Request for Proposal
To Provide

Engineering Services
For

HARVEST WATER PUMPING STATION PROJECT

RFP No. 9068

November 2, 2020

Sacramento Regional County Sanitation District
Request for Proposal
Harvest Water
Pumping Station Project

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I. PREAMBLE

The Sacramento Regional County Sanitation District (Regional San) seeks the services of a consulting engineering firm or team (Consultant) for design and support during construction of the Harvest Water Pumping Station Project (HWPS Project). This Request for Proposal (RFP) includes the information needed for proposal preparation and various attachments associated with proposal preparation and contractual requirements, including a Regional San sample agreement, sample labor hour matrix, and draft Basis of Design Report (BODR). The RFP and all attachments describe the scope requirements for the Project and are posted on Regional San's website (https://www.regionalsan.com/harvest-water-program-opportunities).

II. PROJECT BACKGROUND

Regional San, in collaboration with regional stakeholders, is developing the Harvest Water Program (Harvest Water) to meet its long-term goals of increasing the production and use of recycled water. Harvest Water will offer multiple benefits, including providing a safe and reliable supply of tertiary-treated water for agricultural uses, reducing groundwater pumping, supporting habitat protection and enhancement efforts, and providing near-term benefits to the Sacramento-San Joaquin Delta. The program will help Regional San diversify its effluent management options. .

Regional San has established two program management offices to meet the needs of the project; the Administrative Program Management Office (A-PMO) and the Capital Program Management Office (C-PMO). The A-PMO, led by Regional San Policy and Planning department, has secured $280.5M of capital funding through the Water Storage Investment Program (WSIP), administered by the California Water Commission (CWC). The A-PMO oversees activities related to WSIP Funding Agreement with the California Water Commission (CWC) and WSIP related contracts with the California Department of Fish & Wildlife (DFW) and the State Water Resources Control Board (SWRCB). The A-PMO also oversees CEQA compliance, environmental and water quality related permitting, ecological plan development, public benefits, grants and stakeholder agreements, groundwater accounting, groundwater monitoring and modeling, and other non-capital project administrative functions. The C-PMO is responsible for the planning, design, construction, and commissioning of the capital improvements required to meet the needs of Harvest Water.

Harvest Water will provide up to 50,000 acre-feet per year of tertiary recycled water from the Sacramento Regional Wastewater Treatment Plant (SRWTP) for use in-lieu of pumped groundwater to irrigate crops on permanent agriculture and habitat lands, as well as for ecological beneficial uses in southern Sacramento County.

The C-PMO developed a HWPS Project Draft Basis of Design Report (BODR) and is updating Regional San standards for design and construction of recycled water facilities.

III. PROJECT APPROACH

The Harvest Water capital program is composed of several individual projects. This HWPS Project is one of those projects. The C-PMO has the overall responsibility for management and coordination of all phases of the Harvest Water capital program, including oversight and management of the third party design consultants for all projects. In this role, the C-PMO manages various projects that comprise the capital program and provides review and input to the design documents, assesses design progress, confirms compatibility with basis of design, and coordinates activities between various design consultants. The HWPS Project team will be composed of the members of Regional San Engineering, SRWTP Operations and Maintenance (O&M) staff, Consultant staff, and the C-PMO.

Harvest Water capital projects are divided into the following six phases:

Phase 1 – Planning
Phase 2 – Design
Phase 3 – Bid and Award
Phase 4 – Construction
Phase 5 – Commissioning
Phase 6 – Closeout

The Consultant will provide engineering services for all six project phases. During the design phase, the Consultant and C-PMO will work to resolve design issues, leading to the production of contract documents. During the construction phase (under a future contract or amendment), the Consultant will assist the C-PMO and Regional San with requests for information (RFIs) and submittal reviews from the contractor, and will provide other construction support services relating to the installation of the facilities. The Consultant will also participate as necessary during the commissioning and closeout phases of the project.

Close coordination with other Harvest Water capital program projects is required by the Consultant. In particular, the Project must be coordinated with the Harvest Water Transmission Main Project and the EchoWater Tertiary Treatment Facilities (TTF) Project.

IV. KEY ACTION DATES

Regional San has established the following tentative schedule for the selection process:

Advertise Request for Proposal	November 2, 2020

Pre-Proposal Meeting (Individual pre-proposal meetings with consultants)	November 17-18, 2020
Deadline to Submit Questions	December 3, 2020
Deadline to Submit Proposals	December 11, 2020
Shortlist and Notification for Interviews	January 13, 2021
Interviews (if required)	January 14-16, 2021
Selection Notification	January 21, 2021
Complete Contract Negotiations	February 11, 2021
Board Approval of Agreement	April 14, 2021
Notice to Proceed (NTP)	April 21, 2021

V. PROJECT DESCRIPTION

The principal elements of the HWPS Project are listed below and are described in more detail in Attachment A – Harvest Water Pumping Station Draft Basis of Design Report.

The HWPS will take water from the disinfection contact basins (DCB) constructed as part of the EchoWater Tertiary Treatment Facilities (TTF) Project. HWPS will draw water from a 72" wall thimble installed in the DCB Distribution Box.

Major Project Components

The Draft HWPS BODR contains a site plan including the relative location of project components along with site, civil, utility, and electrical drawings. The HWPS Project includes the following major components:

- Pumping Station consisting of 7 canned vertical turbine pumps and valves
- 78" suction pipeline connection to DCB distribution box
- 66" Discharge pipeline to Harvest Water Transmission Main Project
- 18" connection to the low pressure reclaimed water pumping station
- Electrical building and transformer yard
- Surge protection
- Flow meter vault
- Chemical feed systems

Electrical Power

Electrical power for the HWPS will be provided by a dual 12KV power feed from the expanded plant Main 12KV substation located on the east edge of the plant.

Instrumentation and Control

Control signals will be provided from the TTF ACC. The plant computer control system (PCCS) will monitor the process instrumentation and provide automatic and remote control of the HWPS.

Site Work

Final grading of area will be needed to construct the new facilities and paving will be extend to the HWPS from the TTF to provide access. Area drainage will connect to the existing plant storm water collection system.

VI. PROJECT SCHEDULE

Time is of the essence for the Project and the capital program. Consultant shall prepare a project schedule as part of proposal and comment upon the following milestone dates established by the C-PMO:

Major Milestone	**Date**
Notice to proceed (NTP)	April 21, 2021
Bid Opening	August 7, 2022

The Consultant's schedule in the proposal must include all the major milestones listed below as well as Regional San review periods for major submittals and workshops. A review period of 15 working days from submittal of documents to return of comments is required for each submittal (technical memoranda, draft PDR, design submittals). The Consultant shall not start work on a subsequent design submittal until directed by Regional San.

- Procurement
  - NTP – April 21, 2021
- Phase 1 - Planning
  - Provide comments on Draft BODR
  - Submit Draft Preliminary Design Report (PDR)
  - Submit Final PDR
  - PDR Design Gate Workshop
- Phase 2 - Design
  - Submit Design Submittal #1
  - Conduct Constructability Workshop
  - Submit Design Submittal #2
  - Submit Design Submittal #3
  - Final Design Gate Workshop
  - Deliver Bid Documents
- Phase 3 – Bid and Award
  - Bid Opening – August 7, 2022
- Phase 4 - Construction
- Phase 5 - Commissioning

- Phase 6 - Close out

VII. SCOPE OF SERVICES

This section describes the nature and scope of engineering services to be provided for the completion of the HWPS Project. The successful proposal will demonstrate the approach and qualifications for the **entire project** (Project Phases 1-6); however, only services through the bid and award period (Phase 3) will be negotiated at this time. Upon completion of the bid period, the construction, commissioning, and closeout phase services will be negotiated and added to the scope through a contract amendment.

Regional San has prepared a scope of services necessary for completion of the Project. This scope of services, divided into the six phases of the project, is provided below. This scope of services shall be used as a basis for preparation of the proposal. Additional tasks or modifications to the scope of services that the Consultant feels will produce a more cost-effective project should be included in the proposal. The scope of services is supplemented by detailed requirements contained in various attachments to this RFP.

In general, Regional San requires that all design documents use similar format, symbols, and naming conventions on all projects under the Harvest Water capital program and provide, at a minimum, the level of detail as defined in Attachment B -Design Contract Requirements for Harvest Water Projects, Attachment C - Regional San CAD/BIM Standards, and Attachment D – Design Guidelines. However, there are instances where more design detail is required.

The Consultant is required to use Regional San's Program Management Information System (PMIS) for various functions. The PMIS is a web-based program called PMWeb. PMWeb description and functions are defined in Attachment E – Design Consultant Project Management Requirements.

PHASE 1 – PLANNING

This task includes project management and BODR confirmation tasks performed during the planning phase of the HWPS Project.

Task 1.1 – Project Management (Planning Phase)

Consultant shall be responsible for tasks related to the project in terms of staffing, budget, schedule and scope; promote communication within the project team including the C-PMO, and document key decisions and risks.

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

- Project management plan.

- Consultant Project Safety Plan - Prepare and submit a project-specific safety plan consistent with Consultant company policy. The plan must incorporate Regional San's safety requirements and be consistent with the safety plan developed by the C-PMO. The plan must meet the requirements of an OSHA Injury and Illness Prevention Plan.
- Kickoff meeting for planning and preliminary design phases.
- Weekly progress meetings at the C-PMO.
- Support Regional San's Project Manager (PM) and attend the BODR Gate meetings.
- Other meetings as needed. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, specialty meetings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management and updates.
- Interface with PMWeb, the program management information system deployed for the capital program.
- Assist the PM in updating the risk register and the Risk Management Plan as needed. Assist the PM in identifying, tracking, managing and mitigating project risks that are shared by Regional San and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of sub-consultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and schedule updates.

Additional detail regarding project management requirements is provided in Attachment E – Design Consultant Project Management Requirements.

Task 1.2 – BODR Review and Confirmation

Consultant shall perform evaluations and analyses to confirm the major project design elements outlined in the draft BODR including flows, equipment sizing, general site layout, and connection/interface with other projects. This task will include a review of the draft BODR and supporting documentation and preparation of any comments and recommended changes that would affect the proposed design for the HWPS Project. In addition, Consultant is expected to offer ideas and approaches that improve functionality, flexibility and/or cost-effectiveness of the Project for consideration by Regional San. A review of the overall project schedule should be included.

