ACEC

WSDOT/ACEC Structures Team May 2004

WSDOT/ACEC Structures Team

- Provide a forum for addressing issues of common interest
  - Cost effective; profitable; quality projects
  - Prepare recommendations for specific actions to make improvements to the way we do business
  - Improve quality of (structural) project delivery in the State of Washington

WSDOT / ACEC Structures Team - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://www.wsdot.wa.gov/eesc/bridge/cecw/index.cfm Go Links

Washington State Department of Transportation

News | Site Index | Contact WSDOT | WSDOT Home

TRAFFIC & ROADS | PROJECTS | BUSINESS | ENVIRONMENTAL | MAPS & DATA

Bridge Office | WSDOT / ACEC Structures Team

WSDOT BRIDGE

- Bridge Home
- Bridge Design Manual
- Engineering Software
- Bridge Standard Drawings
- Bridge Design Schedule
- Bridge Management
- Contract Submittal Log
- Pre-Approved Plans for Light and Signal Standards
- Environmental Permitting for Bridge Repair and Maintenance Activities
- Employment
- Contact Us

INDUSTRY ACTIVITIES

- WSDOT/ACEC Structures Team

BRIDGE INFORMATION

- Bridge Engineering Information System

ADMINISTRATION

- Login

BRIDGE LINKS

- WSDOT Standard Plans
- Bridge List (PDF 7MB)
- Posted Bridge List
- Restricted Bridge List
- Historic Bridges
- Bridge Research
- Highway and Local Programs Bridge Office

Home

WSDOT / ACEC Structures Team

- Karl Kirker Contact - WSDOT Co-Chair
- Kathy Cox-Czosnyka Contact - ACEC Co-Chair
- Team Charter - March 2004
- WSDOT/ACEC Structures Team Contacts Listing - November 2003
- Customer, Supplier, Stakeholder Survey
- Presentation About the Team - November 2003
- Presentation: Team Progress & Sharing Lesson Learned Database - March 2004
- Capturing Lessons Learned - Bridge Construction De-Briefing Session

ACEC Washington

American Council of Engineering Companies

Washington State Department of Transportation

Copyright WSDOT © 2002

Traffic & Roads | Site Index | Contact WSDOT | WSDOT Business | WSDOT Home

Bridge Home | Contact Bridge | Evaluate Bridge Site | Privacy Notice

Trusted sites

Start | Inbox - Microsoft O... | Calendar - Microsof... | WSDOTACEC PDE ... | WSDOT / ACEC ... | Address | 12:36 PM

Capturing Lessons Learned

STRUCTURES CONSTRUCTION PROFESSIONALS

PROVIDE FEEDBACK TO YOUR DESIGNERS

The WSDOT/ACEC Structures Team is happy to announce the creation of the Lessons Learned Website.

Structures Team Recommendation

- Capturing Lessons Learned
  - Adopted: 2/2/01
  - Focus: Provide a forum for continued project improvement to the design community through communication of construction challenges and successes to designers
  - Status: Published 7/1/02

Structures Team Completed Issue

- Capturing Lessons Learned

http://www.wsdot.wa.gov/eesc/bridge/cecw/index.cfm

Construction Manual Section 6-1.1

Construction De-Briefing Session

Published July 2002

WSDOT BRIDGE
Bridge Home
Bridge Design Manual
Engineering Software
Bridge Standard Drawings
Bridge Design Schedule
Bridge Management
Contract Submittal Log
Pre-Approved Plans for Light and Signal Standards
Environmental Permitting for Bridge Repair and Maintenance Activities
Employment
Contact Us

INDUSTRY ACTIVITIES
WSDOT/ACEC Structures Team

BRIDGE INFORMATION
Bridge Engineering Information System

ADMINISTRATION
Login

BRIDGE LINKS
WSDOT Standard Plans
Bridge List (PDF 7MB)
Posted Bridge List
Restricted Bridge List
Historic Bridges
Bridge Research
Highway and Local Programs Bridge Office

Home

6-1 Structures, General Requirements

6-1.1 Bridge Construction De-Briefing Session

In an attempt to continually improve the quality of bridge contract plans, specifications and estimates and to obtain feedback on engineering and construction practices, the Bridge and Structures Office is available to assist in conducting post construction De-Briefing Sessions for "Capturing Lessons Learned". The purpose of these De-Briefing Sessions is to provide designers with feedback on positive things that worked well and things that could be improved.

