

CITY OF UNALASKA
UNALASKA, ALASKA

RESOLUTION 2023-49

A RESOLUTION OF THE UNALASKA CITY COUNCIL AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT WITH PND ENGINEERS TO COMPLETE THE GEOPHYSICAL, BATHYMETRY, PERMITTING AND DESIGN FOR THE DREDGING AT THE LIGHT CARGO DOCK AND THE UNALASKA MARINE CENTER IN AN AMOUNT NOT TO EXCEED \$497,000

WHEREAS, The City of Unalaska Council has determined that dredging at the Unalaska Marine Center (UMC) and the Light Cargo Dock (LCD) are necessary to achieve a deep draft port designation; and

WHEREAS, The United States Army Corps of Engineers (USACE) has completed the design for the dredging of the entrance channel into Dutch Harbor; and

WHEREAS, the entrance channel needs to be dredged in order to allow passage of deep draft vessels into Dutch Harbor; and

WHEREAS, the City of Unalaska desires to dredge the UMC and LCD in conjunction with the entrance Channel; and

WHEREAS, the UMC and LCD are constructed with PND's Open Cell Sheet Pile®; and

WHEREAS, the calculations for tolerance on modifications to the dock can only be completed by PND; and


WHEREAS, the City of Unalaska contracted with PND Engineers to begin the design work in 2015; and

WHEREAS, the City of Unalaska has solicited a scope of work from PND to complete the data collection and calculations to complete the permitting and design for dredging at the docks; and

WHEREAS, the City has received a fair and responsible rate to complete the tasks for geophysical, bathymetry, permitting and design.

NOW THEREFORE BE IT RESOLVED that the Unalaska City Council authorizes the City Manager to enter into a sole source contract with PND Engineers, Inc., to complete the geophysical, bathymetry, permitting and design for dredging at the Unalaska Marine Center and Light Cargo Dock.

PASSED AND ADOPTED by a duly constituted quorum of the Unalaska City Council on December 19, 2023.



Vincent M. Tutiakoff, Sr.
Mayor

ATTEST:


Estkarlen P. Magdaong
City Clerk



MEMORANDUM TO COUNCIL

To: Mayor and City Council Members
From: Peggy McLaughlin, Port Director
Through: Marjie Veeder, Acting City Manager
Date: December 19, 2023
Re: Resolution 2023-49: Authorizing the City Manager to enter into a sole source agreement with PND Engineering for the geophysical, bathymetry, permitting and design for the dredging of the LCD and UMC in an amount not to exceed \$497,000

SUMMARY: Resolution 2023-49 will authorize the City Manager to enter into an agreement with PND Engineers (PND) to complete the geophysical, bathymetry, permitting and design for the dredging of the Light Cargo Dock (LCD) and the Unalaska Marine Center (UMC). The request to authorize this contract comes as a sole-source request based on the existing design and the proprietary nature of the Open Cell Sheet Pile® and intellectual property associated with that design. The requested agreement will complete the data collection, permitting and design. The project will go out for a competitive bidding process once design is complete. The amount of this contract is not to exceed \$497,000.

PREVIOUS COUNCIL ACTION:

RESOLUTION 2014-06: AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT WITH PND ENGINEERS, INC. FOR AN AMOUNT NOT TO EXCEED \$420,858 FOR PRELIMINARY DESIGN, PERMITTING, AND GEOTECHNICAL INVESTIGATION

RESOLUTION 2015-37: AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT WITH PND ENGINEERS, INC FOR PRELIMINARY DESIGN (30%), MASTER PLANNING AND PROJECT SCOPING, PUBLIC INPUT PROCESS AND REPORT, PERMITTING PROCESS SUPPORT AND IHA APPLICATION, EXISTING WAREHOUSE STRUCTURAL AND ELECTRICAL CONDITION ASSESSMENT, AND UMC UPLAND SURVEY AND BATHYMETRY IN AN AMOUNT NOT TO EXCEED \$489,135

RESOLUTION 2016-13: AUTHORIZING THE CITY MANAGER TO EXTEND PND ENGINEERS INC. CONTRACT FOR THE UNALASKA MARINE CENTER EXPANSION AND REPLACEMENT PROJECT POSITIONS 3 AND 4 FOR 65% DESIGN COMPLETION IN AN AMOUNT NOT TO EXCEED \$935,000 AND FURTHER AUTHORIZE THE CITY MANAGER TO EXTEND PND ENGINEERS, INC CONTRACT FOR FINAL DESIGN, PROJECT IMPROVEMENT ANALYSIS, AND PROJECT BIDDING SUPPORT UPON ADOPTION OF THE CITY OF UNALASKA FY17 CAPITAL BUDGET INCLUDING APPROPRIATIONS FOR UMC EXPANSION AND REPLACEMENT PROJECT POSITIONS 3 AND 4 IN AN AMOUNT NOT TO EXCEED \$1,021,802.

ORDINANCE 2017-05 BUDGET AMENDMENT NO. 3: CREATING A BUDGET AMENDMENT TO AMEND THE ENTRANCE CHANNEL DREDGING FEASIBILITY STUDY BY \$350,000 TO BEGIN GEOTECHNICAL WORK IN FISCAL YEAR 2017.

