



REQUEST FOR QUALIFICATIONS No. 071085

On-Call Marine Structures Facility Condition Assessment Services

Issued by
Port of Tacoma
One Sitcum Plaza
P.O. Box 1837
Tacoma, WA 98401-1837

RFQ INFORMATION	
Contact:	Heather Shadko
Email Addresses:	procurement@portoftacoma.com
Phone:	253.428-8697
Submittal Date	MARCH 4, 2019 @ 2:00 PM

PLEASE SUBMIT ALL CORRESPONDENCE AND STATEMENT OF QUALIFICATIONS VIA E-MAIL DIRECTLY TO THE PROCUREMENT CONTACT LISTED ABOVE AND INCLUDE IN THE SUBJECT LINE:

MARINE STRUCTURES FACILITY CONDITION ASSESSMENT SERVICES

PORT OF TACOMA & THE NORTHWEST SEAPORT ALLIANCE
Request for Qualifications For
On-Call Marine Structures Facility Assessment Services 2019
RFQ Number 071085

The Port of Tacoma (Port) and the Northwest Seaport Alliance (NWSA) are soliciting Statements of Qualifications (SOQ) from highly qualified teams interested in providing professional consulting services to assist the Port and the NWSA On-Call Marine Structures Facility Assessment Services for the South Harbor (Tacoma).

A. ON-CALL CONTRACTING

The Port/NWSA will select and issue one contract based upon qualifications received. Upon successful negotiation of rates and fees, the Port/NWSA will award the initial contract in an amount of up to \$600,000; at the Port/NWSA's sole option, contract amounts may be increased to meet ongoing needs of the Port/NWSA.

The initial period of performance for work issued under this contract will be two (2) years from the date of contract execution. At the sole option of the Port/NWSA, the contract may be extended two (2) times for up to one (1) year each and until all task orders currently executed are completed.

The Port/NWSA will issue a request for a proposal for each task order defining the work being requested. Before the Consultant may begin work, a fee proposal and schedule must be submitted to, and approved by, the Project Manager identified. An approved task order outlining a defined scope, deliverables, schedule and proposal amount will be issued. Task Orders issued under this contract may not in any case exceed \$150,000. Reference the On-Call Supplementary Conditions section of Attachment B.

The following documents are attached to this RFQ:

Attachment A – Submittal Form

Attachment B – Professional Service Agreement

Attachment C – Sample Rate Sheet

Attachment D – Final Structural Assessment and Pier Inspection Program,
BergerABAM, July 18, 2017

* By submitting a Statement of Qualifications (SOQ), the Proposer represents that it has carefully read all attachments. Any exceptions to the Terms and Conditions in the Draft Professional Service Agreement must be submitted during the Question and Answer period and shall reflect how the Port of Tacoma and the Northwest Seaport Alliance would benefit by the exception.

B. SCOPE OF WORK

The Port/NWSA owns or leases a variety of marine structures including, but not limited to: docks, wharves, trestles, bulkheads and piers. These structures may be constructed of timber, steel, concrete and other building materials. Many of these structures are near, or past, their original design life. As such, the Port/NWSA is seeking one consultant team to provide guidance on an on-call basis regarding the condition and safe use of the structures as detailed further in the Scope of Services.

The Port/NWSA primary intent with this contract is to conduct inspections, under water (including piles and cathodic protection), under dock (pile caps, framing and bollard anchorage, bulkhead walls and above dock (bull rail, appurtenances, decking, pavement and fenders) over the course of four years as identified in the attached Structural Assessment and Pier Inspection Program. Initially, inspection of the following facilities are to be complete by mid November 2019. The locations are as follows:

Northwest Seaport Alliance (South Harbor)

- SSA (East Sitcum Terminal)
- Olympic Container Terminal (West Sitcum Terminal)
- Terminal 7 berth A & B (Timber and Concrete)
- Tote Piers (Aft, Midship, South Forward, North and the Timber Pier)
- Pier 3 and remaining portion of Pier 4
- Washington United Wharf
- Pierce County Terminal Wharf
- Blair Dock
- West Hylebos Log Dock
- Pony Lumber Dock

Port of Tacoma

- Pier 24 and 25

The work to be performed includes:

- Documentation of Field Conditions: The consultant will review existing Port/NWSA drawings and studies that relate to projects. The consultant will also conduct field verifications of existing conditions, and perform additional studies if necessary. This may include general conditions surveys, geotechnical investigations, soils testing, underwater investigations, etc.
- Research and review of the existing pier and trestle structures including any as-built drawings, construction drawings and previously completed condition assessment reports.
- Following research and documentation of existing conditions, the Consultant shall conduct the necessary analysis to determine appropriate/safe loading criteria.

- Perform routine, condition assessments of identified marine structures as defined by ASCE Manuals and Reports on Engineering Practice No. 130 Waterfront Facilities Inspection and Assessment to verify information contained in previous analysis.
- Special purpose inspections may be necessary to perform more detailed inspections.
- Develop Facility Condition Assessment and Evaluations to include:
 - Inspect dock conditions and evaluate results including recommended repairs, estimated costs, timeframe, urgency, and remaining service life once repairs are completed.
 - Inspection associated with marine bore or other invasive species.

Additional work may include, but not be limited to.

- Load Ratings
 - Consultant shall provide load ratings (PSF) with backup calculations, as well as guidance for a number of loading types as prescribed by the Port/NWSA, including rail cars, rail mounted cranes, mobile cargo handling equipment, static deck loads and mooring bollards. The load rating shall consider the capacity of the structure and foundations including the pile-soil interface.
- Underwater Diving Support: including but not limited to performing the following:
 - Inspections of under docks, piles, seawalls, post mitigation, post demolition, security, underwater vessels/debris/obstructions.
 - Underwater diver site monitoring, underwater video and photography, incident response, underwater sampling, salvage recovery assistance.
- Quality Control: Develop and submit project specific QA/QC plans that comply with Port/NWSA QA/QC minimum requirements to ensure the quality of work product.
- Additional other miscellaneous tasks generally associated with Pier Condition Assessments and Load Ratings.
- Follow-on work may include conceptual level repair design and cost estimate; although full engineering design services are not included in this Scope of Work.
- Emergency Structure Inspection – Assist in review of pier structure damage that may occur over the course of this contract. This would include, but is not limited to, inspection of damage, assessment of continued use, recommendations for repairs and estimating.

C. INSTRUCTIONS TO PROPOSERS & EVALUATION CRITERIA:

PROCUREMENT PROCESS

SOLICITATION TIMELINE:

Issuance of RFQ	February 19, 2019
Pre-Proposal Conference	None
Last Day To Submit Questions	February 28, 2019
SOQs due	March 13, 2019 @2:00 PM (PST)
Short List Consultants*	March 26, 2019
Interviews (if required)*	April 3, 2019
Final Selection*	April 5, 2019
Execute Contract*	April 19, 2019

*Dates with an asterisk are estimated dates and are for information purposes only.

All status updates on the above solicitation timeline will be announced on the Port's [website for this solicitation](#).

COMMUNICATION / INQUIRES

Port of Tacoma Requests for Bids, Requests for Proposals and Requests for Qualifications can be accessed on the Port's website, www.portoftacoma.com under 'Contracts'; Procurement and then finding RFQ Number (071085) and RFQ On-Call Marine Structures Facility Condition Assessment Services.

When viewing the details page for this procurement on the Port's Website firms have the option of subscribing to the Holders List. Detailed instructions for subscribing to the Holder's List for Port of Tacoma Procurements are available [here](#).

By subscribing to the Holders List, firms will automatically be notified when new documents or changes relating to this procurement occurs.

Proposers who, relative to this solicitation, contact any individuals, Commission members or Managing Members representing the Port/NWSA, other than the Procurement Representative listed on the RFQ may be disqualified from consideration.

Written questions about the meaning or intent of the Solicitation Documents shall only be submitted to Procurement at procurement@portoftacoma.com (**Solicitation Name** in subject line).

Proposers who may have questions about provisions of these documents are to email their questions by the date listed above. The Port/NWSA will respond to all written questions submitted by this deadline.

PRE-PROPOSAL CONFERENCE

The Port/NWSA will not conduct a pre-proposal conference for this procurement. To obtain answers to any questions or for further clarifications, submit all questions as noted above.

ADDENDA

The Port/NWSA may make changes to this Solicitation. Oral or other interpretations, clarifications or submittal instructions will be without legal effect. Any information modifying a solicitation will be furnished in a formal, written addendum. Addenda will be posted to the Port's web site and conveyed to those potential submitters who have subscribed to the Holders List.

It is the Proposer's responsibility to obtain and acknowledge all addenda by signing and returning the form included in this solicitation as Submittal Form 1, Receipt of Addenda.

Failure to acknowledge Addenda may result in the SOQ being declared non-responsive.

SUBMITTAL PROCESS

SOQs must be received via email on or before the date and time outlined on the front page of this RFQ. Send your electronic submittal to:

procurement@portoftacoma.com.

Name of Firm, RFQ Title (Subject Line)

Please submit one electronic copy in Adobe Acrobat PDF format, including all appendices. Submittals need to be limited to **9 MB in total email size**. It is the Consultant's responsibility to verify the receipt of the submittal. Electronic verification will be provided upon request.

***Late SOQs will not be accepted by the Port/NWSA. SOQs received after the stated date and time will not be reviewed and shall be deemed non-responsive.**

EVALUATION AND AWARD PROCESS

An evaluation team will review the SOQs and evaluate all responses received based upon the criteria listed in the RFQ. The Port/NWSA may request clarifications or additional information, if needed. A selection may be made based on the SOQ's and initial evaluation criteria alone or the firms determined to be most qualified through the initial evaluation phase may be invited in for interviews and the final determination for short listed firms will be based on reference checks and/or interviews.

The Port/NWSA intends to select the proposed Team which represents the most qualified team to the Port/NWSA and begin the negotiation and award process based on the evaluated scores.

The selected Consultant will be invited to enter into contract negotiations with the Port/NWSA. Should the Port/NWSA and the selected consultant not reach a mutual agreement, the Port/NWSA will terminate negotiations and move to the next highest ranked team and proceed with negotiations.

The Port/NWSA reserves the right to accept or reject any or all information in its entirety or in part and to waive informalities and minor irregularities and to contract as the best interest of the Port/NWSA may require. The Port/NWSA reserves the right to reject any or all SOQs submitted as non-responsive or non-responsible.

News releases pertaining to this RFQ, the services, or the project to which it relates, shall not be made without prior approval by, and then only in coordination with, the Port/NWSA.

COSTS BORNE BY PROPOSERS

All costs incurred in the preparation of a SOQ and participation in this RFQ and negotiation process shall be borne by the proposing firms.

PUBLIC DISCLOSURE

SOQs submitted under this Solicitation will be considered public documents and, with limited exceptions, will become public information and may be reviewed by anyone requesting the document under a Public Records Request following the conclusion of the evaluation, negotiation, and award process. This process is concluded when a signed contract is executed between the Port/NWSA and the selected Consultant.

If a firm considers any portion of its response to be protected under the law, the firm shall clearly identify each such portion with words such as “CONFIDENTIAL”, “PROPRIETARY” or “BUSINESS SECRET” on each page for which the protection is sought. If a request is made for disclosure of such portion, the Port/NWSA will notify the firm of the request and allow the vendor not less than ten (10) days to seek a protective order from the Courts or other appropriate remedy and/or waive the claimed confidentiality. Unless such protective order is obtained and provided to the Port/NWSA by the stated deadline, the Port/NWSA will release the requested portions of the response. By submitting a response, the vendor assents to the procedure outlined in this paragraph and shall have no claim against the Port/NWSA on account of actions taken under such procedure.

Submittals should present information in a straightforward and concise manner, while ensuring complete and detailed descriptions of the proposing team (to include the prime, key team members and major sub-consultants) and the team’s ability to meet the requirements and provide the requested services listed in this RFQ. Attention will be paid to technical competence and completeness of content. The written SOQ shall be prepared in the same sequential order of SOQ criteria outlined below.

SOQs must not exceed **10 numbered pages** (8 ½ by 11 inch) **excluding** the cover page, cover letter and requested appendices. All pages shall be in portrait orientation with 1 inch margins. Font size shall be 11 point or larger. SOQs that do not follow this format will not be reviewed. Use of color is not prohibited but note that SOQs are often reproduced for review in black and white.

The cover letter shall include the RFQ Title and Number; Name, Title, Email Address, Phone Number and Addresses of the Proposing’s team main contact and include the following information:

- Descriptions of all claims submitted by any client against the prime within the past two years related to the professional services provided by the prime (inclusive of the prime and sub-consultants) or their key personnel. For this purpose, “claim” means a sum of money in dispute in excess of 10% of the prime’s fee for the services provided;
- Any real or perceived conflicts of interests for team members, inclusive of the prime, sub-consultants and key team members.

SOQs are to address, and will be evaluated upon, the following criteria:

1. Firm Experience and History.....25 PTS

Specialized experience and technical competence of the firms comprising the team, considering the type of services required. Past record of performance on contracts with other government agencies or public bodies and with private industry, including such factors as control of costs, quality of work, ability to meet schedules and cooperation and communication with the owner. Recent experience of the firm and successful completion of Work of a similar type and complexity will be a material consideration.

Submittal Requirements

- Brief résumé of the Submitter firm, including but not limited to: home and branch office information; date established; former name(s); type of ownership or legal structure; general description of services provided and type of clients served; personnel.
- Description of recent projects or Work for which the Submitter firm (or firm's team) provided services to illustrate the firm's ability to perform the requirements of this Contract. SOQs should include but are not limited to:
 - Work name and location
 - Role of the firm (prime, subconsultant, joint venture, etc.)
 - Client (Owner) name, Owner's project manager or primary contact, physical address, phone number and email address.
 - Name, address, phone number and email address of firm's project manager.
 - Brief description of the Work (including description of the services provided by the firm; total cost of project; completion date; etc.).

2. Knowledge and Experience of Key Individuals40 PTS

- Specialized experience and technical competence of the key individuals and support staff that will provide the requested services, including but not limited to the proposed project manager, major subconsultants, and key staff in each firm.
- Key individual's knowledge of and experience with problems, conditions, or circumstances applicable to specific location of this project.
- Knowledge, recent experience and expertise of these key individuals with projects of similar type and complexity will be a material consideration.

