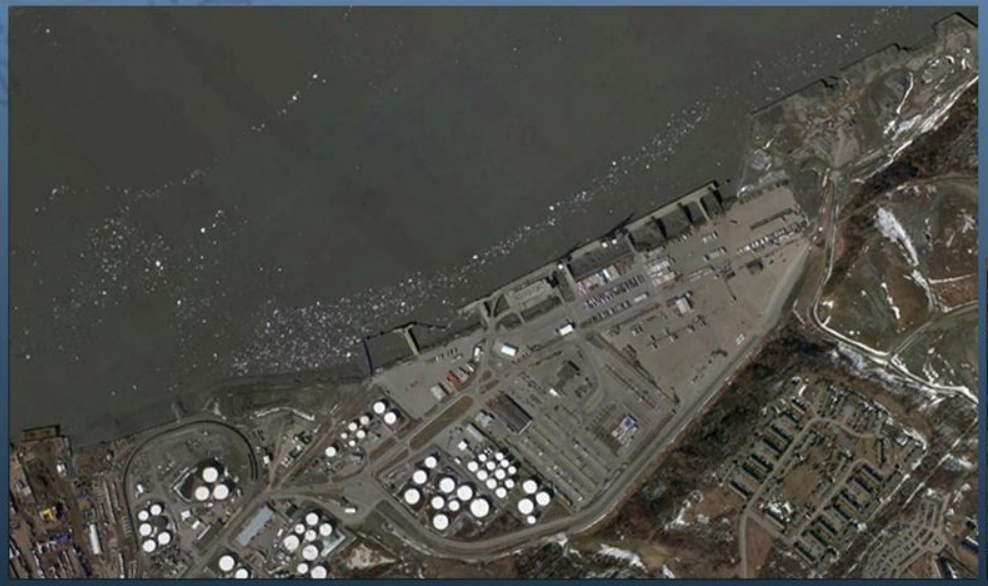



Concept Plan

Anchorage Port Modernization Project

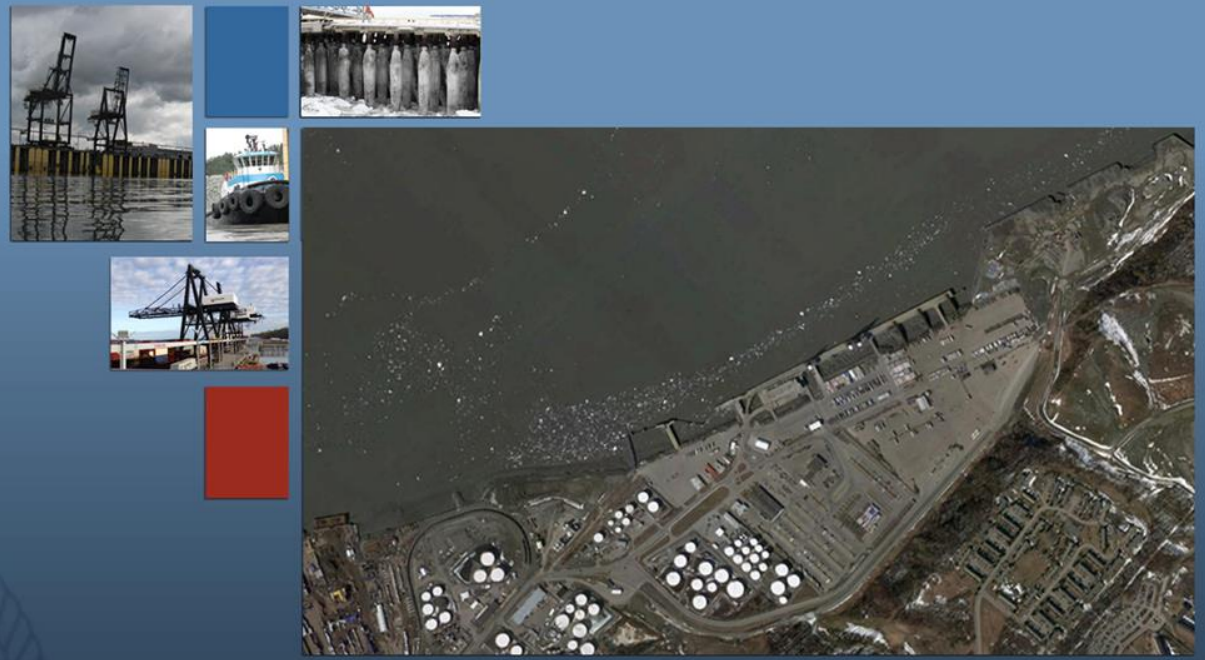



Assembly Briefing
November 21, 2014




Presentation Outline

- Recap of Concept Planning Charrette
- Overview of the 3 Concept Plans using visual simulations
- Results of Concept Evaluation Committee
- Attributes of the Selected Concept
- Project Critical Path



Concept Planning Charrette



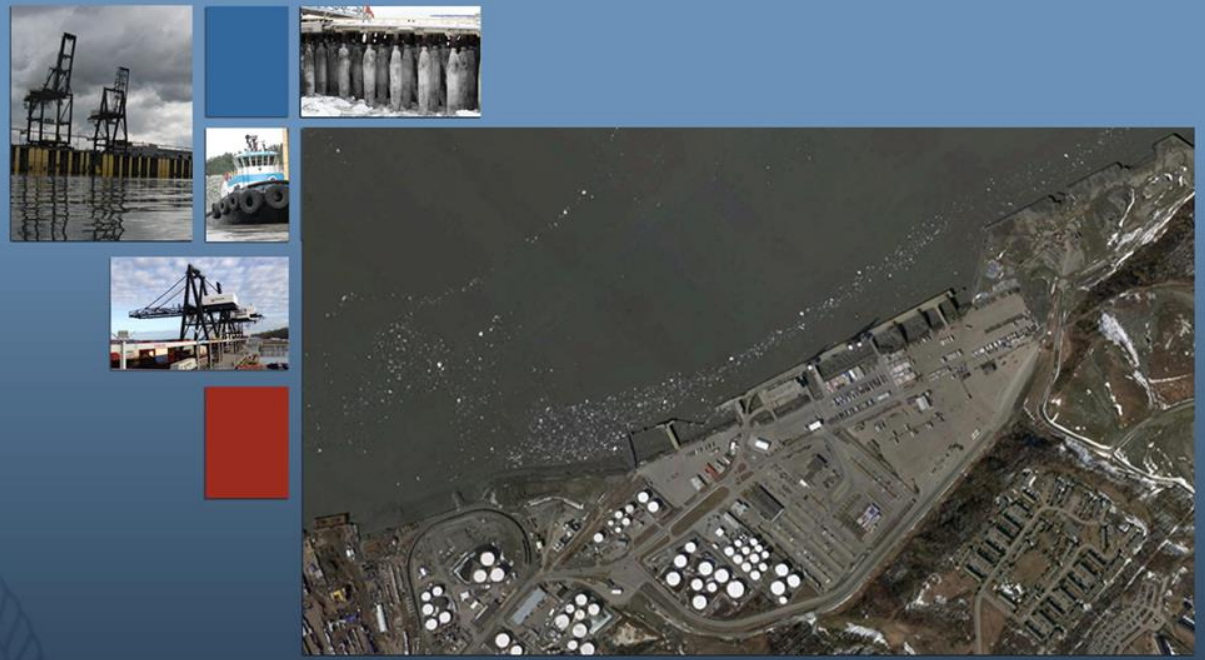

Concept Planning Charrette Goals

- Replace Terminals 2 and 3 while minimizing investment in the North Extension
- Provide new, modern, safe and efficient port facilities
- Focus on existing business
- Plan should provide flexibility for future growth to:
  - Support larger vessels
  - Allow for deeper draft (-45 ft. berth depth)

Organizations Represented

- Municipality of Anchorage (MOA)
  - Geotechnical Advisory Commission (GAC)
- Port of Anchorage (POA)
- Totem Ocean Trailer Express (TOTE)
- Horizon Lines
- ABI Cement
- Southwest Alaska Pilots Association
- Cook Inlet Tug & Barge
- US Army Corps of Engineers Alaska District (USACE)
- Alaska Railroad Corporation (ARRC)
- CH2M HILL/HDR Project Team



Charrette Concepts

GENERAL NOTES:

1. THE EXISTING SHEET PILE WALLS, TAIL WALLS, ROCK STABILIZED SLOPES, EARTH EMBANKMENT AND OTHER FEATURES ARE NOT SHOWN ON GENERAL SITE LAYOUT FOR CLARITY.
2. ADMINISTRATION BUILDING RELOCATED TO PORT UPLANDS. LOCATION NOT SHOWN.
3. THIS CONCEPT CAN BE COMBINED WITH OPTION S1. THE NEW TERMINAL CONSTRUCTED WITH OPTION S1 WOULD SERVE CEMENT OPERATIONS AND ASSIST IN PROJECT PHASING.

