

Master City of San José Consultant Agreement Approved Service Order Form – RWF Capital Projects Cover Page

1a. CPMS Contract No.: 9850 1b. Master Agreement AC Contract No.: 29225

2. Approved Service Order No. 7

3. Consultant's Name: Black & Veatch Corporation ("Consultant")

4. Project Name: Design and Bid and Award Services for the Yard Piping Improvements - Phase 2 Project

5. Project Location: San José-Santa Clara Reginal Wastewater Facility ("RWF")

6. The Consultant and the City will implement this Approved Service Order in accordance with the Master Agreement, this cover page and Attachments "A" (Tasks), "B" (Terms and Conditions), and "C" (Compensation Table), which are incorporated herein by references.

7. Budget/Fiscal:

a. Current unencumbered amount in Master Agreement:	\$	3,953,829.73
b. Maximum Service Order Compensation for this Approved Service Order:	\$	920,700.00
c. New unencumbered balance in Master Agreement (7.a – 7.b):	\$	3,033,129.73

d. **Appropriation Certification:** I certify that an unexpended appropriation in the amount of the Maximum Service Order Compensation is available in the following fund(s) and that such fund(s) will be encumbered to pay for this Approved Service Order.

Fund: 512	Appn: 7396	RC: 207043	Amount: \$	845,480.00
Fund: 512	Appn: 7396	RC: 207044	Amount: \$	75,220.00
Fund: _____	Appn: _____	RC: _____	Amount: \$ _____	

Authorized Signature: *Harpal Singh* Date: Mar 3, 2022

8. **Division Analyst Approval:** *Mary Crippen* Date: Mar 3, 2022

9. **Consultant Approval:** *[Signature]* Date: Mar 2, 2022
Craig Eickhoff (Mar 2, 2022 16:05 PST)

10. **Approval as to Form (City Attorney):**

Service Order Form Approved by the Office of the City Attorney
 (There are no material changes to the provisions of the Approved Service Order Form.)

Approved as to Form: _____ Date: _____
 (Sr.) Deputy City Attorney

11. **City Director Approval:** *Napp Fukuda* Date: Mar 3, 2022
Napp Fukuda (Mar 3, 2022 13:28 PST)

[Signature] Mar 3, 2022

Attachment A: Tasks

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's Contract Manager.

General Description of Project for which Consultant will Provide Services:

The RWF has 67,000 linear feet (LF) of wastewater process pipes ("process pipes") that carry raw sewage, liquids, and sludge between the various unit treatment process areas. Process pipes at the RWF vary in age, material, condition, reliability, redundancy, and diameter (from 8 inches to 144 inches). Rehabilitation or replacement of the process piping has been subdivided into phases to better align condition assessment and rehabilitation work with planned maintenance shutdowns.

The objective of this Service Order No. 7 ("SO") is for the Consultant to provide preliminary design, detailed design, and bid and award support services for the Yard Piping Improvements - Phase 2 Project ("Project"). The Project will rehabilitate pipe segments identified during condition assessments performed by the Consultant between 2019 and 2021. The following pipes and structures are planned to be rehabilitated as part of the Project:

- 48-inch Santa Clara Force Main from the Daylight Box to Santa Clara Structure 1;
- 120-inch Raw Sewage from the Emergency Overflow Basin to Santa Clara Influent Structure 2;
- 96-inch Raw Sewage from the Raw Sewage Mixing Structure to East Primary Influent Structure;
- 84-inch Primary Effluent from Manhole 1 downstream of Primary Effluent Junction Box to the Primary Effluent Metering Vault continuing to the Primary Effluent Pumping Station;
- Nitrification Influent Junction Box top concrete slab including upstream portion of 102-inch Nitrification Influent pipelines serving A-Side and B-Side;
- 42-inch Mixed Liquor pipelines serving A-Side Nitrification Clarifiers;
- 84-inch Secondary Effluent B-Side from 66-inch Secondary Influent at Junction Box 2 to Junction Box 4 upstream of AB Isolation Structure;
- 66-inch Plant Drain from Manhole 1 located near the Environmental Services Building to the Milpitas Influent Control Structure, and;
- Effluent Junction Structures #1, #2, Fish Screening Structure and South Wet Well of the Filtration Influent Pump Station ("FIPS").

This SO consists of the following tasks.

- Task No. 1: Project Management
 - Task No. 2: Preliminary Design (50 percent) Services
 - Task No. 3: Detailed Design (100 percent) Services
 - Task No. 4: Bid and Award Support Services
 - Task No. 5: Additional Services (Optional)
-

Task No. 1: Project Management

- A. Services:** Consultant's Project Manager ("PM") shall make staffing assignments, review and track work progress, coordinate quality management and review procedures, and serve as the primary point of contact when communicating with the City. Consultant's PM shall manage the budget, schedule, and invoicing. Consultant's PM shall also prepare and maintain a log to record decisions made by City throughout the Project and manage the quality of deliverables.

Consultant shall use the document management systems used by the RWF CIP. The systems currently include a Microsoft SharePoint site referred to as the CIP Portal and a construction management document control software called EADOC.

