**RESOLUTION NO. 81-2022**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PACIFICA AUTHORIZING THE CITY MANAGER TO EXECUTE A THIRD AMENDMENT TO THE CONSULTANT SERVICES AGREEMENT WITH GHD, INC. FOR PROFESSIONAL ENGINEERING SERVICES**

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**WHEREAS,** consistent with the City of Pacifica's Purchasing Policy (Administrative Policy No. 76), the City of Pacifica entered into an agreement with GHD, Inc. ("GHD") for consulting services under the City Council's purchasing authority in May 2020; and

**WHEREAS,** the level of effort required to complete the design, environmental documentation, and permitting for the Beach Boulevard Infrastructure Resiliency Project (BBIRP) exceeded the estimates used to establish the original agreement amount for the design phase of work; and

**WHEREAS,** the City Council of the City of Pacifica has considered the City Manager's recommendation to approve a third amendment to the City's agreement with GHD, Inc. for consulting services on November 28, 2022.

**NOW, THEREFORE BE IT RESOLVED** by the City Council of the City of Pacifica to authorize the City Manager to amend the agreement with GHD, Inc. for the purpose of increasing the cost ceiling to an amount not to exceed $1,539,722 for phase 2a per the agreement's task order and extending the term of the contract through November 30, 2024.

*  *  *  *  *

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Pacifica, California, held on the 28th day of November 2022, by the following vote:

**AYES,** Councilmembers: Beckmeyer, Bier, Bigstyck, O'Neill, Vaterlaus

**NOES,** Councilmembers: n/a

**ABSENT,** Councilmembers: n/a

**ABSTAIN,** Councilmembers: n/a

Mary Bier, Mayor

ATTEST:

Sarah Coffey, City Clerk

APPROVED AS TO FORM:

Michelle Kenyon, City Attorney

# CONSULTANT SERVICES AGREEMENT

## AMENDMENT No. 3

This AMENDMENT NUMBER 3 is entered into as of the 28th day of November, 2022, by and between the CITY OF PACIFICA, herein called the "City," and GHD, Inc., herein called the "Consultant."

## RECITALS

A. City desired to obtain PLANNING, ENGINEERING, AND ENVIRONMENTAL services in connection with the Beach Boulevard Seawall Replacement Project ("Project"), and for that purpose entered into an agreement with Consultant dated May 26, 2020 ("Original Agreement"), by which City hired Consultant to perform all work on the project with the understanding the Project would proceed in stages, requiring periodic amendments.

B. On March 19, 2021, City entered into Amendment No. 2 for the project, to provide additional public engagement and changed benefit cost analysis scope and necessary for the project.

C. Consultant hereby warrants to the City that Consultant is skilled and able to provide such services described in this Amendment No.3.

D. City desires to authorize Consultant to modify the services described in this Amendment No. 3 for phase 2a of the subject project per the attached scope.

## AGREEMENT

A. Amendment. The Parties agree that Task Order No. 1 shall be amended as set forth below.

1. **Section 2 "Scope of Services"**. The services to be provided are as outlined in the proposed scope entitled "BBIRP Phase 2" to City by Consultant, which includes the scope of work for phase 2a only which is the subject of this Amendment No. 3, dated November 17, 2022, and attached hereto as Exhibit A and incorporated by reference ("Modified Work").

2. **Section 3 "Compensation and Method of Payment"**.

A. Compensation. The compensation to be paid to Consultant, including both payment for professional services and reimbursable expenses, shall be at the rate and schedules set forth in this Amendment No.3. The total combined compensation for the Original Agreement and this Amendment No.3 shall be changed to two million three hundred fifty four thousand two hundred fifty dollars and thirty four cents ($2,354,257.34). Phase 2a of the project is to have a budget of one million five hundred fifty four thousand four hundred and thirty three dollars ($1,554,433) under Phase 2a

work. Payment by City under the Original Agreement, as amended, shall not be deemed a waiver of defects, even if such defects were known to City at the time of payment.

3. **Section 4 "Time of Performance"**.

A. Time of Performance. The time of performance is to be extended to November 2024.

3. **Agreement in Effect**. All other provisions of the Original Agreement, as amended, shall remain in full force and effect.

IN WITNESS WHEREOF, the City and Consultant have executed this Amendment No.3 as of the date first written above.

| **CITY OF PACIFICA** | **CONSULTANT**<br>**GHD, Inc.** |
|---|---|
| By: _____ | By: _____ |
| Kevin Woodhouse | Craig Lewis |
| City Manager | Principal In Charge |

**ATTEST**:

By: _____
Sarah Coffey
City Clerk

**APPROVED AS TO FORM**:

By: _____
Michelle M. Kenyon
City Attorney

## EXHIBIT A
## SCOPE & COMPENSATION OF AMENDMENT NO. 3

# BBIRP Phase 2

## Scope for Design, Environmental Review and Permitting

City of Pacifica

November 17, 2022

→ The Power of Commitment

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| **Author** | Paul Henderson |
| **Project manager** | Ryan Marquez |
| **Client name** | City of Pacifica |
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| **Revision version** | Rev D |
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**Document Status**

| Revision | Author | Reviewer | | Approved for issue | | |
|---|---|---|---|---|---|---|
| | | Name | Signature | Name | Signature | Date |
| A | Paul Henderson | Craig Lewis | | | | |
| B | Aaron Holloway | Paul Henderson | | | | |
| C | Aaron Holloway | Paul Henderson | | | | |
| D | Paul Henderson | Craig Lewis | | | | |
| | | | | | | |

# Contents

# Background & Understanding

A significant portion of the City's developed shoreline and downtown area is protected by the Beach Boulevard Seawall, a failing shoreline protection system due to both the design height and type. In response to the deficiencies of the structure and to plan for the potential for future increased water levels associated with sea level rise, the City is progressing the Beach Boulevard Infrastructure Resiliency Project (BBIRP or Project). The Project is divided into the following four phases:

- Phase 1: Preliminary Planning & Feasibility (complete)
- Phase 2: Project Design, Environmental Review & Permitting (this scope)
- Phase 3: Construction (to be determined)
- Phase 4: Post-Construction Monitoring & Reporting (to be determined)

In June 2020 the City contracted with the GHD Team, which consists of subconsultants (ESA, HKA and K&W), to complete Phases 1 & 2 of the Project. Phase 1 was competed in June 2021, which identified a preferred concept design alternative that was approved by Council to progress to Phase 2 for detailed design and permitting. The preferred concept is a hybrid shoreline protection system consisting of a seawall, rock scour apron and natural shoreline infrastructure. This proposal provides an update to the scope of work provided in response to the original RFP based on the outcome of Phase 1 and feedback from the community, City leadership and regulatory agencies.

This scope outlines the GHD Team's approach to delivering Phase 2 of the BBIRP, the final deliverable of which includes construction-ready plans, specifications, & estimates (PS&E) and support for the City to attain required permits and secure grant funding.

GHD's approach to the delivery of Phase 2 has been developed in 3 sub-phases, developed to align with significant milestones required in the permitting process for a Project of this nature:

- Phase 2a – Preliminary Design
- Phase 2b - Environmental Document (CEQA / EIR)
- Phase 2c - Final Permitting & Design

The intent of the sub-phase break down is for Phase 2a to develop a well-defined project and 35% PS&E sufficient for a robust CEQA Project Description to be developed. Phase 2b will involve the CEQA process and completion of the Environmental Impact Report (EIR). Once the requirements of CEQA are satisfied then Phase 2c will involve final PS&E and permitting such that the Project is ready to bid for construction. All the Phase 2 sub-phases include a comprehensive community and stakeholder engagement process, the value of which was identified in Phase 1 and was reenforced by Council at the time of approval for the preferred concept.

The Phase 2a scope represents the near-term effort, and the associated scope and fee are presented for contracting purposes. Because the work for Phase 2b and 2c is farther out in time and not yet funded, the scope and fee included here are based upon our current Project understanding and provide a general estimate of cost for informational and budgeting purposes. Community, stakeholder and agency input will influence the preferred Project as we progress, as such we are flexible with our approach scope and fee, by agreement with the City. We anticipate reviewing and refining the Phase 2b and 2c scope and fee with the City when the City is closer to contracting for those tasks.

### Estimated Schedule

The estimated Schedule for Phase 2 of the BBIRP is provided in Attachment 1.

### Estimated Fee

The estimated fee summary and breakdown are provided in Attachment 2 and Attachment 3, respectively.

# 1. Phase 2a: Preliminary Design

BBIRP Phase 2a will advance the shoreline protection concept, approved by City Council in Phase 1, through preliminary design development resulting in a well-defined Project supported with analyses, drawings and visualizations suitable for community outreach meetings to share information on the Project and solicit feedback on specific Project features. Phase 2a will be delivered generally under four primary subtasks: Management & Coordination of Services (Task 1.1), Preliminary Design (Task 1.2), Environmental Services (Task 1.3), and Community & Stakeholder Engagement (Task 1.4).

## 1.1 Management & Coordination of Services

### 1.1.1 Project Coordination

Paul Henderson served as the Project Manager (PM) through Phase 1 of the BBIRP and will continue to serve as our team's PM. Paul will be supported by his team discipline leads for environmental planning, public outreach, permitting, engineering, drafting and other required services.

Paul will provide overall coordination and management, directing resources and keeping project participants informed of progress, technical issues, planned activities, and events. Our project management style is to coordinate and communicate early and often with the greater project team, and key stakeholders.

GHD will utilize a Microsoft OneDrive site as the joint project document repository, were GHD's working review documents, final deliverables and City provided documentation will be stored and accessible to the City and the project team.

It is the Project Manager's responsibility to coordinate all reviews and associated responses to comments. Documents will be stored in project OneDrive site, and reviewers will be alerted of required reviews. A database of review comments and responses will be maintained. The review comment and response database will be in the form of a spreadsheet table, or other agreed tabular format.

### 1.1.2 Project Work Plan & Schedule

At the commencement of Phase 2a the Work Plan will be developed to detail the approach, schedule, and effort for the delivery of Phase 2. Initially, the Work Plan will have a detailed focus on Phase 2a, with higher level detail on the delivery of tasks for Phases 2b and 2c.

The Work Plan will be utilized as a project management tool to empower the project team, and for the City to review and agree on the detailed approach to delivering Phase 2 of the BBIRP. The Work Plan will be considered a 'live' document and updated as the project progresses and evolves.

Following approval to commence Phase 2 the detailed project schedule will be developed for the purposes of project tracking, forecasting and organization of resources. The schedule will be developed in Microsoft Project in the form of a Gantt Chart, which will be updated throughout the performance of the project.

### 1.1.3 Meetings

We anticipate the following meetings, which we will coordinate and document:

- Kickoff meeting: Review Phase 1 outcomes and set Phase 2 goals.
- Progress Meetings with City: occurring bi-weekly, primarily utilizing MS Teams, but may include and telephone and in-person meetings depending on the needs of the project. The average meeting length is anticipated to be 1 hour with longer meetings as needed to meet the needs of the project.

### 1.1.4 Project Financial Management

Financial management will include frequent internal project progress review, with monthly reporting to the City that includes an 's-curve' chart showing our original budget forecast over time as compared to our actual effort and forecast effort remaining to complete the project. This will assist the City with budget planning and enable the Team and the City to discuss alternatives early, if needed. Our management style is to provide transparent budget management and dealing with potential changes early.

Invoices will be issue to the City monthly and will include a full breakdown of effort by task, including quantities of hours and detailed descriptions of completed work for the time billed.

## 1.2 Preliminary Design

Phase 2a will advance the project from the conceptual hybrid alternative approved by City Council through to a well-defined 35% design package accompanied by a CEQA Project Description. This phase will include preliminary design analyses, drawings and visualizations to facilitate community outreach and engagement activities, and coordination with regulatory agencies. The preliminary design tasks will advance the hybrid concept by applying a greater level of detail and variation along the Project reach to account for the opportunities and constraints along each segment of the Project. We have assumed the reach will be divided into four segments: North Wall, Pier Wall, South Wall and Clarendon Gap.

