

Summary – CAG#15/PDT#14

Community Advisory Group / Project Development Team I-5 Willamette River Bridge Project

October 30, 2008, 9:00 a.m. to 12:00 p.m.

*Goodson Conference Room, Lane County Public Works Administration Bldg.
(3040 N. Delta Highway, Eugene)*

ATTENDANCE

CAG Members

- Charlotte Behm – Representative, Springfield Neighborhood (and member, CPC for Whilamut Natural Area)
- Bob Kline – Chair, Harlow Neighbors
- Rich Hazel – Co-Chair, Laurel Hill Valley Citizens Association
- Greg Hyde – Willamalane Parks & Recreation District
- Phillip Richardson – Eugene Parks and Open Space Division
- David Sonnichsen – CPC for Whilamut Natural Area
- Scott Wylie – Springfield Resident

PDT Members

- Don Angermayer – ODOT District 5 Program Coordinator
- Chris Henry – City of Eugene, Transportation Planning Engineer
- Al Heyn – ODOT Region 2, Senior Bridge Engineer
- Kent Howe – Lane County, Planning Director
- Greg Mott – City of Springfield, Community Planning Manager
- Ann Sanders – ODOT, Project Lead

Resource Team

- Dick Upton – ODOT Project Manager, Bridge Delivery Unit
- Carl Deaton – ODOT Region 2, Designer
- Jamie Damon – Public Involvement Manager, JLA
- Kalin Schmoldt – Public Involvement Coordinator, JLA

Other Attendees

- Douglas Beauchamp – Lane Arts Council
- Megan Banks – LCOG
- John Ferguson – T.Y. Lin
- Larry Fox – OBEC
- Larry Gescher – Slayden
- Linda Riley – OBDP
- Suzanne Roberts – OBDP
- Jyll Smith – ODOT
- Steve Turner – ODOT
- Billie O’Conner – OBDP
- Kevin Parrish – Hamilton
- Nicole Hulk – Masters student, U of O

Handouts (*available at meeting*)

- Agenda
- DRAFT meeting summary
CAG#14/PDT#13

WELCOME AND AGENDA REVIEW

Jamie Damon thanked the group for meeting earlier than usual. She explained that the team has been working to establish a design decisions timeline and also to create more space within the project schedule so as to facilitate a good design discussion. The meeting will include a presentation from Larry Fox on the design decisions that have been made to date and which decisions remain. John Ferguson will address how the design can still evolve.

Chris Henry requested that the opportunities for public involvement be addressed before the design discussion in order to give the group a sense of the remaining design decisions. Larry Fox passed out a list of involvement opportunities in order to provide context for his presentation.

Ann Sanders requested that subsequent meetings not be held on Thursdays if possible. Jamie suggested changing the next PDT meeting from Thursday, Dec. 4 to Friday, Dec. 5.

COMMITTEE BUSINESS

Public Comment – There were no public comments

Summary of Meeting CAG#14/PDT#13 – Jamie proposed postponing approval of the meeting summary to give the committee further opportunity for review.

DESIGN SCHEDULE

Opportunities for involvement – Larry Fox explained the list of possible opportunities for stakeholder involvement. He noted that Dick Upton has been working to gain more time to complete the final design by postponing design decisions that are not required as part of the permitting process. The tight permit schedule is required in order to begin work by next summer and meet the project deadlines. The charge to finish the design by June 2009 has now been pushed back until late 2009 and the Guaranteed Maximum Price (GMP) date has been pushed from fall 2009 to early 2010. The new schedule will allow more engagement with the public on the listed items. Larry explained the sequence of the design decisions:

“Immediate” decisions relate primarily to structural elements, parks, and stormwater remediation that must be identified for permitting purposes. Some elements will remain open to minor changes.

“Early” decisions must be decided by May 2009 and will involve elements such as gateway features and bridge rails. Larry noted that while modern rail designs are more limited than their historical counterparts, the team would conduct a nationwide search for rail options. Bridge security issues will need to be addressed by ODOT and ODOT maintenance. The largest opportunity for group involvement during this phase will include developing the pylons and gateway features as well as the canoe canal underpass.

