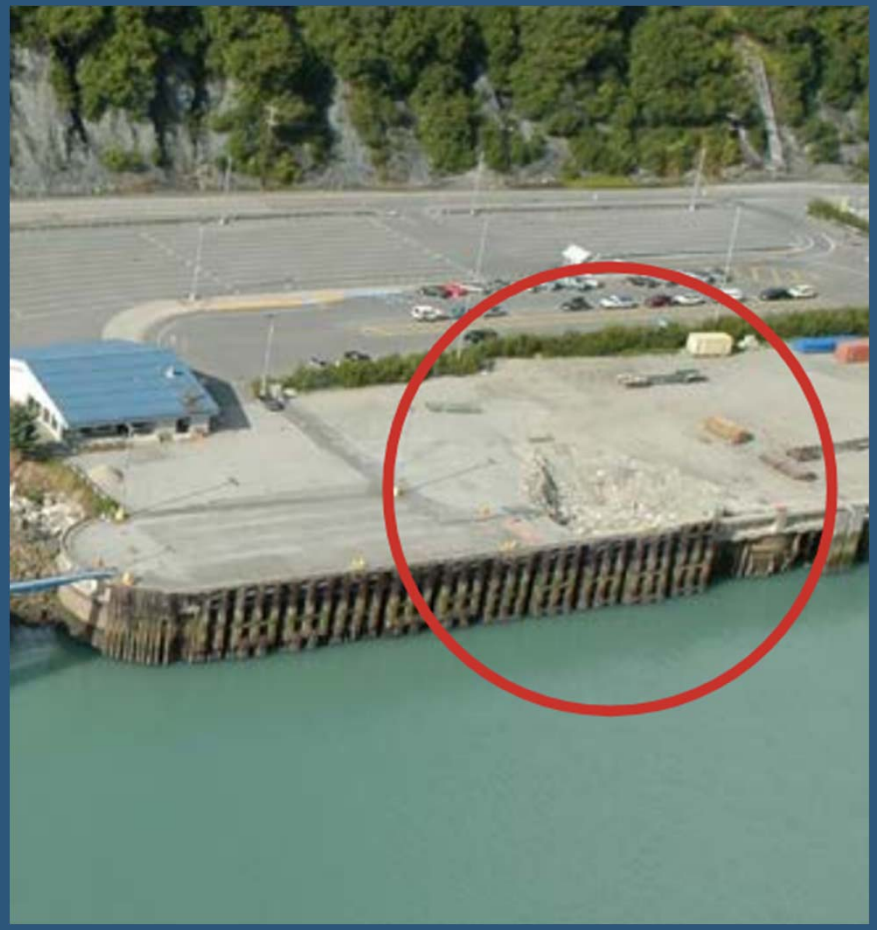


LUTAK DOCK REPLACEMENT PHASE I

PUBLIC MEETING #1

TURNAGAIN MARINE INTRODUCTION

OCTOBER 6TH, 2022

TURNAGAIN TEAM INTRODUCTION

JASON DAVIS

PRESIDENT

- 20 years of experience with Marine Infrastructure projects in Alaska.

JEAN CUMLAT

ENGINEER/DESIGNER

- 9 years of experience with marine structural design.
- Involved in and familiar with the project through the conceptual evaluations phase.

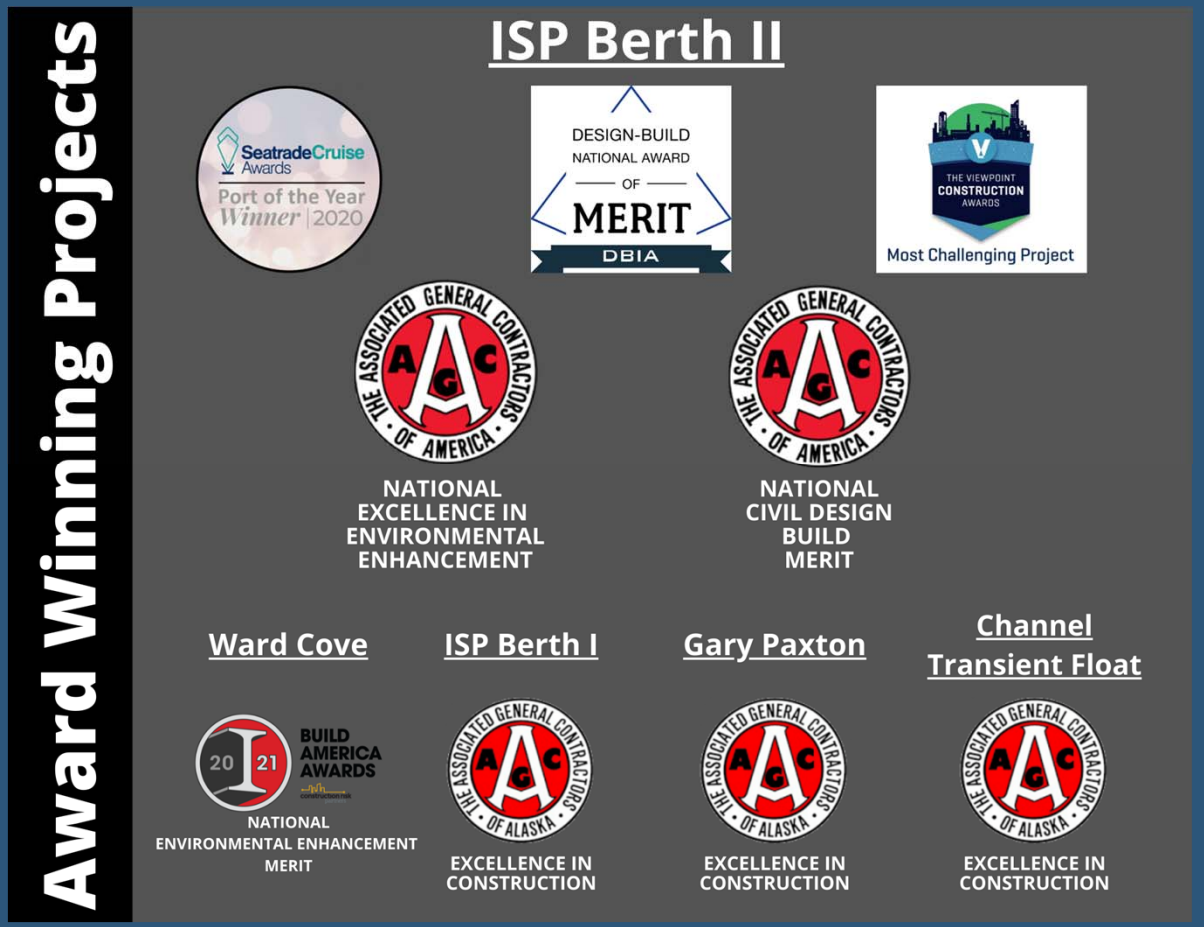
ROBIN REICH

ENVIRONMENTAL PERMITTER

- More than 20 years of experience managing permit documentation involving sensitive environmental impacts and coordination between multiple disciplines and agencies.

