City of Palo Alto City Council Staff Report

(ID # 5050)

Report Type: Action Items Meeting Date: 9/8/2014

Summary Title: Approve Contract with AIA California Council to Manage

Design Competition for the 101 Bike Bridge

Title: Approval of Contract No. C15155728 in the Not-To-Exceed Amount of \$184,790 with American Institute of Architects California Council to Manage the Design Competition for the Pedestrian & Bicycle Overpass at Highway 101 CIP Project PE-11011

From: City Manager

Lead Department: Public Works

Recommendation

Staff recommends that the City Council approve, and authorize the City Manager or his designee to execute, Contract No. C15155728 with the American Institute of Architects California Council (AIACC), (Attachment A) in a not-to-exceed amount of \$184,790 to manage the design competition for the Pedestrian & Bicycle Overpass at Highway 101, CIP Project PE-11011, including \$168,930 for basic services and \$15,860 for additional services.

Executive Summary

This report provides an overview of and recommends proceeding with a by-invitation bridge design competition that could lead to a landmark and iconic bridge representing the identity of Palo Alto. In connecting southern Palo Alto to the Bay trail system with an overcrossing at Adobe Creek, the bridge will be designed for pedestrians and bicyclists. Due to a lack of consensus reached primarily on the design team qualifications and the invitation-based competition discussed with the Architectural Review Board on August 7, staff removed this item from the August 11 Council agenda. This report contains some modifications to the design principles and to the earlier proposal for design firm qualifications in consideration of suggestions from the Architectural Review Board and the Parks and Recreation Commission in July and August.

This is a unique opportunity to showcase the City's commitment to innovation, aesthetics and forward-thinking through the use of a design competition to solicit visionary ideas for a new bridge. Below are three design principles (revisions in bold) that will be used to help orient design competitors in the creation of concepts:

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;

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

Interconnectedness – garner respect for the Baylands environment and ecosystem; 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.

AIACC's role is to manage and facilitate a five-month competition process to select a winning bridge design concept. In coordination with the City, the process includes advertising and marketing to design firms, recruiting a jury, and ranking of up to four design concepts by a jury with community input.

Background

Council directed staff to proceed with an invited design competition process for the overcrossing at Adobe Creek in June 2013 (staff report #3572). Council approved a contract amendment with Alta + Planning (Alta) in June 2014 (staff report #4585) that included a project update, preparation of design guidelines and studies needed to complete the environmental assessment in 2015.

Board and Commission Input

Staff received Architectural Review Board (ARB) comments during study sessions in July and August 2014. The ARB suggested that the project emphasize connection with the Baylands and Palo Alto's leadership and innovative spirit in

Silicon Valley, as reflected in the three guiding design principles provided above.

There is one aspect of staff's recommended competition framework with which the ARB at its July 3rd and August 7th meetings was not in full agreement. The ARB suggested an "idea" or "open" competition as opposed to a qualifications-based competition, while staff, with AIACC's input proposed that design competition teams would need to have experience designing and building two bridges in the past ten years. Staff discussed the proposed requirements for qualifications with the ARB in July and August, and in separate meetings with the chair of the ARB. While an idea competition that does not require actual bridge experience of competitors would broaden the types of concepts submitted, staff is concerned that this type of competition could jeopardize the project schedule and budget. Typically, submittals in an idea competition are from those with little or no design experience. To minimize risk, staff's recommendation is to adopt a somewhat restrictive approach on the bridge design firm qualifications and continue with the recommendation of a qualified-based design competition.

The ARB's intent in suggesting an idea competition is to create more opportunities for local talent and to provide more creative bridge ideas. By minimizing or eliminating the design firm qualifications as much as possible, an idea competition would broaden the potential for identifying hidden talent and the selection of designers, students and/or artists. Soliciting an experienced design firm would likely then be necessary as this firm would need to implement the winning idea. The AIACC and staff have proposed a qualifications—based competition approach to minimize the risk of time delays and cost impacts by requesting concepts by a qualified design firm. Should a firm be selected by Council to advance the design of a winning concept, this qualified project firm must comply with a rigorous City and Caltrans review and permitting process, and production of bid documents by the end of 2016. In response to the concerns raised by the ARB, staff has worked with AIACC and modified the scope of work as follows:

- 1. Adding one more design concept for a total of 4 finalists (adds an additional \$20,000 to the competition cost).
- 2. Requiring a design firm to include a landscape architect, architect and engineer.
- 3. Reducing the design firm requirements to including either an engineer or

- architect with experience of having designed and constructed one bridge within the last ten years, rather than two bridges in ten years.
- 4. Adding a cost estimator to the Technical Advisory Panel to assist in evaluating the bridge concepts for alignment with the project budget.
- 5. Adding a structural engineer to the Technical Advisory Panel to evaluate the bridge concepts for constructability.
- 6. Removing the previously proposed ARB meeting following the jury deliberation, given the entire ARB is part of the panel described below.
- 7. Including the 5-member ARB in a public meeting with the 5-member jury to create a 10-member panel to evaluate the four finalists. These four finalists will present their concepts to the 10-member panel and then the public will be allowed to comment after all four presentations are made similar to a public hearing process. The jury will then deliberate in private and determine the competition winners.

Staff is returning to the ARB on September 4th (after the publication of this staff report) to present the scope modifications that are described above. If ARB members continue to disagree with staff's recommended approach, they may attend the Council meeting to convey their feedback. In this case, staff will provide an "at places" memo to Council summarizing ARB comments from this meeting.

Staff is also pursuing an opportunity to engage Palo Alto youth in developing bridge ideas through the City's Youth Council, makeX: Teen Mobil Makerspace and other stakeholders. Creation of bridge ideas on posters could be a short-term community project. Showcasing these bridge ideas/concepts on the City's website and other areas within the City ahead of the competition may inspire the community and the design firm competitors. In addition, the symbolism of a "bridge" is inherent in the design challenge and opportunity.

Discussion

Staff recommends that the City should enter into a contract with AIACC to manage a five-month competition process, starting this summer. The competition will include selection of a jury with invitations sent out to qualified and reputable Architectural/Engineering (A/E) design firms with bridge design and construction experience. The invitation will also be posted on the City's website and AIACC's so that other qualified firms not directly solicited may participate.

AIACC has managed numerous design awards and competitions that include international, national and local participation. Staff is also finalizing the guiding design principles included in the executive summary for competitors to refer to in developing concepts. The competition process steps are summarized below.

Design Competition Process Overview

AIACC's services include, but are not limited to, establishing competition guidelines and reviewing design criteria, inviting designers to submit proposals, selecting a jury and technical advisory panel, and assisting with the jury's short-listing of four qualified design firms. This was increased to four firms in an effort to provide more opportunity to firms and to create another bridge concept. These firms will be given a stipend to develop conceptual designs for the bridge. The jury's ranking of the designs and selection of a competition winner will be forwarded to the community and City Council.

Step 1: Develop competition work plan, design criteria, outreach and invitations AIACC and the City will develop a work plan that includes steps to complete a five -month design competition. Attachment B contains a revised flowchart of the process for the bridge competition removing the previously proposed ARB meeting after the jury's deliberation. The first step includes developing marketing and promotional materials, engineering and design criteria, and public outreach materials.

The design criteria will include design goals and objectives, guiding principles, and other factors consistent with the environmental assessment. The guidelines (Attachment C) will include a construction budget of \$8 million and a total project budget of \$10 million.

AIACC will develop invitations asking firms to submit their qualifications. This invitation will solicit international, national and local qualified design firms to create design concepts for a landmark bridge. AIACC will solicit a minimum of 20 A/E firms. Qualifications of competitors are revised to include an engineer or an architect team member with experience showing completion of design and construction of one bridge over a 10-year period. This minimum qualification provides assurance that the design firm can develop a bridge concept into final design and construction. Reducing qualifications of a design team member from

completing two bridge projects to completing one bridge in ten years allows more design teams to submit their qualifications.

Public outreach during this initial step will include advertising the competition through AIACC, Bay Area AIA chapters and City websites, use of social media and press releases.

Step 2: Jury and Technical Advisory Panel

The five-member jury will be comprised of local or regional architects selected by AIACC that are recognized in the industry with reputations having the potential to attract design firms to submit proposals. The composition of the jury will be multi-disciplinary and multi-ethnic to create diversity in opinions and expertise. The Technical Advisory Panel (TAP) comprised of City staff, local bridge engineers, architects, cost estimator and local agency representatives will be selected by staff and the AIACC to provide a third party evaluation of the design concepts.

Step 3: Jury review of proposals, request for conceptual designs

AIACC and the City will receive proposals from interested firms and will provide these to the jury for its review and consideration. The receipt of proposals will be managed by AIACC in coordination with the City. Based on the review of the proposals, the jury will select four firms. AIACC will issue a stipend of \$20,000 to each selected firm to develop a total of four conceptual designs.

Step 4: Design concepts and public outreach

Four concepts will be submitted to AIACC and the City and posted on YouTube, AIACC, and City websites. Using social media will allow for public feedback prior to the design presentations by the firms. The TAP will provide commentary on how the design complies with the design criteria including how the design relates to the planning level construction costs and constructability given the site constraints. This commentary for each design along with public comments will be provided to the jury, board members and commissioners prior to the design firm presentations before the joint jury/board at a public meeting.

Step 5: Jury's selection of winning design

The design firms will present their visions and concepts in a joint jury/ARB public meeting. Presentations to the jury and ARB members will be followed with a question-and-answer period of the participants only. The public will be allowed

to comment after all the presentations are made. The jury will then deliberate in private and provide a public announcement of its ranking of the designs and the winner of the design competition. The jury's determination will be followed with media, press releases and display of the bridge concepts shown at libraries and other community locations. This will end the competition process.

Step 6: Council selection of concept

The winning design concept and design team may or may not be approved by the Council depending on cost and/or other factors as determined during the outreach, design review and contract negotiation process. Staff will provide the jury's rationale for the ranking and present this to the Council. Staff will request a recommendation from the Council on a preferred design and possible ranking of designs. The goal of the Council will be to select a design consistent with the site constraints, visual context and budget with community support. Although the preferred outcome would be for the Council to agree with the jury's determination of the design competition winner, Council will have the option of selecting any of the four designers, or of deciding that the City should move forward with a solicitation for design services independent of the design competition results.

Step 7: Award and design of preferred concept

The preferred concept design will be developed further in accordance with the environmental assessment conditions and other constraints as determined in this preliminary design phase of the project. The design documents will comply with the Santa Clara Valley Water District and Caltrans requirements and the City's Site and Design Review process. As a requirement of the design competition, the design team must follow the design guidelines and the City's professional services agreement template should a design team be selected to advance the design of a concept. This initiates the step to complete the design and construction documents for the project.

Resource Impact

The budget for the competition process, including stipends to design firms to develop bridge concepts, is \$184,790 and is funded through Capital Improvement Program project PE-11011.

Policy Implications

Staff recommends proceeding with an invited design competition utilizing AIACC to assist staff in managing the steps of the competition process noted below contracting through an Exemption from Competitive Solicitation procedure. The City has applied an exemption (PAMC 2.30.360(b)(2)) that addresses situations where soliciting would be impractical due to circumstances that would result in a substantial economic loss to the City or result in the interference with a required City operation.

Environmental Review

The bridge project is subject to the requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Alignment 1 has been informally vetted with the regulatory agencies and the community and will be the focus for the competition to simplify design submissions. A draft environmental assessment is planned to be in circulation next spring and the final Environmental Impact Report (EIR) and Environmental Assessment (EA) is anticipated to be certified in winter 2015 comparing various alignments.

Next Steps

Following the initiation and completion of the design competition, the next step will be Council selection of the design team that best meets the project schedule, budget, site constraints and other goals established. Upon Council approval, the selected A/E firm will then enter into a design services agreement with the City to begin design of the concept starting early next year.

Tentative Project Timeline:

ARB guidance on design guidelines & guiding principles	(July/August/Sept. 2014)
Council to approve AIACC scope of work	(September 2014)
Begin design competition/invitations to design firms	(October/November 2014)
Joint jury, board and commission public meeting	(December 2014)
Jury decision/end competition	(December 2014)
Complete design competition process	(Late 2014)
Enter into design contract	(Early 2015)
Public Circulation of Draft EIR /EA	(Spring 2015)
Environmental assessment and PTC review	(Summer 2015)
Circulation of Final EIR/EA/Complete Public Review	(End of 2015)
Completion of 35% preliminary design, estimates and e	environmental
assessment	(End of 2015)

Completion of 100% design and construction bid documents
Begin Construction

(Fall 2016)
(Early 2017)
Complete Construction

(Summer 2018)

Attachments:

• A - C15155728_AIACC Professional Services Contract_finalRev1 (PDF)

• B - AIACA Flowchart (PDF)

• C - Palo Alto POC Draft Design Guidelines V13 compressed revE (DOC)

CITY OF PALO ALTO CONTRACT NO. C15155728

AGREEMENT BETWEEN THE CITY OF PALO ALTO AND THE AMERICAN INSTITUTE OF ARCHITECTS, CALIFORNIA COUNCIL (AIACC) FOR PROFESSIONAL SERVICES

This Agreement is entered into on this 9th day of September, 2014, ("Agreement") by and between the CITY OF PALO ALTO, a California chartered municipal corporation ("CITY"), and **The American Institute of Architects, California Council (AIACC)**, a not for profit organization, located at 1303 J Street, Suite 200, Sacramento, CA 95841 ("CONSULTANT").

RECITALS

The following recitals are a substantive portion of this Agreement.

- A. CITY intends to build a bicycle and pedestrian bridge over Highway 101 ("Project") and desires to engage a consultant to assist and manage the design competition in connection with the Project ("Services").
- B. CONSULTANT has represented that it has the necessary professional expertise, qualifications, and capability, and all required licenses and/or certifications to provide the Services.
- C. CITY in reliance on these representations desires to engage CONSULTANT to provide the Services as more fully described in Exhibit "A", attached to and made a part of this Agreement.

NOW, THEREFORE, in consideration of the recitals, covenants, terms, and conditions, in this Agreement, the parties agree:

AGREEMENT

SECTION 1. SCOPE OF SERVICES. CONSULTANT shall perform the Services described in Exhibit "A" in accordance with the terms and conditions contained in this Agreement. The performance of all Services shall be to the reasonable satisfaction of CITY.

	Optional On-Ca	all Provision	(This	provision	only	applies	if	checked	and	only	applies	to	on-
cal	l agreements.)												

Services will be authorized by the City, as needed, with a Task Order assigned and approved by the City's Project Manager. Each Task Order shall be in substantially the same form as Exhibit A-1. Each Task Order shall designate a City Project Manager and shall contain a specific scope of work, a specific schedule of performance and a specific compensation amount. The total price of all Task Orders issued under this Agreement shall not exceed the amount of Compensation set forth in Section 4 of this Agreement. CONSULTANT shall only be compensated for work performed under an authorized Task Order and the City may elect, but is not required, to

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Professional Services Rev. Nov. 1, 2011 authorize work up to the maximum compensation amount set forth in Section 4.

