

**Project Information**

<i>Name</i>	City of Pleasant Hill, Buskirk Avenue Widening Phase 2 Street Improvement Project
<i>Location</i>	Along Buskirk Avenue between Monument Boulevard and Mayhew Way
<i>Delivery Method</i>	Design – Bid – Build
<i>Final Construction Cost</i>	\$6.628 million
<i>Schedule</i>	First Charged Day: May 6, 2013 Notice To Proceed: May 2, 2013 Completed: October 27, 2014
<i>Start Date:</i>	May 6, 2013
<i>Completed</i>	Substantially completed on October 27, 2014



*General Project Description*

This project realigns and widens Buskirk Avenue from the Crossroads driveway intersection south to the existing Clarie Drive intersection, and construct a new east-west Buskirk Avenue segment from Clarie Drive to the existing Buskirk Avenue segment along the I-680 freeway. A new free sweeping 90 degree roadway curve will be constructed to connect the eastern section of Hookston Road north to the new Buskirk Avenue/Clarie Drive intersection. The project will also construct a new traffic signal at the Buskirk Avenue/Clarie Drive intersection, a new traffic signal at the new Buskirk Avenue/Contra Costa Center southwesterly driveway access intersection, traffic calming median island at the free flowing 90 degree Hookston Road curve, and a new private access driveway from the Lockwood business property and Hookston Square along a portion of the existing Hookston Road.

Buskirk Avenue connects Monument Boulevard to the Pleasant Hill BART Station and serves the large volume of Pleasant Hill and Concord commuter traffic using the Pleasant Hill BART Station. Currently, high-demand left turning vehicles create long queues for through traffic, forcing pedestrians and bicyclists to use the existing roadway shoulders. The proposed widening project is the final phase of a two-phased corridor improvement project to increase capacity and improve operations, circulation and pedestrian access by constructing additional travel lanes, improving signalization, alignment and pedestrian facilities. The adjacent segment of Buskirk Avenue to the north was widened through Phase I.

**Project Team**

*Owner/ Client* City of Pleasant Hill  
100 Gregory Lane, Pleasant Hill, CA 94523  
Mario Moreno, City Engineer, (925) 671-5252, [mmoreno@ci.pleasant-hill.ca.us](mailto:mmoreno@ci.pleasant-hill.ca.us)

*Construction Manager* Ghirardelli Associates, Inc.  
2055 Gateway Place, Suite 410, San Jose, CA 95110  
Randy Bruner, P.E. (408) 930-3410, [randy@ghirardelliassoc.com](mailto:randy@ghirardelliassoc.com)

*Architect/ Engineer* T.Y. Lin International  
1111 Broadway, Suite 2150, Oakland, CA 94607  
Eva Lillie, Project Engineer, (510) 457-3034, [eva.lillie@tylin.com](mailto:eva.lillie@tylin.com)

*Contractor* Ghilotti Brothers, Inc.  
525 Jacoby Street, San Rafael, CA 94901  
Lance Bushnell, Project Manager, 415-256-2271, [lanceb@ghilottibros.com](mailto:lanceb@ghilottibros.com)

*Landscape* Golden Associates, Landscape Architects  
4400 Market Street, Emeryville, CA 94608  
Laurie Batha, Senior Associate, 510-465-4030, [lbatha@goldenlandarch.com](mailto:lbatha@goldenlandarch.com)

*Key Stakeholders* Contra Costa Transportation Authority (CCTA)

*Award Recipient* Please direct all Award correspondence to the following:  
  
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408-930-3410, [randy@ghirardelliassoc.com](mailto:randy@ghirardelliassoc.com)

**Schedule**

<i>Original Construction Duration</i>	60 working days
<i>Construction Start</i>	August 2014
<i>Construction Completed</i>	December 2014
<i>Discussion</i>	The project was completed on time and within budget.



**Cost**

<i>Engineer's Estimate</i>	\$7,293,136.00
<i>Initial Contract Bid Amount</i>	\$6,278,704.40
<i>Final Construction Cost</i>	\$6,628,000.00
<i>Variance from Original Budget</i>	-16.2% from Engineers Estimate; +5.6% from Bid Amount
<i>Value of Change Orders</i>	\$1,049,683.92; 16.7% of Original Contract Bid
<i>Completed Within Budget</i>	Yes
<i>Describe Change Order Growth</i>	% Value Engineering: +/- 10% % Owner Changes: +/- 20% % Differing Site Conditions: +/- 60% % Correct Design problems: +/- 10%
<i>Original CM Contract Amount</i>	\$770,000.00
<i>Final CM Contract Amount</i>	TBD (\$770,000.00 + Task Order in Negotiation)
<i>Describe Variance in CM Cost and Reasons Why</i>	There was a substantial amount of overtime work during the realignment of the storm drain system. In addition, there were contract change orders that extended the project completion date.

