

Attachment 4. Work Summary

PROJECT 1: CERRITOS/FOREST LAWN CYPRESS RECYCLED WATER SYSTEM EXTENSION

Category (a): Direct Project Administration

Task 1: Project Administration

The City of Cerritos (City) will administer the project through the use of consultants appointed by the City Manager. The City Manager's office will provide direct oversight for the processing of payments and execution of contracts.

Deliverables: Executed contracts; Invoices and progress reports; Project management meetings

Task 2: Labor Compliance Program

The City requires all contractors to meet the provision of the California Public Contract Code and pay prevailing wages on all contracts. The City ensures compliance by requiring the submittal of certified payrolls and conducting random audits of certified payrolls with follow-up interviews to ascertain that the appropriate pay rates and classifications were met.

Deliverable: Submission of Labor Compliance Program

Task 3: Progress Reports and Final Reports

The City shall prepare and submit all reports to the Gateway WMA on a timely basis as required in the Grant Agreement.

Deliverables: Submission of monthly, quarterly, semi-annual, and/or annual reports as specified in the Grant Agreement.

Category (b): Land Purchase/Easement

Task 4: Right of Way – Entry/Encroachment Permits

The proposed project will extend the City's recycled water system through the cities of Lakewood and Cypress to serve Forest Lawn Memorial Park, through existing public right of ways. The cities of Lakewood and Cypress are supportive of the project and will be issuing right of way encroachment permits for the recycled water line.

Deliverables: Right of Way Encroachment permits

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

Task 5: Assessment and Evaluation

This project has been a long term objective of the City as part of the original plan for the Cerritos Recycled Water System, which included the future expansion of the water system to serve adjacent communities (see LACSD, Twenty-Fourth Annual Status Report on Recycled Water, Fiscal year 2012-2013, Appendix D). The City has over 35 years of experience operating its recycled water system since 1978. As a result of a \$4.5 million grant from the State Office of Water Recycling, in 1988, the City completed a major upgrade of the recycled water system and currently provides 1,968 acre-feet of recycled water annually.

Deliverables: Technical studies

Task 6: Final Plans, Specifications, & Engineering (PS&E) (Design)

A schematic design of the project is complete and the City can and will complete plans and specifications within thirty (30) days of receiving the notice of award.

Deliverables: Completion of final project plans and specifications

Task 7: Environmental Documentation

The City annually constructs pipelines in public right of ways and complies with CEQA. This project is of the same nature as the City's annual pipeline replacement project, and will be included in the City's CEQA documentation process.

Deliverable: Approved and adopted CEQA/NEPA documentation

Task 8: Permitting

The extension of the recycled water system will require a permit modification of the City's recycled water system which the City will apply for.

Deliverables: Fully executed permits

Category (d): Construction/Implementation

Task 9: Construction Contracting

The City will award a construction contract to the lowest responsible bidder for the construction of the recycled water line extension. In addition the City will provide project management and construction inspection services using appropriately licensed consultants.

Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract

Task 10: Construction

The construction of the project will comply with all City as well as County and State requirements. Final acceptance of the recycled water system extension will be made when the City certifies that all contract requirements have been met.

Subtask 10.1 Mobilization and Site Preparation

Construction crews will mobilize and prepare site for construction activities.

Subtask 10.2 Project Construction

This project will require trenching for 8,200 feet of new piping before connecting with the Forest Lawn Cemetery's existing irrigation system. All city and county construction requirements will be followed.

Subtask 10.3 Performance Testing and Demobilization

Flow rates will be monitored and recorded for the new recycled water system. The success of the project will be indicated by the volume of recycled water delivered to the Forest Lawn Cemetery.

Deliverables: Site photos, Project Completion Certificate, etc.

Task 11: Environmental Compliance/Mitigation/Enhancement

The City does not anticipate there will be any environmental challenges. However, since the project will excavate over 8,000 feet of trench in existing ROWs the City will test for contamination in the excavated areas and in the event that contaminated soils are encountered, a mitigation action will be implemented.

Task 12: Construction Management/Administration

The City will retain a professional consultant to administer the execution of this project. Construction management tasks will include the following: Contractor contract administration; review contractor shop drawing submittals; respond to requests for information; attend progress meetings and review pay requests; inspect construction; perform materials testing; prepare record drawings; contract administration and close out; coordinate with project auditors.

PROJECT 2: MILES AVENUE WELL SITE NITRATE BLENDING IMPROVEMENTS

Category (a): Direct Project Administration

Task 1: Project Administration

The City of Huntington Park will administer the project through a consultant who will be responsible to the City Manager for the oversight of all aspects of the project. The consultant will have direct responsibility for the management of all contractors, coordination with all regulatory agencies, review and approval of all invoices, and all deliverables from contractors to ensure a timely completion of the project. Work will also include executing contracts, preparing invoices, progress reports, and other deliverables as required, and hold project meetings.