Consultant shall follow the City's templates and guidelines. The deliverables submitted by Consultant shall conform to the City's templates and guidelines. The City will provide access to these templates and guidelines no later than ten (10) Business Days following the Kickoff Meeting. The templates and guidelines currently available include the following:

- CIP Cost Estimating Manual;
- Design Guidelines;
- Division 0 and Division 1 Specifications;
- Meeting Agenda;
- Meeting Minutes;
- Project Decision Log ("PDL");
- Project Quality Plan;
- Quality Management Certification;
- Quality Review Form;
- Risk Matrix and Assessment;
- Technical Memorandum;
- Technical Report;

Consultant shall perform the following project management activities.

1. Daily Oversight: Consultant shall oversee the daily management of scope, deliverables, schedule, and budget.
2. Coordination: Consultant shall coordinate work with internal staff, subconsultants, City staff, and other City consultants as appropriate and necessary. All work performed and all work products should be coordinated with other CIP projects currently underway to avoid duplication, confusion, and conflicts.
3. Teleconferences: Consultant shall participate in status teleconferences every two weeks with the City to discuss overall work progress and the status of near-term efforts and requirements. Communication that is more frequent may occur if necessary, and as requested by the City's Contract Manager.
4. Project Work Plan: Consultant shall prepare and submit a Project Work Plan ("PWP") detailing tasks to be performed, schedule, deliverables (including their requirements and resources needed), and risk management plan. The PWP does not need to be updated monthly.
5. Project Schedule: Consultant shall prepare and maintain a Project schedule utilizing the Critical Path Method technique and electronic scheduling software (e.g., Primavera or Microsoft Project). The schedule shall adopt a work breakdown structure that reflects the Project scope and that is based on City Business Days for activity durations (i.e., start and finish dates) and link activities with the appropriate logic (i.e., predecessors and successors). The schedule shall include required constraints, sequences, milestones, and a baseline to track actual progress

- to date and anticipated future performance. No changes shall be made to the baseline without approval from the City's Contract Manager. As appropriate, Consultant shall summarize significant changes in the updated schedule from the previous submitted schedule and propose corrective actions to mitigate negative variances (i.e., delays) to the baseline as soon as they are identified. Consultant shall update the schedule on a monthly basis and submit the updated schedule with the summary of significant changes and proposed corrective actions along with Monthly Progress Reports.
6. Health and Safety Plan: Consultant shall update the Health and Safety Plan ("HASP") for the portion of Consultant's work that will involve field work, assessments, or investigations of certain Project elements. Consultant's HASP must comply with the CIP HASP and shall be updated as new conditions are encountered.
 7. Quality Management: Consultant shall develop and implement a Project-specific Quality Management Plan ("QMP") to support the execution of the work required by this SO. The QMP shall describe Consultant's overall quality management process, identify the quality reviewers and the review levels associated with each Project milestone and deliverable.
 - a. The quality management efforts that shall be addressed by Consultant in the QMP include:
 - o Coordinating work products, milestones, and staff assigned for review activities;
 - o Conducting milestone technical and readability reviews for deliverables;
 - o Documenting comments and work product modifications in the PDL; and
 - o Completing and submitting Quality Review Forms and Quality Management Certifications for draft and final deliverables.
 - b. Consultant's quality reviewers and their respective qualifications shall be identified in the QMP. Quality reviewers shall be independent (i.e., not part of Consultant's core team for the Project) and shall be qualified to provide technical reviews. Each deliverable shall be reviewed by quality reviewers for technical correctness, completeness, and readability prior to the submittal of the deliverable to the City. Consultant shall submit a Quality Management Certification signed by the quality reviewers confirming the quality review process was completed for each draft and final deliverable. The City may request Consultant to submit additional evidence that Consultant is following the procedures in the QMP.
 - c. Comments from the City's review of the Consultant's draft and final deliverables will be recorded on a Quality Review Form. Consultant shall review the City's comments, confirm with the City how Consultant shall address the comments in the next iteration of the deliverable, and then submit a Quality Review Form with responses to the City's comments.
 8. Kickoff Meeting: Consultant shall organize and facilitate a Kickoff Meeting with City staff. Consultant's PM and the appropriate Project team members shall attend the Kickoff Meeting. Topics to be discussed at the meeting shall include the following:
 - a. Introduction of key Consultant and City Project team members;
 - b. Presentation of Consultant's QMP;
 - c. Review of Consultant's understanding of the Project need and objectives;
 - d. Summary of Project scope, work plan, schedule, and deliverables;
 - e. Recap of previously completed analyses, studies, and reports associated with the Project;
 - f. Discussion of other CIP or maintenance projects underway and planned that may be dependent on and/or have implications for the Project;
 - g. Additional information Consultant has deemed relevant to or necessary for the Project; and

h. Confirmation of next steps.

Consultant shall prepare an agenda and meeting materials in advance of the Kickoff Meeting and shall prepare meeting minutes following the Kickoff Meeting.

