TASK AUTHORIZATION

Trash Capture Device - Amendment to Scope to Add Bayview Avenue Site

Date: September 1, 2021

VWNA Project #: TBD

Activity Classification (Check applicable)

Administration	
Engineering	
Planning	
Design	X
Construction	X
Construction	
Sanitary Sewer	
Storm Sewer	X
Sanitary P.S.	
Storm P.S.	
Wastewater	
Other (specify below)	

Proposed by: Keith Oldewurtel, Veolia Water West Operating Services

Reviewed by: Mary Phelps 10/5/2021
Mary Phelps, Authorized City Dept. Rep. (PO verification)
Resolution 84-21 adopted by City Council 07/06/2021

Reviewed by: Change order within adopted budget ($3,270,000)
City of Richmond, Finance Department

Approved by:
Joe Leach
City of Richmond, Public Works Director

Approval Date: 10/5/21

Original Line Item Approved Cost:	$	1,716,953.00
Approved Markup/Margin	$	283,297.25
Total Authorized Amt.:	$	2,000,250.25

Previously Authorized Amount:

Scope of Services

In March 2017, Caltrans and the City of Richmond entered into a Cooperative Implementation Agreement (CIA) for improvement to the State Highway System as a watershed stakeholder with the City's jurisdiction. Pursuant to Attachment IV of the Caltrans NPDES Permit, Caltrans and the City of Richmond are to collaboratively implement the Water Capture Facility, known as a Trash Capture Project. The Contech Engineered Solutions CDS system is a below-ground, flow-through treatment device that uses multiple treatment processes including swirl concentration and continuous deflective separation to screen, separate and trap trash, debris, sediment, hydrocarbons and other pollutants from stormwater runoff. Veolia Water, in conjunction with the City of Richmond, successfully installed four such devices in 2017, 2018, 2019 and 2020/21. Another device is now being proposed at Bayview Avenue.

There is currently an available balance of $3.2M in project funds from Caltrans (approximately $600,000 of unspent funds from the 2020/21 project and a new authorization in the amount of $2,600,000), and Caltrans has asked the City of Richmond and Veolia to install another Trash Capture device using these funds. Veolia will be accomplishing the design and constructability review for this work using some of the same subcontractors from the 2019 Meeker Ditch project and the 2020/21 Cutting Boulevard project, namely Harris & Associates (Design), Contech Engineered Solutions (Equipment supplier), W.R. Forde (contractor constructability review) and Questa Engineering (testing). Upon completion of the design, as directed by the City, Veolia will solicit competitive price proposals for the installation of this trash capture device and issue a PO for Questa Engineering for Soils and backfill testing.

The location of the newly proposed device is at Bayview Avenue in Richmond between Hartnett Avenue and Ells Street (see attached map). The previous project team have all indicated availability and interest in performing this work. Since the specific site is still being determined along Bayview, included herein for the City's approval are estimated costs for the same project team based on the Meeker Ditch and Cutting Boulevard projects adjusted for 2021/22. Caltrans has agreed to reimburse the City for the cost to install this trash capture device, which includes testing and any additional services required. The total authorized amount for this TA is $2,000,250.25 which includes Veolia's 16.5% mark-up and is well within the remaining CalTrans fund balance of $3,200,000. When specific proposals are received and the project is bid, this TA can be revised to the not-to-exceed amount of the $3.2M balance. Per the CIA, the Trash Capture Project is exempt from the California Environmental Quality Act (CEQA), pursuant to CEQA guidelines Section 15301(b) because it is a project constructing minor alterations to an existing publicly owned utility involving negligible or no expansion of an existing use.

Trash Capture Construction	Estimates	SUBTOTAL	Veolia Markup 16.50%	TOTAL
W.R. Forde Construction	497,000	497,000	82,005	579,005
Harris & Associates	149,953	149,953	24,742	174,695
Contech Engineering	1,070,000	1,070,000	176,550	1,246,550
		-	-	-
TOTAL	1,716,953	1,716,953	283,297	2,000,250

Attachments

Copy of CIA and site maps

Harris & Associates

July 7, 2021

Chandrasekar Venkatraman (CV)
Program Manager
Veolia North America
601 Canal Blvd.
Richmond, CA 94804

Bayview Avenue Trash Capture at Carlson Boulevard

Dear Chandrasekar:

The Harris & Associates team is ready to assist Veolia and the City of Richmond with the design of a trash capture device at Bayview Avenue. This scope and fee is to design the project as discussed during our team conference calls on June 24, 2021 and June 28, 2021, and our recent experience working on the Cutting Boulevard Trash Capture Project.

The following outlines our proposed scope of services and estimated fee to provide these services.

PROJECT UNDERSTANDING

In an effort to improve the environment and adhere to the increasing requirements of the Municipal Regional Permit, the City of Richmond, like many other municipalities, is working towards reducing the amount of debris discharged to the bay from its storm drain system.

According to record drawings from Caltrans, the storm drain pipes in Bayview Avenue approaching Carlson Boulevard consists of one 72" CSP pipe, one 36" RCP and two 66" RCP pipes. The 72" CMP pipe carries the stream flow and does not require treatment. The purpose of this project is to treat the flows from the two 66" RCP storm drain lines. It is not logistically feasible to treat the 36" RCP storm drain pipe as part of this project.

To that end, the City/Veolia plans to install a pair of trash capture devices in Bayview Avenue to treat these two storm drain pipes. During our planning meeting with Veolia and City, it was decided to focus on a specific corridor in Bayview Avenue, from 40' south of Harnett Avenue to 50' north of Ells Ave., where potential for utility conflicts are minimized. This corridor is shown on the attached map. The segment between Carlson Boulevard and Hartnett Avenue is not included in the study because it has quite a few underground utilities and therefore offers no space for installation of CDS devices.

It is also likely that it may be infeasible to install the trash capture devices within the identified limits. In which case, an amendment will be issued to search for another suitable location. Harris team will determine the feasibility of installing these devices after the location of the existing underground utilities are identified by our utility locating subconsultant.

The trash capture devices and weir structure would be manufactured by Contech Stormwater Solutions and procured by Veolia.

The project will involve preparation of Plans and Specifications for the construction and installation of the Contech units and weir structure. This work will include utility investigation, topographic survey, geotechnical investigation, coordination with Contech on the final structure design, incorporating Contech's drawing into our bid documents, laying out the structure and tie-ins to adjacent drainage facilities, preparation of documents for bidding, and design services during construction.

SCOPE OF SERVICES

Scope of Services

Harris and Associates will prepare bid documents showing the proposed location and clearly defining the project parameters for bidding. We will coordinate with the City, Veolia, and Contech to design a structure that will be effective and easy to maintain.

Primary project tasks include:

1. Reviewing record drawings of the existing storm drain system in the project area.
2. Gathering and reviewing utility maps.
3. Subsurface utility investigation.
4. Topographic survey.
5. Geotechnical investigation to determine shoring and dewatering parameters.
6. Site investigation
7. Coordination with subconsultants
8. Coordination with Contech.
9. Feasibility study to determine location of the box and tie-ins to existing facilities.
10. Rough hydraulic calculations to assist Contech with sizing the CDS units
11. Providing a preliminary and final design package, including plans and specifications
12. Meeting with Veolia
13. Bid period services, including attendance at the pre-bid meeting, answering bidder questions, and preparation of 1 addendum.
14. Attendance at the pre-construction meeting.
15. Review of submittals, requests for information, and change order requests.
16. Preparation of record drawings.
17. If preliminary investigation demonstrates that the current site is infeasible, an addendum will be negotiated for exploring an alternative site.