The Project Engineer, Bridge Technical Advisor, or Bridge Design Unit Manager should consider initiating a De-Briefing Session on those projects where they feel feedback to the designers would benefit the quality of future construction plans. Suggested projects include Bridge Rehabilitation Projects, Bridges with complex staging, substructure conditions, or new material applications. Suggested attendees at these sessions should include Region Project Office Staff, Headquarters Construction, Bridge and Structures Office, Design Consultants, and the Contractor involved in the structural work.

The Bridge and Structures Office will assist the Project Engineer in organizing and facilitating the De-Briefing Session once it is agreed to go forward with a De-Briefing Session. The Project Engineer will be responsible for making all contacts with Contractor personnel.

The Project Engineer should determine the timing of the De-Brief session with respect to the contract work, generally between 75% and 100% of project completion is ideal. Scheduling the session too long after the contract work is complete may diminish the Contractor's willingness to participate or recall of the issues for discussion. Scheduling a session too soon before the contract work is complete could detract from the completion of the contract work, and may cloud issues currently under discussion. The Project Engineer should exercise caution in selecting the proper timeframe for this session.

More information on these sessions, including De-Brief Meeting guidelines, typical agenda, and De-Brief report outline, are available on the Bridge and Structures Office's homepage at http://www.wsdot.wa.gov/eesc/bridge/cecw/index.cfm

---

6-1.1A General Inspection Procedures

Because of the wide variety of types and designs of structures, the Inspector should be thoroughly familiar with all of the contract documents as they provide the specific materials requirements, dimensions, and other details that make each structure unique. The inspector should examine the contract documents extensively by:

Thoroughly reviewing *all* contract documents, including:

- The plans and special provisions for the project.
- The appropriate *Standard Specifications,* supplemental specifications, and standard drawings that apply.
- Any contractor-provided documents, such as traffic control plans, falsework and forming plans, shoring plans and shop drawings for prefabricated items.
- Check with the Region's Environmental Section to verify that all necessary environmental documentation has been obtained for the project and is current.
- Special care needs to be taken over streams that are subject to the Endangered Species Act (ESA) as the requirements and the regulations are constantly changing and

WSDOT BRIDGE
Bridge Home
Bridge Design Manual
Engineering Software
Bridge Standard Drawings
Bridge Design Schedule
Bridge Management
Contract Submittal Log
Pre-Approved Plans for Light and Signal Standards
Environmental Permitting for Bridge Repair and Maintenance Activities
Employment
Contact Us

INDUSTRY ACTIVITIES
WSDOT/ACEC Structures Team

BRIDGE INFORMATION
Bridge Engineering Information System

ADMINISTRATION
Login

BRIDGE LINKS
WSDOT Standard Plans
Bridge List (PDF 7MB)
Posted Bridge List
Restricted Bridge List
Historic Bridges
Bridge Research
Highway and Local Programs Bridge Office

Home

Bridge Construction De-Breifing Session

Often opportunities for continual improvement in the quality and constructibility of WSDOT and Local Agency design projects are missed because lessons learned during construction are not routinely communicated to designers. This can cause a repeat of field problems, cost change orders, and the failure to capture valuable ideas.

The purpose of the structure construction debrief meeting is to identify ways to continually improve structure plans, construction documents, construction methods, and processes so as to enhance our ability to efficiently construct quality structures. We want to get a better product for less cost, and to eliminate the repeat of field problems, and reduce changes. Designers and Contractors benefit from receiving positive feedback on their accomplishments and appreciation for there in sight, feedback based on performance is the number one motivator of people.

The meeting is to be hosted by the WSDOT Project Engineer, Bridge Technical Advisor, or Bridge Design Unit Manager, when the structures portion of a project reaches approximately 75% construction completion. Invitees should include the Structure Owner, Design and Construction Project Engineer, Contractor, civil and structural Designers, and Inspectors. The designers will be invited to request feedback on specific details of design, or areas of concern. It is suggested that Consultant attendance at this project debrief is budgeted for in the scope of their construction support agreement; however, an invitation to attend the meeting should be extended even if there is no ability or budget to pay the consultant.

