

Columbia County Board of County Commissioners

Ft. White Public Library

Site Plan

FOR:

Columbia County Board of County Comissioners

Lisa Roberts

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STRUCTURAL/CIVIL ENGINEERS

GTC Design Group

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Chadwick W. Williams, PE 63144

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PROJECT LOCATION

LOCATION MAP

SECTION 28, TOWNSHIP 6 SOUTH, RANGE 16 EAST

COLUMBIA COUNTY, FLORIDA

Revisions:

2-5-10 - PER SRWMD

POTABLE WATER NOTES

- Contractor shall keep existing water mains and service lines in operation during construction.
- Contractor shall construct all pipe, pipe fittings, pipe joint packing and jointing materials, valves, fire hydrants, and meters to conform to applicable American Water Works Association (AWWA) standards.
- Contractor shall construct all public water system components, excluding fire hydrants, that will come into contact with drinking water, shall conform to NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C., or other applicable standards, regulations, or requirements referenced in paragraph 62-555.320(3)(b), F.A.C.
- All pipe and pipe fittings installed under this project will contain no more than 8.0% lead, and any solder or flux used in this project will contain no more than 0.2% lead.
- All pipe and pipe fittings installed under this project will be color coded or marked in accordance with subparagraph 62-555.320(2)(b)(3), F.A.C., using blue as a predominant color. Underground plastic pipe will be solid-wall blue pipe, will have a co-extruded blue external skin, or will be white or black pipe with blue stripes (painted into, or applied to, the pipe wall, and that will remain intact during and after installation of the pipe, if tape or paint is used to stripe pipe during installation of the pipe, the tape or paint will be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe; for pipe with an internal diameter of 24 inches or greater, tape or paint will be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Aboveground pipe will be painted blue or will be color coded or marked like underground pipe.
- All new or altered dead-end water mains included in this project will be provided with a fire or flushing hydrant or blow-off for flushing purposes.
- All fire hydrants that will be installed under this project and that will have unplugged, underground drains will be located at least three feet from any existing or proposed storm sewer, stormwater force main, pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., or vacuum-type sanitary sewer, at least six feet from any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-10, F.A.C.; and at least ten feet from any existing or proposed "on-site sewage treatment and disposal system".
- At high points where air can accumulate in new or altered water mains included in this project, provisions will be made to remove the air by means of air relief valves, and automatic air relief valves will not be used in situations where flooding of the valve manhole or chamber may occur.
- The open end of the air relief pipe from all automatic air relief valves installed under this project will be extended to at least one foot above grade and will be provided with a screened, downward-facing elbow. All new or altered chambers, pits, or manholes that contain valves, blow-offs, meters, or other water distribution system appurtenances and that are included in this project will not be connected directly to any sanitary or storm sewer, and blow-offs or air relief valves installed under this project will not be connected directly to any sanitary or storm sewer.
- All new or altered water mains included in this project will be installed in accordance with applicable AWWA standards or in accordance with manufacturers' recommended procedures.
- A continuous and uniform bedding will be provided in trenches for underground pipe installed under this project; backfill material will be tamped in layers around underground pipe installed under this project and to a sufficient height above the pipe to adequately support and protect the pipe; and unsuitably sized stones (as described in applicable AWWA standards or manufacturers' recommended installation procedures) found in trenches will be removed for a depth of at least six inches below the bottom of underground pipe installed under this project.
- All water main tees, bands, plugs, and hydrants installed under this project will be provided with thrust blocks or restrained joints to prevent movement.
- Contractor shall provide pressure and leakage tests in accordance with AWWA Standard C603 or C605, respectively, as incorporated into Rule 62-555.330, F.A.C., all new or altered water mains that are constructed of asbestos-cement or polyvinyl chloride. And Contractor shall provide pressure and leakage tests for all other new or altered water mains in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330.
- Contractor shall provide disinfection and bacteriologically evaluation in accordance with Rule 62-555.340, F.A.C., on all new or altered water mains, including fire hydrant leads and including service lines that will be under the control of a public water system and that have an inside diameter of three inches or greater.
- All new or altered water mains that are included in this project and that will be installed in areas where there are known aggressive soil conditions will be protected through use of corrosion-resistant water main materials, through encasement of the water mains in polyethylene, or through provision of cathodic protection.
- All new or relocated, underground water mains included in this project will be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed vacuum-type sanitary sewer, storm sewer, stormwater force main, or pipeline conveying proposed vacuum-type sanitary sewer under Part III of Chapter 62-610, F.A.C.; a horizontal distance of at least six feet between the outside of the water main and the outside of any existing or proposed gravity-type sanitary sewer (or a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed gravity-type sanitary sewer if the bottom of the water main will be laid at six inches above the top of the sewer); a horizontal distance of at least six feet between the outside of the water main and any outfall or proposed pressure-type sanitary sewer; and a horizontal distance of at least ten feet between the outside of the water main and all parts of any existing or proposed "on-site sewage treatment and disposal system".
- All new or relocated, underground water mains that are included in this project and that will cross any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer will be laid so the outside of the water main is at least six inches above the top of the sewer, and the outside of the water main will be as far as possible from the other pipeline or the pipes will be arranged so that all water main joints are at least three feet from all joints in vacuum-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 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.
- All new or altered water mains that are included in this project and that will cross above surface water will be adequately supported and anchored, protected from damage and freezing, and accessible for repair or replacement.
- All new or altered water mains that are included in this project and that will cross under surface water will have a minimum cover of two feet.
- All new or altered water mains that are included in this project and that will cross under surface water courses greater than 15 feet in width will have flexible or restrained, watertight pipe joints and will include valves at both ends of the water crossing so the underwater main can be isolated for testing and repair; the aforementioned isolation valves will be easily accessible and will be subject to flooding; the isolation valve closest to the water supply source will be in a manhole; and permanent taps will be provided on each side of the isolation valve within the manhole to allow for insertion of a small meter to determine leakage from the underwater main and to allow for sampling of water from the underwater main.

