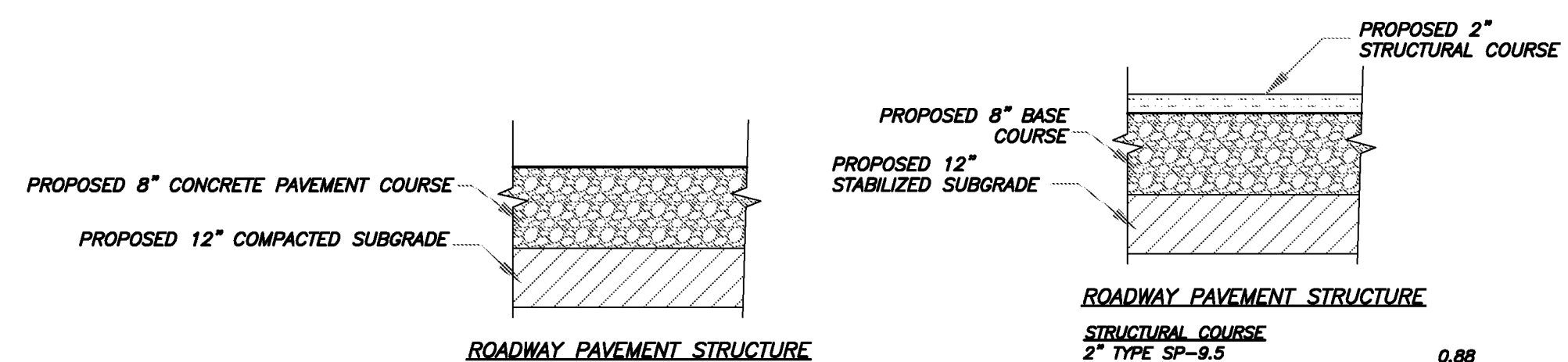
- NOTES:**
1. Dimensions are to the centerline of markings.
 2. An access aisle is required for each accessible space when angle parking is used.
 3. Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.
 4. Blue pavement markings shall be tinted to match shade 15180 of Federal Standards 595.
 5. The FTP-22-06 panel shall be mounted below the FTP-20-06 sign.

PAVEMENT MARKING FOR PUBLIC SIDEWALK CURB RAMP'S (PER FDOT INDEX NO. 17346)
N.T.S.

PASCO COUNTY COMMENT REVISIONS:
1. ADDED FDOT NOTE.

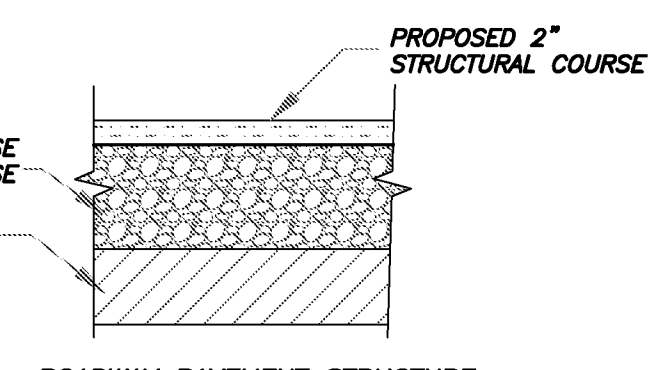


DUMPSTER ENCLOSURE WALL SECTION
N.T.S.



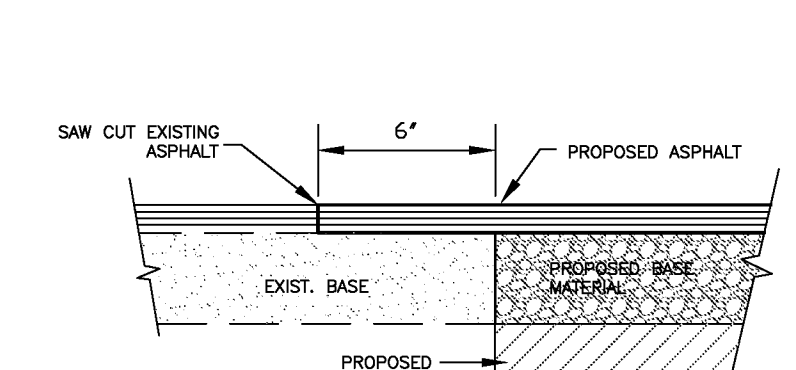
ROADWAY PAVEMENT STRUCTURE
PAVEMENT COURSE
8" CONCRETE (4000 PSI)
SUBGRADE
12" COMPACTED SUBGRADE
N.T.S.

DRIVE ASILE CONCRETE PAVEMENT DETAIL
N.T.S.

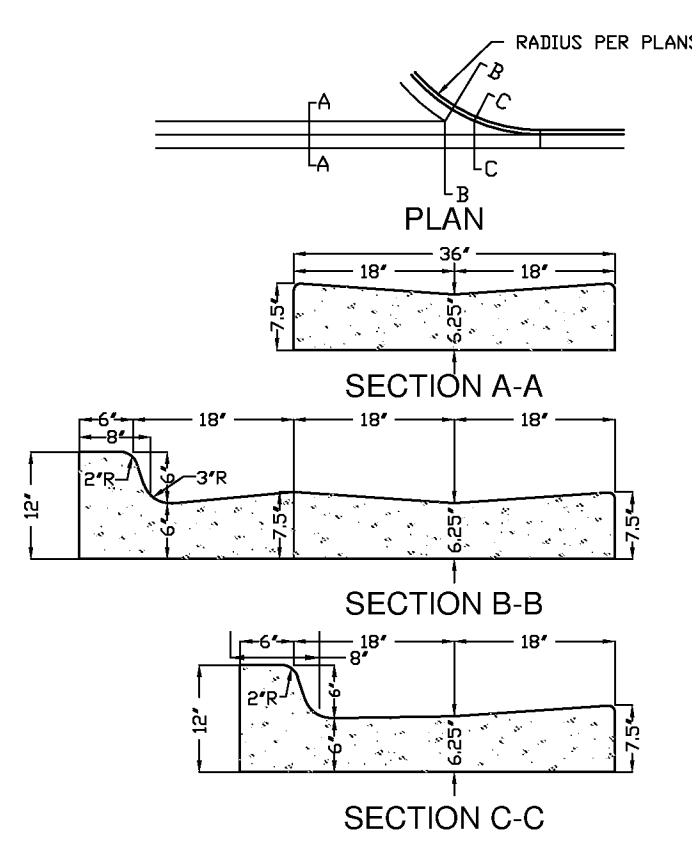


ROADWAY PAVEMENT STRUCTURE
STRUCTURAL COURSE
2" TYPE SP-9.5 0.88
BASE COURSE
8" LIMEROCK (LBR 100) 1.44
SUBGRADE
12" STABILIZED SUBGRADE (LBR 40) 0.96
SN = 3.28

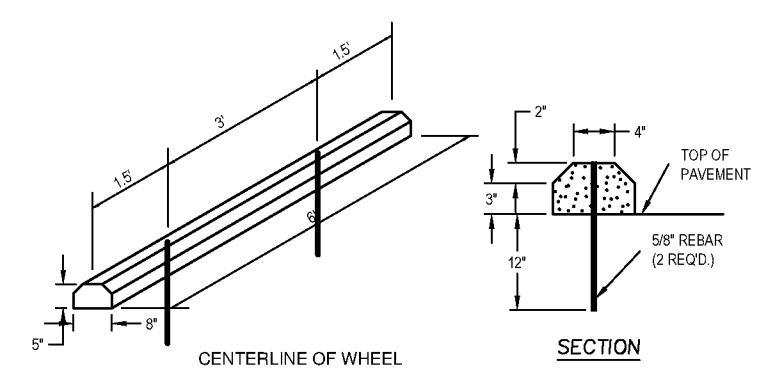
DRIVE ASILE DETAIL
N.T.S.



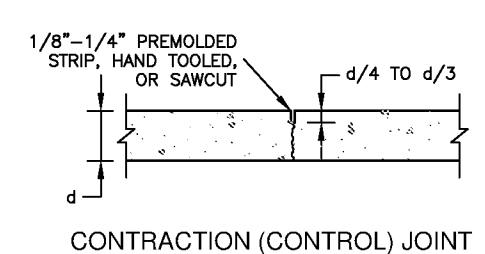
PROPOSED PAVEMENT ABUTMENT DETAIL
N.T.S.



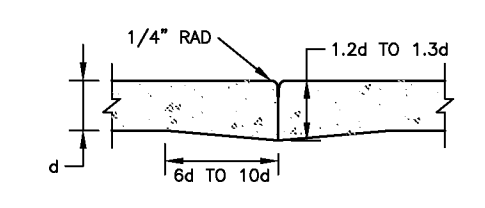
VALLEY GUTTER PER FOOT INDEX NO. 300
N.T.S.



CONCRETE WHEEL STOP DETAIL
N.T.S.



