

January 28, 2022

Nicholas Fields  
Kentucky Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3rd Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, Inc.  
Persimmon Ridge WWTF  
KYPDES Permit No. KY0077674  
Agency Interest No. 458

On behalf of Bluegrass Water Utility Operating Company, LLC, we are submitting this letter to address the current Corrective Action Plan status that was approved January 29, 2020. We are continuing to work to effluent compliance for this facility.

Per the original CAP, Bluegrass Water UOC continues to make improvements stipulated on the submitted construction permit. Due to the effect of COVID-19, our contractors have encountered delays on supplies and materials on common good & services. With uncertainty of material deliveries and unexpected changes to our timeframe for completion, Bluegrass Water Utility Operating Company, LLS determined that the repairs at Persimmon Ridge will be completed by October 1, 2022. Following the improvements included in the construction permit the facility should be able to consistently comply with permitted limits.

Please let me know if this letter meets the status report requirements of achieving system compliance.

Sincerely,



Enrique Chavez Jr.  
Bluegrass Water Utility Operating Company, LLC  
Utility Project Manager

January 28, 2022

Nicholas Fields  
Kentucky Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3rd Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, Inc.  
River Bluffs Subdivision WWTF  
KYPDES Permit No. KY0043150  
Agency Interest No. 3367

On behalf of Bluegrass Water Utility Operating Company, LLC, we are submitting this letter to address the current Corrective Action Plan status that was approved November 12, 2020. We are continuing to work to effluent compliance for this facility.

Per the original CAP, Bluegrass Water UOC continues to make improvements stipulated on our initial assessment. Due to the effect of COVID-19, our contractors have encountered delays on supplies and materials on common goods & services. With uncertainty of material deliveries and unexpected changes to our timeframe for completion, Bluegrass Water Utility Operating Company, LLS determined the repairs at River Bluffs Subdivision will be completed by October 1, 2022. Following the improvements included in the corrective action plan, the facility should be able to consistently comply with permitted limits.

Please let me know if this letter meets the status report requirements of achieving system compliance.

Sincerely,



Enrique Chavez Jr.  
Bluegrass Water Utility Operating Company, LLC  
Utility Project Manager



# BLUEGRASS WATER

Utility Operating Company

A CSWR Managed Utility

Attn: Wes Dement  
Energy and Environment Cabinet,  
Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd 3rd floor  
Frankfort, KY 40601

Mr. Wes Dement,

In accordance with the Corrective Action Plan for Persimmon Ridge WWTF (KY0090956) submitted to the EEC on 12/13/2019 and approved by the Department on 1/29/2020 I hereby submit this status report concerning improvements made to the facility and next steps.

In the original CAP plan documents, it was conveyed that an analysis of the system implied that following the operational and physical repairs and improvements detailed in the CAP the wastewater treatment facility may be capable of meeting limits.

The CAP laid out milestones for repairs, evaluation, and basic improvements at the facility. The milestones included repair of the baffle in the second lagoon cell, installation of scales for the chlorination and dechlorination chemicals, installation of a flow meter and remote monitoring system, and cleaning and jetting of the collection system.

Additionally, an improved aeration system was installed in the first cell of the lagoon as part of a pilot study. All improvements were completed inside of the timelines projected and the facility has met limits since May of this year. The new aeration system has improved the performance of the treatment plant and will be cycled on and off as part of the pilot study to determine the effectiveness of the equipment. Pending the results of the study, additional units may be added in the next few years, however the single unit in the pilot may be adequate to allow the facility to consistently meet limits.

Additionally, we are evaluating switching from chlorine and dechlorination to peroxyacetic acid and post aeration for disinfection at some point in the future to reduce operational costs. Should these additional improvements be pursued, BWUOC will submit construction permits for review by EEC/DEP and KYPSC.

Please feel free to reach out for any additional information or with any questions.

Thanks,

**JON MEANY**  
Utility Engineer

 (314) 380-8537 Ext. 215  
 (314) 482-0342  
 (314) 736-4759  
 jmeany@cswrgroup.com  
 1650 Des Peres Rd., Suite 303,  
Des Peres, MO 63131

1650 Des Peres Rd, Suite 303, St. Louis, MO 63131

[www.centralstateswaterresources.com](http://www.centralstateswaterresources.com)

February 15, 2022

Nicholas Fields  
Kentucky Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3rd Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, Inc.  
LH Treatment WWTF  
KYPDES Permit No. KY0081591  
Agency Interest No. 8083

On behalf of Bluegrass Water Utility Operating Company, LLC, we are submitting this letter per KDEP's requirement consistent with the current Corrective Action Plan (CAP) plan approved by KDEP on February 17, 2020. Additionally, a revised CAP was submitted on February 24, 2021, that stated the facility would be compliant by February 18, 2022.

Construction was recently completed at this facility including all the repairs and upgrades proposed by our third-party engineering firm. The facility effluent will be compliant with the operating permit on February 18, 2022.

Please let me know if this letter meets the status report requirements of achieving system compliance.

Sincerely,



Enrique Chavez Jr.  
Bluegrass Water Utility Operating Company, LLC  
Utility Project Manager



September 23, 2022

Nicholas Fields  
Kentucky Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3rd Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, Inc.  
Persimmon Ridge WWTF  
KYPDES Permit No. KY0077674  
Agency Interest No. 458

On behalf of Bluegrass Water Utility Operating Company, LLC, we are submitting this letter to address the current Corrective Action Plan status that was approved January 29, 2020. BWUOC submitted an extension request on January 28, 2022, with a projected completion date of October 1, 2022. We are continuing to work to effluent compliance for this facility.

Per the original CAP, Bluegrass Water UOC continues to make improvements stipulated on the submitted construction permit. BWUOC continues to encounter delays with materials for the on-going capital improvements project. With uncertainty of material deliveries and unexpected changes to our timeframe for completion, Bluegrass Water Utility Operating Company, LLS determined that the repairs at Persimmon Ridge will be completed by March 31, 2023. Following the improvements included in the construction permit the facility should be able to consistently comply with permitted limits.

Please let me know if this letter meets the status report requirements of achieving system compliance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Enrique Chavez Jr.", is positioned below the "Sincerely," text.

Enrique Chavez Jr.  
Bluegrass Water Utility Operating Company, LLC  
Utility Project Manager

September 23, 2022

Nicholas Fields  
Kentucky Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3rd Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, Inc.  
River Bluffs Subdivision WWTF  
KYPDES Permit No. KY0043150  
Agency Interest No. 3367

On behalf of Bluegrass Water Utility Operating Company, LLC, we are submitting this letter to address the current Corrective Action Plan status that was approved November 12, 2020. BWUOC submitted an extension request on January 28, 2022, with a projected completion date of October 1, 2022. We are continuing to work to effluent compliance for this facility.

Per the original CAP, Bluegrass Water UOC continues to make improvements stipulated on the submitted construction permit. BWUOC continues to encounter delays with materials for the on-going capital improvements project for the blower upgrades and the disinfection system expansion. With uncertainty of material deliveries and unexpected changes to our timeframe for completion, Bluegrass Water Utility Operating Company, LLS determined that the repairs at River Bluffs will be completed by March 31, 2023. Following the improvements included in the construction permit the facility should be able to consistently comply with permitted limits.

Please let me know if this letter meets the status report requirements of achieving system compliance.

Sincerely,



Enrique Chavez Jr.  
Bluegrass Water Utility Operating Company, LLC  
Utility Project Manager

March 14, 2023

Nicholas Fields  
Kentucky Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3rd Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, Inc.  
Persimmon Ridge WWTF  
KYPDES Permit No. KY0077674  
Agency Interest No. 458

On behalf of Bluegrass Water Utility Operating Company, LLC, we are submitting this letter to address the current Corrective Action Plan status that was approved January 29, 2020. BWUOC submitted an extension request on September 23, 2022, with a projected completion date of March 31, 2023. We are continuing to work to effluent compliance for this facility.

Per the original CAP, Bluegrass Water UOC continues to make improvements stipulated on the submitted construction permit. BWOUC received the construction permit approval from EEC on February 22, 2023, and our third-party engineer submitted design plans and specification on November 28, 2022. L Keeley Construction commenced the bidding process on January 24, 2023, under the guidance of BWOUC. Bluegrass Water Utility Operating Company, LLC determined the Moving Bed Biological Reactor Installation Project at Persimmon Ridge will take roughly 12 months to be completed and the project to be finalized by March 31, 2024. Following the improvements included in the construction permit the facility should be able to consistently comply with permitted limits.

Please let me know if this letter meets the status report requirements of achieving system compliance.

Sincerely,



Enrique Chavez Jr.  
Bluegrass Water Utility Operating Company, LLC  
Program & Compliance Manager



March 14, 2023

Nicholas Fields  
Kentucky Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3rd Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, Inc.  
River Bluffs Subdivision WWTF  
KYPDES Permit No. KY0043150  
Agency Interest No. 3367

On behalf of Bluegrass Water Utility Operating Company, LLC, we are submitting this letter to address the current Corrective Action Plan status that was approved November 12, 2020. BWUOC submitted an extension request on September 23, 2022, with a projected completion date of March 31, 2023. We are continuing to work to effluent compliance for this facility.

Per the original CAP, Bluegrass Water UOC continues to make improvements stipulated on the submitted construction permit. BWUOC continues to encounter delays with materials for the on-going capital improvements project for the blower upgrades and the disinfection system expansion. Our general contractor completed the decommission and installation of half of the blower installation project. With uncertainty of material deliveries, prolonged lead times and unexpected changes to our timeframe for completion, Bluegrass Water Utility Operating Company, LLS determined that the repairs at River Bluffs will be completed by December 31, 2023. Following the improvements included in the construction permit the facility should be able to consistently comply with permitted limits.

Please let me know if this letter meets the status report requirements of achieving system compliance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Enrique Chavez Jr.", is written over the "Sincerely," text.

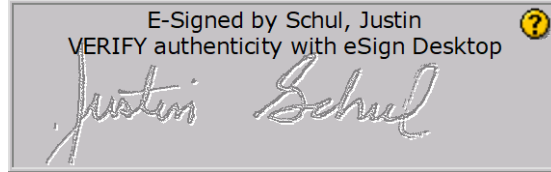
Enrique Chavez Jr.  
Bluegrass Water Utility Operating Company, LLC  
Program & Compliance Manager



**CASE CLOSURE MEMORANDUM**

**TO:** Natalie Bruner, Director  
Division of Enforcement

**THROUGH:** Justin T. Schul, Branch Manager  
Division of Enforcement

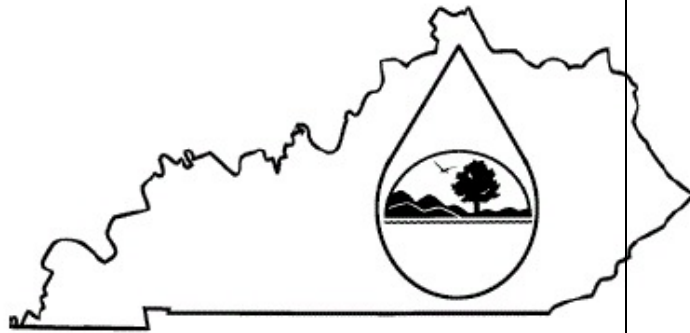


**FROM:** Nicholas Fields, Enforcement Specialist  
Division of Enforcement

**DATE:** February 21, 2022

**SUBJECT:** Closure: Longview Homestead WWTP (Bluegrass)  
AI ID: 8083  
AI Name: Longview Country Club  
Activity ID: ERF20190002  
Scott County  
Case No.: DOW 19-3-0154

- The Longview Country Club WWTP was originally referred to the DENF in 2018 for an extensive amount of permit parameter violations.
- The Cabinet entered into an Agreed Order with the Longview Country Club on September 3, 2019. The Agreed Order required the country club to pay a \$4,000 civil penalty and submit a Corrective Action Plan to address the issues being experienced at the WWTP.
- The civil penalty was paid in full on January 4, 2019 and a CAP was accepted on January 16, 2019.
- Shortly after the execution of the Agreed Order, Bluegrass Water Utility Operating Company purchased the country club's WWTP. The case with the country club was later closed on November 8, 2019.
- Once Bluegrass Operating took ownership of the WWTP, the Cabinet entered into a friendly Agreed Order with Bluegrass to allow them to remediate the ailing treatment plant.
- A CAP from bluegrass was submitted and approved on February 17, 2020. This CAP was amended in 2021 due to the COVID-19 Pandemic, and gave a new final compliance date of February 18, 2022.
- DENF recently received documentation from Bluegrass stating that all upgrades and construction had been completed at the WWTP and the treatment plant was operating in compliance.
- The compliance and operations branch agrees with the closing of this case.
- With the above-stated facts in mind, and with your initials above, this case will be closed in the DENF.



Commonwealth of Kentucky  
Energy and Environment Cabinet  
Division for Water

## CONSTRUCTION PERMIT APPLICATION

### for CLEAN WATER COLLECTION

[Click here for Instructions](#)

for more information about selected portions of this application. Questions on completing this application? Contact the Water Infrastructure Branch at 502/564-3410 or visit our website at <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/Pages/WWCSConst.aspx> for more information.

(\*) indicates a required field; (✓) indicates a field may be required based on user input or is an optionally required field

#### I. Construction Project Information

Project Name(\*)

R&L Carriers - Georgetown

Name of WWTP which will treat sewage from this project: (\*)

Delaplain Disposal Co.

KPDES Number of the WWTP: (\*)

KY0079049

WWTP County: (\*)

Scott

Project County (\*)

Scott

Project Latitude (Decimal Degrees, NAD83): [DMS to DD Converter](#)

38.271389

Project Longitude (Decimal Degrees, NAD83):

-84.551111

11 Digit Hydrologic Unit Code (HUC): (\*) [?](#)

North Elkhorn Creek 280(05100205280)

Estimated construction cost of this project: (\*)

95,000

Is this a funded project? (\*) [?](#)

No

CWSRF

SPAP

Other:

Private

If the project is funded, provide the applicable funding checklist.

Information on the SRF checklist can be found at

<https://eec.ky.gov/Environmental->

Upload Checklist File

Provide details of the project item(s) being constructed.



At least one of the two lists must have a completed record.

\* If completing a Pump record, all columns are required.

\* If completing a Line record, Gravity/Force Main, Pipe Size are required, and at least one of the linear ft columns are required.

Name of Pump Station	# Pumps	Flow Rate (gpm)	Total Dynamic Head in ft.		
Gravity/Force Main	Pipe Size (inch)	PVC (linear ft)	PE (linear ft)	DL (linear ft)	
Other (linear ft)					
Force Main w/ Grinder Pump	3	851	0	0	

**II. Applicant Mailing Address**

First Name:(\*)

Stan

Last Name: (\*)

Richards

Address:(\*)

600 Gillam Road

City:(\*)

Wilmington

State:(\*)

Ohio

Zip Code(\*)

45177

Phone Number:(\*)

937-603-3900

Fax Number:

###-###-####

E-Mail Address:(\*)

srichards@rlcarriers.com

Will ownership be transferred?(\*)

No

If yes, future owner will be:

**III. Design Considerations**

**A. PLANS AND SPECIFICATIONS COMPLIANCE REQUIREMENTS:** Design plans and specifications shall comply with 401 KAR 5:005 and "Recommended Standards for Wastewater Facilities" ("Ten States' Standards"). If engineering practices, other than those contained in "Ten States' Standards", were used in the design, indicate the source and the corresponding portion of the design. [See 401 KAR 5:005, Section 7] For plans submitted to this office, one set of plans must have an original signed and dated P.E. stamp. The additional plan sets must have either an original signature and dated stamp, or a legible facsimile thereof. SRF funded projects shall include at least 1 printed copy of specifications.

**Plan and specification submittals shall meet one of the following options:**

<input type="checkbox"/>	At least one paper printed set of detailed plans (no larger than 24" X 36") and a PDF copy of plans and specifications on CD/DVD/Uploaded. The PDF copy shall contain a stamp, signature, and date. The plans on the CD/DVD shall be in a folder called "Engineering Plans" and the specifications manual shall be in a folder called "Specifications". <input type="button" value="Upload File(s)"/>
<input checked="" type="checkbox"/>	A digital set of detailed plans and specifications for projects being submitted electronically. The plans and specifications manual should be attached as separate PDF files with a single file for each document (e.g. do not submit multiple PDFs for a single set of plans). <input type="button" value="Upload File(s)"/> (4) R+L CARRIERS - Georgetown, KY -Final Engineering Plans- 2022-08-15.pdf

**B. Design Engineer**, if the sewer lines will become part of a sewer system served by a regional facility. **[Section 6]**

P.E. First Name: (*) <input type="text" value="Jim"/>		P.E. Last Name: (*) <input type="text" value="lovinelli"/>	
PE Firm Name: (*) <input type="text" value="Manhard Consulting"/>			
Address: (*) <input type="text" value="700 Springer Drive"/>	City: (*) <input type="text" value="Lombard"/>	State: (*) <input type="text" value="Illinois"/>	Zip Code: (*) <input type="text" value="60148"/>
Phone Number: (*) <input type="text" value="630-925-1110"/>	Fax Number: <input type="text" value="###-###-####"/>		E-Mail Address: (*) <input type="text" value="jiovinelli@manhard.com"/>

**C. Conformity to Plans and Specifications.** Provide name of person who will inspect and certify that the constructed facility conforms to the approved plans and specifications. If the sewer lines will become part of a sewer system served by a regional facility, this person must be a professional engineer (P.E.). [Section 3]

**Copy Design Engineer Information**

P.E. First Name: (*) <input type="text" value="Joe"/>		P.E. Last Name: (*) <input type="text" value="lovinelli"/>	
Inspector: (*) <input type="text" value="Manhard Consulting"/>			
Address: (*) <input type="text" value="700 Springer Drive"/>	City: (*) <input type="text" value="Lombard"/>	State: (*) <input type="text" value="Kentucky"/>	Zip Code: (*) <input type="text" value="60148"/>
Phone Number: (*) <input type="text" value="630-925-1110"/>	Fax Number: <input type="text" value="###-###-####"/>		E-Mail Address: (*) <input type="text" value="jiovinelli@manhard.com"/>

**D. Design Capacities.**

Wasterwater Sources

	Existing	Planned	Date Planned
Residences	<input type="text"/>	<input type="text"/>	<input type="text"/>
Mobile Homes	<input type="text"/>	<input type="text"/>	<input type="text"/>

Apartment	<input type="text"/>	<input type="text"/>	<input type="text"/>
Incorporated Area	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other	<input type="text"/>	1	10/10/2022
The amount of average daily flow added by the sewer line extension (gpd):(*) <input type="text" value="5600"/>		If Additional Flow is Zero, what is the current daily flow (gpd): <input type="text"/>	

The basis for the amount of additional flow: (\*)

**E. Other Information to be OTHER INFORMATION TO BE SUBMITTED WITH APPLICATION. Place a check the items that are included in this application.**

<input checked="" type="checkbox"/> 1.	A copy of a USGS 7½ minute topographic map with the locations of the proposed project shown. [Section 3]
<input type="checkbox"/> 2.	If modifying, replacing or abandoning an existing facility, a closure plan indicating how the new facility will be constructed without a by-pass to a stream and the procedures that will be used for abandoning the existing facility. [Section 3]
<input checked="" type="checkbox"/> 3.	If the project includes a pump station, provide the pump performance curve, design calculations, and detailed wet well drawing with elevations. [Section 8]
<input checked="" type="checkbox"/> 4.	If the project includes gravity sewer lines or force mains, a plan view and a profile view of each. [Section 6]
<input type="checkbox"/> 5.	A model of the hydraulic analysis if the project consists of, or is connected to a network of pumps.[Section 8].
<input checked="" type="checkbox"/> 6.	A brief description of the project, including what is being constructed, who will be served by this project, the flow rate, and flow rate calculations. [Section 8]
<input checked="" type="checkbox"/> 7.	A signed letter from the owner of the proposed sewer line stating that the owner will accept responsibility for the operation and maintenance of the sewer line when it is constructed. [Section 8]
<input checked="" type="checkbox"/> 8.	A signed letters from both the owner of the receiving sewer system and the WWTP stating that they approve the connection and accept responsibility for the additional flow. [Section 8]
<input checked="" type="checkbox"/> 9.	A written statement that the portion of the sewer system used by the connection has adequate capacity to transport the current and anticipated peak flow to the WWTP and that the portion of the sewer system used by the connection is not subject to excessive infiltration or excessive inflow. [Section 8]
10.	Is the receiving WWTP on sewer sanction? (*) <input type="text" value="No"/>

If yes, the following **exemption form** is required.  
The following link lists WWTPs on sanction ([click here](#)).

**Have all the items above been read and considered?(\*)**

No ▼

Upload Checklist File(s)

- (7, 8, 9, 10) Bluegrass Water Utility Operating Co. Utility Services Agreement (SIGNED).pdf
- (6) Project Description.pdf
- (4) R+L CARRIERS - Georgetown, KY -Final Engineering Plans- 2022-08-15.pdf
- (3) Lift Station Calculations & Drawings.pdf
- (1) - USGS Topographic Map.pdf
- (0) EEC Form S-1 - SIGNED.pdf

**IV. Environmental Benefits**

**Check** all the items that apply. Identify the environmental benefit(s) of the project.

<input type="checkbox"/>	Construction of a new sewer lines to service previously non-sewer customers. Number of connections to these customers: <input type="text"/>
<input type="checkbox"/>	Upgrading of existing sewer lines. Reduction of I&I, CSO, or SSO problems.
<input type="checkbox"/>	Elimination of package plant. KPDES Number of the WWTP: <input type="text"/>
<input type="checkbox"/>	Elimination of failing septic tanks. Number removed: <input type="text"/>
<input type="checkbox"/>	Elimination of straight pipe. Number removed: <input type="text"/>
<input checked="" type="checkbox"/>	Other: Provide a brief description in the space below. <input type="text" value="installing oil and water separator, extended water detention and providing soil and erosion control measures"/>

**Have all the items above been read and considered?(\*)**

Yes ▼

**V. Fees**

Check or money order must be made payable to “**Kentucky State Treasurer**” for the total amount. **Fees do not apply** for a municipality, sanitation district, or other publicly owned facility.

Sewer Collection Project Category/Total Amount:(\*)



**Fees do not apply for a municipality, sanitation**

Intermediate Facility: \$400 ▼

**district, or other publicly owned facility.**

**No Payment Required: \$ 0**

(that payment will be or has previously been mailed)

**Small Facility: \$ 200**

(Pump station or sewer line or force main less than 2,500 feet in length)

**Intermediate Facility: \$ 400**

(Pump station or sewer line or force main 2,500 to 5,000 feet in length)

**Large facility: \$ 800**

(Pump station or sewer line or force main more than 5,000 feet in length)

#### VI. Certification

I, the applicant, certify under penalty of law that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment or both for known violations. [Section 2]

Phone Number:(\*)

630-925-1069

Signature:(\*)

Todd Nobles

Signature Date(\*)

08/19/2022

Applicant's Name and Official Title:(\*)

Todd Nobles - Staff Engineer

[Click to Save Values for Future Retrieval](#)

[Continue to Pre-Payment](#)



**Andy Beshear**  
GOVERNOR

**ENERGY AND ENVIRONMENT CABINET**  
**DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 Sower Boulevard  
Frankfort, Kentucky 40601  
Phone: (502) 564-2150  
Fax: 502-564-4245

**Rebecca W. Goodman**  
SECRETARY

**Anthony R. Hatton**  
COMMISSIONER

April 13, 2023

Josiah Cox  
Persimmon Ridge Subd & WWTP  
500 Northwest Plaza Dr Ste 500  
Saint Ann MO 63074

Re: KPDES Application Complete  
KPDES No.: KY0090956  
AI ID: 3955  
Jefferson County, Kentucky

Dear Josiah Cox :

Your Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on April 10, 2023 and a response to a Notice of Deficiency received on April 13, 2023. A completeness review of your permit application has been conducted and your application has been determined to be administratively complete. This means that your application will now be assigned to a technical reviewer. Please be aware that you may be asked to provide additional information to clarify, modify, or supplement your application material. In accordance with 401 KAR 5:075, Section 1 you are being provided written notification that your application has been deemed complete as of the date of this letter.

If you have any questions concerning this matter, please contact 502-782-1363 or by email at [joy.haden@ky.gov](mailto:joy.haden@ky.gov).

Sincerely,

A handwritten signature in black ink that reads "Joy Haden".

Joy Haden  
Surface Water Permits Branch  
Division of Water





**Andy Beshear**  
GOVERNOR

**ENERGY AND ENVIRONMENT CABINET**  
**DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 Sower Boulevard  
Frankfort, Kentucky 40601  
Phone: (502) 564-2150  
Fax: 502-564-4245

**Rebecca W. Goodman**  
SECRETARY

**Anthony R. Hatton**  
COMMISSIONER

April 11, 2023

Persimmon Ridge Subd & WWTP  
72 Persimmon Ridge Dr  
Louisville, KY 40245

Re: KPDES Application Notice of Deficiency  
KPDES No.: KY0090956  
AI ID: 3955  
Jefferson County, Kentucky

Dear Mandy Sappington:

Your Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on April 10, 2023. A completeness review of your permit application has been conducted and your application has been determined to be incomplete. Please complete the deficiencies listed below and return to me at the following address within thirty (30) days of the date of this letter.

**Division of Water, Surface Water Permits Branch**

**ATTN: Joy Haden**

**300 Sower Blvd**

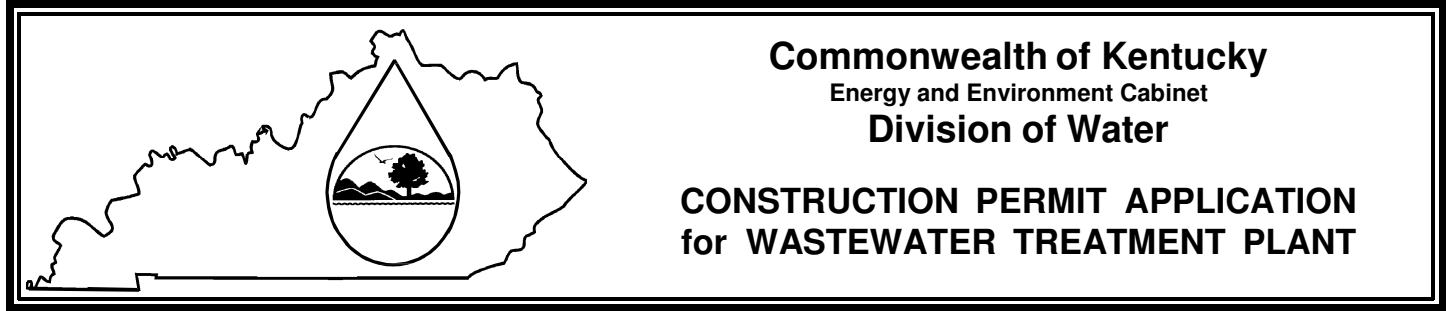
**Frankfort, Kentucky 40601**

1. Form SC: Section IV: Please enter the Population Served and the Total Population Served. This should be the number of individuals in the neighborhood the WWTP serves.
2. Form SC: Section VI: Please enter the Temperature (winter) and Temperature(summer).
3. Form SC: Section VII: Since information has been added to the form, please sign the form again and add the current date.

**Failure to respond within thirty (30) days may result in the Cabinet returning your application to you and retaining fees paid, as per 401 KAR 5:075, Section 15(5).** If you have any questions concerning this matter, please contact 502-782-1363 or by email at [joy.haden@ky.gov](mailto:joy.haden@ky.gov).

Sincerely,

Joy Haden  
Surface Water Permits Branch  
Division of Water



See the INSTRUCTIONS for more information about selected portions of this application.  
 Questions on completing this application? Contact the Water Infrastructure Branch at 502/564-3410 or visit our website at <http://water.ky.gov> for more information.

**I. CONSTRUCTION PROJECT INFORMATION**

Project Name: \_\_\_\_\_  
 Project City/County: \_\_\_\_\_  
 Name of WWTP: \_\_\_\_\_  
 KPDES Number of WWTP, if known (for modifications to an existing plant): KY \_\_\_\_\_  
 Estimated cost of WWTP improvements and sewer line extension: \$ \_\_\_\_\_  
 Project is:  WWTP Only  WWTP with sewer lines  
 Minor Modification to WWTP (Complete only Sections I, II, IV A, B, C, E3, H1, VII, VIII)

**II. APPLICANT INFORMATION**

Applicant (Entity paying for construction): \_\_\_\_\_ E-mail: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Will ownership be transferred?  Yes. Name of new owner: \_\_\_\_\_  No

**III. PRELIMINARY SUBMITTAL**

Has a Preliminary Submittal been made with all the information in this section? [See 401 KAR 5:005, Section 3]  
 Yes. Name of project: \_\_\_\_\_  
 County and Location of project, then skip to next section: \_\_\_\_\_  
 No. Provide the information below that has not been previously submitted (use additional pages, as necessary). Place a **check** (✓) by the items included in the application or an **N/A** if the item is not applicable to the project.  
 \_\_\_ A. A copy of a 7½ minute USGS topographic map, with the WWTP, any proposed sewer lines, service area, and discharge location identified.  
 \_\_\_ B. For a WWTP located within a planning area, a letter from the regional or facility planning agency stating the proposed WWTP is compatible with the regional facility plan or the water quality management plan.  
 \_\_\_ C. For a WWTP located within a planning area, a demonstration that a connection to the regional facility is not available.  
 \_\_\_ D. For a regional WWTP, a water quality management plan that is in compliance with **401 KAR 5:006**.

## IV. DESIGN CONSIDERATIONS

### A. PLANS AND SPECIFICATIONS.

Design plans and specifications shall comply with 401 KAR 5:005 and "Recommended Standards for Wastewater Facilities" ("Ten States' Standards") 2014 edition. If engineering practices, other than those contained in "Ten States' Standards", were used in the design, indicate the source and the corresponding portion of the design. **[See 401 KAR 5:005, Section 7]**

**Plans and specifications submittals shall meet on of the following options:**

Submit at least one paper printed set of detailed plans (no larger than 24" x 36") and a PDF copy of the plans and specifications on a data storage device such as a USB flash drive. Both copies shall be dated with a stamp, signature of a licensed professional engineer in Kentucky which complies with the requirements of 201 KAR 18:104. The digital plans shall consist of a single pdf file and be in a folder called "Engineering Plans" and the specifications manual shall be in a folder called "Specifications".

Submit a PDF copy of the plans and specifications digitally via the electronic form on the KY One Stop Business Portal website. The PDF copy shall be dated with stamp and signature of a licensed engineer in Kentucky which complies with the requirements of 201 KAR 18:104 Section 3. The plans shall be submitted as a single pdf file.

**B. DESIGN ENGINEER,** if the WWTP design capacity is greater than 10,000 gpd or if the sewer lines associated with the WWTP will become part of a sewer system served by a regional facility. **[Section 6]**

P.E.'s Name: \_\_\_\_\_ Firm: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

**C. CONFORMITY TO PLANS AND SPECIFICATIONS.** Provide name of person who will inspect and certify that the constructed facility conforms to the approved plans and specifications. If the WWTP's design capacity is greater than 10,000 gpd, or if the sewer lines will become part of a sewer system served by a regional facility, this person must be a professional engineer (P.E.). **[Section 3]**

Name: \_\_\_\_\_ Firm: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

**D. DESIGN CAPACITIES.** Provide the following design capacities, in million gallons per day or pounds per day. **[Section 3]**

Average Daily Flow: \_\_\_\_\_ MGD    Influent BOD: \_\_\_\_\_ lb/day

Peak Daily Flow: \_\_\_\_\_ MGD    Influent SS: \_\_\_\_\_ lb/day

Peak Hourly Flow: \_\_\_\_\_ MGD    Influent NH<sub>3</sub>-N: \_\_\_\_\_ lb/day

**E. Design Criteria.** Provide the following information (use additional pages, as necessary). Place a **check (✓)** by the items included in the application or an **N/A** if the item is not applicable to the project.

\_\_\_\_ 1. A schematic drawing of the facility layout and explanation of the proposed facility and method of operation. **[Section 3]**

\_\_\_\_ 2. WWTP's Reliability Category, Grade A, B, or C: \_\_\_\_\_. Include a detailed description of the reliability measures that will be used for the WWTP. **[Sections 3 and 13]**

3. A discussion of the design criteria used to size the unit processes. **[Section 3]**

**F. LABORATORY SERVICES.** Give name of laboratory that will provide services for self-monitoring and process control. **[Section 3]**

Firm Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

- G. SITE LOCATION.** Place a **check (✓)** by the items that are included in this application or an **N/A** if the item is not applicable to the project.
- \_\_\_ 1. Include a plat or survey clearly indicating the site's boundaries, position of proposed facility in reference to the boundaries, and position of dwellings within 200 feet of the WWTP. **[Section 3]**
  - \_\_\_ 2. If an open-top WWTP is closer than 200 feet to the closest dwelling, include what structure or other measures will be used for noise and odor control. **[Section 4]**
  - \_\_\_ 3. For a WWTP with a spray irrigation system, if the distance from the spray field to the property boundary is less than 20 feet, include what protective measures will be used to inhibit spray from crossing property boundary. **[Section 21]**

- H. OTHER INFORMATION TO BE SUBMITTED WITH APPLICATION.** Place a **check (✓)** by the items that are included in this application or an **N/A** if the item is not applicable to the project.
- 1. If modifying or replacing an existing WWTP or sewer line, a closure plan indicating how the new facility will be constructed without a by-pass to a stream and the procedures that will be used for abandoning the existing facility. **[Section 3]**
  - \_\_\_ 2. A Sludge Management Plan for WWTPs, including the sludge processing method and how sludge will be ultimately disposed. **[Section 3]**
  - \_\_\_ 3. If the discharge point does not coincide with a blue line on a USGS map, a copy of a recorded deed, recorded other right of ownership, or recorded right of easement for a corridor to the nearest blue line stream. **[Section 3]**
  - \_\_\_ 4. A description of and detailed specifications for the flow measuring device. **[Section 7]**
  - \_\_\_ 5. If the WWTP discharges to a sinkhole or sinking stream, a plan for a groundwater tracer study (or a previously conducted groundwater tracer study). **[Section 4]**

**V. SEWER LINES**

- Include the following items for projects that include sewer lines. If project is for only a WWTP, skip to next section.** Place a **check (✓)** by the items that are included in this application or **N/A** if the item is not applicable to the project.
- \_\_\_ A. If the project includes a pump station, the pump performance curve. **[Section 8]**
  - \_\_\_ B. If the project includes gravity sewer lines or force mains, a plan view and profile view for each. **[Section 6]**
  - \_\_\_ C. A demonstration that the sewer system has adequate capacity to treat the current and the anticipated flow to the WWTP and that the sewer system is not subject to excessive infiltration or excessive inflow. **[Section 8]**
  - \_\_\_ D. A demonstration that the WWTP has adequate capacity to transport the anticipated flow to the WWTP and the WWTP is not subject to excessive infiltration or excessive inflow. **[Section 8]**

**VI. OTHER REQUIRED APPLICATIONS**

- \_\_\_ A. If the WWTP has a discharge, complete and file with this application: KPDES Application (KPDES Form 1); and Form A, B, C, or Short Form C, as applicable.
- \_\_\_ B. If the WWTP does not have a discharge, complete and file with this application the "No Discharge Operating Permit Application, Form ND."


