BAYSHORE SANITARY DISTRICT
CARLYLE PUMP STATION
REQUEST FOR QUALIFICATIONS

SECTION 1: OWNER DESCRIPTION

1.1 General

The Bayshore Sanitary District (BSD) is a special purpose district located in San Mateo County, California that provides wastewater collection and pumping services in portions of Brisbane and Daly City, CA. The collected wastewater is pumped to San Francisco for treatment. (http://www.bayshoresanitary.com/)

Most of the collected wastewater is pumped to San Francisco from the Carlyle Pump Station (CPS) located at 36 Industrial Way in Brisbane. The CPS was constructed in 1972 and has had limited electrical and control upgrades. The operation of the CPS is manual and requires routine visits by the operator.

The BSD is requesting the services of a "system integrator" to design and install an HMI/SCADA system to automate the operation and data collection functions at the CPS.

1.2 Funding/Authority

The BSD will self-fund this project. No Federal or State funding is involved.

1.3 Procurement Website

The Request for Qualifications (RFQ) is available on the BSD website, http://www.bayshoresanitary.com/

SECTION 2: OVERVIEW OF THE PROJECT

2.1 General

The Carlyle Pump Station (CPS) was constructed in 1972 and while it has had upgrades over the last 47 years, it is essentially original. The 4-30 hp pumps and the motor control center (MCC) are original. Currently the CPS operates as a manned pump station. While the flow controller can turn pumps on and off based on level, this controller cannot disengage the pump from the electrical system. To disengage the pump the existing H-O-A (Hand-Off-Automatic) switch must be manually set. The objective of a Human Machine Interface (HMI) system would be to minimize the need for a manned pump station currently requiring an on-site part-time operator.

See dry pit photograph below and additional pictures in Attachment B

BELOW GRADE DRY PIT, WETWELL IS TO LEFT OF DRYPIT AND MCC IS LOCATED DIRECTLY ABOVE DRYPIT

The CPS currently has several intelligent electronic devices (IEDs) that can be linked together to develop an HMI system. These include:

- The electronic level controller
- The electronic mag-meter
- The RTU controlling the new generator
- A digital rain gauge that would be added.

The control and alarm features of these units need to be tied together. In addition, monthly operation reports such as daily flow, pump run time, pump discharge pressure and rainfall need to be generated. This data would be stored locally and manually downloaded to a flash drive and transferred to a computer and saved.

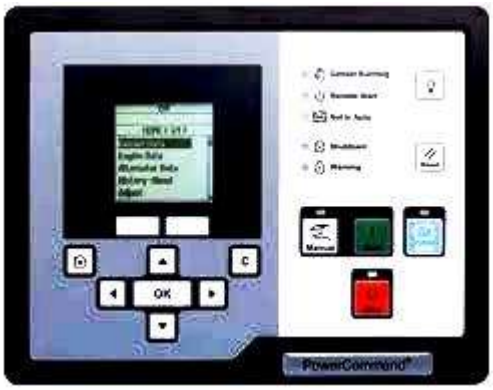
The existing IEDs have limited functions and are not integrated with each other. They also do not collect and/or store data.

The ultrasonic level sensors mounted in the wetwell send a signal to a remote IED located in the MCC that in turn sends a signal to the mechanical controller that alternates, starts and stops the various sewage pumps based on wetwell water surface elevations. These elevations can be set at the IED. The IED also can be used to set the operating points of the pumps and to send out alarm signals. The IED could show and record the level of liquid in the wetwell, but there is no recording or display device.

Similarly, the magnetic flow meter only provides a signal that is used to drive the chart recorder that shows the daily the flow as a function of time throughout the day. The mag-meter also measures the pump output in terms of gallons per minute (gpm), but this information is not displayed anywhere.

There is also an hour running meter for each pump.

A new Cummins generator was installed in 2017-18. The generator controller that was included is sophisticated. This controller can start and stop the generator based on mainline power lost or manual operation for testing. The controller has various alarms built into it as well as data collection features. Currently the controller is in the pump electrical room .