The Consultant shall submit comments to the BODR for Regional San review and response. The comments may include a technical memorandum if desired.

The C-PMO team will prepare a BODR Closeout Memorandum documenting the resolution of Consultant's comments and suggestions. The Consultant will participate in the Gate 1 workshop when the BODR is completed and shall assist the PM in preparing presentation material and pre-meeting handouts. The end result of this task will be acceptance of full responsibility for the Project's design by the Consultant.

PHASE 2 – DESIGN

Phase 2 – Design consists of four main tasks:

- Task 2.1 – Preliminary Design Report (PDR)
- Task 2.2 – Design Submittal 1
- Task 2.3 – Design Submittal 2
- Task 2.4 – Design Submittal 3 and Bid Documents

The Consultant shall provide engineering services to prepare the PDR and subsequently produce a complete package of biddable plans, technical specifications, and other contract documents as required based on the design concepts and criteria developed during the PDR task.

The Consultant shall maintain up-to-date comments and responses and decision logs in electronic format for all Regional San comments received as a result of each submittal review. Regional San comments shall be incorporated into the next submittal, as appropriate.

Task 2.1 – Preliminary Design Report

Consultant will define the project in sufficient detail to establish a clear direction for the subsequent design phases, complete preliminary site layout to a level of detail that will establish overall space requirements/allocation, estimate construction cost for comparison to Regional San's project budget, and establish a preliminary construction schedule. The Consultant will prepare a series of TMs culminating in the preparation of a draft and final PDR. As part of the proposal, Consultant may propose changes to and/or consolidation of TM topics listed in the tasks below. For the listed BCEs and modeling efforts, the Consultant may propose changes to and/or consolidation of these items. The PDR shall include a summary of the TMs, plus drawings showing the proposed improvements.

The PDR is an extension of the work done on the Harvest Water Pumping Station Draft Basis of Design Report (Attachment A) and the BODR confirmation report.

Task 2.1.01 - Project Management (PDR Phase)

The project management task encompasses overall project management, coordination with other projects, and project permitting support.

Consultant shall continue to ensure responsibility of the project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions and risks. The Consultant may co-locate one or more members of Consultant's core project management team with the C-PMO team at the SRWTP for key portions of the design phase. To the extent that space is available in the PMO Building, one or more workstations will be provided for the Consultant's use.

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

- Weekly progress meetings
    - Once every 2 weeks during the planning phase.
    - Once monthly during the design phase.
- HWPS Project and related workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management and updates.
- Interface with PMWeb.
- Assist the PM in updating the Risk Register and the Risk Management Plan as needed. Assist the PM in identifying, tracking, managing and mitigating project risks that are shared by Regional San and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of sub-consultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and schedule updates.

Additional detail regarding project management requirements is provided in Attachment E – Design Consultant Project Management Requirements.

Task 2.1.02 – Hydraulic Modeling

Preliminary hydraulic modeling has been performed by the C-PMO and is summarized in the Harvest Water Pumping Station Draft BODR. Consultant shall evaluate benefits of CFD and physical modeling and provide recommendations. Include special services task in proposal identifying proposed physical modeling details. Regional San may approve task if evaluation determines the effort is beneficial to the project. The physical modeling shall be performed at an independent qualified facility. The testing facility shall have

experience in routinely performing physical model tests that conform to Hydraulic Institute Pump Intake Design standards. The physical model simulation, scale selection, and scope shall conform to the latest version of Hydraulic Institute Pump Intake Design standards (ANSI/HI 9.8). The physical model shall include modeling the approach conditions from the DCB WR Distribution Box and, if necessary, alternative layouts.

Task 2.1.03 - Permitting Assistance

For all applicable project elements of this Scope of Services, the Consultant shall provide contract documents, which ensure that facility features and performance and construction procedures comply with all conditions of existing permits and permits required to construct this project. Construction drawings, specifications and supplemental drawings shall be prepared, as necessary, in the format required to obtain all permits.

The final Environmental Impact Report (EIR) was certified in March 2017 by the Regional San Board of Directors. The Consultant will verify the bid documents meet the mitigation measures described in the EIR.

The Consultant shall assist Regional San in obtaining the permits listed below. This shall include assistance with completing application forms provided by Regional San, preparing supporting documentation for the permit applications as required by the issuing agency, furnishing the required number of copies of all construction drawings, and exhibits and attending meetings with permitting agencies at the request of Regional San.

Regional San staff will execute all applications. All permit fees will be paid directly by Regional San and will not be part of the Consultant's fee. The Consultant shall submit all supporting documentation in a timely fashion for all permits required for this project which include, but are not limited to, the following:

- Permit to construct from the Sacramento Metropolitan AQMD
- Permit to operate from the Sacramento Metropolitan AQMD
- Cosumnes Fire Department

Task 2.1.04 - Risk Management Plan – Design Phase

The Consultant shall participate in the development of a risk management plan. This participation shall include preparation and attendance of one Risk Management Workshop during the preliminary design phase of work to assist Regional San in identifying and developing mitigations for potential risks to the project during final design. This workshop is anticipated to last up to four (4) hours. The Consultant should agree that incorporating risk mitigation measures into the project documents is part of the normal scope of a design project and, therefore, is not to be budgeted under this task. This task is limited to the Consultant's participation in development and updating of the Risk Management Plan. Consultant's staff may be designated as a "Risk Owner."

Task 2.1.05 – Quality Assurance/Quality Control Management (PDR Phase)

The Consultant shall implement a quality assurance and quality control (QA/QC) program during the course of executing the scope of work for the HWPS project including, at a minimum, the following:

1. Identify the qualified professional assigned the responsibility and accountability for administering the QA/QC program for the duration of the Project. This person shall lead the quality assurance activities and provide evidence of compliance to Regional San.

2. Provide a structured program for quality control activities including independent reviews by a senior professional of all work products, technical assumptions, and directives. Perform reviews to verify that project deliverables and supporting documentation are complete, understandable, and conform to applicable and reasonable standards relative to their intended purpose, and meet the requirements of each design submittal.

3. The structured program for quality assurance (QA) activities shall include the planned and systematic actions that provide adequate confidence that an activity or service consistently fulfills the requirements for its intended purpose.

4. Prepare a project-specific QA/QC plan within 20 working days of contract award. The project-specific QA/QC plan shall identify the individuals assigned to perform QC reviews. The QC reviewers shall possess qualifications necessary to perform the review and shall be independent of the project team and the individuals originally providing the services to be reviewed. The Consultant shall coordinate with the QA/QC guidelines developed by the C-PMO, see Attachment E – Design Consultant Project Management Requirements. The Consultant's QA/QC Plan shall be reviewed and accepted by Regional San's PM and shall include or reference all the controls necessary for implementation. Major elements of the QA/QC Plan shall include the following at a minimum:

    - The Consultant and all sub-consultants shall be responsible for the technical adequacy and quality control of this work.
    - QC will include discipline QC of all design work, coordination of work between disciplines, coordination between drawings and specifications, asset data management, and BIM clash detection. All submittals are to be made clash free.
    - Consultant controls shall ensure that planning and design inputs are correctly translated into planning and design documents such as drawings, procedures, specifications, reports and calculations.

- The Consultant shall be responsible for the physical control, security and distribution of controlled documents required for performance of the Scope of Work in paper and electronic format.
- All submittals shall be accompanied by a transmittal letter signed by Consultant's Principal-in-Charge or Project Manager stating that the submitted documents have been checked, and identifying the reviewers' names. All submittals shall be checked with a goal of assuring accuracy and consistency. Consultant QC staff shall sign an affidavit stating that the QC has been completed.

The Consultant shall include labor-hours for all QA/QC activities related to preliminary design as part of this task, including the development of the QA/QC Plan and review of deliverables either by the Consultant, or by the Consultant in conjunction with Regional San staff in meetings and workshops. These labor-hours and associated costs shall be budgeted and tracked separately in the Consultant's invoice as determined at the beginning of the Project.

Task 2.1.06 – Construction Cost Estimate

Consultant shall prepare a planning level construction cost estimate to be included as part of the draft PDR submittal. Refer to Attachment G – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. After review and when accepted by Regional San, this estimate will be the baseline estimate for the project as defined by the PDR. Unless there is a Regional San-approved change in Project scope establishing a new baseline, the PDR baseline will not be changed. All future estimates will be compared to the baseline estimate by the Consultant. If future estimates vary from the baseline estimate, the Consultant shall identify the specific reasons for variations and identify corrective actions to align the newest estimate with the baseline. The Consultant shall specifically note the change in contingency percentages at various stages of design. Submit six (6) hard copies and electronic files.

Task 2.1.07 – Preliminary Construction Schedule

The Consultant shall prepare a preliminary construction schedule using the latest version of Microsoft Project. The initial construction schedule shall be submitted shortly following the PDR and updated with each subsequent design submittal as the design becomes more refined. The schedule shall include the milestones presented in this RFP. The schedule shall include all major construction, testing and commissioning activities necessary to establish the project critical path and milestone durations. This schedule shall be broken down into major work packages and areas. It must be detailed enough to identify the major sequencing of work and coordination of interface to other areas of work. A basic startup, commissioning and testing schedule must be included.

A schedule narrative should be delivered with each schedule submittal describing the sequencing, constraints and any critical sections of work. Any long-lead procurements shall also be identified at this stage. Required schedule layouts will be provided by Regional San. Submit six (6) hard copies and native electronic and PDF files.

Task 2.1.08 – Field Survey

Regional San prepared topographic mapping of the site based on aerial photography obtained in summer 2020 (topographic survey is available on request). It is anticipated that some level of additional, project-specific topographic survey may be required to support the Project. The Consultant shall identify additional design-level survey requirements and include the required scope for this effort in the proposal.

Task 2.1.09 – Geotechnical Services

Consultant will hire a geotechnical engineer of record for the Project who shall prepare a complete and thorough design-level geotechnical investigation and report. A preliminary geotechnical information report was prepared for the EchoWater TTF project and is attached to this RFP for information (see Attachment H – Preliminary Geotechnical Information). The following tasks are anticipated as part of this effort.

Task 2.1.09.1 – Review of Existing Data – Preliminary Geotechnical Report

The Consultant shall review all known soils and inspection reports and provide recommendations for subsurface exploration, laboratory testing, access requests, and traffic control for boring work.

