

San Francisquito Creek Flood Protection and Habitat Restoration Project, Urban Reach 2, Flood Protection, Ecosystem Restoration and Recreation Project

PROFESSIONAL SERVICES- ENGINEERING

REQUEST FOR PROPOSALS FEBRUARY 29, 2024

MASTER SERVICES AGREEMENT

The San Francisquito Creek Joint Powers Authority (SFCJPA) is soliciting proposals from qualified individuals or firms (Consultant) for a Master Services Agreement (MSA) for project development and implementation services related to <u>San Francisquito Creek Flood Protection</u>, <u>Ecosystem Restoration and Recreation Project Upstream of Highway 101 Project</u>.

The MSA will have an anticipated four to five (4 - 5) year period of performance. Work products will be detailed in Task Orders issued by the SFCJPA. This MSA is intended to address both immediate needs for Consulting, Planning, and Engineering services to enable the evaluation of new and augmented potential project alternatives, then advance the preferred alternative(s) through design, planning, entitlements, project permitting, bid support, and engineering support during and post construction.

Because the exact nature and scope of all potential future tasks can't be foreseen at this time, Task Orders will be issued for current planned work. Additional Task Orders will be issued for future work elements, contingent upon satisfactory performance during Task Order 1. Initially the contract's Task Order 1 will focus on selection of a preferred flood risk reduction alternative and 30% designs. Subsequent Task Orders will progress through 60%, 90% and 100% design, permitting, project bidding, engineering, and construction management support, as-builts, and operations and maintenance plans.

Qualified applicant's team will have demonstrated and verifiable experience and expertise in flood control civil engineering, structural design, hydraulic modeling, geotechnical engineering, project permitting, restoration design, public outreach, project management, and construction plans and specifications preparation. Desired qualifications include experience and knowledge of green design and construction strategies and methods and Engineering with Nature. We anticipate the areas of expertise may include but are not limited to civil, geotechnical, structural engineering disciplines, hydraulic analysis and HEC RAS modeling, traffic studies, site restoration/landscape design, surveyor, green design and engineering with nature, graphics and rendering, regulatory agency permit requirements, familiarity with CEQA/NEPA and FEMA accreditation requirements. Visualizations and concept renderings will be required as a tool to aid in presenting alternatives and preferred alternative to SFCJPA Board and public.



PROPOSALS MUST BE SUBMITTED BY:

April 5, 2024, at 5:00 pm local time to:

Margaret Bruce, Executive Director e-mail: <u>MBruce@sfcjpa.org</u>

Please submit an electronic copy by email or similar electronic transfer. Proposals are to be limited to 18 pages, font size 11, including any supporting materials. Proposal shall be valid for up to one year after submittal.

Introduction and Background:

The San Francisquito Creek watershed encompasses approximately 45-square-miles extending from Skyline Boulevard to San Francisco Bay. The watershed and associated alluvial fan floodplain include public lands and numerous private landowners in the cities of East Palo Alto, Menlo Park, Palo Alto, Portola Valley and Woodside, unincorporated areas of San Mateo and Santa Clara counties, and Stanford University. The creek represents the boundary between the two counties in the lower watershed. San Francisquito Creek begins at the confluence of Corte Madera Creek and Bear Creek, just below Searsville Dam in Stanford University's Jasper Ridge Biological Preserve.

The SFCJPA, through partnerships with its five member agencies (Santa Clara Valley Water District, OneShoreline, and the cities of Menlo Park, Palo Alto, and East Palo Alto), completed construction of the San Francisquito Creek Flood Protection, Ecosystem Restoration, and Recreation Project along the creek between Highway 101 and San Francisco Bay in 2019. This was the first and necessary part of the SFCJPA's <u>Comprehensive Plan</u> to reduce flood risk.

