



ENGINEERS, INC.

June 17, 2021

PND No. 214027.02

Fidalgo Marina Owner's Association  
Attn: Assessment Committee, Ed Stubbs, [edst@msn.com](mailto:edst@msn.com) and Rick Pilling, [richard.a.pilling@gmail.com](mailto:richard.a.pilling@gmail.com)  
3101 V Place  
Anacortes, WA 98221

Subject: Proposal for Breakwater Emergency Repair Options

Dear Mr. Stubbs and Mr. Pilling,

Per your request, PND Engineers, Inc. (PND) is providing this scope of work and fee estimate to evaluate repair options for breakwater piles, which were observed to be deficient during the recent dive inspection of the Fidalgo Marina.

### **Scope of Work**

PND will deliver report with repair options to include the following:

#### Task 1 – Existing Information Review

- Estimate breakwater design loading – Existing calculations are not available.
- Estimate remaining capacity of the existing structure

#### Task 2 - Provide three [3] repair options for the breakwater

- Estimate lifespan of each repair option
- Include a rough order of magnitude cost estimate for each of the repair options
- Provide rough order of magnitude cost to replace the breakwater
- Provide estimate of permitting requirements, potential mitigation costs, and expenses for emergency repair.
- Draft Report - We propose to provide a draft report for review.
- Meetings – In person meeting to discuss the report and options
- Final Report – Finalize report and recommendations.

#### Task 3 – Preliminary Design (Future Task TBD)

#### Task 4 – Permitting (Future Task TBD)

#### Task 5 – Final Design (Future Task TBD)

#### Task 6 – Bidding and Construction Assistance(Future Task TBD)

### **Schedule**

We propose to provide a draft report within two weeks after we receive the dive inspection report. Final report will be completed one week after receiving review comments from FMOA.

**Compensation**

PND will complete the proposed work for \$38,300. (T&M) Additional services outside the scope of work would be negotiated separately and could be either fixed fee or billed on an hourly basis under PND's standard rate schedule.

Sincerely,

PND Engineers, Inc. | Seattle Office



Jon Keiser, P.E., Vice President  
Principal-in-Charge



Chris Fornace, P.E., Senior Engineer  
Project Manager