

Requested Action:

Approve the Contracting Strategy for the purpose of developing an overall project construction schedule which will establish a baseline to efficiently advance final design, coordinate with agencies, and establish a procurement approach. Authorize staff to:

1. Evaluate adjustments to the Amendment 3 work plan and current task orders to reflect the packaging, delivery method, and overall schedule criticality.
2. Make changes to the initial Contracting Strategy as needed throughout the Amendment 3 work period while maintaining consistency with the evaluation considerations (**Attachment A**).

Detailed Description/Background:

Development and construction of the Sites Reservoir Project (“Project”) is a significant undertaking that requires significant planning and a strategized approach to meet the adopted 2020 Strategic Plan. The proposed Contracting Strategy kicks off the process for defining the Project construction packages and delivery methods. The full range of approaches have been evaluated and this work builds off of the evaluations done in 2018 on this subject. This proposal has been determined to maximize benefits and reduce risks for the Authority. It is a vital component in establishing and/or validating the overall project construction schedule and is the initial step in setting a baseline to efficiently track and progress agency coordination, prioritize design/construction activities, and procure design and construction services.

Staff, in conjunction with the Operations and Engineering Workgroup and ad-hoc Sub-Workgroup, has developed a strategy for the packaging of work and delivery methods (the “Contracting Strategy”) for the Project based on the below evaluation considerations:

- The values of the Authority as it relates to delivering the Project.
- The available delivery methods established under legislation (California Assembly Bill No. 2551, Chapter 760).
- Market outreach to construction and mitigation contractors.

The recommended Contracting Strategy focuses on:

- Keeping the number of contracts at a reasonable level for the anticipated staffing and capacity envisioned longer term, while ensuring quality and cost control are high priorities. The number of contracts for the Authority to manage is envisioned currently to be 9 and would rely on various delivery methods to manage the Authority's risk.
- Manages the Authority's major development risks and provides improved cost certainty through early contractor engagement.
- Provides staff with a high level work breakdown structure to develop an initial overall project construction schedule, and initiate efforts to define the Project's procurement strategy and execution plan.

There are two main packages envisioned in the recommended Contracting Strategy, both of which are proposed to be delivered utilizing Construction Manager At-Risk (CMAR) contracts. CMAR contracting allows for early selection of the contractor considering qualifications for construction work, provides earlier cost certainty and reduces the Authority's interface risk by combining operational elements under a single designer/construction contractor team. It is possible that these two packages could be further sub-divided as information about contractor capacity and market conditions is continuously evaluated. The two packages currently envisioned are:

1. Reservoir, estimated at \$2B in 2021 dollars, includes all dams, the Sites-Lodoga road and bridge, and the Construction Access and O&M roads. The CMAR method will allow for early contractor input on key risks including site logistics, material management, sequencing of schedule-critical components, and community impacts and opportunities related to the largest labor components of the Project.
2. Maxwell-Sites Pumping and Generating, estimated at \$1.15B in 2021 dollars, includes all infrastructure required for the conveyance of water into and out of the Sites Reservoir (Inlet/Outlet tower, tunnel, pipelines, pumping and generating plants, power facilities, and forebays). The CMAR method will focus on managing risks related to the project's hydraulic performance, electrical infrastructure, controls, and operations and maintenance.

Three standalone packages are proposed to be delivered utilizing Design-Bid-Build (DBB) contracts given the relatively straightforward nature of the work, suitability for competitive bidding and provides the Authority with the most flexibility:

1. Reservoir Clearing and Demolition, estimated at \$35M in 2021 dollars, includes clearing and demolition activities within the proposed reservoir footprint. The DBB method will provide pricing benefits based on the contract's competitive nature, as well as opportunities for community input throughout the design process.
2. Huffmaster Road, estimated at \$50M in 2021 dollars, includes construction of a local access road. The DBB method will provide pricing benefits and opportunities for community engagement.
3. Dunnigan Pipeline, estimated at \$100M in 2021 dollars, includes construction of a turnout near the southern terminus of the Tehama Colusa Canal, pipeline, and release structure at the Colusa Basin Drain. The DBB method will provide pricing benefits and flexibility for refinement as operational needs continue to be evaluated.