BACKGROUND: In 2015 the City of Unalaska authorized PND Engineers to begin preliminary data collection through geotechnical investigation and bathymetry for the purpose of construction and for future dredging at the Unalaska Marine Center (UMC) and the Light Cargo Dock (LCD). The geophysical and bathymetry was authorized as an extension of the Design contract with PND

for the Unalaska Marine Center. The data was used to provide an initial scope of work and identify the future requirements for designing, permitting and dredging at UMC and LCD within the margins of tolerance for PND's Open Cell Sheet Pile® existing at both facilities. The dredging of UMC and LCD was and is intended to run in concert with the Corps of Engineers project to dredge the Entrance Channel.

DISCUSSION: The discussion regarding Resolution 2023-49 requires some detailed background for this dredging project. It also requires some transparent discussion for the purposes of sole-sourcing this part of the UMC and LCD dredging project. Considering the significant turnover in City staff and Council it is worth revisiting the key components and qualifying criteria for the sole-source request.

This project was developed in order to solve the problem of the lack of deep draft moorage in Dutch Harbor. A truly deep draft port is 45 feet (45') of mean lower low water (MLLW). This means at the very lowest tide there is 45' from the surface of the water to the sea floor. The entrance channel is only 43'. Inside Dutch Harbor there are areas that greatly exceed the 45' deep draft requirement, but at the face of the UMC it is only 40' of clearance and LCD is less than that. In order for us to be a deep draft port, or a deep draft Potential Port of Refuge, or to "court" deep draft carriers specific to the Great Circle Route and the Arctic, we need docks that actually meet the deep draft designation and the ability to navigate to them. We recognized that there was limited value in money spent to further research dredging inside of Dutch Harbor until deep draft vessels could navigate the bar. The City asked PND to define the project enough that we could develop a preliminary scope for the project and temporarily shelve it to pick it up at a later date.

During the design phase of the UMC restoration project, PND did the preliminary bathymetry and soundings in conjunction with the design work for UMC positions 3 and 4. PND expanded that work to glean a certain amount of basic information for future dredging in front of UMC; they also did some similar work at the LCD during the LCD expansion project. The LCD and UMC are both constructed with Open Cell Sheet Pile®.

In 2015 and 2016 there was a push to get projects "shovel ready" in hopes that we could capitalize on certain federal funding programs, consolidate projects for cost effective mobilization and demobilization, and reduce overhead of projects by bundling. The dredging for LCD and UMC was initiated and "shelved" with this in mind and while the United States Army Corps of Engineers (USACE) worked on the feasibility and design of the dredging of the entrance channel. The UMC and LCD Dredging project was first added to the CMMP in FY2016-FY2020.

PND was asked by the City to provide the preliminary scope for dredging at UMC and LCD. At the same time there was information sharing with the USACE for marine mammal data collection for the IHA permit for UMC and LCD. At this time, PND provided enough preliminary information to form estimates for the amount of material to be removed, potential means, potential disposal sites and permitting. This preliminary information established a scope of work for the dredging project at UMC and LCD and then was "shelved" until the project could be timed with the dredging of the entrance channel.

PND provided the City with the initial information for the dredging at UMC and LCD, so why is it important the contract with PND continues for the data collection, permitting and design? Further, how does a contract with PND for this work qualify under the City Purchasing Policy for a sole-source contract?

Purchasing is addressed in City Code and the purpose of the Purchasing Policy is to support Code of Ordinances, and specifically to “provide for the fair and equitable treatment of all persons involved in public purchasing by the City, to maximize the purchasing value of public funds in procurement, and to provide safeguards for maintaining a procurement system of quality and integrity.”

The purchasing policy outlines the expected practices for procurement of contracts for services. Typically this means most goods and services of a certain value go through a public bidding process. The purpose of the bidding process works with the purpose of the policy and often will provide multiple qualified bidders in order to have a competitive price. There are, however, times when a bidding process is not practical and the policy allows for the City to sole-source work under certain conditions. The condition that applies for this contract is: “A contract may be awarded without competition when the following circumstances are evident: The item/service is available only from one source.”

The discussion around this particular qualifier is that the Open Cell Sheet Pile® is proprietary. PND owns the design and PND protects the engineered specifications that support the performance of the structure. All forces at play at the dock are calculated into the design, depth of the pile driven and with consideration to the geotechnical data. Without having the specifications for the Open Cell Sheet Pile®, miscalculations could result in undermining the dock and causing the dock to fail or limit the performance of the dock. Catastrophic failure could result in millions of dollars of loss to the City, to UMC customers, and to the community. This is a risk we should not be willing to take. However, if the City Council decides they are not comfortable with sole-sourcing this contract, PND will have to be consulted in order for any other company to produce an end product. PND will not disclose the proprietary information on the Open Cell Sheet Pile®. The information, calculations and specification for the performance of the Open Cell Sheet Pile® are intellectual property.

The data collection and the information that leads to the “design” for dredging is important to maintain the integrity of the dock. Simply stated, PND is the only qualified engineering group to complete that task. Additionally, any design firm wishing to fulfill the work in the proposed contract will need to consult with the original design team (PND) for any dock modifications to the original design, including removal of sea floor material. The Open Cell Sheet Pile design is used at both UMC and LCD.

PND submitted two proposals. There are 7 tasks in all which includes geophysical work and bathymetry in front of the new lay down yard. The tasks are clearly defined in the proposals and the proposals are provided for your review.