The Bridge Technical Advisor will facilitate the meeting, following the "Structure Construction De-Brief Agenda", to encourage open, frank, and focused exchange of information on the design, constructibility, and procedures utilized in the construction. Designers and project sponsors will benefit from informal discussions of what went well, details that didn't work or were expensive to construct, and a debrief of changes made during construction. It is not intended that minutes be kept of all ideas exchanged at the meeting.

At the conclusion of the meeting the attendees will select ideas that may be beneficial to typical future projects, and what should be avoided or changed. The Bridge Technical Advisor will complete a "Structure Construction De-Brief Report" and submit it to meeting attendees and to the co-chairs of the WSDOT / ACEC Structures Team or their designees. A tangible outcome of these meetings is a knowledge base of lessons learned. This knowledge base will document the top ideas that have been identified and will become the basis for ensuring that good ideas from the past are considered in the design of future projects.

Copyright WSDOT © 2002

WSDOT BRIDGE
Bridge Home
Bridge Design Manual
Engineering Software
Bridge Standard Drawings
Bridge Design Schedule
Bridge Management
Contract Submittal Log
Pre-Approved Plans for Light and Signal Standards
Environmental Permitting for Bridge Repair and Maintenance Activities
Employment
Contact Us

INDUSTRY ACTIVITIES
WSDOT/ACEC Structures Team

BRIDGE INFORMATION
Bridge Engineering Information System

ADMINISTRATION
Login

BRIDGE LINKS
WSDOT Standard Plans
Bridge List (PDF 7MB)
Posted Bridge List
Restricted Bridge List
Historic Bridges
Bridge Research
Highway and Local Programs Bridge Office

Home

Structure Construction Debrief Agenda

1. Project Engineer Opening Remarks and Introductions
2. Review Meeting Purpose and Objectives
3. Review De-Brief Report Note Taking Responsibilities
4. Project Engineer Overview of Project to Date
5. Review of Major Project Changes
6. Contractor and Project Office Respond to Specific Questions From Designer
7. Brainstorming and Ranking - Innovative and Noteworthy Design Concepts
8. Brainstorming and Ranking - Opportunities for Improved Design Concepts
9. Review De-Brief Report Contents
10. Review Action Items From Today's Meeting
11. Closing Remarks

Copyright WSDOT © 2002

WSDOT / ACEC Structures Team - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://www.wsdot.wa.gov/eesc/bridge/cecw/dsp_userpage.cfm?fuseaction=report Go Links

WSDOT BRIDGE
Bridge Home
Bridge Design Manual
Engineering Software
Bridge Standard Drawings
Bridge Design Schedule
Bridge Management
Contract Submittal Log
Pre-Approved Plans for Light and Signal Standards
Environmental Permitting for Bridge Repair and Maintenance Activities
Employment
Contact Us

INDUSTRY ACTIVITIES
WSDOT/ACEC Structures Team

BRIDGE INFORMATION
Bridge Engineering Information System

ADMINISTRATION
Login

BRIDGE LINKS
WSDOT Standard Plans
Bridge List (PDF 7MB)
Posted Bridge List
Restricted Bridge List
Historic Bridges
Bridge Research
Highway and Local Programs Bridge Office

Home

Structure Construction Debrief Report

Date: _____

Project Name: _____

Project Sponsors: _____

Description of Structures on Project: _____

Project Bid Amount: _____

Date of Notice to Proceed: _____

Structures Cost: _____

Percent Complete Today: _____

Estimated Structures Cost Today: _____

Lead Agency: _____

Roadway Designers: _____

Structural Designers: _____

Structural Reviewers: _____

General Contractor: _____

Structures Contractor: _____

Specialty Contractors: _____

Effectively Designed and Constructed Elements of the Project:
(Describe Innovative approach or technique, best problem solutions, and cost effective details or concepts.)

Done Trusted sites

Start Inbox - Microsoft O... Calendar - Microsof... Microsoft PowerPoi... WSDOT / ACEC Str... Microsoft ActiveS... Address 1:13 PM

Structures Team Recommendation

- Sharing Lessons Learned
  - Adopted: 4/9/04
  - Focus: Provide a forum for sharing lessons learned, expanding on the benefits gained through “Capturing Lessons Learned”
  - Status: Awaiting completion of revised recommendation prior to transmittal to Executive Committee

Structures Team Nearly Completed Issue

- Sharing Lessons Learned

http://fmapps.wsdot.wa.gov/acec/

Construction Manual Section 6-1.2 ?