SECTION 2. TERM.

The term of this Agreement shall be from the date of its full execution through completion of the services in accordance with the Schedule of Performance attached as Exhibit "B" unless terminated earlier pursuant to Section 19 of this Agreement.

SECTION 3. SCHEDULE OF PERFORMANCE. Time is of the essence in the performance of Services under this Agreement. CONSULTANT shall complete the Services within the term of this Agreement and in accordance with the schedule set forth in Exhibit "B", attached to and made a part of this Agreement. Any Services for which times for performance are not specified in this Agreement shall be commenced and completed by CONSULTANT in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the CONSULTANT.

SECTION 4. NOT TO EXCEED COMPENSATION. The compensation to be paid to CONSULTANT for performance of the Services described in Exhibit "A", including both payment for professional services and reimbursable expenses, shall not exceed One Hundred Sixty Eight Thousand Nine Hundred Thirty Dollars (\$168,930). In the event Additional Services are authorized, the total compensation for services and reimbursable expenses shall not exceed One Hundred Eighty-Four Thousand Seven Hundred and Ninety Dollars (\$184,790). The applicable rates and schedule of payment are set out in Exhibit "C", entitled "BUDGET SCHEDULE," which is attached to and made a part of this Agreement.

Additional Services, if any, shall be authorized in accordance with and subject to the provisions of Exhibit "C-1". CONSULTANT shall not receive any compensation for Additional Services performed without the prior written authorization of CITY. Additional Services shall mean any work that is determined by CITY to be necessary for the proper completion of the Project, but which is not included within the Scope of Services described in Exhibit "A".

SECTION 5. INVOICES. In order to request payment, CONSULTANT shall submit monthly invoices to the CITY describing the services performed and the applicable charges (set forth in Exhibit "C"). The information in CONSULTANT's payment requests shall be subject to verification by CITY. CONSULTANT shall send all invoices to the City's project manager at the address specified in Section 13 below. The City will generally process and pay invoices within thirty (30) days of receipt.

SECTION 6. OUALIFICATIONS/STANDARD OF CARE. All of the Services shall be performed by CONSULTANT or under CONSULTANT's supervision. CONSULTANT represents that it possesses the professional and technical personnel necessary to perform the Services required by this Agreement and that the personnel have sufficient skill and experience to perform the Services assigned to them. CONSULTANT represents that it, its employees and subconsultants, if permitted, have and shall maintain during the term of this Agreement all licenses, permits, qualifications, insurance and approvals of whatever nature that are legally required to perform the Services.

All of the services to be furnished by CONSULTANT under this agreement shall meet the professional standard and quality that prevail among professionals in the same discipline and of similar knowledge and skill engaged in related work throughout California under the same or similar circumstances.

SECTION 7. COMPLIANCE WITH LAWS. CONSULTANT shall keep itself informed of and in compliance with all federal, state and local laws, ordinances, regulations, and orders that may affect in any manner the Project or the performance of the Services or those engaged to perform Services under this Agreement. CONSULTANT shall procure all permits and licenses, pay all charges and fees, and give all notices required by law in the performance of the Services.

<u>SECTION 8. ERRORS/OMISSIONS.</u> CONSULTANT shall correct, at no cost to CITY, any and all errors, omissions, or ambiguities in the work product submitted to CITY, provided CITY gives notice to CONSULTANT.

SECTION 9. COST ESTIMATES. If this Agreement pertains to the design of a public works project, CONSULTANT shall submit estimates of probable construction costs at each phase of design submittal. If the total estimated construction cost at any submittal exceeds ten percent (10%) of the CITY's stated construction budget, CONSULTANT shall make recommendations to the CITY for aligning the PROJECT design with the budget, incorporate CITY approved recommendations, and revise the design to meet the Project budget, at no additional cost to CITY.

SECTION 10. INDEPENDENT CONTRACTOR. It is understood and agreed that in performing the Services under this Agreement CONSULTANT, and any person employed by or contracted with CONSULTANT to furnish labor and/or materials under this Agreement, shall act as and be an independent contractor and not an agent or employee of the CITY.

SECTION 11. ASSIGNMENT. The parties agree that the expertise and experience of CONSULTANT are material considerations for this Agreement. CONSULTANT shall not assign or transfer any interest in this Agreement nor the performance of any of CONSULTANT's obligations hereunder without the prior written consent of the city manager. Consent to one assignment will not be deemed to be consent to any subsequent assignment. Any assignment made without the approval of the city manager will be void.

SECTION 12. SUBCONTRACTING.

□Option A: No Subcontractor: CONSULTANT shall not subcontract any portion of the work to be performed under this Agreement without the prior written authorization of the city manager or designee.

⊙Option B: Subcontracts Authorized: Notwithstanding Section 11 above, CITY agrees that subconsultants may be used to complete the Services. The subconsultants authorized by CITY to perform work on this Project are:

- Project Manager Margie O'Driscoll
- Website designer (TBD)
- Architects to serve on the jury (TBD)

- Professionals to serve on the Technical Advisory Committee (TAP) (TBD)
- A/E teams (competition finalists TBD)

CONSULTANT shall be responsible for directing the work of any subconsultants and for any compensation due to subconsultants. CITY assumes no responsibility whatsoever concerning compensation. CONSULTANT shall be fully responsible to CITY for all acts and omissions of a subconsultant. CONSULTANT shall change or add subconsultants only with the prior approval of the city manager or his designee.

SECTION 13. PROJECT MANAGEMENT. CONSULTANT will assign Nicki Dennis Stephens as the AIACC Senior Director to have supervisory responsibility for the performance, progress, and execution of the Services and represent CONSULTANT during the day-to-day work on the Project. If circumstances cause the substitution of the project director, project coordinator, or any other key personnel for any reason, the appointment of a substitute project director and the assignment of any key new or replacement personnel will be subject to the prior written approval of the CITY's project manager. CONSULTANT, at CITY's request, shall promptly remove personnel who CITY finds do not perform the Services in an acceptable manner, are uncooperative, or present a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property.

The City's project manager is Elizabeth Ames, Public Works Department, Engineering Division, 250 Hamilton Ave., Palo Alto, CA 94303, Telephone: 650-329-2502. The project manager will be CONSULTANT's point of contact with respect to performance, progress and execution of the Services. The CITY may designate an alternate project manager from time to time.

SECTION 14. OWNERSHIP OF MATERIALS. Upon delivery, all work product, including without limitation, all writings, drawings, plans, reports, specifications, calculations, documents, other materials and copyright interests developed under this Agreement shall be and remain the exclusive property of CITY without restriction or limitation upon their use. CONSULTANT agrees that all copyrights which arise from creation of the work pursuant to this Agreement shall be vested in CITY, and CONSULTANT waives and relinquishes all claims to copyright or other intellectual property rights in favor of the CITY. Neither CONSULTANT nor its contractors, if any, shall make any of such materials available to any individual or organization without the prior written approval of the City Manager or designee. CONSULTANT makes no representation of the suitability of the work product for use in or application to circumstances not contemplated by the scope of work. CITY will indemnify and hold CONSULTANT harmless from future use or misuse of work product.

SECTION 15. AUDITS. CONSULTANT will permit CITY to audit, at any reasonable time during the term of this Agreement and for three (3) years thereafter, CONSULTANT's records pertaining to matters covered by this Agreement. CONSULTANT further agrees to maintain and retain such records for at least three (3) years after the expiration or earlier termination of this Agreement.

SECTION 16. INDEMNITY.

Option A applies to the following design professionals pursuant to Civil Code Section

: architects; landscape architects; registered professional engineers and licensed professional land surveyors.] 16.1. To the fullest extent permitted by law, CONSULTANT shall indemnify and hold CITY harmless from and against damages, liabilities, losses, costs and expenses, including the reimbursement of reasonable attorneys' fees, on account of damages to property or persons, including injuries or death, to the extent caused by CONSULTANT's negligent acts, errors or omissions arising out of or in connection with CONSULTANT's services under this Agreement. CONSULTANT shall not have a duty to provide CITY with an upfront defense against unproven allegations or claims arising out of the subject matter of this or any other indemnification clause.

☑[Option B applies to any consultant who does not qualify as a design professional as defined in Civil Code Section 2782.8.] 16.1. To the fullest extent permitted by law, CONSULTANT shall protect, indemnify, but not defend and hold harmless CITY, its Council members, officers, employees and agents (each an "Indemnified Party") from and against any and all demands, claims, or liability of any nature, including death or injury to any person, property damage or any other loss, including all costs and expenses of whatever nature including attorneys fees, reasonable experts fees, court costs and disbursements ("Claims to the extent determined to have been caused by court of competent jurisdiction for any negligent or willful and wrongful performance or nonperformance by CONSULTANT, its officers, employees, agents or contractors under this Agreement.

- 16.2. Notwithstanding the above, nothing in this Section 16 shall be construed to require CONSULTANT to indemnify an Indemnified Party from Claims arising from the negligence or willful misconduct of an Indemnified Party.
- 16.3. The acceptance of CONSULTANT's services and duties by CITY shall not operate as a waiver of the right of indemnification. The provisions of this Section 16 shall survive the expiration or early termination of this Agreement.

SECTION 17. WAIVERS. The waiver by either party of any breach or violation of any covenant, term, condition or provision of this Agreement, or of the provisions of any ordinance or law, will not be deemed to be a waiver of any other term, covenant, condition, provisions, ordinance or law, or of any subsequent breach or violation of the same or of any other term, covenant, condition, provision, ordinance or law.

SECTION 18. INSURANCE.

- 18.1. CONSULTANT shall obtain and maintain, in full force and effect during the term of this Agreement, the insurance coverage described in Exhibit "D". CONSULTANT and its subconsultants if any, shall obtain a policy endorsement naming CITY as an additional insured under any general liability or automobile policy or policies.
- 18.2. All insurance coverage required hereunder shall be provided through carriers with AM <u>Best's Key Rating Guide</u> ratings of A-:VII or higher which are licensed or authorized to transact insurance business in the State of California. Any and all subconsultants of CONSULTANT retained to perform Services under this Agreement will obtain and maintain, in full force and effect during the term of this Agreement, identical insurance coverage, naming

CITY as an additional insured under such policies as required above.

- 18.3. Certificates evidencing such insurance shall be filed with CITY concurrently with the execution of this Agreement. The certificates will be subject to the approval of CITY's Risk Manager and will contain an endorsement stating that the insurance is primary coverage and will not be canceled, or materially reduced in coverage or limits, by the insurer except after filing with the Purchasing Manager thirty (30) days' prior written notice of the cancellation or modification. If the insurer cancels or modifies the insurance and provides less than thirty (30) days' notice to CONSULTANT, CONSULTANT shall provide the Purchasing Manager written notice of the cancellation or modification within two (2) business days of the CONSULTANT's receipt of such notice. CONSULTANT shall be responsible for ensuring that current certificates evidencing the insurance are provided to CITY's Purchasing Manager during the entire term of this Agreement.
- 18.4. The procuring of such required policy or policies of insurance will not be construed to limit CONSULTANT's liability hereunder nor to fulfill the indemnification provisions of this Agreement. Notwithstanding the policy or policies of insurance, CONSULTANT will be obligated for the full and total amount of any damage, injury, or loss caused by or directly arising as a result of the Services performed under this Agreement, including such damage, injury, or loss arising after the Agreement is terminated or the term has expired.

SECTION 19. TERMINATION OR SUSPENSION OF AGREEMENT OR SERVICES.

- 19.1. The City Manager may suspend the performance of the Services, in whole or in part, or terminate this Agreement, with or without cause, by giving ten (10) days prior written notice thereof to CONSULTANT. Upon receipt of such notice, CONSULTANT will immediately discontinue its performance of the Services.
- 19.2. CONSULTANT may terminate this Agreement or suspend its performance of the Services by giving thirty (30) days prior written notice thereof to CITY, but only in the event of a substantial failure of performance by CITY.
- 19.3. Upon such suspension or termination, CONSULTANT shall deliver to the City Manager immediately any and all copies of studies, sketches, drawings, computations, and other data, whether or not completed, prepared by CONSULTANT or its contractors, if any, or given to CONSULTANT or its contractors, if any, in connection with this Agreement. Such materials will become the property of CITY.
- 19.4. Upon such suspension or termination by CITY, CONSULTANT will be paid for the Services rendered or materials delivered to CITY in accordance with the scope of services on or before the effective date (i.e., 10 days after giving notice) of suspension or termination; provided, however, if this Agreement is suspended or terminated on account of a default by CONSULTANT, CITY will be obligated to compensate CONSULTANT only for that portion of CONSULTANT's services which are of direct and immediate benefit to CITY as such determination may be made by the City Manager acting in the reasonable exercise of his/her discretion. The following Sections will survive any expiration or termination of this Agreement:

14, 15, 16, 19.4, 20, and 25.

19.5. No payment, partial payment, acceptance, or partial acceptance by CITY will operate as a waiver on the part of CITY of any of its rights under this Agreement.

SECTION 20. NOTICES.

All notices hereunder will be given in writing and mailed, postage prepaid, by certified mail, addressed as follows:

To CITY: Office of the City Clerk

City of Palo Alto Post Office Box 10250 Palo Alto, CA 94303

With a copy to the Purchasing Manager

To CONSULTANT: Attention of the project director

at the address of CONSULTANT recited above

SECTION 21. CONFLICT OF INTEREST.

- 21.1. In accepting this Agreement, CONSULTANT covenants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the Services.
- 21.2. CONSULTANT further covenants that, in the performance of this Agreement, it will not employ subconsultants, contractors or persons having such an interest. CONSULTANT certifies that no person who has or will have any financial interest under this Agreement is an officer or employee of CITY; this provision will be interpreted in accordance with the applicable provisions of the Palo Alto Municipal Code and the Government Code of the State of California.
- 21.3. If the Project Manager determines that CONSULTANT is a "Consultant" as that term is defined by the Regulations of the Fair Political Practices Commission, CONSULTANT shall be required and agrees to file the appropriate financial disclosure documents required by the Palo Alto Municipal Code and the Political Reform Act.

SECTION 22. NONDISCRIMINATION. As set forth in Palo Alto Municipal Code section 2.30.510, CONSULTANT certifies that in the performance of this Agreement, it shall not discriminate in the employment of any person because of the race, skin color, gender, age, religion, disability, national origin, ancestry, sexual orientation, housing status, marital status, familial status, weight or height of such person. CONSULTANT acknowledges that it has read and understands the provisions of Section 2.30.510 of the Palo Alto Municipal Code relating to Nondiscrimination Requirements and the penalties for violation thereof, and agrees to meet all requirements of Section 2.30.510 pertaining to nondiscrimination in employment.

