



SAN RAFAEL CITY COUNCIL AGENDA REPORT

Department: Public Works

Prepared by: Bill Guerin,
Director of Public Works

City Manager Approval: 

TOPIC: MCSTOPPP KERNER PUMP STATION TRASH CAPTURE DEVICE PROJECT

SUBJECT: A RESOLUTION APPROVING AND AUTHORIZING THE CITY MANAGER TO EXECUTE A SECOND AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH SCHAAF & WHEELER CONSULTING CIVIL ENGINEERS, INC. FOR DESIGN AND ENVIRONMENTAL ENGINEERING SERVICES ASSOCIATED WITH THE MCSTOPPP KERNER PUMP STATION TRASH CAPTURE DEVICE PROJECT, IN AN AMOUNT NOT TO EXCEED \$280,832

RECOMMENDATION:

Adopt a resolution approving and authorizing the City Manager to execute a second amendment to the professional services agreement with Schaaf & Wheeler Consulting Civil Engineers, Inc. for additional design and environmental engineering services associated with the MCSTOPPP Kerner Pump Station Trash Capture Device Project, in an amount not to exceed \$280,832, increasing the total not to exceed amount under the agreement to \$466,466.

BACKGROUND:

On [October 19, 2020](#), the City Council authorized a professional services agreement to Schaaf & Wheeler Consulting Civil Engineers, Inc. (Schaaf & Wheeler) to conduct a feasibility study of two stormwater pump stations in the Canal neighborhood to ascertain which location may be best suited for installation of a full trash capture device. The draft feasibility study was reviewed by both City staff and Marin County staff who manage the Marin County Stormwater Pollution Prevention Program (MCSTOPPP). On October 7th, 2021, the alternatives were presented to the various environmental regulatory agencies at the monthly Marin Project Coordination Meeting to get their feedback.

On [May 3, 2021](#), the City Council authorized a first amendment to the agreement with Schaaf & Wheeler for design and environmental engineering services in an additional amount not to exceed \$50,090. Under this amendment, Schaaf & Wheeler conducted hydraulic modeling and an aquatic resources mitigation analysis.

After weighing the pros and cons of each alternative, which considered costs, ease of maintenance, and environmental impacts, staff have selected alternative 5, which is to pursue installation of a concrete cast-in-place trash capture device downstream of the Kerner Boulevard

FOR CITY CLERK ONLY

Council Meeting:

Disposition:

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stormwater pump station. The device would be located at Pickleweed Park near the San Rafael Canal and will not impact the public's enjoyment of the park. As such, the existing scoped design tasks were modified to provide the services necessary to complete the design of the device.

Another factor for selecting the Kerner location is the integration of the trash capture device with the Marin Audubon Society's (MAS) Tiscornia Marsh project. The Tiscornia Marsh project is a marsh restoration and levee project that wraps around the north and east boundaries of Pickleweed Park. The trash capture device is currently designed to be located within the proposed levee on the northwest corner of Pickleweed Park. City staff has been coordinating with MAS' design consultant to help facilitate both projects.

ANALYSIS:

The hydraulic modeling and aquatic resources mitigation analysis completed by Schaaf & Wheeler highlight the potential for increased flooding if the proposed trash capture device is constructed. To counter the hydraulic obstruction created by a trash capture device, the existing Kerner Pump Station will need to be upgraded. This amendment includes an increase in scope to cover the design needed for these upgrades. (Attachment 2, Exhibit A)

The County's MCSTOPPP staff have helped secure Environmental Protection Agency (EPA) funding for the construction of large trash capture devices in San Rafael. Although these funds were meant to cover construction expenses, the EPA has agreed to allocate a portion for the design phase, which would be used for Schaaf & Wheeler to complete the design of the trash capture device. The City and County are working together with Caltrans to secure funding for the construction phase, which is anticipated for Fall 2023.

FISCAL IMPACT:

This second amendment will increase the compensation payable under the professional services agreement with Schaaf & Wheeler by \$280,832 for a total not to exceed amount under the agreement of \$466,466. The additional consultant's fee of \$280,832 will be paid for and appropriated from the Stormwater Fund (Fund #205). Grant funding from the EPA will reimburse \$280,832 of the total design expense.

