Item No.: 10a_Supp
Meeting Date: September 9, 2026

Terminal 91/Pier 66 Cruise Shore Power Extension GMP Contract Amendment and Pier 91 Rehabilitation Validation Funding

Shore Power Project Purpose

- **In July 2024, Commission Order No. 2024-08 was passed mandating that all homeport cruise ships connect to shore power by 2027.**
- To meet the mandate, the existing shore power systems need to be extended at Pier 91 and Pier 66.
  - Currently, the shore power cables cannot reach from the berth connection point to plug-in locations on all shore power capable ships.
- This project will provide maximum flexibility in how ships with different shore power configurations berth at the pier so they can connect to shore power.

Structural Scope Addition – Pier 91 West

Precast concrete deck panels from below Pier 91

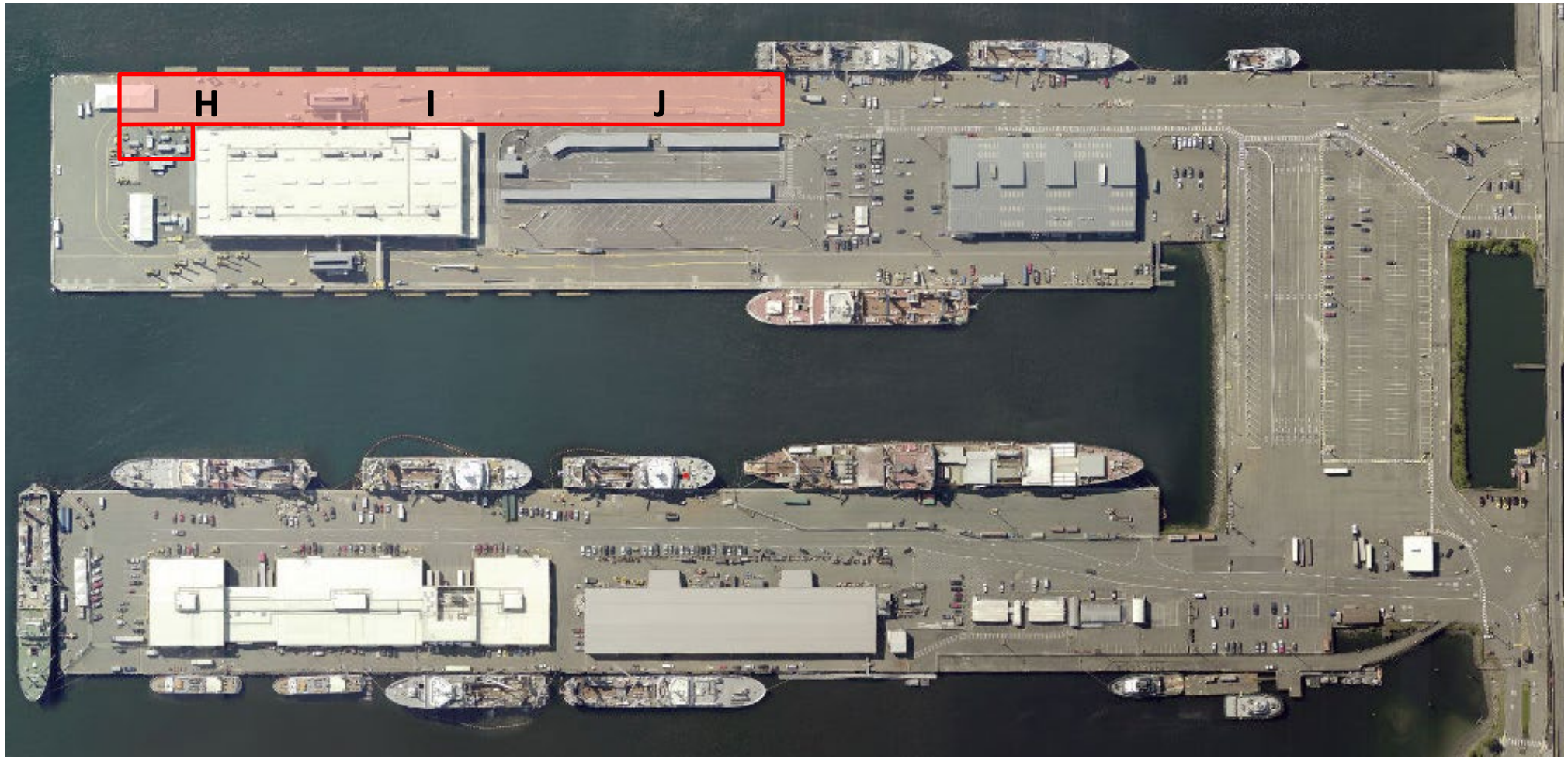
Precast concrete deck panels from top of Pier 91

- Latest inspections have shown that the condition of the pier structure in the project footprint (DU#9202) is deteriorating at an accelerated rate.
- Operational restrictions implemented on twelve (12) precast concrete deck panels.
- Pier structure must be rehabilitated ahead of the west berth shore power to avoid impact to Cruise, resulting in 1-year delay. **P66 and P91 east berth will remain on schedule.**
- The cost of the project now includes the cost of the added scope previously budgeted under a separate CIP. Overall, combining the projects will result in an estimated **net savings of $20M to the capital plan** from efficiencies and innovative design approach.

