PROFESSIONAL SERVICES AGREEMENT – ENGINEERING DESIGN

Laguna Treatment Plant Electrical Infrastructure Improvements Project

Board of Public Utilities Meeting

April 4, 2024

Greg Dwyer, Associate Engineer

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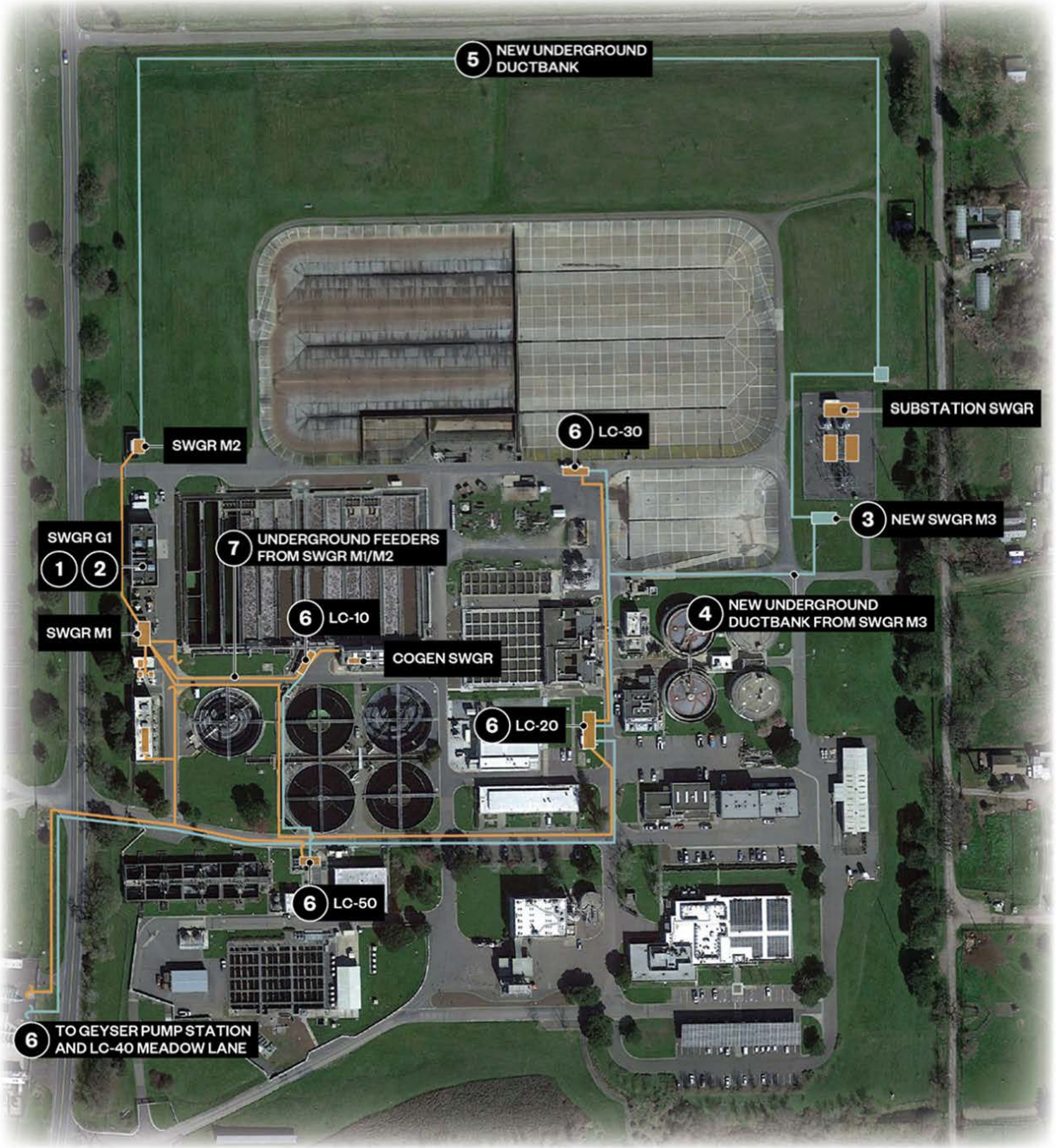
Project Purpose and Description

Much of the electrical infrastructure at the Laguna Treatment Plant (LTP) is at the end of its useful service life.

Project will replace major assets within the electrical distribution system to provide reliable services into the future.

The City is Seeking Professional Services for Engineering Design.

