



**LEE COUNTY**  
SOUTHWEST FLORIDA  
BOARD OF COUNTY COMMISSIONERS

(239) 533-5450

John E. Manning  
*District One*

March 23, 2015

Cecil L. Pendergrass  
*District Two*

SOLICITATION NO.: RFP150142

Larry Kiker  
*District Three*

SUBJECT: ADDENDUM NUMBER THREE

Brian Hamman  
*District Four*

REFERENCE: Gateway WWTP Improvements Design Build

Frank Mann  
*District Five*

Roger Desjarlais  
*County Manager*

The following changes shall become a part of the Bid Documents and shall be as binding as if contained therein:

Richard Wesch  
*County Attorney*

**ITEM NO. 1**

Donna Marie Collins  
*County Hearing Examiner*

**ADD** Design Build Criteria Package, March 2015, Addendum No Three, March 23, 2015

**ITEM NO. 2**

The question and answer period has been extended to **Tuesday April 7, 2015 @ 3:00PM**. Question must still be Email to [ahofschneider@leegov.com](mailto:ahofschneider@leegov.com)

**BIDDER IS ADVISED, YOU ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF THIS ADDENDUM WHEN SUBMITTING A BID. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY RESULT IN THE BIDDER BEING CONSIDERED NON-RESPONSIVE.**

**ALL OTHER TERMS AND CONDITIONS OF THE BIDDING DOCUMENTS ARE AND SHALL REMAIN THE SAME.**

  
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Amy Hofschneider, Procurement Analyst  
Lee County Procurement Management



## **Gateway WWTP Improvement Project**

### **Design-Build Criteria Package**

**Prepared By:**

**Lee County Utilities  
1500 Monroe Street  
Fort Myers, FL 33901**

**March 2015**

## Legal Description for Gateway WWTP Site

Site Address: 13240 Commerce Lake Drive  
Ft. Myers, FL 33913  
Latitude: 26°34'25.127" N Longitude: 81°44'05.66" W

Strap Number: 08-45-26-00-00001.2110  
Zoning: PUD/UD

### Legal Description:

A tract or parcel of land laying in Section 8, Township 45 South, Range 26 East, Lee County, Florida which tract or parcel is described as follows:

Beginning at the southeast corner of the Southwest Quarter (SW-1/4) of said Section 8 run S 89°33' 57" W along the south line of said fraction for 702.32 feet to an intersection with the southwesterly line of a Florida Power & Light Company Transmission Line Easement as described in Official Record Book 258 at Page 378 and Official Record Book 728 at Page 113 of the Public Records of Lee County, Florida; thence run N 37° 57' 04" W along said southwesterly line for 1709.54 feet to an intersection with the southerly curved right-of-way line of Commerce Lakes Drive as described in deed recorded in Official Record Book 2259 at Page 976 of said public records, being a non-tangent curve; thence run northeasterly along said curved right-of-way line to the left of radius 1410.15 feet (chord bearing N 48° 46' 27" E) (chord 565.95 feet) (delta 23° 09' 09") for 569.83 feet to an intersection with a non-tangent line and the northeasterly line of said Florida Power & Light Company Transmission Line Easement; thence run S 37° 57' 04" E along said northeasterly line for 156.89 feet; thence run N 88° 58' 00" E for 50.03 feet; thence run S 37° 57' 04" E for 456.09 feet; thence run N 52° 02' 56" E for 130.18 feet; thence run N 01° 02' 00" W for 286.45 feet; thence run N 88° 58' 00" E for 774.52 feet to an intersection with the east line of the Southwest Quarter (SW-1/4) of said Section 8; thence run S 01° 02' 00" E along said east line for 16 13.93 feet to the Point of Beginning. Parcel contains 45.12 acres, more or less.

Bearings hereinabove mentioned are plane coordinate for the Florida West Zone (NAD 83190 Adjustment), wherein the south line of Section 8, Township 45 South, Range 26 East, Lee County, Florida bears S 89° 33' 57" W.