Because the geotechnical investigation for the adjacent site revealed presence of bedrock, the scope of work for this project will include 3 to 4 borings to depth of 30 to 40 feet over 2 days to collect sufficient data to identify the limits of bedrock.

Additionally, the scope of work for utility locating include confined space entry to identify the edges of the two 66" RCP pipes. This is particularly critical for determining if sufficient space will be available for installation of trash capture devices.

The scope of work for our subconsultants are described in their proposals included in the attachment.

Assumptions and Exclusions

It is assumed that Contech will design and manufacture the trash capture devices and incorporate design flows from the City. Permitting and coordination with regulatory agencies are not included. We understand that Veolia will be providing construction management. Water Pollution Control and Traffic Control plans are not included.

In the absence of updated hydraulic data, Harris will use the hydraulic information from the City's Storm Drain Master Plan, dated November 2006, to the extent possible. Harris is not responsible for the accuracy of the data contained in the Master Plan. If needed, Harris team will attempt to conduct localized hydraulic calculations to assist Contech with the parameters needed for sizing the CDS devices. These calculations will be rough in nature. Harris does not have the means nor the institutional knowledge to perform hydraulic modeling.

PROJECT SCHEDULE

Harris and Associates will fast track this project based on the following tentative schedule:

- July 15, 2021 (assumed) – Notice to proceed to start work
- September 30, 2021 – Submit 50% Design Package
- October 15, 2021 – 50% Review Meeting
- December 28, 2020 – Submit Final Design Package
- January 2021 – Begin Construction

PROJECT TEAM

Harris and Associates will bring an experienced design team to work on this project. **Kourosh Iranpour, PE** has over 33 years of experience on storm drain projects and will be the Project Manager. He is very knowledgeable in storm drain design and well versed in the requirements of the Municipal Regional Permit. **Ka Chow**, PE, and **Zach Carroll**, EIT, ENV SP, will be your project Engineers. They have 6 and 3 years of experience respectively, much of it involving pipeline and drainage projects. Quality control and quality assurance will be performed by **Richard Davis**, PE. Richard has over 30 years of experience providing a multitude of services to the public sector. **Kister Savio and Rei** will perform topographic survey, **Subtronic Corporation** will perform utility locating, and **Miller Pacific Engineering Group** will perform geotechnical investigation.

PROPOSED FEES

Per the attached level of effort spreadsheet, we estimate the design fee to be $149,953, including $33,512 subconsultants' fees. If it would help from administrative standpoint, we can also include an allowance for identifying an alternative site, if this site turns out to be infeasible. This fee will be revocable if not used.

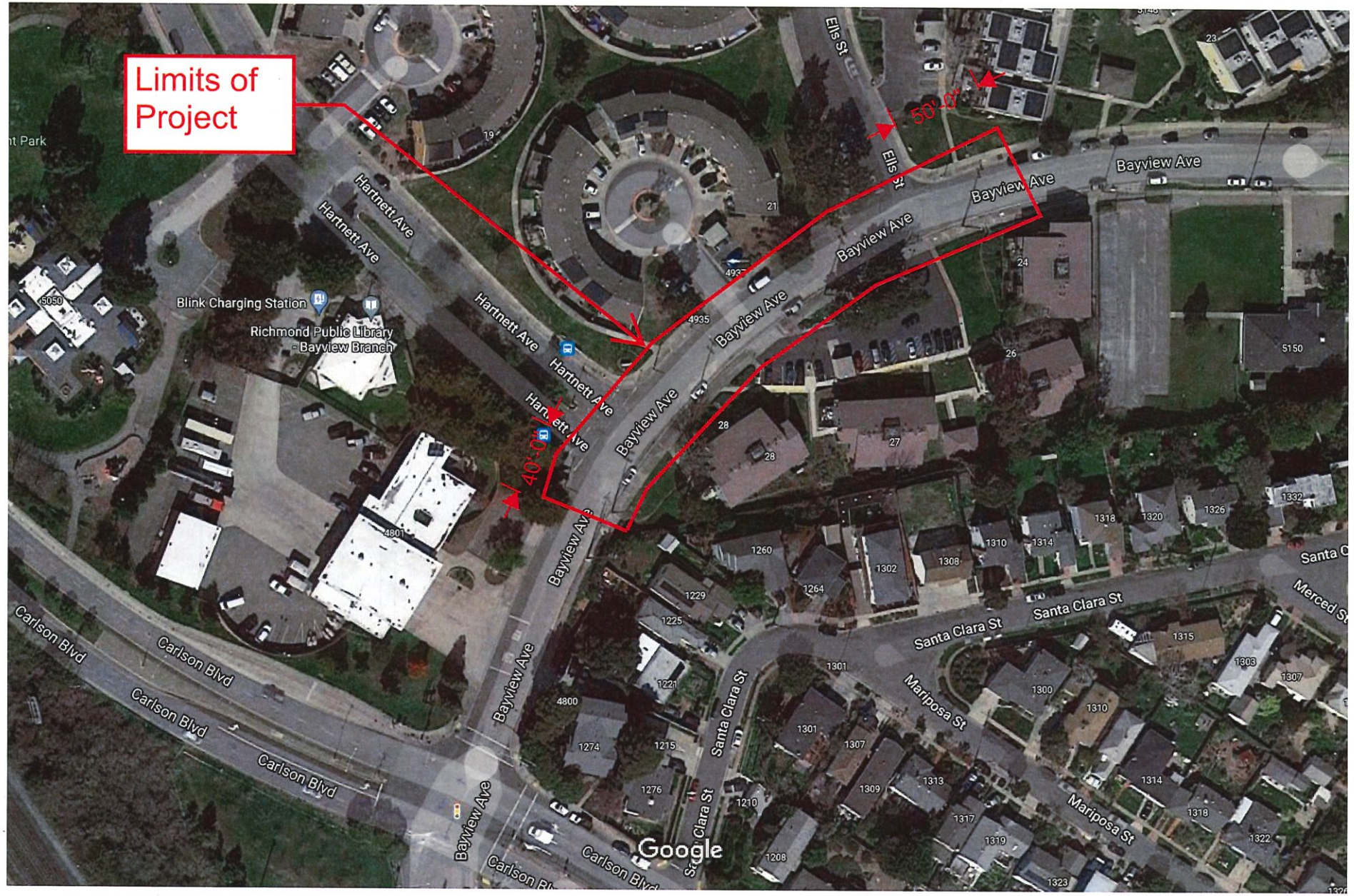
If a portion of this proposal does not meet your needs, or if those needs have changed, we will consider appropriate modifications based on your specific needs. Harris & Associates appreciates the opportunity to be of service again. Please do not hesitate to contact me should you have any questions regarding this proposal.

Sincerely,
Harris & Associates, Inc.

