

SUPPLEMENTAL AGREEMENT

Project Title and Job Number: Tower Bridge Bike/Pedestrian Improvements / HC06

Date: 7/19/07

Purchase Order #: 2HC0601116

Supplemental Agreement No.: 8

The City of Sacramento ("City") and PB AMERICANS, INC ("Consultant"), as parties to that certain Consultant and Professional Services Agreement designated as Agreement Number 2001-116, including any and all prior supplemental agreements modifying said agreement (said agreement and supplemental agreements are hereafter collectively referred to as the "Agreement"), hereby supplement and modify the Agreement as follows:

1. The scope of Services specified in Exhibit A of the Agreement is amended as follows:

See attached Exhibit A.

2. In consideration of the additional and/or revised services described in section 1, above, the maximum not-to-exceed amount that is specified in Exhibit B of the Agreement of Payment of Consultant's fees and expenses, is increased by \$ 197,000.00 and said maximum not-to-exceed amount is amended as follows:

Agreement's original not-to-exceed amount:	\$ <u>699,964.00</u>
Net change by previous supplemental agreements:	\$ <u>1,577,766.00</u>
Not-to-exceed amount prior to this supplemental agreement:	\$ <u>2,277,730.00</u>
Increased by this Supplemental Agreement:	\$ <u>197,000.00</u>
New not-to-exceed amount including all supplemental agreements:	\$ <u>2,474,730.00</u>

3. Consultant agrees that the amount of increase or decrease in the not-to-exceed amount specified in section 2, above, shall constitute full compensation for the additional and/or revised services specified in section 1, above, and shall fully compensate Consultant for any and all direct and indirect costs that may be incurred by Consultant in connection with such additional and/or revised services, including costs associated with any changes in work schedules or in the performance of other services or work by Consultant. The time for the performance of the Agreement is unchanged by 0.00 day(s) by reason of the performance of the work required by this Supplemental Agreement.
4. Consultant warrants and represents that the person or persons executing this supplemental agreement on behalf of consultant has or have been duly authorized by Consultant to sign this supplemental agreement and bind Consultant to the terms hereof
5. Except as specifically revised herein, all terms and conditions of the Agreement shall remain in full force and effect, and Consultant shall perform all of the services, duties, obligations, and conditions required under the Agreement, as supplemented and modified by this supplemental agreement.

Approval Recommended by:

Nader Kamal
Project Manager

Approved as to Form By:

[Signature]
City Attorney

Approved By:

[Signature]
Consultant

Approved By:

City of Sacramento

Attested to By:

City Clerk

EXHIBIT A
TOWER BRIDGE BIKE/PEDESTRIAN IMPROVEMENTS

HC06
7/9/2007

Description		Amount
Supplemental Agreement # 8		
PSA# 16.0	Scope Change Engineering Support during construction March to June 2007	80,000 00
PSA# 17.0	Regulatory Agency Requirement Future Engineering support June to September 2007	60,000 00
PSA# 18.0	Scope Change Design support-intersection modifications	57,000 00
<hr/>		
3	Items	Total Supplemental Agreement # 8 <hr/> \$197,000 00



July 2, 2007

Nader Kamal
Department of Transportation
City of Sacramento
915 I Street, Suite 2000
Sacramento, CA 95814

RE: Tower Bridge Bicycle/Pedestrian Improvement Project
Additional Services – Design Services during Construction
and Curb Ramp and Intersection Modifications

Dear Nader:

This letter is PB's proposal for three Additional Service tasks under the Tower Bridge Bicycle/Pedestrian Improvement Project:

- Design services during construction from March 2007 to June 22, 2007
- Design services during construction from June 23, 2007 to approximately September 2007
- Curb Ramp and Intersection Modifications

1. Designs Services during Construction – March 2007 to Date (June 22, 2007)

PB's scope of services for the Tower Bridge Bicycle/Pedestrian Improvement Project Supplemental Agreement No. 6, dated September 6, 2006, included the following task no. 3 description:

