CONSOLIDATED TREATMENT SYSTEMS
1501 Commerce Center Dr.
Franklin, OH 45005

937-746-2727
Fax: 937-746-1446

Field Sales
937-550-2215

Customer Sales
937-550-2222

Customer Relations
937-550-2221

Production
937-550-2213

Finance & Accounting
937-550-2223

Enviro GUARD

MULTI-FLO

NAYADIC

Over 35 Years of Reliable, Accountable, Professional Service

November 1, 2010

Allen Knapp, Onsite Program Manager
Division of Onsite Sewage and Water Services
Virginia Department of Health
109 Governor St.
Richmond, VA 23219

Dear Sir:

Subject: Multi-Flo FTB-Series Submittal in Accordance with GMP 147

I appreciated the phone call today by Kemper Loyd of your staff. Here is the updated information in response to his questions and issues:

1. Multi-Flo FTB-1.0 Technical Plans. Technical plans for the Multi-Flo FTB-1.0 are attached. Please disregard the mistaken drawing "Multi-Flo FTB-0.6 Version 1" sent last Friday.

2. Statements Regarding Sampling, Samples, and Results. Statements regarding the collection, transport, and testing of samples and statement regarding the forwarding of samples have been added to the third-party contract, which is attached.

Please feel free to contact either Mr. Burks or me if you require additional information. We appreciate your prompt attention to our submittal and look forward to a quick approval.

Sincerely,

Jeff Coomer, Vice President
Consolidated Treatment Systems, Inc

Attachments

3-Engineering, LLC

1605 Hanover Avenue Richmond, Virginia 23220-3525

804-873-5000-voice 804-353-3028-fax Burks@3-eng.com-email

www.3-engineering.com

November 1, 2010

Jeff Coomer, Vice President
Consolidated Treatment Systems, Inc.
1501 Commerce Center Drive
Franklin, OH 45005-1891

Dear Mr. Coomer:

Subject: Professional Engineering Services
Virginia Department of Health GMP 147 Sampling and Analysis

Project Title: GMP 147

Scope of Work:

The scope of work for this project are professional engineer activities required under GMP 147, issued by the Virginia Department of Health (VDH). These activities include, but are not limited, to:

- Certification that the Multi-Flo FTB-Series and Enviro-Guard ENV-0.75 can be expected to produce effluent likely to meet treatment expectations identified in the GMP;

- Certification that the operation and maintenance activities accurately reflect the servicing and maintenance activities of the Multi-Flo FTB-Series and Enviro-Guard ENV-0.75;.

- Supervision of Sample Collection and analysis for 20 installations. Sampling will be conducted quarterly for 12 months and include BOD_5, TSS, and fecal coliform. The complete and entire data set will be submitted to the VDH.

Standards of Performance:

1. A schedule of dates and locations will be established for collecting samples. Sampling will proceed in accordance with the schedule.

2. Samples will collected from sampling ports and transported to certified laboratories, both in conformance to *Standard Methods for the Examination of Water and Wastewater* and QA/AC protocol submitted with GMP 147 application. Wastewater analyses will be conducted on effluent BOD_5, TSS, and fecal coliform.

3. The standard of care for services will be the care and skill ordinarily used in professional engineering practiced under current circumstances and in the Commonwealth of Virginia.

Schedule and Activities:

The Engineer proposes to commence activities upon approval of the contract. Activities will continue until the data set is complete, submitted to the VDH, and a final decision received.

Conformance to Virginia Department of Health Requirements

1. **Submission of Sampling Results.**

   Sampling results will be submitted to the Virginia Department of Health no later than the 15th day following analysis of the sample.

2. **Collection, Transport, and Testing of Samples.**

   All persons who collect, transport, or test samples will be properly trained by employees or agents of Consolidated Treatment Systems, Inc., as to the proper procedures to complete their tasks."