TEAM QUALIFICATIONS

- Extensive marine work throughout the state of Alaska, including:
  - Remote locations
  - Multi-purpose dock construction / remediation
  - Design-Build and alternative project delivery methods
  - Numerous awards and honors



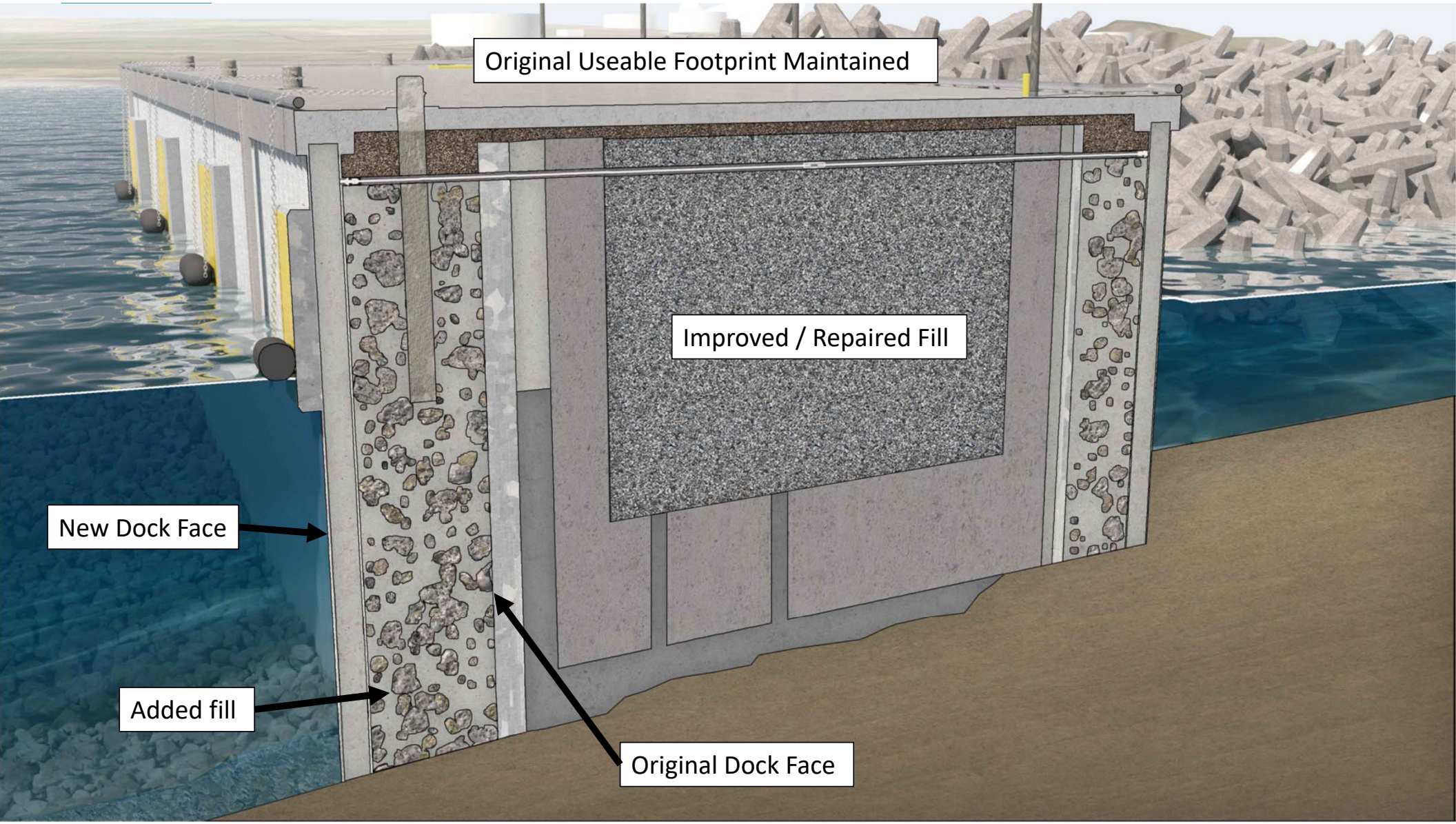
Similar Remediation Work at Alternative Site

Original Structure:

- Cellular filled
- Multipurpose cargo / fuel dock
- Remote Alaska Location

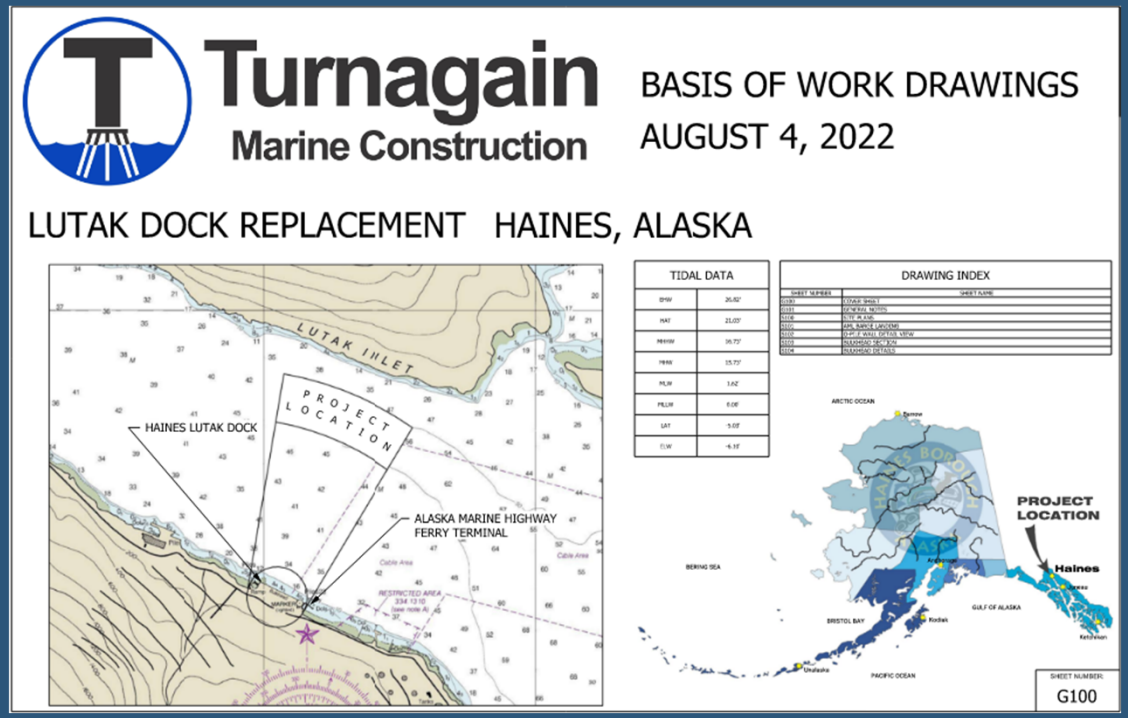
New Construction:

- Pipe-Pile bulkhead wall encapsulating failed structure
- Backfill between original and new structure
- Maintain original dock footprint and functionality


Original Useable Footprint Maintained
Improved / Repaired Fill
New Dock Face
Added fill
Original Dock Face

TURNAGAIN'S SCOPE FOR LUTAK PHASE I

- Data Gathering
  - Environmental and as-built research
  - Geotechnical study
  - Site survey
  - Design development and coordination
- Solicitation and incorporation of public comments through design
- Submission of applicable permit documentation
- Development of firm fixed price cost proposal for Phase II



