

DEPOE BAY DOCKS 2, 3, 4 REPLACEMENT DEPOE BAY, OREGON

Presented by:

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Depoe Bay



FALL
CONFERENCE
2025



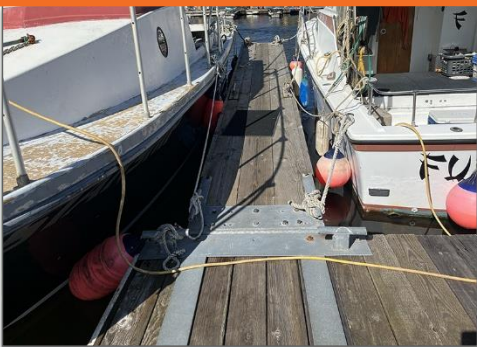
Depoe Bay Docks 2-4 Replacement

CONTEXT

- Harbor operated by the City & overseen by a Harbor Commission
- Small harbor has a limited footprint
- Very narrow, rocky bar: “Hole in the Wall”
- Home to Coast Guard Station Depoe Bay
- Mix of users including fishing charters, whale watching charters, crabbing vessels, & recreational users

“World’s Smallest Natural Navigable Harbor”

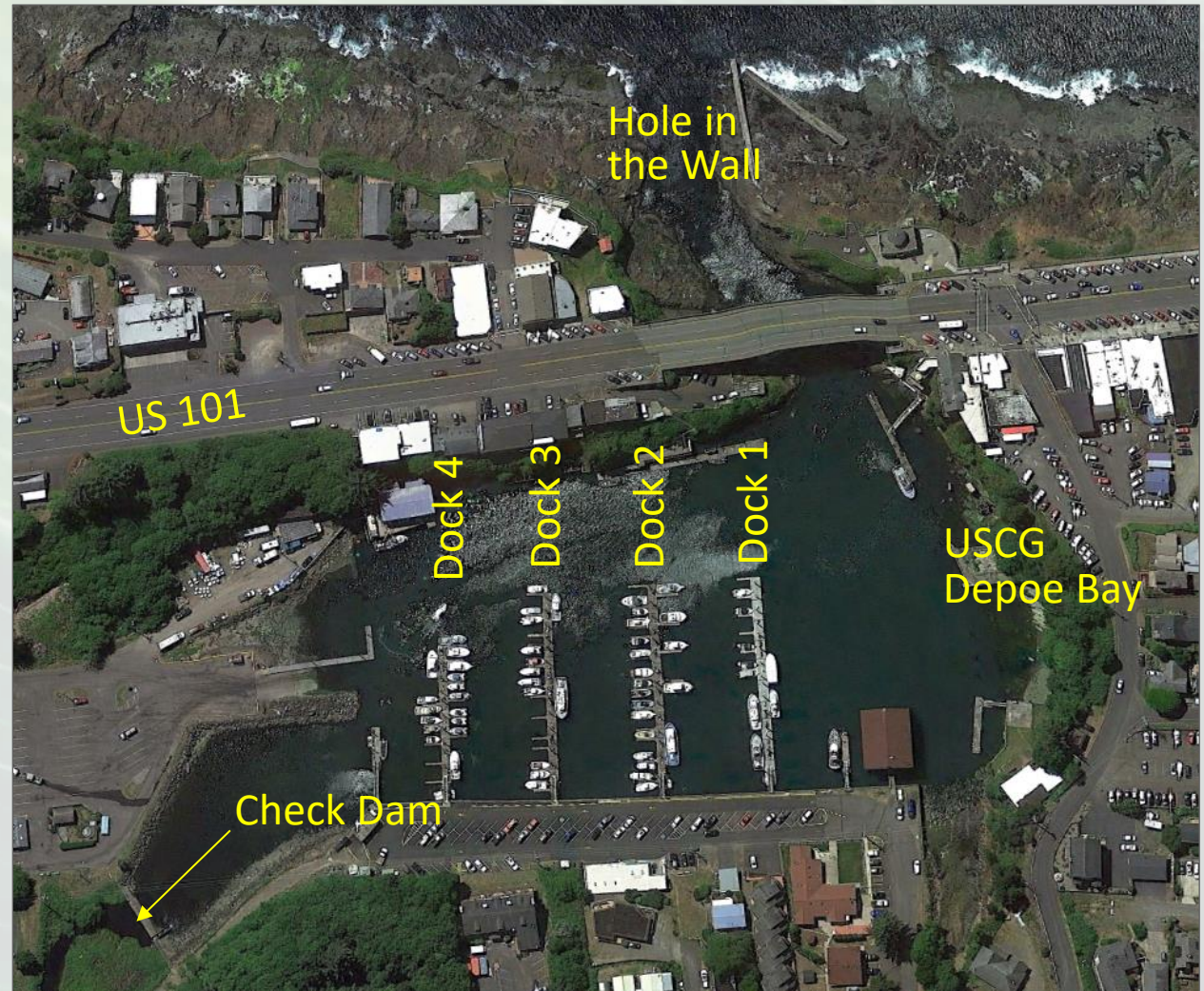
“Whale Watching Capital of the Oregon Coast”



