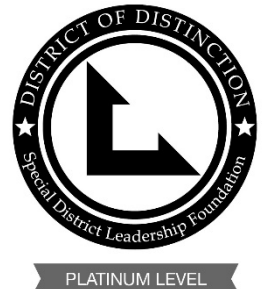




TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT

SDLF Platinum-Level of Governance



President – Kevin Graves • Vice-President – Ashley Porter • Director – Bryon Gutow • Director – Michael Callahan • Director – Carolyn Graham

**NOTICE OF THE REGULAR MEETING
OF THE WATER AND WASTEWATER COMMITTEE
OF THE TOWN OF DISCOVERY BAY
Wednesday July 6, 2022, 5:30 P.M.**

**NOTICE
Coronavirus COVID-19**

In response to the current proclaimed State of Emergency, indoor masking requirements, and recommended measures to promote social distancing imposed by State and local officials, the Town of Discovery Bay Community Services District Board of Directors will take all actions necessary to carry out the intent and purpose of AB 361, including, ensuring that the Directors and meeting attendees may continue to have the option to access and participate in this public meeting by teleconference to avoid imminent risks to the health or safety of the Directors and meeting attendees.

To accommodate the public during this period of time, the Town of Discovery Bay Community Services District Board of Directors has arranged for members of the public to observe and address the meeting telephonically or in person.

TO ATTEND IN PERSON: The meeting will be held at the Community Center located at 1601 Discovery Bay Boulevard.

TO ATTEND BY WEBINAR:

Please register for the Water and Wastewater Committee Meeting by: (Copy and paste into your browser the registration URL. You will then be directed to download the webinar to your device and register with LogMeIn, Inc.)

Registration URL: <https://attendee.gotowebinar.com/register/6864637444858821902>
Webinar ID# 324-336-019

After registering, you will receive a confirmation email containing information about joining the webinar by computer or by phone.

For listen only mode dial: +1 (631) 992-3221 ID# 532-140-641

Download Agenda Packet and Materials at <http://www.todb.ca.gov/>

Water and Wastewater Committee Board Members

*Chair Kevin Graves
Vice-Chair Ashley Porter*

A. ROLL CALL

1. Call business meeting to order 5:30 p.m.
2. Roll Call.

B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)

During Public Comments, the public may address the Committee on any issue within the District's jurisdiction which is not on the Agenda. The public may comment on any item on the Agenda at the time the item is before the Committee for consideration. Any person wishing to speak will have 3 minutes to make their comment. There will be no dialog between the Committee and the commenter as the law strictly limits the ability of Committee members to discuss matters not on the agenda. We ask that you refrain from personal attacks during comment, and that you address all comments to the Committee only. Any clarifying questions

from the Committee must go through the Chair. Comments from the public do not necessarily reflect the viewpoint of the Committee Members.

C. DRAFT MINUTES TO BE APPROVED

1. Approve Water and Wastewater DRAFT Meeting minutes from June 1, 2022.

D. PRESENTATIONS

1. None.

E. UPDATES

1. Well 8 CEQA Update.

F. DISCUSSION ITEMS

1. Discussion and receive input on Change Order No. 2 for BSK Geotechnical Services for the Denitrification and Master Plan Upgrades Project in the amount of \$75, 035.
2. Discussion and Provide Feedback on Pump Station W Repair Options.
3. Discussion Regarding LSCE Proposal: Scope and Budget for Water CIP Development and Funding Assistance.

G. FUTURE AGENDA ITEMS

H. ADJOURNMENT

1. Adjourn to the next Standing Water and Wastewater Committee meeting on August 3, 2022, at the Community Center located at 1601 Discovery Bay Boulevard.

"This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Town of Discovery Bay, at (925) 634-1131, during regular business hours, at least forty-eight hours prior to the time of the meeting."

"Materials related to an item on the Agenda submitted to the Town of Discovery Bay after distribution of the agenda packet are available for public inspection in the District Office located at 1800 Willow Lake Road during normal business hours."



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**NOTICE OF THE REGULAR MEETING
MINUTES OF THE WATER AND WASTEWATER COMMITTEE
OF THE TOWN OF DISCOVERY BAY
Wednesday June 1, 2022**

Water and Wastewater Committee Board Members

*Chair Kevin Graves
Vice-Chair Ashley Porter*

A. ROLL CALL

1. Call business meeting to order 5:30 p.m.
2. Roll Call – all members were present.

B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)

None.

C. DRAFT MINUTES TO BE APPROVED

1. Approve Water and Wastewater DRAFT Meeting minutes from May 4, 2022.

Chair Graves made a Motion to Approve the May 4, 2022, Draft Minutes.

Vice-Chair Porter second.