A new HMI system would monitor and record the operation of the CPS in real time and save data that could be used to generate various reports as a function of time. Saved data would include but not be limited to:

- Rate of flow
- Cumulative flow
- Pump Discharge Pressure
- Rainfall
- Wetwell Depth
- Various Electrical Parameters
- Generator Operation

This would require the installation of a pressure gauge and rainfall gauge that could transmit electronic signals as a function of time used to provide a permanent record of the pump station operation. These would be purchased and installed by the BSD. Reports would be generated that would replace the manual reports showing daily flow and precipitation.

The control system for the generator would be included and fully remote operation provided.

All existing alarms and any appropriate new ones should be integrated into the new

system. Therefore, once operational all alarms and operations would be accessed remotely, and all data collection and reports could be generated from a new host computer to be purchased by the District, and that can be accessed remotely by authorized computers.

2.2 Project Objectives

This is the only pump station that the BSD operates, and it is in exceptional operating condition for a facility 48 years old. The pumps are original but have been rebuilt, as necessary. The electrical and control system is original except for the replacement of:

- The transfer switch
- The standby generator
- The wetwell level sensor and associated IED.

The objective of this project is to convert this to a remotely operated pump station. All facility operation and reporting need to be tied into a central system that can be accessed remotely.

2.3 Scope of Work

BSD desires to retain a system integrator who will design and install the appropriate HMI/SCADA facility for the CPS. The systems integrator will be responsible for procuring all the necessary software and hardware for the fully operational system. The systems integrator shall also install all hardware and software and all electrical wiring and components necessary for a fully operational facility.

2.4 Estimated Budget

The estimated budget for this work is $100,000 - $150,000.

2.5 Project Procurement Schedule

The proposed schedule for this project is as follows

- Release RFQ -- April 20
- SOQs Due – May 22
- BSD determines who RFP should be sent to – May 28
- RFPs distributed – June 1
- RFPs due – June 19
- Board determines preferred system integrator and enters into final negotiations – June 25
- Board finalizes contractor with system integrator – July 23

Note that Board meetings occur on the 4th Thursday of each month and that this sets the schedule.

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SECTION 3: PROCUREMENT PROCESS

3.1 General Information

3.1.1 Compliance with Legal Requirements. This project is being bid as a design-build project in conformance with California Code 22162 et al. It is the opinion of the BSD that the minimum project cost for a design-build of $1,000,000 does not apply as the acquisition and installation of technology applications or surveillance equipment designed to enhance safety, disaster preparedness, and homeland security efforts are exempt.

3.1.2 Compliance with California Public Works Contracting Laws. This contract involves contracting with a special purpose district and the California Public Works Contracting Laws apply. These will be described in detail in the subsequent RFP. These laws include, but are not limited to:

- Providing performance and payment bonds
- Provide general liability
- Payment of prevailing wages as applicable
- Public Works Contractor's Licenses for the prime contractor and any subcontractors

3.1.3 Communications with the Owner. All communication with the BSD during the RFQ phase will be by email and questions addressed to Tom Yeager (teyeagerpe@gmail.com) and responses will be posted on the project website. Due to Covid-19 considerations there will no site visits during the RFQ phase and site visits during the RFP phase will be limited to one team (two persons maximum) at a time and one site visit per team. All questions answered during a site visit will be posted on the project website.

3.2 Outline of the Procurement Process

3.2.1 Request for Qualifications. Based on the Statement of Qualifications provided by the respondents, the BSD will invite 3 or 4 firms to submit proposals.

3.2.2 Request for Proposals. A detailed project scope will be released in the request for proposals. A detailed price proposal will be requested at that time.

3.2.3 Evaluation and Ranking of Offerors.
See Ranking Criteria in Attachment A at the end of this RFQ

3.3 Contract Format

The contract will be awarded on a lump sum basis for the defined scope of services to be provided with the RFP. The contract will be awarded based on a combination of price and qualifications. A sample contract will be provided with the RFP.

SECTION 4: SOQ DOCUMENTATION REQUIREMENTS

4.1 SOQ Format and Submission Requirements

The SOQ shall be submitted on 8 ½ ' x 11" single sided sheets single side, neatly bound in booklet format. There is no page limit, but the SOQ should be concise and well organized with a minimum of generic marketing material; staff

resumes should be limited to two pages.