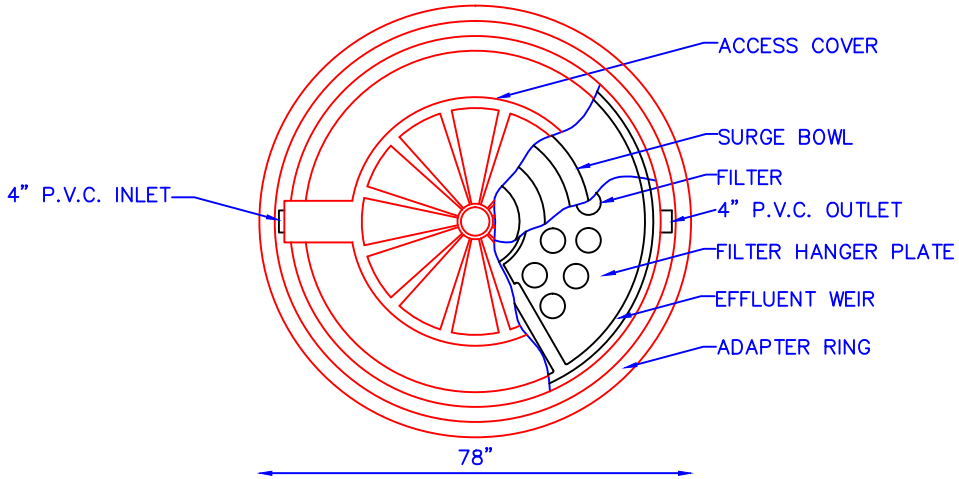
Sincerely,

Bennette D Burks.

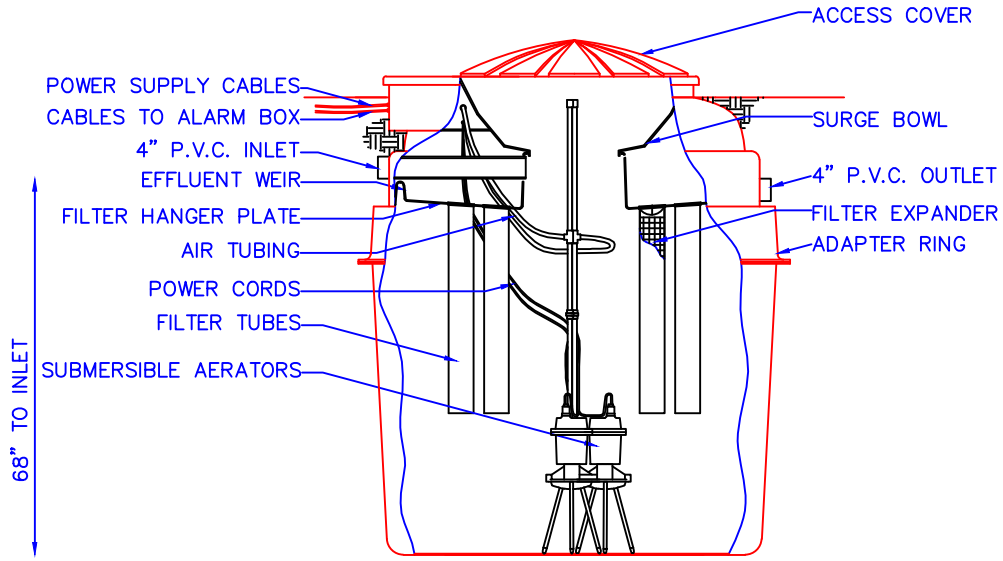
Bennette D. Burks, P.E.
Principal

ACCEPTED BY CLIENT:

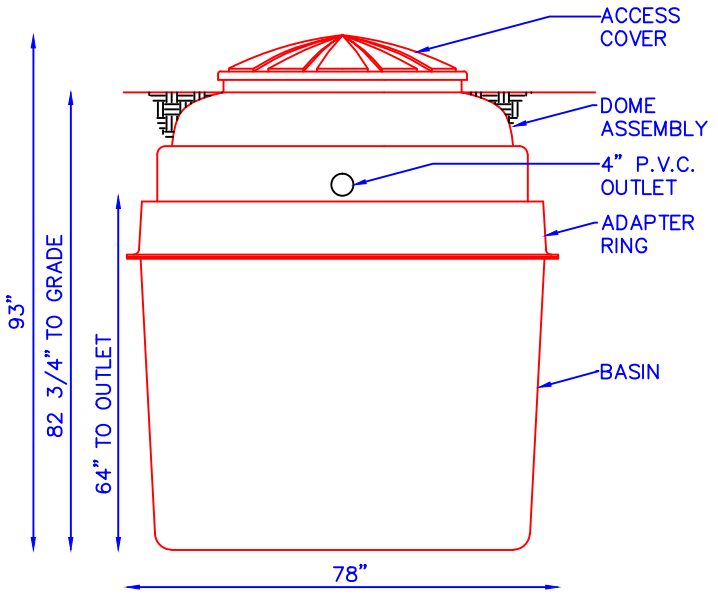
Jeff Coomer Date: November 1, 2010



PLAN VIEW



ELEVATION SECTION



OUTLET END ELEVATION

NOTES:

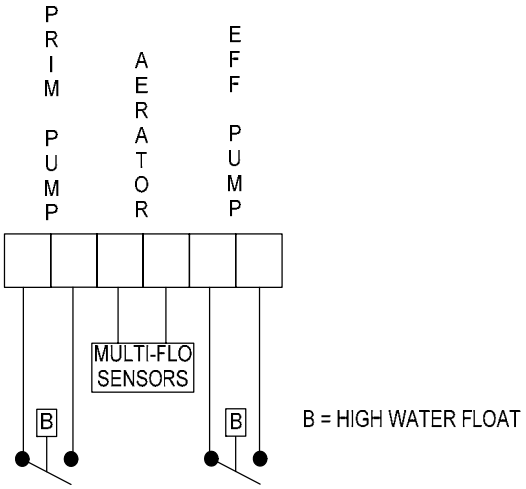
1. THE FTB-1.0 CONTAINTS TWO AERATORS, EACH PROVIDING 3.6 LB/DAY OF OXYGEN.
2. THE FTB-1.0 HAS THE IDENTICAL 30-FILTER MEDIA CONFIGURATION AS THE FTB-0.5, 0.6, AND 0.75.

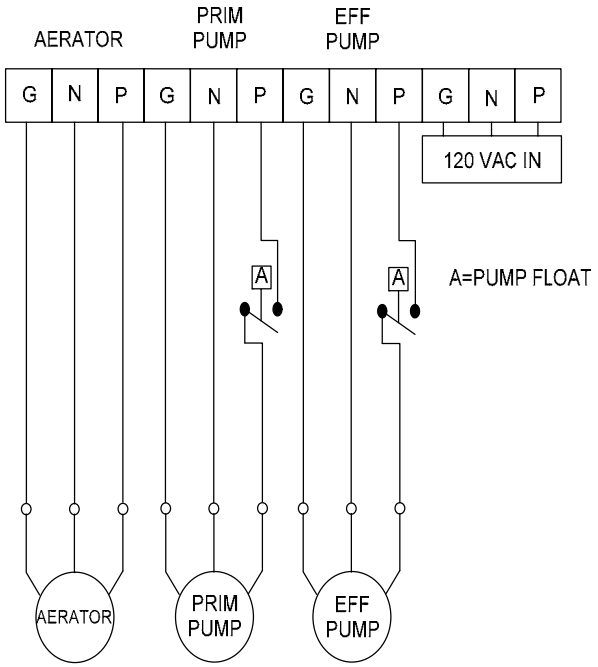
MULTI-FLO FTB 1.0

Date: 12/16/2004
Drawn By: BDB
Scale: NONE

Consolidated Treatment Systems, Inc.
1501 Commerce Center Drive, Franklin, OH 45005-1891
1-937-746-2727 www.multiflo.com

MULTI-FLO CONTROL PANEL SCHEMATIC





RJR CONTROLS LLC

TITLE: 4080D4B-MF

SIZE	CAGE CODE	DWG NO	REV
A2		021407RW-FW	2

MULTI-FLO AND ENVIRO-GUARD MATERIAL AND COMPONENT SPECIFICATIONS

Tank:

Polyester Laminated FRP A-610, or equal, with over 33 percent glass content, Owens Corning fiberglass 825-DA-211, producing cured properties as follows:

Flexural Strength:	*36,350 PSI*
Flexural Modulus:	*1.49 X 106 PSI*
Tensile Strength:	*16,210 PSI*
Heat Distortion Temperature:	*183°F*
Nominal Thickness:	*3/16 in+ 1/16 in -0 in*

Filtration Media:

11-ounce polyester felt having a nominal filtration of 100-micron and an air permeability of 400 cfm

Aeration:

Submerged open impeller aerator with a nominal rating of 1/6 hp drawing no more than 2 A during operation. The aerator shall be rated for continuous operation.

