

AMENDMENT TO CONTRACT

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The County of San Benito (“COUNTY”) and Biggs Cardoso Associates, Inc., a California Corporation (“CONTRACTOR”) enter into this agreement on the date stated next to the signatures below. In consideration of the mutual promises set forth herein, the parties agree as follows:

1. Existing Contract.

a. Initial Contract.

COUNTY and CONTRACTOR acknowledge that the parties entered into a contract, dated January 1, 2013.

b. Prior Amendments. (Check one.)

The initial contract previously has not been amended.

The initial contract previously has been amended. The date(s) of prior amendments are as follows: November 23, 2021.

c. Incorporation of Original Contract.

The initial contract and any prior amendments to the initial contract (hereafter collectively referred to as the “original contract”) are attached to this amendment as Exhibit 1 and made a part of this amended contract.

2. Purpose of this Amendment.

The purpose of this amendment is to change the agreement between the parties in the following particulars:

a. Term of the Contract. (Check one.)

The term of the original contract is not modified.

The term of the original contract (Exhibit 1) is extended from the current expiration date of June 30, 2022, to a new expiration date of June 30, 2024.

b. Scope of Services. (Check one.)

The services specified in the original contract (Exhibit 1) are not modified.

The services specified in the original contract (Exhibit 1) are modified as specified below: (Check one.)

The services specified in the original contract are modified only as specified below:

Modified Scope of Services:

(Insert modified or new services.)

The document entitled “Additional Services Scope of Work” and Attachment A (Scope of Services) to the original contract, as previously amended (Exhibit 1) is hereby further amended to add the following additional services due to required updates for the construction documents related to the Rosa Morada Bridge at the Arroyo Dos Picachos Creek.

ADDITIONAL SERVICES SCOPE OF WORK
AMENDMENT NO. 2

The National Environmental Policy Act (NEPA) revalidation process and required updates to the construction documents have triggered additional services that are needed to complete the construction documents for the Rosa Morada Road Bridge Replacement. These generally include the following, and are described in further detail below:

- Additional project management services due to extension of project schedule by 2 years
- Monthly coordination meetings with design team and COUNTY
- Meetings with property owners
- Additional environmental permitting support
- Inclusion of bird nest deterrence services in the Special Provisions and Estimate
- Staking for right-of-way acquisitions
- *NEPA Revalidation memorandum (Optional Services)*
- *Additional NEPA Revalidation technical studies that may be required by Caltrans (Optional Services)*
- *Bat exclusion services (Optional Services)*

The following Scope of Services is based on certain assumptions as listed in blue below. Please also see additional assumptions indicated in blue in the detailed scope summary below. Any deviation from these assumptions will be coordinated with the COUNTY and a revised scope and fee established as agreed upon.

Exclusions

- *Right of way acquisition services are not included.*
- *Community meetings and public outreach are not included.*
- *Regulatory permitting and coordination not explicitly noted in the detailed scope of services are not included*
- *Detailed preconstruction surveys for plants or animals are not included.*
- *Nesting bird or roosting bat deterrence is not included.*

Assumptions

- *Nursery coordination will be initiated by the COUNTY in spring/summer 2023, for mitigation site installation in late summer/fall of 2024.*
- *Bidding is scheduled to take place in late summer / early fall of 2023, and a construction contract will be awarded by November 2023.*
- *Construction is scheduled to take place in 2024.*

PROJECT MANAGEMENT

Project Management includes the supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, communication with the design team and the client, and the monitoring of the schedule and the budget. Please refer to the original scope of work in the original contract, as previously amended (Exhibit 1), for a more detailed description.

Extension of Project Schedule by 2-years

Additional project management services are needed due to the project schedule being extended by 2-years. As described above, work includes additional coordination with the COUNTY and design team, additional project administration and accounting services, schedule updates, and monitoring of the project budget.

Monthly Coordination Meetings

To assist with the process of final utility coordination, right of way acquisition questions, preparation for right-of-way certification, completion of final construction documents, and project authorization and bidding, the COUNTY has requested monthly coordination meetings with the design team. Hours are included for the monthly meetings, as well as meeting preparation and meeting minutes, for a 12-month time period.

Meetings with Property Owners

Per COUNTY request, CONTRACTOR will attend onsite property owner meetings to discuss the project impacts to the affected properties. Additionally, CONTRACTOR will prepare property owner exhibits for the meetings to visually communicate the proposed project in relation to their property. It is anticipated that there will be up to four (4) onsite meetings and one (1) exhibit required for each meeting.

ADDITIONAL PERMITTING ASSISTANCE

CONTRACTOR will continue to assist the COUNTY with regulatory permitting for the project, which has stalled for some years due to design delays and other issues. Had the permits been granted on the original schedule, several would be expired at this time, so this task will focus on processing updated applications with the USACE, CCRWQCB and CDFW. The project will require ongoing processing for the Section 404 Clean Water Act permit, the 401 Water Quality Certification, the Lake and Streambed Alteration Agreement and the Incidental Take Permit Application.

NEPA REVALIDATION MEMORANDUM SUPPORT (OPTIONAL ADDITIONAL SERVICES)

The COUNTY may request that a memo be provided to support Caltrans

efforts in revalidation of the NEPA conclusions for the project. To this end, the project as currently designed will be compared to impact assessments provided in the project's 2014 Natural Environment Study (NES) and Biological Assessment (BA). CAD files would be analyzed for the new extent of permanent and temporary impacts and overlain to determine where new areas of impact exist as well as where previously reported impacts were avoided, and updated exhibits that clarify these changes will be developed for inclusion in the memo. This task also includes time for a site visit to evaluate current conditions to report in the memo as unchanged, and to survey the site for host plants for the newly candidate species under the Federal Endangered Species Act, Monarch butterfly. CONTRACTOR will also procure updated special status species lists from the U. S. Fish and Wildlife Service and National Marine Fisheries Service. All of the results of this analysis will be summarized in a memo for Caltrans' use.

BIOLOGICAL ASSESSMENT (OPTIONAL ADDITIONAL SERVICES)

If Caltrans feels that re-analysis of biological resources is needed for NEPA revalidation, they may request that a new Biological Assessment be prepared to support re-initiation of Section 7 consultation under the Federal Endangered Species Act. In this case, CONTRACTOR will prepare a draft biological assessment per the latest Caltrans guidance for the purpose of facilitating Section 7 consultation with the USFWS and the NMFS. Based on CONTRACTOR'S understanding of the Project from prior analysis, federally listed species with potential to occur in the vicinity of the project are the California red-legged frog, California tiger salamander, San Joaquin kit fox, and steelhead, and the Biological Assessment will address these species in detail. The report will also include a description of the project; background information regarding the California red-legged frog, California tiger salamander, San Joaquin kit fox, and steelhead and their potential occurrence and distribution in the Project boundary, including agency-provided information; an analysis of potential project effects on these species (if any); and avoidance, minimization, and compensatory mitigation measures proposed for these species (if determined to be necessary). The report will also include a species table addressing the potential for occurrence of all federally listed, proposed, and candidate species known to occur or potentially occurring in the general vicinity of the project boundary. Graphics to be prepared will include site/vicinity, biotic habitats, and California Natural Diversity Database/Critical Habitat maps. CONTRACTOR assumes that revisions to the report may be necessary based on comments from Caltrans and/or the COUNTY/CONTRACTOR'S team. This task also includes time to respond to two rounds of comments, as necessary.

NATURAL ENVIRONMENT STUDY (OPTIONAL ADDITIONAL SERVICES)

If Caltrans feels that re-analysis of biological resources is needed for NEPA revalidation, they may request that a new NES be prepared to support current project findings under NEPA. Following the completion of a site visit, CONTRACTOR will prepare a new NES per the latest Caltrans guidance. The report will briefly describe existing biological conditions, including special-status species with the potential to occur along the project alignment and any potentially sensitive/regulated habitats mapped during the site visit; potential impacts on existing biological resources; and any conceptual mitigation measures necessary to mitigate the project's environmental impacts. Based on CONTRACTOR'S familiarity with the area, the Project alignment and immediately surrounding areas are expected to support jurisdictional waters, as well as potentially suitable habitat for the California red-legged frog, California tiger salamander, San Joaquin kit fox, steelhead, and nesting common and special-status birds. Because all project activities will occur within unsuitable habitat, no sensitive plant species are anticipated to be present. The report will adequately describe impacts on biological resources for purposes of environmental review of the project. Graphics to be prepared will include site/vicinity, biotic habitats, and California Natural Diversity Database maps. CONTRACTOR has assumed that revisions to the report may be necessary based on comments from Caltrans and/or COUNTY/CONTRACTOR'S team. This task also includes time to respond to two rounds of comments, as necessary.

BAT EXCLUSION SERVICES (OPTIONAL ADDITIONAL SERVICES)

Bats have not been documented utilizing the bridge structure on the project site as a day-roosting habitat during previous field studies for the project. Given that bats are likely not day-roosting on the bridge, the project Lake and Streambed Alteration Agreement (LSAA) from CDFW is unlikely to require the preparation of a Bat Exclusion Plan. However, this scope is provided on an optional basis in case the agency disagrees. This plan would describe how bats will be excluded from roost sites, and it would need to be submitted to CDFW for approval at least 30 days prior to the start of construction activities. Features beneath the bridge where bats could be found roosting during field surveys could support nesting birds in addition to roosting bats. These features would therefore need to be sealed prior to February 1 (the start of the avian breeding season) in order to prevent birds from nesting there.

Bat exclusion activities should not be conducted during cold/wet conditions, and CONTRACTOR anticipates that if CDFW requires this plan they will not allow them to be evicted from suitable habitat features beneath the bridge during the winter months. Recently, CONTRACTOR has seen a trend toward allowing bat exclusion only for a brief period in

the spring (e.g., March 1-31) after temperatures have increased but before the bat maternity season starts on April 1, or for a brief period in the fall (September 1 to October 15) after the conclusion of the bat maternity season but before cooler/wetter conditions arrive. As a result, evicting bats during the nesting bird deterrence work in January or early February may not be allowed by CDFW. Rather, in order for bats to be evicted during appropriate weather conditions, but prior to the start of the avian nesting season, the bats would need to be evicted in the fall (e.g., September to mid-October) prior to the start of bridge work. CONTRACTOR understands that the COUNTY intends to hire a Construction Contractor by late fall (e.g., around November). That will not be early enough to have the contractor's biologist prepare a Bat Exclusion Plan, obtain CDFW approval of the plan, and implement exclusion by mid-October. Therefore, CONTRACTOR proposes to assist the COUNTY by preparing the Bat Exclusion Plan, obtaining CDFW approval of the plan, implementing exclusion by mid-October, and maintaining the bat eviction materials until the bridge contractor is hired. Once the Construction Contractor is on board, they would then maintain the bat exclusion measures moving forward, and bats will have been excluded from the bridge by the time nesting bird exclusion materials are installed in January or early February.

Prepare Bat Exclusion Plan

CONTRACTOR will prepare a Bat Exclusion Plan per the requirements of the LSAA. Based on the assumption that bats are roosting in the expansion joints on the bridge, and could possibly be gaining access to roost sites through openings located adjacent to the expansion joints as well as at both bridge abutments, the exclusion plan will involve installation of materials to create "one-way doors" in these roost entrances. For example, two layers of plastic sheeting, attached via adhesive to the underside of the bridge on either side of the expansion joints, would allow bats to exit the roost, but bats would not be able to re-enter the roost site. CONTRACTOR will prepare a draft plan, obtain comments from the Design Team and the COUNTY, revise the draft as needed, then submit the plan to CDFW for review. CONTRACTOR will then coordinate with CDFW as necessary to obtain their approval.

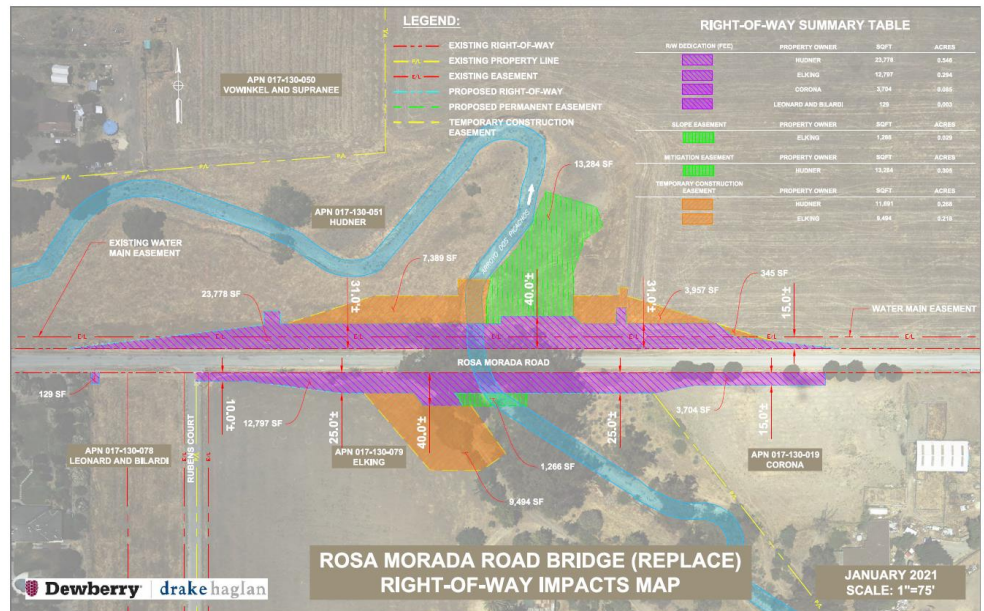
Exclude Bats

After CDFW has approved the Bat Exclusion Plan, CONTRACTOR will install bat exclusion materials. Bats will be excluded between September 1 and October 15. After bats have been evicted from their roosts on the bridge, CONTRACTOR will work to ensure that all bat roost entrances are well-blocked (e.g., perhaps using expanding foam or other materials that are more permanent and easier to maintain than the original bat exclusion devices). Then, CONTRACTOR will inspect these materials and re-install or repair them as necessary to ensure that they effectively

exclude bats until the contractor on-boarding occurs (presumed to be by the end of November, so that the contractor will assume responsibility for maintaining the bat exclusion materials by December 1).

STAKING FOR RIGHT-OF-WAY ACQUISITION

CONTRACTOR will provide survey lath markers to delineate all proposed right-of-way and easement borders as shown on the following “Rosa Morada Road Bridge Right-of-Way Impacts” map. Work does not include setting of any permanent boundary corners.



FINAL PS&E

Updates for Addition of Bird Nest Deterrence Work to the Project Special Provisions and Estimate

The COUNTY prefers to have the Construction Contractor perform the required preconstruction surveys, clearing and grubbing, netting installation, regular site inspection for nests, and other tasks required for the bird nest deterrence work at the project site. CONTRACTOR will update the project special provisions and opinion of probable construction costs to reflect this modification. CONTRACTOR will also review related environmental special provisions to verify consistency and coordination amongst the pertinent environmentally related special provisions, as well as with the remainder of the special provisions document.

Key Assumptions:

- Please see the original agreement and prior amendments for additional assumptions and exclusions.
- All submittals will be in electronic format (Word or PDF)

- *Nursery coordination will be initiated by the County in spring 2023, for mitigation site installation in late fall of 2024.*
- *Bidding is scheduled to take place in late summer / early fall of 2023, and a construction contract will be awarded by November 2023.*
- *Construction is scheduled to take place in 2024.*
- *Plans or technical specifications not explicitly listed above are not included.*
- *Regulatory permitting and coordination not explicitly listed above are not included.*
- *Permit application fees are to be paid by the County when assessed by the state agency.*
- *Wetland delineation or identification of other regulated habitats is not included.*
- *Support during the 3-year plant establishment period is not included.*
- *Detailed surveys for plants or animals are not included.*
- *Nesting bird deterrence is not included.*

The services specified in the original contract are deleted in their entirety and replaced with the following services:

New Scope of Services:

(Insert new services.)

c. Payment Terms. (Check one.)

- The payment terms in the original contract (Exhibit 1) are not modified.
- The payment terms in the original contract (Exhibit 1) are modified as specified below: (Check one.)
- The payment terms are modified only as specified below:

Modified or New Payment Terms:

(Insert modified or new payment terms.)

Attachment B (Payment Schedule) to the original contract, as previously amended (Exhibit 1), is hereby further amended to increase the compensation by an additional amount not to exceed \$163,100.00, for the extension of services provided under the original contract through the terms of this amendment, for a total contract value not to exceed \$760,042.70, as follows:

Original Contract:	\$ 365,892.70
1 st Amendment:	\$ 231,050.00
<u>2nd Amendment:</u>	<u>\$ 163,100.00</u>
Total:	\$ 760,042.70

Paragraph B-3 of Attachment B (Payment Terms) is hereby amended to read as follows:

B-3. COMPENSATION

COUNTY shall pay to CONTRACTOR: (Check one.)