Web Based Database

Publish In 2004

Added DGT Agenda Item - Construction Lesson Learned Reports - Message (Rich Text)

File Edit View Insert Format Tools Actions Help

Reply | Reply to All | Forward

From: James, Bill

Sent: Mon 1/26/2004 1:18 PM

To: Albin, Dick; Briggs, Barbara; Conyers, Ed; Eastman, Jim; James, Bill; Johnson, John E.; Kutrich, Robert; Mitchell, Richard M; Rasaie, Amir; Simonsen, Randy; McPike, Teri

Cc:

Subject: Added DGT Agenda Item - Construction Lesson Learned Reports

CONSTRUCTIO SSONS LEARNE | CONSTRUCTIO SSONS LEARNE | CONST IS LEARNED 66 | CONSTRUCTIO SSONS LEARNE | CONSTRUCTIO SSONS LEARNE | Barclay Debrief Report.doc | Constr Lessons earned(Shifera... | C6157 JCTION LESSO | CONSTRUCTIO SSONS LEARNE | C6388 Lessons Learned.doc | CONSTRUCTIO SSONS LEARNE | CONSTRUCTIO SSONS LEARNE | CONSTRUCTIO SSONS LEARNE

Attached are the Construction Lesson Learned Reports that I have received so far. Please scan the reports before tomorrow's DGT Meeting. For the most part these reports have not had a quality check by the EM and the rest of the project team. Please don't distribute them for general use.

At tomorrow's meeting we will be discussing how to get information from these reports to NWR engineers. We will also discuss what type of a review/editing procedure the reports should go through before they come to the DGT.

Start | Inbox - Microsoft O... | Calendar - Microsof... | Microsoft PowerPoi... | RE: Please forward ... | Added DGT Agen... | Address | 1:19 PM

Barclay Debrief Report.doc - Microsoft Word

CONSTRUCTION LESSONS LEARNED REPORT

PROJECT NAME: SR 2 Barclay Creek Bridge 2/48 Replacement

PROJECT SPONSOR(S): David Lindberg

BRIEF DESCRIPTION OF THE PROJECT AND TYPE OF WORK ON THE PROJECT:

This project replaces the Barclay Creek Bridge with a new High Performance Steel (HPS) structure. The work includes constructing a detour roadway and detour bridge, drainage improvements, and mitigation planting.

PROJECT BID AMOUNT: $3,133,674

STRUCTURES COST: $800,000

FORECAST FINAL COST: $3,403,883

DATE OF NTP: Spring 2002

DATE OF DEBRIEF: 1/12/04

% COMPLETE AT DE-BRIEF: 93%

	FIRM NAME	INDIVIDUAL
LEAD AGENCY:	WSDOT	David Lindberg
WSDOT CONSTRUCTION OFFICE	David Lindberg	Bryan Dabbs
WSDOT DESIGN OFFICE	Methqal Abu-Najem	Bruce Johnson/Ron Franzen
PRIME CONSULTANT	N/A	
STRUCTURES DESIGNER:	HQ Bridge and Structures	Mark Gaines/Paul Kinderman
GENERAL CONTRACTOR:	Wilder Construction Company	Joe Spink/Scott Ayers/Mark Ottele
STRUCTURES CONTRACTOR:	Wilder Construction Company	

Barclay Debrief Report.doc - Microsoft Word

EFFECTIVELY DESIGNED AND CONSTRUCTED ELEMENTS OF THIS PROJECT:

(Describe innovative approach or technique, best problem solutions, & cost-effective details or concepts)

The project was the first High Performance Steel bridge designed in the State of Washington. The structure detailing was fairly simple, utilizing three steel plate girders with a single span of approximately 178 feet. The long spans provided by the design allowed a "high Water Refuge" to be constructed under the bridge, enhancing the environment. Using HPS reduced the structural steel costs by allowing three lines of girders to be used instead of four. The contract documents provided options for several components of the bridge. For example, the contractor had the option of using girder field splices, or eliminating the splices and fabricating the girders as single pieces. The contractor was allowed to bid an alternate wall design for the pier 2 retaining wall. During the bid process, the contractor was able to select the least expensive option and submit an appropriate bid.