**VII. FEES**

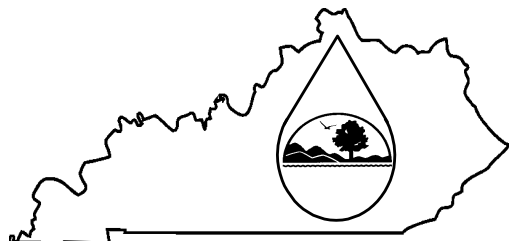
**Fees.** Check or money order must be made payable to "**Kentucky State Treasurer**" for the total amount. **Fees do not apply** for a municipality, sanitation district, or other publicly owned facility. **[Section 5]**

WWTP Category:	_____	Amount:	\$ _____
Sewer Line Category:	_____	Amount:	\$ _____
		<b>Total Amount:</b>	\$ _____

**VIII. CERTIFICATION**

I, the applicant, certify under penalty of law that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment or both for known violations. **[Section 2]**

<b>Applicant's Name and Official Title (Type or Print)</b>	<b>Phone Number (Include area code)</b>
<b>Signature</b> 	<b>Date</b>



**Commonwealth of Kentucky**  
Energy and Environment Cabinet  
**Division of Water**

**CONSTRUCTION PERMIT APPLICATION  
for CLEAN WATER COLLECTION SYSTEM**

See the INSTRUCTIONS for more information about selected portions of this application.

Questions on completing this application? Contact the Water Infrastructure Branch at 502/564-3410 or visit our website at <http://water.ky.gov> for more information.

**I. CONSTRUCTION PROJECT INFORMATION**

Project Name: R & L Carriers - Georgetown

Name of WWTP which will treat sewage from this project: Delaplain Disposal Co.

KPDES Number of the WWTP: KYKY0079049 WWTP County: Scott

Name of Receiving Collection System (if different than WWTP): \_\_\_\_\_

KPDES Number of Receiving Collection System (if applicable): KY Project County: \_\_\_\_\_

Project Latitude/Longitude (DMS): 38.270686,-84.550502 Estimated Construction Cost: \$95,000

Identify the funding sources for the project:

CWSRF  SPAP  Other: Private

If the project is SRF, is the SRF Plans and Specs Checklist included? \_\_\_\_\_

**II. APPLICANT MAILING ADDRESS**

Applicant (Entity paying for construction): R & L Investments L.L.C.

Street Address: 600 Gillam Road P.O. Box 800

City, State, Zip: Wilmington, Ohio 45177

Phone: 937-603-3900 Fax: 937-655-2110 E-mail: srichards@rlcarriers.com

Will ownership be transferred?  Yes, future owner will be: \_\_\_\_\_  No

**III. DESIGN CONSIDERATIONS**

**A. PLANS AND SPECIFICATIONS COMPLIANCE REQUIREMENTS:**

Design plans and specifications shall comply with **401 KAR 5:005** and “**Recommended Standards for Wastewater Facilities**” (“**Ten States’ Standards**”), 2014 edition. If engineering practices, other than those contained in “Ten States’ Standards”, were used in the design, indicate the source and the corresponding portion of the design. [See **401 KAR 5:005, Section 7**]

**Plans and specification submittals shall meet one of the following options:**

- Submit at least one paper printed set of detailed plans (no larger than 24" x 36") and a PDF copy of the plans and specifications on a data storage device such as a USB flash drive. Both copies shall be dated with a stamp, signature of a licensed professional engineer in Kentucky which complies with the requirements of 201 KAR 18:104. The plans digital plans shall consist of a single pdf file and be in a folder called "Engineering Plans" and the specifications manual shall be in a folder called "Specifications".
- Submit a PDF copy of the plans and specifications digitally via the electronic form on the KY One Stop Business Portal website. The PDF copy shall be dated with stamp and signature of a licensed engineer in Kentucky which complies with the requirements of 201 KAR 18:104 Section 3. The plans shall be submitted as a single pdf file.

**B. DESIGN ENGINEER**, if the project will become part of a sewer system served by a regional facility. **[Section 6]**

P.E.'s Name: Joe Iovinelli Firm: Manhard Consulting  
 Street Address: 700 Springer Drive  
 City, State, Zip: Lombard, Illinois 60148  
 Phone: 630-925-1110 Fax: \_\_\_\_\_ E-mail: jiovinelli@manhard.com

**C. CONFORMITY TO PLANS AND SPECIFICATIONS.** Provide name of person who will inspect and certify that the constructed facility conforms to the approved plans and specifications. If the sewer lines will become part of a sewer system served by a regional facility, this person must be a professional engineer (P.E.). **[Section 3]**

Name: Joe Iovinelli Firm: Manhard Consulting  
 Street Address: 700 Springer Drive  
 City, State, Zip: Lombard, Illinois 60148  
 Phone: 630-925-1110 Fax: \_\_\_\_\_ E-mail: jiovinelli@manhard.com

**D. DESIGN CAPACITIES.** The amount of average daily flow added by the sewer line extension is 7600 gpd. The basis for the amount of additional flow is New Sanitary Sewer Lines to service site

**E. OTHER INFORMATION TO BE SUBMITTED WITH APPLICATION.** Place a **check (✓)** by the items that are included in this application or an **N/A** if the item is not applicable to the project.

- 1. A copy of a USGS 7½ minute topographic map with the locations of the proposed sewer lines shown. **[Section 3]**
- N/A  2. If modifying, replacing or abandoning an existing facility, a closure plan indicating how the new facility will be constructed without a by-pass to a stream and the procedures that will be used for abandoning the existing facility. **[Section 3]**
- 3. If the project includes a pump station, provide the pump performance curve, design calculations, and detailed wet well drawing with elevations. **[Section 8]**
- 4. If the project includes gravity sewer lines or force mains, a plan view and a profile view of each. **[Section 6]**
- N/A  5. A model of the hydraulic analysis if the project consists of, or is connected to a network of pumps. **[Section 8]**
- 6. A brief description of the project, including what is being constructed, who will be served by this project, the flow rate, and the flow rate calculations. **[Section 8]**
- 7. A signed letter from the owner of the proposed sewer line stating that the owner will accept responsibility for



the operation and maintenance of the sewer line when it is constructed. **[Section 8]**



8. Letters from both the owner of the sewer system and the WWTP stating that they approve the connection and accept responsibility for the additional flow. **[Section 8]**



9. A written statement that the portion of the sewer system used by the connection has adequate capacity to transport the current and anticipated peak flow to the WWTP and that the portion of the sewer system used by the connection is not subject to excessive infiltration or excessive inflow. **[Section 8]**

10. A written statement that the WWTP has adequate capacity to treat the current and anticipated flow and is not subject to excessive infiltration or excessive inflow. **[Section 8]**

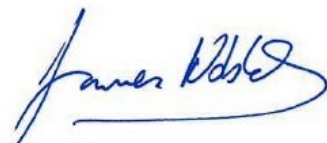
**IV. Fees**

**Fees.** Check or money order must be made payable to “**Kentucky State Treasurer**” for the total amount. **Fees do not apply** for a municipality, sanitation district, or other publicly owned facility. **[Section 5]** If claiming Non-Profit status, provide proof.

**Sewer Collection Project Category:** Small Facility : Sewer Lines                      **Total Amount:** \$ 200.00

**VI. CERTIFICATION**

I, the applicant, certify under penalty of law that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment or both for known violations. **[Section 2]**

<p><b>Applicant’s Name and Official Title (Type or Print)</b> Todd Nobles</p>	<p><b>Phone Number (Include area code)</b> 630-925-1069</p>
<p><b>Signature</b></p> 	<p><b>Date</b> 9-22-2022</p>

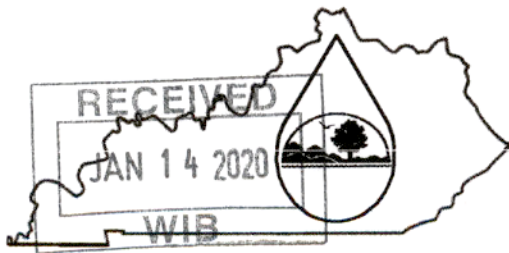


# Scanning Batch Sheet

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Show Form





Commonwealth of Kentucky  
Energy and Environment Cabinet  
Division of Water

CONSTRUCTION PERMIT APPLICATION  
for CLEAN WATER COLLECTION SYSTEM

See the INSTRUCTIONS for more information about selected portions of this application.

Questions on completing this application? Contact the Water Infrastructure Branch at 502/564-3410 or visit our website at <http://water.ky.gov> for more information.

I. CONSTRUCTION PROJECT INFORMATION

Project Name: Persimmon Ridge Golf Section 19 Sewer Extension

Name of WWTP which will treat sewage from this project: Persimmon Ridge WWTP

KPDES Number of the WWTP: KY0 090956 WWTP County: Shelby

Project County: Shelby

Project Latitude/Longitude (DMS) 38-17-42.53N / 85-26-28.05W

Estimated construction cost of this project: \$ 75,000

Is this a funded project:

CWSRF  SPAP  Other: \_\_\_\_\_

If the answer is yes, provide applicable funding checklist.

II. APPLICANT MAILING ADDRESS

Applicant (Entity paying for construction): Persimmon Ridge Development

Street Address: 72 Persimmon Ridge Drive

City, State, Zip: Louisville, KY 40245

Phone 502-419-4797 Fax \_\_\_\_\_ E-mail lajust@persimmonridgedevelopment.com

Will ownership be transferred?  Yes, future owner will be: Bluegrass Water  No

III. DESIGN CONSIDERATIONS

A. PLANS AND SPECIFICATIONS COMPLIANCE REQUIREMENTS:

Design plans and specifications shall comply with **401 KAR 5:005** and "Recommended Standards for Wastewater Facilities" ("Ten States' Standards"). If engineering practices, other than those contained in "Ten States' Standards", were used in the design, indicate the source and the corresponding portion of the design. [ **401 KAR 5:005 Section 7** ]

For plans submitted to this office, one set of plans must have an original signed and dated P.E. stamp. The additional plan sets must have either an original signature and dated stamp, or a legible facsimile thereof. SRF funded projects shall include at least 1 printed copy of specifications.

**Plan and specification submittals shall meet one of the following options:**

       At least **one** paper printed set of detailed plans (no larger than 24" X 36") **and** a PDF copy of plans and specifications on CD/DVD. The PDF copy shall contain a stamp, signature, and date. The plans on the CD/DVD shall be in a folder called "Engineering Plans" and the specifications manual shall be in a folder called "Specifications".

  X   At least **2** paper printed sets of detailed plans (one shall be no larger than 24" X 36" and the other set shall be 11" X 17") and **one** paper copy of the specifications manual.

**B. DESIGN ENGINEER**, if the sewer lines will become part of a sewer system served by a regional facility. **[Section 6]**

P.E.'s Name/Firm: Will Hagan - Kerry P. Magan Consulting Engineers, PLC

Street Address: 506 Main Street

City, State, Zip: Shelbyville, KY 40065 Phone: (502)633-4365 E-mail haganengineering@gmail.com

**C. CONFORMITY TO PLANS AND SPECIFICATIONS.** Provide name of person who will inspect and certify that the constructed facility conforms to the approved plans and specifications. If the sewer lines will become part of a sewer system served by a regional facility, this person must be a professional engineer (P.E.). **[Section 3]**

Name/Firm: Same as above

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_ E-mail \_\_\_\_\_

**D. DESIGN CAPACITIES.** The amount of average daily flow added by the sewer line extension is 1076 gpd. The basis for the amount of additional flow is 269 gallons per day per house with 4 new homes proposed to connect.

**E. OTHER INFORMATION TO BE SUBMITTED WITH APPLICATION.** Place a **check (x)** by the items that are included in this application or an **N/A** if the item is not applicable to the project.

  X   1. A copy of a USGS 7½ minute topographic map with the locations of the proposed project shown. **[Section 3]**

  N/A   2. If modifying, replacing or abandoning an existing facility, a closure plan indicating how the new facility will be constructed without a by-pass to a stream and the procedures that will be used for abandoning the existing facility. **[Section 3]**

  N/A   3. If the project includes a pump station, provide the pump performance curve, design calculations, and detailed wet well drawing with elevations. **[Section 8]**

  X   4. If the project includes gravity sewer lines or force mains, a plan view and a profile view of each. **[Section 6]**

  N/A   5. A model of the hydraulic analysis if the project consists of, or is connected to a network of pumps. **[Section 8].**

  X   6. A brief description of the project, including what is being constructed, who will be served by this project, the flow rate, and flow rate calculations. **[Section 8]**

  X   7. A signed letter from the owner of the proposed sewer line stating that the owner will accept responsibility for the operation and maintenance of the sewer line when it is constructed. **[Section 8]**

  X   8. A signed letters from both the owner of the receiving sewer system and the WWTP stating that they approve the connection and accept responsibility for the additional flow. **[Section 8]**

  X   9. A written statement that the portion of the sewer system used by the connection has adequate capacity to transport the current and anticipated peak flow to the WWTP and that the portion of the sewer system used by the connection is not subject to excessive infiltration or excessive inflow. **[Section 8]**

  N/A   10. A completed sewer sanctions exemption request form has to be submitted, if the receiving WWTP for this

project is on sewer sanction. (Required only when additional flow is added). **[Section 9]**

#### IV. Environmental Benefits

Check all the items that apply. Identify the environmental benefit(s) of the project.

- Construction of a new sewer lines to service previously non-sewer customers. Number of connections to these customers. \_\_\_\_\_
- Upgrading of existing sewer lines. Reduction of I&I, CSO, or SSO problems.
- Elimination of package plant. KPDES Number of the WWTP: KY0 \_\_\_\_\_
- Elimination of failing septic tanks. Number removed \_\_\_\_\_
- Elimination of straight pipe. Number removed \_\_\_\_\_
- Other: Provide a brief description in the space below.  
Private development for 3 new buildable tracts.

#### V. Fees

**Fees.** Check or money order must be made payable to "Kentucky State Treasurer" for the total amount. **Fees do not apply** for a municipality, sanitation district, or other publicly owned facility. **[Section 5]** If claiming Non-Profit status, provide proof.

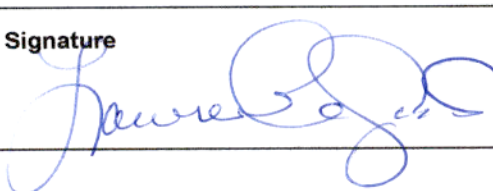
Sewer Collection Project Category: small

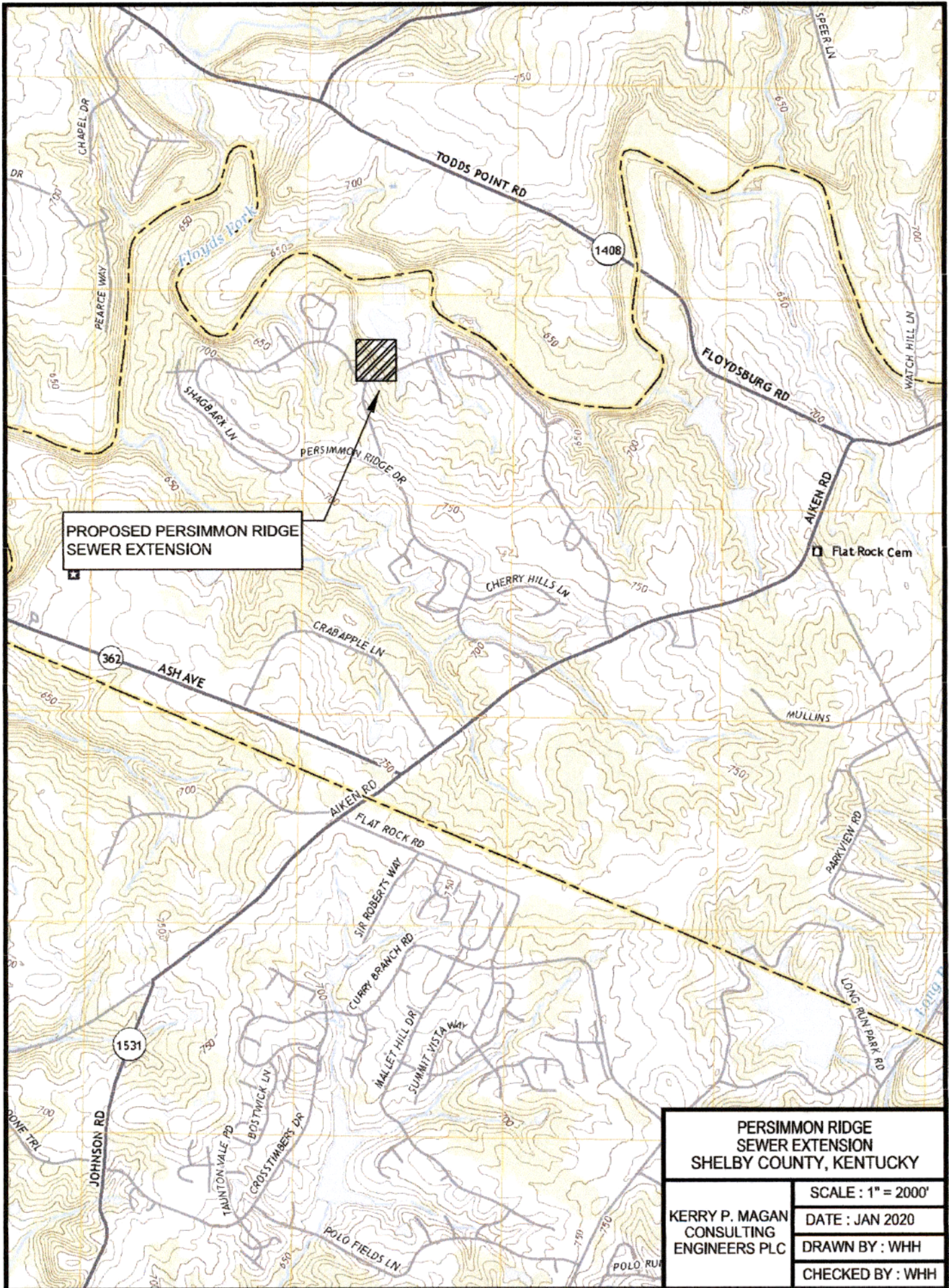
**Total Amount: \$** 200

#### VI. CERTIFICATION

I, the applicant, certify under penalty of law that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment or both for known violations.

**[Section 2]**

<b>Applicant's Name and Official Title (Type or Print)</b> Lawren Just, President	<b>Phone Number (Include area code)</b> (502) 419-4797
<b>Signature</b> 	<b>Date</b> 1/13/20



**PROPOSED PERSIMMON RIDGE  
SEWER EXTENSION**

<b>PERSIMMON RIDGE SEWER EXTENSION SHELBY COUNTY, KENTUCKY</b>	
<b>KERRY P. MAGAN CONSULTING ENGINEERS PLC</b>	<b>SCALE : 1" = 2000'</b>
	<b>DATE : JAN 2020</b>
	<b>DRAWN BY : WHH</b>
	<b>CHECKED BY : WHH</b>

**Persimmon Ridge Section 19 Sewer Extension**  
**Shelby County, KY**  
**Project Description and Hydraulic Analysis – January 2020**

**PROJECT DESCRIPTION:**

This project proposes an 1,150 LF 8" PVC gravity sewer extension to pick up 4 new homes in Persimmon Ridge Golf Course Development. Four pre-cast concrete manholes are proposed for this extension and the project will begin at an existing manhole. (see attached USGS exhibit)

**SEWER CALCULATIONS:**

4 proposed new home sites @ 269gpd = 1,076gpd

1,076gpd = 0.75gpm x peak factor of 4 = 3.00 gpm peak flow

The 8" PVC gravity sewer for this project maintains a minimum slope of approximately 0.50%. At that slope, the pipe is capable of handling 498gpm, thus exceeding design requirements.



# BLUEGRASS WATER

Utility Operating Company

A CSWR Managed Utility

Mr. Terry Humphries, P.E.  
Supervisor, Engineering Section  
Water Infrastructure Branch  
Division of Water  
300 Sower Blvd, 3rd Floor  
Frankfort, Ky. 40601

RE: Sanitary Sewer Line Extension: Persimmon Ridge Golf Course (4 unit single family development)

Dear Mr. Humphries:

Bluegrass Water Utility Operating Company has reviewed and approved the plans and accepts the design for this sewer extension.

The Persimmon Ridge sanitary sewer system has the capacity to transport the additional flow to the WWTF and the portion of the sewer system used by this connection is not subject to excessive infiltration or excessive inflow. Additionally, the Persimmon Ridge WWTF has enough excess capacity to handle the additional flow from the proposed development. We will accept responsibility for the additional flow.

Bluegrass Water Utility Operating Company shall take over the lines upon completion of the project and accept all future operation and maintenance responsibilities.

Sincerely,

Jonathan Meany, Utility Engineer

Phone: 314-482-0342

Fax: 314-736-4743

Bluegrass Water Utility Operating Company

**KERRY P. MAGAN CONSULTING ENGINEERS, PLC**  
**506 Main Street**  
**Shelbyville, KY 40065**  
**Phone: (502) 633-4365**  
**Fax: (502) 633-1374**

**LETTER OF TRANSMITTAL**

Date	1/14/2020	Project
Name	Terry Humphries, PE	
RE:	Persimmon Ridge Section 19 Sewer Extension	
	Shelbyville Mun. Water and Sewer Commission	
	Shelby County, KY	

TO Division of Water  
300 Sower Lane, 3rd Floor  
Frankfort, KY 40601

WE ARE SENDING YOU  Attached  Under Separate Cover Via: \_\_\_\_\_ the following items:

Shop Drawings  Prints  Plans  Samples  Specifications

Copy of Letter  Change Order  \_\_\_\_\_

COPIES	DATE	NO.	DESCRIPTION
1	Jan-20		S-1 Construction Permit and Check
1	Jan-20		USGS Exhibit
1	Jan-20		Project Description with Flow and Pipe Calculations
1	Jan-20		Letter from Owner
2	Jan-20		11x17 Plan Set

THESE ARE TRANSMITTED as checked below:

- For Approval  Approved as Submitted  Resubmit \_\_\_ Copies for Approval
- For Your Use  Approved as Noted  Submit \_\_\_ Copies for Distribution
- As Requested  Returned for Corrections  Return \_\_\_ Corrected Prints
- For Review and Comment  \_\_\_\_\_
- FOR BIDS DUE \_\_\_\_\_  PRINTS RETURNED AFTER LOAN TO US

REMARKS

Techincal specifications for the project are on the attached plan detail sheet.

COPY TO: Ms. Lawren Just, President PRG  
File

SIGNED: Will Hagan, PE

*If enclosures are not as noted, kindly notify us at once*



COMMONWEALTH OF KENTUCKY  
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
DIVISION OF WATER  
FRANKFORT, KENTUCKY 40601

**PERMIT TO WITHDRAW PUBLIC WATER**

Permit Number: 1173

Issued to : Longview Country Club  
3243 Frankfort Pike  
Georgetown, Kentucky 40324

The Natural Resources and Environmental Protection Cabinet authorizes the above named party to withdraw Public Water of the Commonwealth of Kentucky. This permit has been issued under provisions of KRS Chapter 151.140 and 151.150 and regulations promulgated with respect to the withdrawal of public waters. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet, or other state, federal or local agencies. Withdrawals are restricted to the stated quantities, times and locations specified below. This permit represents a limited right of use and does not vest ownership nor absolute right to withdrawal or use of Public Water, nor does it guarantee that requested amounts will be available for use at all times. In times of drought or emergency, the Cabinet may temporarily alter the conditions of the permit. Any violation of the Water Resources Act of 1966 as amended is subject to penalties as set forth in KRS 151.990 and other applicable provisions of law.

The location of the authorized water withdrawal is as follows:

Withdrawals from Longview Golf Course Lake #1 at RMI 0.4 of an unnamed tributary of North Elkhorn Creek, Scott County -- latitude 38°13'12", longitude 84°39'59".

Water withdrawals are limited to the following rates from the specified location:

Jan. -0- MGD	Apr. -0- MGD	July 0.055 MGD	Oct. 0.055 MGD
Feb. -0- MGD	May 0.055 MGD	Aug. 0.055 MGD	Nov. -0- MGD
Mar. -0- MGD	June 0.055 MGD	Sept. 0.055 MGD	Dec. -0- MGD

**Limitations to this permit are as follows:** Withdrawal rates must be accurately measured by meter or other device, as approved by the Cabinet.

Issued: July 31, 1991

Latest Revision: \_\_\_\_\_

*A. Leon Amother*

Manager, Water Resources Branch  
Division of Water

CARL H. BRADLEY  
SECRETARY



WALLACE G. WILKINSON  
GOVERNOR

COMMONWEALTH OF KENTUCKY  
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
FRANKFORT OFFICE PARK  
18 REILLY ROAD  
FRANKFORT, KENTUCKY 40601

July 31, 1991

ATTN: Pat Winch  
Longview Country Club  
3242 Frankfort Pike  
Georgetown, KY 40324

Dear Mr. Winch:

This letter accompanies water withdrawal permit #1173, which allows for withdrawals from the club's lake that adjoins their golf course, in Scott County.

KRS 151.160 requires all permit holders to keep a record of all water withdrawn and to submit this information to the Division of Water in a manner prescribed by this Department. At present, we send special reporting forms to permit holders in June and December of each year. According to your application, you are the person who is to be responsible for completing these forms. Therefore, you should record withdrawals on these forms and return them to this office. Withdrawal amounts reported must be accurately measured by meter or mechanical time totalizer, sonic, photoelectric or other device as approved by the Cabinet.

If average monthly withdrawal amounts begin to exceed permitted amounts, or if there is any change in location of withdrawal site, you must contact this office immediately and request revision of this permit.

The issuance of this permit does not release you from the obligation of obtaining any and all other permits which may be required by this Division or other regulatory agencies.

Thank you for your application. Your cooperation is appreciated. If you have any questions, please contact Carol Moore at (502) 564-3410.

Sincerely,

A handwritten signature in cursive script that reads "A. Leon Smothers".

A. Leon Smothers, Manager  
Water Resources Branch  
Division of Water

ALS:CM:els

cc: Brent Combs



## UTILITY SERVICES AGREEMENT

This agreement to provide sewer utility services ("Agreement") is entered into this \_\_\_\_ day of \_\_\_\_\_, 2022 between **BLUEGRASS WATER UTILITY OPERATING COMPANY, LLC, a Kentucky limited liability company** ("Utility") and **RAMAR LAND CORPORATION, an Ohio corporation**, ("Developer") (each a "Party" and jointly "the Parties").

**WHEREAS**, Utility is a limited liability company, organized and existing under the constitution and the laws of the State of Kentucky, with all the requisite power necessary to enter into the Agreement;

**WHEREAS**, Developer is a corporation, organized and existing under the constitution and the laws of the State of Ohio, with all the requisite power necessary to enter into the Agreement;

**WHEREAS**, Developer has acquired or will acquire property in the State of Kentucky, County of Scott, being known as R+L Carriers - Georgetown (hereinafter "the Property"), as set out herein on **EXHIBIT A**, attached hereto and incorporated herein; and

**WHEREAS**, Developer desires, in accordance with applicable state and local zoning and development regulations, to provide all buildings within the Property with central sewer service; and

**WHEREAS**, Utility is authorized to provide sewer service to the area where the Property is located and desires to own and operate sewer facilities and equipment constructed or installed by Developer to serve structures within the Property;

**NOW THEREFORE**, for the consideration expressed in the Agreement and subject to all its terms and conditions, the sufficiency of which is hereby acknowledged, the Parties contract and agree as follows:

### **1. DEFINITIONS**

- 1.1 **"Accepted Sewage"** means domestic sewage such as sewage from residences, office buildings, motels, restaurants and other commercial uses, but expressly excludes: (i) all substances that will damage, clog, or adversely affect lines and facilities owned or operated by Utility, (ii) industrial or toxic wastes, (iii) any other wastes that Utility (or any governmental agency) determines Utility's sewage treatment facilities (and its lines or other facilities) cannot handle, and (iv) storm and rain water.
- 1.2 **"Environmental Regulator"** means all state or local governmental agencies regulating the construction of Infrastructure (herein defined) within the Property.
- 1.3 **"Final Property Plan"** means the as-recorded official and fully-approved (if governmental approvals are required) map and plat of the Property.
- 1.4 **"Infrastructure"** means:  
Sewer infrastructure including but not limited to, lines, pipes, conduit, tubing, systems, pumps, lift stations, tanks and structures, mechanical apparatus, and facilities constructed, placed, or located by Developer for the receipt and transmission of sewage from the Property.

- 1.5 **“Services”** means:  
Sewer services, which is the receipt and treatment of Accepted Sewage by Utility from structures within the Property.
- 1.6 **“User”** means a customer utilizing Services within the Property.
- 1.7 **“Utility Construction Requirements”** means Utility’s construction specifications, notes and details for Infrastructure for the Property.

## 2. SEWER SYSTEM

- 2.1 Developer shall design and construct, at its sole expense, all Infrastructure within the Property in accordance with engineering plans and specifications of the Developer's engineer prepared in accordance with all applicable governmental standards and regulations and Utility’s Utility Construction Requirements. Plans and specifications shall be submitted to Utility for review, and must have received Utility’s written approval before construction begins, which approval shall not be reasonably withheld or delayed.
- 2.2 All Infrastructure shall be constructed by a contractor that is selected by Developer and approved by Utility prior to beginning construction, which approval shall not be unreasonably withheld or delayed. The contractor must hold all required state and local licenses and, if required by Utility, must produce a valid Certificate of Insurance showing Utility as an additional insured during construction of the Infrastructure.
- 2.3 Developer must submit, at no charge to Utility, all construction plans and specifications for the Infrastructure. The plans submitted in accordance with this section shall be Developer's plans which have received all required governmental approvals.
- 2.4 Upon completion of the Infrastructure, Developer must submit to Utility, at no charge, three (3) sets of "As Built" construction plans and specifications as well as an electronic copy of all plans in a format acceptable to Utility.

## 3. EASEMENTS AND REAL PROPERTY

- 3.1 By its execution of the Agreement, Developer grants, conveys, sets over, and assigns unto Utility a non-exclusive easement of use and passage within all utility easements, rights of ways, and streets within the Property as shown on the final subdivision plan or similar document. The easement of passage shall be used by Utility exclusively in connection with the maintenance, construction, and operation of the Infrastructure within the Property. Notwithstanding the foregoing, Developer further agrees to execute assignments, easements, and any additional documents requested by Utility in order to memorialize this grant of easement.
- 3.2 Developer agrees to add the following wording to the final subdivision plan or similar document as recorded in the official real estate records of each county/parish where the Property is located: Bluegrass Water Utility Operating Company, LLC its successors and assigns, is hereby granted the right to construct, maintain, and provide sewer services

within the street rights of way, both public and private, and easements set forth herein and/or hereafter granted and is further granted the exclusive right to provide sewer services as a non-public, investor-owned utility. No single structure sewage treatment may be constructed while sewer service is available from Bluegrass Water Utility Operating Company, LLC

- 3.3** Upon completion and acceptance by Utility of the facilities to be constructed and installed by Developer in accordance with the Agreement, all Infrastructure shall become the property of Utility, as installed and without the requirement of written documents of transfer. Utility shall own, operate, and maintain such facilities at its sole cost and responsibility and shall have all right, title, and interest as sole owner of those facilities. Notwithstanding the foregoing, Developer shall execute a deed(s), bill of sale and/or other documents reasonably requested by Utility as necessary or desirable, in its sole opinion, to convey to Utility and ensure Utility's ownership of, ready access to, and operations and maintenance of the Infrastructure.

#### **4. WARRANTIES AND REPRESENTATIONS**

- 4.1** Upon final acceptance and transfer to Utility of the Infrastructure at Closing (hereinafter defined), Utility will provide Services to Users within the Property.
- 4.2** Upon final acceptance and transfer to Utility of the Infrastructure at Closing, Utility agrees to indemnify and hold harmless Developer from all liability for Services provided to Users.
- 4.3** Developer represents that the Infrastructure is free of real property tax liens, federal or state tax liens, judgment liens, utility liens, assessment liens and that Utility take the Property free of any liens, mortgages, pledges, leases, options, rights of first refusal, conditional sales agreements, encumbrances or other charges. Developer further agrees to indemnify and hold harmless Utility from any and all liability related to construction and transfer of the Infrastructure, including but not limited to all liens and encumbrances that may be filed and/or attached to the Infrastructure at the time of their transfer to Utility in accordance with the Agreement and agrees to cure any title issues related to the same, at the sole cost of Developer.

#### **5. RIGHTS & OBLIGATIONS OF UTILITY AND DEVELOPER**

- 5.1** Following final transfer of the Infrastructure at Closing, Utility shall be entitled to charge monthly user fees and connection fees for Services within the Property as set and established by state utility regulatory authorities.
- 5.2** Prior to Closing, Developer or Developer's engineer shall inspect the Infrastructure within the Property during construction and shall be responsible for notifying Utility of any and all deviations from the plans and specifications approved by Utility for construction of the Infrastructure.

- 5.3 Prior to Closing, Developer or Developer's approved contractor shall lamp test or smoke test the Infrastructure related to the sewer system at the cost and expense of Developer. A field supervisor from Utility must be present for all testing.
- 5.4 Prior to Closing, Developer shall deliver to Utility a certification from its approved contractor that the Infrastructure related to the sewer system and its connection to Utility's sewer system has been performed in accordance with the approved plans and specifications and is ready for domestic use.
- 5.5 Prior to Closing, and upon substantial completion of the Infrastructure within the Property, Developer or Developer's approved contractor shall provide a notice of completion to Utility that all work has been substantially completed in accordance with the approved plans and specifications, and further certifying the Infrastructure have been tested in accordance with this section and are approved for use. Utility shall have a period of **fourteen (14) days** from the date of such notice and receipt of the as-built drawings from Developer's approved contractor to provide Developer a written list of any objections or defects of the Infrastructure. In the event Utility provides a notice and listing of objections and defects within the time specified, then Developer shall have a reasonable period of time within which to take such corrective measures as may be necessary to remove such objections and defects. The standard for any review of objections and defects of the Infrastructure shall be the plans and specifications for Infrastructure approved by Utility. Developer shall provide notice to Utility of completion of work required to remove all objections and defects set forth in Utility's notice, and thereafter Utility shall have **seven (7) days** within which to provide notice of any additional defects or objections to the Infrastructure. This process of notification by Utility and corrective action by Developer shall continue until all defects and objections have been remedied or corrected to the reasonable satisfaction of Utility.
- 5.6 Upon the transfer from Developer to Utility in accordance with this section, all warranties Developer may have from vendors, manufacturers, contractors, or subcontractors in connection with construction of the Infrastructure shall be assigned and transferred to Utility. Developer further agrees to execute an assignment and any additional documents requested by Utility in order to memorialize this transfer and assignment of warranty.
- 5.7 Each Party agrees to provide reasonable support and assistance required by the other Party to secure governmental approvals, authorizations, and certificates necessary to effectuate the objectives of this Agreement.

