DMJM HARRIS | AECOM

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August 24, 2008

Aleida Andrino-Chavez
City of Albany
1000 San Pablo Avenue
Albany, CA 94706

Subject: Buchanan Street / Jackson Street Curb Bulb-outs, Traffic Signal Replacement and Solar Speed Feedback Sign Installation Design

Dear Ms. Andrino-Chavez,

DMJM Harris is pleased to present this revised proposal to perform civil engineering design services for the construction of traffic signal replacement, bulb-outs and sidewalk modifications at the intersection of Buchanan Street and Jackson Street in the City of Albany. Solar speed feedback signs would also be installed with striping enhancements up and downstream of the intersection as part of this work. The following is a proposed scope of work required to prepare construction documents for the installation of these improvements.

For funding and implementation purposes, the work would include the development of three separate plan sets – Bulb Out Installation, Traffic Signal Replacement and Solar Speed Feedback Signs. Such an approach would allow the improvements to be constructed or funded separately, or together, at the City's direction.

SCOPE OF WORK

Task 1 – Prepare Bulb-Out Installation Plans

The proposed bulb-outs on Buchanan Street at Jackson Street will be for pedestrians crossing Buchanan Street, and therefore will be for improvements on the north and south side of Buchanan. Only bulb outs on the western side of the intersection are included. There will be no bulb-outs proposed for crossing across Jackson Street. Listed below are issues considered for the installation of bulb-outs at this location:

- Design the proposed bulb-outs such that they do not impede truck turning movements at the intersection. (AASHTO WB40 and SU design vehicles will be verified);
- Verify that existing drainage facilities are either not impacted, or are accommodated in the design of the bulb-outs;
- Modifications to the existing median island in Buchanan Street may be necessary depending on final alignment of the crosswalk;
- Utility modifications and relocations at the intersection will be kept to a minimum and the existing overhead utilities on the north side of Buchanan will remain in place;
- Right of way will likely be required from UC for the left turn lane from northbound Jackson Street to westbound Buchanan. Even without the left turn, there is not enough space in this corner for an ADA compliant ramp. We understand that the City will provide legal descriptions, plat maps and negotiations for this ROW acquisition. The addition of a left turn lane on southbound Jackson will require the elimination of some on-street parking. This will require a public process, which we understand that the City will perform.

- We understand that the City proposes to underground the utilities on Buchanan Street in the future (perhaps as early as 2011) with a Rule 20A / 32 A utility undergrounding project. The signal and curb design on the north side of Buchanan will take this into account.
- If a westbound Class 2 bike path on the north side of Buchanan is to be added to the plans for the Buchanan Street path, this path will be accommodated in the intersection design.
- DMJM Harris prepared 10% design drawings for a realignment of the curbs and the merge at Buchanan Marin at Adams Street. This project is located just one block east of Buchanan Jackson and the design for the new turning movements will take into account this future project.
- The no. 2 lane eastbound on Buchanan is only 10 feet wide along the school and park frontage. Consideration will be given to moving this lane line one foot to the north with this project.
- We understand that this is a Safe Routes to Schools Project and the specifications must include all of the special general provisions and bid documents required for this funding as set forth in the Caltrans Local Assistance Program Procedures and Guidelines. Under these procedures the City Engineer must certify that the design meets Caltrans and or City design standards. The Design Engineer must certify to the City Engineer that the design conforms to Caltrans/City design standards.
- There is a 24 inch gas line in Jackson Street that crosses the intersection. There is also a 6 inch gas line in Buchanan Street. By definition, these are high risk facilities. The Caltrans Local Assistance Procedures require the City Engineer to certify that utilities have been investigated per Caltrans design requirements prior to calling for bids. Caltrans utility certifications require that high risk facilities be potholed during design if in conflict. The design engineer must certify compliance with these provisions to the City Engineer.
- The Alameda County Public Works Department Traffic Division will review the plans and provide comments to the City. These comments will be incorporated into the review performed by the City Engineer.

Task 1A – Project Initiation & Existing Data Review

Under this task we will request existing utilities data from service providers that may have facilities within the project area. In addition, we will obtain any improvement plan as-built information the City may have within the project area. We will conduct a site investigation to verify existence of above-ground features, to verify base mapping received, and to identify any other features that may be affected by the proposed project. Any as-built or system data collected during this task will be shown on the project plans.

We anticipate using topographic survey data that is currently being obtained along Buchanan Street for another project that happens to be within the limits of this project. Therefore, this scope assumes that the survey will be adequate for use in this project and no additional topographic survey is included. However, if additional topographic survey field data needs to be obtained, we will prepare a scope and fee to perform these services.

Task 1B – Western Bulb-Out Construction Plans

Plans and a construction cost estimate for the installation of a curb bulb-out and sidewalk modification on the western intersection corners will be prepared to City standards using DMJM Harris' standard plan format at an estimated scale of 1"=10'. A construction quantity and cost estimate will be prepared at each level of submittal. Submittals will be made to the City for review at the 65%, 95% and 100% stages of design and will include the following plan sheets:

- Title Sheet, Legend, Notes & Abbreviations;
- Existing Utility and Demolition Plan;

- Curb Bulb-out Layout and Improvement Plan;
- Curb Bulb-out Grading, Drainage and Curb Profile Plan; and
- Construction Details.

