

WORK SUMMARY

Anderson-Cottonwood Irrigation District Main Canal Lining Project

- Direct Project Administration

This project will be administered by the project proponent. The Project Manager for the District has extensive experience in the field and will coordinate with the environmental consultant and the construction engineer for all aspects of the project.

The Project Manager has secured a work agreement with VESTRA Resources, Inc. as the environmental and permitting consultant. Currently, the consultant is developing the tasks necessary for environmental and permit compliance.

An agreement has also been reached with a design/construction engineering firm, RTA Construction, Inc. Meetings with RTA have been held for project development and pricing.

Anticipated deliverables include: work agreements; access agreements; legal oversight; construction plan review and approval; construction inspections; budget oversight, and reporting.

- Land Purchase/Easement

Implementation of this project will occur within the existing right of way for the District's canal, so there will be no land or easement acquisition associated with the project. Adjacent landowners have been contacted and have provided verbal assurances that the project will not be an inconvenience or problem for them. All access/land/easement issues have been resolved.

- Planning/Design/Engineering/Environmental Documentation

Planning and design for this project has been ongoing since April 2014, and will be implemented as a design/build process with RTA. RTA is also providing the necessary engineering. The environmental documentation and permitting will be provided by VESTRA Resources. Numerous meetings have been held with both consultants in preparation for this project.

Anticipated deliverables for this task include: site survey and topographic mapping; project design; sub-contractor agreements; initial study and environmental assessment; appropriate environmental documentation; environmental consultations; and permit acquisition.

The planning, design and engineering for the project is 80% complete. Remaining tasks include potential design revisions to comply with environmental or permit requirements that may alter the initial design plans - any revisions are expected to be completed by August or September, 2014. Also, the canal is currently in operation at the project site, and a determination will be made after dewatering in early October if it will be necessary to import fill material to shape the canal profile.

Environmental documentation and permitting are underway; initial meetings with the resources agencies have been held, and a meeting with the Department of Fish & Wildlife is scheduled for July 9 to discuss the initial study and environmental assessment (IS/EA), and the requirements for a Lake and Streambed Alteration Agreement with DFW.

Upon completion of the IS/EA, an appropriate level of documentation will be released as a public draft for review prior to adoption; compliance with CEQA and permitting requirements is anticipated by October 2014.

- Construction/Implementation

Deliverables for this task include the following:

- Clear and grub

- Remove trees

- Profile canal embankments to predetermined design dimensions

- Install concrete cut-off walls at beginning and ending of the concrete lining

- Place the invert of the lining

- Place the side slopes of the lining

- Saw cut or score control joints

- Concrete curing

- Final earthwork to dress up project area

- Final erosion control Best Management Practices

There are few anticipated contingencies with this canal lining project, and construction is currently scheduled to begin in late October or early November.

City of Live Oak Water Supply Reliability Well

The need for this project is identified in the City's 2009 Water Master Plan and the Draft 2009 Urban Water Management Plan. In late 2013 the City was awarded a Community Development Block Grant to complete a well siting evaluation. The City prepared a request for proposals and selected a consultant to perform the well siting evaluation. The evaluation is currently underway and is expected to be completed in October 2014. The currently preferred location of the well site is shown on the Project Map included in Attachment 3. This well site is on a City-owned parcel of land, so no land purchase activities are included in this work summary. This section provides a brief description of the project administration, planning/design/engineering/environmental documentation and construction/implementation activities required to complete this project.

Task (a) Direct Project Administration:

This task includes all administrative activities associated with this grant-funded project such as: preparing this grant application, monthly status reports to accompany project invoices, quarterly progress reports, meetings with the Northern Sacramento Valley IRWM grant administrator and DWR's assigned point-of-contact for this project. Deliverables: Grant application, monthly status reports, quarterly progress reports, meeting agendas and minutes.

Task (b) Land Purchase/Easement:

As explained above, the proposed well site is owned by the City so no land purchase activities are required for this project.