## 6. RATES AND CHARGES

- 6.1 In accordance with its approved rates and tariffs, Utility will charge a sewer tie-in fee, a monthly sewer rate, and any other authorized fees and charges to each builder or User within the Property. Monthly service charges shall begin when the User connects to the Infrastructure.
- 6.2 Utility shall be entitled to charge each builder or User a deposit for sewer tap fees in accordance with its approved tariff.

**7. REGULATORY APPROVAL; CLOSING**

**7.1** Upon receipt of all regulatory approvals, in a form satisfactory to Utility in Utility's sole and absolute discretion, and approval of the Infrastructure by Utility, pursuant to Section 5.6, the Parties shall schedule a Closing on a mutually agreed-upon date and place ("Closing"). At the Closing, Developer shall execute and deliver instruments of conveyance, transferring to Buyer the Infrastructure and any real property interests, including but not limited to easements, required for Utility to provide Services to the Property, free of any and all liens and encumbrances.

**8. SPECIFIC PERFORMANCE; DAMAGE; VENUE**

**8.1** If Developer fails to perform its obligations under the Agreement, Utility shall be entitled, at its option, to exercise one or more of the following remedies: (i) specific performance, (ii) compensatory damages, and (iii) rescission and cancellation of this agreement. If Utility elects to exercise its rights under this Section 8, Developer shall pay all costs, attorneys fees, consulting fees and engineering fees, if Utility prevails.

**8.2** Any and all disputes hereunder shall be exclusively heard in a federal or state court located in St. Louis County, Missouri.

**9. NOTICES**

**9.1** Any notice required or permitted to be given or served by any Party to the other Party shall be deemed given in accordance with the provisions of this Agreement upon the addressee's receipt by the addressee by certified mail, return receipt requested, addressed as follows:

If to Utility: **BLUEGRASS UTILITY OPERATING COMPANY, LLC**  
c/o Josiah Cox, President  
1650 Corporate Hill Drive, Suite 303  
St. Louis, Missouri 63131

With a Copy to: James A. Beckemeier  
Beckemeier LeMoine Law  
13421 Manchester Road, Suite 103  
St. Louis, MO 63131  
Facsimile: (314) 965-0127  
Email: jim@bl-stl.com

If to Developer: **RAMAR LAND CORPORATION**  
c/o Stan Richards, Director  
4400 Easton Commons Way, Suite 125  
Columbus, OH 43219  
Phone: (937) 603-3900  
Facsimile: \_\_\_\_\_  
Email: \_\_\_\_\_

9.2 Any Party may change its address by delivering written notice of such change to the other Party in the manner specified above, with the effective date of the change being **ten (10) days** from the date of the receipt of the notice of change.

## 10. CAPTIONS; HEADINGS

10.1 The paragraph headings or captions appearing in this Agreement are for convenience and direction only, are not a part of this Agreement, and are not to be considered in interpreting this Agreement.

## 11. ENTIRE CONTRACT MODIFICATION

11.1 This written Agreement constitutes the entire and complete agreement among the Parties and supersedes any prior oral or written agreements, letters, or correspondence between the parties regarding matters covered by the Agreement. It is expressly agreed that there are no verbal understandings or agreements that in any way change the terms, covenants, and conditions set forth here, and no modification of this Agreement or waiver of any of its terms and conditions shall be effective unless made in writing and duly executed by all Parties.

## 12. ASSIGNMENT

12.1 This Agreement shall not be assigned by Developer to any third party without the prior written consent of Utility, which consent shall not unreasonably be withheld. Any assignment must include the express written assent by assignee to assume all obligations of Developer and to be bound by all terms and conditions of this Agreement. Utility shall be permitted to assign its rights in this Agreement to an affiliated entity that Utility controls without need of consent by the Developer by providing written notice to the Developer of such assignment.

## 13. WARRANTIES

13.1 All covenants, agreements, warranties, representations, and other provisions of the Agreement shall be binding upon and inure to the benefit of the Parties and also to their respective heirs, executors, administrators, representatives, successors, and permitted assigns.

## 14. SEVERABILITY

14.1 If any of the terms or conditions of this Agreement shall for any reason be held to be invalid, unlawful, or unenforceable in any respect, such invalidity, unlawfulness, or unenforceability shall not affect the other terms and conditions, and thereafter the terms and conditions of the Agreement shall thereafter be construed as if such invalid, illegal or unenforceable terms or conditions had never been included.

**IN WITNESS WHEREOF**, the Parties have duly executed this Agreement as of the day and year first above written.



**UTILITY:**

BLUEGRASS WATER UTILITY  
OPERATING COMPANY, LLC

By: Central States Water Resource, Inc.,  
its manager

By: \_\_\_\_\_  
Josiah M. Cox, President

**DEVELOPER:**

RAMAR LAND CORPORATION

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

Name: STAN RICHARDS

Title: VP - CONSTRUCTION

**EXHIBIT A**

## UTILITY SERVICES AGREEMENT

This agreement to provide sewer utility services (“Agreement”) is entered into this 9th day of August, 2022 between **BLUEGRASS WATER UTILITY OPERATING COMPANY, LLC, a Kentucky limited liability company** (“Utility”) and **RAMAR LAND CORPORATION, an Ohio corporation**, (“Developer”) (each a “Party” and jointly “the Parties”).

**WHEREAS**, Utility is a limited liability company, organized and existing under the constitution and the laws of the State of Kentucky, with all the requisite power necessary to enter into the Agreement;

**WHEREAS**, Developer is a corporation, organized and existing under the constitution and the laws of the State of Ohio, with all the requisite power necessary to enter into the Agreement;

**WHEREAS**, Developer has acquired or will acquire property in the State of Kentucky, County of Scott, being known as R+L Carriers - Georgetown (hereinafter “the Property”), as set out herein on **EXHIBIT A**, attached hereto and incorporated herein; and

**WHEREAS**, Developer desires, in accordance with applicable state and local zoning and development regulations, to provide all buildings within the Property with central sewer service; and

**WHEREAS**, Utility is authorized to provide sewer service to the area where the Property is located and desires to own and operate sewer facilities and equipment constructed or installed by Developer to serve structures within the Property;

**NOW THEREFORE**, for the consideration expressed in the Agreement and subject to all its terms and conditions, the sufficiency of which is hereby acknowledged, the Parties contract and agree as follows:

### **1. DEFINITIONS**

- 1.1**     **“Accepted Sewage”** means domestic sewage such as sewage from residences, office buildings, motels, restaurants and other commercial uses, but expressly excludes: (i) all substances that will damage, clog, or adversely affect lines and facilities owned or operated by Utility, (ii) industrial or toxic wastes, (iii) any other wastes that Utility (or any governmental agency) determines Utility’s sewage treatment facilities (and its lines or other facilities) cannot handle, and (iv) storm and rain water.
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- 1.3**     **“Final Property Plan”** means the as-recorded official and fully-approved (if governmental approvals are required) map and plat of the Property.
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Sewer infrastructure including but not limited to, lines, pipes, conduit, tubing, systems, pumps, lift stations, tanks and structures, mechanical apparatus, and facilities constructed, placed, or located by Developer for the receipt and transmission of sewage from the Property.

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Sewer services, which is the receipt and treatment of Accepted Sewage by Utility from structures within the Property.
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- 2.1 Developer shall design and construct, at its sole expense, all Infrastructure within the Property in accordance with engineering plans and specifications of the Developer's engineer prepared in accordance with all applicable governmental standards and regulations and Utility’s Utility Construction Requirements. Plans and specifications shall be submitted to Utility for review, and must have received Utility’s written approval before construction begins, which approval shall not be reasonably withheld or delayed.
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- 3.3** Upon completion and acceptance by Utility of the facilities to be constructed and installed by Developer in accordance with the Agreement, all Infrastructure shall become the property of Utility, as installed and without the requirement of written documents of transfer. Utility shall own, operate, and maintain such facilities at its sole cost and responsibility and shall have all right, title, and interest as sole owner of those facilities. Notwithstanding the foregoing, Developer shall execute a deed(s), bill of sale and/or other documents reasonably requested by Utility as necessary or desirable, in its sole opinion, to convey to Utility and ensure Utility's ownership of, ready access to, and operations and maintenance of the Infrastructure.

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- 4.3** Developer represents that the Infrastructure is free of real property tax liens, federal or state tax liens, judgment liens, utility liens, assessment liens and that Utility take the Property free of any liens, mortgages, pledges, leases, options, rights of first refusal, conditional sales agreements, encumbrances or other charges. Developer further agrees to indemnify and hold harmless Utility from any and all liability related to construction and transfer of the Infrastructure, including but not limited to all liens and encumbrances that may be filed and/or attached to the Infrastructure at the time of their transfer to Utility in accordance with the Agreement and agrees to cure any title issues related to the same, at the sole cost of Developer.

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- 5.6** Upon the transfer from Developer to Utility in accordance with this section, all warranties Developer may have from vendors, manufacturers, contractors, or subcontractors in connection with construction of the Infrastructure shall be assigned and transferred to Utility. Developer further agrees to execute an assignment and any additional documents requested by Utility in order to memorialize this transfer and assignment of warranty.
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## **6. RATES AND CHARGES**

- 6.1** In accordance with its approved rates and tariffs, Utility will charge a sewer tie-in fee, a monthly sewer rate, and any other authorized fees and charges to each builder or User within the Property. Monthly service charges shall begin when the User connects to the Infrastructure.
- 6.2** Utility shall be entitled to charge each builder or User a deposit for sewer tap fees in accordance with its approved tariff.

**7. REGULATORY APPROVAL; CLOSING**

**7.1** Upon receipt of all regulatory approvals, in a form satisfactory to Utility in Utility's sole and absolute discretion, and approval of the Infrastructure by Utility, pursuant to Section 5.6, the Parties shall schedule a Closing on a mutually agreed-upon date and place ("Closing"). At the Closing, Developer shall execute and deliver instruments of conveyance, transferring to Buyer the Infrastructure and any real property interests, including but not limited to easements, required for Utility to provide Services to the Property, free of any and all liens and encumbrances.

**8. SPECIFIC PERFORMANCE; DAMAGE; VENUE**

**8.1** If Developer fails to perform its obligations under the Agreement, Utility shall be entitled, at its option, to exercise one or more of the following remedies: (i) specific performance, (ii) compensatory damages, and (iii) rescission and cancellation of this agreement. If Utility elects to exercise its rights under this Section 8, Developer shall pay all costs, attorneys fees, consulting fees and engineering fees, if Utility prevails.

**8.2** Any and all disputes hereunder shall be exclusively heard in a federal or state court located in St. Louis County, Missouri.

**9. NOTICES**

**9.1** Any notice required or permitted to be given or served by any Party to the other Party shall be deemed given in accordance with the provisions of this Agreement upon the addressee's receipt by the addressee by certified mail, return receipt requested, addressed as follows:

If to Utility: **BLUEGRASS UTILITY OPERATING COMPANY, LLC**  
c/o Josiah Cox, President  
1650 Corporate Hill Drive, Suite 303  
St. Louis, Missouri 63131

With a Copy to: James A. Beckemeier  
Beckemeier LeMoine Law  
13421 Manchester Road, Suite 103  
St. Louis, MO 63131  
Facsimile: (314) 965-0127  
Email: jim@bl-stl.com

If to Developer: **RAMAR LAND CORPORATION**  
c/o Stan Richards, Director  
4400 Easton Commons Way, Suite 125  
Columbus, OH 43219  
Phone: (937) 603-3900

**9.2** Any Party may change its address by delivering written notice of such change to the other Party in the manner specified above, with the effective date of the change being **ten (10) days** from the date of the receipt of the notice of change.

## **10. CAPTIONS; HEADINGS**

**10.1** The paragraph headings or captions appearing in this Agreement are for convenience and direction only, are not a part of this Agreement, and are not to be considered in interpreting this Agreement.

## **11. ENTIRE CONTRACT MODIFICATION**

**11.1** This written Agreement constitutes the entire and complete agreement among the Parties and supersedes any prior oral or written agreements, letters, or correspondence between the parties regarding matters covered by the Agreement. It is expressly agreed that there are no verbal understandings or agreements that in any way change the terms, covenants, and conditions set forth here, and no modification of this Agreement or waiver of any of its terms and conditions shall be effective unless made in writing and duly executed by all Parties.

## **12. ASSIGNMENT**

**12.1** This Agreement shall not be assigned by Developer to any third party without the prior written consent of Utility, which consent shall not unreasonably be withheld. Any assignment must include the express written assent by assignee to assume all obligations of Developer and to be bound by all terms and conditions of this Agreement. Utility shall be permitted to assign its rights in this Agreement to an affiliated entity that Utility controls without need of consent by the Developer by providing written notice to the Developer of such assignment.

## **13. WARRANTIES**

**13.1** All covenants, agreements, warranties, representations, and other provisions of the Agreement shall be binding upon and inure to the benefit of the Parties and also to their respective heirs, executors, administrators, representatives, successors, and permitted assigns.

## **14. SEVERABILITY**

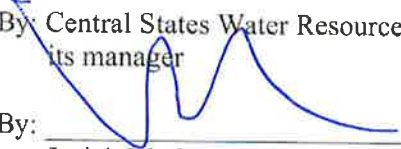
**14.1** If any of the terms or conditions of this Agreement shall for any reason be held to be invalid, unlawful, or unenforceable in any respect, such invalidity, unlawfulness, or unenforceability shall not affect the other terms and conditions, and thereafter the terms and conditions of the Agreement shall thereafter be construed as if such invalid, illegal or unenforceable terms or conditions had never been included.

**IN WITNESS WHEREOF**, the Parties have duly executed this Agreement as of the day and year first above written.



**UTILITY:**

BLUEGRASS WATER UTILITY  
OPERATING COMPANY, LLC

By:  Central States Water Resource, Inc.,  
its manager

By: \_\_\_\_\_  
Josiah M. Cox, President

**DEVELOPER:**

RAMAR LAND CORPORATION

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

Name: STAN RICHARDS

Title: VP - CONSTRUCTION

## **EXHIBIT A**



Civil Engineering

Surveying

Water Resources Management

Construction Management

Landscape Architecture

Land Planning

To whom it may concern,

The scope of the work for this project includes 860' of new 2" forcemain and 690' of new gravity sewer installation. The new forcemain will tie into an existing sanitary sewer located near the construction site which will route the new domestic waste to be treated at the WWTP. A new oil and water separator will be utilized to reduce pollutants flowing into the gravity sewer. A new lift station will also be installed to take the domestic waste water from the gravity sewer and pump it offsite to be treated at the WWTP.



ANDY BESHEAR  
GOVERNOR

REBECCA W. GOODMAN  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET**  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

February 17, 2020

Jake Freeman  
Central States Water Resources  
500 Northwest Plaza Dr., Suite 500  
St. Ann, MO 63074

Re: AI Name: LH Utilities/Longview Country Club  
AI No. 8083  
Case No. DOW-19-3-0154  
Activity No. ERF20190001  
Facility ID: KY0081591  
Scott County

Dear Mr. Freeman:

Thank you for your submission of a Corrective Action Plan ("CAP") dated December 20, 2019, for the facility listed above, which the Cabinet has reviewed and accepted. The Division of Water has no comments regarding this CAP. Feel free to contact me at 502-782-8638 or [wesley.dement@ky.gov](mailto:wesley.dement@ky.gov) should you have any questions or concerns

Sincerely,

A handwritten signature in black ink, appearing to read "Wesley Dement", positioned above a horizontal line.



ANDY BESHEAR  
GOVERNOR

REBECCA W. GOODMAN  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET**  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

January 29, 2020

Jake Freeman  
Central States Water Resources  
500 Northwest Plaza Dr., Suite 500  
St. Ann, MO 63074

Re: AI Name: Persimmon Ridge WWTP  
AI No. 3955  
Case No. DOW-19-3-0155  
Activity No. ERF20190001  
Facility ID: KY0090956  
Shelby County

Dear Mr. Freeman:

Thank you for your submission of a Corrective Action Plan ("CAP") dated December 13, 2019, for the facility listed above, which the Cabinet has reviewed and accepted. The Division of Water has no comments regarding this CAP. Feel free to contact me at 502-782-8638 or [wesley.dement@ky.gov](mailto:wesley.dement@ky.gov) should you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Wesley Dement", positioned above a solid black horizontal line.

May 20, 2022

Nicholas Fields  
Kentucky Department of Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3<sup>rd</sup> Floor  
Frankfort, KY 40601

RE: Bluegrass Water Utility Operating Company, LLC  
Delaplain Disposal WWTP  
KYPDES Permit No. KY0079049  
Agency No. 3901

On behalf of Bluegrass Water Utility Operating Company, Inc., we are submitting this letter per the EEC's requirement consistent with the current CAO plan that was approved on October 27, 2021. We are continuing to work to meet effluent compliance for this facility.

BWUOC is currently waiting for CPCN approval for construction and KDOW has not approve our construction permit for this facility. KDOW requested additional information, with regards to the construction plan submitted by 21 Design Group. The assigned engineering firm responded to all questions presented by KDOW and feedback for scope of work continues to be on-hold.

Construction equipment has been ordered. Construction materials have started to arrive, and improvements will begin as soon as construction permit approval is confirmed by Div. of Water. However, some of the main equipment materials have been delayed on delivery due to shortages and/or limited production. Some of the construction can be started but we are working closely with the manufacturers to ensure all goods and materials are available once approval is confirmed.

Please let us know if this letter does not meet the status report requirements of achieving system compliance.

Sincerely,



**Enrique Chavez Jr.**  
Utility Project Manager  
Email: [echavez@cswrgroup.com](mailto:echavez@cswrgroup.com)  
Office: (314) 380-8043  
Mobile: (314) 437-5714





ANDY BESHEAR  
GOVERNOR

REBECCA W. GOODMAN  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET**  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

February 24, 2022

Bluegrass Water Utility Operating Company, LLC  
500 NW Plaza Drive, Suite 500  
Saint Ann, MO 63074

Re: AI Name: Longview Country Club  
AI No. 8083  
Case No. DOW 19-3-0154  
Activity No. ERF20190002  
Scott County

Dear Bluegrass Water:

The Division of Enforcement has determined that you have complied with the terms and conditions of the Agreed Order, executed September 3, 2019. The Division considers Case No. DOW 19-3-0154 resolved and closed. Please contact me at (502) 782-5273 or [nicholas.fields@ky.gov](mailto:nicholas.fields@ky.gov) if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Nicholas Fields", positioned above a horizontal line.



Pace Analytical Services, LLC  
P.O. Box 907  
Madisonville, KY 42431  
270.821.7375  
[www.pacelabs.com](http://www.pacelabs.com)

## Certificate of Analysis 3023949

Jo Anna McMahon  
Bluegrass Water Utility Operating Company LLC  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

Customer ID: 44-102510  
Report Printed: 03/01/2023 17:33

Project Name: Permit Renewal Persimmon Ridge	Workorder: 3023949
--	--------------------

Dear Jo Anna McMahon

Enclosed are the analytical results for samples received by the laboratory 02/22/2023 14:32.

The results relate to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services LLC Kentucky - Madisonville

If you have any questions concerning this report, please feel free to contact me.



#460210 Madisonville, KY  
#460291 Pikeville, KY

Joe Gray, Project Coordinator

*This page is included as part of the Analytical Report and must be retained as a permanent record thereof.*





**SAMPLE SUMMARY**

Lab ID	Client Sample ID/Alias	Matrix	Date Collected	Date Received	Sampled By
3023949-01	Persimmon Effluent/	Effluent	02/22/2023 11:40	02/22/2023 14:32	Mark Stafford

**ANALYTICAL RESULTS**

Lab Sample ID: **3023949-01**  
 Description: **Persimmon Effluent**

Sample Collection Date Time: **02/22/2023 11:40**  
 Sample Received Date Time: **02/22/2023 14:32**

Matrix: Effluent

Discharge/Site No:

Regulatory ID: KY0090956

**Conventional Chemistry Analyses Madisonville**

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
Chemical Oxygen Demand	63		mg/L	13	8	HACH 8000	03/01/2023 14:30	03/01/2023 14:30	HMF
Nitrate/Nitrite as N	3.90		mg/L	0.20	0.14	EPA 353.2	03/01/2023 10:07	03/01/2023 10:07	SLM
Oil & Grease	4.7		mg/L	1.8	1.4	EPA 1664A	02/27/2023 09:00	02/27/2023 09:32	TRA
Total Kjeldahl Nitrogen	23.2		mg/L	1.80	1.52	EPA 351.2	02/25/2023 08:17	02/27/2023 09:40	SLM
Total Organic Carbon	16.3	D1	mg/L	1.0	0.8	5310 C-2014	02/27/2023 08:26	02/28/2023 02:04	HMF

**Field Analysis Madisonville**

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
Dissolved Oxygen (Field)	9.1		mg/L	0.1	0.1	4500-O G-2001	02/22/2023 11:40	02/22/2023 12:04	MES



Notes for work order 3023949

- Samples collected by PACE personnel are done so in accordance with procedures set forth in PACE field services SOPs .
- Results contained in this report are only representative of the samples received.
- PACE does not provide interpretation of these results unless otherwise stated .
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identification based on the presumptive evidence of the mass spectra.  
Concentrations reported are estimated values.

Qualifiers

- D1 Sample required dilution due to high concentration of target analyte.
- J Estimated value.
- M7 Matrix spike recovery was low.
- U Target analyte was analyzed for, but was below detection limit (the value associated with the qualifier is the laboratory method detection limit in our LIMS system).
- Y5 MS/MSD RPD exceeded the method control limit.

Standard Qualifiers/Acronyms

- MDL Method Detection Limit
- MRL Minimum Reporting Limit
- ND Not Detected
- LCS Laboratory Control Sample
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- DUP Sample Duplicate
- % Rec Percent Recovery
- RPD Relative Percent Difference
- > Greater than
- < Less than



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch BCB2527 - Default Prep Wet Chem</b>										
<b>Blank (BCB2527-BLK1)</b>										
Prepared: 2/27/2023 8:26, Analyzed: 2/27/2023 23:36										
Total Organic Carbon	ND	0.5	mg/L							U
<b>LCS (BCB2527-BS1)</b>										
Prepared: 2/27/2023 8:26, Analyzed: 2/27/2023 23:57										
Total Organic Carbon	5.0	0.5	mg/L	5.00		99.0	80-120			
<b>Duplicate (BCB2527-DUP1) Source: 3024627-05</b>										
Prepared: 2/27/2023 8:26, Analyzed: 2/28/2023 5:13										
Total Organic Carbon	1.9	0.5	mg/L		2.0			4.87	25	
<b>Duplicate (BCB2527-DUP2) Source: 3024627-07</b>										
Prepared: 2/27/2023 8:26, Analyzed: 2/28/2023 5:34										
Total Organic Carbon	1.6	0.5	mg/L		1.6			2.11	25	
<b>Matrix Spike (BCB2527-MS1) Source: 3024627-09</b>										
Prepared: 2/27/2023 8:26, Analyzed: 2/28/2023 5:55										
Total Organic Carbon	4.0	0.5	mg/L	2.50	1.6	98.1	80-120			
<b>Batch BCB2532 - Default Prep Wet Chem</b>										
<b>Blank (BCB2532-BLK1)</b>										
Prepared: 2/25/2023 8:17, Analyzed: 2/27/2023 9:18										
Total Kjeldahl Nitrogen	ND	1.80	mg/L							U
<b>LCS (BCB2532-BS1)</b>										
Prepared: 2/25/2023 8:17, Analyzed: 2/27/2023 9:18										
Total Kjeldahl Nitrogen	10.1	1.80	mg/L	10.0		101	90-110			
<b>Matrix Spike (BCB2532-MS1) Source: 3023518-02</b>										
Prepared: 2/25/2023 8:17, Analyzed: 2/27/2023 9:43										
Total Kjeldahl Nitrogen	10.3	1.80	mg/L	10.0	1.9	83.9	90-110			M7
<b>Matrix Spike Dup (BCB2532-MSD1) Source: 3023518-02</b>										
Prepared: 2/25/2023 8:17, Analyzed: 2/27/2023 9:44										
Total Kjeldahl Nitrogen	11.6	1.80	mg/L	10.0	1.9	96.9	90-110	11.9	10	Y5



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch BCB2567 - Default Prep Extraction Lab</b>										
<b>Blank (BCB2567-BLK1)</b>										
Prepared: 2/27/2023 9:00, Analyzed: 2/27/2023 9:00										
Oil & Grease	ND	1.8	mg/L							U
<b>LCS (BCB2567-BS1)</b>										
Prepared: 2/27/2023 9:00, Analyzed: 2/27/2023 9:02										
Oil & Grease	22.2	1.8	mg/L	20.0		111	78-114			
<b>Duplicate (BCB2567-DUP1) Source: 3021554-05</b>										
Prepared: 2/27/2023 9:00, Analyzed: 2/27/2023 9:04										
Oil & Grease	1.5	1.8	mg/L		ND				18	J
<b>Matrix Spike (BCB2567-MS1) Source: 3023949-01</b>										
Prepared: 2/27/2023 9:00, Analyzed: 2/27/2023 9:06										
Oil & Grease	25.2	2.0	mg/L	21.7	4.7	94.2	78-114			
<b>Batch BCB2718 - Default Prep Wet Chem</b>										
<b>Blank (BCB2718-BLK1)</b>										
Prepared: 3/1/2023 9:36, Analyzed: 3/1/2023 9:36										
Nitrate/Nitrite as N	ND	0.20	mg/L							U
<b>LCS (BCB2718-BS1)</b>										
Prepared: 3/1/2023 9:38, Analyzed: 3/1/2023 9:38										
Nitrate/Nitrite as N	10.4	0.20	mg/L	10.0		104	90-110			
<b>Matrix Spike (BCB2718-MS1) Source: 3023647-01</b>										
Prepared: 3/1/2023 9:53, Analyzed: 3/1/2023 9:53										
Nitrate/Nitrite as N	5.56	0.20	mg/L	5.00	0.503	101	80-120			
<b>Matrix Spike (BCB2718-MS2) Source: 3023669-01</b>										
Prepared: 3/1/2023 10:08, Analyzed: 3/1/2023 10:08										
Nitrate/Nitrite as N	4.98	0.20	mg/L	5.00	ND	99.6	80-120			
<b>Matrix Spike Dup (BCB2718-MSD1) Source: 3023647-01</b>										
Prepared: 3/1/2023 9:54, Analyzed: 3/1/2023 9:54										
Nitrate/Nitrite as N	5.42	0.20	mg/L	5.00	0.503	98.3	80-120	2.55	30	



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BCB2718 - Default Prep Wet Chem

Matrix Spike Dup (BCB2718-MSD2) Source: 3023669-01

Prepared: 3/1/2023 10:09, Analyzed: 3/1/2023 10:09

Nitrate/Nitrite as N	5.07	0.20	mg/L	5.00	ND	101	80-120	1.79	30	
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Batch BCB2815 - Default Prep Wet Chem

Blank (BCB2815-BLK1)

Prepared: 3/1/2023 14:30, Analyzed: 3/1/2023 14:30

Chemical Oxygen Demand	ND	13	mg/L							U
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LCS (BCB2815-BS1)

Prepared: 3/1/2023 14:30, Analyzed: 3/1/2023 14:30

Chemical Oxygen Demand	118	13	mg/L	125		94.4	90-110			
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Duplicate (BCB2815-DUP1) Source: 3024312-01

Prepared: 3/1/2023 14:30, Analyzed: 3/1/2023 14:30

Chemical Oxygen Demand	9	13	mg/L		8			11.8	25	J
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Matrix Spike (BCB2815-MS1) Source: 3024312-01

Prepared: 3/1/2023 14:30, Analyzed: 3/1/2023 14:30

Chemical Oxygen Demand	272	13	mg/L	250	8	106	90-110			
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Matrix Spike Dup (BCB2815-MSD1) Source: 3024312-01

Prepared: 3/1/2023 14:30, Analyzed: 3/1/2023 14:30

Chemical Oxygen Demand	257	13	mg/L	250	8	99.6	90-110	5.67	10	
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Certified Analyses Included in this Report

Analyte	Certifications
<b>4500-O G-2001 in Water</b>	
Dissolved Oxygen (Field)	KY Wastewater Mdv (00030)
<b>5310 C-2014 in Water</b>	
Total Organic Carbon	KY Drinking Water Mdv (00030) VA NELAC MDV (460210) KY Wastewater Mdv (00030) TN Drinking Water (02819) ADEM Drinking Water Mdv (41880) WV Wastewater Madisonville (241), 825 Industrial Rd Madisonville, KY 42431 AK Drinking Water MADV (KY00020)
<b>EPA 1664A in Water</b>	
Oil & Grease	VA NELAC MDV (460210) KY Wastewater Mdv (00030) WV Wastewater Madisonville (241), 825 Industrial Rd Madisonville, KY 42431
<b>EPA 351.2 in Water</b>	
Total Kjeldahl Nitrogen	KY Wastewater Mdv (00030)
<b>EPA 353.2 in Water</b>	
Nitrate/Nitrite as N	KY Wastewater Mdv (00030)
<b>HACH 8000 in Water</b>	
Chemical Oxygen Demand	KY Wastewater Mdv (00030) VA NELAC MDV (460210) WV Wastewater Madisonville (241), 825 Industrial Rd Madisonville, KY 42431



Pace Analytical Services, LLC  
P.O. Box 907  
Madisonville, KY 42431  
270.821.7375  
www.pacelabs.com

**Sample Acceptance Checklist for Work Order 3023949**

Shipped By: Pace Analytical Services LL

Temperature: 2.40° Celcius

**Condition**

Check if Custody Seals are Present/Intact	<input type="checkbox"/>
Check if Custody Signatures are Present	<input checked="" type="checkbox"/>
Check if Collector Signature Present	<input checked="" type="checkbox"/>
Check if bottles are intact	<input checked="" type="checkbox"/>
Check if bottles are correct	<input checked="" type="checkbox"/>
Check if bottles have sufficient volume	<input checked="" type="checkbox"/>
Check if samples received on ice	<input checked="" type="checkbox"/>
Check if VOA headspace is acceptable	<input type="checkbox"/>
Check if samples received in holding time.	<input checked="" type="checkbox"/>
Check if samples are preserved properly	<input checked="" type="checkbox"/>

### Chain of Custody

Scheduled for: **02/22/2023**



**Client:** Bluegrass Water Utility Operating Company LLC

**Report To:**  
Bluegrass Water Utility Operating Company LLC  
Jo Anna McMahon  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

**Invoice To:**  
Bluegrass Water Utility Operating Company LLC  
AP  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

**Project:** Permit Renewal Persimmon Ridge

Phone: 314-380-8571  
PWS ID#: KY0090956  
State: \_\_\_\_\_

PO#: \_\_\_\_\_  
Quote# \_\_\_\_\_

Please Print Legibly Mark Stafford

Collected by (Signature): Mark Stafford  
\*required information\*

Compliance Monitoring? Yes \_\_\_ No \_\_\_

Samples Chlorinated? Yes \_\_\_ No \_\_\_

\*For composite samples please indicate begin time, end time and temp(oC) at end time below:

Influent: Start Date \_\_\_\_\_ Start time \_\_\_\_\_ End Date \_\_\_\_\_ End Time \_\_\_\_\_ Temp (oC) \_\_\_\_\_

Effluent: Start Date \_\_\_\_\_ Start time \_\_\_\_\_ End Date \_\_\_\_\_ End Time \_\_\_\_\_ Temp (oC) \_\_\_\_\_

LAB USE ONLY	*required information*		Bottle and Preservative	Containers	Sample Description	Composite	Sample Analysis Requested
Workorder #	Date	Collection					
3023949	(mm/dd/yy):	Time (24 hr):					
3023949-01 A	<u>2/22/23</u>		Field Measurement	1	Persimmon Effluent	g / c	DO (Field)
3023949-01 B			*** DEFAULT CONTAINER ***	1	Persimmon Effluent	g / c	Field Services
3023949-01 C	<u>2/22/23</u>	<u>1140</u>	Plastic 500mL pH<2 w/H2SO4	1	Persimmon Effluent	g / c	Nitrate and Nitrite Combined by Lachat 353.2 TKN by Lachat 351.2 <b>COD &amp; TOC ← NDB</b> <b>2/22/2023</b>
			Preservation Check: pH: _____				
3023949-01 D	<u>2/22/23</u>	<u>1141</u>	AG 1L pH<2 w/H2SO4	1	Persimmon Effluent	g / c	Oil and Grease
3023949-01 E	<u>2/22/23</u>	<u>1142</u>	AG 1L pH<2 w/H2SO4	1	Persimmon Effluent	g / c	Oil and Grease

Thermometer Serial Number

**210029556**

Temp 21°C

Preservation Check Performed by: Mark Stafford

Field data collected by: Mark Stafford Date (mm/dd/yy) 2/22/23 Time (24 hr) 1204

pH \_\_\_\_\_ Cond (umho) \_\_\_\_\_ Res Cl (mg/L) \_\_\_\_\_ Tot Cl (mg/L) \_\_\_\_\_ Free Cl (mg/L) \_\_\_\_\_

Temp (oC) 12.7 or (oF) \_\_\_\_\_ Static Water Level \_\_\_\_\_ DO (mg/L) 9.07 Turb. (NTU) \_\_\_\_\_

Flow (MGD) \_\_\_\_\_ or (CFS) \_\_\_\_\_ or (g/min) \_\_\_\_\_

Relinquished by: (Signature) Mark Stafford

Received by: (Signature) [Signature]

Date (mm/dd/yy) 02/22/23 Time (24 hr) 1432  
2/23/23  
12:50:26/23



PACE- Check here if trip charge applied to associated COC

Printed: 2/16/2023 7:21:34AM

Page 8 of 8



Pace Analytical Services, LLC  
P.O. Box 907  
Madisonville, KY 42431  
270.821.7375  
www.pacelabs.com

## Certificate of Analysis 3023748

Jo Anna McMahon  
Bluegrass Water Utility Operating Company LLC  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

Customer ID: 44-102510  
Report Printed: 02/24/2023 18:00

Project Name: Permit Renewal Persimmon Ridge	Workorder: 3023748
--	--------------------

Dear Jo Anna McMahon

Enclosed are the analytical results for samples received by the laboratory 02/15/2023 14:24.

The results relate to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services LLC Kentucky - Madisonville

If you have any questions concerning this report, please feel free to contact me.