Vote: Motion Carried – AYES: 2, NOES: 0, ABSTAINED: 0, ABSENT: 0

D. PRESENTATIONS

1. None.

E. UPDATES

1. None.

F. DISCUSSION ITEMS

1. Discussion Regarding Willow and Newport Water Plant Filter Modification Options.
2. Discussion Regarding Water Quality Level by Well.

Presented by Jason Coleman, Luhdorff & Scalmanini Consulting Engineers.

- Willow Lake and Newport Plants – Filter vessels have been repaired, total of five filters at both plants.
- Water System EDUs – Build out water system EDU will increase due to much larger demand from upcoming developments.
- Water supply will increase when Well 8 is constructed.
- Willow Treatment Plant – Showing signs of filter breakthrough, Veolia is unable to operate at three wells due to limited filter capacity, control valves need replacing.
- Veolia – Will bring back to the committee pricing and availability for manual operated valves.

G. FUTURE AGENDA ITEMS

H. ADJOURNMENT

1. Meeting adjourned at 6:50 p.m. to the next Standing Water and Wastewater Committee meeting on July 6, 2022, at the Community Center located at 1601 Discovery Bay Boulevard.

“This agenda shall be made available upon request in alternative formats to persons with a disability, as required

by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Town of Discovery Bay, at (925) 634-1131, during regular business hours, at least forty-eight hours prior to the time of the meeting.”

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Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

July 6, 2022

Prepared By: Gregory Harris, District Wastewater Engineer
Submitted By: Dina Breitstein, General Manager

Agenda Title

Discussion and receive input on Change Order No. 2 for BSK Geotechnical Services for the Denitrification and Master Plan Upgrades Project in the amount of \$75,035.

Recommended Action

Provide Staff Feedback Regarding BSK Change Order No. 2.

Executive Summary

The Town hired BSK to conduct the initial geotechnical investigation and report for the Denitrification project. Prior to start of construction, the Town hired BSK to provide geotechnical inspection, observation, and testing during construction.

Since construction began, BSK has been dealing with extra soil issues on site. As a result, BSK has used up their initial budget for the Denitrification Project. HERWIT worked with BSK to estimate the work left for them to finish the Denitrification project. Attached is an updated proposal for what would be change order # 2 for their contract. Change order #1 was for the Aerobic Digester Emergency Slope repair and was executed by the General Manager in December 2021. The current contract and change order amounts and statuses are summarized below.

- Original Contract amount \$90,752 (Approved and spent)
- Change Order No. 1 Aerobic Digester Repairs \$10,054 (Approved and spent)
- Change Order No. 2 Additional Inspection and Testing \$75,035 (Pending Approval)
- Revised Total Contract Amount \$175,841

Change Order No. 1 and BSK Proposal C21-312-61L Dated March 28, 2022 are attached for reference.

The attached proposal adds \$75,035 to their contract. Since this request is more than 10% of the original contract value, staff is requesting Town Board approval.

Specific Committee Action:

Provide feedback to Staff with possible Board Action on July 6, 2022 Board Meeting.

Previous Relevant Board Actions for This Item

Fiscal Impact: \$75,035

Amount Requested: \$75,035

Sufficient Budgeted Funds Available?: yes.

Prog/Fund # Category: TBD

Attachments

1. BSK Proposal C21-312-61L Dated March 28, 2022.
2. BSK Change Order No. 1 Dated 12/6/2021.

AGENDA ITEM: F1



399 Lindbergh Avenue
Livermore CA 94551
P 925.315.3151
www.bskassociates.com

March 28, 2022

BSK Proposal C21-312-61L

Mr. Gregory Harris, PE – HERWIT Engineering
c/o Town of Discovery Bay CSD
1800 Willow Lake Road
Discovery Bay, CA 94505

**SUBJECT: Request for Amendment
Geotechnical Observation, Materials Testing, and Special Inspection Services
Denitrification and Master Plan Upgrades Project – Project No. 7005 and 7018
Discovery Bay Wastewater Treatment Plant
Discovery Bay, California**

Dear Mr. Harris:

As we recently discussed with HERWIT Engineering, we expect BSK Associates' (BSK) currently approved budget for geotechnical observation, materials testing, and special inspection services during construction of the above-referenced project could be exceeded in the month of March 2022 or shortly thereafter. As of February 28, 2022, BSK had charged a total of approximately **\$91,692.38** to our currently approved budget of **\$100,806¹**. A number of factors have impacted our original budget, such as a higher number of visits than originally anticipated during excavation and grading for Oxidation Ditch #4, additional visits needed to observe mitigation of unstable/wet subgrade conditions exposed at the bottom of excavations, and evaluation of cut slopes for Oxidation Ditch #4.