9. Progress Meetings: Consultant shall organize and facilitate meetings every two weeks to discuss the Project's progress and any other issues as needed. Meetings shall be held unless otherwise determined by the City. Topics discussed at the meetings shall be determined in collaboration with the City. Consultant shall prepare agendas and meeting materials in advance of the meetings and shall prepare meeting minutes following each meeting.
10. Risk Register: Consultant shall prepare and maintain a risk register that identifies project risks, probabilities, mitigation measures, and ownership using the Program's Risk Matrix and Assessment template. The risk register shall list interfaces with other projects, possible schedule impacts, and contingency plans. The risk register shall be updated on a monthly basis and submitted with Monthly Progress Reports.
11. Project Decision Log: Consultant shall prepare and maintain a PDL that documents the City's comments and decisions made related to the Project and Consultant's work. As applicable, the PDL shall reference other documents such as meeting minutes, technical memoranda, and reports for all decisions made. The Consultant shall maintain the PDL and submit the current version with Monthly Progress Reports.
12. Monthly Progress Reports: Consultant shall prepare and submit a Monthly Progress Report by the tenth of each month, unless requested otherwise by the City's Contract Manager. The Monthly Progress Report shall be a brief written summary of the progress made on each task, estimate the overall task's percent completion, and include the status of each deliverable. The Monthly Progress Report shall also include any significant issues encountered, risks, or concerns Consultant has (e.g., anticipates difficulty meeting deadline for work due within the next 30 days for some reason beyond their control).
13. Monthly Invoices: Consultant shall prepare and submit invoices on a monthly basis by the tenth of each month, unless requested otherwise by the City's Contract Manager. The invoices shall be accompanied by the Monthly Progress Report that describes the work completed during the invoice's billing period.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. PWP:
 - a. A draft PWP shall be provided in an electronic editable file format within ten (10) Business Days from issuance of Notice to Proceed ("NTP"). Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
 - b. The final PWP addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
2. Schedule:
 - a. The initial schedule shall be provided in an electronic editable file format and PDF no later than the Kickoff Meeting.
 - b. Updated schedules, including summaries of significant changes and proposed corrective actions, shall be provided as an electronic editable file and as a PDF file submitted along with the Monthly Progress Reports.
3. HASP:
 - a. A draft HASP shall be provided in an electronic editable file format at least twenty (20) Business Days prior to first scheduled field work, assessment, or investigation. Consultant

- shall allow City a minimum of ten (10) Business Days to review, compile, and provide comments.
- b. The final HASP addressing City comments shall be provided as an electronic editable file and as a PDF file within ten (10) Business Days after receipt of City comments.
 - c. Updated plans shall be provided, as new conditions are encountered and/or as requested by the City.
4. QMP:
 - a. A draft QMP shall be provided in an electronic editable file format when the draft PWP is provided to City. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments. The draft QMP can be included in the draft PWP.
 - b. The final QMP addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments. The final QMP can be included in the final PWP.
 5. A completed Quality Management Certification shall be submitted along with each draft and final deliverable.
 6. A Quality Review Form with Consultant's responses to the City's comments shall be submitted within five (5) Business Days after receipt of City comments on the draft deliverable.
 7. Kickoff and progress meeting agendas and materials (e.g., handouts and presentation):
 - a. The draft agenda and materials shall be provided in an electronic editable file format five (5) Business Days in advance of the meeting date. Consultant shall allow City three (3) Business Days to review, compile, and provide comments.
 - b. The final agenda and materials addressing City comments shall be provided as electronic editable files and as PDF files no later than two (2) Business Days before the meeting. Consultant shall also provide sufficient printed copies of the final agenda and any handouts for meeting attendees.
 8. Kickoff and progress meeting minutes:
 - a. Draft minutes shall be provided in an electronic editable file format within five (5) Business Days after the meeting. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
 - b. Final minutes addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
 9. Risk Register:
 - a. The initial risk register shall be provided within 30 Business Days of the NTP in an electronic editable file format.
 - b. An updated risk register shall be provided monthly as an electronic editable file and as a PDF file with each Monthly Progress Report.
 10. PDL:
 - a. The initial PDL shall be provided within 30 Business Days of the NTP in an electronic editable file format.
 11. Monthly invoices shall be provided as a PDF file with the corresponding Monthly Progress Report, updated project schedule, updated PDL, and updated Risk Register.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following is marked:

- On or before the following date: June 30, 2023.
- On or before ____ Business Days from _____.

Task No. 2: Preliminary Design (50 percent) Services

A. Services: Consultant shall perform the following Preliminary Design Services activities.

1. The Consultant shall develop a Preliminary Design Report (“PDR”) at 50 percent design completion that confirms the Project’s design direction.

Consultant shall develop the Project’s design and prepare a PDR that will be used for the Project’s preliminary design. Consultant shall provide the draft PDR to the City for review and shall organize and facilitate a workshop with the City to present the draft report. Consultant shall address and incorporate City’s comments as well as input received during the workshop into the final PDR.