The Budget that was adopted in the FY23 CMMP was adopted with the 2015 Rough Order of Magnitude (ROM). The entire budget is \$2,654,145. We were given that number without significant detail for engineering. We put \$109,650 into design and engineering knowing that number would likely change as the USACE got closer to design and construction. The remainder of the budget was left in construction services. We will need to do some shifting within the project budget to cover the geophysical, bathymetry, design and permitting in the correct line items. We will not know the entire cost of construction until the design is complete. We are hopeful, even with inflation, we are going to make this budget work, but we will not know for a while yet.

The USACE process and contracts are separate from the City’s contracts for dredging at UMC and LCD. The bidding process for actual dredging will be concluded this spring. The USACE has received their permits (or most of them) and it is time for City to dust off our dredging for UMC

and LCD to be able to continue to share a certain amount of information with USACE for permitting and hopefully recognize some cost savings by working the projects in concert. Seeking a contractor for the actual dredging is separate from completing the necessary geotechnical, bathymetry, and permitting. PND's proposal is to complete that work in order to design a process and depth that is compatible with their Open Cell Sheet Pile System. The actual dredging will be put out to bid when design is complete.

ALTERNATIVES: Council could choose to adopt Resolution 2023-49; Council could choose to amend Resolution 2023-49; and Council could choose to not adopt Resolution 2023-49 and require a competitive bidding process

FINANCIAL IMPLICATIONS: There is funding in the overall budget for this contract.

LEGAL: N/A

STAFF RECOMMENDATION: I recommend adoption of Resolution 2023-49, awarding the contract on a sole-source basis to PND.

PROPOSED MOTION: I move to adopt Resolution 2023-49.

CITY MANAGER COMMENTS: I concur with the Staff Recommendation.

ATTACHMENTS:

1. PND Proposal for Geophysical and Bathymetry – UCM Multi-Purpose Dock
2. PND Proposal for Design and Permitting of Dredging at Unalaska Marine Center and Light Cargo Dock



December 6, 2023

PND: 111135

Peggy McLaughlin
Director of Ports
City of Unalaska
P.O. Box 610
Unalaska, Alaska 99685

Subject: PND Proposal for Geophysical and Bathymetry - UMC Multi-Purpose Dock

Dear Peggy:

PND Engineers, Inc. (PND) is pleased to provide this proposal for an offshore Geophysical and Geotechnical Investigation for UMC Multi-Purpose Dock. We have developed this work plan to provide the information needed to guide the development alternatives being considered for the Cruise Ship Dock and eventual connection to the existing UMC.

As you recall, the most desirable alignment of the proposed UMC expansion would be aligned with the existing UMC dock face, however the bathymetry of the area as well as possibility of shallow bedrock may prevent the economic or practical development of the preferred dock alignment. Several less preferred but functional alternative alignments have been developed which should more economically accommodate the potential for shallow bedrock.

We understand that the Multi-Purpose Dock is intended to initially be a stand-alone facility, however the location and alignment of this facility will determine the alignment of the future phases of UMC expansion. Therefore, it is very important to clearly understand the subsurface conditions within the entire potential future UMC expansion area.

A larger scale geotechnical program designed to provide the necessary site information was evaluated and found cost-prohibitive due to the scope, duration and cost required to complete the number of drilled holes needed to collect the necessary information. The geophysical program described in this proposal is intended to cost-effectively explore the general future project area and identify the location and depth of shallow bedrock that could impede future development phases. This geophysical program is also designed to narrow and refine the scope and improve the cost effectiveness of a future marine geotechnical drilling exploration program.

Task 1 – Bathymetry, Side Scan Sonar, Sub-Bottom Profiling and Electric Resistivity

PND will subcontract with Benthic GeoScience to locate and delineate depth to bedrock and quantify the amount of overburden present above the bedrock in the project area, including the vessel approach area to the south of the project. This information will be used to guide decision making regarding the dock alignment alternatives being evaluated by improving the project team's understanding of dredging requirements and feasibility for each alignment based on the seafloor and underlying bedrock topographies. The investigation area will cover all potential dock face alignments (see attached).

This task will include a bathymetric survey of the project area utilizing Multibeam Echosounder (MBES) and Side Scan Sonar (SSS) technology. It will also include use of Sub-Bottom Profiling (SBP) and Electric Resistivity (ERT) systems to develop profiles of the overburden and bedrock layers present at the site

location. The SBP and ERT systems will be calibrated to five geotechnical boreholes that were previously drilled for the UMC Position III & IV Replacement Project. This “ground-truthing” will increase accuracy of the geophysics system to identify the bedrock layer. One day of weather stand-by is included in the cost below but may not be required. Additional weather standby days are charged at \$18,980, if required.

After performing the field portion of the work, the collected site data will be analyzed and a report will be generated with associated graphics and drawings. Project costs include fuel, room and board, permitting, marine support and expenses, see attached detailed cost breakdown.

Deliverable – Geophysical Investigation – Final Report and Drawings

Task 1

\$294,475 Time and Materials
(including 1 day of stand-by cost for weather)

Task 2 – UMC and Light Cargo Dock Bathymetry

PND/Benthic will perform a bathymetric survey of the area adjacent to the UMC Dock and Light Cargo Dock. Existing bathymetric data sets for UMC Dock area was collected in 2015 & 2018. Existing bathymetric data sets for Light Cargo Dock area was collected in 2007. This task is not a standalone task and the pricing below assumes that this work is performed during the same mobilization as Task 1.

