



THE CITY OF DAYTONA BEACH  
OFFICE OF THE PURCHASING AGENT

Post Office Box 2451  
Daytona Beach, Florida 32115-2451

Phone (386) 671-8080  
Fax (386) 671-8085

**ADDENDUM NO. 2**

DATE: December 6, 2019  
PROJECT: RFP 20173  
RALPH BRENNAN WATER TREATMENT PLANT GRAVITY  
FILTER UPGRADE DESIGN-BUILD PROJECT

OPENING DATE: DECEMBER 19, 2019

This addendum is hereby incorporated into the RFP Documents for the project referenced above. The following items are clarifications, corrections, additions, deletions and/or revisions to and shall take precedence over the original documents. Additions are indicated by underlining, deletions are indicated by ~~striketrough~~.

1. Answers to Bidders' written questions:

**Q1:** The RFP mentions Figure 1, Process Flow Diagram, on Page 21 under Scope of Work: Background. We were unable to locate this attachment and kindly request a copy to make sure we have the most updated document.

**A1:** The Process Flow Diagram is ATTACHED.

**Q2:** Addendum #1 indicates DRAFT watermarks are deleted from the Forms. We were unable to locate the forms without the watermark and request a copy.

**A1:** Pages 15 through 27 are ATTACHED and have had the watermark removed.

2. All other terms and conditions remain the same.

The Bidder shall acknowledge receipt of this addendum in their proposal transmittal letter.

The City of Daytona Beach

Joanne Flick, CPPO, CPPB  
Purchasing Agent

## ANTI-COLLUSION STATEMENT

By signing this form, the Proposer agrees that this Proposal is made without any other understanding, agreement, or connection with any person, corporation, or firm submitting a Proposal for the same purpose and that the Proposal is in all respects fair and without collusion or fraud.

Sign in ink in the space provided below. Unsigned Proposals will be considered incomplete, and will be disqualified and rejected.

IT IS AGREED BY THE UNDERSIGNED PROPSEER THAT THE SIGNING AND DELIVERY OF THE PROPSAL REPRESENTS THE PROPOSER'S ACCEPTANCE OF THE TERMS AND CONDITIONS OF THE FORGOING TERMS AND CONDITIONS AND SCOPE OF SERVICES, AND IF AWARDED, THIS CONTRACT WILL REPRESENT THE AGREEMENT BETWEEN THE PARTIES.

NAME OF FIRM: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_  
(MUST BE SIGNED BY A COMPANY OFFICER OR AUTHORIZED AGENT)

NAME TYPED: \_\_\_\_\_ TITLE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY AND STATE: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

**DRUG FREE WORKPLACE FORM**

The undersigned, in accordance with the Florida Statute 287.087 hereby certifies that \_\_\_\_\_ does:

(Proposer)

1. Publish a statement notifying that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violation of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, any Available drug counseling, rehabilitation, employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under solicitation a copy of the statement specified in Paragraph 1.
4. In the statement specified in Paragraph 1, notify the employees that, as a condition of working on the commodities or contractual services that the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to any violation of Chapter 1893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug free workplace through implementation of Paragraph 1, through Paragraph 5.

As the person authorized to sign this statement, I certify that this firm fully complies with the above requirements.

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature & Title

**SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(a),  
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC  
OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to \_\_\_\_\_  
*(print name of the public entity)*  
by \_\_\_\_\_  
*(print individual's name and title)*  
for \_\_\_\_\_  
*(print name of entity submitting sworn statement)*  
whose business address is

\_\_\_\_\_  
\_\_\_\_\_

and (if applicable) its Federal Employer Identification Number (FEIN) is  
\_\_\_\_\_

(If the entity has no FEIN, insert the Social Security Number of the individual signing this sworn statement above:

2. I understand that a “public entity crime” as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
3. I understand that "convicted" or "conviction" as defined In Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that an “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes means:
- (a) A predecessor or successor of a person convicted of a public entity crime, or

**SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(a),  
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES, cont.**

(b) An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, will be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months will be considered an affiliate.