Submittal Requirements

- A representative list of past or current projects performed by the key individuals who will provide the requested services. SOQs shall include information about the project manager, major subconsultants, and key staff. SOQs shall include but are not limited to:
 - Project name and location
 - Role of the individual (prime or subconsultant)
 - Client (Owner) name, Project Manager or primary contact, physical address, phone number and email address
 - Name, address, and phone number of prime consultant's project manager
 - Brief description of the Work (including description of the services provided by the firm; (total cost of project; completion date; etc.)
 - Brief description of key personnel's knowledge of and experience with problems, conditions or circumstances applicable to specific location of this project.
- Full, one-page résumés for each of the key individuals and/or support staff who will provide the requested services attached to the Appendix.

3. Capacity, Approach and Project Organization 35 PTS

The Submitter will be required to demonstrate the firm's capacity and experience to provide the Port of Tacoma and the Northwest Seaport Alliance with the required services. This should be demonstrated through the firm's understanding of the Scope of Work to be provided in order to manage and complete the work.

Submittal Requirements

Provide information demonstrating the team's:

- Capacity to perform the Work (including any specialized services) within the time limitations, considering the firm's current and planned workload;
- Clearly demonstrate the firm's capability to support the technical requirements as identified in the Scope of Work.
- Availability and accessibility (key personnel and support staff identified in criteria 2); Provide and organizational chart of your firm and include the respective roles that each employee will provide for the team.
- Prime consultant is required to identify in their Proposal what specific Task(s) they would perform, as well as what Task(s) their Subconsultants would perform.
- Ability to coordinate the work quickly and efficiently with the Port of Tacoma and the Northwest Seaport Alliance personnel considering:

- The team's organizational structure.
- Reporting relationship between individual team members.
- The physical location of the office from which the work will be performed.
- Ability to clearly describe the team's approach and methodology for accomplishing the various services outlined in the Scope of Services section. Approach should include information on coordinating the work quickly and efficiently with the Port of Tacoma and the Northwest Seaport Alliance personnel.
- Clearly describe the team's general approach and methodology for accomplishing the various services outlined in the Scope of Services section. Approach should include information on:
 - Project Management: Describe how the team will manage and coordinate the necessary disciplines required to accomplish the services requested.
 - Provide approach for scheduling and sequencing of individual task orders and for providing simultaneous services on multiple task orders in order to meet the Port/NWSA's desired timeline.

FINAL EVALUATION PHASE (if applicable)

4. Interviews (as requested by the Port/NWSA).....100 PTS

If an award is not made based on the written evaluations and references alone, interviews may be conducted with the top-ranked teams. Failure to participate in the interview process will result in the team's disqualification from further consideration. The Port/NWSA will inform top-ranked teams invited for an interview of the interview schedule, agenda and criteria for scoring to time of invitations. Note: Verbal changes to a team's written SOQ will not be allowed or accepted.

END OF RFQ

SUBMITTAL FORM 1 SUBMITTER INFORMATION AND SIGNATURE

Firm's Legal Name: _____

Address: _____

Principal To Contact/Title: _____

Business Telephone: _____

Business Email: _____

Is This Address the: ☐ Main Office ☐ Regional Office ☐ Branch Office ☐ Other _____Former Firm Name(S) Year Established
(If Any)Name/Address/Telephone Of Parent Company or
Other Offices of the Firm, (If Any)

CORPORATE STRUCTURE:

- ☐ Sole Proprietorship ☐ Corporation ☐ Joint Venture
☐ Parent Company ☐ Partnership ☐ Other (specify): _____

1. State Of Incorporation: _____

2. DUNS #: _____

3. State of Washington Unified Business Identifier #: _____

4. Federal Tax Identification #: _____

5. If applicable, acknowledge Addendum(a) by specifying Addendum(a) number in spaces provided :

The Submitter certifies that the information presented in this Statement of Qualifications is true to the best of his/her knowledge:

Submitter: _____
(Type or Print Company Name)

By: _____
(Signature) (Title)

Print Name: _____

END OF FORM

ATTACHMENT B



People. Partnership. Performance.

P.O. Box 1837
Tacoma, WA 98401-1837
www.portoftacoma.com

PROFESSIONAL SERVICES AGREEMENT NO. 071085

PROJECT: On-Call Marine Structure Facility Condition Assessment Services

CONSULTANT: Company, Address, City, State, Zip

PROJECT MANAGER: _____ **PROJECT NO.** _____

THIS AGREEMENT is made and entered into by and between the **Port of Tacoma** (hereinafter referred to as the "Port") and **xxCOMPANYxx** (hereinafter referred to as the "Consultant") for the furnishing of **xxx** (hereinafter referred to as the "Project").

The Port and Consultant mutually agree as follows:

SCOPE OF WORK

The scope of services is ...

COMPENSATION

This will be accomplished on a time and materials basis and will not exceed **\$0.00** without prior written approval from the Port.

The length of this agreement is from **the date of execution** to **xxDATExx**.

This agreement is expressly conditioned upon the following Terms and Conditions and Rate Sheet. Consultant acknowledges reading this Agreement, understands it and agrees to be bound by its Terms and Conditions.

AGREED

PORT OF TACOMA

CONSULTANT (LEGAL NAME)

By _____
Date

By _____
Date

Print Name _____ Title _____

TERMS AND CONDITIONS

1. Relationship of the Parties

Consultant and its employees, are independent Contractors. Nothing contained herein shall be deemed to create a relationship of employer and employee or of principal and agent.

2. Subconsultant and Supplier Relations

- a. Subconsultants at all tiers shall be approved by the Port prior to performing work in support of this Agreement between Consultant and Port.
- b. The award of a subcontract does not create a contract between the Port and the subconsultant. Subconsultants shall have no rights whatsoever against the Port by reason of their contract with the Consultant. The foregoing provision shall apply with equal force to subconsultants, suppliers and all other persons or parties otherwise engaged by the Consultant to do any portion of the scope of services defined in this Agreement.
- c. The Consultant shall ensure every subcontract shall bind the subconsultant to the applicable terms of the Agreement. The Consultant shall appropriately monitor the activities of the subconsultant. In no event shall the activities of the subconsultant operate to release or reduce the liability of the Consultant to the Port for any breach in the performance of the Consultant's duties.

3. Conflicts of Interest

Consultant warrants that it has no direct or indirect economic interest which conflicts in any manner with its performance of the services required under this Agreement. Consultant warrants that it has not retained any person to solicit this Agreement and has not agreed to pay such person any compensation or other consideration contingent upon the execution of this Agreement.

4. Compliance with Laws

- a. Consultant agrees to comply with all local, state, tribal, and federal laws and regulations applicable to the scope of services existing at the time this Agreement was executed or that became applicable subsequent to this Agreement's execution, and those regarding employee safety, the work place environment, and employment eligibility verifications as required by the Immigration and Naturalization Service. Consultant shall obtain and maintain all professional licenses and permits required to complete the scope of work as defined.
- b. Consultant must comply with all Occupational Safety and Health Administration (OSHA), Washington Industrial Safety and Health Act (WISHA), Department of Labor, Environmental Protection Agency and other applicable environmental standards as prescribed by law while on or occupying Port-owned properties.
- c. The Consultant is responsible for ensuring that all personnel performing work on this Agreement are paid wages in accordance with federal, state and local laws when applicable.

5. Records and other Tangibles

- a. The Consultant shall maintain all records and documents, including financial data and other evidence directly pertinent to performance of the work under this Agreement in accordance with Generally Accepted Accounting Principles and Practices consistently applied and as further specified below. Consultant shall provide the Port, or its designated agent, with access to or copies of records and other tangibles upon written request.
- b. The Port or its designated agent, and federal and state auditing authorities have the right to audit this Agreement and access to all records and documents, including financial data, for a period of not less than six (6) years after Completion of all projects related to this Agreement or until resolution of any litigation related to this Agreement whichever occurs last.

6. Ownership of Work

- a. The services to be performed by Consultant shall be deemed instruments of service for purposes of the copyright laws of the United States. The Port has ownership rights to the plans, specifications, and other products prepared by the Consultant as a result of this Agreement "Subject Data." Consultant shall not be liable for changes made in the plans, specifications or other products by anyone other than the Consultant. Consultant shall have free right to retain, copy and use any tangible materials or information produced but only for its own internal purposes. Any patentable result or materials suitable for copyright arising out of this Agreement shall be owned by and made available to the Port for public use, unless the Port determines it is not in the public interest that it be owned or available.
- b. Subject Data shall include all calculations, notes, draft documents, reports, drawings, specifications, electronic files, including e-mails, and any other materials, information or documentation developed or prepared in the performance of the work pursuant to this Agreement and shall be owned by and treated as Port property. The Consultant shall obtain no proprietary rights or interest to such Subject Data.
- c. Any subject data which is developed by the Consultant prior to the execution of this Agreement, and not paid for by the Port, is not covered by this provision "Consultant Data."
- d. All information, materials, data and documentation furnished or made available to the Consultant by the Port for purposes of performing services pursuant to this Agreement on this project shall remain the property of the Port "Port Data." The Consultant shall obtain no proprietary rights or ownership interests to such Port Data. At the Port's written request, the Consultant shall return all such Port Data remaining in the Consultant's possession at the termination or expiration of this Agreement.

7. Disclosure

All information developed by the Consultant, all analyses or opinions reached by the Consultant (Subject Data) and all information made available to the Consultant by the Port (Port Data), shall not be disclosed by the Consultant without the written consent of the Port.

8. Compensation

- a. As full compensation for the performance of its obligations of this Agreement and the services to be provided, the Port shall pay Consultant as specified in the Agreement.
- b. Consultant is responsible for working within the agreement amount. Should the consultant incur costs beyond the agreement amount without an executed amendment to this agreement, the Consultant is solely responsible for the additional costs.
- c. Invoices shall be submitted to cpinvoices@portoftacoma.com each month. Invoice period is for the previous calendar month and shall be computed pursuant to the rates and limitations set forth in the Agreement. Consultant agrees to submit monthly invoices as the work progresses. Invoices that are submitted for payment 90 days or more after the work was completed are subject to non-payment. Under no circumstances will the Port pay interest on payments.
- d. Un-invoiced services performed through December 31 of each year shall be invoiced no later than the 7th day of January. If the Consultant is unable to provide an invoice they shall advise the Port in writing with a summary of the work completed and the accrual amount to be invoiced through December 31 of that year.

9. Costs and Disbursements

Consultant is responsible for and shall pay all costs and disbursements required for the performance of its services under this Agreement.

10. Standard of Care

- a. Consultant shall perform its work to conform to generally accepted professional standards. Consultant shall be responsible for the professional quality, technical adequacy and accuracy, timely completion and coordination of all plans, designs, drawings and specifications prepared under this Agreement. Consultant shall, without additional compensation, correct or revise any errors or omissions in such work.
- b. The Port's approval of plans, drawings and specifications shall not relieve Consultant of responsibility for the adequacy or accuracy thereof. The Consultant shall remain liable for damages and costs incurred by the Port arising from the Consultant's errors, omissions or negligent performance of services furnished under this Agreement.

11. Time

Time is a material consideration in the performance of all work by the Consultant under this Agreement. The Consultant shall complete its work and services within the agreed upon schedule; including any established milestones and task completion dates, and the overall period of performance, set forth in the Scope of Work. The completion dates for tasks may be modified by a written directive; however, the period of performance for the Agreement may only be modified through an amendment. The period of performance and contract milestones shall not be extended because of any unwarranted delays attributable to the Consultant. The period of performance and contract milestones may be extended in the event of a delay caused by the Port which results in a delay in the performance of an affected task, because of unavoidable delay caused by any governmental action, or other conditions beyond the control of the Consultant, which could not reasonably be anticipated and which results in a delay in the period of performance and contract schedule. Upon mutual agreement, the period of performance may be accelerated to meet Project requirements.

12. Assignability

The Consultant may not assign, transfer, or novate all or any portion of the Agreement, including but not limited to any claim or right to the Contract Sum, without the Port's prior written consent. If the Consultant attempts to make an assignment, transfer, or novation without the Port's consent, the assignment or novation, shall be of no effect, and the Consultant shall nevertheless remain legally responsible for all obligations under the Agreement. The Consultant also shall not assign or transfer to any third party any claims it may have against the Port arising under the Agreement or otherwise related to the Project.

