

**MONTHLY PROGRESS REPORT
MARCH 2021**

**EMERGENCY WWTP REPAIR PROJECT
GREENVILLE, MS**

Submitted To:

U.S. Environmental Protection Agency, Region 4
Clean Water Enforcement Branch
61 Forsythe Street, S.W.
Atlanta, GA 30303-8960

and

Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, MS 39225



Prepared For:

City Hall
340 Main Street
Greenville, MS 38701

April 9, 2021



111 S. WALNUT STREET • P.O. BOX 1293 • GREENVILLE, MS 38702-1293
662.332.2619 • FAX 662.332.2622 • WWW.WLBURLE.COM

CERTIFICATION

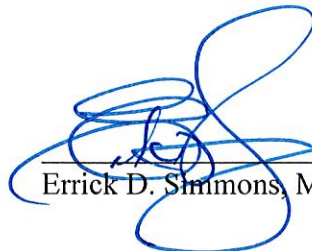
Monthly Progress Report

March 2021

Administrative Order No. CWA-04-2020-0303

City of Greenville, MS

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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 and imprisonment for knowing violations.



Errick D. Simmons, Mayor

April 9, 2021
Date

File Name: Monthly Progress Report (March 2021)

Brad Ammons, EPA Region IV

Bailey Long, MDEQ

Michelle Clark, MDEQ

Gretchen Zmitrovich, MDEQ

Bob Blanz, P.E., Arkansas Dept. of Environmental Quality

Dwight Bradshaw, Louisiana Dept. of Environmental Quality

Les Herrington, P.E., MDH

Chris McDonald, Mississippi Department of Agriculture

Justin Haydel, P.E., Manchac Management Services, LLC

Thelma Glasco, U.S. Dept. of Agriculture Rural Development

Mayor Errick D. Simmons

TABLE OF CONTENTS

CERTIFICATION

SECTION	DESCRIPTION
I	Permit Effluent Exceedances
II	Summary of ICAP Activities
III	ICAP Schedule

FIGURES

FIGURE 1	Vicinity Map
FIGURE 2	WWTP Map No. 1
FIGURE 3	WWTP Map No. 2
FIGURE 4	Aeration Basin Re-Configuration Plan

APPENDICES

APPENDIX A	WWTP Effluent Data – March 2021
APPENDIX B	Mississippi River @ Greenville Gage – March 2021
APPENDIX C	Emergency WWTP Repair Project Construction Schedule

SECTION I

PERMIT EFFLUENT EXCEEDANCES

A tabulation of the permit effluent limit exceedances for the month of March 2021 is referenced in Table 1 below. The raw data are referenced in Appendix A.

TABLE 1 - EFFLUENT PERMIT EXCEEDANCES

DATE	FLOW (MGD)	BOD5 (mg/l)	TSS (mg/l)	pH (SU)	TOTAL FECAL COLIFORM (MPN/100ml)
3-01-2021	---	64	452	---	11,667
3-02-2021	---	43	70	---	10,000
3-03-2021	---	61	122	---	16,667
3-04-2021	---	67	176	---	11,667
3-05-2021	---	121	192	---	8,333
3-06-2021	---	102	92	---	21,667
3-07-2021	---	98	146	---	185,000
3-08-2021	---	158	110	---	138,333
3-09-2021	---	152	184	---	173,333
3-10-2021	---	154	240	---	28,333
3-11-2021	---	151	148	---	13,333
3-12-2021	---	174	100	---	61,667
3-13-2021	---	220	176	---	163,333
3-14-2021	---	126	66	---	183,333
3-15-2021	---	486	56	---	150,000
3-16-2021	---	103	54	---	171,667
3-17-2021	---	158	144	---	196,667
3-18-2021	---	142	190	---	185,000
3-19-2021	---	144	156	---	160,000
3-20-2021	---	129	76	---	*
3-21-2021	---	109	114	---	*
3-22-2021	---	102	78	---	150,000
3-23-2021	---	128	148	---	165,000
3-24-2021	---	114	100	---	193,333
3-25-2021	---	117	236	---	226,667
3-26-2021	---	95	158	---	186,000
3-27-2021	---	119	298	---	16,667
3-28-2021	---	106	162	---	161,667
3-29-2021	---	101	158	---	20,667
3-30-2021	---	104	156	---	213,000
3-31-2021	---	245	334	---	198,000

* Sampling point was inaccessible. Gate to Warfield Point Park was locked.

- End of Section -

SECTION II

SUMMARY OF ICAP ACTIVITIES

The following ICAP activities were performed prior to and during the month of March 2021:

1. Clarifier Cleanings – In July 2020, Hemphill Construction Company (HEMPHILL) of Florence, MS, rescheduled the cleaning of Clarifier Nos. 1, 3, & 4 to begin July 15, 2020, and end December 4, 2020. In September, after the surficial groundwater fell to manageable levels, HEMPHILL began cleaning Clarifier No. 1 and completed the work in October. Manchac Management Services LLC (MANCHAC) of Baton Rouge, LA, the WWTP operator, also began removing the duckweed from Clarifier No. 2 in September 2020 and completed the work in October. Towards the end of October, HEMPHILL focused their cleanup efforts on Clarifier No. 4 and completed the work on December 18, 2020.

HEMPHILL has not started cleaning Clarifier No. 3. They amended their construction schedule in February 2021 to move this work, along with the aeration basin cleaning work, back in their overall project schedule so that they could focus their efforts on completing the grit chamber. The amended schedule is referenced in Appendix C.

