

MEMORANDUM

To: Larry Oetker, Humboldt Bay Harbor District
From: Shane Phillips
Date: June 9th, 2021
Subject: MARAD Grant Support Proposal – LARGE GRANT
Proposal No.: P210807

Introduction

Based on our review of the Notice of Funding Opportunity for USDOT Port Infrastructure Development Program (PIDP) and our discussions with the Harbor District, we have developed a few pathways for a grant application for the Humboldt Bay California Wind Energy Port development project. We believe the District has a compelling story and good timing for an application for the US DOT Maritime Administration (MARAD) PIDP funding. Our experience indicates competition is very stiff for these funds which requires a well written and technically thought through project scope and justification of the project purpose and need to be successful.

Project Background

Based on our discussions with the Humboldt Bay Harbor District (District), the goal for pursuing the grant is to help provide the baseline funding to facilitate planning, permitting, design and construction of a new Multipurpose Marine Terminal (MMT) to support proposed offshore wind energy located on Bureau Ocean Energy & Management (BOEM) federal lands. The MMT would be the early phase of a multi-phase buildout as described in the April 27, 2021 LACO and Julian Ber Designs Master Plan Scheme A graphic.

Approach

A small project (\$4.1 million grant maximum) and large project (\$56.25 million grant maximum) were reviewed and discussed for consideration. The District intends to pursue a large project category grant. PIDP grants include provisions for funding both development (planning, permitting and design) and construction activities, but with a heavy emphasis on preference for construction phase projects. Based on our discussions with the Harbor District, review of the Grant criteria, and available information for the basis of the application, the following is an assumed pathway for approaching the submission of a project for the grant.

- Large Project Category (This Scope of Work). Project scope for a large project would be a buildout of a small commercial scale (Shatz Energy Center Study Humboldt Port Assessment) marine terminal that would function as a multi-purpose dock for both early phase buildout of offshore wind and other breakbulk cargo. The maximum allowable grant for a large project is limited by a requirement that no more than \$56.25 million can be awarded to a single state. A benefit cost analysis (BCA) will be required for the large project category that outlines the project's cost effectiveness from a transportation perspective.
- Strategy. Develop a large grant application that outlines two components that in combination will represent a total large project and result in a functioning port facility. Two components are provided to break out the implementation into smaller steps to allow the possibility of a partial funding scenario if funds aren't available for the entire large project. The two components consist of the following:
 - Component 1. Access road improvements (phase 1) permitting, design and construction plus overall master plan NEPA, CEQA, and preliminary design and permitting for a marine terminal development.
 - Component 2. Final design and construction of a marine terminal development (yard and wharf) that would be functional for a small commercial scale wind farm buildout scenario.

Scope of Services

Task 1 - Project Management

M&N will coordinate the work scope, schedule, budget, and deliverables. M&N will facilitate deliverable review comments received from the District and delegate to team members for action. This task also includes time for coordination calls with the M&N Team, District, and/or other stakeholders, as directed.

Task 2 – Preconceptual Design for Grant Scoping

Moffatt & Nichol (M&N) will provide pre-conceptual level analysis to assess several items in the conceptual plan utilizing the District's April 2021 Master Plan Graphic as a basis for the work. The work in Task 1 will expand the work conducted for the small project to further develop the large project concept and scope for construction.

- Marine Terminal. Conduct preconceptual design to verify the type and size of marine structures that are needed for offshore wind (OSW) development based on experience in other projects. Evaluate the size of marine structures that could be built within an assumed funding limit and as part of a phased buildout. Review available geotechnical information at the site provided by client to assist in determining a feasible conceptual foundation type/size based on an assumed 5,000 psf live load. Assume deck system type and wharf fixtures (fenders, bollards, utilities, curb, railing, etc) based on experience on other similar projects.
- Marine Terminal (Small Commercial Scale) Basis of Design. Utilize results of pre-conceptual work to develop a Basis of Design for the Large Project. Work will include evaluation of a combination of marine terminal, road improvement, environmental mitigation and yard improvement that fits within a Harbor District defined budget (maximum PIDP plus matching funds). Develop summary narrative basis of design for use in development of the application narrative.
- Preferred Large Project Construction Scope. Assist the District with finalizing a large project construction scope and corresponding overall terminal phasing plan as the basis for the grant application. One preferred large project concept will be developed based on a review of costs for the project elements relative to the funding limits. Graphics will be developed and provided by others based upon input provided by M&N that outline the large project scope as well as the phased project full buildout.
- Regulatory Permitting. Review prior environmental and regulatory documentation. Coordinate with District staff regarding CEQA/NEPA process and corresponding strategy, outline framework for environmental permitting, data collection and regulatory process for estimating cost and approach for inclusion in the grant application.
- Cost Estimate. Develop high level cost estimate with contingency for the large grant project construction scope elements to assist in finalizing the preferred project configuration for the grant application.
- Coordination. Provide limited coordination of project basis of design and construction costs with the Harbor District and industry stakeholders.

Task 3 – Grant Application Materials

The following work will be conducted utilizing information developed for the large project grant as a basis for the large grant application.

