



City of Santa Barbara
Public Works Department

Memorandum

DATE: June 09, 2022

TO: **Water Commission**

VIA: Joshua Haggmark, Water Resources Manager

FROM: Philip Maldonado, Interim Principal Engineer

SUBJECT: Update for the El Estero Water Resource Center Electrical Distribution
Renewal Project

Background

The El Estero Water Resource Center (El Estero) is one of the City of Santa Barbara's most important facilities and serves a critical role in the protection of the environment and public health. El Estero provides wastewater treatment, recycled water treatment, and renewable energy production, serving a population of approximately 95,000. Initially constructed in 1952, the majority of El Estero's current infrastructure was constructed in 1978.

Over the past several years, planned capital improvements have been implemented including upgrades to the Headwork's system, influent pumps, tertiary treatment (recycled water), and the secondary process. These improvements have enhanced the level of treatment at El Estero and have kept it operating reliably. Significant advancements are still required to replace other aging equipment and modernize processes. On September 20, 2016, Council authorized a contract with Brown and Caldwell (BC) to develop the El Estero Facility Plan, which produced a prioritized list of projects to implement over the next 25 years in order to maintain the operational performance of the facility. The replacement of the electrical power and distribution system was identified as the top priority. This was based on overall risk factors, which include safety, the likelihood of failure, and the consequence of failure.

On August 7, 2018, Council authorized a contract with BC to develop a preliminary design for the El Estero Water Resource Center Electrical Distribution Renewal Project (Project), with the option to continue under a separate contract through the final design. On December 17, 2019, Council authorized a contract with BC to complete the final design, which is now nearly complete. The Project includes replacing and upgrading the electrical distribution system, installing a new waste gas flare, replacing and upgrading the fiber optic system, and ensuring storm water compliance. This will include replacing the existing five electrical substations and the main electrical distribution panel. Electrical and fiber optic conduit runs will be replaced throughout the site. The new system will be constructed in parallel to the existing system to limit the number of required system shutdowns. The new system includes five new buildings. These building are for primary power, distribution power, and three substations.

On May 10, 2022, Council authorized a contract with Mimiaga Engineering Group (MEG) to conduct a pre-bid constructability review of the designed project. MEG's services include a review of the plans, specifications, permits, reports, schedules, sequencing, and cost estimates for the anticipated work. MEG will prepare a Technical Memorandum (TM) with recommended construction phasing requirements and findings from their review. MEG will deliver the TM prior to publically bidding the Project and will support staff through the bidding and award process.

On April 22, 2022, Water Commission supported staff's recommendation to authorize a contract with MEG. At this meeting, Water Commission requested a staff update on the status of the Project. The status update is scheduled for presentation at the June 9, 2022 meeting focusing on the following topics:

Completed Elements

Project elements completed to date include the Preliminary Design, the Final Design to 95%, completing approval through the City's Design Review process, selection of a construction manager and inspection services, and coordination with the State Water Board to have the Clean Water State Revolving Fund Loan (CWSRF) application deemed complete.

Current Work

Ongoing work elements include continued coordination with the State Water Board to finalize and implement the CWSRF funding agreement, conducting the pre-bid constructability review, completing the City's Building and Safety review for Building permit approval, and incorporating all comments to complete the final design.

Planned Work

The project is anticipated to be publically bid by winter 2022. Bidding requirements on this Project necessitate an extended bid period of approximately two months. The selected construction contract will be presented to Water Commission prior to approval at City Council. Construction is anticipated to begin in spring 2023 and continue for approximately three years.



PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION

EL ESTERO WATER RESOURCE CENTER ELECTRICAL DISTRIBUTION RENEWAL PROJECT

Project Update – Water Commission - June 9, 2022

Presentation Topics

- Background
- Completed Elements
- Current Work
- Planned Work, Timeline, and Budget



Electrical Renewal – Project Purpose and Need

- The goal of the project is to eliminate the risk of failure by replacing the aging electrical distribution system infrastructure, improving redundancy, and eliminating single points of failure within the system.
- Identified as top priority.

