

Communication

Hood Canal Bridge Project Team

The ultimate goal of the Hood Canal Bridge team is to administer a world-class project to replace the Hood Canal Bridge. Meet one of the people who make it all happen.



Phil Wallace, Kiewit-General Pontoon Project Manager, Hood Canal Bridge Team

Phil's extensive experience on floating structures is a great asset for the Hood Canal Bridge team. His jobs have ranged from Port Ludlow to the Port of Los Angeles, but the majority of his time has been focused in the Puget Sound area. He has specialized understanding of the tools required when building in the Northwest climate because of his years with projects at the Port of Seattle and Port of Tacoma.

Phil started using his knowledge to enhance WSDOT projects two years ago when he worked on the Anacortes and Seattle area ferry terminals. Now his skills will be utilized as he supervises construction of the Hood Canal Bridge pontoons in Tacoma.

Outside of work, Phil enjoys spending time with his wife, Becky, and playing with his kids, Kaylee, 6, and Duncan, 4. With a passion for music, movies, softball, golf, PS2 and X-Box, he plays just as hard as he works! Phil relaxes sometimes by going through his collections of sports cards and vintage comic books or taking the family, including his 2-year-old Springer Spaniel, camping.

Several years of pontoon construction face Phil, and he is determined to do a good job. Maybe when it is all over he will celebrate by playing a song from his high school rock band days...

Project Responsibilities: Construction of the concrete pontoons at the Concrete Technology Facility in Tacoma, WA. Questions? Phil.Wallace@kiewit.com or (253) 439-6174.

Next Month...



Mock-up Pontoon Construction

Crews started constructing a mock-up, or scale model, of a pontoon. Find out why this is so important, how is it done and what lessons the workers learned through completing this exercise.

Workers stand up panel wall used for pontoon mock-up construction. The panel wall is the same height as the pontoon sections. Jan. 6, 2005



This report highlights Hood Canal Bridge Project information from **January 1-31, 2006.**

For more information about the Hood Canal Bridge Project visit the project web site, www.hoodcanalbridge.com, or contact project staff:

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Hood Canal Bridge Retrofit and East-half Replacement Project

East-half Replacement
Completion Goal: 2009

West-half Retrofit Completion: 2010

Q. Where is the bridge?

A. The Hood Canal Bridge is located between Kitsap and Jefferson counties at the northern mouth of the Hood Canal.

Q. Why is it important?

A. It serves as a vital economic and social link between the greater Puget Sound and the Olympic Peninsula.

Q. What is WSDOT doing?

A. The Washington State Department of Transportation is improving this lifeline by replacing the east-half floating portion of the bridge, replacing the east and west approach spans, replacing the east and west transition truss spans and updating the west-half electrical system. The project completion estimate is 2010.

Q. What can drivers do to stay informed?

A. Sign up to receive the latest news regarding the Hood Canal Bridge Project and other related area transportation news right in your email inbox. Visit www.hoodcanalbridge.com to subscribe.

Monthly Report



A crane-supported vibratory sheet pile driver (or hammer) drives unused sheet piles brought from Port Angeles on the north side of the Concrete Tech graving dock, Jan. 18, 2006.

Hood Canal Bridge Retrofit and East Half Replacement Project

East-half Replacement Completion Goal: 2009
West-half Retrofit Completion: 2010

Project Delivery

Hood Canal Bridge Project construction is on schedule for east-half bridge replacement in 2009. The work elements currently in progress are:

Work Elements	Percent Completed	Description of Work	Scheduled Completion Goal
Replacement of approach spans	West: 99% East: 99%	Site clean-up work continued. Temporary work trestle and old pier removal, electrical work and access ladder installation progressed.	February 2006
West-half widening	99.5%	Workers placed the remaining permanent signs.	February 2006
Anchor construction	0%	Site evaluation continued.	Summer 2008
Pontoon construction	1%	Work focused on getting ready for the construction of the first three draw span section pontoons: Q, PA and PB. Crews continued with site improvements to the Concrete Technology graving dock while engineers developed work plans for placing forms, reinforcing steel and concrete. Once the graving dock modifications are complete, construction of the pontoons will begin.	Winter 2008
Truss and transition span construction	50%	All components of the truss and transition spans have been fabricated and crews are getting ready to start assembly.	Summer 2009

