



Staff Report

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To: City Council

From: Valerie J. Barone, City Manager

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Subject: **Considering Construction Change Order No. 5 in the amount of \$357,000 and authorizing a budget transfer of \$525,000 to the Clayton Road/Treat Blvd./Denkinger Road Intersection Capacity Improvements Project, Project No. 2144. (\$400,000 from Measure J Funds and \$125,000 from Measure Q Lease Revenue Financing Agreement Funds)**

Report in Brief

The Clayton Road/Treat Blvd./Denkinger Road Intersection Capacity Improvements project (Project No. 2144) includes the widening of the Clayton Road/Treat Boulevard/Denkinger Road intersection and installation of a new traffic signal to provide increased capacity and maximize the operational efficiency of the intersection during peak traffic periods.

The City Council awarded a construction contract to Granite Rock Construction of San Jose on April 7, 2015. Once the project was under construction, several situations arose that resulted in significant project delays, including the discovery of underground fuel storage tanks, the discovery of contaminated soil, delays in the removal of existing poles and overhead utilities by various utility companies, required changes to a joint utility trench conduits by PG&E, relocation of water meter that was in conflict with the roadway widening, including acquisition of water line easement to relocate the meter on to the fronting property, and inclement weather. Additionally, there have been unforeseen utility conflicts encountered in the expanded roadway area, a need to maintain the project area through the delay periods and a revision in striping design to accommodate the construction activities. Many of these delays have resulted in increased costs (discussed more fully in the Analysis

section of this report). Staff has negotiated a change order to address the increased construction costs in an amount not exceed \$357,000.

Additional project funds are also required for (1) additional design services needed during construction, (2) additional construction management and inspection, and (3) to provide a nominal contingency through the remainder of the project (discussed in more detail in the Analysis section of this report). In total a budget transfer of \$525,000 is required to complete this project.

Recommended Action

Take the following actions:

1. Authorize the City Manager to execute contract change orders for the Clayton Road/Treat Blvd./Denkinger Road Intersection Capacity Improvements project (Project No. 2144) in the amount of \$357,000; and
2. Authorize staff to execute additional contract change orders that become necessary up to \$50,000; and
3. Approve a budget transfer in the total amount of \$525,000 (\$400,000 from Measure J Funds and \$125,000 from Measure Q Lease Revenue Financing Agreement Funds to the Clayton Road/Treat Blvd./Denkinger Road Intersection Capacity Improvements project (Project No. 2144).

Background

The City Council awarded the subject construction project to Granite Rock Construction on April 7, 2015 in the amount of \$1,209,534. The total project budget was \$3,124,000. This project will improve the level of service at the Clayton Road/Treat Boulevard/Denkinger Road intersection during weekday peak traffic hours by increasing its capacity, reducing vehicle delay and queuing conditions. The improvements include widening the northbound Treat Boulevard approach to include two left-turn lanes, two thru lanes and one right-turn lane, as well as installing a new traffic signal. This project required condemnation of property and establishment of a construction easement on private property.

To date, four contract change orders (CCO) have been executed in a total amount of \$224,185.50 and are summarized as follows:

- Additive Change Order No. 1 in the amount of \$5,071.50 addressed signal and lighting revisions requested by the City;
- Deductive Change Order No. 2 in the amount of -\$6,250 revised the pipe material and alignment of a storm drain lateral;

- Additive Change Order No. 3 in the amount of \$84,000 addressed the cost of delays related to discovery and remediation of underground storage tanks, and the method of installing traffic signal conduits to address utility conflicts;
- Additive Change Order No. 4 was issued in the amount of \$141,364 to extend joint trench conduits as required by PG&E and to cover delay charges related to additional conduit installation required by PG&E.

City Engineering and Attorney staff have been working together to recover all costs associated with the first four change orders that are attributable to others. Specifically, the discovery of underground storage tanks (owned by BP) during construction created delay costs and additional excavation and off-haul of associated contaminated materials costs of approximately \$115,631. Additionally, PG&E is responsible for approximately \$200,000 in costs due to (1) their delay in relocating the overhead utility poles and (2) the extra work required to extend the joint trench conduits as unexpectedly required. During the construction delays, staff requested Granite Rock to conduct extra work (beyond their existing construction contract) to provide for better interim pedestrian access, to repair potholes in the area and to conduct other site maintenance activities. Staff also authorized a new pothole investigation to positively locate unforeseen underground utilities in the construction area that were discovered during construction.

Analysis

The pothole analysis identified a number of previously unknown underground utilities in the roadway widening area that were in conflict with the project. As an alternative to creating additional delays to relocate the conflicting utilities, staff worked with the project designer to design an alternate roadway structure that was shallower (avoiding the utility conflict) but provided equivalent structural integrity and durability. The new roadway design will require the contractor to change his methods of work and utilize different equipment, resulting in some additional construction costs as reflected in the change order.

