

Exhibit K. Sinclair Site Wastewater Infrastructure Upgrade Letter & Map



Sinclair Site Wastewater Infrastructure Upgrade Letter & Map



CSRS, INC.
6767 Perkins Road, Suite 200
Baton Rouge, Louisiana 70808
Phone: (225) 769-0546
Fax: (225) 767-0060

December 16, 2016

Mr. Andrew Jacques
St. Bernard Economic Development Foundation
100 Port Boulevard, Suite 10
Chalmette, Louisiana 70043

Re. Sinclair Site Wastewater System Cost Estimate
CSRS Job No.214094

Dear Mr. Jacques:

Our research indicates that a St. Bernard Parish Sewer force main exists approximately 155 feet from the Sinclair Site. According to correspondence with local utility officials, the existing wastewater system is for domestic use only. The sewer system meets LED requirements; however, the utility officials expressed concern about the available capacity of the downstream sewer line. In order to treat the potential development's domestic waste, approximately 155 feet of force main will need to be installed to tie into the existing St. Bernard Parish force main. The construction cost of this line, including a pump station, is estimated to be \$75,000.00. This would require negotiating an agreement with St. Bernard Parish to connect to their facility.

In order to provide a wastewater treatment facility to treat 250,000 gallons per day (GPD) of industrial waste, a wastewater treatment facility would need to be constructed on site which would discharge to the Mississippi River south of the site.

Before the individual industry discharges to the proposed treatment facility, pretreatment requirements necessitate strengths less than or equal to 200 mg/L 5-day Biological Oxygen Demand (BOD) and 200 mg/L Total Suspended Solids. After treatment at the wastewater treatment facility, treated wastewater then may be discharged to the Mississippi River via a wastewater line constructed from the proposed treatment facility. Expected discharge limits of BOD₅, TSS, NH₃, and Phosphorous are 30/30/2/5 mg/L, respectively. Providing service for a total capacity of 250,000 GPD would yield a peak demand of approximately 560 gallons per minute (806,400 GPD) with an excess capacity of approximately 500,000 GPD. The construction cost of this new wastewater treatment facility plus the cost for an effluent pump station, levee crossing and discharge line is estimated to be \$1,275,000.00.

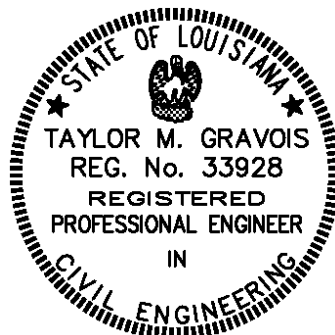
Please note that these estimates do not include engineering, rights of way acquisition, environmental impacts and permitting or operation and maintenance costs. This cost estimate was prepared with the best information available at the time of certification. The actual costs can vary based on the availability of material, site conditions and labor availability. Both plans can be executed within a reasonable timetable of 6 months based on preliminary engineering judgment.

Thank you for the opportunity to assist you in this project. Should you have any questions or require additional information, feel free to contact me.

Sincerely,

CSRS, Inc.

Taylor M. Gravois, PE, PLS



Sinclair Site Wastewater Infrastructure Upgrade Letter & Map



Sinclair Site
Wastewater Cost Estimate
214094

Rough Order of Magnitude Cost Estimate - Domestic Waste					
Item No.	Description	Unit	Est. Quantity	Unit Price	Extension
1	6" C900 PVC Effluent Force Main	L.F.	150	\$ 37.50	\$ 5,625.00
2	Ductile Iron Fittings	Tons	1	\$ 8,850.00	\$ 8,850.00
3	14 gpm Influent Pump Station ₅	Each	1	\$ 40,000.00	\$ 40,000.00
Subtotal:					\$ 54,475.00

20% Contingency₁: x 1.20

Rough Order of Magnitude (ROM):		\$ 75,000.00
Rough Order of Magnitude Cost Estimate - Industrial Waste		

Item No.	Description	Unit	Est. Quantity	Unit Price	Extension
1	250,000 gpd Average Daily Flow Wastewater Treatment Plant (30/30/2/5 Limits) with effluent Pump Station and Levee Crossing ₄	L.S.	1	\$ 1,000,000.00	\$ 1,000,000.00
2	6" C900 PVC Effluent Force Main	L.F.	1,150	\$ 37.50	\$ 43,125.00
3	6" DR11 HDPE Effluent Force Main (Jack & Bore)	L.F.	60	\$ 125.00	\$ 7,500.00
4	Ductile Iron Fittings	Tons	1	\$ 8,850.00	\$ 8,850.00
Subtotal:					\$ 1,059,475.00

