CITY OF COOS BAY
JOINT CITY COUNCIL / URA WORK SESSION
Agenda Staff Report

MEETING DATE	AGENDA ITEM NUMBER
March 14, 2017	

TO: URA Chair Kramer and Board Members

FROM: Jim Hossley, Director of Public Works

THROUGH: Rodger Craddock, City Manager

ISSUE: Consider Approving Design Contract for Hollering Place Seawall

SUMMARY:

The seawall that once protected the Hollering place soil from wave erosion has failed. The City requested a proposal from KPFF Consulting Engineers to develop a bank stabilization design and to provide permitting support necessary to implement the preferred solution. The proposed approach will utilize rock and Large Woody Debris (LWD) or some type of Bio-engineering techniques. KPFF proposal includes Phase 1: Preliminary Design and Phase 2: Final Design and permitting.

ACTION REQUESTED:

At the March 21st regular Council meeting staff will request Council consider authorizing the City Manager to enter into a professional contract with KPPF to provide consultant services for the above mention consultant scope; phase 1, and phase 2 not to exceed $55,650.

BACKGROUND:

A seawall is a man-made structure erected to protect the shore from tidal waves and thus prevent erosion and flooding. Apart from providing coastal defense, a seawall protects human habitation and recreational activities from the sea waves. A seawall reduces the wave energy by reflecting it back to the sea. This greatly reduces the energy and erosion of the existing coastline. If nothing is done the erosion will continue, and quite possibly expand further inland, and threaten abutting properties.

KPFF is one of the City's consultants on our miscellaneous engineering services contract.

BUDGET IMPLICATIONS:

Funding to support Phase 1, Preliminary Design, is $29,450 and for Phase 2, Final Design, is $26,200. The combined consultant services cost for both phases is $55,650. These funds would come from Urban Renewal Agency Empire Capital Projects Fund, GL # 58-945-530-3112 (Hollering place Project).

111 SW Fifth Avenue, Suite 2500 Portland, OR 97204 503.542.3860 **kpff.com**

March 2, 2017

Randy Dixon
City of Coos Bay
500 Central Avenue
Coos Bay, OR 97420

Via Email: rdixon@coosbay.org

RE: Proposal for Project Management and Engineering Services
Hollering Place Bank Stabilization Project

Dear Randy:

We are pleased to provide you with this Civil Engineering Services proposal for the Hollering Place Bank Stabilization Project in Coos Bay, Oregon. We understand that the proposed project will address bank erosion at the Hollering Place property with a rip rap section.

We thank you for the opportunity to provide you with the following proposal for this project. If this proposal is acceptable, we will finalize our agreement through a mutually approved contract.

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

Sincerely,
KPFF Consulting Engineers

Curtis C. Vanderzanden
Principal

Attachments: Scope of Services and Fee

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SCOPE OF SERVICES AND FEE

Hollering Place Bank Stabilization Project

A. PROJECT UNDERSTANDING

The riverbank near Hollering Place has been experiencing erosion. The City of Coos Bay has requested a proposal from KPFF Consulting Engineers to develop a bank stabilization design and to provide permitting support necessary to implement the preferred solution. The proposed approach will utilize rock and Large Woody Debris (LWD) or some type of Bio-engineering techniques.

KPFF will be assisted by the following subconsultant partners:

- **WEST Consultants, Inc.** will provide hydraulic design, tide and wave analysis, scour analysis and riprap sizing.
- **Pacific Habitat Services** will provide environmental documentation and permitting services.

As requested, the following scope of work is separated into two distinct phases; Preliminary Design and Final Design. We understand that the City may decide to proceed with only the first phase at this time.