Deliverables: Executed contracts; Invoices and progress reports; project management meetings

Task 2: Labor Compliance Program

As with all of the City's public works contracts, the Miles Avenue Nitrate Blending Improvement Project will require the contractor to pay prevailing wages consistent with California's Public Contract Code requirements. The City or its authorized agent will meet the labor compliance requirements by requiring certified payroll records, conduct field inspections and interviews in conjunction with random audits of the certified payrolls to verify that workers are properly classified and paid wages that are consistent with the prevailing wage in effect for the region.

Deliverable: Submission of Labor Compliance Program

Task 3: Progress Reports and Final Reports

The City shall prepare and submit all reports to the Gateway WMA on a timely basis as required in the Grant Agreement.

Deliverables: Submission of monthly, quarterly, semi-annual, and/or annual reports as specified in the Grant Agreement.

Category (b): Land Purchase/Easement

Task 4: Land Acquisition

The City owns the Miles Avenue well site located at 5920 Miles Ave., Huntington Park, CA. Therefore, additional land and easements will not be required.

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

Task 5: Assessment and Evaluation

The Miles Ave. well site (Well #17) was designed and built as one of the City's largest capacity wells in 1985 with a design capacity of 2,100 gpm. From the time of its installation until 2000, the well produced as designed and the City was able to rely on ground water to meet most of its demand. In 2000, high levels of Carbon Tetrachloride (CTC) were detected and a Granular Activated Carbon (GAC) system was installed to remove the CTC. In 2009, the City modified the GAC system to prolong the life of the GAC system to reduce the amount of time the well had to be taken out of service and maximize the extraction flow rate. During the time the GAC system was being modified, the City found high nitrate concentrations at the well site. To deal with the high nitrate concentrations the City proposes to blend the well water with system water. However, due to limited funds necessary to modify the well site, piping, and install necessary valves and nitrate monitors to regulate the blending process, the City kept the well out of service. This site is an ideal candidate for the nitrate blending because it has three large reservoirs – one with a capacity of 1MG, a second with a 1.8MG capacity, and a third with a 4.2 MG capacity – which can be used to blend and divert water that exceeds the discharge standards set by the California Department of Health Services.

Deliverables: Technical studies

Task 6: Final Plans, Specifications, & Engineering (PS&E) (Design)

The City has proposed a blending system that relies on the installation of three new automatic control valves, four nitrate analyzers, and a flow monitor to provide for the appropriate blending rates. This system will divert water from the mixing reservoir to a standby reservoir prior to shutting down the well in the event that the blended water exceeds the discharge limits. Upon funding, a final design will be prepared which will include: Base drawings; details for installation of valves, analyzers, sampling points, and flow monitors; specifications for upgrades to the SCADA system

Deliverables: Completion of final project plans and specifications.

Task 7: Environmental Documentation

The City has reviewed the extent of the work required to complete the nitrate blending improvement project and after completing a CEQA initial assessment finds that the project is exempt. Upon moving forward with the project the City will file a negative declaration with the State Clearinghouse.

Deliverable: Approved and adopted CEQA/NEPA documentation

Task 8: Permitting

The City's water system is permitted by the California Department of Public Health Services (CDPH). The City will file a technical report with CDPH requesting an operating permit modification to allow the Miles Avenue well to be placed back in service.

Deliverables: Final technical report and fully executed CDPH permits.

Category (d): Construction/Implementation

Task 9: Construction Contracting

The City will award a contract for the nitrate blending modifications at Well #17 within four months of receiving the notice of conditional approval. In the same period, the City will contract with its SCADA vendor for upgrades to the SCADA system to interphase with the additional monitoring and mixing installations.

Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract.

Task 10: Construction

Construction will include modifications to existing yard pipelines, installation of new valves and pipe connection, flow and nitrate monitors, analyzers and associated electrical modifications. Upgrades to the SCADA system will be completed to facilitate the operation of the blending improvements.

Deliverables: Site photos, Project Completion Certificate, etc.

Task 11: Environmental Compliance/Mitigation/Enhancement

Although no environmental impacts will result from the project the city will increase the monitoring frequency to, from and at the well site.

Task 12: Construction Management/Administration

Construction management and administration will include: Review and approvals of all shop drawings; Review and responses to requests for information; Holding timely project meetings on a weekly basis; Providing continuous construction inspection; Obtain complete as built drawings; Obtain manufacturers manuals and warranties for all automated valves, flow monitors, and analyzers; Collect and audit certified payrolls; Processing change orders if necessary; Overseeing project close-out and filing a notice of completion.

PROJECT 3: SIGNAL HILL ADVANCED GROUNDWATER WELLHEAD TREATMENT

Category (a): Direct Project Administration

Task 1: Project Administration

City staff will administer the project with consultants and construction management. City staff will execute contracts, prepare invoices, progress reports, and other deliverables as required.