PROJECT CONTACTS

GTC DESIGN GROUP
(386) 719-9985

COLUMBIA COUNTY PUBLIC WORKS
(386) 752-5955

COLUMBIA COUNTY SCHOOL BOARD
(386) 755-8065

FDOT UTILITIES
(386) 961-7153

FDOT DRIVEWAY CONNECTION
(386) 365-5873

SUWANNEE RIVER WATER MANAGEMENT
(396) 362-1001

GENERAL NOTES

- The contractor shall verify all existing conditions and dimensions at the job site to insure that all new work will fit in the manner intended on the plans. Should any conditions exist that are contrary to those shown on the plans, the contractor shall notify the engineer and Columbia County, Florida (Department of Growth Management) of such differences immediately & prior to proceeding with the work.
- The contractor shall maintain the construction site at all times in a secure manner. All open trenches and excavated areas shall be protected from access by the general public.
- Boundary and topographical information shown was obtained from a survey performed by Donald F. Lee & Associates, Inc., P.S.M. Florida Certificate #77042.
- Any public land corner within the limits of construction is to be protected. If a corner monument is in danger of being destroyed and has not been properly referenced, the contractor should notify the engineer.
- Contractor shall contact GTC Design Group, LLC and Department of Public Works for Columbia County to perform site inspections. No Certificate of Occupancy will be issued for any developments that do not receive the following inspections:
 - A. Erosion & sediment control inspection (prior to commencing construction)
 - B. Completion of clearing and grubbing (no test requirements)
 - C. Rough Grading and Drainage Structures in Place (LSR test results required)
 - D. Subgrade of pavement sections complete (Density test results required)
 - E. Asphalt/Concrete in place (Thickness and Density tests required)
 - F. Site Compliance Inspection (once building foundation poured)
 - G. Final Site Compliance Inspection (once all improvements are finalized)
- Contractors shall adhere to the Erosion Control Plan. All erosion control measures shall be implemented prior to construction and be continued until construction is complete.
- The stormwater system is designed in accordance with SRWMD.
- All disturbed areas not sodded shall be seeded with a mixture of long-term vegetation and quick-growing short-term vegetation for the following conditions. For the months from September through March, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of winter rye. For the months of April through August, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of millet.
- A pad of rubber riprap shall be placed at the bottom of all collection flumes and collection pipe outlets.
- Existing drainage structures within the construction limits shall be removed, unless otherwise specified in the plans.
- The location of the utilities shown in the plans is approximate only. The exact location shall be determined by the contractor during construction.
- The contractor shall waste all excess earth on site as directed by the engineer.
- All site construction shall be in accordance with the Columbia County Land Development Regulations.
- Contractor shall provide an as-built survey meeting the requirements of Chapter 61-01, F.A.C., for the stormwater management systems. Include horizontal and vertical dimensional data so that improvements are located and delineated relative to the boundary. Provide sufficient detail data to determine whether the improvements were constructed in accordance with the plans. Submit the survey to the engineer on reproducible 20 lb. vellum.
- Contractor shall review and become familiar with all required utility connections prior to bidding. Contractor shall provide all work and materials required to complete connection to the existing utilities. This includes, but is not limited to, manhole coring, wet taps, pavement repairs and directional boring.
- Contractor shall coordinate all work with other contractors within project limits.
- Contractor shall sod all slopes of 4' horizontal to 1' vertical and staple sod all slopes of 2' horizontal to 1' vertical.
- All swales, depression areas and retention ponds shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area should be repaired as soon as possible. If a solution pipe sinkhole does form in the stormwater system, then the sinkhole shall be repaired by backfilling with a lower permeability material. A 2-foot cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with clayey soils. The clayey soil should have at least 20% passing the number 20 sieve, compacted to 95% of Standard Proctor, and compacted in a wet condition with moisture 2%-4% above optimum. The clay soil cap shall be re-grassed to prevent ponding and re-vegetated.
- All construction shown in these plans shall conform to FDOT indexes and specifications.
- All stormwater pipes shall have a minimum cover of 6". Use Limerock backfill if pipe under pavement has less than 12" cover.
- Potable water will be supplied by the Town of Ft. White and sanitary sewer will be supplied by an onsite septic system.
- The construction plans must be reviewed and approved by Columbia County prior to commencing construction.
- All materials and construction shall conform to the requirements of the FDOT Standard Specifications for Road and Bridge Construction.
- The materials and construction shall be certified by a testing laboratory retained by the contractor. Copies of all test results shall be provided prior to acceptance.
- All traffic control and safety items (stripping, stop bars, regulatory signs, etc.) shall be in place.
- The temporary grass shall be sufficient to control erosion.
- Final inspection for acceptance to be performed by GTC Design Group and Public Works Director.
- Contract Time - The contract time will be 180 calendar days from the date of contract execution. Liquidated damages shall be \$500.00 per calendar day. No work allowed on Saturdays, Sundays, and designated county holidays.
- Construction and Materials - All construction and materials shall conform to the requirements of the Florida Department of Transportation Specifications for Road and Bridge Construction, Latest Edition. Certification by an approved testing laboratory is required (contractor responsibility). Payment shall be as specified in the bid proposal.
- Maintenance of Traffic - (Koon Hollow Rd) ONE TRAFFIC LANE MAY BE CLOSED FROM 8:30 AM - 4:30 PM (ONLY) with flagging during working hours only. All construction signing necessary for the protection of workers and motorists to be provided by the contractor. Centerline delineation will be required @ all non-working times.
- See additional notes in "General Requirements"