The Reach 2 area – Defined as the segment of the San Francisquito Creek from East Bayshore Road to El Camino Real- is fully urbanized, primarily with residential dwelling units, roads, and some business areas. The surrounding community members in East Palo Alto, Palo Alto, and Menlo Park place a high value on the relatively natural creek bank and associated riparian corridor. The surrounding community also needs solutions to chronic creek flooding that occurs during storm events greater than a 25-year flow event; the frequency of higher storm events is anticipated to accelerate due to climate change.

The Reach 3 or Upper Watershed area–Defined as the creek segment from El Camino Real to Searsville Dam- will be included in the potential area(s) where there may be options for project alternative(s) evaluation.

Project History:

Planning for project elements to reduce flood risks upstream of Highway 101 (Reach 2) has been advanced by the SFCJPA and partner agencies using hydraulic modeling reviewed and



SAN FRANCISQUITO CREEK

sfcjpa.org

certified by the Army Corps of Engineers (ACOE) in 2016. Santa Clara Valley Water District developed designs for replacing the Pope Chaucer Bridge and creek widening areas using the 2016 HEC RAS model. The Environmental Impact Report for these proposed project elements was certified by the SFCJPA Board in September 2019.

The original Reach 2 project objective was to provide flood protection up to a 70-year flow event, or up to 7,500 cubic feet per second (cfs) as measured at the USGS Stream Gage at the Stanford Golf Course. However, during the second largest flow of record, which occurred on December 31, 2022, the creek overtopped its banks in many locations at a flow of 5,880 cfs, that was directly measured by the USGS at the Stanford gage. Santa Clara Valley Water District ("Valley Water") determined that the model may have originally underestimated the creek's hydraulic capacity, to a level that translates to water surface elevations up to two feet higher than previously modeled.

The measured flows and conditions in 2022-2023 resulted in Valley Water's analysis and evaluation of the 2016 hydraulic model, and a subsequent third-party validation of the model and model results. This independently verified model will be the default HEC-RAS model used by the project and will be used to determine the basis for the augmentation of the Reach 2 project design elements.

The ACOE has been evaluating creek widening areas as part of a CAP 205 Program. The ACOE work was paused during much of 2023. The ACOE is currently evaluating the updated model and is beginning their review of updated HEC-RAS model. ACOE's hydraulic review and certification of the HEC-RAS model is anticipated by July. Through SFCJPA staff, Consultant will need to be aware of and coordinate closely with ACOE in project planning and implementation. An optional task under this MSA includes evaluation of alternatives and their suitability for implementation within the ACOE's CAP 205 program requirements.

Stanford University has developed a sediment transport model, and this model is also being used in the watershed to estimate sediment impacts from Stanford's proposed <u>Searsville</u> <u>Project</u>. The Searsville project has the potential to affect hydraulic capacity in the constrained Urban Reach 2 area and exacerbate flooding. It is understood that sediment modeling is imprecise, with an accuracy of +/- 50%. The consultant will need to be familiar with sediment transport and creative solutions for flood risk reduction in this constrained flood prone Urban Reach.

Coordination Needs:

The SFCJPA has secured the services of EMC Planning Group, an environmental planning consultant, to prepare a Supplemental EIR to document the revised project elements and proposed impacts of construction. The ACOE's current work on channel widening areas will also require coordination as any alternative will include ACOE's plans to widen the channel at specified locations. As noted above, Stanford's Searsville project must be closely coordinated in terms of sediment impacts. The selected consultant will need to work closely with the Environmental Planning Consultant, ACOE and Stanford, and the SFCJPA will facilitate this coordination.



The SFCJPA staff will lead on coordination with project neighbors, member agency staff, regulatory agencies, and will include Consultant and utilize Consultant's work products and expertise, especially in terms of visualization graphics of concepts.

Utility providers will be responsible for relocating their infrastructure as needed. Consultant will lead future needs for coordination of utility relocation needs in the future, based on selected alterative(s).

