



WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION (WSDOT)

BREAKTHROUGH IN MITIGATING MARINE PILE DRIVING NOISE

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Moderator

IMPLEMENTATION



COMMERCIALIZATION



- WSDOT should be greatly commended for supporting this research
- Innovative technology is often trapped behind university walls
- Must be commercialized in order to provide maximum benefit to industry, society, and the environment



PUBLIC BENEFIT CORP, PBC

Marine Construction Technologies, PBC will commercialize double wall piles and make them widely available

This is a new type of business entity: Mission-driven rather than profit-driven

Dedicated to improving the efficiency of marine construction and providing environmental benefit



**MARINE
CONSTRUCTION
TECHNOLOGIES**

WWW.MARINECONTECH.COM



PROVIDED AS STEMS

**SHOE ATTACHED
TO DISTAL 40' PIPE**



**“STEM” DELIVERED
TO CONTRACTOR**



**PILE LENGTH
EXTENDED ON SITE**



ENSURES QUALITY OF SHOE & CRITICAL CONNECTIONS



PRACTICAL CONSIDERATIONS

- Piles may be available as early as next work window
- Pricing TBD, but cost has been a consideration from the onset
- Currently establishing supply chain
- Likely to be more expensive than typical piles, but offer superior value

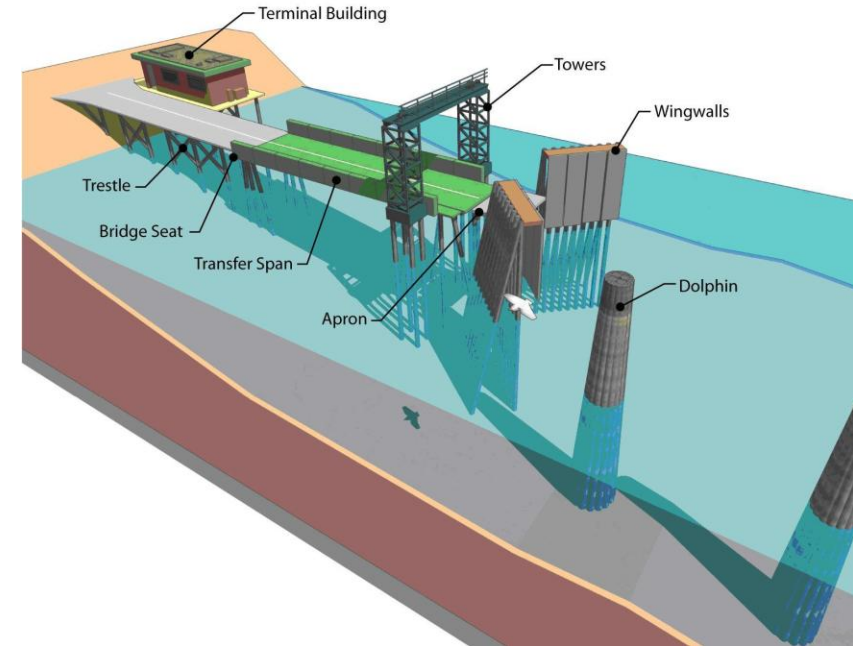


SUPERIOR NOISE ATTENUATION, POTENTIAL FOR STREAMLINED PERMITTING, FASTER DRIVING, FEWER STOPPAGES



REMAINING QUESTIONS

- WSDOT will conduct another test to evaluate drivability and answer remaining structural questions
- WSDOT desires conclusive test
- Please complete surveys and participate in panel discussion to follow
- Help identify remaining issues and questions



WSDOT VASHON ISLAND FERRY TERMINAL
REPLACEMENT PLAN, 2015/16



CLOSING

There is an improved noise attenuation method consistently offering > 20 dB Peak noise reduction at 10m

Remaining structural and drivability questions will be addressed in an upcoming WSDOT test at Vashon Island

Further improvements in the technology are possible; this is only “version 1.0”

Additional information is available for download at www.marinecontech.com, where you can find a resource repository

WSDOT should be commended for their continued leadership



W MECHANICAL ENGINEERING

UNIVERSITY of WASHINGTON



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