CONTRACTION (CONTROL) JOINT



CONSTRUCTION JOINT

CONSTRUCTION (BUTT) JOINTS SHALL BE USED WHEREVER PLACEMENT OF CONCRETE IS STOPPED FOR MORE THAN 30 MINUTES. THICKEN EDGE AS SHOWN WHEN d IS GREATER THAN 4-INCHES. SLABS WILL REQUIRE KEYWAY OR DOWELS TO MAINTAIN ALIGNMENT AT BUTT JOINTS. SEE TYPICAL SECTION.

CONCRETE JOINT DETAILS
N.T.S.

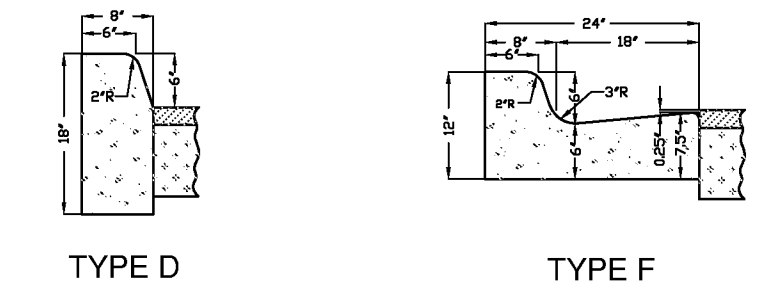
JOINT SPACING

CURBS:
EXPANSION JOINTS ABUTTING SIDEWALKS, CONCRETE PAVEMENT, STRUCTURES, RETURNS, RAMPS AND AT MAX 50' INTERVALS UNLESS APPROVED OTHERWISE BY ENGINEER & LOCAL ROAD AUTHORITY.

CONTROL JOINTS SHALL MATCH ADJACENT SIDEWALK, OR AT MAX 10' INTERVALS.

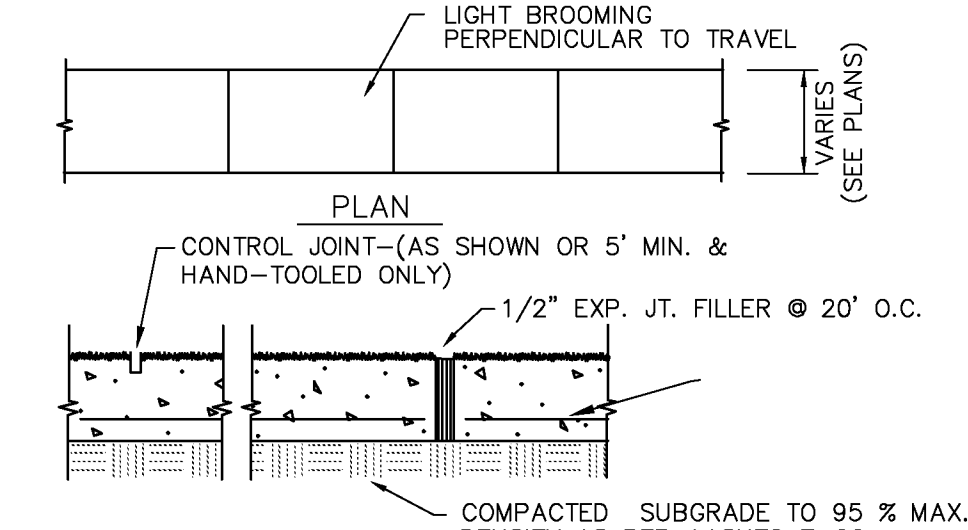
SIDEWALKS:
EXPANSION JOINTS ABUTTING CURBS, STRUCTURES, CHANGES IN CROSS-SECTION, OR ALIGNED WITH ADJACENT SURFACES, OR AT MAX 20' INTERVAL.

CONTROL JOINTS SHALL MATCH ADJACENT FEATURES OR INTERVAL SHALL BE MAX OF 2xWIDTH.



CURB TRANSITION
USE 3/4" RADIUS FOR ALL NON-LABELLED RADII
TYPE "D" CURB
TYPE "F" CURB
N.T.S.

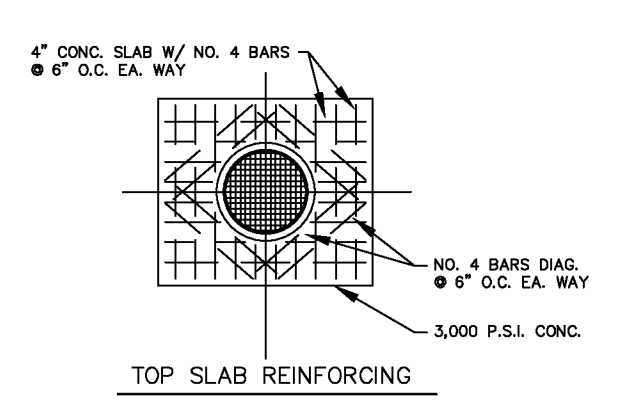
- NOTES:**
- SEE F.D.O.T. INDEX NO. 300 FOR ADDITIONAL DETAILS.
 - A 1/2" EXPANSION JOINT IS REQUIRED BETWEEN CONCRETE PAVEMENT AND CURBS AND/OR GUTTERS.
 - MINIMUM 3,000 psi. FIBERMESH CONCRETE TO BE USED FOR CURBS AND/OR GUTTERS.



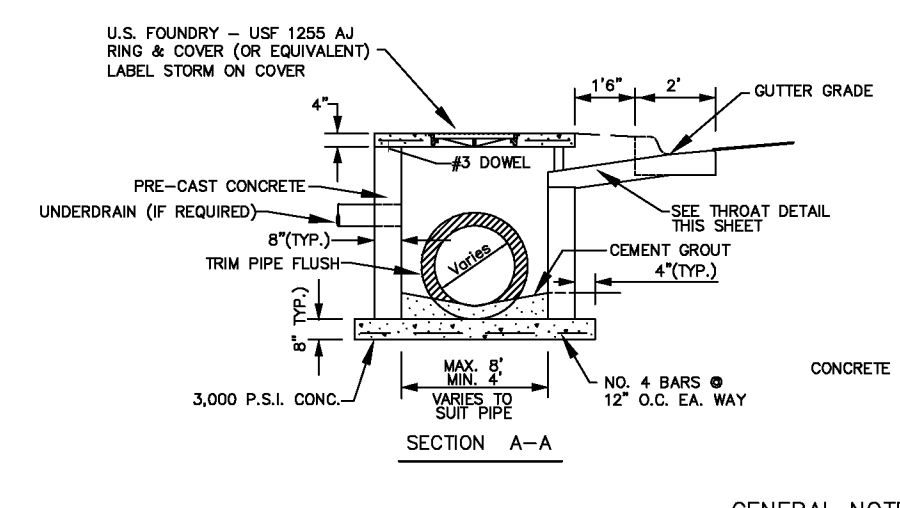
CONCRETE SIDEWALK DETAIL
N.T.S.

NOTES:

1. ALL JOINTS TO BE HAND-TOOLED.
2. CONCRETE SHALL BE 3,000 PSI, 4" DEEP MIN.
3. A MAXIMUM CROSS SLOPE OF 2% 6" X 6" - # 10 W.W.F.
4. CONTROL JOINTS 5' O.C. MAX. (OR AS SHOWN) AND HAND-TOOLED.
5. EXPANSION JOINTS 20' O.C. MAX. (1/2" WIDE EXPANSION JOINT MATERIAL W/ 1/4" REVEAL AND SEALANT).



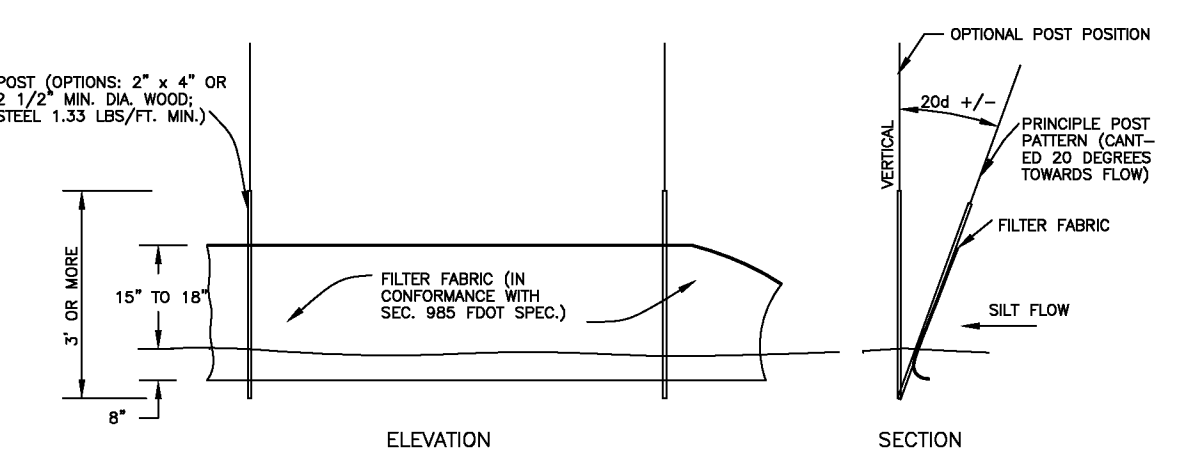
TOP SLAB REINFORCING



SECTION A-A

- GENERAL NOTES**
1. ALL STEEL IN INLET TOP SHALL HAVE 1/2" MINIMUM COVER UNLESS OTHERWISE SHOWN. INLET TOPS SHALL BE EITHER CAST-IN-PLACE OR PRE-CAST CONCRETE.
 2. THESE INLETS ARE TO BE USED WITH CONCRETE DROP CURB. LOCATE OUTSIDE OF PEDESTRIAN CROSSWALK AND DRIVEWAYS WHERE PRACTICAL.
 3. THROAT CAPACITY- SINGLE (PC TYPE 1&2) = 5.7 C.F.S. DOUBLE (PC TYPE 3) = 11.3 C.F.S.