SECTION 23. ENVIRONMENTALLY PREFERRED PURCHASING AND ZERO WASTE REOUIREMENTS. As related to this agreement, CONSULTANT shall comply with the City's Environmentally Preferred Purchasing policies which are available at the City's Purchasing Department, incorporated by reference and may be amended from time to time. CONSULTANT shall comply with waste reduction, reuse, recycling and disposal requirements of the City's Zero Waste Program. Zero Waste best practices include first minimizing and reducing waste; second, reusing waste and third, recycling or composting waste. In particular, Consultant shall comply with the following zero waste requirements:

- All printed materials provided by Consultant to City generated from a personal computer and printer including but not limited to, proposals, quotes, invoices, reports, and public education materials, shall be double-sided and printed on a minimum of 30% or greater post-consumer content paper, unless otherwise approved by the City's Project Manager. Any submitted materials printed by a professional printing company shall be a minimum of 30% or greater post-consumer material and printed with vegetable based inks.
- Goods purchased by Consultant on behalf of the City shall be purchased in accordance with the City's Environmental Purchasing Policy including but not limited to Extended Producer Responsibility requirements for products and packaging. A copy of this policy is on file at the Purchasing Office.
- Reusable/returnable pallets shall be taken back by the Consultant, at no additional cost to the City, for reuse or recycling. Consultant shall provide documentation from the facility accepting the pallets to verify that pallets are not being disposed.

SECTION 24. NON-APPROPRIATION

24.1. This Agreement is subject to the fiscal provisions of the Charter of the City of Palo Alto and the Palo Alto Municipal Code. This Agreement will terminate without any penalty (a) at the end of any fiscal year in the event that funds are not appropriated for the following fiscal year, or (b) at any time within a fiscal year in the event that funds are only appropriated for a portion of the fiscal year and funds for this Agreement are no longer available. This section shall take precedence in the event of a conflict with any other covenant, term, condition, or provision of this Agreement.

SECTION 25. MISCELLANEOUS PROVISIONS.

- 25.1. This Agreement will be governed by the laws of the State of California.
- 25.2. In the event that an action is brought, the parties agree that trial of such action will be vested exclusively in the state courts of California in the County of Santa Clara, State of California.
- 25.3. This document represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, and contracts, either written or oral. This document may be amended only by a written instrument, which is signed by the parties.
- 25.4. The covenants, terms, conditions and provisions of this Agreement will apply to, and will bind, the heirs, successors, executors, administrators, assignees, and consultants of the parties.

Professional Services Rev. Nov. 1, 2011

- 25.5. If a court of competent jurisdiction finds or rules that any provision of this Agreement or any amendment thereto is void or unenforceable, the unaffected provisions of this Agreement and any amendments thereto will remain in full force and effect.
- 25.6. All exhibits referred to in this Agreement and any addenda, appendices, attachments, and schedules to this Agreement which, from time to time, may be referred to in any duly executed amendment hereto are by such reference incorporated in this Agreement and will be deemed to be a part of this Agreement.
- 25.7 If, pursuant to this contract with CONSULTANT, City shares with CONSULTANT personal information as defined in California Civil Code section 1798.81.5(d) about a California resident ("Personal Information"), CONSULTANT shall maintain reasonable and appropriate security procedures to protect that Personal Information, and shall inform City immediately upon learning that there has been a breach in the security of the system or in the security of the Personal Information. CONSULTANT shall not use Personal Information for direct marketing purposes without City's express written consent.
 - 25.8 All unchecked boxes do not apply to this agreement.

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25.9 The individuals executing this Agreement represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.

25.10 This Agreement may be signed in multiple counterparts, which shall, when executed by all the parties, constitute a single binding agreement

IN WITNESS WHEREOF, the parties hereto have by their duly authorized representatives executed this Agreement on the date first above written.

CITY OF PALO ALTO **CONSULTANT**

AIA California Council

DocuSigned by:

Paul W. Welch, Jr.

9F6B26500B5540D...

Name: Paul W. Welch, Jr.

Title: EVP

APPROVED AS TO FORM:

City Manager

Senior Asst. City Attorney

Attachments:

EXHIBIT "A": SCOPE OF WORK

EXHIBIT "B": SCHEDULE OF PERFORMANCE

EXHIBIT "C": **COMPENSATION** EXHIBIT "C-1":

SCHEDULE OF RATES

EXHIBIT "D": INSURANCE REQUIREMENT

EXHIBIT A

SCOPE OF SERVICES

DESCRIPTION OF PROJECT

The City of Palo Alto (City), in cooperation with the California Department of Transportation (Caltrans) District 4, is actively planning to construct a bicycle and pedestrian overcrossing (POC) of U.S. Highway 101, in the City of Palo Alto. The proposed project ("the Project") is located between the Oregon Expressway and San Antonio Road overpasses of Highway 101, in close proximity to Adobe Creek, and will replace the existing seasonal Benjamin Lefkowitz underpass. The City is expecting the design competition will provide a wider range of bridge options that could lead to design and construction of a "landmark" bridge for Palo Alto. The Consultant, American Institute of Architects California Council (AIACC), shall conduct an invited design competition, marketing design teams at the local, national and international level. Development of a unique bridge design shall meet or exceed all applicable policies and standards, and adhere to the identified project environmental footprint, in order to facilitate a smooth approval and permitting process should the City agree to enter into a design contract with one of the chosen design teams.

OBJECTIVE

AIACC shall conduct an invited design competition on behalf of the City for the design of a new pedestrian/bicycle bridge. AIACC shall develop a competition work plan, marketing and promotion materials and website advertising the project with all bay area AIA chapters. AIACC shall invite a minimum of 20 Architectural/Engineering (A/E) design teams to provide proposals for the project. The Consultant shall post all qualified proposals to the AIACC, local AIA chapters and the City website. Public comments received from these websites shall be made available to the jury and the City.

AIACC shall work with the City to identify and recruit jurors and the Technical Advisory Panel (TAP). The jury shall review all qualified proposals and narrow down the list to four design teams. AIACC shall provide a \$20,000 stipend to each of the four selected A/E design teams on behalf of the City to develop design concepts. The TAP shall review the four concepts and provide commentary for each proposal. The City shall host a public meeting to review four concepts through presentations by the four finalists. The jury shall rank the four design concepts after the meeting and provide their analysis and rationale for these rankings. The City's 2010 planning cost estimate for design and construction is \$10M. The competition process shall yield four concepts that meet the project vision, guidelines, and estimates. Consultant shall establish a work plan to complete the process in approximately four months.

Consultant shall:

- Provide technical and administrative expertise to manage an invited design competition
- Work with City staff to develop design criteria addressing qualifications, budget, program, site constraints, design type and vision

- Recommend and recruit potential jurists
- Issue invitations to a minimum select group of twenty A/E design teams, recognized as having the necessary experience to purse this type of project
- Outreach to local architectural and engineering design teams to participate in the competition process
- Conduct jury meetings to review proposals from all qualified design teams and develop a short list up to four design teams which will create more detailed design concepts for further consideration by the jury
- Work with City to provide opportunities for public comment
- Recruit a technical advisory panel consisting of City and local agency staff, local architects and engineers (Structural Engineer is preferred) and cost estimators with specific experience to provide commentary on the viability, cost and constructability of the four concepts and issue recommendations to the jury
- Provide a commentary and planning estimate to reaffirm the four concepts are buildable within the project budget
- Provide the City Council with final jury recommendations
- Develop and distribute media release

Consultant scope of services shall consist of the following tasks:

Task 1 – Project Initiation and Competition Development

The Consultant shall work with City staff to:

- Develop and organize a competition work plan
- Work with City staff to develop design guidelines and design teams qualifications
- Identify a minimum of 20 (A/E) design teams to invite to competition
- Collect proposals from other design teams not invited but that may be qualified
- Provide a competition brief to the Project Manager
- Attend one City Council meeting to outline competition process

Task 2 – Marketing and Promotion

The Consultant shall work with City staff to:

- Develop public outreach, media and marketing plan
- Design invitation and website graphics
- Draft text for AIACC, all bay area AIA chapters, and City websites
- Create webpage on aiacc.org and post information on website including submittal criteria
- Attend one meeting with City staff to present the marketing plan and promotion

Task 3 – Invitations to Architectural/Engineering Firms

The Consultant shall:

- Develop list of deisgn teams
- Coordinate printing and mailing invitations

- Solicit design teams to submit qualifications
- Answering any questions from potential design teams
- Provide updates to the Project Manager

Task 4 – Selection of Jurors and Technical Advisory Panel (TAP)

The Consultant shall:

- Work with City to identify and recruit jurors and panelists
- Provide project materials and answering questions to prospect jurors and panelists
- Provide a honorarium for jury and TAP

Task 5 – Submittal Development

The Consultant shall:

- Accept statements of interest by design teams
- Notify teams to submit proposals
- Work with design teams to finalize projects
- Review proposals
- Convene jurors and panelists to review design teams submittals and select four finalists
- Contract with design teams to develop concepts and provide stipends
- Provide updates to the Project Manager

Task 6 – Design Concepts Review and Select

The Consultant shall:

- Gather design concepts for City website
- Post design concepts on AIACC websites
- Attend one community meeting to present design concepts and gather input from the community
- Coordinate with TAP to provide commentary for each of the four finalists
- Convene a public meeting with the jury and the City's Architectural Review Board for presentations by four finalists
- Convene a private meeting with Jury to deliberate and formulate recommendations to the City Council
- Present jury findings and ranking of finalists to City Council
- Develop press release
- Distribute press release to the City and other media
- Prepare final report to the City

Reimbursable

The administrative, overhead, secretarial time or secretarial overtime, word processing, photocopying, in-house printing, and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. City shall reimburse

Consultant for the following reimbursable expenses at cost. Expenses for which Consultant shall be reimbursed are:

- Travel outside the San Francisco Bay area, including transportation and meals, will be reimbursed at actual cost subject to the City of Palo Alto's policy for reimbursement of travel and meal expenses for City of Palo Alto employees
- Long distance telephone service charges, cellular phone service charges, facsimile transmission and postage charges are reimbursable at actual cost. All requests for payment of expenses shall be accompanied by appropriate backup information
- Jury and Technical Advisory Panel meeting expenses, including meals, refreshments, travel and lodging
- Printing and distribution of competition invitations
- Any expense anticipated to be more than \$500 shall be approved in advance by the CITY's project manager

Additional Services

The Consultant shall provide additional services only by advanced, written authorization from the Project Manager. The Consultant, at the City's Project Manager's request, shall submit a detailed written proposal including a description of the scope of services, schedule, level of effort, and Consultant's proposed maximum compensation, including reimbursable expense, for such services based on the rates set forth in Exhibit C-1. The additional services scope, schedule and maximum compensation shall be negotiated and agreed to in writing by the City's Project Manager and Consultant prior to commencement of the services. Payment for additional services is subject to all requirements and restrictions in this Agreement.

Project Timeline

Consultant shall establish a work plan to complete the process in approximately four months from the date of the Notice of Proceed is issued.

Information Provided by the City

The Public Works Department, Engineering Division has the following reference documents available upon request:

- 1) Vicinity map
- 2) Bridge Alignment and Adobe Creek Reach Trail 15% design
- 3) Draft Design Guidelines
- 4) Baylands Master Plan
- 5) Palo Alto Comprehensive Plan
- 6) Soil reports in the vicinity
- 7) Utility information
- 8) Draft Value Engineering report
- 9) Planning level estimates

EXHIBIT B PROJECT SCHEDULE

No.	Task Name	Duration	Start	Finish
1	Project Initiation and Competition Development	7 days	Mon 9/8/14	Tue 9/16/14
2	Council Approves AIACC Contract/Outline competition process	0 days		Mon 9/8/14
3	City issues Notice to Proceed	1 day	Mon 9/8/14	Mon 9/8/14
4	Develop and organize a competition work plan	6 days		Tue 9/16/14
5	Develop design criteria and firm qualifications	6 days		Tue 9/16/14
6	Marketing and Promotion	14 days	Tue 9/9/14	Fri 9/26/14
7	Develop materials, graphics and website	11 days	Tue 9/9/14	Tue 9/23/14
8	Meeting with City staff to present materials	0 days	Tue 9/23/14	Tue 9/23/14
9	City staff provides comments	2 days	Wed 9/24/14	Thu 9/25/14
10	AIACC revise materials	1 day		Fri 9/26/14
11	Invitations to Architectural/Engineering Firms	9 days	Wed 9/17/14	Mon 9/29/14
12	Develop list of firms	4 days	Wed 9/17/14	Mon 9/22/14
13	Solicits firms to submit qualifications	5 days	Tue 9/23/14	Mon 9/29/14
14	Selection of Jurors and Technical Advisory Panel (TAP)	15 days	Tue 9/9/14	Mon 9/29/14
15	Identify prospects Jurors and TAP	5 days	Tue 9/9/14	Mon 9/15/14
16	Recruit Jurors and TAP	10 days		Mon 9/29/14
17	Submittal Development	20 days	Tue 9/30/14	Mon 10/27/14
18	Accepts statement of interest from design teams	1 day	Tue 9/30/14	Tue 9/30/14
19	Proposals due	20 days	Tue 9/30/14	Mon 10/27/14
20	Jurors review and select four proposals	1 day	Tue 10/28/14	Tue 10/28/14
21	Contract design firms to develop concepts	5 days	Wed 10/29/14	Tue 11/4/14
22	Design firms develop concepts	23 days	Wed 11/5/14	Fri 12/5/14
23	TAP meets to review concepts	1 day	Mon 12/8/14	Mon 12/8/14
24	Prepare press release	5 days	Mon 12/1/14	Fri 12/5/14
25	Distribute press release to media	1 day	Mon 12/8/14	Mon 12/8/14
26	Post Design concepts on websites and newspaper	5 days	Mon 12/8/14	Fri 12/12/14
27	Road show starts	5 days	Mon 12/8/14	Fri 12/12/14
	Jury interviews and ranks design concepts	1 day	Mon 12/15/14	Mon 12/15/14
29	Prepare press release	5 days	Mon 12/8/14	Fri 12/12/14
30	Distribute press release to media	1 day	Mon 12/15/14	Mon 12/15/14
31	City Council meeting to present findings and rankings	1 day	Mon 1/5/15	Mon 1/5/15
32	Prepare press release	6 days	Mon 12/29/14	Mon 1/5/15
33	Distribute press release to media	0 days		Mon 1/5/15

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EXHIBIT C COMPENSATION

Task Name Bu	ıdget
Task 1 - Project Initiation and Competition Development	10,800
Develop and organize a competition work plan	ŕ
Develop design criteria and firm qualifications	
City Council meeting to outline competition process	
Task 2 - Marketing and Promotion	0
Develop public outreach, media and marketing plan	
Design invitation and website graphics	
Draft text for AIACC, AIASCV, and City Website	
Create webpage on aiacc.org and post info on website including submittal	
Meeting with City staff to present materials	
Task 3 - Invitations to Architectural/Engineering Firms	5,600
Develop list of firms	
Coordinate printing and mailing invitations	
Solicits firms to submit qualifications	
Answering any questions from potential design teams	
Task 4 - Selection of Jurors and Technical Advisory Panel (TAP)	1,600
Identify prospects Jurors and TAP	
Recruit Jurors and TAP	
Task 5 - Submittal Development	89,950
Notify teams to submit proposals	
Work with design teams to finalize projects	
Review proposals	
Convene jurors and panelists to review design teams submittals	
Interview and select design firms	
Contract with design firms to develop concepts	
Task 6 - Design Concepts Review and Select	25,150
Gather and Post Design concepts on websites	
Community meeting to present Design Concepts	
Joint Jury, TAP and ARB meeting (1st or 3rd Thur)	
Private Jury and TAP meeting to select winner	
City Council meeting to present findings and rankings	
Prepare press release	
Distribute press release to media	
Public Outreach (finalists)	25.500
Task 7 - Project Management	25,500
Sub-Total	158,600
Contingency (10%)	15,860
Reimbursable	10,330
TOTAL	184,790

Reimbursable Expenses		
Printing & mailing of invitation		380
Jury & TAP meetings - food and refreshments		2,750
Staff, Jury & TAP travel		7,200
	TOTAL	10,330

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EXHIBIT C-1

AIACC FEE SCHEDULE

The following is our professional hourly rate schedule which is used as a basis for establishing compensation:

Project Manager	\$288.00
Contract Administrator	288.00
Website Manager	123.00
Clerical Assistant	99.00
Consultants	110% of actual cost

Travel time is reimbursable at the above rates. Other reimbursable costs shall be billed at 100% actual cost and include travel, lodging, mileage, meeting refreshments, printing, postage, shipping, and conference calls. Mileage will be reimbursed at the IRS standard mileage rate.

