

**AGREEMENT TO PROVIDE PRE-DESIGN, REGULATORY PERMITTING AND  
OTHER PROFESSIONAL ENGINEERING SERVICES  
FOR  
LEEVE PROTECTION PLANNING AND IMPROVEMENTS PROJECT  
(CIP 301-657)**

This Agreement is made and entered into as of the 8<sup>th</sup> day of September, 2015 by and between the City of Foster City hereinafter called "CITY" and Schaaf and Wheeler Consulting Engineers hereinafter called "CONSULTANT".

RECITALS

This Agreement is entered into with reference to the following facts and circumstances:

- A. That CITY desires to engage CONSULTANT to render certain professional services in the CITY;
- B. That CONSULTANT is qualified to provide such services to the CITY and;
- C. That the CITY has elected to engage the services of CONSULTANT upon the terms and conditions as hereinafter set forth.

- 1. Services. The services to be performed by CONSULTANT under this Agreement shall include those services set forth in Exhibit A, which is, by this reference, incorporated herein and made a part hereof as though it were fully set forth herein.

Performance of the work specified in said Exhibit is hereby made an obligation of CONSULTANT under this Agreement, subject to any changes that may be made subsequently hereto upon the mutual written agreement of the said parties.

Where in conflict, the terms of this Agreement supersede and prevail over any terms set forth in Exhibit A.

- 2. Term; Termination. (a) The term of this Agreement shall commence upon the date hereinabove written and shall expire upon completion of performance of services hereunder by CONSULTANT. (b) Notwithstanding the provisions of (a) above, either party may terminate this Agreement without cause by giving written notice not less than ten (10) days prior to the effective date of termination, which date shall be included in said notice. In the event of such termination, CITY shall compensate CONSULTANT for services rendered, and reimburse

CONSULTANT for costs and expenses incurred, to the date of termination, calculated in accordance with the provisions of paragraph 3. In ascertaining the services actually rendered to the date of termination, consideration shall be given both to completed work and work in process of completion. Nothing herein contained shall be deemed a limitation upon the right of CITY to terminate this Agreement for cause, or otherwise to exercise such rights or pursue such remedies as may accrue to CITY hereunder.

3. Compensation; Expenses; Payment. CITY shall compensate CONSULTANT for all services performed by CONSULTANT hereunder in an amount based upon CONSULTANT's hourly rates during the time of the performance of said services. A copy of CONSULTANT's hourly rates for which services hereunder shall be performed are set forth in CONSULTANT's fee schedule marked Exhibit "B" hereof, attached hereto and by this reference incorporated herein.

Notwithstanding the foregoing, the combined total of compensation and reimbursement of costs payable hereunder shall not exceed the sum eight-hundred-eighty-seven thousand, six-hundred-forty-four dollars (\$887,644) unless the performance of services and/or reimbursement of costs and expenses in excess of said amounts have been approved in advance of performing such services or incurring such costs and expenses by CITY's City Manager (for contracts less than \$30,000) or City Council (for contracts \$30,000 or more) evidenced by motion duly made and carried.

Compensation and reimbursement of costs and expenses hereunder shall be payable upon monthly billing therefor by CONSULTANT to CITY, which billing shall include an itemized statement, briefly describing by task and labor category or cost/expense items billed.

4. Additional Services. In the event CITY desires the performance of additional services not otherwise included within the services described in Exhibit A, such services shall be authorized in advance of the performance thereof by CITY's City Manager (for contracts less than \$30,000) or City Council (for contracts \$30,000 or more) by motion duly made and carried. Such amendment to this Agreement shall include a description of the services to be performed thereunder, the maximum compensation and reimbursement of costs and expenses payable therefor, the time of performance thereof, and such other matters as the parties deem appropriate for the accomplishment of such services. Except to the extent modified by written amendment, all other terms and

conditions of this Agreement shall be deemed incorporated in each such amendment.

5. Records. CONSULTANT shall keep and maintain accurate records of all time expended and costs and expenses incurred relating to services to be performed by CONSULTANT hereunder. Said records shall be available to CITY for review and copying during regular business hours at CONSULTANT's place of business or as otherwise agreed upon by the parties.
6. Authorization. This Agreement becomes effective when endorsed by both parties in the space provided below.
7. Reliance on Professional Skill of CONSULTANT. CONSULTANT represents that it has the necessary professional skills to perform the services required and the CITY shall rely on such skills of the CONSULTANT to do and perform the work. In performing services hereunder CONSULTANT shall adhere to the standards generally prevailing for the performance of expert consulting services similar to those to be performed by CONSULTANT hereunder.
8. Documents. All documents, plans, drawings, renderings, and other papers, or copies thereof, as finally rendered, prepared by CONSULTANT pursuant to the terms of this Agreement, shall, upon preparation and delivery to CITY, become the property of CITY.
9. Relationship of Parties. It is understood that the relationship of CONSULTANT to the CITY is that of an independent contractor and all persons working for or under the direction of CONSULTANT are its agents or employees and not agents or employees of the CITY.
10. Schedule. CONSULTANT shall adhere to the schedule set forth in Exhibit A; provided, that CITY shall grant reasonable extensions of time for the performance of such services occasioned by governmental reviews of CONSULTANT's work product or other unavoidable delays; provided, further, that such unavoidable delay shall not include strikes, lockouts, work stoppages, or other labor disturbances conducted by, or on behalf of, CONSULTANT's officers or employees.

CONSULTANT acknowledges the importance to CITY of CITY's Project schedule and agrees to put forth its best professional efforts to perform its services under this Agreement in a manner consistent with that schedule.

11. Indemnity. To the fullest extent allowed by law, CONSULTANT hereby agrees to defend, indemnify, and save harmless CITY and Estero Municipal Improvement District, its Council, boards, commissions, officers, employees and agents, from and against any and all claims, suits, actions liability, loss, damage, expense, cost (including, without limitation, costs and fees of litigation) of every nature, kind or description, which may be brought against, or suffered or sustained by, CITY or Estero Municipal Improvement District, its Council, boards, commissions, officers, employees or agents caused by, or alleged to have been caused by, the negligence, intentional tortuous act or omission, or willful misconduct of CONSULTANT, its officers, employees, subcontractors or agents in the performance of any services or work pursuant to this Agreement.

The duty of CONSULTANT to indemnify and save harmless, as set forth herein, shall include the duty to defend as set forth in Section 2778 of the California Civil Code; provided, however, that nothing herein contained shall be construed to require CONSULTANT or any of its subconsultants to indemnify CITY and Estero Municipal Improvement District, its Council, boards, commissions, officers, employees and agents against any responsibility or liability in contravention of Section 2782 of the California Civil Code.

CONSULTANT's responsibility for such defense and indemnity obligations shall survive the termination or completion of this Agreement for the full period of time allowed by law.

The defense and indemnification obligations of this agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained within this Agreement.

