

WORK PLAN TASKS: City of Mt. Shasta Supply Line Replacement Project

Task 1: Direct Project Administration

The City will provide direct project administration, prepare and submit necessary reporting forms to DWR as required, including quarterly progress reports and a final report. The City will monitor a Labor Compliance Program that includes periodic interviews with Contractor's employees and confirmation of compliance with applicable prevailing wage determinations. Final deliverables will include all required reporting forms. The City will provide quarterly progress reports and final reports as specified in the Grant Agreement. The City will also provide the USR Region secretary with the necessary information to update the USR Project Website.

This task is about 5% complete, as the grant application has been completed.

Task 2: Land Purchase/Easement

All construction is planned within existing rights-of-way, therefore no land purchase or permanent easements are required. Minimal construction easements may be required and will be obtained as part of the planning and design phase if necessary.

This task is 100% complete.

Task 3: Planning/Design/Engineering/Environmental Documentation

The Engineer will provide preliminary planning of the proposed improvements as required for the final design. This will include completing hydraulic modeling of the proposed improvements to determine necessary pipeline and equipment sizes and set points. Final deliverables will include hydraulic model results and design constraints.

The Engineer will design the necessary supply pipeline and infrastructure improvements including control valve, parallel pipelines, and modification to the existing system to accommodate the improvements. Final plans and specifications for the improvements will be completed, which will be submitted to appropriate regulatory bodies for approval.

The City will perform all required environmental compliance and/or mitigation work not included in the construction contract documents and as identified in the CEQA documentation. In addition, the City will provide approved and adopted CEQA documents and apply all necessary mitigation measures, although these are anticipated to be minor as most of the work will be within the existing right-of-way. Only minor construction easements will likely be needed; therefore, it is anticipated a CEQA Mitigated Negative Declaration will be adequate for this project. NEPA will not be required for this project.

California Government Code §53091(d) states the following: *Building ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency.* This, together with the fact that most of the work will mainly be in the right-of-way, indicates minimal to no permits are anticipated to be required for construction of the supply line. Final deliverables will include plans, specifications, regulatory agency approval, and CEQA compliant environmental documents.

This task is about 10% complete as preliminary studies including initial investigation of the condition of the supply line is completed and improvements required have been identified.

Task 4: Construction/Implementation

The Engineer will publish the advertisement for bids and perform a pre-bid contractor meeting as an aid to potential Contractors. Upon completion of the bidding process, the Engineer will evaluate the bids and provide the City and DWR with an apparent low bidder. The City and DWR will review the apparent low

bidder's documents and, if satisfied, authorize award of the contract. Final deliverables will include the advertisement for bid, pre-bid contractor meeting, apparent low bidder and bid summary, and award of contract.

The Engineer will review project submittals and perform the day-to-day construction administration efforts, including coordinating construction activities between the City and the Contractor. The City and the Engineer will ensure environmental compliance is maintained throughout construction. The Engineer will review and respond to requests for information from the Contractor, as well as prepare contract change orders, as required. As construction progresses, the Engineer will prepare and submit pay estimates for approval by the City, Contractor, and DWR. The Engineer will also provide an on-site construction observer to help ensure construction quality. The construction observer will keep a daily log and take photos of the construction activities for the City and Engineer's records. Final deliverables will include pay estimates, requests for information, contract change orders, daily logs, and photos.

The Contractor will construct the new spring supply pipeline, control valve, parallel pipelines and modifications to the existing system to accommodate the improvements as shown in the plans and specifications. The Contractor will also perform necessary testing as defined by the plans and specifications to the satisfaction of the City and the Engineer. Upon successful completion of the required testing, the Contractor will remove all equipment and temporary facilities. Final deliverables will include performance test results (pressure, trench compaction, functional), a project completion report, and before and after site photos in addition to the completed improvements.

Implementation of the Climate Change Vulnerability Assessment of the City's water supplies will proceed in parallel to the construction process. The City will work in partnership with California Trout to complete the following tasks. The City will publish a request for proposals for a technical hydrology consultant. Final deliverables will include the request for proposals, evaluation of proposals, and award of contract.

The Hydrologist will obtain relevant precipitation, discharge and isotope data, and reduce the data into the appropriate format. The Hydrologist will review the existing reports and data and use that understanding to develop a preliminary strawman workplan for an investigation/analysis/assessment. Water samples will be collected for analysis of tritium, noble gases, and sulphur-35. Final deliverables will include reduction of data, a strawman workplan for presentation to the expert panel, and collected water samples.

The City, California Trout, and the Hydrologist will identify and obtain expertise for an expert panel that includes state and federal agency staff, consultant, academic, and NGO experts, and facilitate a collaborative process to review the available information and refine the strawman workplan developed by the Hydrologist. The Hydrologist will implement the agreed upon workplan/data analysis and develop a draft report for the expert panel to review. It is assumed the technical work will be limited to a regression relationship-type analysis in a spreadsheet supported by a rudimentary GIS to provide spatial data relevant to the physical processes being assessed. This task also includes data visualization, GIS, and related cartography to develop materials to assist in visualizing the results. The expert panel will work together to provide a single, coalesced set of comments to the Hydrologist to respond to and further augment the analysis. Expert input in those comments will include any additional recommended next steps for water supply forecasting to be completed separately as a part of future efforts. The Hydrologist will respond to review comments and provide additional analysis, as appropriate, to finalize the report. The expert panel will review the finalized report and discuss relevant issues for the upcoming presentation at the Water Conservation Workshop. Final deliverables will include three expert panel meetings (workplan development, draft report review, and final review), the final assessment report, and a public presentation of the findings, conclusions, and recommended next steps from the report at the 3rd Water Conservation Workshop "Drought Data: Findings from Climate Change Vulnerability Assessment of City Water Supplies."

