

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.



Adam Worden, Document Control Engineer, Hood Canal Bridge Team

Almost five years ago, Adam started his career at WSDOT as a Transportation Technician in the Port Orchard office and has since then promoted to a Transportation Engineer position. Adam's duties are essential to the Hood Canal Bridge project. The efficient handling of all documentation coming in and going out of the office – submittals and information requests, inspector's daily reports, photos and

correspondence between WSDOT and contractor Kiewit-General – is essential to the success of the entire team.

Adam's technical knowledge and computer experience enables him to administer the different programs WSDOT uses, such as Expedition and File Maker Pro. He has made a difference in the documentation process by improving the format of inspectors' daily reports. In addition to being easier to use, the new reports are kept in an electronic version which makes them available to all staff and reduces the amount of paper used. Adam is currently working on applying the same idea to the photo documentation process.

Before coming to WSDOT, Adam gathered valuable knowledge and experience working everywhere from the retail industry, to a fish processing boat in Alaska to the U.S. Army. His Civil Engineering Technology degree from Centralia College helped him prepare for basic engineering knowledge and technical writing that are required for his current position. His experiences with drafting, design, inspection, surveying and the materials laboratory have also helped him to understand the basic engineering principles that he deals with everyday.

When he's not "riding the waves of documentation at work," Adam loves to fish, garden and play video games with his family. He also builds wood models and is hoping to begin building furniture soon.

Adam lives with his wife Cindy and their three children, ages three, six and 16. The family also shares their home with dogs Rocky and Adrian.

Project Responsibilities: documentation control and computer program administration
Questions? WordenA@wsdot.wa.gov or (360) 305-6410.

Next Month's Activities

- Continue forming and pouring pontoon PA cell walls
- Install pontoon PB wall rebar
- Pour first portion of pontoon PB concrete floor
- Start pouring pontoon Q concrete walls
- Complete closure mitigation plan scope, schedule and budget
- Begin closure mitigation public outreach efforts

July Monthly Report...

Not all concrete is the same

Concrete mixing is a bit like cooking...really. The first step in the process is having a good recipe. Design engineers have created a specific mix design for floating bridge pontoons. Find out about designing the concrete mix in July's monthly report.

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.

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

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

Becky Hixson, Communication Manager, (253) 305-6450, hixsonb@wsdot.wa.gov

Eric Soderquist, Project Director, soderqe@wsdot.wa.gov

Monthly Report



Worker installs interior hatch cover components in one of the pontoon PA anchor galleries. May 31, 2006

Crane sets guide roller wear plate and anchor bolts in pontoon PA. May 31, 2006

Project Delivery

Good Planning Keeps Project Moving Forward

From hatch covers to ladders, bolts to piping, a variety of bridge components are being fabricated and delivered to the Concrete Technology graving dock in Tacoma when they are needed for the next step of the pontoon construction process. Coordinating the fabrication of all the materials is challenging. Both the Washington State Department of Transportation (WSDOT) and the contractor, Kiewit-General (K-G), are working diligently to make sure quality components and materials are delivered on time.

Just the right fit...

Space is limited inside the pontoon cells. All the materials must meet strict standards to ensure the different parts coming from Washington, Oregon, Mississippi, Pennsylvania, Illinois and Alaska can be assembled to fit in their specific locations inside the cells. WSDOT staff travels to the fabrication facilities to inspect the materials and ensure a quality product is produced.

At just the right time...

Anything that is too big to fit through a three-foot round hatch cover has to go into the pontoon before the concrete top is poured. Some materials, such as the draw span hydraulic power units, had to be ordered years ahead of time so they arrive on site when needed. This advance planning is critical to keep the work progressing smoothly and the project on schedule.

The first materials were incorporated into the pontoons during the month of May.

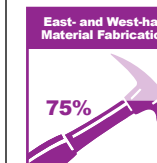
- Crews installed the first stainless steel and aluminum hatches in pontoon PA. Fabrication is nearing completion for all 550+ hatches needed for the 14 pontoons.
- K-G workers set in place the first guide roller anchor bolt assemblies for pontoon PA. The anchor bolts hold the 10-ton guide rollers in place. The guide rollers keep the draw span in alignment as the bridge opens and closes for marine traffic.
- The first pontoon access ladders arrived on site, ready for installation.

Upcoming Fabrication and Material Delivery Milestones

June : Hydraulic power units delivered

July: Steel assemblies needed to form the anchor gallery (the area where the anchor cables connect to the pontoons) delivered

August: Welders certified to start transition and truss span welds



East- and West-half Material Fabrication

Work includes truss and transition span, lift span cylinder and fabrication and assembly of other steel bridge parts.