- a total lump sum payment of \$ _____, or
- a total sum not to exceed \$ 760,042.70,

for services rendered pursuant to the terms and conditions of the original contract (Exhibit 1) and this amendment, and pursuant to any special compensation terms specified in paragraph B-4.

Paragraph B-4 (Special Compensation Terms) of Attachment B (Payment Terms) to the original contract, as previously amended (Exhibit 1), is hereby further amended to add the following tables to the end of Paragraph B-4:

ROSA MORADA ROAD BRIDGE REPLACEMENT PROJECT					
ADDITIONAL SERVICES REQUEST #2 FEE SUMMARY					
TASK	BCA PM Structural	DHA Civil Roadway	HTH Environmental Mitigation Planting	RJA Survey	Total
Additional Services	\$35,391	\$14,430	\$20,479	\$3,200	\$73,500
<i>Optional Additional Services</i>	<i>\$22,674</i>	<i>\$7,400</i>	<i>\$59,526</i>		<i>\$89,600</i>
	\$58,065	\$21,830	\$80,005	\$3,200	\$163,100

Estimated Man Hours and Cost for the Rosa Morada Road Bridge Replacement

Additional Services Request - Final Design

BIGGS CARDOSA ASSOCIATES

PRIME CONSULTANT



TASK	BIGGS CARDOSA ASSOCIATES						Total BCA Hours	Total BCA Dollars without OH and Fee	Total BCA Dollars with OH and Fee
	M. Harms Principal	Engineering Manager	Senior Engineer	Project Engineer	Senior CADD Drafter	Secretarial			
Rate (unloaded)	\$121.49	\$66.92	\$61.01	\$55.20	\$51.05	\$40.34			
1. PROJECT MANAGEMENT									
Project Administration, Coordination, Meetings	14	96	20	0	0	0	130	\$9,345	\$27,567
Project Management and Administration Design Coordination and Quality Assurance Meetings with the County	4	32					36	\$2,627	
Meetings with Property Owners	4	8	4				16	\$1,265	
	4	36	4				44	\$3,139	
	2	20	12				34	\$2,314	
2. ENGINEERING AND REPORTS									
Engineering and Reports	4	18	14	0	0	0	36	\$2,545	\$7,506
Right of Way Staking Coordination Permitting Coordination	4	2	2				4	\$256	
		16	12				32	\$2,289	
							0	\$0	
							0	\$0	
TOTAL HOURS									
Subtotal Hours	18	114	34	0	0	0	166	166	
Total BCA Direct Labor Cost	\$2,187	\$7,629	\$2,074	\$0	\$0	\$0	\$0	\$11,890	\$35,073
TOTAL HOURS							166		
BCA TOTAL DIRECT LABOR AND DIRECT COSTS								\$35,391	\$35,391
A. Biggs Cardosa Associates									
Total BCA Direct Labor Cost								\$11,890	
Overhead (1.6316)								\$19,400	
Project Escalation (5% per year) 1 years..								\$595	
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES (\$)								\$31,884	
B. Subconsultants									
AVILA ASSOCIATES (HYDRAULICS)								\$0	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN)								\$14,430	
DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL)								\$0	
GEOCON (HAZARDOUS MATERIALS TESTING)								\$0	
HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN)								\$20,479	
PARIKH CONSULTANTS								\$0	
RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW)								\$3,200	
B. SUBTOTAL SUBCONSULTANTS (\$)								\$38,109	
C. Direct Costs									
Plots Reproduction Delivery								\$318	
Services									
Miscellaneous									
C. SUBTOTAL DIRECT COSTS (\$)								\$318	
TOTALS									
	A							\$31,884	
FIXED FEE (10.0%)								\$3,188	
B+C								\$38,427	
FEE (0%)								\$0	
TOTAL NOT TO EXCEED =								\$73,500	

1) Includes 0% mark-up on subconsultant services.

2) All ICRs and charge rates match the rates indicated in the contract.

MAN HOUR LEVEL OF EFFORT

	Tasks	Engineer, Range C	Total Additional Hours Requested	Total Hours
		DHA		
	TASK 1 - Phase I: Preliminary Engineering & Reports			
	1.1 Project Management/Coordination Meetings	30	30	30
	1.2 Property Owner Meetings and Exhibits	48	48	48
	Total Hours	78	78	78
	Rate	\$ 185		
	Total Additional Budget Requested	\$ 14,430		\$ 14,430





H. T. HARVEY & ASSOCIATES

Ecological Consultants

Proposal Name: Rosa Morada Road Bridge Replacement Project - NEPA Revalidation Memo, Additional Permitting Support, and PS&E Assistance

NON-OPTIONAL TASKS

Project Number: 4312-01

Staff Time Estimates

Personnel Hours by Task

Task	Kelly Hardwicke Principal, Plant Ecology	Joe Howard Principal, Landscape Architect	Megan Richards Landscape Architect	Katie Gallagher Senior Plant Ecologist	Stephen Peterson Senior Wildlife Ecologist	Allegra Watson Restoration Landscape Designer	Steve Rottenborn Principal, Wildlife Ecology	Senior GIS Analyst	Technical Support	HTH Cost by Task	HTH Direct Expenses (No Markup)	Total Project Cost
	\$247.02	\$304.66	\$163.44	\$148.47	\$155.43	\$104.94	\$349.96	\$204.85	\$156.46			
Task 1. Additional Permitting Assistance	20			24			10	12	6	\$15,400	\$120	\$15,520
Task 2. Bird and Bat Deterrence PS&E		3	8		4	12	2		1	\$4,959	\$-	\$4,959
Total Labor Hours	20	3	8	24	4	12	12	12	7			
Total Cost	\$4,940	\$914	\$1,308	\$3,563	\$622	\$1,259	\$4,200	\$2,458	\$1,095	\$20,359	\$120	\$20,479

Billing Rates are subject annual increases and will be adjusted at the beginning of each calendar year.



Fee Estimate for Rosa Morada Road Bridge

		Bryan Pierce Senoir Suveyor	Reimbursables, Subconsultants, Other Direct Costs		
Task		Hours	NTE including Mark- up	Hours by Task	Cost by Task
CUP					
1	Place survey markers to delineate easement borders	15	\$0	15	\$3,070.05
				0	\$0.00
6			\$130	0	\$129.95
				Total =	\$3,200.00
	Subtotal Hours =	15			
	Subtotal Dollars =	\$3,070.05	\$129.95		
	Hourly Rate =	\$204.67			
OPTIONAL					

Assumptions and Conditions

- 1 Fees do not include provision of preliminary title report
- 2 Fees do not include assistance with right of way or easement acquisition
- 3 Borders to be delineated are shown in the scope document

Estimated Man Hours and Cost for the Rosa Morada Road Bridge Replacement
Optional Additional Services Request - NEPA Revalidation



BIGGS CARDOSA ASSOCIATES									
PRIME CONSULTANT									
TASK	Principal	Engineering Manager	Senior Engineer	Project Engineer	Senior CADD Drafter	Secretarial	Total BCA Hours	Total BCA Dollars without OH and Fee	Total BCA Dollars with OH and Fee
Rate (unloaded)	\$121.49	\$66.92	\$61.01	\$55.20	\$51.05	\$40.34			
1. PROJECT MANAGEMENT									
Project Administration, Coordination, Management	8	40	16	0	0	0	64	\$4,625	\$13,642
Project Management and Administration Design	4	16					20	\$1,557	
Coordination and Quality Assurance	2	8	8				18	\$1,266	
Meetings and Coordination with Design Team and County	2	16	8				26	\$1,802	
2. ENGINEERING AND REPORTS									
Engineering and Reports	8	20	10	0	0	0	38	\$2,920	\$8,615
NEPA Revalidation Memorandum	2	8	4				14	\$1,022	
NEPA Revalidation: Updated Biological Assessment NEPA	2	4	2				8	\$633	
Revalidation: Updated Natural Environment Study Bat Exclusion	2	4	2				8	\$633	
Services	2	4	2				8	\$633	
TOTAL HOURS									
Subtotal Hours	16	60	26	0	0	0	102	102	
Total BCA Direct Labor Cost	\$1,944	\$4,015	\$1,586	\$0	\$0	\$0		\$7,545	\$22,257
TOTAL HOURS							102		
BCA TOTAL DIRECT LABOR AND DIRECT COSTS								\$22,674	\$22,674
A. Biggs Cardosa Associates									
Total BCA Direct Labor Cost								\$7,545	
Overhead (1.6316)								\$12,311	
Project Escalation (5% per year) 1 years..								\$377	
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES (\$)								\$20,233	
B. Subconsultants 1									
AVILA ASSOCIATES (HYDRAULICS)								\$0	
DEWBERRY DHA (CIVIL / ROADWAY DESIGN)								\$7,400	
DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL)								\$0	
GEOCON (HAZARDOUS MATERIALS TESTING)								\$0	
HT HARVEY ASSOCIATES (ENVIRONMENTAL & MITIGATION PLANTING DESIGN)								\$59,526	
PARIKH CONSULTANTS									
RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW)								\$0	
B. SUBTOTAL SUBCONSULTANTS (\$)								\$66,926	
C. Direct Costs									
Plots Reproduction Delivery								\$417	
Services									
Miscellaneous									
C. SUBTOTAL DIRECT COSTS (\$)								\$417	
TOTALS									
A								\$20,233	
FIXED FEE (10.0%)								\$2,023	
B+C								\$67,343	
FEE (0%)								\$0	
TOTAL NOT TO EXCEED =								\$89,600	

1) Includes 0% mark-up on subconsultant services.
 2) All ICRs and charge rates match the rates indicated in the contract.



H. T. HARVEY & ASSOCIATES

Ecological Consultants

Proposal Name: Rosa Morada Road Bridge Replacement Project - NEPA Revalidation Memo, Additional Permitting Support, and PS&E Assistance

OPTIONAL TASKS

Project Number: 4312-01

Staff Time Estimates

Personnel Hours by Task

Task	Kelly Hardwicke Principal, Plant Ecology	Kattie Gallagher Senior Plant Ecologist	Stephen Peterson Senior Wildlife Ecologist	Steve Roffenborn Principal, Wildlife Ecology	Dave Johnston Associate Wildlife Ecologist	Emily Malkauskas Wildlife Ecologist	Senior GIS Analyst	Technical Support	HTH Cost by Task	HTH Direct Expenses (No Markup)	Total Project Cost
	\$247.02	\$ 148.47	\$ 155.43	\$ 349.96	\$ 215.12	\$ 121.56	\$ 204.85	\$ 156.46			
Optional Task 3. NEPA Revalidation Memo	28			4			12	3	\$ 11,244	\$ 120	\$ 11,364
Optional Task 4. Biological Assessment	4		40	10			6	2	\$ 12,247	\$ 60	\$ 12,307
Optional Task 5. NES	12	40	40	6			8	2	\$ 19,172	\$ 139	\$ 19,311
Optional Task 6. Bat Exclusion Assistance			16	10	16	48	2		\$ 15,673	\$ 871	\$ 16,544
Total Labor Hours	44	40	96	30	16	48	28	7			
Total Cost	\$ 10,869	\$ 5,939	\$ 14,922	\$ 10,499	\$ 3,442	\$ 5,835	\$ 5,736	\$ 1,095	\$ 58,336	\$ 1,190	\$ 59,526

Billing Rates are subject annual increases and will be adjusted at the beginning of each calendar year.

MAN HOUR LEVEL OF EFFORT

	Tasks	Engineer, Range C	Total Additional Hours Requested	Total Hours
		DHA		
	Optional Task - Phase I: Preliminary Engineering & Reports			
	10.1 Engineering Support for NEPA Revalidation	40	40	40
	Total Hours	40	40	40
	Rate	\$ 185		
	Total Additional Budget Requested	\$ 7,400		\$ 7,400



All other provisions of Attachment B to the original contract (Exhibit 1) shall remain the same.

- The payment terms are deleted in their entirety and replaced with the following payment terms:

New Payment Terms:

B-1. BILLING

Charges for services rendered pursuant to the terms and conditions of this contract shall be invoiced on the following basis: (Check one.)

- One month in arrears.
 Upon the complete performance of the services specified in the original agreement (Exhibit 1) and this amendment.
 The basis specified in paragraph B-4.

B-2. PAYMENT

Payment shall be made by COUNTY to CONTRACTOR at the address specified in paragraph 8 of the original contract, net thirty (30) days from the invoice date.

B-3. COMPENSATION

COUNTY shall pay to CONTRACTOR: (Check one.)

- a total lump sum payment of \$_____, or
 a total sum not to exceed \$_____.

for services rendered pursuant to the terms and conditions of the original contract (Exhibit 1) and this amendment, and pursuant to any special compensation terms specified in paragraph B-4.

B-4. SPECIAL COMPENSATION TERMS: (Check one.)

- There are no additional terms of compensation.
 The following specific terms of compensation shall apply:
(Specify)

d. Other Terms. (Check one.)

- There are no other terms of the original contract that are modified.
 Other terms of the original contract are modified only as specified below:

3. Other Terms.

All other terms and conditions of the original contract (Exhibit 1) which are not changed by this amendment shall remain the same.

CONTRACTOR

DocuSigned by:

Mahvash Harms

99FBF84E77C9427...

Mahvash Harms, S.E., Principal

6/22/2022

Date

COUNTY

San Benito County Board of Supervisors

Peter Hernandez, Chair

Date

APPROVED AS TO LEGAL FORM:

San Benito County Counsel's Office

DocuSigned by:

Shirley L. Murphy

0B8B7E2DFDF84CA

Shirley L. Murphy, Deputy County Counsel

6/23/2022

Date

**EXHIBIT 1
TO AMENDMENT # 2**

**ORIGINAL
CONTRACT**

(Please attach the initial contract and any prior amendments, from the most recent to the initial contract, in reverse chronological order.)

AMENDMENT TO CONTRACT

1

The County of San Benito (“COUNTY”) and Biggs Cardosa Associates, Inc., a California Corporation (“CONTRACTOR”) enter into this agreement on the date stated next to the signatures below. In consideration of the mutual promises set forth herein, the parties agree as follows:

1. Existing Contract.

a. Initial Contract.

COUNTY and CONTRACTOR acknowledge that the parties entered into a contract, dated January 1, 2013.

b. Prior Amendments. (Check one.)

The initial contract previously has not been amended.

The initial contract previously has been amended. The date(s) of prior amendments are as follows: _____.

c. Incorporation of Original Contract.

The initial contract and any prior amendments to the initial contract (hereafter collectively referred to as the “original contract”) are attached to this amendment as Exhibit 1 and made a part of this amended contract.

2. Purpose of this Amendment.

The purpose of this amendment is to change the agreement between the parties in the following particulars:

a. Term of the Contract. (Check one.)

The term of the original contract is not modified.

The term of the original contract (Exhibit 1) is extended from the current expiration date of _____, to a new expiration date of _____.

b. Scope of Services. (Check one.)

The services specified in the original contract (Exhibit 1) are not modified.

The services specified in the original contract (Exhibit 1) are modified as specified below: (Check one.)

The services specified in the original contract are modified only as specified below:

Modified Scope of Services:

(Insert modified or new services.)

The document entitled “Additional Services Scope of Work” and Attachment A (Scope of Services) to the original contract, (Exhibit 1) is hereby amended to add the following additional services due to required updates for the construction documents related to the Rosa Morada Road Bridge at Arroyo Dos Picachos.

ADDITIONAL SERVICES SCOPE OF WORK
AMENDMENT NO. 1

The addition of mitigation planting to the project, and the progress of the coordination with the utility companies impacted by the project have generated additional services that are required to complete the construction documents. The following Scope of Services indicates the remaining work required to complete the design of the Rosa Morada Road Bridge Replacement, and includes additional utilities coordination and associated construction documents work, coordination and construction document work pertaining to environmental permitting and mitigation planting, and construction support services.

The following Scope of Services is based on certain assumptions as listed in blue below. Please also see additional assumptions indicated in blue in the detailed scope summary below. Any deviation from these assumptions will be coordinated with the COUNTY and a revised scope and fee established upon further amendment of this contract.

Exclusions

- *Right of way acquisition services are not included.*
- *Community meetings and public outreach are not included.*
- *Construction management, construction inspection and structural observation services are not included*
- *Detailed preconstruction surveys for plants or animals are not included.*
- *Nesting bird or roosting bat deterrence is not included.*

Assumptions

- *Drainage systems are not required.*
- *Nursery coordination will be initiated in spring/summer 2021, for mitigation site installation in late summer/fall of 2022.*
- *Note that the exact level of effort required to complete utility coordination and to obtain environmental permits is not precisely known. A moderate level of effort to complete these tasks has been assumed and included. If these tasks require work beyond the hours shown, additional services may be needed, and will be coordinated with the COUNTY.*
- *Please see the original agreement for additional assumptions and exclusions.*

PROJECT MANAGEMENT

Project Management for the scope included herein includes the supervision and scheduling of project staff, review of work prepared by

staff and subconsultants, project coordination, client liaison services, and the monitoring of the schedule and the budget. Also included in this task is the preparation of progress reports and attendance at meetings with the COUNTY'S staff to receive input, and to discuss and review the project during critical design and decision periods. Please see the original scope of work for a more detailed description.