### 1.2.1 Preliminary Basis of Design Report

The preliminary basis of design (BOD) report will summarize results of tasks 1.2.2 through 1.2.6 to describe the fundamental engineering principles guiding the development of the preliminary design drawings (Task 1.1.1). The BOD will summarize the preliminary engineering analyses and design tasks to document the key findings and how they informed design of the seawall, rock scour apron and natural shoreline infrastructure. The BOD will also demonstrate conformance with the established design criteria and objectives for each element of the hybrid alternative along each segment of the Project reach.

**Deliverables:**

- Preliminary Basis of Design Report (Draft and revised draft)

### 1.2.2 Seawall

GHD will progress the engineering analysis and design of the seawall. The conceptual hybrid alternative considered a secant pile wall, fronted by a rock scour apron. Given the significant cost estimated for the secant pile wall, this task will first evaluate the feasibility of using a different type of wall to reduce estimated construction cost. General progression of the seawall design includes:

- Develop site-specific parameters for use in seawall design along each segment of the project reach including geotechnical conditions, earth pressure, seismic, hydrostatic, later surcharge pressure, scour and wave impact.
- Conduct an internal "optioneering" & value engineering workshop to evaluate seawall type to be considered for each segment. Although CIDH/Secant Piles were determined to be a feasible option, there may be other more economical structural options along certain segments of the project reach (North wall, South wall, Clarendon Gap & Pier Abutment wall).
- Perform preliminary structural analysis and design of seawall along each segment of the project reach. Preliminary design will consist of developing typical sections and structural details as needed to illustrate each seawall type.
- Identify the materials and approximate quantities required for each segment of seawall, along with a description of the probable construction methods and equipment that will be used for the seawall.

**Deliverables:**

- Seawall type selection memorandum

- Preliminary structural analysis and design calculations

### 1.2.3 Coastal Hazard Analysis

The coastal hazard analysis will focus on the hazards associated with an extreme wave event, and will include wave load impacts on the seawall, and wave runup and overtopping, which could result in flooding of the Promenade and Beach Blvd. Under this task, the team will complete the following:

- Refine beach profile based on prior work and identify storm exposure characteristics along each primary segment of the Project reach (North Wall, South Wall, Pier Wall and Clarendon Gap) to provide additional details
- Refine prior wave runup and overtopping analysis, and apply to each segment of the project reach to consider detailed geometry, profile and storm exposure characteristics
- Use a deterministic approach to evaluate combination of parameters for use in establishing design crest elevation (i.e. water level, sea level rise, scour depth, wave height & period)
- Estimate of wave impact forces for use in structural design
- Evaluation of seawall crest configurations to reduce frequency and magnitude of wave overtopping (i.e. recurved wall, or secondary floodwall)
- Analysis of surface drainage improvements along the Promenade and/or Beach Boulevard to reduce duration and extent of coastal flooding due to overtopping of the seawall

**Deliverables:**

- Coastal hazard analysis memorandum (Draft and revised draft)

### 1.2.4 Rock Scour Apron

Preliminary design of the rock scour apron will be based on a deterministic analysis of potential water levels and wave heights breaking on or near the seawall, building on the hazards developed for each segment of the Project reach in Task 1.2.3. This task will develop the preliminary design cross-section of the rock scour apron including details showing the toe elevation, crest elevation, armor thickness, under-layer thicknesses and plan view width of this feature. We will evaluate the feasibility of using the existing rock based on calculations of the desired armor stone size, compared to the estimated volume and gradation of the existing armor stone.

**Deliverables:**

- Rock scour apron design calculations

### 1.2.5 Natural Shoreline Infrastructure

A preliminary feasibility study of a natural shoreline infrastructure concept will be conducted, and will consist of the following elements:

Shore change and sand transport parameters: Surf zone and shore, Mori Point to Mussel Rocks.

- Sand grain sizes: characterize existing sand sizes and other characteristics. Assume collection of up to 6 grab samples of the beach sand to be sent to a laboratory for grain size analysis.
- Shorelines: analyze the historical shoreline positions using available shoreline data to estimate erosion rates, including long-term, seasonal, and event fluctuations.
- Sand transport: compute wave-driven, along-shore sand transport rates using standard coastal engineering approaches (e.g., energy flux method, etc.).
- Sand Budget: conduct a rough estimate of the approximate sand budget at the project area. We will account for sand storage changes and apply computed sand transport rates to solve for likely range of sand supply/loss at Mori Point, Mussel Rocks and offshore boundaries of sand control volume.

- Shore Evolution Modeling: select and use shore evolution software (e.g., Unibest, GenCade, etc.) to model shore changes at the project site. We will first develop the model to represent the historical conditions and will establish a range of parameters to model shore responses to proposed sand placement.

Assess Likely Performance of Sand Placement Alternatives: Apply parameters and tools developed above to compute the persistence of sand placement at Beach Boulevard in terms of beach width over time.

- Consider a range of sand placement volumes and compute persistence of minimum desired beach width in terms of years following sand placement
- Consider range of sand grain sizes to assess benefits of using coarser sands

Review and summarize available information for sand sources (e.g., coordination with current ongoing efforts that are reviewing potential natural shoreline infrastructure sand sources offshore of Marin, San Francisco, and San Mateo Counties; review of USACE navigation dredging in San Francisco; local offshore sand deposits, etc.) and construction methods (e.g., sand dredging/excavation, transport and placement means and methods).

Provide preliminary assessment of natural shoreline infrastructure feasibility and range of parameters (e.g., sand size, placement volumes and dimensions, placement frequency, etc.) to advance into design, and describe expected construction techniques.

**Deliverables:**

- Natural Shoreline Infrastructure summary report (Draft and revised draft)

## 1.2.6 Urban Environment, Features & Amenities and Visual Simulations

This task will focus on preliminary design of the public access features and amenities of the Project. Building on the concepts developed and community feedback received during Phase 1, GHD will perform the following tasks:

- Develop a preliminary design concept along each segment of the project reach to illustrate the features and amenities that can be integrated into the Promenade
- Develop visual simulations or renderings to illustrate the features and amenities
- Develop up to 3 alternatives for the design of the Public Area between the protection structure and Beach Blvd. (does not include park space - designed by Gates Associates).
- Alternatives will be used for soliciting feedback during public presentation and workshops. To prepare for these public meetings, GHD will develop presentation materials and exhibits that communicate the following:
    - Alternatives showing the horizontal and vertical relationship between the protection structure, the public promenade, parking, road, and adjacent private residence. This relationship will be shown in plan view, sections, and 3d visualizations. The alternatives will reflect the proposed protection structure types provided by the civil team in order to show a more refined and realistic representation of the impact and change to the existing conditions versus what was previously presented in other workshops.
    - Alternatives for materials, styles, and general character of the elements will also be presented to allow for guidance on the desired aesthetic of the amenities.
    - Prepare exhibits of the preferred (per direction from previous workshops) Public Area design.

**Deliverables:**

- Preliminary design sketches,
- Visualizations
- Renderings illustrating the public access features & amenities

## 1.2.7 35% Plans

The 35% plans will be used as the basis for the CEQA Project Description and environmental document to be prepared in Phase 2B. Drawing details will be sufficient to illustrate the location and dimensions of the major project features based on the preliminary engineering analysis and design. Plans will be prepared in AutoCAD Civil 3D and

will include plan view, cross-sections and elevations of the major project elements to depict how they will vary along each segment of the Project reach. The 35% design drawings will be used to estimate quantities and establish the basis for the development of visualizations and renderings (Task 1.2.6) and will consist of about 20-25 sheets including the following:

- Title Sheet
- General notes, datums, abbreviations & symbols
- Seawall plan & elevation
- Natural shoreline infrastructure plan & typical sections
- Civil design - drainage improvements and other utility work
- Promenade Features & Amenities
- Preliminary design details (4 sheets)

This task will also identify the specification format to be used on the project and develop an outline of technical specifications.

**Deliverables:**

- Preliminary design (35%) plans and specifications outline (Draft and revised draft)

## 1.2.8 Constructability Review and Cost Estimate

As the design progresses GHD, and the project team, will review the design with consideration to constructability and cost. Real value can be realized by identifying potential construction issues, and value engineering alternatives, early in the project design. GHD's construction professionals will coordinate with construction industry partners to discus and workshop the design, considering alternative construction means and methods, access, available resources, and other pertinent aspects of the project construction. Constructability review and cost estimating outputs will include forecasts of labor, equipment, materials, and schedule that will be a deliverable provided to the environmental team to be utilized in the development of the EIR.

- Prepare constructability review of preliminary design plans
- Evaluate the potential means and methods of construction for purposes of estimating construction costs
- Estimate construction duration and types of equipment as needed to draft the CEQA Project Description
- Prepare opinion of probably construction cost
    - GHD will utilize in-house professional cost estimators and subcontracted specialist marine construction cost estimator, Bill Cooke.
    - The 35% design cost estimate will be developed in a report format, and will form the basis for future cost estimates as the project design develops.

**Deliverables:**

- Preliminary design (35%) cost estimate (Draft and revised draft)
- Preliminary design (35%) constructability review memorandum (Draft and revised draft)

## 1.2.9 Wave and Water Level Data Collection

We will provide hydrographic and hydrologic data collection pertinent to characterizing site conditions sufficiently for preliminary design and scoping of environmental review. The wave and water level data collected in this task will be used to inform the design of the seawall and the natural shoreline infrastructure components of the project, as well as inform the public landside improvements, such as the promenade.

- **Waves:** We will install a directional wave measuring device (buoy Sofar Spotter) coupled with a wave pressure sensor (RBR Virtuoso) offshore of the study area. An initial deployment of 6 months (winter conditions, approximately October to April) is proposed, and the instruments will be deployed and serviced from an ocean-safe vessel. Wave data will be made available on a website for BBIRP team (and public review if desired). We will

characterize data, compute wave transformations with Point Reyes NOAA buoy in terms of wave direction, frequency (period) and spectral density (wave height). Results will be compared with the CDIP-FEMA synthetic transformations (based on models only, no real data).

- **Water Levels:** We will install two nearshore water level measurement instruments (downward facing radar reflection) on the Pacifica Pier to measure water level fluctuations associated with incident waves and infragravity fluctuations (dynamic wave setup which varies with momentum transfer of incident wave groups often called wave sets) which are a critical component of wave loading and overtopping. The data will be analyzed in time series and frequency space, and correlated with available wave data. One instrument will be located at the end of the pier, one instrument will be located closer to the shoreline, and both instruments will push data to cloud-based data storage for real-time data viewing and to limit the potential for data loss. The instruments will be deployed on the same schedule as the wave instruments described above for "Waves." The data will be compared to implicit components of wave runup and overtopping calculations.

Buoy deployment will require compliance with applicable state and federal permit requirements, including those of the California Coastal Act and Clean Water Act.

With respect to the Coastal Act, the buoys are expected to qualify for a coastal development permit (CDP) waiver, pursuant to Coastal Act Section 30624.7. A CDP waiver still requires submittal of a complete CDP application.

We will prepare a CDP application package for the buoys. The application package will generally include a completed application form, supplemental information to support the application form, stamped envelopes addressed to owners and occupants of properties adjacent to the Project site, and a draft notice of pending permit for public posting. The supplemental information will include a detailed description of the buoy, and its purpose, deployment and recovery.

We will address up to two rounds of City comment on the draft application package. Upon receipt of final comments, we will prepare a final application for submittal to CCC. The proposed task budget provides for up to eight hours of staff time to support the City in responding to CCC comments on the submitted CDP application package. This scope of work assumes further that environmental setting in which the buoy will be deployed is sufficiently documented in existing available reports to support the CCC's review and that no additional site assessment is required.

CDP waivers typically do not require a hearing before the Coastal Commission. Accordingly, the budget for this task does not provide for staff's attendance at a Coastal Commission meeting. The budget does, however, provide for a coastal planner's participation in up to four teleconference/web meetings of one hour in duration, including one such meeting with CCC staff.

The buoys' Clean Water Act Section 404 compliance is expected to be covered under the USACE's Nationwide Permit (NWP) 5 (Scientific Measurement Devices). The NWP 5 has been pre-certified by the State Water Resources Control Board (SWRCB) as being compliant with Clean Water Act Section 401, subject to selected notification conditions.[1] We will prepare draft and final notices for City review, and submit the final notice to the Regional Water Quality Control Board).