“Later” decisions pertain largely to permanent improvements that will remain when the contractor leaves the park. Park and interpretive signage will present additional opportunities for involvement. Larry noted that the State Historic Preservation Office (SHPO) is requiring that the small impact to the mill race structure be mitigated by providing interpretive signage about the site. Jamie noted an Oct. 26 article in the Register Guard that raised the question of how the new bridge would interact with the mill race. She said that the article underscores the need to inform the community how the EA will influence the bridge design. Larry explained that later decisions could also include artwork, slope paving, and landscape features such as the suggested mountain bike park. Reconfiguring the pathways will come at the end of the project.

Chris Henry noted the possibility of using a pylon in the middle of the bridge and asked how such a structure would affect the center pier in the river. Larry said that widening the structure with a center pylon would require an immediate decision in order to make the piers large enough to accommodate the pylon. Kent Howe asked about the feasibility of using non-structural arches on

the bridge. Larry said that while pylons were not the only option, adding large arches could prove prohibitively expensive.

Greg Mott cited agreements regarding site restoration had been put in place during the construction of the temporary bridge. He asked whether the planning commission would need to have site restoration plans in place before they would approve the necessary permits and he questioned whether the scheduled permit dates might be inconsistent with later parks decisions. Charlotte Behm said that she was still unclear on the specific proposals. Larry Fox explained the improvements as expressed by Eugene and Willamalane. He said it will be necessary to detour the north bank path to the canoe canal during construction and it will be necessary to improve sight distance for the rerouted path. This may involve a new intersection. The contractor may also need to temporarily move the south shore bike path closer to the railroad during construction. Permanent improvements include changes to the canoe canal, lowering the retaining walls, and improving the intersection at the Frog Pond, possibly using an “oval-about.” Larry explained that he had received support from Springfield and Eugene with regard to seeking two separate greenway permits for the project. The first permit will be sought at the state level and will be based on basic footprint decisions, overestimated impacts, and corresponding mitigation. The second permit will come later and will deal with local land use. The decision to divide the permits will allow more immediate flexibility in the design discussion.

Scott Wylie encouraged that early decisions should be made thoughtfully and inclusively so they do not preclude future opportunities. Larry agreed, noting that Tom Lauer had encouraged the group to develop a comprehensive theme before developing the design. Larry said that he envisioned different groups focusing on different elements of the bridge while being guided by a common master plan that doesn't preclude design opportunities or result in a disjointed design.

UNDERSTANDING THE DESIGN

Dick Upton said that he did not want the group to lose sight of the bridge as a “signature” structure. He explained how he had sought opportunities to extend the design process. He noted the constraints imposed by the four summer construction seasons but said that time has been found to expand the design conversation.

Dick said that the recent miscommunication on the bridge type selection was the result of a process failure and he described the decision making process using a decision flow chart. He described how input from the public will be combined with team feedback and brought to the CAG in order to synthesize recommendations. Those recommendations will go to the PDT and corresponding agency partners and decision makers. The PDT will render a decision that is bound by the constraints of ODOT with regard to scope (elements such as safety, technical requirements, environment, etc.) schedule, and budget. The PDT decision will be a project decision so long as it fits the ODOT constraints. Dick explained that he would be checking the constraints. He added that the bridge type selection was made and tested by these ODOT constraints, but was not brought back to the CAG. Jamie said that discussion of scope, schedule, and budget would be included as a part of all upcoming meetings.

How we got to this point – Larry highlighted the revised design schedule. The 30% design was submitted on Oct. 28. Progress plans and permit applications (PCA) are currently set for Jan. 20. Until then, the team will focus on what is necessary for the permits. Early Work Packages will allow more upfront work before reaching GMP. The first Early Work Package (EWP) is intended to allow

the contractor to build staging areas and work bridges and demolish the existing bridge during the summer of 2009. Foundation design must be completed by Dec. 2008 in order to accommodate the first EWP. The foundation design is also driving the design of the main spans. The second EWP will involve soundwalls and retaining walls, with final plans due in December 2009. GMP is expected in early 2010.

