

From: [Green, Frank](#)
To: [document.control](#)
Subject: FW: Columbia River Crossing Drilled Shaft and Driven Pile Test Program
Date: Tuesday, September 20, 2011 10:58:36 AM

Document controls,

Please file under correspondence to FTA regarding the Drilled Shaft and Driven Pile Test Program

Thank you.

From: Green, Frank
Sent: Monday, September 19, 2011 9:25 AM
To: Gehrke, Linda
Cc: Strickler, Kris; Niemi, Mike; Rust, Lynn
Subject: Columbia River Crossing Drilled Shaft and Driven Pile Test Program

Linda,

Here is the information you requested.

Columbia River Crossing Drilled Shaft and Driven Pile Test Program

Cost Estimate: Construction - \$4.0 million
Construction admin, permit compliance, engineering - \$1.0 million
Total - \$5.0 million

The Columbia River Crossing Drilled Shaft & Driven Pile Test Program will test the use of deep foundations for the Columbia River Crossing Project by constructing up to 3 drilled shafts and 5 driven piles in Oregon and Washington. The program will reduce cost and increase reliability of foundations for all bridges to be constructed as part of the Columbia River Crossing Project which has a benefit for both transit and highway users on the shared facility across the Columbia River. This program is anticipated to reduce the total foundation costs for the entire Columbia River Crossing Project by approximately 20% due to the site specific data and procedures that will be developed which will increase the knowledge during design and reduce the risk during construction. The design for the program is completed and advertisement for construction is scheduled for early November. Construction is scheduled to begin January 2012 and should be completed within 4 months.

If you have any other questions, please let me know.

Frank Green, PE
Structures Engineering Manager
Columbia River Crossing
360.816.8855 (d)
360.600.2632 (m)