ADDITIONAL ENVIRONMENTAL PERMITTING

This revised Task includes additional time for additional coordination with regulatory permit agencies during the permit application review process, responding to regulatory agency comments and questions, and obtaining and coordinating updated final permits with the COUNTY and design team.

ADDITIONAL UTILITY COORDINATION

Utility coordination is ongoing and additional effort beyond the original contract scope is needed to coordinate relocating the overhead PG&E facilities, as well as the additional coordination needed with the San Benito County Water District to protect the existing asbestos water main.

FINAL PS&E

Updates for Mitigation Planting Site

The addition of mitigation planting plans to the project after the original 95% PS&E submittal requires numerous changes to the Roadway Plans and additional detail sheets to create an access road to the mitigation site, and provide details for the associated grading and fencing. Special provisions will be updated to incorporate these additions. Due to these changes, additional effort will also be required to prepare roadway cross sections and slope staking notes.

Updates for Protection of Water Main

In recent coordination with the San Benito County Water District, the District requested that additional precautions be taken to protect the existing asbestos water main adjacent to Rosa Morada Road. These precautions include specifying the use of steel plates during construction over the temporary road crossing areas to distribute the load over the asbestos pipe. The District also requested that the grading be modified to increase the dirt cover over the asbestos pipe. This requires adjusting the roadway profile and associated ditch grading.

Updates for Permit Requirements and Construction Contractor Supplied Biologist

The COUNTY has determined that they would prefer to use a Construction Contractor Supplied Biologist to perform the required preconstruction surveys, training and other biological tasks that must be

completed immediately prior to and during construction. CONTRACTOR will update the project special provisions and opinion of probable construction costs to reflect this modification. CONTRACTOR will also review and coordinate environmental special provisions for compliance with the final permit conditions and to verify consistency amongst all the environmentally-related special provisions, and proper coordination with the remainder of the special provisions document.

NURSERY COORDINATION FOR MITIGATION PLANTING

Advance coordination with a native plant nursery will be necessary to ensure that permit-approved plant material will be available during construction. CONTRACTOR will prepare a nursery request for proposals and distribute it to up to three (3) native plant nurseries to solicit their estimate. CONTRACTOR will assist the COUNTY in evaluating the proposals received and establishing a contract with the selected nursery.

Key Assumptions:

- ✓ *It is assumed that the contract will be held between the COUNTY and the nursery.*
- ✓ *All mitigation sites will be located on the bridge project site. COUNTY will be responsible for acquisition of property needed to accommodate mitigation planting.*
- ✓ *Water for mitigation planting will be supplied to the irrigation system via a standpipe point of connection.*
- ✓ *Nursery coordination will be initiated in spring/summer 2021, for mitigation site installation in late summer/fall of 2022. If construction is delayed, it may be necessary to repeat native plant collection and planting starts.*

CONSTRUCTION SUPPORT SERVICES

Construction support services were not included in the original design contract, and COUNTY has requested they be added. These services will include attending periodic construction meetings, reviewing contractor submittals and Requests for Information (RFI's), and clarifying the contract documents. The design team will perform the following the scope of work:

- Attend preconstruction meeting;
- Attend periodic field visits, as required, to assist in the resolution of construction issues;
- Review shop drawings and construction submittals;
- Answer clarification questions pertaining to the plans and special provisions, if needed;
- Review contractor RFI's and provide written responses;

- Review construction inspection reports prepared by the Resident Engineer;
- Provide full-time field observation by the Geotechnical Engineer of Record during construction of the Cast in Drilled Hole (CIDH) piles;
- Provide geotechnical and structural engineering support and interaction for post-construction testing and evaluation of CIDH piles;
- Provide field observation of riparian area mitigation fencing, grading and soil conditions, hydroseeding, planting layout, irrigation system layout and testing;
- Prepare Final Site Grading and Water Quality Certification Letter;
- Prepare Biological As-Built Report:
 - The USACE, RWQCB, and CDFW permits require submittal of the as-built report prepared by the monitoring biologist within 8 weeks of the completion of mitigation site installation. The report will document the post-construction condition of the site, and will include plan view drawings of the aquatic and riparian areas to show biologically significant deviations from the concepts outlined in the *Rosa Morada Road Bridge Replacement Project Aquatic and Riparian Habitat Mitigation and Monitoring Plan* (prepared August 2019 by H. T. Harvey & Associates) and other relevant information such as planting zones, plant palettes and quantities installed, and typical plant spacing. This report will outline observations made during construction relevant to the ecological aspects of the mitigation project, as well as establish permanent photo-documentation points for use as a baseline for the long- term monitoring of the site.
- Prepare Roadway and Bridge Record Drawings:
 - The basis of the revisions shown on the record plans will be a red mark construction set of plans provided by the project Resident Engineer. These construction red mark plans must show all revisions that were made during construction.

Key Assumptions:

- ✓ *Please see the attached fee breakdowns for additional assumptions regarding number of submittals, etc.*
- ✓ *Construction is scheduled to take place in the spring, summer and fall of 2022.*
- ✓ *Structural inspections, all other required inspections, and construction administration services will be provided by the COUNTY'S Resident Engineer for the project.*
- ✓ *Construction Administration services are not included.*
- ✓ *Structural Observation and Structural Inspection services are not*

included.

- ✓ *Geotechnical Observation of CIDH pile installation is included (full time).*
- ✓ *It is assumed that CIDH piles will take up to 9 days to install.*
- ✓ *The regular earthwork and compaction inspections will be performed by the project Resident Engineer.*
- ✓ *Support during the 3-year plant establishment period is not included.*
- ✓ *Detailed surveys for plants or animals are not included.*
- ✓ *Nesting bird or roosting bat deterrence is not included.*
- ✓ *Wetland delineation or identification of other regulated habitats is not included.*
- ✓ *Remedial engineering design to determine corrective action required due to materials and/or contractor's operations not meeting contract requirements is not included. Upon COUNTY'S request, CONTRACTOR can provide this work as additional services, upon further amendment of this contract.*
- ✓ *Engineering advice and technical support for construction change orders to the plans and specifications for the project, preparation of change order documentation to include, where appropriate, changes to plans and specifications, and additional structural details are not included. Because the level of effort required to process change orders can vary widely depending upon the type of changes requested, per COUNTY'S request CONTRACTOR can provide this work as additional services, upon further amendment of this contract.*
- ✓ *Record drawings will be based on a thorough and complete re-marked set of plans provided by the project Resident Engineer.*
- ✓ *CONTRACTOR'S construction support services fee proposal represents its best estimate of the costs involved. The construction support services costs are highly dependent on the construction schedule, the contractor's operations, the contractor's proficiency and performance. For these reasons, CONTRACTOR recommends that the COUNTY establish a contingency budget for construction support, which could be used if more support services are required.*

[] The services specified in the original contract are deleted in their entirety and replaced with the following services:

New Scope of Services:
(Insert new services.)

c. Payment Terms. (Check one.)

- The payment terms in the original contract (Exhibit 1) are not modified.
- The payment terms in the original contract (Exhibit 1) are modified as specified below: (Check one.)
 - The payment terms are modified only as specified below:

Modified or New Payment Terms:
(Insert modified or new payment terms.)

Paragraph B-3 (Compensation) of Attachment B (Payment Schedule) to the original contract (Exhibit 1) is hereby amended to increase the compensation by an additional amount not to exceed \$231,050.00, for the extension of services provided under the original contract through the terms of this amendment, for a total contract value not to exceed \$596,942.70, as follows:

Original Contract:	\$ 365,892.70
<u>1st Amendment:</u>	<u>\$ 231,050.00</u>
Total:	\$ 596,942.70

Paragraph B-3 of Attachment B (Payment Terms) is hereby amended to read as follows:

B-3. COMPENSATION

COUNTY shall pay to CONTRACTOR: (Check one.)

- a total lump sum payment of \$ _____, or
- a total sum not to exceed \$596,942.70,

for services rendered pursuant to the terms and conditions of the original contract (Exhibit 1) and this amendment, and pursuant to any special compensation terms specified in paragraph B-4.

Paragraph B-4 (Special Compensation Terms) of Attachment B (Payment Terms) is hereby amended to add the following tables to the end of Paragraph B-4:

ROSA MORADA ROAD BRIDGE REPLACEMENT PROJECT ADDITIONAL SERVICES REQUEST #1 FEE SUMMARY					
TASK	BCA Structural	DHA Roadway	HTH Migation Planting	Parikh Geotechnical	Total
Finish Construction Documents	\$13,860	\$40,896	\$29,644	\$0	\$84,400
Construction Support	\$75,613	\$24,336	\$24,772	\$21,929	\$146,650
	\$89,473	\$65,232	\$54,416	\$21,929	\$231,050

Estimated Man Hours and Cost for the Rosa Morada Road Bridge (Replace)

Additional Services Request



BIGGS CARDOSA ASSOCIATES										
PRIME CONSULTANT										
TASK	M. Harms Principal	Engineering Manager	Senior Engineer	Project Engineer	Senior CADD Drafter	Secretarial	Total BCA Hours	Total BCA Dollars without OH and Fee	Total BCA Dollars with OH and Fee	
1. PROJECT MANAGEMENT										
Project Administration, Coordination, Management	12	32	16	0	0	0	60	\$4,349	\$12,828	
Project Management and Administration	4	12	12	16			16	\$1,224	\$1,922	
Design Coordination and Quality Assurance	4	12	12	12			28	\$1,922	\$1,922	
Meetings and Coordination with Design Team and County	4	8	4	4			16	\$1,203	\$1,203	
TOTAL HOURS										
	12	32	16	0	0	0	60	\$4,349	\$12,828	
Subtotal Hours	12	32	16	0	0	0	60	\$4,349	\$12,828	
Total BCA Direct Labor Cost	\$1,388	\$2,031	\$930	\$0	\$0	\$0	\$0	\$4,349	\$12,828	
TOTAL HOURS										
BCA TOTAL DIRECT LABOR AND DIRECT COSTS										
A. Biggs Cardosa Associates										
Total BCA Direct Labor Cost								\$4,349	\$12,828	
Overhead (1.6316)								\$7,095	\$217	
Project Escalation (5% per year) 1 years..								\$11,662		
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES (\$)										
B. Subconsultants										
AVILA ASSOCIATES (HYDRAULICS)										
DRAKE HAGLAN ASSOCIATES (CIVIL / ROADWAY DESIGN)										
DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL)										
GEOCON (HAZARDOUS MATERIALS TESTING)										
HT HARVEY ASSOCIATES (MITIGATION PLANTING DESIGN)										
PARIKH CONSULTANTS										
RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW)										
B. SUBTOTAL SUBCONSULTANTS (\$)										
C. Direct Costs										
Plots									\$700	
Reproduction									\$332	
Delivery Services										
Miscellaneous										

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C. SUBTOTAL DIRECT COSTS (\$)										\$1,032
TOTALS										
A										
FIXED FEE (10.0%)										\$11,662
B+C										\$1,166
FEE (0%)										\$71,572
TOTAL NOT TO EXCEED =										\$0
										\$84,400

- 1) Includes 0% mark-up on subconsultant services.
- 2) ICR used to develop BCA fee is per the on-call contract: 163.16%

MAN HOUR LEVEL OF EFFORT

Tasks	Principal-in-Charge		Senior Engineer, Range C		Engineer, Range C		Asst. Engineer, Range B		Total Additional Hours Requested	Total
	DHA	DHA	DHA	DHA	DHA	DHA	DHA	DHA		
Phase 3 - Final Design										
8.1 - Utility Coordination, ROI & Utility Certification		4	64		68				\$	11,520
8.2 - Prepare Final PS&E	4	8	80	120	212				\$	28,024
8.3 - Prepare Cross Sections & Slope Staking Notes		4	8	80	92				\$	11,208
Total Hours	4	16	152	200	372					
Rate	\$	276	\$	208	\$	167	\$	113		
Total Additional Budget Requested	\$	1,104	\$	3,328	\$	25,384	\$	22,600	\$	52,416
Internal Amendment From Biggs Cardosa:										(\$11,520)
Remaining Amount Needed for Amendment 3										\$ 40,896



1. ICR matches the ICR indicated in the on-call contract: 143.62%



H. T. HARVEY & ASSOCIATES

Ecological Consultants

**Proposal Name: Rosa Morada Bridge Replacement Project -- Mitigation Site Design and Bid Period
 Additional Services DESIGN & PROJECT MGMT ONLY
 Project Number: 4312-01**

Staff Time Estimates

Task	Personnel Hours by Task														HTH Cost by Task	Subtask Cost with Annual 5% Escalator on 2021 rates													
	Joe Howard	Karen Verpeet	Senior Associate, Landscape Architect	Lauren De Silva	Landscape Architect (Senior Ecologist 2)	Allegria Watson	Restoration Landscape Designer (Field Biologist 2)	Max Busnardo	Principle, Restoration Ecology	Ryan Hegstand	Principle, Restoration Ecology	Steve Kottenborn	Principle, Wildlife Ecology	Kim Briones			Senior Wildlife Ecologist 1	Loy DeBruyn	Technical Support	Kelly Hardwicke	Principle, Plant Ecology	Mark Bibbo	Senior Plant Ecologist 2	Ethan Barnes	Senior Plant Ecologist	Kat Shnikova	Technical Support		
Task 1. Plans, Specifications, and Cost Estimates																													
1.2 100% Submittal	1	4	8				1				6	10	2	8	1	12	6												
1.3 Final (bed set) Submittal	1	2	4				1				4	2	1	4	1	4	3												
Task 6. Project Management	4	8	16				2				2																		
Total Labor Hours	6	14	28	0	4	0	4	0	0	\$ 1,086	\$ 4,410	\$ -	\$ -	\$ 1,835	\$ 358	\$ 6,587	\$ 351	\$ 2,290	\$ 749	\$ 26,468	\$ 10,738	\$ 5,326	\$ 10,404	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Labor Cost	\$ 1,7141	\$3,061	\$ 4,410	\$ -	\$ 1,086	\$ -	\$ 1,086	\$ -	\$ -	\$ 1,086	\$ 4,410	\$ -	\$ -	\$ 1,835	\$ 358	\$ 6,587	\$ 351	\$ 2,290	\$ 749	\$ 26,468	\$ 10,738	\$ 5,326	\$ 10,404	\$ -	\$ -	\$ -	\$ -	\$ -	
Direct Expenses																													
TOTAL BUDGET																													

\$ -
\$ 26,468

ICR matches the ICR indicated in the on-call contract: 205%



**Proposal Name: Rosa Morada Bridge Replacement Project -- Mitigation Site Design and Bid Period
 Additional Services NURSERY COORDINATION ONLY
 Project Number: 4312-01**

Staff Time Estimates

Task	Personnel Hours by Task										HTH Cost by Task	Subtask Cost with Annual 5% Escalator on 2021 rates		
	Joe Howard Principal, Landscape Architect \$ 290.15	Karen Verpeet Senior Associate, Landscape Architect \$ 218.62	Lauren De Silva Landscape Architect (Senior Ecologist 2) \$ 157.50	Allegra Watson Restoration Landscape Designer (Field Biologist 2) \$ 99.94	Max Busardo Principal, Restoration Ecology \$ 271.56	Ryan Hegstand Principal, Restoration Ecologist 1 \$ 112.93	Steve Kottenborn Principal, Wildlife Ecology \$ 333.30	Kim Briones Senior Wildlife Ecologist 1 \$ 152.93	Joy DeBruyn Technical Support \$ 119.28	Kelly Hardwicke Principal, Plant Ecology \$ 235.26			Mark Bibbo Senior Plant Ecologist 2 \$ 175.51	Ethan Barnes Senior Plant Ecologist \$ 143.14
Task 3. Nursery Coordination														
Total Labor Hours	0	2	4	16	1	0	0	2	2	0	0	0	0	0
Total Labor Cost	\$ -	\$ 437	\$ 630	\$ 1,599	\$ 272	\$ -	\$ -	\$ 239	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Expenses														
TOTAL BUDGET													\$ 3,176	

Owner Costs: Plant material for initial installation (not part of this contract) per January 2020 plan check set submittal opinion of estimated cost, not based on nursery quotes	\$ 500
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Estimated Man Hours and Cost for the Rosa Morada Road Bridge (Replace)