Overlapping Project Areas

= Area of pier to be rehabilitated (DU #9202)

= Pier 91 west berth shore power project extent



Action Requested

Request Commission authorization for the Executive Director to approve funding to:

1. Execute a Guaranteed Maximum Price (GMP) Contract Amendment to the alternative public works Progressive Design Build contract, MC-0322060, for the T91/P66 Cruise Shore Power Extension project to complete construction of the Pier 66 and Pier 91 East shore power extension systems, bollards, and limited deck panels replacement.
2. Authorize funding for a Validation Phase to include the rehabilitation of the section of Pier 91 deck delineated as Development Unit (DU) #9202.

Total amount requested for this action is $49,330,000 for a total project authorization of $69,980,000, and an estimated total project cost of $116,480,000.

Details of Request

- The contract will now proceed with two (2) separate milestone scopes for which separate GMPs will be negotiated:

  - **Milestone 1 (2027)** - today's funding request
    A. Completion of Pier 66 shore power extension
    B. Completion of Pier 91 east berth shore power extension
    C. Limited deck panel replacements
  - **Milestone 2 (2028) -** validation phase in today's request
    D. Completion of the Pier 91 west berth shore power extension
    E. Full rehabilitation of Pier 91 west dock
    *Construction funding in future request

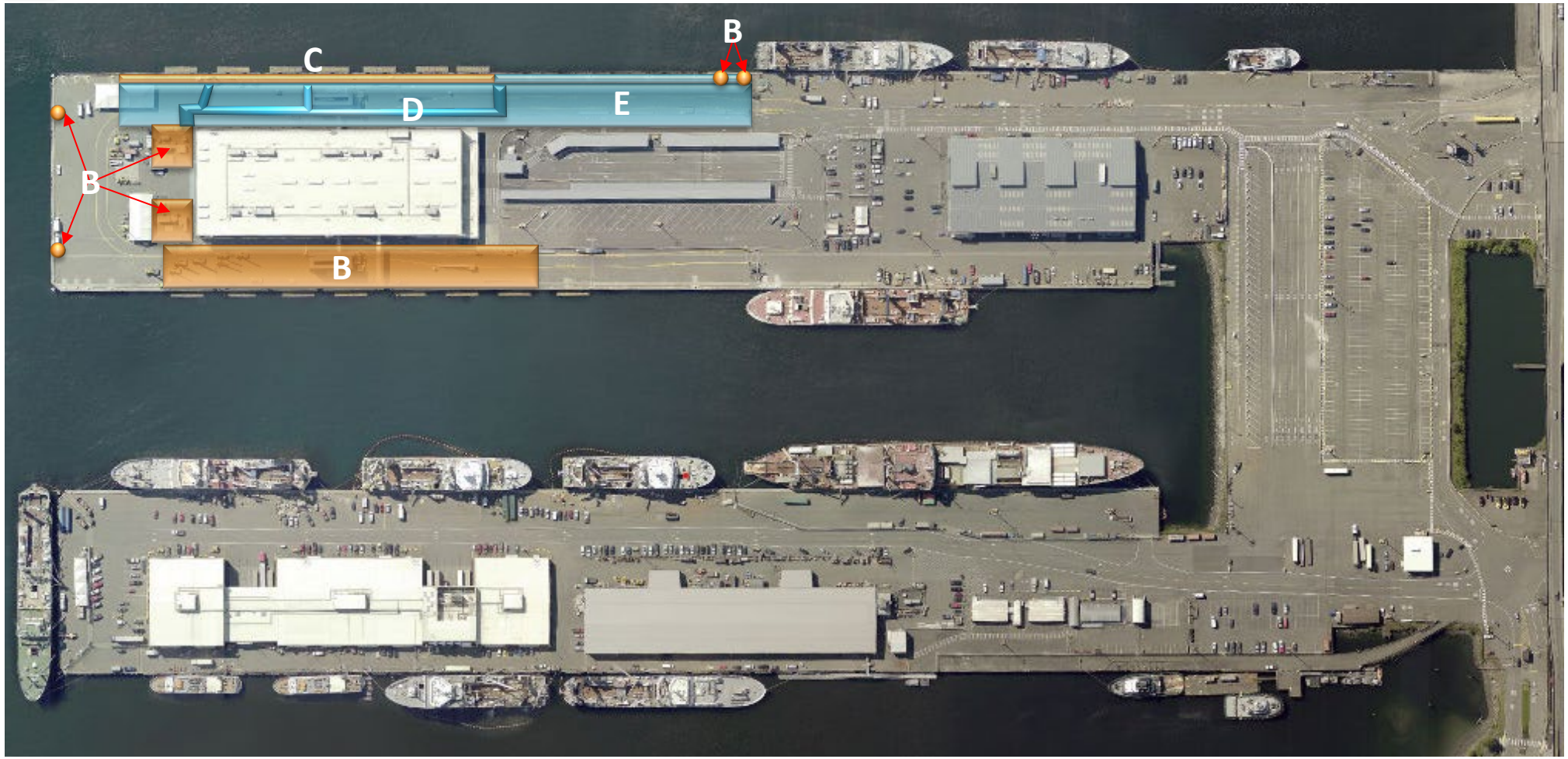
- Final GMP for Milestone 1 has been successfully negotiated and amendment execution will follow today's request.