Also, after a prolonged rainfall event in December 2020, Clarifier Nos. 1 and 2 were again inundated with sand and grit. MANCHAC was able to remove the solids from Clarifier No. 1; however, as of the end of this reporting period, Clarifier No. 2 was still inoperable. MANCHAC began removing the solids from Clarifier No. 2 in February 2021; however, when the groundwater table rose above 116.0' mean sea level (MSL) and the clarifiers were again threatened by the groundwater's hydrostatic force, MANCHAC postponed the work.

2. Clarifier Repairs – W. L. Burle Engineers, P.A. (BURLE) worked with Industrial Services, Inc. (IS) of Greenville, MS, to reschedule the clarifier repair work to sync with HEMPHILL's cleaning schedule. IS began repairing Clarifiers Nos. 1 and 2 in September 2020 and completed Clarifier No. 2 in October and Clarifier No. 1 in November. Both were operational in December 2020; however, as noted earlier, both clarifiers were inundated with grit/sand after a prolonged rainfall event and, as of the end of this reporting period, only Clarifier No. 1 has remained clean and operable. As soon as the weather and groundwater conditions become manageable, IS will focus on repairing Clarifier No. 4.
3. Aeration Basins 1-7 Cleanings – On January 20, 2020, HEMPHILL began cleaning Basin No. 7 and completed the work March 18, 2020. Basin No. 2 was cleaned in April 2020, Basin No. 1 was cleaned in May 2020 and Basin No. 3 was cleaned in July 2020. The cleaning of

Basin Nos. 4 and 6 began in July 2020. In September, HEMPHILL stopped cleaning Basin Nos. 4 and 6 and moved their crew to the clarifier cleaning project. In October, HEMPHILL completed the cleaning of Clarifier No. 1 and moved their crew back to Basin Nos. 4 and 6. They completed the cleaning of Basin No. 6 in October 2020. As noted under Item No. 1, in order to focus their attention on the completion of the grit chamber, HEMPHILL amended their construction schedule and moved the cleaning of Basins Nos. 4 and 5 back in their overall schedule (See Appendix C). They completed the cleaning of Basin No. 4 in March 2021 and are now focusing on Basin No. 5.

4. By-Pass Channel Cleaning – HEMPHILL started and completed the cleaning of the by-pass channel in March 2020.
5. UV Disinfection Chamber Cleaning – HEMPHILL rescheduled this work to occur in December 2020; however, as noted earlier, HEMPHILL amended their construction schedule to move the UV disinfection chamber cleaning work back in their overall construction schedule so that they could focus their efforts on the completion of the grit chamber (See Appendix C). HEMPHILL completed the cleaning of the UV chamber in March 2021.
6. Interim Disinfection Systems – Upon receipt of the administrative order in December 2019, the CITY began disinfecting the WWTP's effluent using chlorine tablets and chlorine gas and continued using chlorine until the CITY's interim NaClO disinfection system was installed and operational.

Also in December 2019, the CITY retained BURLE to prepare the construction plans and specifications for the project. BURLE immediately specified the NaClO disinfection equipment and recommended to the CITY that they directly purchase the equipment. The CITY voted to purchase the equipment during the December 3, 2019, council meeting; delivery was expected in 10 to 12 weeks.

In order to expedite construction, BURLE broke the project into two (2) phases: Phase I – Foundation and Phase II – Equipment Installation. The phases are discussed below:

- Phase I was bid on January 3, 2020. Avis Construction Company (AVIS) of Avon, MS, was the low bidder (\$37,000) and was awarded the project. AVIS finished the project January 21, 2020.
- Phase II was bid January 30, 2020. AVIS was again the low bidder (\$24,800), and was awarded the project. The 10,000-gallon aboveground storage tank arrived on February 28, 2020, and was installed by AVIS that day. The balance of equipment (pumps, controls, housing, etc.) was delivered in March 2020, with the exception of

an eyewash station which was received in April 2020. The installation of the remaining equipment followed.

Start-up was delayed due to COVID-related supply disruptions/travel restrictions. On April 21, 2020, the equipment representative for the disinfection equipment company conducted a training session for the WWTP staff. Sodium hypochlorite was then ordered and delivered the following week. Startup occurred April 29, 2020, and the system has remained operational since.

7. Sludge Lagoon No. 2 Project – BURLE completed the construction plans/specifications for Contract No.4-WWTP Sludge Disposal Project, and submitted same to the MDEQ SRF Division for review on January 31, 2020. MDEQ reviewed and approved the documents in March. The project was bid May 27, 2020. Two (2) bids were received; both were over budget. The bids were rejected during the June 2nd council meeting.

BURLE redesigned the project to emphasize landfill disposal instead of land application and also extended the construction period by 110 days, bringing the total construction period to 475 days. MDEQ reviewed/approved the amended plans and specifications. The CITY bid the project August 26, 2020. The low bidder was Mitchell Contracting of Madisonville, LA; however, their bid was unbalanced and the CITY rejected the bids during the September 1st council meeting.

BURLE again redesigned the project's bid proposal and submitted it again to MDEQ for review/approval. After receiving MDEQ's approval, the CITY bid the project on November 5, 2020. Synagro-WWT, Inc. (SYNAGRO) of Baltimore, MD was the low bidder (\$2,259,003). The City Council awarded the project to SYNAGRO during the November 17, 2020 council meeting. SYNAGRO is currently under contract to perform the work.