The consultant will employ a Professional Engineer registered in the State of California to sign and seal the final Preliminary Design Report. Upon the City’s acceptance of the final Preliminary Design Report, substantive changes to the Project’s design will only be permitted when authorized in writing by City. The Preliminary Design Report will be provided after completing the 50 percent design.

The PDR shall include the following sections.

1. Introduction
 - a. Background information;
 - b. Objectives and vision; and
 - c. Project design scope and an overview of the overall approach to the design.
2. Design Criteria—summary of the design criteria and redundancy considerations in design.
3. Regulatory and Agency Requirements—outline of the regulatory and agency requirements as well as the approval process required for the Project’s construction and operation.
4. Related and Supporting Studies—a brief overview of the related and supporting studies available for reference.
5. Hydraulic Profile—a preliminary hydraulic profile through the effluent junction structures.
6. Site Civil
 - a. Demolition and removals requirements;
 - b. Site grading;
 - c. Construction access and staging areas, including fencing and access gate(s); and
 - d. Stormwater management, sedimentation and erosion control.
7. Constructability
 - a. Identify the provision of temporary systems to maintain RWF operations during construction;
 - b. Address coordination of the construction in recognition of other construction projects underway or posed at the RWF, noting potential interferences, construction issues, etc.; and
 - c. Include pre-design of the demolition and decommissioning work required.

8. Schedule
 - a. Updated schedule for construction, commissioning, and post-construction services. Consultant shall incorporate reasonable timelines into the schedule for obtaining City approvals; and
 - b. Updated construction sequence with particular consideration to the sequence or phasing of construction required to minimize disruption to RWF operations.
9. Cost Estimates—a summary of the construction costs as well as an updated estimate of annual operational and maintenance costs. Construction costs shall be a Class 3 Opinion of Probable Construction Costs (“OPCC”) and be based on available quantity take-offs, manufacturers’ quotes, experience at other wastewater treatment facilities incorporating similar Project elements and shall be escalated to the mid-point of construction. The OPCC shall be prepared to a level of accuracy consistent with the standards of the AACE International, formerly known as the American Association of Cost Engineering and the Association for the Advancement of Cost Engineering, and the Program’s cost estimating guidelines. If the Class 3 OPCC exceeds the Class 5 OPCC developed in the Alternatives Analysis Report, Consultant shall include a summary explaining the cause(s) for such increase.
10. Appendices to include in PDR:
 - a. Pipe/Equipment lists;
 - b. Catalog cuts;
 - c. Summary of basic design data; and
 - d. Interim deliverables (e.g., workshops agendas and meeting minutes)
2. Consultant shall prepare the 50 percent design drawings depicting modifications and/or additions to be made to the existing facilities using the electronic record drawings furnished by the City or field photos taken by Consultant as background for the design drawings. Consultant shall develop a design package at the 50 percent design completion for the City to review. Complete the 50 percent design documents with the appropriate disciplines while clearly documenting all major design decisions agreed by the City. The Consultant shall resolve all outstanding issues from the Alternatives Analysis and use this report to prepare the 50 percent design documents.
3. Complete the technical specifications in Construction Specifications Institute (CSI) Master Format 2004 for this Project. The technical specifications shall include the City provided CIP standard Division 0 and Division 1 specifications. The Consultant shall amend these standard specifications with Project specific requirements as needed with City approval and append the technical specifications for the Project elements for which the City does not maintain its own current version. Consultant shall format the Project specifications to result in a unified document.
4. Review relevant existing geotechnical data available from soil borings provided by the City pertaining to the proposed pipeline rehabilitation design. Consultant shall provide areas of soil disturbances to the City to coordinate hazardous testing by the City’s representative and incorporate mitigation language into the Project specifications.
5. Develop the detailed drawings following the City’s computer-aided design (“CAD”) standards augmented with Consultant’s standards as approved by the City. The drawing set must include, without limitation: general, civil, and structural drawings.
6. Consultant shall organize and facilitate one (1), two-hour Design Progress Meeting Workshop as part of the 50 percent design to discuss Operations and Maintenance (O&M) constraints and timelines as well as to focus on startup and commissioning and other key topics as identified by the City. Consultant shall prepare an agenda and meeting materials in advance of the Design Progress Meeting and shall prepare meeting minutes following the meeting.

