



CITY OF MORRO BAY
WATER RECLAMATION FACILITY
CITIZEN ADVISORY COMMITTEE (WRFCAC)
MEETING AGENDA

The City of Morro Bay provides essential public services and infrastructure to maintain a safe, clean and healthy place for residents and visitors to live, work and play.

September 3, 2019
3:00 P.M. to 5:00 P.M.
Morro Bay Veteran's Memorial Building
209 Surf Street, Morro Bay, CA

Barbara Spagnola
Vice Chair

Paul Donnelly

Doug Rogers

Valerie Levulett

Jesse Barron

Vacant

Steve Shively

Planning Commission

At Large

Public Works Advisory Board

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE/PLEDGE OF ALLEGIANCE
ANNOUNCEMENTS/PRESENTATIONS

PUBLIC COMMENT PERIOD

Members of the audience wishing to address the Board on City business matters not on the agenda may do so at this time. For those desiring to speak on items on the agenda, but unable to stay for the item, may also address the Board at this time.

Public comment is an opportunity for members of the public to provide input to the advisory body. To increase the effectiveness of the Public Comment Period, the City respectfully requests the following guidelines and expectations be followed:

- When recognized by the Chair, please come forward to the podium to speak. Though not required, it is helpful if you state your name, city of residence and whether you represent a business or group. Unless otherwise established by the Chair, comments are to be limited to three minutes.
- All remarks should be addressed to Board, as a whole, and not to any individual member thereof.
- The Board respectfully requests that you refrain from making slanderous, profane or personal remarks against any elected official, commission and/or staff.
- Please refrain from public displays or outbursts such as unsolicited applause, comments or cheering.
- Any disruptive activities that substantially interfere with the ability of the Board to carry out its meeting will not be permitted, and offenders will be requested to leave the meeting.
- Your participation in Board meetings is welcome and your courtesy will be appreciated.
- The Board in turn agrees to abide by its best practices of civility and civil discourse according to Resolution No. 07-19.

A. CONSENT CALENDAR

A-1 Approval of minutes from the Water Reclamation Facility Citizen Advisory Committee regular meeting of June 4, 2019

Staff Recommendation: Approve minutes as submitted.

B. BUSINESS ITEMS

B-1 Review of the following items:

- A. Review of Amendment to Contract with Water Works Engineers, LLC (WWE) for Engineering Design Services for the Water Reclamation Facility (WRF) Lift Station and Offsite Pipelines
- B. Review of Amendment to Contract with Carollo Engineers, Inc (Carollo) for Engineering (Program Management) Services for the Water Reclamation Facility (WRF) Project

Recommendation: Staff recommends the Water Reclamation Facility Citizens Advisory Committee (WRFCAC) provide comments and input on the presentation for the draft contract amendments with WWE and Carollo.

C. ADJOURNMENT

This agenda is subject to amendment up to 72 hours prior to the date and time set for the meeting. Please refer to the agenda posted at the Public Works Department, 955 Shasta Avenue, for any revisions or call the department at 772-6262 for further information.

Materials related to an item on this Agenda are available for public inspection during normal business hours in the Public Works Department at 955 Shasta, City Hall at 595 Harbor, or the Morro Bay Library at 695 Harbor, Morro Bay, CA 93442. Materials related to an item on this agenda submitted to the Board after publication of the agenda packet are available for inspection at the Public Works Department during normal business hours or at the scheduled meeting.

This agenda may be found on the Internet at: www.morrobayca.gov/wrfcac or you can subscribe to Notify Me for email notification when the Agenda is posted on the City's website. To subscribe, go to www.morrobayca.gov/notifyme and follow the instructions.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Works Department at (805) 772-6262. Notification 24 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

AGENDA NO: <u>A-1</u>
MEETING DATE: <u>September 3, 2019</u>
ACTION: _____

- | | | |
|----------|---|--|
| PRESENT: | Valerie Levulett
Doug Rogers
Steve Shively
Paul Donnelly | Committee Member
Committee Member
Committee Member
Committee Member |
| ABSENT: | Barbara Spagnola
Jesse Barron | Vice Chairperson
Committee Member |
| STAFF: | Rob Livick
Joe Mueller
Eric Casares
Janeen Burlingame | Public Works Director
Utilities Division Manager
WRF Program Manager
Management Analyst |

ESTABLISH QUORUM AND CALL TO ORDER
The meeting was called to order at 3:01 p.m. and a quorum was present.

MOMENT OF SILENCE / PLEDGE OF ALLEGIENCE
ANNOUNCEMENTS - None

PUBLIC COMMENT
<https://youtu.be/oFd4qo0v Js?t=1m51s>

The public comment period was opened.

Carol Truesdale, resident and homeowner asked questions concerning the status of the loan documents. She raised a concern on being able to read and print out the documents that are on-line. She asked the status of the hydrology reports. She had questions regarding the plans for the pipelines coming down the back of the baseball fields and the behind the mobile home park.

The public comment period was closed.

Rob Livick and Eric Casares responded to comments.

A. CONSENT AGENDA
<https://youtu.be/oFd4qo0v Js?t=399>

A-1 APPROVAL OF MINUTES FROM THE WATER RECLAMATION FACILITY CITIZEN ADVISORY COMMITTEE REGULAR MEETING OF MAY 1, 2018

RECOMMENDATION: Approve as submitted.

A-2 APPROVAL OF MINUTES FROM THE WATER RECLAMATION FACILITY CITIZEN ADVISORY COMMITTEE SPECIAL MEETING OF JUNE 12, 2018

RECOMMENDATION: Approve as submitted.

A-3 APPROVAL OF MINUTES FROM THE WATER RECLAMATION FACILITY CITIZEN ADVISORY COMMITTEE SPECIAL MEETING OF JUNE 25, 2018

RECOMMENDATION: Approve as submitted.

MOTION: Steve Shively moved to approve Items A-1 – A-3. The motion was seconded by Doug Rogers and carried 4-0-0 unanimously.

A-4 APPROVAL OF MINUTES FROM THE WATER RECLAMATION FACILITY CITIZEN ADVISORY COMMITTEE SPECIAL MEETING OF MAY 9, 2019

RECOMMENDATION: Approve as submitted.

MOTION: Doug Rogers moved to approve Items A-4 The motion was seconded by Valerie Levulett and carried 4-0-0 unanimously.

B. BUSINESS ITEMS

B-1 SUBMISSION OF THE CONCEPT DESIGN REPORT FOR THE WATER CONVEYANCE FACILITIES PROJECT AND REVIEW OF THE GROUNDWATER MODELING TECHNICAL MEMORANDUM

<https://youtu.be/oFd4qo0v Js?t=8m21s>

Eric Casares presented the staff report.

Discussion, comments and questions continued amongst Committee members, staff, and consultant.

The public comment period was opened.

Barry Brannon, Morro Bay citizen, expressed concerns about the existing pipes that are leaking and would like those pipelines repaired.

Larry Truesdale, Morro Bay citizen, asked questions regarding the corrections in the flow volume with the departure of Cayucos from our system and the lifespan of high-density polyethylene pipes verses stainless steel regarding the impact of the businesses on Quintana Road.

The public comment period was closed.

Rob Livick and Eric Casares responded to comments.

Discussion, comments and questions continued amongst Committee members, staff, and consultant.

C. COMMITTEE MEMBER CLOSING COMMENTS - None

D. ADJOURNMENT

The meeting adjourned at 5:06 p.m.

Recorded by:

Gina Gregory
Office Assistant



AGENDA NO: B-1

MEETING DATE: September 3, 2019

Staff Report

TO: Water Reclamation Facility Citizen Advisory Committee (WRFCAC)
DATE: August 28, 2019
FROM: Rob Livick, PE/PLS – Public Works Director/City Engineer
Eric Casares, PE – Water Reclamation Facility (WRF) Program Manager
SUBJECT: Review of the following items:

- A. Review of Amendment to Contract with Water Works Engineers, LLC (WWE) for Engineering Design Services for the Water Reclamation Facility (WRF) Lift Station and Offsite Pipelines
- B. Review of Amendment to Contract with Carollo Engineers, Inc (Carollo) for Engineering (Program Management) Services for the Water Reclamation Facility (WRF) Project

RECOMMENDATION

Staff recommends the Water Reclamation Facility Citizens Advisory Committee (WRFCAC) provide comments and input on the presentation for the draft contract amendments with Carollo and WWE.

FISCAL IMPACT

WWE: The total cost for Amendment No. 1 is \$691,822. If the amendment is approved, then the total not to exceed amount for the Water Works Engineers agreement will increase from \$1,353,574.00 to \$2,045,396.00. The total revised amount is within the planned contingency for the Conveyance Facilities component of the project included in the \$126 Million baseline budget. Acceptance of Amendment No. 1 would not result in an increase in the WRF Project baseline budget for the following reasons:

- Approximately \$500,000 was budgeted anticipating the changes described above, because many of the changes were identified in late 2018 and included in the revised budget estimates developed and presented to City Council at the end of Q3 FY 19/19 and Q4 18/19.
- The latest budget presented for Q4 18/19 included \$150,000 for additional potholing.
- Constructing a new pilot groundwater test well was anticipated to be completed as part of the ongoing hydrogeological investigation, and the City is working with Vistra and PG&E to use the existing Morro Bay Mutual Water Company Well #3 for this test.

Carollo: In addition to the detailed scope and budget for Phase 1, Carollo also provided an estimate for the entirety of the program management effort (anticipated end date in FY22/23) of \$7.64 million. That estimate for program management, including the requisite construction management, was consistent with previous estimates established for those services. Those estimates are also comparable to industry standards for program management costs for capital projects that have a similar scope and budget to the WRF.

Prepared By: rl/ec

Dept Review: RL

As outlined in the April 10, 2018 staff report, for each year of the Project, the City will review Carollo's scope and budget for the upcoming fiscal year and present them to the City Council for review and approval. That approach allows flexibility as the Project moves through each phase and new information and project definition becomes available.

On November 27, 2018, the City Council approved Carollo's budget for FY 18/19 that included the majority of the Phase 2 (Program Implementation) activities. Phase 2 focuses on program controls, funding support, permitting support, and providing technical direction to the Conveyance Facilities design engineer and WRF design-build team. The total cost for Amendment No. 1 was \$1,606,948

Based on the information available at this time, Carollo has developed a Scope of Services (Amendment No. 2) with a total cost of \$2,34,352 that covers the anticipated activities for the remainder of FY 19/20. The Scope of Services identified in Amendment No. 2 covers most of the remaining activities for Phase 2 and the first elements of Phase 3 (Project Oversight). The detailed Scope of Services is included as Exhibit A to Amendment No. 2 and the detailed fee is included in Exhibit B to Amendment No. 2. Attachment 2 to this report provides the breakdown of the original contract, Amendment No. 1, and this amendment over the duration of the WRF Project by fiscal year. Attachment 2 also provides a comparison of the anticipated budget for each activity that was developed in June 2018 as part of the \$126 million Project budget that was used as the basis of the rate study and rate surcharges.

The City approved \$33,647,976 in expenditures for the WRF Project in FY 19/20; the amendments to the WWE Agreement nor the Carollo Agreement will not result in an increase in the WRF Project baseline or fiscal year budgets.

DISCUSSION

WWE Contract Amendment

The City of Morro Bay and Water Works Engineers entered into an agreement as of November 15, 2017, for consulting services related to the WRF Lift Station and Offsite Pipelines. The original scope of work included design of the following:

- A single lift station with a capacity of 0.5 to 7 million gallons per day (MGD) and a backup electrical generator.
- Approximately 14,500 linear feet (LF) of raw wastewater force main.
- Approximately 14,500 LF of parallel, treated effluent pipeline.
- One trenchless crossing of State Highway 1.

The original scope of work included a lift station site evaluation, pipeline routing analysis, development of design criteria, and conceptual design of the recommended lift station and pipelines. An internal working draft of the Conceptual Design Report (CDR) that documents the results of the evaluation and analysis was submitted in November 2018. The lift station and alignment alternatives developed as part of the CDR were presented to WRFCAC on December 17, 2018.

Following the December 2018 WRFCAC meeting, City staff and the Program Manager made a similar presentation to City Council on January 22, 2019. At that meeting, the City Council agreed with staff's recommendation of the West Alignment and Full-Time PS-B. At City Council's request, the recommendation was brought back at the February 13, 2019, City Council meeting for formal approval of staff's recommendation. The Final Draft CDR was submitted in May 2019, and received

by City Council at the June 11, 2019, meeting.

The recommendation from City staff that was approved by City Council was to move forward with the West Alignment and the inclusion of a second pump station that would be used at all times located on City property at Main Street and Highway 1 (i.e., the Full-Time PS-B alternative described in the CDR). The approved project adds the following facilities to the design scope of work, which will require additional effort:

- A second lift station with backup electrical generator.
- Approximately 14,700 LF of additional raw wastewater force main, constructed parallel to the wastewater force main included in the original scope of work.
- Approximately 12,200 LF of indirect potable reuse pipeline, constructed parallel to the parallel raw wastewater force mains.
- Approximately 15,200 LF of fiber optic/communications conduit, constructed parallel to the parallel raw wastewater force mains.
- Approximately 1,900 LF of raw wastewater force main from the City's existing Lift Station 2 and connecting to the proposed parallel raw wastewater force mains.
- An additional trenchless crossing of Willow Camp Creek on the bike path near the Vistra and PG&E properties.
- Approximately 3,000 LF of replacement potable water main between La Loma Street and South Bay Boulevard on South Quintana Road (identified as a capital project in OneWater Morro Bay).

In addition to design of the above facilities, Water Works Engineers will require additional effort for the following:

- Coordination with Caltrans on the additional encroachment permit required to move the pipelines alignments from Lila Keiser Park and into the on ramp from Atascadero Road to Highway 1.
- Acquisition of additional easements along the bike path and adjacent to the roundabout, including additional coordination, surveying, and preparation of legal descriptions.
- Geotechnical borings and investigation activities associated with the additional force main from Lift Station 2 to the proposed parallel wastewater force mains.
- Coordination and delays associated with gaining access to the Vistra property and the property adjacent to the roundabout.
- Supporting the subsurface and aquifer testing work associated with the hydrogeological investigation.
- Additional buried utility investigation and potholing associated with the pipelines that have been added to the scope.