CURB INLET DETAIL FOR (PC-TYPE 3)
N.T.S.



TYPE III SILT FENCE
N.T.S.

DATE	REV. BY	REV. NO.	REVISION
04-21-2016	HPB	1	PASCO COUNTY SITE COMMENTS

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COASTAL DESIGN CONSULTANTS
CA # 00009572

PASCO COUNTY FACILITIES MANAGEMENT DEPARTMENT
TASK # FM 12-003
PAUL A. MANUEL, P.E.
P.E. NO. 51424

CIVIL DETAILS
PROJECT NAME:
PASCO COUNTY FIRE & RESCUE STATION NO. 12
PASCO COUNTY, FLORIDA

JOB No: 12003
SHEET
C6.0

PIPE RESTRAINT LENGTHS IN FEET COMMON FITTINGS

WATER MAINS - TEST PRESSURE 150 PSI					
FITTING TYPE					
PIPE SIZE	11-1/4"	22-1/2"	45"	90"	DEAD END
4"	2'	4'	8'	20'	45'
6"	3'	6'	12'	28'	63'
8"	4'	7'	15'	36'	82'
10"	4'	9'	18'	43'	98'
12"	5'	10'	21'	50'	116'
16"	6'	13'	26'	63'	148'
20"	7'	15'	31'	76'	179'
24"	9'	17'	36'	87'	208'

FORCE MAINS - TEST PRESSURE 100 PSI					
FITTING TYPE					
PIPE SIZE	11-1/4"	22-1/2"	45"	90"	DEAD END
4"	1'	3'	6'	13'	30'
6"	2'	4'	8'	19'	42'
8"	2'	5'	10'	24'	55'
10"	3'	6'	12'	29'	66'
12"	3'	7'	14'	34'	77'
16"	4'	8'	18'	42'	99'
20"	5'	10'	21'	50'	119'
24"	6'	11'	24'	58'	139'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE FITTING ALONG THE PIPE IN BOTH DIRECTIONS (EXCEPT DEAD ENDS).