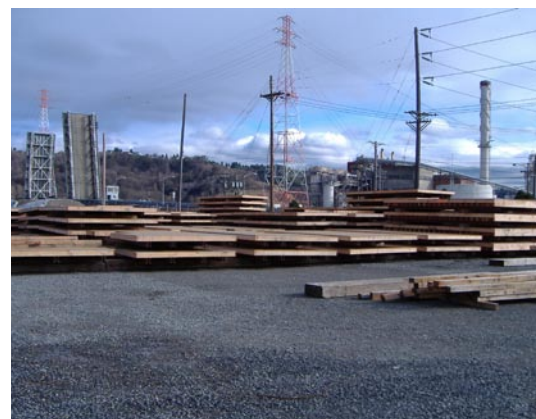
Accountability



Corner forms being built on a raised fabrication bed, Jan. 13, 2006.



Flat panel form being built on a raised fabrication bed, Jan. 13, 2006.



Constructed flat panel forms for pontoon PA and PB waiting to be used, Jan. 23, 2006.

Producing Quality Work: Pontoon Forms

Fitting the 17 pontoons together that will make up the new east half of the Hood Canal Bridge requires detailed work. One of the first steps in this process is creating wood forms for the pontoon sections.

Kiewit-General (K-G) carpenters are now building the wood forms needed for the construction of the first three draw span section pontoons: Q, PA and PB. Wood forms were typically built on a large in-ground flat work surface called a fabrication bed. Crews worked on one side of each pontoon form, then turned it over to work on the other side. This process was not only slow, but sometimes caused the unfinished forms to warp.

Over the years, great strides have been taken to improve the form-building process. Today, K-G crews are using a fast and efficient way to build pontoon forms by utilizing large elevated support structures. The forms are elevated several feet off the ground, enabling workers to access both sides of the form at the

same time. This improved form-making process is not only easier for the workers, but ensures quality pontoon forms are built at a faster pace. Eleven fabrication beds are set up at Concrete Technology in Tacoma for building the Hood Canal Bridge pontoon forms. Crews are finishing five flat panel forms per day and a corner form every one to two days.

Over the last month, K-G crews finished:

- All the exterior and interior flat forms for pontoons PA and PB
- Ten percent of the pontoons PA and PB corner forms
- All the exterior forms for Pontoon Q
- All the flat and corner forms needed for the pontoon scale model, or mock-up.

Once all the forms are completed for pontoons Q, PA and PB, they will be assembled in stages inside the graving dock. Rebar, conduit

and other materials are installed inside each form section. Concrete is poured into the forms and allowed to cure. The forms are then removed. About 55 percent of the forms will be used more than once. The remaining 45 percent of forms are one-of-a-kind, built just for one uniquely shaped pontoon section.

When the final forms are removed, the pontoons will be floated out of the graving dock. This milestone will mark the end of the first of four pontoon construction cycles needed to complete the Hood Canal Bridge pontoons.