Carollo Contract Amendment for Program Management

At the April 10, 2018 City Council meeting, Carollo was awarded a contract for program management services (Item No. C-1). Since coming onboard, Carollo has helped the City achieve several key milestones for the WRF Project including:

- Certification of the Final Environmental Impact Report (FEIR)
- Completion of the Proposition 218 process and adoption of new water and sewer surcharges
- Submission of a complete U.S. Environmental Protection Agency (EPA) Water Infrastructure

Finance and Innovation Act (WIFIA) low-interest loan application

- Selection of the preferred WRF design-build team
- Award of a contract to the selected WRF design-build team

Carollo's initial Scope of Services was focused on making sure the Project was structured appropriately and included the following activities:

- Conducting an overall assessment of the WRF Program
- Conducting an evaluation of the current WRF technical approach
- Conduct comprehensive review of the design-build proposals for the WRF
- Supporting negotiations for the WRF design-build contract
- Developing a program controls framework including the development of the Program Management Information System (PMIS)
- Providing regular program updates to the City Manager, City Council, and community

At the November 27, 2018 City Council meeting, Amendment No. 1 to Carollo's original contract was approved. Since that time, Carollo has performed the following activities:

- Continual oversight of the WRF Project budget and schedule
- Reviewed major deliverables from the WRF design-build team
- Reviewed major deliverables from the Conveyance Facilities design engineer
- Developed of the final Clean Water State Revolving Fund (CWSRF) application for the State Water Board
- Led the permitting activities for potable reuse California State Water Resources Control Board Division of Drinking Water (DDW)
- Coordinated with EPA staff to facilitate review of the City's WIFIA application to facilitate finalizing a loan agreement
- Coordinated with State Water Board staff regarding the City's CWSRF application
- Led the Coastal Development Plan permitting effort with California Coastal Commission staff
- Began developing key documents including the Title 22 Engineering Report and Report of Waste Discharge to advance the potable reuse permit process
- Developed a public outreach plan and provided public outreach services focused on the July 2019 rate increase
- Led the development of an addendum to the FEIR to reflect changes to the WRF Project since August 2018

Between November 28, 2018 and August 2019, Carollo has helped the City reach several key milestones for the WRF Project including:

- Receipt of a Coastal Development Permit from the California Coastal Commission
- Placement on the FY 19/20 CWSRF Fundable List for a total of \$105 million (including \$5 million in grant funding)
- Completion of the FEIR Addendum

As FY 19/20 progresses, Carollo will continue to work on Phase 2 activities, but will also transition into Phase 3 with construction oversight of the WRF. A summary of the activities in Amendment No. 2 include:

- Continual oversight of the WRF Project budget and schedule
- Communication of WRF Project status to the City Council and other stakeholders including WRFCAC and the Citizens' Finance Advisory Committee
- Development of monthly and quarterly reports detailing the WRF Project performance against key performance indicators
- Completion of key potable reuse permitting documents including the Title 22 Engineering Report and Report of Waste Discharge

- Development of the City's Enhanced Source Control Program
- Construction outreach for businesses that could potential be impacted by the construction of the Conveyance Facilities
- Bidding support for the Conveyance Facilities
- Development of an Outfall Management Plan that will evaluate the capacity and condition of the City's existing outfall and identify costs for a future rehabilitation project
- Preliminary design of the Recycled Water Facilities based on information from ongoing hydrogeological work
- Field construction oversight services for the WRF

As mentioned previously, Amendment No. 2 of Carollo's agreement covers the majority of the Phase 2 program management efforts. In addition to those services identified above, the following activities will need to be scoped and budgeted in order to complete the Phase 2 activities:

- Procuring the designer for the Recycled Water Facilities
- Providing design oversight for the Recycled Water Facilities
- Leading bidding of the Recycled Water Facilities component of the WRF Project

Amendment No. 2 also only initiates the Phase 3 program management effort. In addition to those services identified above, the following activities will need to be scoped and budgeted in order to complete the Phase 3 activities:

- Construction oversight for the WRF for FY 20/21 and FY 21/22
- Construction management for the Conveyance Facilities
- Construction management for the Recycled Water Facilities

It is anticipated City staff will return to City Council near the end of this current fiscal year with an amendment to cover those additional Phase 2 and Phase 3 services for FY 20/21.

ATTACHMENTS

1. Amendment No. 1 to the agreement with Water Works Engineers, LLC for Engineering Design Services for the Water Reclamation Facility (WRF) Lift Station and Offsite Pipelines.
2. Carollo Scope of Services and Fees for proposed contract amendment
3. Carollo Work Plan: Summary and Fiscal Year Breakdown

CITY OF MORRO BAY

AMENDMENT NO. 1 TO THE AGREEMENT
FOR CONSULTANT SERVICES
BETWEEN THE CITY OF MORRO BAY
AND WATER WORKS ENGINEERS, LLC

This Amendment No. 1 is entered by and between the City of Morro Bay, a municipal corporation (“City”) and Water Works Engineers, LLC, an Arizona limited liability company (“Consultant”).

RECITALS

WHEREAS, City and Consultant entered into an agreement as of November 15, 2017, for consulting services related to the Water Reclamation Facility (the “Project”) Lift Station and Offsite Pipelines, which was approved by the City Council for a not to exceed amount of \$1,353,574 and additional services not to exceed amount of \$135,357.00 (the “Agreement”).

WHEREAS, the Parties now agree to amend the Agreement to provide for additional design effort for the Project, which work requires an expansion of the tasks to be provided by Consultant pursuant to the Agreement;

WHEREAS, Consultant has specific knowledge and experience to provide technical oversight needed to accomplish necessary tasks required to meet the City Council's goals for the Project, and

WHEREAS, due to the expansion of tasks to be provided, the compensation payable pursuant to the Agreement must be increased.

NOW THEREFORE, City and Consultant mutually agree to amend the Agreement as follows:

1. The additional services to be provided by Consultant, pursuant to the Agreement, as hereby amended, shall include Tasks 1, 3, 4, 6, and 7 of the Scope, as set forth in Exhibit A, attached hereto and incorporated herein by this reference (the "Additional Work"). The Additional Work shall be satisfactorily commenced immediately after August 27, 2019, and completed no later than June 30, 2022.
2. The compensation for the Additional Work shall not exceed \$691,822.00 and be paid in accordance with the amounts and hourly rates set forth in Exhibit B, attached hereto and incorporated herein by this reference, and the process established by the Agreement on a time and materials basis. With the amount added for the Additional Work, the total compensation paid pursuant to the Agreement shall not exceed \$2,045,396.00.
3. Except as expressly stated herein, all terms and conditions in the Agreement shall remain in full force and effect.

4. The effective date of this Amendment No. 1 shall be deemed to be August 27, 2019.

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to be executed by their duly authorized representatives as of the day first written above.

CITY OF MORRO BAY

CONSULTANT

By: _____
Rob Livick, PE/PLS
Public Works Director

By: 
MICHAEL J. FISHER, PE
PRINCIPAL/MANAGING MEMBER

Attest:

WATER WORKS ENGINEERS, LLC

Dana Swanson, City Clerk

Approved As To Form:

Chris Neumeyer, City Attorney

Exhibit A

SCOPE

CONSULTANT shall provide additional services in the following tasks as further described herein:

Task	Title
1	Project Management
3	Easement Acquisition Support
4	Survey, Geotechnical Investigation, and Potholing
6	Construction Documents and Specifications
7	Permitting Support

Task 1: Project Management

ENGINEER will extend project management and quality control engineering services as described in the original agreement for an additional 10-month extension of the project schedule. The following summarizes the original agreement and current Amendment 1 schedule.

Task	Title	Original Agreement		Amend 1	
		Start	End	Start	End
1	Project Management	11/4/17	12/2/21	11/4/17	4/22/22
2	Site Alternatives Evaluation	11/15/17	3/22/18	11/15/17	9/27/18
3	Easement Acquisition Support	11/16/17	6/19/19	11/16/17	4/3/20
4	Survey, Geotechnical Investigation, & Potholing	11/16/17	9/5/18	11/16/17	12/11/19
5	Concept Design Report	3/22/18	8/30/18	4/17/18	8/30/19
6	Construction Documents and Specifications	6/28/18	6/6/19	12/18/18	4/22/20
7	Permitting Support	12/21/17	6/26/19	11/16/17	3/13/20
8	Engineering and Services during Construction	10/11/19	12/2/21	5/6/20	4/22/22

In addition, ENGINEER will add the following services under this task:

1. Project Communication and Control
 - H. Participate in weekly project status calls with WRF Program Manager. These are assumed to continue through completion of Final Design, ending 4/22/20.

Task 3: Easement Acquisition Support

ENGINEER will provide additional property rights procurement support for the preferred project improvements. For the CLIENT to complete the proposed sewer project permanent easement (PE), temporary construction easement (TCE), and access rights (right of entry, ROE) must be acquired from several separate parcels. Water Works and our survey Subconsultant, Praxis, will assist with additional easement and property rights research; preparation of schematics, maps and descriptions necessary for the City's acquisition agent to complete notice, appraisal, negotiation and easement procurement. In addition to engineering services related to research and development of Easement Acquisition Assessment related to this amendment, the following additional deliverables are included:

1. Preliminary Title Report(s)

Praxis Consolidated International, Inc. will obtain preliminary title reports for the following parcels.

 - i. 065-182-010 (Atascadero Rd – PSA Site Alternative)
 - ii. 066-332-001 (Atascadero Rd – PSA Site Alternative)
 - iii. 066-332-002 (Atascadero Rd – PSA Site Alternative)
 - iv. 066-461-002 (Embarcadero – Pipe Alignment Alternative)
 - v. 066-084-037 (Pacific – Pipe Alignment Alternative)

Task 3 Deliverables:

- ✓ PTRs (scanned electronic copies)

- ✓ Plat and Legal Description (PDF electronic copies of Draft, 1 hard copy of FINAL signed and wet stamped and PDF electronic copy)

Task 4: Survey, Geotechnical Investigation, and Potholing

WWE teaming partners will provide additional field studies in support of preferred alternative.

1. Topographical Survey and Base Mapping for Design – Praxis, will extend topographic mapping, utilizing aerial mapping augmented by ground survey and research, to include “Caltrans” preferred alignment, east and west IPR, LS-2 FM realignment, and Quintana water line replacement. The pipeline reach will include a strip approximately between edges of existing right of way (from property boundary, fence or other inaccessible or immovable feature to similar limit on alternate side) along the proposed route, as well as extension onto private properties where permanent easement procurement is anticipated.
 - A. Aerial Mapping
ENGINEER team will extend processing of aerial mapping to encompass preferred alternative.
 - B. Ground Survey
ENGINEER team will design and execute a control network survey that will serve as the basis of mapping surveys and future construction layout and as-built surveys. ENGINEER team will base mapping on CCS83 Zone 5 grid (NAD83, CSRS Epoch 2017.50) by ties to the CSRN, and NAVD88 by ties to available local benchmarks. In addition, the ENGINEER’s team will aid with integration of WRF and Offsite Pipelines project survey as follows:
 - i. The project horizontal datum will be CCS83 Zone 5, CSRS Epoch 2017.50 (NAD83(2011) 2017.50) based on ties to Continuous GPS stations P523, P525, P067, and USLO.
 - ii. The project vertical datum will be assumed (nominally NAVD88) based on ties to benchmark J693. We found that the published NAVD88 elevation of J693 is about 0.35 feet different than the measured NAVD88 elevation using our survey data. The decision is to intentionally hold the published elevation of J693 to avoid the need to adjust contours and elevations on the WRF site topo.
 - iii. ENGINEER team will locate and survey two points shown on the WRF site topo for the purpose of determining a translation and rotation to be used by the project team to “move” the WRF topo horizontally onto the project horizontal datum.
 - iv. ENGINEER team will provide several (Qty 4) project control stations in the City that are outside of the project area (to avoid disturbance) that will be available to other future surveyors.
 - v. ENGINEER team work approach includes setting additional survey control points (Qty 4) along the entire route, and the position and elevation of all of these control points will be provided as part of deliverables.
 - vi. ENGINEER team will provide a brief survey report to document our work, along with surveyors notes and control listing suitable for insertion into CD’s
 - C. Existing Utility Research and Subsurface Utility Engineering
ENGINEER team will add subsurface utilities researched and identified as part of additional ground survey (paragraph 4.1.B above) and additional pot-holing results (paragraph 4.3 below) to design survey.
 - D. Right of Way Mapping
ENGINEER team will add properties researched as part of this Amendment to Right of Way mapping.
 - E. Biological & Cultural Resource Mapping
ENGINEER will delete Biological and Cultural Mapping from our scope of work.
2. Geotechnical Investigation – Yeh and Associates, Inc will extend their program of data review, field exploration, laboratory testing and engineering analysis and prepare a Preliminary Geotechnical Report and a Geotechnical Report for the design of the preferred alternative. Yeh is providing on-going geotechnical services for the project. The project Preliminary Geotechnical Report was submitted on April 23, 2018. Since that time, certain design components have evolved, as enumerated herein. These components were not part of the original scoping for the project and were addressed in the Preliminary

Geotechnical Report, and thus, necessitate additional geotechnical analysis. A summary of the key changes that impact geotechnical analyses are as follows:

- A portion of the pipeline was shifted away from crossing Lila Keiser Park due to the likely presence of cultural resources that are mapped on that property. The current alignment will encroach into the Caltrans Right-of-Way (ROW) along the southbound on-ramp to Highway 1 from Atascadero Road. Based on previous experience with utility easements within Caltrans ROW, the agency will likely require specific geotechnical assessment near the location of the proposed longitudinal trench that will be excavated along the edge of the traveled way as a part of the utility encroachment permit for the project. Yeh will need to perform subsurface exploration within the Caltrans ROW and procure an encroachment permit to do so.
- The East IPR pipeline is proposed to traverse under Highway 1 and along Highway 41 until it turns to head south and connects to a proposed injection well near the Silver City Mobile Home Park adjacent to Little Morro Creek. This aspect of the project will necessitate additional exploration and an encroachment permit to work within the Caltrans ROW.
- An existing water line will be replaced on Quintana Road between La Loma Avenue and South Bay Boulevard. Other utilities including storm drains, communication lines, and sewer lines will also be relocated.
- The existing sewer force main connection from Lift Station No. 2 on the Embarcadero to the new pipelines will be relocated through property owned by Vistra (Dynege). Subsurface exploration in this area will necessitate access to this route on private property. We anticipate access will require additional communication and input to the team that will aid in attaining an access agreement to the exploration sites on Yeh's behalf.
- Monitoring well and well maintenance services for GSI Water in support of groundwater injection well feasibility and hydrogeological study.