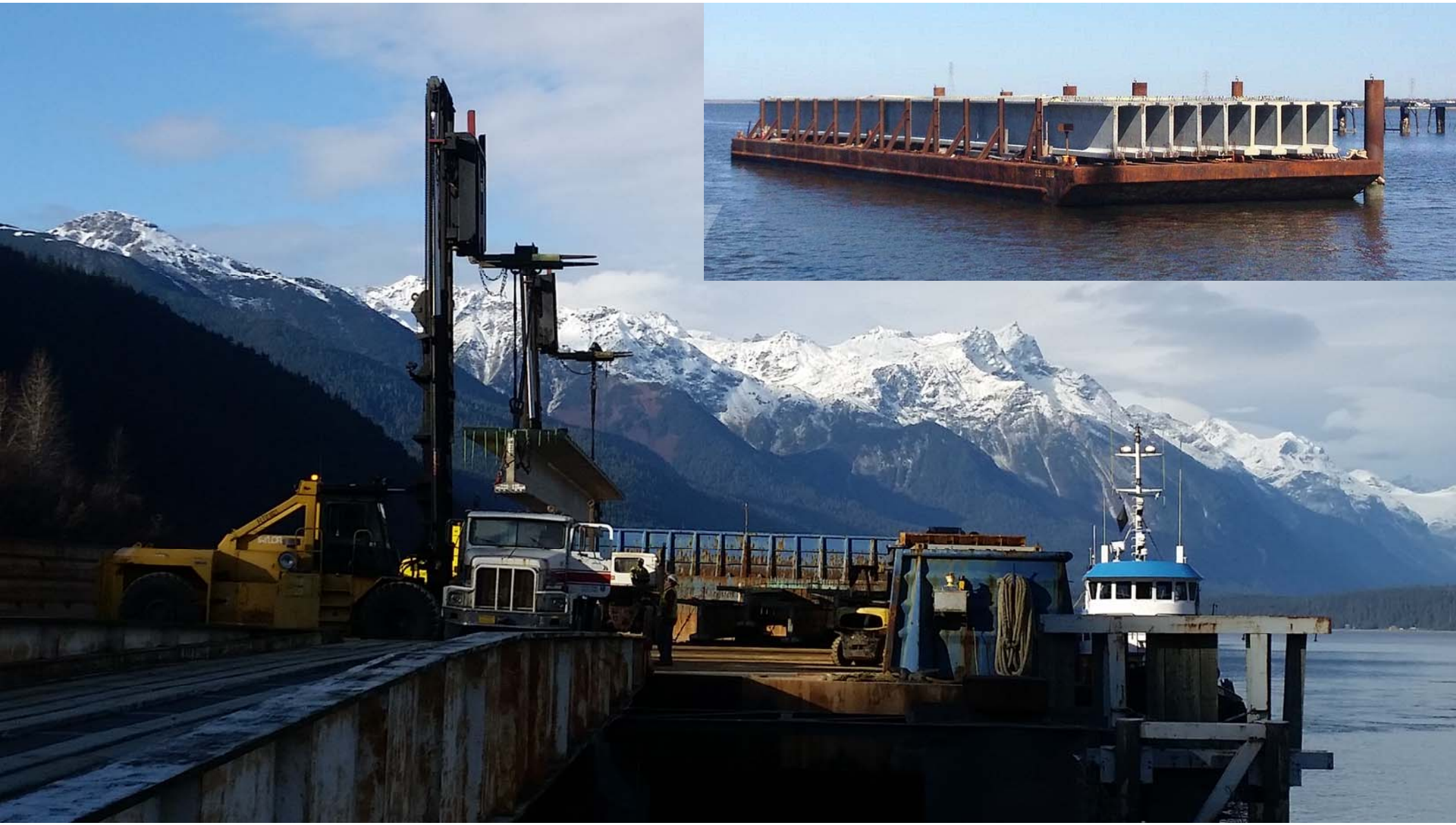
LUTAK DOCK HISTORICAL USES

FIGURE 3 – CARGO BARGE (LYNDEN ALASKA MARINE LINES)

Lutak Dock is Haines' primary marine industrial facility; it is an ice-free dock that accommodates regularly scheduled shipments of fuel and freight for the Borough and surrounding area. The Lutak Dock is responsible for most cargo and freight movement activity in Haines and currently operates year-round. The tow primary users of Lutak Dock are AML and Delta Western, which move cargo and bulk fuel respectively. In fiscal year 2016, the dock generated approximately $421,600 in dockage and wharfage revenues (Haines Borough, 2016). Recent activity includes:

- Oil Transferred – 12-13 million gallons annually
- General Cargo Transferred – 9,845 tons in 2010
- Hazardous Cargo Transferred – 2,368 tons in 2010
- Loaded Containers at Lutak Dock – 4,033 in 2009