Engineering Support and Design Services during Construction

PB will provide engineering support and design services during the construction period including the following:

- *Respond to contractor RFI's as requested by the City and Construction Manager*
- *Review shop drawings and other contractor submittals as requested by the City and Construction Manager*
- *Attend field review meetings and contractor coordination meetings as requested by the City and Construction Manager*
- *Investigate proposed changes to the project plans and specifications resulting from contractor requests and/or actual site conditions*
- *Revise plans and specifications as necessary*
- *Assist Construction Manager as requested in review of contractor's proposed Change Orders or Claims*



- Provide other engineering support and design assistance as requested by the City

The level-of-effort required for assistance during construction is dependent on the number and type of contractor RFI's and shop drawing submittals, field conditions requiring investigation, and other factors which are beyond PB's control. Our proposed budget for these Additional Services is \$50,000. If the required support services during construction utilize the entire proposed budget for this task, PB will submit a proposal to the City for a budget modification at such time.

PB has provided Engineering Support and Design Services during Construction from August 2006 to the present. The level of effort required to perform such services has been significant, and has exceeded the \$50,000 budget assumed in Supplemental Agreement No. 6. The Additional Services performed were due to the following:

- At the time the scope of services for Supplemental Agreement No. 6 was prepared (August 2006), the project was in the initial bidding period. The \$50,000 budget was intended to cover design support services after the construction contract was awarded. However, the City rejected the initial contractor bids and re-advertised the project. PB prepared addenda to the contract documents (plans, specifications and estimate) to reflect changes in the project that were intended to lower the construction cost. PB provided support during the second bidding period including preparation for and presentation to the second contractor's pre-bid meeting, response to questions during the second bidding period, assistance in comparing contractor bids, and other engineering support as requested by the City. Approximately \$25,000 of the \$50,000 budget for support during construction was utilized during the two bidding periods that occurred over three months, thus leaving only \$25,000 available for Design Services during Construction once the construction actually began.
- The level of effort required for Design Services during Construction has been significant. PB has responded to approximately 50 Requests For Information (RFI's) to date (see Attachment 1 – Log of RFI's). The Tower Bridge project is a retrofit of an existing historical steel structure. Shop drawing review is critical to insure the contractor has correctly interpreted the design drawings and has detailed connection details and structural member dimensions adequately prior to initiating fabrication. PB has provided the level of engineering review required to process in a timely manner the contractor's 15 shop drawing submittals (see Attachment 2 – Log of Submittals). Some of the items in excess of anticipated support effort, include:
 - Several field visits were conducted, to either better understand RFI's or proposed changes to design.
 - The contractor had notified the City that they are very motivated to finish in advance of scheduled completion date. In an attempt to expedite the review process, it was agreed that shop drawings will be reviewed quickly. Even if there are partial problems, partial approvals will be granted so that fabrication can go as fast as possible. This resulted in multiple reviews of the same shop drawing submittals, each time securing partial approval as appropriate.



- Several design changes were considered to facilitate the design and make it easier for the Contractor's construction methods. Each of these items, while potentially very beneficial to the Construction contract, required several design re-calculations and preparation or review of design change details.
 - The project required replacement of damaged historical railing posts. This activity required additional coordination with Caltrans and FHWA, preparation of draft design change order, response to Caltrans comments, and finalizing the design change order plans.
 - To ensure efficiency in coordination with R.E. and contractor, design representatives have attended some of the weekly construction meetings.
 - Utility coordination effort with Caltrans and utilities, their activity status and relocation requirements also required supplemental effort from PB's team.
- PB has provided Design Services during Construction consistent with the task description provided above. The required support services utilized the allocated budget for this task. The amount of Additional Services provided from March 2007 to date (June 22, 2007) totals over 600 hours and \$80,000 in total cost. See Cost Proposal, Attachment 3. This amount includes \$5,000 for Additional Services provided to date by Wave Engineers, PB's electrical engineering subconsultant.