Construction Support Services



BIGGS CARDOSA ASSOCIATES										
PRIME CONSULTANT										
TASK	Rate (unloaded)	Principal	Engineering Manager	Senior Engineer	Project Engineer	Senior CADD Drafter	Secretarial	Total BCA Hours	Total BCA Dollars without OH and Fee	Total BCA Dollars with OH and Fee
1. PROJECT MANAGEMENT										
Project Administration, Coordination, Management		16	24	0	0	0	0	40	\$3,543	\$10,451
Project Management and Administration		16	24					40	\$3,543	\$0
3. CONSTRUCTION PHASE										
Bidding		0	0	0	0	0	0	0	\$0	\$0
Services During Bidding								0	\$0	\$0
Construction Support										
Respond to RFIs, emails and telephone requests		12	66	140	100	36	0	354	\$21,755	\$64,171
Review submittals and shop drawings		2	24	48	32			108	\$6,537	\$8,083
Meetings/site visits		2	24	48	60			134	\$8,083	\$2,193
Plans and Special Provisions Clarification		4	8	12	8			32	\$2,193	\$2,240
As-Built Plans		2	8	24	34			34	\$2,240	\$2,702
		2	2	8	36			48	\$2,702	
TOTAL HOURS										
Subtotal Hours		28	90	140	100	36	0	394		
Total BCA Direct Labor Cost		\$3,402	\$5,997	\$8,541	\$5,520	\$1,838	\$0		\$25,298	\$74,622
TOTAL HOURS							394			
BCA TOTAL DIRECT LABOR AND DIRECT COSTS										
									\$75,613	\$75,613
A. Biggs Cardosa Associates										
Total BCA Direct Labor Cost									\$25,298	
Overhead (1.6316)									\$41,276	
Project Escalation (5% per year) 1 years...									\$1,265	
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES (\$)									\$67,838	
B. Subconsultants										
AVILA ASSOCIATES (HYDRAULICS)									\$0	\$0
DRAKE HAGLAN ASSOCIATES (CIVIL / ROADWAY DESIGN)									\$24,336	\$24,336
DAVID J. POWERS ASSOCIATES (ENVIRONMENTAL)									\$0	\$0
GEOCON (HAZARDOUS MATERIALS TESTING)									\$0	\$0
HT HARVEY ASSOCIATES (MITIGATION PLANNING DESIGN)									\$0	\$24,772

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PARIKH CONSULTANTS										\$21,929
RUGGERI-JENSEN-AZAR ASSOCIATES (SURVEYING / ROW)										\$0
B. SUBTOTAL SUBCONSULTANTS (\$)										\$71,037
C. Direct Costs										
Plots										\$291
Reproduction										\$700
Delivery Services										
Miscellaneous										
C. SUBTOTAL DIRECT COSTS (\$)										\$991
TOTALS										
A										\$67,838
FIXED FEE (10.0%)										\$6,784
B+C										\$72,028
FEE (0%)										\$0
TOTAL NOT TO EXCEED =										\$146,650

Notes:

- 1) Includes 0% mark-up on subconsultant services.
- 2) ICR used to develop BCA fee is per the on-call contract: 163.16%

MAN HOUR LEVEL OF EFFORT

Tasks	Principal-in-Charge		Senior Engineer, Range C		Engineer, Range C		Asst. Engineer, Range B		Total Additional Hours Requested	Total
	DHA		DHA		DHA		DHA			
Phase 4 - Construction Support										
9.1 Construction Support	4		4		80		80		168	\$ 24,336
										\$ -
										\$ -
Total Hours	4		4		80		80		168	
Rate	\$ 276	\$ 208	\$ 167	\$ 113						
Total Additional Budget Requested	\$ 1,104	\$ 832	\$ 13,360	\$ 9,040						\$ 24,336



Note:
 1. ICR matches the ICR indicated in the on-call contract: 143.62%



H. T. HARVEY & ASSOCIATES
Ecological Consultants

Proposal Name: Rosa Morada Bridge Replacement Project -- Mitigation Site Construction Support Additional Services
Project Number: 4312-01

Date: November 18, 2020

Staff Time Estimates

Task	Personnel Hours by Task														HTH Cost by Task	Subtask Cost with Annual 5% Escalator on 2021 rates			
	Joe Howard	Principal, Landscape Architect	Karen Verpeet	Senior Associate, Landscape Architect	Lauren De Silva	Landscape Architect (Senior Ecologist 2)	Allegra Watson	Restoration Landscape Designer (Field Biologist 2)	Max Busardo	Principal, Restoration Ecology	Ryan Hegstad	Restoration Ecologist 1	Steve Rofenborn	Principal, Wildlife Ecology			Kim Briones	Senior Wildlife Ecologist 1	
Task 4. Construction Support Services	2		4	4	24	157.50	99.94	271.56	112.93	333.30	152.93						\$ 15,159	\$15,917	
Task 5. Biological As-Built Report	1		2	4	4	16		4	24				1		2		\$ 7,392	\$8,150	
																	\$ -	\$0	
																	\$ -	\$0	
																	\$ -	\$0	
																	\$ -	\$0	
Total Labor Hours	3		6	28	52	9	68	333	2	2	2	2	2	2	2	2	\$22,551	\$24,067	
Total Labor Cost	\$ 870	\$ 1,312	\$ 4,410	\$ 2,444	\$ 5,197	\$ 2,444	\$ 7,679	\$ 333	\$ 306	\$ 15,159	\$ 7,392	\$ 8,150	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Direct Expenses																			
TOTAL BUDGET																		\$ 705	\$24,772

Note:
1. ICR matches the ICR indicated in the on-call contract: 205%

**PARIKH CONSULTANTS
ROSA MORADA ROAD CONSTRUCTION SUPPORT SERVICES**

PERSONNEL	UNIT RATE	HOURS/ UNITS	SUB- TOTALS
1. Project Manager	\$ 285	8	\$ 2,280.00
2. Senior Engineer	\$ 210	20	\$ 4,200.00
3. Field Engineer (Observation)* *Prevailing Wage	\$ 140	90	\$ 12,600.00
		118	\$ 19,080.00
OTHER DIRECT COST			
1. Travel Mileage	\$ 0.57	1500	\$ 855.00
TOTAL DIRECT COSTS			\$ 855.00
			\$ 19,935.00
TOTAL with 10% Contingency			\$ 21,928.50

Note:

1. ICR matches the ICR indicated in the on-call contract: 150%

All other provisions of Attachment B to the original contract (Exhibit 1) shall remain the same.

- The payment terms are deleted in their entirety and replaced with the following payment terms:

New Payment Terms:

B-1. BILLING

Charges for services rendered pursuant to the terms and conditions of this contract shall be invoiced on the following basis: (Check one.)

- One month in arrears.
 Upon the complete performance of the services specified in the original agreement (Exhibit 1) and this amendment.
 The basis specified in paragraph B-4.

B-2. PAYMENT

Payment shall be made by COUNTY to CONTRACTOR at the address specified in paragraph 8 of the original contract, net thirty (30) days from the invoice date.

B-3. COMPENSATION

COUNTY shall pay to CONTRACTOR: (Check one.)

- a total lump sum payment of \$ _____, or
- a total sum not to exceed \$ _____,

for services rendered pursuant to the terms and conditions of the original contract (Exhibit 1) and this amendment, and pursuant to any special compensation terms specified in paragraph B-4.

B-4. SPECIAL COMPENSATION TERMS: (Check one.)

- There are no additional terms of compensation.
- The following specific terms of compensation shall apply: (Specify)

d. Other Terms. (Check one.)

- There are no other terms of the original contract that are modified.
- Other terms of the original contract are modified only as specified below:

Other Modified or New Terms:

(Insert other modified or new terms.)

Paragraph 7 of the original contract (Exhibit 1) is hereby amended to reflect the addition of Attachment D to this contract. Attachment D is attached to this Amendment. Paragraph 7 is hereby amended to read as follows:

7. Specific Terms and Conditions (check one)

- There are no other provisions to this contract.
- The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment D. Attachment D is made a part of this contract.
- The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment E. Attachment E is made a part of this contract.

All other provisions of the original contract (Exhibit 1) shall remain the same.

3. Other Terms.

All other terms and conditions of the original contract (Exhibit 1) which are not changed by this amendment shall remain the same.

CONTRACTOR

DocuSigned by:

Mahvash Harms

89FB88E77C9427
Mahvash Harms, S.E., Principal

11/15/2021

Date

COUNTY

San Benito County Board of Supervisors

Bea Gonzales

Bea Gonzales, Chair

11/23/2021
Date

APPROVED AS TO LEGAL FORM:

San Benito County Counsel's Office

DocuSigned by:

Shirley L. Murphy

08AB7E20FD84CA
Shirley L. Murphy, Deputy County Counsel

11/15/2021

Date

**ATTACHMENT D
Specific Terms and Conditions**

**Licensed Architects, Landscape Architects, Professional Engineers and
Professional Land Surveyors**

The rights and duties of the parties to this contract are additionally governed by the following specific, additional terms and conditions:

D-1. INDEMNIFICATION. With regard to the design services described in California Civil Code section 2782.8 only, Paragraph C-1 of Attachment C to this contract is hereby modified to read as follows:

To the fullest extent permitted by law, CONTRACTOR shall indemnify, defend and hold harmless the COUNTY and its officers, agents, employees and representatives, from and against any and all claims, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, brought for or on account of, injury to or death of any person, including but not limited to workers, County employees, and the public, or damage to property, which arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONTRACTOR, its officers, agents, employees, volunteers, representatives, contractors and subcontractors. This duty of CONTRACTOR includes the duty of defense, inclusive of that set forth in California Civil Code Section 2778. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this contract. CONTRACTOR shall not be liable under this indemnification provision if the COUNTY has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence, recklessness or willful misconduct. The obligations set forth herein shall continue beyond the term of this contract.

The provisions of Paragraph C-1 of Attachment C shall remain in full force and effect and shall apply to CONTRACTOR'S provision of all other services under this contract.

D-2. ADDITIONAL SPECIFIC TERMS AND CONDITIONS: (check one)

There are no additional specific terms and conditions.

The following additional specific terms and conditions shall apply: (Specify)

D-3. HARMONIZATION OF CONTRACT TERMS. Where the specific terms and conditions set forth in this Attachment D specifically conflict with the general terms and conditions set forth in Attachment C to this contract, the more specific terms and conditions shall be deemed to control. However, the general terms and conditions in Attachment C shall remain in full force and effect, to the extent they do not specifically conflict with the specific terms and conditions set forth in this Attachment D.

END OF ATTACHMENT D.

**EXHIBIT 1
TO AMENDMENT # 1**

**ORIGINAL
CONTRACT**

(Please attach the initial contract and any prior amendments, from the most recent to the initial contract, in reverse chronological order.)

C O N T R A C T

The COUNTY OF SAN BENITO ("COUNTY") and Biggs Cardosa Associates Inc. ("CONTRACTOR") enter into this contract which shall be effective on the date stated in Paragraph 1.

1. Duration of Contract.

This contract shall commence on January 1, 2013, and end on June 30, 2022, unless sooner terminated as specified herein.

2. Scope of Services.

CONTRACTOR, for COUNTY's benefit shall perform the services specified on Attachment A to this contract. Attachment A is made a part of this contract.

3. Compensation for Services.

In consideration for CONTRACTOR's performance, COUNTY shall pay compensation to CONTRACTOR according to the terms specified in Attachment B. Attachment B is made a part of this contract.

4. General Terms and Conditions.

The rights and duties of the parties to this contract are governed by the general terms and conditions mutually agreed to and listed in Attachment C. Attachment C is made a part of this contract.

5. Insurance Limits.

CONTRACTOR shall maintain the following insurance policy limits of coverage consistent with the further insurance requirements specified in Attachment C.

- (a) Comprehensive general liability insurance: \$1,000,000
- (b) Professional liability insurance: \$1,000,000
- (c) Comprehensive motor vehicle liability insurance: \$1,000,000

6. Termination.

The number of days of advance written notice required for termination of this contract is 30 days.

7. Specific Terms and Conditions (check one)

- [X] There are no additional provisions to this contract.
- [] The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment D. Attachment D is made a part of this contract.
- [] The rights and duties of the parties to this contract are additionally governed by the specific, additional terms mutually agreed to and listed in Attachment E. Attachment E is made a part of this contract.

8. Information about Contract Administrators.

The following names, titles, addresses, and telephone numbers are the pertinent information for the respective contract administrators for the parties.

Contract Administrator for COUNTY:

Name: John Guertin

Title: RMA Director

Address: 2301 Technology Pkwy

Hollister, California 95023

Telephone No.: 831-636-4170

Fax No.: 831-636-4176

Contract Administrator for CONTRACTOR:

Name: Mahvash H. Harms

Title: Principle Engineer/Project Manager

Address: 865 The Alameda

San Jose, CA 95126-3133

Telephone No.: 408-296-5515

Fax No.: 408-296-8114

SIGNATURES

CONTRACTOR

M Harms
Name/Title: Mahvash H. Harms / Project Manager

12/4/2018
Date

COUNTY

San Benito County Board of Supervisors,
Anthony Botelho
Anthony Botelho, Chair

December 11, 2018
Date

APPROVED AS TO LEGAL FORM:

San Benito County Counsel's Office
Michael Ziman
By: Michael Ziman, Deputy County Counsel

December 5, 2018
Date

**SAN BENITO COUNTY:
REPLACEMENT OF ROSA MORADA BRIDGE AT ARROYO DOS PICACHOS
SCOPE AND FEE TO FINISH DESIGN AND CONSTRUCTION DOCUMENTS**

SCOPE OF WORK TO FINISH CONSTRUCTION DOCUMENTS

The following Scope of Services to complete the Construction Documents for the project is based on certain assumptions as listed in blue below. Please also see additional assumptions indicated blue in the detailed scope summary below. Any deviation from these assumptions will be coordinated with the County and a revised scope and fee established as agreed upon.

Exclusions

- *Right of way acquisition services are not included.*
- *Construction support services and preparation of as-built plans are not included.*
- *Community meetings and public outreach are not included.*

Assumptions

- *Drainage systems are not required.*
- *Project impacts will not affect wetlands, and that a Wetlands Technical Assessment will not be required.*
- *Rock Slope Protection will be used for bank protection.*
- *Final design will be completed in 2018.*

SCOPE OF SERVICES

Biggs Cardosa Associates' approach for the Rosa Morada Bridge Replacement Project is as follows:

- | | |
|------------|----------------------------|
| 1 | Project Management |
| Phase II: | Engineering and Reports |
| Phase III: | Final Design |
| Phase IV: | Construction Services: |
| | Bidding Support |
| | Construction Support (NIC) |

1. PROJECT MANAGEMENT

(BCA)

Project Management includes the supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, client liaison and the monitoring of the schedule and the budget. Also included in this task is the preparation of progress reports and attendance at meetings with the staff of San Benito County to receive input, and to discuss and review the project during critical design and decision periods.

- A. Project Administration: Supervise, coordinate, and monitor design for conformance with



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Caltrans standards and policies. Prepare monthly progress reports and invoices. Employ and monitor subconsultants. Coordinate Consultant's work with the County's work. Close and archive the project records at the end of the project.

- B. **Local Program Compliance:** The Biggs Cardosa Associates team will prepare all of the required local programs forms, including the scope/cost/schedule change, request for right of way authorization, right of way certification, construction authorization request and project closeout forms.
- C. **Project Re-Initiation:** Upon receipt of Notice to Proceed, a project meeting will be held to review the project scope, the project approach, the goals and the schedule. Items to be addressed include a review of the key issues associated with completion of the project, a discussion of strategy for management of these issues, review of environmental approvals status, and review of the right-of-way acquisition status.
- D. **Coordination Meetings:** To facilitate comprehensive input from the County for critical coordination and design issues, the Consultant's Project Manager and selected Team Members will attend up to 2 coordination meetings with the County staff members.
- E. **Design Review Meetings:** The Consultant's Project Manager and selected Team Members will attend 1 design review meeting with County staff which will be scheduled to coincide with the completion of the final design phase.

Extended Project Duration:

(Design Team)

Due to the contract lapse the project has been stalled for approximately 3.5 years. Scope includes additional time for the design team to become re-familiarized with the project and coordinate with each other about the work remaining to be completed. This work would include determining the project status when it was stopped, assessing outstanding design and coordination issues, assessing updated design and other requirements, reviewing previous plans, details and reports, etc.

2. PHASE II: ENGINEERING AND REPORTS

2.1 GEOTECHNICAL INVESTIGATION

(Parikh)

Bridge Foundation Report:

- A. **Prepare Final Foundation Report:** A final, detailed foundation report will be prepared based on current Caltrans guidelines, field data collected and soils analyses performed, including design recommendations for foundation types, footing elevations, lateral design capacities and pile foundation or spread footing design recommendations. The report will also discuss seismic considerations, evaluate the liquefaction potential and comment on the site soil conditions from this standpoint. Information related to Caltrans Seismic Design Criteria (SDC v 1.7) will be provided.
- B. **Log of Test Borings:** Using the bridge General Plan as a base map, final boring log sheets will be provided for the plan set.
- C. **Ongoing Design Consultation and Review:** Design review and consultation will be provided through final design.

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Bank Protection Design:

- A. **Bank Protection Design:** Installation of bank protection is complicated by the presence of large eucalyptus trees that stand just to the south of each bridge abutment. The trees have large root systems that will likely interfere with bank protection placement, and removal of the trees may leave large holes that will need to be filled and protected. Because of this condition, portions of the bank protection may need special preparation for installation or may need to retain earth, requiring geotechnical design and coordination with design team members to determine appropriate bank protection details, installation procedures, specifications, etc.