5. I understand that a “person” as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (*Indicate which statement applies.*)

\_\_\_\_\_ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

\_\_\_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

**SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(a),  
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES, cont.**

\_\_\_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list (*attach a copy of the final order.*)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

\_\_\_\_\_  
[Signature]

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Personally known \_\_\_\_\_

OR Produced Identification \_\_\_\_\_  
(Type of identification)

Notary Public - State of \_\_\_\_\_

By: \_\_\_\_\_

My commission expires \_\_\_\_\_

\_\_\_\_\_  
(Printed typed or stamped  
commissioned name of  
Notary Public)

**LOCAL VENDOR AFFIDAVIT**

*Complete and submit this form ONLY if you qualify for local preference as provided in the City of Daytona Beach Purchasing Code.*

*A copy of the Proposer's Daytona Beach Business Tax Receipt must be submitted with this Affidavit.*

NAME OF PROPOSER: \_\_\_\_\_

LOCAL BUSINESS ADDRESS *(street address being used to claim Local Preference, including zip code):*

\_\_\_\_\_

The undersigned certifies under penalty of perjury each of the following:

The Local Business Address has continuously been used as a Permanent Place of Business with at least one full-time employee since \_\_\_\_\_.  
*(Insert date)*

The Local Business Address has consistently offered or provided the goods or services being solicited by the City of Daytona Beach during the time referenced above.

The Local Business Address has not been established with the sole purpose of obtaining the advantages that may be granted pursuant to the Local Preference provisions of the City of Daytona Beach Purchasing Code.

\_\_\_\_\_  
Signature *(Must be same person as person signing the Proposal)*

\_\_\_\_\_  
Print Name/Title

Subscribed and sworn to before me

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
(Signature of Notary Public)

My commission expires: \_\_\_\_\_

**The City of Daytona Beach reserves authority to require a copy of the corporate charter, corporate income tax filing return, and any other documents(s) to evaluate the Proposer's Local Preference claim.**

## Background

The City of Daytona Beach owns and operates the Ralph Brennan Water Treatment Plant (Brennan WTP). The Brennan WTP operates as a lime softening plant and was originally constructed in the 1970's, with an expansion in the 1980's to its current permitted treatment capacity of 24.0 MGD. The Brennan WTP is considered a Class I A Community public water system (PWS) and is the sole source of water for the City of Daytona Beach. Based on 2017 flows, the ADD was 12.27 MGD and the MDD was 15.15 MGD.

The primary treatment process includes ozonation, lime softening, recarbonation, chlorination, filtration, and fluoridation. Additional ancillary processes include sludge thickening/dewatering, washwater recovery, and storage/high service pumping. A process flow diagram is provided on **Figure 1**.

### Project Need

After recarbonation, water is conveyed to the dual media filtration system for removal of suspended solids using a gravel, sand and anthracite combination filter media. The filtration system consists of six (6) individual filter cells. The filter structure itself was built in 1974 when the Brennan WTP was first constructed. Filters 1, 2 and 3 were placed into service when the plant was built in 1974, with Filters 4, 5 & 6 being placed into service in 1985 when the plant was expanded. The following lists some aspects of the design parameters for the existing filtration system:

- Underdrain Mfg: Leopold
- Rated Capacity: 5 MGD per cell, for a total filtration capacity of 30 MGD.
- Filter Design Rate: 3 gpm per sq. ft
- Backwash Rate: 6-12 gpm per sq. ft
- Backwash Volume: 160,000 gpd per cell (MDD)
- Backwash Initiation: 6-8 psi head loss (typically 160 hrs)

Each filter cell utilizes a turbidity meter to monitor the filters performance. While the total installed filtration capacity is 30 MGD, the Brennan WTP is unable to filter greater than 15 MGD without exceeding the regulatory limit for Total Suspended Solids (TSS) of 1.0 NTU at the Point of Entry (POE) for 4 hours. Within the past year, the Brennan WTP has had two occurrences of reportable turbidity exceedances underscoring the need for this project. The following factors are thought to contribute to the overall filter performance issues:

- Age – The filter components (i.e. underdrains, troughs, piping, valves and electrical) are original to the filters being placed into service. As such, the filter components for Filters 1, 2 and 3 are 45 years old and the components associated with Filters 4, 5 and 6 are 34 years old. The components are past their useful life and beginning to show signs of excessive wear.
- Materials of Construction – The filter underdrains are made of clay and plastic and have shown signs of excessive wear. Filters 2, 3, 4 and 6 all consist of clay underdrains installed in 1974 (Filters 2 and 3) and 1985 (Filters 4 and 6). Filters 1 and 5 were replaced with a plastic underdrain system in 2005. The excessive wear has been evidenced by the excessive loss of filter media. Additionally, inspections of the clear well have shown significant build-up of filter media.