The following summarizes additional services to complete geotechnical analyses in support of the preferred project alternative.

A. Revised Phase 2 – Design Geotechnical Services

- i. Field exploration for Phase 2 will involve logging borings along the proposed West Alignment per the 30 percent design plans by Water Works Engineers. Borings will be drilled to depths ranging from 20 to 60 feet below the ground surface. Three of these borings will be completed as monitoring wells and monitored using data acquisition devices over a period of 6 months. Yeh will obtain monitoring well permits from San Luis Obispo County Environmental Health for borings deeper than 25 feet. Traffic control will consist of two-way flagging for a lane closure on Quintana Road, a temporary detour at the roundabout at the east leg onto Quintana Road, and signage with traffic cones where necessary. Yeh will procure an encroachment permit from the City of Morro Bay for the work within the City ROW and an encroachment permit from Caltrans for work within their ROW
- ii. The following table provides a description of the exploration locations proposed for Phase 2 and the revised alignment. Where appropriate, we have clarified if separate mobilization and permit lead times are needed to account for coordination with Caltrans, the City and property owners.

Boring No.	Depth	Traffic Control	Comments:
19P-01	60	Cones	At Pump Station A.
19P-02	20	Cones - Signs	Atascadero Road in Shoulder
19P-03	30	<i>Shoulder Closure pending Caltrans Enc. Permit</i>	<i>CT ROW - Separate Mob Caltrans Encroachment Permit</i>
19P-04	60	Cones - Signs	At pipe bridge. Need to back into site with rig along bike path
19P-05	30	Cones-signs	Need to back into site with rig along bike path
19P-06	50	Cones-signs	At Pump Station B. Completed as monitoring well (40 ft. screen, 10 ft. solid)
19P-07	20	Two-way flagging	Quintana road
19P-08	20	Two-way flagging	Quintana road
19P-09	50	Cones-sings	<i>Separate Mob. Access permit needed for drilling in U-Haul location at crossing. Completed as monitoring Well (40 ft. Screen, 10 ft. Solid)</i>

Boring No.	Depth	Traffic Control	Comments:
19P-10	35	Lane Closure/detour at roundabout	In roadway, need closure of roundabout leg.
19P-11	50	Cones-signs	On shoulder of Las Tunas Avenue. Completed as monitoring well (40 ft. screen, 10 ft. solid)
19P-12	20	Cones-signs	In field north of South Bay Boulevard
19P-13	20	Cones-signs	Access permit needed for drilling on Dynegy property
19P-14	20	Cones-signs	Access permit needed for drilling on Dynegy property
19P-15	20	<i>Cones-signs</i>	<i>Separate Mob. Caltrans Enc. Permit</i>
19P-16	20	<i>Cones-signs</i>	<i>Separate Mob. Caltrans Enc. Permit</i>

- iii. As noted in table, some of the borings will require lead time (19P-03, 19P-15, and 19P-16) for procurement of encroachment permitting from Caltrans. Other borings (19P-09, 19P-13 and 19P-14) will require access agreements with private property owners that will need to be obtained and provided prior to access. We have included costs assuming separate mobilization for the borings within Caltrans Right of Way and on private properties so that work on the remainder of the project can be initiated while a Caltrans Encroachment Permit and access agreements with property owners are obtained. Some specific considerations for the required coordination at those locations are provided below.
 - a. Highway 1 (19P-03) & IPR Line East Alignment (19P-15 and 19P-16). One 30-foot deep boring is planned within the Caltrans ROW where the proposed pipelines will traverse along the traveled edge of the southbound on-ramp to Highway 41 from Atascadero Road. Two 20-foot deep borings are proposed within the Caltrans ROW along the propose route of the IPR. Yeh will procure a Caltrans Encroachment Permit for this work and traffic control would include a shoulder closure. We anticipate Caltrans can permit borings at both areas under a single encroachment permit. We understand that the area where borings are planned for the IPR line are within an area that could have cultural resources and that if required, cultural resource monitoring of our drilling activities will be provided by others. We have assumed

that mobilization for these three borings will be separate from the other portion of work due to the lead time for a Caltrans Encroachment Permit (which is approximately 6 to 8 weeks with the District Permit Engineer).

- b. Lift Station No. 2 Reconnection (19P-13 and 19P-14). Two 20-foot deep borings are planned within the property owned by Vistra (Dynergy) where an easement will be acquired for the re-routed pipeline. We have assumed that access agreements will be provided by others to Yeh for the two borings planned within this property. The additional time to perform the subsurface investigation, laboratory testing, and reporting is included.
- c. U-haul Lot (19P-09). One 50-foot deep boring is planned at the west end of the proposed crossing under the roundabout at Morro Bay Boulevard and Quintana Road. The preferred location of the boring is within the parking lot of the existing U-haul yard. We understand that access to this location will require an access agreement with the land owner at this parcel as well as coordination to provide access to the boring location with a truck mounted drill rig and support vehicle.
- d. Separate mobilizations for work within the Caltrans ROW, Vistra (Dynergy) and U-Haul properties are assumed.
- iv. Yeh shall provide monitoring well and well maintenance services for GSI Water in support of groundwater injection well feasibility and hydrogeological study, including:
 - a. Drilling and installation of a monitoring well on Errol Street to be performed by S/G Drilling of Lompoc, California.
 - b. Servicing of the well and pump on Errol Street to be performed by Fisher Pump Service of Santa Maria, California.
 - c. Project coordination and management of the Yeh's subcontractors.
 - d. Drilling and installation of a piezometer on Vistra parcel to be performed by S/G Drilling Company of Lompoc, California.
 - e. Oversight and coordination of services to be performed
 - f. ENGINEER and Yeh understands that GSI will be directing the work and that invoicing will be handled through Yeh and Associates. GSI will be responsible for directly coordinating of the subcontractors for this phase of the project.
 - g. The additional fees associated with subcontracting of the monitoring well and well maintenance services will be provided on a time and materials basis according to fee schedule rates at the time of work. ENGINEER and Yeh will not exceed the estimated contract amount without prior authorization of the CLIENT.
3. Potholing – Based on the preferred alignment and existing underground utility research, ENGINEER identified qty 164 locations in City of Morro Bay Right of Way (RPOW) and qty. 10 locations in Caltrans ROW where utility potholing could mitigate utility conflict risk on the project. These locations represent existing utility alignments that, based on field survey and existing utility research, are in close proximity to the preferred offsite pipelines alignment and more precise utility location data could provide sufficient location data to avoid or mitigate conflict. ENGINEER will prepare a map of the proposed locations with each location prioritized based on the following clearance criteria:
 - Preferred 4-pipe offsite pipelines 15' wide construction corridor between existing utilities.
 - Distance from gas and/or fiber lines
 - Depth of gravity lines that cross the preferred 4-pipe corridor
 - Pressurized main lines that cross the preferred 4-pipe corridor
 - Pressurized/communication lines that parallel the preferred 4-pipe corridor
 - Gravity lines that parallel the preferred 4-pipe corridor
 - Communications lines that parallel the preferred 4-pipe corridor
- A. ENGINEER will facilitate a meeting with CLIENT to review the locations and prioritization and develop a mutually agreed upon top 100 locations where expenditure of funds to locate utility is consistent with Client's desire to mitigate utility conflict risk on this project.

- B. Water Works utility potholing subconsultant, MGE Underground, will complete vacuum excavation to confirm underground utility location and depth using the prioritization list as the basis for work. Every pothole will be photographed and documented prior to restoration and submitted as part of a close out package. Restoration will include consolidated slurry backfill and the roadway will be paved back to the limits of the pothole with HMA. For budgeting purposes, the following is included
- i. 14 days of vacuum excavation in City of Morro Bay Right of Way where typical production is 4-8 pothole locations per day (qty 96 pot holes total anticipated), including encroachment permit, USA, traffic control plans, traffic control, documentation and surface restoration.
 - ii. One (1) days of vacuum excavation in Caltrans Right of Way where typical production is 3-5 pothole locations per day (qty 4 pot holes total anticipated), including encroachment permit, traffic control plans, USA, traffic control, documentation and surface restoration.
 - iii. Two (2) 8-hr days of Ground Penetrating Radar (GPR) utility locating in City of Morro Bay Right of Way (assume 8-hrs of typical business hours and 8-hours of nighttime work), including encroachment permit, traffic control plans, traffic control, documentation and surface restoration.
 - iv. The potholing services described in the original agreement scope of work are superseded by the services described herein. It is understood that the total fee included for MGE under this Amendment is only additional funds required to provide the services described above. Potholing fee included in the original contract shall be used in addition to that included in the Amendment to provide the Potholing services described herein.
 - v. Unforeseen Conditions including groundwater, rock, hardpan, unmarked and/or unknown utilities, flooding, hazardous materials, unsuitable onsite materials can impact production pothole production rate. ENGINEER will make available to MGE geotechnical project data to characterize soil conditions prior to commencement of work. Any increase in job cost, directly or indirectly, that is due to the unforeseen conditions shall be considered out of scope and ENGINEER/MGE reserves the right to modify total quantity of potholes completed per day and total provided under this scope as a result of these demonstrated conditions.

Task 4 Deliverables:

- ✓ Survey (AutoCAD electronic files incorporated into and delivered with FINAL Design)
- ✓ Geotechnical Report(s) (PDF electronic copies of Draft, 1 hard copy of FINAL signed and wet stamped and PDF electronic copy)
- ✓ Utility Locating Report(s), Field Data Sheets for Potholes and GPR Data Processing Report (PDF electronic copies of Draft and Final)

Task 6: Construction Documents and Specifications

WWE will prepare contract document (improvement plans, technical specifications and cost estimates) for the following additional improvements not included in the original scope of work:

- One 0.5 to 5.8 MGD WW Pump Station (PSA) and one 0.5 to 8.0 MGD WW Pump Station (PSB), rectangular wet well with self-cleaning enhancements, and separate electrical controls building with Radio SCADA communications
- ~12,200-lineal feet of indirect potable reuse pipeline from WRF property line to west IPR injection well location (assumed to be Vistra property)
- ~15,200-lineal feet of fiberoptic / communications conduit from WRF property line to ocean outfall connection structure (assumed to be on Atascadero Rd just west of the existing City WWTP)
- ~1,900-lineal feet of raw wastewater forcemain from LS2 to PSA to B WW FM (assumed to be across existing and new easement on Vistra property)
- Realignment of misc. potable water pressure pipeline(s) to support construction of preferred alignment
- Trenchless crossing of bike path creek

Attachment 1

- ~3,000-linear feet of potable water line from La Loma Street to South Bay Blvd on Quintana Road (assumed to be generally as described in project number PWFF-1nof One Water Morro Bay Potable Water Master Plan)

ENGINEER will complete final design in accordance with the detailed Task 6 scope of work provided in the original agreement. Design will be delivered in three submittals: 60%, 90% and 100% (Final Bid Documents) in accordance with the scope details in the original agreement. The Final Draft Concept Design Report will serve as the foundation for detailed design. Submittal of the 60% and 90% review documents, inclusive of original and amendment improvements, will occur at Project Review Workshops with the project team. The submittal will be presented to City staff to familiarize the group with the information submitted and the design thought process behind the work. Following the Project Review Workshop, City staff will have a 2-week review period to provide any additional comments which were not brought forward in the Project Review Workshop.

ENGINEER will revise and update Technical Specifications provided with the original scope of work as deemed necessary to include required details related to the additional improvements. The following is a summary of additional plan sheet(s) anticipated for the additional improvements.

Civil / Yard Piping (Add Qty. 20-27)

OVERALL PLAN (add 1 for 2nd LS)
DEMOLITION PLAN (add 1 for 2nd LS)
PUMP STATION SITE PLAN (add 1 for 2nd LS)
PUMP STATION SECTIONS (add 1-2 for 2nd LS)
PLAN AND PROFILE (add 8-10 for additional scale granularity to accommodate 4-pipes on single PnP and add 5-8 for water line on separate PnPs)
BORE AND JACK DETAIL (add 1-2 for Creek Crossing)
YARD PIPING (add 1 for 2nd LS)
EMERGENCY STORAGE DETAIL (add 1 for 2nd LS)

Structural / Mechanical (Add Qty. 11-15)

LIFT STATION RENDERING (add 1 for 2nd LS)
LIFT STATION TOP PLAN- STRUCTURAL (add 1 for 2nd LS)
LIFT STATION LOWER PLAN AND SECTION-STRUCTURAL (add 1 for 2nd LS)
LIFT STATION SECTIONS - STRUCTURAL (add 3-5 for 2nd LS)
LIFT STATION TOP PLAN- MECHANICAL (add 1 for 2nd LS)
LIFT STATION LOWER PLAN AND SECTION-MECHANICAL (add 1 for 2nd LS)
LIFT STATION SECTIONS - MECHANICAL (add 3-5 for 2nd LS)

Standard Details (Add Qty 2-3 sheets)

Water Works standard details can be provided within the Plans or Technical Specifications as directed by City. It has been our experience that City Building Department Reviewers prefer that the standard details are included within the Plans, so we have made that assumption for this scope of services. (add 3-4 for water line and fiber conduit)

Task 6 Deliverables shall include:

- ✓ 60% Design Submittal (PDF)
- ✓ 90% Design Submittal (PDF)
- ✓ 100% Design Submittal (PDF)
- ✓ Bid Documents (PDF and source files)
- ✓ Final cost opinion

Electrical/Instrumentation (Add Qty. 15)

PROCESS AND INSTRUMENTATION DIAGRAM (add 1 for 2nd LS)
FLOOR AND ROOF PLAN (add 1 for 2nd LS)
SECTION – ELECTRICAL (add 1 for 2nd LS)
ELEVATIONS – ELECTRICAL (add 1 for 2nd LS)
MASTER / MAIN ONE-LINE AND ELEVATION (add 1 for 2nd LS)
ATS AND DISTRIBUTION ONE-LINE AND ELEVATION ELEMENTARY DIAGRAMS (add 1 for 2nd LS)
CONTROL PANEL ELEVATION AND BACKPANEL LAYOUT (add 1 for 2nd LS)
POWER DISTRIBUTION AND COMMUNICATION BLOCK DIAGRAMS (add 1 for 2nd LS)
CONTROL PANEL ELEVATION AND BACKPANEL LAYOUT (add 1 for 2nd LS)
BACK-UP CONTROLS AND PLC WIRING DIAGRAMS (add 1 for 2nd LS)
ELECTRICAL ROOM, DRY WELL/ WET WELL POWER AND CONTROL PLAN (add 1 for 2nd LS)
DRY WELL/WET WELL LIGHTING AND RECEPTACLE PLAN (add 1 for 2nd LS)
BUILDING LIGHTING AND RECEPTACLE PLAN, TOP DECK ELECTRICAL PLAN (add 1 for 2nd LS)
AREA ELECTRICAL PLAN (add 1 for 2nd LS)
CONDUIT SCHEDULE (add 1 for 2nd LS)

Task 7: Permitting Support

Under the original scope of work, ENGINEER continues to provide support for select permitting efforts related to the WRF Lift Station and Offsite Pipeline Project. Work is completed on an as-needed / on-call basis as directed by the City or the WRF Program Manager (as approved by the City) and billed against a Task 7 allowance. ENGINEER will provide technical information, exhibits and other requested items as part of the Permitting Support allowance budget. At the time of this amendment, approximately \$16,500 of Permitting Allowance remains.