Kourosh Iranpour, PE
Project Manager, Engineering Services
925-969-8013 ▪ kourosh.iranpour@WeAreHarris.com

Attachments
Location Map
Level of Effort Spreadsheet
Kister, Savio and Rei Proposal
Miller Pacific Proposal
Subtronic Proposal

Bayview Avenue Trash Capture Project



Imagery ©2021 CNES / Airbus, Maxar Technologies, U.S. Geological Survey, Map data ©2021 50 ft

HARRIS & ASSOCIATES - LEVEL OF EFFORT							7/7/2021
VEOLIA / CITY OF RICHMOND							
Bayview Avenue Trash Capture at Ells St.							
PHASE, ACTIVITY, TASK	HARRIS & ASSOCIATES				SUBCONSULTANTS W/O MARKUP		SUBTOTAL TEAM
	QC	PM/PD	ASSIST ENGR	HARRIS TOTAL			
1.0 PROJECT MANAGEMENT	**HOURS**	**HOURS**	**HOURS**	**$**	**NAME**	**$**	
1 Coordination with Veolia / City		24					
2 Project Management Activities		36					
3 Weekly Progress Meetings		48	4				
SUBTOTAL HOURS	0	108	4				
SUBTOTAL COSTS	$0	$28,080	$640	**$28,720**			**$28,720**
2.0 50% DESIGN SUBMITTAL							
1 Information Gathering		12	16				
2 Site Visit		24	12				
3 Topographic Survey		4	6		Kister Savio & Rei	$6,855	
4 Utility Locating		4	6		Subtronic	$7,257	
5 Geotechnical Investigation		4			Miller Pacific	$19,400	
6 Coordination with Contech		16	6				
7 Prepare 50% Plans	2	24	72				
8 Prepare 50% Specifications	1	12	8				
9 Perform in-house Quality Check	4						
SUBTOTAL HOURS	7	100	126				
SUBTOTAL COSTS	$1,890	$26,000	$20,160	**$48,050**		**$33,512**	**$81,562**
3.0 FINAL DESIGN SUBMITTAL							
1 50% Design Review Meeting		2	2				
2 Coordinate with Contech		16	8				
3 Prepare Final Plans		12	48				
4 Prepare Final Specifications		8	8				
5 Perform in-house Quality Check	4						
SUBTOTAL HOURS	4	38	66				
SUBTOTAL COSTS	$1,080	$9,880	$10,560	**$21,520**			**$21,520**
4.0 BID PERIOD AND CONSTRUCTION PHASE SERVICES							
1 Attend Pre-bid Meeting		2					
2 Answer Bidding Questions/Prepare Addendum (1 assumed)		8	12				
3 Attend Pre-Construction Meeting		2					
4 Submittal Review (8 assumed)		12	4				
5 Respond to RFI's, change orders (1 RFI and 1 CCO assumed)		8	6				
6 Prepare Record Drawings		4	12				
SUBTOTAL HOURS	0	36	34				
SUBTOTAL COSTS	$0	$9,360	$5,440	**$14,800**			**$14,800**
TOTAL COST							
HOURS PER POSITION - HARRIS PERSONNEL	11	282	230				
2018 HOURLY RATES (average for position)	$270	$260	$160				
TOTAL COST PER POSITION	$2,970	$73,320	$36,800				
TOTAL COST- HARRIS PERSONNEL							$113,090
TOTAL COST- SUBCONSULTANTS							$33,512
SUBCONSULTANT MARKUP (10%)							$3,351.20
TOTAL COST							$149,953

ASSUMPTIONS UPON WHICH COST PROPOSAL IS BASED:

1 Hours and fee for individual tasks and projects are a guide; the total hours and cost take precedence.
2 Hours and fee may be renegotiated if the project is delayed by factors beyond Harris' control.
3 The plan set will include:

Description	Scale	# of Sheets
Title Sheet, General Notes, Legend, Abbreviations, Key map	None	1
Site Plan	1"=10'	1
Civil Details	various	1
Trash Capture Plans (by Contech)	TBD	3
	Total	6

4 The number of meetings is indicated in the spreadsheet
5 Environmental investigation and permitting are not included.
6 Trash capture device will be manufactured by Contech and procured by Veolia.
7 Veolia will provide sample specifications.
8 Construction Management not included.
9 Veolia will provide access to project site for Harris and subconsultants
10 Water Pollution Control Plans are not included

KISTER, SAVIO & REI

LAND SURVEYORS & CIVIL ENGINEERS

825 San Pablo Avenue, Pinole, CA
510-222-4020 Fax 510-222-3718
Email: info@ksrinc.net

COST PROPOSAL

TO:	Harris & Associates c/o Kourosh Iranpour
EMAIL:	Veolia Trash Capture Project
PROJECT:	Bayview Ave Trash Capture Phase II
SCOPE OF WORK:	Topographic Survey of area shown on Trash Capture Project - Bayview Ave Map.pdf, dated 6-25-2021. Scope of work to include Topographic mapping from Back of Walk to Back of Walk of approximately 500lf of Bayview Ave. Survey data will be collected and compiled digitally in AutoCAD Civil 3D .DWG electronic file format with 1' contours where practical. Utilities will be located to the extent possible by observed surface evidence, USA markings if available and available records.
FEES:	Not to exceed $6,855.00

Kister, Savio & Rei, Inc. is a California Certified SBE (Small Business Enterprise) and a SLBE (Small Local Business Enterprise) with Contra Costa County and the Port of Oakland and is signatory to the Operating Engineers Local 3. All field surveyors carry TWIC Cards (Transportation Worker Identification Card) and are actively enrolled in DISA.

TERMS AND CONDITIONS:
Terms and conditions in this proposal are valid for 30 days.
Payment of Invoices: Client is solely responsible for full payment of the invoice within 30 days of their receipt and acceptance of invoice. NO RETENTION Invoices will be deemed accepted by client unless client notifies Kister, Savio & Rei, Inc. of any objections to the invoice in writing within 10 days of receipt of the invoice. 1.5% monthly interest will be assessed on all past due accounts. If termination of this agreement is necessary it will be done in writing either by the Client or Kister, Savio & Rei, Inc. The aforementioned fees are applicable unless there is an approved change in the Scope of Work. All changes to the Scope of Work will be done in writing. The Client agrees to limit the Surveyor's liability for damages to the client to the sum of the fee charged for the surveying services. This limitation of liability shall apply regardless of the cause of action or legal theory pled or asserted by the Client. Should this limitation be unacceptable to the Client, the Client will notify the Surveyor in writing before services begin. Client agrees to reimburse KSR for all court costs, filing fees and attorney fees in the event of litigation.

KISTER, SAVIO & REI

LAND SURVEYORS & CIVIL ENGINEERS

SUBMITTED BY:

KISTER, SAVIO & REI, INC.

BY: _____
Patrick M. Rei, President of Surveying

DATE: July 7, 2021

AUTHORIZATION TO PROCEED:
This proposal and the terms and conditions described hereon are hereby accepted. Kister, Savio & Rei, Inc. is hereby authorized to proceed with the work described above.

OWNER/COMPANY: _____

ADDRESS: _____

CITY, ST & ZIP: _____

TELEPHONE: _____

BY _____

TITLE _____

DATE: _____

MILLER PACIFIC ENGINEERING GROUP

July 6, 2021
File: 21-11704pro(REV).doc

Harris & Associates
1401 Willow Pass Road, Suite 500
Concord, CA 94520

Attn: Mr. Kourosh Iranpour

Re: Proposal for Geotechnical Services
Richmond/Veolia - Bayview Trash Capture
Richmond, California

Introduction and Project Description

As requested, we are pleased to propose our geotechnical engineering services for the proposed trash capture structure located northwest of the intersection of Carlson Blvd. and Bayview Avenue in Richmond, California. We understand this project includes temporary shoring, installation of a precast below grade structure and backfill. The majority of the project site is located in alluvial soils, with fractured Franciscan chert Bedrock mapped to the northeast. Harder greenstone bedrock is mapped further to the northeast.

Scope of Services

We customarily provide our services in phases to correspond with project development. Based on our understanding of the project, we propose the following scope of services:

Phase 1 –Geotechnical Investigation

Our Phase 1 services will include review of available, published geologic mapping and geotechnical background information from our files and any geologic/geotechnical background information supplied by you. We will perform a site reconnaissance to observe and document existing conditions and pre-mark the site for utility location by USA North as required.

Subsurface exploration at the site will include obtaining a drilling permit from the County, and three to four borings drilled over 2 days with a truck mounted auger rig to collect soil samples for laboratory testing to determine the engineering properties of the underlying soils. We have estimated a boring depth of 30 to 40 feet (depending on location).

