

Construction Plans
for
ORANGEWOOD, VISTANA,
AND HUNTERS CREEK
FUEL TANK REPLACEMENT

TERESA S. JACOBS
Mayor

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Utilities Department Director

UTILITIES DEPARTMENT
ORANGE COUNTY, FLORIDA

JUNE 2015

PREPARED BY



BID SET

SEQUENCE NUMBER 79205
HUNTERS CREEK WSF ORG/SUB ORG 1498-12
VISTANA WSF ORG/SUB ORG 1498-13
ORANGEWOOD WSF ORG/SUB ORG 1498-14



HUNTER'S CREEK WSF
VICINITY MAP



ORANGEWOOD WSF
VICINITY MAP



VISTANA WSF
VICINITY MAP

UTILITY CONTACTS

UTILITIES	COMPANY	TELEPHONE
WATER SANITARY SEWER RECLAIMED WATER	ORANGE COUNTY FIELD SERVICES	(407) 836-6818
ELECTRIC	DUKE ENERGY	(407) 938-6618
CABLE - TV	BRIGHT HOUSE CABLE	(407) 532-8509
GAS	TECO (PEOPLE GAS)	(407) 532-8509
OCU CONSTRUCTION DIVISION		(407) 254-9798
OCU ENGINEERING DIVISION		(407) 254-9900
OCU CONSTRUCTION DIVISION'S INSPECTOR		(407) 254-9798

NOTE: THIS LISTING IS PROVIDED AS AN AID. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY AND ARRANGE FOR FIELD LOCATION OF ALL FACILITIES THAT WILL BE ENCOUNTERED DURING CONSTRUCTION.

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GENERAL NOTES

ALL WORK AND REQUIREMENTS FROM THE NOTES IN THIS PAGE SHALL BE A REQUIREMENT OF THE CONTRACT AND EXECUTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO ORANGE COUNTY.

1. ALL COORDINATION AND COMMUNICATIONS WITH ORANGE COUNTY STAFF SHALL BE MADE THROUGH THE ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION INSPECTOR. CONTACT THE OCU DISPATCH DURING EMERGENCIES.
2. THE ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION SHALL BE NOTIFIED AT LEAST SEVEN (7) DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY, OR PRIOR TO ANY ACTIVITY REQUIRING THE PRESENCE OF OR AN ACTION BY UTILITIES STAFF SUCH AS SCHEDULING VALVE OPERATION, PRESSURE TESTING, PIPE CONNECTION, PUMP STATION OPERATIONS OR SHUTDOWNS, ETC.
3. THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION DIVISION AT LEAST 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION BY CALLING (407) 254-9798.
4. ORANGE COUNTY FIELD SERVICES TELEPHONE NUMBER: 407-836-6818 SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OCU DISPATCH OPERATOR (407-836-2777) AND THE OCU INSPECTOR.
5. WATER, WASTEWATER AND RECLAIMED WATER VALVES, PUMP STATIONS OR OTHER UTILITY INFRASTRUCTURE ARE TO BE OPERATED ONLY BY ORANGE COUNTY UTILITIES PERSONNEL COORDINATED BY OCU INSPECTOR (407-254-9798). FOR OPERATION OF ORANGE COUNTY PUMP STATIONS THE CONTRACTOR SHALL COORDINATE ALL PUMP STATION OPERATION AND SHUT DOWN WITH AN ORANGE COUNTY UTILITIES INSPECTOR (407-254-9798).
6. ALL EXISTING WATER MAIN, FORCEMAINS, GRAVITY PIPES AND OTHER UTILITY FACILITIES WITHIN THE LIMITS OF THE PROJECT SHALL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WATER MAINS, WASTEWATER FORCE MAINS, AND GRAVITY MAINS AND RECLAIMED WATER MAINS. WATER MAIN, FORCE MAIN, GRAVITY MAIN AND RECLAIMED WATER MAIN LOCATIONS SHOWN ON THE PLANS ARE NOT EXACT OR GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITY LOCATIONS.
8. LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTENCE AND LOCATION OF ALL ABOVEGROUND AND UNDERGROUND UTILITIES AND DETERMINE THE STATUS OF SAID UTILITY, PRIOR TO ANY DEMOLITION OR CONSTRUCTION OF THE PROPOSED WORK. CONTRACTOR SHALL CONTACT UTILITY OWNERS, INCLUDING FIBER OPTICS COMPANIES, AT LEAST SEVEN (7) DAYS PRIOR TO CONSTRUCTION AND A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION. EXTREME CAUTION SHALL BE EXERCISED IN AREAS OF FIBER OPTICS AND GAS MAINS.
9. IMMEDIATELY AT ONSET OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CRITICAL TO COMPLETING THE PROJECT (INCLUDING FUEL LINES, WATER, SEWER, RECLAIMED WATER, POWER, TELEPHONE, GAS AND CABLE TV) AND SHALL EVALUATE POTENTIAL CONFLICTS IN A WRITTEN REPORT TO OWNER AND ENGINEER. ANY CONFLICTS SHALL BE REPORTED TO ENGINEER/OWNER IMMEDIATELY UPON DISCOVERY AND DETAILED IN THE REPORT.
- △ 10. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH O.C. RISK MANAGEMENT ON ALL ACTIVITIES WITH A MINIMUM OF 7 DAYS NOTICE. CONTRACTOR TO NOTIFY RPR ON ALL ACTIVITIES. CONTRACTOR SHALL COORDINATE WITH ALL OTHER UTILITY OWNERS FOR RESOLUTION OF CONFLICTS. CONTRACTOR SHALL HAVE 48 HOURS TO DETERMINE THE RESOLUTION OF ANY UNKNOWN OR UNFORESEEN CONFLICTS. COSTS INCURRED SHALL BE BORNE BY THE UTILITY OWNER AND/OR CONTRACTOR AND NO CLAIMS MAY BE MADE AGAINST ORANGE COUNTY OR THE ENGINEER FOR THESE CONFLICTS. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR THE PERIOD OF TIME TO RESOLVE ANY CONFLICTS.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH UTILITY OWNERS AND BE RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORT FOR ALL UTILITIES DURING CONSTRUCTION.
12. ALL UTILITIES CONSTRUCTION CONNECTING TO THE ORANGE COUNTY UTILITIES SYSTEM SHALL CONFORM TO THE CURRENT ORANGE COUNTY UTILITIES STANDARDS AND SPECIFICATIONS MANUAL FOR WASTEWATER AND WATER MAIN CONSTRUCTION UNLESS OTHERWISE NOTED. ALL MATERIALS USED IN CONSTRUCTION SHALL BE ON THE APPROVED 'APPENDIX D' LIST FROM THE CURRENT STANDARDS MANUAL MENTIONED PREVIOUSLY.
13. ALL PIPE, PIPE FITTINGS AND APPURTENANCES INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH STATE OF FLORIDA STANDARDS. CONTRACTOR TO PROVIDE SUBMITTALS FOR APPROVAL, INCLUDING REFERENCE TO STATE STANDARDS.
14. ALL BACKFILL SHOWN ON PLANS TO BE COMPACTED TO NOT LESS THAN 98% OF MAXIMUM DRY DENSITY AS MEASURED BY AASHTO T-180 METHOD 'D' TEST (MODIFIED PROCTOR). ALL SOIL TESTING TO BE CONDUCTED BY THE COUNTY. THE CONTRACTOR SHALL PROVIDE ALL REASONABLE ASSISTANCE DURING THE SOIL TESTING.
15. PIPE LENGTHS SHOWN ON PLANS ARE APPROXIMATE. ACTUAL LENGTHS ARE TO BE DETERMINED DURING CONSTRUCTION.
16. MAINTAIN EMERGENCY VEHICLE ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES.
17. ALL WORK SHALL BE CONSTRUCTED AS SHOWN ON PLANS. A MINIMUM COVER OF 36 INCHES SHALL BE MAINTAINED ON ALL BURIED FUEL LINES. ALL DIRECTION CHANGES IN THE PIPE BOTH HORIZONTAL AND VERTICAL SHALL BE BY INSTALLATION OF FITTINGS. NO DEFLECTION OR BENDING OF ANY KIND SHALL BE PERMITTED FOR FUEL PIPE.
- △ 18. ~~ALL PIPES SHALL BE RESTRAINED IN ACCORDANCE WITH THE RESTRAINT TABLES SHOWN ON DETAIL SHEETS. IN ADDITION, ALL FITTINGS SHALL BE MECHANICAL JOINT RESTRAINED. NO THRUST BLOCKS SHALL BE PERMITTED. RESTRAIN EXISTING PIPE WHERE REQUIRED IN ACCORDANCE WITH THE RESTRAINT TABLE.~~
19. PIPE SIZES SHOWN ON PLANS ARE MINIMUM INSIDE DIAMETER.
20. WHEN USING SCALED DATA CONSIDER THAT THESE PLANS MAY HAVE ALTERED IN SIZE DURING REPRODUCTION.
21. LOCATIONS AND DIMENSIONS OF WORK ARE BASED ON BEST AVAILABLE INFORMATION. VERIFY AND STAKE THE LIMITS OF CONSTRUCTION PRIOR TO CONSTRUCTION.
22. WHEN OBTAINING DATA AND INFORMATION FROM THE PLANS, FIGURES SHALL BE USED IN REFERENCE TO SCALED DIMENSIONS.
23. LOCAL RESIDENTIAL ACCESS SHALL BE MAINTAINED AT ALL TIMES. PROVIDE WRITTEN NOTIFICATION TO RESIDENTS SEVEN (7) DAYS PRIOR TO IMPLEMENTING ANY ROADWAY OR DRIVEWAY CLOSURE.
24. COMPLETE ALL CONSTRUCTION WITHIN PROPERTY LIMITS, UNLESS OTHERWISE NOTED.
25. RESTORE ALL EXISTING IMPROVEMENTS AND DISTURBED AREAS TO ORIGINAL OR BETTER CONDITION. PAVEMENT TO BE RESTORED, MATCHING EXISTING THICKNESS. AT A MINIMUM, PAVEMENT SHALL BE 12" STABILIZED BASE, 8" LIMEROCK BASE, AND 2" ASPHALT.
26. PROTECT EXISTING IMPROVEMENTS TO THE MAXIMUM EXTENT POSSIBLE. ALL DAMAGED SIDEWALK, ROADWAY PAVEMENT AND OTHER IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION, AT THE CONTRACTOR EXPENSES.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFYING ALL REQUIREMENTS OF REGULATORY AGENCY PERMITS FOR CONSTRUCTION ACTIVITIES AND RELATED ACTIVITIES.
28. WHERE REQUIRED, AT NO ADDITIONAL COST TO THE COUNTY, THE CONTRACTOR SHALL USE TEMPORARY SHEETING OR TRENCH BOXES TO MINIMIZE THE SIZE OF EXCAVATIONS AND PROTECT EXISTING ROADWAYS, UTILITIES AND OTHER FACILITIES. CONTRACTOR TO COMPLY WITH OSHA TRENCH SAFETY REQUIREMENTS AT ALL TIMES.
29. NEW OR RELOCATED FUEL LINES SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE FUEL LINE AND THE OUTSIDE OF ANY EXISTING WATER MAIN, RECLAIMED WATER MAIN, GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
30. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ON-SITE DURING THE LIFE OF THE PROJECT, A WEATHERPROOF ENCLOSURE CONTAINING A READILY ACCESSIBLE LIST OF EMERGENCY CONTACTS AND PHONE NUMBERS.
31. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL NO LESS THAN FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION - PHONE - 800-432-4777.
32. THE DISPOSAL OF ANY EXCESS EARTHWORK MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
33. SALVAGE AND/OR DISPOSAL OF ALL EXISTING EQUIPMENT SHALL BE AT THE DIRECTION OF THE ORANGE COUNTY RESIDENT PROJECT REPRESENTATIVE.
34. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DISPOSAL OF ALL STRUCTURES, PIPE, CONDUIT, WIRE, FITTINGS, PANELS, ETC. THAT ARE DEMOLISHED, DISASSEMBLED, OR REMOVED, PER THE SPECIFICATION MANUAL OF THIS PROJECT.
35. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DE-WATERING REQUIRED DURING CONSTRUCTION AND TO OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR THE TEMPORARY DEWATERING OF DRAINAGE STRUCTURES.
36. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY PLUGS, BLOCKING, TAPS, AND TESTING EQUIPMENT REQUIRED TO COMPLETE PRESSURE TESTING, AS SPECIFIED.
37. THE CONTRACTOR SHALL PREPARE AND SUBMIT FOR APPROVAL BY THE COUNTY, A COMPREHENSIVE WRITTEN PROCEDURE THAT DESCRIBES THE INTENDED CONSTRUCTION SEQUENCE FOR MAINTAINING AND TRANSFERRING SERVICE FROM THE EXISTING GENERATOR/FUEL TANK TO THE NEW FUEL TANK. THIS PROCEDURES SHALL BE SUBMITTED WITH THE PROJECT SCHEDULE.