7. Conduct two (2) site visits. Site visits are assumed to be performed prior to 50 percent submittal to review existing conditions and obtain needed information. For efficiency, site visits are planned to be performed to coincide with design progress meetings or other previously scheduled site work.
8. Organize and facilitate one (1) 3-hour workshop with the City to present the 50 percent design package including key elements of the design, operational requirements and changes, maintenance requirements, construction sequencing, and anticipated construction impacts on RWF operations. As the City-owned temporary pumping system will be required for the repair work to be completed, the Consultant shall present coordination details of all interfaces and requirements for this system in the workshops. Consultant's PM and the appropriate project team members shall attend the workshop. The Consultant shall prepare the meeting agenda and materials in advance of the workshop and meeting minutes following the workshop. The meeting minutes shall include action items for the design development.
9. Perform an internal quality review and constructability review at the 50 percent level of completion with all comments made by the quality reviewers addressed and appropriately incorporated into the documents prior to submittal to City for review.
10. Utilizing the Quality Review Form, provide responses to the City's comments on the 50 percent design package. Respond to the list of comments and questions received from the City prior to the issuance of the subsequent design package. The City and Consultant will meet to agree that the responses prepared by Consultant are acceptable before the Consultant incorporates them into the applicable final design package.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. Preliminary Design Report:
 - a. Draft report provided as one (1) electronic editable file and as one (1) PDF file at least five (5) Business Days prior to Workshop. Consultant shall allow City a minimum of ten (10) Business Days following the Workshop to review, compile, and provide comments.
 - b. Final signed and sealed report addressing City comments as five (5) bound printed copies, one (1) electronic editable file, and one (1) PDF file within five (5) Business Days after receiving City's review comments on the PDR.
2. 50 Percent Design Package - Provided as eight (8) printed bound copies of documents from Item a – f and two (2) bound copies of all supporting documents in Item g, electronic editable files (e.g. CAD and Microsoft Word), and PDF files.
 - a. Specifications.
 - b. Drawings – Half-size (11"x17") for 50 percent design package.
 - c. Quality Management Certification - Completed by the quality reviewers for each design package.
 - d. Quality Review Form – Listing all previous City's comments and Consultant's responses of how comments will be incorporated into the 100 percent design package.
 - e. Class 3 OPCC and Basis of Cost Estimate Report.
 - f. Updated Construction Schedule.
 - g. All supporting documents related to design of the Project including, but not limited to, engineering calculations, equipment or catalog cut sheets, and back up for engineer's cost estimates shall be submitted by Consultant to the City as a bound document and cataloged per the appropriate engineering discipline with each review package.
3. Construction Sequencing Plan – Provided as a printed bound copy and a PDF file with 50 percent design package.

4. Design Progress Meeting Workshop Agenda and Material – Provided as an electronic editable file no later than three (3) Business Days before the workshop and sufficient printed copies of the agenda and any handouts and presentation for attendees.
5. Design Progress Meeting Workshop Minutes
 - a. Draft minutes provided as an electronic editable file within five (5) Business Days after the workshop. Consultant shall allow City a minimum of five (5) Business Days to review, compile and provide comments.
 - b. Final minutes addressing City comments provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following is marked:

- On or before the following date: June 30, 2023.
- On or before ____ Business Days from _____.

Task No. 3: Detailed Design (100 percent) Services

- A. Services:** Consultant shall prepare detailed design review packages at 100% (final) design completions. Consultant shall submit specifications and half-sized (11" x 17") drawings for the City's review. Design review packages shall include progressively more detailed design drawings and specifications from 50% to 100% (final) completion. Consultant shall coordinate the 50% design documents with the appropriate disciplines. At this point, all major design decisions should have been documented clearly by Consultant and agreed by the City, and all outstanding issues from the Preliminary Design Report must be resolved. The 100% design documents shall be functionally complete such that they are ready for final review and will only need minor adjustments prior to bidding.

This task includes the following services:

1. The Consultant shall resolve all outstanding issues from the Preliminary Design Report and the 50 percent design to use these to prepare Final Design contract documents complete such that they are ready for public bidding and construction.
2. Complete the technical specifications in Construction Specifications Institute (CSI) Master Format 2004 for this Project. The technical specifications shall include the City provided CIP standard Division 0 and Division 1 specifications. The Consultant shall amend these standard specifications with Project specific requirements as needed with City approval and append the technical specifications for the Project elements for which the City does not maintain its own current version. Consultant shall format the Project specifications to conform into a unified document.
3. Prepare a Class 2 OPCC at 100 percent design completion. Each OPCC must include accompanying Basis of Cost Estimate Reports. The OPCCs shall be based on available quantity take-offs, manufacturers' quotes, and experience at other wastewater treatment facilities incorporating similar Project elements and shall be escalated to the mid-point of construction. The OPCC shall be prepared to a level of accuracy consistent with the standards of the AACE International and the Program's cost estimating guidelines. The Consultant shall include a summary explaining the causes for the difference between the previous OPCCs developed.
4. Develop the detailed drawings using City's computer-aided design ("CAD") standards augmented with Consultant standards as approved by the City. Drawing set must include, without limitation: general, civil, and structural drawings.

