



## Staff Report

**TO:** Mayor, and City Council Members  
**FROM:** Kristine Day, Assistant City Manager  
**DATE:** February 4, 2020  
**SUBJECT:** **Wastewater Treatment Plant Expansion/Renovation and Brine Pipeline Installation Project Status Update**

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### Background and Analysis:

#### Reach 1

- The contractor continues to work three crews on pipe installation/ restoration pavement, directional drill at San Timoteo Creek, and pipe jacking.
- Approximately 66,242 linear feet of brine line has been installed to date.
- Contractor has requested 43 inclement weather days to date.
- The three week look ahead schedule is included as an attachment to this report (Attachment A).

#### Reach 2

- The contractor is focusing on the jack and bore for San Timoteo and Redlands as well as the connection to the Inland Empire Brine Line and the E Street Bridge connection.
- Approximately 49,595 linear feet of brine line has been installed to date.
- Contractor has requested 17 inclement weather days to date.
- The three week look ahead schedule is included as an attachment to this report (Attachment B).

Approved Change Orders:

<b>CO No.</b>	<b>Contractor</b>	<b>Description</b>	<b>Reason for Change</b>	<b>Amount</b>
1 (Potrero CO 10)	Ortiz	Brine Line Improvements (Pre-Authorized)	Addition of 12" Brine Line During Construction	\$238,615.70
2 (Potrero CO 11)	Ortiz	Brine Line Improvements (Remaining Work) (Force Account)	Addition of 12" Brine Line During Construction	\$324,043.15 Not to Exceed but direct to Force Account
3	Weka, Inc.	Brine Line Improvements Potrero Boulevard – 4 <sup>th</sup> Street	Addition of 12" Brine Line During Construction	\$646,482.65
4	Weka, Inc.	County of Riverside Encroachment Permit Credit	City Paid Fee for Encroachment	(\$45,460.00)
5	Weka, Inc.	Potrero Bridge / Caltrans Right-of-Way	Brine Line Installation Requirements	\$110,394.90
6	Weka, Inc.	Changes and Modifications to Brine Line Installation on 4 <sup>th</sup> Street & Potrero Rd.	Drain Installation, Add Vent Line to MH, and 4 <sup>th</sup> Street Brine Line Changes	\$12,821.87
7	T.E. Roberts, Inc.	Unknown Utility Crossings and Associated Potholing	Additional Potholes Not on Plans	\$14,300.00
8	Weka, Inc.	Heartland Parkway and Potrero Boulevard Site Condition Restorations	Site Condition Changes	\$41,076.93
<b>Brine Line Contingency Budget Amount</b>		<b>Budget Amount</b>	<b>Change Orders 1-8</b>	<b>Remaining</b>
		<b>\$2,600,000.00</b>	<b>\$1,342,275.20</b>	<b>\$1,257,724.80</b>

Permit fees accrued to date are:

<b>Agency</b>	<b>Description</b>	<b>Amount</b>
City of San Bernardino	Brine Line Encroachment Permit	\$682.50
Riverside County Tax Collection	Permit for Brine Line	\$2,000.00
Union Pacific Railroad (UPRR)	Pipeline Crossing Agreement & Encroachment Permit	\$98,655.00
San Bernardino Flood Control	Brine Line Encroachment Permit	\$9,539.00
San Bernardino Flood Control	408 Permit	\$59,489.00
City of Redlands	Plan Check Fees	\$2,500.00
City of Loma Linda	Plan Check Fee for Brine Line	\$13,000.00
SAWPA	Brine Line Encroachment Permit Deposit	\$20,000.00
County of San Bernardino	CEQA Environmental Filing Fee	\$50.00
Riverside County – Paid by Weka	Permit for Brine Lin – Supplemental Inspection Fee	\$45,460.00
California Department of Fish & Wildlife	1602 Permit	\$5,145.75
State Water Resources Control Board	401 WQC	\$24,197.00
Various Monitoring Required by EIR	Paid Hourly	\$250,000.00
Southern California Edison	Permit	\$6,951.84
<b>Total</b>		<b>\$537,670.09</b>

The project accounting for the Brine Line Project is as follows:

<b>Brine Line</b>	<b>Budget Amount</b>	<b>Actual</b>	<b>Remaining</b>
Design	\$2,082,357.37	\$1,764,461.94	\$317,895.44
Construction Management	\$3,436,471.38	\$2,431,737.45	\$1,004,733.93
Permit	\$508,240.25	\$278,131.09	\$230,109.16
Construction	\$31,884,226.35	\$25,482,062.63	\$6,402,163.72
Contingency	\$2,600,000.00	\$1,342,275.20	\$1,257,724.80
<b>Total</b>	<b>\$40,511,295.35</b>	<b>\$31,298,668.31</b>	<b>\$9,212,627.05</b>