Larry said that OBEC has been focused on the project goals throughout the design process to date. He noted a table from the OBEC A&E proposal which acknowledges the OTIA III, ODOT, and CAG/PDT goals along with OBEC's interpretation of how well each bridge type satisfied each goal. Larry explained that key goals from the CAG and PDT, such as minimizing piers and impacts to river, directly informed the placement of piers in the design. Aesthetics were considered in the selection of a deck-arch bridge, which is considered to be a unique and signature bridge style. The design also considered goals regarding maintenance, minimizing environmental impacts, satisfying local and regional transportation plans, and creating a constructible and cost effective bridge.

Kent Howe suggested that the term "signature bridge" was being diluted from the original intent of the group. Ann Sanders recalled that there had been a decision of not using the term "signature" to describe the bridge. Jamie said that the decision to avoid the term "signature" was because it was subjective and appeared to convey special treatment for this bridge when others in the program were receiving less funding. Larry said that he felt the bridge would be a signature structure and that he was comfortable using the term.

Larry explained that the goals and attributes from the public survey have also influenced the design to date. He noted attributes such as *long life*, *sustainability*, *gateway*, and *long distance views*; as well as descriptors like *graceful* and *unique*.

Elements of the design today – Larry explained that the current bridge design uses cast-in-place concrete which is durable, requires less maintenance, and has a long design life. Pre-cast concrete is used on some sections of the bridge for the sake of construction speed and cost. The final structure will be entirely concrete aside from the railing which could be steel. The arch is reinforced concrete with reinforced and post-tensioned approach spans. The design uses slender members in order to be more efficient, use fewer materials and create a unique look that needs less maintenance. The design minimizes spandrel columns and arch bracing to create a cleaner view under the bridge that gives a sense of openness and does not restrict views. Minimizing the spandrel columns also reduces the number of possible nesting sites.

While the aforementioned elements are largely fixed, they can be modified to include texture, reveals, or chamfer corners. The actual locations of the piers and approach spans were determined as part of the EA and are constrained by the elements below the bridge such as the railroad, wetlands, Franklin Blvd, an EWEB water line, river hydraulics, river safety needs, and minimizing impacts to the mill race structure.

Scott Wylie asked whether coloring was considered minor input. Larry said that colorized concrete would not be used because it would be difficult to get uniform color. Stain can be applied at a later date and is preferable to paint because it does not peel off over time.

Larry showed a graphic with the proposed bridge footings superimposed over the mill race. The footing locations were selected in order to minimize impacts, though some locations do impact the mill race structure.

David Sonnichsen asked whether any legal action to protect the mill race structure was expected. Dick Upton said that judges typically will not grant injunctions if the proper legally defensible process has been followed, and he said that the process has been as legally defensible as possible. Larry Fox said that the SHPO final determination was that there would be no adverse impact and they agreed to the interpretive site as mitigation because the existing site is currently difficult to appreciate as a historic resource. Steve Turner added that the EA included larger footings than are being used in the current design. Chris Henry suggested that defendants of the mill race could appeal the greenway permits, which would take time. Larry agreed that the greenway permits were the most likely point of contention.

Scott Wylie noted that it can be difficult to visualize the mill race structure and suggested that renderings of the impacted site could help people understand and accept the potential changes.

Charlotte Behm asked about access to the mill race. Larry Fox said that the site would be accessible from the bike path. He said that plans to put the path on a bench overlooking the site could facilitate a good location for an interpretive plaza. Jamie noted that decisions regarding the interpretive area could provide a good opportunity to involve the writers of the recent op-ed. Kevin Parrish noted that the article gave the impression that a different bridge type may not have affected the mill race and Larry said that there would have been impacts regardless. Larry noted that part of the agreement with SHPO requires creating documentation of historical information about the site. He noted plans to gather information for public review and to assemble an oral history about the mill race which will happen later in the design.

Larry noted that the contractor will try to build the new foundations for both bridges with the detour bridge still in place, and must accommodate the locations of the detour bridge foundations. The number, location, shape and size of the arch ribs are constrained by the structural geometry, foundations, and gap between the bridges. The shape and size of the arch is dictated by the load being put on it and the acceptable ratio of span to arch size. Larry noted that the final arch will be a series of shorter, curved sections.