# Boundary Survey Site Plan

Official Records BK 040002 PG 2660

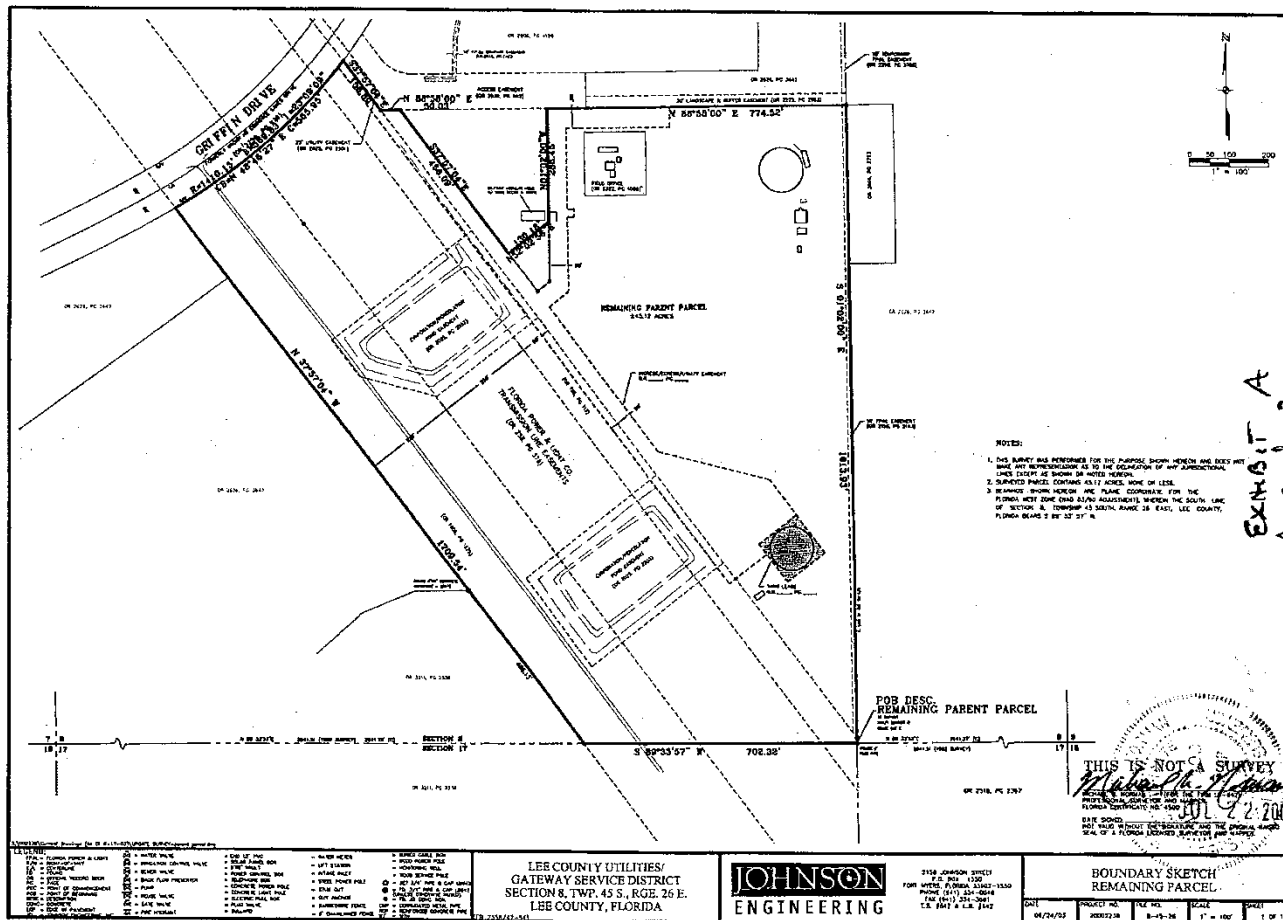


EXHIBIT A  
P. 9 & 10

**(Insert Soils and Materials Testing Report)**

## **Design and Construction Schedule**

Design & Permitting:           Approximately 9 months  
Site Construction:                Approximately 6 months

## **Site Development Requirements**

Strap Number:           08-45-26-00-00001.2110  
Zoning:                    PUD/UD

FDEP:                    Refer to F.A.C. Chapter 62, including 62-4, 62-528, 62-600, 62-601, 62-610, 62-620, 62-640, and 62-650

SFWMD/FDEP:           Refer to F.A.C. Chapters 62, 40E-4, 40E-40, 40E-400

Lee County:             Refer to Lee County Land Development Code & Lee County Design Manual

# **Gateway WWTP Improvement Projects by Design-Build Scope of Services**

LEE COUNTY has established the following guidelines, objectives, criteria, constraints, schedule, and other requirements which shall serve as a guide to the DESIGN-BUILD TEAM in performing services.