Major Assets to be Replaced per Condition and Risk Assessments from the LTP Power Master Plan, January 2023

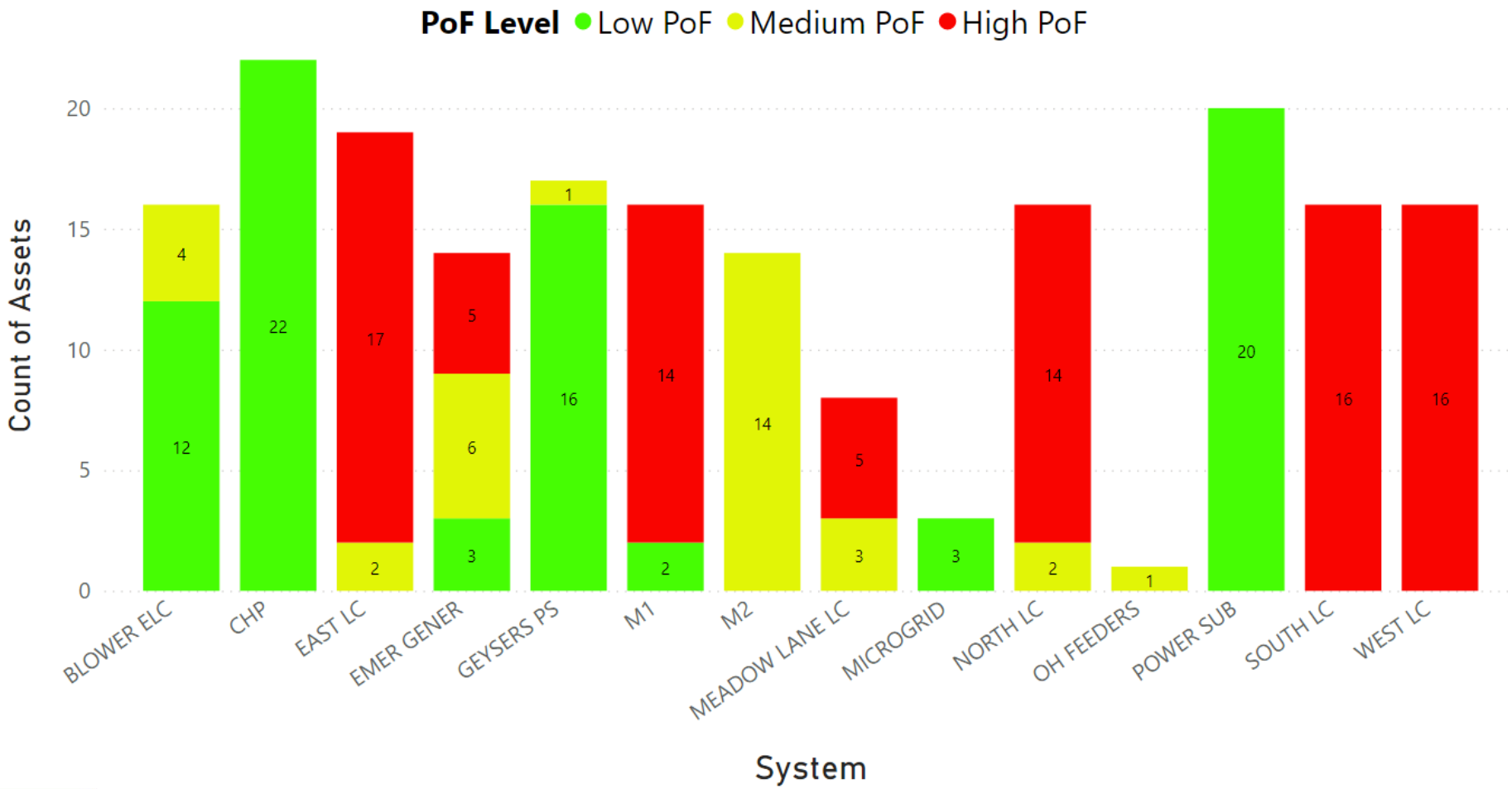


ELECTRICAL DISTRIBUTION SYSTEM IMPROVEMENTS

New Existing

1. SWGR G (Emergency Generator Switchgear) – Repair/Align Circuit Breaker Frame
2. Standby Power System Redundancy – Add Redundant Circuits from SWGR G to Distribution Switchgear.
3. Install new Switchgear M3 near LPS to replace SWGR M1.
4. Install ductbank system from new SWGR M3 to Load Centers.
5. Convert 15kV overhead to underground.
6. Replace Existing Load Centers
   a. LC-10 (West)
   b. LC-20 (East)
   c. LC-30 (North)
   d. LC-40 (Meadow Lane)
   e. LC-50 (South)
7. Replace existing 15kV cables from SWGR M1/M2 to Load Centers

Probability of Asset Failure from the LTP Power Master Plan, January 2023



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Convert Overhead Power Lines to Underground

- Existing 12kV overhead wooden power poles vulnerable to damage from inclement weather or natural hazards.
- Adds resiliency to the power distribution system and eliminates need for specialized overhead line work crew.
- Incorporate permit / mitigation measures for ground disturbing activities within California tiger salamander habitat.