**Assumptions:** GHD's subconsultant, ESA notes there are risks associated with field data collection, especially in the marine environment. ESA maintains insurance for instruments, and therefore takes the risk of damage to the hardware or loss. ESA also applies quality control procedures to reduce the possibility of malfunction. ESA will endeavor to complete the scope of work within the estimated fee and schedule with the data collected. ESA's policy is to notify clients if a problem arises and results in the need for added effort or schedule revision, so that the appropriate remedy can be identified and implemented. ESA requests the right to not re-deploy instruments if the risk of damage or loss, especially due to theft or vandalism, appears high. If this risk management approach is not acceptable to the City we would be pleased to discuss alternatives. This scope of work assumes that the buoy would qualify for a CDP waiver, NWP 5 coverage, and no other agency permits or approvals would be required.

**Deliverables:**

- Wave and water level instrument launch
- Maintenance and recovery

[1] State Water Resources Control Board, General Order for Clean Water Act Section 401 Water Quality Certification Action Order No. WQ 2021-0048-SWQ. October 12, 2021.

- Website for data access and viewing
- Draft and final CDP application package
- SWRCB Notice of Intent, Notice of Construction Commencement, and Notice of Project Complete.

### 1.2.10 Independent Design Review Coordination

The City will select and engage an independent Design Review group, who will review and make comments on the deliverables of Phase 2, including: civil engineering, coastal engineering, hydraulic engineering, geotechnical engineering, structural engineering, environmental impacts, constructability, and cost estimating. GHD will develop RFP scope for the City to use in procurement of independent design review consultants.

GHD will provide the City's Design Review group with access to the pertinent project documentation, including deliverables and review documentation. GHD will coordinate a design review workshop to facilitate the review process. GHD will prepare responses to comments, ensuring review, comment and response timeframes are kept to the required durations. The Project Manager will ensure all comments are addressed, either by amending the design or by providing explanation of reasons why the design is not amended. In either case the Project Manager will work with the Team, the City and the Design Review Group to ensure all design concerns are addressed.

During Phase 2a, reviews will occur at the 35% Design milestone and include review of technical reports, calculations, plans, and cost estimates; We assume all review comments will be received at one time.

**Deliverables:**

- Request for Proposal (RFP) scope (provided in basic formatting, assume City will package into a City formatted procurement document)
- Review and address comments and develop response matrix
- Design Review Workshop/Meeting notes

### 1.2.11 Funding Support

GHD has included budget to support the City on various activities related to finding and securing grant funds for the next phases of the Project. Our team tracks state and federal grant funding opportunities and have a significant amount of experience in securing these funds for clients. Activities to be carried out under this task may include researching specific grant opportunities, meeting with grant funding entities (e.g. project screening meetings), assisting the City in the preparation of grant applications (letters of intent or full applications); not to exceed the budgeted amount. Efforts under this task are as-needed and will be at the direction of the City.

## 1.3 Environmental Services

A clear and concise Project Description is critical to the associated environmental review. The Project Description will define the Project under review and consideration, and establish an understanding of the Project, its purpose, and need, and objectives. And because it provides the information to conduct the environmental review for the Project, it is the duty of the Project Description to present the facts of the proposed Project in a clear and useful fashion, prior to the initiation of CEQA and supporting technical studies.

The Notice of Preparation (NOP) signals the start of the CEQA review process and formally invites the public, as well as Responsible and Trustee agencies to participate and engage in that process.

### 1.3.1 CEQA Project Description

We will review the May 2021 Feasibility Analysis of Project Alternatives Report, the Preliminary Basis of Design Report prepared by GHD, and other material being developed by GHD including site plans, preliminary designs, and technical studies prepared by the GHD team to prepare and provide an initial draft project description. This task includes one site visit for the project team. The project description will meet the standards set forth in CEQA Guidelines Section 15124, including by identifying the characteristics of the project and construction details, and presenting the project

background, location, elements, and objectives, supplemented with graphics to illustrate the proposed improvements. The GHD team will prepare an initial draft project description that clearly describes in text and figures the proposed project design, and construction details at a level sufficient for incorporation into the CEQA analysis. Following receipt of City comments on the initial draft project description, the GHD team will prepare and submit for City review a revised draft project description. City comments on the revised draft project description will be incorporated into ADEIR-1 (Phase 2b).

**Deliverables:**

- Information Request(s)
- Initial Draft CEQA Project Description
- Revised Draft CEQA Description

### 1.3.2 Notice of Preparation

This subtask provides for the first steps in support of CEQA outreach activities. We will develop the Notice of Preparation (NOP) and Notice of Completion (NOC). The NOP will include a description of the project, the location of the project, and an identification of the probable environmental effects of the project. The NOC will comprise the standard CEQA Guidelines Appendix C form. We will work with the City to compile the mailing list for NOP distribution, including the standard distribution lists of the agencies. This scope of work assumes the City will provide the names and addresses of residents and businesses located within 1,000 feet of the project site. The NOP will include notification of a public scoping meeting to solicit public and agency input (see Task 1.4.4). We will distribute the NOP to the State Clearinghouse (along with the NOC), county clerk, agencies, the general public, and other stakeholders. We will mail up to 1,500 notices assuming the City will provide mailing list contact information for local residents and businesses.

**Deliverables:**

- Administrative draft NOP and NOC for review and comment
- Second administrative draft NOP and NOC
- Screencheck draft NOP and NOC
- Final NOP and NOC for printing and distribution

## 1.4 Community & Stakeholder Engagement

Building on best practices established in Phase 1, the GHD team will work in close coordination with the City in the design and implementation of community and stakeholder engagement activities for Phase 2a. Specifically, this will entail the continuation of the Ad-Hoc Committee, comprised of City Council members and select City staff, to solicit feedback on project developments and guide the community & stakeholder engagement activities. The Phase 2a engagement will include a combination of outreach methods to provide the City with 2-way communication that provides valuable input to the project, where input is needed.

The Ad-Hoc Committee will provide critical input at the inception of Phase 2a. The team has provided a scope below that will provide a robust outreach program with flexibility to adapt along the way based on the outcome of each engagement activity.

Formal coordination with stakeholder agencies will commence in Phase 2b, however agencies such as California Coastal Commission will be engaged during Phase 2a to solicit feedback on the project progress and key developments.

Attachment 4 contains a diagram showing the proposed Phase 2 Community & Stakeholder Engagement components.

### 1.4.1 Development of Engagement & Communications Plan

The Team will evaluate Community & Stakeholder Engagement Strategy Memo from Phase 1 to consider the relationships created, community objectives identified, and concerns raised during Phase 1. The Team will work with City of Pacifica (staff and Ad-Hoc Committee members) to develop a Phase 2 Community & Stakeholder Engagement Plan that:

- Identifies current key stakeholders
- Assesses potential issues/risks and proposed mitigation measure
- Identifies engagement activities and sequencing to support project development
- Provides an overview of the engagement approach
- Includes a timeline to align with the project schedule including design, CEQA process, and permitting requirements
- Outlines key communications approach and activities, such as identifying key messages, channels/media, and target audiences.

The development of the Engagement & Communications Plan takes place in Phase 2a, however it will be developed to cover the remainder of the project, with updates and additional detail being added and implemented if needed in future phases.

The Community & Stakeholder Engagement Plan will be developed in consultation with the City to identify a range of activities that can be undertaken throughout Phase 2a and how to appropriately sequence them.

The Team proposes core tasks and a menu list of optional items that the Ad Hoc Committee can choose from to deliver the best value in terms of 2-way communication with the community. Identifying a menu of engagement approaches will allow for flexibility to accommodate both current COVID-19 health and safety protocols and accommodate requests from the community for specific activities throughout the duration of Phase 2a.

The Team will create and manage a comprehensive stakeholder list and comment log to track and record comments received and corresponding responses. The log shall also include communications and meeting summaries with stakeholders and agencies. GHD will also create and maintain a project mailing list to be referenced for distributions of general updates and workshop invitations.

A key objective of the Community & Stakeholder Engagement Plan is to identify clearly which items the team requires feedback from the community, and which items do not. At this time, at a high level, the team anticipates feedback from the community on features behind the face of the wall, whereas engineering will determine the features of the 'wall' itself and in front of the wall, including the geometry, materials and other features of the walls, rock revetment and beach. Features behind the 'wall' will likely include landscaping, hardscaping, beach access and community amenities, which will be determined as the project progresses.

### 1.4.2 Implement Stakeholder Engagement Plan for Phase 2a

Implementation of the Stakeholder Engagement Plan will commence following final approval of the plan by the Ad-Hoc Committee, or approval by the City Council, depending on the City's preference.

Engagement activities are likely to involve residents and business owners adjacent to the project area, underrepresented populations, recreational groups, community organizations, and the public at large. Pandemic-related guidance, state and local gathering restrictions, and community transmission rates will be considered in the design of community engagement events. If in-person gatherings become restricted, virtual delivery methods shall be selected to align with the engagement approach identified in the Engagement Plan, provide flexibility for stakeholders, and protect public health.

The Team will design process, prepare materials, attend, document results, and develop a summary for each engagement activity. Engagement activities for Phase 2a includes:

#### 1.4.2.1 Core Items:

- Drop-in/Pop-up style workshops (5 workshops)
- Online surveys, non-map based (2 surveys)
- Public Workshops at key milestones during Phase 2a (3 workshops – 1 in-person and 2 virtual/hybrid), which will include:
  a. Brief review of Phase 1, and future phases outline
  b. Brief review of the reasons for, and objectives of, the project
  c. Present the preliminary design, explain where community feedback is required
     i. Key design features to be presented will be 'wall' alignments, wall height and wall guardrail aspects
     ii. Renderings and other visual aids will be utilized to convey the design intent
  d. Present and seek feedback on features and amenities
     i. focus on addressing concerns and potential impacts identified in Phase 1 such as impacts to viewshed, business, future use, amenities, etc.
  e. A summary of the workshop will be developed and published on the City's project web page
- Optional Ad-Hoc Committee meetings (5 meetings)
- Presentation of preliminary design to City Council (1 meeting)
- Workshop invitations sent to all City residents by postal mail, rather than electronic means only
- Summary memorandum / report for Phase 2a engagement

#### 1.4.2.2 Optional Menu Items:

- Additional Ad-Hoc Committee Meetings
- Additional Online Surveys
- Design working group meetings
- Support for City staff to perform targeted engagement of local residents and businesses assumes support for 10-20 one-on-one meetings/calls to be conducted at the onset of the project and periodically throughout the duration of Phase 2a on as needed basis
- Additional public workshop
- Presentations to smaller City committees (3 meetings)
-

#### 1.4.2.3 Development of Communications Materials

The Team will develop communications materials for the various engagement activities. Communications materials will convey messaging, provide information for events, invite event attendance etc. Communications materials include:

- Project timeline graphic to be updated if needed during the course of the project (1 graphic)
- Progress update summary at preliminary design completion to include design related materials (1 project sheet).
- Develop presentation materials (i.e. PowerPoint presentations, posters, etc.)
- Develop outreach materials in digital format (i.e. announcements, updates, social media posts, e-mail invitations, postcard, flyer, etc). Assumes City will print, mail, e-mail, post or otherwise distribute materials. If preferred, GHD can provide scope and fee for these services.
- Workshop promotion/invitation designs in digital format (for 1 public workshop)
- Project mailing list, updated as needed

### 1.4.3 Agency Engagement

Engagement with public agencies in Phase 2a will include the following:

- Meetings with California Coastal Commission (CCC) staff (4 meetings)
- Meeting with One Shoreline (1 meetings)
- Meeting with San Francisco Recreation & Park Dept/Golf Course (1 meeting)

### 1.4.4 CEQA Scoping Meetings

GHD assumes virtual tools will be used for CEQA Scoping Meetings (2) to align delivery with the engagement approach identified in the Engagement Plan, provide flexibility for stakeholders, and protect public health.

The purpose of the scoping meetings will be to present the proposed project and environmental review process, and to solicit stakeholder input on environmental concerns and issues to be addressed in the environmental documents. The GHD team will prepare materials, facilitate, and document results for one hybrid (in-person & virtual) Public Meeting and one virtual Agency Meeting to discuss scoping of the CEQA document.