Depoe Bay Docks 2-4 Replacement

BEFORE

- Remove & Replace Docks 2, 3, and 4
- Dock 1 recently replaced





BEFORE



- Timber floats with steel H-pile supports
- Short/steep gangways at low tide
- City wanted to maintain same vessel mix (84 slips)

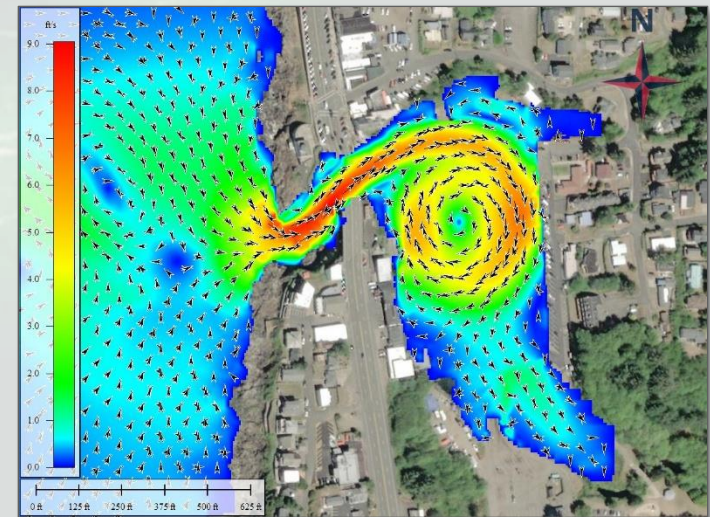
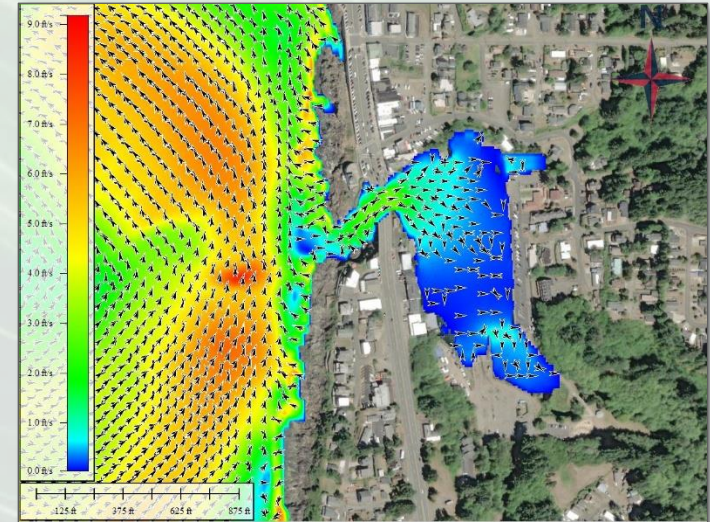
PROPOSED

- | SLIP COUNT (PROPOSED) | | EXISTING SLIP COUNTS | |
|-----------------------|----------|----------------------|--------------------------------|
| SLIP LENGTH | QUANTITY | | |
| 25' | 14 | 66
SLIPS | 25' TO 35'
LONG
65 SLIPS |
| 32' | 42 | | |
| 35' | 10 | | |
| 45' | 9 | 17
SLIPS | > 35' LONG
19 SLIPS |
| 55' | 8 | | |
| TOTAL | 83 | | 84 |
- ESTABLISH BEARING**
- CONTROL PT. #1: FACE OF TOP OF BULKHEAD AT CENTERLINE OF GANGWAY (EXISTING DOCK 1)
CONTROL PT. #2: CENTERLINE AT END OF EXISTING DOCK 1
- LAYOUTS Docks 2, 3 AND 4
- CONTROL PT. #3: FACE OF TOP OF BULKHEAD ON MEASURED LINE PERPENDICULAR TO BASIS OF BEARING, DISTANCE FROM CONTROL PT. #1 MARKS CENTERLINE OF NEW DOCK 2
CONTROL PT. #4: CENTERLINE ON NEW DOCK 2
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Depoe Bay Docks 2-4 Replacement