13. Termination of Agreement

a. Termination for Default:

- i. The Port may terminate this Agreement, in writing, if the Consultant substantially fails to fulfill any or all of its material obligations under this Agreement through no fault of the Port; provided that the Consultant has been given an opportunity to cure.
 1. Cure Notice: If the Port determines that a breach of this Agreement has occurred, that is, the Consultant has failed to comply with any material terms or conditions of this Agreement or the Consultant has failed to provide in any manner the work or services agreed to herein, and if the Port deems said breach to warrant corrective action, the following sequential procedure will apply:
- ii. The Port will provide the Consultant with a written Cure Notice; notifying the Consultant of the nature of the breach;
- iii. The Consultant shall respond within five (5) calendar days of the notification. The Consultant shall submit a corrective action plan indicating the steps to be taken to correct the specified deficiencies within fifteen (15) calendar days of the notification. The corrective action plan shall specify the proposed completion date for bringing this Agreement into compliance within the number of calendar days specified by the Port;

b. Show Cause Notice:

- i. In the event that the Consultant does not respond within the appropriate time with a corrective action plan, the Port will provide the Consultant with a written Show Cause Notice; notifying the Consultant of their requirement to notify the Port in writing within seven (7) calendar days of any reason the Port should not terminate this Agreement. At the expiration of the seven (7) calendar day period the Port may commence termination of this Agreement in whole or in part;
- ii. The Port may withhold payment owed the Consultant, instruct the Consultant to stop work and to refrain from incurring additional costs until the Port is satisfied that the breach has been corrected;
- iii. No increase in total price or period of performance shall result from breach of this Agreement; and
- iv. Nothing herein shall be deemed to affect or waive any other rights of the Port.

c. Notice of Termination:

- i. If the Port terminates this Agreement for default, the Port shall determine the amount of work satisfactorily performed to the date of termination and the amount owing to the Consultant using the criteria set forth below; provided, that (a) no amount shall be allowed for anticipated profit on unperformed services or other work and (b) any payment due to the Consultant at the time of termination may be adjusted to the extent of any additional costs the Port incurs because of the Consultant's default. In such event, the Port shall consider the actual costs incurred by the Consultant in performing this Agreement to the date of termination, the amount of work originally required which was satisfactorily completed to the date of termination, whether that work is in a form or of a type which is usable and suitable to the Port at the date of termination, the cost to the Port of completing the work itself or of employing another firm to complete it and the inconvenience and time which may be required to do so, and other factors which affect the value to the Port of this Agreement's work performed to the date of termination. Under no circumstances shall payments made under this provision exceed the Total Price set forth in this Agreement. This provision shall not preclude the Port from filing claims and/or commencing litigation to secure compensation for damages incurred beyond that covered by withheld payments.
- ii. Upon receipt of a termination notice the Consultant shall at no additional cost to the Port:
 1. Promptly discontinue all services (unless the notice directs otherwise);
 2. No later than fourteen (14) calendar days after receipt of termination, promptly deliver or otherwise make available to the Port all Subject Data and Port Data including data, drawings, electronic drawing files, specifications, calculations, reports, estimates, summaries, official project documentation and other project documentation, such other information and materials as the Consultant or subconsultants may have accumulated in performing this Agreement, whether completed or in progress and all equipment/materials purchased specifically for this Agreement where the Port has paid the Consultant for such items.
 3. Upon termination, the Port may take over the work and prosecute the same to completion by agreement with another party or otherwise.

d. Termination for Convenience:

- i. The Port may terminate this Agreement, for the convenience of the Port. The Port shall terminate by delivery to the Consultant a Notice of Termination specifying the termination and the effective date.
- ii. If the Port terminates this Agreement for convenience, the Port shall pay the Consultant for the following items:
 1. An amount for Direct Labor Costs and Indirect Costs in accordance with the Agreement for services satisfactorily performed to the date of termination;
 2. Reasonable invoiced Other Direct Costs as allowed by the Agreement , actually incurred before the date of termination; or

3. Reasonable termination settlement costs the Consultant actually incurred, unless the Port determines to assume said commitments. Reasonable termination settlement costs include settlement costs for subconsultants and reasonable accounting and clerical costs actually incurred by the Consultant.
- iii. Upon receipt of a termination notice the Consultant shall at no additional cost to the Port:
 1. Promptly discontinue all services (unless the notice directs otherwise);
 2. No later than fourteen (14) calendar days after receipt of termination, promptly deliver or otherwise make available to the Port all Subject Data and Port Data including drawings, specifications, calculations, reports, estimates, summaries, Official Project Documentation, other project documentation, and such other information and materials as the Consultant may have accumulated in performing this Agreement, whether completed or in progress and all equipment/materials purchased specifically for this Agreement where the Port has reimbursed the Consultant for such costs;
 3. Take any action necessary, or that the Port may direct, for the protection and preservation of property related to this Agreement that is in the possession of the Consultant and in which the Port has or may acquire an interest.
 - iv. Within sixty (60) calendar days of receipt of the notice of Termination for Convenience, the Consultant shall submit to the Port a Termination Settlement Proposal. The Termination Settlement Proposal shall include:
 1. Request for Direct Labor Costs and Indirect Costs for services satisfactorily performed to the date of termination;
 2. As allowed by the Agreement , Actual and reasonable Other Direct Costs incurred before the termination;
 3. Documentation supporting all costs identified in the Termination Settlement Proposal; and
 4. A statement certifying, under penalty of perjury, that the Termination Settlement Proposal is made in good faith, the Termination Settlement Proposal and supporting data are true and accurate to the best of the Consultant's knowledge and belief, the Termination Settlement Proposal is fully supported by the accompanying data, and the amount requested accurately reflects the amount for which the Consultant believes the Port is responsible.
 - v. Termination settlement costs and proposals are subject to audit verification by the Port.
 - vi. Upon termination, the Port may take over the work and prosecute the same to completion by agreement with another party or otherwise.

14. Disputes

If a dispute arises relating to this Agreement and cannot be settled through direct discussions, the parties agree to endeavor to settle the dispute through a mediation firm acceptable to both parties, the cost of which shall be divided equally. The Port reserves the right to join any dispute under this Agreement with any other claim in litigation or other dispute resolution forum, and the Consultant agrees to such joinder, so that all disputes related to this Agreement may be consolidated and resolved in one forum.

15. Venue & Governing Law

Venue for any litigation shall be the Pierce County Superior Court of the State of Washington and the prevailing party shall be entitled to recover its costs and reasonable attorney(s) fees. This Agreement shall be interpreted under the laws of the State of Washington.

16. Integration and Merger/ Extent of Agreement

- a. This Agreement represents the entire and integrated understanding between the Port and Consultant, supersedes any previous written or oral representations and may be amended only by written instrument signed by both the Port and Consultant. No verbal agreement or conversation between any officer, agent, associate or employee of Port and any officer, agency, employee or associate of Consultant prior to or following the execution of this Agreement shall affect or modify any of the terms or obligations contained in this Agreement.
- b. Authority to sign. Every signer of this Agreement warrants that they have the authority to enter into this Agreement and to bind the entity for which they represent.

17. Non-Discrimination

- a. Nondiscrimination in Employment and Provision of Services: During performance of this Agreement, the Consultant and all parties subcontracting under the authority of this Agreement agrees that it will not discriminate against any employee or applicant for employment because of the employee or applicant's age, sex, marital status, sexual orientation, race, creed, color, national origin, honorably discharged veteran or military status, or the presence of any sensory, mental, or physical disability or the use of a trained dog guide or service animal by a person with a disability.
- b. Equal Employment Opportunity Efforts: The Consultant and all parties subcontracting under the authority of this Agreement agree to undertake equal employment opportunity efforts to ensure that applicants and employees are treated, without regard to their age, sex, marital status, sexual orientation, race, creed, color, national origin, honorably discharged veteran or military status, or the presence of any sensory, mental, or physical disability or the use of a trained dog guide or service animal by a person with a disability.
- c. The Consultant and all parties subcontracting under the authority of this Agreement shall comply fully with all applicable federal, state and local laws, ordinances, executive orders and regulations that prohibit discrimination.

18. Indemnity / Hold Harmless Clause

- a. The Consultant shall indemnify, defend and hold harmless the Port of Tacoma and the Northwest Seaport Alliance and its officers, managing members, employees and agents

from and against any liability, claims, damages, losses, expenses or actions, including reasonable attorney's fees, costs caused by or arising out of the negligence, recklessness, or intentional wrongdoing of Consultant or its officers, employees, subcontractors, or agents under this Agreement; or arising from the Consultant's, its' officers, employees, subcontractors, or agent's failure to comply with any applicable state, federal, local, law, statute, rule, regulation or act.

- b. This duty to indemnify, defend and hold harmless shall not apply to claims which arise out of the sole negligence on the part of the Port of Tacoma and the Northwest Seaport Alliance, and this duty shall survive the termination or expiration of this Agreement.
- c. Consultant specifically assumes potential liability for actions brought by Consultant's own employees against the Port and the Northwest Seaport Alliance and, solely for the purpose of this indemnification and defense, Consultant specifically waives any immunity under the state industrial insurance law, Title 51 RCW. Consultant recognizes that this waiver was the subject of mutual negotiation.

19. General Insurance Requirements

The Consultant shall procure and maintain during the life of this Agreement such insurance as shall protect it from claims or damages for bodily injury, including death resulting therefrom as well as from claims for property damage, which may arise from operations under this Agreement, whether such operations be by itself, its agents, or by anyone directly or indirectly employed by either of them, and shall comply with any such Project specific insurance requirements as determined by the Port.

20. Miscellaneous Provisions

- a. Remedies Cumulative: Rights under this Agreement are cumulative and nonexclusive of any other remedy at law or in equity.
- b. Captions: All titles, including sections or subsections, are for convenience only and do not define or limit the contents.
- c. Severability: Any term or provision of this Agreement found to be prohibited by law shall be ineffective to the extent of such prohibition without invalidating the remainder of the Agreement.
- d. Waiver: No covenant, term, or the breach thereof shall be deemed waived, except by written consent of the Party against whom the waiver is claimed, and any waiver of the breach of any covenant, term or condition shall not be deemed to be a waiver of any preceding or succeeding breach of the same or any other covenant, term or condition. Neither the acceptance by Port of any performance by Consultant after the time the same shall have become due nor payment to Consultant for any portion of the Work shall constitute a waiver by Port of the breach or default of any covenant, term or condition unless otherwise this is expressly agreed to by Port, in writing. Port's failure to insist on performance of any of the terms or conditions herein or to exercise any right or privilege or Port's waiver of any breach hereunder shall not thereafter waive any other term, condition, or privilege, whether of the same or similar type.
- e. Negotiated Agreement: The Parties acknowledge that this is a negotiated Agreement, that they have had the opportunity to have this Agreement reviewed by respective legal counsel, and that terms and conditions are not construed against any Party on the basis of such Party's draftsmanship thereof.

- f. No Personal Liability: No officer, agent or authorized employee of either Port or Consultant shall be personally responsible for any liability arising under this Agreement, whether expressed or implied, nor for any statement or representation made herein or in any connection with this Agreement.

21. Key Personnel

The Consultant's key personnel, as described in the Consultant selection submittals, shall remain assigned for the duration of the Project unless otherwise agreed to in writing by the Port.

22. Insurance - Assumption of Risk

- a. As a further consideration in determining compensation amounts, the Consultant shall procure and maintain, during the life of this Agreement, such commercial general liability insurance, professional liability insurance and environmental liability insurance including asbestos abatement liability and other insurance as required by contract for this project that shall protect Consultant and any subconsultant performing work under this Agreement from claims for damages from bodily injury, including death, resulting therefrom as well as from claims for property damage, economic damage or cleanup costs, which may arise under this Agreement, whether arising from operations conducted by the Consultant, any subconsultant, or anyone directly or indirectly employed by either of them. Consultant recognizes that it is the obligation of the Consultant to ensure that all Subconsultants of any tier have insurance for the activities performed under this agreement. If this agreement requires that a Subconsultant perform ultra-hazardous operations the Port will require that it be named as an Additional Insured by endorsement on all Subconsultant insurance policies and waivers of subrogation shall be provided by endorsement. Workers Compensation and Professional Liability are exempted from the additional insured requirement.
- b. Consultant shall submit to the Port of Tacoma, prior to the commencement of services, certificates of insurance evidencing:
- i. Commercial General Liability coverage on occurrence form CG0001 or equivalent with limits of \$2,000,000 per occurrence and \$4,000,000 aggregate. Coverage will include: Products and Completed Operations, Contractual Liability and Personal & Advertising Injury; and
 - ii. Automobile Liability covering owned, non-owned and hired vehicles of \$2,000,000 combined single limit per accident; and
 - iii. Professional Liability including environmental consulting services of not less than \$2,000,000 per claim and in the aggregate. If the scope of Professional Services includes environmental testing, consulting or other such professional services, the Consultant's Professional Liability policy shall include coverage for these services. If such coverage is written on a claims-made basis, any retroactive date on the policy shall be prior to the start of this contract. Coverage shall remain in effect for the term of this Agreement plus three years. Certificates of Insurance citing the contract and project number shall be provided to the Port of Tacoma on an annual basis for each of the three years.

- iv. Workers Compensation Insurance: Statutory Workers Compensation Insurance as required by the State of Washington.
 - v. Stop Gap/Employers Liability Insurance shall be provided with a limit of not less than \$2,000,000 per claim.
 - vi. Protection and Indemnity Insurance/Jones Act: \$1,000,000 limits shall be provided covering all vessels and crew.
 - vii. Maritime Employers Liability: \$1,000,000 limits shall be provided covering all divers.
- c. All policies shall be issued by a company having an A. M. Best Financial Strength Rating of A- and Financial Size Category of VIII or better. The Consultant shall be responsible for notifying the Port in writing within ten (10) days of receipt of notice of coverage being suspended, voided, cancelled or materially reduced. Except for professional liability, the Port and the Northwest Seaport Alliance shall be named as an additional insured on all policies by endorsement on ISO Form CG 20 10 Form B or equivalent. Except for Workers Compensation and Professional Liability, waivers of subrogation shall be provided by endorsement to all policies.
 - d. Consultant is responsible for complying with the Washington State laws that pertain to industrial insurance (RCW 51). Consultant shall submit a current employer liability certificate as issued by the Washington Department of Labor and Industries that shows the status of Consultant's worker compensation account prior to contract execution, including those Consultants who are qualified self-insurers with the state. Consultant bears the responsibility to ensure that any out-of-state (non-Washington) employees and subconsultants have appropriate workers compensation coverage while working for the Port in Washington State. Consultant may be exempt from state worker compensation insurance requirements (RCW 51.12.020) such as if Consultant is a sole proprietor.
 - e. Certain work or services under this Agreement may require United States Longshoremen's and Harbor Worker's Act (USL&H) and Jones Act. The Consultant shall be solely responsible for determining the applicability of USL&H and Jones Act coverage. The failure of the Consultant to procure either USL&H or Jones Act coverage shall at no time create liability on the part of the Port. The Consultant shall bear all responsibility and shall indemnify and hold harmless the Port for any and all liability, cost and/or damages.

23. Payment Schedule

- a. Consultant shall submit detailed numbered invoices in accordance with the Agreement by the 10th of the month. After a complete and correct invoice has been received by the Port, payment will be made within thirty (30) days.
- b. All invoices shall be sent "Attention: Facilities Development". Invoices shall be emailed to cpinvoices@portoftacoma.com. The email must include the required supporting documentation. Incomplete or improperly prepared invoices will be returned for correction without processing or payment.