A detour roadway and detour bridge was provided for in the project, minimizing impacts to the traveling public. Other than short-term lane closures, disruptions to traffic was minimal.

The Contractor came up with several innovations to save time and impacts to the traveling public. The contractors ideas consisted of working around the clock, 24 hours a day, to complete several task with high impact to the traveling public. These ideas saved the State money in traffic control costs as well as lessened impacts to the traveler. The Contractor removed the old bridge, in whole, using two cranes, and set it on a roller system where it was rolled to the old roadway and dismantled. This eliminated any impacts to the creek or river.

The Contract plans were exceptionally well prepared. The Design office worked closely with the Construction office early on in preparing the plans. Details and staging plans for the project were very well done.

TOP IDEAS TO IMPROVE COST EFFECTIVE DESIGN CONCEPTS & DETAILS:

(Describe opportunity to improve and the impact to cost, schedule, quality, or maintainability)

Pre-drilling for timber piles: The presence of very large boulders at the timber pile bent for the detour structure made it impossible to drive timber piles. A change order was written for $28,000 to pre-drill, using a down force drill, prior to driving the piles. The project should have required the pre-drill in the documents as the large boulders and cobbles were known to exist prior to advertisement for bids.

Page 2 Sec 1 2/4

Proposal

- 1. Database of “lessons learned” on the Internet.
  http://fmapps.wsdot.wa.gov/acec/
- 2. Periodically analyze lessons learned, identify trends, and consider recommendations for changes.
- 3. Share lessons learned at forums that may be appropriate such as: Western Bridge Engineers Seminar, Associated General Contractors, etc.

Access the DebriefReport Database - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/ Go Links

Washington State Department of Transportation

HIGHWAYS & LOCAL PROGRAMS
Operations

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

Search for a Lesson Learned

Building that grand double-arch peon to the spirit of Washington Roebling and you're not sure if you did the span over the quicksand correctly? Look here to see if anyone else had that problem

Add your own Lesson Learned

Did you find out in real life to your dismay that Silly Putty and Jello don't make good additives for concrete piers? Share your experiences here.

Lessons Learned may not apply in all situations or on all projects, each project has it's own unique set of criteria and circumstances. The Sharing Lessons Learned Website shares issues to consider when managing a design project. Although the Lessons Learned contained on this website originate from actual project experiences, they are simply issues to consider on future projects.

Neither the State of Washington, WSDOT, nor any agency, officer, or employee of the State of Washington warrants the accuracy, reliability or timeliness of any information published by this web site, nor endorses any content, viewpoints, products, or services linked from this web site, and shall not be held liable for any losses caused by reliance on the accuracy, reliability or timeliness of such information. Portions of such information may be incorrect or not current. Any person or entity that relies on any information obtained from this web site does so at their own risk.

Local intranet

Start | Inbox - Microsoft O... | Calendar - Microsof... | Microsoft Word | Access the Debri... | Microsoft PowerPoi... | Address | 12:37 PM

DebriefReport - Search - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro?-db=DebriefReport&-lay=Web&-format=search.htm&-view

Department of Transportation

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

HIGHWAYS & LOCAL PROGRAMS
Operations

Search for Lessons Learned

Project Name: Seismic Retrofit

Stage Superstructure:
- ☐ Prestressed Concrete
- ☐ Cast in Place Concrete
- ☐ Steel Plate
- ☐ Timber
- ☐ Bearings
- ☐ Other

Stage Deck:
- ☐ Cast in Place Deck
- ☐ Precast Deck
- ☐ Overlay
- ☐ Joints
- ☐ Rail/Sidewalk
- ☐ Drains
- ☐ Alternative Material
- ☐ Other

Stage Substructure:
- ☐ Spread Footing
- ☐ Piles
- ☐ Drilled Shafts
- ☐ Other

Other Structure:
- ☐ Walls
- ☐ Sign Structures
- ☐ Culverts
- ☐ Signals/Illumination
- ☐ Vaults
- ☐ Other

Brief Description keywords:

Find those lessons!