12. Insurance. CONSULTANT shall acquire and maintain Workers' Compensation, employer's liability, commercial general liability, owned and non-owned and hired automobile liability, and professional liability insurance coverage relating to CONSULTANT's services to be performed hereunder covering CITY's risks in form subject to the approval of the City Attorney and/or CITY's Risk Manager. The minimum amounts of coverage corresponding to the aforesaid categories of insurance per insurable event, shall be as follows:

<u>Insurance Category</u>	<u>Minimum Limits</u>
Workers' Compensation	statutory minimum

Employer's Liability	\$1,000,000 per accident for bodily injury or disease
Commercial General Liability	\$1,000,000 per occurrence and \$5,000,000 aggregate for bodily injury, personal injury and property damage
Automobile Liability	Required of CONSULTANT and/or subconsultants when vehicles owned and/or operated in furtherance of work required by this Agreement: \$1,000,000 per accident for bodily injury and property damage (coverage required to the extent applicable to CONSULTANT's vehicle usage in performing services hereunder)
<sup>1</sup> Professional Liability	\$2,000,000 per claim and aggregate

It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits shall be available to the CITY as an Additional Insured. Furthermore, the requirements for coverage and limits shall be the greater of either (1) the minimum coverage and limits specified in this Agreement or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured.

CONSULTANT agrees to include with all subcontractors in their subcontracts the same requirements and provisions of this agreement including the indemnity and insurance requirements to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by CONSULTANT shall agree to be bound to CONSULTANT and CITY in the same manner and to the same extent as CONSULTANT is bound to CITY under this Agreement and its accompanying documents. Subcontractors shall further agree to include these same provisions with any sub-subcontractors. A copy of the indemnity and insurance provisions of this Agreement will be furnished to the Subcontractor upon request. CONSULTANT shall require all subcontractors to provide a valid

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<sup>1</sup> Note: Professional liability insurance coverage is not required if the contractor/vendor/consultant is not providing a service regulated by the state. (Examples of service providers regulated by the state are insurance agents, professional engineers, doctors, certified public accountants, lawyers, etc.) Please check and initial the following if professional liability is **NOT** required for this agreement.  Recommended \_\_\_\_\_ [Project Manager]  Approved \_\_\_\_\_ [Risk Manager]

certificate of insurance and the required endorsements included in the subcontract agreement and will provide proof of compliance to the CITY prior to commencement of any work by the subcontractor. A copy of the indemnity and insurance provisions of this Agreement shall be furnished to any subcontractor upon request.

Concurrently with the execution of this Agreement, CONSULTANT shall, on the Insurance Coverage form provided in Exhibit C, furnish CITY with certificates and copies of information or declaration pages of the insurance required hereunder and, with respect to evidence of commercial general liability insurance coverage, original endorsements:

- (a) Precluding cancellation or **reduction in per occurrence limits** before the expiration of thirty (30) days (10 days for nonpayment) after City shall have received written notification of cancellation in coverage or **reduction in per occurrence limits** by first class mail;
- (b) Naming the City of Foster City and Estero Municipal Improvement District, its Council, officers, boards, commissions, employees, and agents, as additional insureds; and
- (c) Providing that CONSULTANT's insurance coverage shall be primary insurance with respect to CITY and Estero Municipal Improvement District, its Council, officers, boards, commissions, employees, and agents, and any insurance or self-insurance maintained by CITY for itself, its Council, officers, boards, commissions, employees, or agents shall be in excess of CONSULTANT's insurance and not contributory with it. CONSULTANT and its insurer may not seek contribution from CITY's insurance or self-insurance.

The limits of insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of CITY, to the extent required by this Agreement, before the CITY's insurance or self-insurance may be called upon to protect CITY as a named Insured.

All self-insured retentions (SIR) must be disclosed to CITY for approval and shall not reduce the limits of liability coverage. Policies containing a SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named CONSULTANT/Named Insured or CITY.

CITY reserves the right to obtain a full certified copy of any insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

CONSULTANT shall maintain insurance as required by this Agreement to the fullest amount allowed by law and shall maintain insurance for a minimum of five (5) years following completion of this project or service. In the event CONSULTANT fails to obtain or maintain completed operations coverage as required by this Agreement, the CITY at its sole discretion may purchase the coverage required and the cost will be paid by CONSULTANT.

13. WORKERS' COMPENSATION. CONSULTANT certifies that he is aware of the provisions of the Labor Code of the State of California which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and CONSULTANT certifies that he will comply with such provisions before commencing the performance of the work of this agreement.
14. NON-DISCRIMINATION. The CONSULTANT will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The CONSULTANT will take affirmative action to insure that applicants are employed and the employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, advancement, demotion, transfer, recruitment, or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The CONSULTANT shall at all times be in compliance with the requirements of the Federal Americans with Disabilities Act (Public Law 101-336) which prohibits discrimination on the basis of disability by public entities. The CONSULTANT agrees to post in conspicuous places available to employees and applicants for employment any notices provided by the CITY setting forth the provisions of this non-discrimination clause.
15. Notice. All notices required by this Agreement shall be given to the CITY and CONSULTANT in writing, by first class mail, postage prepaid, addressed as follows:

CITY: City of Foster City  
610 Foster City Boulevard  
Foster City, CA 94404-2299  
Attention: Allan Shu, Senior Civil Engineer

CONSULTANT: Schaaf & Wheeler Consulting Civil Engineers  
1171 Homestead Road, Suite 255  
Santa Clara, CA 95050-5485  
(408) 246-4848  
Attention: Charles D. Anderson, President

16. Non-Assignment. This Agreement is not assignable either in whole or in part.
17. Amendments. This Agreement may be amended or modified only by written agreement signed by both parties.
18. Validity. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.
19. Governing Law. This Agreement shall be governed by the laws of the State of California and any suit or action initiated by either party shall be brought in the County of San Mateo, California. In the event of litigation between the parties hereto to enforce any provision of the Agreement, the unsuccessful party will pay the reasonable attorney's fees and expenses of litigation of the successful party.
20. Mediation. Should any dispute arise out of this Agreement, the parties shall meet in mediation and attempt to reach a resolution with the assistance of a mutually acceptable mediator. Neither party shall be permitted to file legal action without first meeting in mediation and making a good faith attempt to reach a mediated resolution. The costs of the mediator, if any, shall be paid equally by the parties. If a mediated settlement is reached neither party shall be deemed the prevailing party for purposes of the settlement and each party shall bear its own legal costs.
21. Conflict of Interest. CONSULTANT may serve other clients, but none who are active within the City of Foster City or who conduct business that would place CONSULTANT in a "conflict of interest" as that term is defined in State law.
22. Entire Agreement. This Agreement, including Exhibit A, B and C, comprises the entire Agreement.



IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the date first above written by their respective officers duly authorized in that behalf.

CITY OF FOSTER CITY

Dated: 10/5/15

Art Kiesel  
Art Kiesel, Mayor

ATTEST:

Dated: 10/5/15

Doris L. Palmer  
Doris L. Palmer, City Clerk

APPROVED AS TO FORM

Dated: 10/5/15

Jean B. Savaree  
Jean Savaree, City Attorney

CONSULTANT

Dated: 9/14/15

Charles D. Anderson  
Charles D. Anderson, President

**EXHIBIT A**

**SCOPE OF WORK AND SCHEDULE  
FOR  
LEVEE PROTECTION PLANNING AND IMPROVEMENTS PROJECT  
(CIP 301-657)**

Based on Federal Emergency Management Agency's (FEMA) coastal flood hazard study, roughly 85 percent of Foster City's levee system does not meet the required freeboard elevation per Title 44 of the Code of Federal Regulations (CFR), section 65.10 and therefore, the levee will not retain accreditation status when the Flood Insurance Rate Map (FIRM) is updated in mid-2016. The general scope of services include planning and pre-design work necessary to prepare plans and specifications and CEQA documents for construction to raise the levee surrounding the majority of the outer perimeter of Foster City to regain FEMA accreditation. With accredited levee protecting Foster City, residents will not be required to purchase mandatory flood insurance annually.

