TTEM #: 17
DATE: 10-14-25
DEPT: PW

COUNCIL ACTION FORM

SUBJECT: 2025/26 TRAFFIC SIGNAL PROGRAM - EMERGENCY VEHICLE PREEMPTION UPGRADES

BACKGROUND:

The Traffic Signal Program provides for both the replacing of older traffic signals and constructing new traffic signals in the City. As part of this program, the City will upgrade the emergency vehicle preemption (EVP) systems at intersections included in Phases 1 through 3 of the Intelligent Transportation System (ITS) Program.

EVP systems allow emergency response vehicles such as police, fire, and emergency medical services to have priority when approaching a signalized intersection. The EVP systems recognize the unique frequency of emergency beacons and prompt the signal software to change the signal operations to give priority to emergency response vehicles. Phases 4 & 5 of the ITS Program will include EVP upgrades during design and bidding phases.

The existing EVP systems, installed approximately 15 years ago, are now out of warranty and cannot be repaired. To ensure continued reliable operation, these outdated systems will be replaced. The new EVP units are fully compatible with the existing emitters used in emergency vehicles, meaning that no vehicle equipment replacement will be required. Additionally, the upgraded systems include a blue confirmation light, allowing emergency responders to visually confirm that their preemption signal has been received by the traffic signal.

To align with the original ITS project rollout, the EVP upgrades will also be completed in three phases. The City's existing EVP systems are eligible for a 10–20% trade-in credit, which will be applied sequentially: systems removed during Phase 1 will be traded in to offset the Phase 2 purchase, and so on, with the final credit applied after Phase 3 completion for future EVP purchases.

The City of Ames utilizes Tomar-brand EVP systems, which are available exclusively through MoboTrex, LLC of Davenport, lowa, due to regional distribution rights. City staff, therefore, solicited a single-source proposal from MoboTrex for the Phase 1 upgrades. After review, staff determined that the proposal is acceptable and consistent with prior EVP purchases. The City's existing EVP systems are eligible for a 10–20% trade-in credit, which will be applied toward Phases 2 and 3 of the EVP replacements. City staff will perform the installation of the new systems as schedules allow.

This project is identified in FY 2025/26 of the Capital Improvements Plan, with Road Use Tax funding allocated in the amount of \$200,000.

ALTERNATIVES:

- 1. Waive the Purchasing Policies and Procedures requirement for formal bidding procedures and award a contract to MoboTrex, LLC of Davenport, IA, in the amount of \$84,135 for Phase 1 of the 2025/26 Traffic Signal Program EVP Upgrades.
- 2. Do not proceed with this project at this time and reject the emergency vehicle preemption systems proposal.

CITY MANAGER'S RECOMMENDED ACTION:

This project will complete important emergency vehicle preemption upgrades providing continuity for emergency response through signalized corridors. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.

ATTACHMENT(S):

Phase 1 Map.pdf Ames Phase 1 quote.pdf