



Request for Qualifications for Coastal Engineering Services

APRIL 17, 2018

**Corpus Christi Metropolitan Planning Organization 602 N.
Staples, Ste. 300 Corpus Christi, TX 78401 Tel: 361.884.0687
Website: www.corpuschristi-mpo.org**

I. OVERVIEW

The Corpus Christi Metropolitan Planning Organization (MPO) is federally funded to help plan and implement transportation projects of all types in the greater Corpus Christi area. The MPO intends to engage a coastal engineering service provider (consulting engineer) to design a nature-based (i.e. integrating engineering and ecological principals) shoreline protection feature to be installed along the western shoreline of the Laguna Madre to help protect transportation infrastructure.

The MPO is seeking statements of qualification from interested, established, and experienced coastal engineering consulting firms, to be received no later than **Friday, May 11th at 4:00p CST**.

In this service provider, the MPO will be seeking interdisciplinary environmental science and coastal engineering capabilities, including demonstrable, local experience in:

- Evaluating shoreline geomorphology
- Modeling the influence of wave action
- Designing shoreline protection of various types with an emphasis on integrating ecological (living shoreline) components
- Integrating stakeholders and technical experts from other sectors to produce creative and collaborative solutions

The successful applicant must be prepared to work as part of an interdisciplinary, cross-sector team, leveraging contributions from MPO staff as well as municipal (City of Corpus Christi (City)), academic (TX A&M University – Corpus Christi (TAMUCC)), and non-profit (Coastal Bend Bays and Estuaries Program (CBBEP)) partners in order to make the most of the available project budget.

The shoreline protection feature will be constructed by the City of Corpus Christi as part of the reconstruction of portions of Laguna Shores Road (to be funded as part of the 2018 Bond program). The selected consulting engineer will generate engineering plans and specifications for inclusion in the City's permitting and construction plan set for the roadway reconstruction project.

This work is part of an applied research pilot, funded by a Resilience and Durability to Extreme Weather grant from the Federal Highways Administration (FHWA), wherein the MPO will lead a collaborative effort to:

- Assess baseline habitat and shoreline conditions
- Identify one or more innovative shoreline protection strategies that integrate engineering and ecological (habitat restoration/living shoreline) techniques
- Construct a pilot shoreline protection project as part of the roadway reconstruction project
- Monitor project effectiveness in terms of habitat development and shoreline condition to evaluate the utility of the pilot technique(s) to enhance the durability of other segments of Laguna Shores Road and other, similarly vulnerable transportation infrastructure

The Corpus Christi MPO, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in

response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

II. PROJECT LOCATION

Laguna Shores Road, which runs along the western shoreline of the Laguna Madre between SH 358 and the Barney M. Davis Energy Center, is a major north-south thoroughfare in the Flour Bluff neighborhood of Corpus Christi.

Under existing conditions, several locations along Laguna Shores Road are subject to periodic inundation under spring tide and other typical (non-storm) conditions. Likewise, shoreline erosion has historically undermined the roadway in multiple locations, which has direct negative impacts on project lifecycle, maintenance costs, and public safety. These locations are particularly susceptible to the impacts of storm surge and extreme weather events, and this vulnerability will increase in the face of sea level rise.

The City of Corpus Christi is currently initiating the design phase of a project to rebuild three separate portions of Laguna Shores Road to improve level of service and reduce susceptibility to inundation; construction of this phased, multi-year project is expected to begin in spring of 2019.

The southern end of Segment 1 of the reconstruction project (outlined in red on Exhibit A – Project Location Map) is particularly vulnerable to extreme weather. At this location, there is no habitat buffer between the roadway and the open water of the Laguna Madre; the toe of the slope on the eastern side of the roadway is in the intertidal zone (see Exhibit B – Photograph of Project Location). This location is representative of significant portions of Laguna Shores Road, making it an ideal sight for a pilot implementation of innovative shoreline protection techniques.