If you would like to respond or comment on a Lesson Learned
Please send us your comments by clicking here.

mailto:merthj@wsdot.wa.gov

Local intranet

Start | Inbox - Microsoft O... | Calendar - Microsof... | Microsoft Word | DebriefReport - ... | Microsoft PowerPoi... | Address | 12:40 PM

DebriefReport - Search Results - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro Go Links

Washington State Department of Transportation

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

HIGHWAYS & LOCAL PROGRAMS
Operations

Lessons Learned

Displaying records **1** through **1** of **1** lessons found.

Project Name	Project Description
Seismic Retrofit	Geometric Alignment

Start New Search

Done Local intranet

Start Inbox - Microsoft O... Calendar - Microsof... Microsoft Word DebriefReport - ... Microsoft PowerPoi... Address 12:41 PM

DebriefReport - Record Detail - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro?-db=debriefreport.fp5&-format=record%5fdetail%5fnew.htm&-lay=all%20fields&-sortfield=project%20name&-op=eq&Project%20N. Go Links

Washington State Department of Transportation

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

HIGHWAYS & LOCAL PROGRAMS
Operations

A Lesson Learned

Project Name:
Seismic Retrofit

Bridge Superstructure:
- ☐ Prestressed Concrete
- ☐ Cast in Place Concrete
- ☐ Steel Plate
- ☐ Timber
- ☐ Bearings
- ☑ Other

Seismic Retrofit

Bridge Deck:
- ☐ Cast in Place Deck
- ☐ Precast Deck
- ☐ Overlay
- ☐ Joints
- ☐ Rail/Sidewalk
- ☐ Drains
- ☐ Alternative Material
- ☐ Other

Bridge Substructure
- ☐ Spread Footing
- ☐ Piles
- ☐ Drilled Shafts
- ☑ Other

Catcher Blocks

Other Structures:
- ☐ Walls
- ☐ Sign Structures
- ☐ Culverts
- ☐ Signals/Illumination
- ☐ Vaults
- ☐ Other

Brief Description:
Geometric Alignment

Detailed Description:
The alignment and profile of a roadway need to be considered when detailing a cather block.

Done Local intranet

Start Inbox - Microsoft O... Calendar - Microsof... Microsoft Word DebriefReport - ... Microsoft PowerPoi... Address 12:42 PM

DebriefReport - Record Detail - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro?-db=debriefreport.fp5&-format=record%5fdetail%5fnew.htm&-lay=all%20fields&-sortfield=project%20name&-op=eq&Project%20N. Go Links

1 Attachments

Document Name: CatcherBlock.jpg

Document Type: jpeg

Document Description: SR 5 Holgate U'Xing Abutment Seismic Catcher Block

Done Local intranet

Start Inbox - Microsoft O... Calendar - Microsof... Microsoft Word DebriefReport - ... Microsoft PowerPoi... Address 12:41 PM

DebriefReport - Search - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro?-db=DebriefReport&-lay=All%20Fields&-format=search.htm&-view

Department of Transportation

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

HIGHWAYS & LOCAL PROGRAMS
Operations

Search for Lessons Learned

Project Name:

Stage Superstructure:
- ☑ Prestressed Concrete
- ☐ Cast in Place Concrete
- ☐ Steel Plate
- ☐ Timber
- ☐ Bearings
- ☐ Other

Stage Deck:
- ☐ Cast in Place Deck
- ☐ Precast Deck
- ☐ Overlay
- ☐ Joints
- ☐ Rail/Sidewalk
- ☐ Drains
- ☐ Alternative Material
- ☐ Other

Stage Substructure:
- ☐ Spread Footing
- ☐ Piles
- ☐ Drilled Shafts
- ☐ Other

Other Structure:
- ☐ Walls
- ☐ Sign Structures
- ☐ Culverts
- ☐ Signals/Illumination
- ☐ Vaults
- ☐ Other

Brief Description keywords:

Find those lessons!

If you would like to respond or comment on a Lesson Learned
Please send us your comments by clicking here.

Local intranet

Start | Inbox - Microso... | Calendar - Micro... | Microsoft Word | DebriefReport... | Microsoft Power... | Address | 12:44 PM

DebriefReport - Search Results - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro Go Links

Washington State Department of Transportation

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

HIGHWAYS & LOCAL PROGRAMS
Operations

Lessons Learned

Displaying records **1** through **1** of **1** lessons found.