Task 2.1.09.2 - Subsurface Exploration

The geotechnical services will include the subsurface exploration necessary to observe, test, and classify soils and monitor groundwater. The number and spacing of borings or other subsurface exploratory means ("borings" hereafter) shall be based on the Consultant's and geotechnical professional's interpretation of needs and recommendations.

The depth of the borings, proposed sampling, and boring locations shall be adequate to characterize the soils to a depth of at least 10 feet below the bottom of an excavation or any proposed pipe invert elevation. At least two (2) borings shall extend 20 feet below the proposed excavation bottom or conduit invert. If unexpected or unique soils are encountered, an adequate number of borings shall be taken to try and define the limits of the anomaly.

Consultant shall specify in the proposal the recommended number of borings and include them in the cost proposal. The final number of borings and observation wells proposed for the Project will be determined and agreed upon by the Consultant and Regional San.

The location of all borings and observation wells shall be plotted on a map and attached to the geotechnical report. The borings shall be located by survey coordinates consistent with the Project survey. Complete logs of the soil profiles shall be included in the report.

Task 2.1.09.3 - Geotechnical Report

The Geotechnical Report shall address, but not be limited to, seismic design parameters, soil contamination, groundwater presence, groundwater levels, groundwater contamination, construction dewatering, pipe bedding requirements, trench shoring requirements, engineered fill and settlement potential, excavation of soils, temporary slope stability, location of rock, backfill suitability, backfill compaction, allowable foundation bearing pressures, and any other analyses and recommendations needed to design and construct the HWPS Project.

The report shall describe and categorize the soil types and identify disposal locations. The Consultant shall be responsible for establishing the actual scope of work for the geotechnical report. The report shall emphasize specific construction concerns regarding the integrity of existing piping, pavement and structures.

The report shall address in detail the excavation impact of the proposed work on all existing structures and utility trenches in the vicinity of the proposed Project. The report also shall focus on the potential collapse of the earth prism located between existing parallel utilities and the trench excavated for any proposed sewer installation. The report shall address all of the information needed for compliance with codes, structural design, buried piping, roads, walkways, and other design elements such as soil corrosivity.

The draft and final geotechnical reports shall be submitted to Regional San for review and comment. All comments received regarding the geotechnical report shall be addressed.

Task 2.1.10 - Coordination with Other Projects

The project shall be a complete and fully functional facility that is integrated with existing facilities and coordinated with other projects under the EchoWater and Harvest Water Programs.

The HWPS Consultant must work closely with other Harvest Water and EchoWater project design consultants and the C-PMO to coordinate the following:

- Physical points of connection between the projects.

- Hydraulic profile points at the interface between the Project and the components of the existing plant. The Consultant will be responsible to develop the hydraulic profile from the DCBs to the customer turn-outs.
- Process control and instrumentation.
- Testing and commissioning plans, requirements and schedules.
- Temporary bypasses, structures, piping and pumping to route water during testing and commissioning.
- Electrical power supply and distribution.
- Building space for O&M staff.
- Ancillary process support systems.
- Contractor access, office trailers and laydown areas.
- Site earthwork, grading, paving, storm drainage and utilities.
- Site access, traffic flow and parking.
- Demolition, facility abandonment, and utility relocation.

Task 2.1.11 – TM-1 Design Criteria

TM-1 will focus on the basis of design and design criteria. The key elements of the BODR, modified under Task 1.2 by Consultant comments and Regional San responses, shall be incorporated into TM-1. The TM shall include any exceptions being proposed to Regional San design standards. The TM will also include a list of major equipment and their individual sizing criteria. A general outline for the TM is as follows:

TM-1 Design Criteria

- Flow and head conditions
- Flow Modeling
- Process overview
- Discipline design criteria
    - Civil
    - Architecture
    - Structural
    - Process
    - Corrosion
    - Noise
    - Mechanical (HVAC, plumbing)
    - Electrical
    - Process and instrumentation
- Process flow diagrams (including normal and various diversion scenarios)
- Pumps
    - Facility capacity, orientation

    - Equipment type, configuration, number, size, orientation, features
    - Process and equipment redundancy
    - Arrangement to allow future expansion to build out capacity
    - Pump BCE update by RCD
- Naming and numbering plan for facilities and equipment
- Flowmeter location and installation requirements
- Chemical feed requirements
- Service air requirements
- Maintenance requirements and access
- Preliminary drawing list

Key elements of TM-1 shall include the following:

1. Facility capacity, orientation.
2. Equipment number, size, orientation, features.
3. Equipment redundancy.
4. Arrangement to allow future expansion to build out capacity.
5. Utility requirements.
6. Operating philosophies and general control descriptions.
7. Instrumentation Diagrams
8. Piping schematics.
9. Models of buildings.
10. Use BCEs to compare flow alternatives and major equipment types. See Attachment I – BCE Guidance.
11. For the basis of design and general design criteria, extract and compile information from Attachment A – Harvest Water Pumping Station Draft Basis of Design Report. Evaluate process design criteria and propose any modifications to the basis of design.
12. Evaluate and analyze system operation for extended periods at equalized maximum day flow and determine any special design requirements and considerations.
13. Evaluate system surge conditions during all expected operating conditions. Recommend mitigation measures at pump station, transmission mains, and distribution mains.
14. Augment the discipline design criteria found in the BODR and Regional San design guidelines with design criteria specific to individual design discipline elements.

15. Start development of the Master Equipment List (MEL) including the list of major equipment, develop equipment names and begin to assign tag numbers based on Regional San's conventions and guidance.
16. Develop a preliminary drawing list.
17. Submit the CAD/BIM Execution Plan including hardware, software, configuration, responsibilities, and methodologies in accordance with Attachment C - Regional San CAD/BIM Standards.
18. HWPS Pumps and suction header
    a. Prepare BCE evaluating various alternatives including, but not limited to the following:
        i. Use of fixed speed and VFD pumps
        ii. Use of large and small pumps
        iii. Switching location of pumping station and electrical building.
    b. Evaluate HWPS pump and suction header requirements.
    c. Describe HWPS alternatives suction header layouts and pump manufacturers.
    d. Evaluate structure alternatives.

Task 2.1.12 – TM-2 Site Development and Layout

TM-2 will focus on the site. Because the HWPS site is shared by other contiguous projects, the Consultant will consider development of the HWPS site as a whole when preparing this TM. In addition, the Consultant will work with the C-PMO to develop assumptions and constraints relative to parts of the site to be occupied by other projects.

In addition to project area topography (Task 2.1.05), Regional San will provide master site utility and process pipeline drawings of the project area in AutoCAD Civil 3D. The drawings show known buried lines and duct banks and the proposed utilities. These drawings indicate the accuracy of location information (i.e., whether the location of a line is based on survey, or record drawings or design documents). The Consultant shall review these drawings and perform additional surveying, and all other research, to produce complete drawings of existing conditions for design and construction. The TM should include recommendations for potholing.

The TM shall include site development plans, hydraulic profile, and utility information as follows:

TM-2 Site Development and Layout

- Demolition and relocation requirements
- Hydraulic profile
- Site plans
    - Site plan
    - Grading plan and site sections
    - Site paving plan including site gravel and erosion control

    - Storm water handling requirements
    - Site Utility Plan (water, gas, drains, etc.)
- Conveyance piping.
- Flow distribution and connection structure(s)
- Pipe/duct bank corridors
- Earthwork balance calculation and drawings
- Geotechnical considerations
- Coordination with other projects
- Utility coordination requirements
- Corrosion assessment and means of protection for new and existing buried utilities

Key elements of TM-2 shall include the following:

1. Evaluate site plans, ancillary facility locations, and coordinate with other projects.
2. Develop interconnecting channels and piping systems.
3. Determine hydraulic conditions.
4. Identify point of connection with the Harvest Water Transmission Main Project and specific connection details.
5. Assess relocation of any existing utilities that conflict with construction.
6. Develop site grading and paving plans and show access and circulation for chemical deliveries and maintenance.
7. Determine storm water requirements including drainage patterns and flow rates. Coordinate with C-PMO on points of connection to plant storm water system.
8. Evaluate utility demands and coordinate with the C-PMO to assess existing utility capacity and need for the extension of utilities.
9. Show contractor laydown areas and portion of site that will be under the contractor's control.
10. Confirm and show areas for contractor trailers and construction support facilities, construction management (CM) facilities.
11. Show areas to be reserved for future expansion.

Task 2.1.13 – TM-3 Electrical and Instrumentation

TM-3 will focus on electrical and instrumentation. The TM shall include electrical and instrumentation design information as well as an initial P&ID for each type of equipment on the project. A general outline for the TM is as follows:

TM-3 Electrical and Instrumentation

- Site power and distribution schematic

- Electrical site plan and duct bank routing
- Single-line diagrams
- Network and communication block diagrams
- Control system overview schematic diagrams
- Communication systems overview diagrams
- Preliminary control strategies
- Process and instrumentation diagrams (P&IDs)

Key elements of TM-3 shall include the following:

1. Locate, size, and develop the electrical requirements and equipment to support the Project and buildout conditions.
2. Show preliminary locations of electrical buildings or rooms and large outdoor transformers.
3. Evaluate power distribution options and the location and size for each electrical building, switchgear, and MCC. Prepare preliminary load calculations.
4. Determine corridors for routing power and signal duct banks and coordinate with site piping and other potential conflicts.
5. Prepare the network and communication block diagram.
6. Develop overall control strategies.

Task 2.1.14 – TM-4 Buildings and Structures

TM-4 is focused on the structures and buildings. The TM includes a section for each discipline involved with the design of buildings and structures. A general outline for the TM is as follows:

TM-4 Buildings and Structures

- Architecture
    - Room area plan, section, and dimensions
    - Code analysis and requirements
    - Exit plan
    - Fire protection requirements
    - Building materials and finishes
    - Doors, windows, skylights
    - Roof
    - Security
- Structural
    - Foundation design based on geotechnical study results
    - Structural concept
    - Preliminary structural sizing and thicknesses

- Process
    - Equipment location and working space
    - Major pipe routing
    - Maintenance access and removal provisions for equipment
    - Safety hazards for O&M after construction
- Corrosion
    - Corrosion narrative
    - Protection schemes
- Noise
    - Noise narrative
    - Noise mitigation schemes
- Mechanical (HVAC, plumbing)
    - Interior air temperatures
    - HVAC requirements and duct layout
    - Plumbing provisions
    - Utility needs and coordination with site

Key elements of TM-4 shall include the following:

1. Develop floor plans and sections for all unit processes and buildings and determine code requirements.
2. Develop architectural concepts consistent with the BODR and Regional San Standards.
3. Evaluate structural concepts and list alternatives for materials, finishes, and features.
4. Give dimensions for areas, volumes, and estimate wall thicknesses.
5. Provide foundation design based on the geotechnical report.
6. For all processes and equipment, identify the equipment location, working space requirements, pipe routing, valve and equipment access, and maintenance access and removal provisions.
7. Identify potential safety hazards for O&M activities and mitigation measures.
8. Evaluate corrosion potential and mitigation measures for structural and building materials, equipment, and exposed pipe and conduit.