Below is a breakdown of our estimated charges for the budget increase we are requesting. The number of estimated visits was based on our discussion with HERWIT Engineering on March 25, 2022. Please note that this is just an estimate and is subject to change based on actual visits performed. Based on the estimated additional charges, we request increasing the approved budget of **\$100,806** by approximately **\$75,035** for a new total approved budget of **\$175,841**. **If you agree, please request that the Town of Discovery Bay send us another change order to our current Agreement with the Town of Discovery Bay dated June 4, 2021.** Please note that if this increase is not sufficient to cover our remaining visits requested for this project and associated charges through completion of the project, we will need to ask for another increase to our budget beyond what is requested above.

We appreciate the opportunity to be of continued assistance to the Town of Discovery Bay and HERWIT Engineering on this project and look forward to the successful construction of the project. Please, contact us at (925) 315-3151 if you have any questions or require additional information.

Respectfully submitted,

BSK Associates


Cristiano Melo, PE, GE
Livermore Branch Manager


Omar K. Khan
Project Geologist

CC: Kurt Gardner, HERWIT Engineering (kgardner@herwit.com)

¹ \$90,752 (original contract amount) + \$10,054 (Change Order #1 – Services associated with the Aerobic Digester Slope Repair).

Breakdown of Estimated Charges for this Amendment

FIELD SERVICES	VISITS	HRS/DAY	HOURS	RATE	EXTENSION
Earthwork					
Foundation Inspection & Compaction Testing ¹	19	4	76	\$171.00	\$12,996.00
Pipe Backfill Testing and Observation ²	8	6	48	\$129.00	\$6,192.00
Nuclear Gauge Equipment Fee	27			\$61.00	\$1,647.00
Concrete					
Concrete Placement Sampling ³	7	4	28	\$112.00	\$3,136.00
Concrete Placement Sampling ⁴	11	8	88	\$112.00	\$9,856.00
Sample Pickup and Delivery	18	2	36	\$108.00	\$3,888.00
Shotcrete					
Shotcrete Placement Sampling ⁵	7	8	56	\$112.00	\$6,272.00
Pre-construction Test Panel Observation (Dependent on Number of Nozzlemen)	2	8	16	\$142.00	\$2,272.00
Sample Pickup and Delivery	7	2	14	\$142.00	\$1,988.00
Trip Charge (Vehicle & Mileage)	79			\$53.00	\$4,187.00
FIELD SERVICES ESTIMATE					\$52,434.00

LABORATORY TESTING	FREQUENCY	SETS/UNITS	RATE	EXTENSION
Laboratory Testing				
Concrete Compressive Strength Test (Set of 4)	1 Set / 150 CY	40	\$141.00	\$5,640.00
Shotcrete Compressive Strength Tests	1 panel / day	7	\$330.00	\$2,310.00
Compaction Curves - Base Rock (6" Mold)	1 per material	2	\$259.00	\$518.00
Compaction Curves - Site Soils (4" Mold)	1 per material	2	\$244.00	\$488.00
LABORATORY TESTING ESTIMATE				\$8,956.00

BSK SERVICES ADMINISTRATION	HOURS	RATE	EXTENSION
Registered Engineer (Review, support and reporting)	8	\$248.00	\$1,984.00
	6	\$221.00	\$1,326.00
Project Manager (Field Oversight, Daily Report Review)	20	\$171.00	\$3,420.00
Administration (Data Processing, Report Prep., Field Coordination)	20	\$86.00	\$1,720.00
Certified Payroll / DIR Upload	11	\$300.00	\$3,300.00
Non-Performance Certified Payroll / DIR Upload	4	\$100.00	\$400.00
Final Construction Observation/Testing Letter	1	\$248.00	\$248.00
	1	\$221.00	\$221.00
	6	\$171.00	\$1,026.00
ADMINISTRATION ESTIMATE			\$13,645.00
TOTAL BUDGET ESTIMATE			\$75,035.00

Notes:

Estimated number of visits shown below based on BSK's discussion with HERWIT Engineering on 3/25/2022.

1. Anoxic Basin #2 (2 visits), Anoxic Basin #3 (2 visits), Mixed Liquor Recycle Pump Station #2 (2 visits), Mixed Liquor Recycle Pump Station #3 (2 visits), Oxidation Ditch #2 (3 visits), Oxidation Ditch #3 (3 visits), pavement subgrade & AB (5 visits)
2. Pipeline trench backfill (8 visits)
3. Mixed Liquor Recycle Pump Station #2 (2 visits), Mixed Liquor Recycle Pump Station #3 (2 visits), Oxidation Ditch #2 (1 visit), Oxidation Ditch #3 (1 visit), Concrete Driveway (1 visit)
4. Anoxic Basin #2 (4 visits), Oxidation Ditch #4 (7 visits)
5. Shotcrete for Oxidation Ditch #4 (7 visits)



CHANGE ORDER NO 1

Geotechnical Services During Construction of Denitrification Project
Contract Dated June 4, 2021

Consultant
BSK Associates
399 Lindbergh Ave
Livermore, CA 94551

<u>Description of Changes:</u>	<u>Cost (Credit):</u>
1 Provide observation of digester slope repair As per estimate dated 12/1/2021 attached	\$8,554
2 Contingencies	\$1,500

See attached documentation for description of work only.