The following consultants are part of the project team working on the project.

**Project Team**

<b>Firm</b>	<b>Contact</b>	<b>Project Roles</b>
<b>Schaaf &amp; Wheeler Consulting Civil Engineers</b> 1171 Homestead Road, Suite 255 Santa Clara, CA 95050	Charles D. Anderson, P.E. 408-246-4848 canderson@swsv.com	Project Management Civil design Contract documents Levee accreditation Construction support
<b>ENGEO</b> 6399 San Ignacio Avenue, Suite 150 San Jose, CA 95119	Janet Kan, G.E., C.E.G. 408-574-4900 jkan@engeo.com	Geotechnical investigation Geotechnical engineering Levee accreditation Construction support
<b>Biggs Cardosa Associates</b> 865 The Alameda San Jose, CA 95126	Anthony Notaro, P.E. 408-296-5515 anotaro@biggscardosa.com	Structural Engineering Construction support
<b>Bellinger-Foster-Steinmetz</b> 445 Sherman Avenue Palo Alto, CA 94306	Adit Paul, ASLA, CLA 650-326-6622 apaul@bfscla.com	Landscape architecture Trail design Construction support
<b>Wilsey-Ham</b> 3130 La Selva Street, Suite 100 San Mateo CA 94403	Ken Moore, L.S. 650-286-8414 kmoore@wilseyham.com	Surveying Base mapping Rights-of-way
<b>Huffman-Broadway Group</b> 828 Mission Avenue San Rafael, Ca 94901	Terry Huffman, PhD 415-925-2000 thuffman@h-bgroup.com	Biological assessment Wetland delineation Regulatory permitting

Detailed scope of services are described below. Consultant's work will culminate in a Basis of Design Report suitable for preparation of construction documents. The preparation of construction documents is not included in this agreement. It is anticipated that the design and construction will follow in FY 2016/17 and construction is expected to be complete in FY 2020/21.

## **DETAILED SCOPE OF SERVICES**

### **Task 1.1 Meetings and Coordination**

This task includes ongoing project coordination, coordination of all sub-consultants, and project coordination with the City of Foster City (City), City of San Mateo, County of San Mateo (County), FEMA, and coordination with other agencies not specifically tasked elsewhere.

#### **Task 1.1.1 – Meetings**

- Preparation of agenda and attendance at kickoff meeting.
- Preparation of agenda and attendance at FEMA coordination meeting.
- Preparation of agenda and attendance at initial City/Council coordination meeting.
- Preparation of agenda and attendance at CEQA/permitting coordination meeting that will also include City's environmental consultant.
- Progress meetings with City and County (assume 12).
- Prepare and submit all meeting minutes to City for review.

#### **Task 1.1.2 – Coordination**

- General project coordination.
- Preparation of monthly invoices and progress summaries.
- Prepare and submit to City project budget and schedule tracking.
- Direct sub-consultants as necessary to complete their indicated project tasks.
- Review and manage sub-consultant invoices and incorporate into monthly invoices.
- Arrange access for geotechnical borings, site surveys and other investigations.
- Coordination to obtain environmental regulatory guidance for planning and conducting all surveying, mapping and geotechnical investigations within sensitive habitats and around sensitive species.
- Project Manager's Memorandum outlining all analytical and field criteria.
- Mapping standards and datums.
- Boundaries for mapping and analysis by discipline.
- Establish required levee elevations by levee reach.

### **Task 1.2 Levee Reconnaissance**

The macro assessment levee "walk downs" with the project design team, City representatives, regulatory agency staff and other interested and invited stakeholders

and provide a baseline visual inventory of potential issues for the Foster City Levee Improvement Project. The purpose of performing the walk downs early in the project is to allow the project team and City as much time as possible to address discovered issues before embarking on design development and regulatory permitting tasks. One walk down will be performed by the Consultant's civil engineers, geotechnical engineers, biologists and landscape architects to vet potential design issues and select field exploration locations based on levee characteristics and access. A second walk down will be performed by the Consultant's civil engineers and biologists in conjunction with staff from the regulatory agencies with permit jurisdiction. Upon completion of the walk downs, the project team will meet with the City to discuss the observed issues.

#### Task 1.2.1 – Visual Levee Assessment

Using stationing along the top of the Foster City levee system previously completed under separate contract, note observations made for:

- evidence of abnormal settlement
- erosion
- encroachments by vegetation or other improvements
- levee penetrations
- closure devices
- potential slope stability problems
- inadequate maintenance
- evidence of structural problems
- evidence of seepage
- evidence of distressed levee structures
- unauthorized access or use
- intake and outfall structures
- animal burrows
- damaged or missing rock revetment

#### Task 1.2.2 – Photo-documentation

A photographic record of the existing (pre-improvement) conditions will be established by the Consultant. This record will be useful in later tasks including design development and public outreach.

- Photograph levee and adjacent areas and reference to stationing from Task 1.2.1.
- Prepare descriptive text for photos and identify observed deficiencies or potential design issues.
- Gather digital photography suitable for public presentations and the preparation of photo-simulations of levee improvement alternatives.

### Task 1.2.3 – Initial Assessment Technical Memoranda

Prepare Technical Memoranda describing visual levee assessment including date, time, Consultant and sub-consultant staff present, other present, observations and photo-documentation.

- List any issues of concern including issues described in Task 1.2.1 or other issues that are apparent during the visual levee assessment.
- Submit design assessment memorandum for review and comment by City.
- Submit regulatory permit issues memorandum for review and comment by City, then for review and comment by the participating regulatory agencies. Based on the preliminary ecological review and site design, HBG will develop a permit strategy for obtaining authorization from federal and state agencies for the project.

### **Task 1.3 Surveying and Base Mapping**

Wilsey Ham will provide topographic and base mapping services. Wilsey Ham will compile a strip map of the levee and bike path area for the Foster City Levees suitable for completing the design process and producing contract documents for public bid and construction. This map will be utilized as a project base map and will show the bike path, adjacent surface elevations, City property lines, levee easement lines, existing levee elevations and their relationship to the location of the adjacent private improvements. This mapping will be used throughout the project. A scope of services to provide City-wide ortho-rectified digital aerials will be furnished under separate cover.

#### Task 1.3.1 – Base Mapping

The “Project Area” of coverage for this site consists of strip mapping running along the existing levee beginning at the northwesterly termination point at the City of San Mateo, continuing southerly along the existing levee to the southwesterly termination point. The lateral limits of the strip will generally include the water, or toe of levee on the outboard side, and on the inboard side, the private property, the adjacent street and respective improvements. The mapping will also show the Mariner’s Point Golf Center on East Third Avenue. There are some additional areas of coverage as shown on Figure 1.