8. Wasted Activated Sludge (WAS) Pumps/Piping – In December 2019, the CITY voted to purchase three (3) WAS pumps from NOV Process and Flow Technologies (NOV) of Dallas, TX, for \$46,023. The CITY issued a purchase order (No. 200995) on January 21, 2020. NOV delivered the pumps in April 2020. The WAS comminutors and control panels were delivered on May 1, 2020. The pumps, grinders and control panels are scheduled to be installed by MANCHAC after the discharge lines have been inspected and cleaned.

Also, the valving on the WAS suction lines from Aeration Basin Nos. 1 through 8 was included in Contract No. 6 - WWTP Effluent Pump Station Improvement Project. Construction documents were prepared/delivered to MDEQ for review in June 2020. MDEQ approved the construction documents in July. The bid opening was September 2, 2020. HEMPHILL was the low bidder (\$928,000). The CITY awarded the project to HEMPHILL.

during the September 15th council meeting. The CITY executed the agreement with HEMPHILL on September 21st. The project is currently underway.

Also, during February 2021, BURLE requested quotes from utility contractors to replace valving on the WAS discharge piping system to the sludge belt press building. The CITY received the quotes in March and awarded the work to HEMPHILL.

9. Additional WWTP Improvements – During the February 4, 2020, CITY council meeting, the CITY approved additional WWTP improvements which were proposed by MANCHAC, the CITY's WWTP operator.

The improvements consist of:

- a. Blowers – MANCHAC proposed to rebuild three (3) of the existing blowers. On February 6, 2020, MANCHAC removed Blower No. 4 from the blower building and transported it to Erichson Company, Inc. (ERICHSON) of Metairie, LA, for rehabilitation. ERICHSON rebuilt the blower in March 2020, and returned it to the WWTP.

In April 2020, two blowers, Blower Nos. 5 and 6, were delivered to ERICHSON in hopes of rebuilding the better of the two and using the other for parts. ERICHSON rebuilt Blower No. 5 and MANCHAC transported it to the WWTP in June. The motor for Blower No. 6 was taken to Mid-South Electric (MID-SOUTH) of Greenville, MS, for repair.

In July 2020, MANCHAC installed the blowers and now have four (4) operational blowers.

- b. Aeration Basin Diffusers – MANCHAC asked the CITY to purchase sufficient diffusers to replace all of the diffusers for eight (8) aeration basins. The CITY issued a purchase order for the diffusers in February 2020. As many as 14,000 diffusers will be replaced. MANCHAC is performing the work as basins are cleaned and the diffusers are inspected. In April, MANCHAC oversaw the replacement of the diffusers in Basin Nos. 2 and 7. In July, MANCHAC started replacing the diffusers in Basin Nos. 1 and 2; the work was completed in August. In September, MANCHAC began replacing the diffusers in the remaining clean basins. As of the end of the reporting period, six of the eight basins have had their diffusers replaced.
- c. Aeration Basin Aeration Valves – By the end of November 2020, MANCHAC had replaced the aeration valves for Basin Nos. 1 through 8.

- d. Barrack Replacement – BURLE is now under contract to design a new automated bar screen and conveyor/compactor for the aeration basin (Contract No. 15 - 2021 WWTP Improvements - Phase I). The new bar screen, along with the new grit chamber bar screen, will give the WWTP gross solids removal redundancy.
- e. Aeration Basin No. 8 Cleaning – In February 2020, MANCHAC began cleaning Basin No. 8, using MANCHAC's crew, and completed the work in April.
- f. Exercise/Repair Frozen Sluice Gates for Aeration Basin Nos. 1 through 8 – The CITY hired IS to exercise and/or repair eleven (11) frozen sluice gates in Basin Nos. 1 through 8. The work began in June 2020. Several of the gates in Basin Nos. 1, 2, 6 and 7 were in need of concrete wall repairs. The repairs were made by HEMPHILL under a change order which was brought before the CITY Council for review/approval in July 2020. This work was completed in January 2021.
- g. Slide Gate/Stop Gate Installations – MANCHAC plans to use Basin No. 8 as an interim grit chamber until the new grit chamber is operational. To accomplish this, MANCHAC will reconfigure the flow through the aeration basins from parallel flow to serpentine, series flow as shown in Figure 4. This will be accomplished by installing four (4) slide gates and two (2) stop plates as shown in the drawing. The CITY issued purchase orders for both the equipment and to IS for the installation of the equipment. The work began in July 2020 and was completed in February 2021 when the final gate was installed during the shutdown of the WWTP (See Item II.10).

In June 2020, BURLE prepared construction documents for the installation of the slide gate electrical services. The project was bid on July 29, 2020. McInnis Electric was the lone bidder with a bid of \$228,570. The CITY discussed the bid during the August 4th council meeting and voted to table the award. In November, MANCHAC received and the CITY approved a quote from Scott Electric Company (SCOTT) (\$40,938.00) to perform the work. SCOTT completed the work in February 2021.

- h. Temporary Sludge Dewatering – In order to provide interim sludge dewatering services prior to the completion of the Sludge Lagoon No. 2 project, the CITY plans to rebuild the belt press sludge dewatering system and dispose of the sludge at a landfill. This will consist of:
 - Existing Belt Press Building Repairs – The existing belt press building will be repaired. In July 2020, the CITY inspected the WWTP's two (2) belt presses, a 2-meter Phoenix press and a 1-meter Carter press, and scheduled an equipment representative to evaluate the condition of both presses. Phoenix Process

Equipment provided a quote to rebuild the 2-meter Phoenix belt press; the 1-meter Carter belt press was not repairable. The CITY also received quotes in July to repair the belt press building and electrical system. BURLE brought these quotes before the CITY on August 18, 2020; the CITY voted to schedule the work to begin in October 2020. The work is currently under construction.