#460210 Madisonville, KY  
#460291 Pikeville, KY

Joe Gray, Project Coordinator

*This page is included as part of the Analytical Report and must be retained as a permanent record thereof.*





**SAMPLE SUMMARY**

Lab ID	Client Sample ID/Alias	Matrix	Date Collected	Date Received	Sampled By
3023748-01	Persimmon Effluent/	Effluent	02/15/2023 10:18	02/15/2023 14:24	Mark Slafford

**ANALYTICAL RESULTS**

Lab Sample ID: 3023748-01  
 Description: Persimmon Effluent

Sample Collection Date Time: 02/15/2023 10:18  
 Sample Received Date Time: 02/15/2023 14:24

Matrix: Effluent

Discharge/Site No:

Regulatory ID: KY0090956

Conventional Chemistry Analyses Madisonville

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
Chemical Oxygen Demand	79		mg/L	8	8	HACH 8000	02/21/2023 13:52	02/23/2023 16:16	HMF
Nitrate/Nitrite as N	4.91		mg/L	0.20	0.05	EPA 353.2	02/22/2023 11:41	02/22/2023 11:41	SLM
Oil & Grease	ND	u	mg/L	1.8	1.4	EPA 1664A	02/18/2023 09:45	02/18/2023 10:05	SBW
Total Kjeldahl Nitrogen	20.1		mg/L	1.80	1.52	EPA 351.2	02/18/2023 05:54	02/21/2023 09:59	SLM
Total Organic Carbon	16.1	D1	mg/L	1.0	0.8	5310 C-2014	02/23/2023 11:54	02/24/2023 10:02	HMF

Field Analysis Madisonville

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
Dissolved Oxygen (Field)	8.9		mg/L	0.1	0.1	4500-O G-2001	02/15/2023 10:18	02/15/2023 10:20	MES



Notes for work order 3023748

- Samples collected by PACE personnel are done so in accordance with procedures set forth in PACE field services SOPs .
- Results contained in this report are only representative of the samples received.
- PACE does not provide interpretation of these results unless otherwise stated .
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identification based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.

Qualifiers

- D1 Sample required dilution due to high concentration of target analyte.
- J Estimated value.
- M1 Matrix spike recovery was high; the method control sample recovery was acceptable.
- M7 Matrix spike recovery was low.
- U Target analyte was analyzed for, but was below detection limit (the value associated with the qualifier is the laboratory method detection limit in our LIMS system).

Standard Qualifiers/Acronyms

- MDL Method Detection Limit
- MRL Minimum Reporting Limit
- ND Not Detected
- LCS Laboratory Control Sample
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- DUP Sample Duplicate
- % Rec Percent Recovery
- RPD Relative Percent Difference
- > Greater than
- < Less than



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch BCB1857 - Default Prep Wet Chem</b>										
<b>Blank (BCB1857-BLK1)</b>										
Prepared: 2/18/2023 5:54, Analyzed: 2/21/2023 9:36										
Total Kjeldahl Nitrogen	ND	1.80	mg/L							U
<b>LCS (BCB1857-BS1)</b>										
Prepared: 2/18/2023 5:54, Analyzed: 2/21/2023 9:37										
Total Kjeldahl Nitrogen	10.3	1.80	mg/L	10.0		103	90-110			
<b>Matrix Spike (BCB1857-MS1) Source: 3021322-02</b>										
Prepared: 2/18/2023 5:54, Analyzed: 2/21/2023 10:00										
Total Kjeldahl Nitrogen	4.6	1.80	mg/L	10.0	ND	46.4	90-110			M7
<b>Matrix Spike Dup (BCB1857-MSD1) Source: 3021322-02</b>										
Prepared: 2/18/2023 5:54, Analyzed: 2/21/2023 10:01										
Total Kjeldahl Nitrogen	4.8	1.80	mg/L	10.0	ND	48.0	90-110	3.39	10	M7
<b>Batch BCB1859 - Default Prep Extraction Lab</b>										
<b>Blank (BCB1859-BLK1)</b>										
Prepared: 2/18/2023 9:45, Analyzed: 2/18/2023 9:45										
Oil & Grease	ND	1.8	mg/L							U
<b>LCS (BCB1859-BS1)</b>										
Prepared: 2/18/2023 9:45, Analyzed: 2/18/2023 9:47										
Oil & Grease	18.0	1.8	mg/L	20.0		90.0	78-114			
<b>Duplicate (BCB1859-DUP1) Source: 3023748-01</b>										
Prepared: 2/18/2023 9:45, Analyzed: 2/18/2023 9:49										
Oil & Grease	6.1	1.8	mg/L		ND				18	
<b>Matrix Spike (BCB1859-MS1) Source: 3014937-01</b>										
Prepared: 2/18/2023 9:45, Analyzed: 2/18/2023 9:51										
Oil & Grease	27.1	2.0	mg/L	21.7	ND	124	78-114			M1
<b>Batch BCB2080 - Default Prep Wet Chem</b>										
<b>Blank (BCB2080-BLK1)</b>										
Prepared: 2/22/2023 11:12, Analyzed: 2/22/2023 11:12										
Nitrate/Nitrite as N	ND	0.20	mg/L							U



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch BCB2080 - Default Prep Wet Chem</b>										
<b>LCS (BCB2080-BS1)</b>										
Prepared: 2/22/2023 11:13, Analyzed: 2/22/2023 11:13										
Nitrate/Nitrite as N	10.2	0.20	mg/L	10.0		102	90-110			
<b>Matrix Spike (BCB2080-MS1) Source: 3022855-01</b>										
Prepared: 2/22/2023 11:42, Analyzed: 2/22/2023 11:42										
Nitrate/Nitrite as N	5.32	0.20	mg/L	5.00	0.469	97.0	80-120			
<b>Matrix Spike Dup (BCB2080-MSD1) Source: 3022855-01</b>										
Prepared: 2/22/2023 11:43, Analyzed: 2/22/2023 11:43										
Nitrate/Nitrite as N	5.31	0.20	mg/L	5.00	0.469	96.8	80-120	0.188	30	
<b>Batch BCB2094 - Default Prep Wet Chem</b>										
<b>Blank (BCB2094-BLK1)</b>										
Prepared: 2/21/2023 13:52, Analyzed: 2/23/2023 16:16										
Chemical Oxygen Demand	ND	8	mg/L							U
<b>LCS (BCB2094-BS1)</b>										
Prepared: 2/21/2023 13:52, Analyzed: 2/23/2023 16:16										
Chemical Oxygen Demand	127	8	mg/L	125		102	90-110			
<b>Duplicate (BCB2094-DUP1) Source: 3023876-01</b>										
Prepared: 2/21/2023 13:52, Analyzed: 2/23/2023 16:16										
Chemical Oxygen Demand	61	8	mg/L		57			6.78	25	
<b>Matrix Spike (BCB2094-MS1) Source: 3023876-01</b>										
Prepared: 2/21/2023 13:52, Analyzed: 2/23/2023 16:16										
Chemical Oxygen Demand	315	8	mg/L	250	57	103	90-110			
<b>Matrix Spike Dup (BCB2094-MSD1) Source: 3023876-01</b>										
Prepared: 2/21/2023 13:52, Analyzed: 2/23/2023 16:16										
Chemical Oxygen Demand	311	8	mg/L	250	57	102	90-110	1.28	10	
<b>Batch BCB2333 - Default Prep Wet Chem</b>										
<b>Blank (BCB2333-BLK1)</b>										
Prepared: 2/23/2023 11:54, Analyzed: 2/23/2023 18:49										
Total Organic Carbon	ND	0.5	mg/L							U



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BCB2333 - Default Prep Wet Chem

LCS (BCB2333-BS1)

Prepared: 2/23/2023 11:54, Analyzed: 2/23/2023 18:28

Total Organic Carbon	5.0	0.5	mg/L	5.00		99.0	80-120			
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Duplicate (BCB2333-DUP1) Source: 3020217-01

Prepared: 2/23/2023 11:54, Analyzed: 2/24/2023 0:05

Total Organic Carbon	1.8	0.5	mg/L		1.9			3.47	25	
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Duplicate (BCB2333-DUP2) Source: 3022127-01

Prepared: 2/23/2023 11:54, Analyzed: 2/24/2023 10:23

Total Organic Carbon	1.8	0.5	mg/L		1.7			4.73	25	
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Matrix Spike (BCB2333-MS1) Source: 3020217-02

Prepared: 2/23/2023 11:54, Analyzed: 2/24/2023 0:26

Total Organic Carbon	3.7	0.5	mg/L	2.50	1.2	102	80-120			
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Matrix Spike (BCB2333-MS2) Source: 3022127-02

Prepared: 2/23/2023 11:54, Analyzed: 2/24/2023 10:44

Total Organic Carbon	6.2	0.5	mg/L	5.00	0.9	105	80-120			
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Certified Analyses Included In this Report

Analyte	Certifications
<b>4500-O G-2001 in Water</b>	
Dissolved Oxygen (Field)	KY Wastewater Mdv (00030)
<b>5310 C-2014 in Water</b>	
Total Organic Carbon	KY Drinking Water Mdv (00030) VA NELAC MDV (460210) KY Wastewater Mdv (00030) TN Drinking Water (02819) ADEM Drinking Water Mdv (41880) WV Wastewater Madisonville (241), 825 Industrial Rd Madisonville, KY 42431 AK Drinking Water MADV (KY00020)
<b>EPA 1664A in Water</b>	
Oil & Grease	VA NELAC MDV (460210) KY Wastewater Mdv (00030) WV Wastewater Madisonville (241), 825 Industrial Rd Madisonville, KY 42431
<b>EPA 351.2 in Water</b>	
Total Kjeldahl Nitrogen	KY Wastewater Mdv (00030)
<b>EPA 353.2 in Water</b>	
Nitrate/Nitrite as N	KY Wastewater Mdv (00030)
<b>HACH 8000 in Water</b>	
Chemical Oxygen Demand	KY Wastewater Mdv (00030) VA NELAC MDV (460210) WV Wastewater Madisonville (241), 825 Industrial Rd Madisonville, KY 42431



**Sample Acceptance Checklist for Work Order 3023748**

Shipped By: Pace Analytical Services LL

Temperature: 4.00° Celcius

**Condition**

Check if Custody Seals are Present/Intact	<input type="checkbox"/>
Check if Custody Signatures are Present	<input checked="" type="checkbox"/>
Check if Collector Signature Present	<input checked="" type="checkbox"/>
Check if bottles are intact	<input checked="" type="checkbox"/>
Check if bottles are correct	<input checked="" type="checkbox"/>
Check if bottles have sufficient volume	<input checked="" type="checkbox"/>
Check if samples received on ice	<input checked="" type="checkbox"/>
Check if VOA headspace is acceptable	<input type="checkbox"/>
Check if samples received in holding time.	<input checked="" type="checkbox"/>
Check if samples are preserved properly	<input checked="" type="checkbox"/>

# Chain of Custody

Scheduled for: **02/15/2023**



Client: Bluegrass Water Utility Operating Company LLC

Report To:  
Bluegrass Water Utility Operating Company LLC  
Jo Anna McMahon  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

Invoice To:  
Bluegrass Water Utility Operating Company LLC  
AP  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

Project: Permit Renewal Persimmon Rldge

Phone: 314-380-8571  
PWS ID#: KY0090956  
State: \_\_\_\_\_

PO#: \_\_\_\_\_  
Quote# \_\_\_\_\_

Please Print Legibly *Mark Strickland*

Collected by (Signature): *Mark Strickland*  
\*required information\*

Compliance Monitoring? Yes \_\_\_ No \_\_\_

Samples Chlorinated? Yes \_\_\_ No \_\_\_

\*For composite samples please indicate begin time, end time and temp(oC) at end time below:

Influent: Start Date \_\_\_\_\_ Start time \_\_\_\_\_ End Date \_\_\_\_\_ End Time \_\_\_\_\_ Temp (oC) \_\_\_\_\_

Effluent: Start Date \_\_\_\_\_ Start time \_\_\_\_\_ End Date \_\_\_\_\_ End Time \_\_\_\_\_ Temp (oC) \_\_\_\_\_

LAB USE ONLY Workorder # Sample ID#	*required information* Date (mm/dd/yy):	Collection Time (24 hr):	Bottle and Preservative	Containers	Sample Description	Composite	Sample Analysis Requested
3023748-01 A			Field Measurement	1	Persimmon Effluent	g / c	DO (Field)
3023748-01 B			*** DEFAULT CONTAINER ***	1	Persimmon Effluent	g / c	Field Services
3023748-01 C	<i>2/15/23</i>	<i>1019</i>	Plastic 500mL pH<2 w/H2SO4	1	Persimmon Effluent	<input checked="" type="checkbox"/> c	Nitrate and Nitrite Combined by Lachat 353.2 TKN by Lachat 351.2
Preservation Check: pH: <i>✓</i>							
3023748-01 D	<i>2/15/23</i>	<i>1019</i>	AG 1L pH<2 w/H2SO4	1	Persimmon Effluent	<input checked="" type="checkbox"/> c	Oil and Grease
3023748-01 E	<i>2/15/23</i>	<i>1020</i>	AG 1L pH<2 w/H2SO4	1	Persimmon Effluent	<input checked="" type="checkbox"/> c	Oil and Grease

Thermometer Serial Number

210029556

Temp *40* °C

Preservation Check Performed by: *Mark Strickland*

Field data collected by: *Mark Strickland* Date (mm/dd/yy) *2/15/23* Time (24 hr) *1020*

pH \_\_\_\_\_ Cond (umho) \_\_\_\_\_ Res Cl (mg/L) \_\_\_\_\_ Tot Cl (mg/L) \_\_\_\_\_ Free Cl (mg/L) \_\_\_\_\_

Temp (oC) *8.8* or (oF) \_\_\_\_\_ Static Water Level \_\_\_\_\_ DO (mg/L) *8.90* Turb. (NTU) \_\_\_\_\_

Flow (MGD) \_\_\_\_\_ or (CFS) \_\_\_\_\_ or (g/min) \_\_\_\_\_

Relinquished by: (Signature) <i>Mark Strickland</i>	Received by: (Signature) <i>[Signature]</i>	Date (mm/dd/yy) <i>2-15-23</i>	Time (24 hr) <i>1424</i>
_____	_____	_____	_____
_____	_____	_____	_____



Pace Analytical Services, LLC  
P.O. Box 907  
Madisonville, KY 42431  
270.821.7375  
www.pacelabs.com

## Certificate of Analysis 3022989

Jo Anna McMahon  
Bluegrass Water Utility Operating Company LLC  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

Customer ID: 44-102510  
Report Printed: 02/17/2023 11:36

Project Name: Permit Renewal Persimmon Ridge	Workorder: 3022989
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Dear Jo Anna McMahon

Enclosed are the analytical results for samples received by the laboratory 02/09/2023 16:02.

The results relate to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services LLC Kentucky - Madisonville

If you have any questions concerning this report, please feel free to contact me.



#460210 Madisonville, KY  
#460291 Pikeville, KY

*This page is included as part of the Analytical Report and must be retained as a permanent record thereof.*

Brett Davis For Joe Gray, Project Coordinator





**SAMPLE SUMMARY**

Lab ID	Client Sample ID/Alias	Matrix	Date Collected	Date Received	Sampled By
3022989-01	Persimmon Effluent/	Effluent	02/09/2023 11:26	02/09/2023 16:02	Mark Stafford

**ANALYTICAL RESULTS**

Lab Sample ID: 3022989-01  
Description: Persimmon Effluent

Sample Collection Date Time: 02/09/2023 11:26  
Sample Received Date Time: 02/09/2023 16:02

Matrix: Effluent

Discharge/Site No:

Regulatory ID: KY0090956

**Conventional Chemistry Analyses Madisonville**

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
Nitrate/Nitrite as N	4.42		mg/L	0.20	0.05	EPA 353.2	02/15/2023 12:17	02/15/2023 12:17	SLM
Oil & Grease	ND	u	mg/L	1.8	1.4	EPA 1664A	02/15/2023 08:30	02/15/2023 08:48	TRA
Total Kjeldahl Nitrogen	19.5		mg/L	1.80	1.52	EPA 351.2	02/14/2023 09:27	02/15/2023 09:13	SLM

**Field Analysis Madisonville**

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
Dissolved Oxygen (Field)	11.3		mg/L	0.1	0.1	4500-O G-2001	02/09/2023 11:26	02/09/2023 11:31	MES



**Notes for work order 3022989**

- Samples collected by PACE personnel are done so in accordance with procedures set forth in PACE field services SOPs .
- Results contained in this report are only representative of the samples received.
- PACE does not provide interpretation of these results unless otherwise stated .
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identification based on the presumptive evidence of the mass spectra.  
Concentrations reported are estimated values.

**Qualifiers**

- J Estimated value.
- M7 Matrix spike recovery was low.
- U Target analyte was analyzed for, but was below detection limit (the value associated with the qualifier is the laboratory method detection limit in our LIMS system).

**Standard Qualifiers/Acronyms**

- MDL Method Detection Limit
- MRL Minimum Reporting Limit
- ND Not Detected
- LCS Laboratory Control Sample
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- DUP Sample Duplicate
- % Rec Percent Recovery
- RPD Relative Percent Difference
- > Greater than
- < Less than



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch BCB1320 - Default Prep Wet Chem</b>										
<b>Blank (BCB1320-BLK1)</b>										
Prepared: 2/15/2023 11:51, Analyzed: 2/15/2023 11:51										
Nitrate/Nitrite as N	ND	0.20	mg/L							U
<b>LCS (BCB1320-BS1)</b>										
Prepared: 2/15/2023 11:52, Analyzed: 2/15/2023 11:52										
Nitrate/Nitrite as N	10.0	0.20	mg/L	10.0		100	90-110			
<b>Matrix Spike (BCB1320-MS1) Source: 3021935-01</b>										
Prepared: 2/15/2023 12:20, Analyzed: 2/15/2023 12:20										
Nitrate/Nitrite as N	6.88	0.20	mg/L	5.00	1.91	99.4	80-120			
<b>Matrix Spike Dup (BCB1320-MSD1) Source: 3021935-01</b>										
Prepared: 2/15/2023 12:21, Analyzed: 2/15/2023 12:21										
Nitrate/Nitrite as N	6.86	0.20	mg/L	5.00	1.91	99.0	80-120	0.291	30	
<b>Batch BCB1325 - Default Prep Wet Chem</b>										
<b>Blank (BCB1325-BLK1)</b>										
Prepared: 2/14/2023 9:27, Analyzed: 2/15/2023 8:54										
Total Kjeldahl Nitrogen	ND	1.80	mg/L							U
<b>LCS (BCB1325-BS1)</b>										
Prepared: 2/14/2023 9:27, Analyzed: 2/15/2023 8:55										
Total Kjeldahl Nitrogen	9.1	1.80	mg/L	10.0		91.1	90-110			
<b>Matrix Spike (BCB1325-MS1) Source: 3023242-04</b>										
Prepared: 2/14/2023 9:27, Analyzed: 2/15/2023 9:19										
Total Kjeldahl Nitrogen	8.0	1.80	mg/L	10.0	ND	80.2	90-110			M7
<b>Matrix Spike Dup (BCB1325-MSD1) Source: 3023242-04</b>										
Prepared: 2/14/2023 9:27, Analyzed: 2/15/2023 9:20										
Total Kjeldahl Nitrogen	8.6	1.80	mg/L	10.0	ND	85.5	90-110	6.40	10	M7
<b>Batch BCB1427 - Default Prep Extraction Lab</b>										
<b>Blank (BCB1427-BLK1)</b>										
Prepared: 2/15/2023 8:30, Analyzed: 2/15/2023 8:30										
Oil & Grease	ND	1.8	mg/L							U



Conventional Chemistry Analyses Madisonville - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BCB1427 - Default Prep Extraction Lab

LCS (BCB1427-BS1)

Prepared: 2/15/2023 8:30, Analyzed: 2/15/2023 8:32

Oil & Grease	20.5	1.8	mg/L	20.0		102	78-114			
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Duplicate (BCB1427-DUP1) Source: 3023228-01

Prepared: 2/15/2023 8:30, Analyzed: 2/15/2023 8:34

Oil & Grease	ND	1.8	mg/L		ND			18		U
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Matrix Spike (BCB1427-MS1) Source: 3023229-01

Prepared: 2/15/2023 8:30, Analyzed: 2/15/2023 8:36

Oil & Grease	19.0	1.8	mg/L	19.6	ND	96.9	78-114			
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Certified Analyses Included In this Report

Analyte	Certifications
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4500-O G-2001 in Water

Dissoved Oxygen (Field) KY Wastewater Mdv (00030)

EPA 1664A in Water

Oil & Grease VA NELAC MDV (460210) KY Wastewater Mdv (00030) WV Wastewater Madisonville (241), 825 Industrial Rd Madisonville, KY 42431

EPA 351.2 in Water

Total Kjeldahl Nitrogen KY Wastewater Mdv (00030)

EPA 353.2 in Water

Nitrate/Nitrite as N KY Wastewater Mdv (00030)

Sample Acceptance Checklist for Work Order 3022989

Shipped By: Pace Analytical Services LL

Temperature: 3.00° Celcius

Condition

Check if Custody Seals are Present/Intact	<input type="checkbox"/>
Check if Custody Signatures are Present	<input checked="" type="checkbox"/>
Check if Collector Signature Present	<input checked="" type="checkbox"/>
Check if bottles are intact	<input checked="" type="checkbox"/>
Check if bottles are correct	<input checked="" type="checkbox"/>
Check if bottles have sufficient volume	<input checked="" type="checkbox"/>
Check if samples received on ice	<input checked="" type="checkbox"/>
Check if VOA headspace is acceptable	<input type="checkbox"/>
Check if samples received in holding time.	<input checked="" type="checkbox"/>
Check if samples are preserved properly	<input checked="" type="checkbox"/>

# Chain of Custody

Scheduled for: 02/08/2023



Client: Bluegrass Water Utility Operating Company LLC

Report To:  
Bluegrass Water Utility Operating Company LLC  
Jo Anna McMahon  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

Invoice To:  
Bluegrass Water Utility Operating Company LLC  
AP  
1630 DES Peres Rd, Ste 140  
St. Louis, MO 63131

Project: Permit Renewal Persimmon Ridge

Phone: 314-380-8571  
PWS ID#: KY0090956  
State: \_\_\_\_\_

PO#: \_\_\_\_\_  
Quote#: \_\_\_\_\_

Please Print Legibly Mark Sroff

Collected by (Signature): Mark Sroff  
\*required information\*

Compliance Monitoring? Yes \_\_\_ No \_\_\_

Samples Chlorinated? Yes \_\_\_ No \_\_\_

\*For composite samples please indicate begin time, end time and temp(oC) at end time below:

Influent: Start Date \_\_\_\_\_ Start time \_\_\_\_\_ End Date \_\_\_\_\_ End Time \_\_\_\_\_ Temp (oC) \_\_\_\_\_

Effluent: Start Date \_\_\_\_\_ Start time \_\_\_\_\_ End Date \_\_\_\_\_ End Time \_\_\_\_\_ Temp (oC) \_\_\_\_\_

LAB USE ONLY	*required information*		Bottle and Preservative	Containers	Sample Description	Composite	Sample Analysis Requested
Workorder #	Date	Collection					
3022989	(mm/dd/yy)	Time (24 hr)					
3022989-01 A			Field Measurement	1	Persimmon Effluent	g/c	DO (Field)
3022989-01 B			*** DEFAULT CONTAINER ***	1	Persimmon Effluent	g/c	Field Services
3022989-01 C	<u>2/9/23</u>	<u>1126</u>	Plastic 500mL pH<2 w/H2SO4	1	Persimmon Effluent	g/c	Nitrate and Nitrite Combined by Lachat 353.2 TKN by Lachat 351.2
Preservation Check: pH :				<u>✓</u>			
3022989-01 D	<u>2/9/23</u>	<u>1450</u>	AG 1L pH<2 w/H2SO4	1	Persimmon Effluent	g/c	Oil and Grease
3022989-01 E	<u>2/9/23</u>	<u>1132</u>	AG 1L pH<2 w/H2SO4	1	Persimmon Effluent	g/c	Oil and Grease

Thermometer Serial Number

210029556

Temp 32.0 °C

Preservation Check Performed by: Mark Sroff

Field data collected by: Mark Sroff Date (mm/dd/yy) 2/9/23 Time (24 hr) 1137  
pH \_\_\_\_\_ Cond (umho) \_\_\_\_\_ Res Cl (mg/L) \_\_\_\_\_ Tot Cl (mg/L) \_\_\_\_\_ Free Cl (mg/L) \_\_\_\_\_  
Temp (oC) \_\_\_\_\_ or (oF) \_\_\_\_\_ Static Water Level \_\_\_\_\_ DO (mg/L) 11.33 Turb. (NTU) \_\_\_\_\_  
Flow (MGD) \_\_\_\_\_ or (CFS) \_\_\_\_\_ or (g/min) \_\_\_\_\_

Relinquished by: (Signature) <u>Mark Sroff</u>	Received by: (Signature) <u>[Signature]</u>	Date (mm/dd/yy) <u>02/09/23</u>	Time (24 hr) <u>1602</u>
---	--	------------------------------------	-----------------------------



PACE- Check here if trip charge applied to associated COC

Printed: 2/7/2023 6:58:12PM

ANDY BESHEAR  
GOVERNOR



REBECCA W. GOODMAN  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET**  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

April 6, 2021

Bluegrass Water Utility Operating Company LLC  
Delaplain Disposal  
249 W Yusen Dr  
Georgetown, KY 40324

RE: **Change of Ownership**  
Agency Interest # 3901  
KPDES Permit #: KY0079049  
Location: Scott County, Kentucky

Dear [Mr. Cox](#):

The Division of Water received your request for modification of the Kentucky Pollutant Discharge Elimination System (KPDES) coverage for the above-referenced facility. The KPDES permit has been modified to reflect the change of ownership.

If you have any questions, please contact me at [502-782-1363](tel:502-782-1363), or via e-mail at [joy.haden@ky.gov](mailto:joy.haden@ky.gov).

Sincerely,

A handwritten signature in black ink that reads "Joy Haden".

**Joy Haden**  
Surface Water Permits Branch  
Division of Water

Enclosure

**KPDES**



**KENTUCKY POLLUTANT  
DISCHARGE ELIMINATION  
SYSTEM**

**PERMIT TRANSFER**

**TRANSFER OF  
AUTHORIZATION TO DISCHARGE UNDER THE  
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**PERMIT NO.:** [KY0079049](#)  
**AGENCY INTEREST NO.:** [3901](#)

**Pursuant to Authority in KRS 224, this permit for:**

New Facility Name: [Delaplain Disposal](#)  
Facility Address: [249 W Yusen Dr](#)  
[Georgetown, Scott County, Kentucky](#)

Prior Owner: [Delaplain Disposal](#)  
Address: [249 W Yusen Dr](#)  
[Georgetown, KY 40324](#)

**is hereby transferred to:**

New Owner: [Bluegrass Water Utility Operating Company LLC](#)  
Mailing Address: [1650 Des Peres Rd Ste 303](#)  
[Des Peres, MO 63131](#)

**in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.**

The effective date of this permit transfer is April 6, 2021.

[July 21, 2021](#)

**Date Signed**

**Paul Miller, Director**  
**Division of Water**

Civil Engineering  
 Surveying & Mapping  
 Potable Water  
 Wastewater Treatment



Civil Site Design  
 Construction Support  
 Transportation  
 Wastewater Collection

---

scfm Required for Complete Mixing (provided with blowers common for MBBR, Airlift and Lagoon Aeration)	12.73	scfm
Discharge Pressure	4.01	psig
<b><u>Effluent Parameters</u></b>		
Effluent CBOD	10	mg/L
Effluent CBOD	4.6	lbs/day
Effluent TSS	30	mg/L
Effluent TSS	13.8	lbs/day
Summer Effluent NH3-N	2.0	mg/L
Summer Effluent NH3-N	0.9	lbs/day
Winter Effluent NH3-N	5.0	mg/L
Winter Effluent NH3-N	2.3	lbs/day
E Coli	130/240	cfu/100 mL
Minimum Dissolved Oxygen	7.0	mg/L
Total Chlorine Residual	0.011	mg/L



Civil Engineering  
 Surveying & Mapping  
 Potable Water  
 Wastewater Treatment



Civil Site Design  
 Construction Support  
 Transportation  
 Wastewater Collection

Side Water Depth of Each	5.75	ft
Tank Height of Each	7.25	ft
Volume of Each	2,753	gallons
Volume Total	5,505	gallons
Hydraulic Retention Time at Average Flow	2.4	hours
Hydraulic Retention Time at Peak Daily Flow	1.2	hours
Total Media Surface Area Requirement	4,627	m <sup>2</sup>
Total Media Surface Area Proposed	4,741	m <sup>2</sup>
<b><u>MBBR Aeration Requirement Summary</u></b>	<b><u>Stage 1</u></b>	
AOR (lbs/day)	35	lbs/day
Assumed Diffuser Subm. at AWL (ft.)	5	ft
Elevation (ft.)	634	ft
Alpha	0.70	
Beta	0.9	
Target DO Residual (MBBR Process) (mg/L)	5.0	mg/L
SOR (lbs/day)	138	lbs/day
Target Diffuser Efficiency/ft. Submergence	1.1	%
Airflow (scfm)	141	scfm
Airflow per 1,000 scfm	192	scfm/1,000 cf
<b><u>Blower Requirement Summary</u></b>		
No. of Blowers	2	
Airflow Requirement for MBBR	141	scfm
Airflow Requirement for Air Lift into MBBR (4" Eductor)	17	scfm
Airflow Requirement for Post-Aeration in CCT	13	scfm
Airflow Requirement per Blower	171	scfm
Discharge Pressure	5.37	psig
Assumed Overall Efficiency	0.62	
Approximate BHP Requirement/Blower	5.9	bhp
Approximate BHP Requirement Total	5.9	bhp
Estimated Nameplate HP / Blower	7.5	hp
Blower Type	Dual Lobe PD	
<b><u>Existing Chlorine Contact Tank / Post Aeration</u></b>		
Length	7.58	ft
Width	12	ft
Depth	7	ft
Contact Tank Volume	4,763	gallons
Disinfection HRT at Peak Flow	31.2	minutes
scfm/1,000 cf	20	scfm/1KCF

Civil Engineering  
 Surveying & Mapping  
 Potable Water  
 Wastewater Treatment



Civil Site Design  
 Construction Support  
 Transportation  
 Wastewater Collection

## Section B – Summary of Design Criteria

### Plant Influent Characteristics

Annual Average Daily Flow	55,000	gpd
Maximum Monthly Average Daily Flow	55,000	gpd
Peak Daily Flow	165,000	gpd
Peak Hourly Flow (w/out Equalization)	220,000	gpd
Influent BOD	225	mg/L
Influent BOD	103.2	lbs/day
Influent TSS	225	mg/L
Influent TSS	103.2	lbs/day
Influent NH3-N	33	mg/L
Influent NH3-N	15.1	lbs/day
Influent TKN	38	mg/L
Influent TKN	17.4	lbs/day
Influent pH	7	
Water Temperature	12	deg-C

### Lagoon Aeration

Actual Oxygen Supplied (BOD Reduction Only)	127	lbs/day
Target DO Residual	2.0	mg/L
Use 6, Existing 5.0 hp Mechanical Surface Aerators and 1		
Use 1, Existing 25.0 hp Mechanical Surface Aerator		

### MBBR Influent Characteristics

Annual Average Daily Flow	55,000	gpd
Maximum Monthly Average Daily Flow	55,000	gpd
Peak Daily Flow (w/Equalization)	110,000	gpd
Peak Hourly Flow (w/Equalization)	110,000	gpd
Influent BOD	40	mg/L
Influent TSS	40	mg/L
Influent NH3-N	26	mg/L
Influent TKN	13	mg/L
Design Influent TKN	13	mg/L
Influent pH	7	
Minimum MBBR Water Temperature	4	deg-C

### Tank Sizing Summary

No. of Tanks Proposed	2	
Length of Each	8.0	ft
Width of Each	8.0	ft

# PERSIMMON RIDGE IN LOUISVILLE, KENTUCKY

PERMIT ISSUE: November 18, 2021  
CONSTRUCTION ISSUE: \_\_\_\_\_, 2021  
RECORD ISSUE: \_\_\_\_\_, 2021



LOCATION MAP

**DOCUMENT LIST**

001	TITLE
002	NOTES
003	SITE UTILITY PLAN
004	ACCESS PLAN
005	HYDRAULIC PROFILE
006	ACCESS NOTES, AGREEMENTS AND LEGEND
007	PROPOSED PAVEMENT PLAN
008	LANDSCAPE PLAN
009	LANDSCAPE SECTION AND DETAILS
010	ACCESS DETAILS AND ELECTRICAL ROOM DIAGRAM



<p>DATE: 11/18/21 SCALE: AS SHOWN</p>	<p><b>DESIGN 21 GROUP INC.</b> 1101 West Bank Lane Dr. Louisville, KY 40203 Phone: 502-261-1100 Fax: 502-261-1101</p>	<p><b>COVER SHEET</b></p> <p>PERSIMMON RIDGE 77 PERSIMMON RIDGE DRIVE LOUISVILLE, KENTUCKY 40240</p>	<p>Project No. 21-0004 Revision No. 01 Date: 11/18/21</p> <p>STEPHEN R. GALLOWAY Professional Engineer License No. 10000 State of Kentucky</p>
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**GENERAL NOTES AND CONSTRUCTION REQUIREMENTS**

1. All work shall be in accordance with the specifications and drawings for this project.
2. The contractor shall be responsible for obtaining all necessary permits and licenses.
3. The contractor shall be responsible for the safety of all workers and the public.
4. The contractor shall be responsible for the protection of all existing utilities.
5. The contractor shall be responsible for the disposal of all waste materials.
6. The contractor shall be responsible for the maintenance of all equipment.
7. The contractor shall be responsible for the cleanup of all work areas.
8. The contractor shall be responsible for the payment of all taxes and fees.
9. The contractor shall be responsible for the insurance of all workers and equipment.
10. The contractor shall be responsible for the bonding of all work.
11. The contractor shall be responsible for the completion of all work within the specified time frame.
12. The contractor shall be responsible for the maintenance of all records.
13. The contractor shall be responsible for the coordination of all work with other contractors.
14. The contractor shall be responsible for the protection of all adjacent properties.
15. The contractor shall be responsible for the maintenance of all access roads.
16. The contractor shall be responsible for the maintenance of all drainage systems.
17. The contractor shall be responsible for the maintenance of all lighting systems.
18. The contractor shall be responsible for the maintenance of all security systems.
19. The contractor shall be responsible for the maintenance of all communication systems.
20. The contractor shall be responsible for the maintenance of all fire protection systems.
21. The contractor shall be responsible for the maintenance of all environmental systems.
22. The contractor shall be responsible for the maintenance of all energy systems.
23. The contractor shall be responsible for the maintenance of all water systems.
24. The contractor shall be responsible for the maintenance of all sewer systems.
25. The contractor shall be responsible for the maintenance of all stormwater systems.
26. The contractor shall be responsible for the maintenance of all traffic control systems.
27. The contractor shall be responsible for the maintenance of all signage systems.
28. The contractor shall be responsible for the maintenance of all landscaping systems.
29. The contractor shall be responsible for the maintenance of all site furnishings.
30. The contractor shall be responsible for the maintenance of all site amenities.
31. The contractor shall be responsible for the maintenance of all site infrastructure.
32. The contractor shall be responsible for the maintenance of all site utilities.
33. The contractor shall be responsible for the maintenance of all site services.
34. The contractor shall be responsible for the maintenance of all site operations.
35. The contractor shall be responsible for the maintenance of all site management.