METOCEAN ANALYSIS

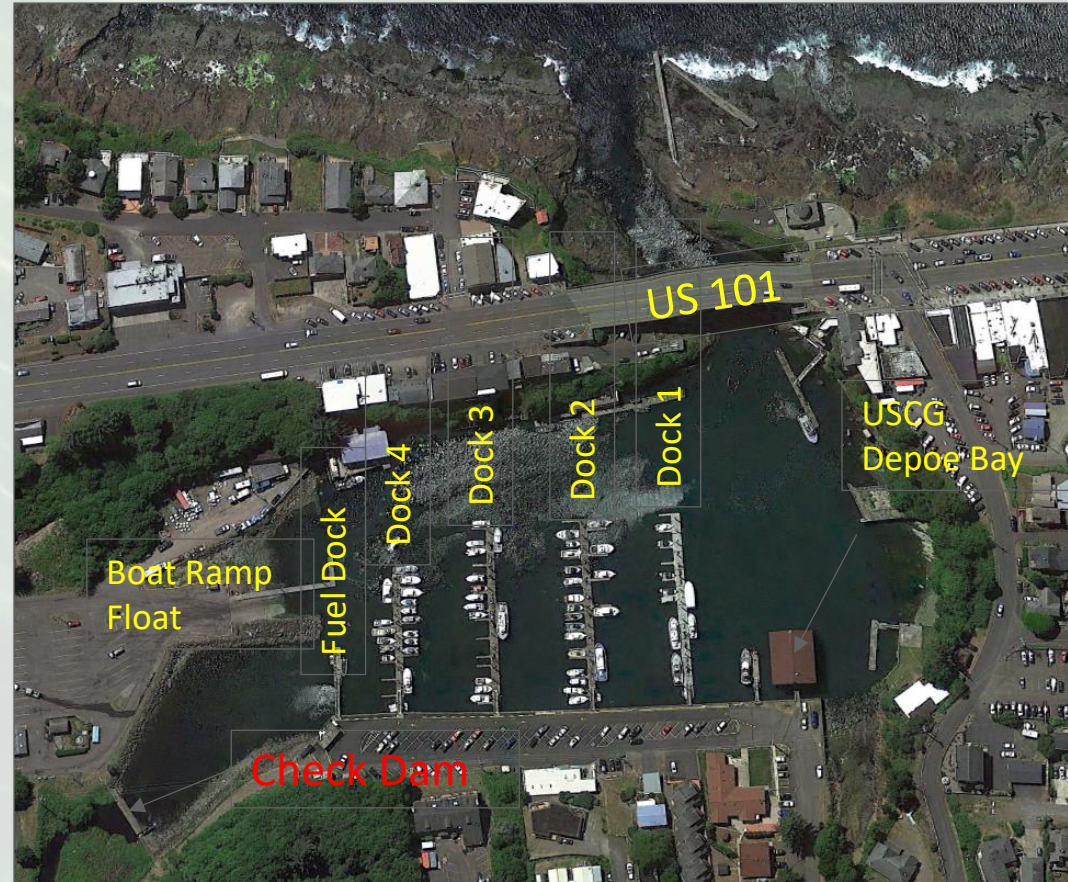
- PND performed wind/wave/current & tsunami analysis
- Harbor subject to surge from ocean waves
- Docks prone to tsunamis
- New floats designed to safely resist tsunami equivalent to Tohoku (not CSZ tsunami)



Depoe Bay Docks 2-4 Replacement

PERMITTING

- Permitting performed by Campbell Environmental
- Limited opportunities for mitigation within Harbor
- Creative mitigation solution was to study the removal of the check dam
- Study concluded the check dam removal would increase erosion & harbor sedimentation