2. Designs Services during Construction – June 23, 2007 to September 2007

PB will continue to provide the specific Design Services during Construction as described above. The level-of-effort required for assistance during construction is dependent on the number and type of contractor RFI's and shop drawing submittals, field conditions requiring investigation, and other factors which are beyond PB's control. Some of the main remaining construction support effort includes:

- Final approval of the shop drawings
- Review, coordination with Caltrans, and approval of Lift Span Balancing submittal
- Review, coordination with Caltrans, and approval of lift span temporary locking system
- Review, coordination with Caltrans, and approval of FRP products, test results, quality control, maintenance program and warranties
- Review, coordination with Caltrans, and approval of FRP installation procedure
- Continue responding to RFI's, evaluate proposed changes, and review and approve submittals.

Our proposed budget for these Additional Services is an additional \$60,000 based on an assumed average level of effort corresponding to \$16,000 per month (approximately 120 hours per month) for the next 15 weeks. See Cost Proposal, Attachment 4. If the required support services during construction utilize the entire proposed budget for this task, PB will submit a proposal to the City for a budget modification at such time.



3. Curb Ramp and Intersection Modifications

The City of Sacramento DOT has requested PB to provide Additional Services on the Tower Bridge Bicycle/Pedestrian Improvement Project for the design of curb ramps and intersection modifications.

ASSUMPTIONS:

- The improvements at Capitol Mall and Front Street intersection include:
 - New curb ramps and pedestrian crosswalks on the east end of Tower Bridge west of the railroad tracks
 - Removal and replacement of curb ramps, pedestrian crosswalks and islands on the other corners of the intersection
 - Reconfiguration of the turn movements on the north leg (Front Street next to parking lot) and south leg (Embassy Suites driveway) of the intersection
 - Modification to the traffic signal and installation of new pedestrian signals
 - Signing and striping
- The City will provide the conceptual layout of the intersection east of the railroad tracks

TASKS:

- a) **Conceptual Design.** PB will develop conceptual level design of the curb ramps and pedestrian crosswalk on the west side of the railroad tracks. Required changes to the existing sidewalk, light poles, utility vaults and other features will be identified. Revisions to the current plans for sidewalk improvements on the two corners of the bridge will be determined. The conceptual design will be submitted to the City for review.

Supplemental field surveys of the intersection to provide additional spot elevations will be provided by Psomas, our surveying subconsultant.

- b) **Design and Details.** Based on the conceptual design of the crossing on the west side of the tracks and the conceptual design of the remainder of the intersection that will be provided by the City, PB will develop detailed design and details.

The traffic signal modifications, signing and striping will be provided by DKS Associates, our traffic engineering subconsultant.

- c) **Agency Coordination.** PB will coordinate with SSRR/State Parks, Caltrans, City and other agencies as necessary on the reconfiguration of the intersection.
- d) **Plans and Estimate.** PB will provide revised and new plan sheets and Engineer's Estimate for the intersection modifications. Plans will be submitted at 65%, 95% and Final.
- e) **Meetings.** PB and our traffic subconsultant will attend a maximum of three design review meetings.



SCHEDULE:

- Conceptual plans submitted by July 13, 2007
- 65% Plans submitted by July 27, 2007
- 95% Plans and Engineer's Estimate submitted by August 10, 2007
- Final Plans submitted by August 17, 2007

Our proposed budget for the design of curb ramps and intersection modifications is \$57,000 (see Cost Proposal, Attachment 5).

Summary of Budget Request

1. Design services during construction - March 2007 to June 22, 2007	\$80,000
2. Design services during construction - June 23, 2007 to Sept. 2007	\$60,000
3. Curb ramps and intersection modifications	<u>\$57,000</u>
TOTAL	\$197,000

If you have any questions or require additional information about these Additional Services, please let me know.

Sincerely,

PB Americas, Inc.

A handwritten signature in black ink that reads 'Robert J. Cermak'.