## **Project Objective**

To select one design-build team to work with Lee County Utilities for a Guaranteed Maximum Price (GMP) for the complete repair and rehabilitation of the existing 1.0 MGD Davco Field Erected Dual Path Waste Water Treatment Plant, within the Gateway Waste Water Treatment Plant (GWWT), including all technologies and ancillary components, to ensure a fully functioning treatment unit capable of meeting the required effluent limits as specified in the Domestic Wastewater Facility Permit # FLA014542-011.

## **Project Description**

The Gateway Waste Water Treatment Plant (GWWT) is located at 13240 Commerce Lake Drive, Ft. Myers, FL 33913. The facility to be rehabilitated is within the GWWT property limits.

The facility to be rehabilitated consists of a domestic wastewater treatment plant with a treatment capacity of 1.0 MGD. The facility's wastewater primary treatment consists of a Davco Field Erected Dual Path Package Plant. Secondary treatment is provided by two 500 SF shallow bed steel tanks sand filters and two 55,000-gallon concrete chlorine contact chambers.

The scope of services includes design, permitting, and construction of various plant improvements, consisting of:

- Complete repair and rehabilitation of the existing 1.0 mgd Davco Field Erected Dual Path WWTP
- Steel tank filters system replacement with owner furnished 1 MGD Disc filter.
- Repair existing concrete chlorine contact tanks (2 EACH) and ancillary equipment.
- Complete rehabilitation of existing Davco transfer pump station.
- Replace existing blowers as needed.
- Upgrade existing Control/Electrical panel.
- Approximately 150 LF of pipeline to connect the 1.0 MGD Davco WWTP to the new Deep Bed Sand Filters for redundancy.
- Remove and/or demolish surplus equipment.

The scope of services may also include an **additive** alternate for the design, permitting, and construction of:

- Operator's Office and Laboratory Building replacement.

The project will utilize the Design-Build project delivery method, with a Guaranteed Maximum Price.

Additionally, LCU will consider alternate designs to enhance the proposed improvements and possibly provide more cost effective solutions.

### **Design Services**

Professional services will be provided by the Design-Builder, including but not necessarily limited to the following:

- Provide survey services as necessary
- Provide geotechnical services as necessary
- Provide design schedule details
- Prepare design plans and technical specifications meeting the project Design Criteria
- Provide document reviews at 30%, 60% and 90% completion
- Perform process testing and analyses as necessary
- Perform necessary testing and analyses to re-rate the existing 2MGD Deep Bed Filters and chlorine basin to 3 MGD.
- Evaluate design alternatives
- Conduct value engineering review meetings
- Coordinate various design and review meetings
- Prepare permit applications and obtain permits required by all regulatory agencies, including FDEP, SFWMD, and Lee County (Development Order), and any other necessary permits

### **Construction Services**

Construction services will be provided by the Design-Builder, including but not necessarily limited to the following:

- Obtain all construction permits required by Lee County and other agencies as required
- Manage and perform the overall project construction
- Manage project costs within the guaranteed maximum price and progress scheduling
- Manage procurement, delivery, and storage of all materials, including direct purchased materials by the County
- Provide engineering support services during construction
- Provide engineering inspection and testing services
- Coordinate regular progress meetings
- Coordinate all work with existing WWTP operations and accomplish work without disruption to existing operations and process treatment
- Provide start-up and performance testing
- Prepare O&M Manuals and provide equipment training
- Prepare accurate record drawings of all completed work.
- Prepare Asset Management List of constructed assets.



### **Schedule**

A deadline for design and construction of this project is provided. The Design-Builder will be required to prepare a new project schedule to accompany the guaranteed maximum price.

### **Additional Information**

The preliminary/conceptual plans show rather specific improvements, however LCU will consider alternate designs to enhance the proposed improvements and possibly provide more cost effective solutions.

Two ~~mandatory~~ pre-bid meetings will be conducted. One mandatory meeting will be at the Gateway WWTP facility to familiarize the Design-Builder with the project in general. A second non-mandatory meeting will be also held at the Gateway WWTP to answers questions for those who attended the first meeting. ~~held at the LCU main office (1500 Monroe St.) to answer specific questions.~~

# Gateway WWTP Improvement Projects by Design-Build

## Design Criteria Scope of Tasks

### Major Components:

1. Complete repair and rehabilitation of the existing 1.0 MGD Davco Field Erected Dual Path Waste Water Treatment Plant.
2. Steel tank filters system replacement with owner furnished Disc filter.
3. Repair existing concrete chlorine contact tanks (2 EACH) and ancillary equipment.
4. Complete rehabilitation of existing Davco transfer pump station.
5. Replace existing blowers as needed.
6. Upgrade existing Control/Electrical panel.
7. Remove and/or demolish surplus equipment.
8. Approximately 150 LF of pipeline to connect the 1.0 MGD Davco WWTP to the new Deep Bed Sand Filters for redundancy.
9. Operator's Office and Laboratory Building replacement (**ADDITIVE**).