**Deliverables:**

- Public Workshop Meeting facilitation (evening event)
- Agency Meeting facilitation (during business hours event)
- Presentations
- Workshop/meeting summaries

### 1.4.5 Phase 2a Engagement Summary

The engagement summary report will be developed to capture the Community and Stakeholder Engagement activities and interactions during Phase 2a.

**Phase 2a Community and Stakeholder Engagement Deliverables:**

- Community & Stakeholder Engagement Plan (Draft and revised draft)
- Public workshop facilitation
- Workshop presentations
- Online surveys
- Workshop/meeting summaries
- Communications materials
- Phase 2a engagement summary report (Draft and Final)

# 2. Phase 2b: Environmental Document

A project of this scale and importance to the community will require the preparation of an EIR. Our approach assumes the City will serve as the Lead Agency for CEQA compliance since project approval by the City is likely to be the first discretionary action (e.g., committing funds to advance the project through final design and permitting). Responsible agencies (e.g., California Coastal Commission, Regional Water Quality Control Board) will also rely upon the CEQA document to support their permit application reviews, and each agency will require the CEQA document be certified prior to issuance of their project approvals.

## 2.1 Management & Coordination of Services

Project management and coordination for Phase 2b will follow the same approach as for Phase 2a, outlined in Section 1.1 of this scope document.

## 2.2 CEQA Document Preparation

GHD will manage and review the environmental document preparation for the BBIRP, document preparation will be completed primarily by ESA, with support from the greater project team. This task presents the proposed scope for completing an EIR for the BBIRP, and includes tasks known at this time to be necessary to complete the CEQA process for an Environmental Impact Report (EIR). If it is later determined that other tasks are needed, or that a NEPA-compliant document is required, We will work with the City to determine an appropriate revised scope and fee, as provided for under Optional Task 2.4.

### 2.2.1 Prepare EIR Outline

Prepare and respond to one round of City review and comment on an annotated outline of the Draft EIR prior to initiating work on the full First Administrative Draft EIR (ADEIR-1; Task 2.2.2).

**Deliverables:**

– Draft and Final Draft EIR Outline

### 2.2.2 First Administrative Draft EIR

The ADEIR-1 will include the Project Description prepared under Task 1.3.1 and will evaluate the direct and indirect physical environmental effects of the project, as described therein. The ADEIR-1 will address project-specific and cumulative construction and operational impacts associated with each topic listed in CEQA Guidelines Appendix G. Where appropriate, the EIR will identify feasible mitigation to reduce or avoid significant impacts. A brief overview of the key ADEIR-1 sections, including a summary of EIR topics, is presented below.

**Summary**

The summary will be prepared in accordance with the requirements of CEQA Guidelines Section 15123. It will include a brief discussion of the project, including characteristics, location, and setting. It will identify the date of issuance of the NOP and outline the terms used in the EIR to describe level of significance of impacts. In addition, the summary will include tables summarizing project impacts, mitigation measures, and conclusions regarding level of significance after mitigation. The section will describe project alternatives and present a matrix comparing the impacts of the project with those of the alternatives. Finally, the summary will identify areas of known controversy or issues to be resolved.

**Introduction**

The introduction will include descriptions of the purpose and function of the EIR, the CEQA environmental review process and level of environmental review, and a brief project summary. This section will also describe related projects and planning efforts, and summarize public comments received during the scoping period. Finally, the

introduction will identify where copies of the Draft EIR can be obtained and provide instructions on how to comment on the Draft EIR during public review.

**Project Description**

The ADEIR-1 project description will be as prepared under Task 1.3.1, and will address City comments thereon.

**Environmental Setting, Impacts, and Mitigation**

We will prepare a description of the setting (including pertinent regulations), an evaluation of impacts, and develop appropriate mitigation as necessary, for each impact area identified in the CEQA Appendix G Environmental Checklist. The environmental topics expected to be the focus of this section are summarized below. The other topics identified on the Appendix G checklist (e.g., Energy, Minerals, Population and Housing) will also be addressed, albeit at a lesser level of detail.

*Aesthetics*

The aesthetics section will rely and build upon the visual resources characterization prepared in Phase 1 (ESA 2020b) to identify scenic vistas and scenic resources in the project area, describe the project area's scenic quality and identify and evaluate project effects upon potentially sensitive viewpoints. The description will rely on photo-documentation and visual simulations prepared by in earlier project tasks to support the section's impact analysis. The analysis will assess the potential for the project changes to affect scenic vistas or scenic resources, or otherwise conflict with applicable zoning and other regulations governing scenic quality. The section will also evaluate the potential for project construction or operation to result in substantial new sources of light and glare.

*Air Quality*

The air quality section will describe existing conditions in the project area (e.g., location of nearby sensitive receptors, ambient monitoring data, attainment designations, and emissions inventory) and natural factors (e.g., meteorology, climate, and topography) that affect the transport and dilution of pollutants. The section will present estimated project construction emissions of criteria air pollutants. Estimation of construction emissions will be based upon the construction equipment types and operating durations developed in Phase 2a, along with the worker vehicle and haul-truck trip estimates included in the transportation analysis. Operational emissions will be based upon the estimated change in vehicle miles traveled due to new/modified trips (if any), as presented in the transportation section, as well as emissions related to long-term natural shoreline infrastructure. The impact discussion will assess the project's potential to conflict or obstruct implementation of an applicable air quality plan; its contribution to increases in criteria air pollutants for which the project region is in non-attainment with applicable federal, state, or local standards; potential for exposure of sensitive receptors to substantial pollutant concentrations; and the potential for other emissions (e.g., odors) which could adversely affect large numbers of people.

In accordance with guidance from the Bay Area Air Quality Management District (BAAQMD), California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA), and the California Air Resources Board (CARB), We will analyze construction-generated criteria air pollutant emissions, Diesel Particulate Matter from diesel equipment, and exhaust particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (PM2.5) from construction-related combustion sources. We will calculate construction emissions using the current version of the CalEEMod air quality model at the time of EIR preparation, and will separately calculate emissions from stationary sources such as diesel backup generators and other equipment if applicable.

Given the scale of construction activities and potential sensitive receptors, a Health Risk Assessment (HRA) will be prepared to evaluate potential health impacts from project construction, largely from emissions from diesel-powered construction equipment. Other sources of potential health risk include routine testing of diesel-powered electrical generators and other on-site backup diesel equipment, diesel delivery trucks serving the project site, and project-related traffic.

We will evaluate maximum health risk impacts at nearby sensitive receptors from construction activities. The maximum impact for each phase of construction will consider localized construction emissions and distances to the closest receptors.

*Biological Resources: Terrestrial, and Marine*

These biological resources sections will draw upon the ecological characterizations prepared in Phase 1 (ESA 2020a, 2020c), and other recent studies of the project area. While the immediate project area's terrestrial ecology has been substantially modified over the years, important habitat for biological resources remains at the adjacent Laguna Salada, and offshore. The marine waters immediately offshore are designated critical habitat for green sturgeon, leatherback sea turtle, and black abalone. Additionally, critical habitat for humpback whale and southern resident killer whale is proposed for designation along the Pacific coastline.

The EIR will characterize the existing biological resources within a study area, and analyze potential direct and indirect effects of project construction and operation on special-status plants and animals and their habitats; sensitive natural communities, including wetlands and other potential environmentally sensitive habitats; movement of native resident or migratory fish or wildlife species; and potential conflicts with relevant, applicable local policies and ordinances, regulations, or conservation plans.

*Cultural Resources, and Tribal Cultural Resources*

To determine the cultural resources and tribal cultural resources sensitivity of the BBIRP Project area, we will prepare a Cultural Resources Survey Report (CRSR) that establishes a project-level study area, and includes background research at the Northwest Information Center of the California Historical Resources Information System (CHRIS) and other archives and repositories as necessary, a surface survey, a reconnaissance-level architectural survey, and an evaluation of potentially impacted historic-age architectural resources. We will also review the potential for submerged cultural resources, including sunken vessels, using the California State Lands Commission shipwreck database and available multibeam bathymetric or other geophysical data. This scope assumes that there are no more than 35 historic-age architectural resource in the project area that that may be impacted by the project (e.g., the Municipal Pier and Promenade constructed in 1974, buildings and structures located within 150 feet of Beach Boulevard that were constructed prior to 1980). These properties will be documented on the appropriate California Department of Parks and Recreation (DPR) 523 form(s) and will be evaluated for significance using the National Register of Historic Places, the California Register of Historical Resources and Pacifica City Landmark (Municipal Code Section 9-7.201) criteria.

The CRSR will document the methods and findings of the CHRIS records search, other archival research, archaeological survey, Native American coordination, will include site records updates (California Department of Parks and Recreation 523 Forms) for previously recorded cultural resources identified in the APE as well as documentation of newly identified historic-age cultural resources within the study area. The CRSR, will meet the requirements of CEQA, and support future Section 106 documentation if needed. Recommendations for additional work will be provided, and could include archaeological site evaluation, monitoring during project implementation, and/or actions to follow in the event of an inadvertent discovery of archaeological materials or human remains.

The CRSR will provide the basis for the cultural resources and tribal cultural resources sections of the CEQA document. This includes an analysis to determine what impacts, if any, the project may cause on cultural resources. Where required, mitigation measures will be developed to address potential impacts.

To the greatest extent possible, we will reference material and analysis from the Sharp Park Specific Plan and the Sharp Park Specific Plan EIR for those portions of the study area that overlap with those documents. In addition, we will contact the Native American Heritage Commission to request information on known sacred sites in the project vicinity. We will draft letters for the City to send to tribes who have requested consultation in compliance with Public Resources Code 21080.3.

*Geology and Soils*

The geology and soils section will draw upon the work performed during the Phase 1 Feasibility Study, and other publicly available materials. The impact discussion will address the potential effects of project construction and operation associated with seismic impacts related to fault rupture; seismically induced ground shaking, ground failure (e.g., liquefaction), and landslides; soil erosion and loss of topsoil; construction on unstable soil or geologic units; and potential to encounter unique paleontological resources. In addition, we will conduct an analysis of coastal processes to assess the effects and effectiveness of the project.

The stand-alone coastal process analysis will characterize beach performance for the proposed project and alternatives, utilizing and building upon the modeling performed during Phase 2a. The purpose of this study is to evaluate the effects of the beach alternatives, the effectiveness of the beach alternatives, and to document the sediment sources, transport and likely placement approach. The impact discussion will consider potential effects of the project and alternatives under range of conditions (e.g., sea-level, wave events) and possible management activities (e.g., scheduled and delayed sand placement). The analysis may consider different combinations of beach width, beach materials (e.g., sand or gravel), sea-level rise amount, and single or repeated sand placement, as appropriate.

*Greenhouse Gas Effect*

The Greenhouse Gases (GHG) section will include a setting section, explaining the various types of GHGs potentially emitted, the regulatory context including applicable plans and policies for the reduction of GHG's within California, and the significance thresholds applicable to the proposed project. Short-term impacts due to project construction, and longer term impacts due to natural shoreline infrastructure will be assessed. We will estimate GHG emissions associated with the Project construction and operational phase using CalEEMod and other tools and emission factors as appropriate. Because the BAAQMD does not specify GHG thresholds for construction, GHG emissions from Project construction shall be amortized over the life of the Project for comparison with the BAAQMD's operational threshold. The project will also be assessed for consistency with state and local plans developed for the purpose of reducing GHG emissions including the state's 2017 Climate Change Scoping Plan Update for achieving the statewide GHG target mandated by SB 32 and Executive Order No. S--3-05 that established a goal of reducing the State's GHG emissions to 80 percent below the 1990 level by the year 2050. Consistency with the City's 2014 Climate Action Plan and latest GHG Reduction Strategy will also be assessed. Mitigation measures will be developed if impacts are identified to be potentially significant.

*Hazards and Hazardous Materials*

We will describe the existing environmental conditions at the project site to determine whether the potential exists for site workers, the public, or the environment to be exposed to hazardous materials. This evaluation will rely upon available environmental, geological, and hydrological documents prepared in concert with and independent of the proposed Project. We will identify existing and potential hazardous materials sites on and near the project site from the California List of Hazardous Materials Release Sites (or Cortese List) and will present an overview of the federal, State, and local regulations that apply to the transport, storage, use, and disposal of hazardous materials within and adjacent to the project sites.