OPTIONS:

The City Council has the following options to consider relating to this matter:

1. Adopt the resolution authorizing the City Manager to execute a second amendment to the agreement with Schaaf & Wheeler.
2. Do not accept the proposal and provide further direction to staff.

ATTACHMENT:

1. Resolution Approving and Authorizing the City Manager to Execute a Second Amendment to the Professional Services Agreement with Schaaf & Wheeler Consulting Civil Engineers, Inc. for Design and Environmental Engineering Services Associated with the MCSTOPPP Kerner Pump Station Trash Capture Device Project, in an Additional Amount Not To Exceed \$280,832
2. Second Amendment to the Professional Services Agreement with Schaaf & Wheeler, Inc. for Design and Environmental Engineering Services for the MCSTOPPP Kerner Pump Station Trash Capture Device Project, with attached Exhibit A (Proposal)

RESOLUTION NO.

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL APPROVING AND AUTHORIZING THE CITY MANAGER TO EXECUTE A SECOND AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH SCHAAF & WHEELER CONSULTING CIVIL ENGINEERS, INC. FOR DESIGN AND ENVIRONMENTAL ENGINEERING SERVICES ASSOCIATED WITH THE MCSTOPPP KERNER PUMP STATION TRASH CAPTURE DEVICE PROJECT, IN AN ADDITIONAL AMOUNT NOT TO EXCEED \$280,832

WHEREAS, pursuant to City Council Resolution #14864, the City of San Rafael and Schaaf & Wheeler Consulting Civil Engineers, Inc. (“Schaaf & Wheeler”) entered into a Professional Services Agreement on October 30, 2020, in an amount not to exceed \$135,544, for design and environmental engineering services associated with the MCSTOPPP Kerner Pump Station Trash Capture Device Project; and

WHEREAS, pursuant to City Council Resolution #14905, the City and Schaaf & Wheeler entered into a First Amendment to the Agreement dated May 19, 2021, to perform additional design services for an amount not-to-exceed \$50,090 and increasing the total not-to-exceed amount under the Agreement to \$185,634; and

WHEREAS, the City requires additional design services to complete the design after the results of the hydraulics analysis and aquatic mitigation study; and

WHEREAS, staff received a proposal from Schaaf & Wheeler for said services in an additional amount of \$280,832 and staff has reviewed the proposal and found it complete and within industry standards;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN RAFAEL RESOLVES
as follows:

1. The City Council hereby approves and authorizes the City Manager to execute a Second Amendment to the professional services agreement with Schaaf & Wheeler Consulting Civil Engineers, Inc. for additional design and environmental engineering services in the amount of \$280,832 and a revised total contract value not to exceed \$466,466, in the form included in the staff report for this resolution.

2. Funds totaling \$280,832 will be appropriated for this project from Fund 205. Staff will seek a max reimbursement of \$280,832 from the EPA grant for these design services.

3. The Director of Public Works is hereby authorized to take any and all such actions and make changes as may be necessary to accomplish the purpose of this resolution.

I, **LINDSAY LARA**, Clerk of the City of San Rafael, hereby certify that the foregoing resolution was duly and regularly introduced and adopted at a regular meeting of the Council of said City on the 18th day of April, by the following vote, to wit:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

LINDSAY LARA, City Clerk

SECOND AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH SCHAAF & WHEELER, INC. FOR DESIGN AND ENVIRONMENTAL ENGINEERING SERVICES FOR THE MCSTOPPP KERNER PUMP STATION TRASH CAPTURE DEVICE PROJECT

THIS SECOND AMENDMENT to the professional services agreement by and between the **CITY OF SAN RAFAEL** (hereinafter “**CITY**”), and **SCHAAF & WHEELER CONSULTING CIVIL ENGINEERS, INC.**, (hereinafter “**CONSULTANT**”), is made and entered into as of the _____ day of _____, 2022.