Robert J. Cermak
Project Manager

**Cost Proposal
Tower Bridge Pedestrian/Bicycle Improvement Project
Additional Work -- Design Services During Construction to Date**

Summary

Grade	Cermak		Noban		Consolacion		Renner		Lopez		Burns		Wickam		Skinner		Total Cost
	Proj Mgr P14 \$209	Sr Sup Engr P13 \$190	Lead Engr P11 \$118	Engineer II Pg \$98	Sr Engineer P10 \$108	CADD T9 \$129	Lead Engr P11 \$115	Proj Admn P10 \$108	Total Hours								
Rate/Hour																	
Task Description																	
March 2007 to June 22, 2007	5	60	245	132	118	42	3	8									\$73,633
																	\$0
																	\$0
																	\$0
Total Labor	5	60	245	132	118	42	3	8									\$73,633

Wave Engineers	\$5,000
Subtotal	\$5,000
Fee on Subs	
Total Subconsultants	\$5,000

Travel Costs	\$167
Reproduction	\$0
Delivery Services & Misc	\$1,000
Subtotal Direct Expenses	\$200
Fee on Direct Expenses	\$1,367
Total Direct Expenses	\$1,367

TOTAL \$80,000

**Cost Proposal
Tower Bridge Pedestrian/Bicycle Improvement Project
Additional Work -- Design Services During Construction - June 23 to Sept 2007**

Summary

Grade	Cermak		Nobari		Consolacion		Renner		Lopez		Burns		Wickam		Skinner		Total Hours	Total Cost
	Proj Mgr P14 \$217	Sr Sup Engr P13 \$197	Sr Sup Engr P13 \$197	Sr Sup Engr P13 \$197	Lead Engr P11 \$122	Lead Engr P11 \$122	Engineer II P9 \$106	Engineer II P9 \$106	Sr Engineer P10 \$108	Sr Engineer P10 \$108	CADD T9 \$129	CADD T9 \$129	Lead Engr P11 \$114	Lead Engr P11 \$114	Proj Admin P10 \$111	Proj Admin P10 \$111		
Task Description																		
June 23 to Sept. 2007 (15 wks)	2	56	56	160	160	90	90	70	70	20	20	7	7	13	13	418		\$53,000
																		\$0
																		\$0
																		\$0
Total Labor	2	56	56	160	160	90	90	70	70	20	20	7	7	13	13	418		\$53,000

Wave Engineers	\$7,000
Subtotal	\$7,000
Fee on Subs	
Total Subconsultants	\$7,000

Travel Costs	\$0
Reproduction	\$0
Delivery Services & Misc	\$0
Subtotal Direct Expenses	\$0
Fee on Direct Expenses	
Total Direct Expenses	\$0

TOTAL \$60,000

(1) Billing rates effective 6/9/07

Tower Bridge - Curb Ramp and Intersection Modifications Cost Proposal

Summary

Grade	Cermak		Holt		Wickam		Consolacion		Esparaza		Burns		Total Cost	
	Proj Mgr	P14	Sr Sup Engr	P13	Lead Engr	P11	Struct Engr	P11	Engr II	P9	CADD	P11		Total Hours
Rate/Hour	\$217	\$154	\$114	\$122	\$80	\$129							Total Hours	Total Cost
Task Description														
Conceptual Design	4		24		80								108	\$9,979
Design & Details	4		24	8	72								108	\$10,322
Coordination w/ SSRR, CT, City	4		16										20	\$2,697
Plan Sheets & Estimate	4		24	8	64								124	\$12,973
Meetings	8		8										16	\$2,652
Total Labor	24	8	96	16	216	16	16	16	16	376	\$0	\$0	376	\$38,622

DKS Associates	\$10,000
Psomas	\$8,000
Subtotal	\$18,000
Fee on Subs	
Total Subconsultants	\$18,000

Travel Costs	\$50
Reproduction	\$0
Delivery Services & Misc	\$300
Subtotal Direct Expenses	\$380
Fee on Direct Expenses	
Total Direct Expenses	\$380