**GENERAL NOTES AND CONSTRUCTION REQUIREMENTS**

36. The contractor shall be responsible for the maintenance of all site safety.
37. The contractor shall be responsible for the maintenance of all site security.
38. The contractor shall be responsible for the maintenance of all site access.
39. The contractor shall be responsible for the maintenance of all site parking.
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**GENERAL NOTES**

PERMISSION ROAD  
77 PERMISSION ROAD DRIVE  
LOUISVILLE, KENTUCKY 40240

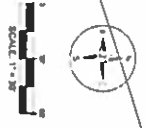
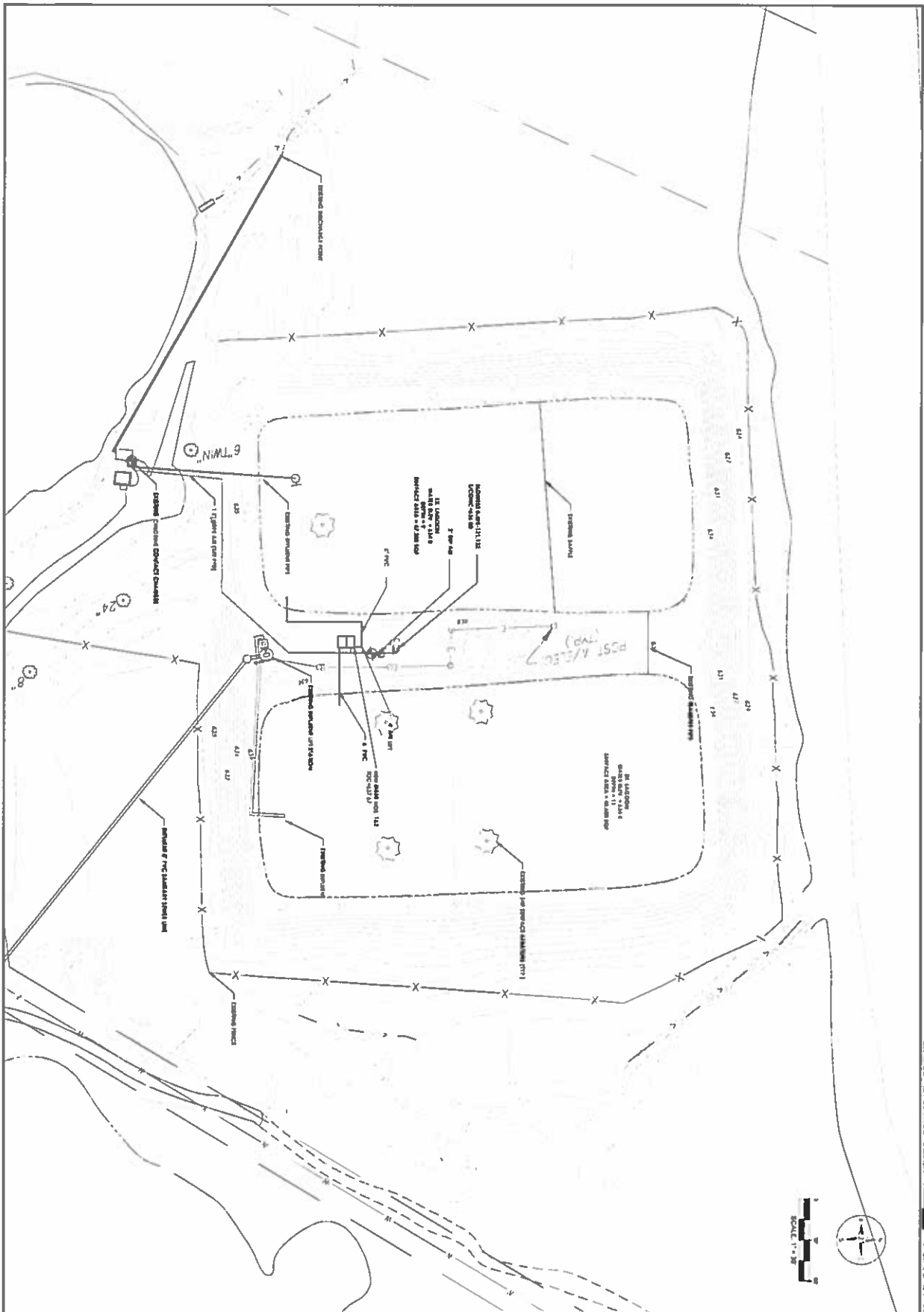
**DESIGN GROUP INC.**

7777 NORTH COLLETS BLVD  
LOUISVILLE, KY 40241

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TIME: 10:10:10 AM  
USER: JACOB  
PROJECT: PERM ROAD



002



	<b>DAVID L. SMITH</b> ENGINEER No. 10000 State of Ohio
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**SITE PLAN**

**PERMANENCE RIDGE**  
**72 PERMANENCE RIDGE DRIVE**  
**LOUISVILLE, KY 40258**

21 DESIGN GROUP INC.  
 72 PERMANENCE RIDGE DRIVE  
 LOUISVILLE, KY 40258

NO.	DATE	DESCRIPTION
1	08/11/10	PRELIMINARY
2	08/11/10	REVISED
3	08/11/10	REVISED
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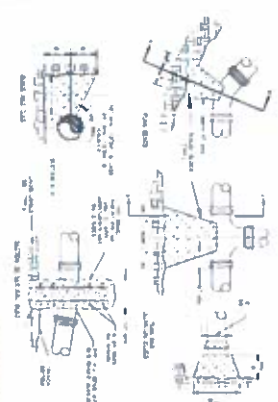
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CONCRETE SECTION NO. 1-1  
 SHOWS THE WALL AND FOUNDATION FOR THE...  
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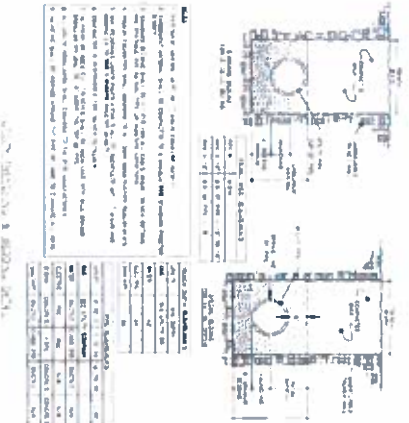
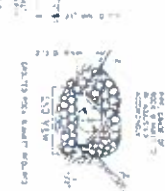
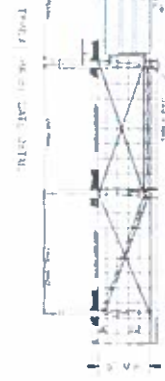
CONCRETE SECTION NO. 1-1



RM-CAS1 CONCRETE WALLING  
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**DETAIL PLAN SHEET**

PERMISSION ROAD  
 72 PERMISSION ROAD DRIVE  
 LOUISVILLE, KENTUCKY 40246

**21**  
**DESIGN**  
**GROUP INC.**

1711 Johnson Road Dr  
 Raleigh, NC 27609  
 Phone: 919.877.0000  
 Fax: 919.877.0000

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PLANT INFLUENT FLOW

Q<sub>in</sub> = 14,000 GPD  
 Q<sub>out</sub> = 10,000 GPD  
 Q<sub>recycle</sub> = 220,000 GPD  
 TSS = 47 MG/L

WATER INFLUENT FLOW (EQUILIBRIATED)

Q<sub>in</sub> = 35,000 GPD  
 Q<sub>out</sub> = 110,000 GPD

LAGOON AERATION

BOD REMOVED = 125 UG/L, 84.9 LBS/D  
 BOD IN/OUT RATIO = 3  
 AIR IN/OUT RATIO = 12.5 LBS/DAV  
 USE 1/2 EXISTING 3.0 HP MECHANICAL SURFACE AERATORS USE 1, 250.0 HP MECHANICAL SURFACE AERATOR (ACTUAL POWER DEMAND MET WITH LOWEST UNIT COST OF SERVICE)

WARR (SPECTREVIEW)

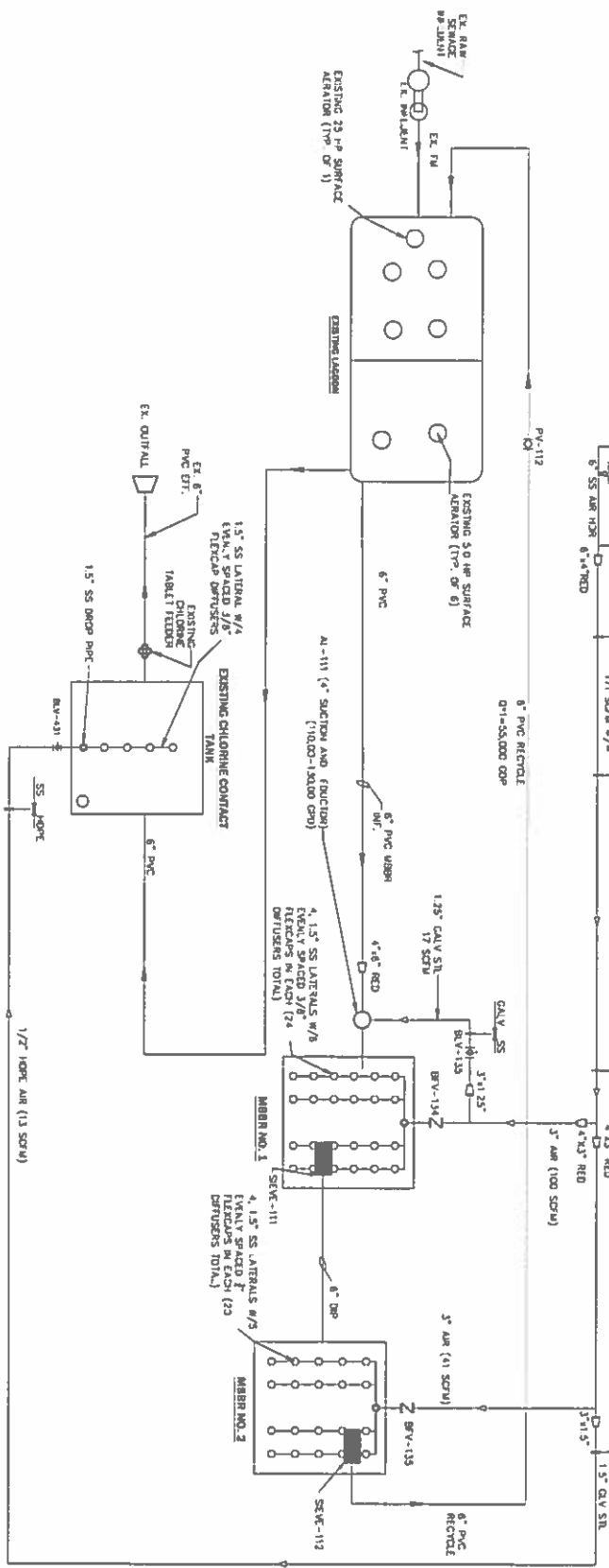
NO. OF WARRS = 2  
 DRAINAGE AREA = 16.125 AC  
 WARR TYPE = 18.4 LBS/DAV  
 WARR BOD = 40 UG/L, 18.4 LBS/DAV  
 WARR BTU BOD (SOLUBLE) TARGET = 5 UG/L, 2.3 LBS/DAV  
 WARR AIR = 2.4 UG/L, 4.241 UG/L  
 MEDIA VOLUME RATIO = (W/BSO UG/L / WDA) = 251 UG/L  
 MEDIA FILL % = 15%  
 SCFM RATIO = 141 SCFM

BLOCKIES

FUNCTION: LAGOON AERATION, WARR AERATION, AERATOR POST-AERATION  
 101.11 SCFM (401), 171 SCFM (171)  
 SCFM/BLOWER: 171 SCFM (171)  
 NO. OF BLOWERS: 1 (1)  
 (SIBAWBY)

COLLECTOR AERATION =  
 VOLUME: 4783 GAL.  
 DIMENSIONS: 7'-7" x 3' x 7' 5"  
 WRT: 1.1 HP, 31 AM, FIBER GLASS DISINFECTANTS TO ACHIEVE COMPLETE W/NO TO PROVIDE EFFECTIVE CONTACT TIME FOR DISINFECTION  
 WRT: 1.1 HP, 31 AM, FIBER GLASS DISINFECTANTS TO ACHIEVE COMPLETE W/NO TO PROVIDE EFFECTIVE CONTACT TIME FOR DISINFECTION  
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 WRT: 1.1 HP, 31 AM, FIBER GLASS DISINFECTANTS TO ACHIEVE COMPLETE W/NO TO PROVIDE EFFECTIVE CONTACT TIME FOR DISINFECTION

EQUIPMENT LIST  
 TSS <= 20 UG/L  
 M3-N (SANDWICH) <= 20 UG/L  
 M3-N (WHITER) <= 5.0 UG/L  
 COOL <= 100 GDU/100 MG A  
 TOTAL CHLORINE RESIDUAL <= 0.011 MG/L



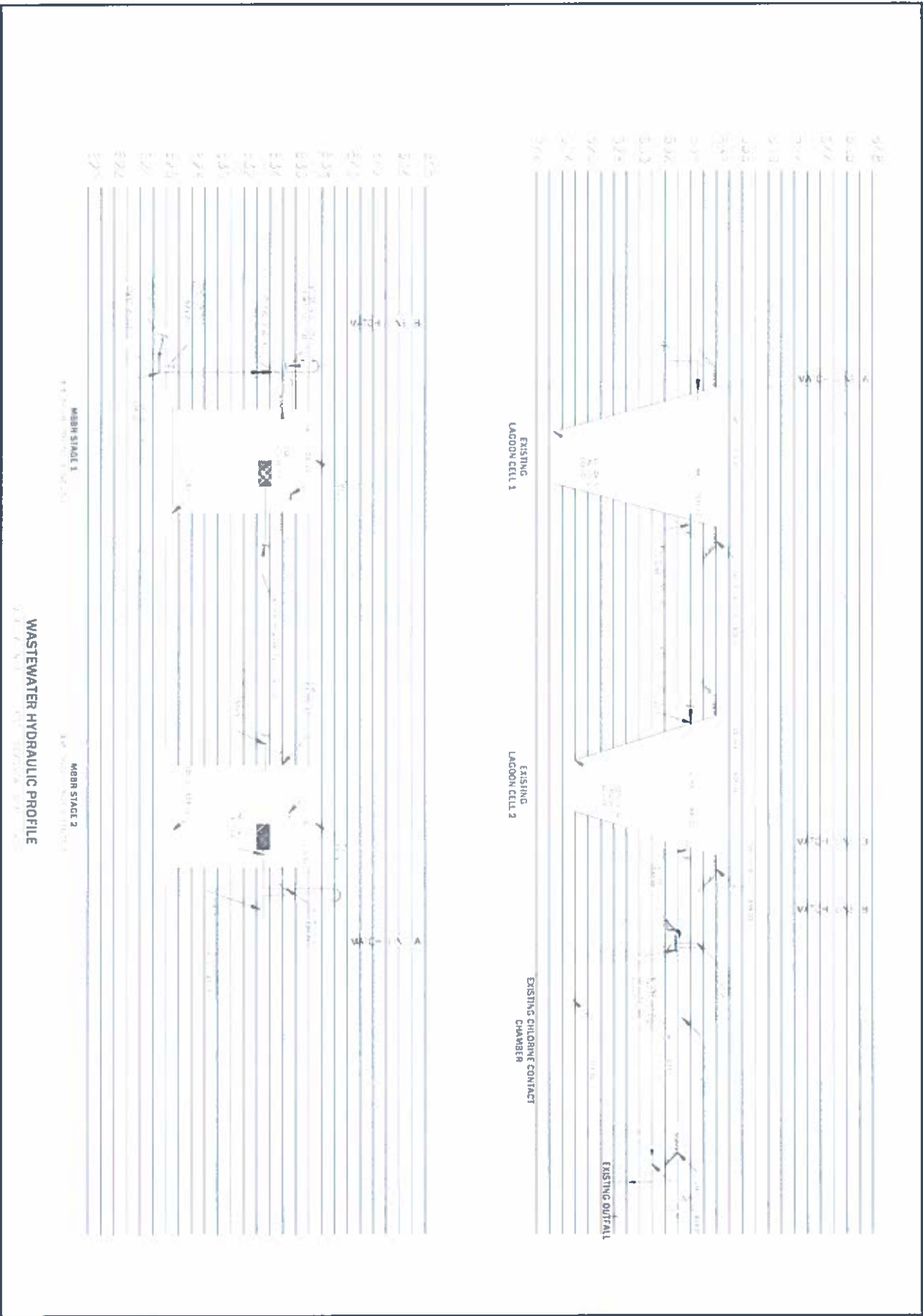
PROCESS FLOW DIAGRAM



PERFORMANCE W/TP IMPROVEMENTS  
 SRI PERFORMANCE DRIVE  
 LOUISVILLE, KENTUCKY

DESIGN GROUP INC.

NO.	REVISION	DATE
1	ISSUED FOR PERMITS	11/20/2008
2	REVISED PER COMMENTS	12/15/2008
3	REVISED PER COMMENTS	01/15/2009
4	REVISED PER COMMENTS	02/15/2009
5	REVISED PER COMMENTS	03/15/2009
6	REVISED PER COMMENTS	04/15/2009
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49	REVISED PER COMMENTS	11/15/2012
50	REVISED PER COMMENTS	12/15/2012
51	REVISED PER COMMENTS	01/15/2013
52	REVISED PER COMMENTS	02/15/2013
53	REVISED PER COMMENTS	03/15/2013
54	REVISED PER COMMENTS	04/15/2013
55	REVISED PER COMMENTS	05/15/2013
56	REVISED PER COMMENTS	06/15/2013
57	REVISED PER COMMENTS	07/15/2013
58	REVISED PER COMMENTS	08/15/2013
59	REVISED PER COMMENTS	09/15/2013
60	REVISED PER COMMENTS	10/15/2013
61	REVISED PER COMMENTS	11/15/2013
62	REVISED PER COMMENTS	12/15/2013
63	REVISED PER COMMENTS	01/15/2014
64	REVISED PER COMMENTS	02/15/2014
65	REVISED PER COMMENTS	03/15/2014
66	REVISED PER COMMENTS	04/15/2014
67	REVISED PER COMMENTS	05/15/2014
68	REVISED PER COMMENTS	06/15/2014
69	REVISED PER COMMENTS	07/15/2014
70	REVISED PER COMMENTS	08/15/2014
71	REVISED PER COMMENTS	09/15/2014
72	REVISED PER COMMENTS	10/15/2014
73	REVISED PER COMMENTS	11/15/2014
74	REVISED PER COMMENTS	12/15/2014
75	REVISED PER COMMENTS	01/15/2015
76	REVISED PER COMMENTS	02/15/2015
77	REVISED PER COMMENTS	03/15/2015
78	REVISED PER COMMENTS	04/15/2015
79	REVISED PER COMMENTS	05/15/2015
80	REVISED PER COMMENTS	06/15/2015
81	REVISED PER COMMENTS	07/15/2015
82	REVISED PER COMMENTS	08/15/2015
83	REVISED PER COMMENTS	09/15/2015
84	REVISED PER COMMENTS	10/15/2015
85	REVISED PER COMMENTS	11/15/2015
86	REVISED PER COMMENTS	12/15/2015
87	REVISED PER COMMENTS	01/15/2016
88	REVISED PER COMMENTS	02/15/2016
89	REVISED PER COMMENTS	03/15/2016
90	REVISED PER COMMENTS	04/15/2016
91	REVISED PER COMMENTS	05/15/2016
92	REVISED PER COMMENTS	06/15/2016
93	REVISED PER COMMENTS	07/15/2016
94	REVISED PER COMMENTS	08/15/2016
95	REVISED PER COMMENTS	09/15/2016
96	REVISED PER COMMENTS	10/15/2016
97	REVISED PER COMMENTS	11/15/2016
98	REVISED PER COMMENTS	12/15/2016
99	REVISED PER COMMENTS	01/15/2017
100	REVISED PER COMMENTS	02/15/2017

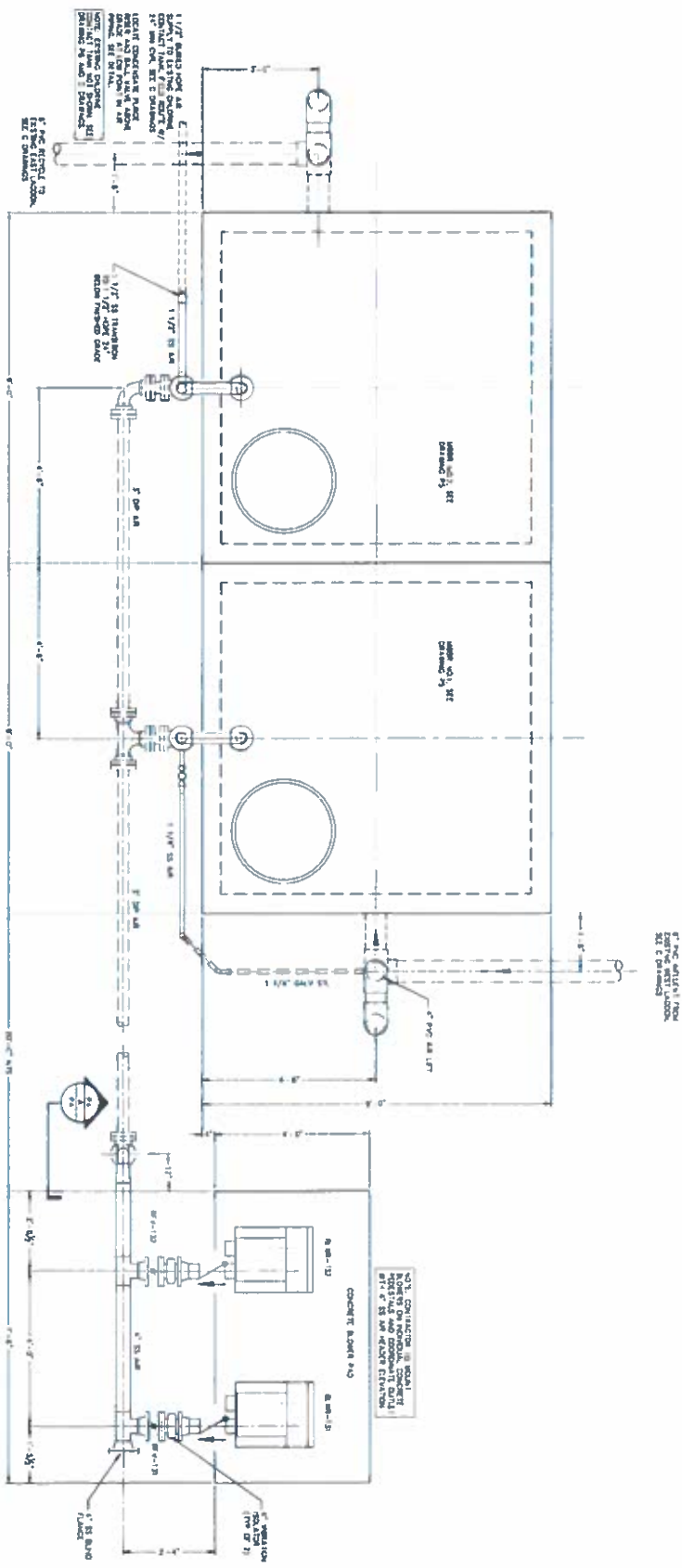


	<p><b>HYDRAULIC PROFILE</b></p> <p>PERFORMANCE RIDGE WWTP 280 PERFORMANCE RIDGE DR LOUISVILLE, KENTUCKY</p>	<p><b>DESIGN GROUP INC.</b></p> <p>1701 East Main Street Birmingham, AL 35202 Phone: (205) 988-8888 Fax: (205) 988-8889</p>	<p>DATE: 10/15/2014 TIME: 10:00 AM DRAWN BY: [Name] CHECKED BY: [Name]</p>
---	---	---	--

10/15/2014 10:00 AM [Name]



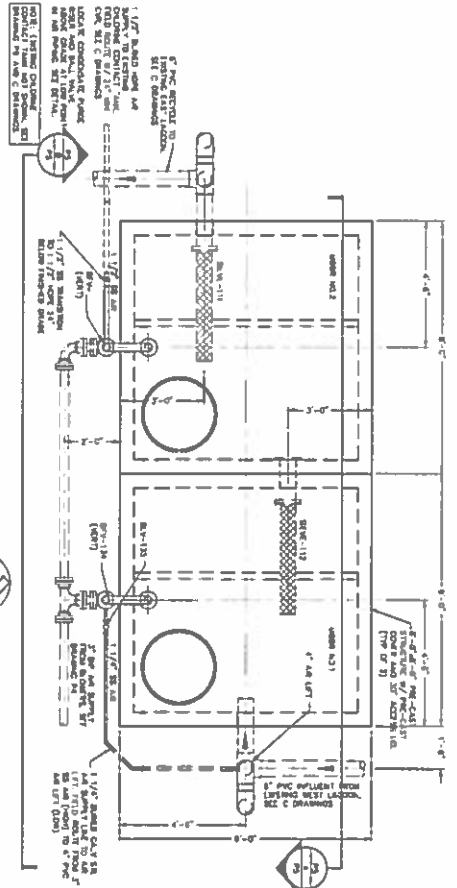




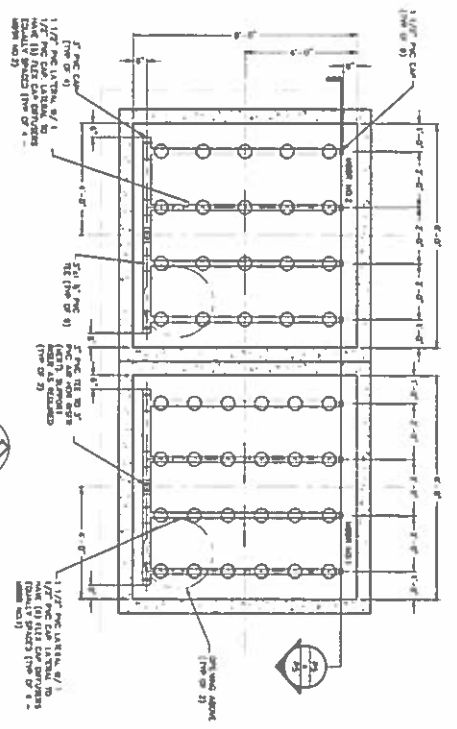
**PROCESS PLAN LAYOUT AND BLOWER ARRANGEMENT PLAN**  
SCALE 3/4" = 1'-0"

**AIR HEADER ELEVATION**  
SCALE 3/4" = 1'-0"

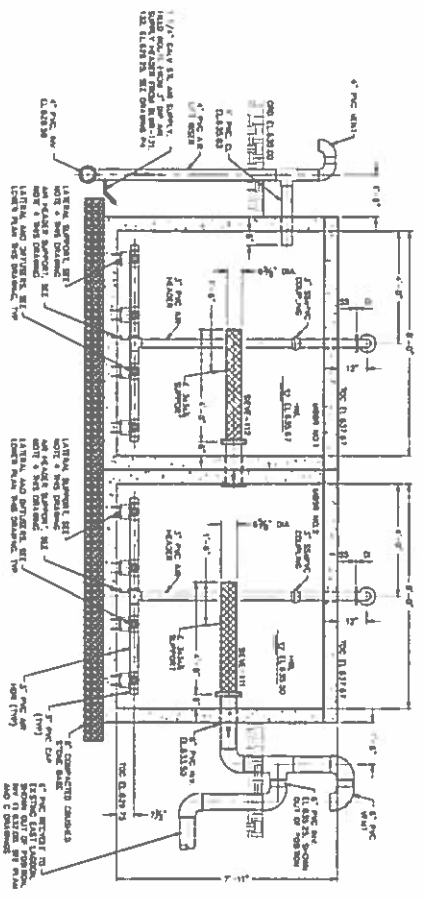
- NOTES:**
1. ALL DIMENSIONS TO FACE UNLESS NOTED OTHERWISE.
  2. ALL DIMENSIONS TO FACE UNLESS NOTED OTHERWISE.
  3. ALL DIMENSIONS TO FACE UNLESS NOTED OTHERWISE.
  4. ALL DIMENSIONS TO FACE UNLESS NOTED OTHERWISE.
  5. ALL DIMENSIONS TO FACE UNLESS NOTED OTHERWISE.



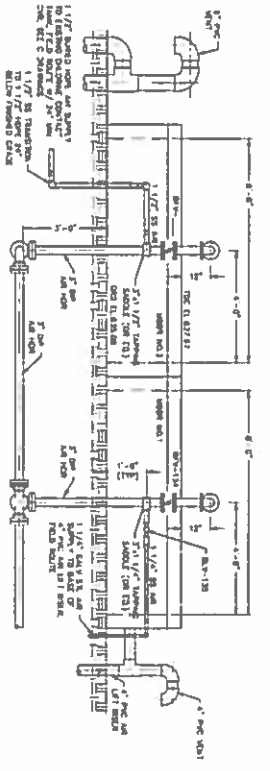
MBBR UPPER PLAN  
SCALE: 1/2" = 1'-0"



MBBR LOWER PLAN  
SCALE: 1/2" = 1'-0"

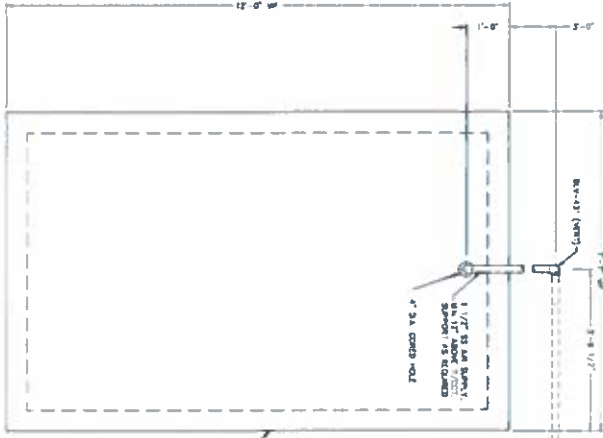


MBBR SECTION  
SCALE: 1/2" = 1'-0"



MBBR ELEVATION  
SCALE: 1/2" = 1'-0"

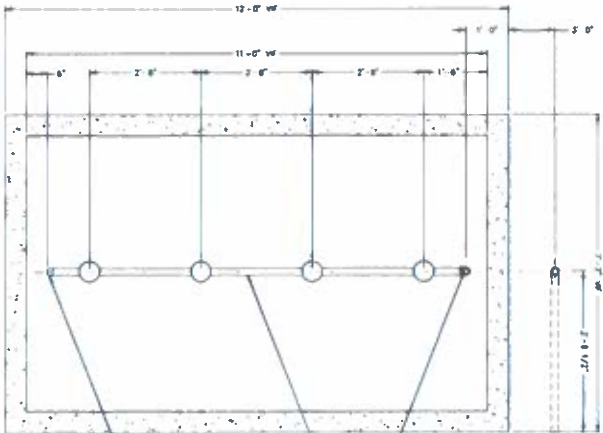
- NOTES:
1. CONSTRUCTION TO MATCH PIPE SUPPORTS AS SHOWN SUPPORT LOCATIONS AND TYPES.
  2. SEE GENERAL NOTES FOR MBBR SYSTEMS FOR PIPE PLANS, DETAILS, ETC.
  3. SEE GENERAL NOTES FOR MBBR SYSTEMS FOR PIPE PLANS, DETAILS, ETC.
  4. SEE GENERAL NOTES FOR MBBR SYSTEMS FOR PIPE PLANS, DETAILS, ETC.
  5. SEE GENERAL NOTES FOR MBBR SYSTEMS FOR PIPE PLANS, DETAILS, ETC.



EXISTING CHLORINE CONTACT TANK  
MODIFICATIONS - UPPER PLAN  
SCALE: 3/4" = 1'-0"



NOT LISTED. SEE ARCHITECTURAL DRAWINGS AND CONSULT WITH THE CLIENT FOR THE LOCATION OF THE EXISTING TANK. THE EXISTING TANK IS TO BE MODIFIED TO ACCOMMODATE THE NEW 1 1/2" DIA. PIPE AND TO BE USED AS A CHLORINE CONTACT TANK.



EXISTING CHLORINE CONTACT TANK  
MODIFICATIONS - LOWER PLAN  
SCALE: 3/4" = 1'-0"



NOT LISTED. SEE ARCHITECTURAL DRAWINGS AND CONSULT WITH THE CLIENT FOR THE LOCATION OF THE EXISTING TANK. THE EXISTING TANK IS TO BE MODIFIED TO ACCOMMODATE THE NEW 1 1/2" DIA. PIPE AND TO BE USED AS A CHLORINE CONTACT TANK.

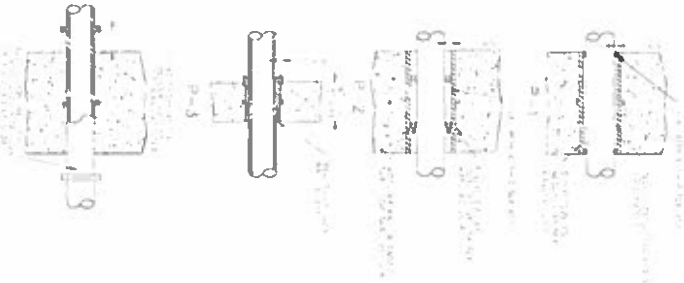
THESE PLANS TO PROVIDE THE SUPPORT AS REQUIRED. SUPPORT LOCATIONS AND TYPES ARE TO BE DETERMINED BY THE CLIENT. THE CLIENT IS TO PROVIDE THE NECESSARY FOUNDATION AND RETENTION WALLS. THE CLIENT IS TO PROVIDE THE NECESSARY DETAILS AND REVISIONS.

