



DATE: January 7, 2011  
TO: STA Board  
FROM: Janet Adams, Deputy Executive Director/Director of Projects  
RE: I-80 Eastbound Cordelia Truck Scales Relocation Project - Contract  
Amendment for HDR Engineering, Inc.

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**Background:**

STA is taking the lead with Plans, Specifications and Estimate (PS&E) and Right-of-Way (R/W) engineering for the I-80 Eastbound Cordelia Truck Scales Relocation Project. In spring 2008, STA retained HDR Engineering, Inc. (HDR) to provide PS&E and R/W engineering services, including coordinating utility relocations and demolition of two residences.

**Discussion:**

Consistent with STA Board direction, staff has been proceeding with the implementation for the I-80 Eastbound Cordelia Truck Scales Relocation Project. As mentioned above, HDR is providing final design services and has now reached a major milestone in that the final PS&E package was submitted to Caltrans on December 28, 2010. In reaching this significant milestone in the preparation of the final design, staff has determined it is the appropriate time to evaluate the budget required to complete the remaining tasks associated with final design and R/W engineering. The HDR letter dated January 11, 2011 provides a detailed discussion of the tasks remaining to be completed (Attachment A). Staff is recommending the Board approve a contract amendment with HDR in the not-to-exceed amount of \$718,104 to complete PS&E and R/W engineering services for the I-80 Eastbound Cordelia Truck Scales Relocation Project.

**Fiscal Impact:**

The I-80 Eastbound Cordelia Truck Scales Relocation is being funded with bridge toll funds already allocated to the Project.

**Recommendation:**

Approve a contract amendment with HDR in the not-to-exceed amount of \$718,104, to complete PS&E and R/W engineering services for the I-80 Eastbound Cordelia Truck Scales Relocation Project.

Attachment:

- A. Letter from HDR Engineering, Inc. dated January 11, 2011.

January 11, 2011

Ms. Janet Adams  
Deputy Executive Director  
Solano Transportation Authority  
One Harbor Center, Suite 130  
Suisun City, CA 94585

**Subject: Additional Design and Construction Support Services  
I-80 Eastbound Cordelia Truck Scales Relocation Project**

Dear Janet:

The HDR team has accomplished a major milestone in the submittal of the Final PS&E to Caltrans Headquarters Office Engineer in December 2010. In reaching this significant milestone it is appropriate to review the budget and remaining activities to complete the I-80 Eastbound Cordelia Truck Scales Relocation and related projects; the Cordelia Vehicle Management System (CVMS), Tree Removal, Building Demolition, and Solano Irrigation District (SID) relocation contracts.

The following describes the additional activities and tasks remaining to complete the right-of-way engineering and acquisition, utility relocations, advertisement and award, and design support in construction for these projects.

1.0 Tree Removal, SID Relocations, and Property Demo Contracts – To satisfy the project's environmental, utility relocation, and right-of-way requirements three additional PS&E packages are required; (1) Tree Removal, (2) SID Relocations, and (3) Property Demo. HDR will finalize the PS&E packages, respond to constructability review comments, prepare the final bid documents, and respond to bidder inquiries during the advertisement and award of these projects. In the construction phase of each contract, HDR will provide design support and environmental monitoring services in accordance with the project requirements.

The budget estimate for each contract is shown in Exhibit A. The construction support and environmental monitoring is limited to the hours shown.

2.0 Caltrans Office Engineer Reviews – during final PS&E preparation several unanticipated project and Caltrans requirements were identified that are necessary to fulfill prior to advertising and awarding the I-80 Eastbound Cordelia Truck Scales Relocation project. HDR will accomplish the identified items which include; final approval of the proposed plant establishment period, modifications to non-standard special provisions, processing Caltrans required forms and approvals

for a project risk vote, final environmental revalidation exhibits and coordination and additional coordination requirements with Caltrans Office Engineer.

- 3.0 State Fire Marshall and Architect Approvals - in preparing the final PS&E Caltrans determined that the State Fire Marshall and State Architect approvals shall be processed and coordinated by STA and their representatives. Activities and costs associated in obtaining these approvals include agency review fees, coordination of the reviews to meet schedule requirements, response to inquiries, and coordination with Caltrans Office Engineer for the transmittal of full size hard copy and electronically approved drawings for final signatures.
- 4.0 Utility Relocations – after several months of processing, revisions, and coordination the PG&E Utility Agreements for the Transmission and Distribution lines have been secured. Remaining utility relocation work includes modifications to the SID utility relocation agreements based on owner requirements, securing the SID agreement and the PG&E Gas agreement, and obtaining a permit to enter from Caltrans for the utility relocation work near Suisun Creek.
- 5.0 Right of Way Support – HDR continues to provide right of way support to STA (performing condemnation) and Caltrans (performing acquisition). Due to the unique arrangement in agency responsibilities, additional coordination and revisions were required for several of the right of way documents provided by HDR. Those include additional Resolution of Necessity documents, revisions to the Appraisal Maps for an excess parcel, and revisions to legal descriptions, quitclaims, CCUAs, JUAs, and plats to meet agency (Caltrans and STA) and owner (SID and PG&E) requirements. In addition, final right of way activities dictated by Caltrans are anticipated and include providing final electronic and hard copies of the Appraisal and Hard Copy Maps reflecting any final adjustments.
- 6.0 Borrow Site Grading Plan and Permit – STA has identified an optional borrow site for use during construction. The advantage of the optional borrow site is that it may reduce earthwork costs on this project while also accomplishing excavation that is ultimately needed for the interchange projects. A grading and encroachment permit will be required from the City of Fairfield to perform the work at the site. HDR will coordinate with the City and prepare the grading permit application including the grading plans and cross sections. HDR will also prepare a supplemental information handout fact sheet to include in the I-80 Eastbound Cordelia Truck Scales Relocation bid documents, as well as respond to requests for information for final permit processing by the Contractor. It is anticipated that the grading plans will be approved by the City of Fairfield but the permits will not be issued until after the Cordelia Truck Scale Relocation contract award and the Contractor chooses to exercise the optional borrow site location. At that time the contractor will supply the final requirements of the permit application including the preparation of a traffic and transportation plan, storm water pollution prevention and erosion control plan. The permit application fees are anticipated to be paid for