EXHIBIT "D" INSURANCE REQUIREMENTS

CONTRACTORS TO THE CITY OF PALO ALTO (CITY), AT THEIR SOLE EXPENSE, SHALL FOR THE TERM OF THE CONTRACT OBTAIN AND MAINTAIN INSURANCE IN THE AMOUNTS FOR THE COVERAGE SPECIFIED BELOW, AFFORDED BY COMPANIES WITH AM BEST'S KEY RATING OF A-:VII, OR HIGHER, LICENSED OR AUTHORIZED TO TRANSACT INSURANCE BUSINESS IN THE STATE OF CALIFORNIA.

AWARD IS CONTINGENT ON COMPLIANCE WITH CITY'S INSURANCE REQUIREMENTS, AS SPECIFIED, BELOW:

DECLIEBED	TYPE OF COVERAGE	DEGLITPEMENT	MINIMUM LIMITS		
REQUIRED		REQUIREMENT	EACH OCCURRENCE	AGGREGATE	
YES YES	WORKER'S COMPENSATION EMPLOYER'S LIABILITY	STATUTORY STATUTORY			
YES	GENERAL LIABILITY, INCLUDING PERSONAL INJURY, BROAD FORM PROPERTY DAMAGE BLANKET	BODILY INJURY PROPERTY DAMAGE	\$1,000,000 \$1,000,000	\$1,000,000 \$1,000,000	
	CONTRACTUAL, AND FIRE LEGAL LIABILITY	BODILY INJURY & PROPERTY DAMAGE COMBINED.	\$1,000,000	\$1,000,000	
YES	AUTOMOBILE LIABILITY, INCLUDING ALL OWNED, HIRED, NON-OWNED	BODILY INJURY - EACH PERSON - EACH OCCURRENCE PROPERTY DAMAGE BODILY INJURY AND PROPERTY DAMAGE, COMBINED	\$1,000,000 \$1,000,000 \$1,000,000 \$1,000,000 \$1,000,000	\$1,000,000 \$1,000,000 \$1,000,000 \$1,000,000 \$1,000,000	
YES	PROFESSIONAL LIABILITY, INCLUDING, ERRORS AND OMISSIONS, MALPRACTICE (WHEN APPLICABLE), AND NEGLIGENT PERFORMANCE	ALL DAMAGES	\$1,00	00,000	

THE CITY OF PALO ALTO IS TO BE NAMED AS AN ADDITIONAL INSURED: CONTRACTOR, AT ITS SOLE COST AND EXPENSE, SHALL OBTAIN AND MAINTAIN, IN FULL FORCE AND EFFECT THROUGHOUT THE ENTIRE TERM OF ANY RESULTANT AGREEMENT, THE INSURANCE COVERAGE HEREIN DESCRIBED, INSURING NOT ONLY CONTRACTOR AND ITS SUBCONSULTANTS, IF ANY, BUT ALSO, WITH THE EXCEPTION OF WORKERS' COMPENSATION, EMPLOYER'S LIABILITY AND PROFESSIONAL INSURANCE, NAMING AS ADDITIONAL INSUREDS CITY, ITS COUNCIL MEMBERS, OFFICERS, AGENTS, AND EMPLOYEES.

I. INSURANCE COVERAGE MUST INCLUDE:

YES

- A. A PROVISION FOR A WRITTEN THIRTY (30) DAY ADVANCE NOTICE TO CITY OF CHANGE IN COVERAGE OR OF COVERAGE CANCELLATION; AND
- B. A CONTRACTUAL LIABILITY ENDORSEMENT PROVIDING INSURANCE COVERAGE FOR CONTRACTOR'S AGREEMENT TO INDEMNIFY CITY.
- C. DEDUCTIBLE AMOUNTS IN EXCESS OF \$5,000 REQUIRE CITY'S PRIOR APPROVAL.
- II. CONTACTOR MUST SUBMIT CERTIFICATES(S) OF INSURANCE EVIDENCING REQUIRED COVERAGE.
- III. ENDORSEMENT PROVISIONS, WITH RESPECT TO THE INSURANCE AFFORDED TO "ADDITIONAL INSUREDS"

A. PRIMARY COVERAGE

WITH RESPECT TO CLAIMS ARISING OUT OF THE OPERATIONS OF THE NAMED INSURED, INSURANCE AS AFFORDED BY THIS POLICY IS PRIMARY AND IS NOT ADDITIONAL TO OR CONTRIBUTING WITH ANY OTHER INSURANCE CARRIED BY OR FOR THE BENEFIT OF THE ADDITIONAL INSUREDS.

B. CROSS LIABILITY

THE NAMING OF MORE THAN ONE PERSON, FIRM, OR CORPORATION AS INSUREDS UNDER THE POLICY SHALL NOT, FOR THAT REASON ALONE, EXTINGUISH ANY RIGHTS OF THE INSURED AGAINST ANOTHER, BUT THIS ENDORSEMENT, AND THE NAMING OF MULTIPLE INSUREDS, SHALL NOT INCREASE THE TOTAL LIABILITY OF THE COMPANY UNDER THIS POLICY.

C. <u>NOTICE OF CANCELLATION</u>

- 1. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR ANY REASON OTHER THAN THE NON-PAYMENT OF PREMIUM, THE ISSUING COMPANY SHALL PROVIDE CITY AT LEAST A THIRTY (30) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.
- 2. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR THE NON-PAYMENT OF PREMIUM, THE ISSUING COMPANY SHALL PROVIDE CITY AT LEAST A TEN (10) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.

NOTICES SHALL BE MAILED TO:

PURCHASING AND CONTRACT ADMINISTRATION CITY OF PALO ALTO P.O. BOX 10250 PALO ALTO, CA 94303



CITY OF PALO ALTO



AIA CALIFORNIA COUNCIL



- DEVELOP COMPETITION WORK PLAN
- DEVELOP MARKETING AND PROMOTIONAL MATERIALS
- ISSUE INVITATIONS TO A MINIMUM OF 20 A/E FIRMS



- FOUR CONCEPTS ARE DEVELOPED
 - CONCEPTS SENT TO WEB/MEDIA

TECHNICAL ADVISORY PANEL (TAP)

TAP ISSUES COMMENTARY FOR EACH OF THE CONCEPTS

PUBLIC COMMENTS



JOINT JURY/ARB MEETING

- PUBLIC ORAL COMMENTS
- REVIEW TAP'S MEMO
- DESIGN FIRM PRESENTATIONS

JURY DECISION

- DELIBERATION
- RANKING DESIGN CONCEPTS
- ANNOUNCE DESIGN WINNER



STAFF PRESENTS TO CITY COUNCIL

PALO ALTO HIGHWAY 101 BICYCLE AND PEDESTRIAN OVERCROSSING AT ADOBE CREEK DESIGN GUIDELINES (DRAFT AUGUST 2014)



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Glossary of Acronyms

AASHTO – **American Association of State Highway Transportation Officials**. The AASHTO Bicycle Facility Design Guide (4th Edition) is a key reference source for the design of pedestrian and bicycle overcrossings, particularly with respect to curve radii and minimum design speeds.

AIA - American Institute of Architects.

ARB – **City of Palo Alto Architectural Review Board**. The Project is subject to local design review and approval by this body, in addition to review and approval by Caltrans.

HPSR –**Historic Properties Survey Report**. These technical studies were performed as part of the NEPA environmental review process and are included in this document as **Appendix E**.

CAMUTCD - California Manual on Uniform Traffic Control Devices.

CDFW - California Department of Fish and Wildlife.

CEQA – **California Environmental Quality Act**. The Project is subject to CEQA environmental approval, with the City of Palo Alto acting as lead agency.

CPUC – California Public Utilities Commission. CPUC guidelines dictate required clearances (both vertical and horizontal) between the Project structures and existing overhead electrical utility lines.

EIR/EA – **Environmental Impact Report / Environmental Assessment**. A combined EIR/EA is the identified environmental document being prepared as part of the federal (NEPA) and state (CEQA) environmental review processes.

PDA – **Priority Development Area.** A designated area targeted for future employment and housing growth. The nearest PDA to the proposed Project is approximately ¼ mile to the south in Mountain View.

PEER – Permit Engineering Evaluation Report. A PEER report is the identified document for Caltrans design approval, due to the project's expected limited permanent impacts on Highway 101 and improvement value of less than \$3 million within the Caltrans right-of-way.

PFR – **Preliminary Foundation Report**. This report provides preliminary geotechnical and foundation design guidance for assisting the design development process. The PFR is included as **Appendix D**.

PG&E – **Pacific Gas & Electric**. PG&E utilities in the project area include a high pressure gas line adjacent to the Bay Trail, as well as high voltage (60kv) overhead utility lines that cross Highway 101 and the Adobe Creek/Barron Creek confluence area.

POC – **Pedestrian (and Bicycle) Overcrossing**. The term POC is used generally throughout the document in reference to the Project.

NES - Natural Environment Study.

NEPA – **National Environmental Policy Act**. This project is subject to NEPA environmental review due to the receipt of federal funding.

SCVWD – Santa Clara Valley Water District, or "the Water District." The Water District is responsible for flood protection and water supply/quality within Santa Clara County, and owns/maintains the Adobe Creek and Barron Creek channels within the Project area.

City of Palo Alto - Draft Design Guidelines

VTA – Santa Clara Valley Transportation Authority. The VTA Bicycle Technical Guidelines is a valuable reference document for pertinent design considerations and guidelines related to bicycle and pedestrian overpasses as well as Class I shared use trails.

Executive Summary

These Guidelines are intended to provide background information and guidance for a competition to design the Palo Alto Highway 101 Pedestrian Overcrossing (POC) Project at Adobe Creek. The City of Palo Alto (City) is one of the most active bicycling and recreation-oriented communities in the Bay Area and California. Whether traveling for work, school, shopping or recreation, more people choose walking or bicycling on streets and trail systems than almost anywhere else for a comparable mid-size community. Such activity occurs despite a number of major barriers that bisect the City, not the least of which is the U.S. Highway 101 (Highway 101) corridor that separates the City from its largest open space, the Palo Alto Baylands, and the San Francisco Bay Trail (Bay Trail).

As the heart of Silicon Valley, Palo Alto (along with its neighbor to the south Mountain View) is home to hundreds of technology and research-based companies, including a number of major employers such as Google, Intuit, and Space Systems Loral that have clustered in close proximity to Highway 101 and the Bay Trail. Between the need to better link these growing job centers with regional trails and bicycle facilities, as well as the need to improve access to superb recreation opportunities like the Baylands, Palo Alto has prioritized the funding and construction of a new, year-round bicycle and pedestrian overcrossing (POC) over Highway 101 at Adobe Creek near the City's southern border.

The proposed Highway 101 POC at Adobe Creek ("the Project") would replace an existing underpass that is available for only half the year (on average) due to seasonal flooding, and would complement an existing, but Americans with Disabilities Act (ADA) deficient, overpass that is 1.25 miles away to the north. The position of the new overcrossing was selected from over a dozen locations studied in 2010/2011, and has since been refined to include a short list of alignment alternatives, a 0.13 mile Class I trail connection along an existing Santa Clara Valley Water District (SCVWD, or "the Water District") maintenance road, and a potentially optimized alignment developed to the 15% design level. As the new overcrossing would encroach upon state right-of-way, project approval from the California Department of Transportation (Caltrans) is required for this project. The City and Caltrans are currently working on environmental documentation for the project in the form of a joint Environmental Impact Report/Environmental Assessment to satisfy both state and federal environmental requirements.

With the vast majority of project funding secured, the City of Palo Alto has partnered with the American Institute of Architects California Council (AIACC) to conduct a design competition for the Highway 101 POC at Adobe Creek. This design guidelines document has been prepared to help focus design competitors and ensure compliance with existing environmental and site constraints, as well as provide a consistent understanding of the relevant context and recent planning work in support of the Project. Utilizing this document in combination with established procedures of the Palo Alto Architectural Review Board (ARB) and input from Caltrans, a conceptual final design will be selected from the competition and the winning design team(s)may be awarded by City Council through the City's Professional Services Contract to complete the design, permitting/approvals, and construction administration for the Highway 101 POC at Adobe Creek.

Project Introduction and Background

Project Description

The City, in cooperation with Caltrans District 4, is actively planning to construct a POC of Highway 101, in the City of Palo Alto. The Project is located between the East Oregon Expressway and San Antonio Road overpasses of Highway 101, in close proximity to Adobe Creek, and would replace the existing seasonal Benjamin Lefkowitz underpass. The grade-separated crossing would provide year-round connectivity from residential and commercial areas to the Palo Alto Baylands Nature Preserve, East Bayshore Road business park area, and the regional Bay Trail network of multi-use trails. The project construction program includes a new bridge over Highway 101 and West and East Bayshore Roads, a .13 mile trail connection along Adobe Creek to E Meadow Drive, sidewalk improvements along West Bayshore Road, and significant landscaping and habitat restoration within the Palo Alto Baylands and along the Adobe Creek riparian corridor (**Figure 1**). The project lies primarily within City and Caltrans right-of-way, although the south/west project area includes SCVWD and private property (a portion of 3600 West Bayshore Road, a Google-owned property).