Task (c) Planning/Design/Engineering/Environmental Documentation:

(c1) Planning / Well Siting Evaluation: As explained above, this task is in-progress and will be completed in October 2014. The well siting evaluation includes the following subtasks:

(c1.1) Data Compilation and Evaluation. The data evaluated in this task will be used to select the optimal depth and screen intervals for new wells and will also be used in Task (c1.2) to prioritize alternative new well sites. Deliverables: Agenda and minutes for project kick-off meeting, data index listing all information compiled for the study and source of information, hydrogeologic cross-sections for use as a tool in selecting well locations and designing well(s).

(c1.2) Identify and Prioritize Future Well Sites; Deliverables: Draft and Final Technical Memorandum (TM) with table listing alternative sites, selection and prioritization criteria and relative ranking. TM will also include GIS map showing alternative locations in relation to the City's water distribution and system.

(c1.3) Preliminary Testing of New Well Locations which will include analysis of up to five groundwater samples from selected wells in, or adjacent to, the City, field inspections of well locations, shallow soil borings for visual inspection of soil color, texture and evidence of contamination, collection and analysis of samples collected at influent and effluent locations on existing well-head treatment to verify performance of existing treatment system. Deliverable: Draft and Final TM summarizing the methods and results of testing.

(c1.4) Evaluation of Treatment Alternatives which will include evaluating the information and data collected in the above planning tasks, along with previous treatability studies and performance testing data. Deliverable: Draft and Final TM providing recommendations with supporting rationale for groundwater treatment at the new well site and at a centralized location.

(c1.5) Final Report Including Implementation Work Plan and Environmental Strategy. The report will summarize the results of the above tasks and include a prioritized list of potential well sites. The work plan will include: a description of operation of facilities; a recommended environmental compliance strategy; evaluation of project impacts, stakeholder involvement; conceptual design of new well; methods for drilling, constructing and testing new wells; engineering and construction considerations regarding connecting new wells to the existing water system; and a project schedule. Deliverable: Draft and Final Report.

(c2) Design and Engineering

(c2.1) Preliminary Design Report. Major design items to be addressed as part of preliminary design and incorporated into the final design documents include: the site layout, architectural and structural features,

noise reduction facilities, pump station design, storage tank design, security, defined electrical & instrumentation requirements and major components, supervisory control and data acquisition (SCADA) system design. Deliverables: Draft and final preliminary design report with design assumptions, criteria, and planning level cost estimates.

(c2.2) Construction Documents which will include two sets of detailed design drawings and construction specifications for the project: one for construction of the drilling and well construction and one for construction of above ground improvements including groundwater treatment. Deliverables: One reproducible set and three sets of drawings and specifications along with the final engineer's cost estimate. Specifications will also be provided electronically in both PDF and Microsoft Word formats.

(c3) Environmental Documentation and Obtaining Necessary Permits

(c3.1) Preparation of Mitigated Negative Declaration; Deliverable: Notice of Preparation, draft and final Mitigated Negative Declaration document.

(c3.2) Permits: Determine what permits and agency authorizations are required for implementation of the project. Apply for required permits on behalf of the City and coordinate with all other agencies as required. Track permit progress and provide any additional information required by the permitting agency through construction. Deliverable: permit applications as-needed.

Task (d) - Construction/Implementation

Construction activities begin with the selection of a drilling and production well construction contractor so that drilling and well construction can commence quickly. This work will be underway before April 2015. A second contractor will be selected for construction of the above ground facilities including the pump station, storage tank and well-head treatment facilities required to remove arsenic from the groundwater.

(d1) Construction Bidding and Contractor Selection which will include two bid periods and two contractor selection processes; drilling and well construction first, followed by pump station, tank, and treatment, and conveyance. Deliverables: five conformed sets of specifications and drawings.

(d2) Construction Management and Inspection Services; Deliverables: meeting agendas, detailed field notebook logging of all site activities and personnel on site, compliance documentation for all environmental mitigation requirements, a project file database system for use by the City, engineer, construction manager, and contractor, record drawings: 1) on reproducible vellum, 2) a single PDF file with all plan set sheets, and 3) in AutoCAD format (v. 2009 or later) with all associated files, and six copies of reviewed O&M manuals.