Two partner facility packages are proposed to be delivered utilizing Owner Agreement contracts:

1. Tehama Colusa Canal Authority, estimated at \$5M in 2021 dollars, will improve existing facilities to accommodate Project needs. The Owner Agreements delivery method will ensure continued ownership of the Bureau of Reclamation facilities and TCCA operation responsibilities.
2. Glenn Colusa Irrigation District, estimated at \$7M in 2021 dollars, will improve existing facilities to accommodate Project needs. The Owner Agreements delivery method will ensure continued ownership and operation responsibilities of GCID infrastructure.

Two specialty packages are proposed to be delivered utilizing various contracting methods:

1. Recreation, estimated at \$35M in 2021 dollars, includes construction of three new recreational areas. Two delivery methods are proposed to be considered for this package, which will allow the Authority flexibility in determining the recreation operator role as a future item.
2. Mitigation, estimated at \$600M in 2021 dollars, includes implementation of environmental mitigation commitments. This is a specialized activity involving different mitigation approaches that are key to initiating project construction activities. Having one contract to manage will streamline oversight efforts and mitigate the Authority's schedule related risk.

The recommended contract packages and delivery methods are further described in Attachment A.

The recommended Contracting Strategy will be used to develop a high level baseline overall project construction schedule for the program and schedules for each package, targeted for initial release in October 2022. Any changes that result to the Amendment 3 work plan will be brought back to the Reservoir Committee and the Authority Board as part of the annual budget process.

Staff presented the recommended Contracting Strategy to the Operations & Engineering Workgroup on July 12, 2022, and the Workgroup unanimously concurred with the recommendation to proceed with implementing the Contracting Strategy as discussed above and described within Attachment A.

Prior Action:

None.

Fiscal Impact/Funding Source:

The Amendment 3 Work Plan includes sufficient budget to cover required resources and activities in support of the Contracting Strategy. Any required adjustments to reflect the packaging, delivery method, and overall schedule criticality activities will be considered within the fiscal year budget development process.

Staff Contact:

JP Robinette/Henry Luu

Primary Service Provider:

Brown & Caldwell/HDR with support from AECOM/Jacobs

Attachments:

Attachment A – Sites Project Contracting Strategy

Sites Project Contracting Strategy

The Sites Project Authority (the “Authority”) is developing the Sites Reservoir Project (the “Project”). If approved, the Authority will construct infrastructure including a new off-stream reservoir and a water conveyance system consisting of new pumping and generating facilities and pipelines. In addition to the new infrastructure, the Project makes use of improved existing infrastructure through various agreements with agencies. The Project is currently under environmental review and feasibility design has been completed to support environmental planning, permitting, affordability studies, and to secure funding sources.

A team of consultants from the Project Integration and Project Controls service areas, led by the Authority’s Engineering and Construction Manager (together, the “Staff”), have developed a strategy for the packaging of work and delivery methods (the “Contracting Strategy”). The Contracting Strategy is based on the below evaluation considerations:

- The values of the Authority as it relates to delivering the project.
- The available delivery methods established under legislation (California Assembly Bill No. 2551 Chapter 760).
- Market outreach to construction and mitigation contractors.

Staff has also considered the technical input of the Engineering service areas and evaluated key risk areas for the Authority, categorized by package. These activities are ongoing and may result in future modifications to the Contracting Strategy, which will be made consistent with the evaluation considerations.