### 1. Complete repair and rehabilitation of the existing 1.0 MGD Davco Field Erected Dual Path WWTP

- Asses structural integrity of the plant and perform any necessary repairs to improve on unit function and safety.
- Add approximately 250 LF of aluminum catwalks around the north half of the steel tank to match existing to improve safety.
- Complete repair and rehabilitation of the existing 1.0 MGD Davco Field Erected Dual Path Waste Water Treatment Plant, including all technologies and ancillary components, to ensure a fully functioning treatment unit capable of meeting the below effluent limits as specified in the Domestic Wastewater Facility Permit # FLA014542-011 given the following influent parameters:

- **Influent Parameters:**

- BOD 250 mg/l
- TSS 270 mg/l
- TKN 40 mg/l

- **Effluent Parameters:**

- BOD 20 mg/l
- TSS 5 mg/l
- NH3-N 1 mg/l

### 2. Steel tank filters system replacement with owner furnished Disc filter.

- Remove and dispose of the two shallow bed steel tanks sand filters.
- Access condition of exiting concrete pad. Modify, prepare and/or replace, existing concrete pad for the installation of owner furnished disk filter.
- Furnish and install all necessary piping to and from owner furnished disk filter.
- Furnish and install Electrical, Instrumentation, Control & SCADA per County Standards.

**3. Repair existing concrete chlorine contact tanks (2 EACH) and ancillary equipment**

- Repair existing concrete chlorine contact tanks (2 EACH) and ancillary equipment per recommendations in 2011 PH&A Structural Inspection Report.
- Repair and/or replace Electrical, Instrumentation, Control & SCADA per County Standards.

**4. Complete rehabilitation of existing Davco transfer pump station**

- Repair and/or replace existing effluent transfer pumps.
- Repair and coat as necessary pump station wet well.
- Repair and/or replace Electrical, Instrumentation, Control & SCADA per County Standards.
- Replace existing three-way motor actuated reuse/reject valve.

**5. Replace Existing Blowers**

- Replace existing blowers to provide the necessary aeration for the rehabilitated 1.0 MGD Davco Field Erected Dual Path WWTP. Replace blower control panel with new panel board making provisions for all plant equipment that will remain in service. The new panel board will need to be re-feed from the new electrical building.
- Furnish and install Electrical, Instrumentation, Control & SCADA per County Standards.

**6. Upgrade existing Control/Electrical Panel**

- Upgrade existing Control/Electrical panel for the upgraded pump motors and blowers.
- Furnish and Install a new transfer switch and plug unit for the County mobile generator.
- The Davco system has remote digital inputs and outputs that tie into the existing PLC control panel. This panel will need to be reenergized after the new Davco electrical panelboard is installed. The PLC processor in the panel is obsolete so this will need replaced. Replace the PLC with Allen Bradley Compact Logix and make necessary modifications to the control panel. The contractor will supply code for this PLC based on the original control scheme. LCU will supply the existing code to the contractor.
- Replace existing electrical service and panel with a new Square D panelboard. The electrical contractor will make provisions for all Davco electrical equipment. This panel will be feed from the main electrical room. The contractor will supply and install or make modifications in the main switchgear to power the new panel.
- Supply a new control panel for the aeration blowers using softstart technology. The new blower panel must be NEMA 4x painted powdered coated white. The blower panel must have a dead front or door to maintain ARC FLASH requirements. The blower panel shall have sunshields to maintain the temperature requirements of the softstarts.
- The contractor will provide any wiring and conduit for the Davco equipment. This will include any wiring to the PLC control panel.
- The contractor will be required to update the ARC FLASH engineering study of effected electrical panels.
- The contractor will provide new drawings to all the new equipment. The contractor will be required to maintain a set of as built drawings to the County at the end of the project.

**7. Remove and/or demolish surplus equipment**

- Demolish and dispose of existing components as shown in the conceptual plans.