24. Compensation

- a. Consultant expenses will be reimbursed at cost with the exception of:
 - i. Subconsultant services will be reimbursed at cost plus **4%** markup.
 - ii. Services provided by a third party will be reimbursed at cost plus **4%** markup.
- b. Costs marked up by a sub-tier shall be passed through to higher tiers as a direct cost. In no case shall the mark up at any tier exceed the negotiated percentage.
- c. Reimbursable expenses by a sub-tier shall be passed through to higher tiers as a direct cost. In no case shall markup be applied to reimbursable expenses at any level.
- d. Rates: Rates will remain in effect for the contract term unless renegotiated and agreed to by both parties in a written amendment.
 - i. Rates may be negotiated no more than once annually based on the date of contract execution. Rate adjustments will be tied to the CPI for the Seattle, Tacoma/Bremerton area.
- e. Rates and Markup: are defined in the attached Rate Sheet and made a part of this contract.
- f. Overtime: The Port will allow overtime rates for preapproved labor categories, as required by federal law, at 1.5 times the rate when approved in advance by the Project Manager and when required by the nature of the Work. The Consultant shall submit a list of labor classifications to which overtime rates are applicable to by law.
- g. Local Travel: Compensation for vehicle usage will be paid outside of the 100 mile radices at the current Internal Revenue Service allowable mileage reimbursement rate. Out of state mileage will not be paid. Consultants who are located within 50 miles of the project site will not be reimbursed for meals, lodging or mileage.
- h. Other Travel:
 - i. The Port will reimburse the Consultant for all allowable travel expenses (including expenses for travel by car, air, water and rail, accommodation and meals) incurred in order to provide the scope of work to the Port in accordance with the following guidelines:
 - ii. Lodging and meal reimbursement is in accordance with the following Per Diem rates established by the IRS at <http://www.ofm.wa.gov/resources/travel.asp>
 - iii. Amounts reimbursed will be computed at the rate for physical location to which travel is authorized by the Project Manager. Lodging, travel and local mileage must be approved in writing by the Project Manager prior to performing travel. Request for travel should include a breakout of costs associated with the requested travel.
 - iv. Airfare will be reimbursed at the lowest available commercial coach rate. Airfare will be booked at least 15 days in advance of travel. The Port will reimburse for up to a mid-size vehicle with standard equipment (this does not include GPS, video screens, etc). The Port will also reimburse for gasoline expense associated with

rental vehicle with the exception of gasoline provided/billed by the rental car company. The Port will not reimburse the Consultant for mileage at the IRS rate on a rented vehicle. Receipts are required for all reimbursed expenses with the exception of meals. Reimbursement (other than meals) will be for actual costs incurred subject to the Per Diem rates established by the IRS at <http://www.ofm.wa.gov/resources/travel.asp> for the location to which travel has been authorized.

25. Deliverables

All tangible materials produced as a result of this Agreement shall be prepared as specified by the Port's Project Manager. Delivery of materials produced shall consist both of the tangible materials and one copy of any computer files used in the creation of the tangible product on CD-Rom in a PDF format or other format specified by the Port.

26. Drawing, Specification and GIS

- a. Consultant shall prepare specifications using BSD Speclink-E, Masterformat specification organization, latest edition.
- b. Consultant shall prepare specifications in accordance with industry standards and Port policy using Masterformat 2004 Edition.
- c. All site plans, derivative drawings, record drawings, and bid plans shall be completed using Port GIS and CADD standards and layer/block protocols available at <https://www.portoftacoma.com/contracts/forms> and from the Port Project Manager.

27. Security – Transportation Worker Identification Credential (TWIC)

- a. The requested services may require the consultant to work within a secured/restricted TWIC regulated terminal.
- b. TWIC is a credentialing program managed by the Department of Homeland Security (DHS), through the United States Coast Guard and the Transportation Security Administration. All credentialed merchant mariners and individuals who will need unescorted access to secure areas of a maritime regulated facility or vessel must obtain a TWIC. For more information on TWIC visit <https://www.tsa.gov/for-industry/twic>.
- c. The Consultant shall have a minimum of one TWIC compliant employee trained as an escort for every five workers not possessing TWIC cards working on a secured or restricted site. Each escort will be required to receive Terminal Operator provided escort training.

28. Existing Hazardous Material Information

The Port shall furnish the Consultant with the information as required by the Hazard Communication standard for materials pre-existing on the Project. The Consultant is solely responsible for ensuring that this information is made available to the Consultant's personnel, subconsultants, and that relevant information is incorporated into work products including, but not limited to, reports, specifications, and contract documents.

29. Extent of Agreement

- a. In the event the Consultant identifies something that may impact the scope of work, project schedule, total price, task budget(s) or cost of performing work, the Consultant shall inform the Project Manager in writing prior to exceeding the task budget(s) and within seven (7) calendar days of the event and possible impacts to scope, schedule and cost or task budget.
- b. The Project Manager may, at any time, by written directive require the Consultant to perform work consistent with the Agreement's scope of work; provided that this directive does not add scope or cost to the project.
- c. Any directive shall not constitute an amendment to the Agreement nor entitle the Consultant to any additional compensation or a time adjustment.

30. Prevailing Wages

- a. The Consultant shall ensure that all Subcontractors of any tier pay all prevailing wages and other wages (such as Davis-Bacon Act wages) applicable to the Project.
- b. Pursuant to RCW 39.12, "Prevailing Wages on Public Works," no worker, laborer, or mechanic employed in the performance of any part of the Work shall be paid less than the "prevailing rate of wage" in effect as of the date that bids are due.
- c. The applicable effective date for prevailing wages for this project is the execution date of this Amendment.
- d. The State of Washington prevailing wage rates applicable for this public works project, which is located in Pierce County, may be found at the following website address of the Department of Labor and Industries:
<https://fortress.wa.gov/lni/wagelookup/prvWagelookup.aspx>.
- e. The schedule of the prevailing wage rates is made a part of the Contract Documents by reference as though fully set forth herein; and a copy of the applicable prevailing wage rates are also available for viewing at the Port Administration Building, located at One Sitcum Plaza, Tacoma, WA 98421 (253-383-5841). Upon request to the Procurement Department at procurement@portoftacoma.com, the Port will email or mail a hard copy of the applicable Journey Level prevailing wages for this project.
- f. Questions relating to prevailing wage data should be addressed to the Industrial Statistician.

Mailing Address: Washington State Department of Labor and Industries
Prevailing Wage Office
PO Box 44540, Olympia, WA 98504

Telephone: (360) 902-5335
Facsimile: (360) 902-5300

- g. If there is any discrepancy between the attached or provided schedule of prevailing wage rates and the published rates applicable under WAC 296-127-011, or if no schedule is attached, the applicable published rates shall apply with no increase in the Contract Sum. It is the Contractor's responsibility to ensure that the correct prevailing wage rates are paid.

- h. Prior to any payment being made by the Port under this Contract, the Contractor, and each Subcontractor of any tier, shall file a Statement of Intent to Pay Prevailing Wages under oath with the Port and certified by the Director of Labor and Industries. The statement shall include the hourly wage rate to be paid to each classification of workers entitled to prevailing wages, which shall not be less than the prevailing rate of wage, and the estimated number of workers in each classification employed on the Project by the Contractor or a Subcontractor of any tier, as well as the Contractor's contractor registration number and other information required by the Director of Labor and Industries. The statement, and any supplemental statements, shall be filed in accordance with the requirements of the Department of Labor and Industries. No progress payment shall be made until the Port receives such certified statement.
- i. The Contractor shall post in a location readily visible to workers at the Project site (1) a copy of the Statement of Intent to Pay Prevailing Wages approved by the Industrial Statistician of the Department of Labor and Industries and (2) the address and telephone number of the Industrial Statistician of the Department of Labor and Industries to whom a complaint or inquiry concerning prevailing wages may be directed.
- j. If a State of Washington prevailing wage rate conflicts with another applicable wage rate (such as Davis-Bacon Act wage rate) for the same labor classification, the higher of the two shall govern.
- k. Pursuant to RCW 39.12.060, if any dispute arises concerning the appropriate prevailing wage rate for work of a similar nature, and the dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries, and his or her decision shall be final and conclusive and binding on all parties involved in the dispute.
- l. The Contractor shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify and hold the Port harmless from all liabilities, obligations, claims, demands, damages, disbursements, lawsuits, losses, fines, penalties, costs and expenses, whether direct, indirect, including but not limited to attorneys' fees and consultants' fees and other costs and expenses, from any violation or alleged violation by the Contractor or any Subcontractor of any tier of RCW 39.12 ("Prevailing Wages on Public Works") or Chapter 51 RCW ("Industrial Insurance"), including but not limited to RCW 51.12.050.

31. On-Call Definitions Supplementary **Conditions**

Commented [AS1]: Delete this section if not an ON-CALL.

- a. Task Order: The document that memorializes agreement between the Consultant and the Port, in accordance with the terms of the On-Call Contract. Task Orders are executed for defined work under the On-Call Contract.
- b. Contract Owner: Port staff member responsible for managing the On-Call Contract and executing all Task Orders.
- c. Project Manager: Port staff member responsible for managing a specific Task Order.
- d. Consultant Representative: The Consultant staff member(s) delegated the authority to provide signature approval for Task Orders under the On-Call Contract.
- e. Task Order Proposals:

- i. The Project Manager will request consultant to provide a fee proposal for a scope of work requested by the Port.
- ii. The Port will not pay for time or materials associated with development of fee proposals, unless such costs are approved by the Project Manager and Contract Owner in advance.
- iii. Task Order proposals shall be signed and submitted by the Consultant Representative to the Port's Project Manager in writing. Proposals shall include one of the following:

- 1. Time and Materials Proposal

- a. Description of Task Order scope and deliverables.
- b. Consultant's Personnel Titles and Rates as negotiated.
- c. Hours per person per task.
- d. Sub-tier consultant scope and deliverables (when applicable).
- e. Anticipated reimbursable costs.
- f. Total proposal with Not to Exceed dollar amount.

- f. Task Order Execution:

Executed Task Orders will be issued by the Contract Owner to the Consultant.

- g. Task Order Revision:

- i. Revisions include when the Consultant becomes aware of the potential to exceed the executed amount or when changes are requested by the Project Manager.
- ii. Consultant shall provide a revised proposal detailing all revisions per 2A and B above. Consultant shall not proceed with changed work until a revised Task Order is executed by the Contract Owner.

- h. Payment Schedule:

- i. Each Task Order shall be invoiced separately. Consultant shall submit detailed invoices showing the following:
- ii. Invoice Number, Contract number, Title, Task Order Number and Title.
- iii. Summary page with a brief description of work completed during the invoice period, deliverables provided during the invoice period, and forthcoming milestones / deliverables.
- iv. Current Amount Due:

- v. For Lump Sum Task Orders: Percentage of work complete, percentage of completed work billed.
 - 1. For Time and Materials Task Orders: titles, hours, hourly rates, and all expenses itemized, with backup, in accordance with the contract.
- vi. Total amount of the Task Order, and balance of Task Order amount.
- vii. Indicate "**Final Invoice**" when invoice is the final billing for that Task Order.
- i. Task Order Closure:

When work has been completed and final invoice processed by the Port, the Contract Owner will issue a Task Order Completion Notification to the Consultant Representative.

- j. Task Order Termination:

The Port may terminate the Task Order at its convenience with or without cause. In such case, the Consultant shall be paid for all work performed and reasonable expenses properly incurred in connection with the termination.

HOURLY RATES
Consultant
Project Name

<u>Personnel</u>	<u>Hourly Rates</u>
Sr. Consultant 2	\$ -
Sr. Consultant 1	\$ -
Consultant 2	\$ -
Consultant 1	\$ -
Project 2	\$ -
Project 1	\$ -
Staff 2	\$ -
Staff 1	\$ -

<u>Subconsultant</u>	<u>Hourly Rates</u>
Sr. Consultant 2	\$ -
Sr. Consultant 1	\$ -
Consultant 2	\$ -
Consultant 1	\$ -
Project 2	\$ -
Project 1	\$ -
Staff 2	\$ -
Staff 1	\$ -

<u>Equipment</u>	<u>Rate</u>	<u>Unit</u>
Equipment 1	\$ -	Day
Equipment 2	\$ -	Day
Equipment 3	\$ -	Each
Equipment 4	\$ -	Each
Equipment 5	\$ -	Feet
Equipment 6	\$ -	Feet
Equipment 7	\$ -	Day
Equipment 8	\$ -	Day

<u>Reimbursable</u>	
Subconsultants	Cost + Negotiated Markup (= or < 4%)
Other Direct Costs	Cost
Mileage (All Vehicles)	IRS allowable rate

SECTION 00 73 00
SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

1.01 DEFINITIONS

- A. Project Work is defined as the scope of work defined for each task order. The general term Work includes the overall scope of the on-call contract for Pier and Marine Repairs in the Tacoma Tideflat and miscellaneous associated tasks.
- B. Project Submittals are submittals due with each task order. General Submittals are for the overall on-call contract for Pier and Marine Repair services. General Submittals includes all pre-award submittals and additionally (but not limited to) following:
 - 1. Weighted Wage Rates
 - 2. Contractors Equipment Rates and List
 - 3. Emergency Contracts
- C. The Project Manager is the individual identified by the Port as having delegated authority under this contract for the specific task order.

1.02 CONTRACTOR'S COST ESTIMATE

- A. Prior to any work being performed by the Contractor, the Port Project Manager identified for a Task Order will forward the Contractor a proposed scope of work and may additionally request a site visit with the Contractor. The Contractor shall review the proposed scope of work and become familiar with all site conditions and constraints and review the contract documents for specific requirements for the scope of work services.
 - 1. Contractor shall review with the assigned Project Manager the work restraints, submittals, security and access to the site requirements and all other coordination and task order requirements that may be required and submit all costs associated with the task order with their task order proposal.
- B. The Contractor shall provide the Project Manager with a detailed cost estimate for the proposed scope of work on the template provided by the Port. The Contractor's cost estimate shall identify the estimated unit quantities for the work and, as needed, further labor, material, and equipment costs for the work if no unit price exists for the work being estimated.
 - 1. For task order work not included in the bid Schedule of Unit Prices, the additional work will be paid preferably as negotiated unit price(s) or lump sum(s) or on a time and material basis if unit pricing or lump sums cannot be negotiated at the time of Task Order negotiation. Contractor shall provide backup information for scope pricing of items not included on the Schedule of Unit Prices when requested by the Project Manager, including as needed work proposed to be performed by a Subcontractor.
 - 2. The Contractor's cost estimate shall include only those mark-ups allowed by the Contract. Markups for task order pricing on time and material work shall be as defined in Section 00 72 00 - General Conditions, paragraph 8.02 B. The estimate shall include a final project estimate which will be the bases for the task order amount.
 - 3. The Contractor shall submit its cost estimate within five (5) calendar days of receipt of the proposed scope of work.
 - 4. Estimates shall also include an estimated start date and an estimated duration, in calendar days, to complete the proposed scope of work.
- C. EXECUTED TASK ORDERS
 - 1. If the Port accepts the Contractor's cost estimate, the Port's Contracting Department will issue the Contractor an executed Task Order for the scope of work defined. The Contractor shall do no work without a fully executed Task Order from the Port. Work shall be coordinated through the Port Project Manager.
- D. PROCEEDING WITH THE WORK
 - 1. The Task Order will serve as notice to the Contractor to proceed. The Contractor shall begin work within five (5) calendar days of receipt of the executed Task Order unless otherwise noted and

agreed upon with the Port Project Manager. No mobilization on site shall occur until all required pre-work submittals are submitted and accepted by the Project Manager.