(d3) Drilling and Well Construction; Deliverable: 2,000 gpm (approx.) well site.

(d4) Pump Station, Storage, Treatment, and Conveyance; Deliverables: pump station, well-head treatment facilities, approx. 700,000 gallon storage tank, and approx. 2,600' of 12-inch pipeline connecting the new well facilities to the City's drinking water distribution system.

City of Shasta Lake Water Supply Reliability Project

The scope of work to be completed shall consist of the following four Scope Tasks (note that this scope of work is greatly condensed from what a typical scope of work for a project would entail, due to the page limitations):

Scope Task 1: Direct Project Administration (currently 0.5% complete)

This Task shall include, but not be limited to:

- All meetings, agendas, and minutes.
- Coordinate and consult with all appropriate local and state regulatory agencies to ensure clearance for project construction.
- Schedules and schedule updates.
- Preparation and submittal of all grant reporting requirements, including quarterly progress reports, invoices, and final reports to Shasta County.
- Coordination with Shasta County (Grant Administrator), Bella Vista Water District, US Bureau of Reclamation, and California Department of Water Resources, as necessary and in accordance with all grant agreements, MOUs, cooperative agreements, and existing water contracts.
- Project tracking, in accordance with the project schedule and the project performance monitoring plan.
- Quality Assurance/Quality Control programs.
- Ensuring labor compliance during all Scope Tasks.
- Correspondence and file maintenance.
- Performance of all project and construction management activities related to the project.

To date, the City has performed project administration tasks related to initial hydraulic model updates and feasibility assessment of the project.

Scope Task 2: Land Purchase / Easement (currently 0.0% complete)

This Task shall include, but not be limited to:

- Review existing City of Shasta Lake, Bella Vista Water District, City of Redding, and Shasta County property and easements and, in coordination with engineering design work and environmental compliance and permitting documents, determine what, if any, additional right-of-way must be obtained.
- Conduct any and all public meeting planning, advertising and administration, including comment solicitation and preparation of response to comments for City review.
- Coordinate, prepare, and record all documents needed to obtain additional right-of-way, including, but not limited to, legal descriptions, exhibits, and appraisals.
- Coordinate, prepare, submit, and obtain construction right-of-entry agreements and encroachment permits from all private landowners and public entities as needed to allow for all construction activities.

All right-of-way documents shall be prepared in preliminary and final draft stages for City review, and shall incorporate, if appropriate, any public, agency, and City comments made during the previous draft review. The City's Consultant shall prepare a schedule of right-of-way issues with anticipated timelines to ensure all issues are resolved prior to the start of construction. The City shall provide all payments and escrow services required to obtain required right-of-way.

Scope Task 3: Planning/Design/Engineering/Environmental Documentation (currently 0.5% complete)

This Task shall include, but not be limited to:

- Prepare the appropriate California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) environmental documents and any associated technical studies required to clear the project for construction. Possible documents and technical studies include:
 - Mitigated Negative Declaration environmental document;
 - Biological and archaeological studies;
 - Identification and delineation of wetlands and other Waters of the United States;
 - Botanical and sensitive species surveys;
 - Cultural resources survey and review;
 - Floodplain evaluation, review, and mapping;
 - Construction-related traffic and staging impact analyses;
 - Endangered species consultation with US Fish and Wildlife Service and/or National Marine Fisheries Service;
 - Department of Fish and Game Code Section 1600 Streambed Alteration Agreement;
 - RWQCB Clean Water Act Section 401 Water Quality Certification;
 - US Army Corps of Engineers CWA Nationwide Permit, and;
 - Misc. encroachment permits
- Coordinate and consult with all State and local regulatory and jurisdictional agencies necessary to obtain required permits and provide environmental clearance, including local tribes and rancherias.
- Conduct any and all public meeting preparation, planning, advertising and administration, including comment solicitation and preparation of response to comments for City review.
- Prepare all field, topographic and control surveys.
- Complete all geotechnical investigations and reports.
- Complete all floodplain engineering, surveying, analysis and investigation.
- Coordinate with any and all utilities required to ensure horizontal and vertical conflicts are identified and resolved through design or relocations.
- Prepare all design calculations and complete all plan preparation, technical specification preparation, special provision preparation, and engineers cost estimates, and all other appropriate architectural and engineering services necessary to provide complete contract documents, ready for public bid (all design work shall comply with any and all appropriate federal, state and local design codes and guidelines, including ADA, fire protection, and building codes, as well as City of Shasta Lake and Bella Vista Water District construction standards).