CONCEPT A

CH2MHILL

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CONCEPT B

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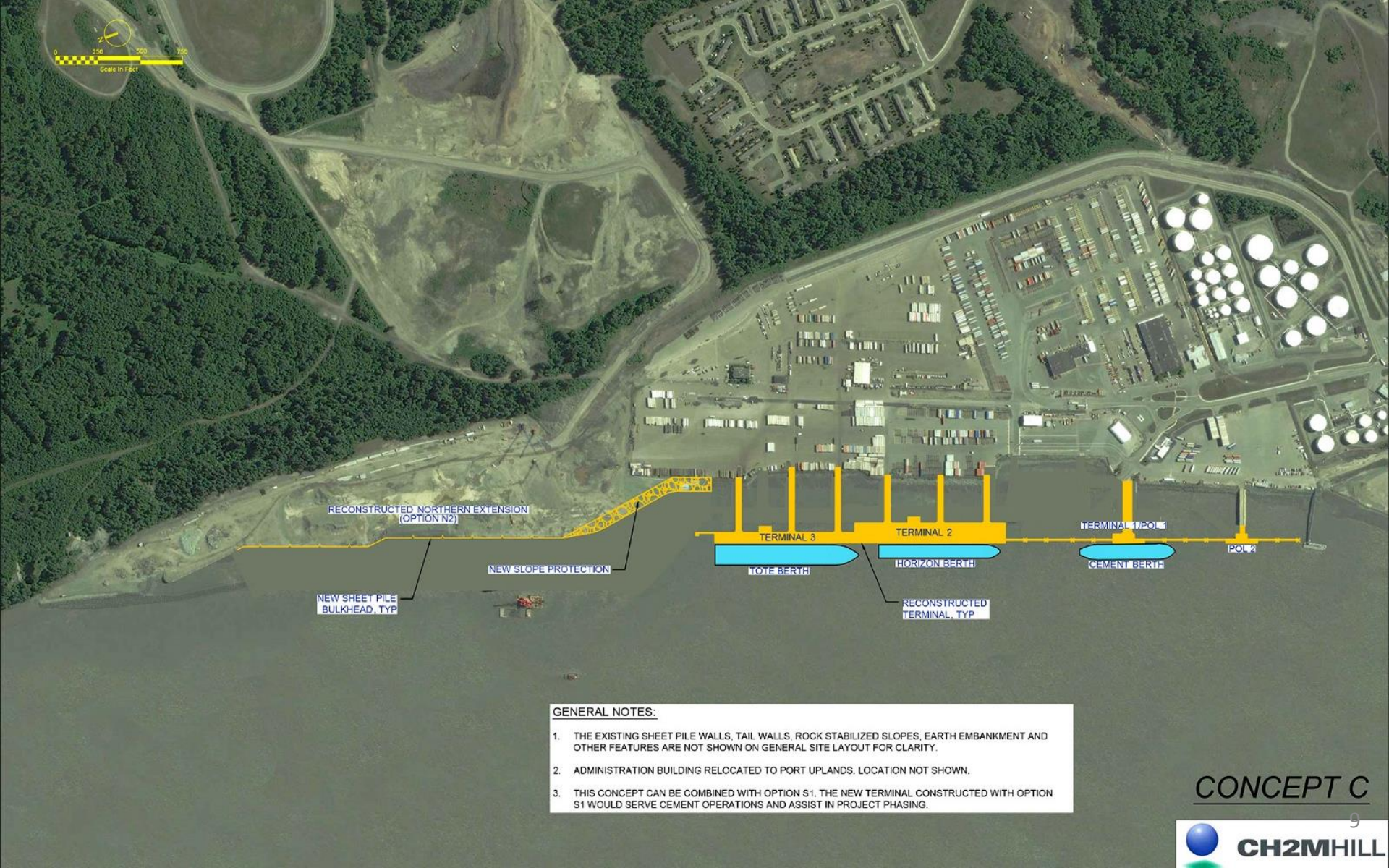

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CONCEPT C

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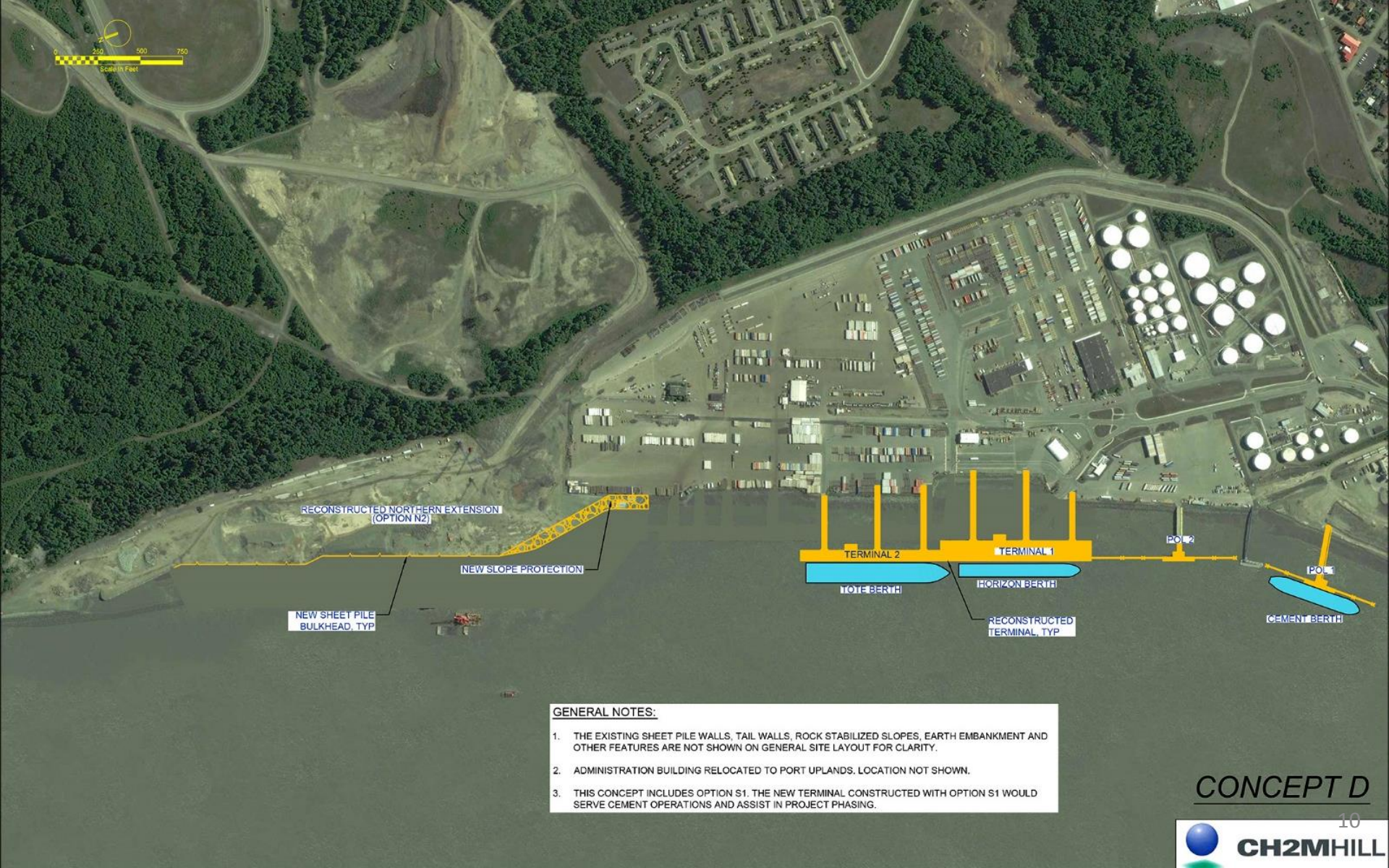

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1. THE EXISTING SHEET PILE WALLS, TAIL WALLS, ROCK STABILIZED SLOPES, EARTH EMBANKMENT AND OTHER FEATURES ARE NOT SHOWN ON GENERAL SITE LAYOUT FOR CLARITY.
2. ADMINISTRATION BUILDING RELOCATED TO PORT UPLANDS. LOCATION NOT SHOWN.
3. THIS CONCEPT INCLUDES OPTION S1. THE NEW TERMINAL CONSTRUCTED WITH OPTION S1 WOULD SERVE CEMENT OPERATIONS AND ASSIST IN PROJECT PHASING.

CONCEPT D

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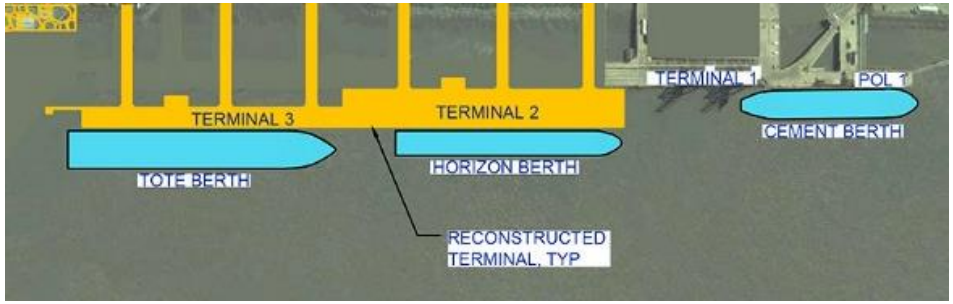
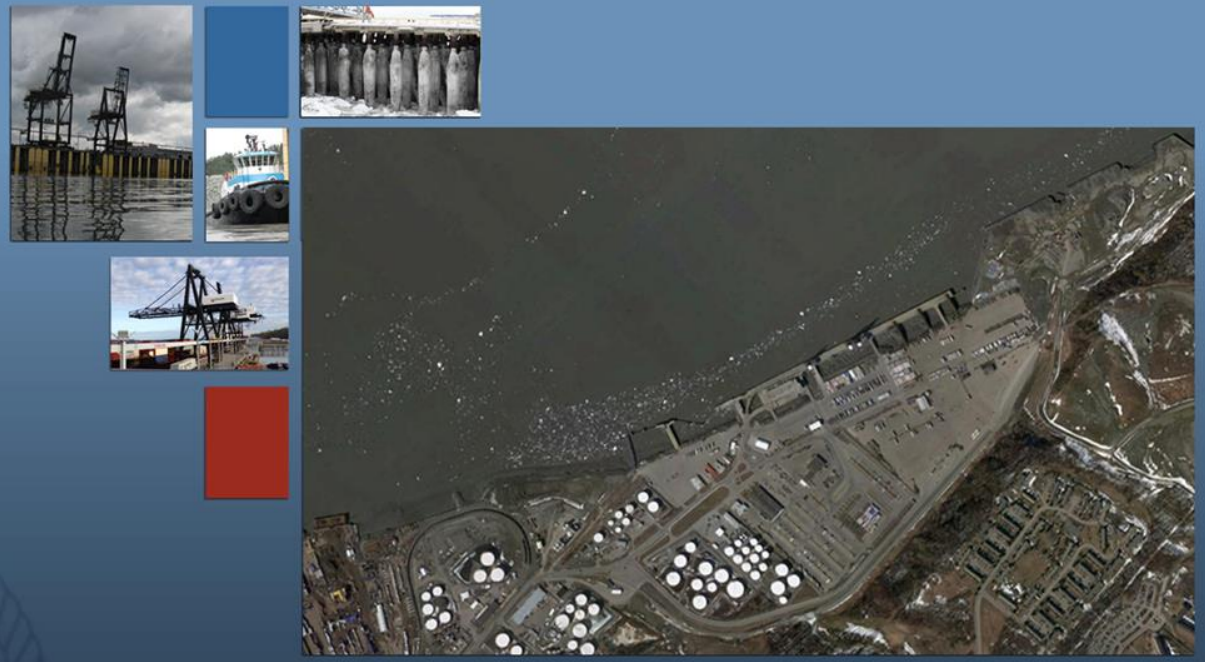
Charrette Findings