**8. Pipeline to connect the 1.0 MGD Davco WWTP to the new Deep Bed Sand Filters**

- Furnish and Install approximately 150 LF of pipeline to connect the 1.0 MGD Davco WWTP to the new Deep Bed Sand Filters to provide redundancy.
- Furnish and install Instrumentation, Control & SCADA per County Standards.

**9. Office and Laboratory Building replacement (ADDITIVE)**

- Existing Office/Lab Building to remain in service until proposed Office/Lab Building is constructed, tested and permitted to be placed into service.
- Construct a proposed  $\pm 1,800$  ft<sup>2</sup> vertically expandable building to include:
  - Built on Concrete pad
  - Load bearing masonry walls
  - Roof truss and deck sloped to meet wind load classification
  - Exterior wall finish – stucco
  - Interior wall finish – knockdown
  - Concrete Sealed and painted per LCU standard code. Scott Paint – Hacienda.
  - Floors to be seamless lab quality linoleum
  - Windows – All windows to be aluminum framed with brushed mill finish. Windows shall be hurricane impacted rated for 170 mph and/or provided with hurricane shutters.
  - Doors – All exterior doors to be fiberglass composite with stainless steel hardware hinges and knobs latched and locks. Doors shall not be steel.
  - Exterior lighting – LED.
  - Lead Operator Office
  - Control/Lab Room – Countertops and sinks all in on, made of lab slate material with lab approved fixtures. Control/Lab Room to follow kitchen standards as per the Florida Building. Ventilation hood properly sized for usage. Wall mounted eye wash station.
  - Restroom w/ shower - shall be Moen or Kohler fixtures.
  - Control Room
  - Break room/meeting area
  - Meeting room/area
  - Floor drains as needed.
  - Break room refrigerator.
  - AC shall be Carrier, Trane, or York. Coated by corrosion solutions. With heat strip.
  - Dual entry/exit to building with all necessary stairs/ramps/walkway for both entry/exits.
- Finished Floor to be 1 ft. above the 100 year flood event, but not lower than the Electrical Building finished floor elevation of +29.3 NGVD. Existing site Elevation = +28.6 NGVD.

- Building to meet all local, state and federal requirements, such as Florida Building Code and Lee County Land Development Code.
- Building Structure must be Certified to withstand 170 mph wind loads, category IV and exposure “B” per Florida Building Code.
- Evaluate, furnish and install Electrical, Instrumentation, Control & SCADA per County Standards:
  - Relocate electrical feed that connects trailer to panel in new office. The existing panel feeds some miscellaneous receptacles these will need to be moved as well to the new office panel.
  - The contractor will be required to tie the communications of the PLC control panel into the new office. The contractor will provide any changes that are required to the existing Scada system.
  - As part of the design verify the generator sizing after added power consumption of recommended building equipment is available.
  - Install one 2-inch conduit to each new equipment location for fiber optic cable, these conduits will terminate in new fiber patch panel in control building. The fiber optic cable shall contain one spare pair for each location.
  - There shall be a new control panel installed in the new building. This panel shall contain the following items.
    1. Fiber patch panel for all fiber connections.
    2. Fiber to Ethernet convertors.
    3. UPS Backup
    4. This panel will be the demark location for the County Utility wide network.
  - Install and update Citect primary and secondary maintaining LCU Scada standards. The existing Scada system will be updated to meet all the new fiber connections and control schemes. There will be a pre-design meeting with operations staff.
  - Any conduit runs, electrical devices, or fitting installed in any of the pipe trenches must be rated for submergence in water.
  - All verifications/evaluations should take into consideration functionality, operability, maintainability of the equipment. Minimization of equipment and facility life cycle cost should also be considered.
  - Instrumentation standards and specification attached
  - Demolish and disposed of existing Operator’s Office and Laboratory trailer.

**Other**

- Construction/Design shall follow all Federal, State and Local standards. Including but not limited to The Florida Building Code, the Lee County Land Development Code, the Lee County Utilities Design Manual, FDEP and SFMWD.

**Project Schedule:**

Develop a project schedule taking into consideration down time and our peak season demands.

**GMP Development:**

Develop GMP estimate.

**(Insert Preliminary/Conceptual Design Plans)**

**(Insert Gateway WWTP FDEP Wastewater Facility Permit )**



**(Insert Record Drawings)**

**(Insert 2011 PH&A Structural Inspection Report)**

**(Insert Design Specifications)**

**(Insert Bid Schedule)**