*Hydrology/Water Quality*

The hydrology and water quality section will describe the existing hydrologic and water quality environment in the project area, including the drainage areas where project components would be located, existing sewer system infrastructure, groundwater levels, and coastal water quality. The impact discussion will assess the project's potential to violate water quality standards or otherwise degrade water quality; substantially alter drainage patterns or surface runoff which could result in substantial erosion, flooding, or exceedance of stormwater drainage system capacity; and increase risk of pollution due to flood hazard, tsunami, or seiche. In particular, the analysis will consider the water quality impacts of the initial sand placement and natural shoreline infrastructure program, including potential for leaks and spills associated with the dredger and/or onshore earthmoving equipment, as well as that associated with the handling and placement of sand.

*Noise and Vibration*

To evaluate impacts resulting from construction-generated noise and vibration, locations for the collection of long-term (48-hour) noise data at two (2) locations, and up to four additional short-term noise measurement locations will be determined in consultation with City staff. We will collect this data to establish a baseline for estimating the magnitude of construction- and operational-related impacts. Noise levels will be predicted using the Roadway Noise Construction Model of the Federal Highway Administration (FHWA). The section will identify sensitive noise receptors located near the Project area (e.g., residences, schools) that could be affected by project construction and operations. The impact analysis will focus on the potential noise and vibration impacts generated by the project, including potential increases in temporary noise levels along local roadways due to hauling of excavated materials and deliveries.

*Recreation*

The recreation section will build upon the recreational resources characterization prepared in Phase 1 (ESA 2020b) and characterize existing recreational facilities in the project area, their conditions, and present available general user information obtained from existing, publicly available sources. The section will also identify and describe similar alternative recreational facilities in the region. The direct effects on existing recreational amenities (e.g., the Promenade, Municipal Pier, picnic tables, benches, and beach areas) and construction of new amenities will be the subject of the EIR overall, and the environmental impacts of those actions will be addressed under the topical sections corresponding to the resources affected. The recreation section's impact discussion will address the project's secondary construction and operational effects on recreational facility usage. For example, the analysis will consider whether project area closure during construction would result in increased use of other regional recreational facilities such that substantial physical deterioration of the "receiver" recreational facilities would result. Mitigation will be developed if necessary to reduce a potentially significant impact.

*Transportation and Circulation*

The transportation and circulation section will describe the existing setting and conditions for traffic, transit, pedestrians, bicycles, emergency vehicle access, loading and parking. The impact discussion will assess impacts of the project on transportation during construction (i.e., construction impacts) and after project completion (i.e., operational impacts). The impact discussion will evaluate whether the project would create potentially hazardous traffic conditions for homeowners, motorists, pedestrians, or cyclists; interfere with pedestrians or cyclist accessibility; delay public transit; impede emergency vehicle access; and cause substantial additional vehicle miles traveled or substantially induce automobile travel. To establish baseline conditions, we will collect 3-day traffic counts at up to six (6) locations in and around the Sharp Park neighborhood.

*Utilities and Service Systems*

Construction of the BBIRP could affect existing public utilities and we will provide an analysis of potential utilities impacts (including water, wastewater, stormwater, electric power, natural gas, telecommunications facilities, and solid waste) and identify mitigation measures, as applicable, for avoiding potential conflicts with utilities during project construction.

*Other CEQA Issues*

The EIR will include a section addressing other topics whose consideration is required under CEQA Guidelines Sections 15123(b)(2) and 15126(b) through (d), including growth-inducing impacts, significant unavoidable impacts, significant irreversible changes, and areas of known controversy and issues to be resolved. The subsection on growth inducement will discuss whether the project has the potential to foster economic or population growth that could impact environmental resources. The discussion of significant unavoidable impacts will identify significant impacts of the project that cannot be reduced to a less-than-significant level with mitigation and will briefly summarize the associated impact discussions. The discussion of areas of known controversy and issues to be resolved will address controversies associated with the project's environmental effects, mitigation, alternatives, and issues requiring resolution by the City Council.

*Cumulative*

We will initiate the cumulative impact discussion task by compiling a list of cumulative projects in the project vicinity. The list will include capital improvement projects and other projects in the area that could contribute to cumulative environmental impacts. The cumulative impact analysis, as required by CEQA, will assess the residual (i.e., post-mitigation) project impacts along with those of past, present, and foreseeable future projects. For each environmental topic area, the cumulative impact analysis will consider the relevant geographical area of impact, whether the combined effects of project and one or more cumulative projects would result in an impact that is cumulatively significant, and whether the project's incremental effect is cumulatively considerable.

*Alternatives*

The Alternatives chapter will be prepared in accordance with the requirements of CEQA Guidelines Section 15126.6. We will review the alternatives examined in Phase 1 for their ability to present a "reasonable range" of alternatives as required under CEQA, and work with the City to develop feasible CEQA alternatives capable of avoiding or reducing

physical environmental impacts identified by the analyses for evaluation in the EIR. The analysis will examine these alternatives with respect to their ability to meet project objectives, assess the resulting environmental impacts of the selected alternatives, and qualitatively compare alternatives. This scope assumes review of four alternatives, including the No Project Alternative, and a discussion of alternatives considered but rejected.

**Assumptions:**

- Significant project changes after initiation of analysis (e.g., addition of project variants) or redirection may affect the project schedule and require additional analyses not included in this scope.
- The EIR will include an evaluation of up to four alternatives, including the No Project Alternative.
- For ADEIR-2 and Screencheck Draft EIR, comments from the City will be provided as a consolidated set with internal discrepancies resolved.

**Deliverables:**

- Administrative Draft EIR No. 1 (electronic and 5 hard copies)

### 2.2.3 Second Administrative Draft EIR

We will incorporate comments on ADEIR-1 and prepare ADEIR-2 for review.

We will also prepare and submit with ADEIR-2 a legal advertisement for newspaper publication, a Draft Notice of Availability (NOA) of a Draft EIR (announcing the public review of the DEIR) and a Draft Notice of Completion (NOC, for agency review of the DEIR).

**Deliverables:**

- Administrative Draft EIR No. 2 (electronic and 4 hard copies), Draft Legal Ad, NOA and NOC

### 2.2.4 Screencheck Draft EIR

Following review of the ADEIR-2, We will incorporate comments and prepare a Screencheck DEIR for review and comment. We will also prepare revised drafts of the legal ad, NOA, and NOC. This scope assumes that at this stage comments from the City will be minimal, limited to correction of typographic errors and minor changes in wording; additional, more extensive revision can be covered under an augmented budget.

**Deliverables:**

- Screencheck Draft EIR (electronic plus one hard copy)
- Revised Draft Legal Ad, NOA, and NOC

### 2.2.5 Public Draft EIR

We will produce and distribute the Draft EIR (USB drives and hard copies) to the City, resource agencies and public libraries, and will distribute the NOA to other entities on the mailing list. We will prepare and post public notices in accordance with CEQA requirements and the City's requirements. This scope assumes we will be responsible for postage, handling, and delivery costs and physical mailing of the notices, public postings, and Draft EIR. We will submit the Draft EIR, NOA, and NOC to the State Clearinghouse. The City will be responsible for newspaper publication of the legal advertisement. During the public review period, the project team will manage and facilitate stakeholder engagement meetings as described under Task 2.3, below.

**Assumptions:**

- The City will submit the legal advertisement to appropriate local newspapers and the County Clerk.
- We will submit the Draft EIR, NOA, and NOC to the State Clearinghouse.
- We will deliver hard copies to City, GHD and local public libraries. Resource agencies will be provided the Draft EIR on a USB drive (assumes tracked delivery of up to 30 USB drives).

- We will print up to 1,500 notices and distribute via regular U.S. mail.
- Draft EIR hard copies are estimated at up to $200 each.

**Deliverables:**

- Public Draft EIR (10 hard copies with appendices on USB drives; 50 USB drives) and electronic version for website posting
- Final Legal Ad
- NOA, and NOC
- References cited in the EIR (on 2 USB Drives)

### 2.2.6 Final EIR

Following public review, we will prepare a Final EIR and Mitigation Monitoring and Reporting Plan (MMRP). The Final EIR will include a response to comments document (RTC) that summarizes comments received, provides responses to public agency comments, and presents errata and other revisions to the Public Draft EIR, as warranted. The Draft EIR together with the RTC will comprise the Final EIR. At this time, the number, nature, and extent of comments on the Draft EIR cannot be predicted. We have assumed a budget sufficient to respond to a reasonable number of comments based upon similar projects and given the potentially controversial nature of this project. For the purposes of this scope of work, we assume that responses will not require major new analysis in any resource area, any substantive changes to the project description, or any new quantitative analysis of a substantive nature.

At the conclusion of the public review period for the Draft EIR, we will compile all comments received from the public, organizations, and agencies. The first task will be to bracket all comment letters. Each comment letter, organized by Agency (State and Local), Tribe, Organization, and Individual, will be assigned a unique identifier (e.g., the California Coastal Commission, a state agency, would be identified as "S-CCC"). All text within the letter will be broken down into separate and individual comments, and each comment will be assigned its own identifier (e.g., S-CCC-01). This will create multiple (tens, hundreds) of individual comments within each letter, depending on the length and content of each comment letter.

All comments received will be responded to in the Final EIR, either by a Master Response (general response covering recurring technical topic raised by multiple commenters) or an individualized response, or both. We will prepare and submit for City review a first Administrative Final EIR (AFEIR-1) containing proposed responses to comments on the Draft EIR. This submittal will not contain errata changes or a revised Draft EIR. We assume the City will provide one set of consolidated comments back (including staff, and legal review). After receipt of comments, we will prepare a second Administrative Final EIR (AFEIR-2). This version will contain revisions to the responses to comments per City comments, and an errata identifying all changes proposed to the Draft EIR sections resulting from response to comments. The AFEIR-2 containing proposed responses to comments on the Draft EIR will be submitted to the City for review.

We will address reviewer comments on the AFEIR-2 in a Screencheck Final EIR; we assume that comments on the Screencheck Final EIR will be minimal. One meeting will be held to conduct a page turn of the Screencheck Final EIR prior to printing and production.

After the City has reviewed the Screencheck Final EIR, we will incorporate the minor necessary revisions into the document and will mail a USB flash drive containing the document (not hard copy) to each public agency (and tribal entity) that commented on the Draft EIR, per CEQA Guidelines Section 15088(b). We will prepare a notification of responses to comments available and of the certification hearing for posting on the City's website and will mail the notice to all members of the public (Individuals) who commented on the Draft EIR; no flash drives will be mailed to these individual commenters, but flash drives will be made available to individuals upon request. No radius mailing will be conducted.

We will also prepare a draft Mitigation Monitoring and Reporting Program (MMRP) and Notice of Determination (NOD) for review by the City. The MMRP will describe the required mitigation necessary to avoid or reduce significant impacts, the responsible parties, tasks, and schedule necessary for monitoring mitigation compliance. The NOD will

comprise the standard CEQA Guidelines Appendix D form. We will incorporate one consolidated set of City comments and will prepare the final MMRP and NOD.

**Assumptions:**

- For AFEIR-2 and Screencheck Final EIR, comments from the City will be provided as a consolidated set with internal discrepancies resolved.
- The City will prepare Findings, a Statement of Overriding Considerations (if necessary), and Resolutions for consideration by City Council.
- The City will submit the NOD to the State Clearinghouse and file with the County Clerk within 5 days of project approval, and will be responsible for payment of CEQA filing fees (i.e., County and Department of Fish and Wildlife).
- We will send the Responses to Comments document to agencies that commented on the Draft EIR.