Deliverables: Final Foundation Report (Pdf format)
 LOTB plan sheets (Pdf format)

2.2 HYDRAULICS ANALYSES

(Avila)

Bridge Hydraulics Report:

- A. **Hydraulic Analysis:** Review the existing hydraulic and scour analyses.
- B. **Scour Estimate:** Update Scour Data Table per the updated Caltrans criteria.

Assumptions:

- *Degradation estimates will be straight line extrapolation using best available data if no numeric sediment transport models are available.*
- *The bridge is a single span bridge with no pier scour estimate needed.*

- B. **Bank Protection Design:** As described above, installation of bank protection is complicated by the presence of large eucalyptus trees that stand just to the south of each bridge abutment. Because of this condition, portions of the bank protection may need special preparation for installation, requiring coordination with design team members to determine appropriate bank protection details, installation procedures, specifications, etc.

- C. **Final Hydraulic Report and LHS/FPE:** Update the Final Hydraulic Report per the updates noted above, and include the Location Hydraulic Study and Summary Floodplain Encroachment Report.

Assumptions:

- *No update to the hydraulic analysis or revisions to the scour analysis would be needed.*
- *As part of the Location Hydraulic Study, the consultant will complete items 3, 4, 5, 7 and 9 of the Floodplain Evaluation Report.*
- *Survey information for adjacent buildings will be used to determine the potential impact of the bridge replacement on the adjacent insurable structures.*
- *It is assumed that no Conditional Letter of Map Revision (CLOMR) will be required. If a CLOMR is required, this would be considered extra work and a separate task order will be necessary.*

Deliverables: Final Hydraulic Study Report, including Location Hydraulic Study (Pdf format)

2.3 ENVIRONMENTAL DOCUMENTS

(David J. Powers, H.T. Harvey)

CDFW Incidental Take Permit for California Tiger Salamander

- A. A California Endangered Species Act (CESA) Section 2081 Incidental Take Permit (ITP) application will be prepared, requesting take approval for the California tiger salamander (*Ambystoma californiense*) at the project site. The potential for the San Joaquin kit fox (*Vulpes macrotis mutica*) to be impacted will also be addressed, though incidental take approval is not being sought for the kit fox. This permit application will include a description of the project, the biology of the California tiger salamander and the San Joaquin kit fox, the potential for occurrence of these species at the project site, the potential impacts of the project on the species, and avoidance, minimization, and compensatory mitigation measures proposed to offset project impacts.
- B. The scope for this task includes preparation of a draft of the ITP application, and responses to public and agency comments on the ITP application. It also includes some time for coordination with the California Department of Fish and Wildlife (CDFW) following submittal of the 2081 application, and to coordinate with the County, CDFW, and others as necessary regarding the application.

Assumptions:

- *It is our understanding that land for compensatory mitigation for impacts to the tiger salamander has been set up by the County for this project and other projects.*
- *This scope assumes that CDFW will find the site acceptable for compensatory mitigation of potential impacts to California tiger salamander habitat, or that on-site mitigation will be feasible.*
- *This scope includes time for a moderate level of coordination between HTH and CDFW, but does not include the cost of investigating other potential mitigation sites or of designing and implementing on-site habitat restoration for the California tiger salamander.*

Mitigation and Monitoring Plan

A Draft Conceptual Mitigation and Monitoring Plan (MMP) will be prepared, which will provide the conceptual mitigation approach to compensate for impacts to riparian and aquatic habitats. Impacts previously determined during preparation of the NES will be reviewed and updated as needed for the current bridge and roadway design, as well as the adequacy of the mitigation site to compensate for the anticipated impacts. The MMP will include a project description, habitat impact confirmation/assessment, conceptual habitat mitigation design, success criteria, mitigation maintenance plan, and long-term monitoring, and will be suitable for submittal to permitting agencies. The draft MMP will be revised into a final MMP based on one set of comments from the project team, the County and the permitting agencies.

Assumption:

This scope assumes that aquatic and riparian mitigation will be developed on-site as identified in the NES and that the location will be acceptable to the permitting agencies. It is also assumed that there will be no complications at the mitigation sites due to the presence of special status plants or animals.

Permits

It is anticipated that the proposed project will require regulatory approvals from the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). The Consultant will prepare the necessary permit applications for submittal to the resource agencies. It is anticipated that the following permits will be necessary for this project:

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Section 404 Permit (USACE)
 Section 401 Certification (RWQCB)
 1602 Streambed Alteration Agreement (CDFW)

The Consultant will submit first-review administrative draft permit packages to the project team for review and comment. After incorporation of any changes, the packages will be submitted to the resource agencies. Throughout the permit process, the Consultant will maintain regular contact with regulatory staff in order to identify any concerns that need to be addressed prior to the issuance of permits.

Exclusion:

Permit fees are not included in the attached fee for services.

Deliverables: Permit Applications (Pdf format)
 Mitigation and Monitoring Plan (Pdf format)

2.4 HAZARDOUS MATERIALS TESTING SERVICES

(Geocon)

- A. The Phase I Initial Site Assessment Report indicated that because the existing bridge was constructed prior to the 1960's, there is potential for the presence of asbestos containing materials and lead based paint. Because of this, the bridge should be tested for each of these materials.
- B. The Initial Site Assessment also indicated that due to the history of agricultural use in the project area, the soil should be tested for pesticides, herbicides and arsenic in addition to the typical ADL, petroleum products, etc.

Assumption:

This work may be completed under the current permissions to access properties provided by the County, or that the County will update permissions to access as needed, and that traffic control will not be necessary to complete the work.

- C. Based on the results of the above testing, an Asbestos Containing Materials and Lead Containing Paint Report will be provided to summarize the levels of hazard for the existing bridge structure, and provide direction about how these materials should be handled during construction. A Limited Site Investigation Report will be provided to summarize the levels of hazard in the surface soils at the site and provide direction about whether special handling of the soil during construction is required.

Deliverables: ACM and LCP Report (Pdf format)
 Limited Site Investigation Report (Pdf format)

2.5 RIGHT-OF-WAY

(RJA)

- A. **Right-of-Way Acquisition Plats & Legal Descriptions:** The Consultant will prepare plats and accompanying legal descriptions for up to three (3) right-of-way acquisitions for the County to use in acquisition negotiations.
- B. **Temporary Construction Easements Plats & Legal Descriptions:** The Consultant will prepare plats and accompanying legal descriptions for up to three (3) temporary construction easements for the County to use in negotiations.

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Assumptions:

- *Please note that these services do not include services pertaining to right of way acquisition services such as assistance with property or easement acquisition, assistance with signatories, or preparation of deeds. These services may be added to the scope of work at the County's request.*
- *Fee does not include provision of preliminary title report.*

Deliverables: Right of Way Acquisition Plats and Legal Descriptions (Pdf format)
Temporary Construction Easements Plats and Legal Descriptions (Pdf format)

2.6 UTILITY COORDINATION

(DHA)

As required in Chapter 13 of the Caltrans, Right of Way Manual, the Consultant will resend the Letters to Owners Requesting Positive Location (Utility "B Letters and Plans"), which identifies claim of liability from the potentially affected agencies. Coordination for any relocation and will be provided at this time. The Utility Agency Coordination Log will be updated as necessary.

3. PHASE III: FINAL DESIGN

3.1 CONSTRUCTION DOCUMENTS

(BCA, DHA, HT Harvey)

Construction Documents will be completed by the design team. The Construction Documents package includes technical special provisions and construction plans that conform to County's and Caltrans' Standards with Federal requirements. Criteria used for design is described below.

- A. **Design Criteria: for Bridge Design:** Final bridge design will be performed in accordance with current Caltrans Bridge Design Specifications and other Caltrans Design Manuals. Design will be based on the "Load and Resistance Factor Design" method, with HL93 and permit truck design live loads. Seismic design will be performed in accordance with current Caltrans Seismic Design Criteria.
- B. **Approach Roadway Design:** The final approach roadway design will be performed in accordance with County Standards, AASHTO, Caltrans Highway Design Manual, and Caltrans Standard Specifications. Final grading and drainage details will be developed as well as new/existing roadway conformance details, as required. Cross sections will be developed on approximately 50-foot intervals.
- C. **Mitigation Planting Design:** Due to the project's construction impacts on trees and riparian areas, re-planting of native riparian plants and trees will be required for the project, to mitigate these impacts. Design of the mitigation planting layout, plant types, irrigation system and maintenance and establishment requirements is needed to satisfy the environmental permitting requirements.

Preliminary mitigation design will include development of a conceptual exhibit to clarify the mitigation planting area extents and irrigation water supply, for collaboration with the design team and the County, and approval of the mitigation approach and right-of-way needs prior to developing 95% mitigation plans, specifications and estimate. Plans and specifications will include permit compliance (e.g. wildlife exclusion fencing), irrigation, seeding, planting, plant protection, and maintenance during the 3-year plant establishment period.

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Assumption:

- *Because the NES and MMP have not been finalized and the permits have not been obtained, any significant alteration to the project's mitigation approach may require revisions to assumed mitigation planting design scope of work. Based on the mitigation measures described in these documents, the mitigation design is assumed to consist of 17 riparian trees installed along Arroyo Dos Picachos north of Rosa Morada Road.*
- *This scope also assumes that all riparian mitigation sites will be located onsite, that the County will be responsible for acquiring any additional property needed to accommodate the mitigation plants, that the contractor will be responsible for providing plant material for the project, and that water for the plants will be supplied to the irrigation system via a standpipe point of connection.*
- *It is assumed the following are not included in this scope of work: detailed surveys for special status plant or animal species, wetland delineation or identification of other regulated habitats.*

- D. **Plan Sheets and Details:** The plan sheets will be prepared in AutoCAD. Plans will be prepared in English units and will be consistent with Caltrans Standard Plans. All plans will be signed by the civil engineer or structural engineer (registered in the State of California) in responsible charge of the design, in accordance with the Caltrans Local Programs Manual. Two submittals will be made during the update of the Construction Documents as follows: When the documents are 95% complete and when the final documents are complete. Each submittal will incorporate the review comments from the previous submittal by the County staff as well as those of all other reviewing agencies.
- E. **Specifications (Special Provisions):** Technical Specifications will be updated based on the Caltrans Standard Specifications 2015, and the Caltrans Standard Special Provisions 2015. Per the County's request, the complete special provisions document will be coordinated and assembled, including incorporation of the County boilerplate provisions, bid forms, FHWA provisions, environmental and wildlife protection provisions, and Caltrans provisions for Divisions I and II.

Assumption:

It is assumed that the County boilerplate provisions, bid forms, and FHWA provisions will be provided by the County, and will already have been edited by the County for the project and for Caltrans 2015 Standards and current FHWA standards, will not require editing by the Consultant and will be ready for incorporation into the specifications document "as is".

- F. **Environmental:** Environmental mitigation planting requirements, such as tree replanting ratios, will be identified during the environmental process by the design team. It is assumed that only minor mitigation requirements will be needed for this project. Revegetation requirements and details will be included in the plans, specifications and estimates.
- G. **Utility Relocation:** The Consultant will provide communication and coordination with the utility companies during the completion of the final design process. The Consultant will coordinate the relocation and protection of the existing utilities for the project based on the information obtained from the County and various affected utilities. It will be the responsibility of each utility owner to provide a design of their facility.

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3.2 REASSESSMENT AND RESUBMITTAL OF 95% PS&E PER NEW STANDARDS

- A. **Revised Design Codes:** Since the original 95% PS&E was submitted in February 2014, the bridge design codes have been revised, as have the Caltrans Standard Specifications, Plans and Special Provisions. Because of this, the 95% PS&E will be revisited, updated and resubmitted.
- B. **Supplemental 95% Design Calculations:** As noted above, the design calculations will be reviewed and updated for conformance with the revised design criteria in AASHTO LRFD 6th Edition with California Amendments, and with Caltrans Seismic Design Criteria Version 1.7. As noted below, supplemental design calculations will be subjected to an independent check and revised as required prior to submittal.
- C. **Update 95% Design Plans:** Plans will be updated to reflect any changes required by the updated design calculations. Updated plans will be independently checked, revised as required, and submitted to the County, utility companies and other agencies for final review and comment. Agencies will thoroughly review the details of the project and provide the design team with review comments. The Consultant will work with the County and other agencies to resolve any conflicts between the comments of different reviewers.
- D. **Update 95% Technical Special Provisions:** The technical special provisions will be updated to the 2015 Caltrans Standard Special Provisions. The special provisions will be independently checked, revised as required, and included in the 95% submittal to the County. Please see Section 3.1 above for discussion of the Consultant and County roles in compiling the complete special provisions document.
- E. **Update 95% Opinion of Probable Construction Costs:** The Opinion of Probable Construction Costs will be updated to 2015 standards and cost levels for use in the Bid Documents. Standard County and/or Caltrans items will be used.
- F. **Independent Quality Assurance Review:** An internal quality assurance review of the updated plans, specifications, and estimate will be conducted per the updated design criteria noted above. The Consultant's quality assurance program provides for independent checking of individual tasks, as well as an independent review by experienced senior staff. The purpose of this review is to provide oversight to specific project details by professionals who are not closely involved in the design, and to review the constructability, cost-effectiveness and completeness of design features relative to the normal standard of professional care. This independent check will include a red, green and yellow check of the structural calculations and plans.
- G. **Response to Comments Memorandum:** If the County has comments on the previous 95% Design submittal, responses to these comments will be incorporated into the Updated 95% Design submittal, and a memo with "response to comments" will be provided.

Assumption:

It is assumed that the County will provide comments on the plans, specifications and Opinion of Probable Construction Costs in the form of one, consolidated set of markups and or written comments.

Updated 95% Deliverables:

- 4 – 95% Plan Sets (11" x 17" plots)
- 1 – 95% Plan Set (Pdf format)
- 1 – 95% Opinion of Probable Construction Cost (Pdf format)

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- 1 – 95% Project Technical Specifications (Pdf format)
 1 – Response to Comments Memo (Pdf format)

3.3 FINAL DESIGN SUBMITTAL (100% PS&E)

- A. **100% Final Plans:** After agency review of the Updated and Checked Design Submittal (95%), the Consultant will prepare the Final Contract Documents in accordance with the County's instructions and provide the County and other agencies the opportunity to review the completed Bid Documents and direct minor revisions.
- B. **100% Opinion of Probable Construction Costs:** The Opinion of Probable Construction Costs will be finalized. Standard County and/or Caltrans items will be used.
- C. **Response to Comments Memorandum:** A memo with "response to comments" received from the 95% Design Submittal will be provided.

Assumption:

The County will provide comments on the plans, specifications and Opinion of Probable Construction Costs in the form of one, consolidated set of markups and or written comments.

- D. **Bid Documents:** After County review of the 100% Final Submittal, any minor final revisions will be incorporated and Completed Contract Documents prepared in accordance with the County's instructions. Final bid documents will be submitted for signature.

100% Deliverables:

- 4 – 100% Plan Sets (11" x 17" plots)
 1 – Final Opinion of Probable Construction Cost (Pdf format)
 1 – 100% Project Technical Specifications (Pdf format)
 1 – Response to 95% Comments Memo (Pdf format)

Bid Set Deliverables:

- 4 – Bid Plan Sets (11" x 17" plots, signed)
 1 – Bid Plan Set (Pdf format, signed)
 1 – Final Opinion of Probable Construction Cost (Pdf format)
 1 – Bid Set Project Technical Specifications (Pdf format)
 1 – CD of Final Project Documents

3.4 UTILITY COORDINATION: OWNER AND/OR UTILITY AGREEMENT

(DHA)

As required in Chapter 13 of the Caltrans, Right of Way Manual, the Consultant will send Notice to Owner and/or Utility Agreement (Utility "C Letters and Plans") of which covers the positive location, relocation, removal, and abandonment of facilities and who is responsible for costs of relocation from the affected agencies. Any relocation design plans, specifications, and estimate will be included in the final design documents. The Utility Agency Coordination Log will be updated as necessary.

3.5 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

(DHA)

A Risk Level I Storm Water Pollution Prevention Plan (SWPPP) will be prepared, which will be in effect for the duration of the Project. This will include the design and implementation of sediment and erosion control best management practices (BMPs) as well as Stormwater Post Construction Requirements (PCRs). Stormwater PCRs include calculations to determine pervious and impervious surfaces before and after construction and the design of post construction BMPs. Consultant will file the Notice of Intent (NOI) through the State Water

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Board's Storm Water Multiple Application and Report Tracking System (SMARTS) and upload the necessary Permit Registration Documents (PRDs) in order to obtain a Waste Discharge Identification Number (WDID) number. PRDs include the Risk Level I SWPPP, the Risk Determination Spreadsheet, and post construction calculations and BMPs. The Risk Determination Spreadsheet and Post Construction Requirements are included in the SWPPP but are also uploaded into SMARTS separately.