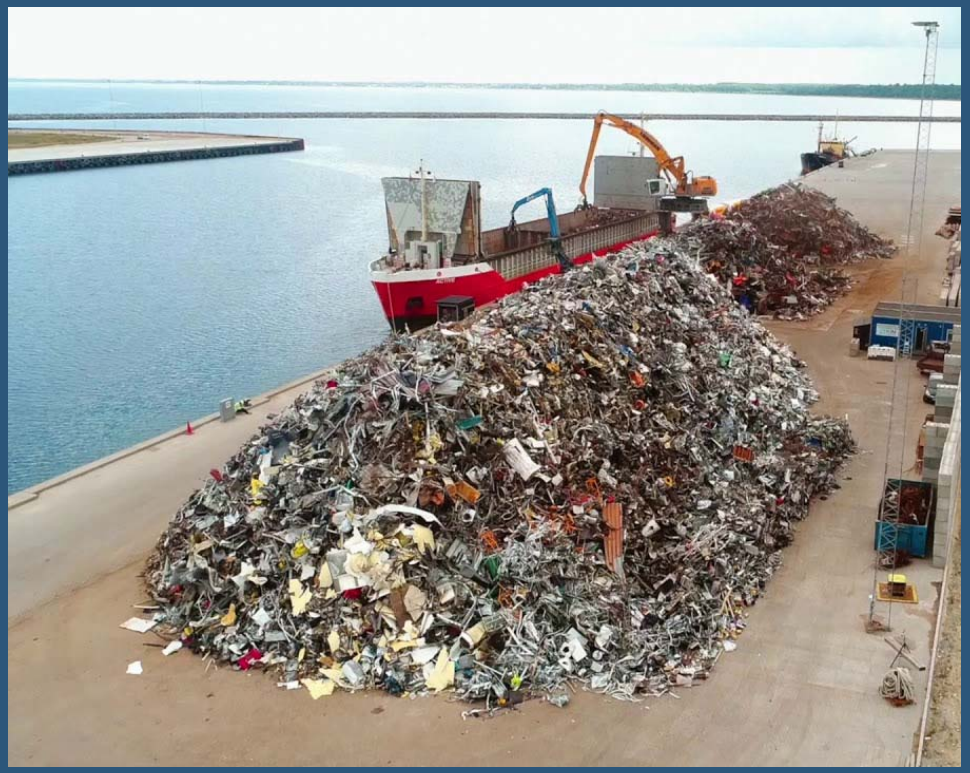
OVERSIZED CONSTRUCTION MATERIALS

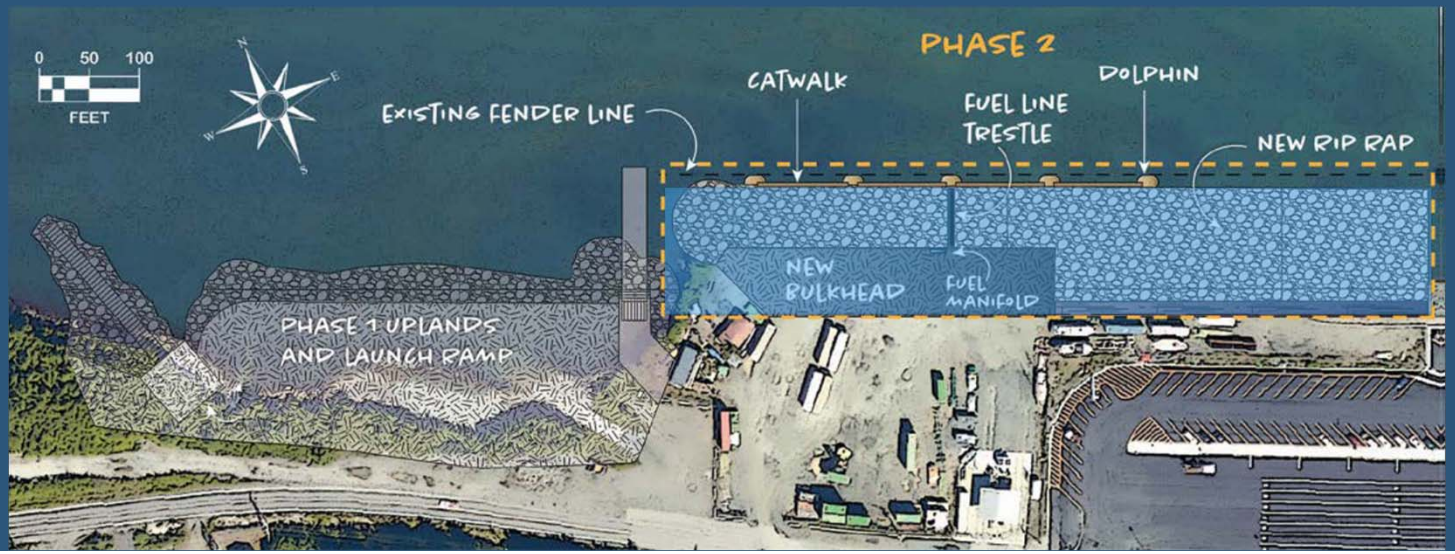


LOADING AGGREGATE FOR LOCAL CONSTRUCTION PROJECTS


LOADING AGGREGATE FOR
LOCAL CONSTRUCTION PROJECTS

CIVIC NEEDS – SPECIAL CARGO





Historical uses would be difficult or impossible to perform with the loss of uplands and reduced access to the dock face.

LUTAK DOCK FACILITY IS NOT SUITABLE FOR BULK ORE HANDLING

For mineral export there is a requirement for a large concentrate storage building (CSB) and related support facilities. Due to environmental regulations all receiving, stockpiling, handling, and reclaiming of the mineral concentrates must be done indoors in a controlled environment. In order to accommodate the CSB and related operations, approximately 7 to 10 acres of uplands would need to be developed.

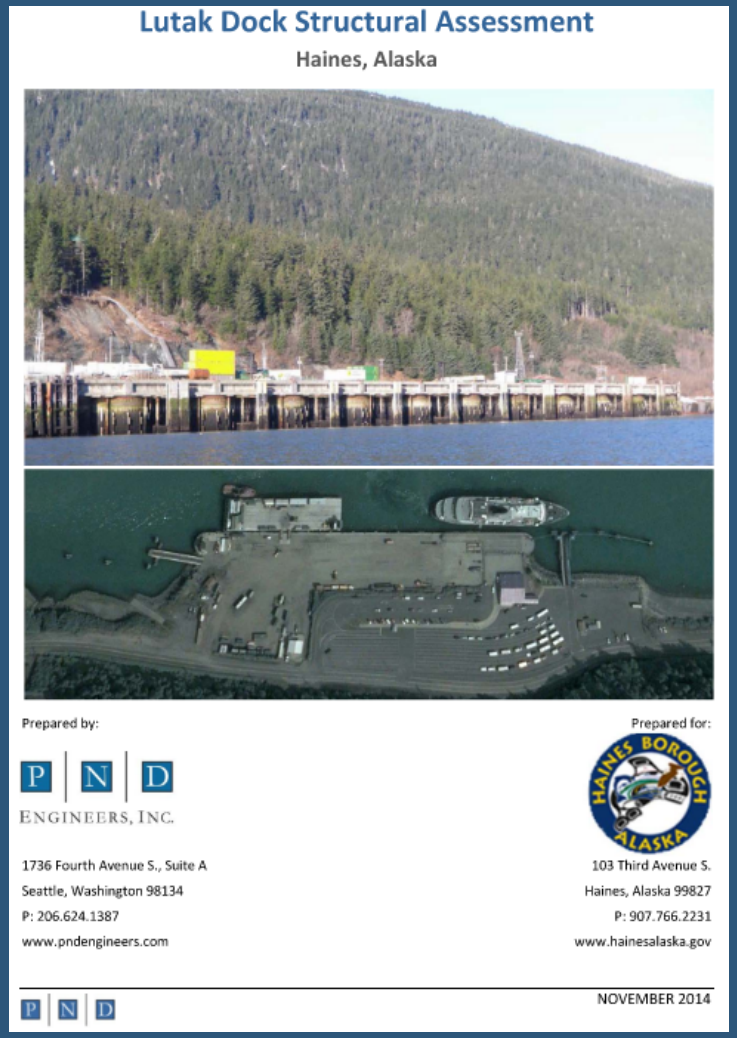
This facility will not realistically fit at the current dock site, which has just over 4 acres. The concentrate storage building and related operations would fit at the nearby former US Army fuel tank farm site.

Mineral export would also require a ship loader and a berth sufficient for Handimax bulk cargo vessels. Such a berth could be provided with a series of mooring and berthing dolphins. Since this would be a single purpose berth, it would be best

if it were not combined with a multi-purpose dock. It would also be best if it were located adjacent or close to the CSB.

Therefore the mineral export berth would be best located at some place other than the Lutak Dock. Note that the Lutak Dock is well situated to provide general cargo support for mining operations. Cargo, equipment, supplies etc. to support mining operations could come over the Lutak Dock.

PROJECT NEED


Lutak Dock Structural Assessment

Haines, Alaska

Prepared by:

P N D ENGINEERS, INC.

1736 Fourth Avenue S., Suite A
Seattle, Washington 98134
P: 206.624.1387
www.pndengineers.com

Prepared for:

HAINES BOROUGH ALASKA

103 Third Avenue S.
Haines, Alaska 99827
P: 907.766.2231
www.hainesalaska.gov

P N D

NOVEMBER 2014

"... it is the opinion of PND Engineers, Inc. (PND) that the structure has reached the end of credible 60-year service life. Further utilization is effectively on **borrowed time**."

PROJECT NEED CONTINUED

Given the USACE design background, the current corrosion loss, and the results of this assessment, it is the view of PND that failure conditions exist at all other closure arcs.

"…the Lutak Dock does not meet current USACE minimum factors of safety for cellular structures "

PHOTO No. 18:

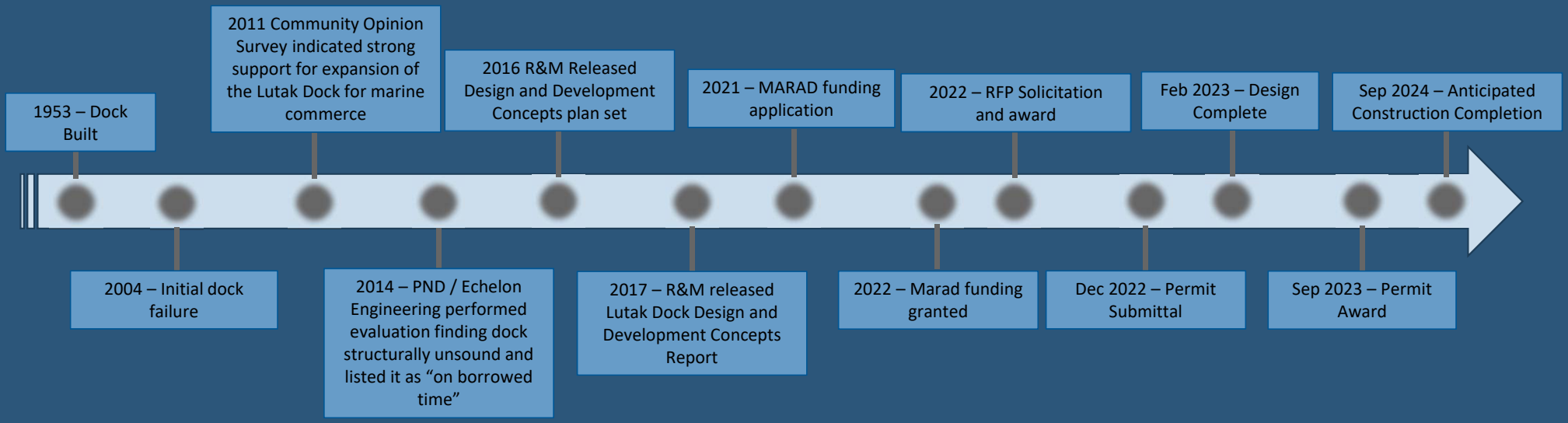
Closure Arc No. 6.5, East Side - Inspection also found these two sheet piles which have also failed due to corrosive section loss.