Project Name	Project Description
37th St Pedestrian Bridge	Pedestrian bridge grade

Start New Search

Local intranet

Start | Inbox - Microso... | Calendar - Micro... | Microsoft Word | DebriefReport... | Microsoft Power... | Address | 12:45 PM

DebriefReport - Record Detail - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro?-db=debriefreport.fp5&-format=record%5fdetail%5fnew.htm&-lay=all%20fields&-sortfield=project%20name&-op=eq&StageSupersti Go Links

Brief Description:

Pedestrian bridge grade

Detailed Description:

A 600' long pedestrian bridge was constructed with a grade of only 0.32%. Because of the shallow grade and minor variations in the deck profile, ponding often occurs at various points along the deck after a rainfall. The potential exists for the water freezing on the deck and creating a hazard for pedestrians.

Recommendations:

Ensure there is sufficient grade on pedestrian bridges to prevent ponding.

---

0 Attachments

If you would like to respond or comment on a Lesson Learned

Please send us your comments by clicking here.

Press the **Back** button in your browser to go back to your list of projects.

Or Click here to search for a different list.

Done Local intranet

Start Inbox - Microso... Calendar - Micro... Microsoft Word DebriefReport... Microsoft Power... Address 12:45 PM

DebriefReport - New Record - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro?-db=DebriefReport&-lay=Web&-format=new.htm&-view

Go Links

Washington State Department of Transportation

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

HIGHWAYS & LOCAL PROGRAMS

Operations

Add New Lesson Learned

Project Name:

Wetland A Bridge

Contact Information:

Please note, the following information will be used by the moderators to contact you if they need to clarify any of the information you provide. It will NOT be displayed as part of your lesson to the public.

First Name:

Karl

Last Name:

Kirker

Phone:

360 705 7187

Email:

kirkerk@wsdot.wa.gov

Select category for issue described - Please limit Lesson Learned to one topic per submittal

Bridge Superstructure:

- ☐ Prestressed Concrete
- ☐ Cast in Place Concrete
- ☐ Steel Plate
- ☐ Timber
- ☐ Bearings
- ☐ Other

Bridge Deck:

- ☐ Cast in Place Deck
- ☐ Precast Deck
- ☐ Overlay
- ☐ Joints
- ☐ Rail/Sidewalk
- ☐ Drains
- ☐ Alternative Material
- ☐ Other

Local intranet

Start | Inbox - Microsoft O... | Calendar - Microsof... | Microsoft Word | DebriefReport - ... | Microsoft PowerPoi... | Address | 1:26 PM

DebriefReport - New Record - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro?-db=DebriefReport&-lay=Web&-format=new.htm&-view

Go Links

☐ Vaults
☐ Other

Wetland Impacts

Brief Description:

Boundaries of wetland not shown in exact actual location.

Detailed Description:

During construction of this bridge, which crosses a wetland, it was discovered that the area of the Shaft Foundations at Piers 4 and 5, within the the field surveyed and staked wetland boundary, was greater than specified in the Permit.

Recommendation:

Carefully review field survey data to ensure it is correct by having data independently reviewed, by comparison with fixed objects in photos and by actual site visits. Ensure that careful checking is done of all drawings prepared by Bridge Office to ensure they have drawn the boundaries correctly.

Click here to send photos or other documents as attachments to the moderators of this site

Please make the subject line "**ACEC Lessons**" and note the project name in the body of the message

Go ahead and add this lesson to the database | Reset this form

The information submitted will be reviewed by the moderators for content and appropriateness. If considered suitable the Lesson Learned will be added

Local intranet

Start | Inbox - Microsoft O... | Calendar - Microsof... | Microsoft Word | DebriefReport - ... | Microsoft PowerPoi... | Address | 1:28 PM

DebriefReport - New Record Added - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec/FMPro Go Links

Washington State Department of Transportation

TRANSPORTATION CONSTRUCTION - LESSONS LEARNED

HIGHWAYS & LOCAL PROGRAMS
Operations

New Record Added

Your lesson learned has been added successfully.

The information submitted will be reviewed by the moderators for content and appropriateness. If considered suitable the Lesson Learned will be added to the database and can be found under the "Search for Lessons Learned" link.

