



**CITY OF LARKSPUR
Staff Report**

February 6, 2019 City Council Meeting

DATE: January 28, 2019
TO: Honorable Mayor Morrison and the Larkspur City Council
FROM: Julian Skinner, Public Works Director
SUBJECT: CONSULTANT SERVICES AGREEMENT AMENDMENT WITH PRESCIENCE CORP FOR CONSTRUCTION MANAGEMENT SERVICES FOR THE BON AIR BRIDGE REPLACEMENT PROJECT (CIP 04-011)

ACTION REQUESTED

That Council adopt attached resolution authorizing the City Manager to execute a Consultant Services Agreement amendment for the Bon Air Road Bridge Replacement project as follows:

1. The 4th amendment with PreScience Corp for Construction Management Services in the amount of \$3,148,045.

SUMMARY AND BACKGROUND

Construction on the Bon Air Bridge Replacement project started in May of 2018 after ten years of project development. In December of 2013, the City entered into a Consultant Services Agreement (CSA) with PreScience Corp (PSC) for Construction Management Services. These services generally include review of bid documents prior to bid advertisement, support during bid process, resident engineer, construction inspection, quality assurance and public outreach services.

The negotiated contract anticipated a two-year construction project and included a not-to-exceed estimated fee of \$2,075,880, which through a number of amendments was increased to \$2,408,703. The timeline and fee were estimated before the project design and permitting was complete. The current construction project, as awarded to low bidder Golden State Bridge, allows for four years of construction time. In addition to the extended construction window, the resource agency permitting process yielded additional construction management needs for development of mitigations and monitoring during construction.

With construction well under way, an amendment to the PSC contract is required to account for the anticipated actual construction (and contract) duration and account for other costs that were not known when their initial contract was negotiated. PSC has provided an estimated fee proposal for the additional

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work. The additional Construction Management work is eligible for federal aid reimbursement at a rate of 88.53%, the same as the reimbursement rate of the construction work.

Based on level of effort to date and anticipated tasks moving forward, PSC has prepared a proposed scope and fee amendment for the City's consideration. The actual level of effort that will be required to carry out the construction management work is dependent on factors beyond the Consultant, City or Contractor's control, such as presence of protected species. The fee proposal conservatively estimates a high level of monitoring. Since agreements on this project require not only City but Caltrans approval, a conscious effort has been made to make sure the contract amounts are conservative with sufficient contingency allowance to reduce the staff time and project delay that could be required with multiple approval requests to Caltrans. PSC will only invoice and be compensated for actual time spent on the project. The Public Works Director has reviewed these additional scopes of services and has found the scope and associated fee to be reasonable.

Based on the \$3,148,045 value of the contract amendment, City Council approval of the amendment is required.

DISCUSSION

The Bon Air Bridge Replacement Project (CIP 04-011) is under construction after more than ten years of planning. Through the process of vetting the project with the public and obtaining numerous resource agency permits for the work, the project is anticipated to take four years to complete. The complexity of the project was evidenced by two separate public bidding processes that yielded low bids significantly above early engineer's estimates. After the first bid, staff discussed the project constraints with consultants, contractors and Caltrans and determined that based on the current construction climate and complexity of the project, with its long duration and need to keep the bridge open during construction, the high bids were true reflections of the actual project cost. A second bid confirmed this, with a low bid of four submitted the same as the low bid of the first process.

Construction and Construction Management costs on the project are eligible for 88.53% reimbursement through the Federal Bridge Program. Staff worked with Caltrans to secure the additional funding needed for the low bid, and the subsequent construction contract award to Golden State Bridge Inc, in the amount of \$26,730,037. This process implied an increase in Construction Management costs, but the accounting of the same was deferred pending negotiations with PSC. With finances updated for the construction contract, staff worked with PSC to negotiate a contract amendment for the Construction Management services. PSC's contract had been negotiated with the City at \$2,075,880 in 2013 for what was envisioned to be a much different project at that time.

In addition to a construction duration double what was anticipated when PSC's contract was negotiated, the resource agency permitting process and experience with environmental monitoring costs through the first year of construction results in a significant increase in projected environmental costs. The following tabulates the components of the CM work as anticipated in 2013 versus what is known today and the associated costs of each.