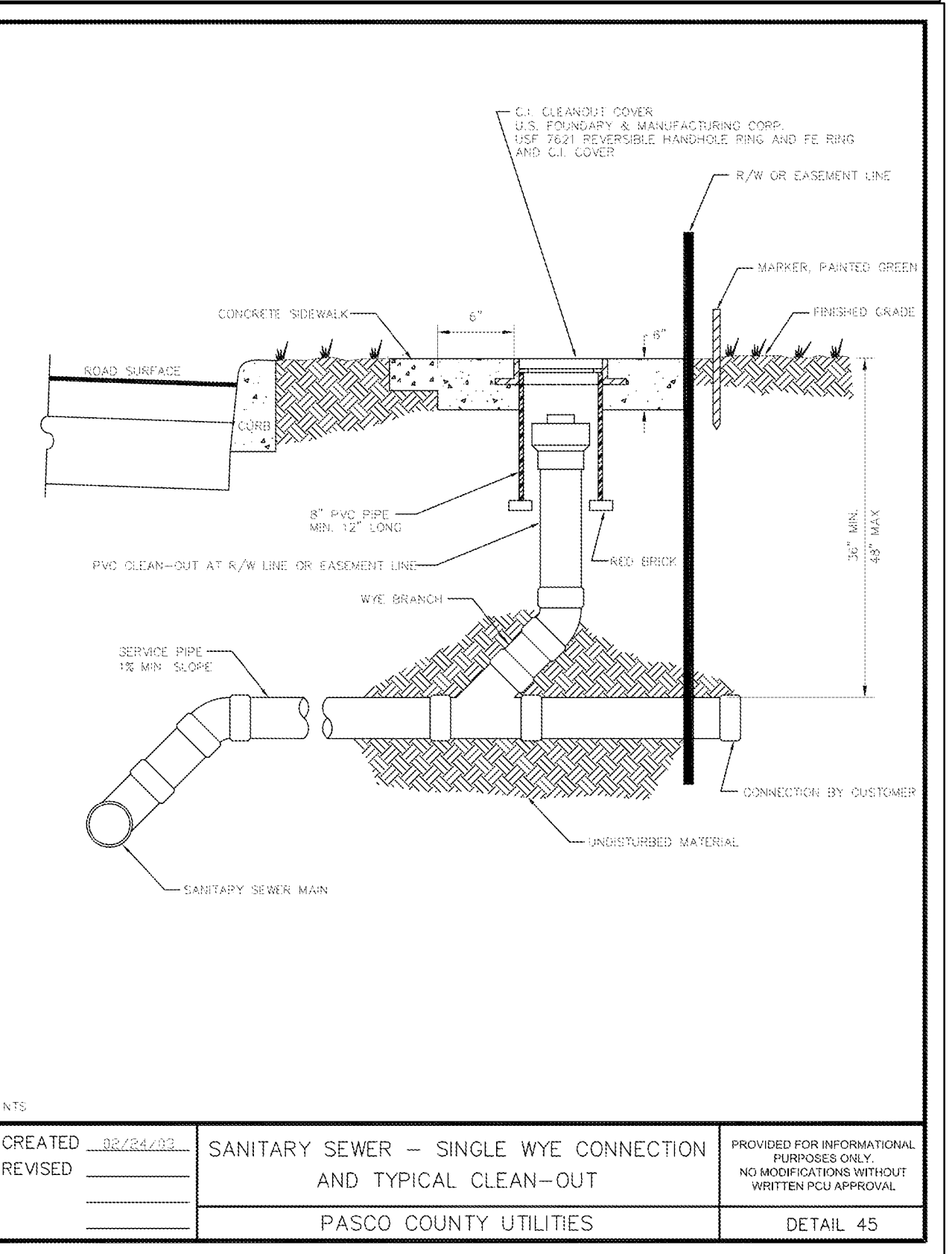
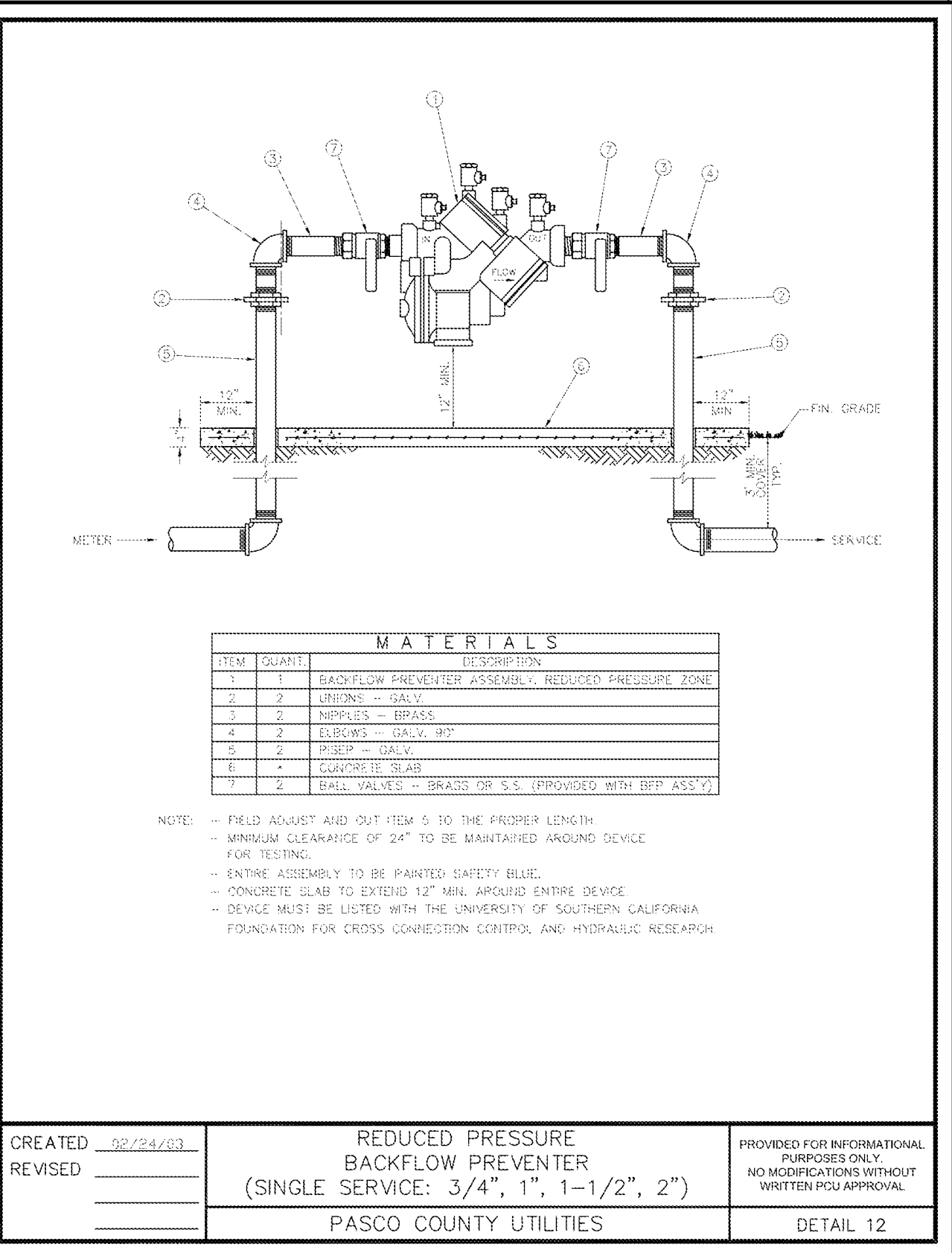
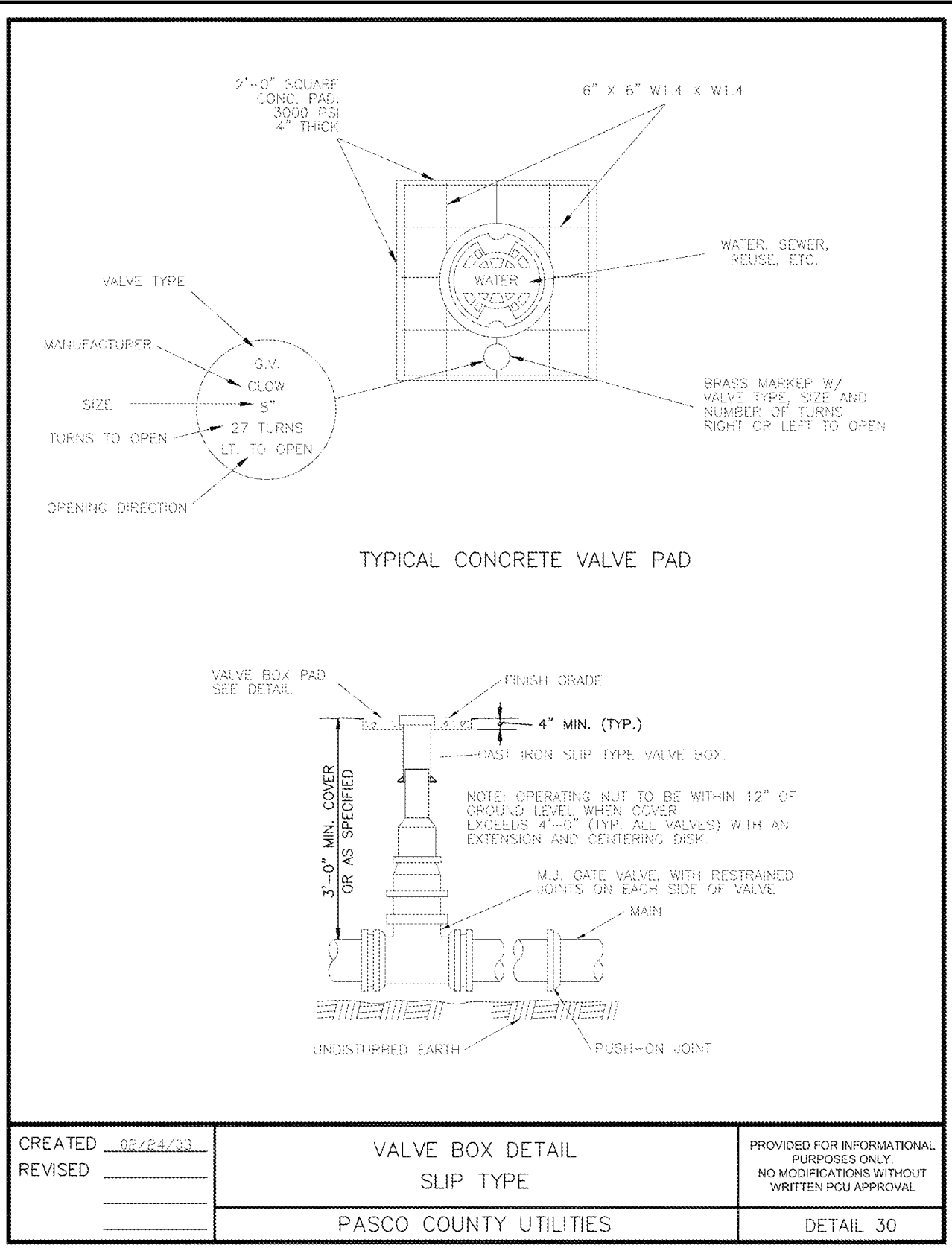
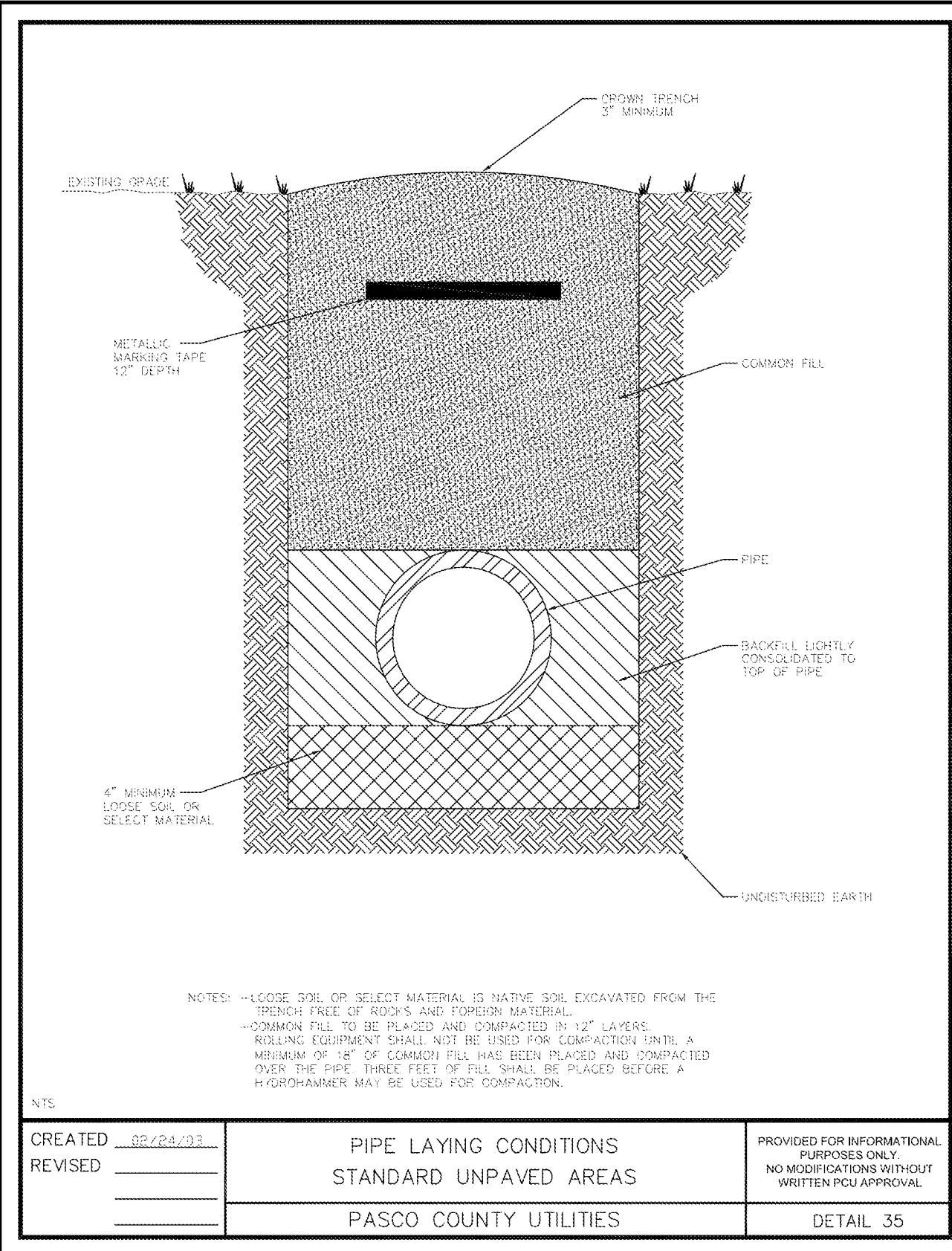
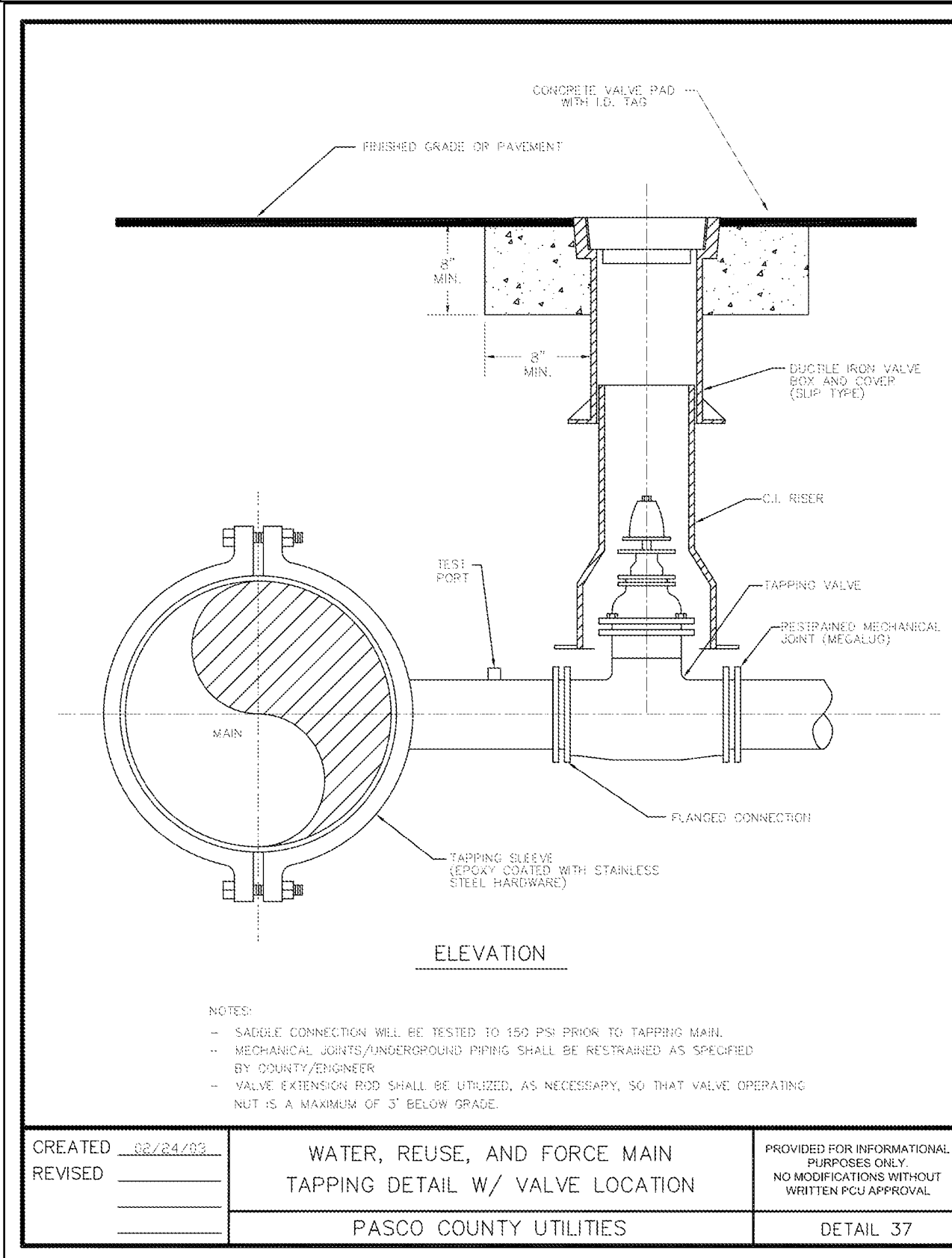
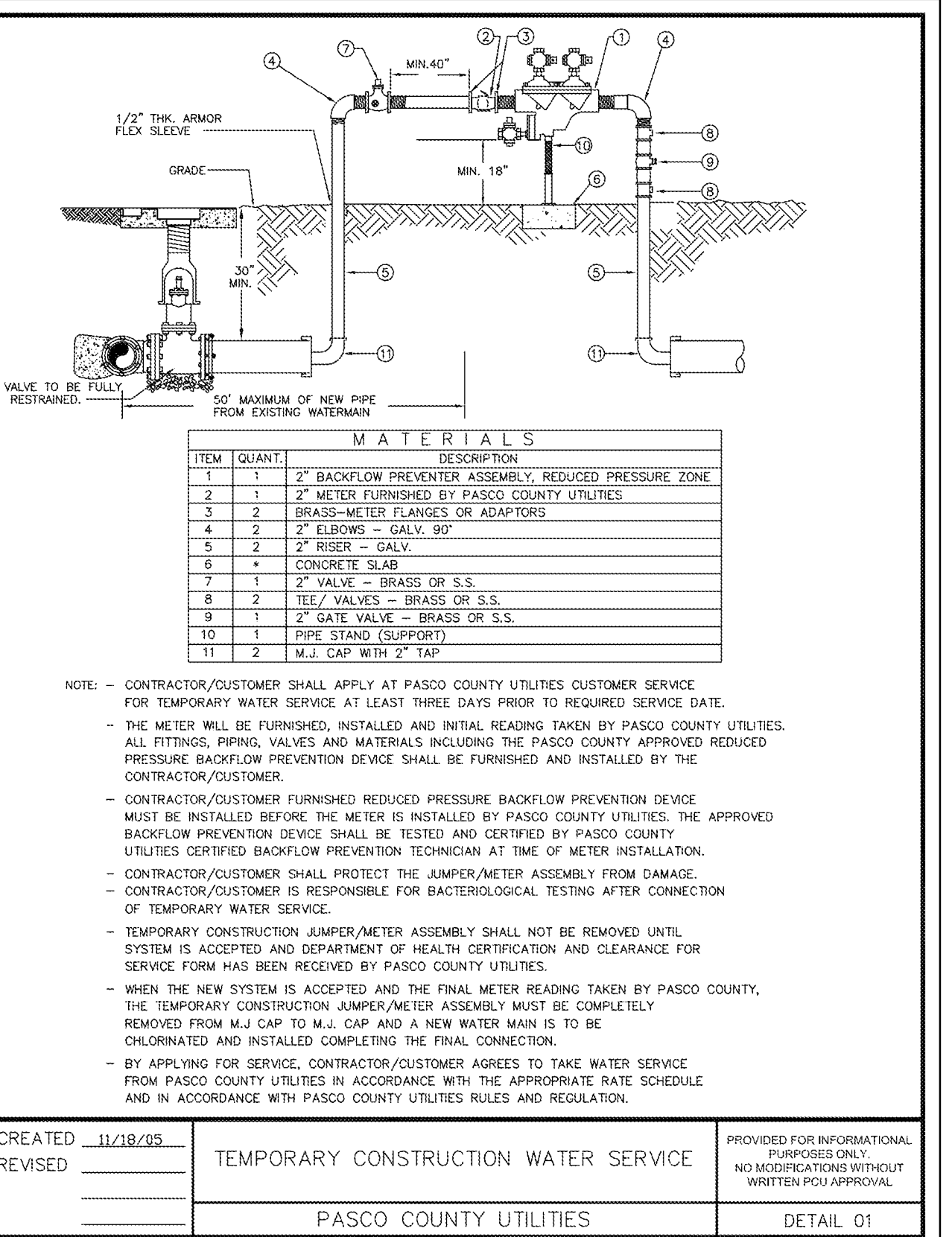