Task 2.1.15 – TM-5 Implementation Plan

TM-5 will focus on construction, testing and commissioning. A general outline for the TM is as follows:

TM-5 Implementation Plan

- Constructability issues

- Construction sequencing narrative and drawings
- Permit requirements and what type of permits needed
- Preliminary construction schedule
- Preliminary construction cost estimate
- Coordination with other projects
- Testing/commissioning planning

Key elements of TM-5 shall include the following:

1. Evaluate construction sequencing in coordination with other projects.
2. Identify potential constructability issues and develop strategies for mitigating the impacts.
3. Incorporate preliminary construction schedule and cost estimate developed under other tasks.
4. Coordinate implementation plan with other projects associated with this program.
5. Develop operational testing, reliability testing and commissioning procedures and coordinate with related projects and ongoing SRWTP operations.

Task 2.1.16 – TM-6 Reliability Centered Design Workshop

In accordance with Attachment F – Reliability Centered Design Implementation Guide, Consultant will participate in RCD Workshop together with Regional San and C-PMO staff and Regional San's RCD facilitation consultant. The workshop will be conducted when preliminary P&IDs have been prepared, but before quantities and layout of Project elements requiring maintenance are established. Prepare a TM describing how RCD will be incorporated into design of the Project. Incorporate outcome of RCD activities into PDR documents.

Task 2.1.17 – PDR – Draft

The draft TMs prepared under the previous tasks will be submitted individually for review as they are completed. Final TMs will be integrated into the draft PDR that includes all of the drawings associated with the PDR.

Documents that must accompany the PDR include the following:

- PDR in PDF format with 8-1/2" x 11" documents in Volume 1 and 11"x17" (half size) drawings in Volume 2. Ten (10) hard copies plus PDF electronic files.
- BIM and CAD files per Attachment C– Regional San CAD/BIM Standards.
- QA/QC documentation.
- Verification that all comments have been responded to.

- Verification that the decision log is up to date.
- Verification that all meeting and workshop notes are up to date.
- Equipment catalog and correspondence with suppliers and vendors.
- Native data files as needed for review.
- Other research, materials, and construction cost documentation.

Task 2.1.18 – PDR Review Workshop

Conduct PDR submittal workshop with Regional San and C-PMO staff. Present the proposed design using Navisworks or equivalent program.

Task 2.1.19 – PDR – Final

Following incorporation of responses to all comments, Consultant will submit the following:

- PDR in PDF format with 8-1/2”x11” documents in Volume 1 and 11”x17” drawings in Volume 2. Ten (10) hard copies plus PDF electronic files formatted to print 11”x17” drawings.
- Written responses to comments.
- Updated decision log.

Consultant shall attend and participate in the PDR Design Gate 2 Workshop at completion of the PDR. Consultant shall assist Regional San’s PM in preparing presentation material and pre-meeting handouts for Gate 2 meeting, including briefing on outcome of PDR phase, updates to project schedule and budget, risk management matrix, updated schedule, and updates to project team. Refer to Attachment E- Design Consultant Project Management Requirements.

Task 2.2 – Design Submittal 1

Design Submittal 1 (DS1) begins the process of preparing the project design specifications, drawings, and construction cost estimate, building on the work performed during the preliminary design phase. The focus during this phase of design is finalizing major equipment sizing, process and piping schematics, P&IDs, overall facility layouts, and utility corridors. The list of specifications shall be finalized as well during the DS1 phase. The following describes the specific tasks required as part of this effort.

Task 2.2.01 – Project Management (DS1 Phase)

The project management task encompasses overall project management, coordination with other projects, and risk management.

Consultant shall continue responsibility of the Project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions.

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

- Design phase kickoff meeting.
- Bi-weekly progress meetings.
- Project workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, operability review meetings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management.
- Interface with the program management information system PMWeb.
- Assist the PM in updating the risk register and the Risk Management Plan as needed. Assist the PM in identifying, tracking, managing and mitigating project risks that are shared by Regional San and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of sub-consultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and updated schedule.

Additional detail regarding project management requirements is provided in Attachment E – Design Consultant Project Management Requirements.

Task 2.2.02 - Risk Management Plan- Design Phase

The Consultant shall participate in an update of the Risk Management Plan developed during the PDR Phase. This participation shall include preparation for and attendance at one Risk Management workshop to identify and mitigate potential risk to the project during final design. This workshop is anticipated to last up to four (4) hours. The Consultant should assume that incorporating risk mitigation measures into the project documents is part of the normal scope of a design project and, therefore, is not to be separately budgeted under this task. This task is limited to the Consultant's participation in the workshop and updating of the Risk Management Plan.

Task 2.2.03 – Quality Assurance/Quality Control (DS1 Phase)

This task includes labor-hours for all QA/QC activities related to DS1, including the review of deliverables either by the Consultant, or by the Consultant in conjunction with Regional San staff in meetings and workshops as described in Attachment B - Design Contract Requirements for Harvest Water Projects. These labor-hours and associated costs shall be tracked separately in the Consultant's invoice as determined at the beginning of the Project.

Task 2.2.04 – Construction Cost Estimate

Consultant shall prepare a design level construction cost estimate to be included as part of the DS1 submittal. Refer to Attachment G – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. Consultant will compare the construction cost estimate to the baseline estimate. If the current estimate exceeds the baseline estimate, the Consultant shall identify the specific reasons for variations and identify corrective actions to align the newest estimate with the baseline. The Consultant shall particularly note the change in contingency percentages at various stages of design. Unless there is a Regional San-approved change in Project scope establishing a new baseline, the baseline estimate will not be changed. Submit ten (10) hard copies and the electronic files.

Task 2.2.05 – Construction Schedule

The Consultant shall coordinate with the C-PMO scheduler to review the format for the schedule. Consultant shall incorporate any comments to the PDR construction schedule made by the C-PMO, update the construction schedule to reflect any changes to the PDR, and submit it with the DS1 submittal package. Additional construction detail should be added consistent with the further detail incorporated in the DS1 design. The 3D model detail should be expanded for consistency with the expanded DS1 construction schedule and estimate. Any changes to durations, sequencing, tie-ins, and milestones must also be included. A more detailed startup, commissioning and testing plan must be included. The schedule narrative shall also be updated and expanded, particularly noting any critical sections of work, coordination with other projects and Regional San shutdown or tie-in requirements. Submit ten (10) hard copies and native electronic and PDF files.

Task 2.2.06 - Coordination with Other Projects

The project shall continue to be coordinated with other Harvest Water, EchoWater, and Regional San projects. Consultant shall plan on attending coordination meetings with other design consultants each month.

Task 2.2.07– Drawings and Design Development

The Consultant shall prepare DS1 submittal including drawings, electronic drawing files, BIM model and clash detection reports in accordance with Attachment B - Design Contract Requirements for Harvest Water Projects and Attachment C–Regional San CAD/BIM Standards. Consultant's work breakdown structure and budget for the drawing preparation effort shall include subtasks for tracking of progress and costs. Breakdown shall be by process and then discipline.

Task 2.2.08 – Specifications

The Consultant shall prepare a full list of anticipated specifications using the Construction Specifications Institute Master Format 50-Division numbering system. Identify specification sections that will be sourced from Regional San's guide specifications, as well as those that will be prepared by the Consultant. (Final content and format of all project specification sections, including those sourced from Regional San guide specifications shall be the responsibility of the Consultant.) Note that source of Division 00 contract specifications will be Regional San guide specifications, with the exception that the Consultant shall provide project-specific information such as the bid schedule, work constraints, and time of completion.

Task 2.2.09 – Design Related Documents

Under this task, the Consultant shall develop all parts of the DS1 submittal which are not specifically identified under other DS1 tasks including, but not limited to, the documents described in Attachment B - Design Contract Requirements for Harvest Water Projects. Minimum content expected at the time of DS1 submittal includes:

- A detailed outline for the project test plans.
- A Project Design Manual shall be prepared, and include updates of information contained in the PDR to conform to the DS1 submittal.
- Equipment numbering system and related asset management database shall be developed for the project. Database shall include:
    - Master equipment list
    - Equipment maintenance summary spreadsheets
    - Major equipment inventory control list
    - Copy of manufacturer's catalog information for acceptable equipment

Task 2.2.10 – DS1 Submittal and Design Review Workshops

DS1 work products shall consist of:

- Contract drawings, compiled into sets on 11" x17" (half size) paper – ten (10) hard copies and PDF files formatted to print 11" x 17" drawings.
- Complete list of specifications printed on 8-1/2" x 11" paper– ten (10) hard copies and PDF files.
- BIM and CAD files per Attachment C – Regional San CAD/BIM Standards.
- Clash detection report–electronic file.
- Project test plans outline – ten (10) hard copies and PDF files.
- Project Design Report – ten (10) hard copies and PDF files.
- Equipment databases –MS Excel or Access files, and PDF files.
- QA/QC documentation
- Construction schedule (see specific task).
- Construction cost estimate (see specific task).

Conduct design submittal review workshops during Regional San's review of DS1.

Task 2.2.11 – Responses to Review Comments and Validation Workshop

Respond to all review comments from Regional San and C-PMO. Conduct one design submittal validation workshop to confirm responses to comments and resolve any issues. Refer to Attachment E – Design Consultant Project Management Requirements.

Task 2.2.12 – Constructability Review

A constructability review shall be held immediately following DS1 in accordance with the Attachment E - Design Consultant Project Management Requirements. The C-PMO will assemble a constructability review team. The Consultant is responsible for preparing the documents for the constructability review, presenting the project to the review team, meetings with the review team, responding to review comments, and incorporating the results of review into the design documents. Consultant shall include adequate time in project schedule to allow for Constructability Review, response to recommendations, and Regional San's disposition of CR recommendations, prior to commencing work on DS2.