Pier 66 Milestone Scope

Milestone 1 (2027)

Pier 91 Milestone Scopes

Milestone 1 (2027)
Milestone 2 (2028)



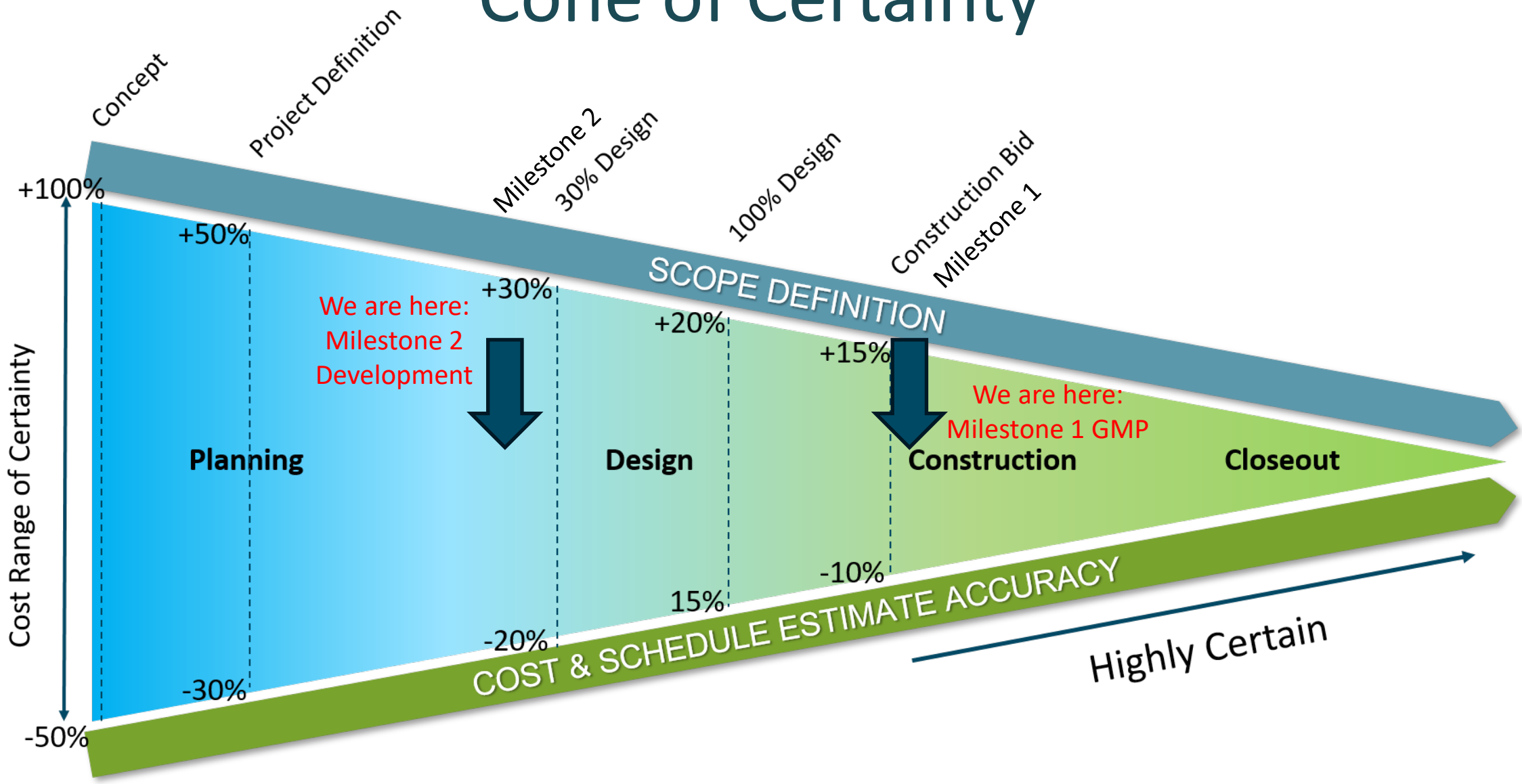
Cost Breakdown

Cost Element	Current Request	Total Cost
Planning through Validation (Milestone 1)	**$0**	**$2,450,000**
GMP Development (Milestone 1)	**$0**	**$5,000,000**
Material Pre-Procurements (Watts)	**$0**	**$8,000,000**
Early Work Amendment (Milestone 1)	**$0**	**$5,200,000**
Construction-Final GMP (Milestone 1)	**$48,164,000**	**$48,164,000**
Milestone 2 Validation	**$1,166,000**	**$1,166,000**
	Total Authorized including this request	**$69,980,000**
	Remaining to be authorized: Milestone 2	$46,500,000
	Estimated Project Total	$116,480,000

*Overall funding for DU#9202 has been accounted for through cash flow reduction in CIP #801294 T91 Dock Rehabilitation project. Funding for Validation scope will be accounted for in reduction of scope for T91 Programmatic Design contract P-00322462 SD1 – T91 Dock Rehab 30% Design. Overall Capital Plan reduction of $20M is anticipated by combining west berth shore power and DU #9202 under the Progressive-Design-Build contract.