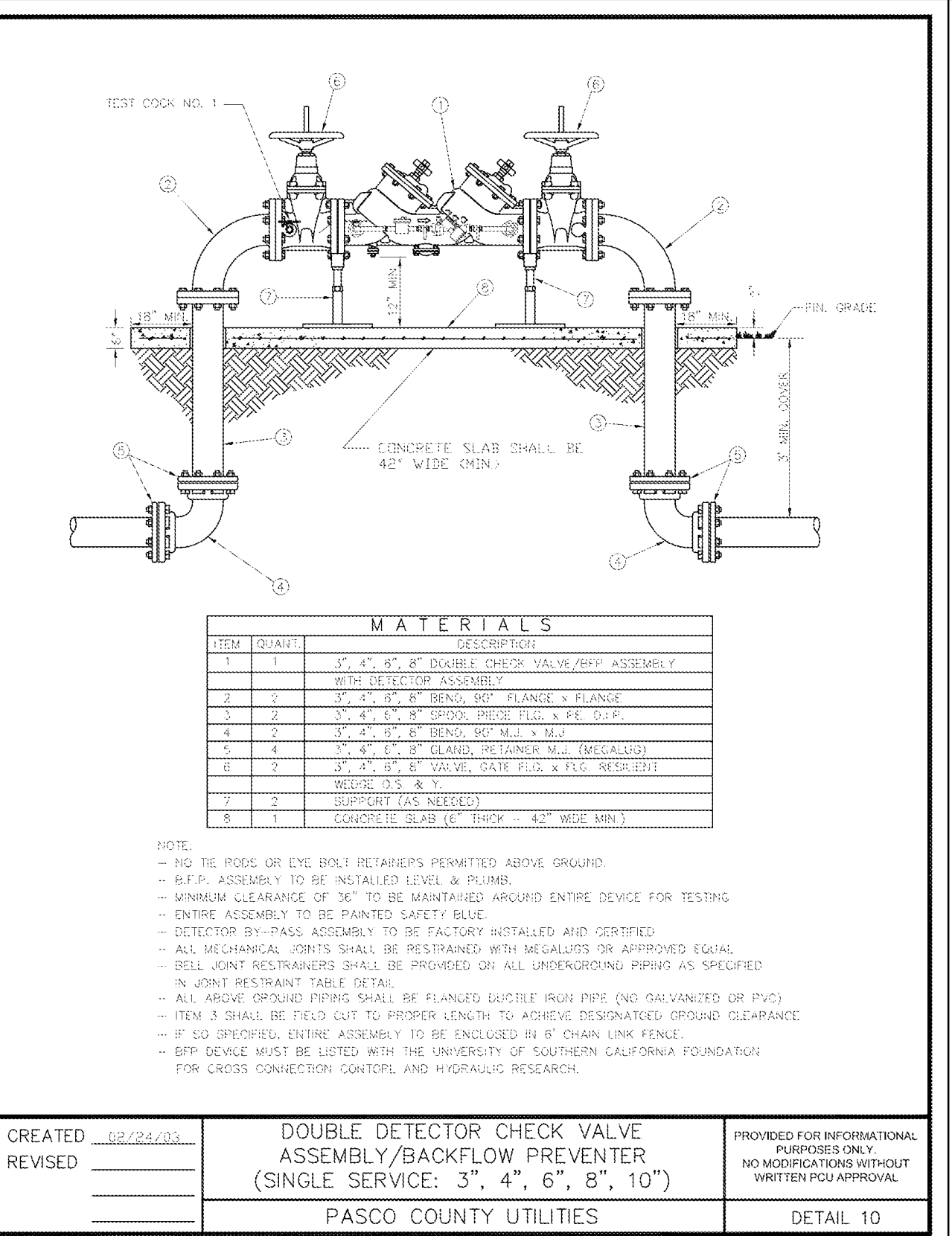
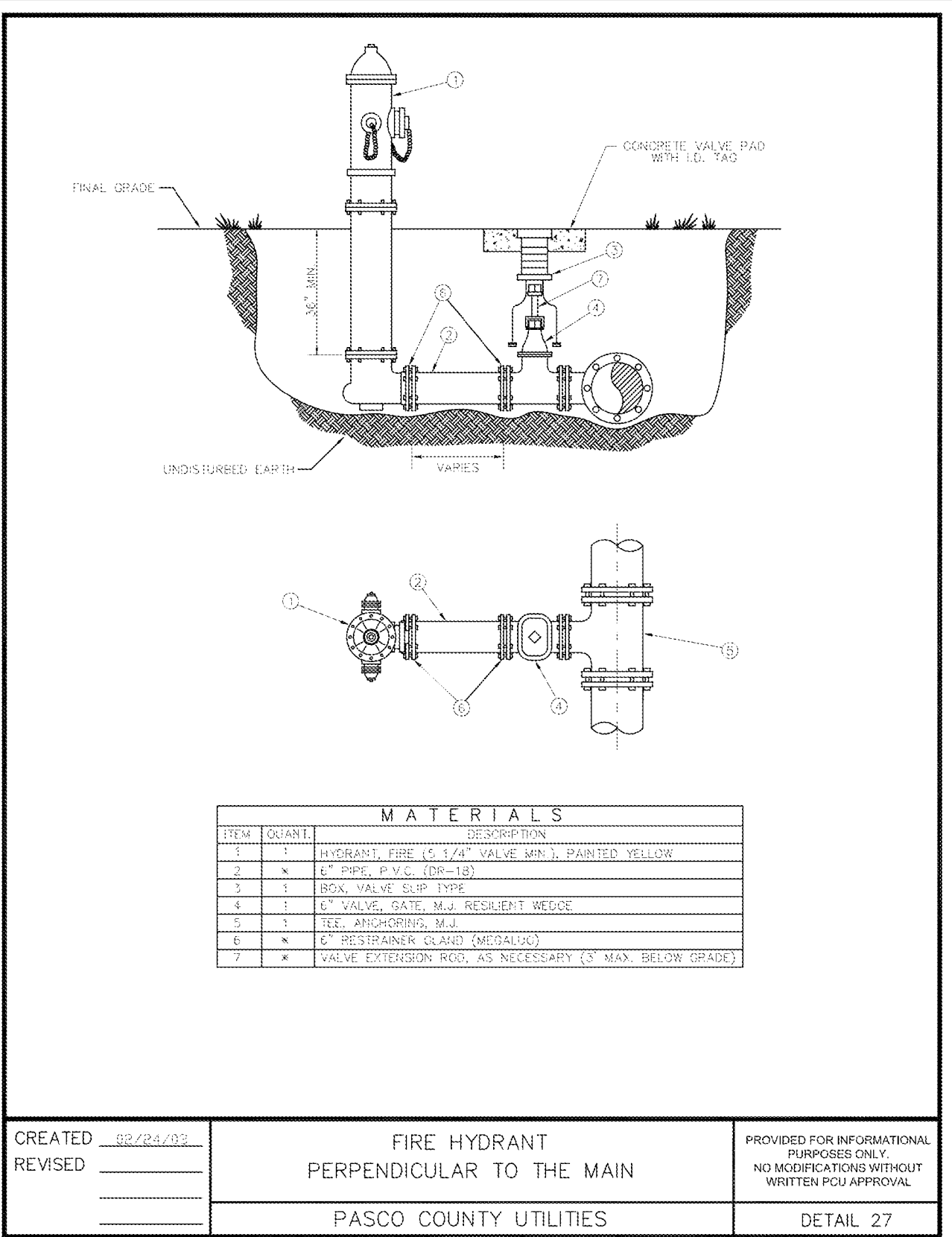
CREATED	02/24/03	RESTRAINED JOINT TABLE COMMON FITTINGS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISED		PASCO COUNTY UTILITIES	DETAIL 31