- **Obsolete Components** – The filters are set up to run in an automated mode by opening/closing valves associated with the filter cells. The actuators and control system were installed in 2004 and many of the components are no longer available/serviceable. Additionally, many valves no longer fully seat and allow for leakage around the valve.
- **Mechanical Malfunctions** – Given the age/condition of the various filter components, mechanical malfunctions (i.e. valve failing to open/close, glitch in SCADA system, etc.) have led to regulatory exceedances for TSS.

In addition to the abovementioned items, the Project will address other filter related items. These items include:

- **Pipe Gallery** – Filtered Water and Backwash piping, including all associated valves are located in a pipe gallery below and between the filter cells. Due to the environment, the gallery is constantly damp and has led to paint peeling off the walls, degradation of metal conduits, corrosion of bolts on filter piping, among other items.
- **Concrete Restoration** - Concrete spalling is visible within the 45 year old structure within most filter cells. Additionally, Filters 4, 5 and 6 have a fiberglass liner that will need to be removed.

### **Scope of Services**

The purpose of this project is to replace the aging filter system with a new system. The City wishes to replace the underdrain system with a stainless steel underdrain system that includes air scouring. The City's preferred manufacturer of the filter system is AWI, but equal systems will be considered if identified. The new system will include all components necessary to provide a fully functional filtration system, including, but not limited to new: underdrain system and associated piping and valves, filter media, troughs, air piping, blowers, electrical and instrumentation. The scope of services is anticipated to include, but not be limited to, the following:

- **Design services that will include:**
  - Recommendation of complete filter system.
  - Evaluation of the existing system to determine the extent of components that need to be replaced.
  - Assessment of concrete structure and recommendations for repair, as necessary.
  - Evaluation and recommendation of GAC as a possible filter media layer.
  - Electrical and instrumentation design needed to bring system up to code and for compatibility with future SCADA improvements.
- **Comprehensive design services of selected improvements including Development of Guaranteed Maximum Price**
- **Regulatory permitting**
- **Preconstruction Services with Development of Guaranteed Maximum Price for construction**
- **Construction of selected improvements, including any demolition and rehabilitation of the filters**
- **Logistic sequencing for improvements while the Brennan WTP is operational**

- Start-up and testing
- Operation and Maintenance manuals
- Training in the operation of selected improvements
- Scheduling of all logistics
- Estimated Construction Budget: \$ 4.35M