Completed Elements

- Preliminary Design
- Final Design – 95%
- Design Review approval
- Selected CM and Inspection consultant
- Funding Application – Deemed Complete

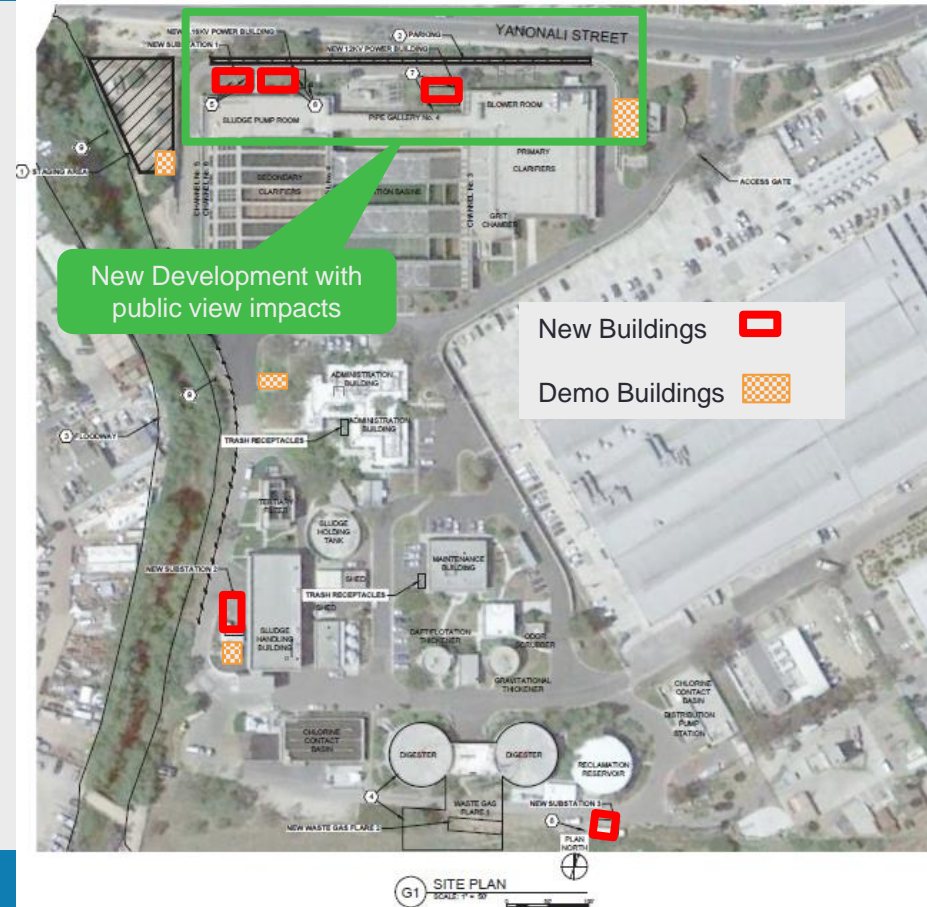
Current Work

- Implement Funding Agreement
- Constructability Review
- Building Permit Approval
- Final Design – Complete