ENGINEER will provide additional permitting support services that have been identified through preliminary design phase research and coordination with agencies and City departments to identify permits that will be required for construction of the project. Those identified that are best completed prior to construction will be completed by our design team. Those requiring information specific to the selected Contractor will be placed within the contract documents as the responsibility of the Contractor and/or a combination of the design team and Contractor. The specifications will call for all necessary information to obtain the permit be provided within the submittal. ENGINEER will complete the following additional services under the Permitting Support Task:

1. ENGINEER complete encroachment permit applications for three locations where preferred alignment enters Caltrans Right of Way.
2. ENGINEER will develop and include in bid documents a Storm Water Pollution Prevention Plan (SWPPP) and assist the City with submittal of Notice of Intent (NOI) to comply with State Water Resources Control Board General Permit for Discharges of Storm Water Associated with Construction Activity and inclusion of project WDID# in bid documents for use by Contractor to further develop and implement permit requirements based on Contractor selected means and methods.
 - A. The site water pollution control requirements will be defined and utilized to develop a draft Storm Water Pollution Plan (SWPPP), which will be included in the Contract Documents. Final SWPPP implementation and maintenance of site conditions consistent with SWPPP requirements will be placed on the Contractor as part of the Contract Documents.
3. ENGINEER will develop materials, present and facilitate discussion with California Department of Drinking Water (DDW) requesting variance to potable water pipeline separation requirements; and,
4. ENGINEER will assist with Air Pollution Control District Authority to Construct and Permit to Operate (for onsite generators)
 - A. ENGINEER will obtain required equipment data from Contractor to confirm compliance with specifications and upon favorable review, ENGINEER will complete the Generator Authority to Construct and Permit to Operate application package and submit to Air Pollution Control District for approval.

Exhibit B

PROPOSED COMPENSATION

Water Works Engineers proposes to complete the additional services described herein on a Time and Expense basis not to exceed \$691,822 without written consent from CLIENT and invoiced in accordance with our Hourly Billing Rates table below, bringing the total approved project budget to \$2,045,396.

The Original, Amendment 1 and Revised Total Budget for each task will be as follows:

Task	Title	Original	Amend 1	Revised Total
1	Project Management	\$64,090	\$38,195	\$102,285
2	Site Alternatives Evaluation	\$106,236	\$-	\$106,236
3	Easement Acquisition Support	\$34,090	\$22,588	\$56,678
4	Survey, Geotechnical Investigation, and Potholing	\$254,423	\$274,523	\$528,946
5	Concept Design Report	\$159,806	\$-	\$159,806
6	Construction Documents and Specifications	\$506,749	\$320,965	\$827,714
7	Permitting Support	\$45,500	\$35,551	\$81,051
8	Engineering and Services during Construction	\$182,680	\$-	\$182,680
Total		\$1,353,574	\$691,822	\$2,045,396

*A detailed fee basis work plan is provided on the following page for reference.

Classification	Title	Hourly Rate
AA	Administrative	\$96
E1	Staff Engineer	\$119
E2	Associate Engineer	\$146
E3	Project / Structural Engineer	\$165
E4	Senior Project Engineer / Manager	\$191
E5	Principal Engineer	\$221
I1	Field Inspector	\$129
I2	Senior Inspector	\$144
I3	Supervising Inspector	\$160
T1	CADD Tech 1	\$81
T2	CADD Tech 2	\$109
T3	CADD Tech 3	\$133

Notes:

1. A markup of 10% will be applied to all project related Direct Costs and Expenses.
2. An additional premium of 25% will be added to the above rates for Expert Witness and Testimony Services.
3. Rate effective through December 31, 2017. A 3% increase will be added for any services performed in each year thereafter.

EXHIBIT A

SCOPE OF SERVICES

This Scope of Services is the second amendment (Amendment No. 2) to the existing agreement executed with Carollo Engineers, Inc., (PROGRAM MANAGER) dated April 11, 2018 to provide Program Management Services to the CITY related to the Water Reclamation Facility Project (PROJECT). The major components of the PROJECT include:

- New Water Reclamation Facility (WRF);
- Offsite facilities including injection wells to facilitate potable reuse via groundwater injection (RECYCLED WATER FACILITIES); and
- New lift station located near the existing wastewater treatment plant (WWTP), a secondary lift station located near Main Street and Highway 1, raw wastewater force main from the lift station to the WRF, potable reuse line to the groundwater injection wells, and treated effluent brine line from the WRF to the existing ocean outfall (CONVEYANCE FACILITIES).

The design and construction of the new WRF is being completed through a design-build process, while the other components of the PROJECT are being delivered via a traditional design-bid-build procurement. The CITY has selected a joint-venture between Filanc and Black & Veatch (DB TEAM) for the new WRF and design of the CONVEYANCE FACILITIES is currently being completed by the CITY'S design consultant (Water Works Engineers). Procurement of a design engineer for the RECYCLED WATER FACILITIES has not yet been initiated.

One of the reasons the CITY selected Carollo to provide Program Management Services for the PROJECT is because the PROGRAM MANAGER, Eric Casares, is the primary contact with the CITY and the primary person Carollo would rely on for supervision and performance of this Agreement. Therefore, any change in that assignment would be a material change to this Agreement and would require approval of the CITY'S City Council. The PROGRAM MANAGER will utilize Carollo's technical staff and other members of the CITY's technical team to successfully deliver all aspects of the PROJECT.

The duration for the Scope of Services described below is approximately 57 months (4.5 years) in duration, spanning from approximately April 2018 through December 2022. The Scope of Services includes the following elements:

- Evaluation of the PROJECT (Completed)
- PROJECT implementation (Completed)
- PROJECT controls (Ongoing)
- Permitting support (Ongoing)
- Funding support (Ongoing)
- Public outreach (Ongoing)
- Coordination with other PROJECT consultants (Ongoing)
- Procurement of the WRF design-build team (Completed)
- WRF design-build contract negotiations (Completed)
- WRF design-build technical support services (Ongoing)
- WRF design-build management services (Ongoing)
- Construction oversight for the WRF (Included in this and other Subsequent Amendments)
- Start-up and operational support services for the WRF (Future Contract Amendment).
- CONVEYANCE FACILITIES technical support services (Ongoing).
- Construction management for the CONVEYANCE FACILITIES (Future Contract Amendment)

- Development of a request for proposals (RFP) for design of the RECYCLED WATER FACILITIES (Future Contract Amendment)
- Procurement of the designer for the RECYCLED WATER FACILITIES (Included in this Amendment)
- Bidding services for the RECYCLED WATER FACILITIES (Future Contract Amendment)
- Construction management for the RECYCLED WATER FACILITIES (Future Contract Amendment)

The PROJECT will also include the following project activities: Hydrogeological Investigations; Outside Funding Advise and Coordination; Environmental Permitting/Mitigation; and Rate Setting. However, the PROGRAM MANAGER will be responsible for advice, oversight, coordination and management of those activities, as well as other activities related to the PROJECT currently being led or may in the future be led by other CITY's consultants.

The PROGRAM MANAGER was the lead advisor to the CITY for the DB TEAM. The PROGRAM MANAGER will continue to provide key advice and coordinate the procurement of the CONVEYANCE FACILITIES contractor, whereas the CITY's CONVEYANCE FACILITIES design engineer will take the lead in answering questions and developing addenda during the bid process. The PROGRAM MANAGER will be the adviser to the CITY for the procurement of the RECYCLED WATER FACILITIES design engineer and the primary contact with those proposing on that project on behalf of the CITY.

Phase 1 (Project Confirmation) - Phase 1 for PROGRAM MANAGEMENT was included as part of the previous Scope of Services in the original Agreement. Phase 1 was completed on December 31, 2018. The goal of Phase 1 was to establish a roadmap for the next four years of the PROJECT and successfully bring on-board the DB TEAM for the WRF.

Phase 2 (Project Implementation) - The second portion of Phase 2 of PROGRAM MANAGEMENT is included in this Scope of Services. Phase 2 will continue through June 31, 2021. This Scope of Service is intended to cover the period between July 01, 2019 and June 31, 2020. The remaining portion of Phase 2 will be included in a latter Scope of Services (i.e., Amendment No. 3). These services will include:

- Procurement of the RECYCLED WATER FACILITIES designer
- Bidding services for the RECYCLED WATER FACILITIES

Phase 3 (Project Oversight) - The first component of Phase 3 for PROGRAM MANAGEMENT is included in this Scope of Services. Phase 3 will continue through December 31, 2022. Phase 3 will focus on program controls, funding support, permitting support, construction oversight for the WRF, construction management for the CONVEYANCE FACILITIES, and construction management for the RECYCLED WATER FACILITIES. The remaining portion of Phase 3 will be included in latter Scopes of Service (i.e., Amendment No. 3, 4, 5). These services will include:

- Construction support for the WRF from July 01, 2020 to June 31, 2021 (Amendment No. 3)
- Construction support for the WRF from July 01, 2021 to June 31, 2022 (Amendment No. 4)
- Construction management for CONVEYANCE FACILITIES from July 01, 2020 to June 31, 2021 (Amendment No. 3)
- Construction management for CONVEYANCE FACILITIES from July 01, 2021 to June 31, 2022 (Amendment No. 4)
- Construction management for CONVEYANCE FACILITIES from July 01, 2021 to June 31, 2022 (Amendment No. 4)

It is anticipated amendments to the Scope of Services will be developed for each fiscal year of the PROJECT. An amendment to cover the remaining portion of Phase 3 will be developed preceding the end of FY 20/21.

Tasks for Phase 1 Project Confirmation

Task 1 - Project Assessment (Complete)

No additional effort will be assigned to this task.

Task 2 - Technical Evaluation (Complete)

No additional effort will be assigned to this task.

Task 3 - Design-Build Procurement Support (Complete)

No additional effort will be assigned to this task.

Task 4 - Project Controls Plan (Complete)

No additional effort will be assigned to this task.

Task 5 - Project Team Integration Plan (Complete)

No additional effort will be assigned to this task.

Tasks for Phase 2 Project Confirmation

Task 6 - Routine Project Update Meetings (July 01, 2019 to June 31, 2020)

PROGRAM MANAGER will continue to conduct and attend the following regular meetings to discuss progress, current status, and planned activities with internal PROJECT technical team, CITY staff, and CITY Council for the duration of the PROJECT.

Subtask 6.1 - Project Update Meetings

PROGRAM MANAGER will continue to hold bi-weekly project update meetings for the core CITY team including members of the WRF Subcommittee. The PROGRAM MANAGER will prepare for and lead these meetings. The meetings will consist of updates on project progress, action items for the coming week, task assignments, and any issues that may impact schedule and budget.

Up to twenty (20) one-hour meetings have been estimated under this task.

Subtask 6.2 - Internal Project Status Meetings

PROGRAM MANAGER will continue to conduct weekly internal progress meetings to include all members of the PROJECT technical team. The primary focus of this meeting is to discuss engineering issues and the status of individual projects.

Up to forty (40) one-hour meetings per have been estimated under this task.

Subtask 6.3 - City Council Meetings

PROGRAM MANAGER will attend monthly CITY Council meetings for the PROJECT to communicate the PROJECT progress to the CITY Council. PROGRAM MANAGER will assist CITY staff with development of the Staff Report and will be responsible for preparation of the CITY Council presentation. PROGRAM MANAGER will also attend Citizen's Finance Advisory Committee (CFAC) and Water Reclamation Facility Citizen Advisory Committee (WRFCAC) meetings as needed.

Subtask 6.4 - Project Monitoring and Reporting

PROGRAM MANAGER will monitor PROJECT schedule and budget and prepare monthly progress reports on the status of the PROJECT.

Subtask 6.5 - WRF Onsite Design-Build Pre-Construction Meeting

With the goal of facilitating collaboration between the WRF DB TEAM, PROGRAM MANAGER, CITY staff, and other key stakeholders, increasing the efficiency and effectiveness of project delivery, and identifying roles and responsibilities for key stakeholders, the PROGRAM MANAGER will facilitate the second in a series of partnering workshops. The first workshop (i.e., kick-off workshop) was held on December 19, 2018. The second meeting (i.e., pre-construction workshop) is included in this Scope of Services. Additional workshops may be conducted and will be included in subsequent Scopes of Services.

The pre-construction workshop may include individuals from the following PROJECT stakeholder groups:

- Facilitator Leonard Steinberg
- CITY staff
- DB TEAM design team key members
- DB TEAM construction team key members
- PROGRAM MANAGER and key Carollo technical staff
- LIFT STATION AND PIPELINES Project Manager

The selected participants will be chosen based on their ability to positively impact the PROJECT.