Thank you for sharing your experience!

Return to Home Page

Local intranet

Start | Inbox - Microso... | Calendar - Micro... | Microsoft Word | DebriefReport... | Microsoft Power... | Address | 1:25 PM

TEST New Lessons Learned Record Added TEST - Message (Plain Text)

File Edit View Insert Format Tools Actions Help

Reply | Reply to All | Forward

From: Kirker, Karl

Sent: Mon 5/17/2004 2:04 PM

To: merthj@wsdot.wa.gov; Kirker, Karl; kathryn.Cox-Czosnyka@ch2m.com

Cc: cvalenti@wsdot.wa.gov

Subject: TEST New Lessons Learned Record Added TEST

Today, on 5/17/2004 a lesson learned on project Wetland A Bridge was added to the database.

Start | Inbox - Microso... | Calendar - Micro... | Microsoft Word | DebriefReport - ... | Microsoft Power... | TEST New Les... | Address | 2:05 PM

DebriefReport - Search - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec_review/FMPro?-db=DebriefReport&-lay=All%20Fields&-format=search.htm&-view

Go Links

Washington State Department of Transportation

TRANSPORTATION CONSTRUCTION LESSONS - REVIEW & APPROVAL

HIGHWAYS & LOCAL PROGRAMS

Operations

Review and Approve Lessons Learned

Approved for Viewing?

Show me all lessons marked => ○ Yes ◉ No

Find those puppies!

Return to Home Page

Local intranet

Start | WSDOT/ACEC ... | Calendar - Micro... | Microsoft Word | DebriefReport... | Microsoft Power... | Address | 1:40 PM

DebriefReport - Search Results - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec_review/FMPro Go Links

Washington State Department of Transportation

HIGHWAYS & LOCAL PROGRAMS
Operations

TRANSPORTATION CONSTRUCTION LESSONS - REVIEW & APPROVAL

Displaying records **1** through **2** of **2** lessons found.

Project Name	Project Description
Bing Court Driveway	Make it bigger
Wetland A Bridge	Boundaries of wetland not shown in exact actual location.

Start New Search

Local intranet

Start | WSDOT/ACEC ... | Calendar - Micro... | Microsoft Word | DebriefReport... | Microsoft Power... | Address | 1:39 PM

DebriefReport - Record Detail - Microsoft Internet Explorer provided by WSDOT Version: 6.0 SP1

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://fmapps.wsdot.wa.gov/acec_review/FMPro?-db=debriefreport.fp5&-format=record%5fdetail.htm&-lay=all%20fields&-sortfield=project%20name&-op=eq&Approved%2C Go Links

Detailed Description:

During construction of this bridge, which crosses a wetland, it was discovered that the area of the Shaft Foundations at Piers 4 and 5, within the the field surveyed and staked wetland boundary, was greater than specified in the Permit.

Recommendations:

Carefully review field survey data to ensure it is correct by having data independently reviewed, by comparison with fixed objects in photos and by actual site visits. Ensure that careful checking is done of all drawings prepared by Bridge Office to ensure they have drawn the boundaries correctly.

---

0 Attachments

Approve for Viewing?

WSDOT	ACEC
⦿ Yes ○ No	○ Yes ⦿ No

Delete this lesson | Go ahead and change this lesson

Local intranet

Start | WSDOT/ACEC ... | Calendar - Micro... | Microsoft Word | DebriefReport... | Microsoft Power... | Address | 1:38 PM

Description

- WSDOT will maintain a knowledgebase of lessons learned based on information received via a reporting webpage. Prior to posting the information received, the co-chairs of the ACEC/WSDOT Structures Team will evaluate the appropriateness of the information.
- Annually, the “lessons learned” will be presented at the ACEC/WSDOT Annual meeting by the Co-Chairs, who will encourage attendees to share with their staffs as appropriate.

Pros: and Cons:

- **Pros:** Knowledge will be shared easily between WSDOT, consultants, contractors, and local agencies.
- **Cons:** Reviewing and sharing the “lessons learned” will require some additional effort by the co-chairs and WSDOT staff.

Questions or Comments? Contact the Team Co-Chairs

- Karl Kirker WSDOT
  - (360) 705-7187
- Kathy Cox-Czosnyka CH2MHill
  - (206) 248-7472