



BRIEFING: JULY 18, 2017 BOARD MEETING AGENDA ITEM #2

TO: Chairman Richard and Board Members

FROM: Scott Jarvis, Chief Engineer

DATE: July 18, 2017

RE: Consider Amending the Project and Construction Management Contract for Construction Package 1

Summary of Recommended Action

Staff recommends that the Board authorize the Chief Executive Officer, or his designee, to execute an Amendment to Agreement HSR 11-20, with Wong + Harris, JV (Wong Harris), to extend the term of the Project and Construction Management Services Agreement for an additional nine (9) months through December 31, 2019, and to increase the contract value by \$35,000,000.

Background

The civil infrastructure of the Central Valley segment is currently being designed and constructed through three design-build (DB) contracts. Project and Construction Management (PCM) consultants support the California High-Speed Rail Authority (Authority) in the management of the DB contracts and in overseeing the work performed by the DB contractors. Specific services provided by the PCM include, but are not limited to: project management; contract management; engineering, construction and environmental oversight; assuring quality of the work and materials; project controls and risk management; third party agreements development and management; public outreach; and, safety and security oversight.

Construction Package 1 (CP 1) is the first significant construction contract of the high-speed rail program. The CP1 construction area is a 32-mile stretch between Avenue 19 in Madera County to East American Avenue in Fresno County. For CP 1, the Authority entered into Agreement HSR 11-20 for Project and Construction Management Services, with Wong Harris, in May of 2013, for a not to exceed amount of \$34,208,888. The PCM Services Agreement is a professional services contract with selection based on qualifications of the PCM and its staffing resources. It is an Architectural & Engineering contract based upon best value and qualifications as opposed to low bid.

The term of the current Agreement is from May 15, 2013 to December 31, 2018, which is nine (9) months after the original Final Completion Date of the CP 1 Design-Build (DB) Construction Contract of March 31, 2018.

The cost of the PCM services is affected by three primary categories: 1) the duration that the PCM is required to provide services; 2) the magnitude of the DB contract that the PCM is managing and the work the PCM is overseeing; and 3) the scope of the services that the PCM is directed to perform.

The CP 1 DB contract completion date was previously extended by 17 months, primarily to resolve claims pertaining to right-of-way access, thus requiring the PCM to provide services for a longer duration. The magnitude of the CP 1 contract has been significantly increased, primarily by adding the PG&E and AT&T utility relocation work to the contract in the amount of \$159 million (Resolution #HSR 17-04) and extending construction 2.7 miles north of the original contract limit (Northern Extension) (Resolution #HSR 16-09). The PCM has been directed to perform additional scope of services through environmental re-examination work of the Northern Extension, project level due diligence checks, and proposed additional environmental permit monitoring and oversight. To date, the PCM contract has not been adjusted to reflect the additional time and scope of services.

Based upon established industry standards for design and construction support costs, the Authority established an aggressive metric for PCM support costs to be at or less than 6%. To date, despite the additional scope of services that has been required of the PCM, its support costs have been a very efficient 5.4%. If this proposed increase in the CP 1 PCM contract value is approved, the PCM support costs are anticipated to be less than 5% when the PCM has completed its services. This is well within industry standards for design and construction support costs.

Prior Board Action

On January 12, 2013, the Board approved Resolution #HSRA 13-01, to award a contract for Project and Construction Management services for CP 1 to Wong Harris, in an amount not to exceed \$34,908,809. There have been no other prior actions taken by the Board related to the CP 1 PCM contract.

Discussion

As CP 1 design and construction work has progressed, the DB contract has been extended by 17 months, significant additional scope has been added to the DB contract, and extra work has been added to the scope of the services required of the PCM. As a result, it is necessary to extend the time of performance of the PCM services contract and increase the value of the contract.

CP 1 PCM Funding Request

The Authority requested a cost proposal from the PCM to develop a level of effort and scope of services necessary to complete CP 1. The PCM has presented a cost proposal for \$25,967,203.90. PCM staffing levels were determined based on the anticipated work schedule of the contractor. The cost estimate reflects the required additional level of oversight for the following: increased resources related to the CP 1 DB contract time extension; accelerated work effort approved under Change Order (CO) 99.1, which accelerated the contract completion date by 7 months and resulted in numerous concurrent work locations; coordination of originally

excluded third party utility relocations which have been added to the DB contract scope; additional scope of work related to the Northern Extension; due diligence reviews; and, additional environmental permit monitoring and oversight.