BSD will be impressed by concise, well-written explanations of proposed products, services and benefits. Lengthy narrative is discouraged. Proposals should clearly express the turnkey nature of the project implementation

Five hard copies and one electronic version of the SOQ should be sent to the District office at 36 Industrial Way in Brisbane, CA and must arrive by 2:00 p.m. on May 22nd. SOQs received after this date and time will not be reviewed. The District will advise all respondents which firms submitted SOQs,

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SECTION 5: SOQ EVALUATION CRITERIA AND SUBMITTAL INFORMATION

5.1 Contents of SOQ

The SOQ shall contain the following in the following order:

- A Letter of Transmittal
- Firm Qualifications and Related Experience
- Project Understanding and Approach
- Key Personnel, Software and Hardware
- References on Similar Projects
- Other Supporting Material

5.2 Letter of Transmittal

The letter of transmittal shall identify the submitting organization, the prime contractor, all subcontractors, and the software vendor. The letter of transmittal shall acknowledge any addenda posted on the District's website. The letter of transmittal shall identify the person who can be contacted to obtain clarification on the content of the SOQ. It shall be signed by the person authorized to contractually obligate the firm to the District, and by the project manager who will be assigned to this project and who is responsible for meeting the project budget and schedule. The project manager shall be the individual who will be assigned to this project from start to finish and shall be responsible for executing the agreed upon scope on time and within budget.

5.3 Firm Profile and Qualifications

Include a description of the firms, history, its capabilities, and recent relative experience particularly with respect to similar services for public entities on similar projects. Demonstrate the firm's qualifications by listing all licenses, certifications and professional associations that the firm belongs to. Provide the California Public Works Contractor Number for the prime contractor and any subcontractors.

5.4 Project Understanding and Approach

Describe how you will provide the required services to the BSD. It is important that this section be written to specifically address the needs of the BSD, and not be a generic discussion of services that are not applicable to this project. The project

approach should be on a task and subtask basis. A preliminary schedule should be provided that shows project tasks and subtasks, their duration and BSD involvement.

5.5 Key Personnel, Software and Hardware

List key personnel that will be assigned to this project and their areas of responsibility. Provide an organization chart that clearly defines the hierarchy of responsibility and the primary contacts. Provide resumes for all staff identified on the organization chart.

Identify the specific vendor who would provide the required software. Demonstrate a long-term working relationship with the elected vendor. With respect to the required hardware, list various vendors that you have relationships with and that would provide quality products for incorporation in this project.

5.6 References on Similar Projects

Provide references for a maximum of 5 HMI/SCADA projects completed in the State of California in the last 5 years. The owner should be a public entity, either a municipality or a special purpose district, preferably a smaller entity like the BSD. The reference project must incorporate either a water or wastewater pumping station with multiple pumps. It is important the reference projects be as like the CPS project as possible. For the reference projects, provide:

- Screen shots of all computer screens incorporated into the final design (one pump station only if multiple pump stations are involved)
- A brief description of the facility, its operation, and when the work was initiated and completed
- Contact information for each project including name , title, phone number, and email address for the reference.

5.7 Other Supporting Material

Provide any other material that you think would help the BSD in evaluating your firm's qualification. A limited amount of appropriate marking material can be included.

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.ATTACHMENT A: RANKING CRITERIA

EVALUATION CRITERIA	MAXIMUM SCORE
Overall Quality of SOQ/Conformity to RFQ	15
Completeness and Qualifications of Project Team	25
Appropriateness of Proposed Software	10
Experience with Similar Projects and Agencies	25
Schedule	10
Training and post-construction support	15

Overall Quality and Conformity

SOQs will be evaluated on their completeness and conformity to RFQ and to overall quality of SOQ as quality of SOQ is an indication of the finished product

Completeness and Qualifications of Project Team

The project requires software hardware and field installation including electrical. Identify team (prime and subcontractors) and provide organization charge, Identify software provider and typical hardware providers. Provide team organization chart. Provide resumes with reference projects.