RECITALS

WHEREAS, pursuant to City Council Resolution #14864, on October 30, 2020, the **CITY** and **CONSULTANT** entered into an “Agreement for Professional Services for the MCSTOPPP Full Trash Capture Device Project”, in an amount not to exceed \$135,544, for design and environmental engineering services associated with the MCSTOPPP Kerner Pump Station Trash Capture Device Project (the “Agreement”); and

WHEREAS, pursuant to City Council Resolution #14905, the **CITY** and **CONSULTANT** entered into a First Amendment to the Agreement dated May 19, 2021, to perform additional design services for an amount not-to-exceed \$50,090, and increasing the total not-to-exceed amount under the Agreement to \$185,634; and

WHEREAS, the **CITY** requires additional design services to complete the design after the results of the hydraulics analysis and aquatic mitigation study; and

WHEREAS, staff received a proposal from the **CONSULTANT** for said services in an additional amount of \$280,832 and staff has reviewed the proposal and found it complete and within industry standards;

AMENDMENT TO AGREEMENT

NOW, THEREFORE, the parties hereby agree to amend the Agreement as follows:

1. Section 2 of the Agreement, entitled “DUTIES OF CONSULTANT” is hereby amended to include the additional services set forth in **CONSULTANT**’s proposal entitled “MCSTOPPP/San Rafael Trash Capture Project Revised Design Scope” dated January 14, 2022, attached to this Second Amendment as “Exhibit A” and incorporated herein by reference.

2. Section 4 of the Agreement, entitled “COMPENSATION” is hereby amended to include additional compensation payable to **CONSULTANT** for the services described in “Exhibit

A” to this Second Amendment, on a time and materials basis in accordance with the “Revised Fee” included in “Exhibit A”, in a not-to-exceed amount of \$280,832, and to change the total not-to-exceed amount under the Agreement to \$466,466.

3. Except as specifically amended herein, all the other provisions, terms, and obligations of the Agreement between the parties shall remain valid and shall be in full force.

IN WITNESS WHEREOF, the parties have executed this Second Amendment on the day, month, and year first above written.

CITY OF SAN RAFAEL

CONSULTANT:

SCHAAF & WHEELER, INC.

JIM SCHUTZ, City Manager

By:_____

Name:_____

ATTEST:

Title:_____

and

LINDSAY LARA, City Clerk

By:_____

APPROVED AS TO FORM

Name:_____

Title:_____

ROBERT F. EPSTEIN, City Attorney

Schaaf & Wheeler

CONSULTING CIVIL ENGINEERS

870 Market Street, Suite 1278
San Francisco, CA 94102-2906
415-433-4848
FAX 415-433-1029

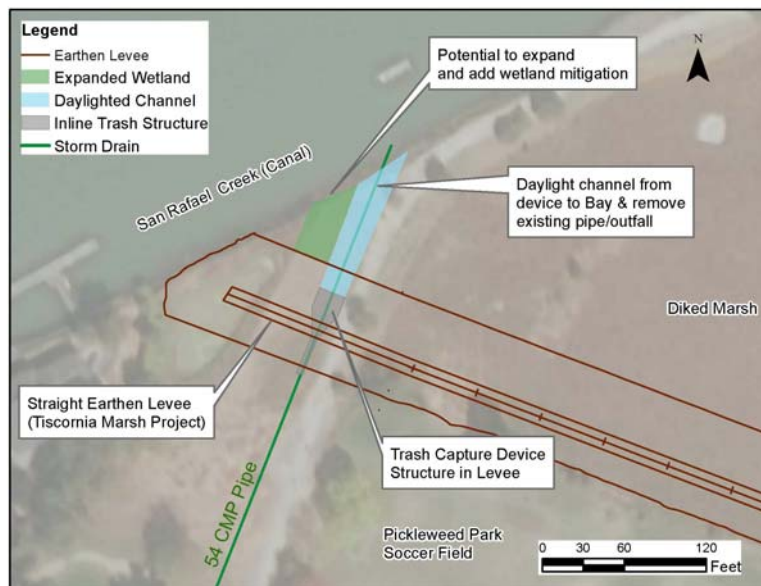
January 14, 2022

April Miller
Assistant Public Works Director/City Engineer
Department of Public Works
City of San Rafael
(415) 485.3409
April.miller@cityofsanrafael.org