Deliverable - Survey base map drawing (in AutoCAD and PDF) of the project area.

Task 2

\$18,980 Time and Materials

Task 3 –Permitting for UMC Multi-Purpose Dock Geotechnical Investigation

We recommend initiating permit acquisition for the geotechnical drilling investigation at this time with the assumption that a geotechnical drilling program will be pursued within the next few years (permit is valid for multiple years) and the permit process is expected to require 6-9 months duration. PND will develop and submit the required documentation (applications, drawings and equipment plans, etc.) to obtain permits for the geotechnical investigation. We anticipate that only a nationwide permit (NWP) from the U.S. Army Corps of Engineers (USACE).

Deliverable – UMC Multi-Purpose Dock Geotechnical Investigation USACE Permit

Task 3

\$25,000 Time and Materials

Total cost for Tasks 1 2, and 3 is \$338,455

We recommend the geophysical program be performed as soon as practicable to minimize weather risk and because this information is needed to finalize the geotechnical drilling plan. Benthic GeoScience is available in March 2024 to perform this work and has confirmed that this work can be completed without additional permitting. A notice to proceed must be received by **December 20, 2023** to secure equipment needed to meet this schedule.

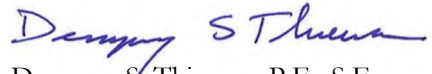
For your future planning purposes, we anticipate the cost of geotech drilling, testing and report will be \$550,000 - \$1,050,000 depending on the results of the geophysical program and the scope of the geotechnical

investigation. A detailed proposal for geotechnical investigation will be developed after analysis of the geophysical program.

We look forward to assisting the City in evaluating future expansion of the UMC Multi-Purpose Dock project. Please call if you have any questions regarding this proposal.

Sincerely,

PND Engineers, Inc.



Dempsey S. Thieman, P.E., S.E.

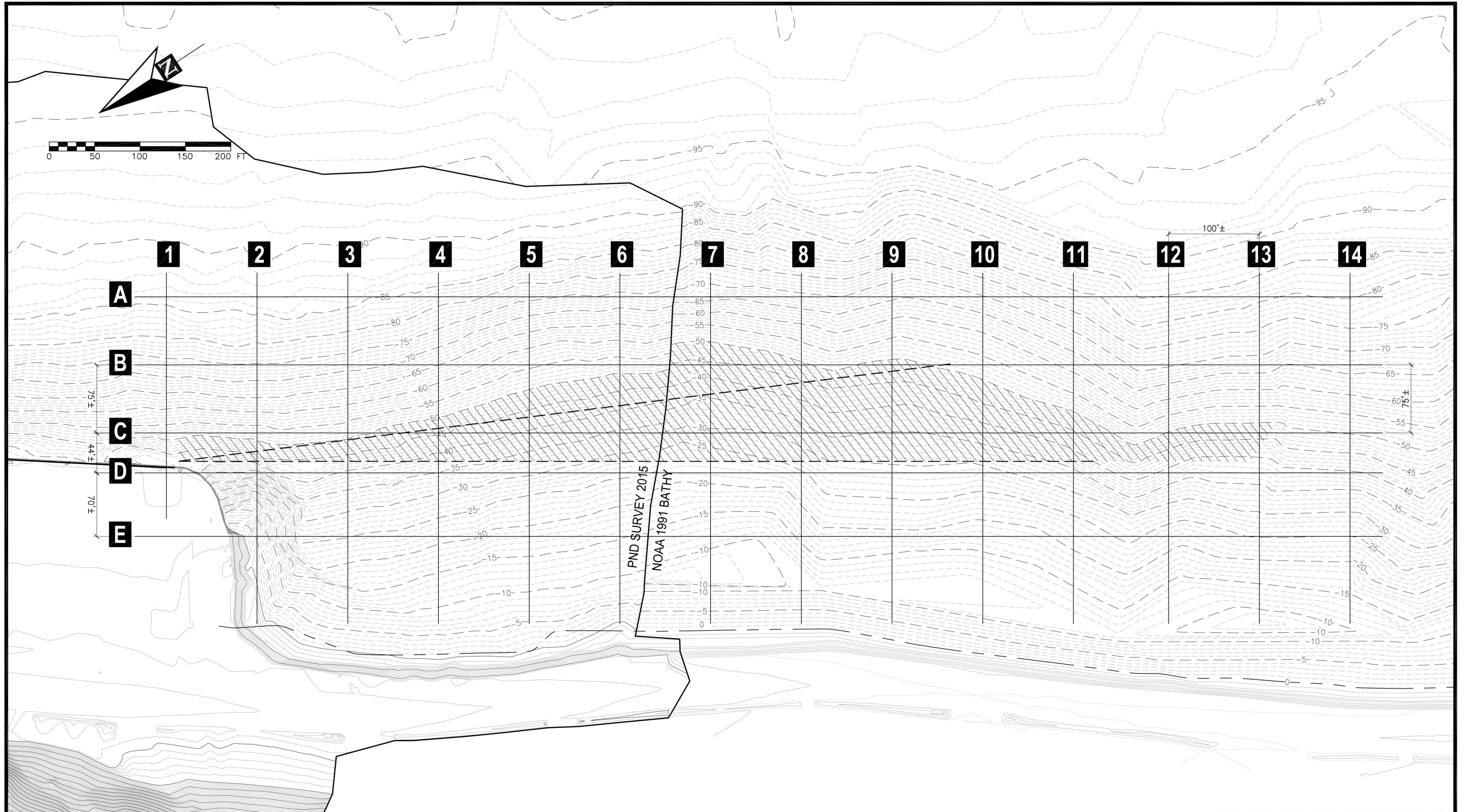
Senior Vice President

Attachments:

Proposed Geophysical Survey Areas

Dock Concept Drawings

PND Standard Rate Schedule



CONCEPT
06/29/2017

PND Engineers, Inc. (PND) is not responsible for safety programs, methods or procedures of operation, or the construction of the design shown on these drawings. Where specifications are general or not called out, the specifications shall conform to standards of industry. Drawings are for use on this project only and are not intended for reuse without written approval from PND. Drawings are also not to be used in any manner that would constitute a detriment directly or indirectly to PND.

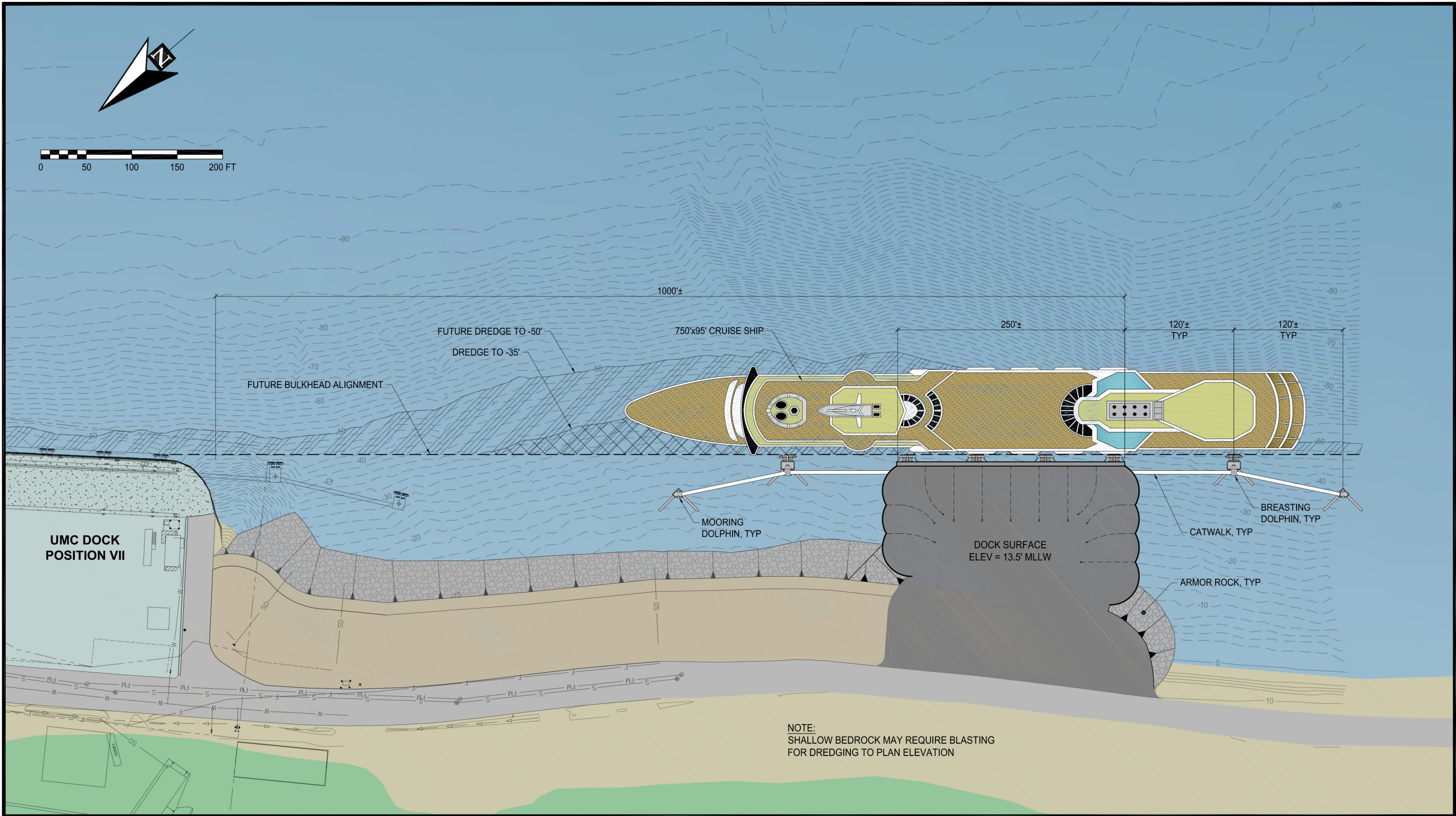
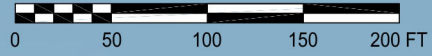
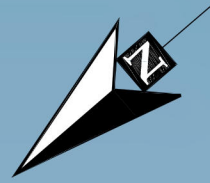
REV	DATE	DESCRIPTION

DATE: _____

1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
Fax: 907.563.4220
www.pndengineers.com



PROJECT: UMC DOCK MULTIPURPOSE DOCK			
TITLE: GEOPHYSICS AREA			
DESIGNED BY: MJC	DATE: 12/1/2023	SHEET NO: 1 OF 1	
CHECKED BY: DST	PROJECT NO: 111135		