In 2010, an initial *Feasibility Study* project phase examined twelve separate potential Highway 101 bicycle and pedestrian over/undercrossing concept locations. Alternatives were generally located between the Highway 101 overpasses of East Oregon Expressway and San Antonio Road, and included variations in both length and configuration. Selection of a preferred project alternative (an overcrossing at Adobe Creek) was identified and evaluated through a participation process involving the general public, a technical advisory committee, stakeholder groups, and City and technical consulting staff.



Figure 1. Project Area Overview

Project Purpose and Need

The purpose of the Palo Alto Highway 101 Bicycle and Pedestrian Overcrossing Project is to build a year-round overcrossing to replace the existing Benjamin Lefkowitz seasonal underpass, which is prone to repeated and spontaneous weather-related closures and does not meet minimum Class I trail standards. The overcrossing would improve connectivity to the Palo Alto Baylands Nature Preserve, East Bayshore Road businesses, and regional Bay Trail network from residential neighborhoods and employment districts in south Palo Alto. The project would further improve accessibility and safety of local access by constructing a Class I multi-use trail along Adobe Creek, and improving pedestrian connectivity from West Bayshore Road. The combined overcrossing and access improvements would support regional bicycle commuting and encourage greater recreational activity and use of the Baylands and trail system.



Existing Benjamin Lefkowitz Seasonal Underpass at West Bayshore Road

Current year-round bicycle and pedestrian access over Highway 101 to/from southern Palo Alto and the Baylands Nature Preserve/Bay Trail requires significant out-of-direction travel south to the San Antonio Road overpass, which lacks sufficient non-motorized access facilities, and north to the Oregon

Expressway Overpass, which is more than 1.25 miles away. The Oregon Expressway Overpass also does not meet current ADA standards. The need for a new year-round pedestrian/bicycle crossing of Highway 101 in south Palo Alto is identified in the City of Palo Alto Comprehensive Plan (2007) and the Palo Alto Bicycle and Pedestrian Transportation Plan (BPTP). The BPTP was adopted in June 2012 and identifies the Highway 101 POC project as the highest priority Across Barrier Connection (ABC) project in the City. The Highway 101 POC at Adobe Creek is also identified as a high priority project in the Bicycle Transportation Plan (2003) and draft East Meadow Circle/Fabian Way Sub-Area Concept Plan, which will be folded into the update to the City's Comprehensive Plan.



Palo Alto Baylands at Adobe Creek, with Bixby Park visible in the background

Project Context & Setting

The City of Palo Alto is a dynamic, mixed-use community that is both the heart of Silicon Valley's technology-based employment boom and a coveted assortment of quiet, tree-lined residential

neighborhoods served by a top notch public school system. A leader in environmental sustainability, Palo Alto's quality of life is heavily supported by investments in and close proximity to recreational open space areas (both near the San Francisco Bay and in the foothills to the west) as well as some of the highest rates of walking and bicycling in the country. Approximately 8% of workers in Palo Alto commute by bicycle and another 6% travel on foot, while nearly 60% of all school children travel to school using an active transportation mode.

Continuing to grow the share of trips that take place on foot and bicycle is critical to maintaining Palo Alto's quality of life. This is especially so for the East Meadow Circle sub-area to the west/southwest of the Project, where recently proposed zoning changes (awaiting adoption into the City's General Plan) and significant land purchases by Google indicate strong potential for office/R&D development in the near term.1 Coupled with existing businesses and anticipated growth nearby in Mountain View's North Bayshore Priority Development Area (PDA), active transportation investments such as the Highway 101 POC at Adobe Creek will be necessary to help manage transportation demands on an already-congested and physically-constrained state highway and local arterial roadway system.

The existing built environment in the Project area is characterized by low (one- to three-story tall) office/research park and light industrial land uses to the east, south, and west. A multi-unit residential development also sits to the southwest across from Adobe Creek, but is somewhat buffered from the project area by a PG&E electrical sub-station.

The Project is expected to cross US Highway 101 approximately 1,500 feet (ft) northwest of San Antonio Road, directly north of where Adobe Creek passes under the highway. Highway 101 in this location is a ten-lane, 160-ft wide highway (recently widened from eight lanes), and there are two-lane frontage roads with bikes lanes on either side.

The north/east portion of the project site includes the Bay Trail, which runs parallel to Adobe Creek from Mountain View and turns sharply north across the creek (via a steel truss bridge) to follow the edge of the Palo Alto Baylands Nature Preserve at East Bayshore Road. Visible to the north within the Baylands sits Hawk Pond and delineated wetlands in the immediate foreground, with Byxbee Park (a former landfill site undergoing transformation into a passive recreational area) in the distance providing one of the few interruptions of the predominantly horizontal Baylands views. Directly east of East Bayshore Road, the creek changes character from a concrete-lined flood channel to a riparian corridor vegetated predominately with non-native plants, including a large stand of Eucalyptus trees.

The south/west portion of the Project is dominated by the confluence of the channelized Barron and Adobe Creeks, which drain urbanized areas of Palo Alto from the west and include maintenance roads owned and operated by the SCVWD. The existing seasonal undercrossing rises up to meet with West Bayshore Road approximately 100 ft north of the main entrance for the Water District maintenance road access to the confluence area (and proposed Adobe Creek Reach Trail).

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¹ See http://www.mercurynews.com/ci 23672621/google-buys-nearly-15-acres-palo-alto

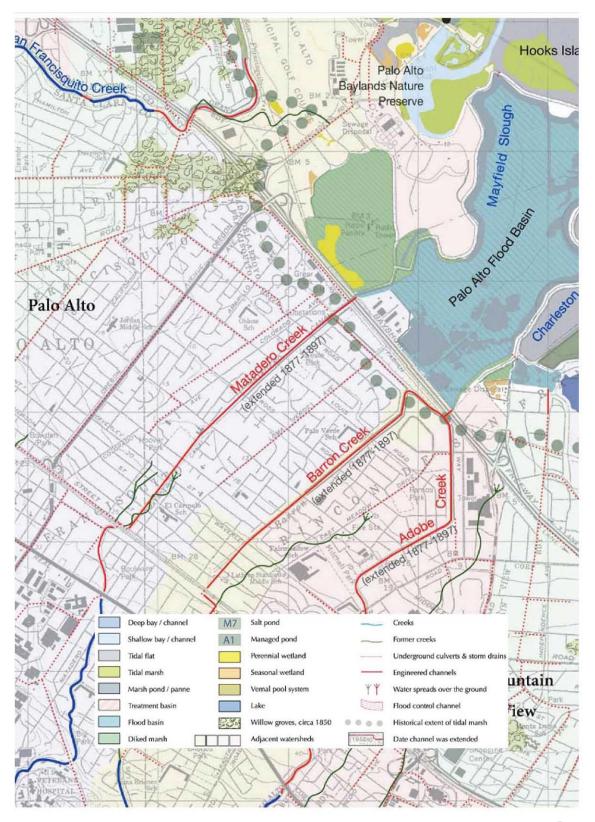


Figure 2. Flood Basin and Historic Creek/Tideline Map (source unknown).

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Figure 3. 1948 Aerial Photograph of Project Area (from Google Earth)

From an historical context, most of the current Project site features represent relatively recent additions to a landscape that has undergone a series of dramatic changes in the last century and more. These changes include the Adobe and Barron Creek channels themselves, which have been relocated and modified from their historic alignments since the late 1800's; as well as the Highway 101 corridor itself, which sits to the east (outboard) from the historic extents of the tidal marsh (**Figure 2**). Prior to the 1950's, when mechanical gates were installed to control tidal flooding, the Project area consisted of little more than farmland on either side of the four-lane Bayfront Freeway, which was built in the 1930's (**Figure 3**). Construction of the wider, access-controlled highway occurred in the 1960's.

Project Status

Local Entitlements

Local entitlements, including design review, would be required.

Environmental Review & Oversight

The proposed project is subject to federal (NEPA) and state (CEQA) environmental review in addition to City design review, due to the use of federal Congestion Management and Air Quality (CMAQ) funding. The City of Palo Alto is the lead agency for CEQA review, and Caltrans is lead agency for the NEPA process.

Caltrans Permitting

Caltrans' Project Development Process is used for projects where the capital construction cost within state right-of-way exceeds \$3 million. This process requires execution of a cooperative agreement and preparation of a Project Study Report (PSR), Final Plans, Specifications and Estimates (PS&E), and other related reports following standard Caltrans procedures. The City may submit the Adobe Creek POC PSR/PR for review concurrent with preparation of the environmental review. However, Caltrans will not approve the PSR/PR until the environmental review is complete per CEQA requirements.

Funding

The project has received \$8 million in federal and local grant funding for construction. Together with committed local resources, the project budget for design and construction is \$10 million based on a 2010 planning cost estimates.

Alternatives Considered

Subsequent to the adoption of the Feasibility Study, three alignment alternatives (shown in **Figure 4**) were developed for initial environmental and Caltrans review:

Alternative 1

Alternative 1 generally crosses East and West Bayshore Roads and Highway 101 at a perpendicular angle, making a curving 90-degree turn from West Bayshore Road and the Adobe Creek Reach Trail to cross over Highway 101. A more curving north/east ramp alignment seeks to relate to the Baylands and provides a pleasant experience for both bicyclists and pedestrians. The physical footprint of Alternative 1 extends approximately 150 ft east into the natural area along the north side of Adobe Creek before looping back and ramping down adjacent to the Bay Trail.

Alternative 2

Alternative 2 would cross East and West Bayshore Road and Highway 101 in a curving alignment. It includes a curving north/east ramp just north of Adobe Creek before linking to the Bay Trail, and loops back over itself on the west approach in order to minimize footprint and allow an earlier touchdown point on West Bayshore Road. While potentially having the least visual impact on the Baylands vista, the looping south/west ramp associated with this alignment is not considered optimal due to sight distance and potential user conflict concerns.

Alternative 3

Alternative 3 attempts to minimize physical intrusion into the Baylands by providing a straight ramp extending northwesterly parallel to the existing Bay Trail and East Bayshore Road. Non-preferred features include placing columns within the floodway of Barron Creek for the south/west approach, and extending the north/east approach to the north parallel to the Bay Trail, which would intrude into expansive views of the Baylands from Highway 101 and force out-of-direction travel (i.e., a 180-degree

turn) for a majority of bridge users. Due to an existing PG&E gas line within a 20 foot easement, this alignment is not fully able to stay outside of the Baylands north/east of East Bayshore Road.

Based on results from preliminary environmental analyses performed to date, Alignment 1 was selected as the alignment used for development of 15% plans for preliminary Caltrans review and for environmental review, including the project boundary map for the environmental document (**Figure 5**). For the purposes of the design competition, the alignment in Alternative 1 will be used. The Preferred Alternative is not yet formally determined through the environmental review process.

The Design "Envelope"

To meet project schedule objectives a preliminary (15%) design has been completed for the Project (see **Appendix A**), and environmental documentation is in progress and will be completed in parallel with the design competition. The Caltrans (PA/ED) review process is in progress. In order for the design competition to maintain consistency with the environmental document, these Guidelines provide specific design requirements as well as a range of structural and architectural alternatives and design features to provide an "envelope" to guide design competitors. This includes the design parameters needed to stay within the environmental analysis assumptions, respond to community preferences, and be consistent with other standards and requirements. Note that a design departing from this envelope of assumed location, configuration, and features could trigger the need to revise and reissue the environmental document, creating undesirable delay and expense to the project. A design departing from this envelop shall be disqualified.

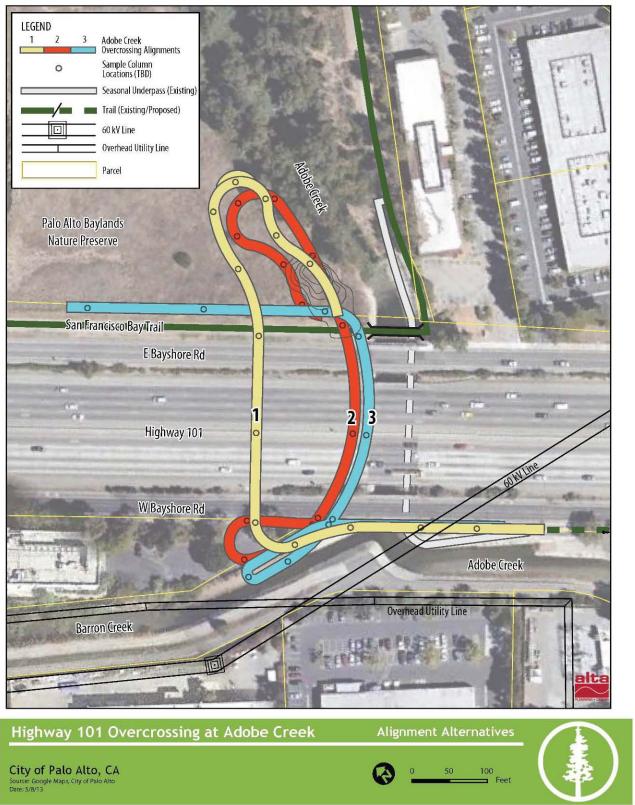


Figure 4. Project Alignment Alternatives for Environmental Review

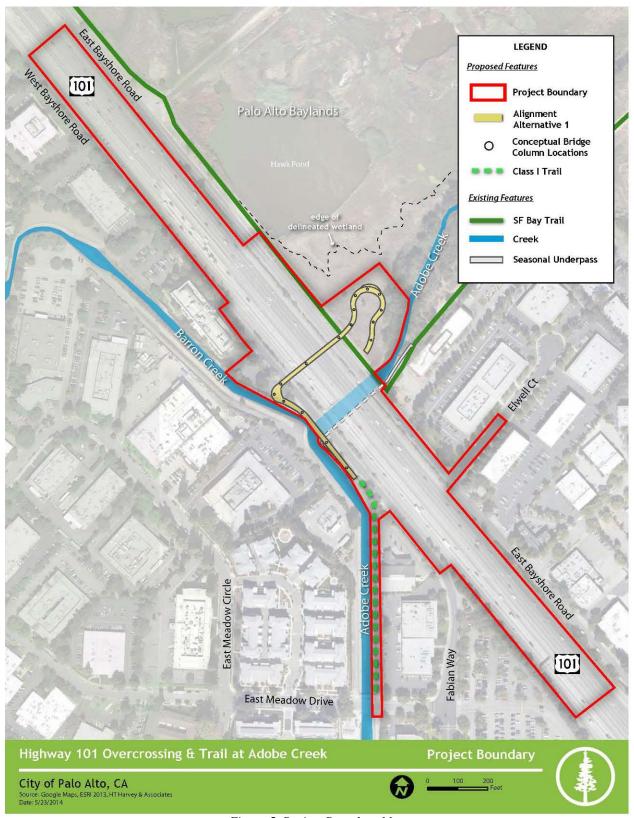


Figure 5. Project Boundary Map

Caltrans and Environmental and Design Review Schedule

The project schedule (**see Figure 6**), shows the relationship between the preliminary design and environmental analysis that will be completed under the current contract with a consultant team, and the subsequent stages of project design and Caltrans review that will be completed by the consultant(s) selected through the design competition.