Subject: MCSTOPPP/San Rafael Trash Capture Project Revised Design Scope

Dear Ms. Miller:

Based on work completed under Schaaf & Wheeler's existing contract, the City has elected to pursue the design of a cast in place trash capture device at the outfall from the Kerner Pump Station. As such, the existing scoped design tasks are modified herein to provide the services necessary to complete the design of the device. This scope assumes the inline alternative #2 (MCSTOPPP Full Trash Capture Feasibility Analysis Memorandum dated 2/2/21) with setback from the Bay as seen in the image below. **It also assumes that the project will be permitted with the adjacent Tiscornia Marsh project and that trash capture device CEQA will be conducted by the City's consultant, with input from S&W as scoped herein.**



The following revised scope of services is proposed. Where no change is made the text remains in black or omitted and noted as unchanged. Changes and additions are indicated in red text for clarity.

Revised Task 1: Project Management

Quality Control: Schaaf & Wheeler will perform quality control on all deliverables throughout the project tasks outlined herein. Quality control will be conducted by the project manager, Caitlin Gilmore, as well as a separate principal engineer within the firm not familiar with the day-to-day activities of the project to obtain an objective quality assurance analysis.

Monthly Invoicing and Contracting: Schaaf & Wheeler will work with the City and stakeholders to finalize the scope of work and contract associated with this project. This includes subcontracting with the design team. Monthly invoices will be submitted to the city in a timely manner, with billing summaries, project and schedule status and percentage complete. **Revised scope assumes an additional project duration of 1 year, February 2022-February 2023. This contract specifically excludes bidding and construction support anticipated in 2023; however, it can be provided for additional fee.**

Coordination with subconsultants and the City: During the duration of the project, Schaaf & Wheeler will coordinate with the City, stakeholders and subconsultants to monitor timely progress of the project, to stay on budget, and resolve issues as they arise. **Coordination with the Tiscornia Marsh project Team. This assumes up to 10 virtual meetings of 1 hour in duration and two on-site meetings. This assumes Schaaf & Wheeler and Hultgren Tillis will be present at all Tiscornia Marsh coordination meetings, with Finn Design Group present at half of the meetings.**

Deliverables:

- Project schedule updates in MS word
- Billings summaries for monthly billings, including tasks completed and percent complete

Assumptions:

- Project meetings, **besides those associated with Tiscornia Marsh coordination**, have been included within the tasks below

Task 2: Feasibility Analysis

2.5 – Pump Station Capacity Mitigation Feasibility Analysis

The proposed trash capture device will decrease the Kerner Pump Station Capacity by approximately 10%. Schaaf & Wheeler and electrical engineering subconsultant, TJC and Associates, will evaluate alternatives for mitigating the reduction in pump station capacity. Alternatives will likely require replacing one or more pumps. Depending on the power requirements for the new pump(s), additional pump station equipment may also need to be replaced and upsized. The pump station capacity mitigation feasibility analysis will be summarized in a brief memorandum. Preliminary estimates of probable construction costs will be included for planning purposes.

Deliverables:

- Pump Station Capacity Mitigation Summary Memorandum

Assumptions:

- This scope does not include evaluation of the existing force main, or developing alternatives to mitigate the pump station capacity by modifying the force main.

Revised Task 3: Design**3.1 – Field Investigations****3.1.1 – Geotechnical Investigation**

Hultgren-Tillis will drill one boring near the planned trash capture device. The boring will be drilled to a depth of about 80 feet below existing grade or practical refusal with truck-mounted drilling equipment. We anticipate that mobilization and advancing the boring will take one day of field work.

A permit from the Marin County Environmental Health Department will be obtained to drill and grout the boring. If additional permits are required for the boring, we assume that they will be facilitated by the City. We assume that traffic control will not be required.

Before drilling, Underground Service Alert (USA) will be contacted to have their member firms locate utilities. The boring could encounter utilities or other buried structures not marked through USA. The cost to repair damage to utilities or other underground facilities is not included in our scope of services or fee estimate. The cost to repair damage to such facilities will be an additional fee.