The DB contractor is also currently performing additional environmental monitoring and oversight activities through a change order. This extra work is necessary due to significant changes that were made in the Final Environmental Permits from the Draft Permits that the DB contractor based its proposal cost on. These environmental services can be performed more effectively and efficiently by the PCM. Therefore, the Authority also requested a cost proposal from Wong Harris to perform these environmental compliance activities for the project. Wong Harris submitted a cost proposal for \$10,593,773.47. The cost estimate includes the required level of effort to provide coordination with permitting agencies, monitor construction activities in the field to comply with permitting requirements and develop the required reports associated with monitoring efforts. In contrast, the estimated cost for the DB contractor to continue to perform this extra work is \$16 million.

Authority Review and Findings – CP 1 PCM Funding Request

Authority staff independently estimated the level of effort for PCM services and finds that the level of effort, scope of work and planned resources reflected in the two proposals described above are reasonable and necessary to provide required PCM services. The Authority has estimated this effort at a not to exceed amount of \$35 million.

In review of the PCM's proposal for additional services, Authority staff considered mitigation strategies ranging from assignment of Rail Delivery Partner (RDP) staff to augment PCM services to amending the contract for only a 12-month period initially, which would allow the Authority to explore other funding or budget options. However, due to the nature of the work, mitigation strategies are limited since options involve either significantly reducing level of effort by professionals knowledgeable in the specific PCM services being performed or eliminating critical PCM services altogether. Authority staff believes both of these options increase risks associated with quality of the work and the ultimate fitness for use of the civil infrastructure. The Authority has done a review of PCM activities for any potential duplication or non-essential efforts and agrees with the proposed scope of work. Also, the Authority will continue to minimize PCM costs by managing the scope and cost of the PCM services through its review, approval and oversight of the PCM staffing plan.

The following describes in greater detail the extra work elements that are driving the additional cost of the PCM services. None of this extra work is included in the original PCM scope of work, nor could the work have been anticipated when the PCM submitted its original cost proposal.

DB Contract Time Extension & Related Additional Costs

Delays in acquiring the necessary project right-of-way properties caused delays in the CP 1 DB contractor's construction progress. An element of the agreement to resolve all delays through December 31, 2015 was to extend the time for performance of the CP 1 DB contract by 17 months. CP 1 DB Change Order No. 99, Completion Deadline Extension and

Resolution, dated June 2, 2016, adjusted the "Final Acceptance Deadline" from March 31, 2018 to August 31, 2019.

The PCM Agreement ends on December 31, 2018, prior to the adjusted completion date for the CP 1 DB contract. To provide PCM services throughout the DB contract period, as well as to perform necessary project close out activities, the PCM Agreement duration needs to be amended to allow the PCM to continue its services for at least four (4) months after the completion of the CP 1 DB contract, which would allow continued PCM services through December 31, 2019.

CP 1 Change Order No. 99 also required the DB contractor to accelerate work to mitigate delays. This accelerated work effort has increased the PCM workload. An aspect of this acceleration required the CP 1 DB contractor to work concurrently in numerous locations. This has required the PCM to assign additional resources to provide oversight concurrently at all work locations.

Excluded Third Party Utility Relocations

The CP 1 DB contract scope of work originally excluded utility relocations for PG&E and AT&T. The PCM contract scope was originally limited to providing oversight of TPZP's coordination of relocation work that was to be performed by PG&E and AT&T. However, the excluded Third Party utility relocation work was added to the CP 1 DB contract on February 14, 2017 (Resolution #HSR 17-04). This expands the PCM scope to oversee the procurement of relocation design and construction contracts, and oversight of the relocation design and construction activities.

Northern Extension Construction

The Authority directed the CP 1 DB contractor to extend construction 2.7 miles north of the original contract limit on March 8, 2016 (Resolution #HSR 16-09). Prior to the resolution, this section was to be a part of a future construction contract, but was already cleared as part of the Merced to Fresno environmental document. The additional CP 1 DB contract scope included demolition of structures, constructing four structures (three grade separations and one creek crossing), as well as the guideway elements, thus requiring additional PCM work.