Task 6 Deliverables:

- Project Update Meetings (bi-weekly up to twenty [20])
- Internal PROJECT Status Meetings (weekly up to forty [40])
- CITY Council, CFAC and WRFCAC Meetings (monthly up to eighteen [18])
- Monthly Invoices and Progress Reports (monthly up to ten [10])

Task 6 Assumptions:

- The need for future partnering workshops will be determined prior to the beginning of FY 20/21 and would be included in future Scopes of Services.

Task 7 - Program Management Oversight (July 01, 2019 to June 31, 2020)

This task expands upon the administrative management services for Phase 1 for the PROJECT. PROGRAM MANAGER will be responsible for management and coordination of PROGRAM MANAGER's resources and staffing.

Task 8 - Project Controls

The PROGRAM MANAGER will provide overall program management, administration, and controls for the PROJECT. The PROGRAM MANAGER will manage the following PROJECT components:

- WRF
- CONVEYANCE FACILITIES
- RECYCLED WATER FACILITIES

Items covered under this task include, but are not limited to:

- Scope, budget, and schedule management.
- Interface with the established PMIS.

- Management and coordination of subconsultants.
- Monthly invoicing and schedule updates.
- Monthly progress report preparation.

Subtask 8.1 - Project Management Information System (PMIS) Development

No additional effort will be assigned to this task.

Subtask 8.2 - Project Monitoring and Reporting

Using the previously developed PMIS, the PROGRAM MANAGER will monitor and report on the status of the PROJECT. PROGRAM MANAGER will monitor the scope, budget, schedule, and risks for both the PROJECT as a whole as well as the three (3) individual PROJECT components described above. The status for each PROJECT component and the aggregate of the projects will be measured against the PROJECT targets for schedule, budget, quality, and other key performance indicators (KPIs). PROGRAM MANAGER will coordinate with PROJECT team members (i.e., subconsultants, contractors, CITY staff, etc.) to obtain status information and report on the PROJECT activities. Scope, budget, schedule, and risk management updates for each PROJECT component will be provided to the PROGRAM MANAGER by the Project Manager for the three (3) projects. PROGRAM MANAGER will report on the PROJECT status as part of monthly CITY Council update meetings, quarterly CFAC meetings, quarterly WRFAC meetings, and other outreach efforts (i.e., website, mailings, etc.).

Subtask 8.2.1 - Scope Management

PROGRAM MANAGER will provide overall management and administration of the scope over the duration of the PROJECT. This includes assistance with development of the overall PROJECT scope as a rollup of individual PROJECT component scopes, management of PROJECT scope changes in the context of the overall PROJECT, and monitoring of progress towards the established contract scope targets.

Subtask 8.2.2 - Schedule Management

PROGRAM MANAGER will manage the PROJECT Baseline Schedule, including the schedule for each of the three (3) PROJECT components, and monitor the PROJECT schedules in relation to the baseline schedule for the duration of the PROJECT. Schedules will be managed using Microsoft Project and updated at least monthly in coordination with individual Project Managers. The schedule will be published to the PMIS and integrated with the public outreach tools and with other reports. PROGRAM MANAGER will perform regular reviews of PROJECT activities and schedule and compare progress of critical path activities to the PROJECT schedule. PROGRAM MANAGER will discuss schedule and critical path activities with the CITY at progress meetings and provide monthly schedule updates as part of the PROJECT Monitoring and Reporting task and at monthly CITY Council meetings.

Subtask 8.2.3 - Budget Management/Cost Control

PROGRAM MANAGER will manage the PROJECT Baseline Budget, including the budget for each of the PROJECT components, and monitor the financial performance of the PROJECT in relation to the baseline budget for the duration of the PROJECT. The PROGRAM MANAGER will use information from individual Project Managers and CITY internal costs to compare current financial performance against the baseline budget and schedule. A monthly earned value analysis for the PROGRAM MANAGER's activities will also be performed. PROGRAM MANAGER will discuss financial performance with the CITY at the progress meetings

and provide monthly budget updates with cash flow projections as part of the PROJECT Monitoring and Reporting task and at monthly CITY Council meetings.

PROGRAM MANAGER will support the review, processing, and approval procedures for progress payments (i.e., invoices) submitted monthly by Project Managers for each PROJECT component. PROGRAM MANAGER will coordinate with Project Managers and engineering supervisors to support the review and approval process for progress payments. Using the PMIS, PROGRAM MANAGER will document and monitor the progress payments for compliance with contract requirements, process and track the payment approvals, and maintain a current log of contract payments.

Subtask 8.2.4 - Risk Management

PROGRAM MANAGER will develop a risk register for the PROJECT that identifies risks that could impact the ability to meet the established PROJECT goals and objectives as the PROJECT moves into construction. A risk management workshop will be held with the CITY to review the draft risk register, assign weights and priorities, and identify risk management strategies for the PROJECT. PROGRAM MANAGER will update and manage the risk register for the duration of the PROJECT. PROGRAM MANAGER will review the risk register with the CITY on at least a monthly basis and provide updates for reporting purposes as part of the Project Monitoring and Reporting task and at monthly CITY Council meetings.

Subtask 8.2.5 - Document Management

PROGRAM MANAGER will follow the formal document management approach established for the PROJECT, including use of standard file structures, document naming conventions, and forms/templates for technical memoranda, meeting agendas, minutes, and monthly progress reports established in Phase 1. PROGRAM MANAGER will utilize the PMIS, established under a previous Scope of Services, to support these document management standards, enforce compliance by all PROJECT team members, and provide that PROJECT information is appropriately documented.

Subtask 8.2.6 - Project Reporting

PROGRAM MANAGER will support timely and effective communications of the PROJECT to CITY stakeholders including, but not limited to, the CITY Council, CFAC, and WRFCAC through the development of the Monthly and Quarterly PROJECT Report. Under this task, PROGRAM MANAGER will prepare Monthly and Quarterly Reports and present the findings in these reports to the CITY Council, CFAC, and WRFCAC on a quarterly basis. These meetings are detailed in Task 6.

External PROJECT communications to the general public and other non-CITY stakeholders, will be provided as documented in the Public Outreach task (Task 11).

Task 8 Deliverables:

- Risk register and risk management updates (monthly up to ten [10]).
- Project Monthly and Quarterly Reports (monthly up to ten [10]).

Task 9 - Funding Support (July 01, 2019 to June 31, 2020)

Subtask 9.1 - Master Water Reclamation Plan Completion Support

No additional effort will be assigned to this task.

Subtask 9.2 - Title XVI Crosswalk Document

No additional effort will be assigned to this task.

Subtask 9.3 - WIFIA Funding Support

PROGRAM MANAGER will provide general support to facilitate an EPA WIFIA loan agreement and provide general coordination with WIFIA staff throughout the remainder of the fiscal year. Services include:

- Participation in monthly coordination calls with WIFIA staff;
- Answering questions and providing clarification regarding the CITY's WIFIA application; and
- General support for finalizing a funding agreement with WIFIA.

Subtask 9.4 - CWSRF Funding Support

PROGRAM MANAGER will provide general support to facilitate a CWSRF loan agreement and provide general coordination with CWSRF staff throughout the remainder of the fiscal year. Services include:

- Participation in regular, weekly coordination calls with CWSRF staff;
- Answering questions and providing clarification regarding the CITY's CWSRF application; and
- General support for finalizing a funding agreement with CWSRF.

Task 9 Deliverables:

- Agenda and meeting minutes for the monthly WIFIA coordination calls.
- Agenda and meeting minutes for the weekly CWSRF coordination calls.

Task 9 Assumptions:

- A total of two (2) monthly coordination calls will be held with WIFIA staff.
- A total of twenty four (24) weekly coordination calls will be held with CWSRF staff.

Task 10 - Permitting Support (July 01, 2019 to June 31, 2020)

Subtask 10.1 - Land Use Permitting

This task includes all resource regulatory agency permitting for the PROJECT, as well as any other land use permitting that may be needed. PROGRAM MANAGER will coordinate these efforts, and work with members of the PROJECT technical team, and CITY staff to prepare these permit applications.

Subtask 10.1.1 - Resource Regulatory Agency Permitting

The PROJECT will require a variety of permits from State and federal resource regulatory agencies. At this time, it has been determined that the PROJECT will not require a Section 404 permit pursuant to the Clean Water Act from the U.S. Army Corps of Engineers (USACE), a Section 401 certification from the Regional Water Quality Control Board (RWQCB), or a Streambed Alteration Agreement from the State Department of Fish and Wildlife. The RWQCB will likely require a Report of Waste Discharge as an application to enroll and comply with Resolution No. R3-2014-0041 (General Waiver).

These regulatory agencies will use the FEIR and the FEIR Addendum to assist in the permitting processes. If any permitting agency determines the existing environmental documentation is not sufficient for their

permitting purposes, PROGRAM MANAGER will work with the CITY to develop a plan to address specific agency requirements. The plan may include additional services that would require an amendment to this Scope of Services.

The additional effort needed to secure the permits identified above is included in this Scope of Services.

[Subtask 10.1.2 - Land Use Permitting](#)

The PROJECT will require a variety of permits from State and federal land use permitting agencies.

Key land-use permitting agencies for the PROJECT will include:

- California Coastal Commission (CCC) Coastal Development Permit (CDP)
- California Department of Transportation (Caltrans) Encroachment Permit

The PROJECT has pursued a consolidated CDP from the CCC. On July 11, 2019, the CCC approved a CDP for the PROJECT. The Caltrans encroachment permit will be needed since pipelines will be located within the Caltrans right-of-way (i.e., Highway 1 and potentially Atascadero Road/Highway 41).

As is the case for resource regulatory permitting, these land use agencies will use the FEIR and the FEIR Addendum to assist in the permitting processes. If any permitting agency determines the existing environmental documentation is not sufficient for their permitting purposes, PROGRAM MANAGER will work with the CITY to develop a plan to address agency requirements. The plan may include additional services that would require an amendment to this Scope of Services.

The additional effort needed to secure the permits identified above is included in this Scope of Services.

[Subtask 10.1.3 - Annexation](#)

No additional effort will be assigned to this task.

Subtask 10.2 - Potable Reuse

[Subtask 10.2.1 - Title 22 Engineer's Report](#)

PROGRAM MANAGER has been developing the Draft Engineer's Report for indirect potable reuse (IPR). Work includes compilation of existing material in accordance with Division of Drinking Water (DDW) standards as well as development of some new materials. DDW requires potable reuse facilities meet an extensive list of performance criteria for pathogens, nutrients and trace pollutants.

Per Title 22 of the California Code of Regulations (22 CCR §60320.206), potable water reuse systems, regardless of size or the amount of industry in a community, must administer and maintain an industrial pretreatment and pollutant source control program. For potable water reuse projects, the combined effort is referred to as an Enhanced Source Control Program (ESCP). The purpose of an ESCP is to control the discharge of constituents of concern (COCs) to a publicly owned treatment works (POTW) that might impact the production of purified water from an advanced water purification facility (AWPF).

Based on an evaluation of alternatives completed in a previous Scope of Services, the PROGRAM MANAGER recommends the CITY pursue development of an informal but sufficiently developed pretreatment program and ESCP without submitting the pretreatment program to the State Water Resources Control Board (State Water Board) for formal approval. The previous Scope of Services included development of the ESCP.

The additional effort identified in this Scope of Services includes development of the other stand-alone pretreatment program documents including an updated Sewer Use Ordinance (SUO), Industrial Waste Survey (IWS), Enforcement Response Plan (ERP), permit templates, and Local Limits (LL).

Subtask 10.2.2 - Report of Waste Discharge

No additional effort will be assigned to this task.

Subtask 10.2.3 - Brine Analysis and Management

No additional effort will be assigned to this task.

Subtask 10.2.4 - Permitting Guidance and Regulatory Meetings

No additional effort will be assigned to this task.

Subtask 10.3 - Potable Reuse

No additional effort will be assigned to this task.

Task 10 Assumptions:

- Scope of Services includes coordination with regulatory agencies, CITY, COUNTY, and LAFCO and does not include any supplemental CEQA studies or environmental documents in addition to the FEIR and the FEIR Addendum (if required).

Task 10 Deliverables:

- NA

Task 11 - Public Outreach (July 01, 2019 to June 31, 2020)

The PROJECT is not only a significant undertaking for the CITY, but it is also a highly-visible program throughout the CITY that impacts customers, residents, business owners, community leaders, elected officials, regulatory authorities, and funding partners. Clear, timely, and informative communication is instrumental to encouraging trust and collaboration for the successful completion of the PROJECT. The public outreach effort for the PROJECT is based on a two-phase approach.

Subtask 11.1 - Public Outreach Plan

The overall approach for strategic communications during the second phase of to the PROJECT consists of the following components:

- Strategic Counsel
- Communication Plan Updates
- Stakeholder Database Refinement
- Key Messages
- Media Relations

Subtask 11.1.1 – Strategic Counsel

Strategic counsel will be available for initiatives or issues requiring in-depth communication planning and rapid response. The hours allocated may be used for meetings, calls or writing assignments, at the CITY's discretion.

Subtask 11.1.2 – Communication Plan Update

During FY 18/19, a Communication Plan was prepared to inform the community about the purpose and need for the Project, and to provide additional information on the many benefits of potable reuse. The

Communication Plan was developed in the first phase and included a situational analysis, PROJECT challenges and opportunities, communication goals and objectives, messages, audiences, strategies, tactics and evaluation activities.

During FY 19/20, the Communication Plan will be reviewed and updated for timeliness, and revised to address near-term issues associated with PROJECT construction and construction outreach.

Subtask 11.1.3 – Stakeholder Database

Segments of the Stakeholder Database were developed during FY 18/19, but primarily for purposes of outreach about rates and initial gathering of contacts for specific geographic areas near the PROJECT areas. Additional contact information will be gathered and organized during the FY 19/20, with the primary objective of reaching the right stakeholders before and throughout construction. As the PROJECT proceeds, the PROGRAM MANAGER will update and expand the list with new contacts to ensure all interested stakeholders are included. This database will be used to keep stakeholders informed about project progress (i.e., newsletters, phone, email contact, etc.).