RISKS	DESCRIPTION	PROBABILITY	IMPACT	MITIGATION
Constrained Schedule	Project schedule is highly constrained by regulated work windows	High	High	Utilize Progressive Design Build project delivery to accelerate timeline. Pre-purchase of long-lead items.
Seattle City Light Terminal 91 Operations Agreement	Existing operations agreement between cruise lines and SCL does not account for increased connections during peak power usage times during the week.	Med	High	Early engagement with SCL to do system impact study and begin negotiation of agreement terms for power delivery.
Supply chain uncertainty	Supply chain logistics could delay project delivery. Tariffs could impact ability to procure long-lead electrical equipment by 2027 and create uncertainty in pricing.	Med	High	Early execution of Watts contract to begin procurement of long-lead shore power equipment in advance.
Coordination with other projects at Terminal 91	There are many other projects scheduled on Pier 91 with similar timelines to the cruise shore power project: gangways, water line replacement, dock rehabilitation, west berth dredging.	High	Med	Identification of all on-going and upcoming construction work at Terminal 91. Requirement of logistics plan by PDB to account for constraints of other projects.
Tribal Concurrence	Constrained schedule requires some work during tribal fishing season. Concurrence needed at T91.	High	High	Tribal consultation and negotiation. Adjustment to means and methods.

Cone of Certainty



Next Steps

- Milestone 1 Construction Q4 2026 – Q2 2027
- Milestone 2 Validation and GMP development Q4 2026 – Q3 2027
- Milestone 2 Commission Authorization Final design/Construction Q3 2027
- Milestone 2 Construction Q4 2027 – Q2 2028


Questions?

Action Requested

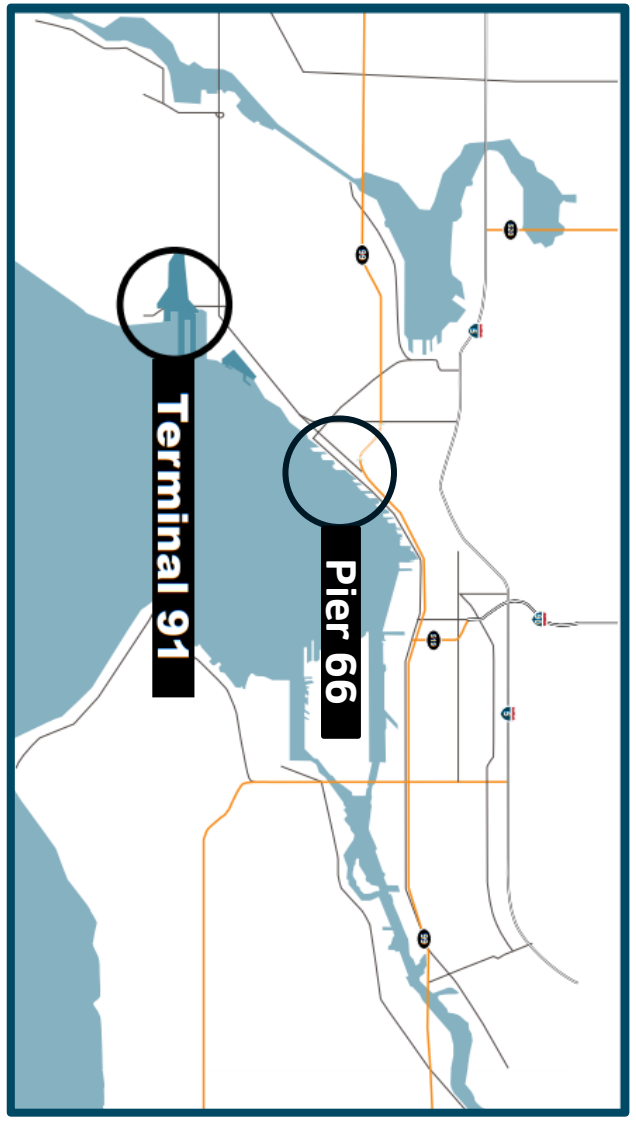
Request Commission authorization for the Executive Director to approve funding to:

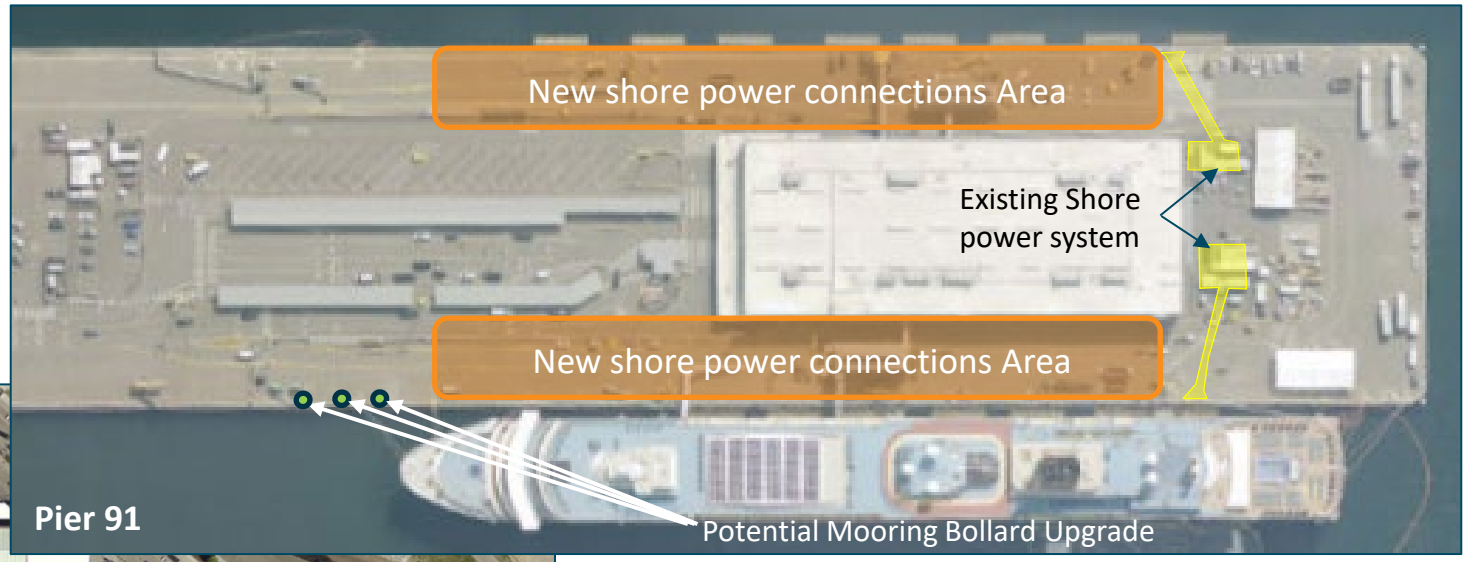
1. Execute a Guaranteed Maximum Price (GMP) Contract Amendment to the alternative public works Progressive Design Build contract, MC-0322060, for the T91/P66 Cruise Shore Power Extension project to complete construction of the Pier 66 and Pier 91 East shore power extension systems, bollards, and limited deck panels replacement.
2. Authorize funding for a Validation Phase to include the deck rehabilitation of Pier 91 Development Unit (DU) #9202.

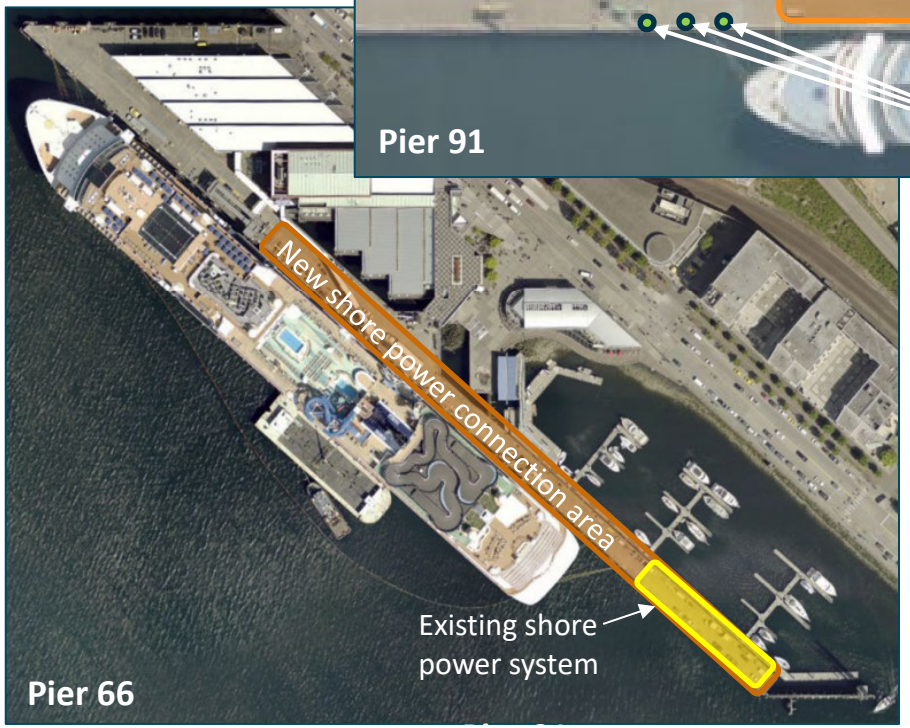
Total amount requested for this action is $49,330,000 for a total project authorization of $69,980,000, and an estimated total project cost of $116,480,000.