The number, size, and location of spandrel columns needed to be balanced between too many, which would be inefficient and costly, and too few, which would adversely affect the design of the arch. The piers have been sized based on the foundations and seismic analysis. The girder arrangement attempts to maintain continuity between the approach spans and the main spans so as to create a unified theme with continuity throughout the structure. The design also attempts to keep the deck overhang and girder depth continuous. Scott Wylie also encouraged continuity in the use of approach and anchorage piers.

Larry showed a variety of engineering drawings reflecting the 30% design. He noted the goal of visually integrating the different bridge types over Franklin Blvd.

Larry showed a rendering of the bridge profile and noted that the spandrel column placement accurately reflected the current design. He noted that double columns were used at the junction of the arch spans to accommodate a joint in the bridge decks and reduce maintenance needs.

Chris Henry asked whether it was still possible to consider portal options at the ends of each arch. Larry said that considerations for non-structural additions in the middle of the bridge would need to be made soon in order to determine deadload. Chris noted that the chamber of commerce view would be more affected by a pylon at the center pier. Jamie said that the possibility will be addressed at the Nov. 20 workshop.

Scott Wylie commented that pylons could be placed at the ends of the entire bridge, not just at the ends of the arches. He also reiterated his suggestion that the bridge be considered as a “realm” with a progression of design elements that precede the bridge. He noted that a gateway can be defined by more than a single point in space.

Bob Kline observed that the structure doesn’t seem capable of supporting longitudinal features and suggested that it would be important to decide on above deck features while structural decisions are still being made. He asked whether non-structural arches were still possible. Larry said that adding non-structural arches can add significant costs, though vertical options still remain. Bob said that elements need to be aesthetically pleasing and should not look tacked-on or distract from the beauty of the bridge. Larry suggested that Eric Gunderson could offer some insights. He noted that Jiri, the bridge designer, also has concerns about how possible additions would fit the bridge. Bob noted that the current profile of the bridge is interesting and aesthetically pleasing and he noted the challenge of figuring out what should or should not be added to the structure.

Ann Sanders asked whether the approach spans were outside of the arches. Larry said that they were, though the approach span on the north side should look like part of the arch.

Charlotte Behm suggested that an extension of the spandrel in the middle of the bridge might not look like an add-on. Larry said that any elements in the middle of the bridge would need to be built out from the bridge behind the barrier. Jamie said that a more thorough conversation would be held on the 20th. Bob Kline suggested that it may be necessary to be pragmatic and consider the views of trees, and mountains as the above deck-elements. He suggested providing renderings of the possible views from the bridge.

Larry showed several architectural studies and noted questions about what the base of each arch could look like. He noted the need to include some kind of debris deflection nosing and described several options for minimizing the size of the bridge pedestals. He said that the design team was conscientious of the appearance of the bridge from below. The deck will be composed of precast rectangular beams and the view through the arches will be open and without cross-bracing.

Several pier designs are possible. Larry noted the joint between the foundations and the arches and said that the design team would try to make the piers and arches look architecturally integrated.

Larry noted that the longer spans over the railroad require adding haunching and depth though the designers want to keep deck overhang the same. He noted possible treatments to address how the haunched span might look. Scott Wylie suggested using low-relief articulation between the haunched section to disengage it from the rest of the structure, noting that the difference in type created visual dissonance.

NEXT STEPS

Jamie noted upcoming events. The next newsletter will come out in November and will include sections on the updated design, the new design schedule, opportunities for involvement, and information about the mill race. A focused design discussion will occur at the Nov. 20 workshop. Jiri Sirasky, the lead bridge designer, will be visiting from the Czech Republic during that time. The workshop will involve the PDT and CAG, as well as representatives from the arts and architecture communities. Jamie offered to work with Douglas Beauchamp and Eric Gunderson to help identify people to participate in a focused conversation on the short term decisions as well as the bridge theme. The workshop has not been scheduled yet, but will likely be around six hours long.

Regular CAG and PDT meetings will resume on Dec. 2 and Dec. 5 (respectively) at their normal times and locations.