The below table is a summary of the Contracting Strategy:

No.	Package	Estimated Value (2021\$)	Major Facilities	Recommended Delivery Method	Key Risk Areas
1	Reservoir	\$2.0 B	2 Main Dams 7 Saddle Dams 2 Saddle Dikes Sites-Lodoga Road & Bridge Construction/Access/O&M Roads	Construction Manager at Risk (CMAR)	Logistics Material Balance Schedule Community
2	Maxwell-Sites Pumping and Generating	\$1.15 B	Inlet/Outlet Tower Inlet/Outlet Tunnel Pipelines and Manifold 2 Pumping and Generating Plants 2 Power Interconnection Facilities Instrumentation and Controls Forebay/afterbay Improvements	CMAR	Hydraulics Power System Controls & Maintenance
3	Reservoir Clearing and Demolition	\$35 M	Clearing and Demolition within Reservoir Footprint	Design-Bid-Build (DBB)	Community
4	Huffmaster Road	\$50 M	Local Access Road	DBB	Community
5	Dunnigan Pipeline	\$100 M	Canal Turnout Pipeline Colusa Basin Drain Release	DBB	Operational Flexibility
6	Tehama Colusa Canal Authority	\$5 M	Existing Facility Improvements	Owner Agreements	Ownership & Operation
7	Glenn Colusa Irrigation District	\$7 M	Existing Facility Improvements	Owner Agreements	Ownership & Operation
8	Recreation	\$35 M	Peninsula Hills Stone Corral Creek Day-use Boat Ramp	DBB with concessions or Design-Build-Operate	Specialty
9	Mitigation	\$600 M	Implement Environmental Mitigation Commitments	Various	Schedule

Reservoir Committee and Authority Board Actions

Staff is requesting approval of the Contracting Strategy for the purpose of:

1. Developing schedules by package for the overall program and establish a baseline to efficiently advance design, coordinate with agencies, and begin considerations for establishing a procurement strategy (targeting approval by October 2022)
2. Adjusting the Project's work plan and current task orders to reflect packaging, delivery method, and overall schedule criticality (targeting approval by December 2022)

Staff is also requesting authorization to make changes to the Contracting Strategy consistent with the evaluation considerations identified below if future conditions under Amendment 3 work warrant a change in packages or delivery method.

Evaluation Considerations

Values

The Authority's Contracting Strategy values were established by members from the Budget and Finance Committee and Reservoir Operations and Engineering Workgroup, which reflects the high-level vision and preference for packaging of work and delivery methods:

- Oversight – to remain streamlined and efficient, the Authority will engage in an oversight role during design and construction.
- Construction Contracts – the number and size of construction contracts must prioritize qualified contractors and management of cost & risk.
- Project Cost – cost certainty must be established as soon as possible.
- Project Schedule – look for opportunities to expedite schedule to reduce Project Cost.
- Project Risks – balance risks with values.

Evaluation criteria were formulated based on the above values and presented as follows:

- Does the recommended strategy reduce the number of contracts for the Authority to manage while retaining flexibility to issue multiple construction packages?
- Does the recommended strategy allow for consideration of contractor qualifications and experience where it is most critical?
- Does the recommended strategy provide early cost certainty for elements that “move the needle” on overall affordability?
- Does the recommended strategy reduce potential interface risk between contractors and help the Authority manage other risks?
- Does the recommended strategy facilitate system-wide testing, commissioning, and logistical planning?
- Does the recommended strategy facilitate early engagement of operator and community perspectives?
- Does the recommended strategy provide opportunities for local contractors?

Project packaging and delivery method must meet the above criteria.

Available Delivery Methods

Pursuant to existing laws and California Assembly Bill No. 2551 Chapter 760, the project may use any of the following project delivery methods:

- Design-Bid-Build (DBB)
- Construction Manager At-Risk (CMAR)
- Design-Build, including conventional, progressive, and target price (DB)
- Design-Build-Operate (DBO)

Market Outreach

The Authority hosted a Sites Reservoir Construction Contractor Open House on June 9, 2022 to seek input from the contracting community on project delivery. Afterward, staff continued one-on-one conversations with contractors to validate interest and leverage construction expertise and insight. Key takeaways from discussions with the contractors are:

- There is substantial local, regional, national, and international market interest.
- There is multiple qualified and interested contractors for all recommended packages, including local constructors.
- Early contractor involvement/collaborative delivery is preferred where risk mitigation, logistical planning, innovation, cost, and schedule are most significant.
- Geotechnical investigation and access to properties for environmental surveys are top priorities.
- The 2030 milestone is aggressive.