- Concept A, C and D were carried forward
- Concept B was eliminated:
  - Two different berth lines would cause:
    - Ice build up between Terminals 1 and 2
    - Difficulty dredging Terminal 1

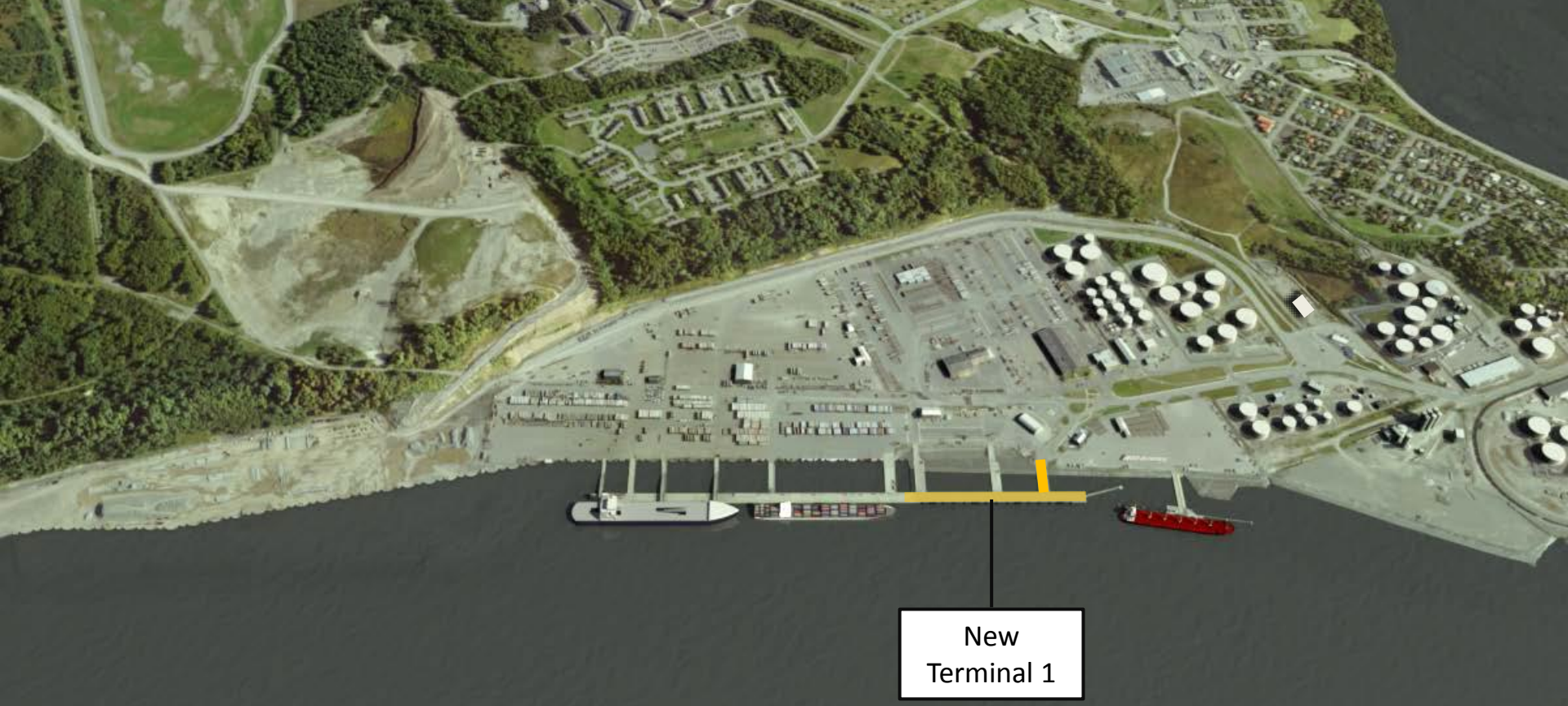




Concept A - Visualizations

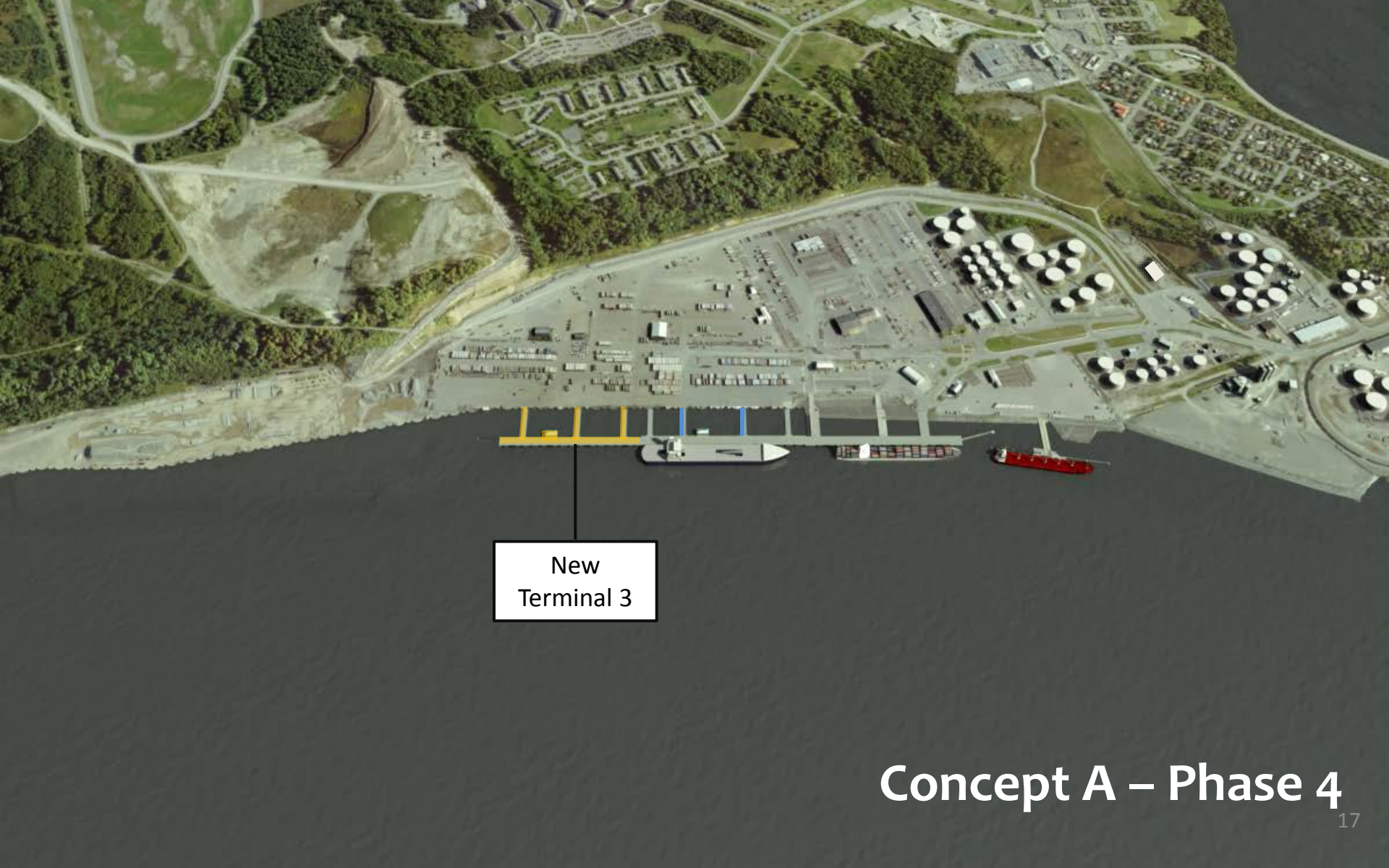
Concept A - Existing

Concept A – Phase 1



Concept A – Phase 2

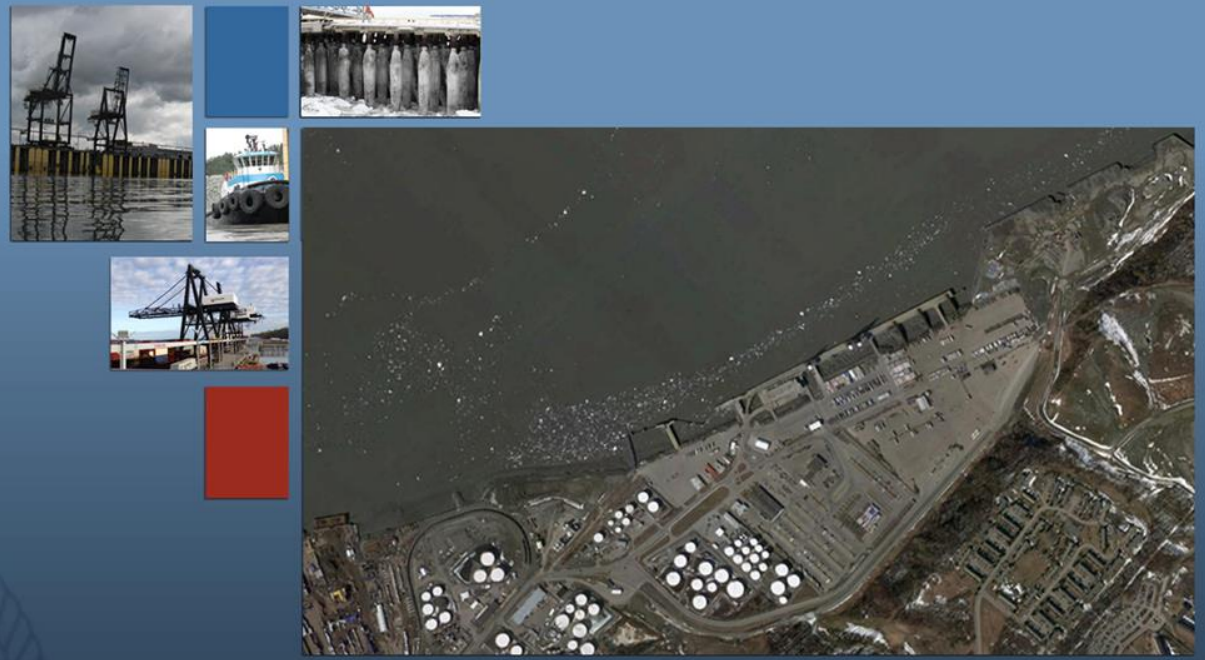
Concept A – Phase 3



Concept A – Phase 4

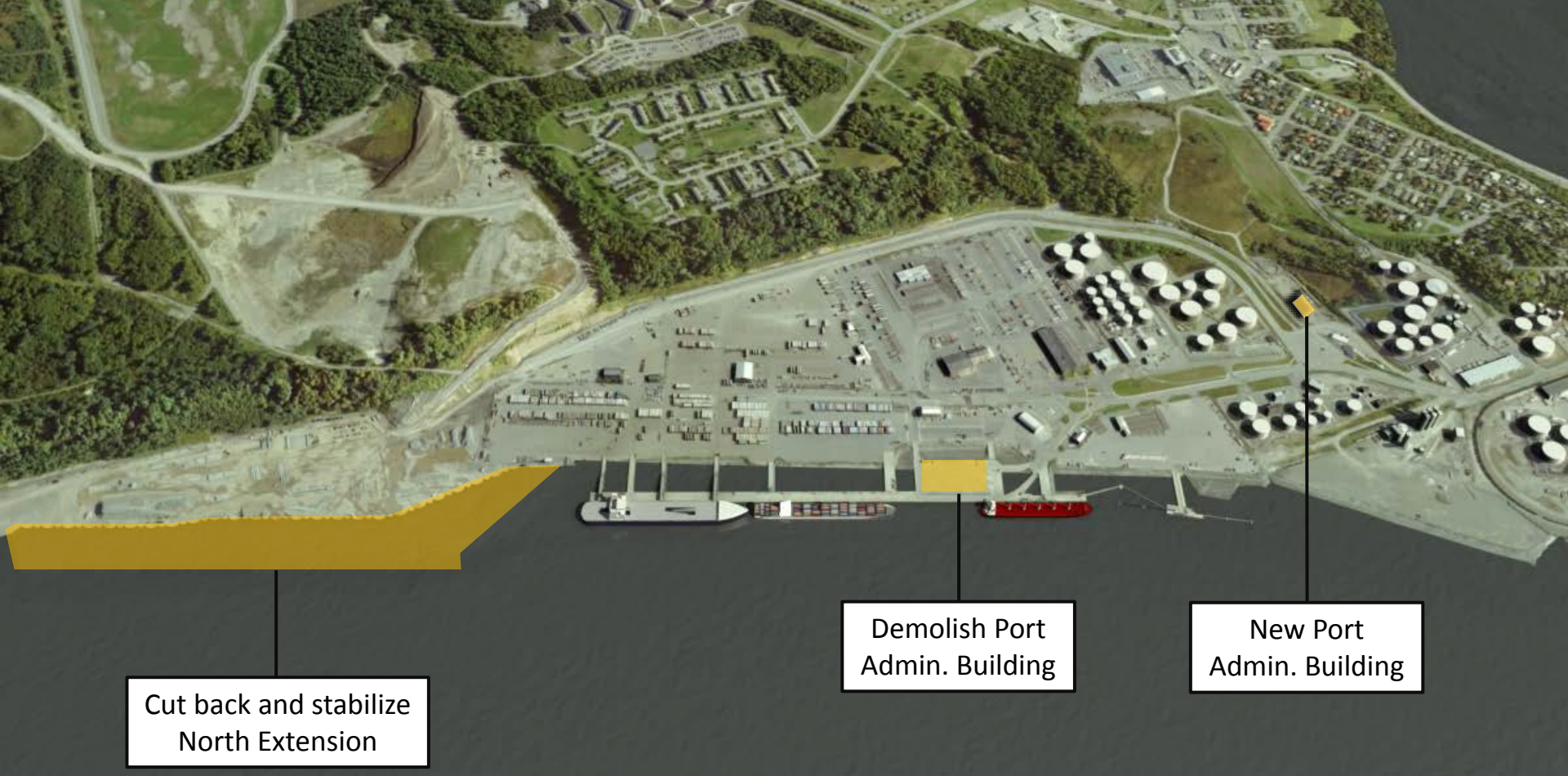
Concept A – Complete

Concept A – Complete



Concept C - Visualizations

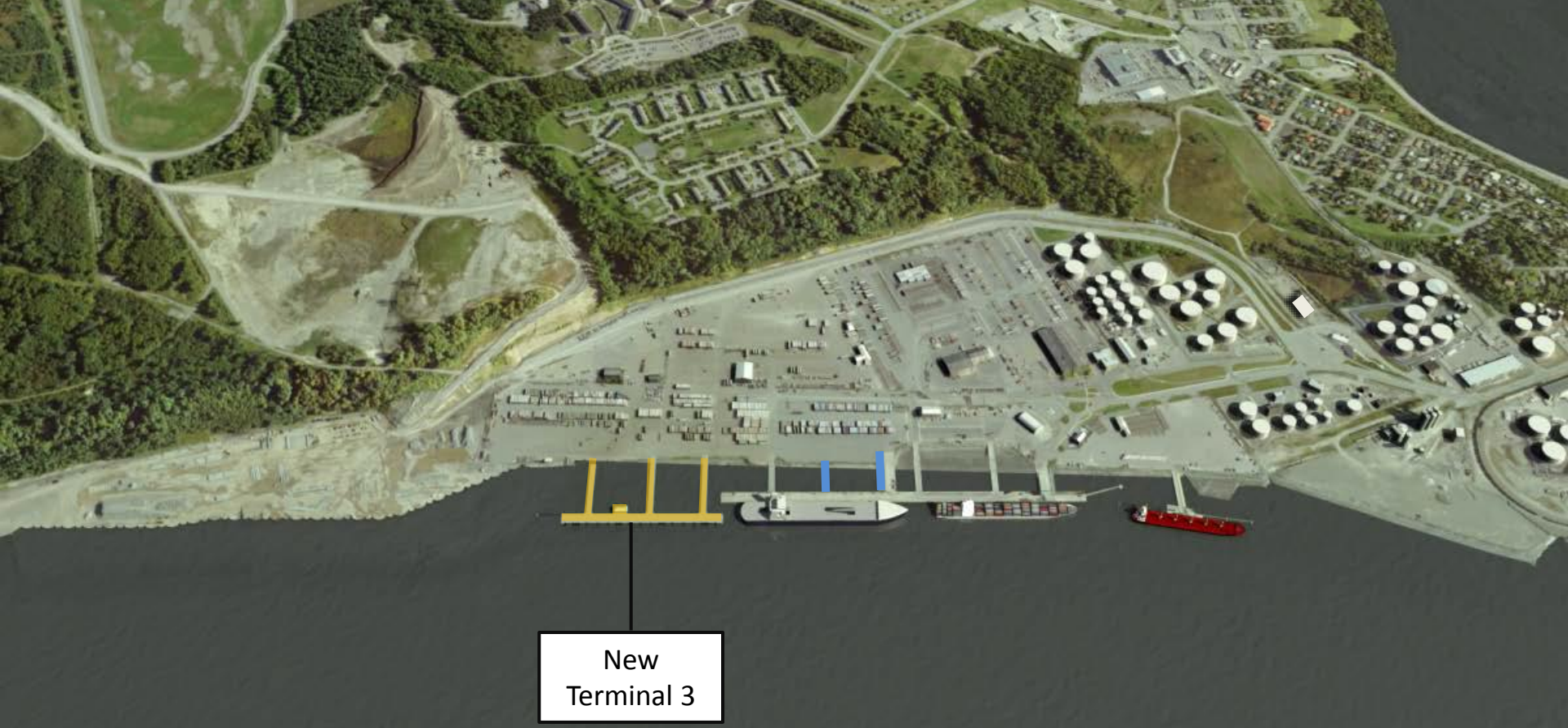