Based on our subsurface exploration, we will prepare geotechnical recommendations and criteria for the project summarized in a letter report addressing the following:

- Regional and local geologic conditions;
- Subsurface exploration and laboratory testing;
- Opinion regarding project feasibility and primary geotechnical considerations;
- Criteria for grading, including discussion of anticipated excavation conditions (soil and groundwater) and backfill options and compaction requirements;
- Underground utility construction, including Cal/OSHA soil-type categorization and shoring requirements;
- Foundation and retaining structure recommendations and criteria;
- Pavement sections;
- Other geotechnical items pertinent to the project.

Our report will also include our boring logs and other plates and figures as needed to support our conclusions and recommendations.

Phase 2 – Supplemental Consultation and Review

Following completion of our Phase 1 services, we will be available to consult with the project team, respond to geotechnical issues that may arise during project development, and/or attend project meetings as required. We should also review the project plans as they near completion to ensure that the intent of our geotechnical recommendations has been sufficiently incorporated.

Phase 3 – Construction Observation and Testing

We should perform intermittent observation and testing of the geotechnical portions of the project to verify that our recommendations remain appropriate for actual conditions encountered and to form an opinion regarding the Contractor's compliance with the project plans and specifications.

Contractual Arrangements

Based on our understanding of the project and the scope of services described above, we propose the following fee arrangements:

Phase 1 – Geotechnical Investigation ..... Fixed Fee, $17,900

Environmental Testing (if needed) $1,500

Phase 2 – Supplemental Consultation ..... Time and Expense, Estimate, $1,500

Phase 3 – Construction Observation and Testing ..... Time and Expense, Estimate, TBD**

**Will provide a detailed construction observation and testing scope and budget proposal after project plans are finalized and a construction schedule is available.

We are pleased to have the opportunity to work with you on this project. We will commence with our Phase 1 services shortly after your authorization. If you have any questions concerning this proposal, please call us.

Very truly yours,
MILLER PACIFIC ENGINEERING GROUP

Scott Stephens
Geotechnical Engineer No. 2398
(Expires 6/30/23)

Attachments: Schedule of Charges

MILLER PACIFIC
ENGINEERING GROUP

MILLER PACIFIC ENGINEERING GROUP
a California corporation

SCHEDULE OF CHARGES
PROFESSIONAL ENGINEERING AND TESTING SERVICES

Professional and Technical Personnel	Hourly Rate
Staff Engineer/Geologist – Level 1-3	$105 - $115 - $125
Project Engineer/Geologist – Level 1-3	$135 - $145 - $155
Senior Engineer/Geologist – Level 1-3	$175 - $185 - $195
Associate Engineer/Geologist – Level 1-3	$210 - $220 - $230
Principal Level 1-3	$235 - $245 - $255
Project Assistant/Word Processor	$85
Technician Level 1-3	$100 - $105 - $110
Senior Technician Level 1-3	$120 - $125 - $130
Prevailing Wage	$150

Other Inside Charges	
Mileage	$ 0.80 per mile
Vehicle (Field)	$9 per hour
Nuclear Density Gage	$8 per test
Inclinometer	$160 per day / $90 per half day
Laser Level/Floor Level Equipment	$25 per day
Sampling and Video Equipment	$50 per day / $30 half day

Outside Services ..... Cost + 20%

Exploration, drilling equipment and instrumentation, in-situ monitoring, specialized laboratory testing, per diem, shipping, courier/delivery services, outside reproduction, and other services and supplies not normally provided.

*NOTES:

1. Field site visits and travel time are normal hourly rates, portal to portal.
2. Overtime – Weekday — add $35
   Overtime – Weekend/Holiday/Night — add $45*
   *(4 or 8 hour-minimums)
3. Rates are for normal Geotechnical Engineering and Geological services. Rates for depositions and testimony are $510 per hour for Principal; $460 per hour for Associate; and $410 per hour for Senior. All other personnel are $305 per hour. These fees are due and payable at the time of service.
4. Schedule of charges is effective as of January 2021. It is subject to revision annually and at other times without notice.
5.

Subtronic Corporation

5031 Blum Rd, #2
Martinez, CA 94553

Estimate

Estimate # 34888

Date of Estimate 6/29/2021

BILL TO:

Harris & Assoc
1401 Willow Pass Road, Suite 500
Concord, California 94520
925.969.8013
Attn: Kouŗosh Iranpour

ESTIMATE TO:	P.O. #:	

SURVEYOR	JOB DATE	DAY	TIME	Estimate #	COUNTY	TERMS
JT				34888 - PW Ri...		Net 30

DESCRIPTION	QTY	COST	TOTAL
PROJECT LOCATION: Trash Capture Project - Bayview Avenue, Richmond, CA. Note: SD culvert access is via a MH on Bayview Avenue, just east of Ells St. AREA OF SURVEY: The area of survey is defined by information received June 29, 2021 regarding the location of underground utilities from back of side walk to back of sidewalk along approximately 450' of Bayview Avenue between a point 40' west of the west curb of Hartnett and a point 50' east of the east side of Ells St. SCOPE OF SURVEY: We will endeavor to locate underground utilities in the areas indicated, but for technical reasons cannot guarantee to do so, some short lengths of abandoned utilities may not be located. The edges of one of the two 66" SD culverts will be located as part of the survey.. METHODOLOGY: Location of utilities will be by electromagnetic field induction. Ground Penetrating Radar will also be used.			

Signature & Date	**TOTAL**

Subtronic Corporation

5031 Blum Rd, #2
Martinez, CA 94553

Estimate

Estimate # 34888

Date of Estimate 6/29/2021

BILL TO:

Harris & Assoc
1401 Willow Pass Road, Suite 500
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925.969.8013
Attn: Kourosh Iranpour

ESTIMATE TO:	P.O. #:	

SURVEYOR	JOB DATE	DAY	TIME	Estimate #	COUNTY	TERMS
JT				34888 - PW Ri...		Net 30

DESCRIPTION	QTY	COST	TOTAL
INCLUSIONS: Metallic utilities i.e. electric, telephone, gas and water. Non metallic utilities with tracer wire visible. Sewer and drain lines with minimum 4" cleanout or manhole access will be located by inserting a transmitter. ASSUMPTIONS: 1. We assume access will be granted to all places requiring admission for the purpose of tracking and identifying the utilities. 2. We assume that any existing utility drawings will be made available. 3. We assume Underground Service Alert will be notified prior to any future excavation. 4. We assume an encroachment permit will be granted at no charge to us in order to access the culverts. 5. Unless noted otherwise we assume this is a prevailing wage project and we are not obligated to a project labor agreement.			

Signature & Date	**TOTAL**

Subtronic Corporation

5031 Blum Rd, #2
Martinez, CA 94553

Estimate

Estimate # 34888

Date of Estimate 6/29/2021

BILL TO:

Harris & Assoc
1401 Willow Pass Road, Suite 500
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Attn: Kourosh Iranpour

ESTIMATE TO:	P.O. #:	

SURVEYOR	JOB DATE	DAY	TIME	Estimate #	COUNTY	TERMS
JT				34888 - PW Ri...		Net 30

DESCRIPTION	QTY	COST	TOTAL
TRAFFIC CONTROL METHODOLOGY: We will facilitate vehicle and pedestrian traffic through temporary traffic control zones by following California Uniform Traffic Control Devices (MUTCD) standards and specifications. CONFINED SPACE: We understand the requirements for confined space entry and will supply and use the necessary equipment and trained personnel QUALIFICATIONS: Class A General Engineering Contractor, CA License # 940232 Public Works Registration 1000004188. PLS: Surveying and mapping will be supervised by a Professional Land Surveyor # 7054 DEPTHS of utilities will be provided where possible. Instrument readings are deemed within 10% accuracy. Critical depths may require potholing (not included in this proposal, but available on request).			