HAZARDS OF INACTION

Given that the bulkhead is euphemistically working on "borrowed time" it is PND's primary recommendation that planning for full replacement begin as soon as credibly possible. The bulkhead does not meet required factors of safety for normal operating conditions of self-weight dead load with surface live load and operating vehicles and cannot withstand a design level earthquake.

PROJECT TIMELINE AND COMPLIANCE WITH 2025 HAINES BOROUGH COMPREHENSIVE PLAN

"Improvements and expansion of the Lutak Dock and work area will position Haines Borough to capture revenue sufficient to sustain the facility and potentially provide additional jobs and economic Opportunity." (Haines Borough 2025 Comprehensive Plan)



Goal: Achieve a strong, diversified local economy that provides employment and income for all citizens that desire to work while protecting the health of the environment and quality of life. Build on local assets and competitive advantages to create economic opportunity.

Goal: Provide a safe, reliable, and connected transportation network to move goods and people to, from, and within Haines Borough. Aggressively maintain road, port, and harbor facilities to maximize public investment, enhance public safety and access, and provide economic opportunity.

Objective: Improve harbor and marine facilities for resident use and to support commercial fishing activity.

Objective: Capitalize on Haines' position as a transportation hub to increase transfer and shipment of cargo, supplies, fuel, and other commodities with the Yukon, northern British Columbia, and Interior Alaska.

Objective: Support Alaska Marine Highway System ferry service to and from Haines.

ENVIRONMENTAL PERMITTING AND MARAD FUNDING

PRIOR TO ANY CONSTRUCTION

MATERIALS NEED TO BE ORDERED AND FABRICATED

NEPA PROCESS HAS TO BE COMPLETED BEFORE MARAD WILL RELEASE FUNDING

ESA PROCESS MUST BE COMPLETED BEFORE NEPA PROCESS CAN BE COMPLETED

IHA AND ESA PROCESSES MUST OCCUR SIMULTANEOUSLY

IHA CANNOT BE STARTED UNTIL THE SCOPE OF WORK AND PRIMARY STRUCTURAL ELEMENTS ARE DEFINED

SCOPE OF WORK AND PRIMARY STRUCTURAL ELEMENTS CANNOT BE DEFINED WITHOUT DIRECTION AND DESIGN WORK

PREVIOUS ENGINEERING / DESIGN STUDY CONCEPT COMPARISON

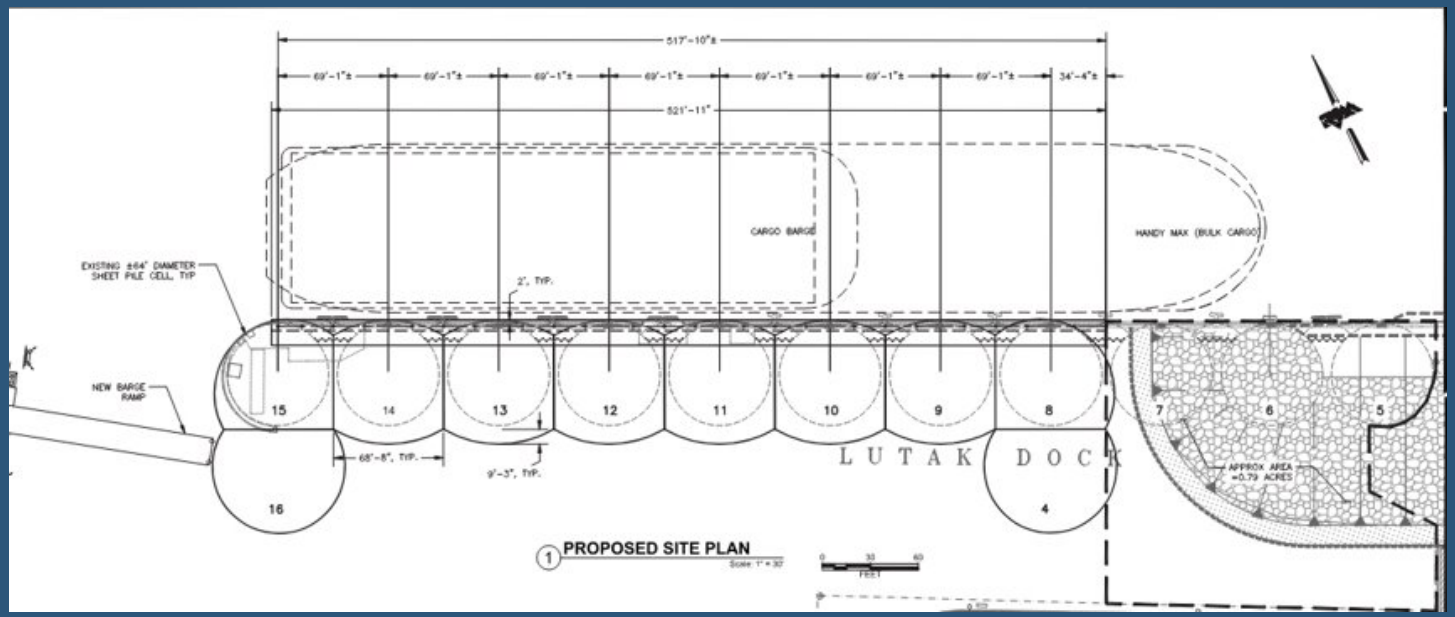
Engineer - Recommended Action

Funding-limited compromise selection for RFP

ALT. NO.	DESCRIPTION	PROS	CONS	LEVEL OF SERVICE	CAPITAL COST
1A	ENCAPSULATE USING MODIFIED DIAPHRAGM	• EFFICIENT AND COST EFFECTIVE • MAINTAINS EXISTING FOOTPRINT • ACCOMMODATES CURRENT USERS INCLUDING PASS PASS CARGO OPERATIONS • RECLAIM ABOUT ½ ACRE UPLANDS AT CELLS 5, 6, AND 7	• PILE DRIVING RISK DURING CONSTRUCTION • ENCAPSULATES EXISTING SHEETS AND POOR QUALITY FILL	• HIGH	• $37,420,000
1B	ENCAPSULATE USING MODIFIED DIAPHRAGM	• EFFICIENT AND COST EFFECTIVE • MAINTAINS EXISTING FOOTPRINT • ACCOMMODATES CURRENT USERS INCLUDING PASS PASS CARGO OPERATIONS	• PILE DRIVING RISK DURING CONSTRUCTION • ENCAPSULATES EXISTING SHEETS AND POOR QUALITY FILL • DOES NOT RECLAIM UPLANDS AT CELLS 5, 6, AND 7	• HIGH	• $31,989,000
2	PLATFORM DOCK (STEEL PILE-SUPPORTED CONCRETE DECK)	• ALL NEW FACILITIES • HIGHER LEVEL OF SEISMIC PERFORMANCE • MAINTAINS EXISTING FOOTPRINT AND RECLAIMS ½ ACRE UPLANDS AT CELLS 5, 6, AND 7 • ACCOMMODATES CURRENT USERS INCLUDING PASS PASS CARGO OPERATIONS	• HIGHEST COST	• HIGH	• $61,840,000
3A	DOLPHINS AND TRANSFER BRIDGE	• ALL NEW FACILITIES	• LOSE APPROXIMATELY 1.7 ACRES OF UPLANDS • LOSE ABILITY TO USE PASS PASS FOR CARGO OPERATIONS • LOSE ABILITY TO SIDE LOAD OVER DOCK FACE	• MEDIUM	• $25,383,000
3B	DOLPHINS AND TRANSFER BRIDGE	• LEAST COST • ALL NEW FACILITIES	• LOSE APPROXIMATELY 1.7 ACRES OF UPLANDS • LOSE ABILITY TO USE PASS PASS FOR CARGO OPERATIONS • LOSE ABILITY TO SIDE LOAD OVER DOCK FACE • SERVICEABILITY LIMITED TO EXISTING FUEL AND CARGO BARGES	• MEDIUM	• $21,166,000