Change Order Total	\$10,054
Original Contract Amount	\$90,752
Change Order #1	\$10,054
Revised Contract Amount	<u>\$100,806</u>

Number of days added to contract time
as a result of this Change Order 0

Accepted:



BSK

Approved:

Dina Breitstein

Town of Discovery Bay

Cristiano Melo

Print Name

12/6/2021

Date

Dina Breitstein

Print Name

12/6/2021

Date

Mike Yeraka

From: kgardner@herwit.com
Sent: Thursday, December 2, 2021 10:40 AM
To: Mike Yeraka
Subject: FW: BSK Estimate (Emergency Repairs of the Aerobic Digester Slopes - Discovery Bay WWTP)

Mike,

Based on the time they have already sent and the inspection left, this seemed reasonable to us.

If you agree, is this adequate for the Town to issue a change order to BSK, or do you need any additional info.

Kurt

From: Cristiano Melo <cmelo@bskassociates.com>
Sent: Wednesday, December 1, 2021 3:43 PM
To: Kurt Gardner (kgardner@herwit.com) <kgardner@herwit.com>; Gregory Harris (Gharris@herwit.com) <gharris@herwit.com>
Subject: BSK Estimate (Emergency Repairs of the Aerobic Digester Slopes - Discovery Bay WWTP)

Hello, Kurt and Gregory,





Below is my estimate for BSK's services associated with the emergency repairs of the Aerobic Digester slopes. I suggest adding a 10% or 20% contingency (about \$900 to \$1,700) to this estimate just in case the contractor takes longer than 3 weeks to finish the repairs. Note that BSK's charges will be applied on a T&M basis using our fee schedule for the project. Per my previous communication, BSK will not be running any laboratory tests or taking any compaction testing of the fill placed by the contractor to repair the slopes.

Field Services	Estimated Hours	Rate	Estimate Charges
Group 3 Engineering Technician	40	\$ 129.00	\$ 5,160.00
Principal	3	\$ 248.00	\$ 744.00
Trip Charge	8	\$ 53.00	\$ 424.00
		Subtotal	\$ 6,328.00
Administration & Consultation	Estimated Hours	Rate	Estimate Charges
Principal	5	\$ 248.00	\$ 1,240.00
Project Professional II	2	\$ 171.00	\$ 342.00
Administrative Assistant	4	\$ 86.00	\$ 344.00
Certified Payroll /DIR Upload	1	\$ 300.00	\$ 300.00
		Subtotal	\$ 2,226.00
		Total	\$ 8,554.00
Assumptions:			
1. Emergency repairs to the Aerobic Digester slopes will be completed over a period of 3 weeks.			
2. First two visits by BSK will last 8 hours each (including travel) and will be conducted on the first 2 or 3 days of the repair operation. Afterwards, our representative will visit the site twice a week for about 4 to 6 hours a visit (including travel).			

Cristiano Melo, PE, GE
 Livermore Branch Manager
BSK Associates
 399 Lindbergh Avenue, Livermore, CA 94551
 P: 925.315.3151 x110
 C: 925.765.9483



Environmental, Geotechnical, Construction Services, Analytical Testing - **An Employee-Owned Company**

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CAUTION: This email has been originated outside the organization.



Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

July 6, 2022

Prepared By: Gregory Harris, District Wastewater Engineer
Submitted By: Dina Breitstein, General Manager

Agenda Title

Discussion and Provide Feedback on Pump Station W Repair Options.

Recommended Action

Provide Feedback for Staff on repair options for Pump Station W with possible future board action.

Executive Summary

The Town operates an Influent Pump Station at Plant No. 1 that conveys all sewage flows from the Town to Plant No. 2. The Influent Pump Station was backed up by Pump Station W immediately adjacent to it. Pump Station W served as a backup pumpstation and to allow maintenance work to be performed on the primary Influent Pump Station.

As part of the Denitrification Project, needed repairs were scheduled for both the Influent Pump Station and Pump Station W. Repair activities uncovered sever structural damage to Pump Station W and all project work on Pump Station W was stopped. The Structural Engineer for HERWIT indicated the structural steel was compromised and the structure is no longer safe. To allow repairs to the influent pump station, the roof to the structure was removed and soil excavated off of the top of the structure. Repairs to the influent pump station are now complete and Pump Station W now has to be dealt with. It currently sits in a partially excavated hole with no roof.

The Town asked HERWIT for options to repair or replace the Pump Station. HERWIT has prepared the attached Memo on Pump Station W discussing the repair options.

This memo will be reviewed by HERWIT in the Wastewater Committee meeting and options discussed.