5. Identify performance and equipment test requirements that will be imposed on the general contractor and incorporate the test requirements into the specifications.
6. Consultant shall prepare a process control strategy as defined in "City of San Jose Program Automation Requirements AG-RWF-008", Section 7.1 to cover the operation of the Final Effluent Junction Structure #2 Sampler-Analyzer Station system. A section providing a table of instrument ranges, set points, process minimum and maximums, signal scaling and alarm limits shall be included. The table will be based on the existing process control strategy to be provided by the City.
7. Prepare and submit to the City an updated schedule for construction and commissioning of the Project at 100 percent completion stage. The schedule shall be based on an analysis of key sequencing constraints by a construction management specialist. The schedule shall serve as the basis for determining the appropriate construction duration and document the sequence of proposed shutdowns and their execution timetable and anticipated commission and start-up periods.
8. As the City-owned temporary pumping system will be required for the repair work to be completed for the SES reroute, the Consultant shall coordinate and detail all interfaces and requirements for this system in the 100 percent (final) design packages.
9. Consultant shall organize and facilitate one (1), two-hour Design Progress Meeting Workshop as part of the 100% percent design to discuss Operations and Maintenance (O&M) constraints and timelines as well as to focus on startup and commissioning and other key topics as identified by the City. Consultant shall prepare an agenda and meeting materials in advance of the Design Progress Meeting and shall prepare meeting minutes following the meeting.
10. Conduct one (1) site visit to further review the existing conditions to assist in the completion of the 100 percent (final) design. For efficiency, the site visit is planned to be performed to coincide with design progress meetings or other previously scheduled site work.
11. Organize and facilitate one (1) 3-hour workshop with the City to present the 100 percent design package including key elements of the design, operational requirements and changes, maintenance requirements, construction sequencing, and anticipated construction impacts on RWF operations. As the City-owned temporary pumping system will be required for the repair work to be completed, the Consultant shall present coordination details of all interfaces and requirements for this system in the workshop. Consultant's PM and the appropriate project team members shall attend the workshop. The Consultant shall prepare the meeting agenda and materials in advance of the workshop and meeting minutes following the workshop. The meeting minutes shall include action items for finalizing design.
12. The final design package shall be sealed and signed by the responsible Professional Engineer registered in the State of California and shall be comprised of complete biddable construction documents.
13. Perform an internal quality review and constructability review at the draft 100 percent levels of completion with all comments made by the quality reviewers addressed and appropriately incorporated into the documents prior to submittal to City for review. The purpose of the constructability review shall be to determine whether the Project can be constructed with readily available equipment and techniques. Suggestions for design revisions shall be made for features for which simpler but equally functional, durable, and cost-effective alternatives exist. An internal quality review and constructability review will be performed on only new items for the final 100% deliverable, if required based on City and SECI review comments.
14. Utilizing the Quality Review Form, provide responses to the City's comments on the 100 percent design packages. Respond to the list of comments and questions received from the City prior to the issuance of the subsequent design package. The City and Consultant will meet to agree that the responses prepared by Consultant are acceptable before the Consultant incorporates them into the applicable final design package.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. Draft and final 100 percent Design Packages - Provided as eight (8) printed bound copies of documents from Item a – f and two (2) bound copies of all supporting documents in Item g, an electronic editable file (e.g. CAD and Microsoft Word), and a PDF file.
 - a. Specifications.
 - b. Drawings – Half Sized (11"x17") for the 100 percent design package and three (3) full-sized (22"x34") printed bound copies and one (1) full-sized PDF file for 100 percent design package.
 - c. Quality Management Certification - Completed by the quality reviewers for each design package.
 - d. Quality Review Form – Listing all previous City's comments and Consultant's responses of how comments got incorporated into the 100 percent design package.
 - e. Class 2 OPCC and Basis of Cost Estimate Report at draft 100 percent design completion.
 - f. Updated Construction Schedule.
 - g. All supporting documents related to design of the Project including, but not limited to, engineering calculations, equipment or catalog cut sheets, and back up for engineer's cost estimates shall be submitted by Consultant to the City as a bound document and cataloged per the appropriate engineering discipline with each review package.
2. Construction Sequencing Plan – Provided as a printed bound copy and a PDF file at the draft and final 100 percent design packages.
3. PDL – Provided as an electronic editable file and a PDF file with each design package.
4. Workshop Agendas and Materials – Provided as an electronic editable file no later than three (3) Business Days before workshop and sufficient printed copies of the agenda and any handouts and presentation for attendees.
5. Workshop Minutes
 - a. Draft minutes provided as an electronic editable file within five (5) Business Days after the workshop. Consultant shall allow City a minimum of five (5) Business Days to review, compile and provide comments.
 - b. Final minutes addressing City comments provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following is marked:

- On or before the following date: June 30, 2023.
- On or before ____ Business Days from _____.

Task No. 4: Bid and Award Period Services

A. Services: Consultant shall provide the following engineering services between the advertisement of a request for bids and award of a construction contract. The City will schedule and conduct the Project's pre-bid meeting, bid opening and bid review. Advertisement, printing, and distribution of construction documents and addenda will be also be conducted by the City.

1. Pre-Bid Meeting: Consultant shall attend a pre-bid meeting and prepare minutes for the

meeting.