**Deliverables:**

- First Administrative Final EIR, electronic versions in Word and PDF formats.
- Second Administrative Final EIR, electronic versions in Word and PDF formats.
- Screencheck Final EIR, electronic versions in Word and PDF formats.
- Final EIR, electronic versions in Word and PDF formats.
- Draft and Final MMRP and NOD, electronic versions in Word and PDF formats

# 2.3 Community & Stakeholder Engagement

Community and Stakeholder Engagement in Phase 2b will have 2 streams:

1. Community and agency outreach activities (similar to Phase 2a)
2. CEQA Document (Environmental Impact Report (EIR)) meetings

GHD understands there may be a pause in the project following Phase 2a, dependent on available funding. The Community and Stakeholder Engagement scope outlined below provides a plan to move forward, however the Team appreciates that changes may be needed based on timing, funding and other influences. Our approach is flexible, and we will work with the City if amendments are needed.

Virtual tools will be used in Phase 2b to align delivery with the engagement approach identified in the Engagement Plan (developed in Phase 2a), provide flexibility for stakeholders, and protect public health. GHD team will attend coordination meetings with the City and Ad-Hoc Committee to plan, advise on and select virtual platform, obtain platform host license, organize and schedule practices and events, develop runsheet, and facilitate one Public and one Agency Draft EIR meeting.

## 2.3.1 Update of Engagement & Communications Plan

Upon commencement of Phase 2b the Team will review the Engagement & Communications Plan to confirm the previously planned strategy remains relevant, making amendments as needed and in conjunction with City staff and the Ad-Hoc Committee.

## 2.3.2 Community Engagement

Community engagement in Phase 2b will provide 2-way communication to provide detail of the project and seek feedback where input is required. Phase 2b is focused on the CEQA process and preparation of an EIR which includes several opportunities for public review and input.

Phase 2b community outreach will include:

#### 2.3.2.1 Core Items:

- Ad-Hoc Committee meetings (3 meetings)
- Drop-in/Pop-up style workshop (4 workshops)
- Final EIR presentation to City Council
- Summary memorandum / report for Phase 2b community engagement

#### 2.3.2.2 Optional Menu Items:

- Additional Ad-Hoc Committee Meetings
- Additional Online Surveys
- Workshop invitations sent by postal mail, rather than electronic means only
- Design working group meetings
- Support for City staff to perform targeted engagement of local residents and businesses assumes support for 10-20 one-on-one meetings/calls to be conducted at the onset of the project and periodically throughout the duration of Phase 2b on as needed basis
- Additional public workshop
- Project presentation to City Council
- Interactive workshops with GHD landscape architects and engineers

### 2.3.3 Agency Engagement

Engagement with public agencies in Phase 2b will include the following:

- Meetings with California Coastal Commission (CCC) staff (2 meetings)

### 2.3.4 CEQA Document (EIR) Meetings

GHD team will design process, prepare materials, attend, facilitate, document results, and develop a summary for one virtual Public Meeting and one virtual Agency Meeting to align the commencement of the public comment period associated with the release of the draft EIR, and satisfy CEQA requirements.

Assumes that City will establish a process for receiving comments, collect comments during the comment period, and provide comments to the GHD team. If preferred, the GHD team can provide scope and fee for establishing and monitoring a project specific e-mail address that may be used for collecting comments.

The Public Meeting shall be designed to align with engagement approach as identified in the Engagement Plan and adapted based on outcome of Phase 2a outreach and engagement activities.

If the draft EIR public meetings can be held in-person, the GHD team will attend the public meetings in-person and will be responsible for providing the following additional meeting materials: audio/visual equipment, comment cards, signs, speaker request cards, sign-in sheets, and refreshments. We assume the City will secure the meeting venue.

**Deliverables:**

Meeting #1: Draft EIR Public Meeting (*assumes virtual, <100 attendees)*

- (2) Preparation Meetings/Rehearsals
- (1) Technical support
- (1) Meeting host/moderator
- (1) Meeting attendance summary
- (1) Meeting summary and (1) transcript of comments captured to support EIR finalization
- (1) digital format file of Meeting recording

Meeting #2: Draft EIR Agency Meeting (*assumes virtual, <100 attendees*)

- (1) Preparation Meeting/Rehearsal
- (1) Technical support
- (1) Meeting host/moderator
- (1) Meeting attendance summary
- (1) Meeting summary and (1) transcript of comments captured to support EIR finalization
- (1) digital format file of Meeting recording

### 2.3.5 Final EIR Presentation to Council

The GHD team will develop materials, prepare presentation, attend practice sessions, and present and help respond to technical questions during one City Council meeting on the Final EIR.

**Deliverables:**

- Develop presentation materials
- Attend preparation sessions and City Council meeting

## 2.4 (Optional Task) NEPA Document Preparation

As an optional service, the GHD team will prepare additional environmental compliance documentation necessary to satisfy the Federal Emergency Management Agency's (FEMA) National Environmental Policy Act (NEPA) requirements for issuance of Building Resilient Infrastructure and Communities Grant funds for the project, if awarded. We anticipate the type and scope of the NEPA document will be determined in coordination with FEMA. As a result, the effort required to prepare the document cannot be estimated with precision at this time. Regardless of document type, we expect the NEPA analysis will draw heavily upon the work completed for the CEQA document. Additional work in the areas of environmental justice and socioeconomic impacts, and to support federal agency consultations may be required. For budgeting purposes, we estimate that the NEPA compliance documentation effort would be approximately $150,000. If the project is selected for BRIC funding and NEPA is required, we anticipate revising the scope and fee in coordination with the City and FEMA.

# 3. Phase 2c: Permitting and Final Design

Permitting and final design of the Project will occur in parallel, with updates to the design package performed as needed to satisfy information required in the permit applications and in response to questions or comments received from agency staff during processing of the permits. An anticipated list of the permits required for the Project are provided in Section 3.2 and the tasks associated with final design of the Project are described in Section 3.3. The sequence and overlap of these tasks, will be developed in a Phase 2c work plan informed by agency feedback received during the pre-application meeting (Task 3.2.1).

## 3.1 Management & Coordination of Services

Project management and coordination for Phase 2c will follow the same approach as for Phase 2a, outlined in Section 1.1 of this scope document.

## 3.2 Permitting

The GHD team will assist the City in obtaining permits and authorizations from the state and federal resource agencies. The full extent of environmental regulatory permit application requirements cannot be determined until the final Project design is selected and the Project area is defined. Based upon existing Project concepts, we expect the Project will require permits or other approvals from the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), National Marine Fisheries Service (NMFS), California Coastal Commission, and California State Lands Commission. Securing permits from these agencies will involve regular conference calls, meetings and written correspondence, which will be led by the GHD team with support from technical staff and City representatives as needed. Once the Project area is known, based on the outcome of Phase 2b, we will review potential regulatory agency jurisdictions to confirm these assumptions. If it is determined that one or more of these jurisdictions are not present within the Project area, some tasks listed below may not be required.

### 3.2.1 Pre-application Agency Coordination

Following publication of the EIR, the GHD team's permitting specialists will schedule a pre-application meeting with the USACE and encourage attendance by the RWQCB, California Department of Fish and Wildlife, Coastal Commission, U.S. Fish and Wildlife Service, NMFS, and State Lands Commission. This meeting will introduce the Project to the regulatory agency representatives and solicit their input on the Project design and permitting assumptions. This will provide immediate feedback from the agencies and streamline the permitting process. We will prepare an interagency meeting request letter that will include a summary of the Project description, description of the Project site, reason for the Project, and other pertinent information. We will prepare a brief PowerPoint presentation and meeting agenda in coordination with the City.

This task assumes two (2) one-hour conference calls- one to prepare for the meeting (before) and one to debrief from the meeting (after) along with the Interagency Meeting which by then will be conducted virtually or in person at the USACE office in San Francisco. This task assumes that 6 GHD team staff will attend the interagency meeting and the conference calls.

**Deliverables:**

- Draft and Final Interagency Meeting Request for City Review (electronic copy)
- Draft and Final Interagency Meeting PowerPoint presentation (electronic copy)

### 3.2.2 U.S. Army Corps of Engineers 404 Permit Application

We anticipate the Project may qualify for approval under the Corps Nationwide Permit (NWP) 13 for Bank Stabilization and will prepare the associated USACE Clean Water Act (CWA) Section 404 permit application and supporting documents. A Nationwide Permit Pre-Construction Notification (PCN) Form will be prepared for the Project, including a detailed Project description (with all pertinent maps and plans), along with a discussion of the Project's impacts on jurisdictional wetlands and waters, proposed avoidance, minimization, and mitigation measures, and supporting maps and/or graphics. The permitting project description will be based on the project description presented in the CEQA document prepared for the Project and will be refined with project updates and specific details required for permit applications. The Cultural Resources Report (developed in Task 2.2.2), and the NMFS Biological Assessment (Task 3.2.4) will be submitted with the permit application.

Our coastal engineers will determine the elevation and approximate location of the mean high tide line (MHTL) and the high tide line (HTL) for use in permitting with various agencies, including the USACE and others. The elevation of the MHTL will be identified by interpreting available published tidal datums from NOAA. The elevation of the HTL will be identified as the maximum predicted high tide for the Project site in the calendar year of when the work is anticipated to be constructed. The MHTL and HTL will be shown on the Project base map for use in permitting and design analyses.

**Deliverables:**

- Draft and Final USACE Section 404 Permit application for City Review (electronic copy for City; electronic and hard copy for submittal to USACE)

### 3.2.3 Regional Water Quality Control Board 401 Permit Application

In accordance with CWA Section 401, the RWQCB must take certification action for projects that propose impacts to jurisdictional waters and wetlands subject to a permit issued by the USACE, to ensure the activity complies with state water quality standards. The RWQCB typically also conducts a concurrent review of projects under the Porter-Cologne Water Quality Control Act, which results in the issuance of Waste Discharge Requirements which are incorporated into the 401 Certification. To obtain certification for the proposed project, we will prepare the Section 401 Water Quality Certification / Waste Discharge Requirements Application Form and supporting documentation. The permit application will include a detailed permitting project description, a discussion of the project's impacts on jurisdictional waters, proposed avoidance, minimization, and mitigation measures, and supporting maps and/or graphics.

**Deliverables:**

- Draft and Final RWQCB Section 401 Permit application for City Review (electronic copy for City; electronic and hard copy for submittal to RWQCB)

### 3.2.4 National Marine Fisheries Section 7 Consultation

Our biologists will prepare a NMFS Biological Assessment (BA) to support USACE consultation with NMFS Section under 7(c) of the Endangered Species Act. One of our fisheries biologists will conduct a reconnaissance-level survey of the site and will include information from the habitat assessment in the BA. The BA will evaluate project impacts on federally listed species that have potential to occur in the project area, and to critical habitat which occurs within the project area and include conservation measures to reduce impacts to this species and its critical habitat. As part of the

BA, we will also do an assessment of potentially affected Essential Fish Habitat (EFH) regulated under the Magnuson-Stevens Fishery Conservation and Management Act.

**Deliverables:**

- Draft and Final NMFS Biological Assessment for City Review (electronic copy)

### 3.2.5 Coastal Development Permit

The City has a Local Coastal Program (LCP) and maintains coastal development permitting (CDP) authority for onshore facilities. The project will also affect portions of the Coastal Commission's retained jurisdiction and therefore will require a CDP from the Coastal Commission. The Coastal Act (Section 30601.3) provides for consolidated review of CDP applications for projects affecting both LCP and CCC retained jurisdictions where all parties agree to the consolidated review. Under the consolidated review approach, the Coastal Commission reviews the project pursuant to the Coastal Act and affected the LCP (as guidance) and issues a single CDP for the entire project. We recommend the consolidated approach because it streamlines the permitting process and potentially limits the number of permits and permit conditions that must be tracked. We will coordinate with the City and the Coastal Commission in attempt to secure agreement around the consolidate CDP approach. Assuming agreement will be reached, we will prepare an application for consolidated CDP for submittal to the Coastal Commission.

As part of the Coastal Development Permit application, we will prepare a sea-level rise and wave runup analysis of the Project that provides the following:

- Defines the range in sea-level rise that is expected over the life of the Project. We assume that others will provide the expected life of the Project.
- Provides an estimate of the 100-year total water level (TWL) or wave uprush elevation and landward extents for existing and future conditions with sea-level rise. This will largely rely on analyses completed in Phase 2a, but minor updates are expected, including the extreme value analysis and calculations for specific sea-level rise amount(s).
- Describes the capacity of the Project design to accommodate sea-level rise, and the likely timing and scale of future adaptation to higher amounts of sea-level rise. This capacity assessment will be used to identify likely sea-level rise adaptation triggers (e.g., amount of sea-level rise as an indicator for change, including response time).
- Describes how the Project site may be constrained with future sea-level, and to what degree the Project would unavoidably affect coastal resources.