20% Contingency₁: x 1.20

Rough Order of Magnitude (ROM):		\$ 1,275,000.00
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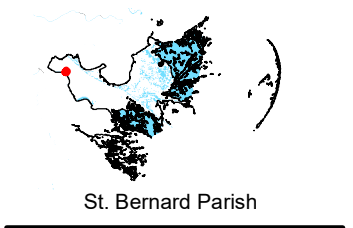
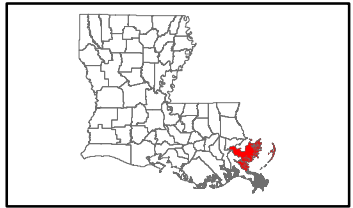
Footnotes:

- 1.) Does not include costs for engineering, permitting, or general project management.
- 2.) This cost estimate was prepared with the best information available at the time of certification.
- 3.) Actual costs can vary based on availability of material, site conditions, and labor.
- 4.) Wastewater Treatment Plant capacity based on LED required capacity of 250,000 gpd
- 5.) Wastewater influent pump station capacity based on 20,000 gpd domestic waste.

Sinclair Site Wastewater Infrastructure Upgrade Map

Proposed Wastewater Upgrade
Sinclair Site
St. Bernard Parish, LA

St. Bernard EDF



LEGEND

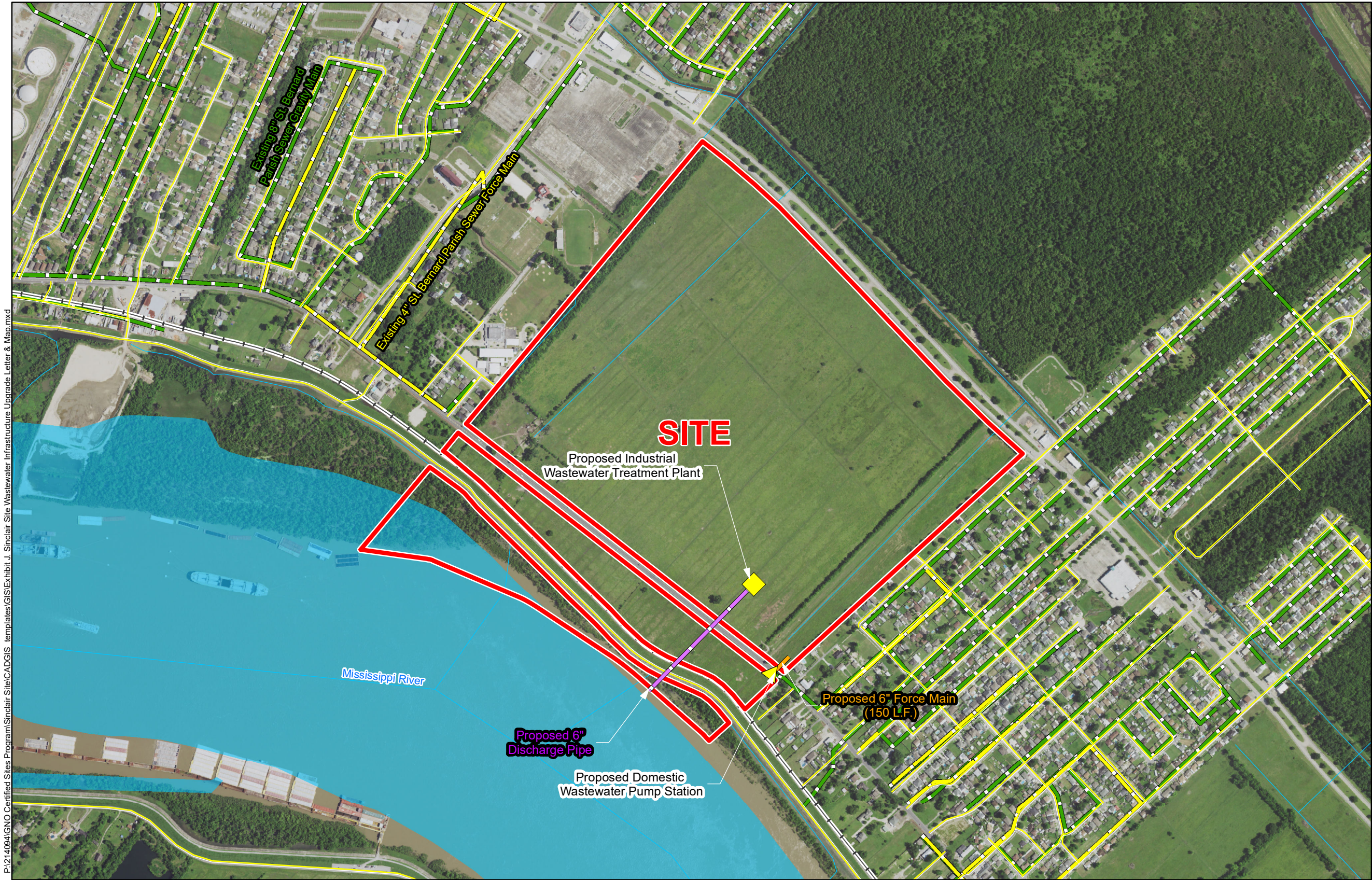
Site Boundary (285.64 Ac. ±)