Concept C – Existing



Concept C – Phase 1

Concept C – Phase 2

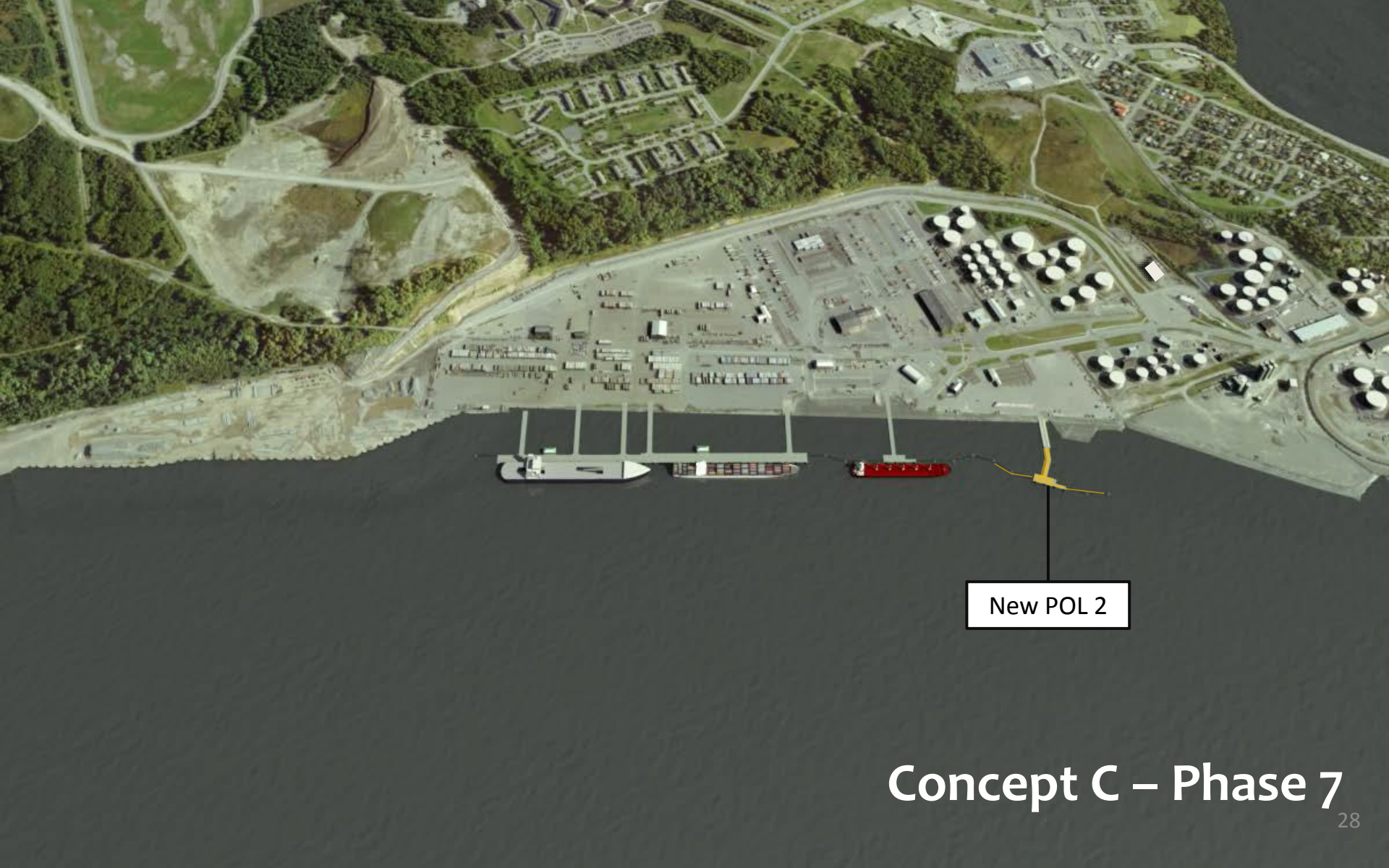
Concept C – Phase 3



Concept C – Phase 4

Concept C – Phase 5

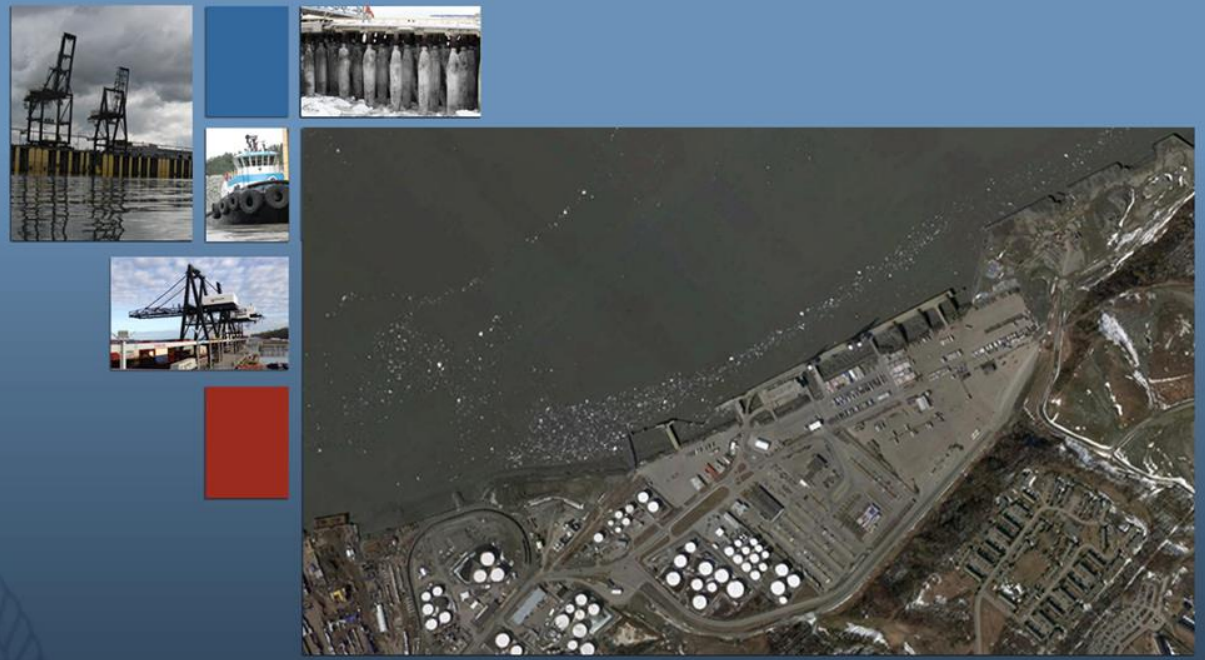
Concept C – Phase 6



Concept C – Phase 7

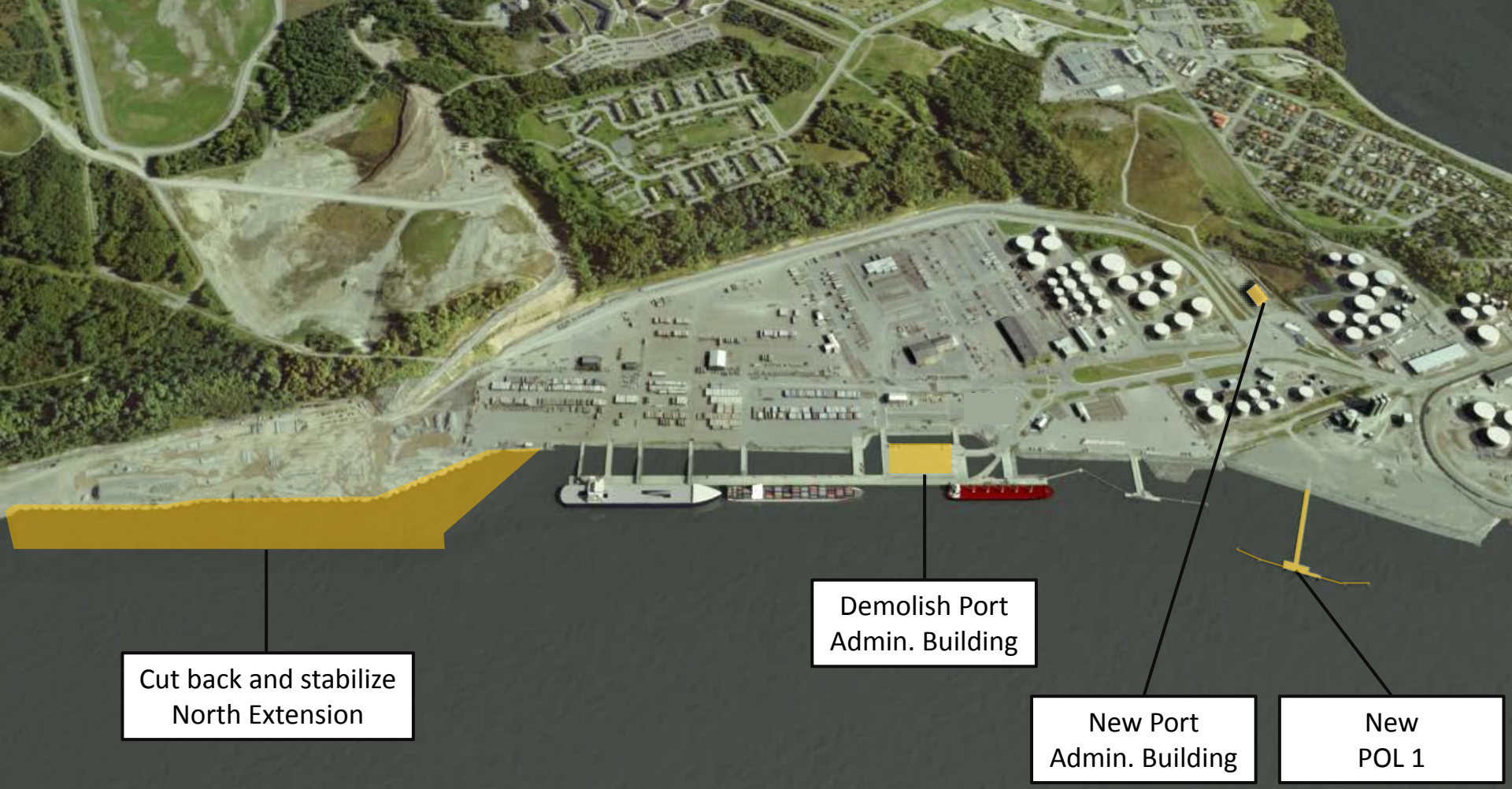
Concept C – Complete

Concept C – Complete

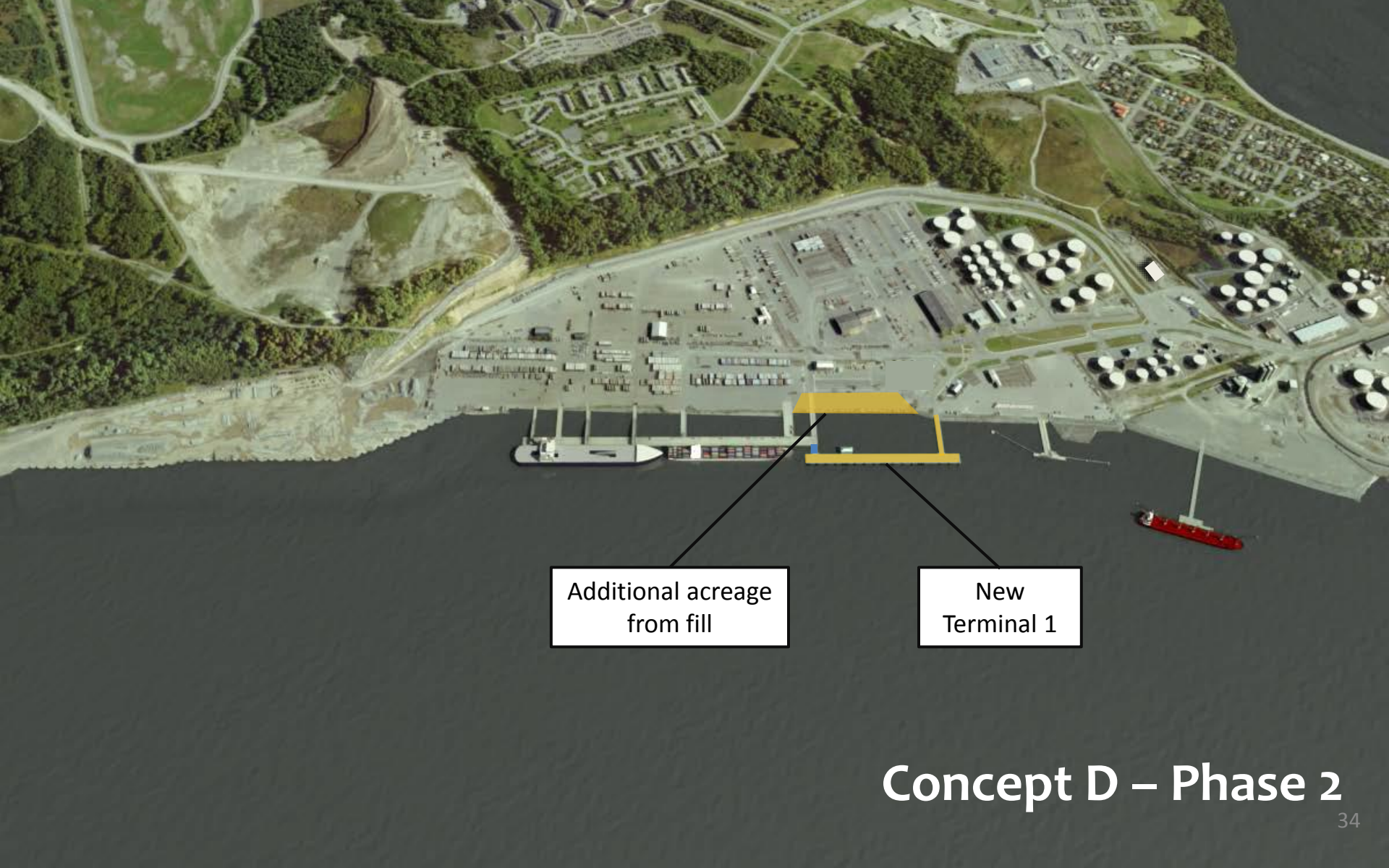


Concept D - Visualizations

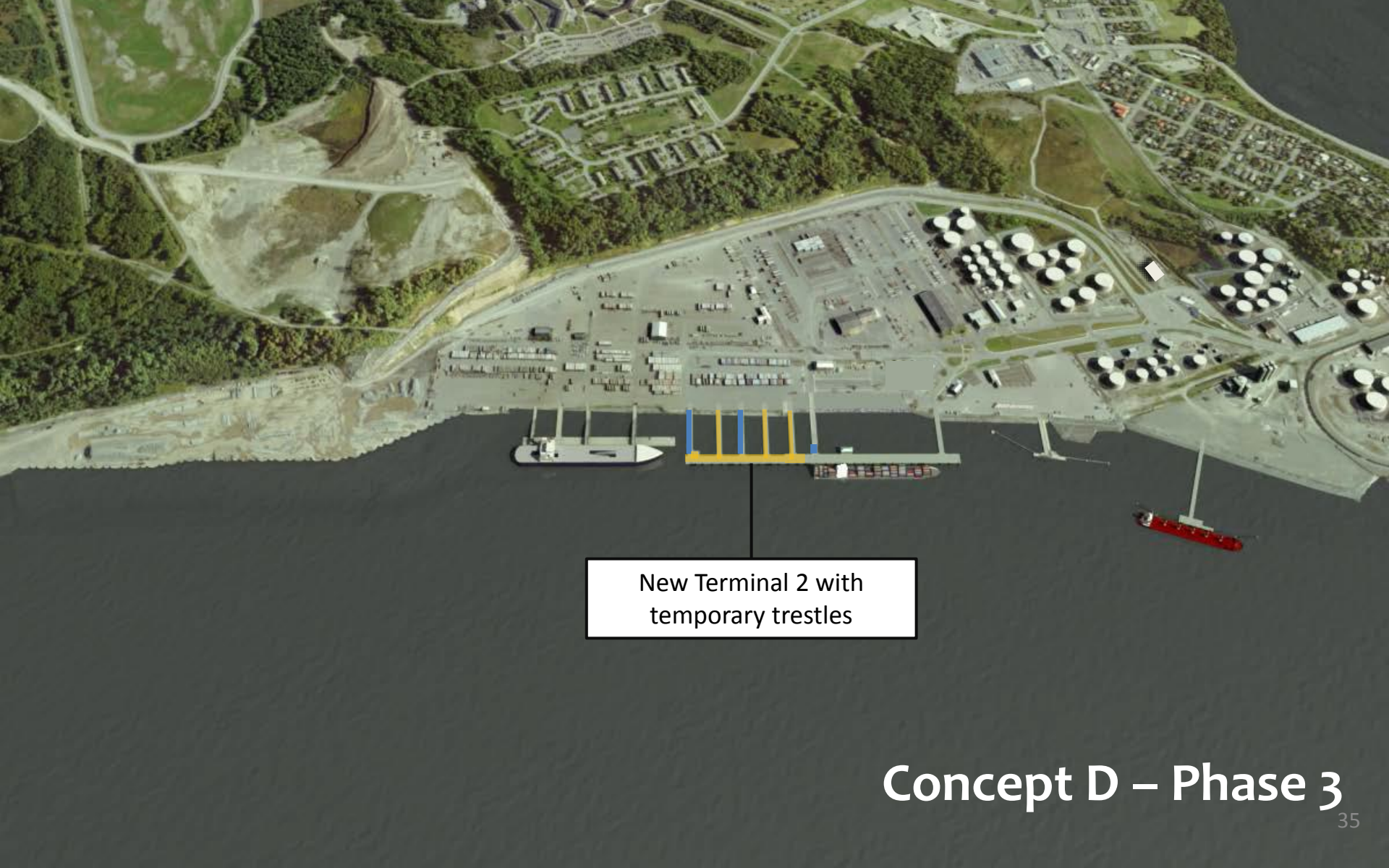
Concept D – Existing



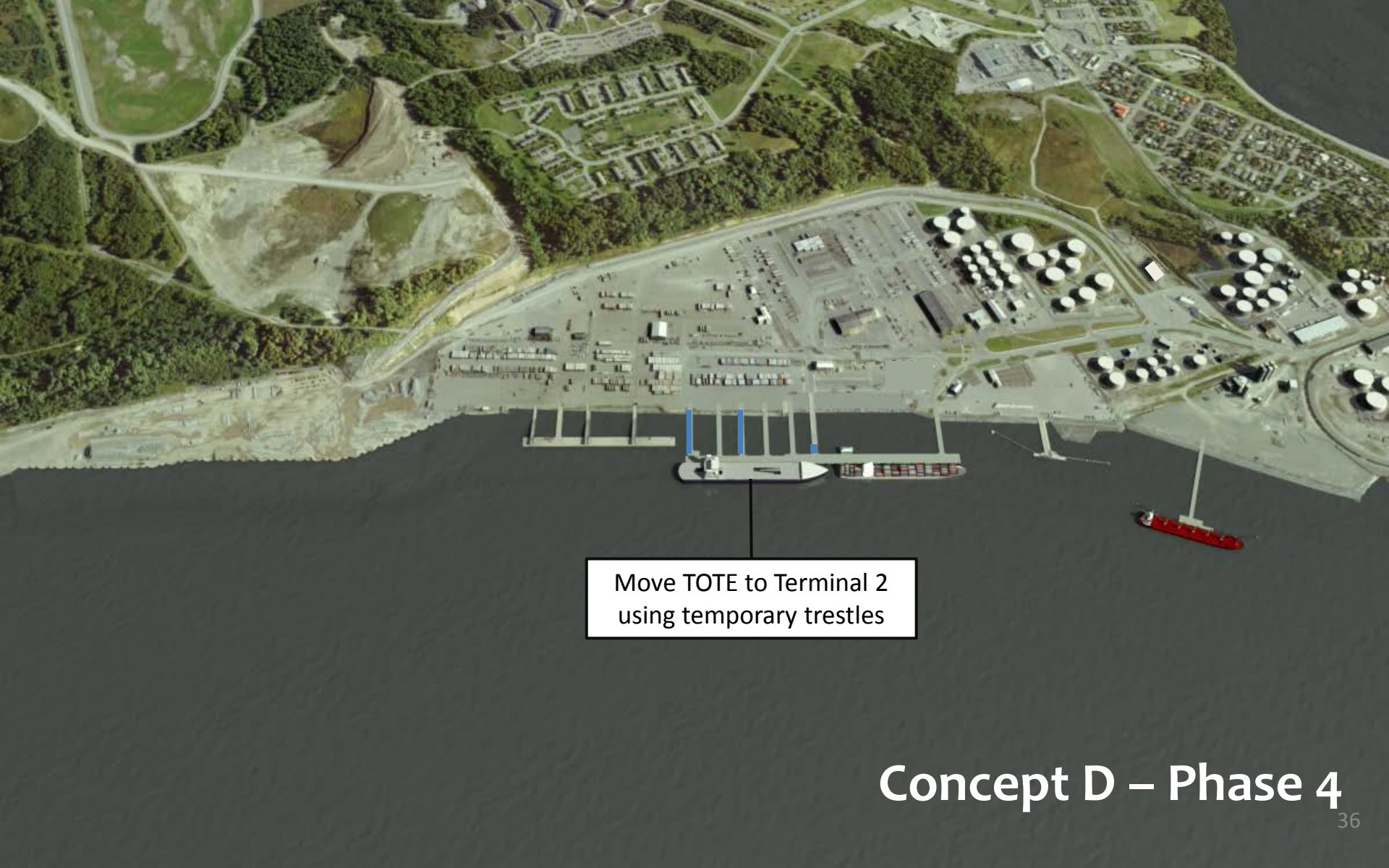
Concept D – Phase 1



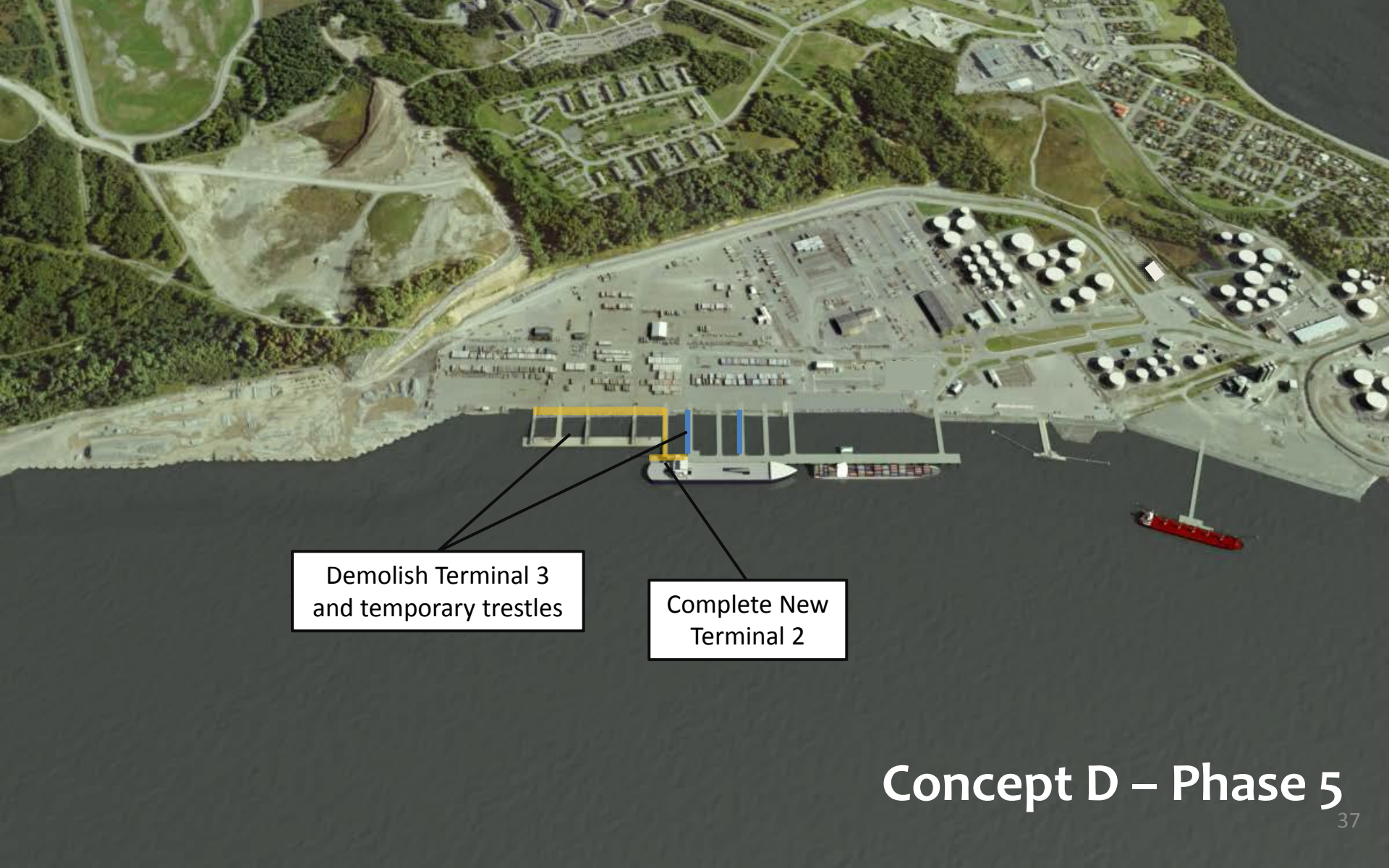
Concept D – Phase 2



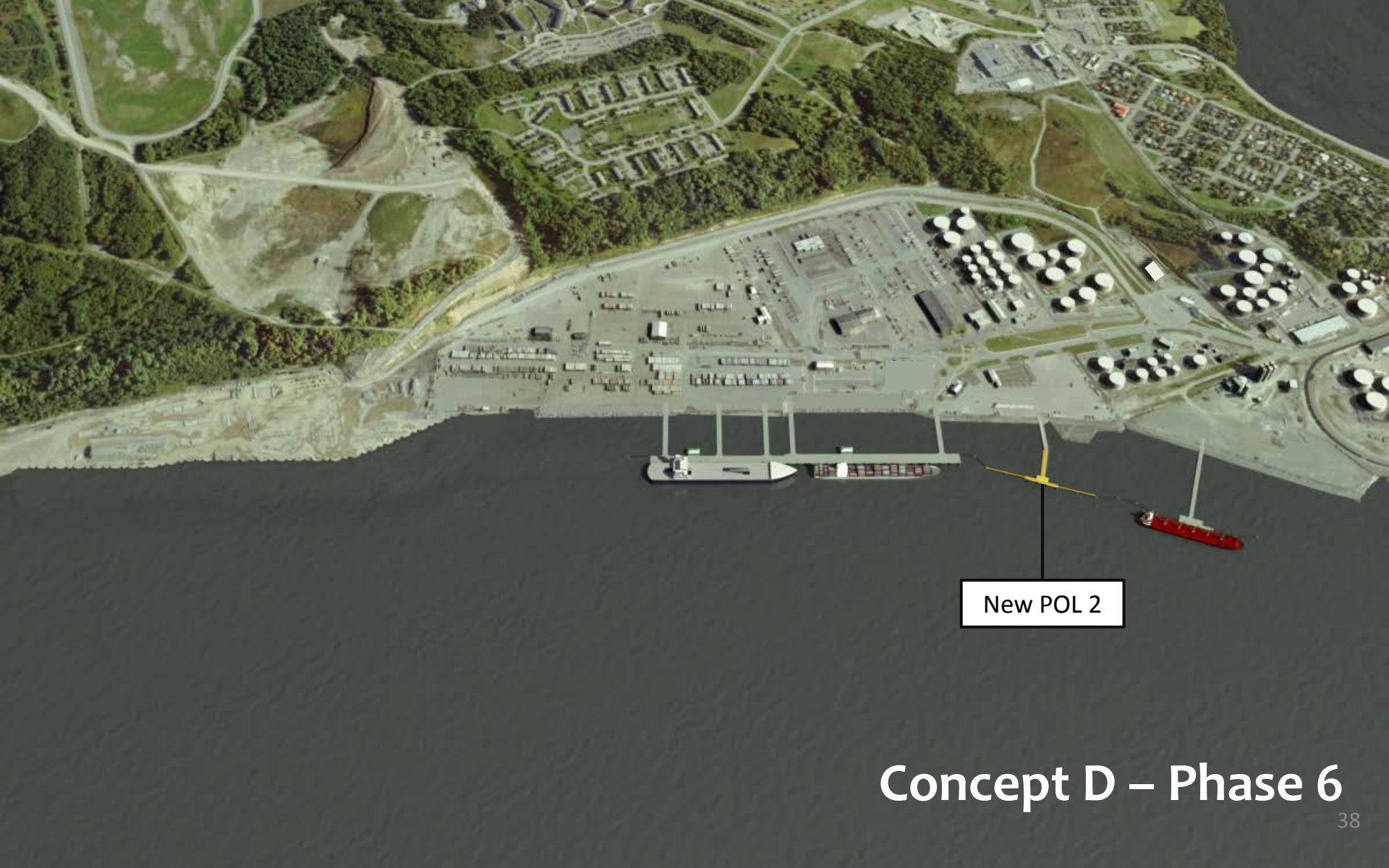
