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DATE: January 9, 2023

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Jeff Stutsman, PE, – City Engineer, Public Works & Utilities (PW&U)  
Gina Benedetti-Petnic, PE – Assistant Director, PW&U  
Christopher J. Bolt, MPA, PE, CPM, ICMA-CM – Director, PW&U

SUBJECT: Resolution Accepting the Completion of the Traffic Signal Timing Improvements Project C16102250 by DC Electric Group Inc., and Authorizing the Release of the 10% Retention, and Finding This Action is Not a “Project” Pursuant to CEQA Guidelines Section 15301(c)

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### **RECOMMENDATION**

It is recommended that the City Council adopt the attached Resolution accepting the completion of the traffic signal timing improvements project C16102250 by DC Electric Group, Inc., and authorizing the release of the 10% retention, and finding this action is not a “project” pursuant to CEQA guidelines section 15301(c).

### **BACKGROUND**

In 2020, the City upgraded communication equipment on 22 of its 51 traffic signals. The upgrades included new network connections at City facilities, network switches at the signals, and a combination of fiber optic and radio signal interconnects. This project completed the installation of the remaining upgraded radios excluding 6 intersections that have line-of-sight issues.

As outlined in the City’s Capital Improvement Program (CIP) budget, staff has begun a multi-year, multi-phased project to modernize the City’s Traffic Signal Timing system. A key feature of this system is continuous and reliable communications with a central management system. On October 18, 2021, the Petaluma City Council approved a resolution to purchase communication equipment from Western Pacific Supply for communication upgrades along East Washington Street, McDowell Boulevard, D Street, and Petaluma Boulevard North. On December 6, 2021, the City Council approved a resolution to purchase new Iteris Video Detection Equipment for North McDowell Boulevard in anticipation of the North McDowell Complete Streets project. On December 9, 2021, the City received construction bids for the installation of the City-furnished communication equipment and City-furnished video detection equipment. The video detection will replace the traffic loops on North McDowell Blvd. from Old Redwood Highway to Caulfield Lane

in advance of the North McDowell Complete Streets project and the implementation of new signal coordination timing. The new detection provides traditional stop bar detection and advanced dilemma zone detection to enhance safety. The dilemma zone is the zone in which a vehicle can neither stop safely at the stop bar nor proceed through the intersection before the onset of the red stop signal. The new system provides more robust data collection, which can be used by the signal communications system to monitor the intersections' health and safety and improve the corridor's overall efficiency. In addition to the installation of new equipment, signal phasing changes are being proposed at the intersection of Sonoma Mountain Parkway and Ely Road North/Colombard Road. The updated signal programming will change from a permissive safety along Ely Road North/Colombard to split phasing. Split phasing will provide a cost-effective phasing change to eliminate turning conflicts with pedestrians without installing new mast arms.

## **DISCUSSION**

The final construction cost for this Traffic Signal Timing Communications Upgrades project is \$317,040 including two change orders totaling \$188,800. Change Order No. 1 was for emergency work to repair seven wood street light poles that blew over in a windstorm along Caulfield Lane between St. Francis Dr. and South McDowell Blvd. The work included reinstalling seven wood poles, overhead wiring, and new fixtures. Change Order No. 2 was for the emergency repair of the traffic signal system at Maria Dr. and E. Washington St., which was damaged by a transit accident. The full cost of these repairs will be recovered through the City's insurance company.

## **PUBLIC OUTREACH**

This agenda item appeared on the City's tentative agenda document on December 19, 2022, which was a publicly noticed meeting.

## **COUNCIL GOAL ALIGNMENT**

The proposed action supports City Council goals and the following workplan items:

- Workplan Item 15 – “Identify funds and develop a plan to improve Petaluma's streets and roads;” and
- Workplan Item 79 – “Improve traffic safety through proactive education, engineering, and enforcement strategies.”

## **CLIMATE ACTION/SUSTAINABILITY EFFORTS**

The upgrade of the traffic signal communication system and new video detection equipment will reduce field crew maintenance and repair trips by providing the technology for staff to identify issues and solutions before dispatching field technicians. In addition, the enhanced communications will enable the central management system to be more data-driven. This data will help us monitor signal performance in real time and allow staff to identify and implement improvements to optimize the timing. As this multi-year project is completed, improved timing will result in better traffic flow, less vehicle idle time, and correspondingly less greenhouse gas (GHG) emissions.

## **ENVIRONMENTAL REVIEW**

This project is categorically exempt pursuant to the California Environmental Quality Act (“CEQA”) Article 19, Section 15301(c), of Title 14 of the California Code of Regulations (“CEQA Guidelines”), because the project consists of the repair, maintenance, and minor alteration of existing public facilities involving negligible or no expansion of existing or former use. The improvements will install new fiber signal interconnects through existing conduits and switches in existing signal cabinets without changing the use of those facilities. Accordingly, there is negligible or no expansion of use beyond what currently exists and there are no cumulative impacts, unusual circumstances, or other factors that would make the exemption inapplicable pursuant to CEQA Guidelines Section 15300.2

## **FINANCIAL IMPACTS**

The following is a breakdown of the budget for the project showing the FY 21/22 Adopted Project Budget for C16102250, and the proposed Revised Project budget. A portion of the installation cost related to the Video Detection Camera Installation for North McDowell estimated at \$82,239 is funded by the North McDowell Complete Street Project C16102147.

<b>CIP C16102250 Traffic Signal Timing Upgrades</b>	<b>FY 22/23 Revised Project Budget</b>	<b>FY 22/23 Estimated Actual Costs</b>
Planning and Environmental		\$ 352.00
Design (City Staff)		
Legal Services		
Administration		
Construction Contract		
Purchase Order (Previous Council Action)	\$ 104,999	\$ 118,368
Installation	\$ 45,001	\$ 317,040
Construction Management		
Contingency		
CIP Overheads		\$ 3,412
<b>Total</b>	<b>\$ 150,000</b>	<b>\$ 439,172</b>
<b>Funding Source</b>		
Street Maintenance	\$ 116,000.00	\$ 371,172.00
Traffic Mitigation Funds	\$ 34,000	\$ 68,000
<b>Total</b>	<b>\$ 150,000</b>	<b>\$ 439,172</b>

## **ALTERNATIVES**

The project was completed satisfactorily by the Contractor. Not accepting completion would likely lead to a contractual dispute with the Contractor.

## **ATTACHMENTS**

1. Resolution
2. Project Map