- Leasing Belt Press Equipment – MANCHAC plans to lease and operate a trailer-mounted, 2-meter belt press. The system will be installed adjacent to the existing, belt press building.
- Biosolids Land Application Site – The biosolids currently stored in Aeration Basin Nos. 9 through 12 and Lagoon No. 3 will be disposed of on a land application site. The CITY is planning to use a CITY-owned property at the Mid-Delta Regional Airport as a biosolids land application site. In November, the CITY authorized BURLE to begin the permitting process. BURLE worked on the project through the end of this reporting period.

10. Grit Chamber Construction Project – HEMPHILL began construction of the grit chamber in February 2020. The work has continued through the end of this reporting period.

During December 2020, HEMPHILL submitted a by-pass plan to BURLE which proposed to divert the influent WWTP flow around the WWTP directly to the effluent pump station. This will allow HEMPHILL to install the necessary piping/gates to redirect the flow to the new grit chamber. The by-pass system will remain in operation for approximately three (3) months.

BURLE submitted the by-pass plan to MDEQ for review and subsequent approval on December 21st. HEMPHILL began by-passing the WWTP on December 29, 2020. HEMPHILL stopped the by-pass on April 2, 2021.

11. WWTP Biosolids Land Application Site – In January 2020, MANCHAC constructed the WWTP biosolids land application site which was approved of by MDEQ and referred to in their approval letter (dated December 3, 2019) as the “Basin Material Removal Plan”. MANCHAC made the site available to HEMPHILL for disposal of the aeration basin material in January.

During the January 23, 2020, public works committee meeting, a neighbor living south of the WWTP, Ms. Sarah Moorman, complained about both the odor from the land application activities and the land application site’s stormwater run-off. The CITY told Ms. Moorman that they were operating the land application site within the terms of their MDEQ-approved

plan. She stated she would attend the February 4, 2020, council meeting to object to the disposal practices.

On January 30, 2020, MDEQ inspected the site and subsequently instructed MANCHAC to discontinue land application work until the site was dryer and the biosolids could be properly incorporated into the surficial soils as required in MDEQ's approval plan. This action temporarily forced HEMPHILL to cease basin cleaning activities.

In February 2020, HEMPHILL installed a HDPE pipeline from the aeration basins to the sludge lagoons. This pipeline gave HEMPHILL the option of pumping the biosolids to either the sludge lagoons, as originally planned under the grit chamber project, or to the biosolids land application site. Since February, HEMPHILL has used the pipeline to convey the solids from the basins/clarifiers to the sludge lagoons.

12. WWTP Effluent Pump Station Repair – In March 2020, MANCHAC informed the CITY that the effluent pumps were in poor condition. Of the three pumps, only two were marginally operational. The situation was such that the pump station could not process the CITY's anticipated wastewater flow during a rain fall event.

The following actions were taken to address the problem:

- MANCHAC has installed two (2) by-pass pumps to assist Pump No. 3 in meeting demand. While they are in use, MANCHAC is making the following repairs:
 - Pump No. 1 (East Pump) – The motor was removed and taken to MID-SOUTH for repair. The motor was repaired and returned on May 20, 2020.
 - Pump No. 2 – The motor was removed and taken to MID-SOUTH for repair; the motor was repaired and returned on May 20, 2020. Luckett Pumps (LUCKETT) of Tutwiler, MS, was hired to inspect, repair and re-install the pump; the work continued through this reporting period.
 - Pump No. 3 (West Pump) – LUCKETT was also hired to inspect the pump. The pump is operational and serves as the pump station's primary pump.
- The CITY issued a purchase order to MANCHAC to purchase one (1) new effluent pump for Pump No. 1. The CITY installed the pump October 6th. It is now operational.

- BURLE moved the effluent pump station repair and aeration basin valve replacement project up in order of design under MDEQ SRF Loan 11 and called it “Contract No. 6 WWTP Effluent Pump Station Improvement Project”. The project, as it relates to the effluent pump station, will involve the complete replacement of two pumps (Pump Nos. 2 and 3) and the valves for all three pumps.

The design of the project was expedited. Plans/specifications were delivered to MDEQ for review/approval in June 2020, instead of the original deadline of September 30, 2020. MDEQ approved the plans/specifications in July. The CITY received bids September 2, 2020; the low bidder was HEMPHILL (\$928,000.00). During the September 15th council meeting, the CITY awarded the project to HEMPHILL. The CITY has issued a Notice to Proceed to HEMPHILL with a completion date on August 7, 2021. HEMPHILL worked on the project through the end of this reporting period.

- End of Section -

SECTION III

ICAP SCHEDULE

During the July 10, 2020 conference call with EPA, DOJ and MDEQ, the CITY discussed the impact the COVID-19 pandemic, the 2020 Spring Flood Event and the complexity of the repair work have had on the CITY's Emergency WWTP Repair Project. EPA requested an amended ICAP Schedule which recognized the impacts and delays.

The CITY sent the amended schedule to EPA/MDEQ on August 7, 2020, for review and comment (See Appendix C).