Signature & Date	**TOTAL**

Subtronic Corporation

5031 Blum Rd, #2
Martinez, CA 94553

Estimate

Estimate # 34888

Date of Estimate 6/29/2021

BILL TO:

Harris & Assoc
1401 Willow Pass Road, Suite 500
Concord, California 94520
925.969.8013
Attn: Kourosh Iranpour

ESTIMATE TO:	P.O. #:	

SURVEYOR	JOB DATE	DAY	TIME	Estimate #	COUNTY	TERMS
JT				34888 - PW Ri...		Net 30

DESCRIPTION	QTY	COST	TOTAL
PRESENTATION: Utilities will be painted on the ground. These marks will be surveyed and plotted onto a drawing, by layers, in AutoCAD format. Unless two site control points and their coordinate values are provided, the utilities will be plotted on an arbitrary coordinate system referencing a minimum of two prominent building corners or other features. This will enable insertion into other drawings by the client. The final drawing will be delivered to the client via the Internet as an attachment to e-mail in AutoCAD and as a .pdf file.			
COMPENSATION: For work performed as described above including equipment, personnel and travel costs for the sum of:			
Underground utility location, 1st hour on site	1	452.00	452.00
Underground utility location, subsequent hours:	7	226.00	1,582.00
Traffic Control Design, per plan (retained from last project)	0	300.00	0.00
Placement of No Parking signs prior to work	1	257.00	257.00
Confined Space Entry Locate team, 1st hour	1	1,236.00	1,236.00
Confined Space Entry Locate team, subsequent hours	4	618.00	2,472.00

Signature & Date	**TOTAL**

Subtronic Corporation

5031 Blum Rd, #2
Martinez, CA 94553

Estimate

Estimate # 34888

Date of Estimate 6/29/2021

BILL TO:

Harris & Assoc
1401 Willow Pass Road, Suite 500
Concord, California 94520
925.969.8013
Attn: Kourosh Iranpour

ESTIMATE TO:	P.O. #:	

SURVEYOR	JOB DATE	DAY	TIME	Estimate #	COUNTY	TERMS
JT				34888 - PW Ri...		Net 30

DESCRIPTION	QTY	COST	TOTAL
Traffic Control: (Included in above rates)	0	0.00	0.00
Collect coordinate values of utility locations using total station.	3	246.00	738.00
Create drawing (AutoCAD), hourly	4	130.00	520.00
PREVAILING WAGE: State & Federal prevailing wage rates apply to all public works contracts as set forth in Labor Code Sections 1720, 1720.2, 1720.3, 1720.4, 771. and DAVIS-BACON ACT Title 40 U.S.C. If the work is performed over a number of years an increase in the quoted fees of 3% per annum will be applied. Wage Determination Classification: Construction Specialist Area 1			
This estimate is good for 60 days.			

Signature & Date	**TOTAL**

Subtronic Corporation

5031 Blum Rd, #2
Martinez, CA 94553

Estimate

Estimate # 34888

Date of Estimate 6/29/2021

BILL TO:

Harris & Assoc
1401 Willow Pass Road, Suite 500
Concord, California 94520
925.969.8013
Attn: Kourosh Iranpour

ESTIMATE TO:	P.O. #:	

SURVEYOR	JOB DATE	DAY	TIME	Estimate #	COUNTY	TERMS
JT				34888 - PW Ri...		Net 30

DESCRIPTION	QTY	COST	TOTAL
Insurance Coverage: General Liability: $1,000,000 per occurrence $ 2,000,000 aggregate Excess/Umbrella Liability: $7,000,000 Worker's Comp: $1,000,000 Employer's Liability Professional Liability: $2,000,000 per claim $2,000,000 annl aggr. Automobile:$1,000,000 Combined Single Limit			

Signature & Date _____

TOTAL $7,257.00

This quotation is subject to our Specification and Standard Conditions of Contract.
CA License # 940232

COOPERATIVE IMPLEMENTATION AGREEMENT
AMENDMENT 3

This AMENDMENT 3 ENTERED INTO EFFECTIVE ON June 18, 2021 2021, is between the State of California acting by and through its Department of Transportation, referred to as CALTRANS and the CITY OF RICHMOND, referred to as "AGENCY" and together referred to as PARTIES.

RECITALS

1. CALTRANS and AGENCY entered into Cooperative Implementation Agreement No. D43CIARI0002 on January 22, 2019, defining the terms, covenants and conditions to implement the Water Capture Facility Project, within the regional area under the jurisdiction of AGENCY to comply with the TMDL referred to herein as PROJECT. AGENCY has agreed to implement PROJECT in accordance with Attachment II-SCOPE SUMMARY that defined in detail the PROJECT's scope of work, description, timeline, location and budget.

2. On June 24, 2020, CALTRANS and AGENCY amended the AGREEMENT to revise the scope of the PROJECT to implement an additional Water Capture Facility at another location, Bayview Avenue, to provide supplemental stormwater runoff treatment benefits under Phase II of the PROJECT ("AMENDMENT 1")

3. The AGENCY discovered geotechnical engineering constraints at the Bayview Avenue construction site precluding installation of the AMENDMENT 1 Water Capture Facility Project at the location.

4. On April 20, 2021, CALTRANS and AGENCY further amended the AGREEMENT to relocate the Water Capture Facility to Cutting Boulevard at South 3rd Street ("AMENDMENT 2").

5. As a result of changed circumstances, CALTRANS and the AGENCY have determined that the Water Capture Facility at Bayview Avenue is now feasible and wish to expand the scope of the PROJECT to include such additional work.

6. The purpose of this AMENDMENT 3 is to increase the scope of the PROJECT to provide additional stormwater runoff treatment. Phase 1 of the PROJECT has been completed and PARTIES have decided to amend the AGREEMENT to add an additional treatment location to the project as described under "Phase 3" as shown in

REVISED ATTACHMENT II – FOR AMENDMENT 3, attached and made a part of this AMENDMENT 3.

IT IS MUTUALLY AGREED:

7. The PARTIES hereby amend ATTACHMENT II by incorporating REVISED ATTACHMENT II – FOR AMENDMENT 3 in its entirety. No change to the cost is proposed.

8. Any reference to ATTACHMENT II in the AGREEMENT is deemed to incorporate REVISED ATTACHMENT II – FOR AMENDMENT 3 by reference.

9. AMENDMENT 3 with its ATTACHMENT(S) are by reference made a part of the AGREEMENT and incorporated herein.

10. All sections of AMENDMENT 3 including the recitals are enforceable.

11. Notwithstanding these amended terms of the AGREEMENT by this AMENDMENT 3, all other applicable terms and conditions of the AGREEMENT and attachments, AMENDMENT 1 and AMENDMENT 2, shall remain in full force and effect.

ATTACHMENTS

The following attachment is incorporated into and is made a part of this AMENDMENT 3 by this reference and attachment.

