City of Palo Alto (ID # 5523)

City Council Staff Report

Report Type: Action Items **Meeting Date: 3/16/2015**

Summary Title: Adobe Creek Bike/Ped Bridge Design Competition

Title: Review of the Adobe Creek Pedestrian & Cyclist Bridge 2014 Design Competition Process and Outcome, and Authorization to Proceed with Contract Negotiations to Develop a Scope of Work and Cost for Basic Design Services Necessary to Complete Joint California Environmental Quality Act/National Environmental Policy Act Review for the Adobe Creek Pedestrian & Cyclist Bridge

From: City Manager

Lead Department: Public Works

Recommendation

Staff recommends that the Council authorize staff to proceed with contract negotiations with the party voted the winner by the design competition jury of the Adobe Creek Pedestrian & Cyclist Bridge 2014 Design Competition. The HNTB Corporation team was the winner of the competition. Contract negotiations will develop a scope of work and cost of the basic design services necessary to complete joint California Environmental Quality Act/National Environmental Policy act review for the Adobe Creek Pedestrian & Cyclist Bridge.

Alternatively, the Council could direct staff to proceed with contract negotiations with one of the other two design teams that participated in the competition, or to proceed with a Request for Proposal process in lieu of selecting any of the teams. The Council could also request additional information about any of the three design team submissions to the competition prior to making its decision.

Executive Summary

This report recommends proceeding with the winner of the design competition, the design team of HNTB Corporation, 64 North, Bionic Landscape Architecture and Ned Kahn, as determined through the Adobe Creek Pedestrian & Cyclist

Bridge 2014 Design Competition, held on December 17, 2014. The Council's directive initiated a five-month competition process, managed by American Institute of Architects California Council (AIACC). AIACC and the City solicited 60 international, national and local design firms, ultimately spurring the creation of three inspirational bridge designs that met the following four guiding design principles set in advance by the City Council:

1. Innovation – inspire and engage the community with a contemporary design, incorporating creativity, originality, functionality, technology and education, that is also identifiable as a landmark in the heart of Silicon Valley;

2. Versatility – achieve a balance between engineering and art, efficiency and beauty, diversity of users and functionality, while conforming to the project's construction budget;

3. Interconnectedness –respect the delicate ecosystem of the Baylands; recognize the integration with nature, connection to the bay trails and importance of viewing nature while accommodating walkers/bikers/commuters, enhancing the human experience and universal accessibility; and

4. Conservation – incorporate state-of-the-art bird-friendly design science and guidelines and develop innovative approaches to management of native and non-native predator species.

The firm selected by Council to further develop a design must negotiate with the City on scope of work and cost to complete and other items, comply with rigorous City and Caltrans review and permitting processes, and produce bid documents by the end of 2016.

Background

The existing Lefkowitz Tunnel is a seasonal Highway 101 undercrossing facility located in South Palo Alto near the confluence of Barron and Adobe Creeks and connects to the San Francisco Bay Trail. This undercrossing is typically accessible approximately six months of the year from April 15 to October 15. The Council initiated and unanimously approved the City of Palo Alto Highway 101

Over/Undercrossing Feasibility study in 2011 identifying the need for a year-round, pedestrian and bicycle bridge crossing of Highway 101 at Adobe Creek. The Council approved the 2012 City of Palo Alto Bicycle and Pedestrian Transportation Plan that identifies this bridge as the preferred alternative for improving connections across Highway 101 from South Palo Alto to the Baylands. The Council directed staff to proceed with a qualifications-based design competition process for the overcrossing at Adobe Creek in June 2013 (staff report #3572). The competition process was implemented the following year after the Council approved a contract amendment with Alta + Planning (Alta) in June 2014 (staff report #4585); that scope of work included the preparation of design guidelines and studies needed to define the parameters of the design competition and to complete the environmental assessment in 2015.

Board, Commission, Council Input prior to the competition

Staff received Architectural Review Board (ARB) and Parks and Recreation Commission (PRC) comments on the guiding principles and design guidelines during study sessions in July and August 2014, respectively. The ARB suggested that the project emphasize the bridge representing the "heart of Silicon Valley" through Palo Alto's leadership and innovative spirit in Silicon Valley, and the ARB and PRC emphasized the connection with the Baylands, as reflected in the first three guiding design principles. The fourth guiding principle, "Conservation", was added by the Council in September 2014.

Staff finalized the competition process in September 2014 (staff report #5050) by:

1. Reducing design concepts to 3 finalists (reducing the competition cost by $20,000).
2. Requiring design firm teams to include a landscape architect, architect and engineer.
3. Requiring design firms to have experience designing and building at least one bridge in the last ten years (reduced from two bridges).
4. Adding a cost estimator to the Technical Advisory Panel (TAP) to evaluate bridge concept and project budget alignment.
5. Adding a structural engineer to the jury to evaluate the constructability of bridge concepts.
6. Creating a 9-member panel (4 ARB and 5 jury members) to evaluate the three finalists and holding deliberations in public.