CONCEPT
12/27/2018

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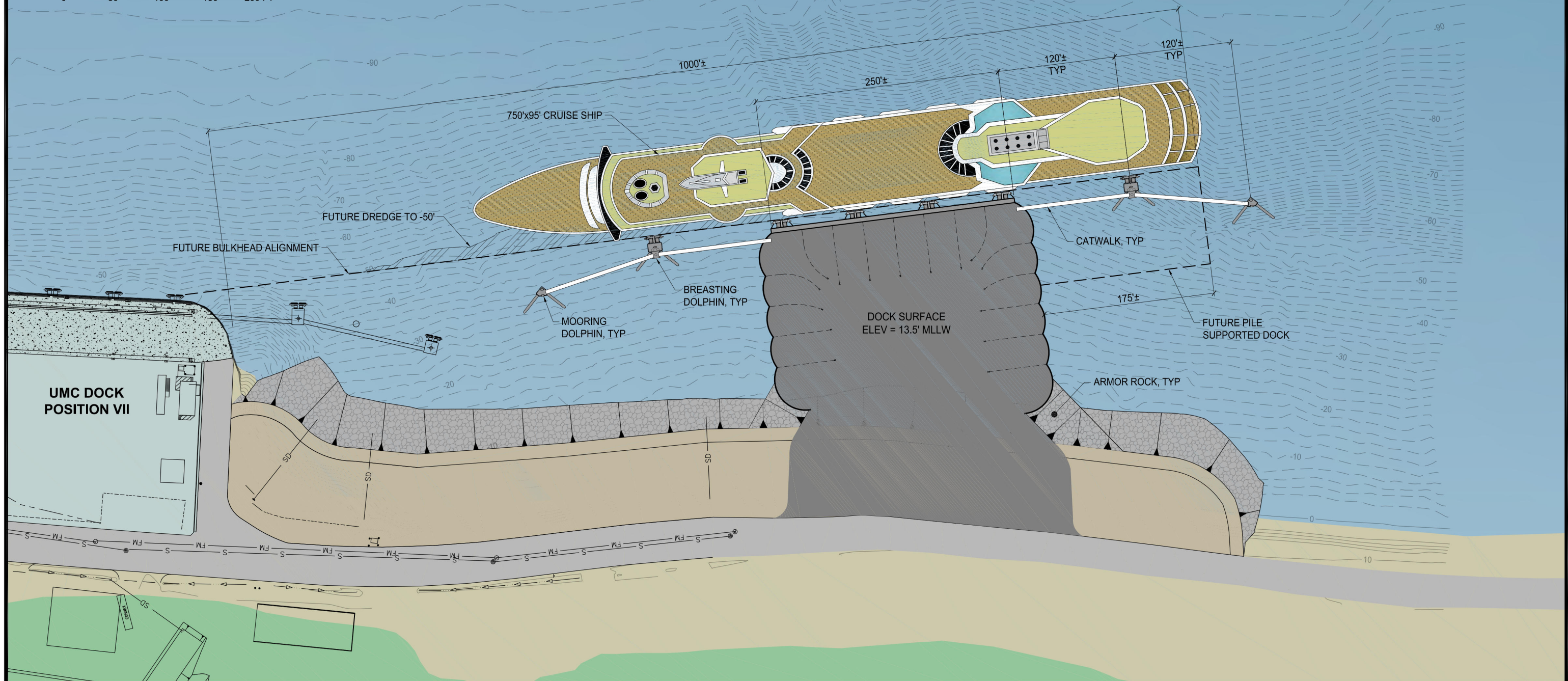
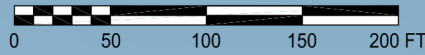
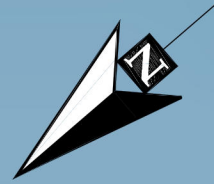
1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
Fax: 907.563.4220
www.pndengineers.com



PROJECT: **UMC CRUISE SHIP DOCK CONCEPT**

TITLE: **PLAN - ALTERNATIVE 1**

DESIGNED BY: CC	DATE: 10/09/2018	SHEET NO: 1 OF 3
CHECKED BY: DST	PROJECT NO: 111135	



CONCEPT
10/09/2018

PND Engineers, Inc. (PND) is not responsible for safety programs, methods or procedures of operation, or the construction of the design shown on these drawings. Where specifications are general or not called out, the specifications shall conform to standards of industry. Drawings are for use on this project only and are not intended for reuse without written approval from PND. Drawings are also not to be used in any manner that would constitute a detriment directly or indirectly to PND.

