

# Exhibit L. Germania Site Potable Water Infrastructure Upgrade Letter & Map



# Germania Site Potable Water Infrastructure Upgrade Letter & Map

Germania Site  
Ascension Parish, LA

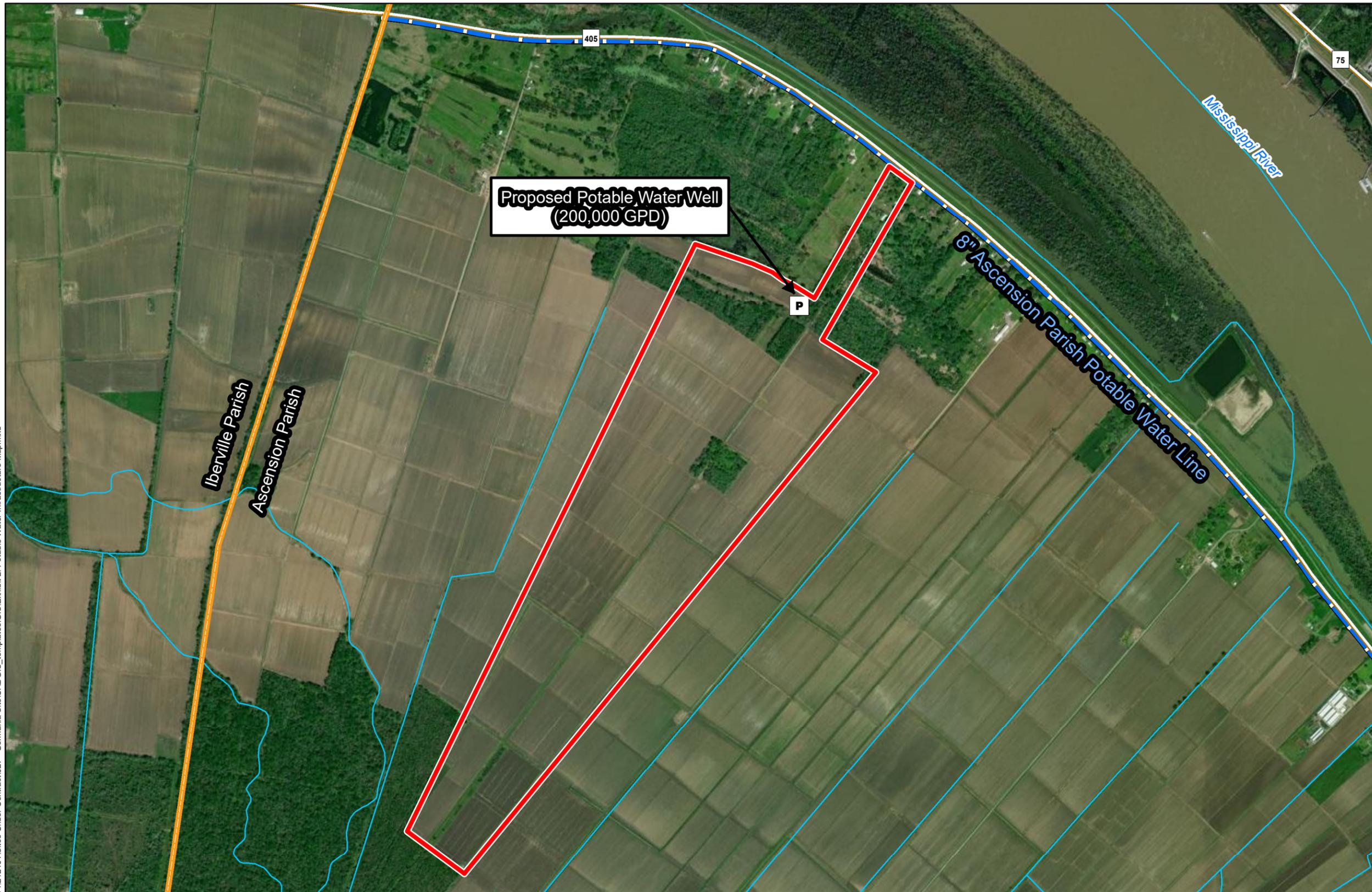
## BRAC



Ascension Parish

## LEGEND

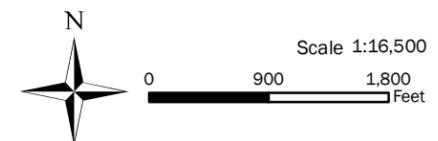
- Site Boundary (435.63± ac.)
- Parish Boundary
- P Proposed Potable Water Well (200,000 GPD)
- 8" Ascension Parish Potable Water Line
- Stream
- Existing Roadway**
- Rural State Highway



Date:	12/19/2023
Project Number:	212161
Drawn By:	BMS
Checked By:	EEB

**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. Utility information from visual inspection and/or the individual utility operators. Exact field location has not been determined by survey. The lines shown are an approximate representation only and may have been offset for depiction purposes.
4. 2015 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.