REPAIR IMMEDIATELY

38. ALL DAMAGE TO ORANGE COUNTY MAINS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. IF THE REPAIR IS NOT DONE IN A TIMELY MANNER, AS DETERMINED BY THE ORANGE COUNTY UTILITY INSPECTOR, ORANGE COUNTY MAY PERFORM REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR SAID REPAIRS.
39. CONTRACTOR TO PROVIDE SIGNED AND SEALED SURVEYED AS-BUILTS BY A STATE OF FLORIDA LICENSED SURVEYOR. SURVEY TO INCLUDE AS-BUILTS ON ALL INSTALLED TANKS, FUEL LINES, VALVES, AND FITTINGS ON THE FUEL LINE, CONCRETE PAD LOCATION AND SIZE (LENGTH, WIDTH), ELECTRICAL LINES, ETC. SURVEY ALSO TO INCLUDE BOTH HORIZONTAL AND VERTICAL SEPARATION FROM ALL EXISTING WATER LINES, SANITARY SEWER LINES AND STORM LINES. SURVEY TO INCLUDE LOCATION AND SIZE OF ALL CASING PIPES INSTALLED (DIAMETER, END POINT, INVERT ELEVATION).
40. CONTRACTOR TO RESTORE ALL DAMAGED AND DISTURBED AREAS TO EQUAL OR BETTER CONDITION. CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS FOR RESTORATION OF ALL LANDSCAPED AND SODDED AREAS DISTURBED AS PART OF HIS WORK.
41. CONTRACTOR TO COMPLETE HIS WORK AT THE END OF EACH DAY AND REOPEN SIDEWALKS FOR PUBLIC USE. SIDEWALKS SHALL CONSIST OF A STABILIZED ASPHALTIC SURFACE, OR EQUAL, SUITABLE FOR PUBLIC FOOT TRAFFIC. MATERIAL TO BE USED SHALL BE APPROVED BY THE COUNTY PRIOR TO INSTALLATION.
42. THE PROPOSED ORDER OF WORK SHALL BE THE ORANGEWOOD WSF, FOLLOWED BY THE HUNTERS CREEK WSF AND THEN THE VISTANA WSF PLANT LAS.
43. NO NEW SURVEY WAS PROVIDED FOR THIS PROJECT. EXISTING INFORMATION SHOWN IS FROM EXISTING AS-BUILT PLANS PROVIDED BY THE COUNTY. CONTRACTOR TO FILED VERIFY ALL EXISTING CONDITIONS AS PART OF HIS WORK.

No.	Date	Revision	By	No.	Date	Revision	By	 A Full Service A & E Firm Architects M / E / P Engineers Planners Environmental Surveyors Landscape Architects Traffic/Transportation	Offices In: • Florida • Puerto Rico • Connecticut • Maryland • Texas	Designed by: ACL Drawn by: DGH Checked by: BCB/ACL Approved by: ACL Job No. 028419	Date: 6/08/2015 Scale: NONE	ORANGEWOOD, VISTANA, AND HUNTERS CREEK FUEL TANK REPLACEMENT Orlando, Florida	Plans Prepared By: CPH, Inc. 1117 E. Robinson St. Orlando, FL 32801 Ph: 407.425.9452 Licenses: Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926 Survey L.B. No. 7143 Landscp. Lic. No. LC0000298	ALLEN C. LANE, JR., P.E. REG - 60144	Sheet No. 3
△	12-15-14	REVISED NOTES PER COUNTY COMMENTS	ACL	△											
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Item No.	Description	Totals	Units	Sheet 5	Sheet 6	Sheet 7
1	Mobilization, Demobilization & Bonds	1	LS			
2	Pre-construction Video	1	LS			
3	Indemnification	1	LS			
4	Record Drawings (3 sites) *	1	LS			
5	Dewatering (3 sites)	1	LS			
6	Erosion and Sediment Control (silt fence, etc.)	1	LS			
7	Unsuitable Soil Removal & Replacement w/Clean Backfill	20	CY			
8	Concrete Pad (Fuel Tank)	20	CY			
Orangewood WSF						
9	New Fuel Tank (2000 gallons)	1	EA	0	1	0
10	New Fuel Lines	1	LS	0	1	0
11	Access ladder to top of tank	1	EA	0	1	0
12	Electrical connection to new tank	1	EA	0	1	0
13	New Fuel Tank Management System	1	EA	0	1	0
14	Fuel new tank (first filling by contractor)	1	EA	0	1	0
15	Remove/dispose of excess fuel	1	EA	0	1	0
16	Remove/dispose existing fuel tank, piping	1	EA	0	1	0
17	Restoration/sodding	1	LS	0	1	0
Hunters Creek WSF						
18	New Fuel Tank (2000 gallons)	1	EA	1	0	0
19	New Fuel Lines	1	LS	1	0	0
20	Access ladder to top of tank	1	EA	1	0	0
21	Electrical connection to new tank	1	EA	1	0	0
22	Fuel new tank (first filling by contractor)	1	EA	1	0	0
23	Remove/dispose of excess fuel	1	EA	1	0	0
24	Remove/dispose existing fuel tank, piping	1	EA	1	0	0
25	Restoration/sodding	1	LS	1	0	0
Vistana WSF						
26	New Fuel Tank (1000 gallons)	1	EA	0	0	1
27	New Fuel Lines	1	LS	0	0	1
28	Access ladder to top of tank	1	EA	0	0	1
29	Electrical connection to new tank	1	EA	0	0	1
30	Fuel new tank (first filling by contractor)	1	EA	0	0	1
31	Remove/dispose of excess fuel	1	EA	0	0	1
32	Remove/dispose existing fuel tank, piping	1	EA	0	0	1
33	Restoration/sodding	1	LS	0	0	1
Alternate Tank Selection						
Orangewood WSF						
A1	New Fuel Tank (7 day operation, 3500 gallons)	1	EA			
Hunters Creek WSF						
A2	New Fuel Tank (7 day operation, 3500 gallons)	1	EA			
Vistana WSF						
A3	New Fuel Tank (7 day operation, 2000 gallons)	1	EA			