Revised Attachment II – FOR AMENDMENT 3.	Amended Scope of Work, Description, Timeline, Location and Budget

SIGNATURES

Signatories may execute this AMENDMENT 3 through individual signature pages provided that each signature is an original. This AMENDMENT 3 is not fully executed until all original signatures are attached. PARTIES are empowered by California Streets and Highways Code (SHC) sections 114 and 130 to enter into this AMENDMENT 3 and have delegated to the undersigned the authority to execute this AMENDMENT 3 on behalf of the respective agencies and covenant to have followed all the necessary legal requirements to validly execute this AMENDMENT 3.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

Signature: Kenneth Johansson
Print Name: **KEN JOHANSSON**
Title: **Interim Stormwater Coordinator**
Date: 06-18-2021

Signature: Hardeep Takhar for
Print Name: **SHAILA CHOWDHURY**
Title: **Assistant Chief, Division of Environmental Analysis**
Date: 06/18/21

Signature: Philip J. Stolarski
Print Name: **PHIL STOLARSKI**
Title: **Chief, Division of Environmental Analysis**
Date: 06/18/21

AGENCY

Signature:
Print Name: **LAURA SNIDEMAN**
Title: **City Manager**
Date: 6/18/2021

Signature
Print Name **JOE LEACH**
Title **Public Works Director**
6/18/21
Date

ATTACHMENT II – FOR AMENDMENT 3

CITY OF RICHMOND
PROPOSED WATER CAPTURE FACILITIES PROJECT

Executive Summary:

CIP No.	*"Finance will assign"*	Total Estimated Capital Cost	$3,270,000
Project Manager	Mary Phelps	Estimated Start Date	07/01/2021
Dept/Division	Public Works/Water Resource Recovery	Estimated Completion Date	06/30/2022
Department Priority	High	Project Status	*Pending funding*
Project Name	Full-Trash Capture Facilities at Regatta Blvd (Meeker Ditch)		
Project Description and Scope	Phase III: The additional funding of the CIA, D43CIARI0002, approximately $3,270,000 will be utilized for the design, purchase and construction of two hydrodynamic separators, Contech Continuous Deflection Separation (CDS) units. These units will be constructed at Bayview Ave. Approximately 840 acres of land, of which 38 acres are from Caltrans Right of Way, 84 acres are from the City of Richmond, and 723 acres from the City of El Cerrito, will be treated by these units. Caltrans has already advanced $591,866.57 that will be used for the purchase of the CDS units for the Bayview Ave project. This amendment will bridge the funding gap that remains to complete the design and construction of the project. This CDS unit will screen, separate and trap debris, sediment, and oil and grease from stormwater runoff. The units have been rated as being effective at trapping 80% of sediment at either the 140- or 175-micron level depending on unit type. Thus, they will achieve load reductions of PCBs and Hg, beside trash. This project was previously revised due to the construction and time constraints. However, now with additional funding and longer period for construction, the project will be able to succeed. There are three potential sites that have been reviewed for the Bayview Ave project. Design engineers will review the site(s) and determine the best location for the		

	installation of the CDS units. The proposed projects gear toward compliance of TMDLs of trash, PCBs and Mercury, as set forth by in the San Francisco Bay Regional Water Resource Control Board. Ultimately, this project posts a watershed-based solution to reduce pollutant loadings, trash, and PCBs and Mercury in sediments, from entering local watersheds and the San Francisco Bay from three different jurisdictions, City of Richmond, City of El Cerrito, and Caltrans, thus enhancing water quality for beneficial and recreational uses.

Introduction

On January 22, 2019, the City of Richmond (the City) and CALTRANS entered a Cooperative Implementation Agreement (the Agreement) to implement a water capture facility project, which consists of the construction of two full-trash capture devices (FTCDs), Contech CDS units, with the cost not to exceed $3 million. These devices were installed in the City on Regatta Boulevard (Meeker Ditch). The project completed under budget with the total cost of approximately $700,000.

On June 24, 2020, the City and CALTRANS amended the CIA to revise the scope of work to add another water capture facility project, consisting of two FTCDs on Bayview Avenue; utilizing the remaining funds of approximately $2.3 million to deliver additional trash load reduction from the City and CALTRANS right of ways. During the design phase of the project, based rocks were preliminary determined through the regional geologic map of the Richmond quadrangle published through the U.S. Geological Survey in 1980. The presence of base rock at the project location was later confirmed through boring activities. Field log noted base rocks was discovered at ten feet below ground surface (bgs), and refusal was encountered at 15 ft bgs at the Bayview project site (see Exhibit A). The removal of base rocks for the installation of the proposed FTCDs would have required added cost and time for the completion of the project. Furthermore, this activity could damage the foundation of the apartment complex located adjacent to the project site. Due to this geotechnical engineering constraints, it was deemed infeasible to complete this project within to the time frame and budget as prescribed in Amendment No. 1 of CIA No. D43CIARIC002. In order to avoid the scenario as described above in future partnership opportunities with CALTRANS, the City learns that it must perform an alternative analysis of multiple project sites to determine the most feasible project location for the installation of FTCD.

This amended Scope Summary is to revisit the proposed water capture project at Bayview Avenue There were three locations that were examined regarding installation of the CDS units. Now that additional funding is available and time is not a factor, the Bayview Ave project can proceed.

Background

The City of Richmond is located in Contra Costa County, a county in the San Francisco Bay Region. The San Francisco Bay Region encompasses po1tions of Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, San Mateo, Solano, and Sonoma Counties. One way that the San Francisco Regional Water Board protects water bodies within region is to develop Total Maximum Daily Loads (TMDLs), which are programs to restore water quality in water bodies impaired by pollutants such as Trash, PCBs and Mercury. To achieve the goals of the TMDLs, a reduction in the amount of inputs of the aforementioned pollutants to the San Francisco Bay (the Bay) is required.

In 2015, the San Francisco Regional Water Board reissued the stormwater Municipal Regional Permit 2.0 (MRP 2.0), a National Pollutant Discharge Elimination System (NPDES) permit that regulates discharges of stormwater runoff from MS4s. The MRP 2.0 includes provisions that implement the requirements in the Trash, PCBs, and Mercury TMDLs to reduce discharges of these pollutants in stormwater runoff to the San Francisco Bay. The reduction of these pollutants could be achieved through the implementations of FTCDs or green stormwater infrastructure (GS1), and programmatic approach such as the PCBs building demolition material controls.

The MRP requires compliance with TMDL requirements, specifically the San Francisco Bay Mercury TMDL (SFRWQCB, 2004, amended by SFRWQCB, 2006) and the San Francisco PCB TMDL (SFRWQCB, 2008). Water quality objectives were established in each TMDL to protect beneficial uses of the impaired receiving water, mainly San Francisco Bay. PCB concentrations tend to be highest in sediments, thus typical bioaccumulation starts with bottom-feeding species and transfers along the flood chain, with the additional issue of biomagnification (increased concentrations in organisms higher up on the food chain) known to occur with PCBs. Mercury is also strongly associated with sediments and builds up through bioaccumulation and biomagnification. Methylmercury, the organic form of mercury, is of particular concern due to the toxicity and increased bioavailability to aquatic organisms. Overall, the consumption of some fish in San Francisco Bay can be a threat to human health given the elevated levels of PCBs and mercury in fish tissue. The legacy nature of the pollutants of concerns and lack of knowledge on dispersion and degradation processes contributed to the uncertainty in future conditions.

The PCB TMDL established two water quality objectives; a fish tissue target of 10 micrograms per kilogram (µg/kg) and a sediment target of 1 µg/kg based on a food web model developed by the

San Francisco Estuary Institute (SFEI). To achieve these objectives, the total mass of PCBs in the active layer of the Bay must be reduced to 160 kilograms. Based on a mass budget model in the TMDL, external loads to the Bay must be reduced to IO kilograms per year to achieve the required reduction within 30 years. The waste load allocation (WLA) for urban stormwater is 2 kilograms per year, which must be achieved by 2030. Allocations were further broken down by County based on respective Bay-side populations in the year 2000, resulting in a WLA for Contra Costa County of 0.3 kilograms per year. The baseline PCB load from stormwater runoff was estimated at 20 kilograms per year, based on grab samples from Water Year (WY) 2005, resulting in a required load reduction of 10 kilograms per year (90% reduction).