Deliverables: Executed contracts; Invoices and progress reports; Project management meetings

Task 2: Labor Compliance Program

The City or its authorized agent will perform labor compliance services including labor compliance program administration, meetings with contractors and subcontractors, review and monitoring of certified payroll records for payment of the proper prevailing wage rate, conduct regular random audits of the certified payroll reports and conduct field inspections to confirm proper jobsite postings, interview workers to confirm water rate classification.

Deliverable: Submission of Labor Compliance Program

Task 3: Progress Reports & Final Reports

The City shall prepare and submit all reports to the Gateway WMA on a timely basis as required in the Grant Agreement.

Deliverables: Submission of monthly, quarterly, semi-annual, and/or annual reports as specified in the Grant Agreement.

Category (b): Land Purchase/Easement

Task 4: Land Acquisition

The City of Signal Hill owns the parcel at 1275 28th Street for Well No. 9. The proposed treatment facilities will be constructed within the City's property limits. Therefore, additional land and easements will not be required.

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

Task 5: Assessment & Evaluation

Preliminary engineering analyses were conducted in 2010 and 2012 that evaluated viable treatment technologies, various pumping capacities and costs. They recommended construction of a nanofiltration treatment plant to address the color and organics at Well No. 9. Studies include:

1. Preliminary Design of Membrane Treatment Plant at Well No. 9; Tetra Tech, September 2010
2. Analysis of Alternative Treatment Methods for Well No. 9 Memorandum; Tetra Tech, July 2012
3. Analysis of Construction Membrane Plant at Various Alternative Well Flows Memorandum; Tetra Tech, July 2012
4. Evaluation of Colored Groundwater Conditions City of Signal Hill Well No. 9 Memorandum; Richard C Slade & Associates, February 2013

Task 6: Final Plans, Specifications, & Engineering (PS&E) (Design)

As part of the September 2010 report, preliminary design plans have been prepared at the 30% design level for the proposed treatment facilities. The City will construct the project using a design/build approach. The City will contract with a design/build firm upon conditional award of the grant. The City of Signal Hill will provide general administration over the final design. The final design will include such tasks as:

- Surveying, site topography, contours, horizontal and vertical controls, and existing utilities. A final geotechnical investigation will be performed and reviewed to identify issues to the planned alignment of the pipeline
- Preparation and review of design drawings, including civil, hydraulic, process, architectural, structural, mechanical and instrumentation design for all project components
- Preparation of technical specifications and final construction cost estimates

- Review design drawings and technical specifications at the 60 percent, 90 percent and final stages
- Prepare and review final contract documents

Deliverables: Completion of final project plans and specifications.

Task 7: Environmental Documentation

The City will comply with CEQA requirements by preparing an Initial Study and adopting a Mitigated Negative Declaration.

Deliverable: Adopted CEQA/NEPA documentation

Task 8: Permitting

For construction of the treatment facilities, a water supply permit will be required CDPH. Draft final design plans will be submitted to CDPH along with a Technical Report for review. Other regulators approving the project include South Coast Air Quality Management District (permits to construct and operate), Regional Water Quality Control Board, stormwater discharge during construction, and De Minimus permit for well water dewatering and plant air gap discharges), and Los Angeles County Sanitation District, (for brine disposal and sewer connection). The treatment plant site is owned by the City of Signal Hill. Pipelines for distribution system connection are primarily located within public street rights-of-way.

Deliverables: Fully executed permits.

Category (d): Construction/Implementation

Task 9: Construction Contracting

Services will include attending pre-bid conference; interpreting contract documents as needed; Receive and review design/build bids; Prepare construction contracts for award

Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract

Task 10: Construction

The construction task items will include: installation of well pump and motor; construction of pipelines, treatment facilities, and finished water pipeline; and connection to sewer. A well pump and motor will be constructed for existing Well No. 9. Mechanical equipment includes: pumps/motors, control/isolation valves, flow meters, piping, backflow prevention, miscellaneous appurtenances, and provisions for surge control. Electrical and instrumentation control panels will also be included. The treatment facility will be sized and constructed to treat approximately 1,200 gpm of groundwater supplies from Well No. 9 using nanofiltration membrane technology to treat the impaired groundwater. Start-up testing tasks will include: supply facilities (wellhead) testing; groundwater transmission pipeline testing; treatment facilities testing; finished product water transmission pipeline testing. After operation of the project begins, the project yield, water quality, volume and concentration of influent and waste streams will be measured to determine effectiveness. Flow rates will be monitored and the water production of the treatment plant will be recorded for the potable system. The success of the project components will be indicated by the annual production of potable water.

Deliverables: Site photos, Project Completion Certificate, etc.

Task 11: Environmental Compliance/Mitigation/Enhancement

With incorporation of adopted mitigation measures from the mitigated negative declaration, the temporary impacts associated with construction would be reduced to less than significant.

Task 12: Construction Management/Administration

The City will retain a professional consultant to administer the execution of this project. Construction management tasks will include: contractor contract administration; review contractor shop drawing; inspect construction; perform materials testing; prepare record drawings; other contract administration and close out; and coordinate with project auditors.