Hultgren-Tillis' field engineer will log the boring and obtain soil samples for further visual classification and laboratory testing. After drilling is complete, the boring will be backfilled with grout. Drill cuttings generated from drilling will be collected and disposed. It is assumed that the drill cuttings are nonhazardous. Selected soil samples will be submitted for laboratory testing. The laboratory testing program will include moisture content, dry density, Atterberg limits, sieve analysis, consolidation, unconsolidated undrained (TxUU) triaxial shear strength, and corrosivity tests.

Based upon the results of the field exploration and laboratory testing, a geotechnical engineering analysis will be performed to develop conclusions and recommendations regarding the following:

1. Subsurface conditions;
2. Site preparation and grading;
3. Potential for liquefaction;
4. Site Class and mapped acceleration parameters in accordance with 2019 California Building Code (we assume a site-specific seismic study will not be required);
5. Suitable type(s) and depth(s) of foundations;
6. Geotechnical criteria for deep foundation design including minimum embedment depth, axial pile resistance, and lateral load-moment-deflection relationships;
7. Geotechnical criteria for bedding and backfill;
8. Geotechnical criteria for seepage cutoff; and
9. Estimated total and differential settlement.

The results of the investigation will be summarized and submitted in a report along with a site plan and log of boring.

3.1.2 – Topographic Survey and Boundary Research

No revision to the original scope proposed.

3.1.3 – Utility Locating

Both USA and private underground utility locating will be performed at the selected project site prior to geotechnical boring and site survey. This includes potholing up to five (5) underground utilities adjacent to the proposed device to determine exact location, depth and size. **It is assumed one of the potholes will be to expose the top of the existing CMP force main to determine exterior condition.** This includes pothole backfilling per local standards. This excludes traffic control and encroachment permits as it is assumed the potholes will be located off the city roadway right-of-way.

3.2 – Design Documents

3.2.1 – 65% Design Documents

Design plans will be developed on 22"x34" titleblock provided by the city. A technical specification outline will be developed following Caltrans standards. A construction cost estimate will be developed. This includes development of a draft design report which includes hydraulic and device sizing calculations, as well as the design of the system for dewatering for maintenance as necessary. **Includes design of the device for future FEMA levee certification and connection to the adjacent proposed Tiscornia Marsh levee. Includes the design of removal of the existing CMP outfall. Includes daylighting the existing culvert downstream of the trash capture device. Structural details will not be provided at 65% design. Structural input on the design, foundation and cost will be provided as well as a structural report. This task includes the development of a report detailing the proposed dewatering plan.**

This includes the following construction sheets:

- Title Sheet
- Notes
- **Demolition and outfall removal plan**
- **Dewatering Plan**
- Plan and Profile
- Construction Details
- Erosion Control
- Traffic Control **(includes pedestrian and bike trail detour)**

3.2.2 – 95% Design Documents

95% design plans will be developed, including comments by stakeholders on the 65% plans. Includes written response to comments. The geotechnical study recommendations will be incorporated as well as potholing data. This includes development of 95% specifications per Caltrans standards as provided by the City. The design report and cost estimate will be updated. **Structural design, details and structural calculations will be included.**

3.2.3 –100% Design Documents

Design plans will be developed, including comments by stakeholders on the 95% plans. Includes written response to comments. This includes development of 100% specifications and schedule of bid items and quantities. Includes review of the design by geotechnical engineer. The design report

and cost estimate will be updated. Includes written response to comments. **Structural design and structural calculations will be updated.**

3.2.4 – Bid Set

Final bid set will be developed, incorporating all comments on the 100% set.

FEMA levee certification and accompanying documents will be prepared for future levee accreditation.