Concept D – Phase 3



Concept D – Phase 4



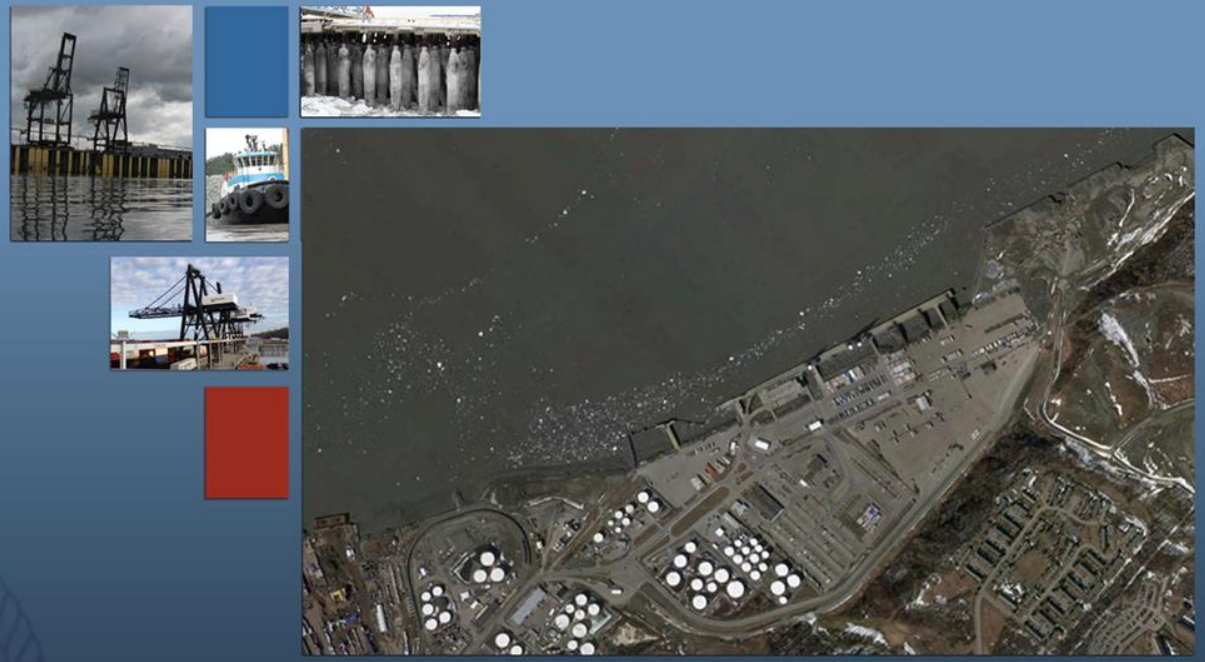
Concept D – Phase 5



Concept D – Phase 6

Concept D – Complete

Concept D – Complete



Results of Concept Evaluation Committee




Qualitative Scoring of Performance Objectives

- The Concept Evaluation Committee included members from the MOA, POA, TOTE, Horizon, and Southwest Alaska Pilots Association.
- To score the performance objectives, the qualitative scoring factors were defined as:
  - 1.0 — Outstanding
  - 0.8 — Excellent
  - 0.6 — Good
  - 0.4 — Fair
  - 0.2 — Poor
  - 0.0 — Unsatisfactory