PIPE RESTRAINT LENGTHS IN FEET TEES (BRANCH SIDE)

WATER MAINS - TEST PRESSURE 150 PSI									
BRANCH SIZE									
RUN SIZE	3"	4"	6"	8"	10"	12"	16"	20"	24"
3"	6'	14'	30'	—	—	—	—	—	—
4"	2'	11'	28'	44'	—	—	—	—	—
6"	1'	2'	22'	40'	52'	—	—	—	—
8"	1'	1'	16'	35'	48'	62'	—	—	—
10"	1'	1'	10'	30'	44'	58'	83'	—	—
12"	1'	1'	3'	25'	40'	55'	80'	103'	—
16"	1'	1'	1'	14'	31'	48'	75'	98'	119'
20"	1'	1'	1'	2'	22'	40'	69'	94'	116'
24"	1'	1'	1'	1'	11'	31'	63'	89'	111'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE TEE ALONG THE BRANCH FOR THE DISTANCE INDICATED. A MINIMUM OF 5 FEET OF RESTRAINED PIPE MUST BE INSTALLED ON BOTH RUNS OF THE TEE. MEGALUG TYPE RESTRAINERS ARE REQUIRED ON ALL JOINTS.

CREATED	02/24/03	RESTRAINED JOINT TABLE TEES (BRANCH SIDE)	PROVIDED FOR INFORMATIONAL PURPOSES ONLY NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISED		PASCO COUNTY UTILITIES	DETAIL 32



REGULATORY REQUIREMENTS FOR CONSTRUCTION PROJECTS INCLUDE:

ENVIRONMENTAL RESOURCE PERMIT (ERP) CONSTRUCTION SURFACE WATER MANAGEMENT PLAN

PURPOSE : PREVENT EROSION AND SEDIMENT DEPOSIT IN WETLANDS/SURFACE WATERS OR ADJACENT PROPERTIES. PREVENT OFFSITE FLOODING. PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS.