Project Elements and Estimated Dates of Construction:

- Newell Road Bridge Replacement Project City of Palo Alto, 2024 and 2025
- Channel Widening at up to 4 locations USACE San Francisco District, CAP 205, 2025 – 2026.
- Implementation of selected alternative(s) estimated 2026 2027

This includes project elements by SFCJPA and others.

SFCJPA Proposed Project Elements to be evaluated:

Alternatives to be evaluated will assume the completion of the Newell Road Bridge Replacement Project and removal of a large concrete structure and channel widening along Woodland Avenue in East Palo Alto as part of the pre-SFCJPA Reach 2 project conditions.

The 2019 EIR screened 17 potential alternatives that were developed based on stakeholder input. A sub-set of these alternatives, and possible variations of these, will be revisited in this evaluation, and new alternatives may be added. Alternatives may include one or more of the following:

- Replacing the Pope/Chaucer Bridge.
- Using streets for overland flood flows to one or more discharge locations easterly of the existing floodplain.
- Creating additional channel capacity or peak flow storage (or off stream detention) upstream of the existing Pope/Chaucer Bridge
- Alleviating risks at known or potential overbanking locations
- A combination of alternatives meeting flood risk reduction objectives.

The overall Scope of Work for this MSA includes the tasks listed in Exhibit A. Tasks in Exhibit A may be modified or replaced throughout the life of the contract and shall be executed on a task and deliverable basis through the issuance of periodic Task Orders to the consultant.



Project Schedule:

This project will begin with contract execution on or about April 25, 2024, with construction to be completed by December 31, 2027, if reasonably feasible. Consultant will work with SFCJPA team to establish an ambitious but achievable work schedule for all interim steps to complete construction.

Proposal Requirements:

Each proposal must contain the following:

- A cover letter with contact information
- Organizational chart of the project team
- Itemized fee schedule (including costs per unit or per hour for: HEC-RAS model runs, visualizations/renderings, workshop support, and meeting/workshop participation)
- Brief description of previously completed similar projects
- List of team members or subcontractors, their role, and personnel assigned to the project
- Designation of a project administrator who will be responsible for billing and accounting
- Description of any pending litigation or litigation against the firm, or any of its proposed subconsultants that is active or has been settled in the past three (3) years
- Statement of acceptance of Consultant Agreement and Insurance Requirements
- Conflict of Interest Statement
- Statement regarding record of compliance with applicable laws, regulations, policies, guidelines, and orders governing prior or existing contracts
- Three references from work with similar type, scope, or complexity

EVALUATION AND SCORING CRITERIA

SFCJPA staff and staff from its member agencies will evaluate the proposals provided in response to this RFP based on the following criteria.

Proposal Evaluation and Scoring Criteria	Points Range
Responsive Proposal - contains all the following:	
A cover letter with contact information	
Organizational chart of the project team	
 Itemized fee schedule (including costs per unit or per hour for: HEC-RAS model runs, visualizations/renderings, workshop support, and meeting/workshop participation) 	
Brief description of previously completed projects of similar scope,	Y – N
• List of team members or subcontractors, their role, and personnel assigned to the project	"No" to any
 Designation of a project administrator who will be responsible for billing and accounting 	point list disqualifies.



SAN FRANCISQUITO CREEK

sfcjpa.org

Proposal Evaluation and Scoring Criteria	Points Range
 Description of any pending litigation or litigation against the firm, or any of its proposed sub-consultants that is active or has been settled in the past three (3) years Statement of acceptance of Consultant Agreement and Insurance Requirements Conflict of Interest Statement Statement regarding record of compliance with applicable laws, regulations, policies, guidelines, and orders governing prior or existing contracts Three references from work with similar type, scope, or complexity 	
Despensive Proposal Sections Criteria	
Completeness of proposal	1 - 15
Quality of the solution, goods and/or services to be provided as demonstrated by a well-organized and clearly communicated proposal	1 - 20
Cost to the SFCJPA (Lower number for higher cost relative to other proposals)	1 – 10
References	1 - 10
Familiarity with the San Francisquito Creek Watershed, its human and natural history, communities, and circumstances.	1 - 10
Demonstrated and verifiable experience and expertise in flood control civil engineering, structural design, hydraulic modeling, geotechnical engineering, project permitting, restoration design, public outreach, project management, and construction plans and specifications preparation.	1 - 15
Experience and knowledge of green design and construction strategies and methods and Engineering with Nature.	1 - 10
Innovative concepts or services as provided by consultant in proposal	1 - 10
	100 Points Max.

