***We are a welcoming, active and business-friendly rural foothill community built on California's rich gold rush history***

**City Manager's Report**
**May 28, 2024 City Council Meeting**
**Prepared by: Cleve Morris, City Manager**
**Item #: 12.4**

**Subject:** Consider a Resolution approving Change Order #1 with Johnson Controls, Inc. for the Water Reclamation Facility Solar Photovoltaic Project (CIP #42246) in the amount of $1,190,465, authorizing the City Manager to execute the same, and approving a $3,970,420 budget appropriation in State Clean Water Construction Loan (Principal Forgiveness) funds for the said project.

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**Recommendation:**

Adopt a Resolution:
1. Approving Change Order #1 with Johnson Controls Inc. for the Water Reclamation Facility Solar Photovoltaic Project (CIP #42246) in the amount of $1,190,465 and authorizing the City Manager to execute the same; and
2. Approving a $3,970,420 budget appropriation in State Clean Water Construction Loan (Principal Forgiveness) funds for the said project.

**Purpose:** To approve funding and process to complete the Solar project at the Water Reclamation Facility.

**Strategic Plan Strategy:** Strategy 4 - Update and Maintain City-Owned Infrastructure.

**BACKGROUND:**

California Government Code sections 4217.10-4217.18 were enacted in 1984 as a result of an energy crisis. The purpose was to assist public agencies in expediting and financing energy conservation measures. This code eliminates the necessity to separately contract for the design and construction phases of a project. In addition, it provides public agencies with an exception from statutory competitive bidding requirements for public works energy services contracts related to renewable energy and energy conservation.

On March 28, 2017, the City entered into an agreement with Johnson Controls Inc. (JCI), for lighting, HVAC and a Solar Project at the Water Reclamation Facility (WRF). The total cost of the contract at that time was $3,757,578. The lighting and HVAC projects were financed through a California Energy Commission (CEC) Loan and those projects were completed at an estimated cost of $977,623, leaving the balance of the contract for the Solar Project of $2,779,955 for the Solar Project. Savings were received through more efficient lighting and HVAC which were calculated to pay the cost of the loan.

Following completion of the lighting and HVAC projects, staff began concentrating on funding for the Solar project. Several options were considered, primarily loans or bonds financed through the savings on the project. Staff analyzed financing and began working with the State Water Board and the State Revolving Loan Fund. The City used this program to fund a portion of the WRF improvements back in 2009. In January of 2018, we began the application process. As we began exploring options, we were made aware of the potential for a partial grant for the project which would increase the cost savings and benefit WRF operations. This process took a long time and several different scenarios were explored. The discussions continued through 2018, 2019 and into the pandemic which created further issues meeting and working with the State Water Board. We went from a 25% grant to a 50 % grant and eventually to a 100% grant for the project. However, in 2021 as we were beginning to move forward, but prior to a formal agreement, we were informed that due to budget constraints the State had to withdraw the offer of the 100% grant and the best they could do was a no interest loan. Even with the no interest loan, the potential annual savings were worth pursuing. We began that process again and in February of 2022 we were informed that funding had improved and we were once again eligible for a 100% grant. However we had to update our information, which took quite a bit of time. Finally, in June of 2023 we were provided the formal contract awarding the funding. The contract has been signed by both parties and is in place.

Between June 2023 and now, we have been working with JCI on updating costs and doing the required Engineering work. Unfortunately in the Fall of 2023, JCI had a staffing turnover which took some additional time. We now expect engineered drawings in June. It is imperative that we complete the project with PG&E by December 15, 2024, in order to ensure we receive the contracted savings under the NEM 1 electricity rates. If we miss this deadline, we drop to a lower tier and risk significantly lower savings. In 2019, the estimated savings for the project before financing was $150,400 a year after PV Maintenance cost (see chart below.

| Parameter (Annual) | Estimated Cost ($/year) |
|---|---|
| Total HCWRF O&M (before PV System) | $3,530,000 (a) |
| Total HCWRF O&M (after PV System) | $3,379,600 (b) |
| Energy Cost Savings | $188,500 (c) |
| PV System Maintenance Cost | $38,100 (d) |

**Discussion:** In 2017 when the cost estimates were started, the estimate for the Solar project was $2,779,955. As we all know, costs for construction have increased significantly since that time. Many changes have taken place in the solar industry. When we began negotiating the agreement with the State, we also got new cost estimates from JCI for the project. When we first started talking to the State in 2019, the estimate had increased to $3.3 million. In 2022, we again asked JCI to obtain new cost estimates to incorporate into the agreement. The new estimates at that time were updated to the current estimate of $3,970,420 (see attached). Fortunately, we were able to revise this total in the State Water Board Grant Agreement. And the agreement with the State at this time covers this increased cost.

JCI has submitted a Change Order request based on the increased cost since the agreement was adopted in 2017 and other factors related to the project. The requested Change Order Amount is $1,190,465.

**Environmental:** A Mitigated Negative Declaration (MND) was completed for the project in 2019.

**Options:**

1. Adopt the resolution approving the Change Order in the amount of $1,190,465 with Johnson Controls for a total amount of $3,970,420.
2. Direct staff to negotiate amendments to the Change Order and bring back recommendations to Council.
3. Direct Staff to take other action.

**Cost:** The original contract price is $3,757,578 which included the solar project plus lighting and HVAC projects. The lighting and HVAC Projects were funded through a California Energy Commission Loan in the amount of $977,623 leaving a balance of $2,779,955 for the Solar Project. The proposed change order is in the amount of $1,190,465 bringing the total contract amount including HVAC and Lighting to $3,970,420.

**Budget Impact:** Due to the previous assumption that this project would be either partially or wholly financed, the cost of the project was never budgeted. Therefore, staff recommends that the City Council approve a budget appropriation in the amount of $3,970,420 in State Clean Water Construction Loan (Principal Forgiveness) funds for the Water Reclamation Facility Solar Photovoltaic Project (CIP #42246).

M. Cleve Morris, City Manager

Dave Warren, Assistant City Manager/
Finance Director

Attachment A: Resolution
Attachment B: Proposed Change Order
Attachment C: 2022 cost estimate