Selection Criteria and Selected Option

No.	Objective	Measure	Weight	Concept A		Concept C		Concept D	
				Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Upfront Cost									
1	Minimize upfront cost	Lowest upfront cost	25	0.2	5	0.4	10	0.6	15
Life-Cycle Cost									
2	Minimize life-cycle costs	Lowest calculated life-cycle cost	28	0.2	5.6	0.6	16.8	0.6	16.8
Maintenance Dredging									
3	Minimize future maintenance dredging	Least amount of dredging	17	0.2	3.4	0.6	10.2	0.6	10.2
Expandability									
4	Provide for expansion in future phases	Any restrictions created by the Project that hinder expansion	3	0.4	1.2	0.4	1.2	0.4	1.2
Impact to Existing Customer's Long-Term Costs									
5	Provide the least long-term cost impacts to existing tenants	Operational cost of increased transit times, berthing, and line handling	19	0.4	7.6	0.6	11.4	0.4	7.6
Disruption During Construction									
6	Minimize amount of additional cost to operators during construction	Total of additional operating cost during construction	8	0.4	3.2	0.2	1.6	0.6	4.8
		Total Weighted Score	**100**		**26**		**51.2**		**55.6**

NOTES:

a. Weights and scores are only guides to assist in the evaluation of alternatives; they do not mandate automatic selection of any particular alternative.