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No.	Date	Revision	By	No.	Date	Revision	By
△	12-15-14	REVISED TABLE PER COUNTY COMMENTS	ACL	△			
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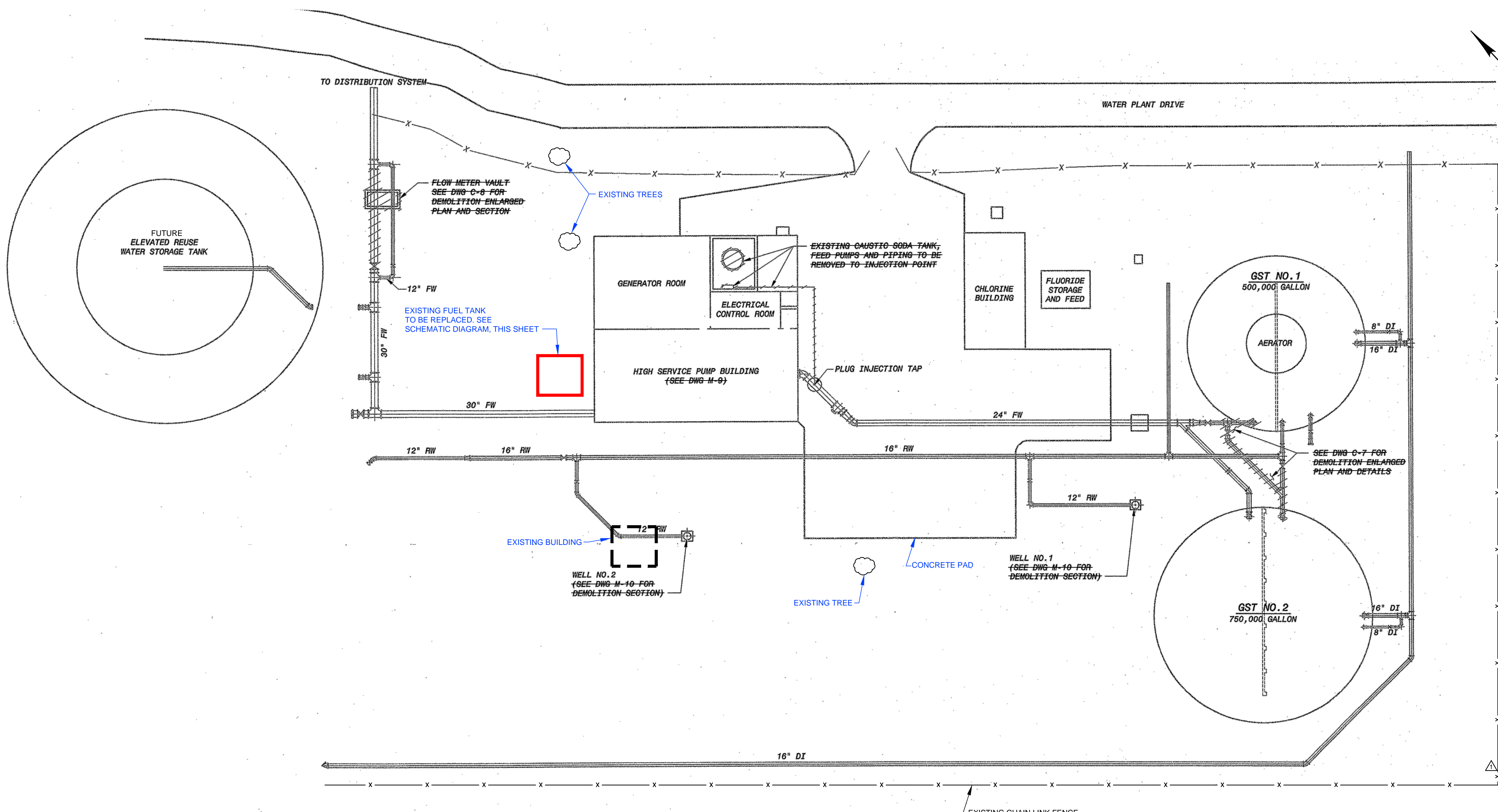
Offices In:	Designed by:	ACL	Date:	6/08/2015
• Florida	Drawn by:	DGH	Scale:	NONE
• Puerto Rico	Checked by:	BCB/ACL		
• Connecticut	Approved by:	ACL		
• Maryland	Job No.	028419		
• Texas				©2015

**ORANGEWOOD, VISTANA,
AND HUNTERS CREEK
FUEL TANK REPLACEMENT**
Orlando, Florida

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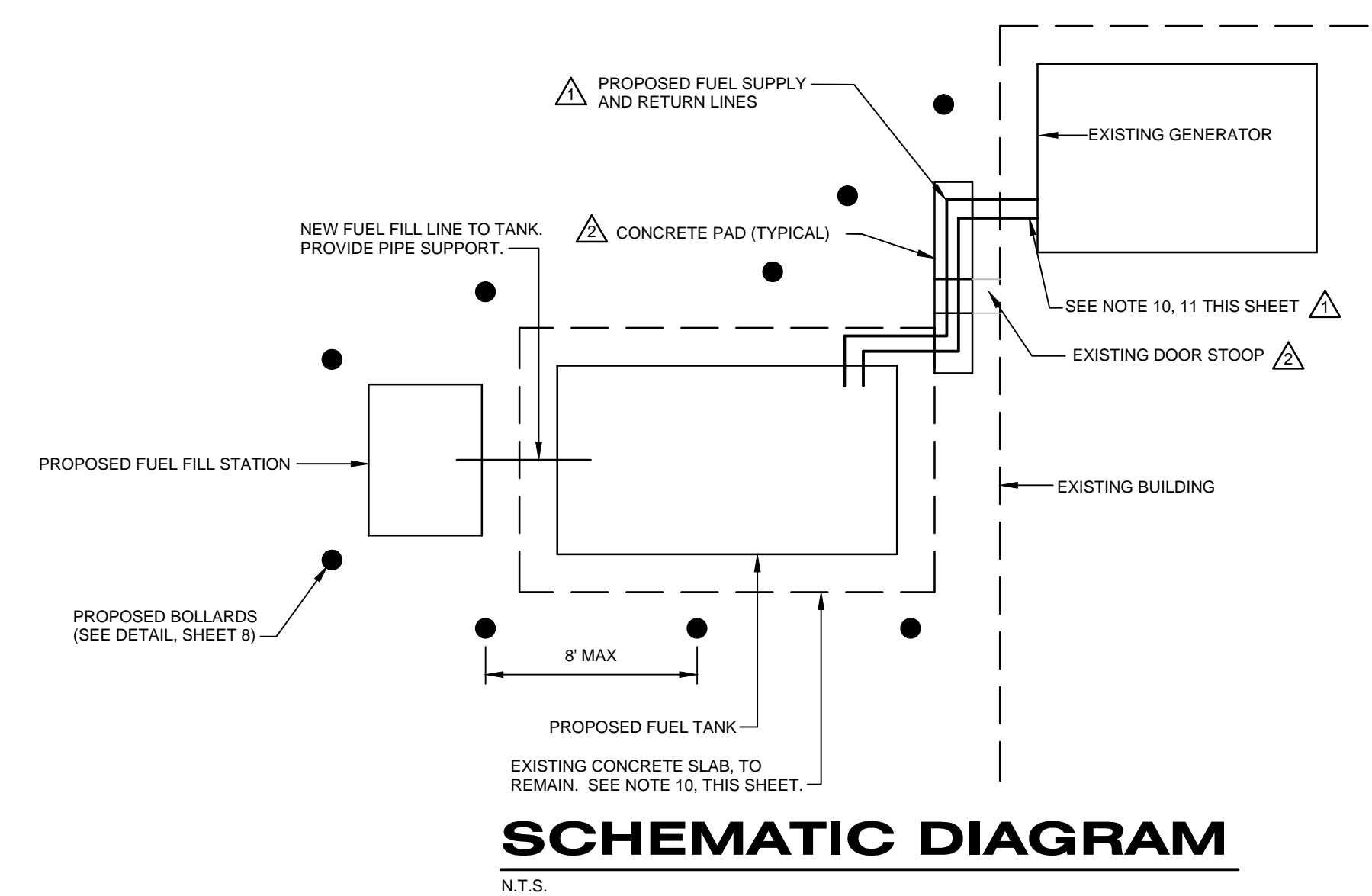
ALLEN C. LANE, JR., P.E.
REG - 60144