Existing Wastewater Infrastructure

- Existing St. Bernard Parish Sewer Force Main
- Existing St. Bernard Parish Sewer Gravity Line

Proposed Wastewater Infrastructure

- Proposed 6" Discharge Pipe
- Proposed 6" Force Main
- Local Roads
- Railroad
- Waterbody
- Stream



P:\214094\GNO Certified Sites Program\Sinclair Site\CAD\GIS templates\GIS\Exhibit J. Sinclair Site Wastewater Infrastructure Upgrade Letter & Map.mxd

- General Notes:
1. No attempt has been made by CSRS, Inc. to verify site boundary, title, actual legal ownership, deed restrictions, servitudes, easements, or other burdens on the property, other than that furnished by the client or his representative.
 2. Transportation data from 2013 TIGER datasets via U.S. Census Bureau at <ftp://ftp2.census.gov/geo/tiger/TIGER2013>.
 3. Proposed wastewater upgrade shown is for representational purposes only, depicting the intent of the cost estimate provided with this exhibit to meet LED minimum requirements, and is subject to revision.
 4. 2015 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.

N

Scale 1:10,000

0 520 1,040 Feet

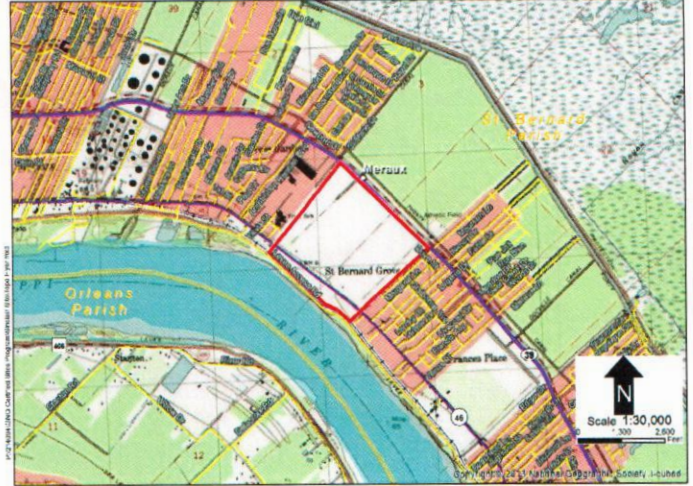


Date:	1/11/2017
Project Number:	214094
Drawn By:	TMK
Checked By:	JAY

CSRS
IMAGINE SHAPE DELIVER
6767 Perkins Road Suite 200 Baton Rouge, LA 70808
Telephone: 225 769-0546 Fax: 225 767-0060
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Wastewater Utility Provider Survey (page 1 of 2)

Project ID 214094



Sinclair Site Wastewater Infrastructure Upgrade Letter & Map

Site Map 1

Site Map 2

Date:

6/21/16

Provider Name:

ST. BERNARD PARISH GOV.

Address:

1111 E. ST. BERNARD HWY

City:

CHALMETTE

State:

LA

Zip Code:

70043

Contact Information

Name:

KEITH LAGRANGE

Phone:

504-352-6809

Email:

klagrang@sbpg.net

Title:

DIRECTOR OF PUBLIC WORKS

Is wastewater collection currently available at this site? ☐ Yes ☒ No

Is there a force main at or near the site? ☐ Yes ☒ No

What is the distance in feet to the closest wastewater collection line to service this site?

500'

What is the size (inches in diameter) of the nearest line?

8"

What is the total capacity of the nearest lift station in gallons per day

1 MGD

NPDES permit number of sewer provider

What is the total capacity of the wastewater system in gallons per day

14.5 MGD

What is the current average daily use of the existing wastewater system in gallons per day

5 MGD

What is the peak load on the existing wastewater system in gallons per day

39 MGD

What is the excess capacity of the existing wastewater system in gallons per day

8.5 MGD

What are the pre-treatment requirements to discharge to the wastewater system?

DOMESTIC WASTE ONLY

Is a plan underway to improve services at or near this site within the next year? If so, please provide anticipated upgrades, location, and time for implementation.

NONE