REV	DATE	DESCRIPTION

DATE: _____

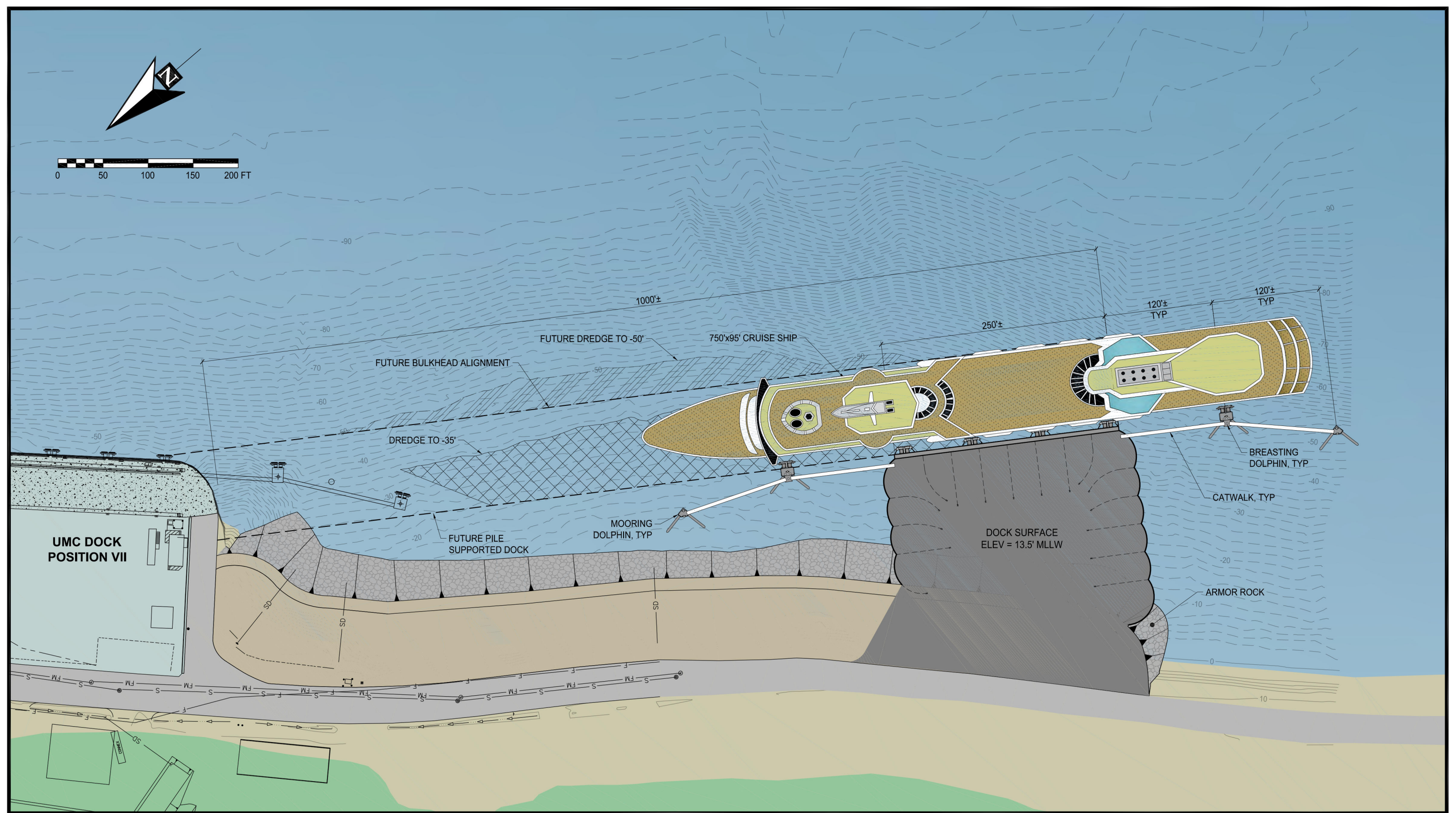
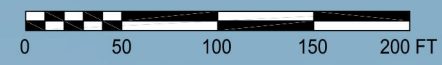
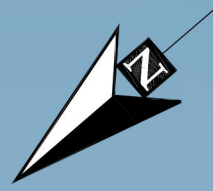
1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
Fax: 907.563.4220
www.pndengineers.com



PROJECT: **UMC CRUISE SHIP DOCK CONCEPT**

TITLE: **PLAN - ALTERNATIVE 2**

DESIGNED BY: CC	DATE: 10/09/2018	SHEET NO: 2 OF 3
CHECKED BY: DST	PROJECT NO: 111135	



CONCEPT
10/09/2018

PND Engineers, Inc. (PND) is not responsible for safety programs, methods or procedures of operation, or the construction of the design shown on these drawings. Where specifications are general or not called out, the specifications shall conform to standards of industry. Drawings are for use on this project only and are not intended for reuse without written approval from PND. Drawings are also not to be used in any manner that would constitute a detriment directly or indirectly to PND.

REV	DATE	DESCRIPTION

DATE: _____

1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
Fax: 907.563.4220
www.pndengineers.com



PROJECT: UMC FERRY DOCK CONCEPT	
TITLE: PLAN - ALTERNATIVE 3	
DESIGNED BY: CC	DATE: 10/09/2018
CHECKED BY: DST	PROJECT NO: 111135
SHEET NO: 3 OF 3	