Specific Committee Action:

Provide feedback to Staff on PS-W options with possible board action in the future.

Previous Relevant Board Actions for This Item

Fiscal Impact: \$1Million to \$2Million
Amount Requested: TBD
Sufficient Budgeted Funds Available?: No.
Prog/Fund # Category: TBD

Attachments

1. Pump Station W Options Memo dated 6-27-2022

AGENDA ITEM: F2

To: WW Committee
TODB CSD

From: Gregory Harris
HERWIT Engineering
Date: June 27, 2022

Reference: Pump Station W at Plant No. 1

Introduction

The Wastewater Committee was previously notified that Pump Station W at Plant No. 1 was found to be structurally unsafe when rehabilitation work was started as part of the Denitrification project. As a result, all project work was halted. Because Pump Station W was required to operate in some manner to allow needed repairs to the influent pump station to take place, a change order was given to the Contractor to remove all soil and concrete off of the roof of the pump station and to temporarily reinstall pumps with temporary piping and controls. PS-W was operated in this capacity while repairs to the influent pump station were being made. Figure 1 shows a current photo of Pump Station W.



Figure 1 - Pump Station W Currently

Reference: Pump Station W at Plant No. 1

Pump Station W cannot be left in this condition. In addition to long term backup, Pump Station W is also needed to allow any future repair work to take place inside of the influent pump station. Because of this, the Town requested HERWIT provide options for Pump Station W going forward with ballpark costs to help in decision making on the next steps. These options are listed below and discussed further in this memo.

1. Rebuild Pump Station W with similar construction as a change order under the Denitrification project or bid as a stand alone project. Reuse existing pumps, piping, and controls.
2. Option 1 plus add a bar screen and compactor and jib crane to the Influent Pump Station.
3. Abandon Pump Station W, remove pumps, and backfill internal and external portions of structure with engineered fill as a change order under the Denitrification project. Build new station in the same location at future date as a stand alone project.
4. Option 3 plus add a bar screen and compactor and jib crane to the Influent Pump Station.

Option 1 – Rebuild Pump station W as Change Order to Existing Contract

Under this option, the Town would demolish the remainder of the concrete structure, immediately build a new structure for PS-W in the same location. Reinstall existing pumps and controls, and reuse existing piping as applicable. This work would be done as a change order to the existing contract with Anderson Pacific for the Denitrification Project or bid as a separate project. There are cost savings to the Town for this approach because it ensures the existing pumps, piping, and controls will be reused and paced in service in a timely manner. It also does not require interim backfill of the hole prior to construction.

Ballpark costs (in today's dollars) for this Option are presented in Table 1.

Option 2 – Rebuild Pump station W as a Change Order to Existing Contract, Add Bars Screen Compactor and Jib crane

This is the same as Option 1 with the addition of constructing a new bar screen, compactor, and jib crane at the influent pump station. In discussing alternatives for Pump Station W with the Town and Veolia staff, several operational issues associated with the Influent Pump Station were also brought up and discussed. These include the following.

1. The Town lift truck is unable to extend a boom out far enough to lift Pump No. 3 out of the Influent Pump Station. As a result, the only way to pull and install this pump as part of routine maintenance is to rent a larger crane every time the pump needs to be pulled and coordinate it as a special project with additional cost to the Town.
2. While there are bar screens at Plant No. 2, rags entering the Influent Pump Station prior to Plant No. 2 are so thick they are damaging the pumps and wearing them out sooner than was expected. This has led to multiple rebuilds required on all of the influent pumps since they have been installed. In addition, not all of the rags end up getting pumped out of the Influent Pump Station. Over time they build up a huge matt on top of the water making servicing the pumps and controls difficult. The Influent Pump Station has limited access to the interior of the pump station and is very deep. As a result, Veolia staff have had very limited success vacuuming rags out of the influent pump station.

Reference: Pump Station W at Plant No. 1

To mitigate Operational Issue No. 1, Veolia reached out to a crane manufacture and obtained a quote to install a permanent jib crane at the Influent Pump Station. A very large foundation would need to be constructed to support the crane. The vendor quote was combined with the foundation cost to develop a ballpark cost for this alternative.

To mitigate Operational Issue No. 2, Veolia requested a new bar screen and compactor be installed in front of the Influent Pump Station to remove rags before they enter the pump station. It was hoped this could be worked into the Pump Station W replacement. HERWIT analyzed options for installing a single bar screen and compactor and found the lowest cost way to do this was to modify the inlet of the Influent Pump Station rather than build a new structure in front of the Influent Pump Station. Figure 2 shows a section view of the Influent Pump Station with a bar screen, compactor and jib crane.

