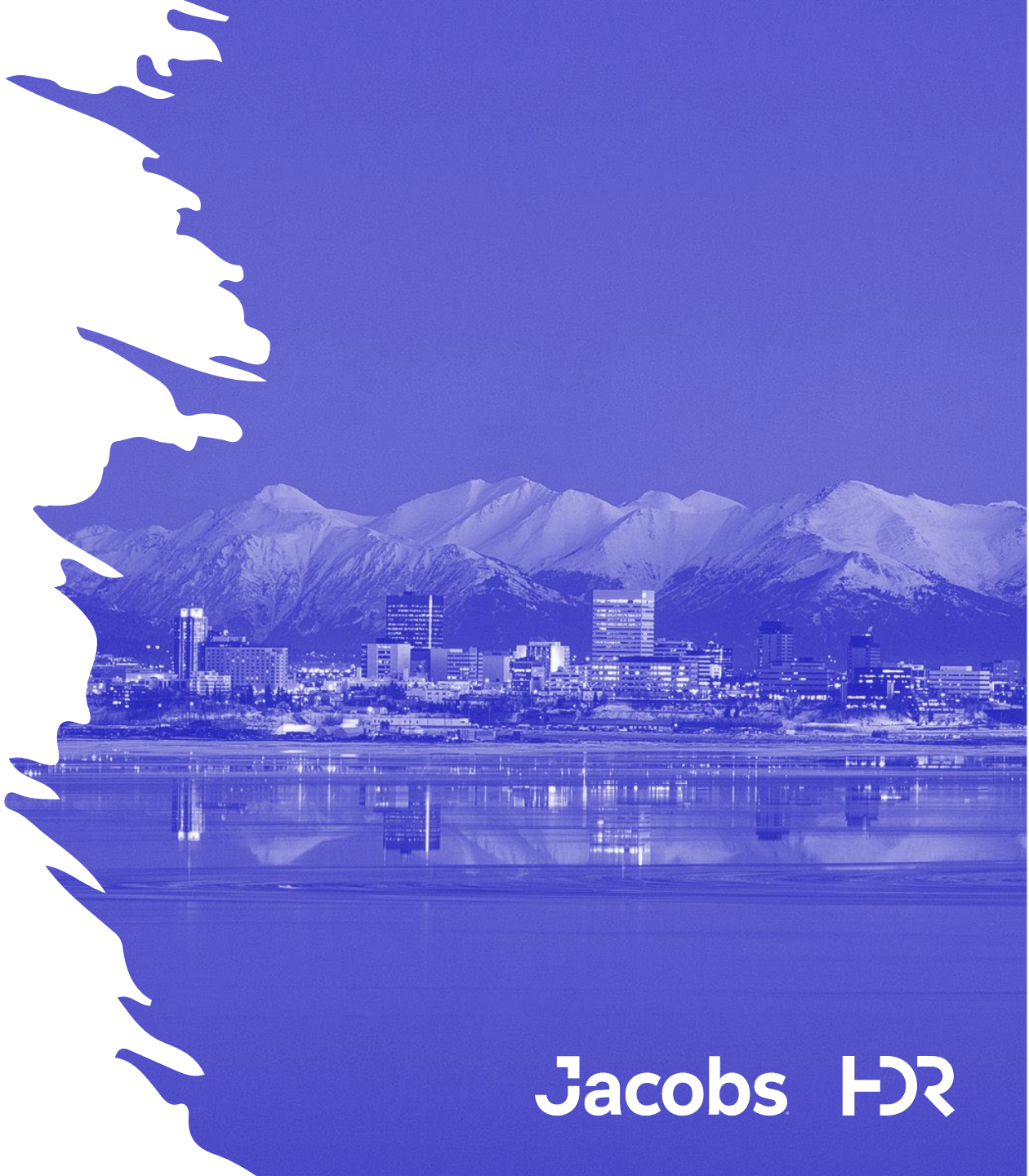
Don Young Port of Alaska Modernization Program