Item	description	cost	description	cost
	2013		2019	
General CM	Two years construction	\$ 1,829,112	Four years construction	\$ 3,981,816
Environmental	Permits and monitoring	\$ 121,650	Increased monitoring	\$ 1,039,530
Vibration monitoring	Required for pile driving	\$ 112,538	Increased for env. conditions	\$ 190,000

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Materials testing	Concrete & steel	\$ 345,402	Same	\$ 345,402
total		\$ 2,408,703		\$ 5,556,748

The resulting net project CM cost increase is estimated to be \$3,148,045 based on the above. Staff has made Caltrans aware of the projected cost overruns in CM similar to the those anticipated for construction and has been advised to submit a funding request similar to what was completed for the construction funding. A finalized CM contract amendment with PSC is required to start the process with Caltrans.

The general CM costs are anticipated to be 218% of the original contract estimate. The bulk of this overage is due to the doubling of construction time, while some is attributable to wage rate increases from 2013 to 2019. Staff anticipates the actual general CM costs will be less than requested as some of the environmental constraints will result in less busy construction periods where the CM level can be reduced. The environmental CM costs are 850% of the original contract estimate. The original estimate was developed before resource agency permits that came with mitigation and monitoring requirements were secured. Much of the environmental cost is for monitoring during certain construction activities such as pile driving to make sure that protected species in the proximity of the work are accounted for and protected.

CM costs on engineering projects typically are in the 10% of final construction cost range, with more complex projects often approaching 15%. The anticipated final construction cost for the project is \$29,403,041 (awarded bid plus 10% contingency allowance.) Materials testing is a typical project CM cost, and as such the sum of testing and general CM at \$ 4,327,218 is used to calculate the percentage CM cost for this project at 14.7%.

Staff feels the proposal by PSC is consistent with the level of effort this project requires for a successful completion. To date PSC has worked closely with the Contractor to ensure the foundation work for the north side of the bridge was completed per project specifications prior to the January 15th deadline for working on the north side of the bridge due to Ridgway rail (bird) surveys.

An overall update on the bridge project has been tentatively scheduled for the February 20, 2019 City Council meeting.

FISCAL IMPACT

An analysis of project funding was undertaken prior to the construction bid award. The costs of the subject CSA are included in the adopted Capital Improvement Program (CIP) for the Bon Air Bridge Replacement project. Project accounting will be updated each year as the new CIP is adopted. Construction and Construction Management costs are eligible for 88.53% reimbursement from the Federal Highway Bridge Program. Staff is working closely with Caltrans staff, which manages the federal bridge program to make sure the needed funding is available when needed.

ENVIRONMENTAL STATUS

This project was previously reviewed for both National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) compliance and determinations made and filed. The subject action does not affect the prior environmental determinations.

STAFF RECOMMENDATIONS

Staff recommends City Manager be authorized to execute the Consultant Services Agreement amendment.

Respectfully submitted,

Julian Skinner, Public Works Director

Attachments

1. Resolution
2. Location Map
3. Proposal
4. CIP Budget Sheet

CITY OF LARKSPUR
RESOLUTION 09/19

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LARKSPUR
AMENDING A CONSULTANT SERVICES CONTRACT WITH PRESCIENCE
CORP IN THE AMOUNT OF \$3,148,045 FOR CONSTRUCTION
MANAGEMENT SERVICES FOR THE BON AIR BRIDGE REPLACEMENT
PROJECT (CIP 04-011)**

WHEREAS, the adopted Fiscal Year 2018/19 Capital Improvement Program includes the Bon Air Bridge Replacement project (CIP 04-011) to construct a replacement bridge on Bon Air Road across Corte Madera Creek;

WHEREAS, the City of Larkspur entered into a Consultant Services Agreement (CSA) with Prescience Corp (PSC) for Construction Management services related to the Bon Air Bridge Replacement Project in 2013;

WHEREAS, 88.53% of project Construction Management costs are reimbursable to the City through the Federal Highway Bridge Program;

WHEREAS, in 2013, the project was anticipated to require two years of construction, and the PSC contract included a not-to-exceed fee of \$2,075,880, with an allocation of \$121,650 for environmental review and permitting;

WHEREAS, a construction contract for the bridge was awarded to Golden State Bridge (GSBI) in March 2018 for \$26,730,037 with an anticipated four-year construction duration;