3.6 RESIDENT ENGINEER'S PENDING FILE

(BCA, DHA)

The Resident Engineer's Pending File will be prepared per the OSFP Information and Procedures Guide, including the following items:

- Quantity summary sheets for excavation, backfill, concrete, reinforcing, piles and miscellaneous metal
- Joint movements calculations
- Notes on special details, and special construction sequences or requirements, as needed
- Final foundation report
- Final hydraulics report
- As-built plans for existing bridge
- 4-Scale deck contour plots

3.7 CONSTRUCTION CROSS SECTIONS AND SLOPE STAKING NOTES

(DHA)

Construction cross sections and slope staking notes for earthwork will be provided at 25-foot intervals, with additional locations as required due to constraints or roadway features. Information provided on the cross-sections will include alignment (stationing), finish grade, sub-grade, original ground, existing and proposed edge of pavement, hinge point, catch point and right-of-way.

3.8 RIGHT-OF-WAY ACQUISITION SERVICES (NIC)

The Consultant will provide services noted above under the section "2.5 RIGHT-OF-WAY" in preparation for the right-of-way acquisition. This may include the development of appraisal maps, right-of-way maps and legal descriptions, as necessary. The County or its agent will make contact with the property owners for the purpose of acquiring property rights to accommodate construction.

Assumption:

Please note that the scope does not include right of way acquisition services such as assistance with property or easement acquisition, assistance with signatories, or preparation of deeds. These services may be added to the scope of work at the County's request.

4. PHASE IV: CONSTRUCTION SERVICES

4.1 BIDDING PERIOD SERVICES

(DHA, BCA, HT Harvey)

The County will advertise the project for bidding and distribute the plans to prospective bidders. The County's project coordinator will be the designated person to receive contractor inquiries. The design team will assist the County as requested during the bidding. The work may include answering questions, providing consultation and interpretation of the construction documents, and assisting the County in preparation of addenda to the PS&E during the advertisement period. Attending pre-bid meetings or bid opening and analysis of bids will also be provided, if requested.

4.2 CONSTRUCTION SUPPORT (NIC)

Construction Support Services may be added to the scope of work at the County's request, and would include the following:

- *Attend preconstruction meeting*
- *Review shop drawings and submittals*
- *Answer clarification questions pertaining to the plans and special provisions, if needed.*
- *Attend periodic field visits, as required, to assist in the resolution of construction issues.*
- *Review contractor RFI's (Request for Information) and provide written response.*
- *Review construction inspection reports prepared by the Resident Engineer.*
- *Prepare record drawings and provide hard copies to the County. The basis of the revisions shown on the record plans will be a red mark construction set of plans provided by the project Resident Engineer. These construction red mark plans shall show all revisions that were made during construction.*

The fee required to complete this work is summarized in the attached Fee Breakdown sheet.

ATTACHMENT A

Scope of Services

PROJECT DESCRIPTION

The approach to this scope is based on simply replacing the bridge while matching its existing profile and length and maintaining the abutments in the channel. This will result in a roadway approach that transitions the paved roadbed from the existing narrow width of approximately 12-feet to approximately 30-feet based on industry standard practices for lane transitions. This will result in the least roadway improvements and simplest bridge replacement that is physically possible.

This bridge replacement assumes stage construction of the bridge to maintain a single lane access over the channel during construction. A one lane bridge will be constructed adjacent to the existing - either to the north or to the south. This will be determined at the onset of the design after coordination with the County and design team. Once the single lane bridge and roadway approaches are constructed, traffic will be shifted to the new single lane bridge and the existing bridge will be *removed*. Once the existing structure is removed, the new bridge will be widened to accommodate two lanes of traffic plus shoulders, and will incorporate Caltrans standard concrete barriers for safety. Once widened, the bridge will be opened for two way traffic.

The following Scope of Services is based on certain assumptions as listed below. As the project ensues, these assumptions will be verified and further discussed with the County to determine if a study phase is warranted to investigate corrective measures for roadway flooding. Any deviation from these assumptions will be coordinated with the County and a revised scope and fee established as agreed upon.

Exclusions

- Field Review support is not included.
- Assistance with Local Assistance Program compliance is not included.
- Mitigation planting and irrigation design services are not included.
- Right of way acquisition services are not included.
- A Phase I Initial Site Assessment is not included.
- Investigation of detours and/or low water crossings is not included.
- Investigation of potential borrow sites in the channel is not included.
- Slope staking notes, construction cross sections and construction staking not included
- Construction support services are not included.
- Design of any other type of bridge structure other than a simple span cast in place concrete slab bridge using the Caltrans tables is excluded.
- Community Meetings and public outreach.

Assumptions

- The bridge will be a single span, reinforced concrete slab bridge with diaphragm abutments and a maximum span length of 40-feet.
- The existing roadway profile will be maintained, and will not be raised to avoid overtopping of the roadway.
- Only one alignment alternative will be considered - either a southerly or a northerly widening.
- Stage construction will be used, rather than a detour.
- Existing utilities will not require relocation.
- Length of roadway approach design will not be more than 200-feet either side of the bridge, with only a slight rise in profile to accommodate an increase in depth of bridge superstructure.
- The proposed bridge will not change the proposed water surface elevation, and will have no adverse impact on the upstream structures.
- The proposed bridge will allow the 100-year discharge to flow under the bridge with sufficient freeboard to allow drift passage, and the 50-year discharge does not overtop the roadway.
- It is assumed that the bridge will not cause a significant encroachment into the floodplain.
- Drainage systems are not required.
- Project impacts will not affect wetlands, and that a Wetlands Technical Assessment will not be required.
- It is assumed that special status species are not present in the project site area and that Biological Assessment of special status species will not be required.
- The County will prepare the boilerplate specifications and compile the technical specifications with the boilerplate.
- The project will be constructed as designed and as-built plans will not be necessary.

SCOPE OF SERVICES

CONTRACTOR'S approach for the Rosa Morada Bridge Replacement Project is as follows:

- Phase 0: Project Management Project
- Phase 1: Study and Definition
- Phase 2: Preliminary Engineering and Reports Final
- Phase 3: Design
- Phase 4: Construction Support Services

Phase 0 - PROJECT MANAGEMENT

Project Management includes the supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, client liaison and the monitoring of the schedule and the budget. Also included in this Task is the preparation of project reports and attendance at meetings with the staff of San Benito County to receive input and discuss and review the project during its critical design periods.

- 0.1 **Project Administration:** Supervise, coordinate, and monitor design for conformance with Caltrans standards and policies. Prepare monthly progress reports and invoices. Make arrangements with and obtain permission from County for CONTRACTOR to work on the County road. Assist the County in obtaining permission to enter private property for environmental and engineering studies. Employ and monitor subconsultants. Coordinate CONTRACTOR's work with the County's work. Close and archive the project records at the end of the project.
- 0.2 **Project Initiation:** Upon receipt of Notice to Proceed, a project kick-off meeting will be held to finalize the project scope, the project approach, the goals and the schedule. Items to be addressed include a review of the key issues associated with the project, a description and clarification of the approach required to respond to these issues, a discussion of potential County, State, Federal and other permits which may be required for the project and the verification of the project milestone dates.
- 0.3 **Coordination Meetings:** To facilitate comprehensive input from the County during the critical design periods, the CONTRACTOR's Project Manager and selected Team Members will attend up to 2 coordination meetings with the County staffmembers.
- 0.4 **Design Review Meetings:** The CONTRACTOR's Project Manager and selected Team Members will attend 2 design review meetings with County staff which will be scheduled to coincide with the completion of the preliminary design and final design phases.

Phase 1 - PROJECT STUDY AND DEFINITION

The County will not require any Phase 1 - Project Study and Definition services be provided.

Phase 2 PRELIMINARY ENGINEERING AND REPORTS

2.1 DATA COLLECTION

The County will research records and supply the CONTRACTOR with copies of documents and plans of any future street or utility plans for review and incorporation into the bridge plans.

2.2 FIELD SURVEYS AND BASE MAP TOPOGRAPHY

- A. **Right-of-Way/Control**: CONTRACTOR shall establish project horizontal and vertical control, search for and locate existing controlling boundary monumentation and resolve project right-of-way based upon the record title information, with supporting documents supplied by the County and available public records. It is assumed the County will provide current preliminary title reports with exceptions packages and legal descriptions prior to commencement of work for this item.
- B. **Aerial Photogrammetry**: CONTRACTOR shall determine the limits and nature of the aerial photogrammetric work appropriate for the project. CONTRACTOR shall coordinate with the photogrammetrist for flight marker requirements and layout, time of flight(s) and schedule. This work also includes the digital mapping of the site at a scale of 1" = 40' with a 1-foot contour interval.
- C. **Flight Marker Control**: CONTRACTOR shall perform field surveys to set flight markers for aerial photogrammetry control. Flight markers will be field surveyed to tie to project horizontal and vertical control. Flight marker field survey will be reduced and coordinated geometry results will be supplied to the photogrammetrist.
- D. **Supplemental/Topo Survey**: CONTRACTOR shall provide supplemental ground survey and data reduction to augment aerial topography. CONTRACTOR shall provide field supplemental survey within the project boundary and office support to obtain horizontal and vertical locations of selected visible above-ground features, dip necessary manholes and storm inlets for location and elevation. CONTRACTOR shall provide location of existing water line and utility poles, and perform up to seven (7) cross-sections of the existing channel.

2.3 GEOTECHNICAL INVESTIGATION

Bridge Foundation Report:

- A. **Research and Data Collection**: Review of readily available geologic and soil literature in the vicinity of the site including review of as-built drawings and existing LOTS sheets, if any.
- B. **Permits/USA Clearances**: The CONTRACTOR shall comply with the County and other permit requirements. It is assumed that a no fee permit will be provided.

- C. **Field Exploration:** A field review will be performed. For the bridge structure, 2 borings up to 70' in depth will be drilled. Hollow stem auger or mud rotary drilling is proposed. These explorations will provide an evaluation of subsurface soils/rock conditions for the proposed structure. One to two bulk samples will be collected from the roadway subgrade to evaluate the R-value for pavement design.
- The boring locations will depend upon the available access and the boring data from previous studies. The use of a truck mounted drill rig for drilling in the general area of the proposed abutment locations is anticipated. No traffic control is anticipated at this time. Subsurface soil conditions encountered in each test boring at the time of drilling will be continuously classified and logged. "Relatively undisturbed" and bulk samples of substrata will be obtained from test borings. The borings will be drilled and capped in accordance with the permit requirements.
- In order to be cost effective any existing available borings/data for the structure will be used. Based on our research of the geologic maps and the as-built information, alluvial soils are expected at the site.
- D. **Laboratory Testing:** Laboratory tests shall be performed on representative soil samples or rock samples such as moisture density, unconfined compression, gradation analyses, R-value tests, corrosion tests and Plasticity Index, as necessary.
- E. **Soils Analysis/Evaluation:** Engineering analyses shall be performed and design recommendations developed for the proposed bridge foundations. Large diameter CIDH piles or driven piles are expected for the bridge supports.
- F. **Prepare Draft Foundation Memo (Type Selection Letter):** Preliminary recommendations for foundations shall be provided, as well as a Type Selection Memo with the LOTB for the structure. The geotechnical engineer shall attend a Type Selection Meeting, if needed.
- G. **Prepare Final Foundation Report:** A detailed foundation report shall be prepared, including design recommendations for foundation types, footing elevations, lateral design capacities and pile foundation or spread footing design recommendations. The report will also discuss seismic considerations, evaluate the liquefaction potential and comment on the site soil conditions from this standpoint. Information related to Caltrans Seismic Design Criteria (SOC v 1.5) shall be provided.
- H. **Log of Test Borings:** Using the bridge General Plan as a base map, boring log sheets shall be provided for the plan set.
- I. **Ongoing Design Consultation and Review:** Design review and consultation shall be provided through final design.

Deliverables: Preliminary Foundation Memo

Final Foundation Report LOTB
plan sheets

2.4 PRELIMINARY RIGHT -OF-WAY

A. Right-of-Way Acquisition Plats & Legal Descriptions: The CONTRACTOR shall prepare plats and accompanying legal descriptions for up to three (3) right-of-way acquisitions for the County to use in acquisition negotiations.

Please note that these services do not include services pertaining to right of way acquisition services such as assistance with property or easement acquisition, assistance with signatories, or preparation of deeds.

B. Temporary Construction Easements Plats & Legal Descriptions: The CONTRACTOR shall prepare plats and accompanying legal descriptions for up to three (3) temporary construction easements for the County to use in negotiations.

Please note that these services do not include services pertaining to right of way acquisition services such as assistance with property or easement acquisition, assistance with signatories, or preparation of deeds.

Deliverables:

Right of Way Acquisition Plats and Legal Descriptions
Temporary Construction Easements Plats and Legal Descriptions

2.5 HYDRAULICS ANALYSES

A. Obtain and Review Project Documentation: CONTRACTOR shall obtain relevant project information, including but not limited to the following: Caltrans and San Benito County records for the existing bridge and adjacent bridges, such as supplemental bridge maintenance reports and historic hydraulic studies; Federal Emergency Management Agency (FEMA) floodplain information (if available).

Assumptions:

- The above reports information are public information and readily available.
- The bridge maintenance records are readily available for use by the CONTRACTOR.

B. Hydrologic Analysis: Peak discharges for the 50- and 100-year flood events shall be estimated using at least two commonly used methods as outlined in the Caltrans Local Assistance Program Manual.

C. Hydraulic Analysis: Hydraulic parameters (water surface elevations and velocity) shall be obtained from the Army Corps of Engineers HEC-RAS (Hydraulic Engineering Center River Analysis System) model based on: 1)

Surveys obtained from the design team and 2) a reconnaissance level field investigation. The river reach will be described. Manning's "n" values for the channel and overbank shall be estimated from field investigation and engineering judgment. Models of existing conditions as well as up to four alternative bridge designs shall be developed and the results evaluated. The hydraulic variables (water surface elevation, velocity etc.) shall be determined for the design discharge, 50- and 100-year discharges estimated as part of the modeling work. Results from the Hydraulic Analysis shall be provided in both tabular as well as graphical output formats for the design team and the County.

- D. **Hydraulic Criteria:** Chapter 800 of the Caltrans Highway Design Manual (HOM) delineates the hydraulic design criteria for bridges. The basic rule for hydraulic design is that bridges should be designed to pass the Oso with sufficient freeboard and convey the Q_{100} without freeboard, exceptions may be granted if sufficient evidence is provided. The HOM notes that 2 feet of freeboard is often assumed for preliminary bridge designs but leaves the recommendation for freeboard to the judgment of the hydraulic engineer based primarily upon the debris anticipated at the bridge.
- D. **Drift:** The CONTRACTOR shall research bridge maintenance records for existing bridges upstream and downstream of the proposed bridge to determine if any maintenance challenges have occurred such as debris getting caught on the bridge piers. This helps to determine the necessary freeboard and span length, to minimize debris capture and therefore future maintenance.
- Assumptions:*
- The proposed bridge will allow the 100-year discharge to flow under the bridge with sufficient freeboard to allow drift passage.
 - The 50-year discharge does not overtop the roadway.
 - If a conditional letter of map revision (CLOMR) is required by the local agency due a change in water surface elevation cause by the new bridge, this would be considered extra work and a separate task order would be required.
- E. **Scour Estimate:** The CONTRACTOR shall review maintenance records for the existing and adjacent bridges over Arroyo Dos Picachos to determine if the stream has degraded over time. Contraction and abutment scour will be estimated using the methods described in the Federal Highway Administration (FHWA) Publication HEC-18, *Evaluating Scour at Bridges*.

Assumptions:

- Degradation estimates will be straight line extrapolation using best available data if no numeric sediment transport models are available.
- No bank protection will be required.
- The bridge will be a single span bridge with no pier scour estimate needed.

F. Location Hydraulic Study: Using the HEC-RAS output data, the CONTRACTOR shall complete a Location Hydraulic Study (Floodplain Evaluation Report) in accordance with 23 CFR 650.113. This report is generally included in the Environmental Document for the bridge.

Assumptions:

- The proposed bridge will not change the proposed water surface elevation and will have no adverse impact on the upstream structures.
- It is assumed that the bridge will not cause a significant encroachment into the floodplain. If a significant encroachment into the floodplain is found, a separate task order will be necessary.
- As part of the Location Hydraulic Study, the CONTRACTOR shall complete items 3, 4, 5, 7 and 9 of the Floodplain Evaluation Report.
- Survey information for adjacent buildings will be used to determine the potential impact of the bridge replacement on the adjacent insurable structures.
- It is assumed that no Conditional Letter of Map Revision (CLOMR) will be required. If a CLOMR is required, this would be considered extra work and a separate task order will be necessary.