SUMMARY OF PAY ITEMS



EXISTING FUEL TANK

- SITE SPECIFIC NOTES:
1. THE DESIGN INCLUDES REMOVING THE EXISTING 6000 GALLON FUEL TANK AND REPLACING IT WITH A NEW FUEL TANK SIZED TO MEET THE RUN TIME REQUIREMENTS OF THE COUNTY. THE CONTRACTOR SHALL REPLACE THE EXISTING FUEL SUPPLY AND RETURN LINES WITH NEW LINES TO PROVIDE A SAFE OPERATING SYSTEM.
 2. ONCE ALL WORK IS COMPLETE, THE CONTRACTOR SHALL PROVIDE THE FIRST FILLING OF THE NEW TANK FOR TESTING.
 3. REPLACE THE EXISTING FUEL TANK WITH A NEW 2000 GALLON FUEL TANK. PROVIDE DEL ZOTTO OR COUNTY APPROVED EQUAL.
 4. THE PROPOSED WORK INCLUDES DISCONNECTING THE EXISTING FUEL LINES FROM THE TANK, REMOVE THE TANK AND REPLACE IT WITH AN APPROVED TANK FROM A LIST OF COUNTY APPROVED MANUFACTURERS.
 5. THE NEW FUEL TANK WILL BE REQUIRED TO INCLUDE AN ENCLOSED SECONDARY CONTAINMENT SYSTEM BUILT INTO THE TANK, OVERFILL PROTECTION AND INTERSTITIAL RELEASE DETECTION (LEAK DETECTION BETWEEN THE INNER AND OUTER WALLS).
 6. THE GENERATOR FOR THE SITE IS ADJACENT TO THE FUEL TANK AND IS IN A ROOM INSIDE THE EXISTING PUMP BUILDING. THE LOCATION OF THE EXISTING CONNECTION OF THE FUEL SUPPLY AND RETURN LINES TO THE GENERATOR SHALL BE PRESERVED AND USED FOR THE CONNECTION OF THE NEW LINES.
 7. A NEW FILL STATION IS TO BE PROVIDED WITH ACCESS FROM GROUND LEVEL. ALL ASSOCIATED MOUNTING HARDWARE, PIPING, ELECTRICAL WIRING AND CONCRETE SLAB ARE TO BE INCLUDED IN THE INSTALLATION OF THE NEW FILL STATION.
 8. THERE IS AN EXISTING FUEL TANK MANAGEMENT SYSTEM, PNEUMERATOR MODEL TMS 2000, MOUNTED INSIDE THE EXISTING PUMP BUILDING. REPLACE THE SYSTEM WITH SIMPLEX CAF-3 MONITORING/CONTROL SYSTEM. RECONNECT SYSTEM TO THE NEW FUEL TANK AND CALIBRATE AS NECESSARY AS PART OF THIS WORK.
 9. THE CONTRACTOR IS TO CONFIRM THE EXISTING CONCRETE SLAB IS SUFFICIENT FOR THE NEW FUEL TANK (DIMENSIONS AND THICKNESS). IF THE EXISTING PAD DOES NOT MEET THE REQUIREMENTS OF THE NEW FUEL TANK, THE PAD SHALL BE REMOVED AND A NEW PAD, SUFFICIENT TO SUPPORT THE NEW FUEL TANK (FULLY FILLED), SHALL BE CONSTRUCTED.
 10. THE EXISTING FUEL SUPPLY AND RETURN LINES ARE TO BE REPLACED WITH WELDED JOINT LINES SUFFICIENT TO CARRY THE REQUIRED AMOUNT OF FUEL TO THE EXISTING GENERATOR FOR PROPER OPERATION.
 11. THE NEW FUEL LINES SHALL BE INSTALLED ABOVE GROUND. THE ABOVE GROUND FUEL LINES SHALL BE INSTALLED PER THE DETAIL ON THE PLANS.
 12. THE EXISTING FUEL SUPPLY AND RETURN LINES ARE TO BE REMOVED AND DISPOSED OF PROPERLY. SEE PROJECT SPECIFICATION SECTION 02080 FOR ADDITIONAL INFORMATION.
 13. THE FUEL TANK SHALL BE PAINTED THE APPROPRIATE COLOR AS PER THE STATE OF FLORIDA STANDARDS. THE FUEL LINES SHALL BE PAINTED RED (10 STATE STANDARDS) AND PERMANENTLY LABELED AS EITHER SUPPLY OR RETURN LINES AND MARKED WITH THE DIRECTION OF FLOW. CONTRACTOR TO VERIFY THAT THE FUEL LINES MEET THE FDEP REQUIREMENTS FOR CORROSION PROTECTION.
 14. STEEL PIPE, CONCRETE FILLED, BOLLARDS SHALL BE PLACED AROUND ANY PIPING WHICH EXTENDS BEYOND THE EDGE OF THE CONCRETE PAD FOR THE FUEL TANK. BOLLARDS SHALL ALSO BE INSTALLED AROUND THE EXTERIOR EDGE OF THE CONCRETE PAD TO PROTECT THE FUEL TANK FROM VEHICULAR TRAFFIC.
 15. ALL WORK WILL BE REQUIRED TO TAKE PLACE WHILE KEEPING THE EXISTING GENERATOR OPERATIONAL IN CASE OF EMERGENCY. THE CONTRACTOR SHALL PROVIDE A BACK-UP FUEL SUPPLY AT THE SITE, CONNECTED TO THE GENERATOR, TO OPERATE THE GENERATOR FOR A MINIMUM OF 72 HOURS. THE PLANT MUST BE ABLE TO SWITCH OVER TO THE BACK-UP FUEL SUPPLY AUTOMATICALLY IN CASE OF EMERGENCY.
 16. TO ASSIST WITH DRAINING THE TANK, OCU WILL DRAW THE TANK DOWN TO A 'LOW' LEVEL UPON WHICH THE CONTRACTOR WILL REMOVE AND DISPOSE OF THE REMAINING FUEL IN THE TANK PER FDEP REGULATIONS.
 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EMPTYING THE EXISTING FUEL TANK OF ANY REMAINING FUEL AND CLEANING THE TANK PER FDEP RULES. ONCE THE EXISTING FUEL TANK HAS BEEN EMPTIED AND PROPERLY PREPARED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE TANK REMOVED FROM THE SITE, AND DECOMMISSIONED PER FDEP AND OCU REQUIREMENTS AND DISPOSED OF PROPERLY. CONTRACTOR TO PREPARE MANIFEST SHOWING WHERE THE PETROLEUM CONTACT WATER (PCW) WAS PROPERLY DISPOSED.
 18. ORANGE COUNTY RISK MANAGEMENT WILL ASSIST IN DECOMMISSIONING THE TANKS INCLUDING ASSISTING IN COMPLETING THE REQUIRED FDEP PAPERWORK TO TRANSFER THE EXISTING FDEP PERMIT FROM THE OLD TANK TO THE NEW. ONCE THE PROPER PAPERWORK HAS BEEN COMPLETED, SUBMITTED AND APPROVED THROUGH FDEP, THE CONTRACTOR SHALL REMOVE THE OLD FUEL TANKS. ALL FDEP RULES FOR TANK REMOVAL WILL NEED TO BE FOLLOWED BY THE CONTRACTOR.
 19. THE CONTRACTOR SHALL BE A LICENSED CONTRACTOR WITH THE STATE OF FLORIDA AND HAVE EXPERIENCE INSTALLING THE BRAND OF TANKS ACCEPTED BY THE COUNTY.
 20. UPON COMPLETION OF INSTALLATION OF THE NEW TANK AND APPURTENANCES, THE CONTRACTOR SHALL RESTORE THE WORK AREA TO EQUAL OR BETTER CONDITIONS. CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITH BAHIA SOD.
 21. ALL INSTALLED EQUIPMENT TO BE CONNECTED TO THE EXISTING COUNTY SCADA SYSTEM. CONTRACTOR TO PROVIDE 2 WEEKS NOTIFICATION TO COUNTY FOR COORDINATION OF CONNECTION TO SCADA SYSTEM.



SCHEMATIC DIAGRAM
N.T.S.

No.	Date	Revision	By	No.	Date	Revision	By
4/25/14		REVISIONS PER COUNTY COMMENTS	ACL	1			
8/6/14		REVISIONS PER COUNTY COMMENTS	ACL	2			
12/15/14		REVISIONS PER COUNTY COMMENTS	ACL	3			

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 Approved by: ACL
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ORANGEWOOD, VISTANA,
 AND HUNTERS CREEK
 FUEL TANK REPLACEMENT
 Orlando, Florida

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 Survey L.B. No. 7143 Landscp. Lic. No. LC0000298