Appendix

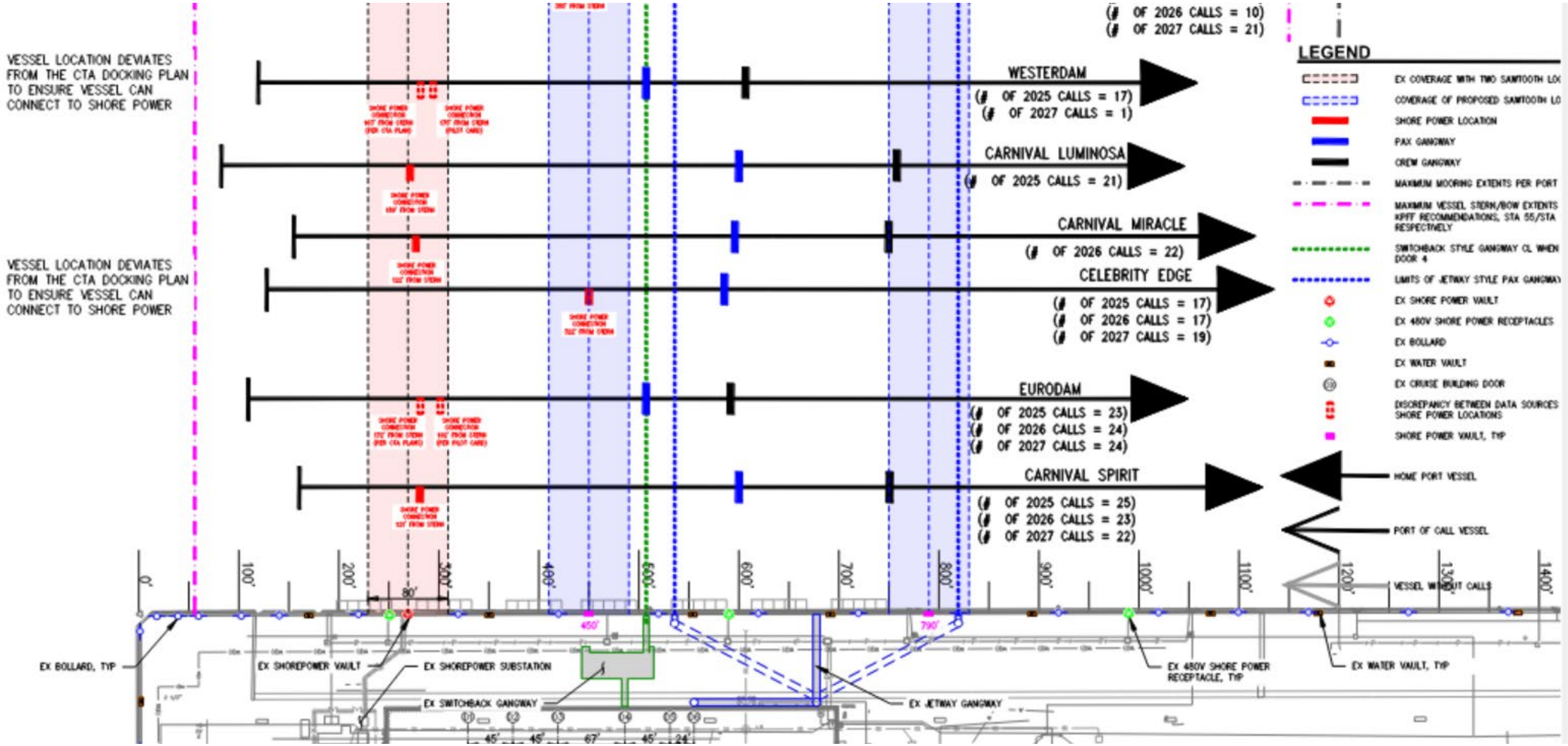
Project Areas – Pier 91/Pier 66







Example Terminal 91 Berthing Analysis



Example Terminal 91 Mooring Analysis

T91W - Quantum - 40% Pretension

8 lines bow, 8 lines stern

ARRANGEMENT PLAN

35 knot Wind at All° True | 0.0 ft Sig Wave Height | 0.0 ft Sig Swell Height | Ref: 1700263 T91 Mooring
35 knot Current 270° True | Period 6.0 secs at 90° | Period 2.0 secs at 160° | Analysis for Time: 0700 Mar 01 2007

Movement of Vessel 2.10 (fwd) 0.70 (low) 0.1° (port) 0.00 (up) | Water Level 11.36 ft steady | Draft 27.9 ft | 0.1 Disequilibrium
at its Srbd Target 0.78 (fwd) 1.70 (low) -0.1° (stbd) 0.00 (up) | Bottom Clearance 18.5 ft | Trim 0.0 ft | after 75 iterations

Line	1	2	3	4	5	6	13	14	15	16	18	20	22	24	28	30
to Bollard/Hook	C	C	B	B	D	D	F	F	'G	'G	'F	'F	Q	Q	O	N
Pull-In (ft)	2.95	2.91	3.10	3.13	2.82	2.76	3.67	3.64	3.50	3.37	3.16	3.16	2.96	3.01	2.31	2.58
Total Line Length	111.2	107.5	138.6	141.5	80.3	75.4	149.7	145.9	129.2	119.0	104.7	108.2	96.7	95.0	142.1	231.6
Inline Motion (±)																
Winch Slippage																
Wave Direction	130°	130°	130°	130°	130°	130°	330°	330°	50°	50°	50°	50°	50°	50°	50°	55°
Tension (kips)	133S	135S	132S	132S	123S	125S	100S	99.5S	131S	125S	116S	113S	136S	124S	181S	146S
% of Strength	41%	42%	41%	41%	38%	39%	31%	31%	41%	39%	36%	35%	42%	38%	56%	45%