- Research Existing Information: M&N will review and use existing information provided by the District to the maximum extent practicable. Additional support from the District with respect to prior study documentation to be provided to M&N for review and use in developing the application materials. Using gathered information, M&N will investigate the suitability of the project elements for the proposed funding source based on PIDP Notice of Funding Opportunity (NOFO) requirements.
- Approach and Technical Expertise: M&N will provide strategic and technical expertise to the District and support development of a competitive approach for the PIDP grant application.
- Benefit Cost Analysis (BCA). M&N will complete a Benefit/Cost Analysis (BCA) for the grant application using information provided by the District and the basis of analysis developed by MN and reviewed by the District.
- Grant Application Materials and Support Letter: M&N will develop a Fiscal Year (FY) 2021 PIDP grant application, SF-424, and SF-424C, consistent with the statutory requirements as established by the USDOT. Review and conduct quality control on the BCA conducted by others. M&N will also provide the District with a template support letter that can be distributed to key project partners and/or stakeholders.

Assumptions

The following assumptions were used to develop the scope and level of effort required for completing this assignment:

- Work for scoping project construction will be based upon existing documentation; no new engineering design or analysis work will be needed.
- Application work is limited to the PIDP grant; no RAISE grant application in this years funding cycle.
- The Large Project category will require a benefit cost analysis (BCA); assistance from the District and industry partners is assumed will be provided to review the industry basis of analysis and corresponding assumptions which will provide the framework for the BCA work.
- Roadway, utilities pre-design and cost estimating to be provided by others (LACO).
- Master plan and other graphics to be provided by the District and their master plan consultants (LACO or other) based on input provided by M&N to align the grant application narrative with the supporting graphics for the application.
- The District will be responsible for obtaining all support documentation for the grant application (i.e. local and state support letters, letters of financial commitment, information from stakeholders, engineering reports, etc.).
- The District will be responsible for uploading the application to the USDOT website using materials supplied by M&N.
- Post-grant-application services are not included.
- The District and M&N have discussed the competitive nature of the PIDP grant and a corresponding strategic approach which is the basis for this scope of services.

Fee

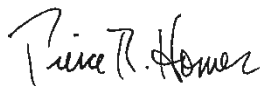
The M&N Team proposes to complete the professional services described herein on a time-and-materials reimbursable expense basis for a not-to-exceed amount of \$62,800 (Sixty two thousand & eight hundred dollars). A detailed breakdown of the level of effort to complete each task is included as Attachment A. Should additional fee be required because of a change in scope, M&N will inform the District prior to expending any additional funds. M&N will not proceed with any extra services outside of this scope of work without prior written authorization from the District.

Staffing

The points of contact for this work will be Pierce Homer (Principal in Charge) and Shane Phillips (Project Manager).

Sincerely,

MOFFATT & NICHOL



Pierce Homer

Project Principal



Shane Phillips

Project Manager

Moffatt & Nichol Fee Proposal Detail
Humboldt Harbor Offshore Wind Port - Grant Funding for LARGE PROJECT CATEGORY

June 9, 2021

Project Number:	Project Manager:	Project Principal:	Subconsultant Mark-up:		LABOR CLASSIFICATIONS & CONTRACT RATES														STAFF-HOUR SUBTOTALS	LABOR COST SUBTOTALS
			10%	10%	Eng./Sci P-9	Eng./Sci P-8	Supervisory Eng./Sci P-7	Senior Eng./Sci P-6	Eng./Sci III P-5	Eng./Sci II P-4	Eng./Sci I P-3	Staff Eng. P-1, P-2	Senior Tech. T-5	Designer T-4	CADD II T-3	CADD I T-2, T-1	Word Processor A-4, A-3	General Clerical A-1, A-2		
Phase	Title		\$260.00	\$240.00	\$215.00	\$182.00	\$165.00	\$165.00	\$145.00	\$140.00	\$130.00	\$125.00	\$100.00	\$115.00	\$90.00					
1 - Project Management																				
		Kickoff meeting	2.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Coordination	4.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2 - Pre-Conceptual Engineering																				
		Marine Terminal Pre Conceptual Design	6.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Marine Terminal Small Commercial Scale Basis of Design	3.0	0.0	14.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Construction Scoping	2.0	4.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0		
		Regulatory Assessment - Coordination w/ District Staff	2.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Cost Estimates	2.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Preferred Phasing Plan Update	2.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Coordination	3.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3 - Grant Application Materials																				
		Research Existing Materials	4.0	0.0	4.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Approach Technical	3.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		BCA Analysis & Technical Appendix	8.0	0.0	32.0	32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Grant Application Support Documentation	5.0	0.0	0.0	10.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Document Preparation	4.0	0.0	2.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		Quality Control	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
I. TOTAL STAFF HOURS			\$2.0	4.0	11.0	88.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
II. M&N LABOR COST			\$13,520.00	\$960.00	\$23,865.00	\$16,016.00	\$1,980.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,200.00	\$0.00	\$5,290.00	\$0.00	\$62,831.00		
III. SUBCONSULTANT COSTS																				
		1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		3	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		6	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		7	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		8	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		9	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Subconsultants Totals:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Other Direct Costs Totals:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total Project Estimate			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		