This task is 0% complete.

WORK PLAN TASKS: City of Mt. Shasta Water Meter Installation Project

Task 1: Direct Project Administration

The City will provide direct project administration and prepare and submit necessary reporting forms to DWR as required, including quarterly progress reports and a final report. The City will monitor a Labor Compliance Program that includes periodic interviews with Contractor's employees and confirmation of compliance with applicable prevailing wage determinations. Final deliverables will include all required reporting forms. The City will provide quarterly progress reports and final reports as specified in the Grant Agreement. The City will also provide the USR Region secretary with the necessary information to update the USR Project Website.

This task is about 5% complete, as the grant application has been completed.

Task 2: Land Purchase/Easement

All construction is planned within existing rights-of-way; therefore, no land purchase or easements are required.

This task is 100% complete.

Task 3: Planning/Design/Engineering/Environmental Documentation

The Engineer will provide preliminary planning of the proposed improvements as required for the final design. This will include performing field surveys and preparing mapping as required to develop a distribution system map for the basis of preparing plan sheets depicting the improvements. These services will include locating existing water services as required on which to install water meters. Final deliverables will include mapping of existing City water system services.

The Engineer will design and provide final plans and specifications for the improvements to be completed, which will be submitted to appropriate regulatory bodies for approval.

The City will perform all required environmental compliance and/or mitigation work not included in the construction contract documents and as identified in the CEQA documentation. In addition, the City will provide approved and adopted CEQA documents and apply all necessary mitigation measures, although these are anticipated to be minor if any as most of the work will be within the existing right-of-way. As such, it is anticipated an Initial Study/Mitigated Negative Declaration will be adequate for this project. NEPA will not be required for this project.

California Government Code §53091(d) states the following: *Building ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency.* This, together with the fact that all work will be within the right-of-way, indicates minimal to no permits will be required for installation of the water meters. Final deliverables will include plans, specifications, regulatory agency approval, and CEQA compliant environmental documents.

This task is 0% complete.

Task 4: Construction/Implementation

The Engineer will publish the advertisement for bids and perform a pre-bid contractor meeting as an aid to potential Contractors. Upon completion of the bidding process, the Engineer will evaluate the bids and provide the City and DWR with an apparent low bidder. The City and DWR will review the apparent low bidder's documents and, if satisfied, authorize award of the contract. Final deliverables will include the advertisement for bid, pre-bid contractor meeting, apparent low bidder and bid summary, and award of contract.

The Engineer will review project submittals and perform the day to day construction administration efforts including coordinating construction activities between the City and the Contractor. The City and the Engineer will ensure environmental compliance is maintained throughout construction. The Engineer will review and respond to requests for information from the Contractor, as well as prepare contract change orders as required. As construction progresses, the Engineer will prepare and submit pay estimates for approval by the City, Contractor, and DWR. The Engineer will also provide an on-site construction observer to help ensure construction quality. The construction observer will keep a daily log and take photos of the construction activities for the City and Engineer's records. Final deliverables will include pay estimates, requests for information, contract change orders, daily logs, and photos.

The Contractor will locate existing water services and install new water meter improvements at locations dictated by City staff and in accordance with the plans and specifications. Final deliverables will include installation of approximately 1,800 new meter boxes, meter stops, and water meters.

Implementation of the Water Conservation Programs and Measures will proceed in parallel to the construction process. The City will work in partnership with California Trout to complete the following tasks.

California Trout will facilitate the information design, graphic design, printing, and mailing of a 4-page drought preparedness water conservation education mailer. This will include meetings with previous public works directors and water department managers to procure historical water records and information, writing the newsletter content, working with the graphic designer, approving the newsletter with City staff and council, and coordinating with the printer to send the mailing. It is anticipated the mailer will include a brief history of the development of the City's spring water supply, the known science about the spring, how the current infrastructure system works, anticipated climate change vulnerabilities, an overview of the City's Water Supply Line Replacement and Water Meter Installation Projects, and water conservation tips and strategies. It will also invite the public to the Water Talks Water Conservation Workshops, and to view the "Get to Know Your Water Supply" video. Final deliverables include a 4-page drought preparedness water conservation education mailer to every city residence,

California Trout will work with the videographer to produce a short (less than 5 minutes) "Get to Know Your Water Supply" video. This will include one preproduction day, two production days, and one post production day. The video will follow the storyline and messages of the drought preparedness water conservation education mailer. The City of Mt. Shasta Water Department water supply manager may be the narrator, and the videography will feature beautiful imagery of Mt. Shasta, Mt. Shasta's springs, and the department manager's daily work around Cold Creek Springs, the water storage tanks, and the City's two wells. The video will be shown at the beginning of the Water Talks Water Conservation Workshops, at the City Council meetings about the City water projects, and aired on the Community Television Access station. The video will also be featured on the City's website. Final deliverables include a short "Get to Know Your Water Supply" educational video uploaded to the City website, delivered to the Community Television Access station, and provided on a hard drive to the City.

California Trout will work with the City to produce three Water Talks Water Conservation Education Workshops. California Trout will manage all aspects of the event coordination including procuring speakers and coordinating presentation content, media outreach including writing and distributing press releases, radio public service announcements, designing, printing and distributing fliers, facility rental, videography coordination, and professional facilitation of the workshops. Final deliverables will include three Water Talks Water Conservation Workshops.

This task is 0% complete.