B. TASK BREAKDOWN

PHASE 1: PRELIMINARY DESIGN

Task 1A: Project Management and Administration - KPFF shall provide management, coordination and direction to the Project Team throughout the duration of the Project, including:

- **Project Coordination -** Consultant shall coordinate with the City's Project Manager and staff as needed. Coordination will occur via telephone communication, written correspondence, e-mail and meetings.
- **Project Schedule -** Consultant shall develop, monitor and maintain a project schedule. Schedule updates will be provided on a monthly basis, with invoices and progress reports.
- **Monthly Invoices -** Consultant shall prepare monthly billing invoices in a format approved by the City.
- **Meetings -** Consultant shall schedule, conduct, prepare for, attend and document meetings; up to two (2) meetings in Coos Bay and up to two (2) additional meetings will be conducted via conference call.

Task 1A - Deliverables: *Project Schedule; Invoices; Meeting Agenda and Meeting Notes*

Task 1B: Revetment Design and Analysis - WEST Consultants shall provide the following revetment design and analysis during Phase 1:

- **Data Collection and Review -** Consultant shall collect and review available information including, but not limited to, aerial photographs, tide data, wind data, LiDAR, survey data, USACE bathymetry data and existing hydraulic models. Data collected and reviewed will be documented in the report completed as part of Task 6.

- **Site Reconnaissance -** Consultant shall conduct a field reconnaissance of the project site. Observations noted during the field reconnaissance will be documented in the report completed as part of Task 6.
- **Tide and Wave Height Analyses -** Consultant shall complete analyses to define the tide and wave conditions at the project site. The tide data will be based on information available from the NOAA Charleston, OR tide station. Consultant shall use available wind data to define the anticipated wave heights at the project site.
- **Size Rock Revetment -** Consultant shall size riprap and recommend horizontal and vertical extents using methods described in the ODOT Hydraulics Manual. Consultant shall provide recommendations for incorporating large woody debris into the design of the revetment.
- **Scour Analysis -** Consultant shall estimate the scour anticipated at the site using methodologies and equations available in the USACE Coastal Engineering Manual.
- **Documentation -** Consultant shall prepare a draft and final report describing the analyses and results of the above described tasks.
- **Quality Control Check -** Consultant shall perform a complete Quality Assurance/Quality Control (QA/QC) check of the work product/report. Either a check of the calculations or an independent analysis will be performed as deemed necessary. Checks will be made of all computer program input and the accurate use of the results. Upon completion of the QA/QC check, the original designer will incorporate revisions with confirmation.
- **Meetings and Coordination -** Consultant shall participate in up to two (2) meetings located in Coos Bay or Portland; meetings will be coordinated and facilitated by others. Consultant shall coordinate via telephone and/or email as needed.

Who are others?

Task 1B - Deliverables: *Riprap Sizing for design; Draft and Final Reports*

Task 1C: 30% Plans and Construction Cost Estimate – KPFF shall provide the following engineering services necessary for the development of 30% Plans and an Estimate of Construction Costs including:

- Develop 30% Plans including:
  - Cover Sheet
  - Existing Conditions
  - Site Plan
  - Typical Sections
  - Erosion and Sediment Control
- Develop 30% Estimate of construction costs based on the 30% Plans.
- Develop a Preliminary Design Technical Memorandum summarizing work completed and identification of outstanding issues remaining to be resolved.
- Conduct QC review of deliverables prior to submittal.

Task 1C - Deliverables: *30% Plans and Estimate; Preliminary Design Technical Memorandum*

Task 1D: Conduct Determination of High Tide Line, Review Current Conditions, Communicate with Agencies and Prepare Permitting Memo - Pacific Habitat Services will provide the following environmental consulting services:

- Determine the limit of State and Federal jurisdiction at the project site. The US Army Corps of Engineers (Corps) and the Oregon Department of State Lands (DSL) will require the City to obtain permits for any work below the high tide line. This elevation is generally slightly higher than the mean higher high water mark.
- PHS will visit the property and place flags at the location that we believe marks the high tide line. We assume a surveyor will survey the locations of our flags. While on-site, we will also review conditions, which will be needed in order to design the bank stabilization methodology and complete the joint permit application.
- This task also includes reaching out to the Corps and DSL, though it sounds like that has already occurred. It appears the project can be approved by the National Marine Fisheries Services (NMFS) through their SLOPES (Standard Local Operating Procedures for Endangered Species) programmatic approval. NMFS play a role in this project, because the Coos Bay Estuary is designated as Critical Habitat for federally-listed coho salmon of the Oregon Coast Evolutionarily Significant Unit (ESU), and green sturgeon of the Southern Distinct Population Segment (DPS).
- We will work closely with KPFF to ensure the 30% design can meet the standards of SLOPES or will be able to be approved through SLOPES using a variance.
- We will discuss the 30% design with both agencies to ensure we understand the permitting process. Our goal is to be able to meet the SLOPES criteria, which means we will not have to prepare a Biological Assessment (BA). We will also clarify how the Corps wants the project to meet Section 106 (cultural resources) and whether an archaeologist needs to be hired.
- We will prepare a brief permitting memorandum, which will describe the permitting process and discussions with State and Federal agencies. It will also describe next steps, which can be used in an RFP for Phase 2 of the project.
- This task assumes one (1) site visit to review on-site conditions.

Task 1D - Deliverables: *Permitting Memorandum*

PHASE 2: FINAL DESIGN AND PERMITTING

Task 2A: Project Management and Administration - KPFF shall provide management, coordination and direction to the Project Team throughout the duration of the Project, including:

- **Project Coordination -** Consultant shall coordinate with the City's Project Manager and staff as needed. Coordination will occur via telephone communication, written correspondence, e-mail and meetings.
- **Project Schedule -** Consultant shall develop, monitor and maintain a project schedule. Schedule updates will be provided on a monthly basis, with invoices and progress reports.
- **Monthly Invoices -** Consultant shall prepare monthly billing invoices in a format approved by the City.

- **Meetings -** Consultant shall schedule, conduct, prepare for, attend and document meetings; up to two (2) meetings in Coos Bay and up to three (3) additional meetings will be conducted via conference call.

Task 2A - Deliverables: *Project Schedule; Invoices; Meeting Agenda and Meeting Notes*

Task 2B: Revetment Design and Analysis - WEST Consultants shall provide the following revetment design and analysis during Phase 1:

- Provide input into the development of the final design, and review the final plans and specifications.
- Participate in up to two (2) meetings located in Portland.
- Coordinate via telephone and/or email as needed.

Task 2C: Final Plans, Specifications and Estimate (PS&E) – KPFF shall provide the following engineering services necessary for the development of Final PS&E, including:

- Prepare 60% Plans, Specifications and Estimate (PS&E) package including plans, technical specifications and engineer's estimate of probable construction cost.
    - Incorporate or address City review comments from the 30% submittal.
    - Develop 60% level design drawings.
    - Develop technical special provisions relevant to the work.
    - Develop 60% Engineer's estimate of probable construction cost.
    - Conduct QC review of 60% deliverables prior to submittal.
- Prepare 90% Plans, Specifications and Estimate (PS&E) package including plans, technical specifications and engineer's estimate of probable construction cost.
    - Incorporate or address comments from the 60% Plans, Specifications and Estimate review.
    - Incorporate additional details to the plans.
    - Develop 90% level design drawings.
    - Develop 90% specifications and engineer's estimate of probable construction cost.
    - Conduct QC review of 90% deliverables prior to submittal.
- KPFF shall prepare Final Plans, Specifications and Estimate (PS&E) package addressing comments from the City's in-house review. The final package will include stamped and signed original drawings, technical specifications and final cost estimate.
    - Incorporate or address comments from 100% review into the Final Plans, Specifications and Estimate.
    - Submit unsigned PS&E to City for final review before stamping and signing.
    - Respond to comments on the unsigned final PS&E; incorporate into final signed set of documents.
    - Conduct QC review of Final deliverables.

