



City Council Report

Date: May 21, 2012
To: City Council
Through: Kari Kent, Deputy City Manager
From: Dan Cleavenger, Transportation Department Director
Alan Sanderson, Deputy Transportation Director—Traffic Engineer
Subject: Agreement with ADOT for Traffic Signal Enhancements
Council District 6

Strategic Initiatives



Purpose and Recommendation

It is recommended the City Council approve and authorize the City Manager to execute an intergovernmental agreement (IGA) between the City and the Arizona Department of Transportation (ADOT) for traffic signal enhancements to be installed with the construction of SR 24 (Gateway Freeway), between SR 202 and Ellsworth Road.

Background

The groundbreaking for construction of SR 24 between SR 202 and Ellsworth Road took place last month. Under the provisions of a previous IGA with ADOT, the City of Mesa will operate and maintain the traffic signals at SR 202 & Hawes Road, and at SR 24 & Ellsworth Road that will be installed with this project. See Figure 1. Mesa traffic signals at major intersections include emergency vehicle preemption systems to aid the Fire Department on emergency responses, and traffic monitoring cameras. ADOT considers these features enhancements because they are not included in ADOT signals. ADOT requires the City to pay for such enhancements.

Discussion

In a previous agreement, Mesa agreed to operate and maintain freeway interchange signals within and along the border of the City. In exchange, ADOT allows the City to install fiber optic communication systems for traffic signal control in ADOT conduits along the freeway system. This benefits the City, ADOT, and the public. The City benefits by using ADOT's conduit along area freeways, thus avoiding the cost of installing separate City conduit. When the agreement was executed in 2006, the cost for Mesa to install the same amount of conduit the City was getting access to was

estimated at \$8 million. The cost to operate and maintain the 39 interchange traffic signals that ultimately will be Mesa's responsibility totals about \$195,000 per year at current costs. Mesa currently operates and maintains 28 interchange signals, costing about \$140,000 annually. The public benefits because sharing the conduits installed by ADOT is a more efficient use of tax revenues than building duplicate facilities. The public also benefits because Mesa integrates the interchange signals into the citywide traffic signal control system, providing for coordination between the interchange signals and adjacent street signals. Operating the interchange signals also allows Mesa to include emergency preemption systems for the Fire Department.

Two new traffic signals will be constructed with the first phase of SR 24: one at SR 202 & Hawes Road, and one at SR 24 & Ellsworth Road. It is more efficient to include the Mesa enhancements with the original signal construction rather than having City crews modify the new signals after they are built, so ADOT included the Mesa enhancements in the freeway construction project.

Alternative

NOT AUTHORIZING the City Manager to enter into this agreement would require ADOT to delete the fire vehicle preemption systems and traffic monitoring cameras from the initial construction of these signals. City crews would have to make these modifications after the freeway project is complete. This is not recommended because it is much easier and more efficient to include these features with the original signal construction. It also eliminates any potential for the original contractor to claim any warranty repairs that may be needed were necessitated by the City's modification of the signal.

Fiscal Impact

Financial impact to the City is estimated at \$46,910 to be paid with Transportation Sales Tax funding budgeted for new signal installation.

Coordinated With

No other departments are affected by this agreement.

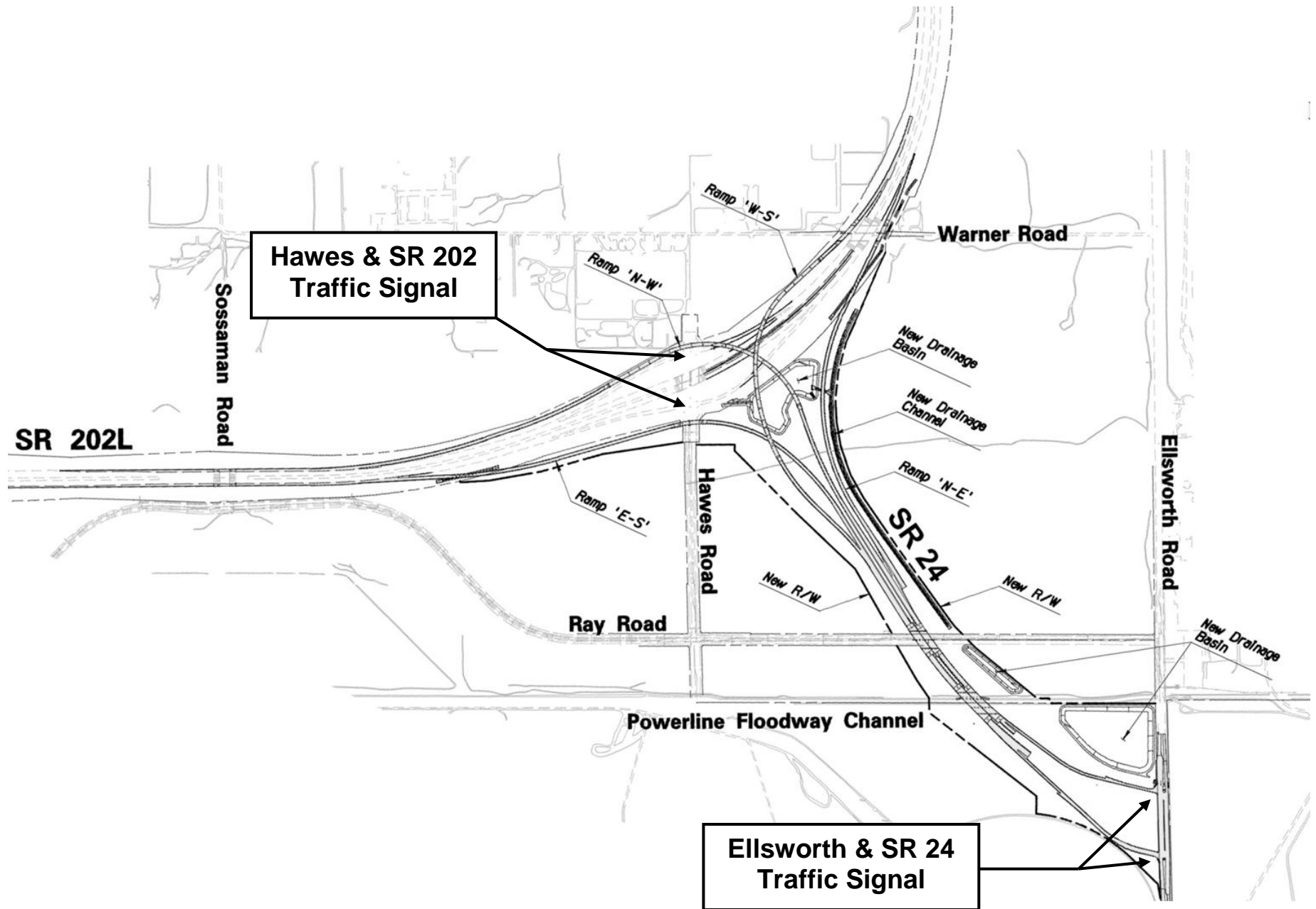


Figure 1. Traffic Signals with Mesa Enhancements Included in SR 24 Project