Task 2.3 – Design Submittal 2

Design Submittal 2 (DS2) continues the process of preparing the project design specifications, drawings, and construction cost estimate, building on the work performed during the DS1 phase. For this submittal, the major design elements are well established and supplementary/auxiliary design elements are in progress between DS1and DS2. Drawings for all disciplines shall be complete or nearly complete relative to basic design elements. Auxiliary equipment, details, and schedules may still be missing. The submittal shall include the location and arrangement of all significant existing and proposed

structures and equipment, all existing utilities adjacent to or within the construction area, drawing index, legend, etc. Specifications are substantially complete and detailed enough for meaningful review and comment by Regional San. Specifications shall include PLC Control Narratives in accordance with Regional San Design Guidelines (Attachment D).

The electrical calculations (Regional San uses Paladin Design Base 5 for electrical studies – see design guidelines) and other discipline calculations, databases, construction costs estimates, schedule and other Project Support Documentation shall be updated to reflect the status of the Drawings and Detailed Specifications and shall support the DS2 workshops.

Task 2.3.01 – Project Management (DS2 Phase)

The project management task encompasses overall project management and coordination with other projects.

Task 2.3.02 – Quality Assurance/Quality Control (DS2 Phase)

This task includes labor-hours for all QA/QC activities related to DS2, including the review of deliverables either by the Consultant, or by the Consultant in conjunction with Regional San staff in meetings and workshops, and preparation of the Submittal Outcome Report, as described in Attachment E - Design Consultant Project Management Requirements. These labor-hours and associated costs shall be tracked separately in the Consultant's invoice as determined at the beginning of the project.

Task 2.3.03 – Construction Cost Estimate

Consultant shall update the design level construction cost estimate and include it as part of the DS2 submittal. Refer to Attachment G – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. Consultant will compare the construction cost estimate to the estimate prepared for DS1. If the current estimate exceeds the latest baseline estimate, the Consultant shall identify the specific reasons for variations and identify corrective actions to align the newest estimate with the baseline. The Consultant shall particularly note the change in contingency percentages at various stages of design. Unless there is a Regional San-approved change in Project scope establishing a new baseline, the baseline estimate will not be changed. Submit ten (10) hard copies and electronic files.

Task 2.3.04 – Construction Schedule

The Consultant shall incorporate any comments to the DS1 construction schedule made by Regional San, update the construction schedule to reflect any changes since the DS1 submittal and submit it with the DS2 submittal package. This schedule submittal shall be utilized for the constructability review, and the Consultant should be prepared to discuss the proposed method of construction. The DS2 construction schedule should provide

additional detail consistent with the further design definition and update the durations, sequencing, tie-ins, and milestones based on the further development of the project design. A detailed startup, commissioning and testing plan must be included. The 3D model detail shall be expanded for consistency with the expanded DS2 construction schedule and estimate, and the terminology in the 3D model, construction schedule and estimate must remain consistent. The schedule narrative also shall be updated and expanded with a clear explanation of the construction plan, noting critical sections of work, coordination with other projects and Regional San shutdown or tie-in requirements. The updated schedule shall be submitted as part of the DS2 submittal package. Submit ten (10) hard copies and native electronic and PDF files.

Task 2.3.05 - Coordination with Other Projects

The project shall continue to be coordinated with other Harvest Water, EchoWater, and Regional San projects. Consultant shall plan on attending coordination meetings with other design consultants each month.

Task 2.3.06 – Drawings and Design Development

The Consultant shall prepare DS2 submittal including hard copy drawings, electronic files, BIM model and clash detection reports in accordance with Attachment B - Design Contract Requirements for Harvest Water Projects and Attachment C – Regional San CAD/BIM Standards. Consultant's work breakdown structure and budget for the drawing preparation effort shall include subtasks for tracking of progress and costs. Breakdown shall be by process and then discipline or by discipline and then process.

Task 2.3.07 – Specifications

The Consultant shall prepare a full list of anticipated specifications using the Construction Specifications Institute Master Format 50-Division numbering system. Identify specification sections that will be sourced from Regional San's guide specifications, as well as those that will be prepared by the Consultant. (Final content and format of all project specification sections, including those sourced from Regional San guide specifications shall be the responsibility of the Consultant.) Note that the source of Division 00 contract specifications will be Regional San guide specifications, with the exception that the Consultant shall provide project-specific information such as the bid schedule, work constraints, and time of completion.

Task 2.3.08 – Design Related Documents

Under this task, the Consultant shall develop all parts of the DS2 submittal which are not specifically identified under other DS2 tasks including, but not limited to, the documents described in Attachment B - Design Contract Requirements for Harvest Water Projects. Minimum expected level of design development at the time of DS2 submittal includes:

- Draft project commissioning and test plans.
- Project Design Manual - updated to conform with the DS2 submittal.
- Draft databases (hard copy and electronic files) shall be submitted for:
    - Master equipment list (MEL shall be substantially complete and tag numbers verified at the completion of DS-2.)
    - Equipment maintenance summary spreadsheets
    - Major equipment inventory control list
    - Catalog information from acceptable manufacturers.
- Calculations in accordance with Attachment B – Design Contract Requirements for Harvest Water Projects.

Task 2.3.09 – DS2 Submittal and Design Review Workshops

DS2 work products shall consist of:

- Contract drawings, compiled into sets on 11" x17" (half size) paper – ten (10) hard copies and PDF files formatted to print 11" x 17" drawings.
- Complete technical specifications printed on 8-1/2" x 11" paper– ten (10) hard copies and PDF files.
- BIM and CAD files per Attachment C – Regional San CAD/BIM Standards.
- Clash detection report –electronic file.
- Draft Commissioning Plan – five (5) hard copies and PDF files.
- Project Design Report – five (5) hard copies and PDF files.
- Equipment databases – five (5) hard copies and MS Excel or Access files, and PDF files.
- Construction schedule (see specific task).
- Construction cost estimate (see specific task).
- Calculations – five (5) hard copies and PDF files.

Conduct design submittal review workshops during Regional San's review of DS2.

Task 2.3.10 – Responses to Review Comments, Validation Workshop

Respond to all review comments from Regional San and C-PMO. Conduct a design submittal validation workshop to confirm responses to comments and resolve any issues. Refer to Attachment E – Design Consultant Project Management Requirements.

Task 2.4 – Design Submittal 3 and Bid Documents

This task includes preparation of the third design submittal and bid documents.

Task 2.4.01 – Project Management (DS3 Phase)

The project management task encompasses overall project management, coordination with other projects, and risk management.

Consultant shall continue to be responsible for the project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions.

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

- Bi-weekly progress meetings.
- Project workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, and other meetings, throughout the duration of the project.
- Scope, budget and schedule management and updates.
- Interface with the program management information system PMWeb.
- Assist the PM in updating the Risk Register and the Risk Management Plan as needed. Assist the PM in identifying, tracking, managing and mitigating project risks that are shared by Regional San and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of sub-consultants.
- Management and coordination of Consultant staff.
- Monthly invoicing and schedule update.
- Consultant shall attend and participate in the Design Gate 3 Workshop scheduled between DS2 and DS3 submittals. Consultant shall assist Regional San's PM in preparing presentation material and pre-meeting handouts for Gate 3 meeting. The Gate 3 meeting is focused on confirming and validating the tag numbering in the project MEL database (all tagged assets, equipment names and tag numbers) and related design documents are sufficiently complete to proceed with production of DS3.

Additional detail regarding project management requirements is provided in Attachment E – Design Consultant Project Management Requirements.

Task 2.4.02 - Risk Management Plan – Construction and Commissioning

The Consultant shall participate in a Risk Management workshop during this phase of work to identify and mitigate potential risk to the project during construction and commissioning. This workshop is anticipated to last up to four (4) hours. The Consultant should assume that incorporating risk mitigation measures into the project bid documents is part of the normal scope of a design project and, therefore, is not to be budgeted under this task. This task is limited to the Consultant's participation in the workshop and updating of the Risk Management Plan.

Task 2.4.03 – Quality Assurance/Quality Control (DS3 Phase)

This task includes labor-hours for all QA/QC activities related to DS3, including the final review of all design phase deliverables either by the Consultant, or by the Consultant in conjunction with Regional San staff in meetings and workshops. Refer to Attachment E – Design Consultant Project Management Requirements for guidance. These labor-hours and associated costs shall be tracked separately in the Consultant's invoice as determined at the beginning of the Project.

Task 2.4.04 – Construction Cost Estimate

Consultant shall update the design level construction cost estimate and include it as part of the DS3 submittal. This will be the final estimate prior to issuing the contract documents for bid. Refer to Attachment G – Design Consultant Cost Estimating Guidelines for details regarding construction cost estimating requirements. Consultant will compare the construction cost estimate to the estimate prepared for DS2. If the current estimate exceeds the latest baseline estimate, the Consultant shall identify the reasons for differences and identify corrective actions to align the newest estimate with the baseline. The Consultant shall particularly note the change in contingency percentages at various stages of design. Unless there is a Regional San-approved change in Project scope establishing a new baseline, the baseline estimate will not be changed. Submit one five (5) hard copies and electronic files.

Task 2.4.05 – Construction Schedule

The Consultant shall provide a final DS3 construction schedule based on the bid documents. This schedule shall be the basis for the contract durations and milestones. The Consultant shall incorporate any comments to the DS2 construction schedule made by the C-PMO and update the construction schedule to reflect any changes since the DS2 submittal. This schedule submittal shall also incorporate any comments from the constructability review. Similar to the DS2 schedule submittal, the DS3 construction schedule should provide additional detail consistent with the further design definition and update the durations, sequencing, tie-ins, and milestones based on the further development of the project design. A detailed startup, commissioning and testing plan

should be included. The 3D model detail should be expanded for consistency with the expanded DS3 construction schedule and estimate. The schedule narrative shall also be updated and expanded with a clear explanation of the construction plan, noting critical sections of work, coordination with other projects and Regional San shutdown or tie-in requirements. The updated schedule shall be submitted as part of the DS3 submittal package. Submit five (5) hard copies and native and PDF electronic files.

The final construction schedule will be made available to bidders in pdf format during the bid period.

Task 2.4.06 - Coordination with Other Projects

The project shall continue to be coordinated with other Harvest Water, EchoWater, and Regional San projects. Consultant shall plan on attending coordination meetings with other design consultants each month.