Competition Process

AIACC's services included establishing competition guidelines and reviewing design criteria, inviting designers to submit proposals, selecting a competition jury and Technical Advisory Panel (TAP), and assisting with the jury's short-listing of three qualified design teams. The teams were then given a stipend to develop conceptual designs for the bridge.

Designs were received from the three design teams on December 5, 2014. On December 8, the TAP (comprised of City staff, local engineers and agency representatives, and a cost estimator) met to evaluate the submitted design concepts. TAP commentary from that meeting is noted in Attachment E.

At the public design competition meeting, held December 17, the jury and ARB received presentations followed by a design team Q & A period. Public comments were heard after the presentations were made. ARB commentary was next, followed by the jury's deliberation. A unanimous third place vote went to Submission B, *The Portage*. A minority vote (1 ARB member and 1 juror) placed Submission C, *the stream-lined bridge design*, first, while a majority vote (3 ARB members and 4 jurors) placed Submission A, *The Confluence*, first. (Please note that while votes of both jurors and ARB members are described, the ARB votes were advisory while the jury vote decided the outcome.)

Competition overview and public outreach

The competition process development, implementation, and community and Boards and Commissions engagement steps taken were, as follows:

ARB & PRC guidance on design guidelines & guiding principles	(Jul-Sep 2014)
Council approval of AIACC scope of work & guiding principles	(Sep 2014)
2014 Design competition instructions, Attachment A	(Oct 2014)
Design Guidelines finalized, Attachment B	(Oct 2014)
Jury reviews 20 submissions/selects 3 finalists, Attachment C	(Nov 3, 2014)
Three designs submitted to City, Attachment D	(Dec 5, 2014)
Three designs posted on YouTube, AIACC and City websites	(Dec 8, 2014)
TAP comment on designs, Attachment E	(Dec 8, 2014)
Jury and ARB public meeting/end competition	(Dec 17, 2014)
Review of designs by:	

Palo Alto Bicycle Advisory Committee	(January 6, 2015)
Planning and Transportation Commission	(January 14, 2015
Architectural Review Board	(January 15, 2015)
Public Art Commission	(January 22,2015)
Parks and Recreation Commission	(January 27,2015)
Public comments on three designs	on-going

Bridge concepts showcased on the City website and the design boards displayed within Palo Alto before and after the competition continue to generate public comment. In January, the jury's ranking, meeting transcripts (Attachment F) and determination of the winner were forwarded to the community and reviewed with the City's boards and commissions. See discussion section of this report and refer to the comments matrix, Attachment G.

Discussion

The staff recommendation that negotiations with HNTB proceed in order to develop a scope of work and cost for basic design services is based on the jury's ranking and the City's boards and commissions review and public commentary as discussed below.

Technical considerations and Jury's ranking of the designs

The jury's professional qualifications and experience, summary of design submissions, and principal comments and findings regarding the designs is summarized by the AIACC, Attachment H.

The jury, considering cost, constructability, maintenance and structure, clearly identified Submission A and Submission C as viable corten steel structures adequately addressing the aforementioned challenges. Submission B, primarily made of wood, did not fare as well given the anticipated higher maintenance costs and wood structure safety concerns. Although the TAP raised questions about cost and constructability, the jury thought all designs could likely meet the $8 million construction budget, including contingency, and a total project budget of $10 million, given this level of conceptual design. The jury recognized the innovative approaches to the structural designs such as minimizing the number and depths of supporting columns, maximizing the deck spans and innovative construction methods that would make it possible to contain costs within the $8 million construction budget.

While the jury and ARB at their joint meeting found that all three submissions followed the design goals and objectives, guiding principles, and other factors consistent with site's environmental considerations, they selected Submission A by HNTB, based on its overall aesthetic and the landmark status they anticipate this bridge could create for Palo Alto citizens and the broader community of Silicon Valley.

Board, commission, public, and public agency input after the competition

The additional board, commission and public commentary received after the competition have provided a wide range of comments (see comments matrix, Attachment G). From a user perspective, Submission A has been designed to give the users an experience of looking up at the arch, artwork and sky before drawing their attention to the Baylands natural setting or Adobe/Barron Creek confluence and the congruent touch-downs of the trail systems. Based on community, board, and commission feedback, this design is an identifiable landmark optimizing artistic expression and the separation of cyclists and pedestrians along their route to work, school and to recreational destinations. See Palo Alto Bicycle Advisory Committee (PABAC), City board and commission meeting notes, Attachment I.