	<p>CHLORINE CONTACT TANK AND POST AERATION DIFFUSER PROCESS PLAN</p> <p>PERFORMANCE RIDGE WHITE IMPROVEMENTS 200 PERFORMANCE RIDGE DRIVE LOUISVILLE, KENTUCKY</p>	<p><b>DESIGN GROUP INC.</b></p> <p>1100 W. Main Street Louisville, KY 40203 Phone: 502-261-1100 Fax: 502-261-1101 www.designgroupinc.com</p>	<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	DESCRIPTION												
NO.	DATE	DESCRIPTION																

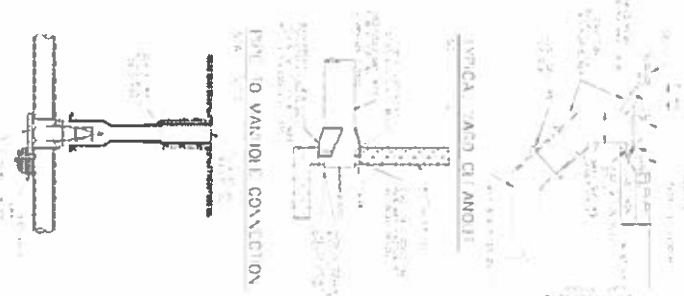
**PIPE HANGERS - WALLS DETAILS**



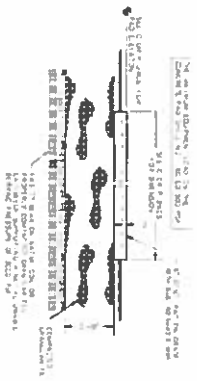
**Pipe Hangers - Walls Details**



**TYPICAL VALVE BOX INSTALLATION**

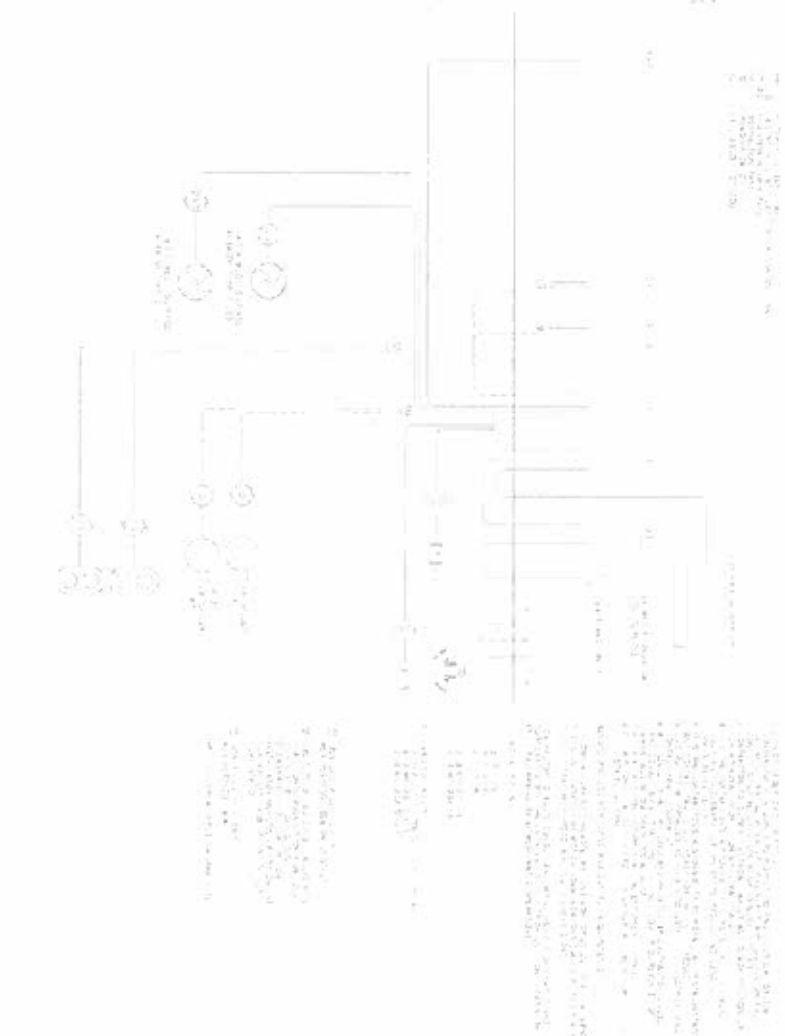


**TYPICAL SLAB ON GRADE CONTROL JOINT**



**TYPICAL EXTERIOR EQUIPMENT PAD ON GRADE**

**ELECTRICAL RISE DIAGRAM**





Civil Engineering  
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 Potable Water  
 Wastewater Treatment



Civil Site Design  
 Construction Support  
 Transportation  
 Wastewater Collection

Side Water Depth of Each	5.75	ft
Tank Height of Each	7.25	ft
Volume of Each	2,753	gallons
Volume Total	5,505	gallons
Hydraulic Retention Time at Average Flow	2.4	hours
Hydraulic Retention Time at Peak Daily Flow	1.2	hours
Total Media Surface Area Requirement	4,627	m <sup>2</sup>
Total Media Surface Area Proposed	4,741	m <sup>2</sup>
<b><u>MBBR Aeration Requirement Summary</u></b>		
	<b>Stage 1</b>	
AOR (lbs/day)	35	lbs/day
Assumed Diffuser Subm. at AWL (ft.)	5	ft
Elevation (ft.)	634	ft
Alpha	0.70	
Beta	0.9	
Target DO Residual (MBBR Process) (mg/L)	5.0	mg/L
SOR (lbs/day)	138	lbs/day
Target Diffuser Efficiency/ft. Submergence	1.1	%
<b>Airflow (scfm)</b>	<b>141</b>	<b>scfm</b>
Airflow per 1,000 scfm	192	scfm/1,000 cf
<b><u>Blower Requirement Summary</u></b>		
No. of Blowers	2	
Airflow Requirement for MBBR	141	scfm
Airflow Requirement for Air Lift into MBBR (4" Eductor)	17	scfm
Airflow Requirement for Post-Aeration in CCT	13	scfm
Airflow Requirement per Blower	171	scfm
Discharge Pressure	5.37	psig
Assumed Overall Efficiency	0.62	
Approximate BHP Requirement/Blower	5.9	bhp
Approximate BHP Requirement Total	5.9	bhp
Estimated Nameplate HP / Blower	7.5	hp
	<i>Dual Lobe</i>	
Blower Type	<i>PD</i>	
<b><u>Existing Chlorine Contact Tank / Post Aeration</u></b>		
Length	7.58	ft
Width	12	ft
Depth	7	ft
Contact Tank Volume	4,763	gallons
Disinfection HRT at Peak Flow	31.2	minutes
scfm/1,000 cf	20	scfm/1KCF

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scfm Required for Complete Mixing (provided with blowers common for MBBR, Airlift and Lagoon Aeration)	12.73	scfm
Discharge Pressure	4.01	psig
<b><u>Effluent Parameters</u></b>		
Effluent CBOD	10	mg/L
Effluent CBOD	4.6	lbs/day
Effluent TSS	30	mg/L
Effluent TSS	13.8	lbs/day
Summer Effluent NH3-N	2.0	mg/L
Summer Effluent NH3-N	0.9	lbs/day
Winter Effluent NH3-N	5.0	mg/L
Winter Effluent NH3-N	2.3	lbs/day
E Coli	130/240	cfu/100 mL
Minimum Dissolved Oxygen	7.0	mg/L
Total Chlorine Residual	0.011	mg/L



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 Wastewater Treatment



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 Construction Support  
 Transportation  
 Wastewater Collection

## Section B – Summary of Design Criteria

### Plant Influent Characteristics

Annual Average Daily Flow	55,000	gpd
Maximum Monthly Average Daily Flow	55,000	gpd
Peak Daily Flow	165,000	gpd
Peak Hourly Flow (w/out Equalization)	220,000	gpd
Influent BOD	225	mg/L
Influent BOD	103.2	lbs/day
Influent TSS	225	mg/L
Influent TSS	103.2	lbs/day
Influent NH3-N	33	mg/L
Influent NH3-N	15.1	lbs/day
Influent TKN	38	mg/L
Influent TKN	17.4	lbs/day
Influent pH	7	
Water Temperature	12	deg-C

### Lagoon Aeration

Actual Oxygen Supplied (BOD Reduction Only)	127	lbs/day
Target DO Residual	2.0	mg/L
Use 6, Existing 5.0 hp Mechanical Surface Aerators and 1		
Use 1, Existing 25.0 hp Mechanical Surface Aerator		

### MBBR Influent Characteristics

Annual Average Daily Flow	55,000	gpd
Maximum Monthly Average Daily Flow	55,000	gpd
Peak Daily Flow (w/Equalization)	110,000	gpd
Peak Hourly Flow (w/Equalization)	110,000	gpd
Influent BOD	40	mg/L
Influent TSS	40	mg/L
Influent NH3-N	26	mg/L
Influent TKN	13	mg/L
Design Influent TKN	13	mg/L
Influent pH	7	
Minimum MBBR Water Temperature	4	deg-C

### Tank Sizing Summary

No. of Tanks Proposed	2	
Length of Each	8.0	ft
Width of Each	8.0	ft

# Scanning Batch Sheet

Show Form



DAILY (NOV

20 2019 02:09 PM) REC

**MEMORANDUM**

**TO:** Michael B. Kroeger, Director Division of Enforcement

**THROUGH:** Justin Schul, Civil Enforcement Branch Manager

**FROM:** Amber Hawkins, Enforcement Specialist

**DATE:** October 9, 2019

**SUBJECT:** Case Closure Memo:  
AI ID: 3955  
AI Name: Persimmon Ridge Subd.  
Activity ID: ERF20170001  
Case No.: DOW-170261  
KPDES No.: KY0090956  
Shelby County

- Persimmon Ridge Subdivision is a golf course community who owns and operates a small package plant for the treatment of residential wastewater. An NOV was issued in 2011 from a DMR review (2009-2010); all of the violations were permit exceedances. A letter of sufficiency was sent to PR Wastewater Management from the Louisville Regional Office on March 30, 2011, for issues found in the 2011 NOV.
- DMRs were reviewed in January of 2016 and again in November of 2017. Due to the number of numeric exceedances (77) and continued exceedances, Persimmon Ridge Subdivision was referred to DENF.
- Another DMR review was conducted on 05/09/2018, for the 4<sup>th</sup> quarter of 2017 and 1<sup>st</sup> quarter of 2018. A total of 24 numeric exceedances were found.
- Representatives from the responsible party participated in an administrative conference on May 11, 2018. Persimmon Ridge agreed to enter into an Agreed Order with the Cabinet. The Agreed Order was executed on September 17, 2018, with a \$10,450 civil penalty. The CAP was accepted on October 31, 2019. The final penalty payment was paid on March 27, 2019.
- Bluegrass Water Utility Operating Company, LLC is a company that acquires failing WWTP in Kentucky to make the much needed repairs and upgrades to those systems for a profit. Bluegrass acquired the WWTP on or around September 15, 2019. An Agreed Order was tendered by the Cabinet to Bluegrass outlining the remedial measures Bluegrass was to complete to bring Persimmon Ridge back into compliance with their KPDES permit. The Agreed Order was executed on September 03, 2019.
- The Division of Water is aware of the facts surrounding this referral and agrees with the closure of this case.
- With the above-stated facts in mind, and with your initials above, this case will be closed in the Division of Enforcement.

June 27, 2022

Nicholas Fields  
Kentucky Department of Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3<sup>rd</sup> Floor  
Frankfort, KY 40601

RE: Bluegrass Water Utility Operating Company, LLC  
Darlington Creek WWTP  
KYPDES Permit No. KY0105325  
Agency No. 44397

### **Corrective Action Plan**

In light of the Darlington Creek WWTP's current status, Bluegrass Water submits the following corrective action plan.

BUUOC has recently purchased this treatment plant. With the change of ownership, operational modifications have been implemented and are ongoing. Due to the poor maintenance of the facility by the previous ownership, the current plant has some areas of concern, which could potential prevent it from meeting limits.

#### **1. Causes of Effluent Violations**

- Nitrogen, Ammonia (NH<sub>3</sub>-N)
- Total Residual Chlorine
- Total Suspended Solids (TSS)
- Carbonaceous Biological Oxygen Demand (CBOD)
- E. Coli

A review was performed of EPA's Echo compliance website which lists violations. The Darlington Creek WWTF has been in "Significant noncompliance" between October 1, 2019, thru September 30, 2021, with numerous failures to report DMR. The package plant portion of the facility has not been maintained by the previous ownership and shows signs of rust and structural concerns. Areas with dense vegetation along the southwest of the facility causing debris to fall into wastewater process lines, which could cause clogging and backup along the system. Duckweed present on one of the clarifiers and it can potentially cause issues with meeting TSS limits.

The existing system does not have a function flow meter and there are concerns with accuracy of flow data. Additionally, there is no remote monitoring available at this system. The fence shows signs of deterioration, and it will require rehabilitation and/or repairs along several sections. Air headers showing signs of age and it will need to be addressed to reevaluate the effectiveness of aeration piping and any associated components along the facility.

#### **2. System Evaluation and Corrective Actions**

The improvements will include rehabilitation to the aeration system to include increase the air piping size and the number of diffusers to improve treatment process. Vegetation control throughout the plant, in order to remove any trees can branches around the plant. In addition, the installation of remote monitoring system and properly installed flow meter will allow operations to continuously monitor flows and alarm conditions.

3. Project Milestones

- a. Continue monitoring performance of facility (October 2, 2022)
- b. Procure equipment (April 5, 2023)
- e. Complete construction (October 5, 2023)

Sincerely,



**Enrique Chavez Jr.**  
Utility Project Manager  
Email: [echavez@cswrgroup.com](mailto:echavez@cswrgroup.com)  
Office: (314) 380-8043  
Mobile: (314) 437-5714





August 15, 2019

Division of Enforcement  
Attention: Director  
300 Sower Blvd.  
Frankfort, KY 40601

AUG 26 2019

RE: Bluegrass Water Utility Operating Company Friendly Agreed Orders

Dear Sir or Ma'am,

Please find enclosed signed copies of nine (9) Friendly Agreed Orders for Case No. DOW 19-3-0148 through Case No. DOW 19-3-0156 pertaining to the Bluegrass Water UOC acquisition case.

If you have any questions or require additional information, please contact me at your earliest convenience. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jacob O. Freeman", is written over a large, light blue, stylized wave graphic that spans across the middle of the page.

Jacob O. Freeman, PE  
Director, Engineering

Enclosures: (9)

**FACILITIES CONSTRUCTION BRANCH  
WASTEWATER FACILITIES REVIEW SECTION**

REFERENCE: Permission Ridge Golf Section 19 Sewer Extension ID # **AI#3955APE2020001**

PURPOSE: SLE

ASSIGNED TO (OR INITIATED BY):

**MM**

INITIALS \_\_\_\_\_ DATE \_\_\_\_\_

TO: Supervisor for Approval  
Approved

Initials \_\_\_\_\_ Date \_\_\_\_\_

COMMENTS:

**Permission Ridge WWTP WWTP**  
KY0090956

TO: \_\_\_\_\_  
Approved

Initials \_\_\_\_\_ Date \_\_\_\_\_

COMMENTS:

TO: \_\_\_\_\_  
Approved

Initials \_\_\_\_\_ Date \_\_\_\_\_

COMMENTS:

TO: Shafiq Amawi, Branch Manager  
Approved

Initials \_\_\_\_\_ Date \_\_\_\_\_

COMMENTS:

Notice of Violation Attached

Yes

No

Sanction List

Yes

No

Tap on Ban

Yes

No

Other enforcement action

Yes

No

100 year floodplain

Yes

No

Letter of approval from owner

Yes

No

Regionalization Possible

Yes

No

Additional Plant Loading

0.0011

MGD

Current Plant loading

0.11

MGD

Plant Capacity

0.14

MGD

Date sewer sanction exemption granted:

LAST PERSON RETURN TO \_\_\_\_\_

**FACILITIES CONSTRUCTION BRANCH  
PLAN LOG-IN SHEET**

AI#3955APE20200001

<b>PROJ ID#</b> AI#3955APE2		<b>RECEIVED</b>			<b>COUNTY</b>	Shelby
<b>PROJECT NAME :</b> Permission Ridge Golf Section 19 Sewer Extension						
<b>SUBMITTED BY :</b>						<b>CODE:</b> _____
<b>NON-SRF</b>	<b>PE: MM</b>	<b>PA:JRR</b>	<b>ENTERED BY:</b> _____		<b>DATE:</b> _____	
<b>NUMBER</b>	<b>REC'D</b>	<b>APPLICATION REC'D</b>			<b>CHECK RECEIVED</b>	
PLANS	SPECS	SLE	KPDES	NONE	YES	NO
1						AMOUNT
						\$200

TO BE COMPLETED BY REVIEW ENGINEER :

<b>REVIEW TYPE :</b> <b>SLE</b>	<b>Permission Ridge WWTP WWTP</b>	<b>KPDES#</b>	<b>KY0090956</b>
<b>FACILITY #</b> _____	<b>INCOMPLETE NOTICE:</b>	<b>APPLICATION COMPLETE:</b>	
<b>APPLICANT/CODE</b>	<b>CONSULTANT/CODE</b>	<b>PERMANENT OWNER/CODE</b>	
<u>Permission Ridge Development</u>	<u>Kerry Magan Consulting Engineers, PLC</u>		

**PHONE #**      502-419-4797                      **PHONE #**      502-633-4365                      **PHONE #**

**FEE REQUIRED :**                      200                      **FEE PAID :**                      \$200

NOD (1) DATE:	RESPONSE (1) :
NOD (2) DATE:	RESPONSE (2) :
NOD (3) DATE:	RESPONSE (3) :
NOD (4) DATE:	RESPONSE (4) :

**ACTION CODE/DATE:**                      **AI**                      (A)PPROVED (D)ENIED (R)ETURNED (N)O ACTION REQUIRED  
AS-(B)UILT (C)ONCUR NO (O)CCUPANCY (E)NFORCEMENT EN(F)ORCEMENT ACTION (W)ITHDRAWN (X)DEAD (V)OID  
(IF RETURN, RETURN FEE          YES          NO

**DISPOSITION CODE/DATE :**                      **M/**                      (M)AILED TO ENGINEER; (P)LUMBING (E)NFORCEMENT (K)PDES  
DRINKING (W)ATER    WATER (R)ESOURCES

**ADD.PLANT LOAD :**    0.001076    MGD                      **LENGTH OF SLE :**                      1084.18    FT  
**CAPACITY ADDED :**                      **NA**                      **COST :**

**NEW FACILITIES ONLY :**    FLOW                      MGD                      CAPACITY                      MGD

**COMMENTS :** \_\_\_\_\_

**ENTERED BY:** \_\_\_\_\_                      **DATE:** \_\_\_\_\_



DATE  
PROJECT ID AI#3955APE2020001  
COUNTY Shelby  
PROJECT NAME Permission Ridge Golf Section 19 Sewer Extension  
NO. PLANS 1

NO. SPECS  
ON SANCT LIST  N NO  YES

EXEMPT

KPDES # KY0090956  
TREATMENT PLANT Permission Ridge WWTP  
PLANT CAPACITY 0.142  
CURRENT FLOW 0.1082  
ADD PLANT LOAD MGD 0.001076  
TEMPO Agency Interest ID: 3955  
Tempo ID: (APE2004000\_)

TYPE OF APP: SLE  SLE  Const  
CHECK RECEIVED Yes  yes  no

Sewer Sanction List Exer

CHECK AMOUNT \$200  
AMOUNT REQUIRED \$200

Municipal MWPP Report 9-15-04

APPLICANT Permission Ridge Development  
APPLICANT PH # 502-419-4797  
CONSULTANT NAME Kerry Magan Consulting Engineers, PLC  
CONS. PH # 502-633-4365

OWNER  
OWNER PH #  
CITY LETTERS Yes  yes  no

REVIEWER Mohammed Mohiuddin  
REVIEWER INITIALS MM  
REVIEWER PHONE 502-782-7020

X: 85 26 28.05 W  
Y: 38 17 42.53 N

Searchable Roster

HUC12 #####

Input number of houses for subdivision, other users below  
houses   
property service connections   
other uses:

APPROVAL DATE

1st NOD   
Response   
Description:

2nd NOD   
Response   
Description:

3rd NOD   
Response   
Description:

4th NOD   
Response   
Description:

not List

This is a computer generated calculation and should be filed as

Notes Worksheet

NOT FOR PUBLIC INSPECTION

ID: AI#3955APE2020001

**Project Name:** Permission Ridge Golf Section 19 Sewer Extension  
**ID Number:** AI#3955APE2020001  
**Consultant:** Kerry Magan Consulting Engineers, PLC

**County:** Shelby  
**Date:**

**Reviewed By:** Mohammed Mohiuddin  
**Treatment Plant:** Permission Ridge WWTP  
**On Sanction List:**

**Plant Design Capacity:** 0.14  
**Present Plant Loading:** 0.11

**I. SEWERS**

**Size: (inches)** 8  
**Length:** 1084.18 gravity  
**Pipe Materials and Joints:** PVC  
**Minimum Slope: (percent)** 0.40  
**Maximum Manhole Spacing:** 400  
**Drop Manhole Required:** no  
**Cover: (inches)** ok  
**Aerial Crossings (piers)** no  
**Sewer in Fill Area (compaction)** no  
**Tests:** standard  
**Water Line Crossings:** no  
**Stream Crossings:** no  
**Additional Loading:** 0.0011

**COMMENTS:**

Reviewed by: Mohammed Mohiuddin

Project information  
 Project Name: Permission Ridge Golf Section 19 Sewer Extension  
 County: Shelby  
 Project ID: AH#3955APE20200001  
 Engineer: Kerry Magan Consulting Engineers, PLC

Manhole data							Manhole Storage Calculations			
Segment	Manhole #	Station number	Manhole elev.	Invert out	Invert in	Drop Manhole diameter	Pipe diameter	Flood Manhole volume (gallons)	Flood Pipe volume (gallons)	
Line	MH-3	55.62	0.00	631.18	631.28	4	8	0	0	
Line	MH-2	455.55	0.00	629.08	629.18	4	8	0	0	
Line	MH-1	855.37	0.00	626.98	627.08	4	8	0	0	
Line	EX MH	1139.80	0.00	625.46	625.56	4	8	0	0	
Line	5	0.00	0.00	0.00	0.00	4	8	0	0	
Line	6	0.00	0.00	0.00	0.00	4	8	0	0	
Line	7	0.00	0.00	0.00	0.00	4	8	0	0	
Line	8	0.00	0.00	0.00	0.00	4	8	0	0	
Line	9	0.00	0.00	0.00	0.00	4	8	0	0	
Line	10	0.00	0.00	0.00	0.00	4	8	0	0	
Line	11	0.00	0.00	0.00	0.00	4	8	0	0	
Line	12	0.00	0.00	0.00	0.00	4	8	0	0	
Line	13	0.00	0.00	0.00	0.00	4	8	0	0	
Line	14	0.00	0.00	0.00	0.00	4	8	0	0	
Line	15	0.00	0.00	0.00	0.00	4	8	0	0	
Line	16	0.00	0.00	0.00	0.00	4	8	0	0	
Line	17	0.00	0.00	0.00	0.00	4	8	0	0	
Line	18	0.00	0.00	0.00	0.00	4	8	0	0	
Line	19	0.00	0.00	0.00	0.00	4	8	0	0	
Line	20	0.00	0.00	0.00	0.00	4	8	0	0	
Line	21	0.00	0.00	0.00	0.00	4	8	0	0	
Line	22	0.00	0.00	0.00	0.00	4	8	0	0	
Line	23	0.00	0.00	0.00	0.00	4	8	0	0	
Line	24	0.00	0.00	0.00	0.00	4	8	0	0	
Line	25	0.00	0.00	0.00	0.00	4	8	0	0	
Line	26	0.00	0.00	0.00	0.00	4	8	0	0	
Line	27	0.00	0.00	0.00	0.00	4	8	0	0	
Line	28	0.00	0.00	0.00	0.00	4	8	0	0	
Line	29	0.00	0.00	0.00	0.00	4	8	0	0	
Line	30	0.00	0.00	0.00	0.00	4	8	0	0	
Line	31	0.00	0.00	0.00	0.00	4	8	0	0	
Line	32	0.00	0.00	0.00	0.00	4	8	0	0	
Line	33	0.00	0.00	0.00	0.00	4	8	0	0	
Line	34	0.00	0.00	0.00	0.00	4	8	0	0	
Line	35	0.00	0.00	0.00	0.00	4	8	0	0	
Sums								0	0	

Slope and length calculations										
Segment	Downslope end manhole	Upslope end manhole	Slope	Slope (percent)	Minimum Allowable slope (%)	Flag slope	Length (feet)	Maximum inter-manhole length	Pipe diameter	Double Check
Line	MH-3	MH-2	-0.0055	-0.55	0.40	##	399.9	400	8	
Line	MH-2	MH-1	-0.0055	-0.55	0.40	##	399.8	400	8	
Line	MH-1	EX MH	-0.0057	-0.57	0.40	##	284.4	400	8	
Line	5	6	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	6	7	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	7	8	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	8	9	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	9	10	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	10	11	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	11	12	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	12	13	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	13	14	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	14	15	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	15	16	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	16	17	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	17	18	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	18	19	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	19	20	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	20	21	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	21	22	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	22	23	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	23	24	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	24	25	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	25	26	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	26	27	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	27	28	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	28	29	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	29	30	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	30	31	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	31	32	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	8 PVC 1084.2
Line	32	33	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	33	34	#DIV/0!	#DIV/0!	0.40	##	0.0	400	8	
Line	34	35	#DIV/0!	#DIV/0!	0.40	##	0.0	401	8	

1084.2

Reviewed by: Mohammed Mohiuddin

**Project information**

Project Name: Permission Ridge Golf Section 19 Sewer Extension  
 County: Shelby  
 Project ID: AI#3955APE20200001  
 Engineer: Kerry Magan Consulting Engineers, PLC

**Manhole data**

Segment	Manhole #	Station number	Manhole elev.	Invert out	Invert in	Drop	Manhole diameter	Pipe diameter	Manhole Storage Calculations		
									Flood	Manhole volume (gallons)	Pipe volume (gallons)
Line 1	1	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 2	2	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 3	3	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 4	4	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 5	5	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 6	6	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 7	7	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 8	8	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 9	9	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 10	10	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 11	11	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 12	12	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 13	13	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 14	14	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 15	15	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 16	16	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 17	17	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 18	18	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 19	19	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 20	20	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 21	21	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 22	22	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 23	23	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 24	24	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 25	25	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 26	26	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 27	27	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 28	28	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 29	29	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 30	30	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 31	31	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 32	32	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 33	33	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 34	34	0.00	0.00	0.00	0.00	4	8	0	0	0	
Line 35	35	0.00	0.00	0.00	0.00	4	8	0	0	0	
Sums								0	0	0	

**Slope and length calculations**

Segment	Downslope end manhole	Upslope end manhole	Slope	Slope (percent)	Minimum Allowable slope (%)	Flag slope	Length (feet)	Maximum inter-manhole length	Pipe diameter	Double Check
Line 1	2		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 2	3		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 3	4		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 4	5		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 5	6		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 6	7		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 7	8		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 8	9		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 9	10		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 10	11		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 11	12		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 12	13		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 13	14		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 14	15		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 15	16		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 16	17		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 17	18		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 18	19		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 19	20		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 20	21		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 21	22		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 22	23		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 23	24		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 24	25		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 25	26		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 26	27		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 27	28		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 28	29		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 29	30		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 30	31		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 31	32		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 32	33		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 33	34		#DIV/0!	#DIV/0!	0.40	###	0.0	400	8	
Line 34	35		#DIV/0!	#DIV/0!	0.40	###	0.0	401	8	
							0.0			



Department for Environmental Protection - Division of Water

## Facilities Construction Branch

14 Reilly Road,

Frankfort, Kentucky

40601

# FAX

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

No. Pages Incl. Cover Sheet: \_\_\_\_\_

To:  
Name:  
Company:  
  
Fax Phone:

From: Mohammed Mohiuddin  
Phone: 502-564-2225 ext. 502-782-7020  
Commonwealth of Kentucky  
Division of Water  
Facilities Construction Branch  
Fax #: 502-564-2741

Remarks:

Urgent

For review

As requested

Please comment

Reply ASAP

**Please send a copy of the approval letter for:**

Permission Ridge Golf Section 19 Sewer Extension

Project ID: AI#3955APE20200001

### Facilities Construction Branch

**NOTE: PLEASE CHECK YOUR NAME**

Manager's Office

- Bill Gatewood
- Debbie Pyles
- 

Project Administration  
Construction

- Kelli Rice
- Cathy Arnett
- Jennifer Peters
- Laura Thompson

Municipal Planning

- Bill Chlebowy
- Shafiq Amawi
- Julie Anderson
- Hamid Beykzadeh
- Don Wills
- Ken Pidgeon
- Mortaza Tabayeh
- Jill Bertelson

Wastewater Facilities

- Bennie McWain
- Ross Bishop
- Bob Robards
- David Phillips
- Jim Stanley
- John Shupp**

Municipal Design &

- Mike Tipton
- Paul Bridges
- Hossein Mehdipour
- Ron Ryker
- Larry Warren
- Paul Fitch

INFORMATION FOR FIELD SPOT CHECK TO SEE IF FACILITY  
CONSTRUCTION HAS BEEN STARTED PRIOR TO PLAN APPROVAL.

Date requested:

Project name: Permission Ridge Golf Section 19 Sewer Extension

ID number: AI#3955APE20200001

County: Shelby

Topo Map:

Contact Person:

Address:

Phone:

Engineer:

Treatment Plant:

Date received in Facilities Construction

Expected date of approval: 1/7/1900

Water lines on plans?

Review engineer Mohammed Mohiuddin

Directions/sketch

## SITE SURVEY REQUEST

To:

From: Mohammed Mohiuddin

Facilities Construction Branch

---

KPDES Branch

Date requested:

Subject: Permission Ridge Golf Section 19 Sewe ID number: AI#3955APE

Project Description:

Project County:

Shelby

Topo Map No.

Nearest Community:

Receiving Stream:

Applicant name:

Address:

Phone:

Project Engineer or installer: Kerry Magan Consulting Engineers, PLLC Phone: 502-633-4361

Nearby Existing Discharges in Drainage Area:

The intended use for this proposed sewage treatment plant is:

Comments or Special Requests:

cc: Sam Lester

\* NOTE: When a positive site survey is received, notify the KPDES Branch Program Coordinator



20200001

5

Item number	: Default	Size	: Hydromatic - HPGF/HPGFX-300
Service	:	Stages	: 1
Quantity	: 1	Based on curve number	: SUB_G_O_AH_00001_B_4 Rev
Quote number	:		2012-03-23
		Date last saved	: 04 Apr 2022 1:35 PM

**Operating Conditions**

Flow, rated	: 55.00 USgpm
Differential head / pressure, rated (requested)	: 36.00 ft
Differential head / pressure, rated (actual)	: 37.60 ft
Suction pressure, rated / max	: 0.00 / 0.00 psi.g
NPSH available, rated	: Ample
Site Supply Frequency	: 60 Hz

**Performance**

Speed criteria	: Synchronous
Speed, rated	: 1750 rpm
Impeller diameter, rated	: 7.75 in
Impeller diameter, maximum	: 8.00 in
Impeller diameter, minimum	: 7.00 in
Efficiency	: -
NPSH required / margin required	: - / 0.00 ft
nq (imp. eye flow) / S (imp. eye flow)	: 24 / - Metric units
Minimum Continuous Stable Flow	: 15.00 USgpm
Head, maximum, rated diameter	: 46.25 ft
Head rise to shutoff	: 28.22 %
Flow, best eff. point	: -
Flow ratio, rated / BEP	: -
Diameter ratio (rated / max)	: 96.88 %
Head ratio (rated dia / max dia)	: 79.67 %
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00
Selection status	: Acceptable

**Liquid**

Liquid type	: Water
Additional liquid description	:
Solids diameter, max	: 0.00 in
Solids diameter limit	: 0.00 in
Solids concentration, by volume	: 0.00 %
Temperature, max	: 68.00 deg F
Fluid density, rated / max	: 1.000 / 1.000 SG
Viscosity, rated	: 1.00 cP
Vapor pressure, rated	: 0.34 psi.a

**Material**

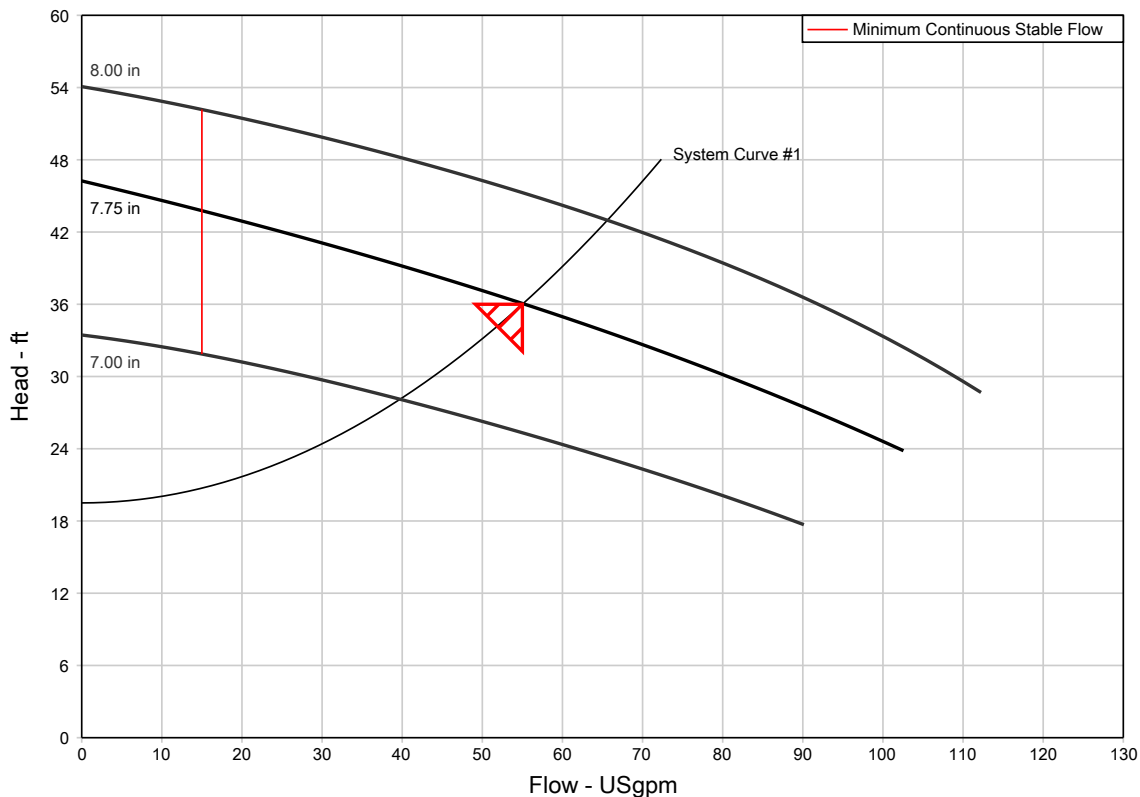
Material selected	: Standard
-------------------	------------

**Pressure Data**

Maximum working pressure	: 20.01 psi.g
Maximum allowable working pressure	: N/A
Maximum allowable suction pressure	: N/A
Hydrostatic test pressure	: N/A

**Driver & Power Data (@Max density)**

Driver sizing specification	: Maximum power
Margin over specification	: 0.00 %
Service factor	: 1.00
Power, hydraulic	: 0.50 hp
Power, rated	: 2.95 hp
Power, maximum, rated diameter	: 2.96 hp
Motor rating	: 3.00 hp / 2.24 kW (Fixed)



October 20, 2021

Nicholas Fields  
Kentucky Department of Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3<sup>rd</sup> Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, LLC  
Delaplain Disposal WWTP  
KYPDES Permit No. KY0079049  
Agency No. 3901

### **Corrective Action Plan**

In light of the Delaplain Disposal WWTP's failure to meet permitted limits, Bluegrass Water submits the following corrective action plan.

