

Project Budget Summary

Anderson-Cottonwood Irrigation District Main Canal Lining Project

This project has two primary budget components: environmental/permitting; and, design/build. The District has entered into work agreements with consultants for both of these components and has been provided estimates of cost from both.

The environmental consultant has agreed to a Task Order with specific costs for time and material, and these costs are deemed by the project proponent to be normal and ordinary. Additional expenses, including printing, filing fees, legal notices, etc. are fixed costs that cannot be negotiated.

RTA Construction has provided cost estimates for time and material, in conjunction with a construction proposal that includes the scope of work, design plans, and estimated cost of construction. The estimated costs are deemed by the project proponent to be normal and ordinary.

City of Live Oak Water Supply Reliability Well

The budget to complete the project scope of work as described in Attachment 4 is summarized in Table 7 and totals \$3,750,000. The City of Live Oak will provide an in-kind contribution of \$50,000 (\$20,200 provided by the City and \$29,800 provided by a state-funded Community Development Block Grant awarded to the City) and is requesting the remaining amount of \$3,700,000 from the Prop 84 IRWM Drought Relief Implementation Grant Program.

Task (a) Direct Project Administration costs are based on the City's past experience with project administration costs associated with grant-funded projects which has ranged from 2 to 3 percent of total project costs.

Task (c) Planning/Design/Engineering/Environmental Documentation costs are based on a contract that is already in place for the well siting evaluation and an engineer's estimate for the planning, design, and environmental documentation.

Task (d) Construction/Implementation costs are based on an engineer's estimate. Bidding and contractor selection (d1) and construction management and inspection (d2) are based on the size of the project. The following assumptions pertain to the drilling and well construction task (d3) and pump station, storage, treatment, and conveyance task (d4).

(d3) Drilling and Well Construction: The budget elements comprising this line item include:

- Exploratory Drilling and Monitoring Well Construction at the proposed well site will be completed using the direct mud rotary drilling method. An 8-inch exploratory borehole will be advanced to 650 feet bgs and cuttings will be logged by a California professional geologist. Geophysical logging will be performed immediately following completion of exploratory drilling. Next the borehole will be reamed to 12" in diameter and a multilevel piezometer will be constructed with screens in up to 4 productive zones. Water quality samples will be collected and analyzed to determine the nature and occurrence of arsenic in the groundwater aquifers at this location. **Cost: \$75,000**
- Using the information obtained above, production well design and construction will use the reverse rotary drilling method. The cost estimate assumes the following: Reverse Rotary drilling method reaming the borehole to 26" diameter, 16" copper bearing steel casing with ¼-inch wall thickness, 100 feet of

stainless steel wire wrap screen (slot size to be determined based on soil sieve samples collected during exploratory drilling). **Cost: \$575,000**

(d4) Pump Station, Storage, Treatment and Conveyance: The budget elements comprising this line item include:

- Pump Station and Treatment will be consistent with the facilities currently being operated at the City's existing Wells #1A and #2A. **Cost: \$1,098,000**
- The cost of the 700,000 gallon ground-level storage tank was estimated based on the assumption of \$1/gallon cost. **Cost: \$700,000**
- The new site will be connected to the City's water distribution system by running 2,600 feet of 12-in water main along Larkin Road as shown in the Project Map in Attachment 3. The cost was estimated based on the assumption of \$120/lineal foot of pipe. **Cost: \$312,000**

City of Shasta Lake Water Supply Enhancement Project

Scope Task 1: Direct Project Administration

Total Estimated Cost: \$413,000

This scope task generally includes all PM and CM tasks related to the project, and accounts for approximately 5% of the total project budget. Considering this project is to be completed over a 3-year time frame and that in-house staff is anticipated to be used for all task items, at this time the City believes this estimate to be accurate.

Scope Task 2: Land Purchase / Easement

Total Estimated Cost: \$110,000

This scope task generally includes all ROW activities, and accounts for approximately 1% of the total project budget. The vast majority of work related to this project will be within existing street ROW, and will be completed in areas that do not have community sewer and have overhead dry utilities. Because of this, the City currently believes that the ROW needs on the project will be minimal, and that the estimate is accurate.

Scope Task 3: Planning/Design/Engineering/Environmental Documentation

Total Estimated Cost: \$1,122,000

This scope task generally includes all design and environmental work, and accounts for approximately 13% of the total project budget and 17% of the construction estimate. Typically, design work falls within 12% and 15% of construction cost. The environmental work to be completed is estimated to be minimal, due to the vast majority of work related to the project being completed within existing street ROW. Because of this, the City currently believes that the combination of all design tasks will be between 15% and 20% of the construction cost of the project, and that the estimate is accurate.

Scope Task 4: Construction and Implementation

Total Estimated Cost: \$6,655,000

This scope task generally includes all construction and startup work, and accounts for approximately 81% of the total project budget. Based on preliminary budget estimates of the work to be completed, the City

believes this estimate to be accurate.

Total Cost Estimate: \$8,300,000

Rio Alto Wastewater Improvements and Constructed Wetland Project

The direct project administration projected at \$162,725 represents 2.6% of the total project cost and is more than reasonable in order to complete all tasks under Task 1 of the Work Plan. These costs include administration, labor code compliance, reporting to all regulatory agencies, including reporting forms and project updates, and quarterly and final progress reports to both lenders for loan administration.

The land and easements were appraised in 2011 by Shaw & Associates, a certified General Real Estate Appraiser. The District and legal counsel negotiated a land acquisition cost of \$410,000 from a private seller. Escrow charges and the cost of the appraisal increased the cost by \$5,405 for the total cost of \$415,405 for Task 2. The escrow on the land closed on 10/25/12 and the District now owns the land for the wetlands and easements.

The planning/design/engineering/environmental documentation budget for the project represents 21.5% of the total project budget. The amount of expenditures in Task 3 are driven by the complexity of the project and compliance with regulatory and environmental agencies. The following items were required, have been completed, and are included in these figures:

- Rate Study and compliance with Prop 218 for rate increases
- Funding assistance applications from the Clean Water State Revolving Fund and USDA Rural Development.
- Formation of a Community Facilities District, including holding an election requiring a 2/3 majority vote to form and levy a special tax on all residents with sewer services
- CEQA & NEPA documents and archeological studies
- Studies required by Regional Board, including installation of piezometers for groundwater mounding and water quality testing, and geotechnical studies.

The Construction and Implementation costs in Task 4 include construction of 39 wetted acres with riparian landscape, levies, walking trails, and piping. Cost also includes installation of a 2-mile recycled force main, construction of a new secondary clarifier, construction of new effluent and RAS pump stations, control room modifications including installation of a generator to run the necessary functions of the wastewater treatment plant in the event of a power failure and upgrading all of the electrical at the wastewater treatment plant. The project went out to bid on February of 2014 and the bids were opened on April 10, 2014. The project was awarded to T&S Construction, Inc. (the lowest responsive responsible bidder) in the amount of \$4,299,264.00, the amount listed in Task 4.

Northern Sacramento Valley IRWM Drought Relief Projects Grant Administration

The estimate for grant administration staff time is based on Butte County's experience administering the NSV IRWM's Planning Grant. Butte County staff indicated they spent approximately 40 hours compiling quarterly reports and preparing invoices for the Department of Water Resources. Additional staff time was allowed for initial start-up, closing out individual projects, and final grant closeout.