Deliverables: Draft Hydraulic Study Report (one round of revisions assumed)
Final Hydraulic Study Report, including Location Hydraulic Study

2.6 ENVIRONMENTAL DOCUMENTS

Coordination with Caltrans and NEPA Analysis

- A. Preparation of APE Map: The CONTRACTOR shall prepare the Area of Potential Effects (APE) Map and an initial project description for submittal to Caltrans. The CONTRACTOR shall coordinate the revision and approval of the APE map and project description by Caltrans staff.
- B. Draft NEPA Technical Studies: It is anticipated that Caltrans will require the completion of technical studies under NEPA to accompany the Categorical Exclusion. These studies will specifically comply with NEPA-related environmental processes, including the following: Section 106 of the National Historic Preservation Act, Endangered Species Act, Executive Order 11990 (Protection of Wetlands), and Executive Order

11988 (Floodplain Management). Based on the PES Form received from Caltrans and the County, it is currently expected that the following technical reports will be required for this project:

- Cultural Resources/Section 106 of the National Historic Preservation Act
- Biological Resources/Natural Environment Study
- Tree Survey
- Floodplain/Location Hydraulic Study

C. Cultural Resources/Section 106: The CONTRACTOR shall prepare the cultural resource studies to comply with Section 106 of the *National Historic Preservation Act*. Compliance studies will consist of an *Archaeological Survey Report (ASR)* and a *Historic Properties Survey Report (HPSR)* of the Area of Potential Effects (APE) of the proposed bridge replacement. These reports will be prepared in the required Caltrans/FHWA formats to address the provisions of Section 106 of the National Historic Preservation Act.

D. Biological Resources/Natural Environment Study: The CONTRACTOR shall prepare a Natural Environment Study (NES) for the project. The design team biologists will review the project preliminary design layouts for the replacement bridge, as well as other pertinent project materials. They will also conduct a data search on the nearest known locations of special status plant and animal species to the site. Existing sources of information will be reviewed, summarized, and cited as appropriate.

The design team biologists shall visit the project area and conduct reconnaissance level surveys. The biotic habitats of the project site shall be surveyed and delineated on a map of appropriate scale. Biotic habitats suitable for the occurrence of plant species of special status shall be identified, as well as those subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) and CDFG. Wildlife habitat values shall be determined based on the biotic habitat surveys. Habitats appropriate for wildlife species listed as threatened or endangered by the state or federal governments, and other species of special status shall be identified.

Following the field visits, the biologists shall conduct an impact analysis to determine which biological resources, if any, will be significantly impacted by the proposed project. The data collected from the above-mentioned tasks will be used as the basis for preparing an NES report per Caltrans guidelines. Graphics shall be produced to portray the habitat types of the site, impact areas, and, if appropriate, proposed mitigation sites. The NES

shall be submitted to the design team, the County, and Caltrans for review and comment.

- E. **Tree Survey:** The CONTRACTOR shall complete a tree survey within the project area. All trees with a diameter at breast height (dbh) of two (2) inches or greater at the project site shall be located by GPS, tagged, identified to species, and evaluated as to general health and condition. Following the completion of the tree survey, the CONTRACTOR shall produce a brief report of findings, including a summary table listing the relevant information (species, dbh, and condition) for the trees surveyed and a map of tree locations. An electronic file of tree locations shall also be provided.
- F. **Submittal of NEPA Environmental Documentation:** The CONTRACTOR shall compile and package the draft NEPA technical environmental studies for submittal to the design team and the County for review and comment. Upon approval by the County and the project team, these technical studies shall be submitted to Caltrans for review and comment.
- G. **Revisions and Additional Coordination:** This scope of work includes time for responding to one round of Caltrans comments and for revising the technical materials, if necessary. This scope also includes time for general coordination and correspondence with Caltrans staff, County staff, and the project team. It is anticipated that attendance at up to two (2) additional meetings with Caltrans and/or the project team may be necessary. The CONTRACTOR shall also draft the NEPA Cat Ex form for Caltrans, if requested.

Preparation of Draft Initial Study/Mitigated Negative Declaration for CEQA:

The CONTRACTOR shall prepare an Initial Study/Mitigated Negative Declaration (IS/MND), which will evaluate the proposed bridge replacement project. The IS shall describe the existing environmental setting and include the CEQA Checklist. An analysis of the potential impacts resulting from the proposed project shall be included in the IS. Mitigation measures shall be identified to reduce impacts to a less than significant level. (In the event that the Initial Study identifies significant impacts of the project that cannot be mitigated to a less than significant level, an EIR would be required. Preparation of an EIR is not included as part of this scope of work; however, an EIR could be prepared as an additional service upon written authorization.) Copies of the Administrative Draft IS shall be submitted to the County staff and CONTRACTOR staff for review and comment.

The IS/MND shall be consistent with the CEQA Guidelines as well as the County's Initial Study format and shall include the following sections and appropriate environmental analysis.

- A. **Background and Project Description:** The Initial Study will include relevant background information on the project site, and a general description of the proposed bridge improvements. Maps, tables, and appropriate graphics will be included to describe the characteristics of the project. The project description will also discuss the project objectives and will include a section describing the consistency of the project with relevant federal, state, and local plans.
- B. **Environmental Setting:** The Initial Study will include an overview of the environmental setting of the project site area, including a description of the existing and surrounding land uses, as well as the local geologic, drainage and flooding, hazardous materials, biological, cultural resource, and visual conditions.
- C. **Environmental Checklist:** The Initial Study will include the CEQA Environmental Checklist, as outlined in Appendix G of the CEQA Guidelines. The checklist will be used to identify potentially significant impacts resulting from development of the proposed project.
- D. **Discussion of Significant Environmental Effects:** The Initial Study will include a discussion of potentially significant environmental effects that will result from the proposed bridge replacement. While the Initial Study will address all issues in the checklist as necessary, it is presently anticipated that substantial discussion will be necessary in the areas of geology, hydrology and flooding, water quality, hazardous materials, biological resources, cultural resources, visual conditions and construction impacts.
- E. **Geology and Soils:** The Initial Study will address the potential geologic impacts from construction of the proposed bridge, based upon available geotechnical information provided by the design team. Mitigation measures will be identified to minimize potentially significant geologic impacts.
- F. **Hydrology and Flooding:** The Initial Study will describe the historical and existing hydrologic conditions in the project area, including the potential for flooding and scour, and will address the changes in hydrologic conditions resulting from the project, based upon the Location Hydraulic Study or other information provided by the County and the design team.
- G. **Water Quality:** Construction of the proposed bridge replacement could cause erosion and sedimentation into the Arroyo Dos Picachos channel. The potential project impacts to water quality will be described in the Initial Study based upon information provided by the County and/or the design

team. Mitigation measures will be identified for potentially significant water quality impacts, as necessary.

- H. **Hazardous Materials:** The Initial Study will describe the potential for existing hazardous materials contamination to be present in the project area, based upon the Phase I Environmental Site Assessment to be completed by the project team.
- I. **Biological Resources:** The Initial Study will describe the potential for the bridge replacement to result in impacts to biological resources present at the project site, based on the Natural Environment Study (NES) described above. The potential impacts of the project upon biological resources will be evaluated in the Initial Study. Mitigation measures will be identified to reduce or avoid significant impacts, as appropriate.
- J. **Cultural Resources:** The potential impacts of the project upon cultural resources which could be present at the site will be evaluated based on the Archaeological Survey Report and the Historic Property Survey Report prepared for the bridge site, as described above. Mitigation measures will be identified to reduce or avoid significant impacts, as appropriate.
- K. **Visual Conditions:** The Initial Study will describe the existing visual character of the project site area and the projected change in visual character resulting from replacement of the proposed bridge. Mitigation measures will be identified to reduce or avoid any significant visual impacts of the project.
- L. **Construction Impacts:** Potential construction impacts of the proposed project will be addressed in the Initial Study, including construction noise, traffic and air quality. The Initial Study will also address the potential for temporary impacts upon adjacent land uses resulting from construction of the proposed bridge improvements. Information on construction staging and scheduling will be provided by the design team. Mitigation measures will be identified to reduce or avoid potentially significant impacts.
- M. **Other Issues:** The Initial Study will also address the following issues as required by the CEQA Guidelines:

- | | |
|-----------------------|------------------------------------|
| Air Quality | Public Services |
| Hazards | Recreation |
| Land Use and Planning | Transportation/Traffic |
| Mineral Resources | Utilities and Service Systems |
| Noise | Mandatory Findings of Significance |

Preparation of the Draft Initial Study:

The Administrative Draft IS will be revised, based upon the comments received from the County and the design team. Upon approval by the County Staff, the document will constitute the Draft IS/MND and copies will be delivered to the County for public review and circulation, as required by CEQA. An electronic disk or email version of the Draft IS/MND will also be provided to the County and the design team.

Mitigated Negative Declaration and MMRP:

The CONTRACTOR shall prepare drafts of the Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program (MMRP) for the project, and will submit these to the County for review and comment. If requested by the County, the CONTRACTOR shall will revise these documents and re-submit them to the County staff for approval and signature.

Preparation of Final Initial Study

The CONTRACTOR shall respond to any substantive comments received on the Draft IS during the public review period, and will make any necessary changes to the Initial Study, based upon the comments received. Copies of the Final IS will be submitted to the County and the design team. An electronic disk or email version of the Final Initial Study/Mitigated Negative Declaration will also be provided to the County and the design team.

This scope of work includes approximately 12 hours to respond to written comments which may be received from the public and/or various governmental agencies as a result of circulation of the Initial Study.

In the event that substantial technical comments are received on the Initial Study, we would provide additional work to defend the IS/MND on a time and materials basis as an extra work item, upon County authorization.

Permits

It is anticipated that the proposed project will require regulatory approvals from the U.S. Army Corps of Engineers (USAGE), Regional Water Quality Control Board (RWQCB) and California Department of Fish and Game (CDFG). The CONTRACTOR shall prepare the necessary permit applications for submittal to the resource agencies. It is anticipated that the following permits will be necessary for this project:

- Section 404 Permit (USAGE)
- Section 401 Certification (RWQCB)
- 1602 Streambed Alteration Agreement (CDFG)

The CONTRACTOR shall submit first-review administrative draft permit packages to the project team for review and comment. After incorporation of any changes, the packages will be submitted to the resource agencies. Throughout the permit process, the CONTRACTOR shall maintain regular contact with regulatory staff in order to identify any concerns that need to be addressed prior to the issuance of permits.

2.7 35% SUBMITTAL AND TYPE SELECTION REPORT

Upon completion of data gathering, investigation and analysis, a Type Selection Report will be prepared by the CONTRACTOR. The Report will summarize the findings and provide a conclusion, and will recommend the design and improvements for the project. Preliminary plans of all major features of the project shall be provided so that the County will have a clear understanding of the proposed improvements. A preliminary opinion of probable construction cost of the proposed improvements will be provided by the CONTRACTOR. A type selection meeting will be arranged if necessary.

- A. **35% Preliminary Plans:** The Preliminary Design Phase is intended to allow the County, utility companies and other involved agencies to review and comment upon the basic design concepts early in the process. Plan development will be based upon the geometry developed in the Geometric Alignment Drawing. Preliminary Plans will be developed to establish fundamental elements of the design. The proposed plans for this preliminary submittal are as follows:

Title/Index Sheet
 Typical Roadway Cross Sections
 Preliminary Roadway Alignment Plans and Profiles
 Traffic Handling/Stage Construction Plans
 Bridge General Plan (Type Selection)

- B. **35% Preliminary Opinion of Probable Construction Cost:** A Preliminary Opinion of Probable Construction Cost will be prepared based on items and quantities of work shown on the Preliminary Plans and other anticipated improvements. The opinion will be based upon current market unit costs, the magnitude of the quantities, our experience with similar local projects and the engineer's judgment.

Deliverables: Type Selection Report
 35% Plan Set
 35% Level Probable Opinion of Construction Cost
 Preliminary Studies and Reports as noted above

2.8 UTILITY COORDINATION: UTILITY VERIFICATION REQUEST

As required in Chapter 13 of the Caltrans Right of Way Manual, the CONTRACTOR shall send a Letter to Owner Requesting Positive Location (Utility "B Letters and Plans"), which identifies claim of liability and cost for positive location of utilities from the potentially affected agencies. Coordination for any relocation will be provided at this time. The Utility Agency Coordination Log will be updated as necessary.

Deliverables: Letter to Owner Requesting Positive Location - "B Letters and Plans

Phase 3 FINAL DESIGN

3.1 CONSTRUCTION DOCUMENTS

Based on the approved Bridge Type Selection, Construction Documents shall be prepared by the design team. The Construction Documents package shall include specifications and construction plans and will conform to County's and Caltrans' Standards with Federal requirements.

Final design calculations shall be prepared for the bridge structure and submitted for County staff review. An opinion of probable construction cost of the project will also be provided. The CONTRACTOR shall coordinate and incorporate any utility agency's future needs, if any, in the bridge. The CONTRACTOR shall also design all street transitions to the bridge.

- A. **Design Criteria: for Bridge Design:** Final bridge design will be performed in accordance with Caltrans Bridge Design Specifications and other Caltrans Design Manuals. Design will be based on the "Load and Resistance Factor Design" method, with HL93 and permit truck design live loads. Seismic design will be performed in accordance with current Caltrans Seismic Design Criteria.
- B. **Approach Roadway Design:** The final approach roadway design will be performed in accordance with County Standards, AASHTO, Caltrans Highway Design Manual, and Caltrans Standard Specifications. Final grading and drainage details will be developed as well as new/existing roadway conformance details, as required. Cross sections will be developed on approximately 50-foot intervals.
- C. **Utility Relocation:** The CONTRACTOR shall provide communication and coordination with the utility companies during the preliminary and final design process. The CONTRACTOR shall coordinate the relocation and protection of the existing utilities for the project based on the information obtained from the County and various affected utilities. The design team

will also provide adequate openings for the utilities in the bridge. It will be the responsibility of each utility owner to provide a design of their facility.

- D. **Environmental**: Environmental mitigation requirements will be included in the specifications and estimates. It is assumed that only minor mitigation requirements will be needed for this project. Revegetation requirements, such as tree replanting ratios, will be identified during the environmental process by the design team. Bridge demolition, water pollution control measures, traffic detours, traffic handling plans, and project signing will be developed by the design team, as well as bridge and roadway embankment protection details. Note that mitigation planting and irrigation plans are not included in the scope. If it is determined that this level of mitigation is required for the project, these items may be added to the scope of work at the County's request.
- E. **Plan Sheets and Details**: The plan sheets will be prepared in AutoCAD. Plans will be prepared in English units and will be consistent with Caltrans Standard Plans. All plans will be signed by the civil engineer or structural engineer (registered in the State of California) in responsible charge of the design, in accordance with the Caltrans Local Programs Manual. Three submittals will be made during the preparation of the Construction Documents as follows: When the documents are 65% complete; when the documents are 95% complete; when the final documents are complete. Each submittal will incorporate the review comments from the previous submittal by the County staff as well as those of all other reviewing agencies.

3.2 -65% DESIGN SUBMITTAL (65%PS&E)

- A. **65% Complete Plans**: Based on comments received from the 35% Design Submittal, the design will be advanced to the point that all major design issues and solutions are represented in the plan documents. Minor details may be missing from the plan set at this milestone, but all plan sheets will be included in this submittal package. The CONTRACTOR shall work with the County and other agencies to resolve any remaining conflicts between the comments of different reviewers. Upon comment resolution with County, no further changes will be anticipated thereafter and such comments or changes will be deferred until the next submittal or next appropriate meeting.
- B. **65% Complete Specifications**: A draft of the technical specifications sections to be included for the final project specifications shall be identified with the submittal. The technical specifications will reference County or Caltrans standard specifications sections for the various items of work,

with specific consideration of measurement and payment provisions. County will be responsible for the completion of "boilerplate" general and standard provisions related to the contract.

- C. 65% Opinion of Probable Construction Cost: The Preliminary Opinion of Probable Construction Costs shall be updated to reflect the refinements from the Preliminary Design to the Unchecked Design Submittal.
- D. Response to Comments Memorandum: A memo with "response to comments" received from the Preliminary Design Submittal shall be provided.

65% Deliverables:

6 - 65% Plan Sets (11x17 plots)
 6 - 65% Level Opinion of Probable Construction Cost
 6 - 65% Complete Project Specifications
 6 - Response to 35% Comments Memo

3.3 -95% DESIGN SUBMITTAL (95% PS&E)

- A. Quality Assurance Review: Conduct an internal quality assurance review of the plans, specifications, and estimate; concurrent with review of the 65% Submittal by the County and other agencies. The CONTRACTOR's quality assurance program provides for independent checking of individual tasks, as well as an independent review by experienced senior staff. The purpose of this review is to provide oversight to specific project details by professionals who are not closely involved in the design, and to review the constructability, cost-effectiveness and completeness of design features relative to the normal standard of professional care. ***This independent check shall include a red, green and yellow check of the structural calculations and plans.***
- B. 95% Complete Design Plans: Checked Plans shall be prepared and submitted to the County, utility companies and other agencies for final review and comment. Agencies shall thoroughly review the details of the project. The CONTRACTOR shall work with the County and other agencies to resolve any conflicts between the comments of different reviewers.
- C. 95% Complete Specifications: The technical specifications shall be updated using County and Caltrans Standard Specifications. The County will prepare boilerplate specifications and compile the technical specifications with the boilerplate.