Subtask 11.1.4 – Key Messages

The key message platform developed during the first phase may be updated and refined to address changes in the PROJECT. There also may be specific topics requiring subsets of key messages specific to construction, project cost and financing or other issues, and those can be developed, as needed.

Subtask 11.1.5 – Media Relations

Using the media list and templates developed in the first phase, the PROGRAM MANAGER will identify opportunities for proactive media relations. This may include distributing materials like maps or photos to reporters, or developing news releases about project milestones. This task also includes tracking and sharing of media coverage related to the PROJECT for the CITY's and PROGRAM MANAGER's situational awareness. Relevant media clips will be logged on the PMIS SharePoint.

Subtask 11.2 - Public Outreach (FY 18/19)

No additional effort will be assigned to this task.

Subtask 11.3 - Monthly Coordination Meetings

Monthly, in-person meetings will continue to be conducted with the PROGRAM MANAGER's public outreach team and the CITY.

Subtask 11.4 - Public Outreach (FY 19/20)

Subtask 11.4 includes the anticipated notifications and materials to be developed and used during FY 19/20 and will include the following components:

- Informational Materials
- Notifications
- Phone Line and Community Inquiries
- Website Update and Management

Subtask 11.4.1 – Informational Materials

Once the PROJECT branding is approved by the City Council for public use, informational materials will be developed that clearly explain the PROJECT purpose and need. The materials will include a fact sheet for distribution in hard copy and electronically, a general Frequently Asked Questions document, a pocket card, a project map and a PowerPoint presentation template that can be used in community meetings and presentations.

During FY 18/19, a brand, logo, and letterhead were developed for use in all informational materials.

Subtask 11.4.2 – Notifications

Quarterly utility bill newsletter inserts will keep the PROJECT top of mind with ratepayers throughout design and construction and provide status updates. Newsletters will be brief, and professionally designed with both text and visual elements to convey technical concepts and address known questions. As was done during the first phase, content for these CITY-wide bill inserts will be provided by the PROGRAM MANAGER in English and Spanish.

Direct email will be used to reach a broad base of stakeholders in advance of meetings and events, and to provide project updates throughout design and construction. Email notifications can include links to website information and can include visual elements like photos and maps. Email contact information will be collected during meetings, public outreach efforts, and subscriptions to the PROJECT website. It is estimated that up to four email newsletters will be developed.

A flier template and a door hanger template will also be developed for use during construction outreach. These will be able to be modified with dates, times and specific activities to be completed by the contractor.

Subtask 11.4.3 – Phone Line and Community Inquiries

An information line has been established and will continue to be used and monitored by the PROGRAM MANAGER for public inquiries. All inquiries will be logged and organized by topic, and responded to in a timely manner. The information line developed in FY 18/19 is 877-MORROBAYH2O.

The information line tracking log will be saved on the PMIS in SharePoint for internal access.

Subtask 11.4.4 – Website Update and Management

The website is currently the online hub for PROJECT updates and materials, and should continue to serve as the go-to source of information about the PROJECT. Pending approval of the branding, the home page design of the website will be refreshed with the new logo. A designated page will also be developed on the website for construction notices and schedule information.

Quarterly content updates will continue to be made to the website to ensure accuracy with more regular uploads of documents during construction.

Subtask 11.4.5 – Meetings and Events

As the PROJECT nears construction, an emphasis will be placed on in-person meetings and events in an effort to speak directly with stakeholders and build relationships. Meetings and events will include:

- Outreach Meetings
- Presentations and Speakers Bureau
- Field Outreach
- Groundbreaking Event

Up to two (2) outreach meetings will be held for the PROJECT in an open house format where stakeholders can learn about the PROJECT and speak with team members. The PROGRAM MANAGER will support the CITY in preparing notifications for the meetings, including both a printed notification and electronic notifications. The PROGRAM MANAGER will develop up to eight (8) informational poster displays for the outreach meetings.

Public speaking engagements with community organizations will be employed to inform the community about and build the profile of the PROJECT. Select presentations will be scheduled based on the CITY's interest and availability. The outreach team will support speaking engagement selection, presentation scheduling and materials development. CITY spokespeople will deliver presentations and will be trained in speaking skills if necessary. PROGRAM MANAGER will support presentations, as needed.

Field outreach to stakeholders near the PROJECT areas will be a priority during FY 19/20. Field outreach may include one-on-one meetings, small group meetings, business pop-in meetings, or door-to-door outreach. PROGRAM MANAGER will schedule and conduct the field outreach based on PROJECT schedules. This assumes at least one (1) round of outreach to impacted businesses before construction begins (WRF) and one (1) round of outreach to impacted businesses during construction (CONVEYANCE FACILITIES).

In fall 2019, a groundbreaking event will be held at the WRF site for the CITY, PROJECT partners, regulatory agencies, PROJECT participants, and stakeholders to kick-off construction and celebrate the largest infrastructure PROJECT in the CITY's history that will help improve the sustainability of the CITY's potable water supply. An event logistics plan will be developed as a roadmap for event planning and implementation. PROGRAM MANAGER will manage RSVPs, notifications, materials, vendors, logistics and speakers for the event, as well as staffing. The CITY will provide a foundational invitation list and support staffing. Consultant and contractor sponsorships will be utilized to cover all event hard costs.

Task 11 Deliverables:

- Outreach Meeting Notifications.
- Outreach Meeting Displays.
- As-Needed Bill Insert Newsletters.
- Monthly Email Notifications.
- As-Needed Social Media Content.
- Website Map and Content Plan.
- Fact Sheet Updates.
- Frequently Asked Questions.
- Template Community Presentation.
- Public Inquiry Log.
- Monthly Activities Summaries.

Task 11 Assumptions:

- CITY to print all materials and provide postage for any mailings.
- CITY to host PROJECT website.
- CITY to pay monthly subscription fees for the information line.

Task 12 - Conveyance Facilities Design Oversight (July 01, 2019 to June 31, 2020)**Subtask 12.1 - General Design Oversight Services**

PROGRAM MANAGER will provide engineering support services for the design and procurement of the CONVEYANCE FACILITIES component of the PROJECT. The PROGRAM MANAGER will continue to provide project management, design review, and other ancillary engineering support services for the two (2) lift stations and approximately 2.75 miles of pipelines that comprise the CONVEYANCE FACILITIES. The PROGRAM MANAGER will provide a formal review of each submittal and provide review comments to the designer in a comment tracking form. The PROGRAM MANAGER will also work with the CITY to facilitate communicating their comments to the designer for each submittal.

In addition to general support, the PROGRAM MANAGER will facilitate and participate in the following workshops identified by the designer:

- 60-Percent Design Submittal Review Workshop.
- 90-Percent Design Submittal Review Workshop.

Subtask 12.2 - Subsurface Utility Investigations

No additional effort will be assigned to this task.

Subtask 12.3 - Bidding Support Services

PROGRAM MANAGER will provide support for bidding of the CONVEYANCE FACILITIES component of the PROJECT. PROGRAM MANAGER will lead and facilitate the pre-bid meeting, lead and facilitate the bid opening, manage the receipt of requests for information (RFI), and prepare and distribute addenda to prospective bidders. The design engineer for the CONVEYANCE FACILITIES will provide the PROGRAM MANAGER responses to technical RFIs received from bidders.

Task 12 Deliverables:

- Consolidated comment forms for the 60-Percent Design Submittal and 90-Percent Design Submittal.
- Agenda and meeting minutes for pre-bid meeting.
- Addenda (up to three [3])
- Consolidated comment forms for the 60 and 90-Percent Design Submittals.

Task 12 Assumptions:

- Agendas, presentation materials, and meeting minutes will be provided by the designer for the 60-percent and 90-percent design workshops.

Task 13 - WRF Onsite DB Support (July 01, 2019 to June 31, 2020)**Subtask 13.1 - Design Build Kick-Off Meeting**

No additional effort will be assigned to this task.

Subtask 13.2 - Design-Build Team Meetings

PROGRAM MANAGER and WRF DB TEAM will continue to hold regular meetings and/or conference calls to be held during the design-phase of the WRF through the end of the 2019 calendar year:

- Monthly conference calls.
 - The conference calls have been scheduled for the third Thursday of the month from 1:00 PM to 3:00 PM.
- Monthly in-person meetings.
 - The in-person meetings have been scheduled for the first Thursday of the month from 1:00 PM to 3:00 PM.

Subtask 13.3 - Design Oversight

PROGRAM MANAGER will continue to provide engineering support services for the design and procurement for the WRF. PROGRAM MANAGER will provide project management, design support, and other ancillary engineering support services for the WRF for the following submittals:

- 60-Percent Design Submittal.
- 90-Percent Design Submittal.

The PROGRAM MANAGER will review each submittal and provide the WRF DB TEAM with a comment log. The PROGRAM MANAGER will also work with the CITY to facilitate communicating their comments to the WRF DB TEAM for each submittal.

Subtask 13.4 - Major Equipment Procurement Support

No additional effort will be assigned to this task.

Subtask 13.5 - Major Subconsultant Procurement Support

No additional effort will be assigned to this task.

Subtask 13.6 - Process Site Visits

No additional effort will be assigned to this task.

Task 13 Deliverables:

- Consolidated comment forms for the 60 and 90-Percent Design Submittals.

Task 13 Assumptions:

- NA

Task 14 - Outfall Management Plan

The CITY's existing outfall was constructed in 1981. It replaced the original 1,760 linear foot (LF), 18-inch diameter outfall constructed in 1953 with 5,160 LF of 27-inch diameter pipeline consisting of 708 LF of reinforced concrete pipe (RCP) and 4,452 LF of mortar lined and coated welded steel cylinder pipe (WSP). The most downstream portion of the WSP has a 170 LF section that contains 34 diffuser ports spaced 5-feet on center with alternating orientations at the 10:00 and 2:00 o'clock positions. The CITY conducted an outfall inspection in 2011 that identified that there was approximately 30 cubic yards of sediment that had accumulated in the outfall since it was placed into service.

The purpose of this task is to develop an Outfall Management Plan (OMP), which is a requirement of the CDP issued by the CCC. The OMP will need to address long-term management of the outfall and identify any modifications that will be needed to accommodate the change in the quantity and quality of effluent produced by the WRF and discharged through the outfall. It will also identify any capital improvements needed to preserve and extend the outfall's service life.

This task includes the following subtasks:

- Condition Assessment.
- Hydraulic Analysis.
- Dilution Modeling.

Subtask 14.1 – Outfall Assessment Plan

While a CDP has been approved by the CCC for the PROJECT, it has been granted subject to a number of special conditions. Specifically, the permit includes requirements that must be met prior to the commencement of any marine development, including any offshore development on the ocean outfall. The plan must specify the procedures for undertaking a complete inspection of the existing outfall line as well as any additional activities that may be associated with the outfall (i.e., cleaning and/or replacement of the diffusers). The plan must also identify construction best practices to avoid adverse impacts to coastal water quality to the maximum extent feasible. The Notice of Intent (NOI) identifies specific coastal water quality and marine habitat protection elements.

The PROGRAM MANAGER will complete a Draft Outfall Assessment Plan for review by the CITY. Following review by CITY staff, the PROGRAM MANAGER will incorporate the CITY's comments and produce the Final Outfall Assessment Plan. PROGRAM MANAGER will also deliver the Final Outfall Assessment Plan to the CCC.

Subtask 14.2 – Condition Assessment

The purpose of this subtask is to assess the physical condition of the outfall, focusing primarily on the welded steel portion of the outfall and specifically on the integrity of the cement mortar lining and coating system. It will also be used to estimate the quantity and characteristics of the accumulated sediment and provide recommendations for improvements to the diffusers. The PROGRAM MANAGER will perform the following activities to complete this subtask:

- Conduct a visual inspection of approximately 3,000 LF of the exterior of the outfall using a dive team experienced in outfall condition assessment and maintenance, to identify any obvious defects in the cement mortar coating system and diffusers. The level of effort estimated for the exterior inspection assumes that the dive team will operate from a boat anchored near the end of the outfall, approximately 4,000 feet off shore, and that one mobilization will be made to conduct the inspection.
- Prepare a draft technical memorandum that documents the results of the inspection, recommendations for correcting any defects or deficiencies noted, and estimated rehabilitation costs. PROGRAM MANAGER will conduct a workshop with the CITY to discuss the results of the inspection, review the draft report and any recommended improvements, and receive CITY comments.

Subtask 14.3 – Hydraulic Assessment

The purpose of this subtask is to assess outfall hydraulics and to support the dilution modeling described in Subtask 14.3. The PROGRAM MANAGER will perform the following activities to complete this subtask:

- Develop a Storm Water Management Model (SWMM)-based hydraulic model of the outfall to evaluate its hydraulic capacity and ability to convey existing and future flows from the WRF. The model will be developed using the CITY's record drawings, and the configuration will be confirmed by CITY staff and verified by the physical inspection of the outfall conducted in Subtask 14.2. The outfall model will use output from Waterworks Engineers' hydraulic model of the 16-inch brine pipeline currently being designed under a separate contract, and it will extend from the existing air relief structure at Station 10+00 on the WRF Offsite Pipelines drawings. Average dry and wet weather flow hydrographs will be developed using the hydraulic model developed by CAROLLO for the OneWater Morro Bay Plan. Maximum, minimum, and future projected tidal data will be used to set the downstream boundary conditions.
- Use the SWMM-based hydraulic model to evaluate up to four (4) scenarios to simulate hydraulic conditions during a range of flows, for three (3) different tidal conditions (for a total of 12 different scenarios), to calculate hydraulic capacity based on projected average and peak flows, and to identify any operational concerns during low flows.
- Prepare a draft technical memorandum that documents the results of the hydraulic assessment. Conduct a workshop with the CITY to review the technical memorandum and to receive CITY comments. Prepare a final technical memorandum and submit it to the CITY.