West Load Center (LC10)

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East Load Center (LC20)

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North Load Center (LC30)

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Meadow Lane RD Load Center (LC40)

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South Load Center (LC50)

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Switchgear (SWGR M1)

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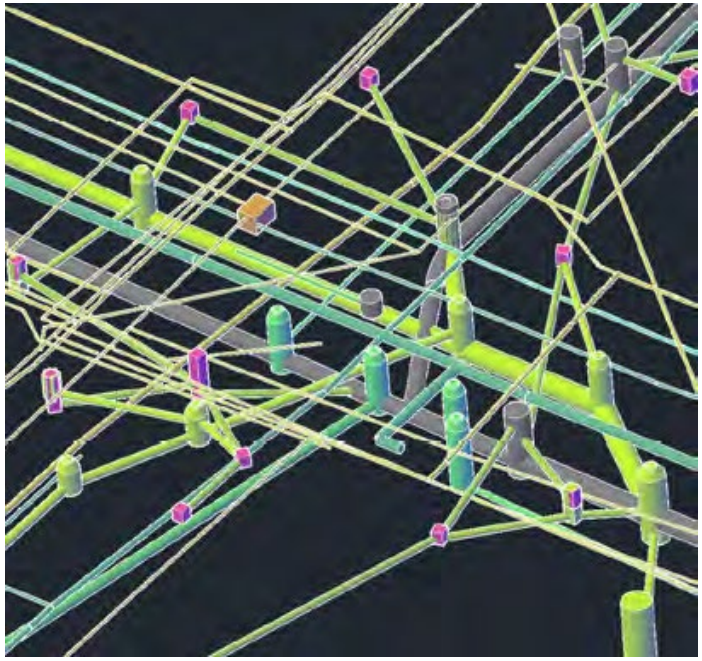
3D Modeling to optimize duct bank routing/ resolve potential conflicts with existing Utilities



Additional Studies

- Llano Pump Station Standby Power Study - Evaluate and confirm the capacity of existing standby power and cogeneration system in the event of a power outage (Fee: $34,680).
- Staffing Analysis – Workforce level review to assess the need for staffing improvements to make sure proper staffing is maintained for the upgraded system (Fee: $30,620).

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Project Schedule

- Project Design: April 2024 to March 2025.
- Environmental: April 2024 to January 2025.
- Procurement: September 2024 to May 2028.
- Anticipated BPU Consideration of Construction Contract Award: April 2026.
- Projected Construction: May 2026 to December 2028.

Proposal Fee Breakdown

HAZEN AND SAWYER PROPOSAL COSTS	
Fee Description	**Fee Cost**
Design	$1,578,460
Project Management	$249,500
Environmental	$275,520
Procurement	$151,990
Additional Studies	$65,300
Subtotal	$2,320,770
10% Contingency	$232,077
Total Consultant Fee	**$2,552,847**

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Proposal Metrics

HAZEN AND SAWYER CONSULTANT FEE METRICS		
Description	**Project Values**	**Industry Standard**
2026 Construction Cost	$24M	
Total Fee (Not Including Contingency)	$2.3M	
Design Fee	$1.6M	
Project Management	$250K	
Design as a Percent of Construction Cost	**7%**	**10% - 18%**
Project Management as a Percent of Total Fee	**10%**	**10%-20%**

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PSA Process

- Solicited proposals through the City's Professional Services Agreement (PSA) process.
- PSA is a competitive process.
- Includes Master Professional Services Agreement (MPSA) consultants who have proven technical abilities, experience and have already gone through the City's contract and insurance approval process.
- Provides an opportunity to reach interested consultants outside the existing MPSA consultant list.

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Selection Criteria

- Request for proposals (RFP) released September 26, 2023 for engineering design and engineering services during construction. (Note: It was decided to postpone engineering services during construction until construction funding has been encumbered).

- Five Hundred Fifty-Two (552) vendors were notified about the RFP via PlanetBids. Thirty-Seven (37) prospective firms downloaded the RFP documents during the Seven (7) week advertisement period of which two (2) submitted proposals.

- Key Selection Criteria:
  - Responsiveness to RFP
  - Qualifications of Project Team
  - Work Plan and Scope of Services
  - Demonstrated Technical Abilities
  - References

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Proposal Selection

Review Panel

- Deputy Director
- Two (2) Associate Engineers
- Civil Engineering Technician III
- Supervising Electrical Technician
- Wastewater Maintenance Superintendent

Two (2) Proposals Received

Hazen and Sawyer

- Complete Proposal that met all RFP Requirements
- Strong Qualifications and Experience
- Detailed Work Plan and Project Understanding

Contract Cost

- Not to Exceed Fee of $2,552,847
- Consistent with City Staff Estimate

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Recommendation

It is recommended by the Transportation and Public Works Department and Santa Rosa Water that the Board of Public Utilities (Board), by motion, approve a Professional Services Agreement with Hazen and Sawyer to provide engineering design for the Laguna Treatment Plant Electrical Infrastructure Improvements Project, for a total authorized amount of $2,552,847.

Questions?

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