Compilation of the technical specifications with the boilerplate specifications may be added to the scope of work at the County's request.

- D. 95 % Level Checked Opinion of Probable Construction Cost: The Opinion of Probable Construction Cost shall be updated for use in the Bid Documents using standard County and/or Caltrans items.
- E. Memorandum: Response to Comments: A memo with "response to comments" received from the 65% Design Submittal shall be provided.

95% Deliverables:

- 6 - 95% Plan Sets (11" x 17" plots)
- 6 - 95% Opinion of Probable Construction Cost
- 6 - 95% Project Specifications
- 6 - Response to 65% Comments Memo

3.4 UTILITY COORDINATION: OWNER AND/OR UTILITY AGREEMENT

As required in Chapter 13 of the Caltrans, Right of Way Manual, the CONTRACTOR shall send a Notice to Owner and/or Utility Agreement (Utility "C Letters and Plans") of which covers the positive location, relocation, removal, and abandonment of facilities and who is responsible for costs of relocation from the affected agencies. Incorporation of any relocation design plans, specifications, and estimate shall be performed at this time. The Utility Agency Coordination Log shall be updated as necessary.

It is assumed that the County will provide potholing services for utility location, as required.

3.5 FINAL DESIGN SUBMITTAL (100% PS&E)

- A. 100% Final Plans: After agency review of the Checked Design Submittal (95%), the CONTRACTOR shall prepare the Final Contract Documents in accordance with the County's instructions and provide the County and other agencies the opportunity to review the completed Bid Documents and direct minor revisions.
- B. Response to Comments Memorandum: A memo with "response to comments" received from the 95% Design Submittal shall be provided.
- C. Bid Documents: After County review of the 100% Final Submittal, any minor final revisions shall be incorporated and 6 sets of Completed Contract Documents prepared in accordance with the County's instructions. Final bid documents shall be submitted for signature.

**100% Deliverables: 6 - Complete Bid Set Drawings - Signed and Dated (11"x
17" plots)**

1 - CD archive of project electronic files

3.6 RIGHT-OF-WAY ACQUISITION SERVICES

The CONTRACTOR shall provide services noted above for the right-of-way acquisition. This may include the preparation of appraisal maps, right-of-way maps and legal descriptions, as necessary. The County or its agent will make contact with the property owners for the purpose of acquiring property rights to accommodate construction.

Phase 4 - CONSTRUCTION SUPPORT SERVICES

4.1 BIDDING PERIOD SERVICES

The County will advertise the project for bidding and distribute the plans to prospective bidders. The County's project coordinator will be the designated person to receive contractor inquiries. The design team will assist the County as requested during the bidding. The work may include answering questions, providing consultation and interpretation of the construction documents, and assisting the County in preparation of addenda to the PS&E during the advertisement period. Attending pre-bid meetings or bid opening and analysis of bids will also be provided, if requested.

END OF ATTACHMENT A.

**ATTACHMENT B
Payment Schedule**

B-1. BILLING

Charges for services rendered pursuant to the terms and conditions of this contract shall be invoiced on the following basis: (check one)

- One month in arrears.
- Upon the complete performance of the services specified in Attachment A.
- The basis specified in paragraph B-4.

B-2. PAYMENT

Payment shall be made by COUNTY to CONTRACTOR at the address specified in paragraph 8 of this contract, net thirty (30) days from the invoice date.

B-3. COMPENSATION

COUNTY shall pay to CONTRACTOR:

a total lump sum payment of \$ 47,644.70, and

an additional sum not to exceed \$ 318,248.00,

for services rendered pursuant to the terms and conditions of this contract and pursuant to any special compensation terms specified in this attachment, Attachment B.

B-4. SPECIAL COMPENSATION TERMS: (check one)

- There are no additional terms of compensation.
- The following specific terms of compensation shall apply: (Specify)

CONTRACTOR will perform work identified in Attachment A, for an amount not to exceed \$365,892.70.

The lump sum payment of \$47,644.70 shall be for work performed during the period of 8/1/2014 to 12/1/2016.

The additional sum of \$318,248.00 shall be payable to CONTRACTOR who will submit requests for progress payments on a monthly basis. COUNTY will review these requests and authorize payment consistent with the provisions of this Attachment. CONTRACTOR shall be paid by COUNTY for the works identified in Attachment A. CONTRACTOR shall provide invoices for said tasks along with documentation to justify the amount being invoiced and confirmation that each of the identified tasks has been completed.

END OF ATTACHMENT B

ATTACHMENT C General Terms and Conditions

C-1. INDEMNIFICATION.

CONTRACTOR and COUNTY each agree to indemnify, defend and save harmless the other party and the other party's officers and employees, from and against any and all claims and losses whatsoever arising out of, or in any way related to, the indemnifying party's performance under this contract, including, but not limited to, claims for property damage, personal injury, death, and any legal expenses (such as attorneys' fees, court costs, investigation costs, and experts' fees) incurred by the indemnitee in connection with such claims or losses. A party's "performance" includes the party's action or inaction and the action or inaction of that party's officers and employees.

C-2 GENERAL INSURANCE REQUIREMENTS.

Without limiting CONTRACTOR's duty to indemnify COUNTY, CONTRACTOR shall comply with the insurance coverage requirements set forth in the contract and in this attachment. Those insurance policies mandated by Paragraph C-3 shall satisfy the following requirements:

- (a) Each policy shall be issued by a company authorized by law to transact business in the State of California.
- (b) Each policy shall provide that COUNTY shall be given notice in writing at least thirty (30) days in advance of any change, cancellation, or nonrenewal thereof.
- (c) The comprehensive motor vehicle and comprehensive general liability policies shall each provide an endorsement naming the County of San Benito and its officers, agents and employees as additional insureds.
- (d) The required coverage shall be maintained in effect throughout the term of this contract.

CONTRACTOR shall require all subcontractors performing work under this contract to obtain substantially the identical insurance coverage required of CONTRACTOR pursuant to this agreement.

C-3. INSURANCE COVERAGE REQUIREMENTS.

If required by paragraph 5 of the contract, CONTRACTOR shall maintain the following insurance policies in full force and effect during the term of this contract:

- (a) Comprehensive general liability insurance. CONTRACTOR shall maintain comprehensive general liability insurance, covering all of CONTRACTOR's operations with a combined single limit of not less than the amount set out in paragraph 5 of this contract.
- (b) Professional liability insurance. CONTRACTOR shall maintain professional liability insurance with liability limits of not less than the amount set out in paragraph 5 of this contract.

- (c) Comprehensive motor vehicle liability insurance. CONTRACTOR shall maintain comprehensive motor vehicle insurance covering all motor vehicles (including owned, non-owned and hired) used in providing services under this contract, with a combined single limit of not less than the amount set out in Paragraph 5 of this contract.
- (d) Workers' compensation insurance. CONTRACTOR shall maintain a workers' compensation plan covering all of its employees as required by California Labor Code Section 3700, either through workers' compensation insurance issued by an insurance company or through a plan of self-insurance certified by the State Director of Industrial Relations. If CONTRACTOR elects to be self-insured, the certificate of insurance otherwise required by this contract shall be replaced with a consent to self-insure issued by the State Director of Industrial Relations.

C-4. CERTIFICATE OF INSURANCE.

Prior to the commencement of performance of services by CONTRACTOR and prior to any obligations of COUNTY, CONTRACTOR shall file certificates of insurance with COUNTY, showing that CONTRACTOR has in effect the insurance required by this contract. CONTRACTOR shall file a new or amended certificate promptly after any change is made in any insurance policy which would alter the information on the certificate then on file. In lieu of providing proof of insurance, CONTRACTOR may provide proof of self-insurance meeting requirements equivalent to those imposed herein. CONTRACTOR warrants that CONTRACTOR's self-insurance provides substantially the same protection to COUNTY as the insurance required herein. CONTRACTOR further agrees to notify COUNTY in the event any change in self-insurance occurs that would alter the obligations undertaken in this contract within thirty (30) days of such change.

C-5. RECORDS TO BE MAINTAINED.

CONTRACTOR shall keep and maintain accurate records of all costs incurred and all time expended for work under this contract. CONTRACTOR shall contractually require that all of CONTRACTOR's subcontractors performing work called for under this contract also keep and maintain such records. All such records, whether kept by CONTRACTOR or any subcontractor, shall be made available to COUNTY or its authorized representative, or officials of the State of California for review or audit during normal business hours, upon reasonable advance notice given by COUNTY, its authorized representative, or officials of the State of California.

C-6. RETENTION OF RECORDS.

CONTRACTOR shall maintain and preserve all records related to this contract for a period of three years from the close of the fiscal year in which final payment under this contract is made. CONTRACTOR shall also contractually require the maintenance of such records in the possession of any third party performing work related to this contract for the same period of time. Such records shall be retained beyond the three-year period, if any audit involving such records is then pending, until the audit findings are resolved. The obligation to insure the maintenance of the records beyond the initial three year period shall arise only if the COUNTY notifies CONTRACTOR of the commencement of an audit prior to the expiration of the three year period.

C-7. TITLE TO DOCUMENTS; COPYRIGHT.

All reports and other materials collected or produced by the CONTRACTOR or any subcontractor of CONTRACTOR shall, after completion and acceptance of the contract, become the property of COUNTY, and shall not be subject to any copyright claimed by the CONTRACTOR, subcontractor, or their agents or employees. CONTRACTOR may retain copies of all such materials exclusively for administrative purposes. Any use of completed or uncompleted documents for other projects by CONTRACTOR, any subcontractor, or any of their agents or employees, without the prior written consent of COUNTY is prohibited.

C-8. INDEPENDENT CONTRACTOR.

CONTRACTOR and its officers and employees, in the performance of this contract, are independent contractors in relation to COUNTY and not officers or employees of COUNTY. Nothing in this contract shall create any of the rights, powers, privileges or immunities of any officer or employee of COUNTY. CONTRACTOR shall be solely liable for all applicable taxes or benefits, including, but not limited to, federal and state income taxes, Social Security taxes, or ERISA retirement benefits, which taxes or benefits arise out of the performance of this contract. CONTRACTOR further represents to COUNTY that CONTRACTOR has no expectation of receiving any benefits incidental to employment.

C-9. CONFLICT OF INTEREST.

CONTRACTOR covenants that it presently has no interest and shall not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the services hereunder. CONTRACTOR further covenants that, in the performance of this contract, no subcontractor or person having such an interest shall be used or employed.

C-10. COMPLIANCE WITH APPLICABLE LAWS.

CONTRACTOR shall comply with all applicable federal, state and local laws now, or hereafter, in force, and with any applicable regulations, in performing the work and providing the services specified in this contract. This obligation includes, without limitation, the acquisition, and maintenance of any permits, licenses, or other entitlements necessary to perform the duties imposed expressly or impliedly under this contract.

C-11. NONDISCRIMINATION.

CONTRACTOR shall not discriminate in the employment of persons necessary to perform this contract on any legally impermissible basis, including on the basis of the race, color, national origin, ancestry, religion, age, sex, or disability of such person.

C-12. BANKRUPTCY.

CONTRACTOR shall immediately notify COUNTY in the event that CONTRACTOR ceases conducting business in the normal manner, becomes insolvent, makes a general assignment for the benefit of creditors, suffers or permits the appointment of a receiver for its business or assets, or avails itself of, or becomes subject to, any proceeding under the Federal Bankruptcy Act or any other statute of any state relating to insolvency or protection of the rights of creditors.

C-13. PROHIBITION AGAINST ASSIGNMENT AND DELEGATION OF DUTIES.

Except as specifically authorized herein, no rights under this contract may be assigned and no duties under this contract may be delegated by CONTRACTOR without the prior written consent of COUNTY, and any attempted assignment or delegation without such consent shall be void.

C-14. NEGOTIATED CONTRACT.

This contract has been arrived at through negotiation between the parties. Neither party is to be deemed the party which prepared this contract within the meaning of California Civil Code Section 1654.

C-15. SEVERABILITY.

Should any provision herein be found or deemed to be invalid, this contract shall be construed as not containing such provision, and all other provisions which are otherwise lawful shall remain in full force and effect. To this end, the provisions of this contract are declared to be severable.

C-16. ENTIRE CONTRACT.

This contract is the entire agreement of the parties. There are no understandings or agreements pertaining to this contract except as are expressly stated in writing in this contract or in any document attached hereto or incorporated herein by reference.

C-17. TIME IS OF THE ESSENCE.

Time is of the essence in the performance of this contract.

C-18. TERMINATION.

Either party may terminate this contract, with or without cause, at any time. In order to terminate this contract, the terminating party shall give advance written notice to the other party. The termination shall be effective no earlier than the expiration of the number of days specified in paragraph 6 of this contract. The termination notice shall be made as specified in paragraph C-19, below. In the event of termination, COUNTY shall pay CONTRACTOR for all work satisfactorily performed prior to the effective date of the termination.

C-19. NOTICES.

Notices to the parties in connection with the administration of this contract shall be given to the parties' contract administrator personally, by regular mail, or by facsimile transmission as more particularly specified in this paragraph. Notices will be deemed given on:

- (a) The day the notice is personally delivered to the contract administrator or the office of the party's contract administrator; or
- (b) Five days after the date the notice is deposited in the United States mail, addressed to a party's contract administrator as indicated in this contract, with first-class postage fully prepaid; or

- (c) On the day that the notice is transmitted by facsimile to a party's facsimile number specified in paragraph 8 of this contract, provided that an original of such notice is deposited in the United States mail, addressed to a party's contract administrator as indicated in this contract, on the same day as the facsimile transmission is made.

C-20. RESPONSIBILITY OF CONTRACT ADMINISTRATORS.

All matters concerning this contract which are within the responsibility of the parties shall be under the direction of, or shall be submitted to, the respective contract administrators or to the party's employee specified, in writing, by the contract administrator. A party may, in its sole discretion, change its designation of its contract administrator and shall promptly give written notice to the other party of any such change.

C-21. MATERIALITY.

The parties consider each and every term, covenant, and provision of this contract to be material and reasonable.

C-22. WAIVER.

Waiver by either party of a breach of any covenant of this contract will not be construed to be a continuing waiver of any subsequent breach. COUNTY's receipt of consideration with knowledge of CONTRACTOR's violation of a covenant does not waive its right to enforce any covenant of this contract. The parties shall not waive any provisions of this contract unless the waiver is in writing and signed by all parties.

C-23. AUTHORITY AND CAPACITY.

CONTRACTOR and CONTRACTOR's signatory each warrant and represent that each has full authority and capacity to enter into this contract.

C-24. BINDING ON SUCCESSORS.

All of the conditions, covenants and terms herein contained shall apply to, and bind, the heirs, successors, executors, administrators and assigns of CONTRACTOR. CONTRACTOR and all of CONTRACTOR's heirs, successors, executors, administrators, and assigns shall be jointly and severally liable under this contract.

C-25. CUMULATION OF REMEDIES.

All of the various rights, options, elections, powers and remedies of the parties shall be construed as cumulative, and no one of them exclusive of any other or of any other legal or equitable remedy which a party might otherwise have in the event of a breach or default of any condition, covenant or term by the other party. The exercise of any single right, option, election, power or remedy shall not, in any way, impair any other right, option, election, power or remedy until all duties and obligations imposed shall have been fully performed.

C-26. INDEPENDENT ADVICE.

Each party hereby represents and warrants that in executing this contract it does so with full knowledge of the rights and duties it may have with respect to the other. Each party also

represents and warrants that it has received independent legal advice from its attorney with respect to the matters set forth in this contract and the rights and duties arising out of this contract, or that such party willingly foregoes any such consultation.

C-27. NO RELIANCE ON REPRESENTATIONS.

Each party hereby represents and warrants that it is not relying, and has not relied, upon any representation or statement made by the other party with respect to the facts involved or its rights or duties. Each party understands and agrees that the facts relevant, or believed to be relevant to this contract may hereunder turn out to be other than, or different from the facts now known to such party as true, or believed by such party to be true. The parties expressly assume the risk of the facts turning out to be different and agree that this contract shall be effective in all respects and shall not be subject to rescission by reason of any such difference in facts.

C-28. REDUCTION OF CONSIDERATION.

CONTRACTOR agrees that COUNTY shall have the right to deduct from any payments specified in Attachment B any amount owed to COUNTY by CONTRACTOR as a result of any obligation arising prior to, or after, the execution of this contract. For purposes of this paragraph, obligations arising prior to, or after, the execution of this contract may include, without limitation, any property tax, secured or unsecured, which tax is in arrears. If COUNTY exercises the right to reduce the consideration specified in Attachment B, COUNTY, at the time of making a reduced payment, shall give CONTRACTOR notice of the amount of any off-set and the reason for the reduction.

C-29. COUNTERPARTS.

This contract may be executed in any number of counterparts, each of which so executed shall be deemed to be an original. The counterparts shall together constitute one contract.

END OF ATTACHMENT C.