**Figure 1. Limits of Base Mapping shown in Shaded Region**

Under this task Wilsey Ham will:

1. Research current subdivision mapping, benchmarks and records of survey for the project area.
2. Locate City monuments (+/-47) as shown on the above historical record mapping and survey their locations utilizing GPS and field survey methods. This data will be used to determine the property lines within the project area.
3. Locate enough monuments to reconstruct the City boundary and easement lines along the levee.
4. Locate historic survey points set for the current City photo base maps.
5. Coordinate the mapping to the earlier mapping utilizing the same horizontal control points as appropriate.
6. Locate City bench marks and confirm vertical data.
7. Mapping will be at 40 Scale with photogrammetric sections at 50-foot and 1-foot contour interval.
8. Vertical datum will be NAVD 88, horizontal datum will be State Plane.
9. Utilize GPS and field surveys to run a field survey for the length of the project area setting survey control and temporary bench marks on and along the sides of the bike path.
10. Set photogrammetric photo control panels.
11. Photogrammetrically show all of the adjacent fences and other private improvements within the project area.
12. Locate top of rip rap and where possible, the toe of rip rap.
13. Compute and plot the existing City boundary and City easement lines within the project area utilizing the above record maps.
14. Rectify the above property lines with the above field surveys, topographic data and survey monuments.

15. Create a layered overlay of the above data.
16. Combine the above overlay data with the digital aerial photogrammetry and prepare final strip maps of the project area.

Wilsey Ham will meet with Schaaf & Wheeler and the City to review the initial results and determine areas that may need additional or more detailed surveys. Wilsey Ham will complete the additional surveys as directed and update the base maps and/or prepare specific plats detailing as needed, not to exceed 8 hours of surveying.

The survey will show significant existing surface features. Surface utility structures will not be field located and underground features, which are not expected within the existing levee footprint, will not be mapped unless found in the field. Property lines, rights-of-way, and easements will be mapped from existing parcel and tract maps. The base map will be checked against the field conditions to make sure all necessary features have been located.

#### Task 1.3.2 – Aerial Topographical Survey

American Aerial will provide aerial photography and topographic mapping of the area shown in Figure 1. The mapping area will require 40 flight cross panels with x, y, z coordinates. The deliverables under this task include:

1. Flying and photographing the site in black & white at scale 1" = 300'
2. One set of 9" x 9" black & white contact prints
3. Analytically bridge the control point data to minimize panels needed
4. AutoCAD digital data (.dwg file) mapped at a scale of 1" = 40" with 1-foot contour interval

#### ***Key Assumptions***

Wilsey Ham assumes that no material discrepancies in the property lines will be uncovered, no monuments will be set and no Record of Survey will be required. The flight will be undertaken at the lowest tide possible to allow for greater shore-side coverage by photogrammetry. This can take some time for planning as the lowest tide generally does not occur at mid-day when flights need to occur to minimize shadows. The SFO flight path also complicates the scheduling of this flight.

#### **Task 1.4 Geotechnical Investigation**

A geotechnical exploration program will be performed by ENGEO to supplement available subsurface information and to evaluate the feasibility of the levee improvement schemes.

##### Task 1.4.1 – Fieldwork

ENGEO will collect data to supplement available existing subsurface data, which consists of 26 exploratory locations, to achieve approximately one exploratory location every 250 to 300 feet along the project limits. Drilling permits will be obtained from the San Mateo County Environmental Health Department and the exploration locations will be backfilled in accordance with permit requirements. Table 3 below summarizes the

proposed field exploration program, which includes a total of 26 supplemental exploratory locations.

**Table 1: Proposed Field Exploration Program**

Exploration Type	Number of Holes	Proposed Depth (feet)	Proposed In-situ Tests
Mud Rotary Borings	2	80 to 100	Vane Shear
	8	10 to 20	--
Cone Penetration Test	5	80 to 100	Seismic Shear Wave Velocity
	11	10 to 20	--

ENGEO's field engineer/geologist will observe the drilling operations and log the subsurface conditions encountered. In-situ vane shear test in select location and seismic shear wave velocity tests at two proposed CPT locations will be performed by ENGEO.

**Task 1.4.2 – Laboratory Testing**

Soil samples will be obtained in mud rotary boreholes for visual classification and laboratory testing. The samples will be reexamined in ENGEO's laboratory to verify field classifications and will be tested for moisture content, dry unit weight, Plasticity Index, gradation, unconfined compressive strength, consolidation, laboratory permeability test (constant head or falling head), strength tests (Triaxial or Direct Shear) or other physical properties, as appropriate. ENGEO will perform corrosion testing on representative samples of the existing fill material and Bay Mud deposits.

**Task 1.4.3 – Engineering Analysis and Report Preparation**

Upon completion of field exploration and laboratory testing, ENGEO will prepare a geotechnical exploration report addressing the following:

- Findings and site conditions
  - Surface conditions based on site reconnaissance
  - Subsurface conditions
  - Groundwater conditions
  - soil, potentially liquefiable soil and corrosive soil conditions
- Results of engineering analysis on
  - Load-induced ground settlement
  - Slope stability
  - Seepage
  - Liquefaction and/or lateral spreading potential
- Geotechnical recommendations for
  - Site preparation and grading alternatives
  - Liquefaction mitigation measures
  - Long-term levee fill settlement mitigation measures



- Seepage control alternatives
- Flood wall foundation design parameters
- Sheet pile design parameters

### ***Site Access and Utility Clearance Considerations***

ENGEO assumes the borings and CPTs will be located within the pedestrian pathway of the existing levee and can be easily accessible by truck-mounted equipment. Necessary removal or unlocking of fences or gates, permission to enter the site from the current owner or leaseholder, and/or required use permits must be secured by the client prior to our field activities. If site access or weather conditions restrict their field operations, a revision to ENGEO's estimate may be necessary.

Prior to initiating subsurface exploration, ENGEO will be provided existing site improvement plans for review. Additionally, all site utilities and utility easements that are within the property boundary will be located in the field by the site facility manager. This information should be made available to ENGEO at least 5 days prior to field exploration. ENGEO will notify Underground Service Alert (USA) at least 48 hours prior to performing subsurface exploration to locate public utilities bordering the property limits. ENGEO will retain a private utility locator to clear readily identifiable, shallow utilities at the proposed boring locations. However, ENGEO or its subcontractors cannot be responsible for damage to existing utilities that are not or cannot be accurately located.

### ***Key Assumptions***

In the event potentially hazardous materials are identified visually or by odor within our exploratory borings, ENGEO will notify the City as soon as possible of such an occurrence in order to mutually decide whether to continue, modify, or cease the remainder of the field exploration program. Additional costs incurred as a result of encountering suspected hazardous materials will be charged on a time-and-expense basis over and above the estimated fee for the exploration proposed herein.

Soil cuttings will be placed in drums and disposed offsite. ENGEO will strive to remove the drums on a daily basis; however, the drums may require temporary storage at a location approved by Foster City if chemical testing is needed prior to disposal. In accordance with standard drum disposal procedure, an authorized representative from Foster City should sign the associated waste disposal paperwork as the "Generator" (owner of the site).

### **Task 1.5 Biologic Resources Report and Wetland Delineation**

The biotic assessment prepared by Huffman Broadway Group (HBG) will be used by the City's environmental consultant to prepare CEQA documents under separate contract, inform design development (Task 1.6) and ultimately be used in the preparation of regulatory agency permit applications (Task 2.3).

HBG will also review all survey plans and mapping, and geotechnical investigation plans, for consistency with reporting requirements of environmental regulatory agencies and compliance with environmental regulatory requirements while conducting surveys within and/or adjacent to suitable habitat for sensitive species and sensitive habitats.