Accountability

Keeping track of it all

Pontoon construction requires tracking hundreds of different materials and tasks. The Hood Canal Bridge Team keeps track of almost everything, from web graphics to pontoon form specifications, through program management software called Expedition. Implementing this software provided the team a way to efficiently track, index, access and retrieve documentation. The Hood Canal Bridge team can:

- Communicate more effectively
- Establish and maintain efficient work processes by forecasting project documentation delivery dates and by approving work plans on-time
- Measure performance

Communicating Effectively

In February, the Hood Canal Bridge team became the first project within the agency to use the web-based version of Expedition. Now, not only do WSDOT employees in Seattle, Tacoma, Olympia and at the bridge site have access to essential documents, but so do contractors and consultants who need to communicate with WSDOT. Communicating in this way takes less time, provides consistent information to the entire team and facilitates collaboration through challenging situations.

Creating Efficient Work Processes

Tracking documents, such as correspondence, inspectors' daily

reports, work plans and photos, is an essential part of keeping the Hood Canal Bridge project operating efficiently. To stay on schedule, it is imperative for the information to flow quickly back and forth between WSDOT and K-G. In the past, Expedition had been used primarily to track changes. With this project, the program's use is centered on communicating potential project changes. The entire team cooperates during the request for change (RFC) or request for information (RFI) processes to research and to implement the change in a timely manner that supports the construction efforts. As a result, both K-G and WSDOT have corresponding information on submittals regarding how the bridge is built, what materials are used and the next steps in the construction process.

Measuring Performance

Each month, reports are generated detailing the time taken to review and approve construction ideas, materials and methods. This information is used as a tool to track team performance and ensure that the paperwork is completed well ahead of when it is needed.

Other WSDOT projects such as the SR 520 floating bridge replacement project and the Alaskan Way Viaduct project are using Expedition to track their project's progress. The Hood Canal Bridge project office is communicating lessons learned to these offices and WSDOT projects across the state.



Workers pour pontoon PA floor concrete. May 19, 2006

Pontoon Construction Update: Cycle One Pontoons

Pontoon PA: The entire concrete floor was completed and the first wall section was poured. The wood forms were installed in preparation for completing the first anchor gallery concrete pours. Wall rebar installation continued.

Pontoon PB: All the rebar for the pontoon floor was installed. Wall rebar installation began.

Pontoon Q: The first floor concrete pour was completed. Rebar installation on the floor continued. Crews installed vertical post tensioning ducts in the pontoon walls.

East-half Pontoon Construction

13%

East-half Pontoon Construction

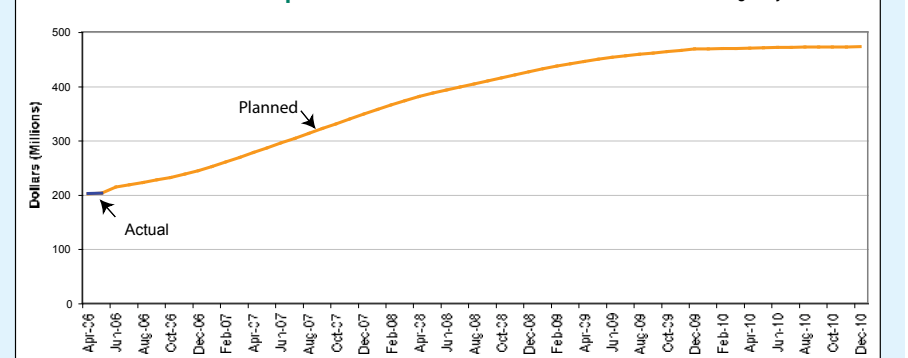
Building 14 new pontoons in four cycles at Concrete Technology in Tacoma and towing them to Seattle for assembly, outfitting and testing.