REGULATORY AGENCY : STATE OF FLORIDA WATER MANAGEMENT DISTRICTS

APPLIES TO : ALL CONSTRUCTION PROJECTS UNLESS SPECIFICALLY EXEMPT BY RULE.

RESPONSIBLE ENTITY : ENVIRONMENTAL RESOURCE PERMITTEE SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE.

REQUIREMENT S: ALL PERMITTED PROJECTS SHALL PREPARE AND MAINTAIN A CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP) IN ACCORDANCE WITH F.A.C. 40D RULES, PART B, BASIS OF REVIEW, SECTION 2.8.

MAJOR COMPONENTS OF THE CSWMP

1. SITE PLAN.
2. TOPOGRAPHY AND HYDROLOGIC DATA
3. CONSTRUCTION DETAILS.
4. PROCEDURES TO CONTROL EROSION AND SEDIMENTATION.
5. PROCEDURES FOR STORMWATER MANAGEMENT.
6. MAINTENANCE PROCEDURES.
7. INSPECTION RECORDS.

SEE "THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL", **APRIL 2006** (OR LATEST EDITION) FOR ADDITIONAL INFORMATION. AND CHAPTER 6, "THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT" (FDER 1988)

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)

PURPOSE: PREVENT THE DISCHARGE OF POLLUTANTS ASSOCIATED WITH CONSTRUCTION ACTIVITIES TO SURFACE WATERS OF THE STATE.

REGULATORY AGENCY : EPA AND STATE OF FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION

APPLIES TO : ALL CONSTRUCTION PROJECTS DISTURBING ONE (1) OR MORE ACRES OF LAND UNLESS SPECIFICALLY EXEMPT BY RULE.

RESPONSIBLE ENTITY : THE "OPERATOR" AS DEFINED IN F.A.C. 62-621.300(4)(a) SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE. TYPICALLY THE CONTRACTOR SHALL BE OPERATOR AND FILE NPDES NOTICE OF INTENT (NOI).

REQUIREMENT S: ALL NON-EXEMPT PROJECTS SHALL PREPARE AND MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH F.A.C. 62-621. THE SWPPP SHALL BE COMPLETED PRIOR TO SUBMITTAL OF THE NOI AND MAINTAINED THROUGH THE LENGTH OF PROJECT.

MAJOR COMPONENTS OF THE SWPPP

1. SITE PLAN.
2. TOPOGRAPHY AND HYDROLOGIC DATA
3. CONSTRUCTION DETAILS.
4. PROCEDURES TO CONTROL EROSION AND SEDIMENTATION.
5. MEASURES TO CONTROL OTHER POLLUTANTS.
6. MAINTENANCE PROCEDURES.
7. INSPECTION RECORDS.
8. OPERATOR CERTIFICATION.

SEE "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES", **MAY 2003** (OR LATEST EDITION) FOR ADDITIONAL INFORMATION.

COMPLIANCE WITH NPDES GENERAL PERMIT CONDITIONS FOR CONSTRUCTION SITES SHALL BE THE CONTRACTOR'S RESPONSIBILITY INCLUDING SUBMITTAL OF THE NPDES NOTICES OF INTENT (NOI) AND TERMINATION (NOT) TO FDEP IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS.

CONTRACTOR IS ADVISED THAT THIS CONSTRUCTION PLAN SET DOES NOT FULFILL ALL REQUIREMENTS OF THE SWPPP. TO ENSURE COMPLIANCE, ADDITIONAL ITEMS TO BE SUPPLIED AND MAINTAINED ON SITE BY THE CONTRACTOR SHALL INCLUDE:

1. Certification Statement.
In accordance with F.A.C. 62-621.305 all documents related to the NPDES Permit, including Contractor's SWPPP, shall contain the following statement "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".
2. Subcontractor's Statement.
In accordance with Document 62-621.300(4)(a), any subcontractors responsible for SWPPP activities shall sign a copy of the following statement "I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder". Certifications are to include name and title of person providing signature, as well as, name, address and telephone number of the contracting firm, and date certification is made.
3. Records.
Contractor's SWPPP shall contain Records of all inspections and maintenance activities as required by permit. A copy of the NOI shall also be kept with the SWPPP. Records are to be maintained for no less than 3 years after final stabilization of the site.
4. Amendments
Contractor's SWPPP shall include any modifications to the "Plan" as may be required to address such items as specific construction phasing, changes to controls made in the field, or changes in responsible personnel.

The following documents may be consulted for additional guidance:

[WWW.DEP.STATE.FL.US/LEGAL/RULES/SHARED/62-621/62-621.IDF](#)

[WWW.DEP.STATE.FL.US/WATER/STORMWATER/NEDES/DOCS/SWPPPTRAINING.IDF](#)

INFORMATION CONTAINED IN THESE CONSTRUCTION PLANS IS INTENDED TO PROVIDE A STARTING POINT FOR THE CSWM AND SWPP PLANS. IN ORDER TO FULLY COMPLY WITH ALL ASPECTS OF CSWMP AND SWPPP REQUIREMENTS, ADDITIONAL ITEMS SHALL BE PROVIDED BY THE RESPONSIBLE ENTITY TO INCLUDE: INSPECTION RECORDS, UPDATES / MODIFICATIONS, AND CERTIFICATIONS.

REFERENCES MADE TO THE "PLAN" IN THE FOLLOWING NOTES REFERS BOTH TO THE CSWMP AND SWPPP AND SHALL BE INTERCHANGEABLE. THE "PLAN" COMPONENTS PROVIDED BY THE ENGINEER INCLUDE SITE DATA, STORMWATER MANAGEMENT EROSION/SEDIMENT CONTROL INSTRUCTIONS, DETAILS, AND NOTES AS PRESENTED THROUGHOUT THIS CONSTRUCTION PLAN SET.

"PLAN" AMENDMENTS

THE PLAN SHALL BE AMENDED WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR DISCHARGE OF POLLUTANTS TO SURFACE WATERS OF THE STATE OR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4). THE PLAN ALSO SHALL BE AMENDED IF IT PROVES TO BE INEFFECTIVE OR TO INDICATE ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR IMPLEMENTING CONTROL MEASURES. ALL AMENDMENTS SHALL BE SIGNED, DATED, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

SITE DATA

PROJECT NAME: PASCO COUNTY FIRE & RESCUE STATION NO. 12

PROJECT DESCRIPTION: CONSTRUCTION OF A 9,739 S.F. FIRE STATION BUILDING, ASPHALT DRIVE AISLE AND STORM PONDS.
LOCATION: S 30 T 26 R 16E

PROJECT SIZE: 3.25 AC SIZE OF DISTURBED AREA: 3.25 AC

SITE MAP: SEE CONSTRUCTION PLANS COVER SHEET

EXISTING TOPOGRAPHY: SEE CONSTRUCTION PLANS SHEET D1.0

PROPOSED TOPOGRAPHY: SEE CONSTRUCTION PLANS SHEET D1.0

PREDEVELOPMENT DRAINAGE MAP: SEE CONSTRUCTION PLANS SHEET D1.0

POST-DEVELOPMENT DRAINAGE MAP: SEE CONSTRUCTION PLANS SHEET D1.0

SOS SOIL DATA: SEE GEOTECHNICAL REPORT PROVIDED BY PROFESSIONAL SERVICES INDUSTRIES, INC.
ADDITIONAL DATA INCLUDING GEOTECHNICAL STUDY AND STORM WATER MANAGEMENT REPORT ARE AVAILABLE FROM THE ENGINEER.

RUNOFF COEFFICIENTS:
PREDEVELOPMENT C VALUE = 0.25 UNPAVED
POST-DEVELOPMENT C VALUE = 0.30 UNPAVED
= 0.95 PAVED

DISCHARGE POINTS AND RECEIVING WATER OR MS4 (UP TO 100 YR / 24 HR EVENT)
DISCHARGE POINT: N/A RECEIVING WATER: ON-SITE RUNOFF

DRAINAGE AREA: SEE SHEET D1.0

FDOT PRECIPITATION ZONE: ZONE 6

WATER MANAGEMENT DISTRICT RAINFALL DATA:

2 YR / 24 HR = 4.0 INCHES
5 YR / 24 HR = 6.0 INCHES
10 YR / 24 HR = 7.5 INCHES
25 YR / 24 HR = 9.0 INCHES
100 YR / 24 HR = 12.0 INCHES

CONSTRUCTION ACTIVITIES

1. Sequence of Major Soil Disturbing Activities
For each construction phase clear and grub as necessary for installation of perimeter controls only. Install perimeter controls before beginning other land disturbing activities. Remove perimeter controls only after all upstream areas are stabilized.
 - A. Clearing, grubbing and earthwork for ponds.
 - B. Clearing, grubbing and earthwork for swales.
 - C. Storm sewer construction. Install storm pipe in the upstream direction.
 - D. Clearing and grubbing for utility installation.
 - E. Clearing, grubbing and earthwork associated with pavement and buildings.
 - F. Complete site work.
 - G. Remove erosion control measures prior to final demobilization.
2. Areas of Soil Disturbing Activities
Any areas where permanent features are shown to be constructed shall be disturbed.
3. Areas to be Stabilized
All areas disturbed during construction shall be stabilized unless specifically shown otherwise.