Staff met with Caltrans representatives after the competition to discuss the agency's following comments regarding: (a) a request for refined cost estimates and technical data to support the proposed structural design; (b) concerns regarding the use of corten steel in a saline environment; (c) construction staging and the associated traffic impacts of installation of large steel structures near and over the Highway 101 freeway; and (d) a need for further study of potential visual, lighting and bird-safety impacts related to Submission A's height, cables and "disk" technology proposed as a bird deterrent. These concerns align with comments by the public, TAP, PABAC, City board, commission, Audubon and Acterra representatives, and the Sierra Club Loma Prieta Chapter's Conservation Committee.

Staff's recommendation to proceed with further development of Submission A is based on (a) the jury's decision, (b) comments of the public and board and commission members; and (c) a general consensus on cost, constructability, structure, the guiding design principles and aesthetics. Although staff did not ask board and commission members to vote on the submissions, nearly all did

express their preference, and a strong majority concluded that the HNTB Corporation team's Submission A had best satisfied the competition's guiding design principles. Concerns that have been raised regarding cost, constructability, structure type and material, bird-safety, and lighting would be analyzed further prior to the public circulation of the draft environmental assessment. Additionally, the City's Site and Design process provides another venue to refine the design concept to meet environmental and site constraints. Visible design modifications to either Submission A or Submission C could include significant changes such as the spacing and thickness of cables; additional structural supports, columns and anchoring devises to eliminate and/or minimize vibration and deck movement; and lighting level reduction depending on further study and environmental assessment of the selected design. Staff's recommendation assumes that the Council will concur with the winner of the Design Competition as its preferred design team for further development of a bridge design. Council could alternatively choose one of the other two bridge design teams or could decide not to pursue any of the three. Council can direct staff to initiate a traditional Request for Proposal process if no design team is selected.

Resource Impact

Funding for a $10 million total project cost for the Highway 101 Pedestrian/Bicycle Overpass Project is programmed in Capital Improvement Program project PE-11011 (staff report #5050). Funding for this project consists of $8 million grant for construction from One Bay Area Government (OBAG) and local grants and $2 Million in funding from the Infrastructure Reserve and the Council Infrastructure Plan. It is important to note that the $10 million total project cost is a planning level estimate that is now several years old. The estimate does not include construction cost inflation, the current higher cost bidding environment, or the likely cost impacts of building in the Baylands area. Once the design progresses, an estimate of the construction cost will be refined. If additional funding is needed, staff will review and return to Council with options to reduce cost if desired.

Policy Implications

The project is consistent with the goals, policies and programs of the Comprehensive Plan.

Goal T-3 Facilities, Services and Programs that Encourage and Promote Walking and Bicycling

Goal T-14 Improve pedestrian and bicycle access to and between local destinations, including public facilities, schools, parks, open space, employment districts, shopping centers, and multi-model transit stations.

Environmental Review

The bridge project is subject to the requirements of California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). Bridge alignments within the Baylands have been informally vetted with regulatory agencies and the community, prompting competitors to consider the sensitivity of Baylands in their design submissions. A draft environmental assessment will be circulated during summer 2015 to account for new alignments proposed in design submissions with the final certification of the Environmental Impact Report (EIR) and Environmental Assessment (EA) anticipated during winter 2015.

Next Steps

Upon receiving the Council's direction assuming Council concurs with staff's recommendation, staff will begin negotiations with the HNTB Corporation's design team concerning a scope of work and cost to complete preliminary design work to provide the necessary information and analysis for the joint CEQA/NEPA environmental assessment. Staff will then return to Council within one to two months for approval of the design contract. The initial design contract will develop the design only to the level needed for completion of the environmental assessment (often 20-25% design). Further development of the design will require a future contract amendment that will occur after certification of the environmental assessment.

The current project timeline is as follows:

<u>Tentative Project Timeline</u>

Enter into design contract	(April 2015)
Public Circulation of Draft EIR /EA	(Summer 2015)
Environmental assessment and PTC review	(Summer/Fall 2015)
Circulation of Final EIR/EA/Complete Public Review	(End of 2015/Early 2016)

Completion of 35% preliminary design, estimates and environmental assessment (End of 2015)
Completion of 100% design and construction bid documents (Fall 2016)
Begin Construction (Early 2017)
Complete Construction (Summer 2018)

Attachments:

- **Attachment:** A - Design Competition Instructions (PDF)
- Attachment: B - Design Guidelines (PDF)
- Attachment: C - Pedestrian & Cyclist Bridge Proposals-reduced (PDF)
- Attachment: D - Three Designs Submitted (PDF)
- Attachment: E - TAP commentary for Adobe Creek Bridge(PDF)
- Attachment: F - 12-17-2014 Jury's Design Competition transcript (PDF)
- Attachment: G - Comments Matrix (PDF)
- Attachment: H - AIACC Final report- Adobe Creek Bridge Competition (PDF)
- Attachment: I - Letters from the Public (PDF)