



CITY OF MILPITAS AGENDA REPORT (AR)

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| Item Title: | Approve and Authorize the City Manager to Execute Amendment No. 4 with PSOMAS for Mapping and Field Investigation of the Traffic Signal Intersection and Fiber Optic System in the City GIS for the total amount of \$93,201, for a total not-to-exceed contract amount of \$339,529, for Technology Project, Project No. 3427 |
| Category: | Consent Calendar-Community Development |
| Meeting Date: | 3/1/2022 |
| Staff Contact: | Steve Erickson, Engineering Director/City Engineer, 408-586-3301 |
| Recommendations: | Approve and Authorize the City Manager to Execute Amendment No. 4 with PSOMAS for Mapping and Field Investigation of the Traffic Signal Intersection and Fiber Optic System in the City GIS for the total amount of \$93,201, for a total not-to-exceed contract amount of \$339,529, for Technology Project, Project No. 3427 |

BACKGROUND:

The Technology Projects, Project No. 3427 (“Project”) is in the adopted 2022-2026 Capital Improvement Program. The City has an extensive GIS system, database and mapping of City underground water, sewer and storm drain assets. GIS mapping utility layers are referenced from 2,000 records of completed improvements totaling approximately 35,000 utility features. Originally, the water, sewer and storm drain assets were mapped in Auto CAD and were subsequently converted to a GIS database format. As a result, data from the CAD conversion including some numeric data requires rectification to properly convert to the new GIS format. The City’s GIS mapping system also requires updates to include public improvement infrastructure information from development projects that were completed within the last 15 years and critical infrastructure such as traffic signal and fiber optic systems.

On June 18, 2019, the City Council approved the professional service agreement with PSOMAS to enhance, update, and verify the City GIS utility data base and public improvement infrastructure information from development project records for a total price not-to-exceed amount of \$154,025. On April 1, 2020, the City Manager executed Amendment 1 to extend the expiration date of the Agreement by six months to allow the Consultant additional time to complete the verification, evaluation, and update of City utility information in the GIS system.

On June 2, 2020, City Council adopted a resolution for Approval of Contracts and Payments over \$100,000 which included an amendment to PSOMAS professional service agreement not-to-exceed \$200,000 for GIS utility data verification and update. On October 1, 2020, the City Managed executed Amendment 2 to expand mapping services to include traffic signals, communication interconnections between signals, and fiber optic facilities throughout the City through record drawing research and limited field investigation for an additional amount of \$92,303 and for a total not-to-exceed contract amount of \$246,328. On October 1, 2021, the City Manager executed Amendment 3 to extend the expiration date of the Agreement by six months to allow the Consultant additional time to complete the work.

ANALYSIS:

In reviewing the GIS traffic signal, intersection, fiber optic database layer, it was discovered that the existing data model was insufficient to deliver the expected level of asset information, and additional field investigative work and mapping of an additional 15 City traffic signals and fiber optic systems was required. Updating the

data base and mapping of these critical infrastructure assets is critical for ongoing maintenance, planning future system improvements and upgrades, and to allow for the accurate locating of these underground facilities during construction to avoid damage and disturb these critical infrastructures.

Staff has negotiated a scope and fee with PSOMAS to complete the additional data model work for 15 traffic signals, and to perform additional field investigation and mapping of the City fiber system at 5 locations. This will conclude the mapping task of traffic signal and fiber optic system. Future work to update GIS related to City infrastructure will be funded through a new CIP "GIS Development and Data Collection" project. Staff recommends the City Council approve and authorize the City Manager to execute Amendment No. 4 (**Attachment 1**) with PSOMAS for additional compensation amount of \$93,201 for a new contract not-to-exceed amount of \$339,529, which is considered reasonable for the services to be provided.

POLICY ALTERNATIVE:

Alternative: Not approve and authorize the City Manager to execute an Amendment No. 4 with PSOMAS for the update of the City's GIS mapping systems.

Pros: None

Cons: GIS database will remain outdated and not include records of these critical infrastructure for use by City staff to complete their duties.

Reason not recommended: Verification and update of the GIS database would provide significant cost savings resulting from greater efficiency in asset management and distribution of asset data and would benefit staff across multiple departments including Engineering, Public Works and Fire.

FISCAL IMPACT:

Adequate funds are available in Project No. 3427, Technology Projects, for this contract amendment, and no additional appropriation is required. Project No. 3427 is funded by the General Government CIP Fund and the Permit Automation Fund.

As of 12/31/2021, uncommitted balance of the Project is as follows:

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| Available Project Budget | \$491,402 |
|--------------------------|-----------|

Summary of Estimated Remaining Costs:

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|----------------|-----------|
| Amendment No.4 | \$93,201 |
| Total | \$398,201 |

California Environmental Quality Act

Not Applicable

Recommendations:

Approve and Authorize the City Manager to Execute Amendment No. 4 with PSOMAS for Mapping and Field Investigation of the Traffic Signal Intersection and Fiber Optic System in the City GIS for the total amount of \$93,201, for a total not-to-exceed contract amount of \$339,529, for Technology Project, Project No. 3427

Attachments:

1. Original Agreement
2. Amendment No. 1
3. Amendment No. 2
4. Amendment No. 3
5. Amendment No. 4