#### Task 1.5.1 – Prepare CEQA Biological Assessment

HBG will prepare a detailed Biological Assessment report that will serve as a technical resource document for the City's documentation pursuant to the California Environmental Quality Act. The CEQA documentation for this Project is assumed to be an Environmental Impact Report. The detailed biological assessment report will include a description of existing conditions, impact evaluation and mitigation measures.

The existing conditions section will describe the nature of the site in its current state and potential biological constraints. This description will include mapping of the vegetation communities within the Project Site, results of the wetland delineation (see Task 1.5.2), and information regarding the potential presence of rare, threatened, or endangered species of flora and/or fauna on the site. The California Natural Diversity Data Base will be consulted to determine the potential for rare, threatened, or endangered plant or animal species to occur on site or in the general vicinity. The USFWS will be contacted to obtain a list of federal-listed species that may occur in the Project area.

A field reconnaissance survey will be conducted by HBG to inventory habitats present on the site and describe any areas that may be suitable for use by rare, threatened, or endangered plant or animal species of concern.

The CEQA biological assessment will include an evaluation of impacts to biological resources that would occur due to the proposed levee improvement project. Potential impacts to wetlands and other defined sensitive habitats will be determined, including the evaluation of potential direct loss of habitat relevant to any future permit documentation. The biological assessment will describe the extent to which the project would impact any special status species. HBG will also discuss potential reduction of the number and diversity of native plant species, introduction of new species onto the site through landscaping, loss of wildlife habitat, and disruption of wildlife use.

HBG will coordinate with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, the USFWS, NOAA Fisheries (National Marine Fisheries Service), CDFW, BCDC and the San Francisco Bay RWQCB, as necessary and as directed by the client during the preparation of the Biological Assessment. Based on impact findings, HBG will describe feasible mitigation measures to minimize identified impacts. Permit requirements of regulatory agencies related to biological resources (i.e., wetlands, other sensitive habitats, and special status species) will be described, and mitigation measures will be developed in the Biological Assessment to reduce ecological impacts as well as satisfy agency requirements.

This task includes up to two rounds of revisions based on comments from the City and its environmental consultant.

#### Task 1.5.2 – US Army Corps of Engineers Jurisdictional Determination

HBG will conduct a field investigation of the Foster City Levee Improvement Project Site based on current site conditions in order to prepare a determination of the presence of jurisdictional waters. HBG will conduct a field investigation within the Project site in order to collect data necessary to identify and delineate the geographic extent of potential jurisdictional waters in accordance with Code of Federal Regulations (CFR) definitions of jurisdictional waters, the Corps' 1987 Wetlands Delineation Manual, the Corps' 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) and supporting guidance documents (including the 2015 Final Clean Water Rule that becomes effective August 28, 2015) based on current and historic land use conditions.

The location of each jurisdictional water potentially subject to Corps and RWQCB jurisdiction will be located in the field using a Trimble Pathfinder XRS GPS unit (accuracy <50cm). Field data taken regarding vegetation, soil, and hydrology conditions observed during the delineation process will be digitally formatted by HBG and data linked for use in ARCINFO during data analysis. As the project site is currently a tidal wetland, field data studies will concentrate on defining the wetland/upland interface.

All areas identified as potential jurisdictional waters of the United States and / or State will be mapped on to a 100-scale base map. The base map will consist of a color orthorectified aerial photograph and engineer level topographic mapping. All potential jurisdictional areas identified during data analysis and mapping will be reviewed with respect to possible exemption from Corps and RWQCB jurisdiction.

HBG will prepare a jurisdictional determination report in accordance with Corps guidelines and upon City review and approval will submit the report to the Corps for verification under the Corps Preliminary Jurisdictional Determination procedure.

This procedure assumes that a connection to navigable waterways is present and precludes the need for more detailed report documentation and review by the Corps under the Corps/USEPA Rapanos evaluation guidelines. The rationale for the use of the Preliminary Jurisdictional Determination procedure is: (1) the jurisdictional waters potentially impacted by the project are tidal and as such there is no argument that there is a lack of connection with traditionally navigable water, (2) the delineation can be completed and verified by the Corps in a shorter time frame, and (3) the approach is less costly than obtaining a verified jurisdictional determination from the Corps.

This task also includes investigations allowing a determination of jurisdictional boundaries pursuant to regulatory requirements of the RWQCB (wetlands/water jurisdiction of RWQCB is not always consistent with that of the Corps and may include

areas not considered jurisdictional by the Corps), the California Department of Fish and Wildlife, BCDC and the State Lands Commission.

It is assumed that access to potential jurisdictional waters will be granted to HBG staff for sampling, including hand digging shallow pits in both City and private properties.

#### Task 1.5.3 – Verification of Corps Jurisdictional Determination

HBG will coordinate with the Corps, as necessary, during the jurisdictional determination process which may include a site visit with Corps staff, phone calls, emails, meetings, and preparation of additional information or documents (i.e. maps, watershed data, functional analysis methods, etc.). HBG will coordinate all aspects of the jurisdictional determination process with the client and/or designated representative. HBG will keep the client informed of the jurisdictional determination progress with a monthly phone call or email. (Note that verification of regulatory jurisdictional boundaries of RWQCB, CDFW, BCDC and State Lands is typically accomplished as part of the regulatory permit process.)

Once verification of delineations are verified HBG will transfer a final digital version of the jurisdictional boundaries to the Project Lead who will direct the information transfer for inclusion on project plans. If a more accurate survey is required at various locations along the project levee HBG will accompany the project surveyor subcontractor as necessary to assure that the jurisdictional boundary is accurately surveyed to an engineer scale level of accuracy.

#### Task 1.5.4 – Surveys for Ridgway's Rail

Locations along the Bay shoreline located in the vicinity of Belmont Slough and Seal Slough would be considered potential habitat for the federal-listed endangered Ridgway's Rail (formerly known as Clapper Rail). As suitable Ridgway's Rail breeding or nesting habitat occurs in the project area, any disturbances within 700 feet of an active nest would be considered a significant impact. To comply with USFWS requirements, either construction activity would need to occur at a time during the year when the Ridgway's Rails would not be expected to be nesting (between September 1 and January 31), or a breeding survey for Ridgway's Rail would need to be conducted prior to any construction work planned during the nesting season coupled with establishment of 700 feet setbacks from nesting birds.

Depending on project schedules and location of proposed construction, it may be prudent to conduct USFWS Ridgway's Rail protocol surveys along levee stations so that work can be conducted in areas where there are no nests, rather than confine work to specific time periods during the year. Any surveys conducted will be a team of scientists headed by Jules Evens of Avocet Research Associates, a species expert who is specifically permitted to work with this species by the USFWS. Surveys will follow established agency protocol in terms of timing of surveys and spacing of sampling stations.

At the end of each survey, HBG will map location of listening stations, all pairs or individual Ridgway's Rails located during the survey, information on disturbances (e.g. dogs, air traffic) and weather information. Once the protocol surveys are all complete, HBG will generate a letter report that will include data sheets, a map showing the location of the listening stations, location of Ridgway's Rail detected during the surveys, and survey results and information from other protocol surveys that have been conducted within close proximity to the Project site this year. The letter report will be submitted to the USFWS for review and comments. HBG staff will coordinate with the USFWS regarding survey results and to establish any conservation measures that may be required such as work windows and buffer limits. Costs are an estimate from Avocet Research Associates based on a preliminary indication of the location and extent of suitable habitat and new protocols from the USFWS for conducting surveys for Ridgway's Rail.