E. REVISION OF THE AMOUNT AUTHORIZED

1. The Contractor shall immediately notify the Port Project Manager as soon as it's determined that the work cannot be completed as estimated. The Contractor shall provide the Port Project Manager with a revised estimate and schedule within two (2) calendar days of providing notice. The Contractor shall not proceed with any Work that would result in exceeding the authorized not-to-exceed amount identified in the Task Order without confirmation from the Port Project Manager. Once a revised task order total is negotiated, the Port will issue an amendment to the task order.

F. PAYMENT FOR ON-CALL WORK

1. Upon satisfactory completion and acceptance of the Task Order Work, the Contractor shall submit to the Port an invoice for that item of Work. The Contractor shall attach a copy of the Task Order with the invoice. The Port will not make payment on any task order invoice until all required Intents have been filed with L&I (See Section 00 73 49 for Intents and Affidavits for On-Call Contracts).
2. Payment will be based on the Schedule of Unit Prices bid amounts. The Contractor shall include (or attach) the following items pertaining to the project as part of each invoice:
 - a. Port assigned Contract number, and if applicable, Project ID number and Task ID number.
 - b. Quantity and type of Work as described in the Schedule of Unit Prices.
 - c. Copy of signed Contractor Work Authorization.
 - d. Contractor's Partial Release and Waiver of Lien (Form available on Port Website)
 - e. Amounts Paid to Subcontractors and Suppliers (Form available on Port Website)
 - 1) Copies on Intents to Pay Prevailing Wages shall be attached for any new sub-tier contractor doing work for the task order.
3. The invoice shall provide an itemized accounting of the labor, material and equipment costs for the work, all subcontractor work where applicable, and all approved mark-ups. Each invoice shall have backup documentation that supports the invoice including daily work reports, material invoices and equipment rental invoices per the Schedule of Unit Prices.
4. Failure to provide completed invoice information and back-up documentation will delay the payment process and the invoice will be returned to the Contractor for completion.
5. When more than one invoice is submitted for an individual task order, the invoice shall clearly be marked Partial or Final invoice.

1.03 COMPLETION

- A. Substantial Completion will be issued at the completion of each task order once all work is complete and all project submittals have been accepted by the Port and following any revision to the task order, as may be needed, is executed.
 1. The Project Manager will issued the Notice of Substantial Completion. Final Task Order Invoices should be submitted within 30 days of the notice.
- B. Final Completion of the Contract will happen once all substantial Completions have been issued and all required submittals have been received by the Port.
- C. Final Acceptance will be issued once all additional required submittals have been accepted by the Port per these contract documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

18 July 2017

Mr. Stan Ryter, PE, PMP
Project Manager II
Port of Tacoma
P.O. Box 1837
Tacoma, WA 98401

Subject: **FINAL Structural Assessment and Pier Inspection Program**
PSA No. 070390 Civil & Structural On-Call Services, Task Order 2

Dear Mr. Ryter:

PURPOSE AND SCOPE

The purpose of this document is to outline for the Port of Tacoma a Structural Assessment and Pier Inspection Program (Program) which recommends typical above-deck, below-deck, and underwater inspections and frequency intervals for wharf, pier, and waterfront appurtenance assets. The intervals recommended for various waterfront components have been tailored to each marine facility depending on the type of structural component being considered, BergerABAM's experience with component deterioration rates, and the conditions documented in recent facility condition assessment (FCA) reports, and other baseline reference documents.

The Program is intended to be straightforward and flexible enough to accommodate a variety of terminal types and a full-spectrum of likely asset conditions. Some important goals for the Program include the following.

- Increasing facility condition awareness through documented inspections and regular communication of maintenance projections.
- Transitioning from a reactive to a proactive preemptive maintenance philosophy.
- Reducing downtime, disruptions, and unexpected failures for emergency repairs or special projects.
- Improving facility reliability and availability by assigning fiscal budgets which match trends in specific facility maintenance needs and observed rates of deterioration.

PROGRAM DEVELOPMENT

To develop the Program, 2017 site screening observations performed by BergerABAM, existing 2012 FCA reports, and other reference documents were used to assign a 2017 baseline condition rating to each component at each marine facility. Using ASCE's 2015 Report on Engineering Manual No. 130, *"Waterfront Facilities Inspection and Assessment"* (ASCE Manual) as a guide, inspection intervals were assigned to components based on component type, 2017 baseline assessment rating, and the predicted rate of deterioration. Also, overall qualitative assessment ratings were assigned to each marine facility by compiling the individual component ratings.

For each facility, or each part of a facility, a summary of the overall assessment ratings and the recommended inspection intervals for various marine components is shown in Figure 1. Cells are highlighted red, blue, and green to represent inspection intervals of two, four, and six years, respectively. Inspection frequencies which are a multiple of two years were selected as a convenient interval over which a perpetual Program could be established. It also correlated well with the inspection intervals recommended in the ASCE Manual. In the future, this interval could be adjusted to multiples of three years or even 2.5 years, as the Program is intended to be flexible.

Elements assigned to two-year inspection intervals typically include components that may already have moderate to advanced deterioration, or are constructed with timber and generally have a limited lifecycle. Elements assigned to four-year intervals include components that may have moderate defects or localized areas of moderate to advanced deterioration. Elements assigned to six-year intervals include typically resilient components of concrete or steel that may have limited visible damage or minor to moderate defects without signs of overstressing.

The intent of the Program documentation is to support a flexible and ongoing plan which allows for inspection intervals to be adjusted based on observed damage, existing deterioration levels, completed repairs, infrastructure improvements and replacements, etc. For example, if moderate or major damage/deterioration is observed in a specific component, the inspection interval can be reduced, from say 4 years to 2 years, so that closer monitoring of the component can be performed. Alternatively, if deteriorated components are repaired or replaced, the inspection interval might be adjusted from 2 years to 4- or 6-years depending on the expected durability of the replacements.



Figure 1 - Structural Assessment and Pier Inspection Program

Asset ID	Asset Description	2017 Overall Assessment Rating	Categories ^{1,2}				
			A	B	C	D	E
			Underwater	Below-Deck		Above-Deck	
			Piles, Cathodic Protection, Anodes	Pile Caps, Deck Panels, Framing, Bollard Anchorage	Bulkhead, Sheeppile Wall	Mooring Hardware, Bullrail, Appurtenances,	Fenders, Panels, Wales, Chocks, Chains, Dolphins,
1	APM Terminal Wharf	Satisfactory	6 (5)	6 (5)	4 (4)	6 (5)	2 (3)
2	Blair Dock	Satisfactory/Good	6 (5)	6 (5)	4 (4)	4 (4)	2 (3)
3	East Blair One Wharf	Good	6 (5)	6 (5)	4 (4)	6 (5)	6 (5)
4	Olympic Container Terminal, Berth C Timber	Fair	2 (3)	2 (3)	6 (5)	n/a	n/a
5	Olympic Container Terminal, Berths C & D Concrete	Fair	4 (4)	4 (4)	6 (5)	4 (4)	4 (4)
6	Piers 24 & 25	Fair	2 (3)	2 (3)	4 (5)	2 (3)	2 (3)
7	Pierce County Terminal Wharf	Satisfactory/Good	6 (5)	6 (5)	4 (4)	6 (5)	4 (4)
8	Pony Lumber Dock	Fair	2 (3)	2 (3)	2 (4)	2 (4)	n/a
9	Terminal 3 (Husky) Wharf	Satisfactory	6 (5)	6 (5)	4 (5)	6 (5)	6 (5)
10	Terminal 4 (Remaining) Wharf	Satisfactory	6 (5)	6 (5)	4 (5)	n/a	n/a
11	Terminal 4 (New) Wharf	Not Rated	6 (5)	6 (5)	6 (5)	6 (5)	6 (5)
12	Terminal 7, Berths A & B Timber	Fair/Poor	2 (3)	2 (3)	2 (3)	n/a	n/a
13	Terminal 7, Berths A & B Concrete	Fair/Poor	4 (4)	4 (4)	n/a	2 (3)	2 (3)
14	Terminal 7, Berth C Timber	Fair	2 (3)	2 (3)	6 (5)	n/a	n/a
15	Terminal 7, Berth C Concrete	Fair	4 (4)	4 (4)	n/a	2 (3)	2 (3)
16	TOTE (Aft, Midship, South Forward, North Forward)	Satisfactory/Good	6 (5)	4 (5)	4 (5)	4 (5)	4 (5)
17	TOTE (Timber Pier)	Fair	2 (3)	2 (3)	2 (4)	2 (1)	2 (3)
18	West Hylebos Log Dock	Fair/Satisfactory	2 (3)	2 (3)	4 (4)	4 (4)	2 (3)
19	Washington United Terminal Wharf	Satisfactory	6 (5)	6 (5)	4 (5)	6 (5)	4 (4)

NOTE:

1. Table values indicate maximum interval in years between inspections.

2. Values in parenthesis indicate ASCE Manual recommendations.

A general representation of the inspection program is shown in Figure 2. Inspection of the components has been organized by color and covers an initial twelve years. Inspection of “red” components occur every two years, “blue” components occur every four years, and “green” components every six years. The column on the left-hand side titled “Planned Repairs/Watchlist” represents components with significant damage/deterioration that require closer monitoring, will likely need repair, or will have budget assigned for imminent repair/replacement.

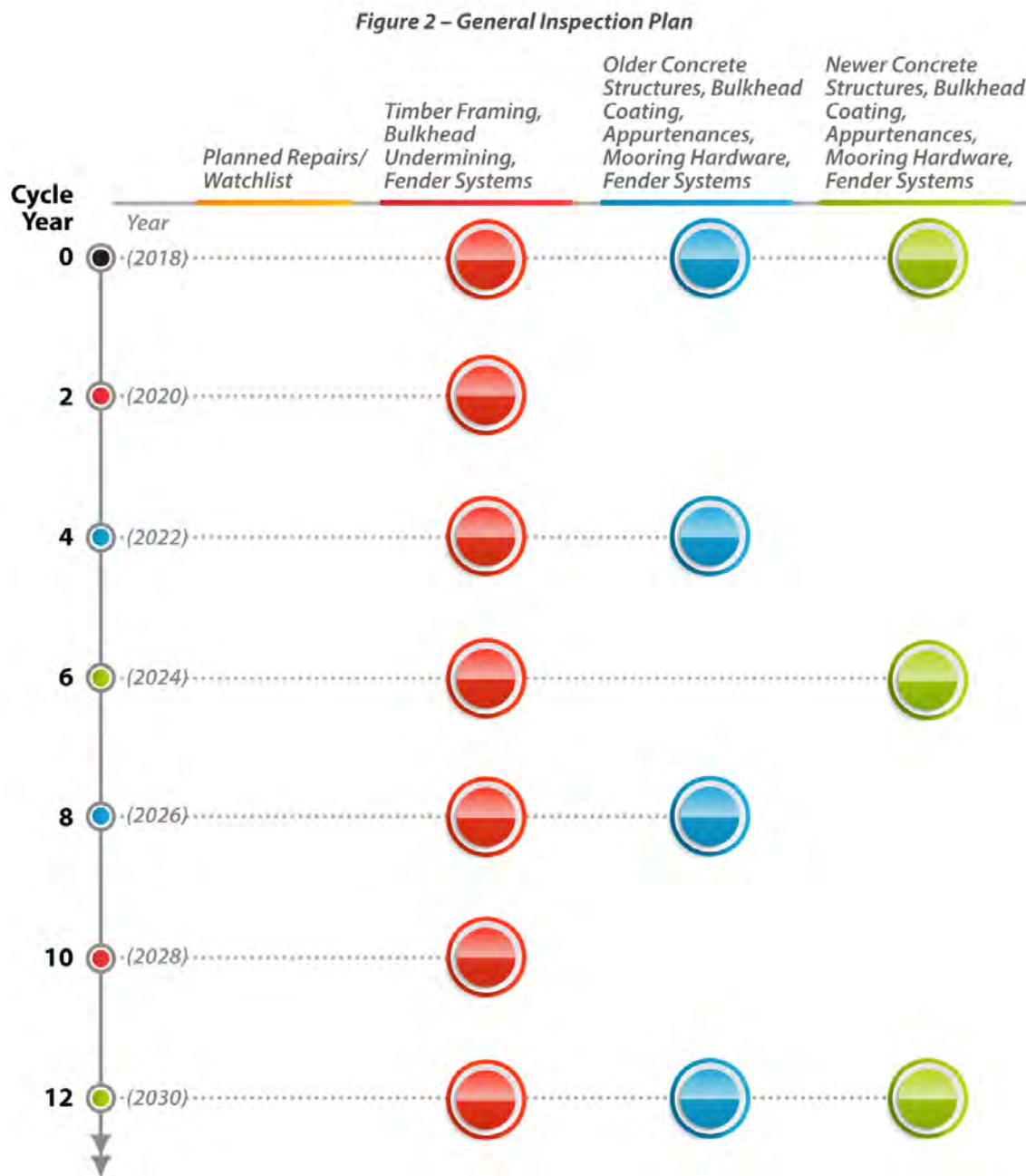
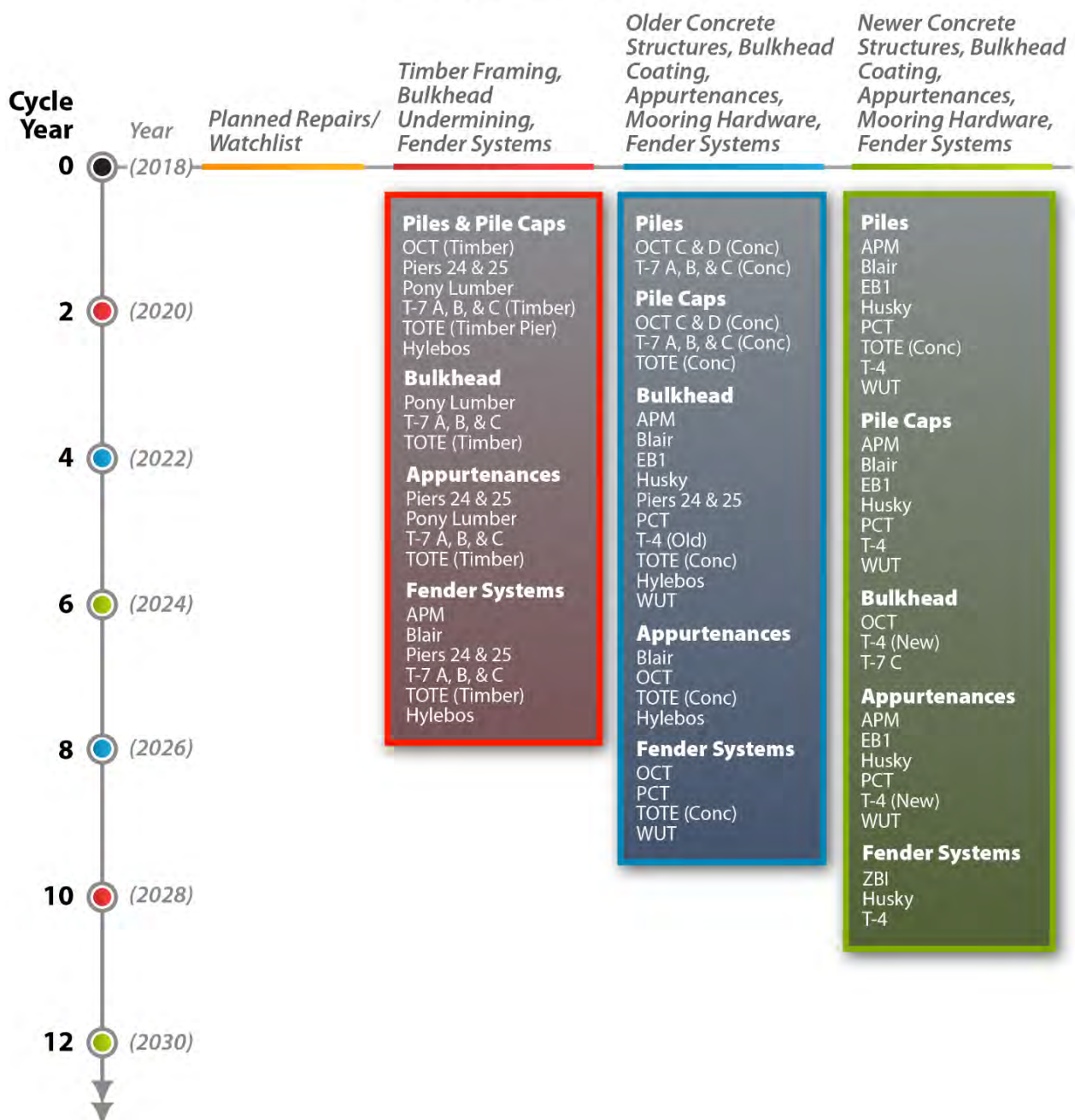