ALLEN C. LANE, JR., P.E.
 REG - 60144

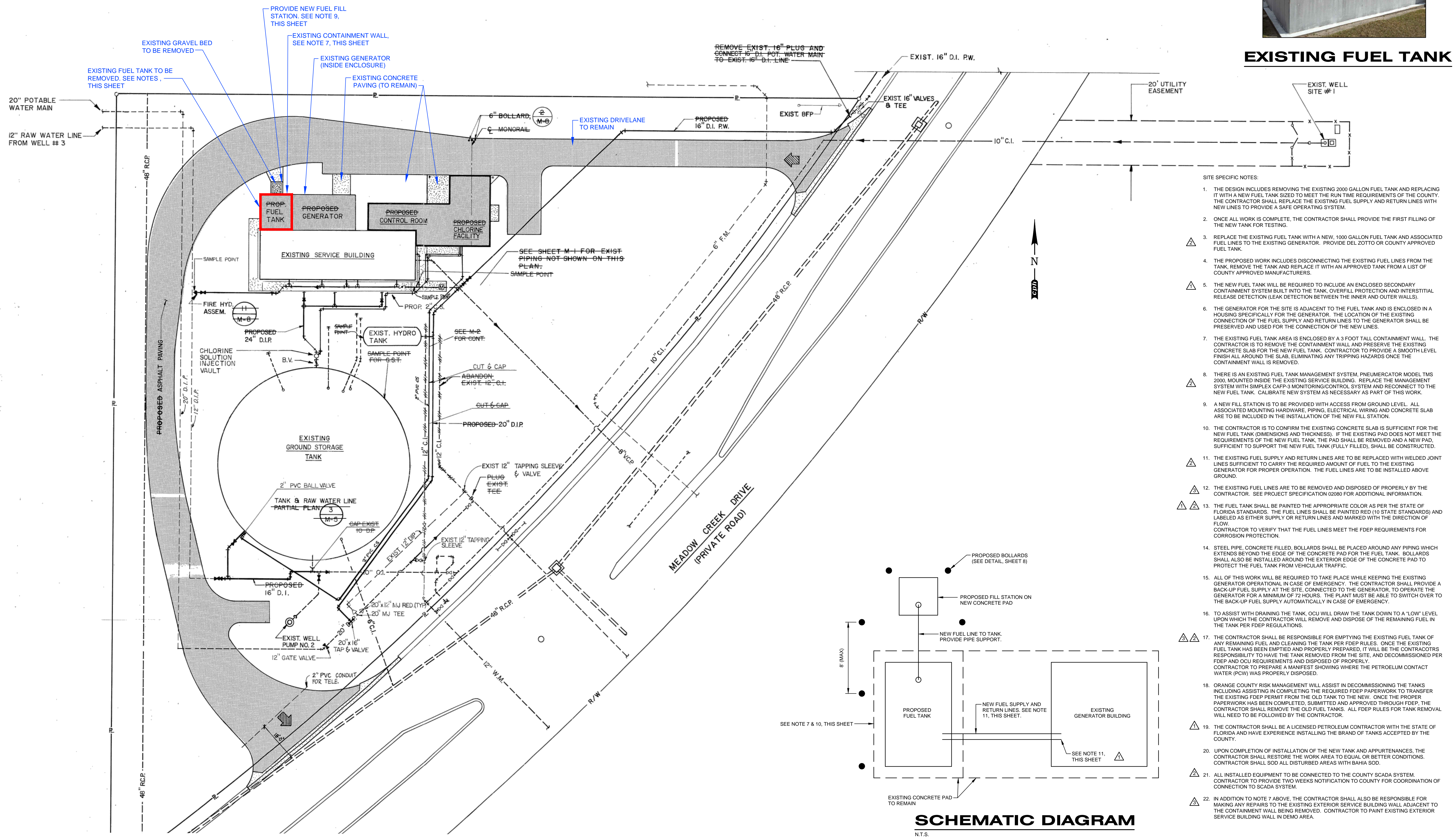
HUNTER'S CREEK WSF
 SITE PLAN

Sheet No.
5

Drawing Name: J:\028419\CAD\DWG\Bldg_Site\028419_Site_Plan.dwg Jun 08, 2015 3:57pm djg:holand



EXISTING FUEL TANK



- SITE SPECIFIC NOTES:**
- THE DESIGN INCLUDES REMOVING THE EXISTING 2000 GALLON FUEL TANK AND REPLACING IT WITH A NEW FUEL TANK SIZED TO MEET THE RUN TIME REQUIREMENTS OF THE COUNTY. THE CONTRACTOR SHALL REPLACE THE EXISTING FUEL SUPPLY AND RETURN LINES WITH NEW LINES TO PROVIDE A SAFE OPERATING SYSTEM.
 - ONCE ALL WORK IS COMPLETE, THE CONTRACTOR SHALL PROVIDE THE FIRST FILLING OF THE NEW TANK FOR TESTING.
 - REPLACE THE EXISTING FUEL TANK WITH A NEW, 1000 GALLON FUEL TANK AND ASSOCIATED FUEL LINES TO THE EXISTING GENERATOR. PROVIDE DEL ZOTTO OR COUNTY APPROVED FUEL TANK.
 - THE PROPOSED WORK INCLUDES DISCONNECTING THE EXISTING FUEL LINES FROM THE TANK, REMOVE THE TANK AND REPLACE IT WITH AN APPROVED TANK FROM A LIST OF COUNTY APPROVED MANUFACTURERS.
 - THE NEW FUEL TANK WILL BE REQUIRED TO INCLUDE AN ENCLOSED SECONDARY CONTAINMENT SYSTEM BUILT INTO THE TANK, OVERFILL PROTECTION AND INTERSTITIAL RELEASE DETECTION (LEAK DETECTION BETWEEN THE INNER AND OUTER WALLS).
 - THE GENERATOR FOR THE SITE IS ADJACENT TO THE FUEL TANK AND IS ENCLOSED IN A HOUSING SPECIFICALLY FOR THE GENERATOR. THE LOCATION OF THE EXISTING CONNECTION OF THE FUEL SUPPLY AND RETURN LINES TO THE GENERATOR SHALL BE PRESERVED AND USED FOR THE CONNECTION OF THE NEW LINES.
 - THE EXISTING FUEL TANK AREA IS ENCLOSED BY A 3 FOOT TALL CONTAINMENT WALL. THE CONTRACTOR IS TO REMOVE THE CONTAINMENT WALL AND PRESERVE THE EXISTING CONCRETE SLAB FOR THE NEW FUEL TANK. CONTRACTOR TO PROVIDE A SMOOTH LEVEL FINISH ALL AROUND THE SLAB, ELIMINATING ANY TRIPPING HAZARDS ONCE THE CONTAINMENT WALL IS REMOVED.
 - THERE IS AN EXISTING FUEL TANK MANAGEMENT SYSTEM, PNEUMATORCATOR MODEL TMS 2000, MOUNTED INSIDE THE EXISTING SERVICE BUILDING. REPLACE THE MANAGEMENT SYSTEM WITH SIMPLEX CAPP-3 MONITORING/CONTROL SYSTEM AND RECONNECT TO THE NEW FUEL TANK. CALIBRATE NEW SYSTEM AS NECESSARY AS PART OF THIS WORK.
 - A NEW FILL STATION IS TO BE PROVIDED WITH ACCESS FROM GROUND LEVEL. ALL ASSOCIATED MOUNTING HARDWARE, PIPING, ELECTRICAL WIRING AND CONCRETE SLAB ARE TO BE INCLUDED IN THE INSTALLATION OF THE NEW FILL STATION.
 - THE CONTRACTOR IS TO CONFIRM THE EXISTING CONCRETE SLAB IS SUFFICIENT FOR THE NEW FUEL TANK (DIMENSIONS AND THICKNESS). IF THE EXISTING PAD DOES NOT MEET THE REQUIREMENTS OF THE NEW FUEL TANK, THE PAD SHALL BE REMOVED AND A NEW PAD, SUFFICIENT TO SUPPORT THE NEW FUEL TANK (FULLY FILLED), SHALL BE CONSTRUCTED.
 - THE EXISTING FUEL SUPPLY AND RETURN LINES ARE TO BE REPLACED WITH WELDED JOINT LINES SUFFICIENT TO CARRY THE REQUIRED AMOUNT OF FUEL TO THE EXISTING GENERATOR FOR PROPER OPERATION. THE FUEL LINES ARE TO BE INSTALLED ABOVE GROUND.
 - THE EXISTING FUEL LINES ARE TO BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR. SEE PROJECT SPECIFICATION 02080 FOR ADDITIONAL INFORMATION.
 - THE FUEL TANK SHALL BE PAINTED THE APPROPRIATE COLOR AS PER THE STATE OF FLORIDA STANDARDS. THE FUEL LINES SHALL BE PAINTED RED (10 STATE STANDARDS) AND LABELED AS EITHER SUPPLY OR RETURN LINES AND MARKED WITH THE DIRECTION OF FLOW. CONTRACTOR TO VERIFY THAT THE FUEL LINES MEET THE FDEP REQUIREMENTS FOR CORROSION PROTECTION.
 - STEEL PIPE, CONCRETE FILLED, BOLLARDS SHALL BE PLACED AROUND ANY PIPING WHICH EXTENDS BEYOND THE EDGE OF THE CONCRETE PAD FOR THE FUEL TANK. BOLLARDS SHALL ALSO BE INSTALLED AROUND THE EXTERIOR EDGE OF THE CONCRETE PAD TO PROTECT THE FUEL TANK FROM VEHICULAR TRAFFIC.
 - ALL OF THIS WORK WILL BE REQUIRED TO TAKE PLACE WHILE KEEPING THE EXISTING GENERATOR OPERATIONAL IN CASE OF EMERGENCY. THE CONTRACTOR SHALL PROVIDE A BACK-UP FUEL SUPPLY AT THE SITE, CONNECTED TO THE GENERATOR, TO OPERATE THE GENERATOR FOR A MINIMUM OF 72 HOURS. THE PLANT MUST BE ABLE TO SWITCH OVER TO THE BACK-UP FUEL SUPPLY AUTOMATICALLY IN CASE OF EMERGENCY.
 - TO ASSIST WITH DRAINING THE TANK, OCU WILL DRAW THE TANK DOWN TO A "LOW" LEVEL UPON WHICH THE CONTRACTOR WILL REMOVE AND DISPOSE OF THE REMAINING FUEL IN THE TANK PER FDEP REGULATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR EMPTYING THE EXISTING FUEL TANK OF ANY REMAINING FUEL AND CLEANING THE TANK PER FDEP RULES. ONCE THE EXISTING FUEL TANK HAS BEEN EMPTIED AND PROPERLY PREPARED, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE TANK REMOVED FROM THE SITE, AND DECOMMISSIONED PER FDEP AND OCU REQUIREMENTS AND DISPOSED OF PROPERLY. CONTRACTOR TO PREPARE A MANIFEST SHOWING WHERE THE PETROLEUM CONTACT WATER (PCW) WAS PROPERLY DISPOSED.
 - ORANGE COUNTY RISK MANAGEMENT WILL ASSIST IN DECOMMISSIONING THE TANKS INCLUDING ASSISTING IN COMPLETING THE REQUIRED FDEP PAPERWORK TO TRANSFER THE EXISTING FDEP PERMIT FROM THE OLD TANK TO THE NEW. ONCE THE PROPER PAPERWORK HAS BEEN COMPLETED, SUBMITTED AND APPROVED THROUGH FDEP, THE CONTRACTOR SHALL REMOVE THE OLD FUEL TANKS. ALL FDEP RULES FOR TANK REMOVAL WILL NEED TO BE FOLLOWED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL BE A LICENSED PETROLEUM CONTRACTOR WITH THE STATE OF FLORIDA AND HAVE EXPERIENCE INSTALLING THE BRAND OF TANKS ACCEPTED BY THE COUNTY.
 - UPON COMPLETION OF INSTALLATION OF THE NEW TANK AND APPURTENANCES, THE CONTRACTOR SHALL RESTORE THE WORK AREA TO EQUAL OR BETTER CONDITIONS. CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITH BAHIA SOD.
 - ALL INSTALLED EQUIPMENT TO BE CONNECTED TO THE COUNTY SCADA SYSTEM. CONTRACTOR TO PROVIDE TWO WEEKS NOTIFICATION TO COUNTY FOR COORDINATION OF CONNECTION TO SCADA SYSTEM.
 - IN ADDITION TO NOTE 7 ABOVE, THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAKING ANY REPAIRS TO THE EXISTING EXTERIOR SERVICE BUILDING WALL ADJACENT TO THE CONTAINMENT WALL BEING REMOVED. CONTRACTOR TO PAINT EXISTING EXTERIOR SERVICE BUILDING WALL IN DEMO AREA.