Exhibit A – Map of Project Location

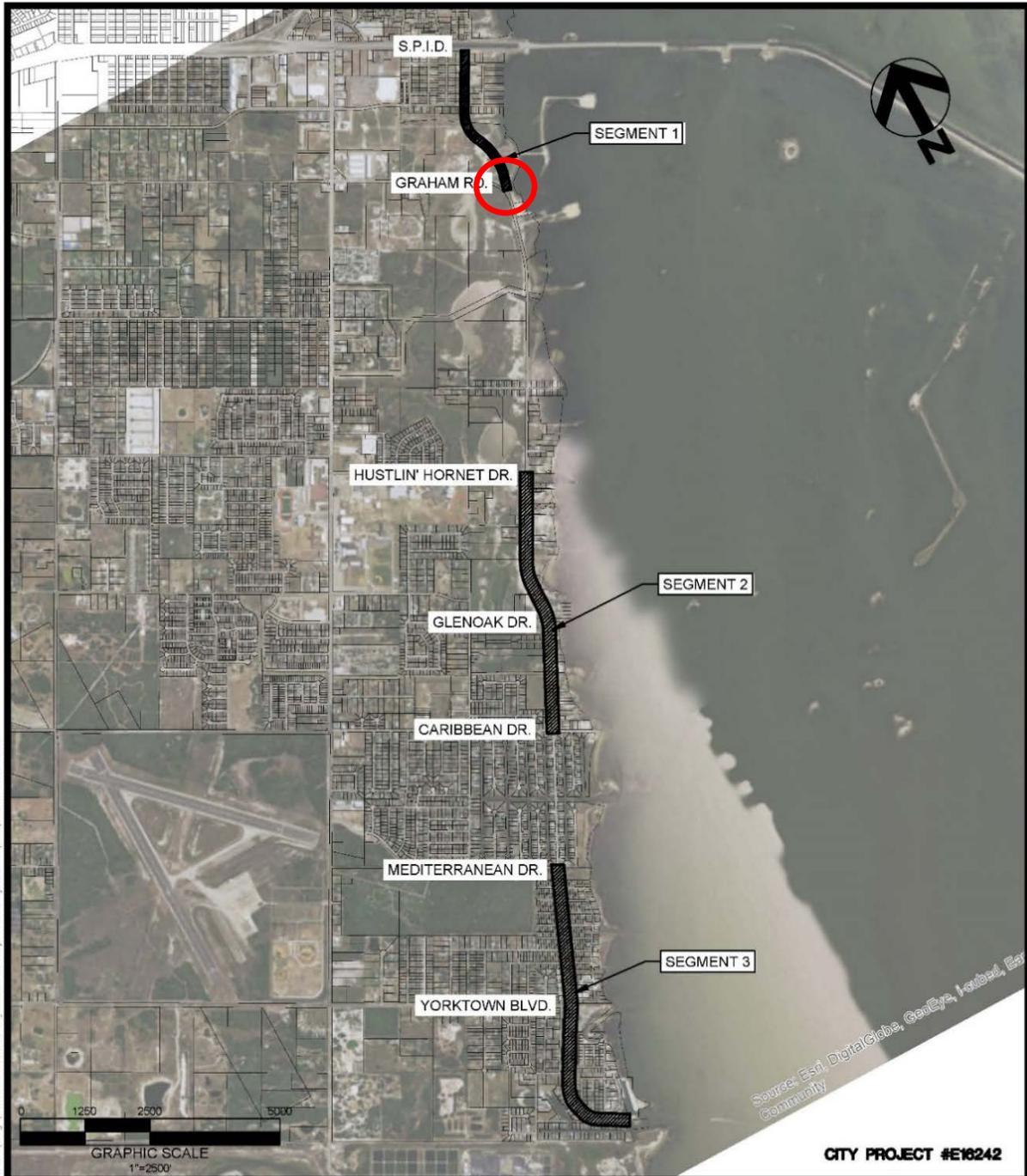


EXHIBIT A OVERALL LOCATION MAP



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Job No. 42848.00.00 2/14 MFH/SL

Exhibit B – Photograph Project Location



Looking south at the project location on Laguna Shores Road under typical (non-storm) conditions.

III. COLLABORATIVE* SCOPE OF WORK

*(*Per details below, not all tasks are the sole responsibility of consulting engineer)*

Data Gathering

The selected consulting engineer will work with MPO staff and project partners to collect a variety of data about historical and existing conditions, including (but not limited to):

- Determining frequency of roadway inundation at project location
- Gathering/reviewing readily available reports, data (tide, wind, and storm surge), historical aerial photographs, survey, and geophysical data for initial characterization of existing site conditions

Shoreline/Habitat Assessment

The estuarine habitat specialists from TAMUCC and CBBEP will develop or adapt a standardized monitoring protocol and will assess the existing (baseline) habitat condition within the project area, including characterizing the dominant vegetative community and recording elevations for target marsh species. The team will also identify unique ecological features, opportunities,

and/or challenges that may influence evaluation/selection of context-appropriate shoreline protection alternative(s).

Academic partners will use unmanned aerial vehicle technology to capture aerial photogrammetry and subtidal bathymetric data to inform engineering design of the shoreline protection features.

The consulting engineer will coordinate with project partners about data collection/site assessment needs to maximize the efficacy and utility of partner contributions. If needed, the consulting engineer will procure supplemental geotechnical information to inform engineering design. As appropriate, the consulting engineer will model prevailing wave conditions to estimate historic/baseline erosion rate (for use in post-construction monitoring and reporting) and to inform project design.

Develop and Evaluate Alternatives

On the basis of data gathering and analysis outlined in the preceding tasks, the consulting engineer will develop design criteria for the project site (utilizing, as appropriate, the expertise of project partners). Based on these criteria, the consulting engineer will develop and evaluate site-specific shoreline protection alternatives utilizing natural and engineered materials, ultimately identifying a preferred alternative.

Each of the alternatives will be evaluated in terms of (at a minimum) cost, constructability, and efficacy in order to identify the preferred technique(s) for deployment at the project location.