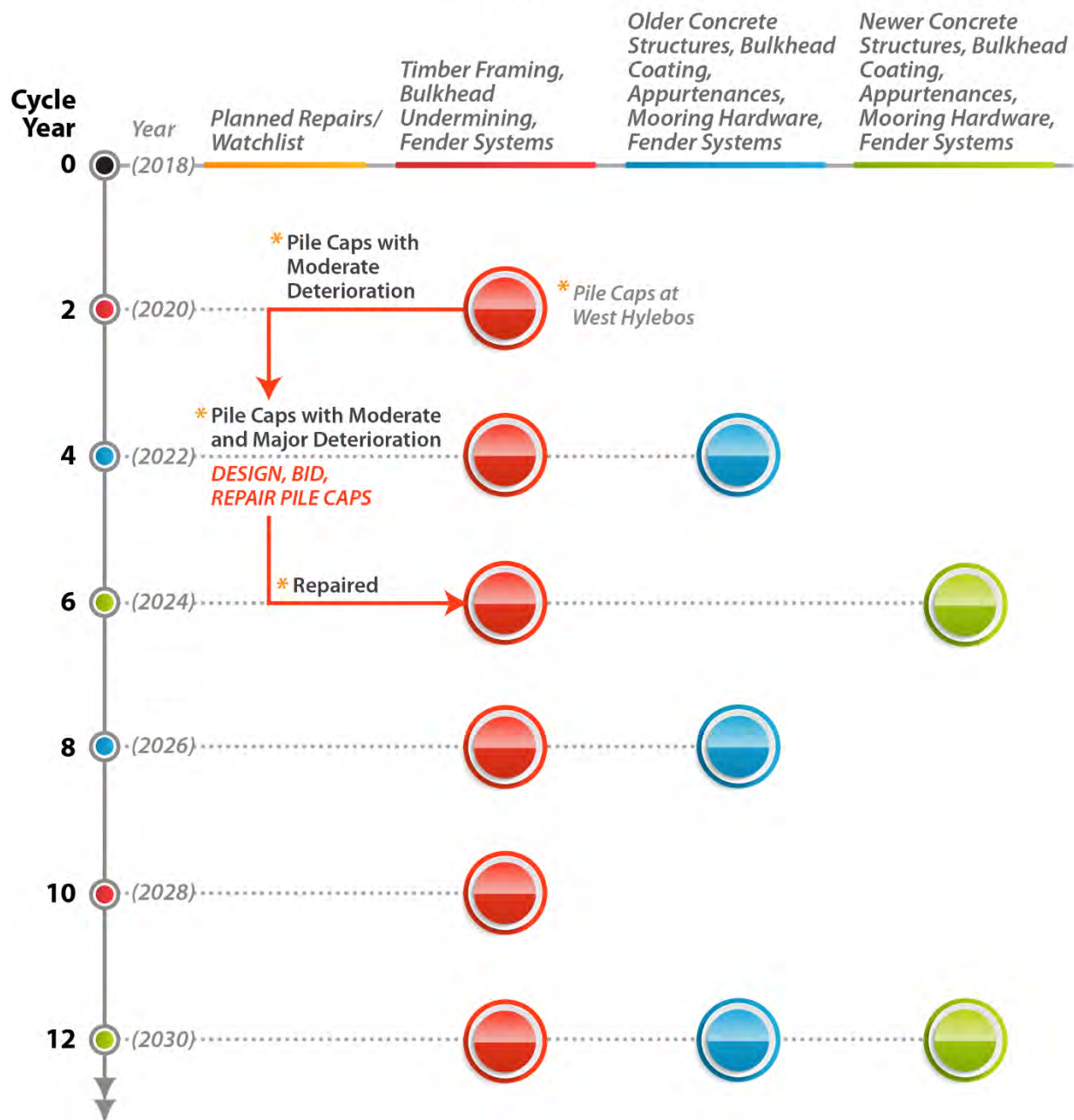
Figure 3 was developed by reorganizing the elements from Figure 1, and inserting them into the specific inspection frequencies of Figure 2 to create a detailed inspection plan; graphically representing individual pier components within each inspection cycle. This would form the basis for determining the scope of inspections at the 2-, 4-, and 6-year intervals. If future inspections determine that the level of damage/deterioration increases, the component should have its inspection interval adjusted, or it can be placed on the watchlist. Once on the watchlist, the Port can budget and plan for repairs and/or develop a customized inspection plan. After a component is repaired, it can be taken off the watchlist and routine inspections can resume.

Figure 3 – Detailed Inspection Plan



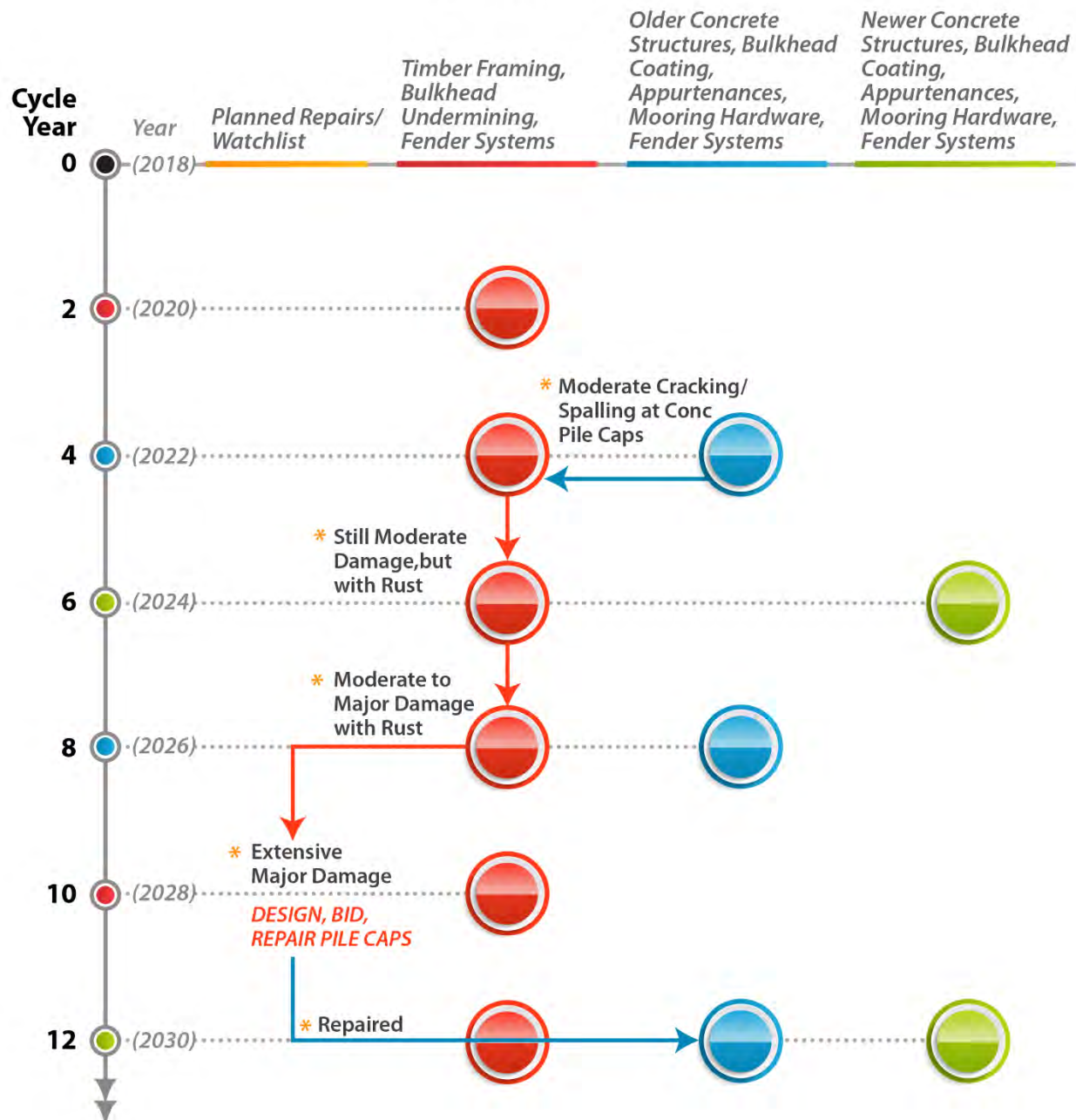
Two simulated examples of a working Program were developed to highlight the damage-watchlist-repair cycle. As shown in Figure 4, suppose in year 2020, timber pile caps at the West Hylebos Dock with moderate deterioration (rated as fair) are discovered and moved to the watchlist. During the next inspection cycle, the pile caps are closely observed and the level of deterioration has increased from moderate to major. In the following period, a repair is designed, and budget is assigned for repairs in year 2024 to avoid accelerated deterioration or component failure. After repairs are completed, the pile caps are removed from the watchlist and returned to their typical inspection interval.

Figure 4 – Example 1



As shown in Figure 5, suppose in year 2022, concrete pile caps with moderate damage (rated as fair) are discovered and the inspection interval is decreased to two years. In year 2024, inspection indicates the pile caps still have moderate damage, but now have rust staining. In year 2026, the level of damage has increased to major (rated as poor) and the pile caps are moved to the watchlist. In year 2028, the extent of major damage has increased, necessitating the need for repairs. A repair design is performed, a budget is assigned, and in 2030 repairs are performed. The pile caps are removed from the watchlist and returned to their typical inspection interval.

Figure 5 – Example 2



BACKGROUND TO PROGRAM DEVELOPMENT

In May 2017, BergerABAM completed above-deck and below-deck site screening assessment for 16 marine facilities at the Port of Tacoma (Port). See Appendix A. The purpose of the site screening was to observe the 2017 conditions of structural components and compare them to those described in the 2012 facility condition assessment (FCA) reports and other baseline reference documents.

Following the site screening effort, components within each marine facility were categorized into five groups, as shown in Table 1. Within each group, components were assigned a condition assessment rating in accordance with Table 2-14 of the ASCE Manual. Ratings were organized on a scale ranging from good to critical. Structures in good condition are described as having minor deterioration with no overstressing observed. Structures in critical condition are described as having advanced deterioration, overstressing, or breakage resulting in local failures. Assessment ratings were assigned to components based on the following criteria.

