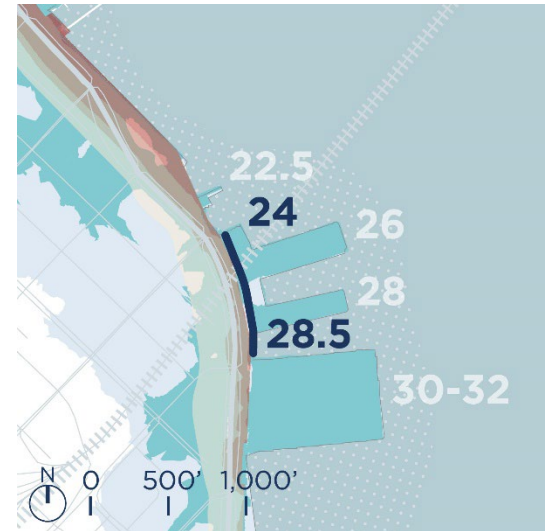


Pier 24-1/2 To Pier 28-1/2 Bulkhead Wall and Wharf Substructure Earthquake Safety Retrofit Project



About the Project

The bulkheads located between Pier 24 ½ and Pier 28 ½ are some of the oldest on the waterfront. They support a portion of the Embarcadero Promenade and the remaining mission-style pier buildings. The Port’s Multi-Hazard Risk Assessment determined the rock dike portion of the Seawall here to be more stable in earthquakes than other areas. However, there is very high earthquake risk to the tall bulkhead wall and wharves because of the way they are connected. Sea level rise flooding is an emerging risk, though the bulkheads here are somewhat higher. Simpler project alternatives focus on improving earthquake safety by retrofitting the most vulnerable portions of the wall and wharf substructures. Higher complexity alternatives focus on permanently stabilizing the seawall and constructing improvements that are adaptable to future sea level rise.

Project Phase	
✓	Planning
➤	Pre-Design
	Detail Design
	Construction
	Closeout
	Complete

Project Details	Responds to Community Feedback	Project Update, Q1 2023
Port PM: Matt Bell matthew.n.bell@sfport.com Total Cost: TBD* Duration: TBD* Complexity: Low <i>*To be determined at the end of Pre-Design</i>	<ul style="list-style-type: none"> ✓ Prioritizes life safety and emergency response. ✓ Protects and preserves maritime resources. ✓ Ensures public access to the waterfront and historic places and an inviting waterfront for all. ✓ Supports an adaptable and equitable waterfront. 	<u>Pre-Design Status</u> <ul style="list-style-type: none"> • Needs Assessment: Done Q4/2022 • Alternatives Analysis: In-Progress • Conceptual Engineer: Start Q4/2023 <u>Highlights</u> <ul style="list-style-type: none"> • Advancing design of a range of alternatives including compatibility with adjacent pier development solutions.