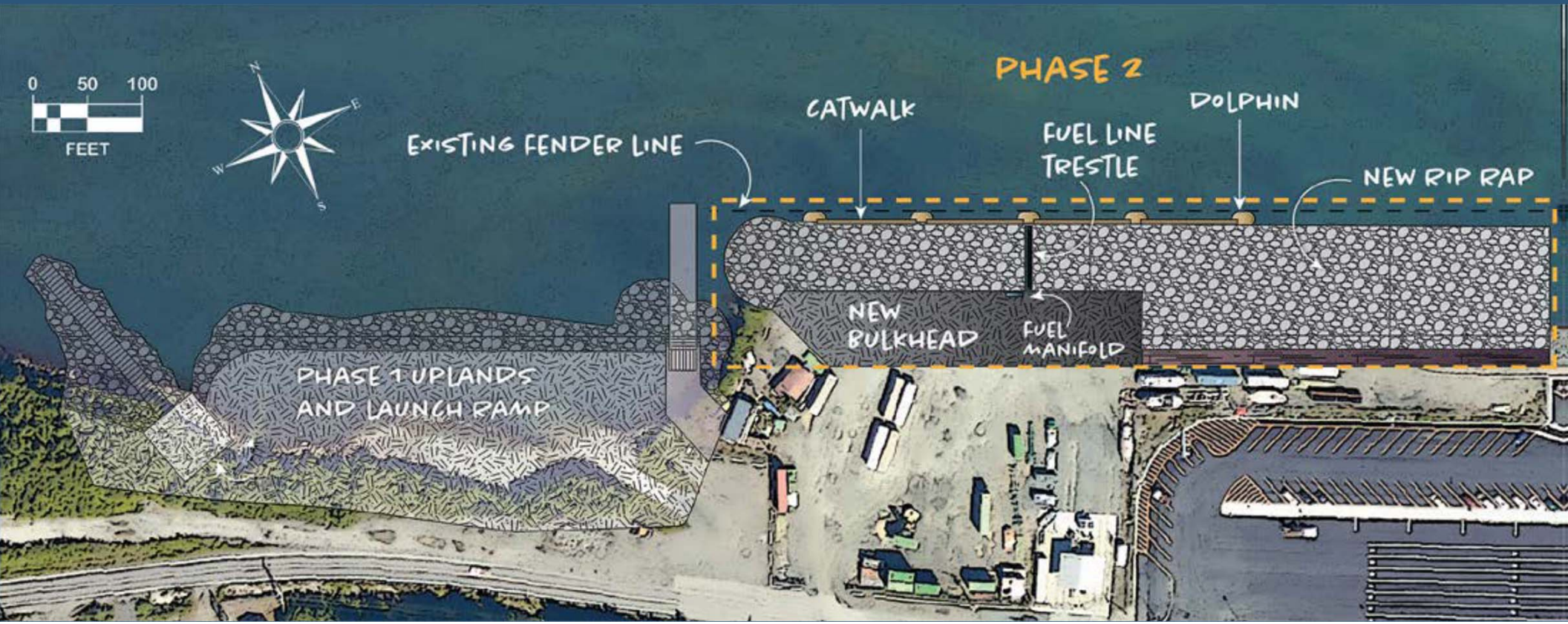
RECOMMENDATION FROM PREVIOUS ENGINEERING STUDY

The engineering recommended alternative is 1B with an estimated cost of $31,989,000. This alternative maintains the same general footprint and use as the existing dock. It supports existing users including general cargo and fuel transfer. It remains a general purpose dock with some capacity for other and future users. The total usable upland area is approximately 3.9 acres.



REDUCED SCOPE OPTION DUE TO FUNDING LIMITATIONS

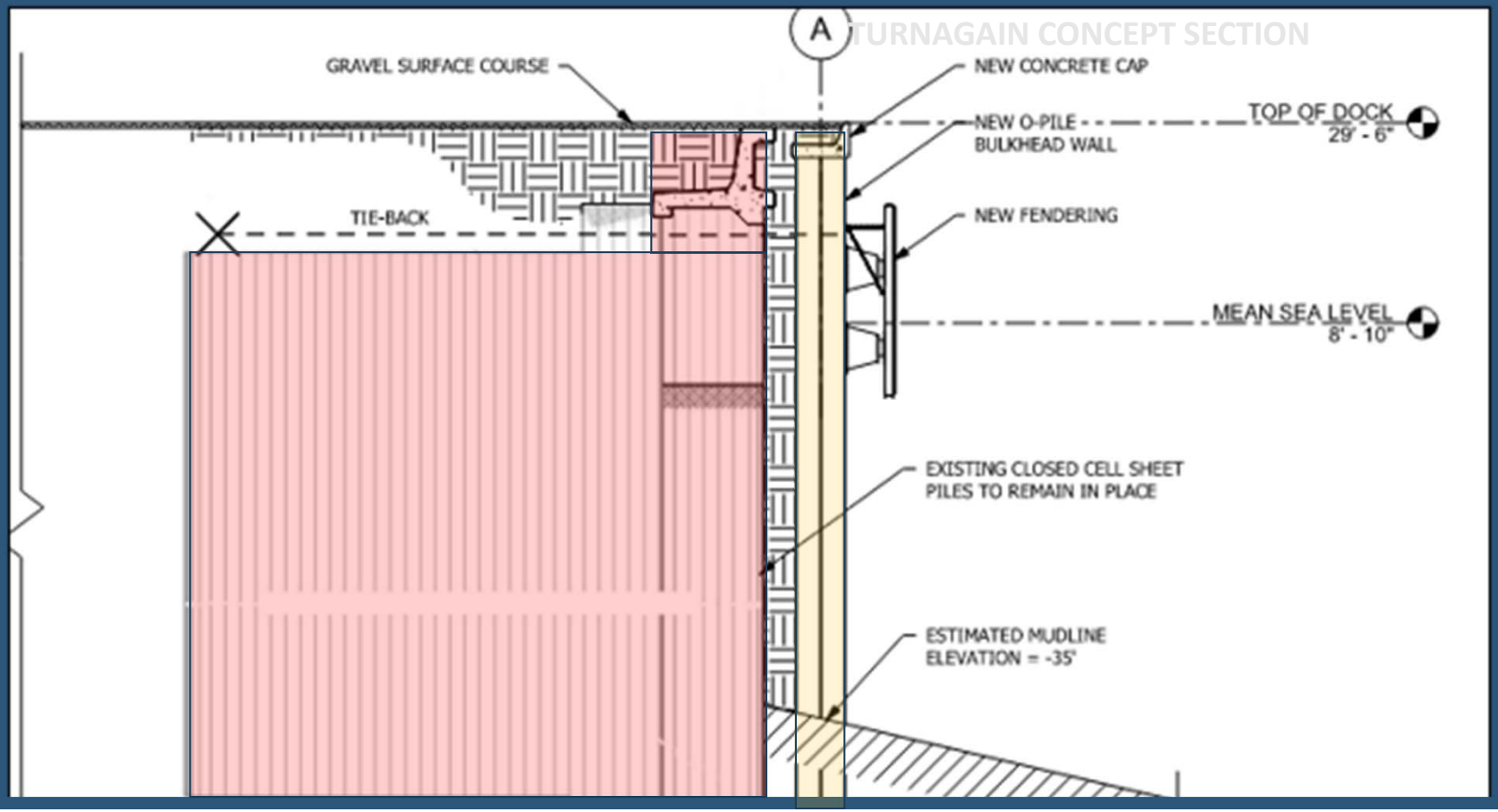
- LOSE 44% OF EXISTING USEABLE PORT LAND
- LOSE ABILITY TO PERFORM PASS-PASS FREIGHT HANDLING
- LOSE ABILITY TO SIDELOAD BARGES AND CARGO VESSELS