The total negotiated cost of this Contract Change Order #5 is \$357,000, which includes the following charges for authorized work already completed, additional work and revisions to the design as requested by City staff, compensable delays, and labor/material escalations summarized below:

\$86,000 of unpaid extra work performed to date

Granite Rock performed the following work outside of their original contract scope to date:

- Additional work to construct around unmarked utility conflicts while installing traffic signal conduits

- Removal of unforeseen buried concrete material found under new roadway section
- Construction of temporary sidewalk at northeast corner of Clayton Road/Denkinger Road, and maintaining driveway access to allow for safe passage for pedestrians and vehicles during construction delays
- Restoring project site and standby time due to PG&E delays
- Pot hole and elevation study of unforeseen utilities encountered in new roadway section

\$169,000 of additional work and revisions to project, as requested by the City

- Pavement restoration following open trench installation of traffic signal conduits. The traffic signal conduits were to be installed by a trenchless micro tunneling, however, due to a number of utility conflicts, the construction method needed to be revised to an open cut method. As a result, additional surface restoration work is needed.
- Construct additional pedestrian push button posts to access intersection crosswalks. Due to unforeseen underground utility conflicts, the pedestrian push button posts could not be installed as originally designed. The posts with a reduced diameter were needed and additional posts are required to accommodate the quantity of push buttons needed.
- Install temporary striping at Clayton Road during construction to maintain 3 lanes of traffic during non-working hours.
- Revision of new roadway structural section and allowance to work around and protect unknown utilities recently discovered.

\$102,000 of compensable delay and labor/material escalation costs

- Contractor delays/standby compensable costs due to PG&E relocation efforts and utility conflicts in new roadway section.
- Increases in labor and material costs due to project extending beyond original contract completion date.

In addition to Contract Change Order #5, project funding is needed to manage the project through to the end of construction. As a result of the various project delays, the City's contract with the firm providing Construction Management and Inspection Services was spent prior to project completion. Staff requested a proposal from the firm to provide services through completion of the project. The proposal received was in excess of \$190,000, which was beyond the amount staff believes is reasonable for oversight of the remaining work. Therefore all additional construction management

work for this project will be done by City staff. It is estimated that staff charges will not exceed \$78,000.

Additional funds are also requested as follows:

- \$50,000 in contingency funds to address any additional unforeseen issues that may arise during the remainder of the construction contract.
- \$15,000 for additional engineering consultant services during construction
- \$18,000 for time extension of the temporary construction easement
- \$7,000 for additional fees to the Contra Costa Water District for relocation of a water meter and backflow prevention device

Financial Impact

There are insufficient funds in the project budget (originally funded by Measure J, Measure C, and OSIP funds) to fully fund the cost of CCO #5 and the additional costs outlined above. A budget transfer in the amount of \$525,000 is required to complete the project. Proposed funding sources are from available Measure J Funds in the amount of \$400,000 and Measure Q Lease Revenue Financing Agreement Funds in the amount of \$125,000, for a total proposed fund transfer of \$525,000 into this project.

The proposed \$400,000 transfer from available Measure J Funds will have no impact to the Measure J 10-year plan. Additional Measure J funds were made available when actual revenue received was higher than the 10-year plan allocated for FY2016-17. The Measure Q Lease Revenue Fund has available funding because there were funds remaining after completion of the FY 14-15 Pavement Maintenance project (Project No. 2329) that can now be reallocated into the Clayton Road/Treat Blvd./Denkinger Road Intersection Capacity Improvements project.

As noted above, staff is seeking to recover costs associated with past and current delays.

Public Contact

The City Council Agenda was posted.

Attachments

1. Contract Change Order No. 5 Financial Analysis

City of Concord

Clayton Road/Treat Boulevard Intersection Capacity Improvements Project (CIP Project No. 2144)

Contract Change Order #5

I.	<u>Unpaid Extra Work Performed to Date</u>	
a.	Additional work for utility conflicts during signal conduit installation	\$28,000.00
b.	Concrete removal under new roadway section	\$4,000.00
c.	Construct temporary sidewalk at Safeway Corner	\$3,000.00
d.	Restore site due to Third Party Utility Work and PG&E standby	\$43,000.00
e.	Maintain driveway access	\$4,000.00
f.	Potholing / Elevation study of unknown utilities	\$4,000.00
	Total of Unpaid Extra Work:	\$86,000.00
II.	<u>Additional Work to Be Performed</u>	
a.	Allowance for Removal of Contaminated Soil	\$11,000.00
b.	Restoration of Pavement at Electrical Conduit Crossings	\$30,000.00
c.	Pedestrian Push Button Changes	\$9,000.00
d.	Install Temporary Striping	\$7,000.00
e.	New roadway structural section revision/utility conflicts	\$112,000.00
	Total of Additional Work to be performed	\$169,000.00
III.	<u>Compensable Delay & Labor/Material Escalations</u>	
a.	Compensable Delay for 179 Days	\$74,000.00
b.	Labor & Material Escalations	\$28,000.00
	Total of Compensable Delay & Labor/Material Escalation:	\$102,000.00
	Total Contract Change Order #5	\$357,000.00
	<u>Construction Contingency Authorization</u>	\$50,000
	<u>Administrative Costs</u>	
a.	Construction Management by Staff	\$78,000.00
b.	Engineering consultant services during construction	\$15,000.00
c.	Temporary construction easement extension	\$18,000.00
d.	Contra Costa Water District water meter and backflow relocation	\$7,000.00
	Total for Administrative Costs	\$118,000.00
	Total Requested Budget Transfer	\$525,000.00