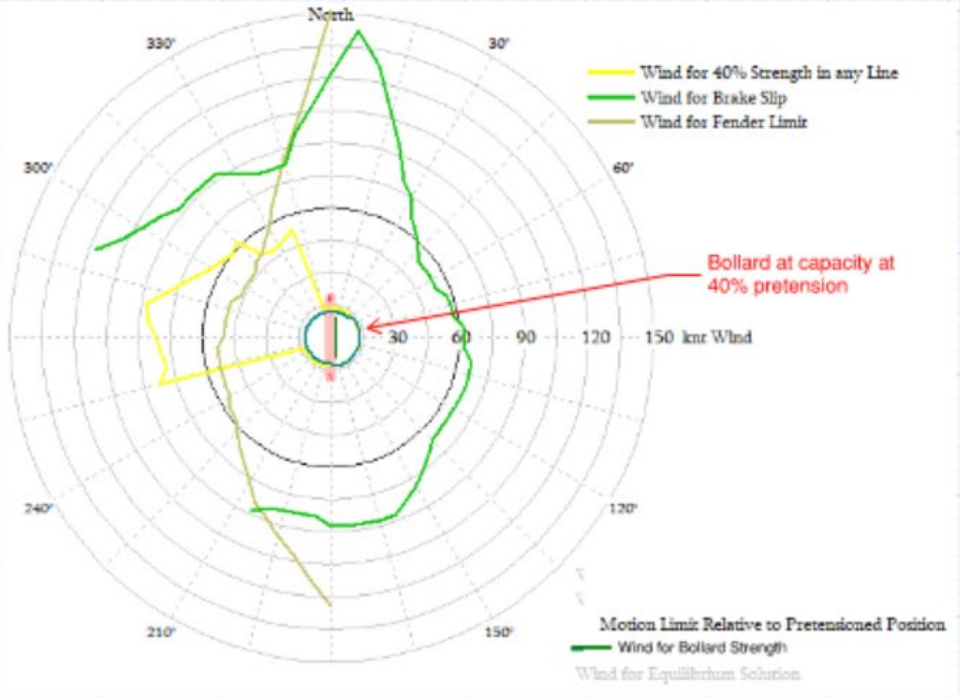
Auto-Calculation

Fender	aa	bb	cc	dd	ee	ff	gg
Thrust (kips)	51	259	260	262	271	279	287
Compression (ft)	0.30	1.70	1.70	1.73	1.81	1.89	1.96
Pressure (kips/ft²)	0.3	1.0	1.0	1.0	1.1	1.1	1.1

Bollard/Hook	B	C	D	F	N	O	Q	'F	'G
X-Force (kips)	-102.6	-78.5	-12.4	167.5	-139.7	-147.0	105.4	133.4	133.8
Y-Force (kips)	242.2	253.9	244.3	94.2	29.2	78.0	195.9	159.3	204.6
Other X-Load									
Other Y-Load									
Total Force	264.0	267.7	248.7	199.9	145.7	181.5	258.5	229.4	256.4
% Bollard Strength	120%	121%	113%	181%	66%	82%	117%	104%	117%
Direction in Plan	-23°	-17°	-3°	61°	-78°	-62°	28°	40°	33°
Bollard Uplift	23.3	32.1	45.0	54.8	29.2	72.3	131.7	97.1	77.1

MOORING RESULTS TABLES

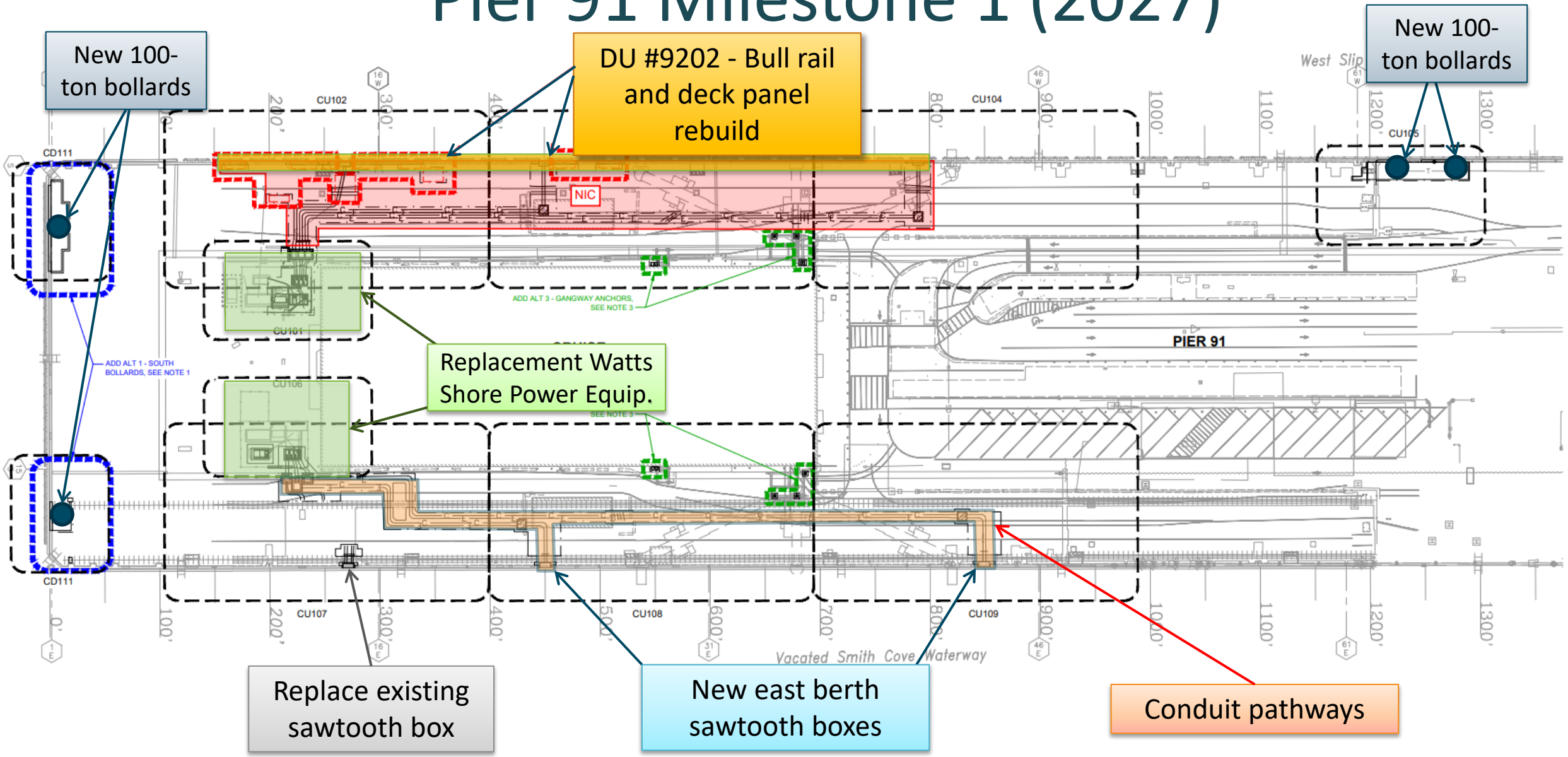
```
Analysis for Time: 0700 Mar 01 2007 (initialised at 0700 Mar 01 2007)
Ref: 1700263 T91 Mooring
Remarks: Remarks:
Water Level: 11.36 above datum
Draft: 27.9
Trim: 0.0
```