Proposals for the MSA and requested work under Task Order 1 (TO1) will be combined with the above evaluation and use the same criteria. Proposals should clearly demonstrate the prospective consultant's capacity to perform the work for TO 1 and probable subsequent work. If after evaluation of the proposals the SFCJPA is not able to select a preferred candidate, interviews may be scheduled with the highest-ranking candidates to complete evaluations.



The <u>SFCJPA's Standard Agreement template</u> should be reviewed. Prospective consultants should consider their ability to comply with the provisions contained within the SFCJPA Standard Agreement prior to submitting a proposal.

Questions or requests for clarification may be directed to the SFCJPA point of contact via email at any time between the issuance of this RFP and March 15, 2024. All questions and responses will be made available to all prospective consultants prior to the proposal due date.

Contract Award

The award, if made by SFCJPA, will be to the consultant or consultant team offering a proposal deemed to provide the best value to SFCJPA, with price and other factors listed in the Scoring Criteria considered.

Anticipated Selection Process Timeline:

Contract Execution	On or about April 25, 2024
Pre-Contract meeting	April 24, 2024
Contract Development	April 15 – 19, 2024
Consultant Selection	April 12, 2024
Interviews (if needed)	April 10, 2024
Proposals Due	April 5, 2024
Deadline for Questions	March 15, 2024
Optional Bidders Webinar	March 8, 2024, 2:00 PM (attendees must preregister)
RFP Issuance	February 29, 2024

GENERAL CONDITIONS:

All work must be completed in accordance with all applicable laws and regulations and in accordance with sound engineering practices.

Survey Datum

All coordinates are based on the California State Plane Coordinate System of 1983, Zone 3; North American Datum of 1983 (NAD83) and North American Vertical Datum of 1988 (NAVD88).



<u>Ownership</u>

All materials submitted in response to the RFP shall become the property of SFCJPA. The Consultant's Proposal and the RFP shall become part of any contract negotiated with the successful organization unless modified in writing by the contract.

By submitting a proposal, each proposer understands and agrees that SFCJPA is subject to the California Public Records Act, which provides that proposals submitted to public agencies are disclosable public records once a contract award has been agendized for consideration at a public meeting. Proposals shall not contain trade secrets.

The SFCJPA, for itself and such others as it deems appropriate, will have unlimited rights to all information and materials developed and submitted to the SFCJPA under this contract, including but not limited to any reports, designs, drawings, analyses, and other items pertaining to the work and services as well as any copyrights. Unlimited rights under this contract include the right to use, duplicate or disclose text, data, drawings, and information, in whole or in part, in any manner and for any purpose whatsoever without compensation to or approval from the Consultant. The SFCJPA will at all reasonable times have the right to inspect the work and will have access to and the right to make copies of the above-mentioned items.

Existing Right-of-Way Mapping

The SFCJPA will coordinate providing this information to the Consultant for the plans, specifications, and estimates (PS&E).

Standard Conditions:

SFCJPA will not reimburse the costs of preparing any proposals.

SFCJPA reserves the right to cancel the contract award at any time before execution of the contract by both parties. The responding consultants bear sole risk and responsibility for costs incurred in preparing and submitting the proposal.

SFCJPA reserves the right to reject all responses to the Request for Proposal.

In disputes over differences of opinions as to the services in the proposal, the decision of SFCJPA shall be final.

SFCJPA reserves the right to negotiate and may ask for clarification in the proposal if needed.