P:\212161\Sites Under Contract\027 - Germania Site\CAD\GIS\_templates\GIS\Exhibit L - Potable Water Infrastructure Map.mxd

May 24, 2023

Mr. Russell Richardson  
Baton Rouge Area Chamber  
564 Laurel Street  
Baton Rouge, LA 70801

**Germania Site  
Potable Water Infrastructure  
Upgrade Letter & Map**

**RE: Germania Site, Ascension Parish  
Potable Water Infrastructure Upgrade Letter & Map  
CSRS Project No 212161**

Dear Mr. Richardson,

According to our research, the Germania Site located in Ascension Parish, Louisiana has an existing Parish of Ascension Utilities 8-inch potable water line adjacent to the site. However, excess capacity of the municipal potable water line was not able to be clearly determined by the provider. Initial discussions with Parish of Ascensions Utilities indicated access to the line is feasible depending on the prospective user for potable water needs but process/industrial water would require other improvements and/or infrastructure. Based on these limitations, a rough-order-of-magnitude (ROM) cost estimate to provide an approximate 200,000 gallon per day (GPD) groundwater well is provided below.

Groundwater resources in Ascension Parish from near surface to deepest includes the Mississippi River Alluvial, Norco, and Gonzales aquifers. The Mississippi River alluvial aquifer ranges from 100 to 300 feet below ground surface (BGS) and is often utilized for industrial process water needs to minimize consumption from the deeper aquifers that supply the surrounding area with drinking water. A summary of water quality characteristics for freshwater in the Mississippi River alluvial aquifer from the U.S. Geological survey Ascension Parish Water Resources report is below:

	Temperature (°C)	Color (PCU)	Specific conductance, field (µS/cm at 25°C)	pH, field (SU)	Hardness (as CaCO <sub>3</sub> )	Chloride, filtered (as Cl)	Iron, filtered (µg/L as Fe)	Manganese, filtered (µg/L as Mn)	Dissolved solids, filtered
Mississippi River alluvial aquifer									
Median	20.5	26.5	994.5	7.1	240	46	18,000	--	528
10th percentile	20	10	569.2	7	110	11.8	13,200	--	329
90th percentile	21	60	1,508	7.6	552	208	23,600	--	766.5
Number of samples	20	6	28	20	37	37	3	0	6
Percentage of samples that meet SMCLs	NA	20	NA	100	NA	100	0	--	37

The construction cost of a 300-ft BGS groundwater well to the Mississippi River alluvial aquifer capable of providing 200,000 GPD (140 GPM) flow requirements is estimated to be \$1,100,000. This estimate includes mobilization, installed of rig supply well, first pass 300' Well, hole opening, set casing, under-ream, set screen, develop and test pump, and 140 GPM pump assembly. Additional storage and pre-treatment requirements may be needed but are not included in this estimate. 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. Plans can be executed within a reasonable timetable of 6 months once preconstruction permits are issued based on preliminary engineering judgment.

Respectfully,



**Taylor Gravois, PE, PLS**  
Principal



Germania Site  
 Industrial Ground Water Well Cost Estimate  
 Job No. 212161

Rough Order of Magnitude Cost Estimate						
Item No.	Description	Unit	Est. Quantity	Unit Price	Extension	
1	Mobilization	L.S.	1	\$ 100,000.00	\$	100,000.00
2	Temporary Rig Supply Well	L.S.	1	\$ 65,000.00	\$	65,000.00
3	Drilling of 300' BGS groundwater well. Includes set casing, under-ream, set screen, and test pump	L.S.	1	\$ 450,000.00	\$	450,000.00
4	140GPM pump system assmebly and foundation	L.S.	1.00	\$ 300,000.00	\$	300,000.00
<b>Subtotal:</b>					<b>\$</b>	<b>915,000.00</b>
<b>20% Contingency<sub>1</sub>:</b>						<b>x 1.20</b>
<b>Rough Order of Magnitude (ROM):</b>					<b>\$</b>	<b>1,100,000.00</b>

**Footnotes:**

Does not include costs for engineering, permitting, ROW acquisition, or general project management.

- 1.)
- 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.) Cost estimate does not include any pretreatment requirements prior to process use.