SHEET INDEX

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| C1 | EXISTING CONDITIONS |
| C2 | MISC NOTES AND DETAILS |
| C3 | SITE PLAN |
| C4 | GRADING & STORMWATER PLAN |
| C5 | FDOT CONNECTION PLAN |

LEGEND

EXISTING	PROPOSED
CONCRETE MONUMENT FOUND	TELEPHONE POLE
IRON PIPE FOUND	TELEPHONE MANHOLE
ELECTRIC METER	ELECTRIC MANHOLE
ELECTRIC MANHOLE	ELECTRIC METER
LIGHT STANDARD	LIGHT
POWER POLE	STANDARD POWER POLE
SHARED POWER POLE W/ TRANSFORMER	POWER POLE SHARED
SHARED POWER POLE	POWER POLE SHARED W/ TRANSFORMER
TELEPHONE POLE	GAS METER
REDUCER	GAS VALVE
WATER METER	WATER METER
WATER VALVE	WATER VALVE
FIRE HYDRANT	WATER REDUCER
BACKFLOW PREVENTER	WATER TEE
SANITARY SEWER VALVE	WATER 90° BEND
SANITARY MANHOLE	SINGLE WATER SERVICE
STORMWATER MANHOLE	DOUBLE WATER SERVICE
FDOT STORMWATER MANHOLE	FIRE HYDRANT
GROUND CONTOUR	BACKFLOW PREVENTER
D.O.T. MARKER FOUND	SANITARY MANHOLE
GAS METER	SANITARY VALVE
GAS VALVE	SANITARY SINGLE SERVICE
SOIL BORING LOCATION	SANITARY DOUBLE SERVICE
SINGLE POST SIGN	GROUND CONTOUR
BENCH MARK	DITCH BLOCK
SECTION CORNER	STORMWATER MANHOLE
	FLOW ARROW
	HANDICAP PARKING
	MITERED END
	SIGN

ABBREVIATIONS

R	PROPERTY LINE	IP	IRON PIPE
C	CENTER LINE	MH	MANHOLE
B	BASE LINE	G	GAS
SAN	SANITARY SEWER	UC	UNDERGROUND CABLE
ST	STORM SEWER	OC	OVERHEAD CABLE
E	ELECTRIC	W	WATER LINE
OHE	OVERHEAD ELECTRIC	HDPE	HIGH-DENSITY POLYETHYLENE
UG	UNDERGROUND ELECTRIC	RCP	REINFORCED CONCRETE PIPE-ROUND
OHT	OVERHEAD TELEPHONE	RCPA	REINFORCED CONCRETE PIPE-ARC
UT	UNDERGROUND TELEPHONE	RCPE	REINFORCED CONCRETE PIPE-ELLIPTICAL
R	RADIUS	CMP	CORRUGATED METAL PIPE-ROUND
CO	CLEANOUT	CMPA	CORRUGATED METAL PIPE-ARC
BM	BENCH MARK	BCCMP	BITUMINOUS COATED CORRUGATED METAL PIPE
IE	INVERT ELEVATION	BCCSP	BITUMINOUS COATED CORRUGATED STEEL PIPE
LF	LINEAR FEET		