Task 2.4.07– Drawings and Design Development

The Consultant shall prepare DS3 submittal in accordance with Attachment B - Design Contract Requirements for Harvest Water Projects and Attachment C - CAD/BIM Standards. CAD/BIM models must be used to generate plan and sections for printing. Consultant's work breakdown structure and budget for the drawing preparation effort shall include subtasks for tracking of progress and costs. Breakdown shall be by process and then discipline or by discipline and then process.

DS3 shall be delivered when the drawings and specifications are 100 percent complete, fully checked by the Consultant, and assembled into printed packages as they will be distributed to bidders. No new drawings and/or specification sections by the Consultant shall be expected after this stage. All Regional San comments on the previous submittal shall have been resolved, addressed and/or incorporated in this submittal. The only additional effort is Regional San final review of the documents after comments are incorporated.

The check performed by the Consultant shall include a review of all deliverables at the discipline level and a comprehensive inter-discipline review of all deliverables to ensure that every document is consistent with all other documents. The Consultant shall incorporate corrections into the project deliverables prior to DS3.

A copy of the comprehensive inter-discipline review comments with the Consultant's detailed responses written next to each respective checker's comments shall be submitted to Regional San along with DS3. A typical mechanical process and electrical/ instrumentation/control cross-check shall compare the process and piping schematics, P&IDs, singe-line diagrams, elementary diagrams, input/output (I/O) schedules or lists, control system and communications schematic, communications plan, control strategy, plans, schedules, and specifications so that each instance of a loop tag number will be

consistent between documents, motor horsepower match, and all equipment is identified in each location.

The electrical calculations and other discipline calculations and databases, construction cost estimates, schedules, and other project support documentation shall reflect the status of the final drawings and detailed specifications and shall support the DS3 workshops.

Task 2.4.08 – Specifications

The Consultant shall incorporate Regional San comments on the draft specifications into a final set of project specifications. Finalize and review the list of approved equipment within the specifications.

Task 2.4.09 – Design Related Documents

Under this task, the Consultant shall develop all parts of the DS3/Bid Document submittal which are not specifically identified under other DS3/Bid Document tasks including, but not limited to, the documents described in the Design Contract Requirements. Minimum expected level of design development at the time of DS3/Bid Document submittal includes:

- Project Commissioning and Test Plans.
- The Project Design Manual shall be finalized to conform with the DS3/Bid Document submittal.
- Complete and final equipment databases (hard copy and electronic files) shall be submitted for:
    - Master equipment list (submitted with all tag number for verification by the District at least one month prior to DS3 submittal)
    - Equipment maintenance and spare parts summary spreadsheets
    - Major equipment inventory control list
    - All catalog information from manufacturers listed in the specifications.

Task 2.4.10 – DS3 Submittal and Design Review Workshops

DS3 work products shall consist of the following:

- Contract drawings, compiled into sets on 11” x17” (half size) paper – ten (10) hard copies and PDF files formatted to print 11” x 17” drawings.
- Complete specifications including front-end, technical sections and appendices printed on 8-1/2” x 11” paper – ten (10) hard copies and PDF files.
- BIM and CAD files per Attachment C – Regional San CAD/BIM Standards.
- Clash detection report–electronic file.

- Project test plans – five (5) hard copies and PDF files.
- Project Design Report – five (5) hard copies and PDF files.
- Equipment databases – MS Excel or Access files, and PDF files.
- Construction schedule (see specific task).
- Construction cost estimate (see specific task).
- All design phase calculations, assembled, logged, and QC'd. Stamped final calculations and computer output – five (5) hard copies and PDF files. Refer to Attachment B – Design Contract Requirements for Harvest Water Projects.

Conduct design submittal review workshops during Regional San's review of DS3.

Task 2.4.11 – Responses to Review Comments and Validation Workshop

Consultant shall respond to all review comments from Regional San and C-PMO. Conduct a design submittal validation workshop to review responses to comments and resolve any issues. Refer to Attachment E – Design Consultant Project Management Requirements.

Task 2.4.12 – Bid Set Submittal

The Consultant shall prepare a check set of the bid documents for final review by Regional San and confirmation that all comments have been addressed satisfactorily. After review of the check set and response to any final comments, the Consultant shall furnish the bid documents for advertising. Regional San will advertise for bids and distribute the bid documents.

Final Check Set

Once all revisions have been made to DS3 documents, three (3) complete printed copies of these documents shall be submitted to Regional San PM for a final review. The final check set shall include finished, checked and complete drawings and specifications and other documents that incorporate all Regional San comments from previous submittals, workshops as appropriate.

Prior to submittal of the final check set, the Consultant shall have performed an interdisciplinary cross-check and clash detection of the design changes made after DS3 and corrected the related discrepancies. The Consultant shall not add any new drawings or make any changes to the plans or specifications that are not a result of comments received from Regional San or the final in-house QC check, or to resolve a problem needing correction that was not previously known. Any such changes shall be identified so that Regional San can review them. The Consultant shall document in-house changes and submit them to Regional San along with the final check set.

Models are to be clash free. All plans and sections shown on drawings must be generated from the models. The models will be made available to the selected contractor for use after award. The models will be provided to bidders during the bid phase with the appropriate use limitations (the models are not for bidding purposes).

All contract documents shall be stamped and signed by a licensed engineer in the State of California.

The final check set of the contract documents shall be in the exact form as intended to be sent to bidders for preparation of bids. Hard copies shall be half size (11" x 17") and the specifications, test plans, and other documents in shall be printed on 8-1/2" x 11" paper. Electronic files shall be PDF. The PM will review the final Check Set documents and notify the Consultant within 5 working days of any comments.

Consultant shall attend and participate in the Design Gate Workshop 4 (final design acceptance) at completion of the design phase, and shall assist Regional San's PM in preparing presentation material and pre-meeting handouts for Gate 4 meeting, including briefing on outcome of design phase, updates to project schedule and budget, Risk Management matrix, and updates to project team. Refer to Attachment E- Design Consultant Project Management Requirements. The Consultant shall include adequate time in the project schedule to resolve any issues discussed in the Gate 4 Workshop before the final design is scheduled for approval to bid by the Regional San Board of Directors (Board).

Bid Documents

The Consultant shall respond to and resolve any final comments from Regional San and update the contract documents accordingly. The Board will authorize advertising for bids. The final bid documents shall be complete and ready in electronic form a minimum of fourteen (14) calendar days prior to the Board meeting. Five (5) working days prior to the day bids are advertised to the public, the following documents shall be delivered:

- Stamped and signed bid sets of drawings and specifications – five (5) hard copies with half-size drawings.
- One set of full-size drawings.
- Final construction schedule – five (5) hard copies.
- Final construction cost estimate – five (5) hard copies.
- Equipment databases – five (5) hard copies.
- Electronic files of all deliverables (including models). Consultant shall coordinate with Regional San's PM regarding format and layout electronic media prior to

submittal.

PHASE 3 – BID AND AWARD

The Consultant shall assist Regional San during the bid and award phase of the Project. The Consultant shall provide the following bid period services:

- Project management
- Respond to bidders' questions
- Attend the pre-bid meeting
- Prepare addenda
- Prepare conformed documents

Task 3.1 – Project Management

Consultant shall continue to be responsible for the project in terms of staffing, budget, schedule and scope, promote communication within the project team, and document key decisions.

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

- B-weekly progress meetings.
- Project workshops and focused meetings.
- Other meetings. In addition to specific types of meetings described in the RFP and attachments, Consultant should anticipate participation in management briefings, and other meetings, throughout the duration of the project
- Scope, budget and schedule management.
- Interface with the program management information system PMWeb.
- Assist the PM in updating the Risk Register and the Risk Management Plan as needed. Assist the PM in identifying, tracking, managing and mitigating project risks that are shared by Regional San and Consultant. Identify, manage and mitigate Consultant's project risks.
- Management and coordination of sub-consultants.
- Management and coordination of Consultant staff.
- Monthly invoicing.

Additional detail regarding project management requirements is provided in Attachment E -Design Consultant Project Management Requirements.

Task 3.2 – Respond to Bidders' Questions

The PM will take the lead in responding to bidders' questions. Consultant shall provide responses to bidders' questions delegated by the PM. Consultant shall also participate in the evaluation of the submitted bids, furnish consultation and advice to C-PMO staff and assist with all the related equipment, cost, and other analyses as required to finalize the award decision. Consultant shall lead the review of the Contractor's requests for substitution in collaboration with the C-PMO.

Task 3.3 – Attend Pre-Bid Meeting

The PM will lead the pre-bid meeting and the Consultant will participate by contributing materials and information for the presentation, contributing to the site walk, responding to certain questions and preparing information materials for attendees. Consultant shall prepare the meeting minutes.

Task 3.4 – Prepare Addenda

During the bid period, the Consultant shall prepare addenda to provide clarification and resolve errors and omissions identified prior to bid opening. Consultant shall update estimate of probable construction cost to account for addenda changes. Each addendum shall include:

- Narrative description of changes
- Revised or new drawings as needed
- Revised or new specification sections as needed

Assume 3 addenda will be issued. Addenda deliverables shall consist of five (5) hard copies and PDF files.

Task 3.5 – Prepare Conformed Documents

The bid set of contract documents shall be updated by incorporating all addenda items issued during the bid period. No other changes to the contract documents shall be made. Within 15 working days after the bid opening date, all addenda shall be incorporated, and one complete set of conformed contract documents in PDF format shall be submitted to the PM for a final review. The set shall be in the exact form as intended to be sent to the printers for reproduction of the conformed sets. The PM will notify the Consultant within 5 working days of any comments.

Submit the following:

- Conformed contract documents – twenty (20) hard copies (half-size drawings), one full-size set of drawings, MS Word, Excel and Access files, and PDF files formatted to print 11" x 17" drawings.
- BIM and CAD files per Attachment C – Regional San CAD/BIM Standards.
- Any final calculations that have been modified subsequent to the DS3 submittal shall be resubmitted as stamped final calculations and computer output – five (5) hard copies and PDF files. Refer to Attachment B – Design Contract Requirements for Harvest Water Projects.

PHASE 4 – CONSTRUCTION (FUTURE TASK)

Construction phase services including on-site support will be scoped and included by future contract amendment once Phase 2 – Design is complete.

Regional San will administer and provide field inspection for construction contracts. Construction support services shall be provided by the Consultant as requested by Regional San.