It is anticipated (but not required) that the selected alternative will include some combination of the following components:

- intertidal marsh
- shoreline protection features (subaqueous and subaerial alternatives)
- nearshore reef habitat
- transition areas from roadway to green infrastructure

Engineering Design of the Shoreline Protection Project

Consulting engineer will generate plans and specifications for construction of the nature-based shoreline protection to be included in the City of Corpus Christi's plan set for reconstruction of Laguna Shores Road.

Support Construction of Shoreline Protection Project

As part of the bond-funded reconstruction of Laguna Shores Road, the City of Corpus Christi will be responsible for:

1. Securing regulatory permits for construction of the shoreline protection project as part of the permitting of the larger roadway reconstruction project
2. Procuring a construction contractor to implement construction of the shoreline protection feature(s) as part of construction of the larger roadway reconstruction project.

While the permitting and construction/construction administration of the shoreline protection are the responsibility of the City of Corpus Christi and are outside of the scope of this RFQ, the consulting engineer selected through this RFQ will coordinate with the City in an effort to facilitate seamless and efficient implementation.

IV. SUBMITTAL GUIDELINES

RFQ Schedule:

- RFQ published – Tuesday April 17th
- Deadline for Requests for Information/Clarification (RFI) - 5:00p CST April 26rd
- Publication of responses to RFI - 5:00p CST May 4th
- Deadline for submittal of complete* statements of qualification - 4:00p CST May 11th
**No materials submitted after this date will be considered*
- Interviews (if necessary)/contract negotiation – week of May 29th (subject to change)

RFI:

Requests for RFI must be set forth electronically via email to Jeffrey Pollack, Director, at jpollack@cctxmpo.us with a carbon copy to Yoshiko Boulan, Office Coordinator, at ccmpo@cctxmpo.us.

Delivery of Submittal:

All submittals must be delivered electronically by email (ccmpo@cctxmpo.us) or on electronic media delivered in person or by regular post to:

Corpus Christi MPO
602 N. Staples St., Suite 300
Corpus Christi, TX 78401

Submittal Content and Evaluation Criteria:

Statements of qualification must not exceed **ten (10) double-sided pages** in length and must include, at a minimum, the following:

1. Respondent Information (5% of Evaluation)
 - Legal name of firm(s) legal name and address of respondent
 - Name and address of the respondent's principal place of business
 - Respondent's legal form of entity (sole proprietorship, partnership, corporation, joint venture, etc.) and state of incorporation or other organization
 - Identification of individual key team members' (including subcontractors) roles and responsibilities
2. Respondent's Relevant Qualifications and Experience (40% of Evaluation)
3. Description of Project Approach (40% of Evaluation)

While this statement is not expected to be a fully developed design concept, it must be of sufficient detail to demonstrate that the team has a systematic and established process for addressing the requisite tasks in this scope of work.

Respondents are encouraged to speak to the team's willingness and ability to work collaboratively with MPO staff and project partners.
4. Three (3) Project References (15% of Evaluation)
 - Client name and contact information
 - Specific role performed

- Summary of project scope
- Location of project
- Date range over which work was performed

Intent:

The MPO intends to use the responses to this RFQ to assist in the possible selection of one or more teams; the MPO reserves the right not to select any team(s). The MPO will evaluate each team based on the information set forth in the response submitted. An interview may be requested with one or more candidates.

Neither this RFQ, nor any response to this RFQ shall be deemed or construed to: (i) create any contractual relationship between MPO and any team; (ii) create any obligation for MPO to enter into a contract with any team or other party; or (iii) serve as the basis for a claim for reimbursement for costs associated with submittal of any response.

If the MPO selects a team as a result of this RFQ, the MPO shall have the right to negotiate any and all of the final terms and conditions of any agreement with the team and nothing in this RFQ or any response shall be deemed or construed as a limitation of such rights.

Addenda:

The MPO in its discretion may, at any time, publish one or more addenda to this RFQ. In doing so, the MPO will attempt to utilize all channels by which the original RFQ was distributed, however, in no event shall the MPO be responsible or liable for any failure of a team to receive any such addendum.

Modification or Withdrawal of Response:

A respondent may at any time withdraw its response by providing written request for withdrawal to the MPO. At any time prior to the deadline for submittal of responses specified in this RFQ, a team may modify its response by submitting the modified response together with a written request to withdraw the original response and replace it with the modified response.

Responsibility for Costs:

Each team (not the MPO) shall be responsible for any and all costs that it incurs in connection with this RFQ, including, without limitation, costs associated with preparation and submission of a response, and expenses associated with travel to any interview or contract negotiation meeting. In no event will the MPO reimburse any team for any such costs or expenses.

Ownership of Documents:

All responses and other materials submitted in response to this RFQ shall become the property of the MPO.

Insurance Requirements:

The MPO will require that the selected team have insurance in effect at all times during the term of this agreement and that the team provide evidence that the insurance is in effect. The applicable insurance requirements and limits will be established by the MPO during negotiations with the team.