Should the City Council and the community agree on a design concept, the Consultant team and City shall enter into the City's Professional Services Agreement to complete the design and the construction bid documents and construction administration in accordance with the City's and Caltrans' local, state and federal requirements. A sample of the City's Professional Services Agreement is in the Appendix. The draft project schedule is for reference.



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Figure 6 Project Schedule

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Design Guidelines

Guiding Design Principles

This is a unique opportunity to showcase the City's commitment to innovation, aesthetics and forward-thinking through the use of a design competition to solicit visionary ideas for a new bridge. Below are three design principles that will be used to help orient design competitors in the creation of concepts:

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;

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

Interconnectedness – garner respect for the Baylands environment and ecosystem; 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.

Design Goals

The following project design goals were derived from public, stakeholder, and decision-maker input during meetings regarding the project:

- 1. Provide an overcrossing that is safe and functional for a wide range of non-motorized users: commuting and recreational bicyclists, including casual or inexperienced riders; and pedestrians, including people with disabilities and families with children.
- 2. Meet or exceed applicable policies and standards, and adhere to the identified project environmental footprint, in order to facilitate a smooth approval and permitting process.
- 3. Protect and enhance environmental qualities and functions of the Baylands and Adobe Creek, incorporating compatible native plant and habitat restoration to the maximum extent feasible.
- 4. Provide a seamless and enjoyable experience for users across Highway 101, ideally creating a bridge that extends the Baylands experience into the urbanized area more than it intrudes into the Baylands.
- 5. Avoid or minimize disruptions and impacts to traffic on Highway 101, local roads, and the Bay Trail; and to utilities and SCVWD maintenance facilities both during construction and resulting from the completed facility.
- 6. Provide an aesthetic/visual resource that respects and is compatible with the character of the Baylands and yet offers new iconographic or gateway elements appropriate to the context.
- 7. Incorporate references to the Baylands and the site's history, with opportunities to view, learn about, and appreciate the adjacent Baylands Nature Preserve and Adobe Creek/Barron Creek habitats.
- 8. Design a cost-effective project that efficiently solves technical challenges/constraints and concerns of ongoing maintenance costs.

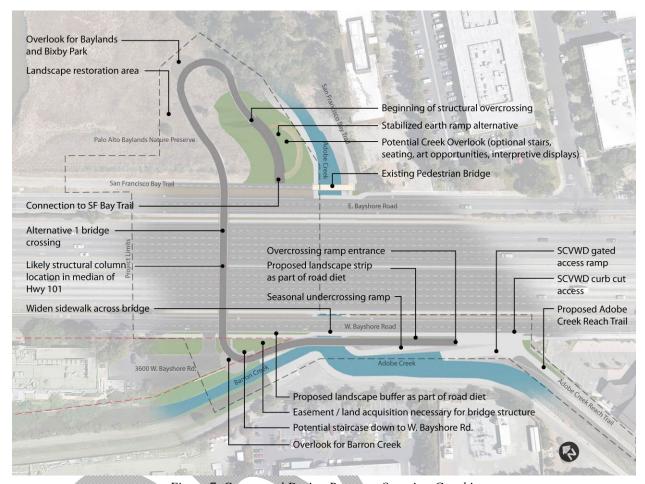


Figure 7. Conceptual Design Program Overview Graphic

Conceptual Design Program - Overview

This section summarizes the primary elements of the project, which are further described and expanded upon in the subsequent visual tour.

Overcrossing Alignment & Structure(s)

As assessed for environmental review, the Project consists of a 250-ft to 280-ft long, 18-ft wide concrete main span structure (with a 16-ft wide shared use travel way cross section) over Highway 101 and East and West Bayshore Roads, with one or more columns anticipated in the center median of the Caltrans right-of-way (see **Figure 7**).² Additional columns are anticipated north and south of Caltrans right-of-

Pending Caltrans potential approval of a 2-ft minimum shoulder width, for which a Design Exception Fact Sheet is being prepared for consideration.

way. Bridge designs that do not include a center column in the highway median are encouraged if they can respond to the project design guidelines and are feasible within the anticipated project budget.

The north/east ramp is expected to be approximately 450-ft to 510-ft long (pending final design) and the south/west ramp is currently projected to be 410-ft to 450-ft long. The north/east ramp would be accessed from the Bay Trail just north of Adobe Creek. The south/west ramp would be accessed from the proposed trail along the Adobe Creek SCVWD maintenance road and from West Bayshore Road.

The configuration and landing point for the ramp on the west side is constrained by the proximity of Adobe Creek and Barron Creek, within which no construction activities are to take place; high voltage overhead and underground utilities; and site access and parking for 3600 West Bayshore Road. The ramp would rise parallel to West Bayshore Road from the proposed Adobe Creek Trail, with a relatively long (approx. 120 ft) pre-cast span between piers in order to cross over the confluence of Adobe and Barron Creeks and minimize utility/creek impacts. The trail in this location will likely need to be narrower than preferred (a minimum 10-ft wide travel way compared to the preferred 16-ft wide travel way) before rising north into a significant portion of private property at 3600 West Bayshore Road before turning north/east to meet the main bridge deck.

The configuration and landing point for the north/east ramp is constrained by wetlands and sensitive habitat area to the north within the Baylands, the Adobe Creek riparian corridor to the south, and utilities located along the back edge of the existing Bay Trail. While a specific construction method and structure type have not been confirmed for the Baylands ramp, a cast-in-place concrete ramp and potential use of reinforced soil slope (RSS)/Mechanically Stabilized Earth (MSE) ramp abutment have been assumed for helping define the potential environmental footprint and impacts.

West Bayshore Road Sidewalk / Accessibility Improvements

The proposed project includes pedestrian and bicycle facility improvements along West Bayshore Road to support travel between the overcrossing ramp and the Adobe Creek Trail. Specifically, the west/south side of West Bayshore Road would be upgraded with a continuous sidewalk, while the existing driveway for the 3600 West Bayshore parcel would be relocated to the north in order to provide room for the bridge's west ramp. Due to the need to accommodate a new sidewalk adjacent to the ramp landing, West Bayshore Road would be narrowed slightly and existing southbound bicycle lanes would be replaced with shared lane markings, or sharrows.³ If an additional column on West Bayshore Road just outside the Caltrans right-of-way is required for a signature span concept, and/or a wider sidewalk over Adobe Creek is desired, the northbound bicycle lane may also be converted to sharrows to accommodate roadway narrowing.

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³ A shared lane marking or sharrow is a street marking used to inform road users that bicyclists may use the full lane.

A secondary stairway or ramp connection is strongly desired within the 3600 West Bayshore parcel to limit out-of-direction travel for bridge users coming from the north, with a belvedere or widening of the bridge encouraged at the point where the secondary stairway/ramp meets the primary ramp deck. The bridge widening would serve several purposes, including:

- Promoting safer trail access for secondary stairway or ramp users
- Mitigating a tight (36 ft radius) curve that is necessary due to site conditions
- Allowing potential seating/viewing area toward the Barron and Adobe Creek confluence
- Possibly facilitating future potential ramp extensions across Barron Creek toward East Meadow Circle

Site design for the secondary ramp/stairway access point, potential belvedere/widened ramp segment, and 3600 West Bayshore parcel segment is identified as a significant design opportunity.

Baylands / Adobe Creek Riparian Area Habitat Restoration

The project includes significant opportunity for site landscaping and habitat restoration, which is required both for environmental mitigation and aesthetic purposes to support Project goals. The work is anticipated to include removal of existing ornamental trees on the west side of the highway, and invasive non-native plants and trees on the east side, to be replaced with native species.

Conceptual Design Program -Visual Tour

This section describes the elements of the overcrossing, moving west to east, based on concepts that were developed for the preliminary environmental documents and Caltrans review. They reflect some of the specific constraints and requirements that are detailed in the checklist that follows, and general design considerations and preferences.

South/West Approach

The south/west approach would be accessed from near the SCVWD maintenance road between West Bayshore Road and Adobe Creek (see **Figure 8**). In Alignment 1, the ramp rises to the north, crosses above a portion of the confluence of Adobe and Barron Creeks, then arcs to the east utilizing a small portion of private property at 3600 West Bayshore Road before meeting the main bridge deck (see **Figure 9**). A stairway connection from West Bayshore Road to the overcrossing ramp is envisioned to facilitate pedestrian access from north of the project site.



Figure 8. Birds eye perspective looking north/west toward bridge ramp over Adobe/Barron Creeks.

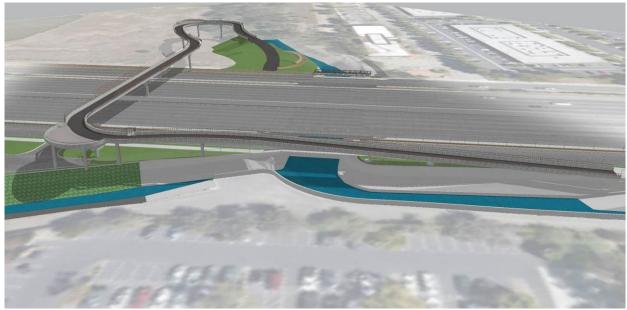


Figure 9. Birds eye perspective looking north/east toward bridge ramp over Adobe/Barron Creeks.

Improvements along West Bayshore Road

West Bayshore Road through the project site currently includes a four-foot wide sidewalk on the west side of the roadway, bike lanes, and an approximately 75-foot long bridge over Adobe Creek. North of the bridge, the sidewalk jogs to the east and the southbound bike lane ends. South of the bridge, the sidewalk jogs to the west and the southbound bike lane resumes.

Proposed pedestrian improvements include widening approximately 525 linear ft of sidewalk to 5 to 6 ft wide between the 3600 West Bayshore parking lot driveway and the SCVWD access gate. North of the Adobe Creek undercrossing, the existing southbound bike lane adjacent to the widened sidewalk segment would be replaced with a four-foot wide buffer with plantings and/or a fence and associated curb and gutter. South of the Adobe Creek undercrossing, a 1.5-ft wide planting strip would be located between the sidewalk and POC ramp. Where the bike lane is removed, the southbound travel lane would be signed and marked as a shared roadway (Class III bike route) for a distance of approximately 600 ft (**Figure 10**). The 4-ft wide sidewalk along the bridge over Adobe Creek would be widened as feasible. The southbound bike lane would resume south of the SCVWD access gate. An approximately 80-ft long 'sidepath,' or two-way trail adjacent to a roadway, is proposed west of the widened sidewalk from the ramp touchdown to the Adobe Creek Trail.

A stairway connection from West Bayshore Road to the overcrossing ramp is proposed north of creek crossing to better facilitate pedestrian travel from north of the project site (**Figure 11**).



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Figure 10. Photosimulation of West Bayshore roadway improvements, looking south toward overcrossing



Figure 11. Photosimulation of bridge at 3600 West Bayshore Road with secondary stairway access and sidewalk improvements.

Main Bridge Structure

In Alignment 1, the superstructure over Highway 101 utilizes a straight alignment, which is suitable for either a concrete or steel structure (see **Figure 12**). For the purposes of environmental review, the City is currently assuming a center support column in the median of Highway 101 north/west of where Adobe Creek crosses under Highway 101, which would require the narrowing of Highway 101 shoulders and potentially travel lanes.

Additional design coordination with Caltrans is necessary to fully understand potential implications and confirm approval of a center median column. Any final design must also be coordinated with ongoing plans to add High Occupancy Vehicle (HOV) express lanes on Highway 101, an effort which is currently in design and expected to operate beginning in 2018. Signature bridge span designs that do not require a center median column are encouraged in the design competition if they can successfully respond to other project goals, including construction budget and ongoing maintenance.

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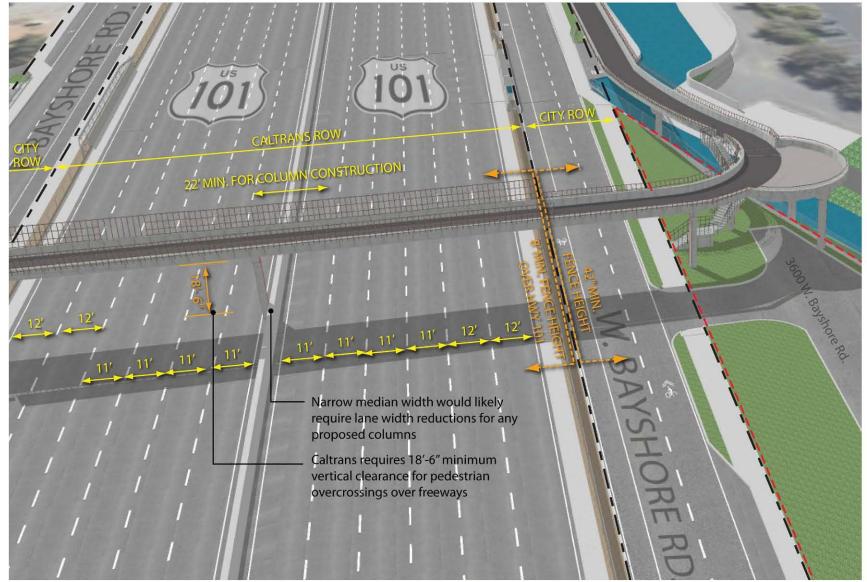


Figure 12. Bird's eye view of bridge main deck, looking 'south' along Highway 101

North/East Approach

In Alignment 1, the structure ramps down on the east side of Highway 101 with a "horse-shoe" alignment in the Baylands Nature Preserve. This alignment touches down and connects with the Bay Trail approximately 100 ft north of where the Bay Trail crosses Adobe Creek via a steel truss bridge. At the ramp's furthest point within the Baylands, the curving trail could include widened shoulders, or a viewing deck, providing users with a vista outward toward the Palo Alto Baylands and in the near distance, Byxbee Park (see **Figure 13**).