2. **Responses/Addenda:** Consultant shall assist the City in responding to questions from prospective bidders. Consultant shall prepare addenda to provide responses, supplementary details, clarifications, and/or revise the drawings and specifications as needed and directed by City.
3. **Bid Reviews:** After the advertisement period ends, Consultant shall review the bids submitted by prospective contractors hours of support to review and evaluate bids and assist the City with the award recommendation, as necessary and directed by the City.
4. **Conformed Bid Documents:** Consultant shall prepare a conformed set of the bid documents consisting of the updated/revised drawings and specifications to include all addenda as described in the City's design guidelines.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. Pre-Bid Meeting Minutes:
 - a. Draft minutes shall be provided in an electronic editable file format within five (5) Business Days after the meeting. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
 - b. Final minutes addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
2. Responses to technical questions during the bid period provided as one (1) electronic editable file and one (1) PDF file, as needed and directed by City.
3. Addenda that address questions during the bid period provided as one (1) electronic editable file and one (1) PDF file, as needed and directed by City.
4. Conformed set of documents provided as two (2) printed bound sets of full-sized (22" x 34") drawings, ten (10) printed bound sets of half-sized (11" x 17") drawings, ten (10) printed bound sets of specifications, and PDF files uploaded to an agreed cloud server location containing searchable PDF files of all drawings and specifications, and in three (3) DVDs each containing searchable PDF files of all drawings and specifications. The electronic drawings and specifications shall be organized in folders for each discipline and division, respectively. Each discipline folder shall include PDF files of each drawing sheet. Each division folder shall include PDF files of each specification section. Consultant shall also provide PDF files that consolidate the drawings and specifications. The conformed documents shall be provided within ten (10) Business Days after the City's award of the Project's construction contract.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following is marked:

- On or before the following date: June 30, 2023.
- On or before ____ Business Days from _____.

Task No. 5: Additional Services (Optional)

A. Services: Upon written authorization from the City, Consultant shall provide following services. Consultant shall perform additional services only upon written request of City's Contract Manager. There is no guarantee that the following services will be authorized by the City.

1. **Additional Detailed Design Services:** Consultant shall include additional design services, meetings, workshops and/or site visits for the following discipline areas: civil, structural, mechanical, corrosion, coating, electrical and instrumentation as required by the selected

alternatives identified in Task 2 to prepare detailed drawings and specifications as part of the 50 percent and 100 percent Detailed Design Packages. This task shall also cover additional engineering services related to plant process piping isolations, flow diversion or reroutes, decommissioning of the existing SES reroute, and unforeseen structural conditions.

2. Additional Bid/Award Phase Services: Consultant shall include additional addenda to provide responses, supplementary details, clarifications, and/or revised drawings and specifications, as directed by the City to address questions from prospective bidders.
3. Additional Environmental Review Services: The Consultant, through an independent sub-consultant, shall assist the City with review of relevant environmental documentation. Consultant will provide coordination with the City throughout the environmental review process for the Project. The Consultant will confirm applicable environmental regulatory and permitting agency requirements and inform the City of such requirements.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. Workshop agenda and materials provided in PDF format no later than two (2) Business Days before Workshop. Consultant shall also provide sufficient printed copies of agenda and any handouts for meeting attendees.
2. Workshop Summary:
 - a. Draft summary provided in an electronic editable file format within five (5) Business Days after the Workshop. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
 - b. Final summary addressing City comments provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following is marked:

- On or before the following date: June 30, 2023.
- On or before ____ Business Days from _____.

Attachment B: Terms and Conditions

1. **City's Contract Manager:** The City's contract manager for this Approved Service Order is:

Name: Tie Feng	Phone No.: (408) 635-4025
Department: Environmental Services Department	E-mail: tie.feng@sanjoseca.gov
Address: 700 Los Esteros Road, San Jose, CA 95134	

2. **Consultant's Contract Manager and Other Staffing:** Identified below are the following: (a) the Consultant's contract manager for this Approved Service Order, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the services and deliverables. ***If an individual identified below does not have a current Form 700 on file with the City Clerk for a separate agreement with the City, and is required to file a Form 700, the Consultant must comply with the requirements of Subsection 17.5 of the Master Agreement, entitled "Filing Form 700."***

		<u>Required to File Form 700?</u>		
		Yes Already Filed (Date Filed)	Yes Need to File	No
<u>Consultant's Contract Manager</u>				
Name: Randy W. Fiorucci	Phone No.: (925) 949-5950	01/18/22		
Address: 2999 Oak Road, Suite 490 Walnut Creek, CA 94597	E-mail: FiorucciRW@bv.com			
<u>Other Staffing</u>				
Name:	Assignment:			
1. Jesse Wallin	Project Manager	01/24/22		
2. David Haug	Quality Assurance	12/20/21		

3. Subconsultants: Whichever of the following is marked applies to this Approved Service Order:

- The Consultant can **not** use any subconsultants.
- The Consultant can use the following subconsultants to assist in providing the required services and deliverables:

<u>Subconsultant's Name</u>	<u>Area of Work</u>
1. Environmental Science Associates	Environmental

4. Contract Personnel: Whichever of the following is marked applies to this Approved Service Order:

- The Consultant can **not** use any Contract Personnel.
- The Consultant can use the following Contract Personnel to assist in providing the required services and deliverables:

<u>Personnel/Agency Name</u>	<u>Area of Work</u>
1.	
2.	
3.	