Exhibits to the RFP:

- A. List of Overall Scope of Work
- B. September 2019 Final Environmental Impact Report Alternative Screening Table
- C. Reach Figure



Exhibit A

OVERALL SCOPE OF WORK

This MSA is anticipated to cover the following work:

- 1. Project Management/Consultant Team Coordination
- 2. Engineering Design: including conceptual, 30%, 60%, 90% and 100% designs
- 3. Regulatory Agency and Local Jurisdiction Project Permitting
- 4. Public Outreach and Related Support
- 5. Final Design and Bid Support
- 6. Engineering Support during Construction As-builts and Operations & Maintenance (O&M) Plan,
- 7. Technical Requests associated with the project work not known at this time, to be defined and documented by SFCJPA and Consultant.
- 8. Optional: Staff Augmentation

Future Task Orders will be issued for specific elements. Task Order 1 is being solicited as the initial priority of this MSA.



Exhibit B

2019 EIR Alternative Screening Table

Table 2-1. Screening of Alternatives, Based on each Alternative's Ability to Meet Project Objectives

Project Objective	Replace the Pope-Chaucer Bridge and Widen Channel Downstream Alt 2 Criteria Facily: 9 = N	Construct One or More Detention Basins Alt 3 Agets Criteria with	Construct an Underground Bypass Culvert Alt 4 Difficulty: X = Does N	Replace the Pope-Chaucer Bridge and Construct Floodwalls Alt 5 ot Meet Criteria	Install a Culvert through the Pope-Chaucer Bridge and Increase Capacity Downstream Alt 6	Develop a Bypass around the Pope- Chaucer Bridge and Increase Capacity Downstream Alt 7	Channel Deepening Alt 8	Develop Multiple Small- scale Detention Facilities Alt 9	Increase Debris and Nonnative Vegetation Removal Alt 10	Remove the Pope-Chaucer Bridge and Increase Capacity Downstream Alt 11	Replace the Pope- Chaucer Bridge with a Bike-/ Pedestrian-only Bridge and Increase Capacity Downstream Alt 12	Increase Incentives or Requirements for Low- Impact Development Alt 13	Use Overland Floodways Alt 14	Build and Operate a New Pump Station Alt 15	Build and Operate a Ladera Dam Alt 16	U.S. Army Corps of Engineers Alternative (not selected by the Corps) Alt 17
a. Protect life, property, and infrastructure from floodwaters exiting the creek.	Yes. Could increase creek capacity by 1,800 cfs, to a total of 7,500 cfs, before water would overtop the channel.	Yes. One basin could reduce peak flow through the floodplain area by at least 800–1,000 cfs. <u>Three</u> <u>newMultiple</u> basins could reduce peak flow by 1,800 cfs, which would eliminate overtopping during a flow event up to 7,500 cfs.	Yes. Culvert could convey 1,800 cfs around the floodplain area, thereby eliminating overtopping during a flow event up to 7,500 cfs.	Yes. Could increase creek capacity by 1,800 cfs, to a total of 7,500 cfs, before water would overtop the channel.	Yes. Could increase cumulative capacity in the creek and new culvert by 1,800 cfs, to a total of 7,500 cfs, before water would overtop the channel.	Yes. Could increase cumulative capacity in the creek and new culvert by 1,800 cfs, to a total of 7,500 cfs, before water would overtop the channel.	