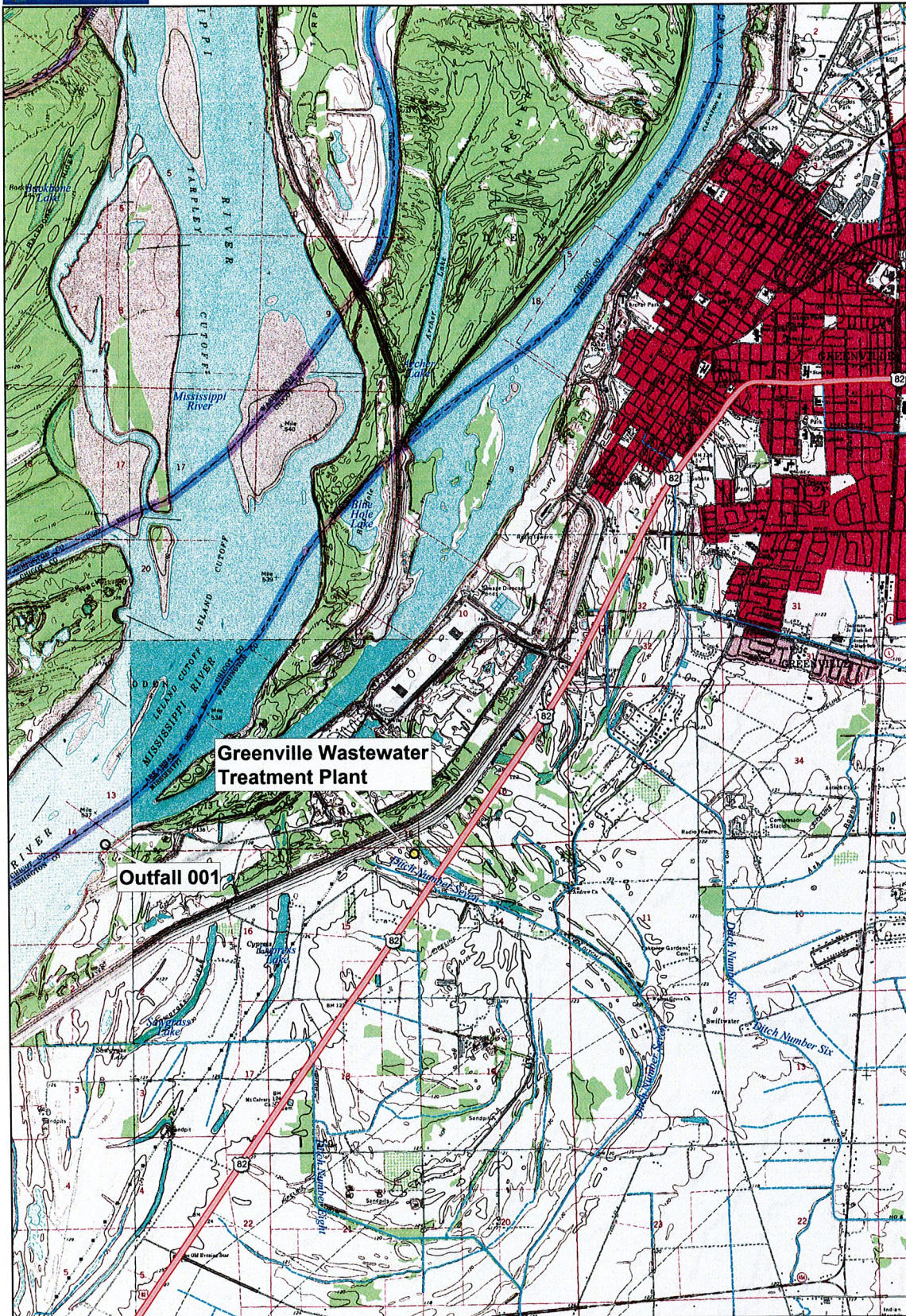
In correspondence dated October 16, 2020, EPA approved the amended ICAP Schedule.

In February 2021, HEMPHILL amended their construction schedule to focus their immediate efforts on the grit chamber and move the basin/clarifier/chamber/sewer cleaning activities back in the schedule. The amended schedule is referenced in Appendix C. The new compliance deadline is July 1, 2021.

- End of Section -

FIGURES

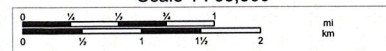
FIGURE 1
VICINITY MAP



Data use subject to license.

© DeLorme. Topo North America™ 10.

www.delorme.com



1" = 5,280.0 ft Data Zoom 12-0



W. L. BURLE

ENGINEERS, P.A.
111 South Walnut Street
Greenville, MS 38701

**FIGURE 1
VICINITY MAP**

MONTHLY PROGRESS REPORT
MARCH 2021
WASTEWATER TREATMENT PLANT REPAIR PROJECT
GREENVILLE, MISSISSIPPI



QUADRANGLE LOCATION

Proj. No.	02500-1-0419
CAD File No.	GWTP Vicinity.Dwg
Drawn By:	MJJ
Chkd. By:	WLB, JR.
Date:	3/31/2021
Scale:	1" = 1 MILE
Dwg. No.	1