Subtask 14.4 – Dilution Modeling

The purpose of this task is to conduct dilution modeling of the CITY's ocean discharge to calculate the dilution factor that will be used for the CITY's NPDES permit. The PROGRAM MANAGER will perform the following activities to complete this subtask:

- Obtain and assess oceanographic data on density stratification and currents, combined with diffuser and effluent modeling results from the hydraulic assessment, for modeling dilution from the existing outfall and diffusers. Assess worst case and typical conditions, specifically focusing on density stratification, and taking currents into account if data on currents are available.
- Take measurements of density stratification and currents if no data is available.
- Perform dilution simulations for average and peak dry weather flows.
- Perform hydraulic analyses for up to three (3) alternate diffuser configurations using the hydraulic model developed in Subtask 14.3.
- Perform up to three (3) dilution simulations for each alternate diffuser configuration.
- Recommend diffuser configuration modifications (i.e., number of ports, orientation, spacing, etc.) to meet dilution and environmental criteria.
- Prepare a draft technical memorandum that documents the results of the hydraulic assessment. Conduct a workshop with the CITY to review the technical memorandum and to receive CITY comments. Prepare a final technical memorandum and submit it to the CITY.

Subtask 14.5 – Outfall Management Plan Report

The purpose of this subtask is to summarize the findings from the condition assessment, hydraulic analysis, and dilution modeling. This report will provide recommendations for improvements correct any defects for the pipeline, diffusers, or any hydraulic deficiencies. The final report will incorporate any comments from the previous technical memoranda and will be submitted to the CITY.

Task 14 Deliverables:

- Draft and Final Outfall Assessment Plan
- Draft and Final Outfall Management Plan
- Agenda and meeting minutes for the Condition Assessment Workshop

Task 14 Assumptions:

- NA

Task 15 – Coastal Development Permit Compliance

While a CDP has been approved by the CCC for the PROJECT, it has been granted subject to a number of special conditions. Specifically, the permit includes requirements that must be met before the CDP can be issued, before construction can be started, and prior to operation of the new WRF. This task includes completion of the plans identified in the special conditions that must be completed before issuance of the CDP and before construction can be started.

Subtask 15.1 – Revised Final Plans

Prior to the issuance of the CDP, the CITY is required to prepare and submit the Revised Final Plans to the CCC for review. As defined in the NOI for Permit No. 3-19-0463, the Revised Final Plans must show the following required changes and clarifications to the PROJECT:

- WRF Approved Development Envelope
- WRF Design
- Pump Stations and Related Development Design
- Landscaping
- Lighting Minimized
- Windows and Other Surfaces
- Utilities
- Storm Water and Drainage

PROGRAM MANAGER will complete a Draft Revised Final Plans package for review by the CITY. Following review by CITY staff, the PROGRAM MANAGER will incorporate the CITY's comments and produce the Final Revised Final Plans package. The PROGRAM MANAGER will also deliver the Final Revised Design Plans package to the CCC.

Subtask 15.2 – Construction Plan

Prior to the issuance of the CDP, the CITY is required to prepare and submit the Construction Plan to the CCC for review. As defined in the NOI for Permit No. 3-19-0463, the Construction Plan must include, at a minimum, the following components:

- Grading
- Construction Areas
- Construction Methods and Timing
- Traffic Control Plan
- Property Owner Consent
- Best Management Practices
- Post-Construction
- Construction Site Documents
- Construction Manager
- Construction Specifications
- Notifications

PROGRAM MANAGER will complete a Draft Construction for review by the CITY. Following review by CITY staff, the PROGRAM MANAGER will incorporate the CITY's comments and produce the Final Construction Plan. The PROGRAM MANAGER will also deliver the Final Construction Plan to the CCC.

Subtask 15.3 – Recycled Water Management Plan

Prior to the construction of the WRF, the CITY is required to prepare and submit the Recycled Water Management Plan to the CCC for review. As defined in the NOI for Permit No. 3-19-0463, the objective of the Recycled Water Management Plan is to ensure the maximum amount of recycled water is produced and used for beneficial reuse purposes, including injected underground in locations that will maximize its ability for groundwater replenishment and IPR.

PROGRAM MANAGER will complete a Draft Recycled Water Management Plan for review by the CITY. Following review by CITY staff, PROGRAM MANAGER will incorporate the CITY's comments and produce the Final Recycled Water Management Plan. The PROGRAM MANAGER will also deliver the Final Recycled Water Management Plan to the CCC.

Task 16 - Operations Support

It is critical that the CITY work closely with DDW and demonstrate continual compliance during the duration of the PROJECT implementation as DDW is the entity that will ultimately permit the advanced treatment facility for IPR. At this time, the CITY is in need of a California certified Grade III or higher potable water distribution operator to perform the following as-needed functions:

- Act as and be listed with the State as the chief distribution system operator (i.e., designated operator)
- Participate in a weekly conference call with the CITY's Utilities Manager and operations staff to discuss distribution system activities, performance, polices, etc.
- Perform a monthly site visit to review the distribution system activities and the monthly report.
- As-needed telephone consultation in the event of a system failure or operational challenge
- Review design information and provide comments regarding the PROJECT as it relates to the potable water distribution system

Task 17 - Recycled Water Facilities Preliminary Design

For the RECYCLED WATER FACILITIES, the CITY will construct up to four (4) new injection wells at either the West or East injection area. Based on the information obtained from the PROJECT hydrogeologist, the PROGRAM MANAGER will prepare the preliminary design for the preliminary design of the RECYCLED WATER FACILITIES. Preliminary design will include defining project components required to meet specific project objectives; determining the basis of design; verifying site conditions to understand opportunities and constraints that may be imposed upon the project and its design; preparing schematic drawings to determine general scope, preliminary design, scale, and relationships among project components; preparing an opinion of probable construction cost; and preparing the Preliminary Design Report (PDR). This task does not currently include surveying of either of the proposed well sites or the geotechnical investigation that will ultimately be required for final design of these facilities. Rather for the PDR, existing information will be used to develop the civil, structural, mechanical, electrical, and instrumentation design criteria.

Task 17 Deliverables:

- Draft and Final RECYCLED WATER FACILITIES PDR

Task 18 - WRF Construction Support

PROGRAM MANAGER's role during Phase 3 of the WRF component of the PROJECT will shift from an engineering-focus to a construction and commissioning oversight, auditing, and support focus. All field and office-related activities during Phase 3 will be coordinated by the PROGRAM MANAGER. Core design oversight team members will continue to provide engineering office support and commissioning support accordingly.

PROGRAM MANAGER's level of effort defined for the various tasks herein is based on the time between the Construction Notice-to-Proceed (anticipated to be September 15, 2019) to the DB TEAM for the start of construction through commissioning. The level of effort for this Scope of Services is for the first approximately ten (10) months of construction. Efforts by the PROGRAM MANAGER after June 30, 2020 will be covered by a future Scope of Services amendment (July 01, 2020 to June 30, 2021). A final Scope of Services amendment will cover the final period (July 01, 2021 to June 30, 2022) of construction, commissioning, punch list, and contract close-out support.

Task 18.1 - Pre-Construction Conference

PROGRAM MANAGER will schedule, coordinate, and conduct one (1) pre-construction conference. The PROGRAM MANAGER will prepare an agenda in advance to notify attendees of key items for discussion, and will prepare and distribute meeting notes to attendees.

Subtask 18.2 - Construction Oversight Services

PROGRAM MANAGER will provide a CONSTRUCTION MANAGER (i.e., Subconsultant: Mimiaga Engineering Group) to oversee all field activities for the PROGRAM MANAGER. The CONSTRUCTION MANAGER will be the central liaison for communication between the PROGRAM MANAGER/CITY and the DB TEAM's Construction Manager. The CONSTRUCTION MANAGER will be provided on-site full-time starting with the Construction Notice to Proceed as required by the CITY's CDP Special Condition No. 2 (Construction Plan). PROGRAM MANAGER's CONSTRUCTION MANAGER's level of effort for this task assumes the following:

- 24 hours per week during the first month (September 2019)
- 40 hours per week during heavy construction (October 2019 through June 2020)

CONSTRUCTION MANAGER will provide contract administration as an agent of the CITY, and will assist in establishing and implementing coordination and communication procedures among the PROGRAM MANAGER, CITY, and DB TEAM.

PROGRAM MANAGER will work with CITY and DB TEAM to identify potential changes, mitigate if possible, determine appropriate change procedure, evaluate DB TEAM's basis for proposed price and schedule adjustment, negotiate changes to Exhibit B of the DB TEAM's agreement, and recommend change action to the CITY. CONSTRUCTION MANAGER will maintain regular communication with the DB TEAM to identify and manage potential changes early.

PROGRAM MANAGER will attempt to resolve any dispute with the DB TEAM in an effort to avoid claims. An escalation matrix will be developed identifying appropriate levels of authority and time allowed for resolution at each level prior to escalation.

PROGRAM MANAGER will receive and evaluate the DB TEAM's claims, including claims of differing site conditions or extra work. PROGRAM MANAGER will respond to notification of claims in accordance with the DB TEAM's agreement, and inform the CITY on a timely basis.

PROGRAM MANAGER will be familiar with all Contract Documents for the WRF component of the PROJECT. PROGRAM MANAGER will have responsibility for enforcing the requirements of the Contract Documents by use of the tools available in Article 8 of the Contract Documents. The CONSTRUCTION MANAGER will provide interpretations and clarifications of Contract Documents.

PROGRAM MANAGER will utilize its own staff for general administrative support in the field (e.g., clerical and word processing support). PROGRAM MANAGER's CONSTRUCTION MANAGER will coordinate with the DB TEAM to assist with establishing the CITY/PROGRAM MANAGER's field office facilities, maintain office supplies, manage supply contracts, verify invoices, coordinate correspondence, and provide customer service to visitors.

PROGRAM MANAGER's CONSTRUCTION MANAGER will manage construction records for the CITY electronically using the SharePoint PMIS, including files for correspondence, reports, Contract Documents, Change Documents, clarifications, and interpretations of the Contract Documents, progress reports, and other PROJECT-related documents. PROGRAM MANAGER and CITY will provide chain-of-authority to release

documents for construction; review DB TEAM management of documents and record drawings; review DB TEAM management of shop drawing reviews, material delivery inspections, etc.; and provide PROJECT record documents to CITY for filing in accordance with CITY procedures.

Subtask 18.3 - Construction Inspection Services

XXX

Subtask 18.4 - Special Inspections and Testing

XXX

Subtask 18.5 - Construction Progress Reporting

PROGRAM MANAGER will review and comment on the DB TEAM's monthly status reports that summarize the previous month's construction activities, and include a schedule of the planned versus actual work completed, summaries of change orders and claims, and a cost summary of budgets and expenditures for construction. The report shall include Change Orders (COs) issued, potential changes orders (PCOs), and PCO and CO amounts. This information will be incorporated into the progress reports developed as part of Task 8.2.

On a quarterly basis, PROGRAM MANAGER will prepare a report to the CWSRF program that summarizes the following information (at a minimum):

- Summary of progress to date including a description of progress since the last report, percent construction complete, percent contractor invoiced, and percent schedule elapsed
- Description of compliance with environmental requirements
- Listing of COs including amount, description of work, and change in contract amount and schedule
- Any problems encountered, proposed resolution, schedule for resolution, and status of previous problem resolutions

Subtask 18.6 - Construction Progress Meetings

CONSTRUCTION MANAGER will attend weekly construction meetings conducted by the DB TEAM. CONSTRUCTION MANAGER will review the DB TEAM's meeting minutes and provide comments back to the DB TEAM. The PROGRAM MANAGER will attend meetings monthly.

Subtask 18.7 - Project Signage

PROGRAM MANAGER will prepare and procure project signage that meets the requirements of the CWSRF and WIFIA programs and any CITY requirements. An allowance of \$5,000 has been budgeted for this task to cover the cost of signage at the WRF site.

Subtask 18.8 - Construction Control Plan Review

PROGRAM MANAGER will assist CITY with review of various construction control plan documents that are developed and submitted by the DB TEAM to ensure conformance with the conditions of the DB TEAM's agreement. PROGRAM MANAGER will provide written comments, compile CITY'S comments, and develop a Comments and Response Log for all relevant deliverables for distribution back to the DB TEAM. Where necessary, CONSTRUCTION MANAGER will retain the services of a subconsultant (ESA) to assist with developing and reviewing the environmental control documents.

The following construction control plan submittals are included in the DB TEAM's agreement:

- Health and Safety Plan
- Data and Document Management Plan
- Environmental Management Plan
- Construction QA/QC Plan
- Design Builders Construction Management Plan
- Stormwater Pollution Prevention Plan (SWPPP)

Subtask 18.9 - Monthly Progress Payment Review

PROGRAM MANAGER will evaluate the DB TEAM's monthly progress payment requests and recommend payment by the CITY if requirements are met. PROGRAM MANAGER will compare requested quantities to the actual quantities completed and negotiate the appropriate progress payment request with the DB TEAM.

Task 18.10 - Certified Payroll Review

PROGRAM MANAGER will review the DB TEAM's certified payroll for compliance with prevailing wage requirements. Any discrepancies will be identified and returned to the DB TEAM for immediate correction. Violations will be addressed in accordance with the State Labor Code. PROGRAM MANAGER will also conduct interviews with select DB TEAM field personnel to confirm payroll conditions. The certified payroll findings will be included in the monthly project progress reporting described in Tasks 8.2 and 18.3. Efforts from this task will ensure the DB TEAM is meeting the SRF Davis-Bacon requirements. PROGRAM MANAGER will require the DB TEAM to maintain records on site and periodically check records for completeness and accuracy.

Task 18.11 - SRF and WIFIA Payment Reimbursement Requests Preparation

Upon completion of certified payroll checks and progress payment processing, PROGRAM MANAGER will prepare a monthly reimbursement request in a form acceptable to the CWSRF and WIFIA programs to the CITY for approval and signature. PROGRAM MANAGER will also submit the reimbursement request to CWSRF and WIFIA on behalf of the CITY.

Task 18 Assumptions:

- DB TEAM will arrange, prepare for, and lead weekly progress meetings attended by the CONSTRUCTION MANAGER.