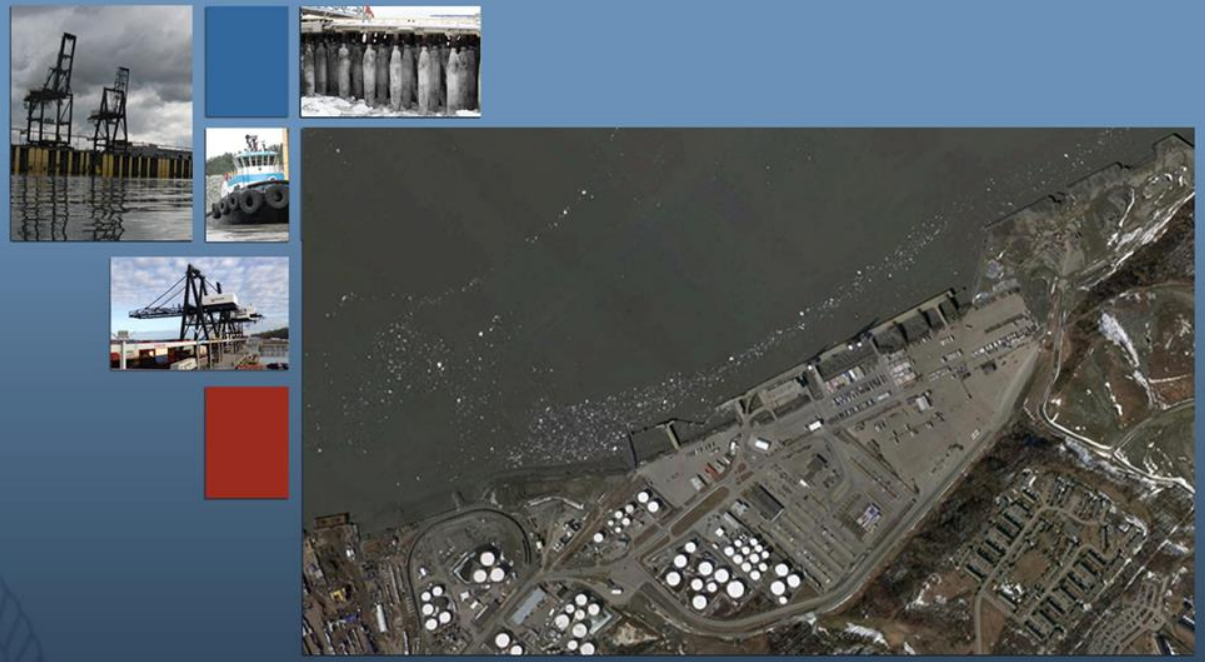
b. At this time, none of the considered options offer a distinct advantage with respect to environmental considerations; therefore, this criteria have not been included.

Draft Total Project Cost Estimates

	60 Percent Confidence ($M)	80 Percent Confidence ($M)	100 Percent Confidence ($M)
Concept A	$527	$555	$693
Concept C	$506	$532	$713
Concept D	$461	$485	$628

$130M Available + $355M Additional

- Factors Affecting Cost
  - Assumes construction starts in 2016, with a construction midpoint of 2019
  - Assumes full funding available at the start of construction
  - Further studies and additional design to be conducted
    - Update to Site Specific Seismic Study
    - Evaluation of seismic performance level recommended by GAC
    - Test Pile Program
  - These cost estimates are not the final cost estimate for the APMP



Concept D Attributes

Concept D Attributes

- Has the lowest upfront and lifecycle costs
- Minimizes future maintenance dredging
- Allows for future deeper draft (-45 ft. berth depth) by moving off shore
- No construction of interim berths
- Shortest construction period
- Least amount of tenant moves during construction
- Maintains 2 POL berths for majority of construction
- Provides additional acreage for tenants




PROPOSED LEASE AREAS - CONCEPT D

TOTE LEASE AREA	
EXISTING (ACRES)	PROPOSED (ACRES)
39.06	43.74

HORIZON LEASE AREA	
EXISTING (ACRES)	PROPOSED (ACRES)
42.71	44.73

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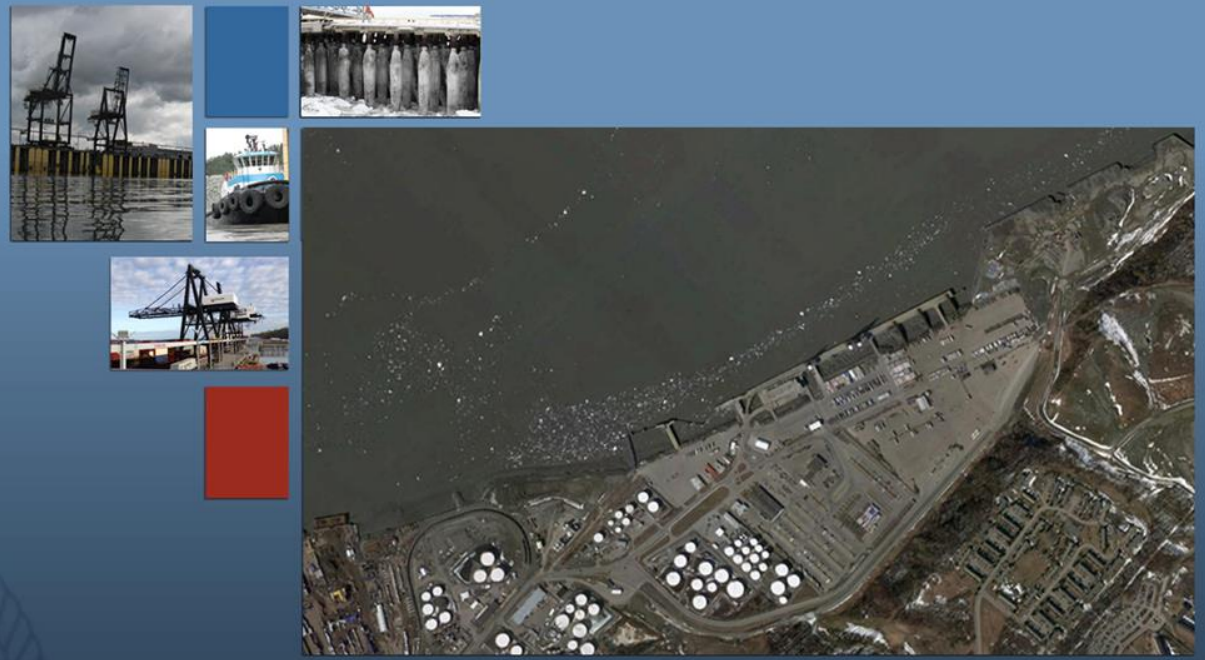
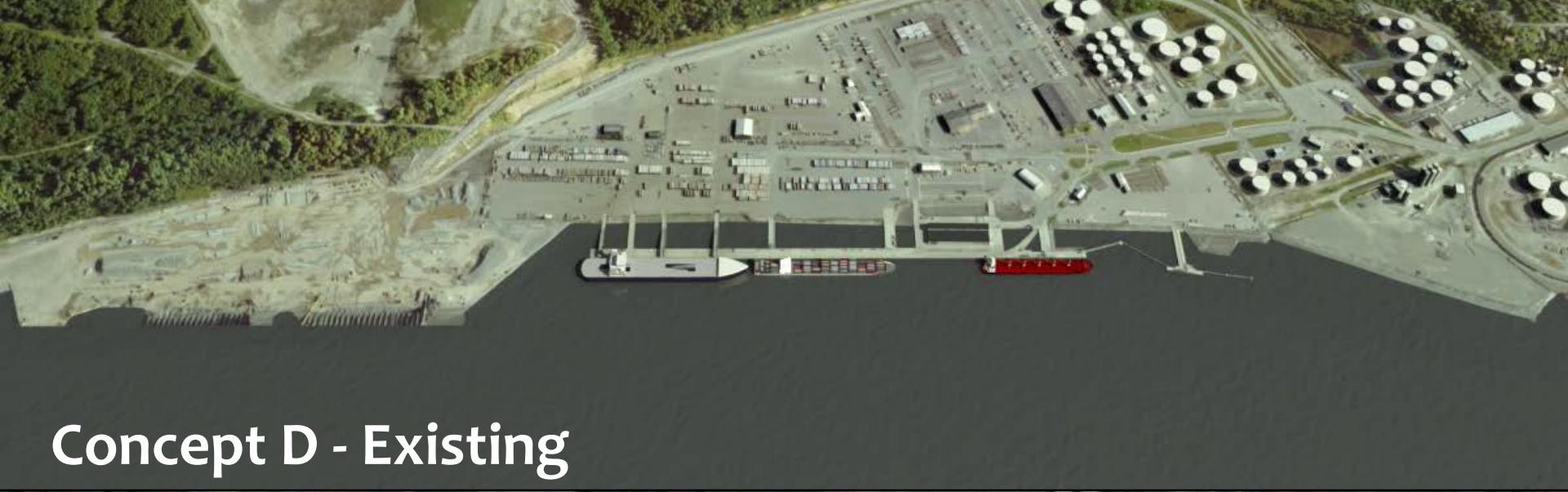


Project Critical Path




Project Critical Path with Available Funding

- Completion of the Concept Design Study (Dec. 2014)
- Test Pile Program (Fall 2015)
- Concept D 35% Design (Jan. to May 2015)
- Permitting for Marine Structures (March 2015 to Nov. 2016)
- Procure Building Design-Build (March to Aug. 2015)
- Procure CM/GC for North Extension (July to Dec. 2015)
- Procure two design teams for D/B/B of Marine Structures
  - POL/Cement Terminals (June to Nov. 2015)
  - Container Terminals (Sept. 2015 to Feb. 2016)



Concept D - Existing

Concept D - Complete