FIGURE 2
WWTP MAP NO. 1



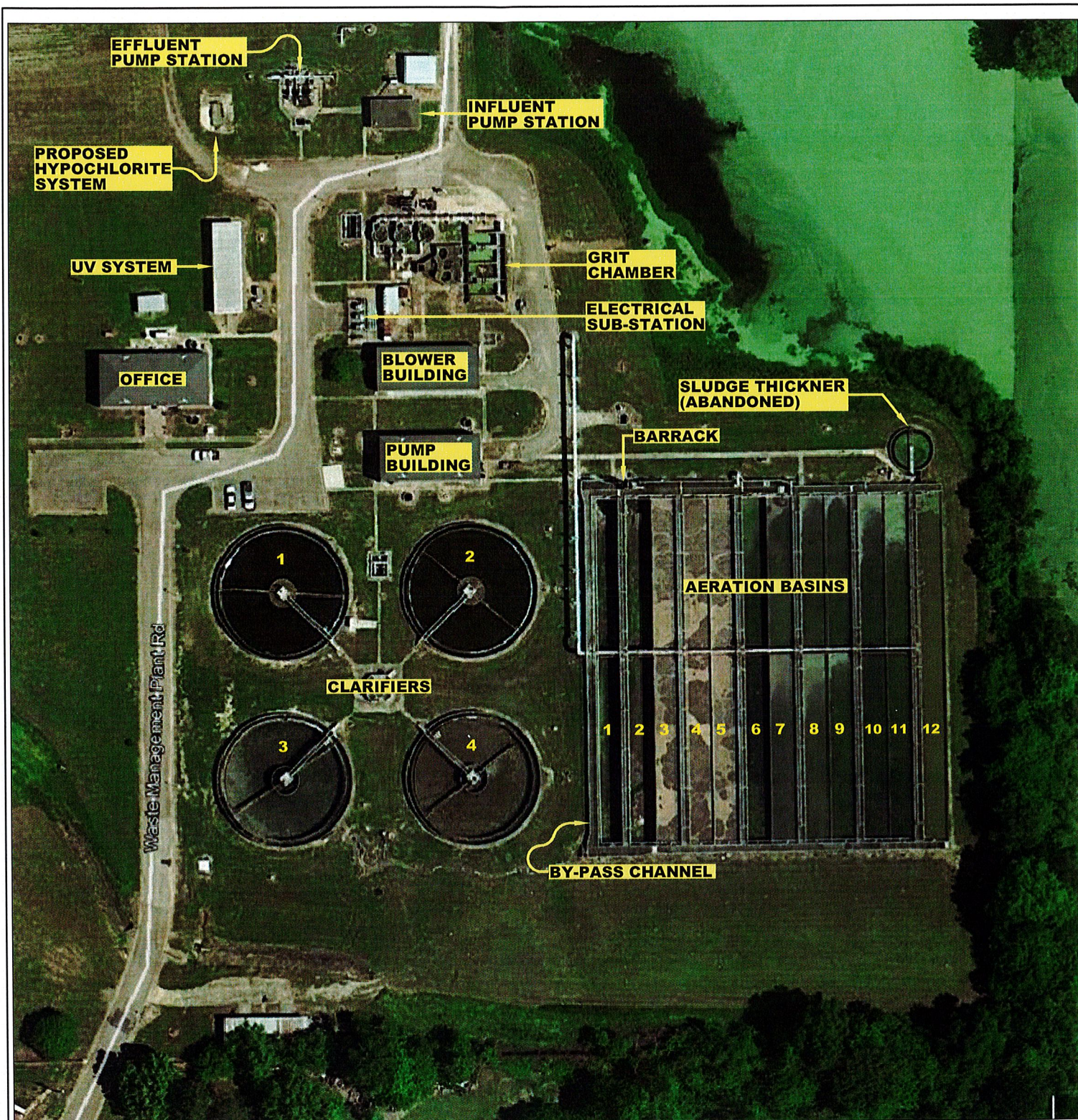
W. L. BURLE
ENGINEERS , P.A.
111 South Walnut Street
Greenville, MS 38701

MONTHLY PROGRESS REPORT
MARCH 2021
WASTEWATER TREATMENT PLANT
REPAIR PROJECT
GREENVILLE, MISSISSIPPI

FIGURE 2
WASTEWATER
TREATMENT
PLANT MAP

Proj. No. 02500-1-0419	
CAD File No. GreenvilleWWTP Layout.dwg	
Drawn By: MJJ	Dwg. No.
Chkd. By: WLB, Jr.	2
Date: 3/31/2021	
Scale: N.T.S.	