Task 2C - Deliverables: *Plans, Specifications and Estimate at 60%, 90% and Final levels of completion.*

Task 2D: Prepare and Submit Joint Permit Application; Obtain State and Federal Approvals – Pacific Habitat Services will provide the following environmental consulting services:

- The stabilization of the bank will require State and Federal permits and approvals. In order to obtain these permits and approvals, we will complete a joint permit application (JPA), which is submitted to DSL and the Corps. The application will contain information on the project; the purpose and need for the improvements; details of the design, construction methods; how erosion will be controlled; the names of adjacent landowners; and the signature of a local planner. We will send a list of information that will be required for the application to the project team members working on the project. It is assumed the Corps will issue a Nationwide Permit #13. DSL will likely issue an Individual Permit, but we will try to see whether we can have the project approved through a General Authorization.
- As stated above, it appears the project can meet SLOPES, which means we have not included time to prepare a BA. If the project cannot meet SLOPES, then we will have to submit an additional proposal to cover the costs of preparing a BA.
- We do not believe the agencies will require mitigation for the proposed improvements, but we may need to do some additional enhancement along the bank. We will include plans to prepare an enhancement plan, which will be suitable for permitting, but perhaps not detailed enough for bidding.
- We will also need to ensure we gain the approval of Oregon DEQ and the Department of Land Conservation and Development (DLCD). DLCD requires that we prepare documentation that the project complies with the Coastal Zone Management Act. DEQ will issue 401 Water Quality Certification for the project.
- DSL, the Corps and DEQ assess fees for processing the application. The DSL fee will likely be less than $1,000 and will depend on the volume of fill used in the project. The Corps does not assess a fee with a Nationwide Permit. If DEQ requires a review of the project, their fee could be several thousand dollars. We have not included fees in our budget.
- During the course of the Corps' review, they may require a cultural resources review. We cannot address cultural resources; though we can recommend an archaeologist should this be required.
- We have assumed that we will not need to conduct an additional site visit.

Task 2D - Deliverables: *Permit applications and supporting documentation*

C. ASSUMPTIONS & CLARIFICATIONS

- All permit fees and agency charges will be paid by others.
- A signed and sealed boundary and topographic survey will be provided by the Owner.
    - At minimum, the boundary survey shall reflect established and/or retraced property lines, right-of-way lines, and easements in accordance with boundary law principles. The boundary survey shall reference information utilized in the retracement including

found monuments, survey control points (with x,y,z values), and the source for easements shown.

- At minimum, the topographic survey should be based on an actual field survey performed on the ground and include all existing surface features, a DTM surface with 1-foot contour intervals, utility line locations/sizes/materials/invert elevations (field observed and measured), trees (6-inches and larger diameter at breast height). Survey shall be in AutoCAD format and include all collected data points.

- The site is adequately served by utilities adjacent to the site.
- Serviced during bidding and construction are not included at this time.
- All value engineering efforts are completed and resolved prior to commencement of the construction document phase.

D. OPTIONAL SERVICES

Should any of these services be required for this project, a mutually agreed upon scope and fee will be negotiated at such time.

- Participation in the public information or planning process (including attending City Council meetings, public hearings, hearing examiner meetings, public open houses and local association meetings).
- Preparation of phased or multiple-packaged construction documents.

E. PROPOSED FEES

Our not-to-exceed fee for this project is outlined below based on the attached Scope of Services and Project Limits. We will bill for our work monthly based on the hours expended during that month. Reimbursable expenses will be billed at our direct cost.

Phase 1: Preliminary Design	
KPFF	$7,500
West Consultants	11,500
Pacific Habitat Services	9,950
Estimate of Expenses	500
Total Estimated Fee Including Reimbursables	**$29,450**

Phase 2: Final Design and Permitting	
KPFF	$10,500
West Consultants	3,700
Pacific Habitat Services	11,500
Estimate of Expenses	500
Total Estimated Fee Including Reimbursables	**$26,200**

Should additional services, including site visits, beyond those noted in the above Scope of Services become necessary, the scope and fee will be negotiated as part of an Additional Service Request (ASR).