**Existing Filter Cells 1, 2 and 3**

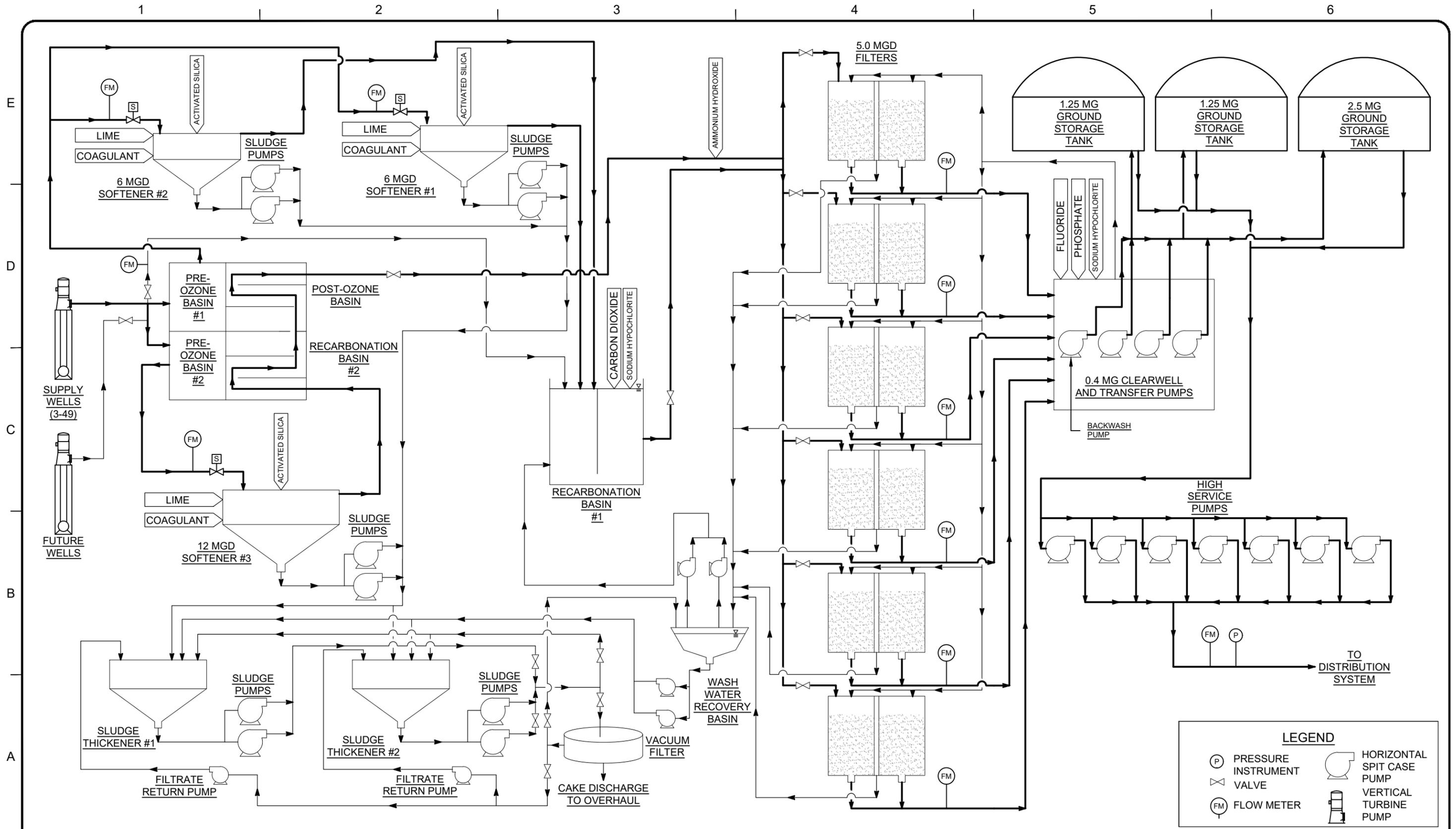


**Close-up of Filter 3  
View of Filter Gallery**



**Close-up of Filter Piping and Valves**

4/25/2019 11:42:27 AM - O:\PROJECTS\ORLANDO\1200-26561-18003\CAD\CONCEPTUAL\FIGURES.DWG - SWARTZENTRUBER, BRANDON



**LEGEND**

- (P) PRESSURE INSTRUMENT
- (V) VALVE
- (FM) FLOW METER
- (Pump Icon) HORIZONTAL SPIT CASE PUMP
- (Turbine Icon) VERTICAL TURBINE PUMP

NOTE:  
POLYMER FOR COAGULATION WAS APPROVED FOR DISCONTINUATION IN 2008.

**TETRA TECH**  
www.tetrattech.com  
201 EAST PINE STREET, SUITE 1000  
ORLANDO, FL 32801  
PHONE: (407) 839-3955 FAX: (407) 839-3790

MARK	DATE	DESCRIPTION	BY

CITY OF DAYTONA BEACH  
20-YEAR WATER SYSTEM  
RALPH BRENNAN WTP  
PROCESS FLOW DIAGRAM

Project No.: 200-26561-18003  
Designed By: JCR  
Drawn By: BLS  
Checked By:  
**FIG. 2-3**

Copyright: Tetra Tech