No. Sediment would be re- deposited in floodplain area, reducing capacity.	No. Beneficial for environment, but would not meet project's objective for meaningful flood protection.	No. Beneficial, but would not meet project's objective for meaningful flood protection.	Yes. Could increase creek capacity by 1,800 cfs, to a total of 7,500 cfs, before water would overtop the channel.	Yes. Could increase creek capacity by 1,800 cfs, to a total of 7,500 cfs, before water would overtop the channel.	No. Floodplain area is mostly developed, and upper watershed has mostly pervious surfaces; therefore, limited opportunities for LID projects, and would not meet project's objective for meaningful flood protection.	No. Flooding overland in the developed floodplain area would pose a risk to people and property, and not meet project's objectives for meaningful flood protection.	Yes. Could convey 1,800 cfs around the floodplain area, thereby eliminating overtopping during a flow event up to 7,500 cfs.	Yes. Could reduce peak flow through the floodplain area by 1,800 cfs, thereby eliminating overtopping during a flow event up to 7,500 cfs.	No. Would result in overtopping during a 7,500 cfs flow event.
Rating	•	Ŷ	•	•	•	•	Х	Х	Х	٠	•	Х	Х	÷	•	Х
b. Minimize impacts on the adjacent community.	Yes. Impacts would include noise and car, bike and pedestrian traffic during construction. Loss of mature trees, which would be mitigated.	Yes. Infrequent impacts on agricultural/ commercial lands. During construction, noise and traffic impacts from trucks off-hauling sediment.	No. During construction, major traffic, utility, and noise impacts, and temporary relocation of adjacent residents. New easements required.	Yes. Aesthetic impacts, noise and traffic during construction, and loss of mature trees, which would be mitigated.	Yes. Impacts would include noise and traffic during construction, loss of several mature trees, which would be mitigated.	Yes. Impacts would include noise and traffic during construction, loss of several mature trees, which would be mitigated.	Yes. Recurring noise and traffic impacts during initial construction as well as periodic maintenance to deepen the channel.	Yes. Noise and traffic impacts during construction. Could displace other land uses.	Yes. Minimal community impacts, if any.	No. Permanent and temporary construction impacts on traffic. Loss of mature trees, which would be mitigated.	No. Permanent impact on car traffic; loss of mature trees, which would be mitigated. During construction, impacts of noise and car, bike and pedestrian traffic.	Yes. Minimal impact during construction. if any.	No. Major impacts on transporta- tion during, and immediately after flood events.	Yes. Construction noise and traffic impacts. Potential noise impacts during operation of pump station.	Yes. During construction, noise and traffic impacts from trucks.	Yes. Impacts would include noise and traffic during construction, and the loss of mature trees, which would be mitigated.
Rating	÷	÷	Х	÷	÷	÷	÷	÷	•	Х	Х	•	Х	÷	÷	÷