Assumptions:

- **City will provide the condition of the existing 54" force main at the proposed trash capture device location. Design of force main repairs beyond the connection point of the trash capture device is not included within this scope of services.**
- **FEMA applications and coordination are not included in this scope of services.**
- Excludes development of a SWPPP. Assumed to be included as a front-end specification requirement for the contractor.
- Excludes post construction water quality treatment as it is assumed not to be needed
- Excludes development of the front-end specification which is assumed to be completed by the City except for the schedule of bid items.
- Assumes the City will be responsible for coordinating any necessary utility relocation
- Does not include a boundary survey.
- Excludes shoring design, which is assumed to be completed by the contractor. Shoring recommendations and specifications are included in this scope.
- Assumes the site will be on publicly owned property, property acquisition excluded
- Traffic control plans and encroachment permits are excluded
- Environmental sampling of soils excluded
- **Excludes mitigation design and planting plans which are assumed to be completed by the Tiscornia Marsh project team as part of permitting process**
- **Excludes bidding and construction support services**

Deliverables:

- 65%, 95%, 100% Design Documents (CAD, PDF, word, excel)
- Stamped and Signed Bid Documents in electronic format
- Basis of Design Report
- Topographic ground survey (CAD and PDF)
- Boundary Research and property line delineation based on research in CAD and PDF format
- Utility research results and coordination letters
- Geotechnical Investigation report including boring logs
- Potholing report
- **Dewatering report**

- Structural Report
- Structural Calculations
- FEMA levee certification documents (geotechnical and structural)

Task 4: Environmental Documentation

No revision proposed. Task is complete.

Task 5: Feasibility Analysis

No revision proposed.

Additional Task 6: Permitting & CEQA Support

This added task includes providing support services during the project permitting and CEQA process.

Task 6.1. Permitting Support

This scope includes supporting the Tiscornia Marsh Team in developing environmental permits which include the trash capture device design scoped herein. This includes up to 4 virtual meetings with permit agencies. This includes providing figures, project description and maintenance description. Scope includes reviewing up to two draft permit application packages and assisting in responding to one round of comments. This assumes one set of compiled comments will be provided for each application.

Task 6.2 CEQA Support

This scope includes supporting the City's CEQA consultant to prepare CEQA documentation. This includes providing a project description, maintenance description, figures, and impact areas. This includes reviewing CEQA documents and providing comment on up to two drafts. This scope includes responding to one set of compiled public comment on the CEQA documents.

Additional Task 7: Pump Station Capacity Mitigation Design

This added task includes providing design services to mitigate the pump station capacity reduction as described in Task 2.5 above. The extents of pump station modifications are not known at this time; therefore, this scope assumes the following:

- Pump station modification will be limited to the replacement of one pump/motor, pump tube, and associated electrical equipment within the existing motor control center (MCC).
- Pump and tube replacement will not require structural modifications to the existing pump station.
- Existing electrical service will not need to be modified or upsized.
- Existing generator has adequate capacity and will not need to be replaced
- Existing MCC, and "Floatrol" pump controller will be reused. Remote monitoring and alarms will be replaced in-kind where necessary.
- Preparation of P&IDs is not required.
- Design submittals will be provided at the 65% (excluding electrical drawings), 95%, 100% draft, and final bid documents.

- Evaluation of the existing force main and potential impacts to the existing force main due to the increased operating pressure are not included within this scope of services; however, they may need to be evaluated by others prior to construction.
- This scope does not include bid or construction support services.

The revised total budget for the scope of services is based on time and materials not to exceed \$466,466 per the attached fee table with charge rates based on the original contract. This total fee includes previously completed and invoiced work. The original contract fee of \$135,544 was amended in March 2021 by a \$50,090 increase for a total contract fee of \$185,634. This scope revision represents a \$280,832 increase from the previously authorized fee.

If you have any questions, or require additional information, please contact me.