For potential aesthetic and environmental assessment purposes, the conceptual design of the north/east ramp touchdown considers the use of engineered fill with earth side slopes and/or retaining walls or MSE walls. The underlying Bay Mud is an important consideration (due to likely settlement issues) however, and such features should only be considered up to a maximum suggested height of 10 ft to 15 ft per the Preliminary Foundation Report (PFR) (**Appendix D**). Masonry units, timber, and gabions may also be considered, in addition to concrete or steel structures.

The north/east landing area, whatever the design, would be disturbed by construction and would require any impacted habitat to be restored. The emphasis would be on native riparian and Baylands appropriate planting. Construction or associated habitat mitigation may involve the removal of up to 36 non-native eucalyptus trees within the Baylands, including trees located along the edge of the Adobe Creek riparian corridor. Site design may also include consideration of a creek side interpretive trail, secondary stairs and ramp approaches, public art, seating, and other potential amenities (see **Figure 14**).

The design of the north/east ramp structure would be subject to <u>Site Assessment and Design Guidelines</u> for the Baylands Nature Preserve, among others (e.g., the Caltrans Highway Design Manual (HDM) and Caltrans Design Information Bulletin (DIB) 82-05). The Baylands guidelines generally favor the celebration and maintenance of the horizontal landscape, muted tones, and natural materials. Further discussion of the guidelines, and potential implications for the Project, is provided in the Design Criteria section below. In general, developing a unified concept for the Baylands bridge and site landscape is the key opportunity and challenge that will be emphasized for the design competition and City of Palo Alto review process.

City of Palo Alto - Draft Design Guidelines



Figure 13. There is the opportunity, as illustrated in the visual simulation, to provide a creek viewing and interpretive area in conjunction with the north/east ramp.

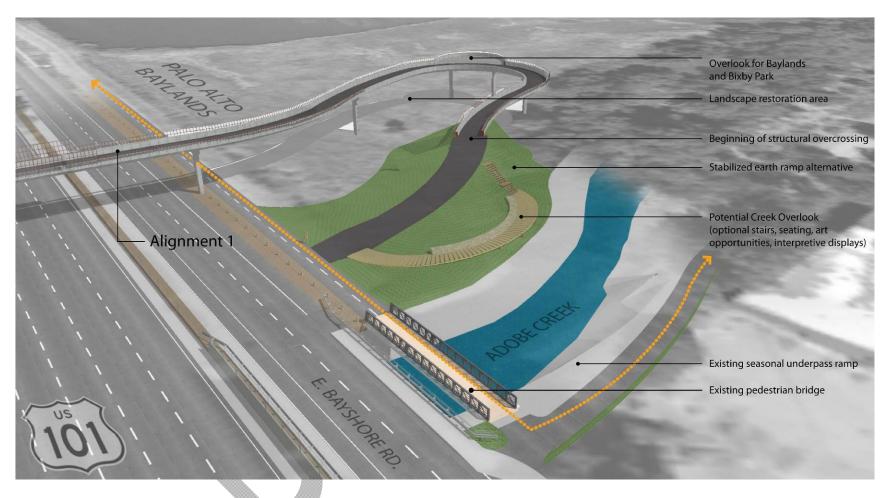


Figure 14, Birds eye view of north/east ramp at the Palo Alto Baylands and Adobe Creek, with conceptual site program opportunities highlighted

Adobe Creek Reach Trail

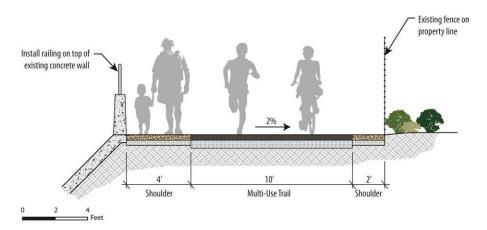


Figure 15: Proposed Cross Section, Adobe Creek Reach Trail

The Adobe Creek Reach Trail would involve construction along the existing SCVWD maintenance road on the east side of Adobe Creek (west of Highway 101), between West Bayshore Road and East Meadow Drive. Improvements along this approximately 800 ft stretch of access road would include (also see **Figure 15**):

- Minor grading and paving of a 10-14 foot shared use trail
- Modifications to the existing maintenance road access at West Bayshore Road and East Meadow Drive, including removal of existing fencing and metal bollards
- Installation of a 42-inch (in) to 56-in high fence along the creek abutment wall, and additional fencing to secure the SCVWD vehicle ramp from public access
- Landscaping: drought tolerant plantings, seating, and other potential decorative and functional elements such as a soft surface jogging path and public art
- Signage and wayfinding

The Adobe Creek Reach Trail would provide a more direct, comfortable, and potentially safer alternative to Fabian Way/West Bayshore Road for pedestrians and bicycle commuters, and is considered a critical complement to the overcrossing project. **Appendix B** presents the preliminary (15%) plan for the Adobe Creek Reach Trail.

Design Criteria & Considerations

The following factors should be considered for design of the overcrossing and associated elements:

Project Boundary

Figure 5 provides illustrates the project boundary identified for this project. The footprint of all construction activities must occur within this boundary, including temporary traffic control, staging, and

construction. Work within Adobe Creek, Barron Creek, or delineated wetlands will be prohibited. Work within the Caltrans right-of-way should be limited to a potential center median column, anticipated to be a maximum of 2 ft wide.

Geometry – Width and Alignment

Per the HDM, a two-way bike path shall have a minimum 8-ft wide paved travel way and minimum 2-ft wide shoulders adjacent to the traveled way of the path when not on structure. The HDM requires a minimum 2-ft horizontal clearance from the paved edge of a bike path to obstructions. Three ft should be provided. Adequate clearance from fixed objects is needed regardless of the paved width. If a path is paved contiguous with a continuous fixed object (e.g., fence, wall, and building), a 4-in white edge line, 2 ft from the fixed object, is recommended to minimize the likelihood of a bicyclist hitting it. The clear width of a bikeway on structure (e.g., a POC) between railings shall not be less than 10-ft wide, and it is desirable that the clear width of structures be equal to the minimum clear width of the path plus shoulders (i.e., 14 feet).

Santa Clara Valley Transportation Authority (VTA) Bicycle Technical Guidelines encourage a minimum effective trail width of 10 ft, which is assumed as the minimum for the Project.

The current basis of design for the Highway 101 POC is an 18-ft wide structure outside edge to edge, with a 16-ft wide travel way cross section. The structure width may be reduced to a minimum of 12-ft wide (or whatever width can support a 10-ft minimum travel way width) where the basis of design is not feasible due to site and environmental constraints.

According to the HDM, the target design speed for a trail overcrossing is 20mph, which corresponds to a minimum bridge curve radius of 90 ft. These design speeds are not achievable or desirable given the site constraints and alignments considered in the environmental assessment. In Alignment 1, the minimum curve radii are identified at 36 ft (14 mph) for the west ramp and 60 ft (18mph) for the east ramp, assuming a 20-degree lean angle as identified by the American Association of State Highway Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities. These curves are both within the acceptable thresholds of AASHTO (assuming a constrained site), but should be mitigated to the maximum extent practical/feasible by widening the trail through these sections.

Bicycle, shared use trail, and pedestrian/bicycle bridge design references:

- Caltrans Design Information Bulletin (DIB) 82-05
- Caltrans Highway Design Manual (HDM)
- AASHTO Guide for the Development of Bicycle Facilities (4th Edition)
- VTA Bicycle Technical Guidelines (2012)
- City of Palo Alto Bicycle and Pedestrian Transportation Plan (2012)

Profile

According to ADA standards, a path with a slope greater than 5% is defined as a ramp. The maximum allowable slope is 8.33% and ramps must provide a level landing for every 30 in of elevation rise. Furthermore, Section 1023.6 (currently Section 1133B.7.6) in Part II of Title 24 California Code of Regulations (CCR) states that walks with continuous gradients (slopes between 2% and 5%) shall have level areas (2% max) at least 5 ft in length at intervals of at least every 400 ft.

The bottom of the proposed pedestrian overcrossing profile would maintain a clear distance of 18.5-ft above the roadway of U.S. Highway 101 when constructed. Accounting for a typical structure depth of 4-ft, the surface elevation of the overcrossing would be approximately 22.5 ft above the roadway. Approximately 450-ft of ramp would be needed on either side of the overcrossing to conform to grade. The structure must be at least 18.5 ft clear above the surface of the adjacent frontage roads – West and East Bayshore within the Caltrans right-of-way and 17 ft clear above approximately half of the frontage roads within the City's right-of-way.

Geotechnical Considerations

Subsurface soil conditions within the project vicinity consist of approximately 10 ft of medium stiff sandy lean clay with gravel (fill). High plasticity clays, such as soft to stiff lean/fat clay, known locally as Young Bay Mud, underlie the fill and is interbedded with medium dense to dense well-graded sand with silt. Well-graded sand with silt was encountered at depths ranging from about 18 to 26 and 45 to 48 ft below the ground surface.

Groundwater in the area is commonly encountered within the upper 10 ft and influenced by tidal fluctuations. It is anticipated to vary with the passage of time due to seasonal groundwater fluctuations, variations in yearly rainfall, water elevations in the bay, surface and subsurface flows, ground surface runoff, and other environmental factors.

The PFR (provided as **Appendix D**) states that the project appears feasible with current civil and geotechnical engineering design practice and construction technology, and that precast/prestressed concrete driven piles should be used for the proposed structure. Cast-In-Drilled-Hole (CIDH) piles are not preferred. Pier depths are anticipated to be between 80 to 120 ft or more, pending additional boring tests and soil analysis. Due to noise impact concerns, all pile driving should take place during the daytime.

Consolidation settlement and stability analysis of the new fill at the abutment locations needs to be evaluated and a settlement period is recommended after embankment construction prior to commencement of the pile construction at the abutments. Mechanically Stabilized Earth (MSE) walls and abutments are not recommended above 10 ft to 15 ft in height.

Structural Considerations

Bridge design load

The bridge should be designed to accommodate a maximum weight that includes potential maintenance and/or patrol vehicles, as well as a live load that would be generated by large events that include near full utilization of the bridge by pedestrians (for example, during the July 4th fireworks or for a big race). H20 loading is identified as the reference standard for guidance.

Column placement for main span over Highway 101 and frontage roads

Due to the narrow median on Highway 101, a typical column design is not feasible. Since the median is only 6-ft wide and Caltrans requires a minimum 2-foot shoulder, only 2-ft is available for the column (pending approval of required design exception). A potential solution for this constraint could be to utilize a 2-foot wide pier wall to support the structure at the median of Highway 101. Alternatively, a column support in the median of Highway 101 can be avoided if a steel or other signature span structure is used. Due to the sensitivity of the project to impact on nearby bird populations, a cable-stay steel structure⁴ is discouraged.

Column placement outside of Highway 101 can be between the Caltrans right-of-way and East/West Bayshore Road, or behind the sidewalk of East/West Bayshore Road. Placing columns between the Caltrans right-of-way and East/West Bayshore Road would require the roadway to be narrowed since there is not enough space for a column within the current lane configurations. Such placement may be feasible, however, by dropping dedicated bicycle lanes in favor of shared bike routes with "sharrows" and other prominent features.

Column placement should be carefully analyzed to avoid impacts to the Barron and Adobe Creek channel banks, since work within the creek area is not anticipated in the Project environmental review and permitting assumptions. All designs need to adhere to the SCVWD maintenance access requirements, which include a minimum 12-ft vertical clearance above existing maintenance roads and sufficient horizontal distance from the Adobe/Barron Creek confluence area. Any significant impacts such as levee reconstruction or column construction within the limits of the creek must be avoided.

Visual and Programmatic Relationship to the Baylands

The overcrossing and ramps would constitute a significant new visual element in the setting. A Visual Impact Analysis (VIA) will be prepared as part of the environmental review process to analyze the two alternative conceptual alignments (Alternatives 1 & 2). The selected design from the AIA design competition will be analyzed in the VIA.

Table 1 highlights the design approaches that would tend to minimize adverse visual impacts. The aesthetics and visual qualities are important community concerns that will drive the project development end environmental assessment process.

⁴ A cable-stayed structure has one or more towers (or pylons), from which cables support the deck. The potential for birds to fly into the cables is a concern.

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Table 1. Potential Visua	l Impacts and	Avoidance/	Mitigation	Strategies	(Dratt)

Potential Visual Impact	Avoidance/Mitigation Strategy
The proposed bridge would obscure views of the Baylands from northbound Highway 101, East Bayshore Road and the Bay Trail.	 Minimize extension of ramp alignments into the Baylands view. Locate the bridge and ramp alignments close to the edge of the Baylands, utilizing proximity to the existing tree canopy/Lowlands Development area as a method to limit loss of exposure to Baylands view.
	Limit the bulk and massing of the bridge structure, particularly east of Highway 101 near the Baylands for views immediately northwest of Adobe Creek.
	 Consider removal of existing non-native Eucalyptus trees to expand views of the Baylands from the Bay Trail and northbound travel lanes on East Bayshore Road and Highway 101.
Bridge lighting may produce glare for highway and frontage road users, contribute to a reduction in nighttime sky visibility within the Baylands, and spillover into the Baylands and riparian	Use lighting features that emphasize illumination of the bridge trail surface. Limit overall intensity of lighting to reduce "spillover" glare, particularly upward toward the sky and outward toward the highway, frontage roads, Baylands, and riparian corridor.
corridor.	Consider limited hours of lighting and/or user-actuated lighting design to minimize unnecessary emissions when bridge is not in use.
Up to 12 trees (including three London Plane street trees and a mature Canary pine) and minor landscaping would be removed from the west side of West Bayshore Road at Adobe and Barron Creeks. Up to 36 Eucalyptus trees may be removed within the Baylands near the Adobe Creek riparian corridor.	Only a small fraction of the Eucalyptus trees proposed for removal within the Baylands may be considered to be impacted by the construction of the overcrossing structure and ramp landing area. The majority of trees identified are to be considered for removal only in so much as they are not compatible with the Baylands design and management guidelines that emphasize native landscapes and horizontal features, and their removal would positively expand views of the Baylands and Adobe Creek.
	To the extent necessary and desirable, the number of trees proposed for removal can be minimized based on proposed project construction footprint and the final landscape design plan. If potential biological impacts are further identified in the removal of specific trees, the proposed ramp alignment can be modified slightly to reduce or avoid these impacts. Lastly, the impact of tree removal would be assessed in accordance with the Palo Alto Tree Technical Guidelines and a suitable mitigation plan (both on-site and off-site) would be prepared and adhered to in coordination with the City Arborist, the Caltrans Office of Landscape Architecture for planting in Caltrans right-of-way, and adhering to applicable California

Potential Visual Impact	Avoidance/Mitigation Strategy Department of Fish and Wildlife (CDFW) requirements.
The project may break up the visual continuity of the Baylands with new vertical elements and further "urbanize" the open space aesthetic.	Limit unnecessary vertical elements east of Highway 101 near the Baylands by maintaining a maximum height of 35 ft from ground level to the top of the east ramp structure, which is consistent with the average height of adjacent tree canopies and buildings. Limit potential vertical towers associated with a signature bridge design to West Bayshore Road, and to a maximum height of 65 ft (consistent with highest allowable building elements according to adjacent zoning).
The final bridge design concept may introduce finishes and colors that conflict with or distract from the Baylands view. The final bridge concept could be a design incompatible with the visual environment of the Highway 101 Corridor.	Avoid garish colors and bright finishes that would be incompatible with the natural setting of the Baylands as established by existing policy and determined further by the local architectural review process.