EUOC Briefing – February 15, 2024



Agenda

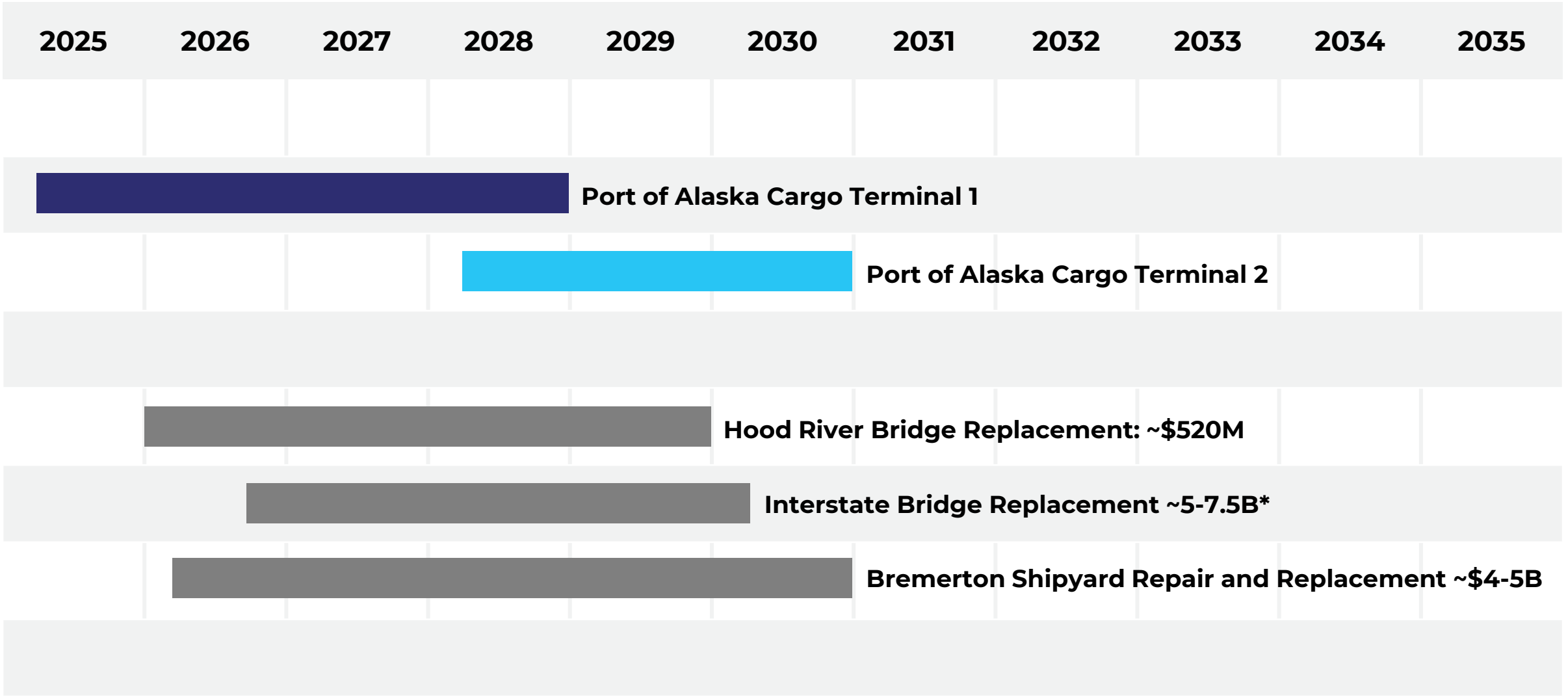
- Purpose of Cost Estimates
- Major Item Cost Comparison
- Variable Items Analysis
- Closing the Gap
- Next Steps

Jacobs HDR

Purpose of Cost Estimates

- Primary purpose is to secure adequate Owner funding
- Contractor bids determine the actual price
  - Contractors have relationships with material vendors and fabricators for best pricing
  - Contractors will be looking for efficient installation methods for a competitive advantage
- Currently a contractor's market

Other Projects



Independent Cost Estimate

- Used as a tool to cross check and analyze the DOR estimate
- Developed from a contractor's view of the work
- Team met to review differences

Cost Estimate Comparison

DOR 65% Design Level	ICE 65% Design Level	DOR 95% Design Level
$660,253,244	$455,482,365	$644,611,142

Difference between the 65% estimates is
$204,770,879

Why the difference?