Sincerely,

Schaaf & Wheeler



Ben Shick, PE
Vice President
RCE#68813

San Rafael MCSTOPPP Full Trash Capture Device Project Revised Fee January 14, 2022		Schedule of Hours and Rates by Task				Schaaf & Wheeler Contract Subtotal	NCE Contract Subtotal	TJC and Associates Contract Subtotal	Finn Contract Subtotal	Kier & Wright Contract Subtotal	Hultgren-Tillis Contract Subtotal	Bess Testlab Contract Subtotal	Subsulant Markup (10%) Contract Subtotal	Contract Total
		Schaaf & Wheeler												
		Principal Project Manager	Senior Project Manager	Associate Engineer	Assistant Engineer									
Task	Hourly Rate	\$240	\$225	\$190	\$175									
Task 1	Project Management	34	54	7	0	\$21,640	\$1,125.00	\$0	\$4,000	\$0	\$8,120	\$0	\$113	\$36,210
1	Coordination & Project Management	14	34			\$11,010	\$1,125.00		\$2,000		\$1,960		\$509	\$16,604
2	Three (3) Progress Meetings	6	6			\$2,790							\$0	\$2,790
3	Tiscornia Marsh Coordination Meetings	14	14	7		\$7,840		\$2,000			\$6,160		\$816	\$16,816
Task 2	Feasibility Analysis	26	18	58	32	\$26,910	\$11,465.00	\$6,000	\$0	\$0	\$0	\$0	\$1,147	\$46,122
1	Site Visits & Data Base Searches		2	2		\$830	\$4,870.00						\$487	\$6,187
2	35% Schematic Drawings		4		32	\$6,500							\$0	\$6,500
3	Draft Feasibility Study	1	8	12		\$4,320	\$5,335.00						\$534	\$10,189
4	Final Feasibility Study	1	4	4		\$1,900	\$1,260.00						\$126	\$3,286
5	Pump Station Mitigation Feasibility	24		40		\$13,360		\$6,000					\$600	\$19,960
Task 3	Design Development	16	80	260	106	\$89,790	\$0.00	\$0	\$41,000	\$15,140	\$56,000	\$9,100	\$4,780	\$223,154
1.1	Geotechnical Investigation	4	4			\$1,860					\$51,100	\$1,400	\$5,250	\$59,610
1.2	Topographic Survey and Boundary Research		2			\$450				\$12,360			\$1,236	\$14,046
1.3	Utility Locating		2	8		\$1,970				\$2,780		\$7,700	\$1,048	\$13,498
2.1	65% Design Documents	4	24	112	50	\$36,390			\$10,000				\$1,000	\$47,390
2.2	95% Design Documents	4	24	60	24	\$21,960			\$22,000				\$2,200	\$46,160
2.3	100% Design Documents	2	16	48	16	\$16,000			\$6,000		\$4,900		\$1,090	\$27,990
2.4	Bid Plans, Estimate and Specifications	2	8	32	16	\$11,160			\$3,000				\$300	\$14,460
Task 4	Environmental Documentation	0	2	0	0	\$450	\$4,055.00	\$0	\$0	\$0	\$0	\$0	\$406	\$4,911
1	CEQA CE and no permits		2			\$450	\$4,055.00						\$406	\$4,911
Task 5	Feasibility Analysis	1	14	14	32	\$24,240	\$23,500.00	\$0	\$0	\$0	\$0	\$0	\$2,350	\$50,090
1	Hydraulic Modeling		4		32	\$16,160							\$0	\$16,160
2	Aquatic Resources Analysis		2	2		\$930	\$23,500.00						\$2,350	\$26,780
3	Coordination	1	8	12		\$7,150							\$0	\$7,150
Task 6	Permitting & CEQA Support	16	24	24	0	\$13,800	\$0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$13,800
1	Permitting Support	10	12	12		\$7,380							\$0	\$7,380
2	CEQA Support	6	12	12		\$6,420							\$0	\$6,420
Task 7	Pump Station Capacity Mitigation Design	48	0	104	172	\$61,380	\$0.00	\$28,000	\$0	\$0	\$0	\$0	\$2,800	\$92,180
1	65% Design Documents	12		16	32	\$11,520		\$7,000					\$700	\$19,220
2	95% Design Documents	16		40	60	\$21,940		\$10,000					\$1,000	\$32,940
3	100% Design Documents	12		32	48	\$17,360		\$7,000					\$700	\$25,060
4	Bid Plans, Estimate and Specifications	8		16	32	\$10,560		\$4,000					\$400	\$14,960
TOTAL		141	192	467	342	\$238,210	\$40,145.00	\$34,000	\$45,000	\$15,140	\$64,120	\$9,100	\$11,594	\$466,466