For purposes of the proposal, the Consultant shall identify the staff that will participate during the construction phase. It is anticipated that the Consultant shall potentially assign at least one person familiar with the design to be co-located with the C-PMO onsite for key phases of construction.

PHASE 5 – COMMISSIONING (FUTURE TASK)

Commissioning services will be scoped and included by future contract amendment once Phase 2 – Design is complete.

The Consultant shall provide commissioning services as requested by Regional San and assign a commissioning leader.

PHASE 6 – CLOSEOUT (FUTURE TASK)

The Consultant shall provide assistance during the closeout phase to support project acceptance and financial closeout. This task will be scoped and included by future contract amendment once Phase 2 – Design is complete.

VIII. BASIS FOR COMPENSATION

Time and Expenses: Compensation for services rendered will be based on a Time and Expenses basis with a not-to-exceed dollar ceiling for the entire contract.

IX. ORGANIZATION AND CONTENT OF THE PROPOSAL

Table VII-1 lists the contents of the proposal by section. Sections 2 through 6 of the proposal shall not exceed 25 pages in length and the cover letter shall not exceed two pages. Use 12-point Times New Roman font for main body text. Other sections have no page limitations and must be limited to the contents listed. Up to four (4) 11" x 17" pages within Sections 2 through 6 will be counted as single pages when used to display figures and tables that do not fit on a standard page; additional 11" x 17" pages will be counted as two pages each.

Table VII-1 Proposal Contents

Section	Contents
Cover Letter	Transmittal
1	Identification of Proposer
2	Project Overview
3	Project Approach
4	Management Approach
5	Staffing
6	Related Project Experience
7	Project Schedule
8	Conflicts of Interest
9	Proprietary Information
10	Insurance
11	DIR Compliance
12	Employment Practices
13	Fee Estimate[a]
14	Exceptions to Contract Terms and Conditions
A	Resumes of Key Staff
B	Description of Project Deliverables

[a]The fee estimate shall be provided in a separate envelope.

SECTION 1 - IDENTIFICATION OF PROPOSER

The proposal shall include the names, offices, addresses, and phone numbers of key Consultant and key sub-consultant staff that are proposed to be involved in the Project. The proposer shall identify in which office(s) the production will occur.

SECTION 2 - PROJECT OVERVIEW

The proposal shall include a description of the Consultant's understanding of the Project including the Project's background, purpose, main issues, and interrelationship with other Harvest Water and Regional San projects. The Consultant also shall demonstrate

an understanding of Regional San's goals and objectives as related to this Project. The proposal shall include a statement acknowledging the Scope of Work, including Consultant's recommended enhancements to the scope, consistent with the Consultant's project approach. To demonstrate an understanding of the Scope of Work, the Consultant shall develop an outline description of project deliverables and include it as an appendix to the proposal. As a minimum, this outline should include proposed technical memoranda, report deliverables, and a preliminary list of drawings. The lists of deliverables and drawings are to be appended to the proposal and will not be counted in the page limit.

SECTION 3 - PROJECT APPROACH

Consultant/Proposer will provide a detailed description of the proposed approach to the Project. The description shall include details to implement the tasks described in the Scope of Work and any recommended revisions or additions to the list of tasks. The Consultant is encouraged to provide comments and enhancements to the scope provided in the RFP. The Consultant/Proposer may recommend BCEs and alternatives along with value added by those BCE's. Conversely, the Consultant/Proposes may recommend value by limiting BCE efforts described in RFP

The proposal shall describe the Project's technical issues and the Consultant's approach to handling said issues. Emphasis should be placed on how the Consultant's technical approach will promote the Project's success, cost containment, coordination, and schedule compliance. The Consultant's approach to construction support services should be included in this section.

SECTION 4 - MANAGEMENT APPROACH

The proposal shall present the Consultant's management approach, including management organization, coordination and monitoring of project schedule, cost, risk, scope, communications, quality, resources, and other management issues that the Consultant feels should be addressed. Emphasis should be placed on how the Consultant's management approach will promote the Project's success and schedule compliance.

The Consultant shall highlight resources, tools, and processes that will be used to obtain and manage resources, partner with Regional San and C-PMO staff, meet BIM requirements, conduct design engineering, and produce drawings and specifications on schedule and on budget. Tools may include capabilities for coordination, communication, automatic checking, and design drawing management. Proposers should highlight items that may have been developed on other projects as well as items to be developed specifically for the Project.

The proposal shall describe the Consultant's approach to managing the design review meetings, organizing the constructability workshop, and involving stakeholders in focus meetings and workshops. The Consultant's approach to quality control and assurance in the preparation of construction documents shall be clearly described in this section.

Finally, describe the Consultant's approach for successful collaboration and coordination with Regional San, C-PMO and other design consultants.

SECTION 5 – STAFFING

The proposal shall include a Team Member Organizational Chart clearly identifying the key individuals assigned to the project and each person's proposed position, responsibility, availability and location. The proposal also shall also clearly indicate who will be in responsible charge of the Project.

The proposal shall include a biography of key individuals proposed to be assigned to the project including, but not limited to, management staff and discipline leaders. Special emphasis shall be provided on the individual's background, qualifications, certifications, experience on related and/or similar projects, and the location from where each person's work will be performed.

At least three client references, including name, description of past working relationship, and current contact information, shall be listed for each key individual who is proposed in the organizational chart. Identify proposed key staff who will be assigned to the Project for construction support, to be negotiated at a later date.

Firm affiliation and professional engineering licenses, including discipline and state of licensure, shall be designated for each individual. Full resumes, sorted first by firm, then by last name, shall be included as an appendix to the proposal.

The proposal shall include an estimate of labor-hours to conduct and complete each task of the Scope of Work through Phase 3 – Bid and Award, broken out by each Consultant labor classification that will be assigned to the Project. A matrix format showing hours per personnel classification (management, engineering, technical, drafting, and support personnel) for each task shall be used. A Sample Labor Hour Matrix is provided in Attachment J. Consultant may use its own matrix providing it includes all of the requested information. A list of drawings is required and may be included as an appendix.

SECTION 6 - RELATED PROJECT EXPERIENCE

The proposal shall include profiles of similar projects for which the firm(s) and proposed team members have completed design in the last ten (10) years including project name, date, description and capacity of project, location, design and construction cost, and client reference information including phone number. The firm's role in the project (prime

consultant, sub-consultant, etc.) should also be described together with the general scope of services (preliminary design, design, construction management, etc.). For each project, indicate which proposed team members worked on the project and describe the role/work they performed and their level of involvement.

SECTION 7 - PROJECT SCHEDULE

The Consultant shall confirm that the work can be done within the schedule planned by Regional San using the resources proposed by the Consultant, as well as describe how the proposed staff will meet the resource requirements of the project. The Consultant shall prepare a schedule showing all major project tasks (integrated with Regional San's WBS) and milestones required to complete all work through Phase 6 (i.e., from Final BODR through closeout). Regional San's project WBS is listed in Attachment J - Sample Labor Hour Matrix.

SECTION 8 – CONFLICTS OF INTEREST

Firms submitting proposals in response to this RFP must disclose to Regional San any actual, apparent, direct or indirect, or potential conflicts of interest that may exist with respect to the firm, management, or employees of the firm or other persons relative to the services to be provided to be awarded pursuant to this RFP. If a firm has no conflicts of interest, a statement to that effect must be included in the proposal. Consultants must submit with their proposal a completed "Conflict of Interest and Non-Collusion Affidavit" Form attached here to as Attachment L.

Implementation of the Harvest Water Capital Program will consist of multiple phases and elements of work that affect both the A-PMO and C-PMO. Potential conflicts of interest arise out of participation in the various phases and elements of that work. Regional San has developed guidelines regarding when participation in a specific phase of work may create a conflict of interest. These guidelines are provided in Attachment N of this RFP. Because an actual determination regarding whether a conflict of interest exists depends upon the specific facts of each situation, the guidelines set forth in Attachment N may be subject to change.

At the recommendation of District Counsel, Regional San submitted a request to the California Fair Political Practices Commission (FPPC) to evaluate the applicability Government Code 1090 contracting restrictions relative to this contract and consultants who have provided planning level services to date on Harvest Water. The FPPC has concluded that said restrictions do not apply. The resulting FPPC advice letter is provided in Attachment O.

SECTION 9 - PROPRIETARY INFORMATION

Any information submitted in a proposal in response to this RFP that the proposer considers proprietary must be identified as such and must include the description of the legal basis for a claim of confidentiality. Regional San will not assert the confidentiality of such information unless the proposer executes and submits a written agreement prepared by Regional San to defend and indemnify Regional San for any liability, costs and expenses incurred in asserting such confidentiality as part of the proposal. The final determination as to whether or not Regional San will assert the claim of confidentiality on behalf of the proposer is in the sole discretion of Regional San.

SECTION 10 - INSURANCE

Provide a summary of the consultant's present and proposed insurance coverage, including commercial general liability, automobile liability, workers' compensation, property damage, employer's liability, and professional liability or errors and omissions liability for the duration of the contract. Please see Attachment K – Regional San Sample Agreement, and refer to Exhibit B for Regional San's insurance requirements.

SECTION 11 – DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) COMPLIANCE

Consultants must note within their proposal, valid DIR registration numbers for consultant's personnel and sub-consultants performing public works tasks.

1. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

2. No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

3. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

4. Labor Compliance Program: The County of Sacramento received final approval from the Director of California Department of Industrial Relations as a Labor Compliance Program effective March 15, 1994. All questions regarding this Labor Compliance Program and prevailing wage requirements should be directed to the Labor

Compliance Section at (916) 875-2711. In accordance with Section 1771.5 of the California Labor Code, the payment of the general prevailing rate of per diem wages or the general prevailing rate of per diem wages for holiday and overtime is not required for any public works project of twenty-five thousand dollars ($25,000) or less when the project is for construction work, or for any public works project of fifteen thousand dollars ($15,000) or less when the project is for alteration, demolition, repair, or maintenance work.

5. This is a contracting services project in accordance with Section 1771.5 of the California Labor Code.

6. Pursuant to California Labor Code Section 1720 and following, and Section 1770 and following, the CONTRACTOR shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of the prevailing wage determinations are on file at the office of the County of Sacramento Labor Compliance Program, 9700 Goethe Road, Suite D, Sacramento, CA 95827, and are also available on the internet at http://www.dir.ca.gov/DLSR/PWD.