The Mercury TMDL established two water quality objectives; a fish tissue target applying to 60-centimeter-long striped bass of 0.2 mg/kg (to protect consumption of fish) and a fish target applying to 3- 5- centimeter long fish of 0.03 mg/kg (to protect aquatic organisms and wildlife). To achieve these objectives, the suspended sediment mercury concentration must be reduced to 0.2 mg/kg dry sediment. The WLA for mercury in stormwater is 82 kilograms per year, of which Contra Costa County has a WLA of 11 kilograms per year. The baseline/existing load from urban stormwater was estimated at 160 kilograms per year, based on box models for sediment and mercury corresponding to WY 2003. The required load reduction from stormwater is therefore 78 kilograms per year. MRP Permittees are responsible for a load reduction of 62 kilograms per year, to be achieved by 2028, of which Contra Costa County is responsible for reducing 11.0 kilograms per year.

These reduction rates are required by the MRP as part of the process to achieve compliance with the Mercury and PCBs TMDLs for San Francisco Bay. Contra Costa County permittees are also required to reduce trash discharges to the Bay from municipal storm drain systems. This requirement began with the issuance of the first MRP in 2009, with a 40% reduction required in 2014. Under the current MRP term, no adverse impact on receiving waters from trash is required by 2022.

These reductions will largely be accomplished through the implementation of green infrastructure, including stormwater capture and use and/or infiltration to groundwater. Contra Costa County Clean Water Program developed a countywide Storm Water Resource Plan (SWRP) that focuses primarily on stormwater capture with a multi-benefit approach to overall water resources planning, including water quality. This plan is being followed by local Green Infrastructure Plans (GI Plans) to meet MRP requirements. Development of the GI Plans will be a multi-year effort that includes preparation of a reasonable assurance analysis (RAA) to demonstrate that long-term GI Plan

implementation by all MRP permittees will reduce PCB loads by three kilograms per year by 2040.

Proposed Project

The City proposes to relocate the project site back to Bayview Ave. Approximately 840 acres of land, of which 38 acres are from Caltrans Right of Way, 84 acres are from the City of Richmond, and 723 acres from the City of El Cerrito, will be treated by these units.

Caltrans has already advanced $591,866.57 that will be used for the purchase of the CDS units for the Bayview Ave project. This amendment will bridge the funding gap that remains to complete the design and construction of the project.

The proposed CDS unit for this project has been rated as being effective at trapping 80% of sediments at the 125-micron level. The reduction of PCBs and Mercury load in the Watershed can be as high as 1.15 mg/year/acre, and 12 mg/year/acre, respectively based on the land-use of the drainage area, 106.7 acres of old urban and 19.3 acres of old industrial The accounting method used for these reductions were documented in the BASMAA Source Control Load Reduction Accounting Report (2020). The loads reduced accounting methodology for FTCDs is the product of tributary area treated by large full trash capture device in acres, area weighted PCBs or mercury yield (mg/acre-year) and efficiency factor for FTCDs, which is assumed to be 20%. Small inlet FTCDs (i.e., United Storm CPS units) will be installed, where feasible, at the City's storm drain inlets to which stormwater from CALTRANS right of way discharge. A total of forty-two inlets are being evaluated for the feasibility of installing these units (Figure 5). The treatment shed areas, as well as PCBs and Mercury load reductions, will be calculated upon completion of feasibility evaluation for these small FTCDs. The installation of the small FTCDs will provide supplement treatment areas to address the reduced treatment areas as a result of the change in project location.

The revised project scope includes initial engineering and geotechnical assessments, detailed design, environmental compliance, local permit application (i.e., Encroachment permit) construction of a diversion structure and piping, construction of a CDS unit, excavation and construction of a high void underground storage/infiltration chamber, disposal of non-hazardous excavated soil, and reconstruction of disturbed portions of the site.

Figure 1: Project Site

Cost Details:

COST TYPE	TOTAL
Design and Field Work for Design	$300,000

CDS Units	$650,000
Isolation Valves	$200,000
Construction Costs	$1,670,000
Contingency	$450,000
Total	**$3,270,000**

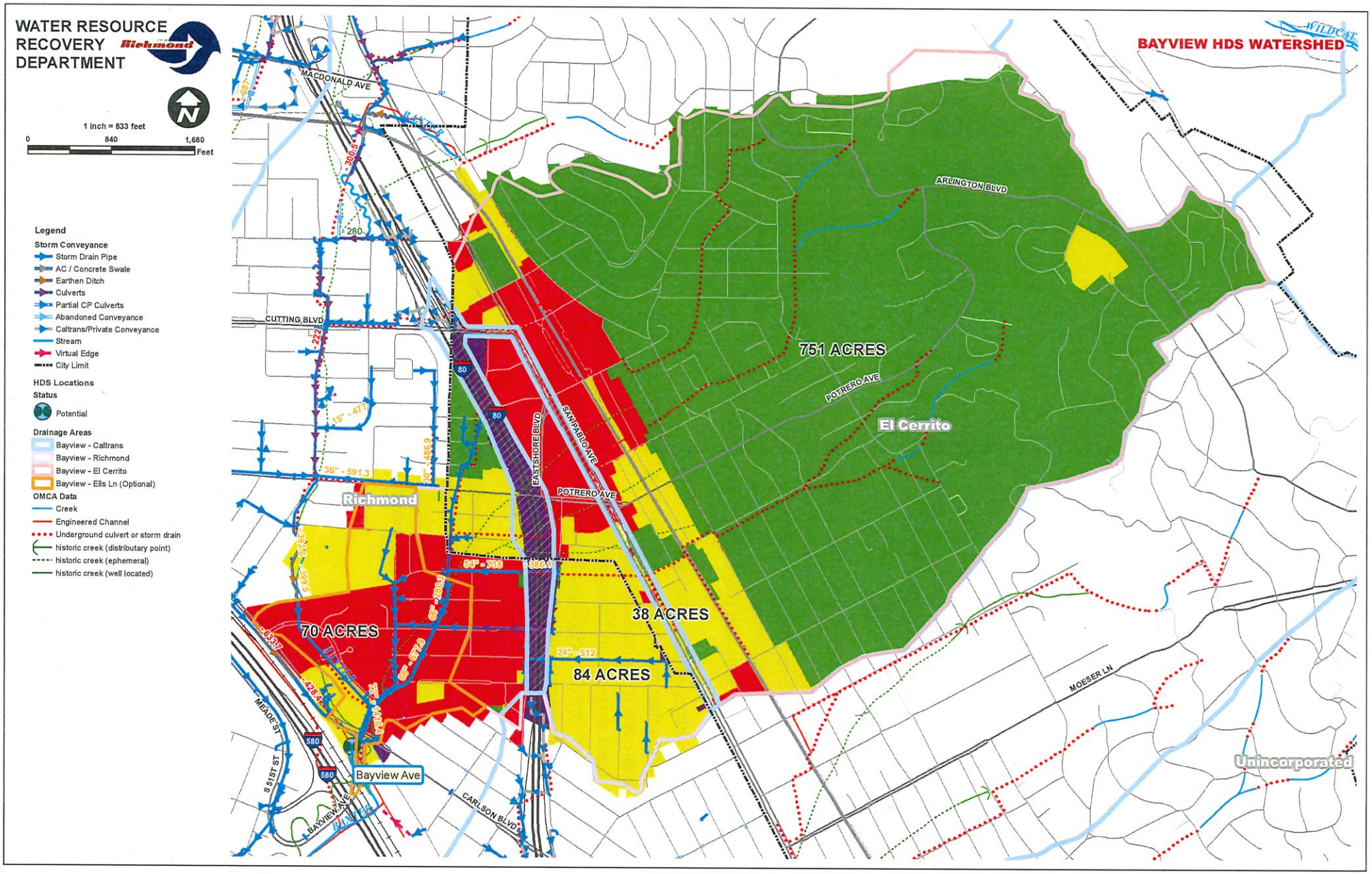
Budget Details:

FUND SOURCE	TOTAL
CALTRANS Cooperative Implementation Agreement	$3,270,000
Total	**$3,270,000**

Phase III: Installation of CDS Units at Bayview Avenue.