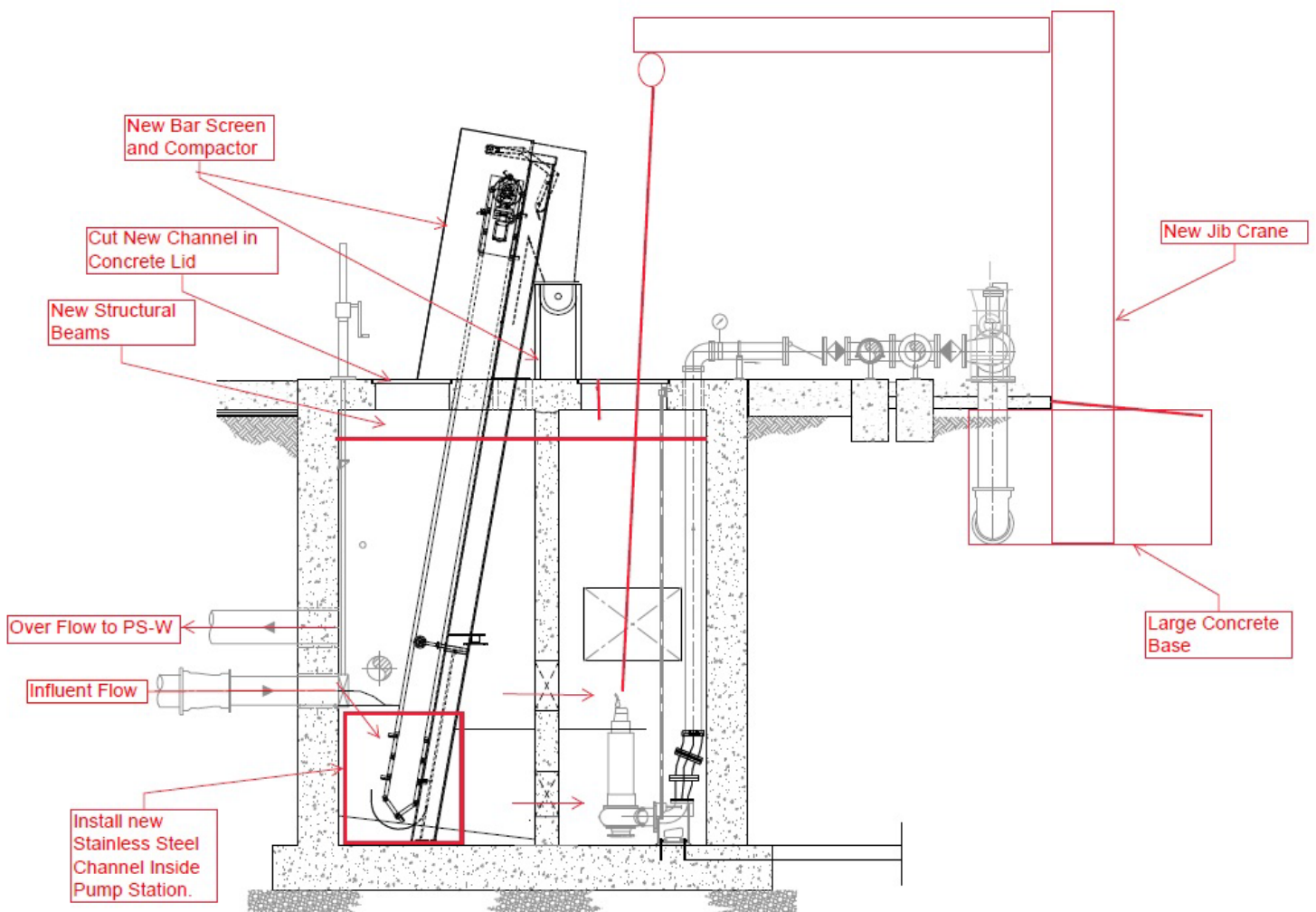


Figure 2 – Influent Pump Station With Optional Bar Screen and Jib Crane

Reference: Pump Station W at Plant No. 1

Ballpark costs (in today's dollars) for this Option are presented in Table 2.

Option 3 – Rebuild Pump station W as a Separate Bid Project in the Future

Under this option, the Town would demolish the remainder of the concrete top, backfill the existing pump station inside and outside up to grade, and remove all pumps, piping, and controls as a change order under the Denitrification project. At some point in the future, the Town would build something equivalent to Pump Station W as a separate standalone project. Timing is very important if the existing pumps, piping and controls are going to be reused in the re-built pump station. If the existing pumps and controls are allowed to sit around unused for years they will become useless. For cost estimating purposes, it is assumed this project will proceed to design and be built within the next 12 months. This option is more expensive than Option 1 because of the need to backfill the existing structure prior to new work taking place, additional overhead costs to produce a standalone project, and the potential to be unable to reuse existing equipment if the delay is longer than anticipated.

Ballpark costs for this Option are presented in Table 3.