**Claims**

No claims were filed on this project.

## Overall Project Management Efforts

### *Description of Team Roles*

Resident Engineer is the point of contact for all project issues between the City, designer, utilities, and contractor. Resident Engineer is responsible for all aspects of contract administration like weekly meetings with the contractor, utility coordination meetings, RFI responses, submittal review, CPM schedule review, SWPPP review, project correspondence and resolution of issues, progress pay estimates, contract change order preparation and cost estimates, tracking CCO and force account work, monthly construction reports, issuing field orders/memos, time impact analysis, materials and testing acceptance, and project documentation closeout.

Construction Inspector is responsible for documenting all construction activities, verifying safety in contractor's work operations, bringing field issues to the Resident Engineer's attention for quick resolution, preparation of pay item calculation sheets, verifying contract change order work, material placement verification and scheduling Quality Assurance testing.

Design Engineer is responsible for design support services during construction, contract change order plan revisions, and concurrence of field changes.

City is responsible for contract change order approval, contract payment and acceptance, funding reimbursement, and administrative support.

### *Lines of Communication*

The CM team has open lines of communication with the owner, the design engineers, the contractor and all project stakeholders. This enables early identification of challenges and quicker resolution process. Our team is always encouraged to consistently improve and optimize the lines of communication among project stakeholders in order to achieve consistent results as it relates to proper planning and successful project completions.

### *Conflict Resolution*

The CM team's approach to conflict resolution is to maintain open and clear communications with the contractor in establishing the same goals. Both parties must be willing to "give and take" when negotiating costs. The CM team and the contractor collaborate with each other to reach an agreement that satisfies the concerns of both parties.

### *Partnering*

The CM team resolved project issues through a formal partnering relationship. Potential issues and obstacles were identified and resolved early to avoid impacts to the schedule. All issues were resolved and settled to the mutual benefit of the CM team, the City and the contractor.

## Control and Management Techniques

### *Quality Management*

The CM team's project approach to quality control/quality assurance during construction is individual accountability in all aspects of the construction. This begins with a clear understanding of the requirements of the contract documents and preparing work plans that include quality assurance and quality control measures to meet the requirements of the contract documents.

### *Schedule Management*

The CM team's approach to schedule control during construction begins with a thorough review of the contractor's baseline CPM schedule for the logic of activities and the duration of each activity. Monthly schedule updates are submitted and reviewed to ensure that there is no significant change from the baseline schedule. Early resolution of issues will minimize delays in the project schedule. If there is any delay in the schedule, the CM team reviews the schedule to see if other critical operations can start earlier in order to regain lost time.

### *Cost Management*

The CM team's approach to cost control during construction is accurate documentation of all construction work activities. Recording of all activities provides the CM team accurate information on the progress of the work and problems associated with the project. Early resolution of issues will minimize delays in the project schedule. Tracking additional costs due to contract change orders and preparing their independent cost analyses will control project costs. The CM team prepares a monthly cost breakdown of all contract items and contract change orders for project cost updates.



## Safety Performance

The project's approach to safety is for every worker to have safety awareness and accountability.

Before each day's work operation begins, the Contractor's foreman discusses specific operations and any associated hazards. All workers are required to wear safety glasses, hard hat and safety boots.

CM team members attend an OSHA HAZWOPER training class annually. We participate in the Contractor's daily safety tailgate meetings. We review all of the Contractor's work plans to ensure worker and public safety is not at risk. If required, we make adjustments to the approved work plan when there is a changed condition during the work operations.

The City adopts the Caltrans general construction safety requirements into the project special provisions.

*Project Fatality* – I verify there were no construction-related fatalities on this project.

*Safety Record*

No. of Recordables = 0

Total Man Hours = 22,488

Lost Time Accident Rate = 0

## Community Relations

The City created and maintained updated project information through the City's website and posted traffic alert information on 511 Contra Costa. The City and the contractor also worked together to provide the public advance written notification for any street or driveway closures, and work impacting the public.

## Accomplishments

### AT&T Coordination

During the installation of underground storm drain pipes, existing AT&T fiber optic lines were exposed and found to be in conflict. AT&T was contacted and with their guidance, the project contractor temporarily moved the fiber optic lines out of the way. This work was coordinated so that work was performed efficiently to minimize project delays.

### Storm Water During Construction

The project design did not provide for storm water runoff during construction to tie-in with the existing storm drain systems. To prevent potential delays and additional costs to the project, a portion of the new storm drain system was realigned and connected to the existing system.