SECTION 12 – EMPLOYMENT PRACTICES

Provide a summary of your firm's employment policies and procedures, including any equal employment opportunity and affirmative action policies. Also, include a brief summary outlining the present composition of your work force.

SECTION 13 - FEE ESTIMATE

A fee estimate for the project shall be provided in a separate sealed envelope. The envelope for the selected firm will be opened for the purpose of negotiating a contract through bid phase services. The envelopes for the firms not selected will be returned unopened after contract negotiations are complete.

Compensation will be on a Time and Expenses basis, with a not to exceed dollar ceiling for the entire contract. Include the following information:

- Direct hourly rates for those staff to be billed to the project.
- Estimated labor hours and fee by task.
- Types and estimated amount of direct (non-labor) costs to be billed to the project.
- Adjustments in rates predicted to occur during the project. For budgeting purposes, a maximum direct salary escalation rate of 3 percent per year should be assumed and will be discussed during fee negotiations.

- Direct labor multiplier. A maximum 3.0 multiplier on base direct salary is permitted. For high salaried employees, a cap may be applied by the District.
- Sub-consultant costs. A maximum markup of 5 percent is permitted.
- Other direct costs (ODCs). A maximum markup of 5 percent is permitted.
- Lodging, meals and travel shall be reimbursed as follows:

  a. Per diem for lodging (equal to the federal standard CONUS per diem rate for Sacramento County at the time of contract negotiation) will be reimbursed for each work night, up to five (5) nights per week.

  b. Per diem for meals and incidentals (equal to the federal standard CONUS per diem rate for Sacramento County at the time of contract negotiation) will be reimbursed for each work day, up to five (5) days per week.

  c. Airfare and local and home transportation costs will be reimbursed at cost.

  d. Mileage will be reimbursed at the current IRS rate which can be accessed by clicking the following link:

  https://www.irs.gov/newsroom/irs-issues-standard-mileage-rates-for-2020

SECTION 14 – EXCEPTIONS TO CONTRACT TERMS AND CONDITIONS.

Provide a list of any exceptions to contract terms and conditions (see Attachment K – Regional San Sample Agreement) which the Consultant will seek from the standard Regional San contract language. Include these exceptions in the sealed fee estimate envelope.

X. PRE-PROPOSAL MEETINGS

Prospective consultants or consultant teams may request one private meeting with Regional San after the RFP is issued and prior to the proposal due date. Meetings may be scheduled on November 17-18, 2020 for up to one hour. Contact Rigoberto Guizar, Project Manager, at 916-876-6051 or guizarr@sacsewer.com. Regional San's selection committee will attend the meeting with the exception that any outside-agency member(s) will not attend.

Generally, any information and/or questions raised during these individual meetings will be kept private; however, Regional San may determine that some information may be summarized and shared with all proposers via addendum.

XI. SUBMITTAL INSTRUCTIONS

Please submit ten (10) hardcopies and one PDF on CD as follows:

Due Date: ***December 11, 2020*** **by 3:00 p.m.**

Deliver to: Harvest Water Capital Program
SRWTP Administration Building
Attn: Rigoberto Guizar, Project Manager
8521 Laguna Station Road
Elk Grove, CA 95758

XII. PROPOSAL RATING CRITERIA

A technical review panel composed of Regional San staff and outside representative(s) will evaluate and rate each proposal on the following criteria:

Criteria	Weight	Scores[a]	Weighted Scores[b]
Project approach	30%		
Management approach	15%		
Firm qualifications and related project experience	10%		
Team qualifications and related experience	20%		
Interview (Optional)	25%		

[a] Each criterion will be assigned a score of 1 to 100.
[b] Scores will be multiplied by the weights and totaled to yield the total points on the proposal and interview. Maximum total points is 100.

XIII. SELECTION PROCESS

In order to be considered, interested consultants must submit a complete proposal document, with organization and content consistent with this RFP, by the closing date and time required.

Ranking of the proposals will be based on capability/qualifications criteria. Proposals will be evaluated in three phases as follows:

Phase 1: Proposals will be examined as to whether or not the Consultant understood and responded in accordance with the following requirements:

1) Proper completion and submittal of required proposal documents
2) Acceptability of exceptions taken to agreement terms and conditions
3) Related experience requirement met or exceeded

Phase 2: Proposals that meet the requirements in Phase 1 will be evaluated and scored using the table above. The table identifies criteria used in the determination of the final proposal ranking. If any single criterion score fails to be above zero, the proposal will be automatically rejected. Based upon the evaluation of the proposals and reference checks, the most responsive proposals may be invited to an interview to further aid the selection process. Regional San may also elect to complete the consultant evaluation and selection without going through the interview process.

Phase 3: Cost information for the highest ranked proposal (and interview, if conducted) will be opened and Regional San staff will enter into negotiations with the consultant. If a mutually agreeable contract is unable to be negotiated, Regional San will conclude negotiations with said consultant, and commence negotiations with the consultant with the next highest ranked proposal. This process will continue until an agreement is successfully negotiated or the entire list of eligible consultants is exhausted. Once a mutually agreeable contract is executed, the remaining sealed cost proposals will be returned to remaining consultants.

Regional San reserves the right:

- **To reject any or all Proposals, or any part thereof; and**
- **To select more than one consultant; and**
- **To waive any informality in the Proposal; and**
- **To accept the Proposal that is in the best interest of the Regional San.**

Regional San's decision will be final.

XIV. AWARD OF CONTRACT

Award of contract shall be made to the consultant who provides the best value and overall response to the requirements of this RFP. Regional San may select whichever proposal it determines will best serve its interests. The successful consultant will be selected in accordance with the proposal evaluation criteria identified above, and any addenda thereto, except for such immaterial deviation as may be waived by Regional San. Selection is expected to be made on or about January 21, 2021, subject to final approval by the Regional San Board. Consultants who submitted proposals will be notified of the outcome of the selection process.

Regional San is prohibited from awarding this Contract to any person, entity or business that is on the Federal Exclusion List (https://www.sam.gov/). If you or your firm is on this list, and/or debarred, suspended, or otherwise excluded from or ineligible for participation in federal, State or county government contracts, Regional San cannot award this contract to you and you should not respond to this RFP. In addition, Consultant certifies that it shall not contract with a subcontractor that is so debarred or suspended.

XV. SOLICITATION OF SUB-CONSULTANTS, SUBCONTRACTORS, OTHER SERVICE PROVIDERS AND SUPPLIERS

If the prime Consultant intends to solicit sub-proposals and/or quotes for certain tasks on this project from qualified sub-consultants, subcontractors, other service providers and suppliers, the prime Consultant shall not illegally discriminate in the solicitation process. Substitution of any sub-consultants, subcontractors, other service providers and suppliers identified in the agreement shall not be made without the written consent of Regional San.

XVI. TERMS AND CONDITIONS

A. IRAN CONTRACTING ACT DISCLOSURE

Pursuant to the Iran Contract Act of 2010 (California Public Contract Code, Sections 2202-2208), consultants are ineligible to submit a proposal for projects with a public entity for goods or services of one million dollars ($1,000,000) or more if the consultant engages in investment activities in Iran.

The top ranked consultant must provide the attached disclosure form as a mandatory submittal for all projects in excess of $1,000,000. The Iran Contracting Act Disclosure Form, incorporated into this RFP package as Attachment M, shall be completed and submitted by the top ranked candidate upon notice of Regional San's notice of intent to award.

B. QUESTIONS REGARDING THE RFP

Proposers are responsible for reviewing all portions of this RFP and attachments. Proposers are encouraged to submit questions regarding the scope and requirements of the RFP. All requests for information concerning the RFP must be in writing and directed to Rigoberto Guizar, Project Manager (guizarr@sacsewer.com) on or before 3:00 PM on December 3, 2020. All inquiries should include the name of the RFP. Modifications and clarifications will be made by addenda as specified in this RFP. Regional San is not obligated to issue addenda in response to any request submitted after the deadline.

If any new or substantive information is provided in response to questions, addenda will be issued and posted on Regional San's website at https://www.regionalsan.com/harvest-water-program-opportunities

C. INTERPRETATION AND ADDENDA

The Proposer will be responsible for ensuring that its proposal reflects any and all addenda posted by Regional San prior to the proposal due date regardless of when the proposal is submitted. Regional San recommends that the Proposer check Regional San's web page before submitting its proposal to determine if the Proposer has read all posted addenda. Regional San will not be responsible for any other explanation or interpretation.

D. REVISION OF PROPOSAL

A Proposer may withdraw or revise a proposal on the Proposer's own initiative at any time before the deadline for submission of proposals. The Proposer must submit the revised proposal in the same manner as the original proposal. A revised proposal must be received on or before the proposal due date. In no case will a statement of intent to submit a revised proposal extend the proposal due date for any Proposer. At any time during the proposal evaluation process, Regional San may require a Proposer to provide oral or written clarification of its proposal.

E. ERRORS AND OMISSIONS IN PROPOSAL

Failure by Regional San to object to an error, omission, or deviation in the proposal will in no way modify the RFP or excuse the Proposer from full compliance with the specifications of the RFP or any Agreement awarded pursuant to the RFP.

F. OBJECTIONS TO RFP TERMS

Should a Proposer object to any provision or legal requirement set forth in this RFP, the Proposer must, not more than ten (10) calendar days after the RFP is issued, provide written notice to Regional San setting forth with specificity the grounds for the objection. The failure of a Proposer to object in the manner set forth in this paragraph will constitute a complete and irrevocable waiver of any such objection.

XV. ATTACHMENTS

A. Harvest Water Pumping Station Draft Basis of Design Report
B. Design Contract Requirements for Harvest Water Projects
C. Regional San Project CAD/BIM Standards
D. Design Guidelines
E. Design Consultant Project Management Requirements
F. Reliability Centered Design Implementation Guide
G. Design Consultant Cost Estimating Guidelines

H. Preliminary Geotechnical Information
I. BCE Guidance
J. Sample Labor Hour Matrix
K. Regional San Sample Agreement
L. Conflict of Interest and Non-Collusion Affidavit
M. Iran Contracting Act Disclosure Form
N. Harvest Water Conflict of Interest Guidelines
O. FPPC Advice Letter re: Gov't Code 1090

Other information available on request.

- Topographic survey of SRWTP EchoWater site (2012)
- Plant Computer Control System Master Plan
- 12kV Electrical Master Plan