Option 4 – Rebuild Pump station W as a Separate Bid Project in the Future, Add Bars Screen Compactor and Jib crane

This is the same as Option 3 with the addition of constructing a new bar screen, compactor, and jib crane at the influent pump station for the same reasons as discussed under Option 2.

Ballpark costs for this Option are presented in Table 4.

Ballpark Costs

Tables 1, 2, 3 and 4 present the ballpark costs for each of the options. Detailed design has not been done on these options and all ballpark estimates are provided to highlight the differences in costs between the projects to allow a decision on which option to select. All costs are ballpark estimates in "Today's Dollars". There will be an inflationary increase in construction cost the longer future construction is delayed. Please also be aware there are a lot of inflationary pressures in the construction market that make the magnitude of future cost increases unknown. There are also currently supply chain surcharges and availability issues for stainless steel and other construction materials, which are resulting in high prices. It is unknown how long these current surcharges will last.

Conclusions

The option that works best for the Town is largely dependent on timing and Town finances. It may also be desirable to have a public bid for changes of this magnitude to attempt to receive a lower bid cost upfront than what may be proposed by change order. These factors should be weighed against the reduced overhead costs for proceeding with a change order.

Reference: Pump Station W at Plant No. 1

Table 1: PS-W Option 1 - Change Order to Existing Contract	
Description	Ballpark Cost
Backfill Existing Structure	\$ -
Demo Old Structure	\$ 75,000
Construct New Pump Station	\$ 800,000
Reuse Existing Pumps, Piping, and Controls	\$ 25,000
Subtotal	\$ 900,000
Contingency	20%
Contingency	\$ 180,000
Total	\$ 1,080,000
Engineering Design	
	5% \$ 54,000
Engineering Services During Construction	
	6% \$ 65,000
Total Project Cost	\$ 1,200,000

Reference: Pump Station W at Plant No. 1

Table 2: PS-W Option 2 - Change Order to Existing Contract	
Description	Ballpark Cost
Backfill Existing Structure	\$ -
Demo Old Structure	\$ 75,000
Construct New Pump Station	\$ 800,000
Reuse Existing Pumps, Piping, and Controls	\$ 25,000
Install New Screen and Compactor at Inf. PS.	\$ 400,000
Install Crane at Inf. PS.	\$ 100,000
Subtotal	\$ 1,400,000
Contingency	20%
Contingency	\$ 280,000
Total	\$ 1,680,000
Engineering Design	
	6% \$ 101,000
Engineering Services During Construction	
	6% \$ 101,000
Total Project Cost	\$ 1,880,000

Reference: Pump Station W at Plant No. 1

Table 3: PS-W Option 3 - Bid as New Project	
Description	Ballpark Cost
Backfill Existing Structure	\$ 100,000
Re-excavate & Demo Old Structure	\$ 100,000
Construct New Pump Station	\$ 800,000
Reuse Existing Pumps, Piping, and Controls	\$ 100,000
Subtotal	\$ 1,100,000
Contingency	20%
Contingency	\$ 220,000
Total	\$ 1,320,000
Engineering Design	
	6% \$ 79,000
Engineering Services During Construction	
	6% \$ 79,000
Total Project Cost	\$ 1,480,000

Reference: Pump Station W at Plant No. 1

Table 4: PS-W Option 4 - Bid as New Project	
Description	Ballpark Cost
Backfill Existing Structure	\$ 100,000
Re-excavate & Demo Old Structure	\$ 100,000
Construct New Pump Station	\$ 800,000
Reuse Existing Pumps, Piping, and Controls	\$ 100,000
Install New Screen and Compactor at Inf. PS.	\$ 400,000
Install Crane at Inf. PS.	\$ 100,000
Subtotal	\$ 1,600,000
Contingency	20%
Contingency	\$ 320,000
Total	\$ 1,920,000
Engineering Design	
	6% \$ 115,000
Engineering Services During Construction	
	6% \$ 115,000
Total Project Cost	\$ 2,150,000



June 7th, 2022
File No. 22-5-080

Ms. Dina Breitstein
General Manager
Town of Discovery Bay
Community Services District
1800 Willow Lake Road
Discovery Bay, CA 94514

SUBJECT: Scope and Budget for Water CIP Development and Funding Assistance

Dear Ms. Breitstein:

Per your request, Luhdorff & Scalmanini, Consulting Engineers (LSCE) is pleased to provide this proposed scope and budget for providing Water CIP development and funding assistance to facilitate cost-effective implementation of water system improvements over the next five years for the Town of Discovery Bay Community Services District (TODB).

Scope of Work

The scope of work outlined herein describes the next steps in developing a funding strategy to fund priority water system improvements related to the TODB public water system. The scope is separated into two primary categories based on current water asset and system understanding and available funding programs to support project implementation activities. The scope includes project meetings and development of a Technical Memorandum to communicate funding recommendations and next steps to achieve water CIP implementation goals and objectives.