Appropriateness of Software

Demonstrate through reference examples that the software proposed is appropriate for this application

Experience with Similar Projects and Similar Agencies

The BSD recognizes that it is a small district, and this is a small project, but it is especially important to us. Provide a reference of a maximum of 5 representative projects for similar sized districts and/or similar sized pumped stations. Describe your commitment to meeting the BSD's needs.

Schedule

Include a realistic schedule that you can commit to.

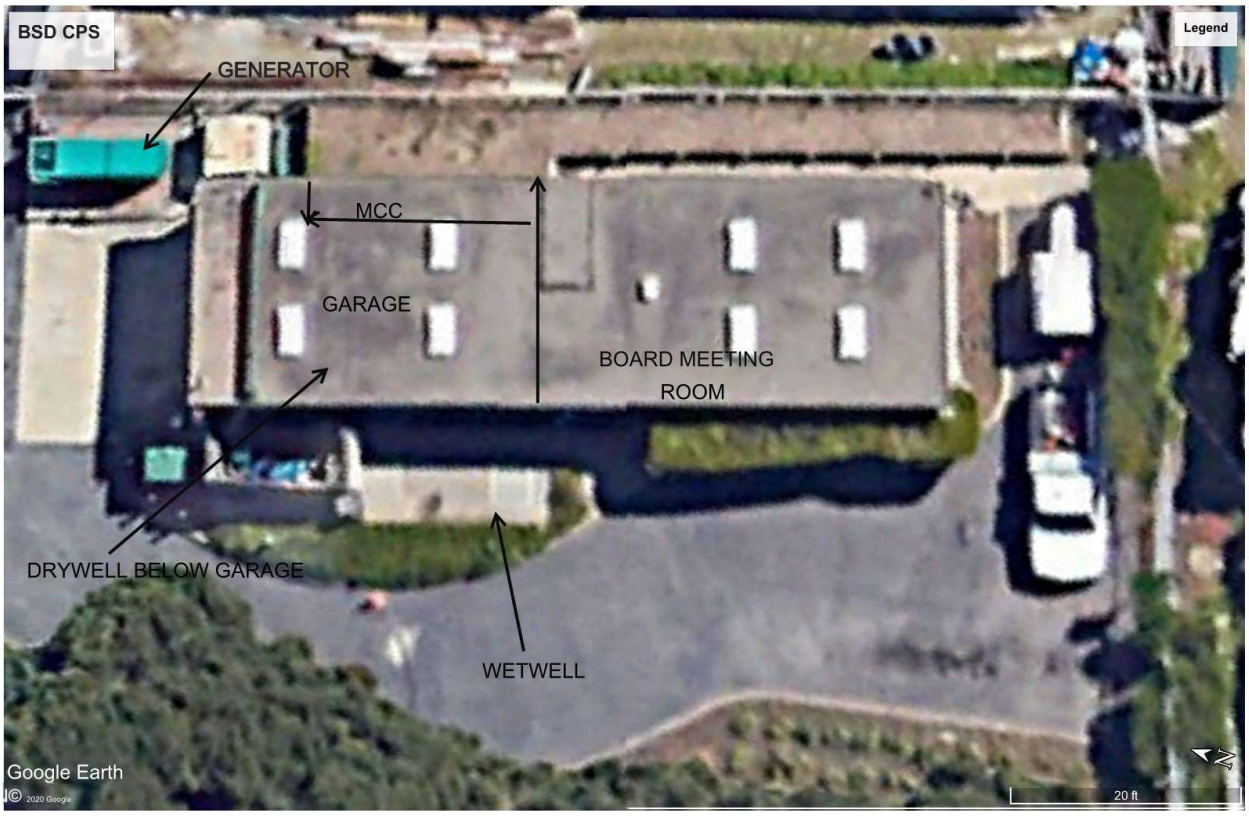
Training and Post-construction Support

Describe your training and post-construction support plans . Do you have a local presence, or will this support be online, or will it be a combination of local and on-line.?

Scoring of Proposals

The scoring of proposals will be performed independently by the District Engineer, District Maintenance Director, and one Board member.

ATTACHMENT B ADDITIONAL PICTURES



BSD OFFICE AND PUMP STATION LAYOUT

MCC LOCATED IN GARAGE AREA ABOVE DRY PIT