Northern Extension Environmental Services

In addition to the environmental services for the CP 1 DB contract base scope, Authority staff has directed the PCM to perform the environmental services for the North Extension. This requires the PCM to perform the environmental document re-examination and provide all environmental monitoring, oversight and reporting.

Due Diligence Reviews

Due diligence reviews are independent checks to assure that the DB contractor is complying with all contract requirements. The PCM Agreement did not include the requirement that the PCM perform due diligence checks of the CP 1 DB contractor's contract submittals, except

to coordinate and manage the submittal review process. The Authority developed and issued a procedure in 2014 after the procurement of the CP 1 PCM, (PROC-CONST-03, *Due Diligence Check for Civil-Structural Design-Build Contracts*) which requires the PCM to perform due diligence checks for project level elements while the Authority or RDP would be responsible for due diligence checks for program level elements. The project level elements reviewed by the PCM include application of design criteria and seismic detailing of critical structural elements. These analyses and plan reviews ensure consistent application of design and other contract criteria. A cost adjustment has not yet been authorized to the PCM contract for these additional services.

Environmental Services – Monitoring and Oversight

Significant changes were made in the Final Environmental Permits from the earlier Draft Permits, upon which the PCM contract cost is based. The new requirements include additional professional service staffing, such as environmental and archeological resources, to be present on site continuously, and requires additional coordination with other state and federal agencies. These agencies have requested that the PCM perform these services instead of the DB contractor.

The Authority received estimates from both the CP 1 DB contractor and the PCM to provide these additional resources. The CP 1 DB contractor's estimate was approximately \$16 million, while the PCM proposal was approximately \$10.6 million. Therefore, the PCM performing the required environmental monitoring and compliance activities will yield about a \$6 million savings versus the DB contractor performing the work. The Authority has independently reviewed the PCM cost proposal and concurs that it is reasonable.

Staff recommends approval of \$35 million to augment the existing PCM budget (\$25 million to complete CP 1 construction and \$10 million for additional environmental services) approval of a nine (9) months term extension to December 31, 2019. This will allow for uninterrupted PCM services for the CP 1 DB contract, and also provides a more efficient approach to environmental monitoring and compliance.

The Authority also continuously evaluates organizational roles and responsibilities between the RDP and the PCMs with respect to project delivery activities, including due diligence reviews, utility coordination, project control functions, environmental compliance and monitoring, and railroad coordination. The objective is to eliminate redundancies that might exist and capitalize on potential efficiencies that are realized thru program level coordination activities by the RDP. Process and organizational improvements are continuously implemented as efficiencies are identified.


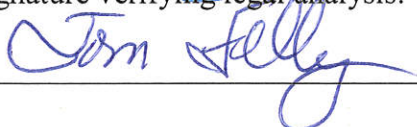
Legal Approval

The Chief Counsel and legal staff have confirmed that this Board item complies with all applicable Board policies and Authority regulations, Public Utilities Code Section 185036, Government Code Section 4525, *et seq.* and State and federal law.

Budget and Fiscal Impact

This proposed budget change is consistent with the 2016 Business Plan cost estimates and is within the Authority's funding source appropriations. Once approved, the Central Valley Segment (CVS) unallocated contingency will be reduced by \$35,000,000 and the CP 1 PCM contract budget will be increased by \$35,000,000, resulting in a net zero overall program budget change. The result of this action will reduce the Unallocated CVS Contingency balance to \$500,175,101. The increase to the PCM budget will be funded with State funding sources.

Contract Name	Contract/Activity Number	Current Contract Budget	Budget Change	Funding Source
Wong-Harris (PCM)	HSR11-20	\$34,208,889	\$35,000,000	State funding
Unallocated CVS Contingency		\$535,175,101	(\$35,000,000)	Various

REVIEWER INFORMATION	
Reviewer Name and Title: Russell Fong Chief Financial Officer	Signature verifying budget analysis: 
Reviewer Name and Title: Tom Fellenz Chief Counsel and Interim CEO	Signature verifying legal analysis: 

Recommendations

Staff recommends that the Board approve Amendment No. 1 to Agreement No. HSR 11-20, with Wong Harris, to extend the term of the agreement for an additional nine (9) months through December 31, 2019, and to increase the contract value by \$35,000,000. The amended not to exceed amount for Agreement HSR 11-20 would be \$69,208,888.

Attachments

- Draft Resolution #HSRA 17-15
- Agreement #HSR 11-20