Major Item Cost Comparison

Shoreline Stabilization

Item	DOR	ICE	DOR minus ICE	% Difference
Shoreline Stabilization	$20,358,906	$9,271,096	$11,141,810	55%

- ICE incorporated contractor innovation for reduced cost
  - Re-used existing primary armor rock to save on material cost
  - Crushed concrete to make the filter rock to save on material cost

Furnish Piling

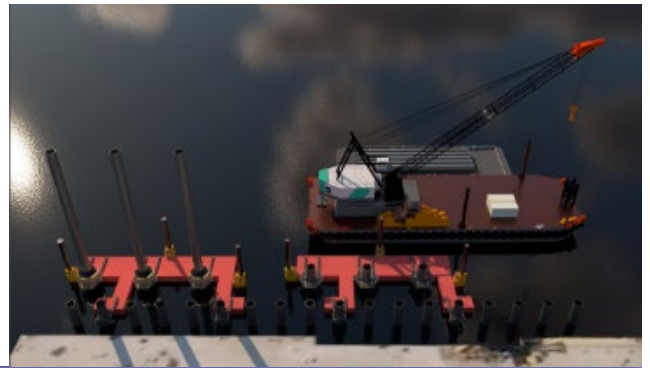
Item	DOR	ICE	DOR minus ICE	% Difference
Furnish Piling	$146,930,720	$138,838,432	$8,092,288	6%

- Material cost is similar
  - DOR estimates $1.98/lb
  - ICE estimates $1.82/lb
- Market analysis indicates the price of steel is decreasing from COVID prices

Install Piling

Item	DOR	ICE	DOR minus ICE	% Difference
Install Piling	$30,665,928	$29,779,782	$886,146	3%

- DOR estimated installing full length piles requiring larger cranes
- ICE estimated splicing (welding 2 sections together during installation) which allows for smaller and more widely available equipment
- Despite different installation methods, cost is similar



Temporary Work Access

Item	DOR	ICE	DOR minus ICE	% Difference
Temporary Work Access	$24,250,132	$2,516,956	$21,733,176	90%

- DOR estimated constructing temporary trestles to work from
- ICE estimated working from the DSM pads and existing structure to eliminate the need for temporary trestles
- DOR is evaluating options and risks

Wharf and Trestle Construction

Item	DOR	ICE	DOR minus ICE	% Difference
Wharf and Trestle Construction	$88,279,463	$75,293,416	$12,986,047	15%

- Construction of the wharf and trestle decking were estimated similar in both method and cost
- Includes abutments, precast concrete, crane rail system and utilities on dock only

Primary Power and Lighting

Item	DOR	ICE	DOR minus ICE	% Difference
Primary Power and Lighting	$50,762,757	$29,907,510	$20,855,247	41%

- The DOR estimated constructing a building
- The ICE estimated a pre-fabricated building which are typically less expensive with longer lead times
- Includes furnish and install telecom, instrumentation and controls

Cost per Square Foot Comparison

Item	DOR	ICE	DOR minus ICE	% Difference
Cost per Square Foot	$2,086	$1,923	$163	8%

- Estimated cost of the structure is very similar (piling, deck, fenders, wharf and trestle construction)
- T1 is 129,464 square feet

Variable Items Analysis

Overhead

Mark-up

Escalation

Overhead Estimate Differences

Item	DOR	ICE	DOR minus ICE	% Difference
Overhead	$126,440,187	$35,000,000	$91,440,188	72%

- Overhead is comprised of project supervision staff, vehicles, project job office expenses, bull crew, maintenance of equipment, etc
- DOR included more overall than the ICE:
  - Larger supervision crew
  - Equipment repair work area
  - Bull crew consistent throughout the project
  - Craft/Staff travel from lower 48 to support construction

Mark-up Estimate Differences

Item	DOR	ICE	DOR minus ICE	% Difference
Mark-up	$87,300,633	$59,130,598	$28,170,035	32%

- Mark-up is comprised of a contractor's profit and company costs
- It's a percentage applied to the total cost and is highly dependent on market conditions
- Both estimates used approximately 15% which signifies agreement on general market conditions

Escalation Estimate Differences

Item	DOR	ICE	DOR minus ICE	% Difference
Escalation	$70,811,598	$45,572,375	$25,239,223	35%

- DOR used to midpoint of construction and NAVFAC Building Cost Index as guidance
- ICE is based on industry sources and is applied to the estimated year
- Both are industry-accepted methods and produce similar percentages
- The delta is due to the difference in total base cost