Pursuant to Coastal Act Section 30607.7, coastal development permits for projects involving sand replenishment require the project applicant to provide onsite monitoring and supervision during the implementation of the permit. We will prepare a monitoring plan to measure and document the Project's performance after construction. The monitoring plan will describe how the physical and biological resources will be monitored after construction. Our focus will be on developing monitoring protocols, metrics, and triggers that can inform the physical and biological changes after construction. We will consult with the Coastal Commission staff and others to assist in identifying the goal and objectives of the monitoring plan, and to discuss the scope of biological information needs that the monitoring plan will address.

We assume that the monitoring plan would include the following topics:

- Description of the pre-project baseline conditions, including the physical conditions of the site, topography and bathymetry, waves and water levels, and recreational and biological use
- Brief description of Project and its potential modes of change; define Project success criteria for physical and biological indicators; define triggers for subsequent interventions or decisions
- Describe the need to document construction activities and how the post-construction baseline conditions will be developed
- Describe the frequency and scope of monitoring and reporting that will be needed for the Project, including physical and biological surveys, regional data collection (e.g., meteorological, oceanographic, etc.), input from promenade and beach users, including surfers, on the project

- Describe how the monitoring and data collection will be used to inform the evolution of the Project after construction; measure the successes of the Project relative to set criteria; identify the important lessons learned from implementing and monitoring of the Project, including the persistence of the sand placement, how and where the sand moves from the placement location, effectiveness of construction methods and proposed changes in design, implications of Project on beach users/recreation, biology, surfing

We will prepare a draft monitoring plan that will be delivered to the City for review. We will revise the draft within three weeks of receipt of one set of consolidated, non-conflicting comments, and then will submit an administrative draft to the Coastal Commission (and others as needed) for review. The administrative draft will be considered the final deliverable of the monitoring plan scope. We assume that a final monitoring plan will be prepared and submitted during project bidding and prior to construction.

**Deliverables:**

- Draft and Final CDP application for City Review (electronic copy for City; electronic and hard copy for submittal to Coastal Commission)
- Draft and Revised Draft Monitoring Plan

### 3.2.6 State Lands Commission Lease

The California State Lands Commission (SLC) has jurisdiction and management control over those public lands of the state received by the State upon its admission to the United States in 1850 ("sovereign lands"), including all ungranted tidelands and submerged lands, among other areas. Due to its location along the Pacific Ocean coastline, the Project will require authorization from the SLC through issuance of a new lease. We will prepare a lease application with attachments for submittal to the SLC via the agency's Online System for Customer Applications and Records (OSCAR). The application package will generally include a completed application form, supplemental information to support the application form, Project plans, existing available technical studies, and verification or status of other permits. The agency requires the submitted plans to display the SLC's jurisdictional boundary (i.e., the mean high tide line) that has been field-verified by a licensed professional land surveyor within 6-months prior to submittal to the SLC. This scope assumes the survey will be prepared by others. The supplemental information will also include a detailed permitting Project description, along with a summary of the EIR's findings regarding environmental impacts, potential Project effects on those resources, and mitigation measures whose implementation would reduce or avoid impacts on those resources. The supplemental information will also summarize and append to the application package, as warranted and available, additional relevant plans and technical analysis developed after EIR publication (e.g., technical documents developed to support project design or project performance).

**Deliverables:**

- Draft and Final Lease application for City Review (electronic copy for City; electronic and hard copy for submittal to SLC)

**Permitting Assumptions:**

- If the USACE determines that the Project does not qualify for approval under a NWP, and an Individual Permit is required, we can prepare a separate scope and budget for this effort.
- If an Incidental Take Permit under Section 2081 of CESA is required from the California Department of Fish and Wildlife, we will prepare a separate scope and budget for this work upon request from the City.
- This scope and budget do not include preparation of a Mitigation and Monitoring Plan. We will prepare a separate scope and budget to prepare this plan once agency consultation clarifies potential permit conditions upon request from the City.
- GHD team staff have access to the entire project area including staging and access areas.
- The City will be responsible for any fees associated with the regulatory permits.
- If a traditional land survey, such as formal property boundaries and maps for general use are required we can provide a licensed, professional land surveyor to complete this work, and can provide additional scope and fee to complete this work.

- Based on our current knowledge of the Project area, consultation with the US Fish and Wildlife Service is not required.
- The CRSR prepared under task 2.2.2 will be sufficient for use by the USACE in Section 106 their consultation with SHPO.
- It is assumed that there will only be one (1) review of the draft applications by City and the City will provide one (1) set of consolidated comments on draft applications.

### 3.2.7 Local Permits

We will coordinate with the City's Department of Public Works to secure local permits or approvals required for project elements which involve modifications to existing utility infrastructure or new public amenities that will be maintained by the City. We assume that most of the project will involve improvements on City property and to City owned infrastructure. Any County permits would also be covered under this task. We have included an allowance in the budget for this task, although the specific permits/approvals are not well defined at this time. The need for City & County permits will be better understood at the conclusion of Phase 2a & 2b and may necessitate some adjustments to the estimated budget prior to authorization to proceed on this task.

## 3.3 Final Design

The final design effort will build upon the 35% plans to include design modifications identified during the CEQA process, feedback from agencies based on their review of the initial permit applications, and detailed engineering analysis and design tasks required for the development of a final design package. For the purposes of this proposal, GHD have assumed that the City will contract the Project as a single traditional Design-Bid-Build project. The final deliverable for this task will be a bid package consisting of final plans, specifications and the engineer's estimate of probable cost. A key assumption in the development of this proposal is that the project scope and length will be similar to that depicted on the conceptual drawings prepared in Phase 1. Any significant modifications to the Project that occur through Phase 2a and 2b may warrant amendments or revisions to the scope of work and estimated budget for this task.

### 3.3.1 Design Quality Management Plan

GHD is an ISO 9001-certified professional services firm and operates with an integrated approach to project planning, setup, management and review via our project management database, which incorporates project management cycles, risk management, knowledge management, and is also used to address the requirements of our Quality Management System and Health Safety and Environment Management System at the project level. As part of our day-to-day business, we operate under stringent quality systems and processes. A Design Quality Management Plan will be developed for the Project and submitted to the City for review prior to commencing design work for the 65% Design Package. The Design Quality Management Plan will include quality control procedures for:

- Internal and inter-discipline design and drawing reviews
- Independent Design Review group
- City's reviews
- Management of subcontractors/sub consultants
- Organization chart showing: Project Manager, discipline leads, quality control review responsibilities, calculation check, constructability and operability review responsibilities, document use authorization
- Design change process
- Quality control of design tools, forms and documentation

**Deliverable:**

- Design Quality Management Plan

## 3.3.2 Coastal Engineering Analysis and Design

A thorough understanding of the environmental conditions and coastal processes within the Project area is critical to the design and implementation of a successful Project. The detailed design phase will include additional field data collection, numerical modeling and analysis of coastal hazards to finalize the design of the seawall, rock scour apron and natural shoreline infrastructure. Tasks associated with developing the final coastal design parameters include the following:

**Surf Zone Bed Surface Characterization**

We will survey two shore transects, oriented approximately perpendicular to shore. We anticipate one transect north of the pier and one south of the pier. Data collection will consist of the elevation of the bed from the shore to approximately 1,200 feet offshore up to a depth of 25 feet NAVD/MLLW, and surface sand grab samples. A data report will be provided with surveyed elevation profiles, including comparison with other available data and previously estimated profile (ESA 2021a), and grain size distributions at each location and composited for each profile. These data are not available but are typically required for natural shoreline infrastructure design and environmental review.

**Data Collection Assumptions:**

– Same data collection assumptions described in Task 1.2.9 also apply to this task.

**Coastal Design Criteria**

We will quantify coastal design criteria, consisting of incident wave height and period, coincident ocean water levels, wave runup elevation and overtopping volume. We will quantify these parameters for the recurrence intervals and structure geometry identified in the wall design. We will use XBeach and/or a boussinesq model to simulate the waves and water levels across the surf zone, as well as beach response, for up to four selected offshore conditions (i.e., extreme wave and water level conditions). For each condition, we will use the modeling to ascertain the wave height and water level at the structure toe and total water level for the preferred beach alternative. Scour depth at the structure toe will be used to determine effects on local water depth and wave height. These calculations will be conducted at up to four locations. Overtopping rates will be provided in terms of volume per foot of seawall as a function of negative freeboard for each reach. The wave and water level conditions incident to the structure will be used to conduct final structure loading calculations for input into the structural analysis of the seawall.

**Deliverables:**

– Coastal Engineering Design Memorandum (Draft and Final)

## 3.3.3 Basis of Design Report

The preliminary BOD prepared in Phase 2a will be revised to reflect the updated analysis and design work performed under each discipline of coastal (Task 3.3.2), structural, geotechnical, civil, and landscape architecture design.

The structural design will consider site–specific geotechnical conditions (including liquefiable materials), earth pressure, seismic, hydrostatic (ground water), lateral surcharge pressure, scour and wave impact forces. Our geotechnical engineers will provide a final design report summarizing the geotechnical parameters to be used in structural design calculations. The main objective of the evaluation is to estimate the required structural capacity of the seawall structures by conducting analyses using anticipated and code basis loads. Service life and maintenance requirements for the seawall structures will also be important considerations. The Basis of Design document to be prepared by the Team will include documentation of vertical (gravity) and lateral (wave, surcharge, and seismic) load resisting systems for the replacement seawall using design basis loading per ASCE 7, USACE Engineering Manual 1110-2-1614 and other applicable design standards.

Civil engineering design will consist of a variety of improvements required to the Promenade and Beach Boulevard to maintain access and provide functional and improved utility systems through the corridor. A key civil engineering task will be the sizing and design of a drainage system to reduce the frequency and magnitude of flooding from wave overtopping. Additional civil engineering design services will be performed for utility connections behind or through the proposed seawall structure, such as the multiple storm drain outfalls which penetrate the existing seawall.

**Deliverables:**

- Draft and Final Basis of Design Report

## 3.3.4 Plans, Specifications & Estimate (PS&E)

The GHD Team will prepare 65%, 95%, 100% plans, specifications and estimates of probable construction costs (final design submittal milestones). Each design phase will incorporate and address the City's comments from the previous submittal, agency comments and permit conditions, and outstanding design issues identified at the prior submittal phase. The 100% plan set will be signed and sealed for use by the City to acquire bids from qualified contractors.

All plan sheets will be plotted on 22" x 34" at an appropriate scale and be provided in PDF format. We anticipate the final design plans will consist of about 50-60 sheets, assuming the entire Project reach will be included in the drawing package. We anticipate the final design drawings will consist of the following sheets:

- Title sheet
- General Notes
- Site plan sheets
- Survey control sheets
- Demolition sheets
- Erosion control sheets
- Seawall plan and profile sheets
- Seawall typical sections
- Structural Detail Sheets
- Civil / Grading Plan sheets
- Civil / Grading cross sections
- Storm drain plan & profile sheets
- Civil & storm drain details
- Features and Amenities Plan Sheets
- Features & Amenities Cross-sections
- Features & Amenities Details

**Specifications**

The specifications will outline the material properties and required performance needed to complete the work, construction tolerances and other technical (and environmental protection) considerations. Issues associated with site access or conflict with existing infrastructure will also be detailed in the specifications. As the design develops the technical specifications will be drafted for the 65% submittal, with the completed specification set submitted at 95%. Special provisions will be included for work items not contained in standard specifications. Measurement and Payment terms will be identified for each bid item within the specifications. GHD intends to use the CSI Specifications format, however this can be discussed with the City if a different format would be preferred i.e. Caltrans.

