

Port San Luis Harbor District  
3950 Avila Beach Drive P.O. Box 249  
Avila Beach, CA 93424  
Attn: Chris Munson, Facilities Manager

**Subject: Avila Pier Reconstruction, Proposal for Project Assessment and Engineer's Estimate**  
M&N Ref P180441

Dear Mr. Munson,

We are writing to describe the services we propose to provide for a Project Assessment and Engineer's Estimate for the Avila Pier Reconstruction Project. Our understanding of the project is based upon your solicitation dated June 15, 2018. We have made certain assumptions regarding the level of effort required to meet the District's goals for the work based on discussions between you and Rich Dornhelm in our office, and would be happy to discuss them once you have had a chance to review the proposal.

**SCOPE:**

We propose to complete the following tasks:

Task 1 Attend a Project kick-off meeting with the District to clarify Project history, technical requirements, communication protocols and admin procedures. While at Avila, also conduct a walk-over reconnaissance level inspection of the current Pier condition. Prepare minutes of the Meeting and notes from the walk-over.

Task 2 Assemble Available Pier Information including:

- a) Shoreline Engineering (SE) 2015 Underwater Inspection
- b) Netzel Grigsby (NG) Pier Project Study
- c) Records of District condition surveys/maintenance of the pier superstructure
- d) Records of pier subsurface conditions from District, including UNOCAL investigations of subsurface hydrocarbon plume and soil conditions
- e) Recent Soundings over length of Pier
- f) Other records?

Task 3 Define Functional Requirements that the District has for the rebuilt pier, including such uses as:

- a) Public Access
- b) Commercial Leases
- c) Recreational Fishing
- d) Small Boat landing
- e) Other Attraction?

Task 4 Develop Pier Design Criteria to satisfy the Functional Requirements, including factors such as:

- a) Analysis of MetOcean conditions affecting pier design, including extreme water levels, projected sea level rise, waves and currents.
- b) Minimum pier design loads, both vertical and lateral
- c) Minimum pier width and length; deck elevation
- d) ADA Requirements

- e) Boat Landing Requirements
- f) Fire Protection requirements
- g) Utility Service requirements

Task 5 Develop Pier reconstruction options to meet identified design criteria, considering Pier repair only if restoration of the existing structure is deemed economically feasible. We will base our decision to consider a restoration alternative on an evaluation of the above water structure by the District staff if it appears necessary, since the SE Study suggests the pier piling deterioration has already progressed so far that economic repair is unlikely. We have worked on timber piers that are over 100 years old and are still functioning, but they have been scrupulously maintained over the years and not allowed to fall into disrepair. But frankly they continue to (and will always) demand considerable maintenance attention. We anticipate that favorable reconstruction options will focus on removal and replacement of the structure with a new structure that takes into account projected sea level rise, and reduces maintenance both now and well into the future.

The alternatives will consider different materials, pier lengths, construction costs, benefits, maintenance and other criteria such as design life, environmental/permit review concerns and sustainability principals. We gather from the NG study that we should target a Project budget of about \$10M; therefore we will develop at least one Alternative that can be built to meet the agreed upon functional requirements for this budget – going over budget only to let you know what a full replacement might cost. We also will defer any additional Geotech investigation for the replacement pier until there is agreement upon a viable Pier Alternative – we would base our alternatives on the information available from the District on subsurface conditions for the existing pier, or the nearby (former) UNOCAL pier.

- a) Repair Alternative (if deemed economically feasible)
- b) Replace Alternatives (up to 2 partial length and one full length rebuild)

Task 6 Identify Alternative Project Evaluation Factors and Help District Select Preferred Alternative. Develop selection factors and appropriate weighting to complete an Alternatives matrix evaluation. Support District in populating the matrix and arriving at a decision on a preferred Alternative.

- a) Meets Functional Requirements
- b) Capital Cost
- c) Maintenance Cost
- d) Design Life
- e) Addresses Public Concerns
- f) Provides revenue generation
- g) Conforms with District's Master Plan
- h) Environmental/Permit Review Concerns
- i) Sustainability Principals

Task 7 Prepare a Pier Project Report Summarizing the above. Submit the report in draft form for District review and comment. Upon receipt of District Comments, revise draft accordingly and submit Final report. Attend a meeting of the District Commission to present the results of the Project Assessment and/or answer questions.

**FEE:**

We propose to provide the above services based on time and materials in accordance with our current Rate Schedule for Professional Services – copy attached. We agree that our fee will not exceed \$46,568 without your written authorization. A breakdown of the fee by task is also attached.

June 26, 2018

**SCHEDULE:**

We propose to begin work within 2 weeks of receipt of a signed agreement with a notice to proceed, and will endeavour to complete the above services within about 12 weeks thereafter.

Thank you for considering Moffatt & Nichol, should you have any questions on the proposal, please give me or Rich Dornhelm a call.

Sincerely,

MOFFATT & NICHOL



Brad Porter, PE