5. Travel Expenses: Travel expenses, including airfare, lodging, ground transportation, per diem, parking, mileage and other travel-related costs, will be reimbursable for Work covered by this Approved Service Order in accordance with the Master Consultant Agreement; provided, however, that the travel expenses are necessary for Consultant's performance of the Work, and the resident office of the personnel for which Consultant seeks travel reimbursement is located more than sixty (60) miles from the San José-Santa Clara Regional Wastewater Facility.

Attachment C: Compensation Table

The City will compensate the Consultant for providing the services and deliverables set forth in **Attachment A** in accordance with this Compensation Table. This Compensation Table is subject to the terms and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement and **Exhibit B**, Basis of Compensation.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Task No. and Task Title from Attachment A	Invoice Period	Multiplier Compensation	Contract Personnel	Reimbursable Expenses (Including applicable markup)	Subconsultant Costs (Including markup)	Total Compensation
Task No. 1: Project Management	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$110,170	\$	\$	\$	\$110,170
Task No. 2: Preliminary Design (50%) Services	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$355,444	\$	\$2,868	\$	\$358,312
Task No. 3: Detailed Design (100%) Services	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$238,120	\$	\$3,278	\$	\$241,398
Task No. 4: Bid and Award Period Services	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$75,220	\$	\$	\$	\$75,220
Task No. 5.1: Additional Detailed Services (Optional)	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$91,164	\$	\$1,004	\$	\$92,168
Task No. 5.2: Additional Bid and Award Period Services (Optional)	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$23,476	\$	\$2,260	\$	\$25,736
Task No. 5.3: Additional Environmental Review Services (Optional)	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$7,196	\$	\$	\$10,500	\$17,696
Maximum Compensation		\$900,790	\$	\$9,410	\$10,500	\$920,700



- FOR YOUR ELECTRONIC SIGNATURE
 FULLY EXECUTED COPY TO FOLLOW

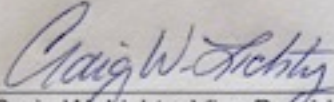
CITY STAFF: _____
STAFF EMAIL: _____

SCANNED SIGNATURE AUTHORIZATION

DATE: 18 December 2020 TOTAL PAGES: _____
(INCLUDING THIS PAGE) 1

CONSULTANT NAME: Black and Veatch
EMAIL: lichtyc@bv.com
PHONE: 415-350-7896M

I agree to use electronic signatures

SIGNATURE OF CONSULTANT: 
Craig W. Lichty, Vice President

DIRECTIONS:

REVIEW THE ENCLOSED DOCUMENT, IF IT IS ACCEPTABLE:

1. SIGN THE DOCUMENT
2. CHECK THE BOX BELOW YOUR NAME AND SIGN AGREEING TO THE USE OF ELECTRONIC SIGNATURES
3. SCAN YOUR EXECUTED DOCUMENT TOGETHER WITH THIS COVER PAGE IN **BLUE** INK
4. EMAIL THE ENTIRE DOCUMENT TO (CITY STAFF EMAIL ADDRESS): [KIM.DALY@SANJOSECA.GOV](mailto:kim.daly@sanjoseca.gov)

TO BE COMPLETED BY CITY STAFF:

ALTERNATIVE METHODS OF VERIFICATION:

- USE OF A PASSWORD PROTECTED WEBSITE
 CONFIRMED BY A KNOWN TELEPHONE NUMBER
 PERSONALLY KNOWN TO CITY STAFF

City of San José Contract/Agreement Transmittal Form

Route Order

Attached / Completed

Electronically Signed

- TO: City Attorney
 City Manager
 City Clerk **OR** Return to
 Dept. (circle one)

- Insurance Certificates / Waivers Electronically Signed: Select one
Business Tax Certificate Audit Trail Attached (if applicable)
 Contacted Clerk re: Form 700 Scanned Signature Authorization
 Supplemental Memorandums (if applicable): Select One

Type of Document: Service Order

Type of Contract: Consulting Services

REQUIRED INFORMATION FOR ALL CONTRACTS:

Existing GILES # 663318-017

Contractor: BLACK AND VEATCH CORPORATION

Address: 2999 OAK ROAD SUITE 490 WALNUT CREEK CA 94597

Phone: 925.949.5950

Email: LICHTYC@BV.COM

Contract Description: SERVICE ORDER 07 YARD PIPING PH 2 DESIGN AND BID AND AWARD

Term Start Date: Contract Start Term End Date: 6/30/23 Extension: Select one

Method of Procurement: Select one RFB, RFP or RFQ No.: _____ Date Conducted: _____

Agenda Date (if applicable): _____ Agenda Item No.: _____

Resolution No.: _____ Ordinance No.: _____

Original Contract Amount: 920,700.00 Amount of Increase/Decrease: _____

Option #: ___ of ___ Option Amount: _____ NTE/Updated Contract Amount: 920,700.00

Fund/Appropriation: _____

Form 700 Required (Selection mandatory for processing): Yes Revenue Agreement: Select one

Tax Certificate No.: 6952151210 Expiration Date: 1/15/23

Department: ESD (76)

Department Contact: TIE FENG 408.635.4025 Customer (Finance Only): _____

Notes:

Department Director Signature: _____ Date

Office of the City Manager Signature: _____ Date