In addition to conducting surveys for Ridgway's Rail, Avocet Research Associates will conduct evaluations related to the federal-listed threatened Western Snowy Plover and the state-listed threatened California Black Rail. While conducting rail surveys, staff of Avocet Research Associates will evaluate habitat adjacent to the proposed levee for suitability to support nesting or foraging by Western Snowy Plover. During the latter rail surveys, Avocet will determine if California Black Rail is present. Mitigation for California Black Rail, if present, will be similar to mitigation measures required to protect populations of Ridgway's Rail.

#### Task 1.5.5 – Design Development Input

HBG will work with the City and design team to help adjust the project design to avoid jurisdictional wetlands where feasible, and to develop conceptual habitat impact mitigation alternatives where not. This task includes creating graphics to illustrate mitigation alternatives and providing sufficient mitigation information for design, cost estimation and permit application.

#### **Task 1.6 Design Development**

The intent of this task is to formulate feasible levee improvement alternatives using the detailed information gathered in Tasks 1.2 through 1.5, and from those alternatives develop a preferred levee improvement project description suitable for CEQA. Design development includes incorporating public input as described in Task 1.8, which is intended to help select the preferred project from among several presented alternatives. The following design constraints and opportunities will be evaluated and screened for feasibility:

- Available rights-of-way
- Adjacent sensitive habitat areas, endangered species, and ease of permitting
- Providing temporary flood protection during construction
- Public access to Bay Trail

- Security
- Intake and outfall structures
- Landscaping
- Sensitive habitats and special status species
- Views and aesthetics
- Recreational opportunities
- Construction impacts including duration
- Adaptation to future sea level rise
- Cost
- FEMA accreditation
- HBG review of design concepts for potential to be Least Environmentally Damaging Practicable Alternative and aid in final selection to ensure LEDPA is selected (Note: only LEDPA can be authorized by Corps and RWQCB)

#### Task 1.6.1 – Alternative Development

Biggs Cardosa Associates (BCA) will prepare preliminary level calculations and sketches to confirm the structural concepts for improvement alternatives that contain floodwalls. Based on the preliminary mapping, it appears that roughly 7.5 miles of levee will require improvements which will likely include floodwalls. One alternative is anticipated to include a sheet pile wall with a maximum design height of roughly 3.5 feet with a concrete cap and fascia on one or both sides. Geotechnical recommendations will be provided by ENGE0. Architectural treatment alternatives developed by Bellinger-Foster-Steinmetz (BFS) are anticipated in the floodwall elements (with feasibility confirmed by BCA). A second floodwall type, supported on spread footings, is anticipated to be required for specialty locations such as below the existing San Mateo Bridge. Additional areas likely requiring special consideration during design include the following:

- Lakeside Drive: Floodwall system must accommodate vehicle access along Lakeside Drive.
- Lagoon Tide Gate: This area will preclude the use of sheet piles on the existing structure. Special detailing will be required.
- Existing pedestrian overcrossing modification near the Phillips office building. The existing structure will need to be raised on the Bay Trail side to accommodate raising the levee/trail. Modification to the existing abutment/foundations will be required.
- San Mateo Bridge: Consider a second alternative to tie the proposed floodwall system into the existing bridge abutments which are already raised several feet above original grade.
- Werder Pier: The existing structure cannot be easily crossed by the floodwall system. Special consideration in floodwall layout/ details will likely be required.
- Central Lagoon Intake: This area will preclude the use of sheet piles on the existing structure. Special detailing will be required.

- Central Lagoon Outlet: This area will also preclude the use of sheet piles on the existing structure. Special detailing will be required.
- O'Neill Slough Tide Gate: The improved levee must tie into the tide intake structure for San Mateo's Marina Lagoon, which was designed by Schaaf & Wheeler and BCA in 2004.

#### Task 1.6.2 – Basis of Design Report

Based on a number of considerations including the potential project constraints listed previously herein, environmental impact (Task 1.5), cost (Task 1.6.3), and public input (Task 1.8), and cost, Schaaf & Wheeler will describe the alternatives analysis, recommend a preferred improvement plan, prepare the Project Description needed for CEQA, and complete a Basis of Design Report documenting work to date. Preliminary plan and profile sheets utilizing the base mapping prepared as Task 1.3 will be completed to show the recommended project improvement plan, suitable for use in CEQA documents, FEMA coordination efforts (Task 1.7), and future preparation of construction plans and specifications for construction.

#### Task 1.6.3 – Construction Cost Estimate

Schaaf & Wheeler will prepare an estimate of the construction costs associated with recommended levee improvements, at a level of detail and contingency commensurate with the level of plan development and available information.

ENGEO, BCA, BFS and HBG will assist Schaaf & Wheeler with the development of the geotechnical, structural, landscaping and environmental mitigation costs, respectively, related to the proposed levee and floodwall elements.

#### **Task 1.7 FEMA Coordination**

Preliminary levee improvement plans and background design materials will be coordinated with the Federal Emergency Management Agency (FEMA). Based on conversations with FEMA Region IX staff, the appropriate technical means for FEMA review and approval of the proposed levee improvements is the Conditional Letter of Map Amendment Process using the MT-2 submittal forms. The intent of this task is to obtain FEMA concurrence that the proposed levee improvements will qualify for accreditation, prior to completing detailed project designs and the Contract Documents.

Task items include the following:

- Participation in Local Levee Partnership Team (LLPT) meetings held by FEMA. (Bimonthly meetings of no more than two hours duration are assumed.)
- Completion of flood hazard mapping using *Analysis and Mapping Procedures for Non-Accredited Levee Systems* (LAMP), initiated after the formation of the LLPT and completion of sufficient geotechnical investigations.
- Preparation of MT-2 CLOMR submittal package, submittal to FEMA, and coordination with FEMA during review process.

- HBG will assist with FEMA coordination to ensure their concurrence that the project will satisfy Section 7 requirements under the ESA.

### **Task 1.8 Regulatory Permit Applications**

This task involves work necessary to prepare permit applications for the regulatory agencies with jurisdiction over the project, using the wetland delineation and Biological Assessment report prepared in Task 1.5, and using the CEQA document prepared by the City under separate contract. Upon City approval HBG will submit an administrative draft of all permit packages for review and comment by the City, incorporate changes and submit the package to the permit agency. Dr. Terry Huffman of HBG will act as the authorized agent for the City during the various agencies permit review and authorization process.

This task includes submitting the regulatory permits outlined herein that do not require detailed construction plan development. Regulatory permit applications listed in this task will be submitted once the City has formally adopted the environmental document prepared in compliance with CEQA under separate contract. Processing fees for all permits shall be the responsibility of the City. HBG will notify the City regarding fee amounts and fee payment schedule as needed.

#### Task 1.8.1 – Prepare U.S. Army Corps of Engineers Permit Application

HBG will prepare and submit, upon City approval, an application to the U.S. Army Corps of Engineers (Corps) for the levee improvement project. The Corps permit application will consist of either a Preconstruction Notification (PCN) for a Nationwide Permit (NWP) or an Individual Permit, depending on the level of impacts. This proposal assumes that the proposed levee project will require an Individual Permit. Adjustments to the scope of work and cost can be accommodated if the project impacts are minimized to the point that a Nationwide Permit is feasible. Since the project may require work within Section 10 River and Harbors Act waters, the permit application package will also include a request for Section 10 Authorization.