Financial Status

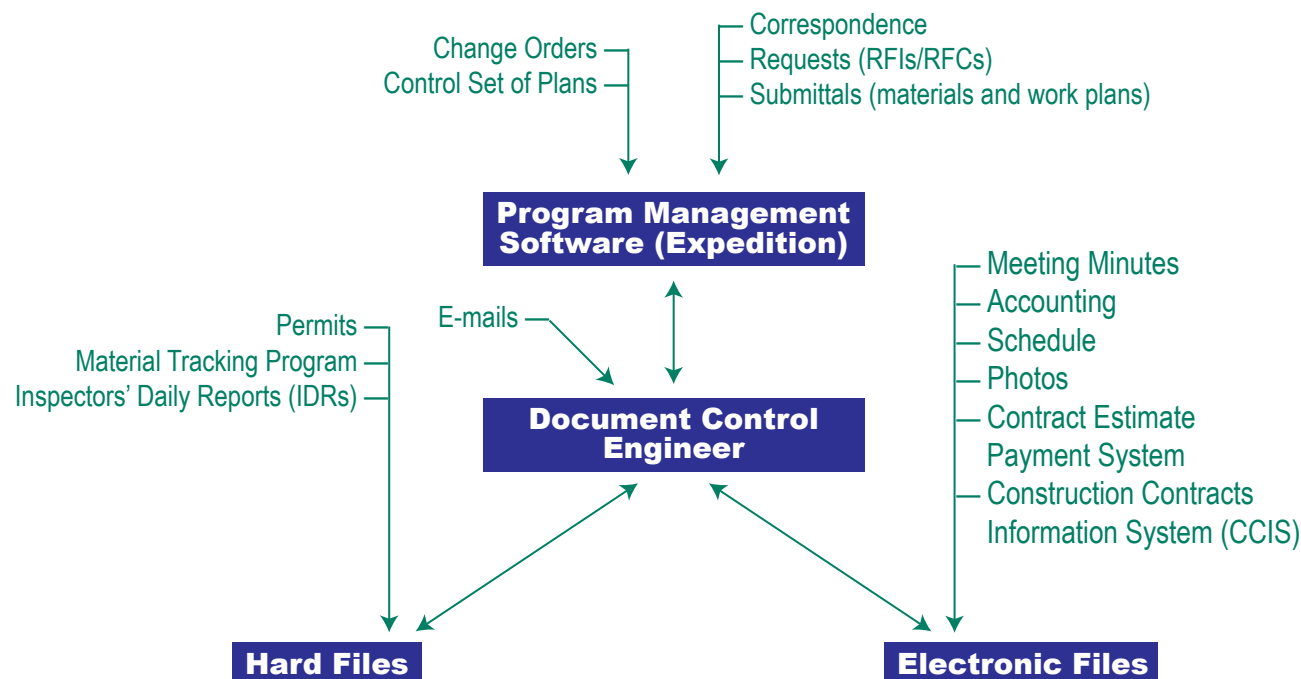
Project Cost Summary

| CATEGORY | BUDGET | Period Ending May 31, 2006 | |
|---------------------------------------|----------------------|----------------------------|------------|
| | | EXPENDED | % EXPENDED |
| Preliminary Engineering | \$13,990,000 | \$12,065,000 | 86% |
| Port Angeles Graving Dock | \$86,823,000 | \$84,462,000 | 97% |
| Bridge Rehabilitation & Approaches | \$54,760,000 | \$47,800,000 | 87% |
| Major Materials for Bridge Completion | \$61,440,000 | \$47,400,000 | 77% |
| Anticipated Audit Adjustment | \$(10,950,000) | — | 0% |
| Modified Commitments | \$264,905,000 | \$16,787,000 | 6% |
| Construction Management | \$32,036,000 | \$4,189,000 | 13% |
| Closure Mitigation | \$9,644,000 | \$278,000 | 3% |
| Bridge Construction | \$220,500,000 | \$12,320,000 | 6% |
| Mechanical & Electrical Retrofitting | \$2,725,000 | — | 0% |
| Total Project | \$470,968,000 | \$208,514,000 | 44% |

Planned vs. Actual Expenditures



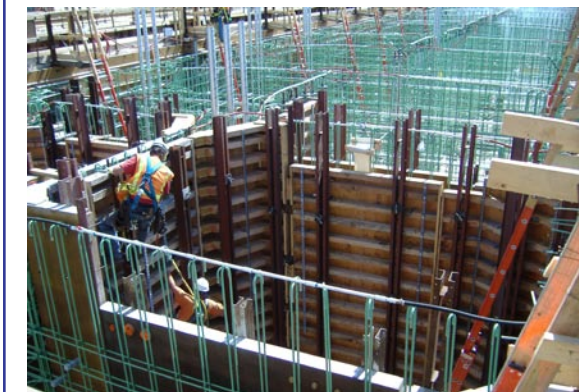
Program Management Work Flow



Performance Measures

One of the core values of this project is safety. The Hood Canal Bridge project objective is to not have any lost time injuries. To date, that goal has been achieved.

This performance measure will be reported in the Hood Canal Bridge quarterly reports. WSDOT and K-G construction safety data is collected monthly and summarized on a quarterly basis to report several safety measures, such as: the total staff hours worked; the number of recordable injuries; the number of lost work days; and, the reasons of lost work days.



Carpenters wear required safety equipment as protection from falls. Since safety is a core project value, ways to protect workers from hazards such as "falls" were identified early in the construction planning stage.