TOTAL \$57,002

Tower Bridge Pedestrian / Bicycle Improvements Project

EA Number: 03 0C9701

REQUEST FOR INFORMATION LOG: LAST UPDATED 5-18-07

RFI #	Date Received	Topic	Response By	Check By	Status	Response Date (To TRC)	Response Date (To Contractor)
01	12/11/06	Round Head Bolts	BLC	FSN	Done	12/14/06	12/18/06
02	12/15/06	Pier Platform Hand Rail	SAW	BLC	Done	12/20/06	12/22/06
03	12/15/06	Criteria for Material Acceptance (granularization)	BLC	VLR	Done	12/20/06	12/22/06
04	12/19/06	Deck Details (cross-slope & haunches)	BLC	FSN	Done	12/22/06	12/22/06
05	01/05/07	Slots at W1 & W2 Support Brackets	BLC	FSN	Done	01/08/07	01/08/07
06	01/05/07	Bracket orientation	BLC	FSN	Done	01/08/07	01/08/07
07	01/08/07	Revised West Approach Bracket Layout	BLC	FSN	Done	01/11/07	01/11/07
08	01/11/07	Deck Access Hatches	BLC	FSN	Done	01/24/07	01/24/07
09	01/13/07	Type 6 Lights	BLC	FSN	Done	01/18/07	01/18/07
10	01/18/07	Slotted Holes at Type W1 & W2 Support Brackets	BLC	FSN	Done	01/22/07	01/22/07
11	01/18/07	Detail 3 Copse (sheet 76 of 116)	BLC	FSN	Done	01/19/07	01/22/07
12	01/18/07	Utilities at Abutment 6 South	Joe Reyes	CT	Done	N/A	01/24/07
13	01/18/07	Head Room Safety Railing orientation	BLC	FSN	Done	01/19/07	01/19/07
14	01/18/07	W1 & W2 Support Bracket Depth	BLC	FSN	Done	01/22/07	01/22/07
15	01/20/07	Support Bracket A8-2 North Side (conflict with utilities)	BLC	FSN	Done	02/07/07	02/13/07
16	01/22/07	Existing Conduit at Abutment 1	Joe Reyes	FSN	Done	N/A	01/24/07
17	01/24/07	Omission of Support Bracket A1	BLC	FSN	Done	02/05/07	2/5/2007 (revised response 2-8-07)
18	01/25/07	Chamfer at Pier 5 Corners	BLC	FSN	Done	02/06/07	02/06/07
19	01/24/07	1/2" plate at New Railing	BLC	FSN	Done	02/05/07	02/05/07
20	01/30/07	Safety Railing	BLC	FSN	Done	1/30/2007	1/31/2007
21	01/25/07	Light Post Relocation at SE side	BLC	FSN	Done	2/6/2007	2/6/2007
22	01/30/07	Web Stiffener / Diaphragm conflict	BLC	FSN	Done	1/30/2007	1/31/2007
23	01/30/07	New Diaphragm to Existing Diaphragm Connection	BLC	FSN	Done	1/31/2007	1/31/2007
24	01/30/07	New Conduit Support to Existing Support	BLC	FSN	Done	1/30/2007	1/31/2007
25	01/30/07	Lateral Bracing Conflicts	BLC	FSN	Done	2/14/2007	2/14/2007
26	02/06/07	Unmarked Utilities	Joe Reyes	FSN	Done	N/A	2/14/2007
27	01/30/07	Plates & Utilities Conflict at FS4 & FS5	Joe Reyes	FSN	Done	N/A	2/14/2007
28	01/30/07	Existing Utilities Conflict at FS4 & LS1	BLC	FSN	Done	2/7/2007	2/8/2007
29	02/06/07	Rebar Stirrups	Joe Reyes	FSN	Done	N/A	2/6/2007
31	02/06/07	relocated hand rail plate bolting	BLC	FSN	Done	2/27/2007	2/27/2007
32	02/27/07	S8x23 @ East Approach	BLC	FSN	Done	3/1/2007	3/1/2007
33	03/02/07	FRP Connection	CANCELLED, see RFI 41	FSN	Done		
34	03/02/07	FRP Wearing Surface	Joe Reyes	FSN	Done	N/A	3/26/2007
35	03/02/07	FRP Curb Rebar	Joe Reyes	FSN	Done	N/A	3/26/2007
36	03/02/07	Splice Plate at Relocated Hand Rail	Joe Reyes	FSN	Done	N/A	3/26/2007
37	03/02/07	Hinged Expansion Detail	Joe Reyes	FSN	Done	N/A	3/26/2007
38	03/02/07	FRP Flat Sheet Option	CANCELLED, see RFI 41	FSN	Done		
39	02/28/07	Support Bracket A8-2 North Side (conflict with utilities)	BLC	FSN	Done	03/08/07	03/09/07
40	03/08/07	Existing Utilities Conflict at North Diaphragm (A8-1)	BLC	FSN	Done	03/09/07	03/14/07
41	03/19/07	3 Degree Slope Conflict	Joe Reyes	FSN	Done	N/A	03/09/07
42	04/23/07	FRP Detail at Curb	BLC	FSN	Done	03/14/07	3/23/2007
43	04/30/07	Shims at Lateralis	BLC	FSN	Done	4/23/2007	4/23/2007
44	04/30/07	Head Room Safety Railing Base Plate	BLC	FSN	Done	N/A	5/9/2007
45	05/10/07	Hand Rail Code	BLC	FSN	Done	5/2/2007	5/2/2007
46	05/10/07	Top Plate Attachment	BLC	FSN	Done	5/11/2007	5/11/2007
47	05/10/07	Hand Rail Gables	BLC	FSN	Done	5/11/2007	5/11/2007
48	05/17/07	Hand Rail Gables and Curb	BLC	FSN	Done	5/16/2007	5/17/2007
49	05/14/07	Cable Anchors at Handrail	BLC	FSN	Done	5/16/2007	5/17/2007