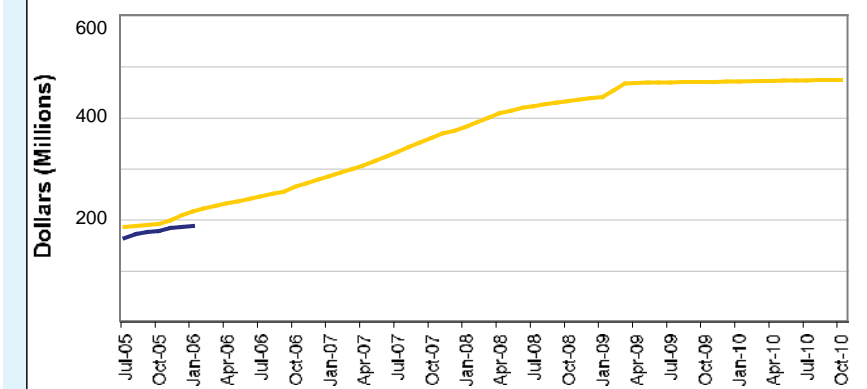
Financial Status Project Cost Summary

Period Ending January 31, 2006

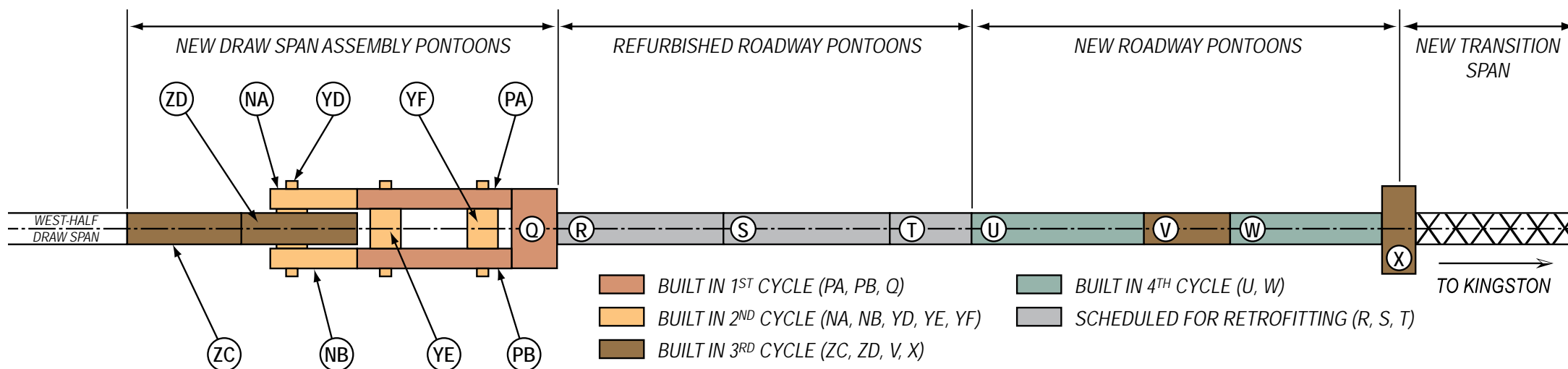
CATEGORY	BUDGET	EXPENDED	% EXPENDED
ORIGINAL COMMITMENTS			
Preliminary Engineering	13,990,000	\$12,065,092	86%
Port Angeles Graving Dock	86,823,000	\$83,847,000	97%
Bridge Rehabilitation & Approaches	54,760,000	\$47,472,922	87%
Major Materials for Bridge Completion	61,440,000	\$45,000,912	73%
Anticipated Audit Adjustment	(10,950,000)	—	0%
MODIFIED COMMITMENTS			
Construction Management	\$32,036,000	\$2,392,839	7%
Closure Mitigation	\$9,644,000	\$51,235	1%
Bridge Construction	\$220,500,000	—	0%
Mechanical & Electrical Retrofitting	\$2,725,000	—	0%
TOTAL PROJECT	\$470,968,000	\$190,830,000	41%

Planned vs. Actual Expenditures

Period Ending January 31, 2006



Birds-eye View of New East-half



Performance Measures:

Managing Materials

One of the most important tasks during the bridge construction is getting the right supplies to the right places at the right times. Tracking the constant flow of materials in and out of a work site is challenging. The construction group addressed this issue by creating two performance measures for this work area: material order rate and material delivery rate. Material order rate is determined by comparing planned to the actual date purchase orders were issued. Material delivery rate is tracked by comparing planned to actual material delivery timelines. Evaluating the results enables the construction crew to watch for schedule delays or increased labor costs and correct problems quickly if materials are not being ordered, delivered to the site and disbursed to the work force in time.