FIGURE 3
WWTP MAP NO. 2



W. L. BURLE
ENGINEERS , P.A.
111 South Walnut Street
Greenville, MS 38701

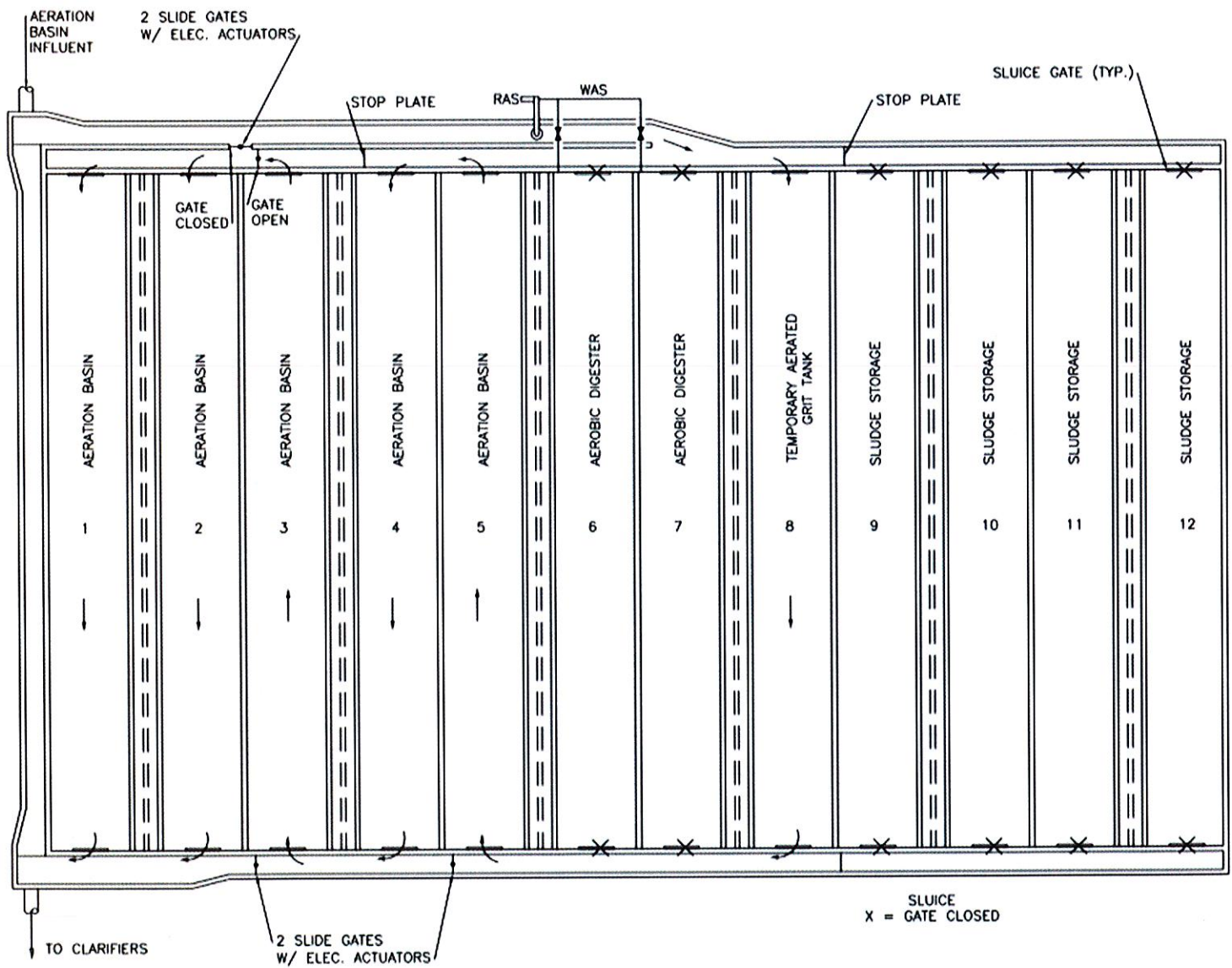
MONTHLY PROGRESS REPORT
MARCH 2021
WASTEWATER TREATMENT PLANT
REPAIR PROJECT
GREENVILLE, MISSISSIPPI

FIGURE 3
WASTEWATER
TREATMENT
PLANT MAP

Proj. No. 02500-1-0419	
CAD File No. GreenvilleWWTP Layout.dwg	
Drawn By: MJJ	Dwg. No. 3
Chkd. By: WLB, Jr.	
Date: 3/31/2021	
Scale: N.T.S.	

FIGURE 4

AERATION BASIN RE-CONFIGURATION PLAN



GREENVILLE WWTW
AERATION BASIN OPERATION
NORMAL FLOW



W. L. BURLE
ENGINEERS, P.A.
111 South Walnut Street
Greenville, MS 38701

MONTHLY PROGRESS REPORT
MARCH 2021
WASTEWATER TREATMENT PLANT
REPAIR PROJECT
GREENVILLE, MISSISSIPPI

FIGURE 4
AERATION BASINS
PLAN

Proj. No. 02500-1-0419	
CAD File No. GreenvilleWWTW Layout.dwg	
Drawn By: MJJ	Dwg. No.
Chkd. By: WLB, Jr.	4
Date: 3/31/2021	
Scale: N.T.S.	

APPENDICES

APPENDIX A

WWTP EFFLUENT DATA (MARCH 2021)