We assume that the bulb-out geometry will be finalized at the 65% review meeting with the City, and that detailed vertical design will be complete at the 95% review level.

Task 2 – Traffic Signal Replacement

Plans for the replacement of the existing traffic signal to include new equipment, a new controller and service equipment enclosure and the installation of protected left turn movements on all four approaches to the Buchanan and Jackson intersection will be prepared. To depict this work the following plans would be prepared:

- Title Sheet, Legend, Notes & Abbreviations;
- Existing Utility and Demolition Plan;
- Signing and Striping Plan;
- Signal Plan;
- Signal Schedule; and
- Details (as necessary).

We have assumed that all necessary base mapping will be available from the current survey being completed for the Buchanan Bikeway Project. Finally, we have assumed that as-built information showing the existing signal equipment including location and types of conduits and the existing signal plan and schedule, is readily available (we have it). The design shall be according to and incorporate the State of California Department of Transportation (CALTRANS) *2006 Standard Plans and Specifications* and latest edition of the *Manual of Uniform Traffic Control Devices*.

Issues for the signal installation include:

- The reconnection of the controls for the flashing yellow beacon at this location will be incorporated into the project.
- The eastbound lanes of Buchanan Street were rehabilitated with rubberized asphalt. The City desires to limit the amount of open trenches that are installed in this street. Trenchless construction for underground construction is preferred and should be specified whenever practicable. The specifications should specify and require compliance with Caltrans guidelines and specifications for Horizontal Directional Drilling when appropriate.
- The Police Chief intends to install video surveillance equipment on the new signals. The signal will be designed to incorporate this equipment in the future.
- The window for construction of this signal will be limited to the summer months when school is out. The design schedule (including right of way) will fit this window. Provided that a notice to proceed is issued in the next 2 weeks, 100% plans will be available by February 2009.

Task 2A. 65% PS&E Submittal

The 65% PS&E Submittal will identify and/or address the following elements:

- Prepare 95% Plans;
- Electrical Technical Specifications; and
- Cost Estimates.

Task 2B. 95% PS&E Submittal

The 95% PS&E Submittal will identify and/or address the following elements:

- Prepare 95% Plans;
- Electrical Technical Specifications; and
- Cost Estimates.

Task 2C. Final Submittal

- Complete final edits based on City design review comments on 95% PS&E. Final plans to be plotted, signed, sealed, and ready for bidding. To include signature block for City Engineer's signature. Submit one complete reproducible set of the final PS&E to the City.

- CD copy of all final files and back up data. Files that are not in electronic format shall be scanned into a commonly used digital format and saved to the CD.

Task 3 – Solar Speed Feedback Signs

Plans for the installation of two solar speed feedback signs on Buchanan Street east and west of the Jackson Street intersection will be prepared. This work will also include miscellaneous striping improvements on Buchanan (Slow School Xing, and crosswalk striping at minor streets) as described in the Ocean View Elementary Improvements document. The design shall be according to and incorporate the State of California Department of Transportation (CALTRANS) *2006 Standard Plans and Specifications* and latest edition of the *Manual of Uniform Traffic Control Devices*.

Task 3B. 95% Submittal

The 95% PS&E Submittal will identify and/or address the following elements:

- Prepare 95% Plans; and
- Cost Estimates.

Task 3C. Final Submittal

- Complete final edits based on City design review comments on 95% design. Final plans to be plotted, signed, sealed, and ready for bidding. To include signature block for City Engineer's signature. Submit one complete reproducible set of the final submittal to the City.

- CD copy of all final files and back up data. Files that are not in electronic format shall be scanned into a commonly used digital format and saved to the CD.

Staff will be available to provide whatever engineering services required during construction on a time and materials basis. These services would be authorized by an amendment to the agreement. Construction engineering services will include reviewing submittals and making site visits to verify the location of traffic signal poles, pavement markings, signs and striping conform to the drawings. As part of this work we will furnish a set of as builts (record drawings) on "4 mil mylar" from redlines prepared by the Contractor and a CD containing the digital as built files.

BUDGET

We propose to complete the above tasks at an estimated cost of **$36,000**, as shown in the attached task breakdown estimate.

Yours sincerely,

Bill Burton
Associate Vice President
bill.burton@dmjmharris.com

Attachment

Fee Estimate
Professional Services

8/24/2008

Buchanan and Jackson - Traffic Signal and Bulbouts		Estimated Labor Hours							
				Senior	Civil Eng	Traffic	ADMIN	Total	Total
Tasks	Description			Traffic Eng		Engineer	CADD	Hours	Cost
1	Bulb Out Installation Plans			4	70		62	136	$15,690
2	Traffic Signal Modification Plans			20		70	80	170	$14,600
3	Solar Speed Feedback Signs			4		20	32	56	$5,040
	Total	0	0	28	70	90	174	362	$35,330
	Rate	$0.00	$0.00	$240.00	$140.00	$100.00	$95.00		

REIMBURSABLE EXPENSES

Traffic Counts	1	Survey	@	$0	$0
Reproduction	1	LS	@	$500	$500
Mileage	188	Miles	@	$0.58	$109

Subtotal - REIMBURSABLE EXPENSES $609
Handling Cost (10%) $61

TOTAL $36,000