Utilities

Existing utilities will be a key consideration in alignment and design of the overcrossing. There are a number of underground and overhead utilities located within the project area. Three underground utilities cross Highway 101 within the project footprint in Caltrans right-of-way: a 4-in gas line, a 3-in telecommunications, and a 15 kV electrical. Overhead electrical lines cross over Highway 101 within the project area, including a 60 kV line (see **Figure 4**). The overcrossing structure would need to adhere to California Public Utilities Commission (CPUC) clearance standards, which specify at least 25 ft clear from the lowest cable sag of the 60kv line.

Numerous underground utilities exist along East and West Bayshore Road, including sanitary sewer, storm water, water, recycled water, gas, electrical, and telecommunications may need to be relocated. The proposed overcrossing structure should avoid utility impacts and honor existing utility easements, which includes 30 inch gas line (approximate) within the 20 ft PG&E easementwhere structures are not allowed. Proposed designs that require relocation of utilities should demonstrate need and practicality of such impacts. Relocated utilities would need to be coordinated with the appropriate owners during the design phase of the project and adhered to any applicable codes.

Due to the adjacency of the project to an electrical sub-station, as well as the prominence of alternative energy within the City of Palo Alto energy portfolio, the concept of utilizing solar panels, possibly as part of overhead shade/weather protection, may also be considered in the bridge design. These features would likely need to remain outside of the Caltrans right-of-way due to anticipated safety, maintenance, and permitting concerns.

Right-Of-Way

It is anticipated that the overcrossing alternatives would impact Caltrans, City, and SCVWD rights-of-way, as well as an adjacent private property owned by Google. West of Highway 101, the overcrossing ramp is anticipated to encroach into Google's 3600 West Bayshore Road property, before touching down within SCVWD right-of-way. The overcrossing would span over Highway 101 within Caltrans right-of-way, and touch down east of Highway 101 within the Palo Alto Baylands Nature Preserve (a City of Palo Alto property). The overcrossing alternatives would require an easement from the 3600 West Bayshore Road property, and construction would have an impact on the private parking lot and landscaping, requiring reconfiguration of these improvements. These private property impacts are not anticipated to be a major constraint. Caltrans requirements for right-of-way certification shall be followed.

Design Elements

Potential Secondary Access (Stairs)

Stairs could be added to each side of the bridge at the ramps to provide additional access to the Highway 101 overcrossing. Stairs can provide faster access for users wishing to bypass the ramp structure or for bicyclists who want to carry their bike, and offer additional recreational value to the structure. Per ADA standards, risers shall be 4-in high minimum and 7-in high maximum. Treads shall be 11-in deep minimum. All steps shall have uniform riser heights and tread depths. Provision of stairs shall not preclude providing accessible pathways to the primary ramp touchdown locations. Provision of secondary ramp structures, in lieu of stairs, may also be desirable if cost effective and feasible within the proposed project footprint.

Railings and Fences

While a minimum 8-ft high "missile barrier" fence with 1-in maximum openings is required by Caltrans standards over Highway 101 and frontage roads, a 42-in to 48-in high railing is preferred for improved user sight distance and design profile beyond the highway. Potentially an earth fill ramp portion of the north/east landing could avoid railings altogether, if the slopes were sufficiently moderate and setbacks adequate (i.e. 1:3 maximum slope and/or 5-ft wide graded shoulder). The most pertinent guidelines for this are in AASHTO Guide for the Development of Bicycle Facilities 4th Edition and VTA Bicycle Technical Guidelines.

Landscaping and Habitat Restoration

The landscape/habitat restoration plan for the north/east ramp area should be reflect the specific guidance on plant palette in the Baylands Master Plan document, as well as SCVWD design guidelines for planting along creeks. There may also be some relevant habitat impact avoidance and mitigation measures to come from forthcoming Natural Environment Study (NES)/biological studies. Landscaping for the limited landscape areas around the south/west ramp that would be planted or restored are more likely to involve ornamental plants, but native plants are desirable to create potential habitat and in the surrounding area and drought-tolerant plants are required.

Lighting

Lighting is required to be installed on the bicycle path within Caltrans right-of-way. Although general bicycle path lighting is discussed in the HDM, the location of the proposed overcrossing requires special consideration for lighting levels due to the environmentally sensitive areas, including Adobe Creek and the Baylands. Any lighting installed on the overcrossing should shield direct light from spreading to sensitive receptors adjacent to the structure; including Highway 101 where light can be a distraction for vehicles.

Construction Phasing & Traffic Handling

Impacts to the existing roadways and Highway 101 should be minimized during construction. Caltrans standards should be adhered to during overcrossing construction. All modifications to Highway 101 that do not meet current Caltrans standards would require design exceptions from Caltrans and extensive coordination. A number of assumptions were made regarding the schedule and staging for construction to provide a basis for evaluation of impacts in the environmental document. They are reproduced here for information.

Construction of the bridge approaches on E. and West Bayshore Road may require sidewalk closures or lane closures. If a column is constructed just outside of the Caltrans right-of-way (between E. and/or West Bayshore and the Caltrans right-of-way), traffic would be disrupted due to foundation construction. This may require a temporary lane closure and temporary traffic signal for one direction travel at a time. In those cases where a full closure is required, vehicles or pedestrians would be detoured.

Construction for the overcrossing spanning Highway 101 is assumed to be built in two stages:

- 1. The first stage constructing the footing in the median of Highway 101 (to support column placement in the median), and
- 2. The second stage for falsework erection and superstructure construction

In order to accommodate footing construction during stage 1 in the median, 22-ft would be required between the temporary railings. The existing median of Highway 101 is 6-ft wide. Since Highway 101 is a significant corridor, it is highly unlikely that Caltrans would allow a lane closure for the duration of construction. Therefore, the lane widths along Highway 101 may need to be narrowed to 11-ft and shifted away from the median per Manual of Uniform Traffic Control Devices (MUTCD) standard lane tapers to accommodate the widened median during this stage. Based on the MUTCD standard lane taper lengths, approximately 1300-ft of restriping would be required on Highway 101 in both directions to accommodate the lane taper. Narrowing the lanes to 11-ft and eliminating the shoulders would require approval from Caltrans. **Figure 16** shows the footing construction stage.

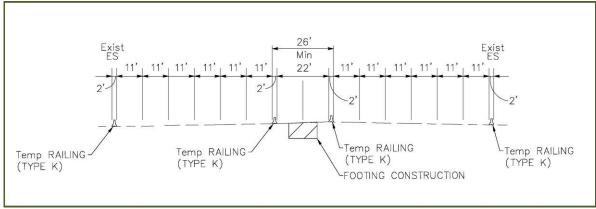


Figure 16: Proposed Temporary Highway 101 Cross Section- Construction Stage 1

Following stage 1, the lane widths along Highway 101 can be shifted back towards the median as long as there is adequate width for falsework and superstructure construction. This stage (stage 2) would also require temporary closure of Highway 101 in order to erect falsework, most likely to occur during nighttime hours when traffic volumes are minimal. A detour plan during the design phase would be developed for the complete freeway closure. This stage is shown in **Figure 17**.

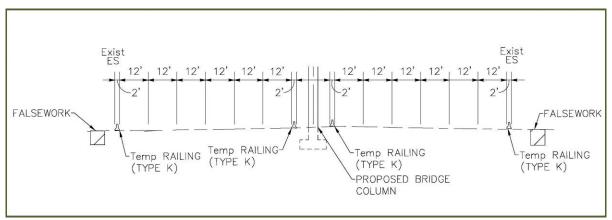


Figure 17: Proposed Temporary Highway 101 Cross Section- Construction Stage 2

If a prefabricated steel structure is selected, temporary closure would also be required as the structure is erected.

The anticipated truck route to the western construction staging area(s) includes Highway 101, San Antonio Road, Fabian Way, and West Bayshore Road. The anticipated truck route to the eastern construction staging area(s) includes Highway 101, San Antonio Road, and East Bayshore Road.

Cost/Budget

The City currently has \$10 million in grant and local monies identified for this project. The preliminary budget target for the construction is \$8 million. The overall cost of the proposed structure will be weighed against its performance relative to the overall project objectives.



Design Criteria Checklist

- Q Maximum pathway profile grade (without landings but with 5-ft long level area for at least every 400 ft interval): 5% (the 15% design used 4.9%)
- Q Maximum pathway profile grade (with level landings for every 30 in of elevation rise): 8.33% (use 8% as target)
- Q Minimum vertical clearance from top of Highway 101 to underneath of pedestrian overcrossing: 18 ft 6 in
- Q Minimum vertical clearance from top frontage road to underside of pedestrian overcrossing: 17 ft
- Santa Clara Valley Water District Design (SCVWD) maintenance access requirements, including sufficient horizontal distance from the Adobe/Barron Creek confluence area.
- Maximum overcrossing structure width, excluding railings/fence: 18 ft
- Q Pathway width: Minimum 10-ft wide paved travel way, preferred overall width of 16-ft including shoulders, where practical.
- Minimum fence (missile barrier) height (over Highway 101 and the frontage roads): 8 ft
- Minimum fence (missile barrier) opening (over Highway 101): 1-in x 1-in
- Minimum railing fence height (on bridge with vertical drop greater than 24 in): 42 in
- Q Caltrans Target Standard Bicycle design speed (may not be feasible to meet): 20mph
- Minimum bicycle design speed: 12 mph (west ramp), 15 mph (east ramp)
- Q Load bearing requirements: H20 (16,000 lbs dual axle)
- Q Bridge piers/columns: All alternatives would include bridge columns with pile depths of up to 120 ft or more, including not more than one column in the center of the Caltrans right-of-way.
- q Abutments
- Q Lighting on bridge: Lighting for bridge use at night, with guidelines to avoid glare on highway, local roadways, Baylands, and other adjacent areas. Dark sky compliance encouraged, but not required.
- Q Signage and striping: Trail striping and signage consistent with a two-way, shared use pathway as identified by the California Manual on Uniform Traffic Control Devices (CAMUTCD), including warning and regulatory signage on the overcrossing and along East and West Bayshore Road.
- Q Wayfinding: All alignments should include improved bicycle and Baylands wayfinding signage consistent with City standards.
- Q Landscaping: Native, drought-tolerant planting as specified in the Baylands Master Plan or SCVWD Guidelines should be used throughout the project, including to replace and/or restore disturbed areas within the nature preserve and along the Bay Trail and Adobe Creek riparian corridor. Additional landscaping of the west side of West Bayshore Road should be included.
- Q Public Art: The incorporation of public art will be a requirement of the project and may help to create this iconographic gateway. Areas shall be identified for the incorporation of Public Art at a minimum.
- q Trail and SCVWD maintenance road fencing.
- Q Benjamin Lefkowitz Tunnel: All alternatives would require the partial removal and permanent closure of the existing seasonal Highway 101 underpass.

The following Caltrans standards for Highway 101 during bridge construction activities must also be considered:

q	Minimum median width of Highway 101 for constructing center column:	22 ft
q	Minimum falsework traffic opening width over Highway 101:	72 ft
q	Minimum vertical falsework clearance over Highway 101:	15 ft

Summary Table of Project Elements

Table 2 Presents a summary of the elements included in the Project.

Table 2: Summary of Project Elements

	Table 2: Summary of Project Elements
Bridge Feature	Description
Main Bridge Span	Maximum span of 240 ft, with 17 ft minimum vertical clearance over City's right-of way frontage roads, 18.5 ft over half of the frontage roads and all of the Highway 101. Assumed structure width: 18 ft from outside edges.
Bridge Ramps & Slope	Target slope of between 4-5% (equates to ramp length of 400 ft to 500 ft from edge of the frontage road); maximum 8% grade for potential steeper segments.
Trail Surface and Width	Minimum 10-ft paved trail, total trail width of 16 ft including shoulders anticipated.
Railings	Min 42 in. where necessary, 8 ft "standard height" fencing required over highway and frontage roads. This is a potential public art element.
Alternative Bridge Access	A secondary stairway access point near 3600 West Bayshore Road would be considered to improve pedestrian accessibility for users headed to and coming from the north along West Bayshore Road. A secondary stairway access point for the north/east bridge ramp may also be considered in conjunction with a potential landscape program.
Lighting	Lighting is strongly recommended for use at night/during winter commute hours, but would be limited to the highway overcrossing structure and approach ramps only. This is a potential public art element.
Signage and Striping	Trail striping and signage consistent with a two-way, shared use pathway as identified by the California Manual on Uniform Traffic Control Devices (CAMUTCD); additional warning and regulatory signage may be included along East and West Bayshore Roads.
Wayfinding	Include improved bicycle and Baylands wayfinding signage consistent with City standards.
Interpretive Signage	Interpretive/educational signage of the natural and cultural history of the Palo Alto Baylands and Adobe/Barron Creek systems would be included.
Columns	Include bridge columns with pile depths of 120 ft or more including not more than one column in the center of the Caltrans right-of-way. Number and spacing of columns outside the Caltrans right-of-way to be determined with subsequent design.
Landscaping /Trees	Assume the removal of up to 12 trees along West Bayshore Road, including 3 London Plane street trees and a tall Canary Pine tree at 3600 West Bayshore Road. Incorporate trees into the design if possible. Additional removal of up to 36 Eucalyptus trees and replacement of vegetation in the Baylands is possible. Removed trees would be replaced on or off site in accordance with the Palo Alto Tree Technical Manual and in consultation with the City arborist, and CDFW requirements (if applicable).

Bridge Feature	Description
	New landscaping on the west side of West Bayshore Road and within the Baylands would be included. Seating/rest areas, soft-surface jogging paths, and public art are also potential elements consistent across design alternatives.

References

American Association of State Highway Transportation Officials. (2012). *Guide for the Development of Bicycle Facilities (4th Edition)*. Washington, D.C.

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Appendices

Appendix A. 15% Overcrossing Design Drawings

Appendix B. 15% Adobe Creek Trail Design Drawings (separate project to coordinate with)

Appendix C. Project Area Base Map

Appendix D. Preliminary Foundation Report (PFR) (prepared by Parikh Consultants)

Appendix E. Sample of City's Professional Services Contract