Greenville Daily WWTP Report

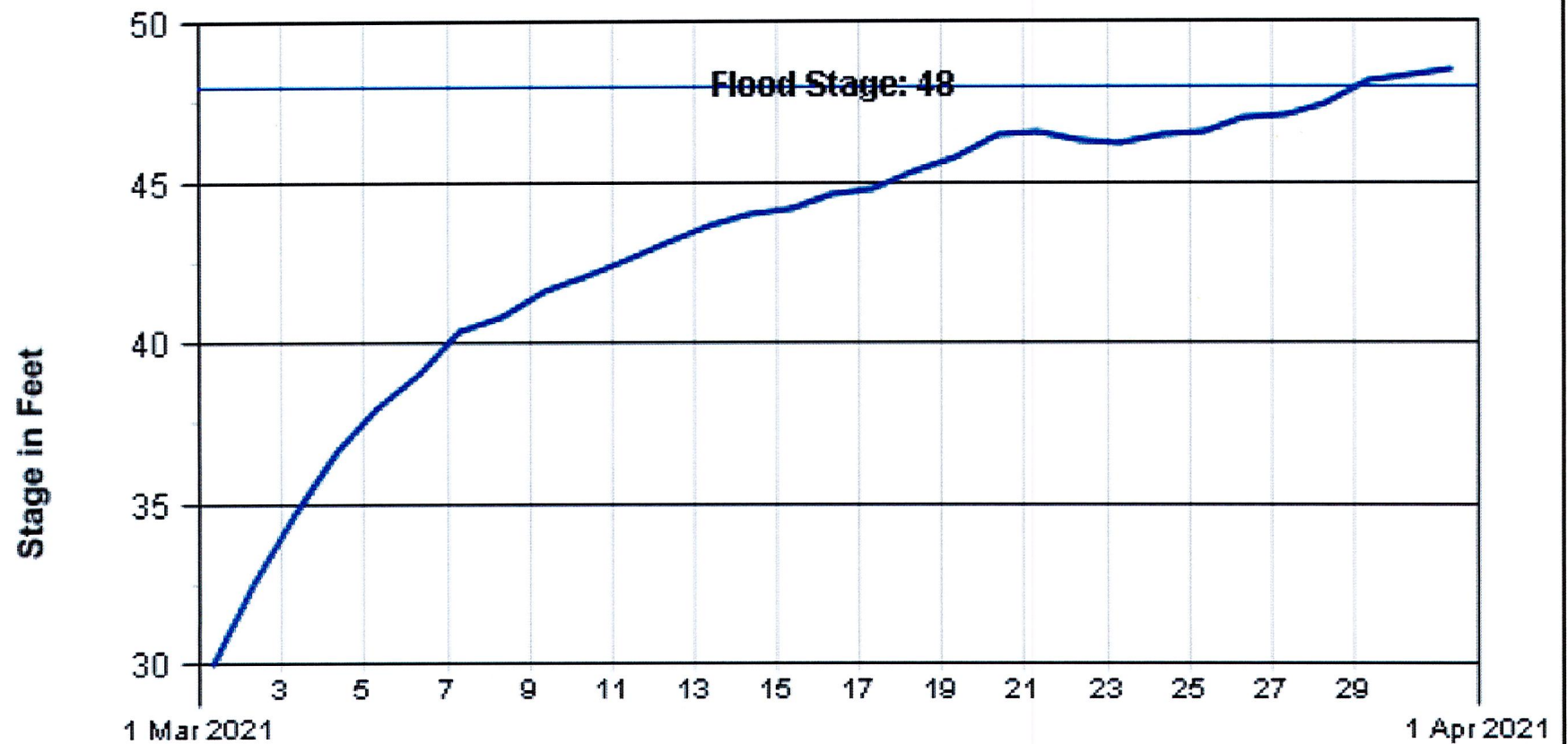
	MGD		Effluent (ppm)				colonies/100mL		
	Effluent flow	pH	BOD	TSS	Total N	Chlorine Residual		Total Fecal Coliform	
Monday, March 01, 2021	13	7.2	64	452		0.59		11667	
Tuesday, March 02, 2021	10.9	7.2	43	70		0.07		10000	
Wednesday, March 03, 2021	8.8	7.2	61	122		0.9		16667	
Thursday, March 04, 2021	7.8	7.1	67	176		0.56		11667	
Friday, March 05, 2021	6.5	7.3	121	192		0.16		8333	
Saturday, March 06, 2021	5.6	7.3	102	92		0.02		21667	
Sunday, March 07, 2021	5.1	7.3	98	146		0.13		185000	
Monday, March 08, 2021	4.5	7.2	158	110		0.06		138333	
Tuesday, March 09, 2021	4.6	7.3	152	184		0.02		173333	
Wednesday, March 10, 2021	4.6	7.3	154	240		0.25		28333	
Thursday, March 11, 2021	4.6	7.3	151	148		0.09		13333	
Friday, March 12, 2021	4.3	7.2	174	100		0.02		61667	
Saturday, March 13, 2021	4.3	7.1	220	176		0.01		163333	
Sunday, March 14, 2021	4.7	7.3	126	66		0.12		183333	
Monday, March 15, 2021	5.7	7.2	486	56		0.29		150000	
Tuesday, March 16, 2021	4.7	7.2	103	54		0.03		171667	
Wednesday, March 17, 2021	4.7	7.4	158	144		0.29		196667	
Thursday, March 18, 2021	3.9	7.4	142	190		0.02		185000	
Friday, March 19, 2021	3.9	7.4	144	156		0.1		160000	
Saturday, March 20, 2021	3.7	Gate	129	76		Gate		Gate	
Sunday, March 21, 2021	3.5	Locked	109	114		Locked		Locked	
Monday, March 22, 2021	3.9	7.3	102	78		0.05		150000	
Tuesday, March 23, 2021	4.6	7.2	128	148		0.23		165000	
Wednesday, March 24, 2021	4.6	7.3	114	100		0.15		193333	
Thursday, March 25, 2021	4.6	7.5	117	236		0.19		226667	
Friday, March 26, 2021	4	7.3	95	158		0.04		186000	
Saturday, March 27, 2021	4.9	7.4	119	298		0.06		16667	
Sunday, March 28, 2021	5.8	7.2	106	162		0.15		161667	

Monday, March 29, 2021	5	7.6	101	158		0.05		206667	
Tuesday, March 30, 2021	6.4	7.4	104	156		0.11		213000	
Wednesday, March 31, 2021	7.8	7.2	245	334		0.05		198000	
Mar. 2021 Total	171.0	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx	
Mar. 2021 Average	5.5	7.3	135	158	#DIV/0!	0.17		124,379	
Mar. 2021 Max	13.0	7.6	486	452	0	0.90		226,667	
Mar. 2021 Min	3.5	7.1	43	54	0	0.01		8,333	

APPENDIX B

MISSISSIPPI RIVER @ GREENVILLE GAGE – MARCH 2021

**Mississippi River @ Greenville, MS
From 03/01/2021 To 03/31/2021**



Gage Zero = 74.92 Ft. NGVD29

APPENDIX C

EMERGENCY WWTP REPAIR PROJECT CONSTRUCTION SCHEDULE