San Francisquito Creek Joint Powers Authority

Project	Replace the Pope-Chaucer Bridge and Widen Channel Downstream	Construct One or More Detention Basins	Construct an Underground Bypass Culvert	Replace the Pope-Chaucer Bridge and Construct Floodwalls	Install a Culvert through the Pope-Chaucer Bridge and Increase Capacity Downstream	Develop a Bypass around the Pope- Chaucer Bridge and Increase Capacity Downstream	Channel Deepening	Develop Multiple Small- scale Detention Facilities	Increase Debris and Nonnative Vegetation Removal	Remove the Pope-Chaucer Bridge and Increase Capacity Downstream	Replace the Pope- Chaucer Bridge with a Bike-/ Pedestrian-only Bridge and Increase Capacity Downstream	Increase Incentives or Requirements for Low- Impact Development	Use Overland Floodways	Build and Operate a New Pump Station	Build and Operate a Ladera Dam	U.S. Army Corps of Engineers Alternative (not selected by the Corps)
Objective	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9	Alt 10	Alt 11	Alt 12	Alt 13	Alt 14	Alt 15	Alt 16	Alt 17
c. Minimize impacts on/ enhance the environment.	Yes. Impacts on riparian vegetation along banks. Improvement of aquatic habitat where channel is widened and concrete is removed.	Yes. Approximately 1-3 times per century, inundation of habitat within basin. Impacts during construction.	No. At water inlet and outlet, impacts on creek bank vegetation and potential impact from trapping aquatic species.	Yes. Impacts on riparian vegetation along banks. Impacts during construction.	No. Creates a less natural channel and flow condition at bridge. Potential trapping of aquatic species and impacts on riparian vegetation. Impacts during construction.	No. Creates a less natural channel and flow condition at bridge. Potential trapping of aquatic species and impacts on riparian vegetation. Impacts during construction.	No. During construction and ongoing impacts on benthic habitat at deepening sites.	Yes. Noise and other impacts during construction.	Yes. Could remove vegetation and natural debris that provides aquatic habitat.	Yes. Impacts on riparian vegetation along banks. Minor impacts during construction.	Yes. Impacts on riparian vegetation along banks. Minor impacts during construction.	Yes. Minimal impacts. Benefits to water quality.	No. Flood waters on roads would pick up petroleum products and debris, which may be delivered to creek and San Francisco Bay.	Yes. Potential impacts on aquatic species at water inlet.	No. Loss of riparian and other habitats, and fish passage would be impeded.	Yes. Impacts on riparian vegetation along banks. Improvement of aquatic habitat where channel is widened and concrete is removed.
Rating	÷	÷	Х	Ŷ	Х	Х	Х	÷	Ŷ	Ŷ	Ŷ	•	÷	Ŷ	Х	Х
d. Minimize operational and maintenance requirements.	Yes. Would not change long- term operation and maintenance.	Yes. Increased operational and maintenance needs for new inlet and outlet structures and detention basins.	Yes. Increased maintenance at water inlet and outlet structures and within culvert.	Yes. Would not change long- term operation and maintenance.	Yes. Increased maintenance of culvert.	Yes. Increased maintenance of culvert.	No. Requires ongoing, channel deepening.	Yes. Maintenance of new detention basins, including water inlets and outlets, and removal of accumulated sediment.	No. Requires ongoing, potentially annual, removal.	Yes. Would likely not change long-term operation and maintenance.	Yes. Would likely not change long-term operation and maintenance.	Yes. LID facilities require maintenance, such as vegetation management.	No. Structures to divert and keep water on specific floodways would require mainten- ance.	Yes. Pump station and related facilities would require mainten- ance.	No. New requirements to maintain dam and remove sediment.	Yes. Would likely not change long-term operation and maintenance.
Rating	•	Ŷ	Ŷ	Ŷ	Ŷ	÷	Х	Ŷ	Х	•	•	Ŷ	÷	÷	÷	•
Advance for feasibility screening?	Yes. Meets project objectives.	Yes. Meets project objectives.	No. Substantial impacts on community during construction. Environmental impacts without the environmental benefits of improving creek habitats.	Yes. Meets project objectives, though potentially substantial impacts on aesthetics and trees on top of bank.	No. Installing a culvert through the bridge's concrete structure would not improve the creek's hydraulic function and would be inconsistent with the project's objective to enhance habitats.	No. Diverting water around the existing bridge would not improve the creek's hydraulic function and would be inconsistent with the project's objective to enhance habitats.	No. High ongoing maintenance costs and benthic habitat impacts make this inconsistent with project goals to minimize environmental impacts and maintenance requirements.	No. Although beneficial, it would not meet project's objective for meaningful flood protection.	No. Although beneficial, it would not meet project's objective for meaningful flood protection. SFCJPA is involved in a separate annual effort related to this alternative.	No. Traffic impacts of bridge removal would not be consistent with the project's objective to minimize community impacts.	No. Traffic impacts of bridge removal would not be consistent with the project's objective to minimize community impacts.	No. Limited opportunities for LID projects; would not meet project's objective for meaningful flood protection.	No. Roadway flooding would be inconsistent with the project objective of meaningful flood protection and make evacuation and emergency response during floods difficult.	Yes. Meets project objectives.	No. Would not meet project objectives to minimize impacts on environment and minimize maintenance.	No. Would be inconsistent with the project objective of meaningful flood protection because overtopping would occur during a 7,500 cfs flow event.



Exhibit C

San Francisquito Creek Reach Figure