**Wastewater Treatment Plant Expansion/Renovation Project:**

- Work Continues on the MBR/RO Startup (Critical Path), Fine Screens Canopy – On Hold, Install Duct-bank 205, 103.2, 204 & 1 – Ongoing, EATON Switch Gear Testing – Ongoing, SCE Switch Gear Inspection – Feb, Submit Short Circuit Study – Ongoing, SKM Short Circuit Study Review – Feb, Install Frontier Duct-bank – Ongoing, Fine Screens Install Misc. Metals – Ongoing, Fine Screens Touch Up Protective Coatings Inside Walls – Jan 28, Fine Screens Install Conveyors – Ongoing, MBR Metal Building Assembly – Ongoing, MBR Bldg. Install Exposed Electrical Conduits – Ongoing, MBR Bldg. Install Lighting & Devices – Ongoing, MBR Bldg. Install Cable Tray – Ongoing, MBR Bldg. Pull Wire Areas 1,2, & 3 – Ongoing, MBR Bldg. Install Electrical Equipment – Ongoing, MBR Bldg. Small Diameter Strut Supports Installation – Ongoing, MBR Bldg. Painting Interior Walls Control Room – Ongoing, MBR Bldg. Coat Above Ground Piping – Feb 3, MBR Bldg. Coat Doors and Frames – Feb, MBR Bldg. Install Handrails – Ongoing, MBR Bldg. Install Mud Valves/Guide Rails – Ongoing, MBR Bldg. MBR Air Scour Piping and Supports – Jan 27, Aeration Basin Install Air Piping and NPW – Ongoing, Aeration Basin Epoxy Coat Influent Box #1 – Jan 28, Aeration Basin Install Control Panels and Pull Wire – Jan 27, Chemical Tank Farm Install Duct Bank – Jan 30, Recycled Water Pump Station Paint AG Pipe – Jan 27, Storm Water Pump Station Coat Storm Water Pump Station – Jan 30, and Electrical Bldg. Pull Wire – Ongoing
- Upcoming pours include the North Aeration Duct Bank.
- Contractor has requested 41 inclement weather days to date and 51 days have been approved.
- Projected Phase 1 completion is May 2020.
- The three week look ahead schedule is attached for review (Attachment C).

Approved Change Orders:

<b>CO No.</b>	<b>Description</b>	<b>Reason for Change</b>	<b>Amount</b>
1	MBR System Improvements	Enhance the performance of MBR System	\$149,741.00
2	RO System Electrical Modifications & Storm Drain System Material Change	Design & Material Updates	(\$245.00)
3	New Aeration Basin 1 through 3 Excavation	Conflict with Existing Utilities	\$19,998.00
4	Structural and Mechanical Modifications	Pre-Selected Submittals	\$57,450.64
5	Vactor Truck Dump Station Modifications	Conflict with Utilities	NTE \$15,000.00
6	EDI/Fine Coarse Bubble Diffuser Equipment	Design Change	\$24,298.00
7	Various Changes – MBR/RO Structural, Site civil & Headworks SCADA Design Modifications	Design Change	\$59,167.49
8	Various Changes – Demolition, Piping Realignment, Material Change, and Electrical Actuated Valve Voltage Change	Unforeseen Conditions and Value Engineering	\$6,067.00
9	Various Changes – Solids Handling Bldg. conveyor Capacity Increase, Electrical Yard Vault Cover Changes, Additional Pothole Investigation and Existing Duct Bank Removal, and Yard Utilities	Design Changes, Conflict with Construction, Owner Requested Changes	\$138,531.73
10	MBR Chemical Area Changes & Other Misc. Changes and Inclement Weather Impact Nov-18 to May-19	Owner Requested Changes & Inclement Weather	\$596,031.05
11	Frontier Internet Provider Duct Bank Modifications, 30-inch MBR & 20-inch Plant Effluent Pipeline Elevation and Alignment Modifications, Additional Safety Required Handrail at Retaining Wall and Generator	Design Changes & Conflict with Construction	\$81,128.29

12	RO-Sulfuric Acid Chemical Piping Material Change, Solids Feed Pump TE/TSH Thermocouple Elements, Solids Handling Bldg. Changes	Design Changes, Owner Requested Changes	\$91,417.26
13	Plant Effluent Chemical Area Changes	Owner Requested Changes	\$404,821.33
<b>WWTP Contingency</b>	<b>Budget Amount</b>	<b>Change Orders 1-13</b>	<b>Remaining</b>
	<b>\$4,000,000.00</b>	<b>\$1,643,406.79</b>	<b>\$2,356,593.21</b>

The project accounting for the Waste Water Treatment Plant Project is as follows:

<b>WWTP</b>	<b>Budget Amount</b>	<b>Paid to Date</b>	<b>Remaining</b>
Design	\$2,709,798.23	\$2,556,828.66	\$152,969.57
Construction Management	\$5,308,585.72	\$2,767,943.60	\$2,540,642.12
Equipment	\$252,906.00	\$253,362.91	(\$456.91)
Permits	\$324,776.76	\$81,936.25	\$242,840.51
Construction	\$53,910,737.00	\$28,407,822.57	\$25,502,914.43
Contingency	\$4,000,000.00	\$483,101.09	\$3,516,898.91
<b>Total</b>	<b>\$66,506,803.71</b>	<b>\$34,550,995.08</b>	<b>\$31,955,808.63</b>

**Fiscal Impact:**

No additional fiscal impacts beyond the project budget.

**Recommended Action:**

Receive and file the project updates.

**Attachments:**

- A. Brine Line Reach 1 – 3 Week Schedule
- B. Brine Line Reach 2 – 3 Week Schedule
- C. WWTP – 3 Week Schedule