The scope will include the estimated costs for priority water CIP projects including planning, funding, design and construction activities. Cost estimates will be calculated in 2022 dollars and projected to mid-point of construction depending on the project. The estimated costs will be based on expected CEQA and Permitting compliance approaches with project contingency included. This includes collaborating with TODB staff on project infrastructure planning, assessment, design, permitting, and/or construction aspects. Funding need will be based on total estimated costs for each project included in the analysis.

Task 1 – Water CIP Development

This task is to prioritize the TODB’s water CIP project list and bundle projects accordingly based on economies of scale and funding program benefits to deliver projects within planned budgets and estimated project delivery costs.

Task 1: Water CIP Development	
Description	Details
Water CIP Review	<ul style="list-style-type: none"> Review and prioritize water CIP projects Address CEQA Compliance and Permitting Issues Update Project Delivery Cost Estimates

Task 2 – Funding Program Assessment and Recommendations

This task is based on assessing available state and federal funding programs that the TODB would be eligible to pursue in the future to fund priority water CIP projects identified in Task 1. LSCE would evaluate funding program guidelines and determine best available funding sources to pursue in FY22-23. LSCE and TODB recognize that market financing conditions hit an inflection point in 2022 with a rapid change in the Federal Reserve Board’s monetary policy with interest rates on the rise to combat inflation. This puts a premium on securing funding terms that are favorable for high priority projects in the event interest rates keep increasing. In parallel, LSCE will assess the viability of pursuing grant funding sources that match the project funding needs identified in Task 1. The TODB may need to be flexible with project implementation schedules based on available funding opportunities and favorable funding market terms in the current dynamic financial market conditions. LSCE will prepare a Technical Memorandum summarizing the findings and recommendations for Tasks 1 and 2. For this task it includes one (1) Board meeting preparation and presentation development, one (1) committee meeting in person, and two (2) meetings remotely. Meeting agendas, minutes and any follow-up action documentation will be provided for each meeting.

Task 2: Funding Program Assessment and Recommendations	
SubTask Description	Details
Assess Water Resource Funding Programs	<ul style="list-style-type: none"> State grant and loan programs. Federal grant and loan programs.
Develop Funding Program Recommendations	<ul style="list-style-type: none"> Evaluate funding program guidelines and eligibility. Match best available funding programs with priority projects. Identify CEQA and Permitting requirements.
Board Meeting presentation	<ul style="list-style-type: none"> Prepare staff report recommendations and presentation for Board review and ongoing discussions.

Proposed Schedule

LSCE's proposed schedule for LSCE to complete the Water CIP prioritization and funding recommendation services scope is 60-days based on the anticipated start date of June 22, 2022. This work will leverage other water system work LSCE is conducting related to asset management, regulatory compliance, and water CIP implementation activities.

Proposed Budget

LSCE's proposed budget for Water CIP prioritization and funding recommendation services is **\$15,000** based on the anticipated projects and funding needs to allow the TODB to complete necessary water system improvements in a timely manner. The budget estimate for this work is included in the table below:

Task	Comments	Budget Estimate
CIP Project Prioritization	Priority projects and phasing	\$5,000
Updated Cost Estimates	Update project cost estimates	\$4,000
Prepare Technical Memorandum	Draft/Final TM	\$6,000
Total Budget Estimate		\$15,000

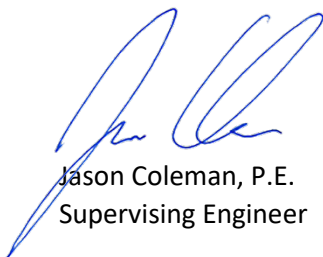
The work will primarily be performed by Jason Coleman and Jacques DeBra.

LSCE will bill monthly for labor and materials, only as incurred, in accordance with LSCE's current Schedule of Fees for Engineering and Field services (attached). In the event that LSCE is required to be involved in activities that deviate from the scope, LSCE will provide notification of any potential changes in the estimated budget for general engineering services.

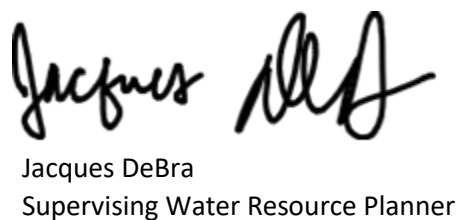
We appreciate the opportunity to continue providing professional engineering support services to the TODB. Should you have any questions, please do not hesitate to contact me.

Sincerely,

LUHDORFF & SCALMANINI
CONSULTING ENGINEERS



Jason Coleman, P.E.
Supervising Engineer



Jacques DeBra
Supervising Water Resource Planner

Enclosures

- 2022 Schedule of Fees for Engineering and Field Services