PERFORMANCE BENCHMARK	July 2021	August 2021	September 2021	October December 2021	January-March, 2021	April-June, 2021	June, 2021
Design	10%	30%	70%	100%			
Purchase and Delivery of CDS units	10%	30%	50%	100%			
Bidding Process		10%	100%				
Construction				30%	70%	90%	100%
Report and Follow-up							100%

Annually during the term of the PROJECT, CALTRANS and AGENCY will agree upon the amount CALTRANS will encumber each year for the PROJECT. Encumbered funds are to be expended within three Fiscal Years (FY). The FY in which the funds are encumbered is considered number one. Any funds not expended by the end of the third FY, that amount will be deducted from RECITALS, Section 2 "not to exceed amount".


WATER RESOURCE RECOVERY DEPARTMENT
Richmond
1 inch = 833 feet
0
840
1,680
Feet
Legend
Storm Conveyance
Storm Drain Pipe
AC / Concrete Swale
Earthen Ditch
Culverts
Partial CP Culverts
Abandoned Conveyance
Caltrans/Private Conveyance
Stream
Virtual Edge
City Limit
HDS Locations
Status
Potential
Drainage Areas
Bayview - Caltrans
Bayview - Richmond
Bayview - El Cerrito
Bayview - Ells Ln (Optional)
OMCA Data
Creek
Engineered Channel
Underground culvert or storm drain
historic creek (distributary point)
historic creek (ephemeral)
historic creek (well located)
BAYVIEW HDS WATERSHED
751 ACRES
38 ACRES
84 ACRES
70 ACRES
El Cerrito
Richmond
Unincorporated
MACDONALD AVE
CUTTING BLVD
ARLINGTON BLVD
POTRERO AVE
SAN PABLO AVE
EASTSHORE BLVD
MOESER LN
MEADE ST
S 51ST ST
CARLSON BLVD
Bayview Ave
WILDCAT
80
580

Mary Phelps

From: Yan, Qi@Waterboards <Qi.Yan@Waterboards.ca.gov>
Sent: Tuesday, June 15, 2021 2:08 PM
To: Mary Phelps
Cc: Joe Leach; Johansson, Kenneth H@DOT; Joanne Le; Beauduy, Derek@Waterboards
Subject: Re: Approval of Trash Capture Device for City of Richmond

Hello Mary,

Thank you for sending the information and working with Caltrans on this project to install a trash capture device in the City of Richmond. This email gives the Water Board's acceptance of the CIA trash capture project proposal that you describe in your email below. Our approval of this cooperative project with Caltrans is conditioned on submittal of the following information by the City and/or Caltrans once project planning and design is finalized, and prior to construction:

- Map(s) delineating the area draining to the trash capture devices. Maps should identify the areas and trash generation rating of Caltrans and City ROW to be controlled for trash by the device.
- GIS mapping and/or as-built plans showing the storm drain system draining to the trash capture device. Storm drain information should correspond with the drainage area maps.
- Breakdown of Caltrans and City ROW acres controlled by the devices and the trash generation rating of those areas.
- Final design plans and calculations.
- Confirmation that the device meets the requirements of MRP Provision C.10 and is on the State Board list of approved trash capture devices.
- Final project agreements between Caltrans and the City. These should include identification of the party responsible for ongoing operation and maintenance of the device once installed. If operation/maintenance responsibilities are not described in the final agreements, provide this information in a separate document.

Thank you for identifying this opportunity to reduce trash discharges through the MS4 and working cooperatively with Caltrans to implement the project. This email serves as our conceptual approval of the project. Please let Derek Beauduy or me know if you have questions or if there are significant changes to the project as the planning and design process moves forward.

Thanks,

Qi Yan, PhD
Water Resource Control Engineer
San Francisco Bay Regional Water Quality Control Board
mobile 510-622-2499 | qi.yan@waterboards.ca.gov

From: Mary Phelps <Mary_Phelps@ci.richmond.ca.us>
Sent: Friday, June 11, 2021 9:17 AM
To: Lichten, Keith@Waterboards <Keith.Lichten@waterboards.ca.gov>; Beauduy, Derek@Waterboards <Derek.Beauduy@waterboards.ca.gov>; Yan, Qi@Waterboards <Qi.Yan@Waterboards.ca.gov>

Cc: Joe Leach <joe_leach@ci.richmond.ca.us>; Johansson, Kenneth H@DOT <ken.johansson@dot.ca.gov>; Joanne Le <Joanne_Le@ci.richmond.ca.us>; Mary Phelps <Mary_Phelps@ci.richmond.ca.us>
Subject: Approval of Trash Capture Device for City of Richmond

EXTERNAL:

To Whom it May Concern:

As you may be aware, the City of Richmond and Caltrans are seeking a partnership to design and construct a large trash capture device in Richmond.
The proposed device is a debris/nutrient separating baffle box (DSBB/NSBB) that will treat 840 acres of land: 38 acres are Caltrans right-of-way, 84 acres are from the City of Richmond, and 723 acres are from the City of El Cerrito.
The attached map shows the drainage area.

This location was previously approved. However, due to physical constraints (utilities, ground impediments), the location was changed.
Now, with the additional funding, the device can be installed.

Project Scope:
These CDS units will screen, separate and trap debris, sediment, and oil and grease from stormwater runoff. The units have been rated as being effective at trapping 80% of sediment at either the 140 or 175 micron level depending on unit type. Thus, they will achieve load reductions of PCBs and Hg, beside trash.

The proposed projects gear toward compliance of TMDLs of trash, PCBs and Mercury, as set forth by in the San Francisco Bay Regional Water Resource Control Board. Ultimately, this project posts a watershed-based solution to reduce pollutant loadings, trash, and PCBs and Mercury in sediments, from entering local watersheds and the San Francisco Bay from three different jurisdictions, City of Richmond, City of El Cerrito, and Caltrans, thus enhancing water quality for beneficial and recreational uses.

Once we enter into an agreement with Caltrans, our projected spending is as follows:

Project Cost	Estimated Duration	Cost
Design and Field Work for Design	3 months	$300,000
CDS Units	3 months	$650,000
Isolation Valves	2 months	$200,000
Construction Costs	8 months	$1,670,000
Contingency	N/A	$450,000
TOTAL:		**$3,270,000**

Performance Benchwork	Estimated Duration	Fiscal Year
Design	3 months	2021-22
Purchase/Delivery of CDS Units	4 months	2021-22
Bidding Process	1 month	2021-22
Construction	8 months	2021-23
Report and Follow-up	1 month	2021-23
TOTAL:	**17 months**	

The City of Richmond and Caltrans is seeking Water Board approval before moving ahead with funding this project. Please let us know of the Board's support and if any additional documentation is needed to assess this project, or if you have any further questions.

Respectfully,

Mary Phelps
Project Manager I
Public Works Department
Water Resource Recovery Division
450 Civic Center Plaza
Richmond CA 94804
(510) 621-1269 (direct)
(510) 685-0820 (cell)
(510) 307-8195 (fax)