MULTI-FLO AND ENVIRO-GUARD SPECIFICATIONS	
Date: 02/26/2009	CONSILIDATED TREATMENT SYSTEMS, INC.
Drawn By: BDB	1501 COMMERCE CENTER DRIVE
Scale: NONE	FRANKLIN, OH 45005-1891
	1-937-746-2727 www.multi-flo.com

QA/QC Procedures for the Collection, Transport, and Analysis of Multi-Flo Samples
Virginia Department of Health Evaluation
October 29, 2010

Notes:

- **All collection and transport will conform to the latest edition *Standard Methods for the Examination of Water and Wastewater*.**
- **Units will be inspected prior to sampling to confirm the ability to obtain samples in accordance with these procedures.**
- **Sampling Ports will be required as a part of new installations and will be encouraged as a part of existing installations.**

1. Preliminary Procedures
    a. Schedule with the Testing Laboratory the collection, transport, and transfer of samples
        i. Identify and Follow specific procedures the Testing Laboratory requires
        ii. Establish and Maintain with the Testing Laboratory a protocol to conduct verification analyses on duplicate samples collected and transported.
    b. Obtain Appropriate Sample Containers from Testing Laboratory
        i. BOD
        ii. TSS
        iii. Fecal Coliform
        iv. Nitrogen Series, optional
    c. Confirm Presence and Fitness for Use of Ancillary Sampling Equipment, if needed.
        i. Dipper
        ii. Vacuum bulb
    d. Prepare Sample Transport Container
        i. Insulated Container with fastening lid
        ii. Container filled with sufficient crushed ice to cool and cushion sample containers
    e. Examine Personal Protective Equipment for Availability and Fitness for Use
        i. Safety Glasses
        ii. Surgical Mask

iii. Gloves
iv. Disinfectant in spray bottle
v. Disinfecting cleaner
vi. Alcohol towelettes
vii. 1-gal bottle of 0.5% Chlorine Solution

f. Confirm Sample Collection Log is Complete
   i. Sample Locations
      1. Owner
      2. Address
   ii. Sample Number
   iii. Date
   iv. Time
   v. Weather Conditions and Temperature
   vi. Analysis Requested
   vii. Photographs Taken Y/N
   viii. Notes

2. General Sample Collection Procedures
   a. The transport container will be secured in a trunk or locked vehicle.
   b. Samples will be transported to the testing laboratory within the time limits and on the days and times established by the testing laboratory.
   c. A Chain of Custody log will be maintained for all samples.
   d. Sample collection will be conducted only by Bennette Burks, Douglas Crooks, or those persons who Mr. Burks has personally trained and certified to collect samples.
   e. Sample containers will be labeled with an indelible ink pen.
      i. Date
      ii. Time
      iii. Location
      iv. Analysis

v. Sample Number
vi. Other information as directed by the testing laboratory

f. Two samples for each analysis will be collected.
   i. Inspect piping and area in proximity to sample location to confirm the absence of any object or item that could affect the validity of the sample to be collected.
   ii. Debris, which could include but is not limited to insects, spider webs, small animals or vegetation, settled solids, or any other substance, will be removed prior to sampling, if necessary, such that a representative sample is collected.
   iii. Induce flow for at least 30 seconds before collecting sample.
      1. Measure time with a stop watch or by manual count
   iv. Collect sample
      1. Directly into sample container, if possible.
      2. Using a *disinfected* dipper or vacuum bulb and transfer immediately into the sample container. Disinfection will be accomplished by wiping with an alcohol towelette and/or rinsing with a chlorine solution and then drying the sampling instrument immediately prior to sample collection.

3. Influent Sample Collection
   a. Collect samples from the discharge piping to the dose tank, if installed, or treatment tank
4. Effluent Sample Collection
   a. Collect samples from sealed, designated sampling port attached to the Multi-Flo treatment tank, if installed.
      i. Sampling port will be purged prior to sampling, if necessary.
      ii. Debris will be removed, if necessary, such that a representative sample of the effluent is collected.

iii. Wipe pipe with alcohol towelette to disinfect the pipe in preparation for the fecal coliform sample.

b. Collect the fecal coliform sample first.

c. Collect sample from discharge to effluent pump tank, if effluent pumping is conducted.

d. Collect sample using a dipper or vacuum bulb from top of weir plate in the center of a filter media opening. Immediately transfer sample to sample container.

5. Place samples in insulated transport container.
6. Transport Samples to the Testing Laboratory.
7. Complete the Chain of Custody log.
    a. Complete and Sign forms required by the Testing Laboratory
    b. Maintain receipts issued by the Testing Laboratory.
8. Request Duplicate Sample Analysis in Accordance with the QA/QC protocol.