Initial 2017 Analysis from Report by Others					
ALT.	**DESCRIPTION**	**PROS**	**CONS**	**LEVEL OF SERVICE**	**CAPITAL COST**
1A	ENCAPSULATE USING MODIFIED DIAPHRAGM	• EFFICIENT AND COST EFFECTIVE • MAINTAINS EXISTING FOOTPRINT • ACCOMMODATES CURRENT USERS INCLUDING PASS PASS CARGO OPERATIONS	• PILE DRIVING RISK DURING CONSTRUCTION • ENCAPSULATES EXISTING SHEETS AND POOR QUALITY FILL	• HIGH	• $37,420,000
1B	ENCAPSULATE USING MODIFIED DIAPHRAGM	• EFFICIENT AND COST EFFECTIVE • MAINTAINS EXISTING FOOTPRINT • ACCOMMODATES CURRENT USERS INCLUDING PASS PASS CARGO OPERATIONS	• PILE DRIVING RISK DURING CONSTRUCTION • ENCAPSULATES EXISTING SHEETS AND POOR QUALITY FILL • DOES NOT RECLAIM UPLANDS AT CELLS 5, 6, AND 7	• HIGH	• $31,989,000
2	PLATFORM DOCK (STEEL PILE-SUPPORTED CONCRETE DECK)	• ALL NEW FACILITIES • HIGHER LEVEL OF SEISMIC PERFORMANCE • MAINTAINS EXISTING FOOTPRINT AND RECLAIMS ½ ACRE UPLANDS AT CELLS 5, 6, AND 7 • ACCOMMODATES CURRENT USERS INCLUDING PASS PASS CARGO OPERATIONS	• HIGHEST COST	• HIGH	• $61,840,000
3A	DOLPHINS AND TRANSFER BRIDGE	• ALL NEW FACILITIES	• LOSE APPROXIMATELY 1.7 ACRES OF UPLANDS • LOSE ABILITY TO USE PASS PASS FOR CARGO OPERATIONS • LOSE ABILITY TO SIDE LOAD OVER DOCK FACE	• MEDIUM	• $25,383,000
3B	DOLPHINS AND TRANSFER BRIDGE	• LEAST COST • ALL NEW FACILITIES	• LOSE APPROXIMATELY 1.7 ACRES OF UPLANDS • LOSE ABILITY TO USE PASS PASS FOR CARGO OPERATIONS • LOSE ABILITY TO SIDE LOAD OVER DOCK FACE • SERVICEABILITY LIMITED TO EXISTING FUEL AND CARGO BARGES	• MEDIUM	• $21,166,000
Turnagain Analysis					
4	Pipe-Pipe Pile Wall with Tiebacks	•Efficient and cost effective •Maintains existing foot print •Accommodates current users including Pass Pass Cargo Operations •All new facilities •Highest level of seismic performance. •Least environmental impact or safety risk. •Reduced geotechnical risk during construction. •Eliminates costly demolition without adversely affecting	• 1A and 1B above claim the encapsulation of poor fill and existing sheets is a con. Turnagain disagrees with this assessment but has made provisions to perform ground improvement inside the existing cells to improve seismic performance negating any perceived or real concerns about the existing fill. A geotechnical engineer has been engaged to aid in the analysis and design of the soil improvements.	• HIGH	$25,383,000 Inclusive of all design, permitting, and construction IF THIS OPTION HAD BEEN CONSIDERED IT WOULD HAVE BEEN THE SELECTED PREFERRED OPTION. This option was not considered because the cost