- Element-Level Damage Ratings per Section 2.5 of the ASCE Manual
- Scope of observed damage
- Severity and distribution of damage
- Type of component (critical to non-critical)
- Location of observed damage
- Serviceability of element in its damaged condition

Table 1 – Grouped Structural Components

Group No.	Description
1	Underwater (Piles, cathodic protection and anodes)
2	Below-Deck (Pile caps, deck panels, framing, and bollard anchorage)
3	Below-Deck (Bulkhead and/or sheetpile wall)
4	Above-Deck (Bullrail, appurtenances, decking, and pavement)
5	Fender System (Fenders, wales, chocks, chains, dolphins, and walkways)

Next, routine inspection intervals were selected for components based on assigned assessment ratings, material type, age of the structure, service environment, and Table 2-2 of the ASCE Manual. Components were assigned to either a two-year, four-year, or six-year inspection cycle depending on the criteria stated above. For example, the recommended inspection interval for timber components rated as fair or poor is two-years between inspections as the likelihood for accelerated deterioration is high. Alternatively, the recommended inspection interval for concrete components rated as satisfactory or good is six years, as the likelihood for rapid deterioration is low. To link standardized condition terminology to inspection intervals, the various pier elements were grouped into the following three categories.

- Category 1: 2-year Inspection Cycle for components rated as poor or fair
- Category 2: 4-year Inspection Cycle for components rated as fair or satisfactory
- Category 3: 6-year Inspection Cycle for components rated as satisfactory or good

CATEGORY 1 (2-YEAR CYCLE)

Elements within Category 1 represent structural components that may have moderate to advanced deterioration throughout the structure (rated as poor or fair). Components within each marine facility to be inspected every two years are shown in Table 2. The group numbers are described above in Table 1.

Table 2 – Category 1 Inspection (2-Year Cycle)

Marine Facility	Group No.
APM Terminal Wharf	5
Blair Dock	5
Olympic Container Terminal, Berth C Timber	1,2
Piers 24 & 25	1,2,4,5
Pony Lumber Dock	1,2,3,4
Terminal 7, Berths A & B Timber	1,2,3
Terminal 7, Berths A & B Concrete	4,5
Terminal 7, Berth C Timber	1,2
Terminal 7, Berth C Concrete	4,5
TOTE (Timber Pier)	1,2,3,4,5
West Hylebos Log Dock	1,2,5

CATEGORY 2 (4-YEAR CYCLE)

Elements within Category 2 represent components that may have limited to moderate defects or localized areas of moderate to advanced deterioration (rated as fair or satisfactory). Components within each marine facility to be inspected every four years are shown below in Table 3.

Table 3 – Category 2 Inspection (4-Year Cycle)

Marine Facility	Group No.
APM Terminal Wharf	3
Blair Dock	3,4
East Blair One Wharf	3
Olympic Container Terminal Berths C & D Concrete	1,2,4,5
Piers 24 & 25	3
Pierce County Terminal Wharf	3,5

Terminal 3 (Husky) Wharf	3
Terminal 4 (Remaining) Wharf	3
Terminal 7, Berths A and B Concrete	1,2
Terminal 7, Berth C Concrete	1,2
TOTE (Aft, Midship, South Forward and North Forward) Piers	2,3,4,5
West Hylebos Log Dock	3,4
Washington United Terminal Wharf	3,5

CATEGORY 3 (6-YEAR CYCLE)

Elements within Category 3 represent components that may have limited visible damage or minor to moderate defects without signs of overstressing (rated as satisfactory or good). Components at each marine facility to be inspected every six years are shown below in Table 4.

Table 4 – Category 3 Inspection (6-Year Cycle)

Marine Facility	Group No.
APM Terminal Wharf	1,2,4
Blair Dock	1,2
East Blair One Wharf	1,2,4,5
Olympic Container Terminal, Berth C Timber	3
Olympic Container Terminal, Berth C & D Concrete	3
Pierce County Terminal Wharf	1,2,4
Terminal 3 (Husky) Wharf	1,2,4,5
Terminal 4 (Remaining) Wharf	1,2
Terminal 4 (New) Wharf	1,2,3,4,5
Terminal 7, Berth C Timber	3
TOTE (Aft, Midship, South Forward and North Forward) Piers	1
West Hylebos Log Dock	3,4
Washington United Terminal Wharf	1,2,4

Structural and non-structural components comprising the Port's marine facilities have varying degrees of damage and deterioration, resulting in variable inspection cycles. To provide a sense of the overall condition and recommended inspection intervals for each marine facility, the information in Tables 1 through 5 were arranged to make up the specific Program, as shown in Figures 1, 2, and 3 above.

PROGRAM IMPLEMENTATION

As described herein, the Structural Assessment and Pier Inspection Program has been developed for inspection of specific structural and non-structural components on a recurring basis, which allows for damaged/deteriorated components to be identified and repaired before structural integrity is compromised.

During each inspection cycle, structural components will be assigned a condition assessment rating based on the element-level damage rating, and typically in accordance with the ASCE's 2015 Report on Engineering Manual No. 130, "*Waterfront Facilities Inspection and Assessment*". Inspection intervals for components found to have moderate to major defects or rated as fair/poor can be decreased (more frequent) so that closer monitoring can be performed. Components identified as having major to severe defects or rated as poor/serious/critical should be placed on the watchlist and monitored closely. Special purpose inspections due to vessel impact damage, or other non-typical defects should be performed on a case-by-case basis.

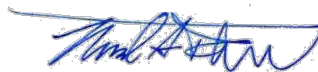
CLOSING

We appreciate this opportunity to assist you with the structural assessment and pier inspection program. If you have any questions about this memo, please call me at 206/431-2381.

Sincerely,



Daryl S. English, PE, SE
Project Manager



Michael A. Dodson, PE
Project Engineer

DSE:MAD

Attachments

Appendix A – Site Screening Report

**Port of Tacoma
Structural Assessment and Pier Inspection Program**

**Appendix A
Site Screening Report**

18 July 2017

Mr. Stan Ryter, PE, PMP
Project Manager II
Port of Tacoma
P.O. Box 1837
Tacoma, WA 98401

Subject: **Site Screening Report – FINAL**
 Structural Assessment and Pier Inspection Program
 PSA No. 070390 Civil & Structural On-Call Services, Task 2

Dear Mr. Ryter:

INTRODUCTION

In May, 2017, BergerABAM completed above-deck and below-deck site screening assessments for 16 marine facilities (piers and wharves) at the Port of Tacoma (Port). The purpose of the site screening was to observe the 2017 conditions of structural components, and to compare them to those described in the 2012 facility condition assessment (FCA) reports and other baseline reference documents. Underwater inspections were not included as a part of the site screening effort. However, where possible changes in condition and deterioration not previously recorded in 2012 have been noted in this report. See Appendix A for a listing of the FCAs and reference documents used for this task.

This letter report also assigns an overall condition assessment rating to each marine facility in accordance with Table 2-14 of ASCE's 2015 Report on Engineering Manual No. 130, *"Waterfront Facilities Inspection and Assessment."* (ASCE Manual). See Table 1 below for the overall assessment ratings. Also see Appendix B for a reproduction of Table 2-14, and a breakdown of the ASCE condition ratings with corresponding typical condition descriptions.

It should be noted that in order to assign an overall rating to a facility, some subjectivity in the observer's assessment is necessary, as the overall FCA rating will be a compilation or average of the structural component ratings. The ratings for primary structural elements such as bulkheads, piles, pile caps, and deck panels are typically weighted more than secondary elements including fenders, bollards, ladders, etc.

Each of the Port's marine facilities is unique and typically constructed from either timber, concrete, steel, or a combination thereof. The methodology used to assign an overall rating for each facility in Table 1 was based on the conditions of individual components, with priority given to the primary structural elements. Additional details on the screening methodology and facility-specific observations are included in the sections below.

Table 1 – Overall Facility Condition Assessment Ratings

WHARF OR PIER FACILITY	OVERALL FCA RATING
APM Terminal Wharf (APMT)	Satisfactory
Blair Dock	Satisfactory/Good
East Blair One Wharf (EB1)	Good
Olympic Container Terminal (OCT) – Berth D & Partial C	Fair
Pier 24 (Trident)	Fair
Pier 25 (Trident)	Fair
Pierce County Terminal Wharf (PCT)	Satisfactory/Good
Pony Lumber Dock	Fair
Terminal 3 Wharf (Husky)	Satisfactory
Terminal 4 Wharf (Remaining)	Satisfactory
Terminal 7 – Berths A & B	Fair/poor
Terminal 7 – Berth C	Fair
Totem Ocean Trailer Express (TOTE) – Concrete Piers	Satisfactory/Good
Totem Ocean Trailer Express (TOTE) – Timber Pier	Fair
West Hylebos Log Dock	Fair/Satisfactory
Washington United Terminal Wharf (WUT)	Satisfactory/Good

SCREENING METHODOLOGY AND OBSERVATIONS

Facility screenings were performed in general accordance with the recommendations of the ASCE Manual. Based on the observed conditions, facilities were given an overall facility condition assessment rating in accordance with the ASCE Manual.

Above-deck observations were performed by walking the wharf deck surface, along the bulkhead, and along the pier face at each facility. Above-deck observations focused primarily on the conditions of decking, asphalt paving, light masts as bases, vault lids, crane rails, crane power cables, mooring hardware, fender systems, capstans, bullrails, and walkways. Below-deck screenings used a skiff to perform float-by observations during suitable tides. Below-deck observations primarily focused on piles, exposed slope armoring, outfalls, pile caps, deck framing or panels, suspended utilities, sheetpile walls, fender systems, and ladders. Photographs showing typical conditions for each facility are provided in Appendix C.

APM Terminal Wharf

APM Terminal Wharf is located along the west shoreline of the Sitcum Waterway. The wharf is constructed with prestressed concrete deck panels spanning between concrete pile caps, and is supported by prestressed concrete piles. The precast deck panels are ballasted and have an asphalt topping.

The facility is in satisfactory condition. In general, the magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components as noted below.

- Fender System – Several of the timber fender piles, wales, and chocks along the pier face on the southern end of the wharf have major to severe damage/deterioration. (previously rated as having moderate damage). Note that a bid package was issued by the Port on May 30, 2017 for APMT Fender Repairs, which included extensive repairs to the timber fender system components.
- Spalling and rust staining on the soffit of deck panels was observed in two locations (previously not recorded).
- Spalling, cracking, and rust staining at pile caps was observed in twelve locations (previously not recorded).
- Approximately six inches of settlement in the asphalt paving behind the sheetpile wall (previously not recorded).

Blair Dock

Blair Dock is located along the southwest shoreline of the Blair Waterway. The dock is constructed with prestressed concrete deck panels spanning between concrete pile caps, and is supported by prestressed concrete piles. The precast deck panels are ballasted and have an asphalt topping. This dock was shortened by 600 feet to accommodate the WUT south wharf extension in 2010. A new breasting and mooring dolphin, linked by aluminum walkways, were added at that time.

The facility is in satisfactory/good condition. In general, the magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components as noted below.

- Guardrail post at the south mooring dolphin is sheared off and the guardrail is bent inwards (previously not recorded).
- Ladder at Bent 13 is severely bent and not useable (previously not recorded).

- Undermining of the concrete bulkhead along pile row A (previously not recorded).

East Blair One Wharf

East Blair One Wharf is located along the southeast shoreline of the Blair Waterway. The wharf is constructed with prestressed concrete deck panels spanning between concrete pile caps and is supported by prestressed concrete piles. The precast deck panels have an asphalt topping and are ballasted in a staggered arrangement for the rail tracks and southwest of the outboard crane rail.

The facility is in good condition. Because an FCA report or previous condition survey report was not available for review, the following damage/deterioration can be used as a baseline for future assessments.

- Concrete spalling at pile row A between bents 12 and 14.
- Missing life ring at Bent 15.5. Missing life ring label at Bent 22.5.
- Missing UHMW-PE panels at top of fender panel at Bent 34. Damaged UHMW-PE panels at bents 16 and 26.
- Broken shear chain at Bent 16 fender.
- Rust staining along face of sheetpile bulkhead wall.

Olympic Container Terminal, Berths D and Partial C

Olympic Container Terminal is located along the northeast shoreline of the Sitcum Waterway. It includes Berth D and the northern 200 feet of Berth C. Berth D and the waterside portion of Berth C is constructed with precast/prestressed concrete deck panels spanning between concrete pile caps and is supported by prestressed concrete piles. The landside portion of Berth C consists of a laminated timber deck supported by timber stringers, spanning between timber pile caps and is supported by timber piles. The precast deck panels at Berth D and along the waterside portion of Berth C are ballasted and topped with asphalt. The landside (timber) portion of Berth C also has an asphalt topping.

The terminal is in fair condition. In general, the magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components as noted below.

- Leaking utility at Bent 1 of Berth D (previously not recorded).
- Bolts connecting the UHMW-PE rub strip to the steel wale are missing in several locations (previously not recorded).

- Undermining is present at the concrete pile cap along pile row Y1 (previously not recorded).
- The fender system on the north end of Berth D, comprised of timber fender piles and timber wales, has major to severe damage. At the far north end of the terminal, three fender piles are broken below the waterline (previously not recorded).

Piers 24 & 25

Piers 24 and 25 are located at the northwest end of the Hylebos Waterway. These piers are constructed with timber decking over timber stringers, spanning between timber pile caps and are supported by timber piles.

The piers are in fair condition. In general, the magnitude and extent of damage/deterioration noted in the 2015 condition assessment and load rating report is consistent with the 2017 screening observations. In several locations, steel plates have been placed over decking which has failed or is severely deteriorated. New deck boards are often not able to be securely fastened to the supporting stringers because of enlarged pre-existing spike holes in the tops of the stringers. This results in loose decking, rocking, and upward movements from vehicle and pedestrian traffic. Conversations with the tenant along with visual observations found that the tenant is actively performing maintenance to the facilities. Improvements/repairs to the facilities since the 2015 survey are shown below.

- Approximately 6,000 lineal feet of decking has been replaced since March of 2017.
- Mooring hardware has been recently painted and is in good condition. However, several cavelts are connected to bullrails which are deteriorated.

Pierce County Terminal Wharf

Pierce County Terminal Wharf is located along the south shoreline of the Blair Waterway turning basin. The wharf is constructed with precast/prestressed concrete deck panels spanning between concrete pile caps and is supported by concrete piles. The precast deck panels have an asphalt topping and are ballasted from the waterside crane rail, extending north to pile row A. Deck panels are also ballasted between the waterside and landside crane rails between Bents 9 and 80.