Closing the Gap

Major Work Item Breakdown

Item	DOR	ICE	DOR minus ICE	% Difference
Overhead	$126,440,188	$35,000,000	$91,440,188	72%
Temporary Work Access	$24,250,132	$2,516,956	$21,733,176	90%
Power, Lighting & Telecom	$50,762,757	$29,907,510	$20,855,247	41%
Quality Control, Surveying, MMO & Dredging	$33,904,395	$18,454,619	$15,449,776	46%
Site Work	$16,514,561	$2,242,320	$14,272,242	86%
Wharf and Trestle Construction	$88,279,463	$75,293,416	$12,986,047	15%
Shoreline Stabilization	$20,358,906	$9,217,096	$11,141,810	55%
Demolition	$21,042,689	$29,875,454	-$8,832,765	-42%
Furnish Piles	$146,930,720	$138,838,432	$8,092,288	6%
Ground Improvement	$30,821,460	$22,783,693	$8,037,767	26%
Cathodic Protection System	$22,923,806	$19,348,458	$3,575,349	16%
Mobilization and Demobilization	$34,712,118	$31,500,000	$3,212,118	9%
Fender System	$7,571,304	$6,070,900	$1,500,404	20%
Install Pile	$30,665,928	$29,779,782	$886,146	3%

Estimate Agreements

- Steel pile price
- Mark-up percentage
- Escalation costs
- Square footage cost of the structure
- Installation cost of the structural elements

Estimate Differences

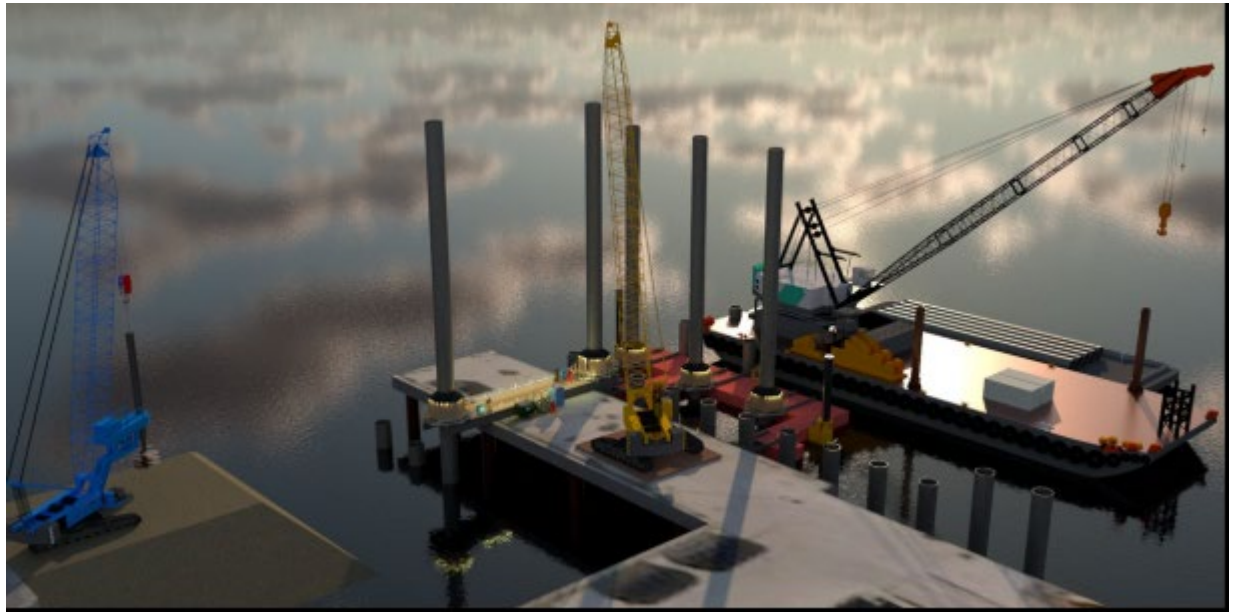
- DOR estimated larger supervisory group and larger work crews
- DOR estimated supplying labor from lower 48
- ICE estimated constructing from the existing dock and work pads for a cost savings
- ICE estimated a pre-fabricated electrical substation
- ICE estimated reusing and creating rock used in the shoreline stabilization