Tower Bridge Pedestrian / Bicycle Improvements Project

EA Number: 03 0C9701

SUBMITTAL REVIEW LOG: LAST UPDATED 5-18-07

Submittal #	Date Received	Topic	Review By	Check By	Status	Response Date (To TRC)
18	02/08/07	West Approach Spans Working Drawings	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required	02/26/07
20	02/21/07	West Fixed Span Working Drawings	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required	03/05/07
22	03/01/07	East Fixed Span & East Approach Spans Working Drawings	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required / Amend And Resubmit	03/13/07
25	03/13/07	Revised Working Drawings	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required	03/21/07
27	03/15/07	Bridge Rail Redesign	BLC	FSN	Make Corrections Noted - Resubmittal Not Required	03/21/07
29	03/23/07	Lift Span Working Drawings	VLR / VML	BLC / FSN	Amend And Resubmit	4/9/2007
30	03/26/07	Rail Light Fixtures	Ken Wardrip		Rejected / Make Corrections Noted - Resubmittal Not Required	4/7/2007
33	03/05/07	Transformers, Switchgear and Lighting	Ken Wardrip		Make Corrections Noted - Resubmittal Not Required	3/16/2007
37	04/23/07	SMUD Vault	Ken Wardrip		No Exceptions Taken	4/25/2007
20B	04/24/07	West Fixed Span Working Drawings	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required	5/16/2007
22B	04/24/07	East Fixed Span & East Approach Spans Working Drawings (South)	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required / Amend And Resubmit	05/14/07
22A	04/19/07	East Fixed Span & East Approach Spans Working Drawings (North)	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required	05/07/07
29A (South)	05/09/07	Lift Span Working Drawings (South)	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required	
29A (North)	05/14/07	Lift Span Working Drawings (North)	VLR / VML	BLC / FSN	Make Corrections Noted - Resubmittal Not Required	
43	05/17/07	Lift Span Initial Balance Plan & Temporary Locking System	FSN	BLC		