Formal deliverables (plans, specifications and estimates) shall occur at the 60%, 90%, and 100% completion points for City and agency review. Submittal formats shall follow the guidelines stated herein. The Consultant shall respond to, and incorporate, if appropriate, any and all comments received from the City or any other regulatory agency or utility.

To date, the City has started initial hydraulic model updates and feasibility assessment of the project.

Scope Task 4: Construction and Implementation (currently 0.0% complete)

This Task shall include, but not be limited to:

- Conduct pre-bid meeting with prospective bidders to answer contractor and supplier technical questions.
- Respond to contractor and supplier technical questions during bidding, maintain a log of bidder questions, and prepare any addenda required.
- Provide any drawings, modifications, and clarifications during the bidding period.
- Attend bid openings and prepare an analysis of bids received for the project.
- Attend preconstruction conference to ensure contractor understanding of the project plans.

- Prepare change orders and responses to requests for information related to design technical issues encountered.
- Prepare design clarifications to clarify the design intent.
- Attend all final construction inspections.
- Prepare record drawings following construction from mark ups by the contractor and resident engineer.

WORK SUMMARY:

RIO ALTO WATER DISTRICT WASTEWATER TREATMENT PLANT IMPROVEMENTS & CONSTRUCTE WETLANDS PROJECT

Task 1: Direct Project Administration

PACE Engineering and Rio Alto Water District will provide direct project administration, prepare and submit necessary reporting form to the USDA Rural Development and the State Revolving Fund as required including quarterly progress reports and final reports. Rio Alto Water District will monitor a Labor Compliance Program that includes periodic interviews with the Contractor's employees and confirmation of compliance with prevailing wage determinations and compliance with Davis Bacon requirements. Pace Engineering will monitor construction progress and approve of construction payments made to General Contractor. Construction began on June 25, 2014 and is less than 1% complete.

Task 2: Land Purchase/Easement

The District has already purchased 78 acres from a private owner. In addition, the District purchased necessary easements and has secured construction easements for the pipeline as needed. This task is 100% complete.

Task3: Planning/Design/Engineering/Environmental Documentation

The District Engineer has completed all of the preliminary planning and studies, final design and environmental documentation for the Rio Alto Water District Wastewater Treatment Plant Improvements and Constructed Wetlands. Funding has been secured in the form of loans with USDA Rural Development and the State Revolving Fund. A Community Facilities District was formed and the customers voted to incur indebtedness and levy a special tax levy secure the loans. Final plans and specifications have been submitted to and approved by the appropriate regulatory bodies. CEQA and NEPA have been completed and the District is working in conjunction with Enplan, the Native American Monitors, and the Contractor to apply all of the mitigation measures required as construction progresses.

This task is 100% complete.

Task 4: Construction/Implementation

The bid has already been awarded to T&S Construction, Inc. The Contractor has begun earthwork on the constructed wetlands. The current wetlands construction schedule includes pond construction, installation of a 10" forcemain, landscaping, access paving and fencing during the period of June 25, 2014 through January 13, 2015. Improvements at the Wastewater Treatment Plant are scheduled to begin on July 14, 2015 with construction of a secondary clarifier, construction and installation of a new pump station, effluent pumps and a RAS pump station to be completed by February 2015. The Electrical and control room modifications are scheduled for November 2014 through January 13, 2015. All construction will be performed in accordance with the plans and specifications. The Engineer will review project submittals and perform day to day construction administration efforts including coordinating construction activities between the District and the Contractor. The project is scheduled for completion for March 13,2015. This task is less than 1% complete.