HBG will prepare and submit an Individual Permit application to the Corps for placement of fill in wetlands or other waters of the United States related to the proposed levee improvements. The permit application will include the project description, technical documentation of the wetland delineation (see Task 1.5.2), an environmental assessment, a Section 404(b)(1) alternatives analysis (see Task 2.3.2), an analysis of compliance with the Corps' public interest review criteria, compliance with Section 106 of the National Historic Preservation Act (see Task 2.3.3), and a conceptual wetland mitigation plan that would compensate for wetland impacts (see Task 2.3.4). Upon City approval, HBG will provide the permit application and required documentation to the Corps for review and approval.



#### Task 1.8.2 – Corps and RWQCB-Required EPA 404 (b)(1) Alternatives Analysis

HBG will prepare a project alternatives analysis report demonstrating that the proposed project avoids, where practicable, waters of the United States (including wetlands) as per the U.S. Environmental Protection Agency Clean Water Act, Section 404(b)(1) Project Alternatives Analysis Guidelines. The Alternatives Analysis will also provide documentation of how the project has been minimized where impacts to jurisdictional waters are unavoidable on site to reduce impacts. Corps and RWQCB regulations require that only the Least Environmentally Damaging Practicable Alternative can be authorized. Upon client approval, HBG will provide the analysis report and required documentation to the Corps and RWQCB for review and approval.

#### Task 1.8.3 – Compliance with Section 106 of the National Historic Preservation Act

As part of the Corps' permit process the Corps will need to verify that the project is consistent with the requirements of Section 106 of the National Historic Preservation Act and will conduct separate coordination with the State Historic Preservation Office (SHPO).

It is assumed herein that a cultural resources evaluation will be conducted as part of the EIR to be prepared by a separate contractor with the City of Foster City. HBG will advise the CEQA contractor regarding cultural resource evaluations that will be necessary for compliance with the federal requirements, will review all cultural resource evaluations for use in the Corps permit process, and will package all materials as part of the permit application documentation for use by the Corps as part of their Section 106 review. HBG can provide this service on request. Upon client approval, HBG will provide the required Section 106 documentation to the Corps for review and approval.

#### Task 1.8.4 – Conceptual and Final Mitigation Plans

As part of the Individual Permit application, HBG will prepare a conceptual wetland mitigation plan for compensation of impacts to wetlands and waters of the U.S. A final wetland mitigation plan will also be prepared based on comments from regulatory agencies on the conceptual plan. The mitigation plan will be based on calculated impacts and mitigation requirements as identified in the CEQA Biological Assessment (See Task 1.5.1) and will satisfy all content and format requirements of the Corps, RWQCB, USFWS, NMFS, BCDC, and CDFW (and SLC, if required) related to compensation for impacts to jurisdictional areas, sensitive species, and sensitive species habitat. Upon client approval, HBG will provide the required Mitigation Plans documentation to the various agencies for review and approval.

#### Task 1.8.5 – Prepare Endangered Species Act Biological Assessment

This proposal assumes that a "likely to adversely affect" finding is warranted for this Project and that an Endangered Species Act (ESA) Biological Assessment, including conservation measures to avoid potential impacts to any federally-listed species, will need to be prepared to initiate a Section 7 consultation with the USFWS and NMFS. HBG will prepare documents necessary to initiate a consultation with the USFWS and NMFS pursuant to Section 7 of the Endangered Species Act including a draft Corps

letter requesting the Section 7 consultation and the Biological Assessment report addressing federal-listed species.

HBG will prepare the Biological Assessment pursuant to requirements of the Endangered Species Act and the Code of Federal Regulations (50 CFR Section 402.12). As required, the Biological Assessment will include an Introduction; Project Description including proposed conservation measures to protect listed species; description of the action area where direct and indirect effects will occur; description of listed species and critical habitats within the action area; an effects analysis including cumulative effects; and a finding (this Project will have a “likely to adversely affect” finding). Upon client approval, HBG will provide the required ESA Biological Assessment to the Corps, USFWS, and NMFS for review and approval.

#### Task 1.8.6 – Prepare Essential Fish Habitat Evaluation

HBG will prepare the necessary Essential Fish Habitat (EFH) evaluation pursuant to the Magnuson-Stevens Fishery Conservation and Management Act. The EFH evaluation will provide an assessment of the project’s effects to EFH and Conservation recommendations to avoid, minimize, mitigate, or otherwise offset those adverse effects. HBG will prepare (1) the EFH Assessment report, and (2) a draft Corps letter to the NOAA Fisheries (the National Marine Fisheries Service) requesting the EFH consultation. Upon client approval, HBG will provide the EFH report and draft letter to the Corps for review and approval as part of the required permit application documentation. The EFH study will be appended to the ESA Biological Assessment prepared in Task 2.3.3. A copy of the EFH study will also be provided to the NMFS.

#### Task 1.8.7 – Prepare RWQCB Application for State 401 Water Quality Certification

HBG will prepare the authorization request for State 401 Water Quality Certification following current RWQCB guidelines for submission. Included with the application submittal will be a copy of the Corps permit application. Upon City approval, HBG will provide the permit application and required documentation to the RWQCB for review and approval.

#### Task 1.8.8 – Prepare CDFW Application for Incidental Take Permit

HBG will prepare the necessary application documentation to obtain incidental take authorization for state endangered species under the CDFW 2080/2081 Program. Upon City approval, HBG will provide the application for incidental take authorization and required documentation to the CDFW for review and approval.

#### Task 1.8.9 – Prepare CDFW Application for Streambed Alteration Agreement

HBG will prepare the application for a Streambed Alteration Agreement from CDFW for impacts to stream courses (e.g., tributary drainages to Seal Slough, Belmont Slough or the Bay) proposed as part of the project. The application will be prepared pursuant to CDFW guidelines for submission. Upon City approval, HBG will provide the application for incidental take authorization and required documentation to the CDFW for review and approval.

### Task 1.8.10 – Prepare Application to State Lands Commission

In the event the project encroaches on State property or may need to use state property for a mitigation site, an authorization from the State Lands Commission (SLC) may be necessary. HBG will prepare the necessary documentation to obtain authorization for from the SLC if necessary. Upon City approval, HBG will provide the application for incidental take authorization and required documentation to the SLC for review and approval.

### **Task 1.9 Public Outreach Assistance**

Schaaf & Wheeler and its subconsultants will provide assistance to the City during its public outreach efforts. This assistance includes the preparation of technical material and graphic representations to explain project alternatives, constraints, opportunities, recommendations and costs to the public and other interested stakeholders. Attendance at bi-monthly meetings for up to four hours is assumed. The project team will provide architectural renderings of proposed levee improvements from up to 12 view locations in Foster City. We will also work with the City to position prototypes showing alternative floodwall/levee improvement heights in the field for public viewing. The renderings and prototypes will show existing conditions and alternate finished levee/floodwall elevations based on Council direction for adaptive sea level rise management.