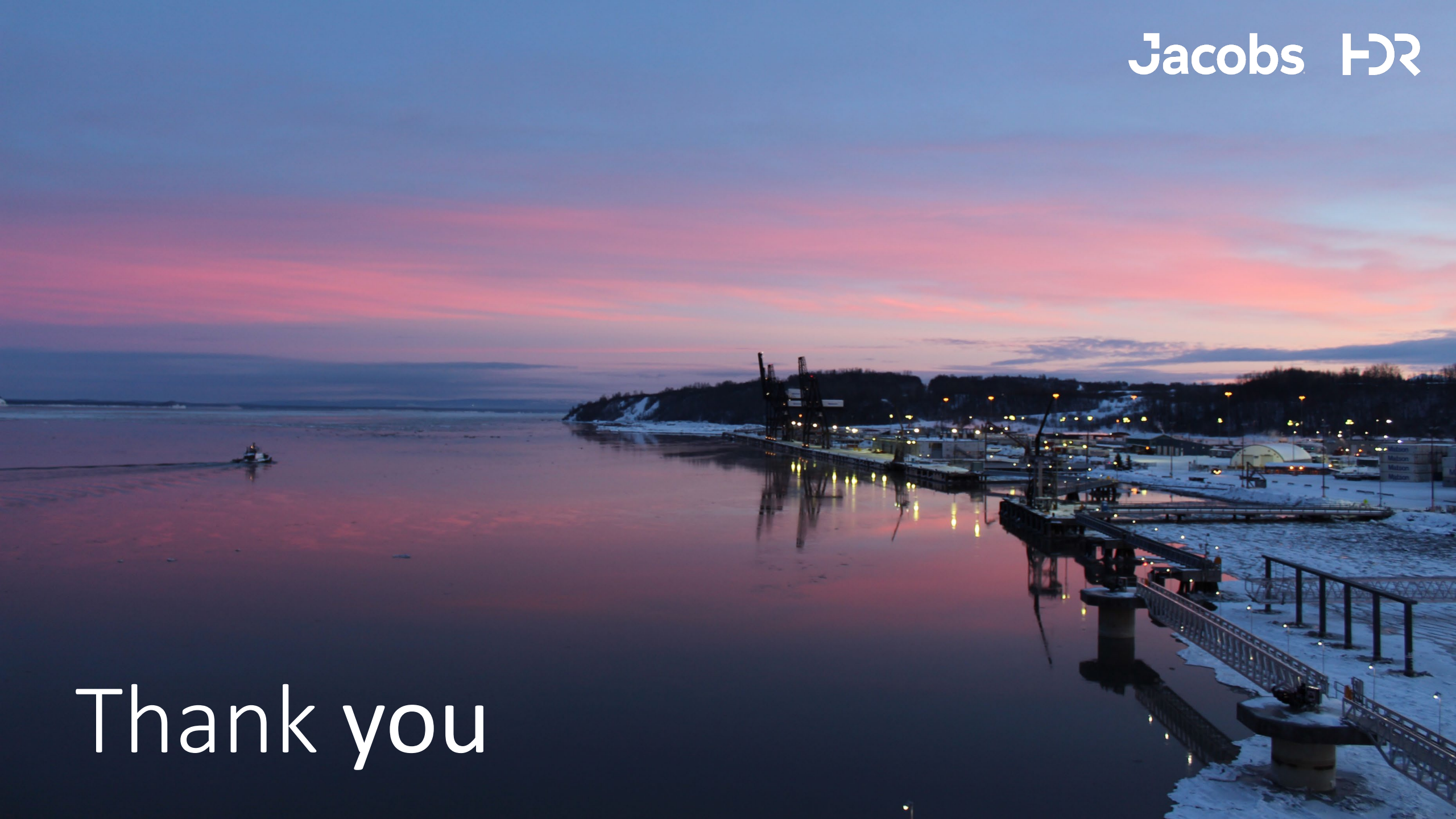
Conclusions

- Excluding overhead, estimates are within class 2 accuracy ranges
- Contractor bids will determine the actual price

Next Steps

1. Incorporate the innovations the ICE has identified into the design
2. Review proposers in the T1 prequalification process
3. Request lump sum bids from qualified proposers in March
4. Notice to proceed October 2024

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Thank you