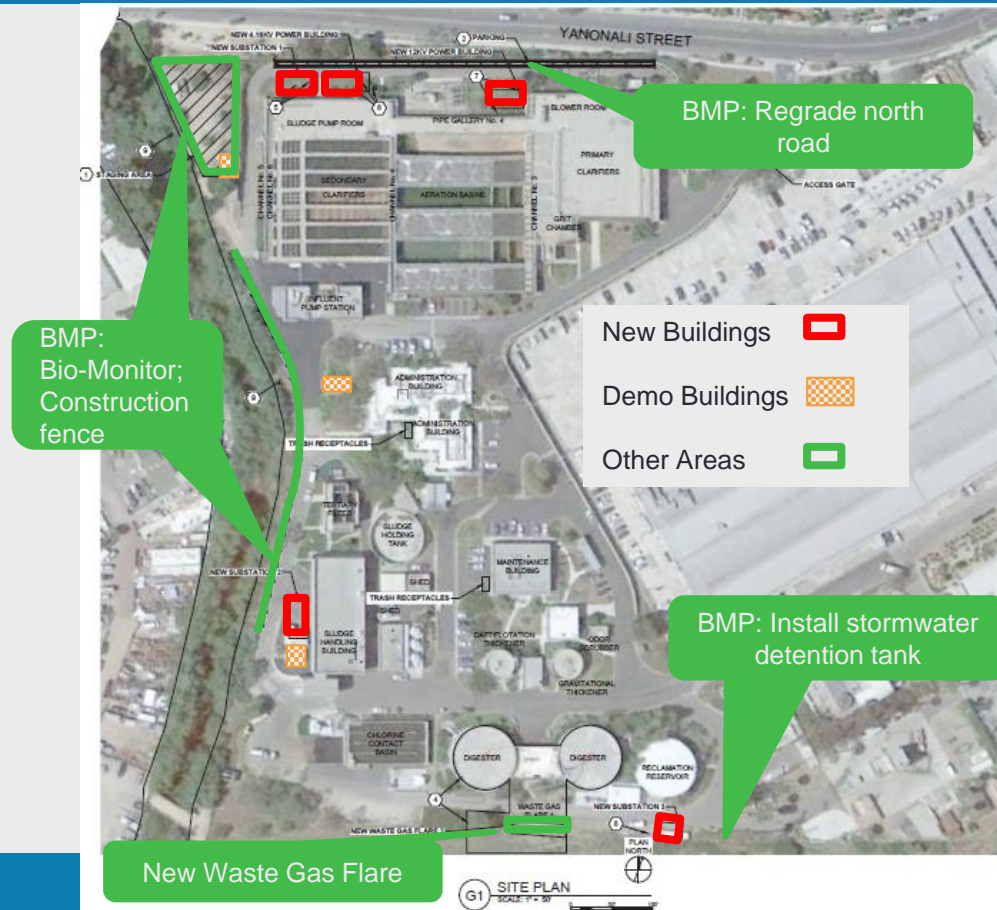
Current Design

- 5 New Buildings
- North with public view
- Spans entire parcel



Other Areas of Disturbance

- Construction Staging
- Above-ground conduit
- Waste Gas Flare



Planned Work, Timeline, and Budget

- Bid Project
- Approve Contract
- Construct Project



Timeline - Project



Project Cost and Funding Plan

- Project is estimated to cost \$30.4 million
 - *Design, engineering, construction, project management*
- Project financing
 - Clean Water State Revolving Fund loan
 - *Low interest long-term financing*
 - *1 to 2-year application process; currently finalizing the funding agreement*
 - Reduce rate burden – better match timing of costs and benefits

Estimated Design Project Cost

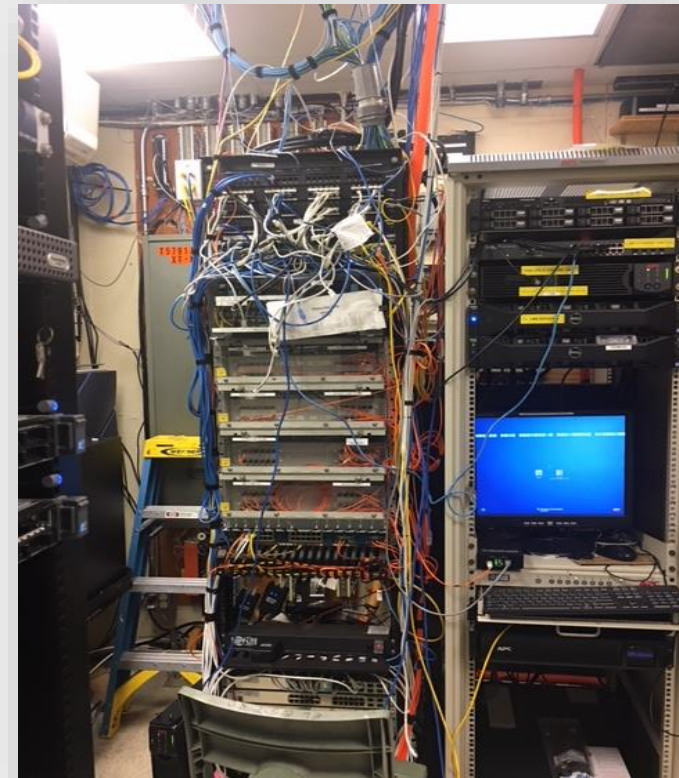
Element	Budgetary Cost
Electrical Final Design	\$1,665,787
City Staff Costs	\$100,000
Preliminary Design	\$1,517,946
City Staff Costs	\$54,914
<i>Subtotal (Design Cost)</i>	<i>\$3,338,647</i>

Estimated Construction Project Cost

Element	Budgetary Cost
Estimated Construction Contract w/Change Order Allowance	\$23,250,000
Estimated Construction Management/Inspection (by Contract)	\$3,309,269
Estimated Other Construction Costs (testing, City staff, etc.)	\$500,000
<i>Subtotal</i>	\$27,059,269
Total Project Cost	\$30,397,916

Update Summary

- Preliminary Design Complete
- Final Design at 95%
- Funding application is complete
- Constructability Review on-going



Update Summary - Continued

- Completing Building review and permitting
- Completing Final Design
- Implement Funding Agreement
- Bid Project
- **Return for approval of Contract for Construction**



Questions?

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