CITY OF YUBA CITY STAFF REPORT

Date: April 5, 2022

To: Honorable Mayor & Members of the City Council

From: Public Works Department

Presentation By: Ben Moody, Public Works & Development Services Director

Summary

Subject: Wastewater Treatment Facility Chlorine Building HVAC Improvements Project

(Plans & Specifications)

Recommendation: Adopt a Resolution adopting a CEQA Class 1 Categorical Exemption for the

Wastewater Treatment Facility Chlorine Building HVAC Improvements Project, approving the plans and specifications, and authorizing advertisement for bids on

the project

Fiscal Impact: Engineer's Estimate: \$150,000.00 – Account No. 1103 (Recurring Plant Projects)

Purpose:

To maintain the City's Wastewater Treatment Facility (WWTF) operational effectiveness through proactive rehabilitation and major maintenance.

Council's Strategic Goal:

This project addresses City Council's Strategic Goal of improving the City's Infrastructure.

Background:

The WWTF utilizes a Chlorine Feed System for wastewater effluent disinfection with the Chlorine Building at the center of the disinfection process. The Chlorine Building consists of 8 chlorine tanks and 4 chlorinators that modulate chlorine gas that is combined with water to be injected into the treatment process. The Chlorine Building is also equipped with electrical and mechanical equipment including motorized roof exhaust fans, motorized dampers, bi-fold door, and a Chlorine Leak Panel.

Upon a chlorine leak detection, the Chlorine Leak Panel sends alarm signals to the Programmable Logic Controller (PLC-CCB) for annunciation within the Supervisory Control and Data Acquisition (SCADA) system. WWTF operators may also utilize the hardwired outputs of the Chlorine Leak Panel to manually shutdown the Chlorine Feed System control panels to close the chlorine gas valves and operate the scrubber system to remove air from the Chlorine Building.

The electrical equipment in the Chlorine Building generates heat as part of the normal operating processes. The heat is normally regulated by the existing HVAC system, however during the summer months of last year, high ambient temperatures and humidity within the Chlorine Building negatively affected the operation of the Chlorine Leak Panel and other temperature sensitive equipment. Staff conducted a system analysis and determined the HVAC system is unable to effectively regulate the temperature within the Chlorine Building.

Staff contracted with ArcSine Engineering to produce the Plans and Specifications for the HVAC system upgrade, including new HVAC units and duct work. Upgrading the HVAC system also includes necessary electrical modifications to existing panel breakers and the Chlorine Leak Panel for a seamless transition to the new system. Upgrades must take place prior to the summer months where ambient temperatures are expected to be in the triple digits.

Analysis:

Public Works has prepared the project plans, specifications, and cost estimate for the Wastewater Treatment Facility Chlorine Building HVAC Improvements Project. With Council's approval of the plans and specifications and authorization to advertise for bids, staff proposes the following schedule:

Advertise for bid: April 2022
Open bids: April 2022
Award contract: May 2022
Start of construction: June 2022
Complete construction: June 2022

The plans and specifications for the project are on file in the Public Works Department at City Hall and at www.yubacity.net/publicworksplans for review. The City's Public Works Department will perform construction management and inspection.

Fiscal Impact:

The estimated total project cost is approximately \$150,000. This estimate includes 10% contingency and system start up and testing. Account No. 1103 (Recurring Plant Projects) has sufficient funding programmed. Detailed fiscal impacts will be presented to Council at the time of award based on actual bid amounts.

Environmental:

The City has performed a preliminary environmental assessment of this project and the City Council determined that it falls within the Class 1 Categorical Exemption set forth in CEQA Guidelines Section 15301, as the rehabilitation of the existing WWTF Chlorine Building is defined as a repair, maintenance, or minor alteration of existing public facilities, involving negligible or no expansion. Further, none of the exceptions to Categorical Exemptions set forth in CEQA Guidelines 15300.2 apply to this project.

Alternatives:

- 1. Do not approve the plans and specifications and delay the project.
- 2. Modify the proposed plans and specifications.

Delaying the project may result in the failure or malfunction of temperature sensitive Chlorine Feed System equipment.

Recommendation:

Adopt a Resolution adopting a CEQA Class 1 Categorical Exemption for the Wastewater Treatment Facility Chlorine Building HVAC Improvements Project, approving the plans and specifications, and authorizing advertisement for bids on the project.

Attachments:

1. Resolution - Wastewater Treatment Facility Chlorine Building HVAC Improvements Project (Plans & Specifications)

Prepared By: Nick Menezes Assistant Engineer Submitted By: Diana Langley City Manager

ATTACHMENT 1

RESOL	.UTION	NO.	

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUBA CITY ADOPTING A CEQA CLASS 1 CATEGORICAL EXEMPTION FOR THE WASTEWATER TREATMENT FACILITY CHLORINE BUILDING HVAC IMPROVEMENTS PROJECT, APPROVING THE PLANS AND SPECIFICATIONS, AND AUTHORIZING ADVERTISEMENT FOR BIDS ON THE PROJECT

WHEREAS, the Public Works Department intends to solicit bids for construction of the WWTF Chlorine Building HVAC Improvements Project.

NOW, THEREFORE, be it resolved and ordered by the City Council of Yuba City as follows:

- 1. The City has performed a preliminary environmental assessment of this project and the City Council determined that it falls within the Class 1 Categorical Exemption set forth in CEQA Guidelines Section 15301, as the rehabilitation of the existing WWTF Chlorine Building is defined as a repair, maintenance, or minor alteration of existing public facilities, involving negligible or no expansion. Further, none of the exceptions to Categorical Exemptions set forth in CEQA Guidelines 15300.2 apply to this project.
- 2. The plans and specifications for the Wastewater Treatment Facility Chlorine Building HVAC Improvements Project be approved.
- 3. The Public Works Department is hereby authorized and directed to advertise for bids for the Wastewater Treatment Facility Chlorine Building HVAC Improvements Project.

The foregoing Resolution was duly and regularly introduced, passed, and adopted by the City Council of the City of Yuba City at a regular meeting thereof held on the 5th day of April, 2022.

AYES:	
NOES:	
ABSENT:	
	Dave Shaw, Mayor
ATTEST:	
Ciara Wakefield, Deputy City Clerk	

APPRO\	/ED AS	TO F	ORM
COUNSEL	FOR Y	UBA C	:YTI:

Shannon Chaffin, City Attorney Aleshire & Wynder, LLP