BWUOC has recently purchased this treatment plant. With the change of ownership, operational modifications have been implemented and are ongoing. Due to the poor maintenance of the facility by the previous ownership, the current plant is not capable of consistently meeting limits.

#### **1. Causes of Effluent Violations**

- Ammonia
- Total Suspended Solids (TSS)
- Carbonaceous Biological Oxygen Demand (CBOD)
- E. Coli

A review was performed of EPA's Echo compliance website which lists violations. The Delaplain WWTF has been in "Significant noncompliance" for all of the last 12 quarters with numerous effluent exceedances as well as notices for improper maintenance and operations of the facility.

The facility is reaching capacity limitations, as the average daily flow and peak flows periodically exceed the rated capacity of the plant. The new operators have significantly improved the average performance of the facility, but the organic and hydraulic overloading conditions remain and during wet weather events, the facility is at risk of continued violations. The heavy organic loading also results in having minimal sludge storage capacity.

#### **2. System Evaluation and Corrective Actions**

The existing system will need to be expanded in the coming years. In an effort to make progress toward this goal as a part of the short term improvements, the improvements will be phased.

A Mission Monitoring system has already been installed and is being utilized to remotely monitor the facility. The existing flow meter has been calibrated, and the system flows and loadings are being monitored.

Ultimately, we believe that the system will require an increase in capacity from a rated average daily flow of 240,000 gpd to at least 300,000 gpd, and the peak flows received at the plant will need to be equalized to reduce peak flows sent into the plant. Ultimately, the improvements should include the addition of equalization and influent pumping facilities (to reduce peak flows conveyed into the plant), conversion from activated sludge to integrated fixed film activated

sludge (to reduce the solids loading to the clarifier, to increase the allowable flow rate into the clarifier, and to reduce sludge production), and the addition of tertiary filtration. The system may also ultimately require the addition of a second stage of clarification; however, the flows into the system are being monitored to see if this will ultimately be required.

Because the new operators have successfully turned around the system performance and met limits 5 of the 6 most recent months, we propose to make improvements in phases with the expectation that the first phase of improvements will allow the system to meet effluent limits in the short term. However, the Delaplain area is growing rapidly and the need for a second stage of improvements is anticipated.

The first phase of improvements will include the addition of moving bed biological reactor “cages” to be installed within the existing aeration tanks and for new blowers to supply air to the integral diffusers. It is anticipated that the new cages will allow the mixed liquor concentration to be utilized within the activated sludge system to drop from 4,000-5,000 mg/L down to 2,000-2,500 mg/L. (Future phases of improvements could allow the mixed liquor to be eliminated entirely, and this will be part of the plan). This reduction in biological solids in the system will have a significant benefit on the solids loading rate to the clarifier, it will reduce the depth of the sludge blanket in the clarifier, and it will reduce the overall waste activated sludge solids produced. The addition of a tertiary filtration system will also be included in the first phase of improvements. When the clarifier experiences hydraulic overloading conditions, the tertiary filter will be able to capture any solids leaving the clarifier system.

The existing system uses chlorine gas to disinfect and sodium bisulfate gas to dechlorinate. The existing chemical feed systems will remain in service. However, the effluent flow meter and dechlorination feed system will be relocated to downstream of the filter to increase the contact time and to allow the water level in chlorine contact tank and post aeration tank to be raised to allow the effluent to flow by gravity to the new filter. The first phase of improvements will also include the addition of a polymer feed system to be used during wet weather events to retain biomass in the secondary clarifier.

The second phase of improvements will include the addition of an equalization tank and an influent pumping system to minimize the peak flows sent to system. Between the first and second phases of construction, the reduction of infiltration and inflow will be targeted.

It is possible that a third phase of improvements to add a second stage clarifier may be required in the future. It is understood that the system area is growing rapidly.

### 3. Project Milestones

- a. Continue monitoring performance of facility (June 30, 2023)
- b. Submit construction permit application for major modifications (January 15, 2022)
- c. Procure equipment (May 15, 2022)
- d. Receive Construction Permit (August 30, 2022)
- e. Complete construction (June 30, 2023)

Sincerely,



**ENRIQUE CHAVEZ JR.**  
Utility Project Manager

(314) 380-8043  
(314) 437-5714  
(314) 736-4743  
[echavez@cswrgroup.com](mailto:echavez@cswrgroup.com)  
1650 Des Peres Rd., Suite 303  
Des Peres, MO 63131  
centralstateswaterresources.com



March 17, 2022

Nicholas Fields  
Kentucky Department of Environmental Protection  
Division of Enforcement  
300 Sower Blvd., 3<sup>rd</sup> Floor  
Frankfort, KY 40601

Bluegrass Water Utility Operating Company, LLC  
Delaplain Disposal WWTP  
KYPDES Permit No. KY0079049  
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- Carbonaceous Biological Oxygen Demand (CBOD)
- E. Coli

A review was performed of EPA's Echo compliance website which lists violations. At the time of Bluegrass Water's acquisition of the Delaplain WWTF, it had been in a state of "Significant noncompliance" for the previous 12 quarters with numerous effluent exceedances as well as notices for improper maintenance and operations of the facility. Following acquisition by Bluegrass water, operational improvements, facility cleanup, and basic repairs have begun and while facility performance has improved the facility continues to exceed permitted limits for Ammonia, total residual chlorine, E.coli, Ammonia, Total suspended solids, and CBOD. The facility is reaching capacity limitations, as the average daily flow and peak flows periodically exceed the rated capacity of the plant. The new operators have significantly improved the average performance of the facility, but the organic and hydraulic overloading conditions remain and during wet weather events, the facility is at risk of continued violations. The heavy organic loading also results in having minimal sludge storage capacity.

#### **2. System Evaluation and Corrective Actions**

Improvements must be made to the facility, including process modifications in order for the plant to reliably meet permitted limits. Mission Monitoring system has already been installed and is being utilized to remotely monitor the facility. The existing flow meter has been calibrated, and the system flows, and loadings are being monitored. Ultimately, we believe that the system will require an increase in capacity from a rated average daily flow of 240,000 gpd to at least 300,000 gpd, and the peak flows received at the plant will need to be equalized to reduce peak flows sent

into the plant. The improvements should include the addition of equalization and influent pumping facilities (to reduce peak flows conveyed into the plant), conversion from activated sludge to integrated fixed film activated sludge (to reduce the solids loading to the clarifier, to increase the allowable flow rate into the clarifier, and to reduce sludge production), the use of currently unused equalization tank for post-aeration, chlorine contact time, and effluent pumping/post-equalization, and the addition of tertiary filtration. The system may also require the addition of a second stage of clarification; however, the flows into the system are being monitored to see if this will be required.

Because the new operators have successfully turned around the system performance and met limits 5 of the 6 most recent months, we propose to make improvements in phases with the expectation that the first phase of improvements will allow the system to meet effluent limits in the short term. However, the Delaplain area is growing rapidly and the need for a second stage of improvements is anticipated.

The first phase of improvements will include the addition of moving bed biological reactor “cages” to be installed within the existing aeration tanks and for new blowers to supply air to the integral diffusers. It is anticipated that the new cages will allow the mixed liquor concentration to be utilized within the activated sludge system to drop from 4,000-5,000 mg/L down to 2,000-2,500 mg/L. (Future phases of improvements could allow the mixed liquor to be eliminated entirely, and this will be part of the plan). This reduction in biological solids in the system will have a significant benefit on the solids loading rate to the clarifier, it will reduce the depth of the sludge blanket in the clarifier, and it will reduce the overall waste activated sludge solids produced.

Effluent from the clarifier will be diverted into the existing package plant’s equalization tank section where chlorine feed will be introduced, the dissolved oxygen level will be raised with post-aeration, and the contents of the equalization tank will be pumped to a new tertiary filtration system in the first phase of improvements. The existing chlorine contact chamber used is much smaller than this equalization tank, so the new system will have significantly more contact time as a result (reducing the required amount of chemical consumption). The use of the equalization tank and variable frequency drive controlled pumping system will also allow the filter to be installed above the flood plain elevation. Overall, this improvement will be useful in the treatment scheme in elevating effluent dissolved oxygen, improving chlorine contact time, and in attenuating the flow sent to downstream processes. When the clarifier experiences hydraulic overloading conditions, the equalization tank and tertiary filter will be able to capture any solids leaving the clarifier system.

The existing system uses chlorine gas to disinfect and sodium bisulfate gas to dechlorinate. The existing chemical feed systems will remain in service. However, the chlorine feed will enter the post-equalization tank, the effluent flow meter will be installed immediately upstream from the new filter, and dechlorination feed point will be relocated to feed the sulfur dioxide solution into the filter vessel, increasing the contact time for dechlorination chemical as well. Finally, the first phase of improvements will also include the addition of an aluminum sulfate feed system to be used to improve filter TSS removal performance (and can also help in meeting any future total phosphorus limits) if or when needed.

The second phase of improvements will include the addition of an equalization tank and an influent pumping system to minimize the peak flows sent to system. Between the first and second phases of construction, the reduction of infiltration and inflow will be targeted.

It is possible that a third phase of improvements to add a second stage clarifier may be required in the future. It is understood that the system area is growing rapidly.



3. Project Milestones

- a. Continue monitoring performance of facility (June 30, 2023)
- b. Submit construction permit application for major modifications (application submitted on February 28, 2022)
- c. Procure equipment (May 15, 2022)
- d. Receive Construction Permit (August 30, 2022)
- e. Complete construction (June 30, 2023)

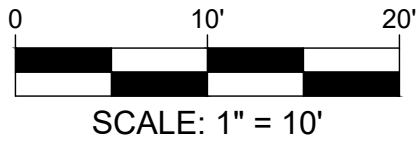
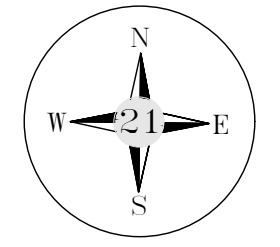
Sincerely,



**ENRIQUE CHAVEZ JR.**

Utility Project Manager

(314) 380-8043  
(314) 437-5714  
(314) 736-4743  
[echavez@cswrgroup.com](mailto:echavez@cswrgroup.com)  
1650 Des Peres Rd., Suite 303  
Des Peres, MO 63131  
[centralstateswaterresources.com](http://centralstateswaterresources.com)



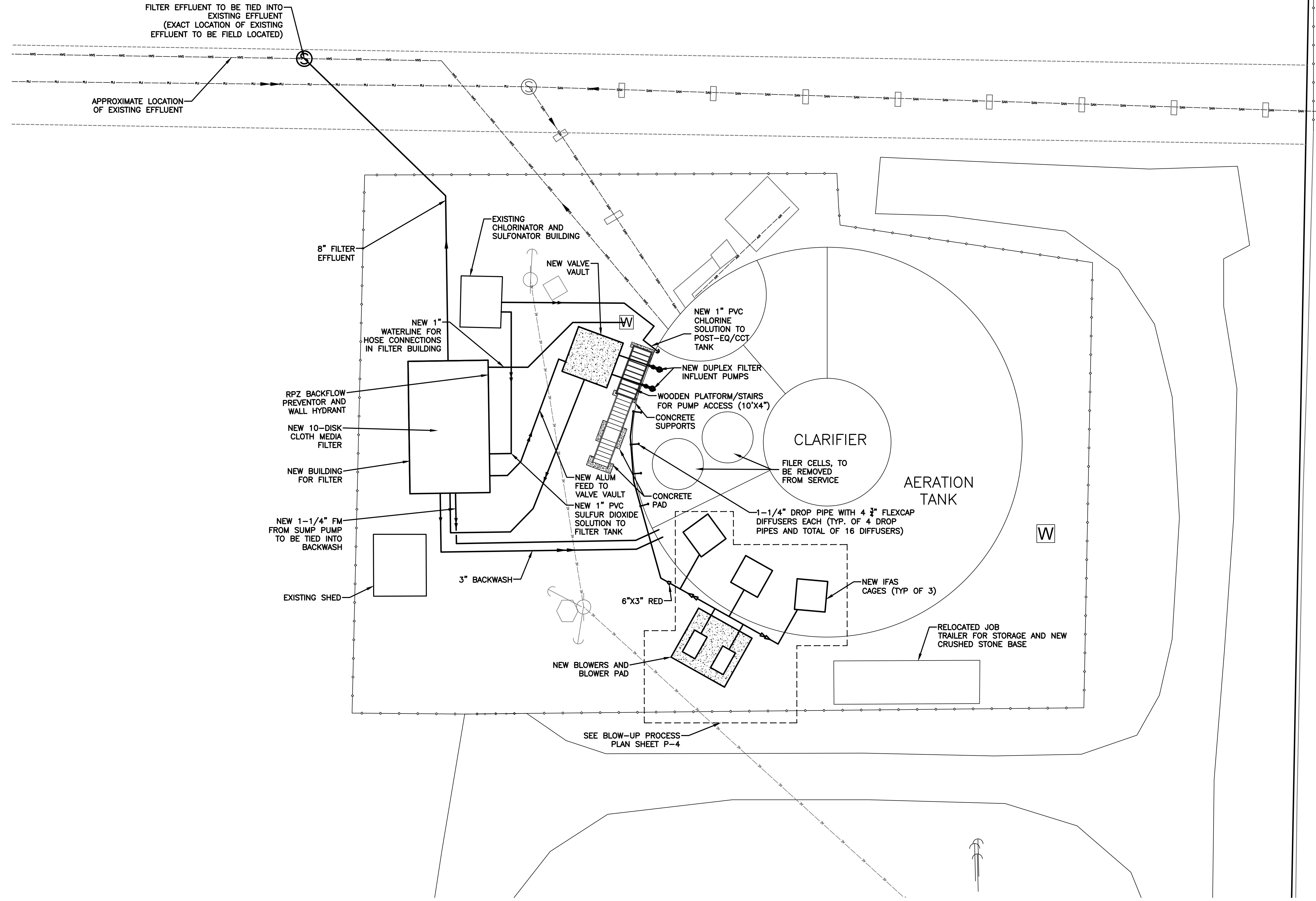
SCALE: 1" = 10'

**DRAWING LEGEND**

DESCRIPTION	EXISTING	PROPOSED
Easement	---	---
Setbacks	---	---
Property Lines	---	---
Aerial Electric	---	---
Tree Line	---	---
Sanitary Manhole		
Utility Pole		
Fire Hydrant		
Telephone Box		
Water Valve		
Gas Valve		
Sign		
Grated Inlet		
Catch Basin		
Grated Curb Inlet		
Junction Box		
Flared End Section		

**PAVEMENT LEGEND**

Existing Asphalt	
Existing Concrete	
New Concrete	
New Standard Duty Asphalt	
New Heavy Duty Asphalt	
New Standard Duty Concrete	
New Heavy Duty Concrete	



**UTILITY PLAN**  
 DELAPLAN WWTF IMPROVEMENTS  
 260 W YUSEN DRIVE  
 SCOTT COUNTY, KENTUCKY

ENGINEERING CERTIFICATE OF AUTHORITY NO. 4804  
 ENGINEERING LICENSE: BENJAMIN J. KUENZEL, PE33718



SEAL DATE	2/23/2022
DRAWN BY	KAR
PROJ NUMBER	542-19
DATE	2/23/2022
DRAWING NO.	C05

NOTE:  
 1. SEE HYDRAULIC PROFILE FOR ALL ELEVATIONS.  
 2. SEE DRAWING P4 FOR ALL AIR PIPING DETAILS.

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### DESIGN CRITERIA:

**PLANT INFLUENT FLOW**

Q<sub>ADF</sub> = 240,000 GPD    BOD = 225 MG/L  
 Q<sub>PHF</sub> = 720,000 GPD    TSS = 225 MG/L  
 Q<sub>PHF</sub> = 1,200,000 GPD    TKN = 40 MG/L

**MBBR INFLUENT FLOW**

Q<sub>ADF</sub> = 240,000 GPD  
 Q<sub>PHF</sub> = 720,000 GPD  
 Q<sub>PHF</sub> = 1,200,000 GPD

**EFFLUENT PARAMETERS**

CBOD: 10 MG/L  
 TSS: 30 MG/L  
 DISSOLVED OXYGEN: 7 MG/L  
 E. COLI: 200 MPN/100 ML  
 NH3: 2 MG/L

**MBBR (CAGES)**

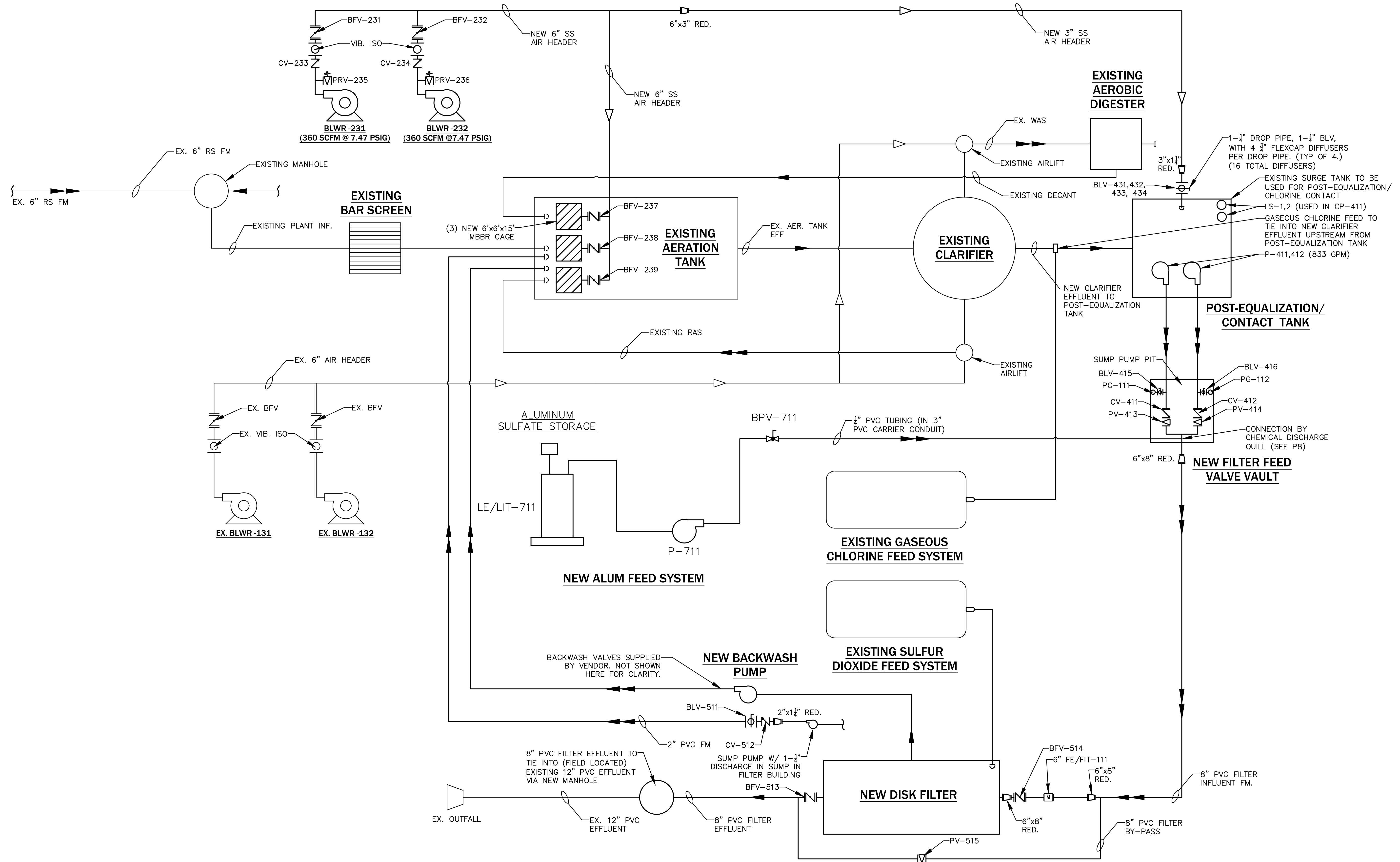
NO. OF MBBRS = 3  
 DIMENSIONS: 6'x6'x15'  
 TOTAL VOLUME = 12,118 GALLONS  
 INF. BOD = 225 MG/L, 675.9 LBS/D  
 EFF. BOD TARGET = 68 MG/L, 203 LBS/DAY  
 HRT @ ADF = 1.21 HRS  
 MEDIA SURFACE RQD. = 13,486 M<sup>2</sup>  
 MEDIA VOLUME RQD. (W/650 M<sup>2</sup>/M<sup>3</sup> MEDIA) = 733 CF  
 MEDIA FILL % = 51 %  
 SCFM RQD. = 310 SCFM

**ALUMINUM SULFATE FEED PROCESS**

DOSAGE: 50 MG/L  
 DENSITY: 11.14 LB/GAL  
 AVERAGE FEED PUMPING RATE: 18.3 GPD  
 MAXIMUM FEED PUMPING RATE: 27.5 GPD  
**POST-EQUALIZATION PUMPS**  
 P-411,412;  
 MODEL: ZOELLER 841 GRINDER PUMP  
 TDH: 23'  
 GPM: 833 GPM

**CCT/POST-AERATION \***

VOLUME: 25,000 GAL.  
 HRT @ PHF (EQUALIZED): 30 MIN  
 THE TANK WILL HAVE 15 3/8" FLEXCAP DIFFUSERS TO ACHIEVE COMPLETE MIXING TO PROVIDE EFFECTIVE CONTACT TIME FOR DISINFECTION  
 AIR FLOW RATE: 15 SCFM/1,000 CF  
 SCFM PROVIDED: 50 SCFM



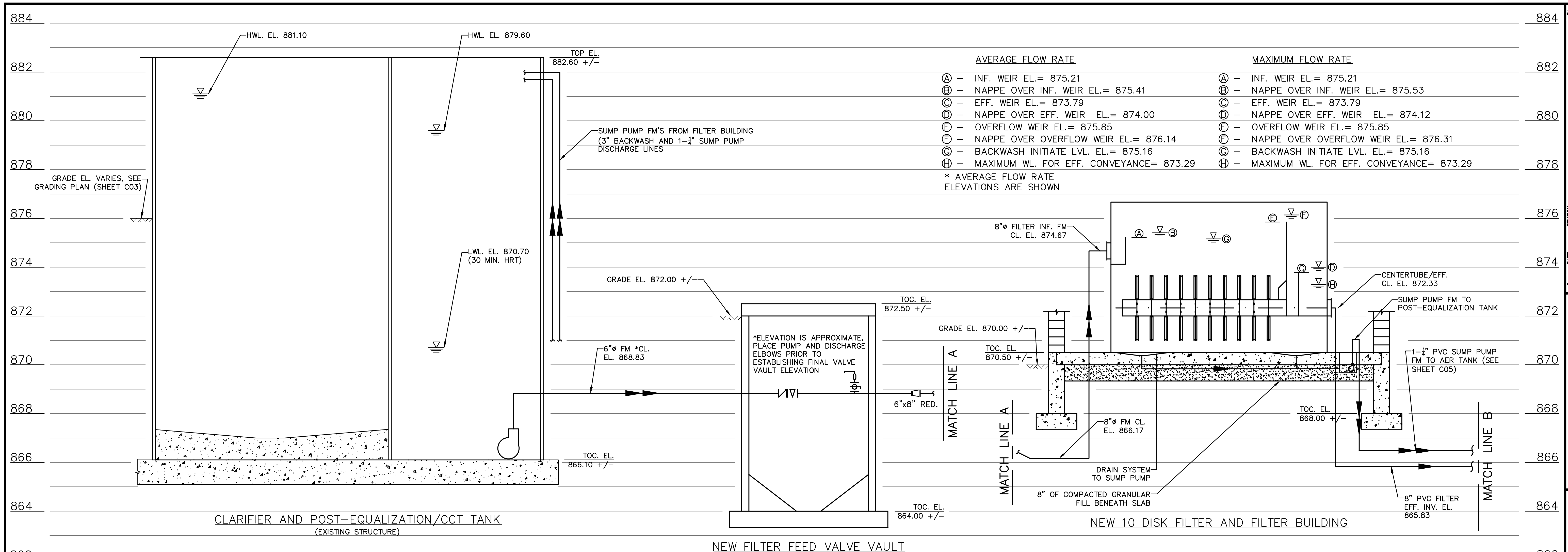
**PROCESS FLOW DIAGRAM**  
 DELAPLAN DISPOSAL WWTF  
 W YUSEN DRIVE  
 SCOTT, KENTUCKY

ENGINEERING CERTIFICATE OF AUTHORITY NO. 4804  
 ENGINEERING LICENSE: BENJAMIN J. KUENZEL, PE33718

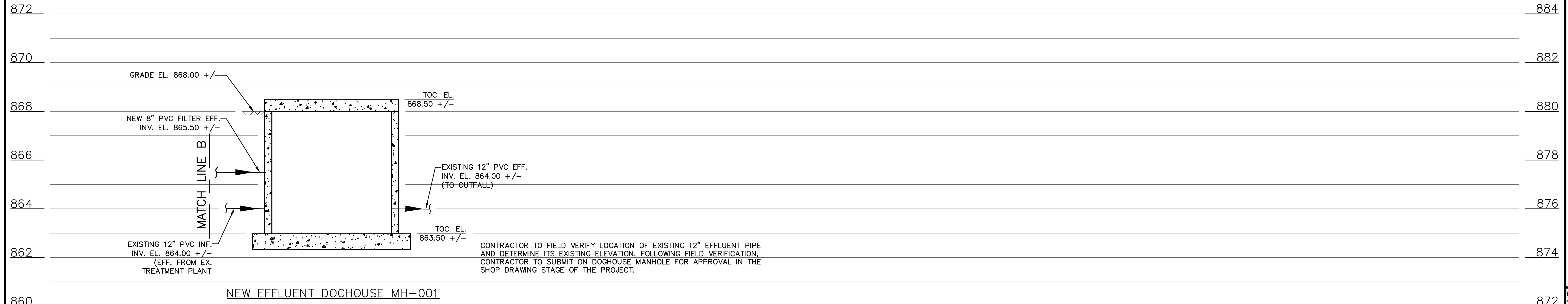


SEAL DATE: 2/23/2022  
 DRAWN BY: KAR  
 PROJ NUMBER: 542-21  
 DATE: 2/23/2022  
 DRAWING NO: P1

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**WASTEWATER HYDRAULIC PROFILE**  
 VERTICAL SCALE: 1" = 2'-0" HORIZONTAL SCALE: NONE



REV	DATE	DESCRIPTION
1	2/23/2022	PERMIT SET

**DESIGN GROUP INC.**  
 135 Jeffersonville 301  
 Washington, MO 65750  
 P: 658-492-8229  
 mail@designgroup.net

**HYDRAULIC PROFILE**  
 DELAPLAN DISPOSAL WWTF  
 W YUSEN DRIVE  
 SCOTT, KENTUCKY

ENGINEERING CERTIFICATE OF AUTHORITY NO. 4804  
 ENGINEERING LICENSE: BENJAMIN J. KUENZEL, PE33718

STATE OF KENTUCKY  
 BENJAMIN J. KUENZEL  
 33718  
 LICENSED PROFESSIONAL ENGINEER

SEAL DATE: 2/23/2022  
 DRAWN BY: MTM  
 PROJ NUMBER: 0542-19  
 DATE: 2/23/2022  
 DRAWING NO: P2

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**TEMPO Agency Interest ID:** 3901  
**Graybar** APE20220003  
**DATE RECEIVED** 9/29/2022  
**COUNTY** Scott  
**PROJECT NAME** R and L Carriers Georgetown  
**NO. PLANS** 1  
**NO. SPECS** 1  
**TREATMENT PLANT** Delaplain Disposal Co owned by Bluegrass Water Utility Operating Co LLC  
**KPDES #** KY0079049 **DATE OF EXEMPT**   
**ON SANCT LIST** yes  NO  YES  
**PLANT CAPACITY** 0.240 MGD  
**CURRENT FLOW** 0.249 MGD  
**ADD PLANT LOAD MGD** 7600 GPD  
**TYPE APP RECD** sle  SLE  CONST  
**CHECK RECD** yes  YES  NO  
**CHECK AMOUNT** \$200.00  
**AMOUNT REQUIRED** \$200.00  
**APPLICANT** R & L Investments LLC  
**APPL. PH #** 937-603-3900  
**CONSULTANT** Joe Iovinelli , Manhard Consulting PE#36757  
**CONS. PH #** 630-925-1110  
**OWNER** Bluegrass Water Utility Operating Company LCC, Josiah Cox Manager  
**OWNER PH #** 314-736-4672 [jcox@cswwgroup.com](mailto:jcox@cswwgroup.com)  
**Utility LETTERS** yes  YES  NO  
**REVIEWER** Cassie Campbell  
**REVIEWER INITIALS** CC **HUC** #051002 05 080  
**REVIEWER PHONE EXT.** 502-782-6909 **MAP** W84.550502  
N38.270686

**input number of houses for subdivision, other users below**  
 houses   
 property service connections   
 other uses:

**APPROVAL DATE**

**1st NOD**   
**Response**   
**Description:**   
**2nd NOD**   
**Response**   
**Description:**   
**3rd NOD**   
**Response**   
**Description**   
**4th NOD**   
**Response**   
**Description**



This is a computer generated calculation and should be filed as

Notes Worksheet

NOT FOR PUBLIC INSPECTION

ID: APE20220003

**Project Name:** R and L Carriers Georgetown  
**ID Number:** APE20220003  
**Consultant:** Joe Iovinelli , Manhard Consulting

**County:** Scott  
**Date:** 9/29/2022  
**PE Seal:**

**Reviewed By:** Cassie Campbell  
**Treatment Plant:** Delaplain Disposal Co  
**On Sanction List:** yes

**Plant Design Capacity:** 0.24  
**Present Plant Loading:** 0.25

**I. SEWERS**

<b>Size: (inches)</b>	6 & 8	3	
<b>Pipe Materials and Joints:</b>	PVC	PVC	
<b>Minimum Slope: (percent)</b>	40	n/a	
<b>Maximum Manhole Spacing:</b>	400	n/a	
<b>Drop Manhole Required:</b>	no	n/a	
<b>Cover: (inches)</b>	ok	ok	
<b>Bedding/Backfill/Trench Width:</b>	ok	ok	
<b>Aerial Crossings (piers)</b>	no	no	
<b>Sewer in Fill Area (compaction)</b>	no	no	
<b>Tests:</b>	standard	standard	
<b>Water Line Crossings:</b>	yes	yes	
<b>Stream Crossings:</b>	no	no	
<b>Additional Loading:</b>	7600	7600	GPD
<b>Length:</b>	784	860	force main

**COMMENTS:**

ArcMap does not show the existing sewer near the site. Right now the sewer populates "Georgetown WWTP #2"s lines on the other side of Cherry Blossom. need details for the wet well of the lift station, and for all pipes to be shown fully in profile views  
Plans show that most of the gravity lines are 6 inches, and as long as they are not extended in the future then 6 inch diameter lines can be used.  
Profile views show adequate 18 inches (or more) separation between proposed sewer line and existing or proposed water lines  
Profile views show adequate cover of 30 inches or more over the gravity lines and force mains

Specifications were copied into the set of plans.

crosses water lines between

plans contain Specifications for:

- x testing forcemain, gravity lines, and manholes (smoke, leakage, vacuum, video)
- x locator tape/ tracer wire
- x manhole connections, joints, frame requirements

Details are provided in the plans for:

- x manholes, lids, frames
- x bedding and backfill
- laterals/connections and cleanouts
- x grease trap
- x encasement / crossings
- sewer vacuum/air release valve
- thrust blocking
- x valve vault
- x manhole invert slope

[https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?year=2022&permit\\_id=KY007](https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?year=2022&permit_id=KY007)

	Flow, in co	Flow, in conduit or thru treatment plant
Mon Pd	MGD	Mon MGD
End Date:	MO AVG	DAILY MX
11/30/2021	0.2297	0.4925
12/31/2021	0.2485	0.4835
1/31/2022	0.2733	0.5324
2/28/2022	0.3424	0.7337
3/31/2022	0.2419	0.5175
4/30/2022	0.259	0.479
5/31/2022	0.224	0.412
6/30/2022	0.2294	0.4155
7/31/2022	0.252	0.492
8/31/2022	0.236	0.445
9/30/2022	0.2313	0.4459
10/31/2022	0.2164	0.2586
<b>avg</b>	<b>0.248658</b>	<b>0.475633</b>
<b>design</b>	<b>0.24</b>	

There is a CAP in place for modifying the wwtp  
The wwtp mod has been approved by WIB  
This will address the effluent limit violations but not the flow, unless performance of modified plant allows for shorted treatment time meaning they can pass more water through faster.