SCHEMATIC DIAGRAM

N.T.S.

No.	Date	Revision	By	No.	Date	Revision	By
4/25/14		REVISIONS PER COUNTY COMMENTS	ACL	1			
8/6/14		REVISIONS PER COUNTY COMMENTS	ACL	2			
12/15/14		REVISIONS PER COUNTY COMMENTS	ACL	3			

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Designed by: ACL Date: 6/08/2015

Drawn by: DGH Scale: 1"=20'

Checked by: BCB/ACL

Approved by: ACL

Job No. 028419 ©2015

ORANGEWOOD, VISTANA, AND HUNTERS CREEK FUEL TANK REPLACEMENT

Orlando, Florida

Plans Prepared By: **CPH, Inc.**

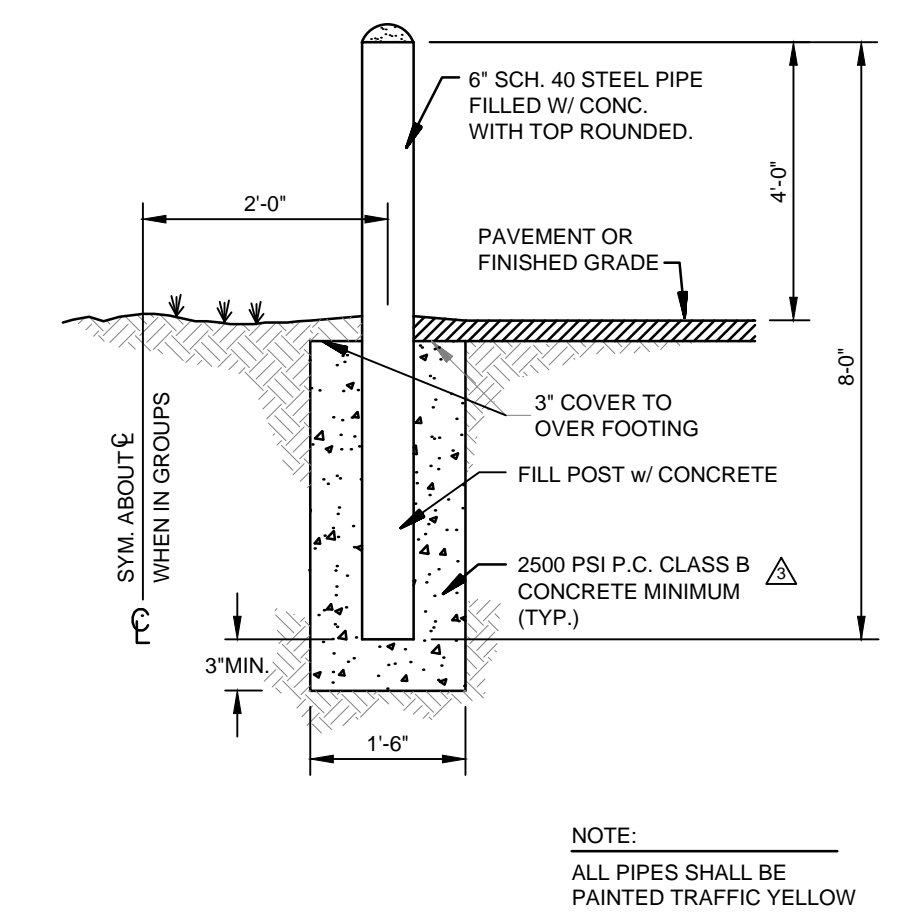
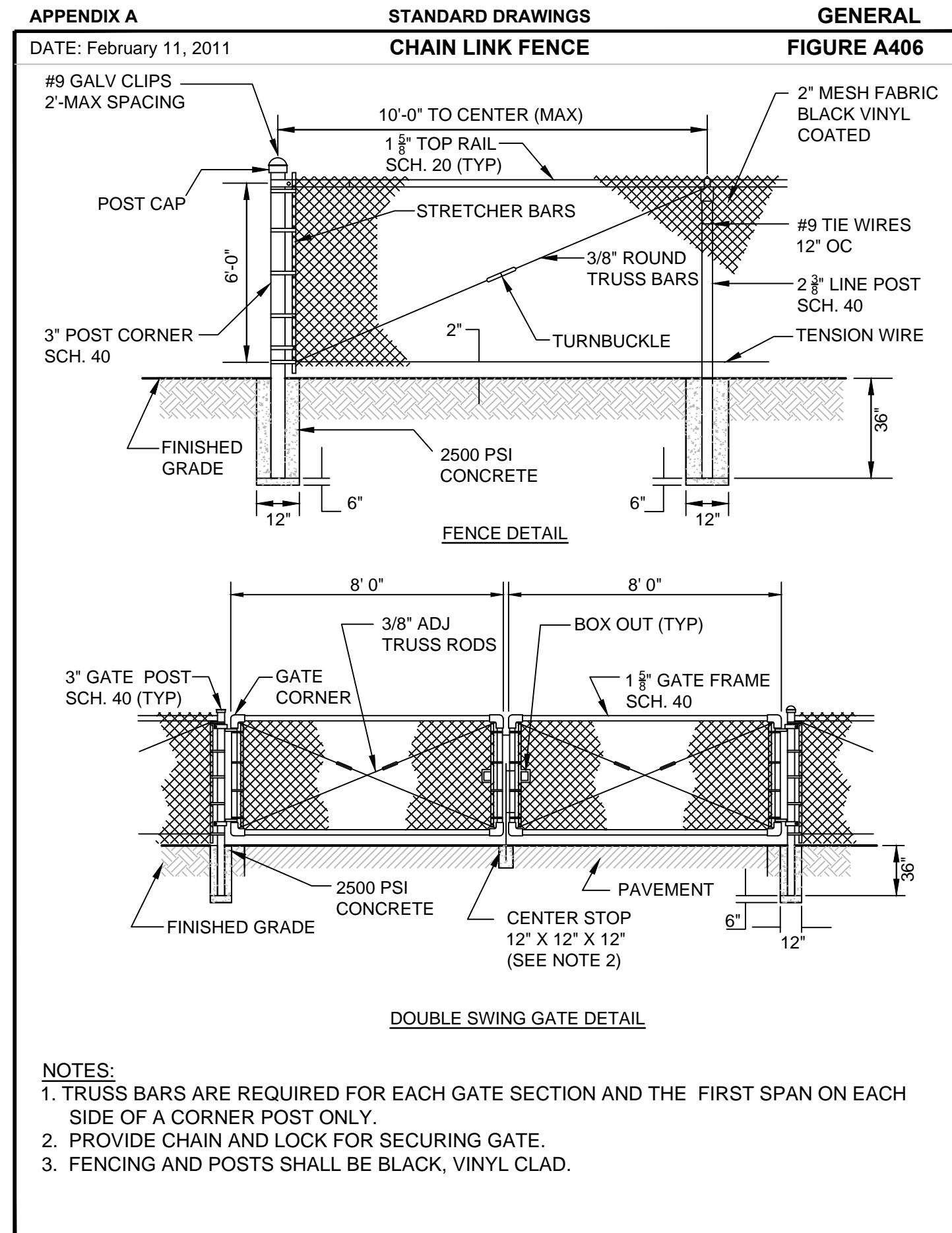
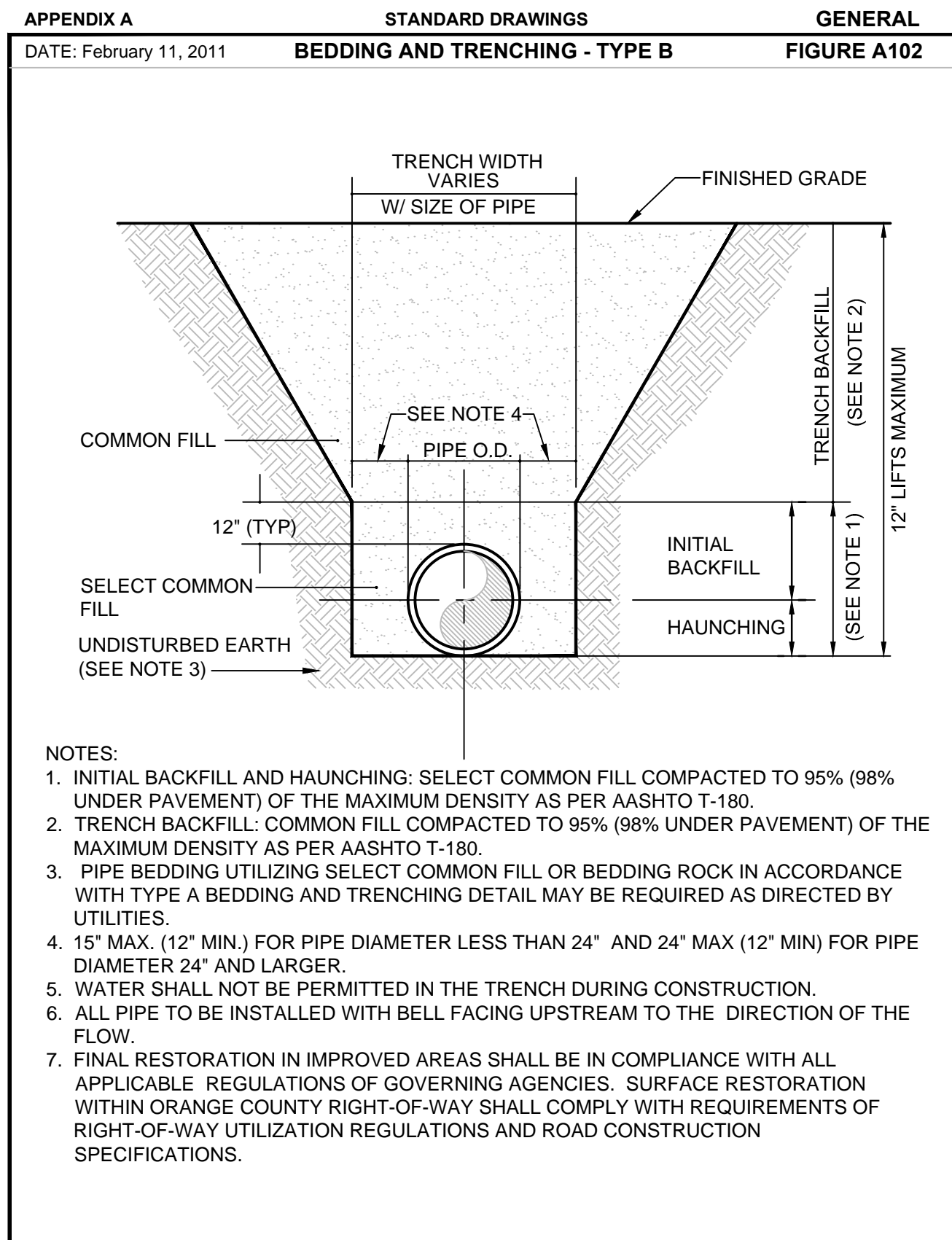
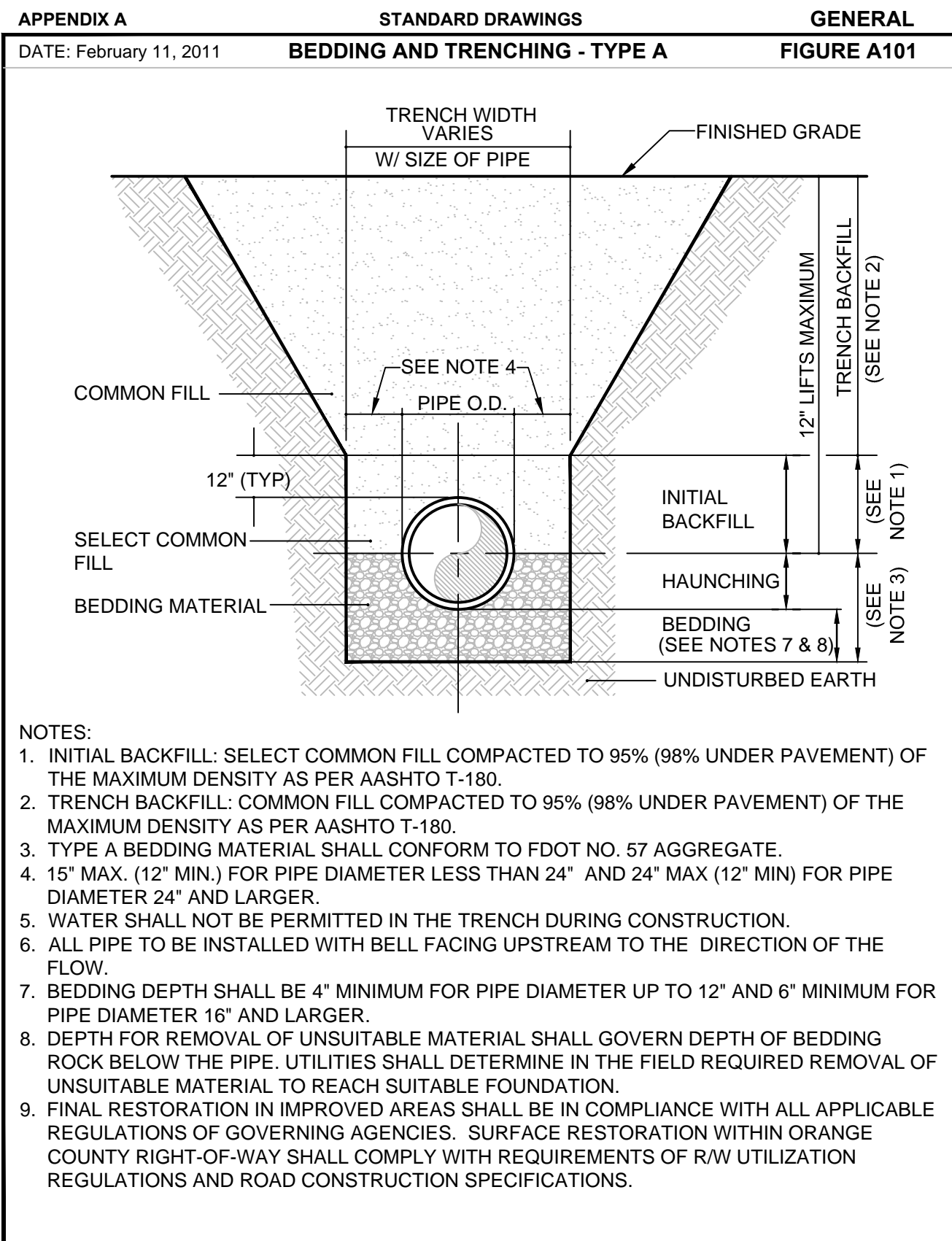
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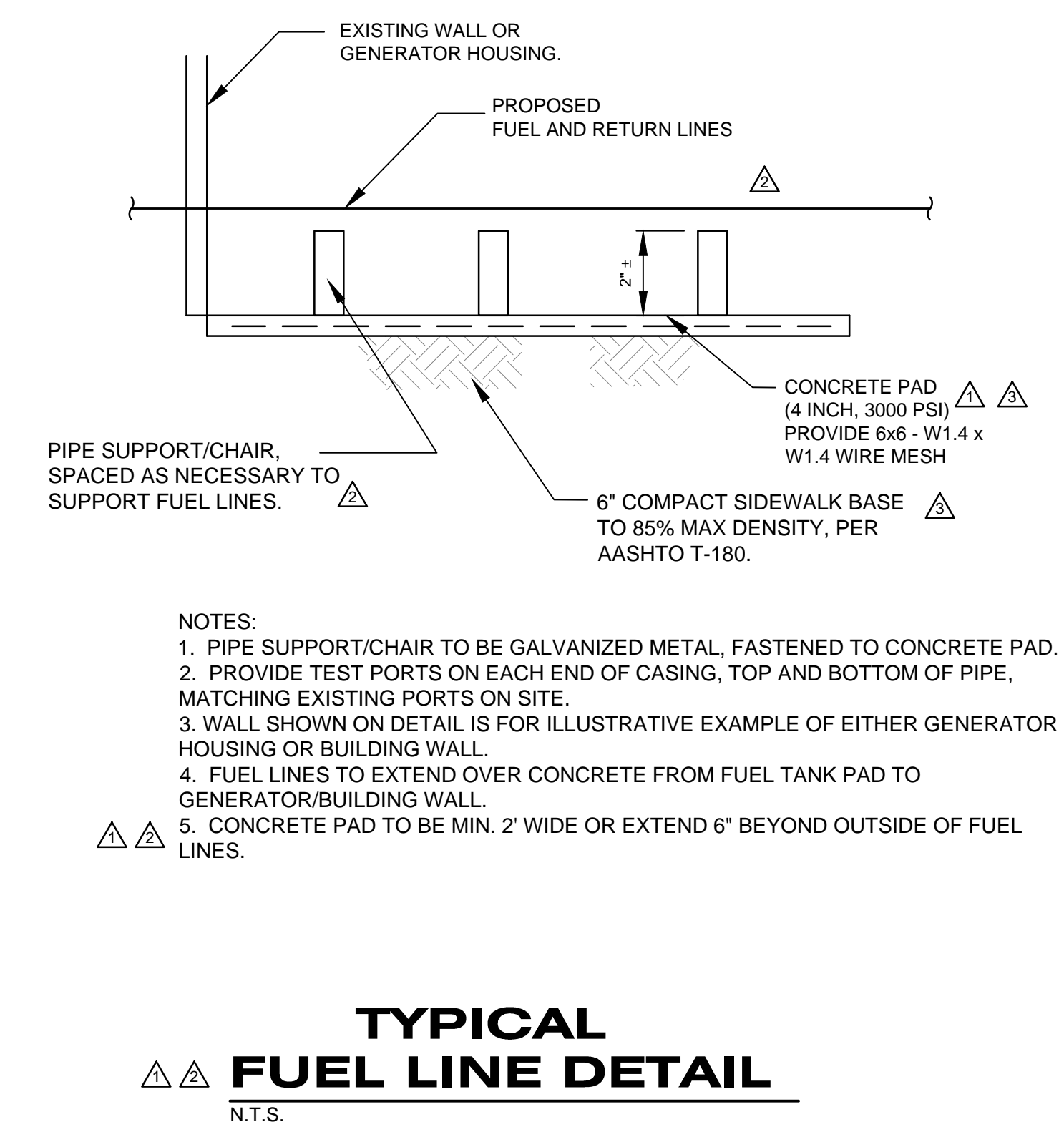
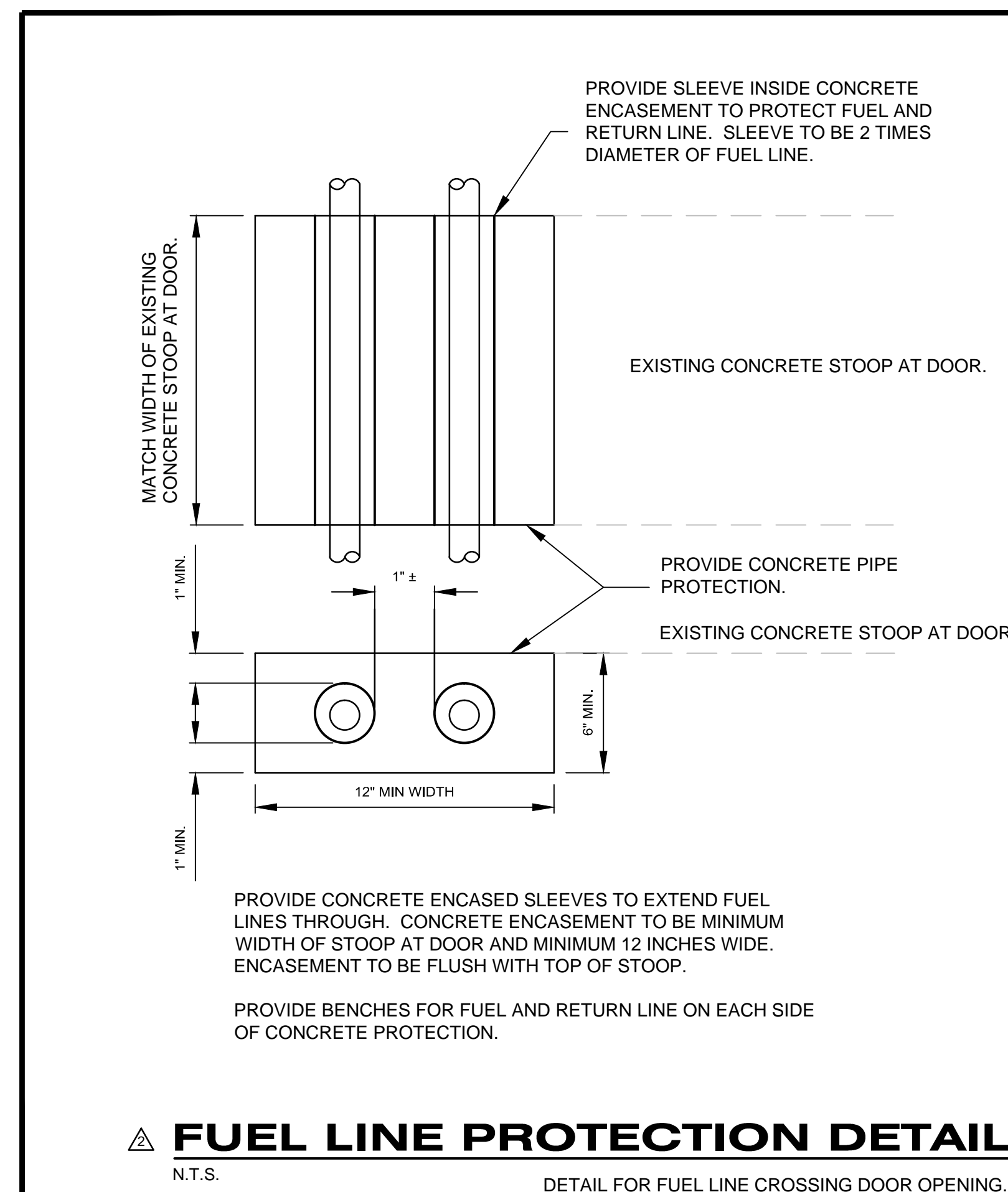
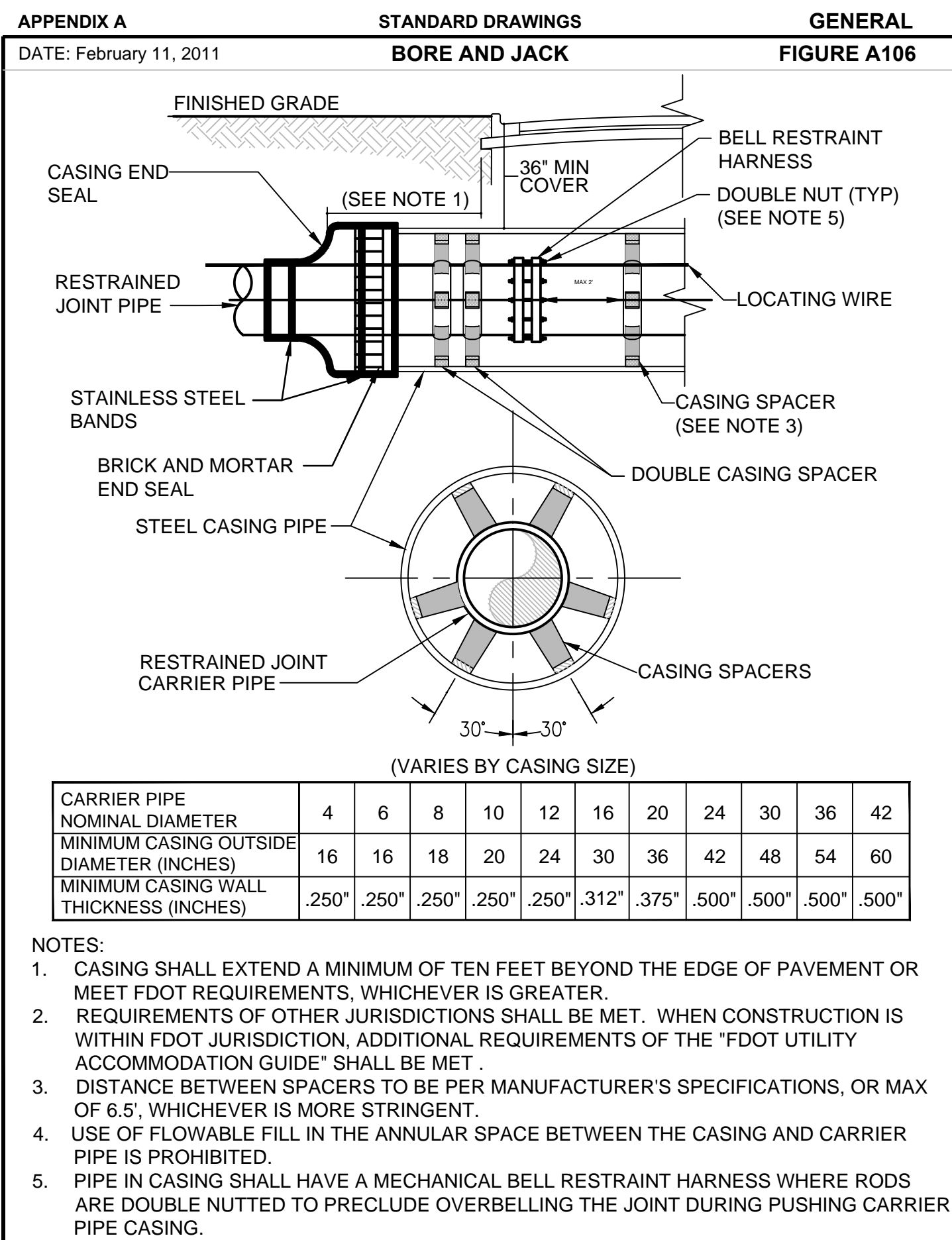
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VISTANA WSF SITE PLAN

Sheet No. **7**



BOLLARD DETAIL



Drawing Name: J:\028419\Civil\DWG\Bldg\Std\028419-Cover - details.rvt, Jun 08, 2015 - 3:57 pm (j.holland)

No.	Date	Revision	By	No.	Date	Revision	By
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8/6/14		REVISIONS PER COUNTY COMMENTS	ACL	2			
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Designed by: ACL Date: 6/08/2015
Drawn by: DGH Scale: AS NOTED
Checked by: BCB/ACL
Approved by: ACL
Job No. 028419 ©2015

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FUEL TANK REPLACEMENT
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DETAILS

Sheet No. **8**