Depoe Bay Docks 2-4 Replacement

FLOAT SYSTEM AND PILES

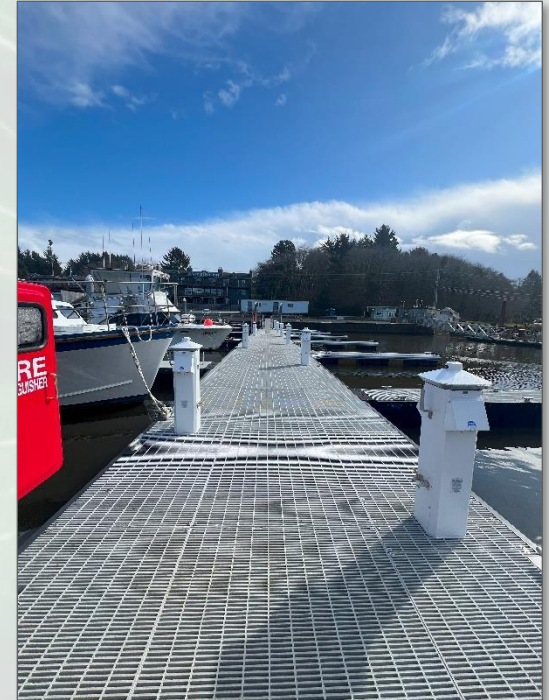
- Grated deck selected for light transmission
- Steel float frame used with double coating system (galvanizing & epoxy)
- Float fingers were designed to be removable but could remain over winter
- 12.75 and 16-inch steel pipe piles used for support. Contingency included in contract for socketing.
- 80-foot gangway for ADA accessibility (most of the time)