CONTROLS

The following discussion defines general guidelines for the use of erosion/sediment controls and stabilization.

1. Temporary and permanent stabilization practices.
 - A. Temporary Sodding:
Install at the limits of phasing in all locations where construction activities have ceased and the likelihood of erosion is high.
 - B. Temporary Grassing:
Install at all locations where construction activities has temporarily stopped for a period to exceed 30 days.
 - C. Permanent planting, sodding and seeding:
All disturbed areas not paved will ultimately receive permanent sodding, seed or mulch unless specifically shown otherwise in plans.
2. Structural Controls.
Intended to divert, store, retain or otherwise limit storm water flow. Structural controls shall be installed prior to any earthwork or construction activity.
 - A. Silt Fence (PER FDOT INDEX 102)
Shall be used
 - around the perimeter of project area as designated in the Construction Plans.
 - around wetlands or other surface waters,
 - where existing ground slopes away from the project
 - Sheet flow areas
 - Stockpile areas shall include silt fence around the perimeter
 - or wherever there is potential for sediment to migrate offsite.
 - Typical useful life of silt fence is 6 months.

NOTE: Additional silt fence may also be required to designate limits of construction, protect trees, or satisfy local development requirements.

B. Hay Bales (Per FDOT Index 102):
May be used as temporary sediment barrier per FDOT Index 120. Typical useful life of hay bales is 3 months.

C. Turbidity Barriers (Per FDOT Index 102):
Shall include staked or floating type, as required, wherever there is a point source discharges from project area to surface water. Typical useful life of staked turbidity barriers is 6 months.

D. Rock Bays
May be used as temporary measure for inlet protection per FDOT Index 120. Primary use shall be around curb type inlets.

3. Sediment Basins for areas disturbing 10 acres or more.
Sumps or traps are required to provide 3,600 cu ft of storage per acre drained. When discharge is to an Outstanding Florida Waterway, Storage must be sufficient to accommodate the 10 year / 24 hour storm.

Requirement for sediment trap may be satisfied by utilizing the project storm water ponds. If so, Ponds shall be cleaned of excess sediment prior to final acceptance.

CONTROLS (CONTINUED)

4. Permanent storm water management controls.
As individual phases of construction are performed, permanent control structures shall be installed.
5. Other Pollutant Controls.
 - A. Waste Disposal:
The Contractor shall be responsible for maintaining field records of their SWPPP activities including disposal of construction debris and waste. The Contractor shall provide litter control and collection within the project boundaries during construction activities. Any fertilizer, hydrocarbon, or other chemical containers shall be disposed of by the contractor according to EPA standard practices as detailed by the manufacturer. No solid materials including building and construction debris shall be placed in, or discharged to, wetlands, surface waters or buried on site.
 - B. Offsite Vehicle Tracking:
The Contractor shall provide control(s) from the following acceptable methods:
 1. Loaded haul trucks shall be covered by a tarpaulin.
 2. Excess dirt on road shall be removed daily. Contractor shall provide pollution control by implementing dust control with water application while dust generating activities are conducted.
 3. Soil Tracking Prevention Device shall be installed where vehicles leave the project area (or enter nearest paved road).
 - C. Herbicides / Pesticides:
Application rates shall conform to applicable local, state and federal regulations.
 - D. Toxic Substances:
Storage, application, generation, migration of all toxic substances shall conform to applicable local, state and federal regulations. Containment areas shall be provided whenever potentially hazardous materials are stored on site.
6. Non-Stormwater Discharges.
No non-stormwater discharges to surface waters, wetlands or the MS4 shall be allowed except as specifically approved by applicable permits and regulations.

MAINTENANCE

The Contractor shall be responsible for daily inspection and maintenance of all control devices throughout the construction phase and removal of control devices when no longer necessary.

NOTE: For SWFWMD, the PERMITTEE is responsible for ensuring that all controls are properly maintained.

The following practices shall be used to maintain controls.

1. The Contractor shall maintain rain gages on the project site and keep a record of daily rainfall.
2. The Contractor shall check and ensure proper operation of the controls. If a repair is necessary, it shall be initiated within 24 hours of the inspection.
3. Built-up sediment shall be removed when it has reached 1/3 the height of barrier.
4. Any controls which are not functioning as intended shall be repaired or replaced.
5. Temporary and permanent seeding shall be inspected for bare spots, washouts, and healthy growth.
6. Soil tracking prevention devices shall be maintained to prevent clogging of rock bedding which may impede usefulness of the structure.

INSPECTION AND DOCUMENTATION PROCEDURES

The Contractor shall be responsible for completing weekly inspection report form and maintaining documentation for 3 years following final stabilization. The Contractor shall submit copies of these reports to the owner prior to final payment for work shown within these construction plans. Additional inspection and documentation must be completed within 24 hours after any significant rainfall event.

NOTE: For NPDES, a significant rainfall shall be 0.5 inches or greater. For ERP, a significant rainfall shall be 0.25 inches or greater. To eliminate confusion, Contractor is advised to carryout inspections after rainfall exceeding 0.25 inches. For projects with minimal potential for discharge to surface waters, it may be possible to adjust this criteria. Contact the Engineer for details.

Where sites have been permanently stabilized, inspections/reports shall be conducted at least once per month until construction activities have ceased and NOT has been submitted.

Minimum inspection requirements shall include:

- Points of discharge to waters of the State.
- Points of discharge to the MS4 (municipal storm sewer).
- Disturbed areas of the site that have not been stabilized.
- Areas used for storage of materials that may create a pollution source (i.e. stockpiles, fuel drums, construction debris) and are exposed to rainfall.
- Structural Controls
- Storm water Management Controls
- Locations where vehicles enter and exit the site.

The Contractor shall initiate repairs / corrections within 24 hours of any items found to be in non-compliance with the associated permit requirements. If inspections indicate that the installed stabilization and structural practices are not sufficient to minimize erosion, retain sediment, and prevent the discharge of pollutants Contractor shall complete corrective measures as needed. Contact the Engineer prior to modifying any structural controls which are specifically shown in the construction plans.

NOTE:
THE CONTRACTOR SHALL MAKE REPAIRS/CORRECTIONS TO ERODED AREAS AND MAINTENANCE OF SEDIMENT CONTROL DEVICES WITHOUT ADDITIONAL COST TO THE OWNER AND/OR THE ENGINEER UNLESS PRIOR APPROVAL OF SUCH COST IS RECEIVED BY THE OWNER.

CONSTRUCTION SURFACE WATER MANAGEMENT RESPONSIBLE ENTITY

AS REQUIRED UNDER FAC 40D, PART B, SECTION 2.8.1.(c) THE OWNER/PERMITTEE OR AUTHORIZED AGENT SHALL ENSURE THAT THE SURFACE WATER AND STORM WATER MANAGEMENT MEASURES PROPOSED IN THE "PLAN" ARE EFFECTIVELY IMPLEMENTED UNTIL COMPLETION OF THE PROJECT OR UNTIL THE PERMANENT SURFACE WATER MANAGEMENT SYSTEM IS OPERATIONAL. THE "PLAN" SHALL INCLUDE NOTES, DETAILS AND INSTRUCTIONS FOR STORM WATER MANAGEMENT PRESENTED THROUGHOUT THESE CONSTRUCTION PLANS, AS WELL AS, ANY AMENDMENTS TO THE "PLAN" AND RECORD KEEPING THROUGH THE COURSE PROJECT.

THE OWNER/PERMITTEE OR AUTHORIZED AGENT IS AWARE OF, AND HEREBY AGREES TO COMPLY WITH THE STORM WATER MANAGEMENT ITEMS CONTAINED WITHIN THE CONSTRUCTION PLANS, INCLUDING MAINTENANCE OF EROSION CONTROL ITEMS, AS SUBMITTED FOR DISTRICT APPROVAL.

SIGNATURE OF APPLICANT / PERMITTEE OR AGENT FOR SWFWMD PERMIT

PRINTED NAME OF APPLICANT / PERMITTEE OR AGENT FOR SWFWMD PERMIT

DATE:	DRAWN BY:	CHK'D BY:	
DATE	REV. BY	REV. NO.	REVISION

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CLIENT:
PASCO COUNTY FACILITIES MANAGEMENT DEPARTMENT
TASK # FM 12-003

PAUL A. MANUEL, P.E.
P.E. NO. 51424

SHEET NAME:
STORM WATER POLLUTION PREVENTION PLAN

PROJECT NAME:
PASCO COUNTY FIRE & RESCUE STATION NO. 12 PASCO COUNTY, FLORIDA

JOB No.: **12003**

SHEET

D2.0