### **Deliverables**

The following deliverables will be provided:

- Meeting Agenda
- Design Assessment Memorandum
- Regulatory Permit Issues Memorandum
- Levee Improvement Project Base Mapping
- Geotechnical Report
- Biological Resources Report
- US Army Corps of Engineers Jurisdictional Determination
- Basis of Design Report
- Construction Cost Estimate
- MT-2 CLOMR Submittal Package
- USACE Permit Application
- Section 404 Alternatives Analysis
- Wetland Mitigation Plan
- Endangered Species Act Biological Assessment
- Essential Fish Habitat Evaluation
- RWQCB Application for State 401 Water Quality Certification
- California Department of Fish and Wildlife Application for Incidental Take Permit
- California Department of Fish and Wildlife Application for Streambed Alteration Agreement
- Application to State Lands Commission for Encroachment (if necessary)

EXHIBIT B

CONSULTANT'S FEE SCHEDULE  
LEVEE PROTECTION PLANNING AND IMPROVEMENTS PROJECT  
(CIP 301-657)

Labor

The maximum amount of compensation to be paid to CONSULTANT under this agreement, including payment for professional services and reimbursable expenses, shall not exceed eight-hundred-eighty-seven thousand, six-hundred-forty-four dollars (\$887,644). Any hours worked for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to the CITY. Charges for labor expended on this project shall be itemized by CONSULTANT and billed monthly in accordance with the rate schedule attached herein. Hourly rates are fixed for the duration of this agreement.

Project Expenses

Project expenses, including subconsultant services, travel, equipment rental, outside printing services, and other identifiable materials and services required for the execution of the work of this agreement shall be reimbursed at cost without any markups. Such reimbursement shall be made upon request by CONSULTANT and with presentation of adequate documentation.

The CITY shall review each monthly payment request and payment shall be made to the CONSULTANT in the amount approved on or about thirty (30) business days after date of approval.

**Estimated Fees**

<b>Task Description</b>	<b>Labor</b>	<b>Reimbursable</b>	<b>Total</b>
1. Meetings and Coordination	\$57,540	\$1,575	\$59,115
2. Levee Reconnaissance	\$67,024	\$1,355	\$68,379
3. Surveying and Base Mapping	\$35,388	\$35,072	\$70,460
4. Geotechnical Investigation	\$60,095	\$54,424	\$114,519
5. Biologic Resources	\$99,660	\$41,003	\$140,663
6. Design Development	\$162,105	\$630	\$162,735
7. FEMA Coordination	\$61,080	\$0	\$61,080
8. Regulatory Permit Applications	\$144,680	\$11,288	\$155,968
9. Public Outreach	\$54,200	\$525	\$54,725
<b>TOTAL</b>	<b>\$741,772</b>	<b>\$145,872</b>	<b>\$887,644</b>

**Schaaf & Wheeler**  
CONSULTING CIVIL ENGINEERS

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Principal Emeritus  
David A. Foote, PE

## Hourly Charge Rate Schedule

### Discounts Applied for Foster City Levee Protection Planning and Improvements Project (CIP 301-657)

#### Personnel Charges

Charges for personnel engaged in professional and/or technical work are based on the actual hours directly chargeable to the project.

Current rates by classification are listed below:

<u>Classification</u>	<u>Rate/Hr.</u>		<u>Classification</u>	<u>Rate/Hr.</u>
Project Manager	<del>\$220</del> \$200		Construction Manager	\$210
Project Engineer	<del>\$210</del> \$195		Senior Resident Engineer	\$180
Senior Engineer	<del>\$195</del> \$180		Resident Engineer	\$160
Associate Engineer	<del>\$175</del> \$165		Assistant Resident Engineer	\$140
Assistant Engineer	<del>\$150</del> \$140		Construction Inspector	\$130
Junior Engineer	<del>\$140</del> \$130			
Designer	<del>\$135</del> \$125			
Technician	<del>\$130</del> \$120			
Engineering Trainee	<del>\$100</del> \$90			

Principal time is \$300 per hour and is charged only for work done in preparation for litigation and other very high level-of-expertise assignments. Court or deposition time as an expert witness is charged at \$400 per hour with a minimum of four hours per day.

#### Materials and Services

Subcontractors, special equipment, outside reproduction, data processing, computer services, etc., will be charged at ~~1.10 times~~ cost.

These rates are fixed for the duration of the agreement ~~subject to revision semi-annually.~~

Effective 1/1/15

## EXHIBIT C

### INSURANCE FORMS

CONSULTANT shall provide, in addition to the Certificates of Insurance, original Endorsement affecting the coverages specified in Section 12 - INSURANCE of the Agreement on the attached form. No substitute form will be accepted.

#### ATTACHED

1. Insurance Coverage Form

**EXHIBIT D**

This **INSURANCE COVERAGE FORM** modifies or documents insurance provided under the following:

Named Insured: \_\_\_\_\_ Effective Work Date(s): \_\_\_\_\_

Description of Work/Locations/Vehicles: \_\_\_\_\_

**ADDITIONAL INSURED:** City of Foster City/Estero Municipal Improvement District  
610 Foster City Boulevard, Foster City, CA 94404  
Attention: \_\_\_\_\_

**Contract Administrator**

<b>Endorsement and Certificates of Insurance Required</b>		
The Additional Insured, its elected or appointed officers, officials, employees and volunteers are included as insureds with regard to damages and defense of claims arising from: (Check all that apply)	Insurer	Policy No.
<input type="checkbox"/> <b>General Liability:</b> (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, (c) premises owned, leased occupied or used by the Named Insured, and/or (d) permits issued for operations performed by the Named Insured. {Note: MEETS OR EXCEEDS ISO Form # CG 20 10 11 85}		
<input type="checkbox"/> <b>Auto Liability:</b> the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the Additional Insured, its elected or appointed officers, officials, employees or volunteers.		
<input type="checkbox"/> <b>Other:</b>		
<b>Certificates of Insurance Required (no endorsement needed) (Check all that apply)</b>		
(Check all that apply)	Insurer	Policy No.
<input type="checkbox"/> <b>Workers Compensation:</b> work performed by employees of the Named Insured while those employees are engaged in work under the simultaneous directions and control of the Named Insured and the Additional Insured.		
<input type="checkbox"/> <b>Professional Liability:</b>		

**PRIMARY/NON-CONTRIBUTORY:** This insurance is primary and is not additional to or contributing with any other insurance carried by or for the benefit of Additional Insureds.

**SEVERABILITY OF INTEREST:** The insurance afforded by this policy applies separately to each insured who is seeking coverage or against whom a claim is made or a suit is brought, except with respect to the insurer's limit of liability.

**PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS:** Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the Additional Insured, its elected or appointed officers, officials, employees, or volunteers.

**CANCELLATION NOTICE.** The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior written notice (ten (10) days if canceled due to non-payment) by regular mail return receipt requested has been given to the Additional Insured. Such notice shall be addressed as shown above.

**WAIVER OF SUBROGATION:** The insurer(s) named above agree to waive all rights of subrogation against the CITY/District, its elected or appointed officers, officials, agents, volunteers and employees for losses paid under the terms of this policy which arise from work performed by the Named Insured for the CITY/District.

**Nothing herein contained shall vary, alter or extend any provision or condition of the Policy other than as above stated.**

**SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE OF THE INSURER**

I, \_\_\_\_\_ (print/type name), warrant that I have authority to bind the above-named insurance company and by my signature hereon do so bind this company.

\_\_\_\_\_  
**SIGNATURE OF AUTHORIZED REPRESENTATIVE (original signature required)**

**ORGANIZATION:** \_\_\_\_\_ **TITLE:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**TELEPHONE:** ( ) \_\_\_\_\_ **DATE ISSUED:** \_\_\_\_\_