EVOLUTION OF THE DESIGN

Theme – John Ferguson explained that the *theme* is a clear definition of what the project should say or what impressions the facility should create. The theme could be a list of objectives or a collection of adjectives that describe the project when it is complete. The results of the community survey emphasized words like *graceful*, *memorable*, *curves* and *unique*. Values, such as *maintainability*, *durability*, and *gateway*, can also form a theme. Themes are helpful in that they keep the elements integrated and avoid a hodgepodge of disconnected elements. John suggested that different parts of the design could be addressed by different groups, all guided by a common vision. Equally valid would be the decision to create something with varied and eclectic components. A theme will also help focus the efforts of the design team as they contend with a tight design schedule. John described several examples of themes from other projects:

Multnomah County assembled a nine person committee to address the design of the Sauvie Island Bridge. Their theme was accompanied by the objective: “Celebrate the island,” and attention to the bridge arch as the focal point of the architecture.

The Sauvie Island committee was presented with a menu of options, but didn’t like the proposed pier shapes, so they modified one. They did not want a St. Johns Bridge style gothic arch in the pier shape, and they did not want the piers to distract from the arch, so they chose a simpler option. The group also had to decide on the type and pattern of cross bracing for the arch itself. The group proposed a pattern that simulated the pattern on a butterfly found on the island. Likewise, a cable pattern that emulates a sun-burst was selected to emphasize the vibrancy of the island and the reliance on the sun for local agriculture. These choices did not compromise the scope, schedule or budget of the project, though John noted that the design did change from a through-arch to a tied-arch because of changing material costs. The committee did not care about the shape of the arch-rib cross section and selected the most economical option. The committee considered a variety of railing options but didn’t like any of them because they felt the railings distracted from the arch. The final railing choice was redesigned to be much simpler. The group selected wheat toned colors that would match the colors of the island. Interpretive signage was installed in the nearby renovated park-and-ride area and the committee was directly involved in creating those displays. Ultimately, the final product was a structure that the committee felt celebrated the island without distracting from the arch shape.

John cited the Bybee Blvd. Bridge in Southeast Portland as another example. The original bridge was a non-continuous structure that used a mix of span types. A group of citizens and architects from

the City sought to counter the spindly nature of the old bridge while blending with the industrial character under the bridge and emulating Conde McCullough's design of the historical structure. The final design was a cast-in-place post-tensioned box girder that used simple bridge columns covered with stone tablets to emulate strength. The group decided to use pylons and lanterns to mimic those on the original bridge. The pylon details were slightly varied because SHPO doesn't permit exact replicas of historic resources. John noted that using the lanterns presents ongoing maintenance issues.

Linda Riley noted that although the pylons were placed at the ends of bridge, the rail continues beyond them. John noted the goal of maintaining continuous arches through the structure and how rails can be integrated with other elements. Again, the group wanted to mimic the historical rail, but was compelled by SHPO to make minor changes to the design. The final cost of the railing was not significantly more than for a typical concrete railing because of the repeated railing pattern. John noted that repetition of a pattern can help lower costs.

The last example design in Elkton, Oregon incorporates four pylons at the bridge corners. The team approached a high school art class to help come up with a pylon design. The students worked with others in the community to help define a theme based on native wildlife and modern and historical commerce from the area. The final pylons will use images of a butterfly, an osprey, an elk, and a salmon. Each pylon will be illustrated like a sawn log with a grape vine in order to capture the historical logging and existing wine industry in the area. The school also created a time capsule that will be cast in one of the columns.

The Nov. 20 workshop will help define the project theme that will drive the remaining process. Larry Fox asked the group to think about theme and to forward ideas to the team in advance of the meeting. He also posed the question of whether an overriding theme is preferable to using a diversity of themes. The workshop will also help characterize future involvement opportunities for the general public. Kalin offered to let the group know when the workshop is scheduled.

David Sonnichsen noted that the issue of preventing people from climbing on the arches still hasn't been addressed. Larry said that such issues would be addressed later on as a matter of bridge security. He noted that the focus to date has been on structural elements. Scott Wylie noted that preventing climbers may have aesthetic implications that could compromise the design. Larry agreed that the team wanted to satisfy the goal without distracting from the structure.

Chris Henry asked about the funding and bridge type of a rumored Willamette River crossing being planned in Portland. John Ferguson said that the proposed bridge would be a transit-only bridge built with FTA funding. It could be an arch, cable-stayed, or a lower profile structure.

CLOSE