PND ENGINEERS, INC.
SEATTLE STANDARD RATE SCHEDULE
EFFECTIVE JANUARY 2024

<u>Professional:</u>	Staff Engineer I	\$116.00	
	Staff Engineer II	\$134.00	
	Staff Engineer III	\$144.00	
	Staff Engineer IV	\$150.00	
	Staff Engineer V	\$155.00	
	Staff Engineer VI	\$173.00	
	Senior Engineer I	\$168.00	
	Senior Engineer II	\$179.00	
	Senior Engineer III	\$192.00	
	Senior Engineer IV	\$206.00	
	Senior Engineer V	\$225.00	
	Senior Engineer VI	\$246.00	
	Senior Engineer VII	\$265.00	
	Environmental Scientist I	\$121.00	
	Environmental Scientist II	\$144.00	
	Environmental Scientist III	\$163.00	
Environmental Scientist IV	\$179.00		
Environmental Scientist V	\$197.00		
Environmental Scientist VI	\$207.00		
<u>Surveyors:</u>	Senior Land Surveyor I	\$134.00	
	Senior Land Surveyor II	\$144.00	
	Senior Land Surveyor III	\$155.00	
<u>Technicians:</u>	Technician I	\$68.00	
	Technician II	\$100.00	
	Technician III	\$110.00	
	Technician IV	\$121.00	
	Technician V	\$150.00	
	Technician VI	\$173.00	
	CAD Designer III	\$100.00	
	CAD Designer IV	\$116.00	
	CAD Designer V	\$139.00	
	CAD Designer VI	\$150.00	



December 7, 2023

PND 23A-173

Peggy McLaughlin
Director of Ports
City of Unalaska
P.O. Box 610
Unalaska, Alaska 99685

Re: PND Proposal for Design and Permitting of Dredging at Unalaska Marine Center and Light Cargo Dock

Dear Peggy,

PND Engineers, Inc. (PND) is pleased to provide this proposal for Design and Permitting of Dredging at Unalaska Marine Center and Light Cargo Dock. We understand that the United States Army Corps of Engineers (USACE) are planning to dredge the entrance channel to allow deeper draft vessels access to Dutch Harbor and that the City of Unalaska (City) may realize permitting and construction synergies for their proposed dredging projects.

Task D1 – UMC Dock Positions 1 through 7 Dock Face Dredging

PND will develop dredging design drawings and specifications for dredging the various sections of UMC Dock – Position 1-7 to Elev -45 MLLW. The design and analysis will be based upon the soon-to-be collected bathymetry (under a separate PND proposal for UMC and LCD bathymetry and sub-bottom profiling) at the dock face and the original design drawings of each section of the docks. Structural stability, scour and slope stability will be evaluated and design of scour resistant revetments will be included if necessary. We assume that UMC and LCD dredging projects will be bid and constructed under a single City contract.

Deliverables – Construction Drawings, Specifications, Cost Estimate and Contract Documents for UMC Pos 1-7 Dock Face Dredging

Table with 2 columns: Schedule - and completion time. Rows include 35%, 65%, 95%, and 100% Design Submittal milestones.

*Updated project bathymetry is required for progression beyond 65% design.

Cost - Total = \$68,000 Fixed Fee

Task D2 – Light Cargo Dock Face Dredging

PND will develop dredging design drawings and specifications for dredging the Light Cargo Dock to Elev -30 MLLW. The design and analysis will be based upon the soon-to-be collected bathymetry at the dock face (under a separate PND proposal for UMC and LCD bathymetry and sub-bottom profiling) and the original design drawings of each section of the docks. Structural stability, scour and slope stability will be evaluated and design of scour resistant revetments will be included if necessary. We assume that UMC and LCD dredging projects will be bid and constructed under a single City contract.

Deliverables – Construction Drawings, Specifications, Cost Estimate and Contract Documents for Light Cargo Dock Face Dredging

Schedule –	35% Design Submittal	6 weeks after NTP
	65% Design Submittal	12 weeks after NTP
	95% Design Submittal*	18 weeks after NTP
	100% Design Submittal	24 weeks after NTP

*Updated project bathymetry is required for progression beyond 65% design.

Cost - Total = \$54,000 Fixed Fee

Task D3 – UMC and Light Cargo Dock Dredge Permitting

PND will develop USACE and ADEC Antidegradation permit drawings and applications for dredging the UMC and Light Cargo Dock. PND will also prepare expedited ESA consultation letters for NMFS and USFWS. If additional permit requirements are identified, PND will notify the client of the unanticipated scope.

We plan to propose near project offshore disposal of excavated materials in adjacent deeper water (i.e., screeding), eliminating the need for removal of the materials from the water and associated permitting challenges. We anticipate that dredge material sampling and analysis plan will not be required but could be added to the scope if needed. Permits are typically received within 180 days after submittal to USACE, but timelines may be affected by agency requirements and availability.

Deliverables – USACE Permit Application and Drawing Package

Schedule –	Draft Permit Application	12 weeks after NTP
	Final Permit Application*	16 weeks after NTP
	Permit Agency Consultation	as needed

*Updated project bathymetry is required for Final Permit application.

Cost - Total = \$25,000 Time and Materials

Task D4 – UMC and Light Cargo Dock Dredge Bid Support

PND will assist the City in the bid process of the project through contractor selection and completed City-Contractor agreement. PND will facilitate and lead a Pre-Bid meeting, respond to bidder questions, issue addenda, lead a bid opening meeting and facilitate execution of the City-Contractor agreement and supporting documents. We assume that UMC and LCD dredging projects will be bid together as a single project.

Deliverables – Bid Support and contract documents as required

Schedule – per City bid schedule after completion of Task D1-3 above

Cost - Total = \$11,000 Time and Materials

TOTAL PROPOSAL COST = \$158,000



We look forward to assisting with continued marine infrastructure improvements and appreciate the opportunity to work with the City of Unalaska. Please call if you have any questions regarding this proposal.

Sincerely,

PND Engineers, Inc.

A handwritten signature in blue ink that reads "Dempsey S. Thieman".

Dempsey S. Thieman, P.E.
Senior Vice President