Select Reporting Year: 2022 

[Top Pollutants](#)



Top Pollutants by Pounds (DMR, 2022)

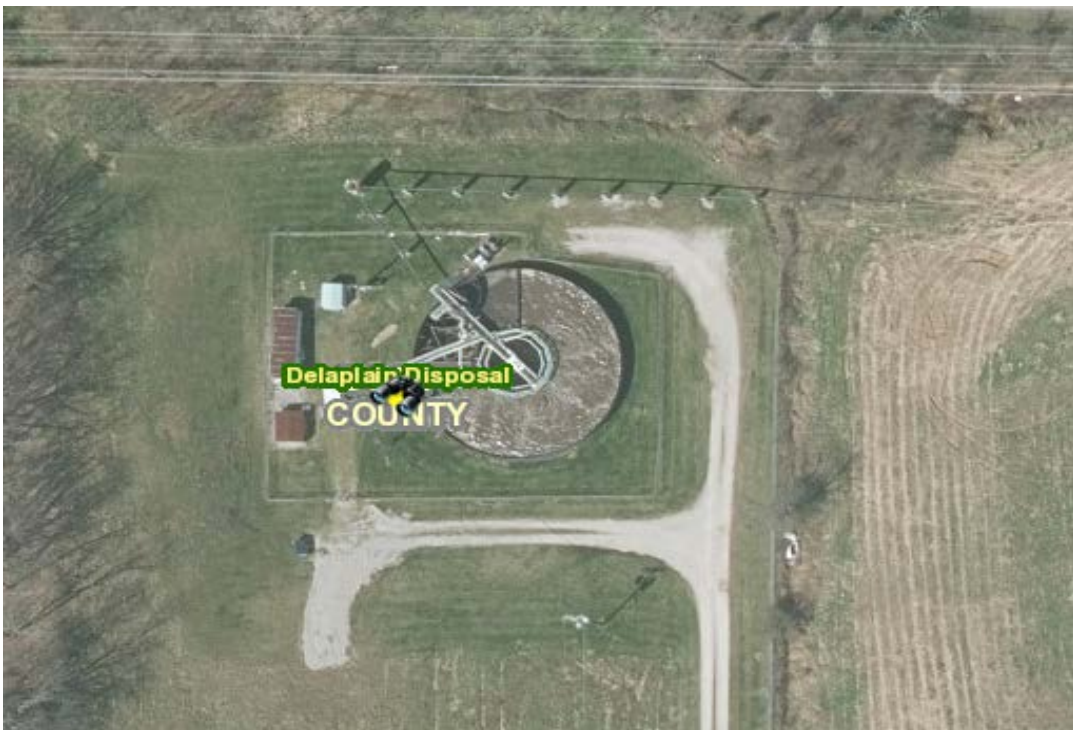
Top Pollutants by Toxic-Weighted Po

Pollutant Name	Total Pounds (lb/yr)	Max Allowable Load (lb/yr) 	Pollutant Name	Total TWPE (lb-
Solids, total suspended 	4,736	19,011	Total Residual Chlorine	
Nitrogen	3,694		Ammonia as N	
BOD, carbonaceous, 05 day, 20 C 	2,751	6,337		
Phosphorus	1,004			
Ammonia as N	374	2,102		
Total Residual Chlorine	5.38	11.62		

[Download All Data](#)

[Download All Data](#)

-  - Indicates value contains loads that are calculated using data that has been flagged as potential outliers or data errors.
-  - Indicates there was one or more exceedances of permit effluent limits for this pollutant sometime during the year. You can hover over limit value.





ounds (TWPE) (DMR, 2022)

eq/yr	Max Allowable Load (lb-eq/yr) ⚠
2.69	5.81
0.4155	2.33

ta

er the yellow flag to see the load

DIAMETER	3 Inches
C FACTOR	120
RADIUS	0.1250 Feet
PERIMETER	0.7854 Feet
AREA	0.0491 Square Ft.
flow	55 gpm
velocity	2.4966 fps

starting elevation	794	ft
lowest	728	ft
final elevation	736.00	ft
difference low to final	-8.0	ft
pump		
head	37	ft
flow	55	gpm

This is a computer generated calculation and should be filed as  
**PUMP STATION AND FORCE MAIN REVIEW**

County:

NOT FOR PUBLIC INSPECTION  
 Scott

ID: **APE20220003**

Project name: R and L Carriers Georgetown  
 ID Number: APE20220003

Reviewed By: CC

Date:

**I: PUMP**

Pump Type:	grinder	Time period	24	Population Served	192
Impeller Size (in):		Q in (gpd)	7600	Peak Factor	4.0
HP	3	Q in (gpm)	5.28	Peak Flow	21.11 gpm
RPM	1750	Q out (gpm)	55		
		TDH	37		

**II: FORCE MAIN**

Type	PVC	C-Factor	120	Design Value C = 120
Size	3	Correction Factor $f_c$		= 0.73
Length	860.00	Velocity In Force Main		2.50 fps (Minimum = 2.0 fps)

**III: STATIC HEAD**

Pump Off Elevation:	865.86 @ Station	0.00
High Point Elevation:	884.16 @ Station	860.00
Discharge Elevation:	875.00 @ Station	860.00

High Point Hs = 18.30

Discharge Hs = 9.14

**VI: WET WELL**

Diameter:	5.0 feet
Working Depth	0.75 feet
Working Volume	14.73 cf X 7.48 = 110.15 gal
Fill Time = Vol/Q <sub>in</sub> =	20.9
Pump Out Time = Vol/(Q <sub>out</sub> - Q <sub>in</sub> ) =	2.2
Cycle Time = Fill Time + Pump Out Time	
= 20.9 + 2.2 minutes =	23.1 minutes

Recommended Cycle Time Is Less Than or Equal to 30 Minutes

DIP length(if mixed pipe types)



Adjusted Length = 860

Adjusted Length = 860

**IV: DYNAMIC HEAD**

Fitting Losses (K):

High No.	Disch. No.	Fitting	Pipe size	High K factor	Discharge K factor
1	1	90° @ 0.75	3	0.75	0.75
		90° @ 0.75	3	0.00	0.00
		45° @ 0.3	3	0.00	0.00
		22 1/2° @ 0.12	3	0.00	0.00
1	1	TEE @ 1.8	3	1.80	1.80
		WYE @ 1.8	3	0.00	0.00
1	1	Check Valve @ 2.5	3	2.50	2.50
		Ball check @ 2.5	3	0.00	0.00
1	1	Gate Valve @ 0.19	3	0.19	0.19
		Plug valve @ .77	3	0.00	0.00
1	1	Expansion <small>Size ratio</small> 1.00	3	0.00	0.00
		Contraction	3	0.00	0.00
1	1	Exit @ 1.0	3	1.00	1.00
Total Losses (K)				6.24	6.24

Note: Expansion and contraction assume gradual change. If the change is abrupt, change the factor for expansion from 0.25 to 1.0 and the factor for contraction from 0.04 to 0.5(1-(size ratio)<sup>2</sup>)

Checklist

- |            |   |
|------------|---|
| Wet well   | <input checked="" type="checkbox"/> Duplex Pumps                                  |
|            | <input checked="" type="checkbox"/> Proper Access to Pumps                        |
|            | <input checked="" type="checkbox"/> Vent on Pump Station                          |
|            | <input checked="" type="checkbox"/> Audio/Visual Alarm                            |
|            | <input checked="" type="checkbox"/> Quick Disconnect Attachment                   |
|            | <input checked="" type="checkbox"/> Storage above alarm in pipes                  |
|            | <input checked="" type="checkbox"/> Grout in corners                              |
|            | <input checked="" type="checkbox"/> Located in Floodplain                         |
| Valve Pit  | <input checked="" type="checkbox"/> Separate Valve Pit                            |
|            | <input checked="" type="checkbox"/> Adequate Valving Arrangement                  |
|            | <input checked="" type="checkbox"/> Drain for pit                                 |
|            | <input checked="" type="checkbox"/> Quick connect                                 |
| Force Main | <input checked="" type="checkbox"/> Adequate Force Main Velocity                  |
|            | <input checked="" type="checkbox"/> Air Release Valve                             |
|            | <input checked="" type="checkbox"/> Adequate Force Main Cover                     |
|            | <input checked="" type="checkbox"/> Thrust Blocks                                 |
|            | <input checked="" type="checkbox"/> 10' Water Line Separation or concrete incased |

This is a computer generated calculation and should be filed as

NOT FOR PUBLIC INSPECTION

# Force Main Calculations

Date: 9/29/2022

NAME R and L Carriers Georgetown  
Reviewer: CC

ID: APE20220003  
Revision:

<b>DIAMETER</b>	3 Inches	<b>Pump</b>	grinder
<b>C FACTOR</b>	120	<b>Rpm</b>	1750
<b>RADIUS</b>	0.1250 Feet	<b>Impeller</b>	0 inches
<b>PERIMETER</b>	0.7854 Feet		
<b>AREA</b>	0.0491 Square Ft.		

## Calculations to high spot

<b>STATIC</b>	18.30	Feet
<b>LENGTH</b>	860	Feet
<b>K VALUE</b>	6.24	

<b>PUMP FLOW (gpm)</b>	<b>Q (cfs)</b>	<b>VEL (ft/sec)</b>	<b>HAZEN</b>	<b>STATIC</b>	<b>K LOSS</b>	<b>PIPE LOSS</b>	<b>TDH</b>	<b>PUMP HEAD</b>
0	0.000	0.000	0.000	18.3	0.000	0.000	18.3	45
10	0.022	0.454	0.000	18.3	0.020	0.425	18.7	43
20	0.045	0.908	0.002	18.3	0.080	1.534	19.9	40.5
30	0.067	1.362	0.004	18.3	0.180	3.251	21.7	39
40	0.089	1.816	0.006	18.3	0.319	5.539	24.2	37.5
50	0.111	2.270	0.010	18.3	0.499	8.374	27.2	35
60	0.134	2.724	0.014	18.3	0.719	11.737	30.8	33
70	0.156	3.177	0.018	18.3	0.978	15.616	34.9	31

## Calculations to discharge

<b>STATIC</b>	9.14	Feet
<b>LENGTH</b>	860	Feet
<b>K VALUE</b>	6.24	

<b>FLOW (gpm)</b>	<b>Q (cfs)</b>	<b>VEL (ft/sec)</b>	<b>HAZEN</b>	<b>STATIC</b>	<b>K LOSS</b>	<b>PIPE LOSS</b>	<b>TDH</b>	<b>PUMP</b>
0	0.000	0.000	0.000	9.1	0.000	0.000	9.1	45
10	0.022	0.454	0.000	9.1	0.020	0.425	9.6	43
20	0.045	0.908	0.002	9.1	0.080	1.534	10.8	40.5
30	0.067	1.362	0.004	9.1	0.180	3.251	12.6	39
40	0.089	1.816	0.006	9.1	0.319	5.539	15.0	37.5
50	0.111	2.270	0.010	9.1	0.499	8.374	18.0	35
60	0.134	2.724	0.014	9.1	0.719	11.737	21.6	33
70	0.156	3.177	0.018	9.1	0.978	15.616	25.7	31

This is a computer generated calculation and should be filed as

Compute storage of pump station  
above alarm and below first overflow

NOT FOR PUBLIC IN\$

ID:.

Reviewer:CC

Alarm Elevation: 867.61 ft.

Overflow elevation: 867.61 ft.

Determine the flooded volume

Wetwell storage 0 gallons

Manhole storage = 0 gallons

Pipe storage= 1129 gallons

Total storage = 1129 gallons

Needed volume= 633 gallons  
(2 hours of  $Q_{in}$ )

Storage surplus = 496 gallons

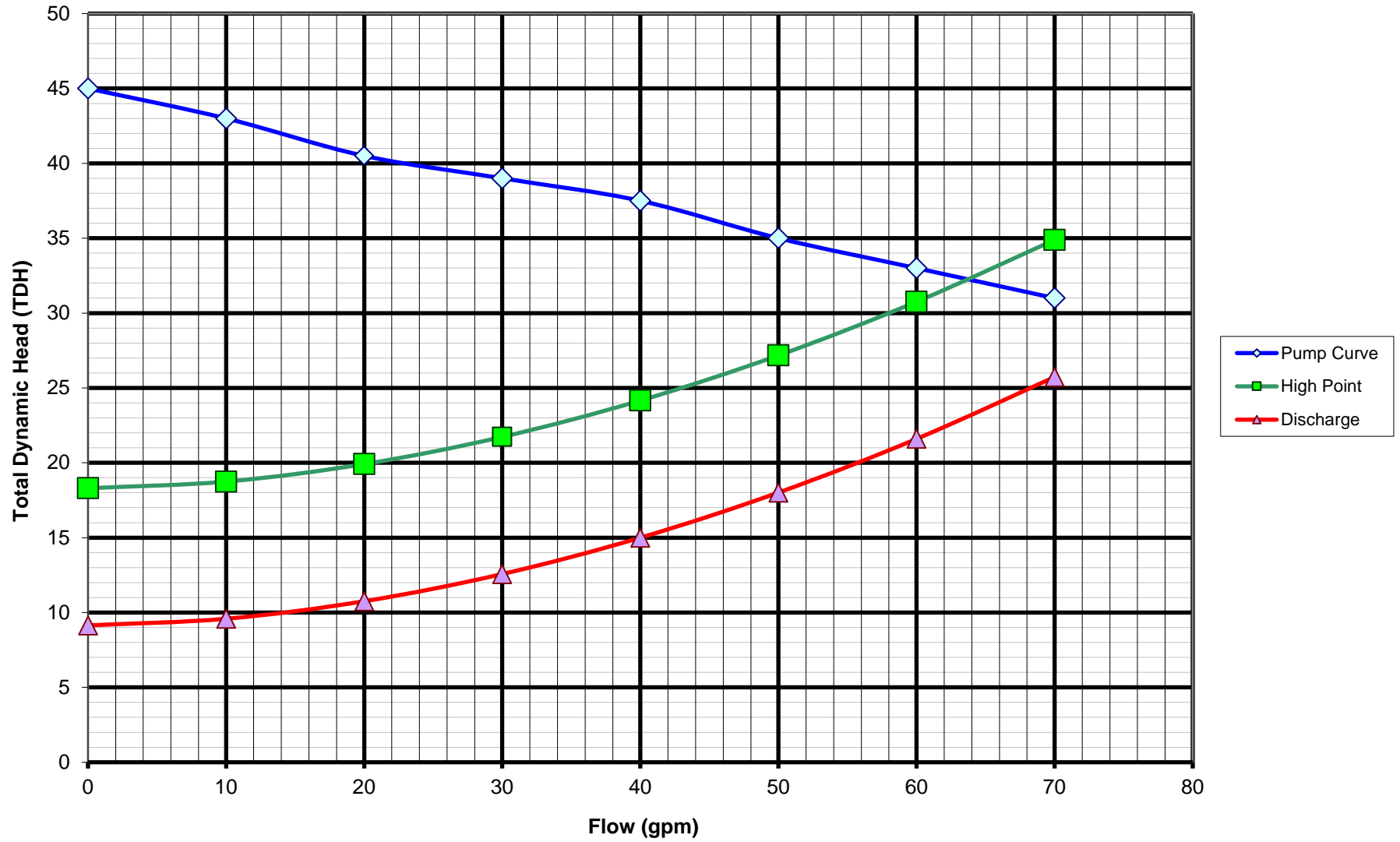
**SPECTION**

APE20210005



R and L Carriers Georgetown  
Pump Station Calculations

APE2022  
0003



PUMP FLC	PUMP HE	TDH	TDH
0	45	18.3	9.1
10	43	18.7	9.6
20	40.5	19.9	10.8
30	39	21.7	12.6
40	37.5	24.2	15.0
50	35	27.2	18.0
60	33	30.8	21.6
70	31	34.9	25.7

APE20220003

This is a computer generated calculation and should be filed as

Worksheet for gravity sewers

NOT FOR PUBLIC INSPECTION

ID: APE20220003

Reviewed by: Cassie Campbell

Date: 9/29/2022  
revised:

Project information

Project Name R and L Carriers Georgetown  
 County Scott  
 Project ID APE20220003  
 Engineer Joe Iovinelli, Manhard Consulting

Manhole data

Segment	Manhole #	Station number	Invert out	Invert in	Drop	Manhole diameter	Pipe diameter	Flood	Manhole volume (gallons)	Flood	Pipe volume (gallons)
Line SMH E	SMH F	298.00	870.67	870.77	4	8					870.72
Line SMH E	SMH B	505.00	868.22	868.32	4	8					868.27
Line SMH E	liftstation	651.00	867.56	867.66	4	8					867.61
Line SMH G	SMH G	0.00	874.59	874.59	4	6					
Line SMH G	SMH D	23.00	874.31	874.41	4	6					874.36
Line SMH G	SMH C	123.00	872.52	872.62	4	6					872.57
Line SMH G	SMH F	167.50	870.09	870.19	4	6					870.14
Sums									0		see below

Slope and length calculations

Segment	Downslope end manhole	Upslope end manhole	Slope	Slope (percent)	Minimum Allowable slope (%)	Flag slope	Length (feet)	Flag length	Maximum inter-manhole length	Pipe diameter	Matches Plans?	area (sq ft)	storage (cf)	storage (gallons)
Line SMH E	SMH F	SMH B	-0.0123	-1.23	0.40		203.0	400	8			0.349066	70.86031	530.0351
Line SMH E	SMH B	liftstation	-0.0052	-0.52	0.40		142.0	400	8			0.349066	49.56731	370.7635
Line SMH G	SMH G	SMH D	-0.0122	-1.22	0.40		19.0	400	6			0.196349	3.730638	27.90517
Line SMH G	SMH D	SMH C	-0.0189	-1.89	0.40		96.0	400	6			0.196349	18.84954	140.9946
Line SMH G	SMH C	SMH F	-0.0569	-5.69	0.40		40.5	400	6			0.196349	7.95215	59.48208
												total	150.9599	1129.18

500.5

ANDY BESHEAR  
GOVERNOR



REBECCA W. GOODMAN  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET**  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601  
TELEPHONE: 502-564-2150  
TELEFAX: 502-564-4245

September 28, 2022

Jacob Freeman  
1650 Des Peres Rd Ste 303  
Saint Louis, MO 63131

Re: Delaplain WWTF Improvements  
Scott County, Kentucky  
Delaplain Disposal  
Activity ID: 3901, APE20220001  
Receiving Treatment Plant KPDES #: KY0079049

Dear Mr. Freeman:

We have reviewed the plans and specifications for the above referenced project. The plan improvements at the WWTP include 3 IFAS Cages (6'x6'x15') with blowers, a building with a 10-Disk Cloth Filter and backwash pump, Alum Feed System, and a Filter Feed Vault. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit.

If we can be of any further assistance or should you wish to discuss this correspondence, please do not hesitate to contact Michael Snyder at 502-782-1235.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Humphries".

---

Terry Humphries, P.E.  
Supervisor, Engineering Section  
Water Infrastructure Branch  
Division of Water

TH / MS

Enclosures

c: Scott County Health Department  
21 Design Group  
Division of Plumbing

River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20210004  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 12/02/2021

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 6.3 mg/L; and concentration daily max. 6.3 mg/L for August 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Natalie P. Bruner  
Natalie P. Bruner, Environmental Control Manager  
Date: January 18, 2022



Persimmon Ridge Subd & WWTP  
Josiah Cox  
500 Northwest Plaza Dr Ste 500

Saint Ann, MO 63074



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** Persimmon Ridge Subd & WWTP  
Josiah Cox  
500 Northwest Plaza Dr Ste 500

Saint Ann, MO 63074

**AI Name:** Persimmon Ridge Subd & WWTP    **AI ID:** 3955    **Activity ID:** ENV20200002

**County:** Shelby

**Enforcement Case ID:**

**Date(s) Violation(s) Observed:** 05/14/2020

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003955():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0090956, monitoring point 002-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading monthly avg., less than or equal to 5.9 lbs/day; and concentration monthly avg., less than or equal to 5 mg/L; and concentration daily max., less than or equal to 7.5 mg/L. The facility reported the following: loading monthly avg. 6.494 lbs/day; and concentration monthly avg. 9.7 mg/L; and concentration daily max. 11.2 mg/L for February 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003955():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0090956, monitoring point 002-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading monthly avg., less than or equal to 5.9 lbs/day; and loading max. weekly avg., less than or equal to 8.9 lbs/day; and concentration monthly avg., less than or equal to 5 mg/L; and concentration daily max., less than or equal to 7.5 mg/L. The facility reported the following: loading monthly avg. 9.477 lbs/day; and loading max. weekly avg. 11.04 lbs/day; and concentration monthly avg. 11.5 mg/L; and concentration daily max. 13.4 mg/L for March 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

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Michael B. Kroeger, Assistant Director  
Date: May 27, 2020

River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20210003  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 09/01/2021

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 6.6 mg/L; and concentration daily max. 6.6 mg/L for June 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Suspended Solids. The permitted limit for Total Suspended Solids is concentration monthly avg., less than or equal to 30 mg/L. The facility reported the following: concentration monthly avg. 41 mg/L for May 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]





Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

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Michael B. Kroeger, Assistant Director  
Date: September 22, 2021

Persimmon Ridge Subd & WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** Persimmon Ridge Subd & WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** Persimmon Ridge Subd & WWTP    **AI ID:** 3955    **Activity ID:** ENV20210002  
**County:** Shelby  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 09/01/2021

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003955():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0090956, monitoring point 002-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading monthly avg., less than or equal to 2.4 lbs/day; and loading max. weekly avg., less than or equal to 3.6 lbs/day; and concentration monthly avg., less than or equal to 2 mg/L; and concentration daily max., less than or equal to 3 mg/L. The facility reported the following: loading monthly avg. 4.597 lbs/day; and loading max. weekly avg. 7.367 lbs/day; and concentration monthly avg. 7.6 mg/L; and concentration daily max. 12.1 mg/L for June 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003955():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0090956, monitoring point 002-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading monthly avg., less than or equal to 2.4 lbs/day; and loading max. weekly avg., less than or equal to 3.6 lbs/day; and concentration monthly avg., less than or equal to 2 mg/L; and concentration daily max., less than or equal to 3 mg/L. The facility reported the following: loading monthly avg. 8.852 lbs/day; and loading max. weekly avg. 9.056 lbs/day; and concentration monthly avg. 17.4 mg/L; and concentration daily max. 17.8 mg/L for May 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**3** Violation Description for Subject Item AIOO0000003955():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0090956, monitoring point 002-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading monthly avg., less than or equal to 5.9 lbs/day; and concentration monthly avg., less than or equal to 5 mg/L; and concentration daily max., less than or equal to 7.5 mg/L. The facility reported the following: loading monthly avg. 6.172 lbs/day; and concentration monthly avg. 14.8 mg/L; and concentration daily max. 17.6 mg/L for April 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

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Michael B. Kroeger, Assistant Director  
Date: September 24, 2021

Bluegrass Water Utility Operating Company LLC  
River Bluffs WWTP  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131





**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** Bluegrass Water Utility Operating Company LLC  
River Bluffs WWTP  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20200002  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 11/10/2020

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 22.7 mg/L; and concentration daily max. 22.7 mg/L for September 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 206 MPN/100 mL for September 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]



Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

---

Michael B. Kroeger, Assistant Director  
Date: January 7, 2021

River Bluffs WWTP  
Betsy C Helm  
5501 W KY 524

Westport, KY 40077



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Betsy C Helm  
5501 W KY 524

Westport, KY 40077

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20200002  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 11/10/2020

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 22.7 mg/L; and concentration daily max. 22.7 mg/L for September 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 206 MPN/100 mL for September 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]





Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

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Michael B. Kroeger, Assistant Director  
Date: December 15, 2020

River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20230001  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 02/16/2023

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 13.2 mg/L; and concentration daily max. 13.2 mg/L for October 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Residual Chlorine. The permitted limit for Total Residual Chlorine is concentration monthly avg., less than or equal to .011 mg/L; and concentration daily max., less than or equal to .019 mg/L. The facility reported the following: concentration monthly avg. .03 mg/L; and concentration daily max. .03 mg/L for November 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**3** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Residual Chlorine. The permitted limit for Total Residual Chlorine is concentration monthly avg., less than or equal to .011 mg/L; and concentration daily max., less than or equal to .019 mg/L. The facility reported the following: concentration monthly avg. 2.2 mg/L; and concentration daily max. 2.2 mg/L for October 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**4** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Suspended Solids. The permitted limit for Total Suspended Solids is concentration monthly avg., less than or equal to 30 mg/L; and concentration max. weekly avg., less than or equal to 45 mg/L. The facility reported the following: concentration monthly avg. 66 mg/L; and concentration max. weekly avg. 66 mg/L for October 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**5** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Dissolved Oxygen. The permitted limit for Dissolved Oxygen is concentration instantaneous min., greater than or equal to 7 mg/L. The facility reported the following: concentration instantaneous min. 4.9 mg/L for November 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Marlon A. Bascombe  
Marlon Bascombe, Environmental Control Manager  
Date: March 16, 2023

Persimmon Ridge Subd & WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871





**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** Persimmon Ridge Subd & WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871

**AI Name:** Persimmon Ridge Subd & WWTP   **AI ID:** 3955   **Activity ID:** ENV20230001

**County:** Shelby

**Enforcement Case ID:**

**Date(s) Violation(s) Observed:** 02/16/2023

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003955():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0090956, monitoring point 002-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading monthly avg., less than or equal to 5.9 lbs/day; and loading max. weekly avg., less than or equal to 8.9 lbs/day; and concentration monthly avg., less than or equal to 5 mg/L; and concentration daily max., less than or equal to 7.5 mg/L. The facility reported the following: loading monthly avg. 8.118 lbs/day; and loading max. weekly avg. 12.8 lbs/day; and concentration monthly avg. 7.546 mg/L; and concentration daily max. 11.9 mg/L for December 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Marlon A. Bascombe  
Marlon Bascombe, Environmental Control Manager  
Date: March 21, 2023

River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20210001  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 02/19/2021

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 8 mg/L; and concentration daily max. 8 mg/L for October 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

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Michael B. Kroeger, Assistant Director  
Date: April 7, 2021

River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131





**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20210001  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 02/19/2021

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 8 mg/L; and concentration daily max. 8 mg/L for October 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

---

Michael B. Kroeger, Assistant Director  
Date: April 7, 2021

River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20220002  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 05/09/2022

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL; and concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 1414 MPN/100 mL; and concentration 7-day geometric 1414 MPN/100 mL for February 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL; and concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 2420 MPN/100 mL; and concentration 7-day geometric 2420 MPN/100 mL for January 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]



Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Natalie P. Bruner  
Natalie P. Bruner, Director  
Date: June 13, 2022

River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131





**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20210002  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 05/10/2021

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL; and concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 715 MPN/100 mL; and concentration 7-day geometric 715 MPN/100 mL for February 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

- 2** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL; and concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 5579 MPN/100 mL; and concentration 7-day geometric 5579 MPN/100 mL for March 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]



Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

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Michael B. Kroeger, Assistant Director  
Date: July 21, 2021

River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20220003  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 08/11/2022

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Residual Chlorine. The permitted limit for Total Residual Chlorine is concentration monthly avg., less than or equal to .011 mg/L; and concentration daily max., less than or equal to .019 mg/L. The facility reported the following: concentration monthly avg. .38 mg/L; and concentration daily max. .38 mg/L for June 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Marlon A. Bascombe  
Marlon Bascombe, Environmental Control Manager  
Date: September 9, 2022



LH WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303  
  
Saint Louis, MO 63131



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** LH WWTP  
Alica Alexander  
1650 Des Peres Rd Ste 303

Saint Louis, MO 63131

**AI Name:** LH WWTP **AI ID:** 163895 **Activity ID:** ENV20210003

**County:** Scott

**Enforcement Case ID:**

**Date(s) Violation(s) Observed:** 09/01/2021

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000163895():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0081591, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 166 MPN/100 mL for April 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By:

Natalie P. Bruner

Natalie P. Bruner, Environmental Control Manager

Date: September 29, 2021

LH WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140  
  
Saint Louis, MO 631311871



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** LH WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871

**AI Name:** LH WWTP **AI ID:** 163895 **Activity ID:** ENV20220001

**County:** Scott

**Enforcement Case ID:**

**Date(s) Violation(s) Observed:** 11/17/2022

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000163895():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0081591, monitoring point 001-1, for Total Residual Chlorine. The permitted limit for Total Residual Chlorine is concentration monthly avg., less than or equal to .011 mg/L; and concentration daily max., less than or equal to .019 mg/L. The facility reported the following: concentration monthly avg. .11 mg/L; and concentration daily max. .11 mg/L for August 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Marlon A. Bascombe  
Marlon Bascombe, Environmental Control Manager  
Date: January 11, 2023



River Bluffs Inc Subd  
Betsy C Helm  
5501 W KY 524

Westport, KY 40077



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

To: River Bluffs Inc Subd  
Betsy C Helm  
5501 W KY 524

Westport, KY 40077

**AI Name:** River Bluffs Inc Subd      **AI ID:** 3367      **Activity ID:** ENV20190001  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 09/27/2019, 12/04/2019

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading weekly avg., less than or equal to 8.26 lbs/day; and concentration weekly avg., less than or equal to 15 mg/L. The facility reported the following: loading weekly avg. 8.302 lbs/day; and concentration weekly avg. 15.8 mg/L for December 2018.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading weekly avg., less than or equal to 8.26 lbs/day. The facility reported the following: loading weekly avg. 11.56 lbs/day for January 2019.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

- 3 Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading weekly avg., less than or equal to 8.26 lbs/day. The facility reported the following: loading weekly avg. 9.381 lbs/day for November 2018.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

- 4 Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading weekly avg., less than or equal to 8.26 lbs/day; and concentration weekly avg., less than or equal to 15 mg/L. The facility reported the following: loading weekly avg. 9.244 lbs/day; and concentration weekly avg. 16.3 mg/L for March 2019.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

- 5 Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is loading weekly avg., less than or equal to 3.3 lbs/day; and concentration monthly avg., less than or equal to 4 mg/L; and concentration weekly avg., less than or equal to 6 mg/L. The facility reported the following: loading weekly avg. 5.137 lbs/day; and concentration monthly avg. 4.1 mg/L; and concentration weekly avg. 11 mg/L for August 2019.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

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Michael B. Kroeger, Director  
Date: January 23, 2020

River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20220004  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 11/17/2022

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Residual Chlorine. The permitted limit for Total Residual Chlorine is concentration monthly avg., less than or equal to .011 mg/L; and concentration daily max., less than or equal to .019 mg/L. The facility reported the following: concentration monthly avg. .73 mg/L; and concentration daily max. .73 mg/L for September 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]



Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Marlon A. Bascombe  
Marlon Bascombe, Environmental Control Manager  
Date: January 25, 2023

Delaplain Disposal  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

To: Delaplain Disposal  
Mandy Sappington  
1630 Des Peres Rd Ste 140

Saint Louis, MO 631311871

**AI Name:** Delaplain Disposal **AI ID:** 3901 **Activity ID:** ENV20230001

**County:** Scott

**Enforcement Case ID:**

**Date(s) Violation(s) Observed:** 02/16/2023

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003901():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0079049, monitoring point 001-1, for pH. The permitted limit for pH is concentration min., greater than or equal to 6 su. The facility reported the following: concentration min. 5.42 su for November 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003901():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0079049, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL; and concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 1544 MPN/100 mL; and concentration 7-day geometric 2420 MPN/100 mL for December 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**3** Violation Description for Subject Item AIOO0000003901():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0079049, monitoring point 001-1, for Total Suspended Solids. The permitted limit for Total Suspended Solids is concentration max. weekly avg., less than or equal to 45 mg/L. The facility reported the following: concentration max. weekly avg. 80 mg/L for December 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**4** Violation Description for Subject Item AIOO0000003901():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0079049, monitoring point 001-1, for Total Suspended Solids. The permitted limit for Total Suspended Solids is concentration max. weekly avg., less than or equal to 45 mg/L. The facility reported the following: concentration max. weekly avg. 88 mg/L for November 2022.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Marlon A. Bascombe  
Marlon Bascombe, Environmental Control Manager  
Date: March 3, 2023

LH WWTP  
Ali Alexander  
1650 Des Peres Rd Suite 303  
Des Peres, MO 63131





**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** LH WWTP  
Ali Alexander  
1650 Des Peres Rd Suite 303  
**Des Peres, MO 63131**

**AI Name:** LH WWTP **AI ID:** 163895 **Activity ID:** ENV20210001  
**County:** Scott  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 02/19/2021

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000163895():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0081591, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 133 MPN/100 mL for December 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

---

Michael B. Kroeger, Assistant Director  
Date: May 28, 2021

LH WWTP  
Josiah Cox  
500 Northwest Plaza Dr Ste 500

Saint Ann, MO 63074



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** LH WWTP  
Josiah Cox  
500 Northwest Plaza Dr Ste 500  
  
Saint Ann, MO 63074

**AI Name:** LH WWTP **AI ID:** 163895 **Activity ID:** ENV20210001  
**County:** Scott  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 02/19/2021

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000163895():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 40 CFR 122.41(a), as adopted by 401 KAR 5:065, Section 2(1), by failing to comply with the terms and conditions of KPDES Permit No. KY0081591, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 133 MPN/100 mL for December 2020.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)



Issued By:

---

Michael B. Kroeger, Assistant Director  
Date: March 24, 2021

Delaplain Disposal  
Ms. Marie Jacobs  
PO Box 4382

Lexington, KY 405444382





**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

To: Delaplain Disposal  
Ms. Marie Jacobs  
PO Box 4382

Lexington, KY 405444382

**AI Name:** Delaplain Disposal **AI ID:** 3901 **Activity ID:** ENV20220001

**County:** Scott

**Enforcement Case ID:**

**Date(s) Violation(s) Observed:** 03/21/2022

This is to advise that you are in violation of the provisions cited below:

**1** Violation Description for Subject Item AIOO0000003901():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0079049, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 7-day geometric 1300 MPN/100 mL for November 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

**2** Violation Description for Subject Item AIOO0000003901():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0079049, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 7-day geometric 980 MPN/100 mL for October 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By:

Natalie P. Bruner

Natalie P. Bruner, Director

Date: April 7, 2022

River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140  
Des Peres, MO 63131



**COMMONWEALTH OF KENTUCKY  
ENERGY and ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
Division of Enforcement**

**NOTICE OF VIOLATION**

**To:** River Bluffs WWTP  
Mandy Sappington  
1630 Des Peres Rd Ste 140  
**Des Peres, MO 63131**

**AI Name:** River Bluffs WWTP      **AI ID:** 3367      **Activity ID:** ENV20220001  
**County:** Oldham  
**Enforcement Case ID:**  
**Date(s) Violation(s) Observed:** 03/21/2022

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL; and concentration 7-day geometric, less than or equal to 240 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 248 MPN/100 mL; and concentration 7-day geometric 248 MPN/100 mL for November 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

- 2** Violation Description for Subject Item AIOO0000003367():  
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for Total Ammonia Nitrogen (as N). The permitted limit for Total Ammonia Nitrogen (as N) is concentration monthly avg., less than or equal to 4 mg/L; and concentration daily max., less than or equal to 6 mg/L. The facility reported the following: concentration monthly avg. 6.84 mg/L; and concentration daily max. 6.84 mg/L for October 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

- 3** Violation Description for Subject Item AIOO0000003367():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

**Description of Non Compliance:**

Failing to comply with 401 KAR 5:065, Section 2(1), which cites to 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0043150, monitoring point 001-1, for E. Coli. The permitted limit for E. Coli is concentration 30-day geometric avg., less than or equal to 130 MPN/100 mL. The facility reported the following: concentration 30-day geometric avg. 222 MPN/100 mL for December 2021.

**The remedial measure(s), and date(s) to be completed by are as follows:**

The permittee shall comply with the terms and conditions of the KPDES Permit. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

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If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection  
Division of Enforcement  
300 Sower Blvd  
Frankfort, KY 40601  
502-782-6859 (8:00 AM – 4:30 PM)

Issued By: Natalie P. Bruner  
Natalie P. Bruner, Director  
Date: May 11, 2022