WHEREAS, the environmental review and permitting for the project, undertaken between the 2013 PSC contract negotiation and the 2018 GSBI contract award resulted in significant mitigation and monitoring efforts, which will continue throughout the four years of construction;

WHEREAS, the PSC CSA has been amended for other scope related items to a current not-to-exceed limit of \$2,408,703;

WHEREAS, based on the additional environmental mitigation and monitoring requirements and the longer construction duration, the PSC contract is not sufficient to cover the anticipated costs of the required construction management work;

WHEREAS, PSC provided an amended fee proposal based on the best information available today for the construction management costs of the four-year bridge project, including a total estimated fee of \$5,556,748, \$1,039,530 of which is for environmental monitoring/ mitigations on the bridge project, which does not include the off-site mitigations;

WHEREAS, the City Engineer has reviewed the amended fee proposal and finds the same to be consistent with the level of effort anticipated to be required to meet the construction management needs of the project; and,

WHEREAS, City Council authorization is required for the City Manager to execute an amendment to the Consultant Services Agreement with PSC for the total additional amount estimated to be \$3,148,045.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Larkspur hereby resolve, declare, determine and order as follows:

- 1 The City of Larkspur is authorized to expend the sums necessary for construction management services on the project, and to draw said sums from the City's current fiscal year CIP budget in an amount not to exceed \$3,148,045.
- 2 The City Manager and/or his designee is authorized and directed to execute an amendment to the Consultant Services Agreement with PSC for an amount estimated to be \$3,148,045 and take all other action necessary to consummate said transactions.

IT IS HEREBY CERTIFIED that the City Council of the City of Larkspur duly introduced and regularly adopted the foregoing resolution at a regular meeting held on February 6, 2019 by the following vote:

AYES: COUNCILMEMBER:

NOES: COUNCILMEMBER:

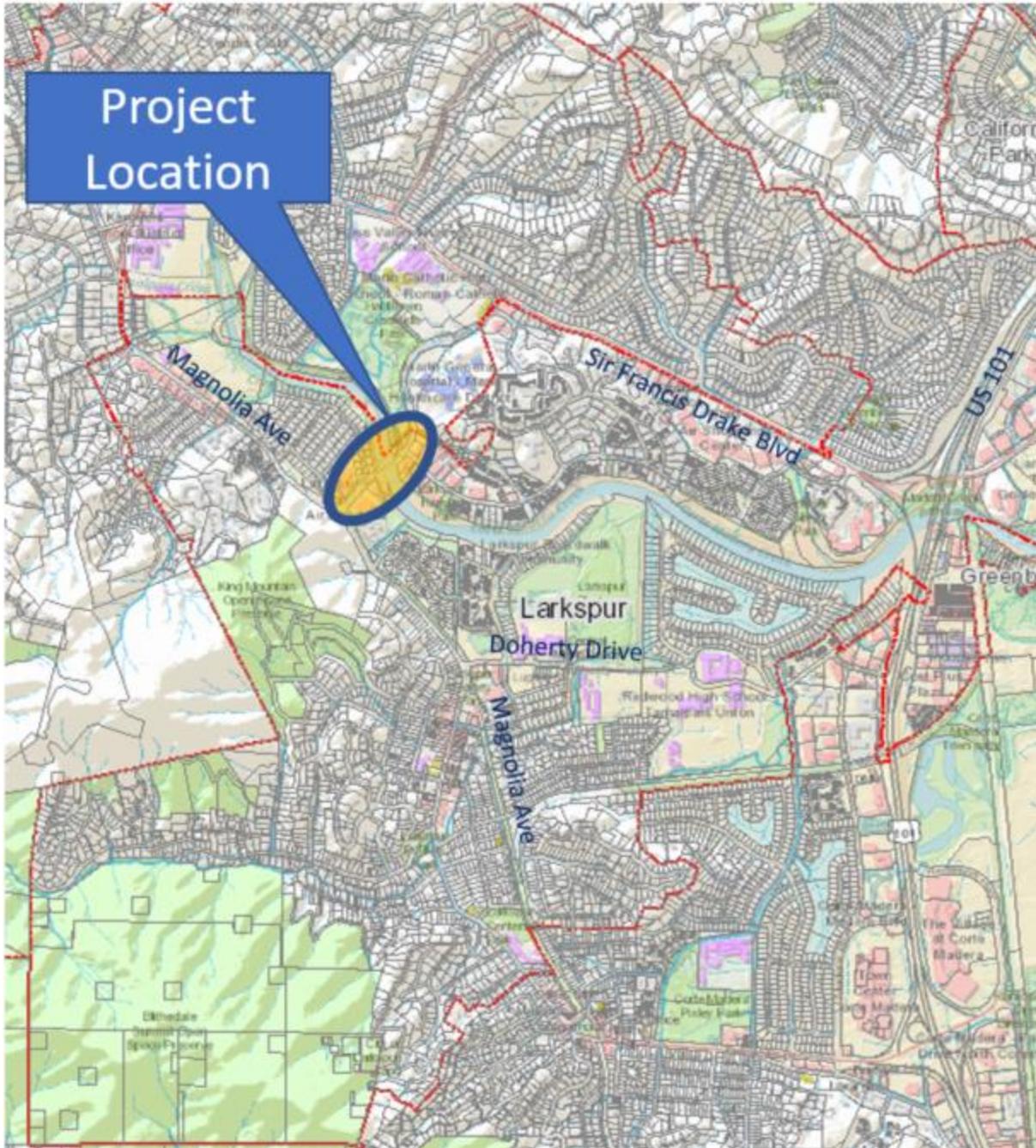
ABSENT: COUNCILMEMBER:

ABSTAIN: COUNCILMEMBER:

Ann Morrison, Mayor

ATTEST:

Jamie Kuryllo, City Clerk

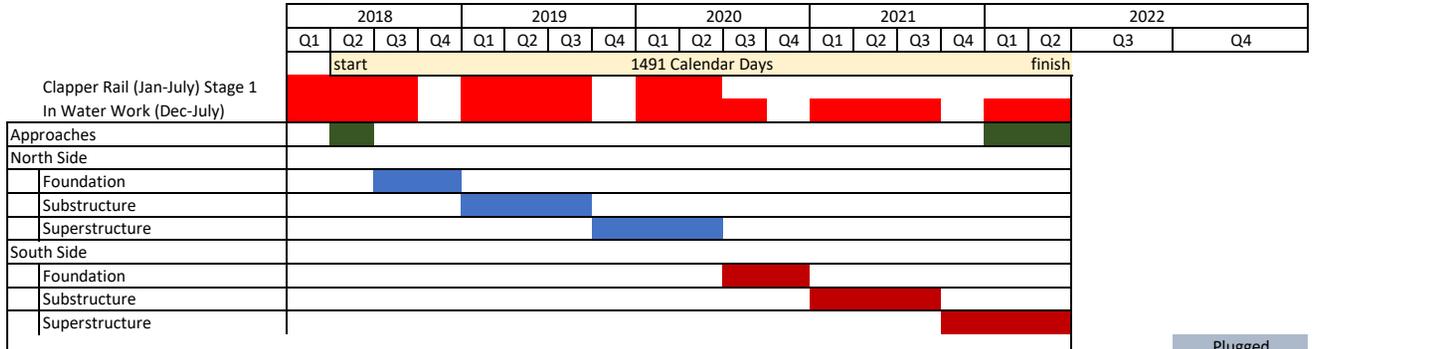


Location Map

Bon Air Bridge Replacement Project

Bon Air Bridge Replacement Project - Schematic Construction Schedule and CM Cost Estimate

Based on As Planned Permit Conditions



	1491 Calendar Days																Hrs	Av Rate/Hr	Sub Totals			
Hours per Quarter	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	8160	Plugged	Includes Fee+OH	

Prescience CM Estimate Budget																							
Resident Engineer	480	480	220	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	3420	\$	220.00	\$	752,400.00
ARE/Structure Rep	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	8160	\$	173.00	\$	1,411,680.00
Inspector 1	480	480	480	260	260	480	480	260	260	480	480	260	260	480	260	260	260	260	6180	\$	167.00	\$	1,032,060.00
Inspector 2		160	480			160	480			160	480			160	480			2560	\$	154.00	\$	394,240.00	
Office Engineer	240	240	240	160	160	160	160	160	160	160	160	160	160	160	160	160	160	2960	\$	92.00	\$	272,320.00	
																	23280	Sub Total =	\$	3,862,700.00			

\$ 295,680.00 Seal Monitoring
Permits
Public Outreach

Other Direct Costs:

Trucks	\$6.39 x hours	23280	\$	6.39	\$	148,759.20
Special Testing		1	\$	10,000.00	\$	10,000.00
Special Engineering Reviews		80	\$	220.00	\$	17,600.00
Overtime (Weekend)	Overtime = Saturdays (12 Months x 4 /Month x 8 hours)	384	\$	259.50	\$	99,648.00
Overtime (Daily)	Weekdays (6 months x 20 days x 2 hours/ day) = 240 hours	240	\$	259.50	\$	62,280.00
Escalation				3%	\$	124,161.22
						\$ 4,138,707.20
					ODC Sub Total	\$ 462,448.42
					PSC Total =	\$ 4,325,148.42

Sub Consultant Budgets		
WRA Biological Services	Biological Monitoring	
Base line Scope of Services		\$ 375,000.00
Seal Monitoring - Stage 1		\$ 60,000.00
Seal Monitoring - Stage 2		\$ 60,000.00
	Sub Total =	\$ 435,000.00

Illingworth	Noise and Vibration Monitoring	
Baseline Scope of Services		\$ 130,000.00
Seal Monitoring - Stage 1		\$ 30,000.00
Seal Monitoring - Stage 2		\$ 30,000.00
	Sub Total =	\$ 190,000.00

\$ 60,000.00

ISI	Materials Testing	
	Sub Total =	\$ 145,000.00

Kelly Biological Consulting	Biological Monitoring	
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Baseline Scope of Services
Seal Monitoring / Permit Amendments

\$ 283,850.00

\$ 25,000.00

\$ 25,000.00

Sub Total = \$ 308,850.00

Abe Construction Services Gamma Gamma Testing

\$ 33,550.00

Substrate Inc. - Special Engineering Services

Sub Total = \$ 67,200.00

Circlepoint Public Outreach / Web Page

Baseline Scope of Services

Sub Total = \$ 52,000.00 ?

Total =

\$ 5,556,748.42

\$ 380,680.00 Seal Delay

\$ 30,000,000.00

GC EE + Contingency

19%

Project Name
Bon Air Road Bridge Replacement

CIP #: **04-011** Category: Streets

Location: Bon Air Road btwn Magnolia Ave & So Eliseo

Project Status: active

Anticipated Start Date: Construction Spring 2018

Project Description
Replacement of the existing Bon Air Road Bridge.

Project is: fully funded un/under funded

Justification/Objective

The bridge was determined to be structurally deficient and replacement under the HBP deemed most cost-effective solution

PROJECT EXPENDITURE:		FY 2017/18 & prior	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Total
Design Engineering	D&E	\$ 4,273,100		\$ -	\$ -	\$ -	\$ -	\$ 4,273,100
Improvements	IMP	500,000	7,000,000	10,000,000	10,000,000	1,522,103	-	29,022,103
Construction Mgt	CM	75,000	1,050,000	1,500,000	1,500,000	228,315	-	4,353,315
Total Design/Construction Costs:		\$ 4,848,100	\$ 8,050,000	\$ 11,500,000	\$ 11,500,000	\$ 1,750,418	\$ -	\$ 37,648,518

FUNDING SOURCES		FY 2017/18 & prior	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Total
HBP Caltrans/FHWA	D&E	\$ 3,588,000	\$ (169,520)	\$ -	\$ -	\$ -	\$ -	\$ 3,418,480
HBP Caltrans/FHWA	IMP	3,098,550	7,233,133	7,505,804	7,500,377			25,337,864
HBP Caltrans/FHWA	CM	464,783	1,084,969	1,125,871	1,125,056			3,800,679
Bridge Fund	D&E	897,000	(42,380)					854,620
Bridge Fund	IMP	401,450	1,338,579	972,457	971,753			3,684,239
Bridge Fund	CM	60,218	200,787	145,868	145,763			552,636
Total Funding:		\$ 8,510,001	\$ 9,645,568	\$ 9,750,000	\$ 9,742,949	\$ -	\$ -	\$ 37,648,518
<i>Carryover</i>		<i>\$ 3,661,901</i>	<i>\$ 5,257,469</i>	<i>\$ 3,507,469</i>	<i>\$ 1,750,418</i>			

Notes:

Approval Mechanism (Reso # & Date)	Reso#	Date	Notes

Printed on: 7/11/2018