**Constructability Review and Cost Estimate**

As the design progresses, GHD and the project team, will review the design with consideration to constructability and cost. Real value can be realized by identifying potential construction issues, and value engineering alternatives at each phase of project design. GHD's construction professionals will coordinate with construction industry partners to discuss and workshop the design, considering alternative construction means and methods, access, available resources, and other pertinent aspects of the Project construction. Constructability review and cost estimating outputs will include forecasts of labor, equipment, materials, and schedule that will accompany each PS&E submittal milestone (i.e. 65%, 95% and 100%). GHD will utilize in-house professional cost estimators, a subcontracted specialist marine construction cost estimator and input from specialist piling and marine construction general contractors with a focus on the following items:

- Prepare constructability review of design plans & specifications
- Evaluate the potential means and methods of construction for purposes of estimating construction costs
- Prepare opinion of probable construction cost

**Deliverables:**

- 65% submittal of plans, specifications & cost estimate (PDF and 3 full size hard copies for City review)
- 95% submittal of plans, specifications & cost estimate (PDF and 3 full size hard copies for City review)
- Bid Package - 100% submittal of plans, specifications & cost estimate (PDF and 3 full size hard copies)

### 3.3.5 Independent Design Review Coordination

The scope of this task will be similar to Task 1.2.10 in Phase 2a and involve coordination and responses to the independent design review efforts. We assume the same reviewer will be engaged by the City for the Phase 2c and that a separate RFP process will not be required. Reviews during Phase 2c are assumed to occur at three design milestones: 65% Design, 95% Design, 100% Design and include review of technical reports, calculations, plans, specifications, and cost estimates. We assume all review comments will be received at one time.

**Deliverables:**

- Review and address comments and develop response matrix for each design milestone
- Three Design Review Workshops/Meeting notes

## 3.4 Community & Stakeholder Engagement

The GHD team will work in close coordination with the City in the design and implementation of community and stakeholder engagement activities for Phase 2c. Specifically, this will entail the continuation of the Ad-Hoc Committee, comprised of City Council members and other City staff, to vet content, messaging, and identify any opportunities for final consultation before bringing them to the public. We assume most agency meetings and coordination will occur at the staff level and be completed by Project team members during Phase 2c permitting and design activities described in Tasks 3.2 and 3.3. Kearns & West will be leading the public facing engagement activities during this phase in addition to facilitating a pre-application meeting with multiple agencies (3.2.1). Technical staff from the Project design team (GHD, ESA and HKA) will also be involved to develop and present content at these meetings.

### 3.4.1 Development of Communications Materials

Develop digital content (i.e.; copy, graphics, maps, etc) for project webpage. *Assumes existing project webpage hosted and updated by City will be used.*

- (1) update Project timeline details for Phase 2, and
- (3) progress update summary at 65%, 95%, and 100% Design to include design related materials.

Develop materials in digital format (i.e.; announcements, updates, social media posts, e-mail invitations, postcard, flyer, etc). *Assumes City will print, mail, e-mail, post or otherwise distribute materials. If preferred, GHD can provide scope and fee for these services.*

- (2) Workshop promotion/invitation designs in digital format
- Update Project mailing list

**Deliverables:**

- Project webpage content, digital communications material

### 3.4.2 Community & Stakeholder Engagement Activities

GHD shall plan, prepare materials, attend, document results, and develop summaries for two (2) public workshops aligned with 65% and 95% design milestones to present the progress of the permit process and the design work. Activities will be designed to allow an opportunity for the public to provide input and feedback on the process for arriving at the design requirements for the milestone and ask clarifying questions to the Project Team. Materials and visual aids will be prepared to present design features, landscaping/hardscaping, amenities, aesthetics, consideration of property requirements and easements, and utility relocations. GHD recommends an on-site drop-in session and online survey or accessible methods to engage diverse populations.

GHD recommends the following Community & Stakeholder Engagement activities for Phase 2c

- (3) Ad Hoc Committee meetings
- Public Workshop/Meeting #1 – Report back on feedback received in Phase 2a/2b, present on progress of design and permit/approval processes
- Public Workshop/Meeting #2 – Present final design, updated timeline for construction, what to expect for construction
- (4) Drop-in/Pop-up style workshops
- (1) Online survey (sequenced with Workshop/Meeting #1, same topics)
- Support for City staff to perform targeted engagement of local residents and businesses assumes support for 5-10 one-on-one meetings/calls to be conducted periodically throughout the duration of Phase 2c on as needed basis
- Materials/graphics development
- Summary of Phase 2c outreach

**Deliverables:**

- Public workshop facilitation
- Presentations
- Online surveys
- Workshop/meeting summaries

### 3.4.3 Presentation to City Council

GHD will plan, prepare materials, attend, document results, and develop summaries for one presentation to Council workshops aligned with design milestones to present the progress of the permitting process and the progress of the design work.

**Deliverables:**

- Develop presentation materials
- Attend preparation sessions and City Council meeting

# 4. General Assumptions

The following general assumptions have been considered in the development of the scope and fee for BBIRP Phase 2, in addition to the specific assumption made in the scope descriptions above. If any of these assumptions should be corrected GHD can discuss with the City and amend scope and fee as needed, by agreement.

1. BBIRP Phase 2 work will be influenced by the input of government agencies and other stakeholders. GHD and our subconsultants have prepared this scope in good faith, based on our experience of similar projects. We anticipate the scope may change based on input from agencies and stakeholders and subsequent direction from the City. Changes to the scope and fee presented in this document will be by agreement between the City and GHD.
2. The City will engage outside consultants for the purpose of independent design review i.e. GHD has not included the cost of these consultants. If needed GHD can include this cost, however the preference would be for the City to assume this cost to avoid perception of conflict of interest.
3. Anticipated approximate schedule for Phase 2:
    a. Phase 2a - Preliminary Design will have a duration of 12 months
    b. Phase 2b - Environmental Document will have a duration of 12-18 months
    c. Phase 2c - Final Permitting & Design will have a duration of 12-18 months

# Attachments

# Attachment 1

## Fee Estimate – Summary

# BBIRP Phase 2 Proposal

## Budget Summary Table

*11/16/2022*

| Phase 2a - Preliminary Design | | GHD Labor | Subs & Expenses | Total |
|---|---|---|---|---|
| Task 1.1 | Management & Coordination of Services | $ 116,104 | $ 60,648 | $ **176,752** |
| Task 1.2 | Preliminary Design | $ 346,200 | $ 394,394 | $ **740,594** |
| Task 1.3 | Environmental Services | $ 22,208 | $ 102,964 | $ **125,172** |
| Task 1.4 | Stakeholder Engagement | $ 154,595 | $ 357,320 | $ **511,915** |
| | | $ ***639,107*** | $ ***915,326*** | $ ***1,554,433*** |

| Phase 2b - Environmental Document | | GHD Labor | Subs & Expenses | Total |
|---|---|---|---|---|
| Task 2.1 | Management & Coordination of Services | $ 118,703 | $ 169,579 | $ **288,282** |
| Task 2.2 | CEQA Document Preparation | $ 254,113 | $ 1,290,028 | $ **1,544,141** |
| Task 2.3 | Stakeholder Engagement | $ 87,095 | $ 243,008 | $ **330,103** |
| Task 2.4 | Optional Task (NEPA Document Preparation) | $ 32,673 | $ 177,892 | $ **210,564** |
| | | $ ***492,584*** | $ ***1,880,506*** | $ ***2,373,091*** |

| Phase 2c - Final Permitting & Design | | GHD Labor | Subs & Expenses | Total |
|---|---|---|---|---|
| Task 3.1 | Management & Coordination of Services | $ 93,124 | $ 71,666 | $ **164,790** |
| Task 3.2 | Permitting Support | $ 170,663 | $ 374,914 | $ **545,578** |
| Task 3.3 | Final Design | $ 678,709 | $ 382,403 | $ **1,061,112** |
| Task 3.4 | Stakeholder Engagement | $ 76,588 | $ 195,241 | $ **271,829** |
| | | $ ***1,019,084*** | $ ***1,024,225*** | $ ***2,043,309*** |

| *Project Totals (Phase 2a - 2c)* | GHD Labor | Subs & Expenses | Total |
|---|---|---|---|
| *Total* | $ *2,150,775* | $ *3,820,057* | $ *5,970,832* |

**Notes:**

1. Assumed Phase 2a - Preliminary Design will have a duration of 12 months for the purpose of this fee estimate
2. Assumed Phase 2b - Environmental Document will have a duration of 12 months for the purpose of this fee estimate
3. Assumed Phase 2c - Final Permitting & Design will have a duration of 12 months for the purpose of this fee estimate
4. GHD has allowed for annual rate escalation of 3.5% which is included in the amounts above.
5. Direct cost expenses are estimated based on 3.5% of GHD's labor cost, includes travel and other expenses. This will be used to cover direct costs with backup provided.
6. At this time no further onsite geotechnical investigations are required. If this changes GHD will consult with the City i.e. if current wall type changes to another type
7. Staff included in the City's On-Call Agreements utilize the On-Call rates, other staff utilize GHD standatd rates.

# Attachment 2

## Summary of Community Engagement and Agency Outreach Activities

# BBIRP Phase 2 Outreach

## Community Engagement[1]

| No. of events | Activity Description | Primary Firm |
|---|---|---|
| **Phase 2a - Preliminary Design** | | |
| 1 | Engagement Plan | K&W |
| 2 | Workshops - Virtual | K&W |
| 1 | Workshops - In-person | K&W |
| 5 | Pop-up style workshop | K&W |
| 2 | Surveys - online | K&W |
| 1 | CEQA scoping meeting - Public (in-person or hyl | K&W |
| 1 | Summary of Phase 2a Outreach | K&W |
| 1 | Meeting with City Council to approve plan | GHD |
| 5 | Ad-Hoc Committee meetings (Optional) | K&W |
| 1 | Presentation of prelim design to Council | K&W |
| 3 | Smaller Committee meetings | K&W |
| **Phase 2b - Environmental Document** | | |
| 1 | Engagement Plan - Update | K&W |
| 3 | Ad-Hoc Committee meetings | K&W |
| 1 | Draft EIR meeting - Public | K&W |
| 0 | Workshops - Virtual | K&W |
| 0 | Workshops - In-person | K&W |
| 4 | Pop-up style workshop | K&W |
| 1 | Summary of Phase 2b Outreach | K&W |
| 1 | Final EIR Presentation to City Council (virtual) | K&W |
| **Phase 2c - Permitting & Final Design** | | |
| 1 | Engagement Plan - Update | K&W |
| 1 | Workshops - Virtual | K&W |
| 1 | Workshops - In-person | K&W |
| 3 | Ad-Hoc Committee meetings | K&W |
| 4 | Pop-up style workshop | K&W |
| 1 | Surveys - online | K&W |
| 1 | Summary of Phase 2c Outreach | K&W |
| 1 | Final Presentation to City Council | K&W |

## Agency Engagement[1]

| No. of events | Activity Description | Primary Firm |
|---|---|---|
| **Phase 2a - Preliminary Design** | | |
| 4 | California Coastal Commission (CCC) Meeting | GHD |
| 1 | Oneshoreline | GHD |
| 1 | Golf Course/SF Rec Park | GHD |
| 1 | CEQA scoping meeting - Agency (virtual) | K&W |
| **Phase 2b - Environmental Document** | | |
| 1 | Draft EIR meeting - Agency (virtual) | K&W |
| 2 | California Coastal Commission (CCC) Meeting | GHD |
| **Phase 2c - Permitting & Final Design** | | |
| 1 | Pre-application Multi-Agency Meeting | K&W |
| 6 | CCC | GHD/ESA |
| 4 | State Lands | GHD/ESA |
| 1 | CDFW | GHD/ESA |
| 2 | NMFS | GHD/ESA |
| 3 | USACE | GHD/ESA |
| 1 | Oneshoreline | GHD/ESA |
| 3 | RWQCB | GHD/ESA |
| 2 | City Planning (CDP consolidation) | GHD/ESA |

Notes:

1. The quantity and type of outreach activities have been developed for budget estimating purposes based on input from the project team and City. These events are subject to change throughout the course of the project based on the effectiveness of each activity and direction from the Ad-hoc committee, City Council, City staff, community and regulatory agencies.

2. GHD is the lead for all activities in the BBIRP project, 'Primary Firm' indicates which firm in the GHD Team will primarily complete the work for the activity.


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