The primary structural components of the wharf are in satisfactory/good condition. However, several of the rubber fender elements are damaged and in fair condition. The magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components as noted below.

- Several of the fenders are cracked, sheared through, or torn (previously not recorded).

- A utility under the deck is leaking near Bent 45 (previously not recorded).
- Approximately 2 inches of settlement in the asphalt pavement directly behind the sheetpile wall along its entire length (previously not recorded).

Pony Lumber Dock

The Pony Lumber Dock is located along the southwest shoreline of the Hylebos Waterway. The dock is constructed with precast/prestressed hollow-core concrete panels spanning between timber pile caps, and is supported by timber piles.

The dock is in fair condition. In general, the magnitude and extent of damage/deterioration noted in the 2013 Pony Lumber Dock Load Rating Report is consistent with the 2017 screening observations. Significant changes in the level of damage/deterioration were not observed. However, in 2014 some replacement pile caps and pile subcaps were installed.

The concrete abutment wall is undermined, similar to the level described in the 2013 load rating report. The hollow-core deck panels have areas with severe damage along the outer perimeter on the north and south sides, also similar to the level described in the 2013 load rating report.

Terminal 3 Wharf (Husky)

Terminal 3 Wharf is located along the northwest shoreline of the Blair Waterway. The wharf is constructed with precast/prestressed concrete deck panels spanning between concrete pile caps, and is supported by prestressed concrete piles. The precast deck panels have an asphalt topping over top of gravel ballasting, except for the north 500 feet which has no ballasting. Upgrades to the fender system, waterside piles, waterside crane beam, electrical system, and pavement topping were performed in 2013 and 2015.

The wharf is in satisfactory condition. The magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components as noted below.

- Diagonal cracking from the pile cap perimeter extending to the face of the pile on the soffit of the landside crane beam between bents 14 and 19 (previously not recorded).
- Cracking on the deck panel soffits near pile row E, between bents 9 and 19 (previously not recorded).
- Hairline cracking on the soffit and sides of the waterside crane beam.

Terminal 4 Wharf (Remaining 1987 Portion)

Terminal 4 Wharf is located along the northwest shoreline of the Blair Waterway. This facility is constructed with precast concrete deck panels spanning between concrete pile caps and is

supported by prestressed concrete piles. The precast deck panels are ballasted and have an asphalt topping.

The wharf is in satisfactory condition. The magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components and are noted below. Note that these areas are in the vicinity of the Pier 4 Realignment project.

- Concrete spalling on deck panel soffits in several areas between bents 70 and 90.

Terminal 7, Berths A, B, and C

Terminal 7 is located along the northeast shoreline of the Sitcum Waterway and is comprised of three berths from south to north: Berths A, B, and C, respectively. Note that observations for Berth D and the northern 200 feet of Berth C are discussed in the Olympic Container Terminal section of this report.

The waterside portions of all berths are constructed with precast/prestressed concrete deck panels spanning between concrete pile caps and are supported by prestressed concrete piles. The landside portions of the berths consist of a laminated timber deck supported by timber stringers, spanning between timber pile caps, and are supported by timber piles. The precast deck panels are ballasted and topped with asphalt. The laminated timber decking also has an asphalt topping.

Berths A and B are in fair/poor condition. In general, the magnitude and extent of damage/deterioration noted in the 2013 wharf load rating analysis report is consistent with the 2017 screening observations. Rust staining and longitudinal cracking along the concrete pile caps are present throughout both berths. The condition of the timber framing is also similar to that observed in 2013. However, due to the structure's age, history, and the inherent tendency for timber to deteriorate in a marine environment, it's expected that the level of deterioration in the timber framing members has increased.

Berth C is in fair condition. Similar to Berths A and B, the magnitude and extent of damage/deterioration noted in the 2013 wharf load rating analysis report is consistent with the 2017 screening observations.

Totem Ocean Trailer Express (TOTE)

Totem Ocean Trailer Express is located along the northeast shoreline of the Blair Waterway. This facility is comprised of five structures as indicated below.

- Aft Pier (with a timber walkway extending to shore)
- Midship Pier
- South Forward Pier

- North Forward Pier (with a timber walkway extending to shore)
- Timber Pier

The Aft, Midship, South, and North piers are constructed with precast concrete deck panels spanning between concrete pile caps and are supported by prestressed concrete piles. The Timber pier is constructed with timber decking over timber stringers, spanning between timber pile caps, and is supported by timber piles.

The concrete piers (Aft, Midship, South, and North) are in satisfactory/good condition. The magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. Significant changes in the level of damage/deterioration were not observed.

The timber pier is in fair condition. However, the condition of the above-deck appurtenances such as the handrailing, bullrail, and cavel anchorage are in serious/critical condition. The magnitude and extent of damage/deterioration noted in the 2012 FCA report is consistent with the 2017 screening observations. Significant changes in the level of damage/deterioration were not observed.

West Hylebos Log Dock

The West Hylebos Log Dock is located along the southwest shoreline of the Hylebos Waterway. The dock is constructed with laminated timber deck spanning between timber pile caps and is supported by timber piles. The laminated timber decking has an asphalt topping.

The dock is in fair/satisfactory condition. The magnitude and extent of damage/deterioration noted in the 2015 Waterfront Facility Inspection and Condition Assessment Report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components as noted below.

- Undermining along the concrete bulkhead. Concrete armoring pieces are settling, moving apart and downslope, exposing the slope to erosion (previously not recorded).

Washington United Terminal Wharf (WUT)

Washington United Terminal Wharf is located along the southwest shoreline of the Blair Waterway. The wharf is constructed with precast/prestressed concrete deck panels spanning between concrete pile caps and is supported by prestressed concrete piles. The precast deck panels have an asphalt topping and are ballasted for utilities outboard of the waterside crane rail.

The wharf is in satisfactory/good condition. The magnitude and extent of damage/deterioration noted in the FCA report is consistent with the 2017 screening observations. However, changes in the level of damage/deterioration were observed for specific components as noted below.

- Minor damage to rubber fenders in isolated locations (previously not recorded).
- Bent ladders (previously not recorded).
- Erosion or settling of the slope protection system along the bulkhead. Minor coating damage/rust was observed in several locations along the sheetpile wall (previously not recorded).
- Approximately six to eight inches of settlement in the asphalt pavement directly behind the sheetpile bulkhead wall (previously not recorded).
- Spalling, delamination, and rust staining on the concrete pile caps in several locations. (previously not recorded).

STEPS FORWARD

Using this letter, the reference documents, and the field notes collected during the site screening investigations, a draft Pier Inspection Program document will be developed. This program will provide the Port with recommendations for above-deck inspection intervals, below-deck inspection intervals, underwater inspection intervals, and inspection intervals for other systems such as fender elements, mooring hardware, crane stops, etc. Depending on the makeup of the individual piers, they may be grouped into categories such as timber and concrete, in order to customize the inspection programs for the particular makeup of particular facilities.

We appreciate this opportunity to assist you with the structural assessment and pier inspection program. If you have any questions about this letter, please call me at 206/431-2381.

Sincerely,



Daryl S. English, PE, SE
Project Manager



Michael A. Dodson, PE
Project Engineer

DSE:MAD

Attachments

Appendix A – Reference Documents

Appendix B – Condition Assessment Rating Descriptions

Appendix C – Photographs

**Port of Tacoma
Structural Assessment and Pier Inspection Program
Site Screening Report**

**Appendix A
Reference Documents**

APPENDIX A – REFERENCE DOCUMENTS

- APM Terminal Wharf
2012-02-04 Final Facility Condition Assessment – APM Terminal
- Blair Dock
2012-11-19 Final Facility Condition Assessment – Blair Terminal
- Olympic Container Terminal – Berth D and Partial C
2012-11-30 Final Facility Condition Assessment – Olympic Container Terminal Berths C & D
- Piers 24 & 25
2006-03 Piers 24 & 25 Condition Survey
2015-08-31 Pier 24 and 25 Final Condition Assessment and Load Rating
- Pierce County Terminal Wharf
2012-10-12 Final Facility Condition Assessment – Pierce County Terminal
- Pony Lumber Dock
2013-10-18 Pony Lumber Dock Load Rating Final
- Terminal 3 Wharf (Husky)
2012-03-01 Terminal 3 Under Dock Condition Survey – Crane Beams and Bullrail
- Terminal 4 Wharf (Remaining)
2014-09-19 Phase 2 Condition Assessment
- Terminal 7 - Berths A, B, C, and D
2003-07-31 T7 Apron
2007-01-11 Pier 7C Condition Survey
2008-06-12 T7 Condition Photos
2009-02-11 Terminal Berths A, B & C Emergency Inspection
2013-06-10 Port of Tacoma Load Rating Analysis (1 of 2)
2013-06-10 Port of Tacoma Load Rating Analysis (2 of 2)
2014-01-15 Fender System Condition Assessment of Terminal 7 Berths C & D
- Totem Ocean Trailer Express
2012-10-24 Final Facility Condition Assessment – Totem Ocean Trailer Express
2013-12-20 TOTE Fender System Condition Assessment
2015-07-16 Tote Lay Berth Condition Assessment
- West Hylebos Log Dock
2012-10-25 Final Facility Condition Assessment – West Hylebos Log Yard
2013-11-05 Hylebos Log Dock Condition Assessment
2016-05-10 West Hylebos Log Dock Waterfront Facility Inspection and Condition Assessment Report
- Washington United Terminal Wharf
2012-10-12 Final Facility Condition Assessment – Washington United Terminal
2014-10-03 WUT Fenders Preliminary Assessment

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**Appendix B
Condition Assessment Rating Descriptions**

APPENDIX B – CONDITION ASSESSMENT RATING DESCRIPTIONS

Table 2-14 Condition Assessment Ratings		
Rating		Description
6	Good	No visible damage or only minor damage noted. Structural elements may show very minor deterioration, but no overstressing observed. No repairs are required.
5	Satisfactory	Limited minor to moderate defects or deterioration observed but no overstressing observed. No repairs are required.
4	Fair	All primary structural elements are sound but minor to moderate defects or deterioration observed. Localized areas of moderate to advanced deterioration may be present but do not significantly reduce the load-bearing capacity of the structure. Repairs are recommended, but the priority of the recommended repairs is low.
3	Poor	Advanced deterioration or overstressing observed on widespread portions of the structure but does not significantly reduce the load-bearing capacity of the structure. Repairs may need to be carried out with moderate urgency.
2	Serious	Advanced deterioration, overstressing, or breakage may have significantly affected the load-bearing capacity of primary structural components. Local failures are possible, and loading restrictions may be necessary. Repairs may need to be carried out on a high-priority basis with urgency.
1	Critical	Very advanced deterioration, overstressing, or breakage has resulted in localized failure(s) of primary structural components. More widespread failures are possible or likely to occur, and load restrictions should be implemented as necessary. Repairs may need to be carried out on a very high-priority with strong urgency.

**Port of Tacoma
Structural Assessment and Pier Inspection Program
Site Screening Report**

**Appendix C
Photographs**

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Structural Assessment and Pier Inspection Program



APM Terminal Wharf Photo 1 – Typical Above-Deck Conditions



APM Terminal Wharf Photo 2 – Typical Below-Deck Conditions

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APM Terminal Wharf Photo 4 – Typical Fender System



APM Terminal Wharf Photo 3 – Typical Fender Panel

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Blair Dock Photo 1 – Typical Above-Deck Conditions



Blair Dock Photo 2 – Typical Below-Deck Conditions

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East Blair One Wharf Photo 1 – Typical Above-Deck Conditions



East Blair One Wharf Photo 2 – Typical Below-Deck Conditions

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Olympic Container Terminal Photo 1 – Typical Above-Deck Conditions



Olympic Container Terminal Photo 2 – Typical Below-Deck Conditions

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Olympic Container Terminal Photo 3 – Damaged Fender System at North End of Terminal

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Pier 24 Photo 1 – Typical Above-Deck Conditions



Pier 24 Photo 2 – Typical Below-Deck Conditions

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Pier 25 Photo 1 – Typical Above-Deck Conditions



Pier 25 Photo 2 – Typical Below-Deck Conditions

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Pierce County Terminal Wharf Photo 1 – Typical Above-Deck Conditions



Pierce County Terminal Wharf Photo 2 – Typical Below-Deck Conditions

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Pierce County Terminal Wharf Photo 3 – Typical Damaged Rubber Fender

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Pony Lumber Dock Photo 1 – Typical Above-Deck Conditions



Pony Lumber Dock Photo 2 – Typical Below-Deck Conditions

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Pony Lumber Dock Photo 3 – Typical Undermining at Bulkhead

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Terminal 3 Wharf (Husky) Photo 1 – Typical Above-Deck Conditions



Terminal 3 Wharf (Husky) Photo 2 – Typical Below-Deck Conditions

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Terminal 4 Wharf (Remaining) Photo 1 – Spall on Deck Panel Soffit Adjacent to New Construction

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Terminal 7 (Berths A, B & C) Photo 1 – Typical Above-Deck Conditions



Terminal 7 (Berths A, B, & C) Photo 2 – Typical Waterside Crane Beam

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Terminal 7 (Berths A, B, & C) Photo 3 – Typical Charred Timber



Terminal 7 (Berths A, B, & C) Photo 4 – Typical Pipe Bollard

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Totem Ocean Trailer Express Photo 1 – Concrete Edge Spalling at Aft Pier



Totem Ocean Trailer Express Photo 2 – Midship Pier

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Totem Ocean Trailer Express Photo 3 – South Forward Pier



Totem Ocean Trailer Express Photo 4 – North Forward Pier

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Totem Ocean Trailer Express Photo 5 – Timber Pier

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West Hylebos Log Dock Photo 1 – Typical Above-Deck Conditions



West Hylebos Log Dock Photo 2 – Typical Below-Deck Conditions

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West Hylebos Log Dock Photo 3 – Undermining at Concrete Bulkhead



West Hylebos Log Dock Photo 4 – Typical Condition of Mooring Hardware

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Washington United Terminal Wharf Photo 1 – Typical Above-Deck Conditions



Washington United Terminal Wharf Photo 2 – Typical Below-Deck Conditions

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Washington United Terminal Wharf Photo 3 – Typical Fender Panel