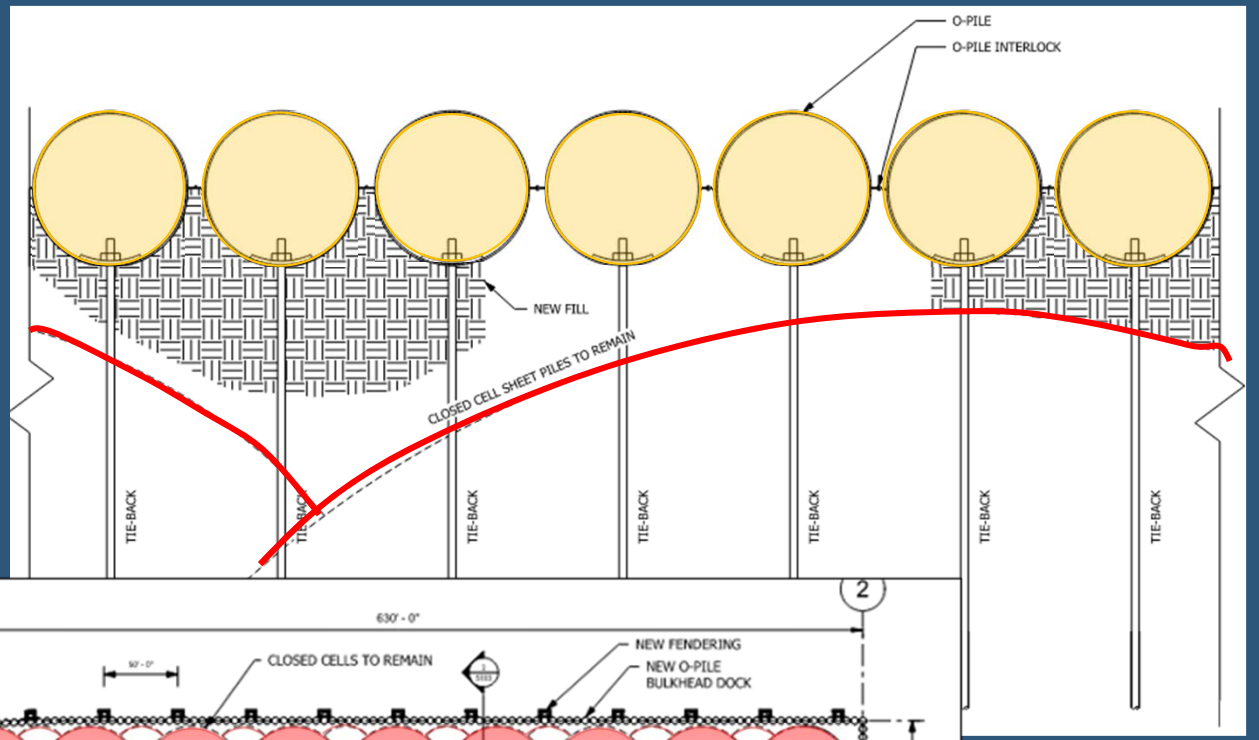
TURNAGAIN DESIGN CONCEPT

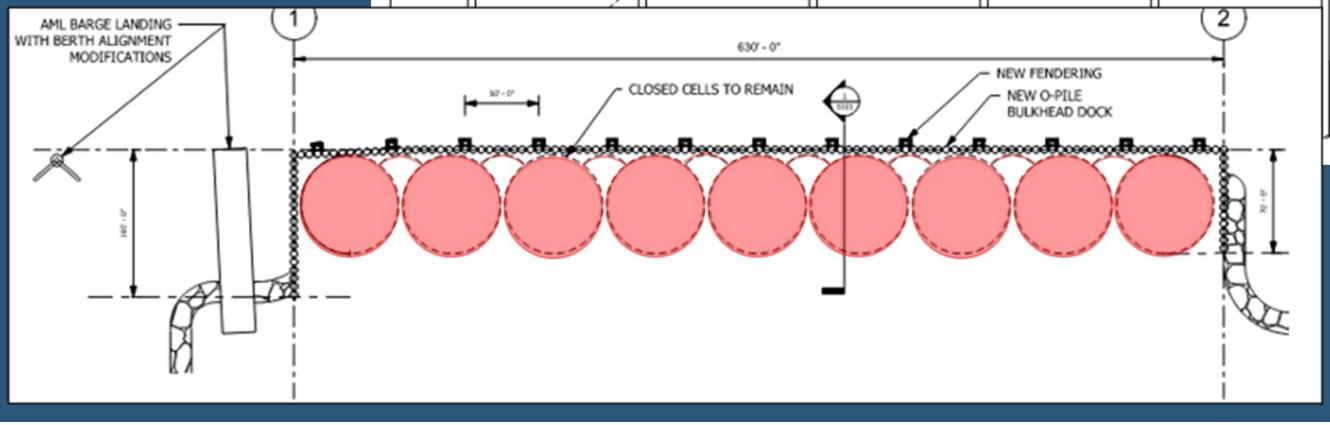
TURNAGAIN CONCEPT



FEATURES OF TURNAGAIN CONCEPT

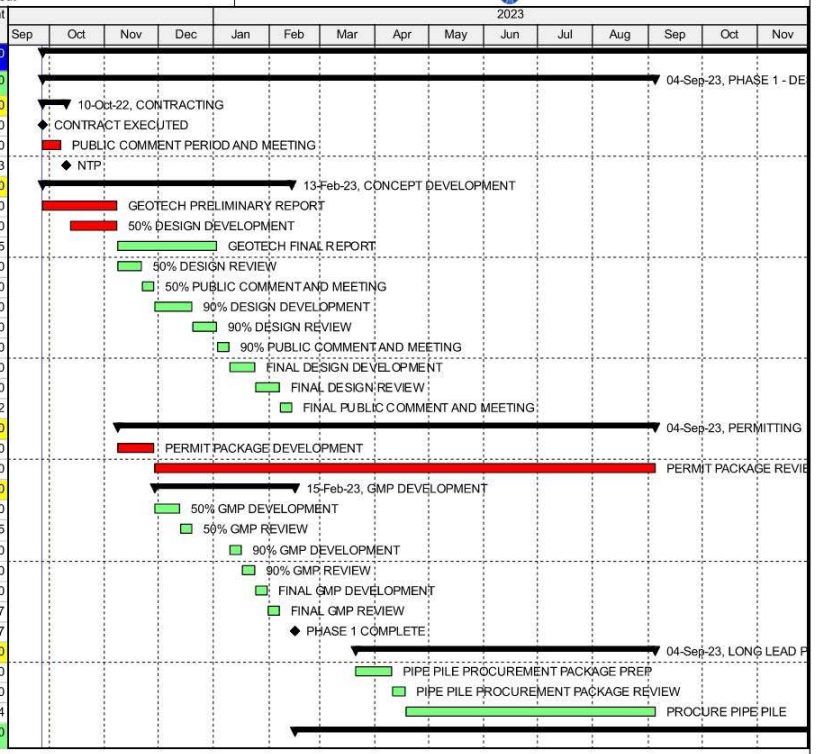
- Pipe-Pipe Bulkhead wall
- Backfill and encapsulate existing dock
- RORO dock will remain
- Freight service will not be interrupted.
- Single construction season





LUTAK DOCK REPLACEMENT | Classic Schedule Layout

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Free Float
LUTAK DOCK REPLACEMENT		726	726	0%	27-Sep-22	21-Sep-24	5	0
PHASE 1 - DESIGN		245	245	0%	27-Sep-22	04-Sep-23	123	0
CONTRACTING		9	9	0%	27-Sep-22	10-Oct-22	-1	0
A1000	CONTRACT EXECUTED	0	0	0%	27-Sep-22*		-2	0
A1020	PUBLIC COMMENT PERIOD AND ME	9	9	0%	27-Sep-22	07-Oct-22	-1	0
A1010	NTP	0	0	0%	10-Oct-22*		-1	3
CONCEPT DEVELOPMENT		100	100	0%	27-Sep-22	13-Feb-23	2	0
A1030	GEOTECH PRELIMINARY REPORT	30	30	0%	27-Sep-22*	07-Nov-22	-1	0
A1050	50% DESIGN DEVELOPMENT	18	18	0%	13-Oct-22	07-Nov-2	-1	0
A1040	GEOTECH FINAL REPORT	40	40	0%	08-Nov-22	02-Jan-23	7	5
A1060	50% DESIGN REVIEW	10	10	0%	08-Nov-22	21-Nov-22	2	0
A1070	50% PUBLIC COMMENT AND MEETI	5	5	0%	22-Nov-22	28-Nov-22	2	0
A1080	90% DESIGN DEVELOPMENT	15	15	0%	29-Nov-22	19-Dec-22	2	0
A1090	90% DESIGN REVIEW	10	10	0%	20-Dec-22	02-Jan-23	2	0
A1100	90% PUBLIC COMMENT AND MEETI	5	5	0%	03-Jan-23	09-Jan-23	2	0
A1110	FINAL DESIGN DEVELOPMENT	10	10	0%	10-Jan-23	23-Jan-23	2	0
A1120	FINAL DESIGN REVIEW	10	10	0%	24-Jan-23	06-Feb-23	2	0
A1130	FINAL PUBLIC COMMENT AND MEET	5	5	0%	07-Feb-23	13-Feb-23	2	2
PERMITTING		215	215	0%	08-Nov-22	04-Sep-23	-1	0
A1140	PERMIT PACKAGE DEVELOPMENT	15	15	0%	08-Nov-22	28-Nov-22	-1	0
A1150	PERMIT PACKAGE REVIEW PERIOD	200	200	0%	29-Nov-22	04-Sep-2	-1	0
GMP DEVELOPMENT		57	57	0%	29-Nov-22	15-Feb-23	0	0
A1160	50% GMP DEVELOPMENT	10	10	0%	29-Nov-22	12-Dec-22	22	0
A1170	50% GMP REVIEW	5	5	0%	13-Dec-22	19-Dec-22	22	15
A1180	90% GMP DEVELOPMENT	5	5	0%	10-Jan-23	16-Jan-23	7	0
A1190	90% GMP REVIEW	5	5	0%	17-Jan-23	23-Jan-23	7	0
A1200	FINAL GMP DEVELOPMENT	5	5	0%	24-Jan-23	30-Jan-2	7	0
A1210	FINAL GMP REVIEW	5	5	0%	31-Jan-23	06-Feb-23	7	7
A1220	PHASE 1 COMPLETE	0	0	0%		15-Feb-2	0	417
LONG LEAD PROCUREMENT		120	120	0%	21-Mar-23	04-Sep-23	123	0
A1230	PIPE PILE PROCUREMENT PACKAG	15	15	0%	21-Mar-23	10-Apr-23	123	0
A1250	PIPE PILE PROCUREMENT PACKAG	5	5	0%	11-Apr-23	17-Apr-23	123	0
A1240	PROCURE PIPE PILE	100	100	0%	18-Apr-23	04-Sep-2	123	274
PHASE 2 - CONSTRUCTION		584	584	0%	15-Feb-23	21-Sep-24	5	0



Actual Work | Critical Remaining Work | Summary
Remaining Work | Milestone

TASK filter: All Activities

QUESTIONS ?

STEPS PRIOR TO NEXT PUBLIC MEETING

- Turnagain will provide responses to comments from this meeting to the Haines Assembly for posting to the Lutak Dock Project Website
- Turnagain will incorporate comments from this meeting and the Haines Assembly into a 50% design package
- The target date for the release of a 50% design package is November 7th, 2022
- The next public meeting will be scheduled following ample time for review by the Assembly and the Haines community

Turnagain is excited to work with the Haines residents to develop a dock that will provide the best value and functionality for the community.

THANK YOU!