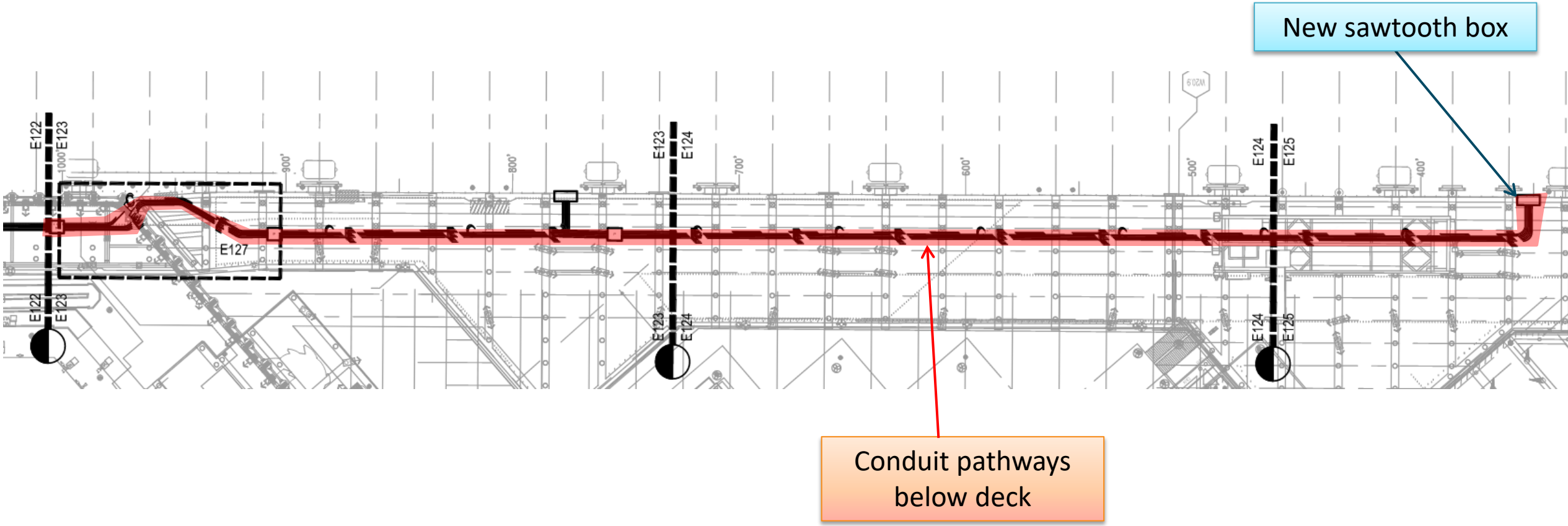
WIND CAPACITY ROSE

kpff 1601 Fifth Avenue, Seattle, WA 98101 kpff.com	POS T91 CRUISE SHORE POWER	PROJECT NO. 250049	REFERENCE SHEET
	40% PRETENSION OPTIMOOR RESULTS SUMMARY AT T91W - QUANTUM	DATE 10/29/2025	SHEET NO. 1
		BY CH	

Pier 91 Milestone 1 (2027)



Pier 66 Milestone 1 (2027)



Pier 91 Milestone 2 (2028)