Task 18 Deliverables:

- Development and maintenance of a Dispute Escalation and Resolution Matrix on the PMIS.
- Orderly maintenance of files for correspondence, reports, Contract Documents, Change Documents, clarifications, and interpretations of the Contract Documents, progress reports, and other PROJECT-related documents on the SharePoint PMIS.
- Review of ten (10) of the DB TEAM's monthly status reports.
- Processing of ten (10) Applications for Payment, which includes review, verification, and process of the application.
- Meeting agenda and minutes for the Pre-Construction Conference.
- CONSTRUCTION MANAGER will record minutes for the weekly progress meetings and distribute electronic copies within seven (7) calendar days after meeting to participants and others affected by decisions made within the meeting.
- CONSTRUCTION MANAGER will provide written comments, compile CITY'S comments, and develop a Comments and Response Log for the various construction control plans for distribution back to the DB team.

**EXHIBIT B - DETAILED LEVEL OF EFFORT
CITY OF MORRO BAY
WATER RECLAMATION FACILITY PROJECT
PROGRAM MANAGEMENT - AMENDMENT NO. 2
August 29, 2019**

Tasks	Task and Sub-Task Description	KEY STAFF						SUPPORT STAFF														Total Labor Hours	Total Labor Cost	PECE	Other Direct Costs Reimbursables (ODCs)	Subconsultants (K&A)	Subconsultants (Dr. Roberts)	Subconsultants (Doug Coats)	Subconsultants (Rincon)	Subconsultants (URS)	Subconsultants (Earth Systems)	Subconsultants (Mimaga)	Subconsultants (Vet)	Subconsultants	TOTAL PROJECT COSTS				
		PM	Procurement Finance	Technical	Controls	Permitting	CM	Controls	Technical	Technical	Technical	Technical	Technical	Inspector	Assistant CM	Technical	Technical	Permitting	Permitting	Controls	Assistant CM															Technical/ Permitting/ Funding	WRF Labor Compliance		
PHASE 2 - PROJECT IMPLEMENTATION		Casares	Ribner	Salveson	Baker	Holmes	Wariner	Crosby	Gilmore	Yellaly	Wright	Amico	Camo	Inspector	Erp	Ducker	Flaher	Kranz	CAD	Winer	Infern	TED	Pailla													1.1			
Task 6	Routine Project Update Meetings	368	48	48	8	0	24	40	48	0	0	48	0	0	0	0	0	0	0	40	0	0	64	736	\$191,392	\$8,832	\$28,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$229,024	
6.1	Project Update Meetings	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	\$10,840	\$480	\$7,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,920		
6.2	Internal Project Status Meetings	40	40	40	0	0	16	40	40	0	0	40	0	0	0	0	0	0	0	0	0	0	0	296	\$80,552	\$3,552	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$84,104	
6.3	City Council Meetings	240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	264	\$68,016	\$3,168	\$11,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82,984		
6.4	Project Monitoring and Reporting	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	80	\$15,800	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,760		
6.5	WRF Onsite Design-Build Pre-Construction Meeting	8	8	8	8	0	8	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	56	\$16,184	\$672	\$9,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,256		
Task 7	Program Management Oversight	80	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	33,360	\$1,440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,800		
	Program Management Oversight	80	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	33,360	\$1,440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,800		
Task 8	Project Controls	160	80	0	120	0	0	240	0	0	0	0	0	0	0	0	0	0	0	160	0	120	80	960	\$225,720	\$11,520	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$240,240	
8.1	PMIS Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
8.2	Project Monitoring and Reporting	160	80	0	120	0	0	240	0	0	0	0	0	0	0	0	0	0	0	160	0	120	80	960	\$225,720	\$11,520	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$240,240	
Task 9	Funding Support	120	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	200	0	368	\$83,936	\$4,416	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$88,352	
9.1	Master Water Reclamation Plan Completion Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
9.2	Title XVI Crosswalk Document	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
9.3	WIFIA Funding Support	40	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	120	0	184	\$40,288	\$2,208	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42,496	
9.4	CWSRF Funding Support	80	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	80	0	184	\$43,648	\$2,208	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,856	
Task 10	Permitting Support	96	0	24	0	40	0	0	0	0	0	40	0	0	0	0	0	0	120	0	0	80	16	416	\$100,808	\$4,992	\$4,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,000	
10.1	Land Use Permitting	80	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	80	16	216	\$50,304	\$2,592	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,896	
10.2	Potable Reuse Permitting	16	0	24	0	40	0	0	0	0	0	0	0	0	0	0	0	0	120	0	0	0	0	200	\$50,504	\$2,400	\$4,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57,104		
10.3	SAFE System	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Task 11	Public Outreach	40	0	0	0	0	0	0	0	0	0	160	0	0	0	0	0	0	0	0	0	0	0	200	\$57,560	\$2,400	\$18,000	\$0	\$0	\$0	\$0	\$0	\$0	\$151,000	\$166,100	\$244,060			
11.1	Public Outreach Plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,800		
11.2	Public Outreach (FY 18/19)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
11.3	Monthly Coordination Meetings	24	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	64	\$18,184	\$768	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,000	\$30,800	\$57,752		
11.4	Public Outreach (FY 19/20)	16	0	0	0	0	0	0	0	0	0	120	0	0	0	0	0	0	0	0	0	0	0	136	\$39,376	\$1,632	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$105,000	\$115,500	\$166,508			
Task 12	Conveyance Facilities Design Oversight	32	0	0	0	0	0	0	0	0	0	104	0	0	0	0	0	0	0	0	0	40	0	176	\$46,520	\$2,112	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,632	
12.1	General Design Oversight Services	24	0	0	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	40	0	144	\$37,344	\$1,728	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,472	
12.2	Subsurface Utility Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
12.3	Bidding Support Services	8	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	32	\$9,176	\$384	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,160	
Task 13	WRF Onsite Design-Build Support	24	0	40	0	0	0	0	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	184	\$48,184	\$2,208	\$10,850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,242	
13.1	Design-Build Team Kick-Off Meeting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
13.2	Design-Build Team Meetings	16	0	16	0	0	0	0	16	16	16	0	0	0	0	0	0	0	0	0	0	0	0	80	\$21,008	\$960	\$5,050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,018	
13.3	Design Oversight	8	0	24	0	0	0	0	24	24	24	0	0	0	0	0	0	0	0	0	0	0	0	104	\$27,176	\$1,248	\$5,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,224	
13.4	Major Equipment Procurement Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
13.5	Major Subconsultant Procurement Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
13.6	Process Site Visits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Task 14	Outfall Management Plan	72	0	0	0	0	0	0	0	0	0	200	0	0	0	0	0	0	0	40	0	0	224	40	576	\$133,920	\$6,912	\$2,600	\$0	\$31,200	\$10,120	\$21,500	\$83,000	\$0	\$0	\$0	\$0	\$160,402	\$303,834
14.1	Condition Assessment	16	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	136	\$30,976	\$1,632	\$1,600	\$0	\$0	\$0	\$21,500	\$83,000	\$0	\$0	\$0	\$0	\$114,950	\$148,158	
14																																							

**CITY OF MORRO BAY
WATER RECLAMATION FACILITY PROJECT
PROGRAM MANAGEMENT - AMENDMENT NO. 2
August 29, 2019**

Tasks	Task and Sub-Task Description	KEY STAFF						SUPPORT STAFF														Total Labor Hours	Total Labor Cost	PECE	Other Direct Costs Reimbursable (ODCs)	Subconsultants (KMA)	Subconsultants (Dr Roberts)	Subconsultants (Doug Coats)	Subconsultants (Rincon)	Subconsultants (UW)	Subconsultants (Earth Systems)	Subconsultants (Minnage)	Subconsultants (Katz)	Subconsultants	TOTAL PROJECT COSTS											
		PM	Procurement/Finance	Technical	Controls	Permitting	CM	Controls	Technical	Technical	Technical	Technical	Technical	Inspector	Assistant CM	Technical	Technical	Permitting	Funding	Controls	Assistant CM															Technical Payroll Funding	WFL Labor Compliance									
PHASE 3 - PROJECT OVERSIGHT																																														
Task 18	WRF Construction Support	68	80	0	0	0	84	0	0	0	0	0	0	0	304	152	0	0	0	0	0	0	0	0	244	0	468	1,400	\$314,308	\$16,800	\$34,000	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$297,480	\$0	\$382,228	\$747,336			
18.1	Pre-Construction Conference	4	0	0	0	0	4	0	0	0	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	4	0	0	24	\$6,164	\$288	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,480	\$0	\$1,628	\$8,880
18.2	Construction Oversight Services	0	0	0	0	0	24	0	0	0	0	0	0	0	0	120	0	0	0	0	0	0	0	0	0	200	0	0	344	\$89,048	\$4,128	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$164,280	\$0	\$180,708	\$293,884
18.3	Construction Inspection Services	0	0	0	0	0	0	0	0	0	0	0	0	0	260	0	0	0	0	0	0	0	0	0	0	0	0	260	\$75,920	\$3,120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,985	\$0	\$16,484	\$95,524	
18.4	Special Inspections and Testing	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	40	\$11,680	\$480	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$14,985	\$0	\$71,484	\$83,644
18.5	Construction Progress Reporting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	40	\$11,680	\$480	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,985	\$0	\$16,484	\$33,644	
18.6	Construction Progress Meetings	40	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	\$22,520	\$960	\$3,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29,970	\$0	\$32,967	\$59,647	
18.7	Project Signage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	\$992	\$96	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,960	\$0	\$3,256	\$9,344		
18.8	Construction Control Plan Review	0	0	0	0	0	16	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	40	\$9,400	\$480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,880	\$0	\$9,768	\$19,648
18.9	Monthly Progress Payment Review	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	\$11,680	\$480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,985	\$0	\$16,484	\$28,644	
18.10	Certified Payroll Review	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	460	\$57,040	\$5,520	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,985	\$0	\$16,484	\$79,044		
18.11	SRF and WIFIA Payment Reimbursement Requests Preparation	24	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	\$18,184	\$768	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,985	\$0	\$16,484	\$35,436		
TOTAL FEE		1,128	248	128	128	64	108	280	88	40	40	744	160	304	152	120	40	120	80	200	244	844	780	6,040	\$ 1,430,892	\$ 72,480	\$ 128,250	\$ 20,000	\$ 31,200	\$ 10,120	\$ 21,500	\$ 83,000	\$ 30,000	\$ 297,480	\$ 151,000	\$ 708,730	\$ 2,340,352									



CITY OF MORRO BAY
WATER RECLAMATION FACILITY PROGRAM
PROGRAM MANAGEMENT - AMENDMENT NO. 2 (PHASE 2-3)
SUMMARY AND FISCAL YEAR BREAKDOWN



Task	Description	Contract Amount				Comparison to \$126M Program Budget		Allocation					
		Original	Amendment No. 1	Amendment No. 2	Total	Total	Difference	FY18/19	FY19/20	FY 20/21	FY 21/22	Total	
Task 1	Program Assessment	\$ 35,235			\$ 35,235	\$ 35,000	\$ (235)	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ 35,000
Task 2	Technical Evaluation	\$ 47,748			\$ 47,748	\$ 48,000	\$ 252	\$ 48,000	\$ -	\$ -	\$ -	\$ -	\$ 48,000
Task 3	Design-Build Procurement Support	\$ 95,181			\$ 95,181	\$ 95,000	\$ (181)	\$ 95,000	\$ -	\$ -	\$ -	\$ -	\$ 95,000
Task 4	Program Controls Plan	\$ 54,316			\$ 54,316	\$ 54,000	\$ (316)	\$ 54,000	\$ -	\$ -	\$ -	\$ -	\$ 54,000
Task 5	Program Team Integration Plan	\$ 27,561			\$ 27,561	\$ 28,000	\$ 439	\$ 28,000	\$ -	\$ -	\$ -	\$ -	\$ 28,000
Task 6	Routine Project Update Meetings	\$ 31,854	\$ 188,447	\$ 229,024	\$ 449,325	\$ 2,282,000	\$ 1,377,650	\$ 407,000	\$ 750,000	\$ 750,000	\$ 375,000	\$ -	\$ 2,282,000
Task 7	Program Management Oversight		\$ 17,389	\$ 34,800	\$ 52,189								
Task 8	Project Controls		\$ 162,596	\$ 240,240	\$ 402,836								
Task 9	Funding Support		\$ 77,632	\$ 88,352	\$ 165,984	\$ 600,000	\$ 434,016	\$ 100,000	\$ 162,500	\$ 225,000	\$ 112,500	\$ -	\$ 600,000
Task 10	Permitting Support		\$ 499,242	\$ 110,000	\$ 609,242	\$ 685,923	\$ 76,681	\$ 192,962	\$ 330,462	\$ 125,000	\$ 37,500	\$ -	\$ 685,923
Task 11	Public Outreach		\$ 181,246	\$ 244,060	\$ 425,306	\$ 287,500	\$ (137,806)	\$ 100,000	\$ 75,000	\$ 75,000	\$ 37,500	\$ -	\$ 287,500
Task 12	Conveyance Facilities Design Oversight		\$ 107,478	\$ 52,632	\$ 160,110	\$ 105,000	\$ (55,110)	\$ 30,000	\$ 41,250	\$ 22,500	\$ 11,250	\$ -	\$ 105,000
Task 13	WRF Onsite Design-Build Support		\$ 372,918	\$ 61,242	\$ 434,160	\$ 367,500	\$ (66,660)	\$ 105,000	\$ 144,375	\$ 78,750	\$ 39,375	\$ -	\$ 367,500
Task 14	Outfall Management Plan			\$ 303,834	\$ 303,834	\$ -	\$ (303,834)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Task 15	Coastal Development Permit Compliance			\$ 54,228	\$ 54,228	\$ -	\$ (54,228)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Task 16	Operations Support			\$ 21,132	\$ 21,132	\$ -	\$ (21,132)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Task 17	Recycled Water Facilities Preliminary Design			\$ 153,472	\$ 153,472	\$ 150,000	\$ (3,472)	\$ 100,000	\$ 50,000	\$ -	\$ -	\$ -	\$ 150,000
Task 18	WRF Construction Support			\$ 747,336	\$ 747,336	\$ 2,500,000	\$ 1,752,664	\$ -	\$ 500,000	\$ 1,000,000	\$ 1,000,000	\$ -	\$ 2,500,000
Total		\$ 31,854	\$ 1,606,948	\$ 2,340,352	\$ 3,979,154	\$ 6,977,923	\$ 2,998,769	\$ 1,034,962	\$ 2,053,587	\$ 2,276,250	\$ 1,613,125	\$ -	\$ 6,977,923