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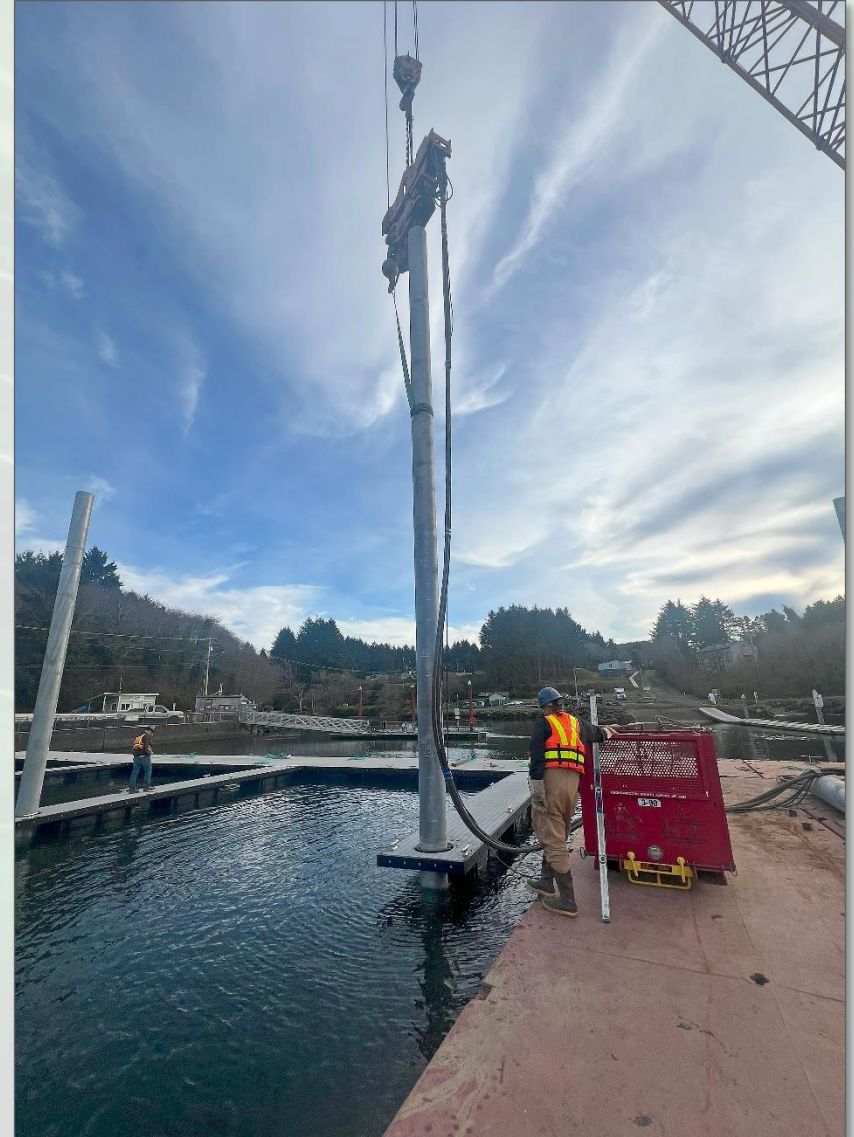
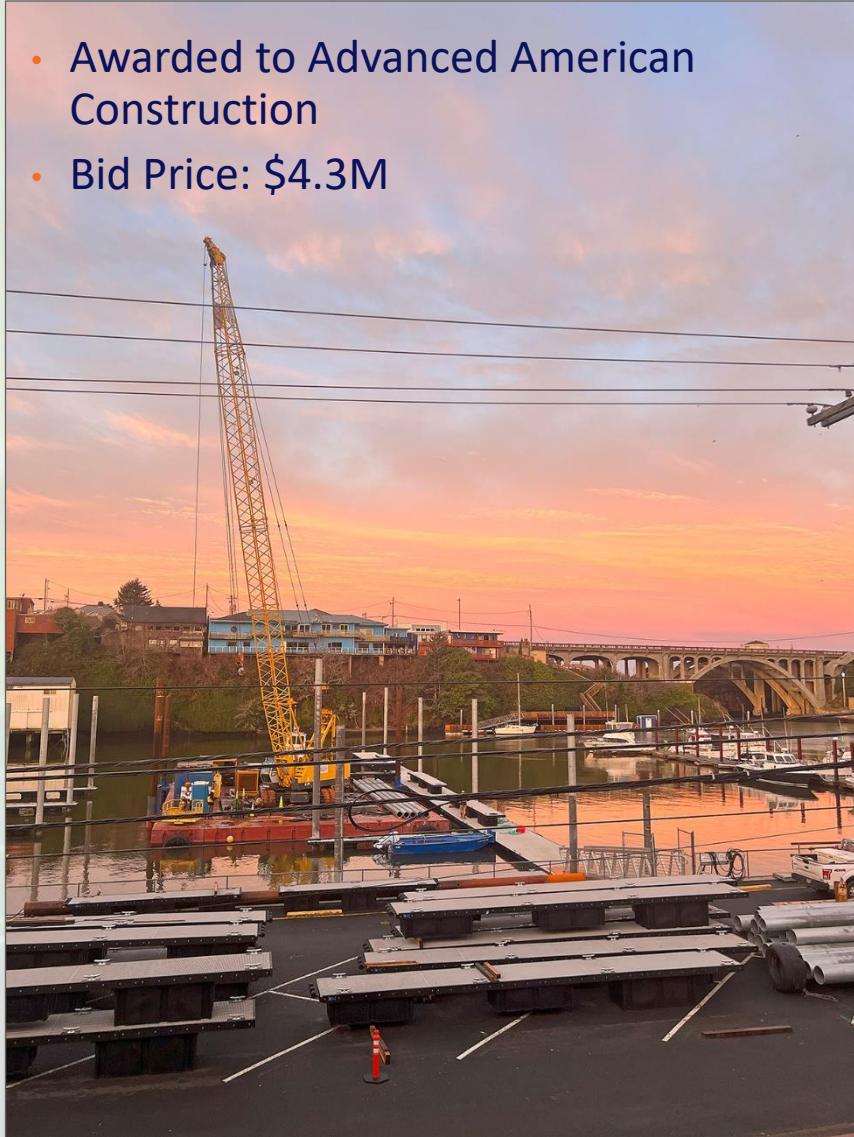
ELECTRICAL

- Electrical design performed by Harbor Power Engineers (Wood Harbinger)
- 30A/120V electrical service at 29 pedestals
- Emergency call boxes
- Low-glare lighting



Depoe Bay Docks 2-4 Replacement CONSTRUCTION BEGAN 11/2024

- Awarded to Advanced American Construction
- Bid Price: \$4.3M



Depoe Bay Docks 2-4 Replacement

COMPLETION 03/2025



Depoe Bay Docks 2-4 Replacement

AFTER

Thank you