by STA at the initial application submittal to cover costs for the City of Fairfield processing and grading plan review time.

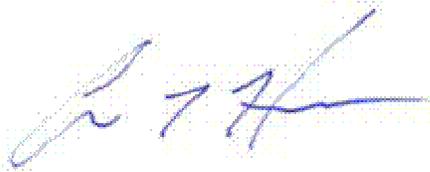
7.0 Additional Design Requirements for CVMS – three additional items have been identified for the CVMS system; HDR team participation at Factory Acceptance Test (FAT), structural analysis of existing Gilroy Inspection facility for IIS field test, and modifications to the Cordelia facility design to accommodate CVMS technology components. HDR will perform the required design and analysis so that the FAT and Field Tests, and the facility design met the CVMS and project requirements.

8.0 Construction Support – The HDR Team will provide design support during construction. Activities include the preparation of the Resident Engineer File, final LEED Certification, Bridge Engineer Pending File, and Survey File (including slope staking notes and earthwork cross sections) in accordance with Caltrans standards and procedures. HDR will support the STA during the bidding process by attendance at the pre-bid meeting, providing clarifications to bidder's inquiries (response to RFI's), and issuing contract addenda if required. Within the budget limits shown in Exhibit A, the HDR Team will provide design support for the project through construction with responses to contractor questions, review of shop drawings, attendance at construction meetings as required, and preparation of addenda if required. If additional services are required beyond the budget limits shown in exhibit A, HDR can provide these services at fees supplemental to this amendment.

Attached is our estimate of the fees associated with this additional work. If you have any questions, please feel free to contact me.

Sincerely,

HDR Engineering, Inc.



Carlton L. Haack, P.E.  
Project Manager

Attachments:

- Exhibit A - Additional Fee Spreadsheet

Fee Estimate for Additional Services Date: January 5, 2011		Cost By Firm and Task					Totals: Hours Cost
		HDR	WMH	Kennedy- Jenks	Biggs Cardosa	Chaudhary	
Task	Task Description						
<b>1.1</b>	<b>Tree Removal Contract</b>						
	Complete Final PS&E & Prepare Bid Docs	9,180					9,180
	Environmental Monitoring	5,920					5,920
	Design Support During Construction	2,520					2,520
	Hourly Subtotal:	140					140
	Labor Subtotal:	17,620					17,620
	Direct Expenses & Tech Charge Subtotal:	1,018					1,018
	<b>Task Total:</b>	<b>\$ 18,638</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$18,638</b>
<b>1.2</b>	<b>SID Relocation Contract</b>						
	Complete Final PS&E & Prepare Bid Docs	11,000					11,000
	Environmental Monitoring	9,440					9,440
	Design Support During Construction	8,440					8,440
	Hourly Subtotal:	212	-	-	-	-	212
	Labor Subtotal:	28,880	-	-	-	-	28,880
	Direct Expenses & Tech Charge Subtotal:	1,284	-	-	-	-	1,284
	<b>Task Total:</b>	<b>\$ 30,164</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$30,164</b>
<b>1.3</b>	<b>Private Property Demolition Contracts</b>						
	Complete Final PS&E & Prepare Bid Docs	14,840					14,840
	Geocon Hazmat Testing and Coordination	1,120					1,120
	Design Support During Construction	3,300					3,300
	Hourly Subtotal:	150	-	-	-	-	150
	Labor Subtotal:	19,260	-	-	-	-	\$19,260
	Direct Expenses & Tech Charge Subtotal:	805	-	-	-	-	\$805
	<b>Task Total:</b>	<b>\$ 20,065</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$20,065</b>
<b>2</b>	<b>Caltrans Office Engineer Reviews</b>						
	Caltrans Delivery Forms and Coordination	9,600	0	0	0		9,600
	Environmental Revalidation	9,240	0	0	0		9,240
	Caltrans OE Coordination	43,600	51,400	0	39,640		134,640
	Hourly Subtotal:	472	280	-	320	-	1,072
	Labor Subtotal:	62,440	51,400	-	39,640	-	\$153,480
	Direct Expenses & Tech Charge Subtotal:	6,746	1,036	-	-	-	\$7,782
	<b>Task Total:</b>	<b>\$ 69,186</b>	<b>\$ 52,436</b>	<b>\$ -</b>	<b>\$ 39,640</b>	<b>\$ -</b>	<b>\$161,262</b>
<b>3</b>	<b>State Fire Marshall and Architect Approvals</b>						
	State Fire Marshal/Architect (SFMA) Coordination	780	3,235				4,015
	SFMA Comment Response	1,440	7,250				8,690
	Hourly Subtotal:	16	64	-	-	-	80
	Labor Subtotal:	2,220	\$10,485	-	-	-	\$12,705
	Direct Expenses & Tech Charge Subtotal:	359	\$8,237	-	-	-	\$8,596
	<b>Task Total:</b>	<b>\$ 2,579</b>	<b>\$ 18,722</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$21,301</b>
<b>4</b>	<b>Utility Relocations</b>						
	Utility Relocation Revisions / Final Documents	19,540	-	-	-	-	\$19,540
	Utility Services - Final Documents and Approvals	6,260	-	-	-	-	\$6,260
	Hourly Subtotal:	200	-	-	-	-	200
	Labor Subtotal:	25,800	-	-	-	-	\$25,800
	Direct Expenses & Tech Charge Subtotal:	1,240	-	-	-	-	\$1,240
	<b>Task Total:</b>	<b>\$ 27,040</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$27,040</b>
<b>5</b>	<b>Right of Way Support</b>						
	Additional RONS	2,000				11,670	13,670
	Appraisal Map Revisions	1,000				12,974	
	Legal Descriptions, JUAs, CCUAs, Quitclaims, Plats	3,000				6,060	
	Final Revisions to Hard Copy and Appraisal Maps	3,240				7,794	11,034
	Hourly Subtotal:	44	-	-	-	262	306
	Labor Subtotal:	9,240	-	-	-	38,499	\$47,739
	Direct Expenses & Tech Charge Subtotal:	163	-	-	-	500	\$663
	<b>Task Total:</b>	<b>\$ 9,403</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 38,999</b>	<b>\$48,402</b>

Fee Estimate for Additional Services Date: January 5, 2011		Cost By Firm and Task					Totals: Hours Cost
		HDR	WMH	Kennedy- Jenks	Biggs Cardosa	Chaudhary	
Task	Task Description						
<b>6</b>	<b>Borrow Site Grading Plan and Permit</b>						
	Grading Permit Application	2,460					2,460
	Grading Plan & Cross Sections	24,800					
	Supplemental Information Handout	2,360					2,360
	Hourly Subtotal:	248	-	-	-	-	248
	Labor Subtotal:	29,620	-	-	-	-	\$29,620
	Direct Expenses & Tech Charge Subtotal:	1,168	-	-	-	-	\$1,168
	<b>Task Total:</b>	<b>\$ 30,788</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$30,788</b>
<b>7</b>	<b>Additional Design Requirements for CVMS</b>						
	Factory Acceptance Test	0	4,400				4,400
	Structural Analysis for Field Test	6,200	0				
	CVEF re-design to accommodate CVMS	0	20,400				20,400
	Hourly Subtotal:	36	140	-	-	-	176
	Labor Subtotal:	6,200	24,800	-	-	-	\$31,000
	Direct Expenses & Tech Charge Subtotal:	133	1,318	-	-	-	\$1,451
	<b>Task Total:</b>	<b>\$ 6,333</b>	<b>\$ 26,118</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$32,451</b>
<b>8</b>	<b>Construction Support</b>						
	RE File, Bridge Engineer File, Survey File, Project Closeout	15,880	15,600	0	12,912		44,392
	Bidding Support	8,180	10,800	10,880	7,176		37,036
	Design Support During Construction	44,520	60,300	62,160	73,200		240,180
	Hourly Subtotal:	520	530	472	744	-	2,266
	Labor Subtotal:	68,580	86,700	73,040	93,288	-	\$321,608
	Direct Expenses & Tech Charge Subtotal:	4,424	1,961	-	-	-	\$6,385
	<b>Task Total:</b>	<b>73,004</b>	<b>88,661</b>	<b>73,040</b>	<b>93,288</b>	<b>-</b>	<b>\$327,993</b>
	<b>Total Hours</b>	<b>2,038</b>	<b>1,014</b>	<b>472</b>	<b>1,064</b>	<b>262</b>	<b>4,850</b>
	<b>Total Labor</b>	<b>\$269,860</b>	<b>\$173,385</b>	<b>\$73,040</b>	<b>\$132,928</b>	<b>\$38,499</b>	<b>\$687,712</b>
	<b>Total Direct Expenses &amp; Tech Charge</b>	<b>\$17,341</b>	<b>\$12,552</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$30,392</b>
	<b>TOTAL</b>	<b>\$287,201</b>	<b>\$185,937</b>	<b>\$73,040</b>	<b>\$132,928</b>	<b>\$38,999</b>	<b>\$718,104</b>