Project Update Commission Conference Meeting September 17, 2024



LAKE CENTER

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Mass Excavation Comparison



Mobilized – September 2023 Broke Ground – October 2023

Excavated – 97,000CY of 110,000CY Backfilled – 85,000CY of 167,000CY

Increasing site elevation by 7'





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Underground Pipe Progress



Underground Pipe Installed 27,000 of 37,000 Linear Feet





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Underground Electrical Conduit Progress



Underground Electrical Conduit 105,000 of 138,000 Linear Feet installed





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Injection Wells

Current Depth of West Injection well-3000 of 3500 Linear feet

Current Depth of Monitoring well-1500 of 1800 Linear feet





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Upcoming Onsite Activities

- Complete underground and backfill phase-
 - October 2024
- Complete Major equipment Foundations
 - November 2024
- Begin to receive Plant equipment
 - September 2024- Stripping towers





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Permitting Update

- Permitting process with the City is progressing smoothly
- Critical Infrastructure Agreement between City and County Approved
- FDEP permit to construct issued April 2024









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Optimal Corrosion Control Treatment

- January 2021 Lead and Copper Rule Revision (LCRR)
 - Requires water systems to conduct an optimum corrosion control treatment (OCCT) study before implementing a treatment change.
 - December 2023 Proposed Lead and Copper Rule Improvements further reinforce the need for a pipe loop study
- October 2023 Jacobs completed a desktop OCCT study
 - Reviewed existing distribution system water quality and pipe materials
 - Recommend a pipe loop study to confirm treatment chemicals and different treatment blending limits
- Pipe loop tests include:
 - Six loops each using 3 pipe materials to simulate the impact on distribution system water quality of different blends of nanofiltration, ion exchange and corrosion inhibitor chemical treatment
 - Pilot will operate for 52 weeks to meet EPA / FDEP requirements and will cost \$5.8M







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PFAS Update

- PFAS Background (Ref: EPA Proposed PFAS National Drinking Water Regulations FAQs)
 - Per- and Polyfluoroalkyl Substances (PFAS) are manufactured chemicals used in industry and consumer products (e.g., nonstick cookware, waterproof clothing, firefighting foam) since the 1940s
 - The Environmental Protection Agency (EPA) set a Maximum Contaminant Level (MCL) of 4 parts per trillion (PPT)
- Project Considerations and Activities To Date
 - City directed Project Company to test for
 PFAS in the well field during the summer
 of 2023
 - Average PFAS levels were approximately 18 PPT
 - A Preliminary Engineering Report was submitted to the City in October of 2023; given the uncertainty around the final MCL and the related costs for treatment at that time, the City directed Project Company to move forward with a Pilot Study
 - The City and their owner's representative (Hazen & Sawyer) has worked with Project Company to develop the scope of work to conduct the Pilot Study





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PFAS Pilot

- The regulation change requires full compliance by April 2029
- Pilot objective is to validate that the new plant can remove PFAS or determine if additional treatment is required
- The pilot simulates all relevant treatment processes designed for Prospect Lake and will evaluate alternative technologies for PFAS removal (e.g., GAC, IX Resins)
- Piloting is an essential stage to ensure compliance before any full-scale implementation of a solution is implemented
- The Pilot Study will take approximately 9 months to complete and will cost \$4.7M







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Upcoming Change Orders

- First Amendment to the Comprehensive Agreement / Change Order #4 - Transfer of 54-inch Feedstock Watermain from Annex B-1 City Infrastructure Obligations to Annex to B-2 City Enabling Works, \$3,275,339
- Change Order #5 Optimal Corrosion Control Pipe Loop Test, \$5,790,004
- Change Order #6 PFAS Pilot Testing, \$4,720,061

	and the second	City's			
		Deadline			
Feedstook Water- Delivery-and- Feedstock Water- Connection-at- Project-boundary-	SW-Corner of the Site- industry as- indicated by- TP-01 in Anner E-1-	600 days from Effective Date	S4 inch	Designed- for- 89MGD- (Maximum- Lond-65-	The City shall complete construction of all Feeder Water piping and valves and begin to deliver to Project Company of Least 50 MGD (in the ordin course) but not more than 65 MGD (in the or replenishment of the City Strange Tanks is requi under this Agreement) of Feedereck Water
	(Sur- Description),			MGD phas- requests- from- Fivensh- Water- Treatment- Plant)	compliance with the requirements of Anney (Recedence Alexa-Specifications) to this Agreem and in accordance with the terms of this Agreement The City shall be responsible for making connection to the Project Company's pipe City responsible for permitting, pressure tool destribution and clearance of the pipeline prior connection at the Tate in Point.
Product Water	East Site	400 days from	City shall	50 MGD	The City shall complete a 48-inch Product Wi
Transmission to Fiveash Water Treatment Plant	boundary as indicated by TP-05 in Annex E-1 (Site Description).	the Effective Date for the City to furnish 60% design information 912 days from Effective Date for completion of installation	furnish 48 inch connection to the City Feedstock Water pipeline to Fiveash Water Treatment Plant		transmission main (pipe) from the Tie-In P provided by the Project Company at the C Wellfield to Fiveash and be available to begin receive Product Water from the Project in accorda with this Agreement. City is responsible permitting, pressure testing, disinfection is clearance of its pipeline prior to connection at Tie-In Point. The City shall make the final connect to the Project Company's pipe. The City shall provide a copy of its design docume to the Project Company so that the Project Comp may design and construct a surve protection syster.
					necessary.
Fiveash	Fiveash Water	912 days from	N/A	50 MGD	The City shall complete any necessary improvement
art 1					
Feedstock Water Main and Feedstock Water Connection at Project boundary	SW Corner of 54 inch the Site, boundary as indicated by TP-01 in Annex E-1 (Site, Description),		Designed for 59MGD Cor enal (Maximum baad = 65 the the MGD plus requests from Fiveash Water, Treatment Agr Wal		nstruction of the Feedstock Water main ble the City to deliver to the Project Compa- test 59 MGD (in the ordnary course) but r re than 65 MGD (in the event replenishment City Storage Tanks is required under th reement) of Feedstock Water in complian h the requirements of Annex G (Feedstan the Specifications) to this Agreement and ordance with the terms of this Agreement.
Pre-Treatment and Booster Pumps Work	Incorporated TBD into the Prospect Lake Clean Water Center		As required to Exti provide the pre- design Wai capacity of 59 Rev MGD up to a boo maximum of pres 65 MGD in spec accordance Spec with Annex Pre- B-1 (City Am Infrastructure Boo Obligations) dess Boo		tra Work necessary to design and construct t- treatment processes to treat the Feedsto ter from the City Wellfield to address t vised Feedstock Water Specifications and t stere pumps within the Site to increase t ssure of the Feedstock Water to the lev- cified in Annex G (Feedstock Water crifications) to this Agreement for t -Treatment and Booster Pumps Work Fundi south (consistent with the Pre-Treatment a oster Pumps Work Funding Amount Cap), cribed in Section 8.01(a) (Pre-Treatment a ster Pumps Work) of this Agreement.
Second Disposal	NW Corner the Site as	of 20"	Design 1 of 11.39	Basis DB MGD sec	Work necessary to design and construct ond Disposal Well as described in Annex
Well	indicated by the SW TP- in Annex E (Site Description	/ 06 -1		(De Sta Dis	and Construction ndards) to this Agreement, for the Seco sposal Well Funding Amount.

50 MGD

Standards Work





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