



Traffic Signal Equipment and Flood Warning System Contracts

City Council

February 17, 2025

Traffic Signal System



- City staff operates and maintains 16 signalized intersections (orange) with a 17th (Hidden Creek Pkwy @ Gardens) under construction
- Each signalized intersection relies on a number of components to operate
- Implementation of the Intelligent Transportation System (ITS) project and pending assumption of maintenance responsibilities for an additional 27 TxDOT signalized intersections will increase the need for additional equipment
- Expanding the network of signals maintained requires maintaining a supply of long lead signal equipment components



Flood Warning System



On July 22, 2024, Council provided direction to incorporate funding in the FY25 budget to install flood warning systems (sensors and flashing lights) at the three low water crossings below:

Hulen Street

Existing Conditions

- Constant flow of water except in prolonged dry conditions
- "Watch for Water" / "Turn Around Don't Drown" signs
- Flood gauges
- Moderate rain events result in flooding
- Gates are manually closed to prevent vehicles from accessing

Future Identified Improvements

- Bridge over railroad
- Estimated Cost - \$20m - \$25m (2024 dollars)
- Currently un-funded; exploring grants



South Fox Lane

Existing Conditions

- Floods in moderate rain events
- Flood gauge
- When flooded, there is no public outlet for (or emergency response access to) residents along Fox Ln. and Antonio Ct.
- No gates installed as they would exacerbate the access issue above

Future Potential Improvements

- Additional signs/flashers - Estimated cost \$125,000 - \$150,000
- Explore connection to Hidden Creek Parkway to provide additional public egress and emergency response access
- Gates if connection to Hidden Creek Parkway is made



SE Tarrant Ave

Existing Conditions

- Floods in moderate rain events with frequent road closures
- Low water crossing signs
- No gates, temporary barricades deployed

Pending Improvements

SE Tarrant Sewer Erosion Control Project

- Council approved design contract in May 2024, construction anticipated early 2025
- Project addresses erosion threatening sewer infrastructure
- Project raises crossing subject to downstream adverse impacts to reduce the frequency of flooding the road
- Total project estimated cost - \$1,100,000

Texas Water Development Board Grant Application

- Grant application includes safety improvements at this location
- Anticipated notification in August
- Estimated \$124,000 (includes signs and flashers)



Vendor and Contract Background – Paradigm and Consolidated Traffic Controls



- Public Works has spent \$13k to \$35k annually over the last few years purchasing and repairing signal components for the **current** 16-signal system currently maintained by the city
- Both vendors are the authorized distributors for the Burleson area for many components necessary for the signal system to operate and has a current BuyBoard cooperative contract
- Paradigm also provides equipment necessary to address the flood warning system funded in the FY2025 budget that can be seamlessly integrated into the Traffic Management Center currently under construction (anticipated installation by May 2025)
- Many other cities in the DFW area, such as Fort Worth and Plano also use this same BuyBoard contract for competitive pricing of common system components that comply with the TxDOT specifications applicable in this area
- The proposed agreements will help ensure that repairs needing parts are completed promptly and traffic signal downtime is mitigated and deliver an integrated flood warning system for the three low water crossings included in this year's budget

BuyBoard Cooperative Purchasing



- Cooperative contracts enhance procurement efficiency for local governments by leveraging collective purchasing power, allowing access to diverse goods and services at competitive rates, and saving time and resources
- BuyBoard's solicitation processes complies with state procurement laws



Actions Requested

Approve a Cooperative Purchase Customer Agreement for replacement parts for traffic signal systems from Paradigm, Inc., through BuyBoard Cooperative Purchasing (Contract #695-23), for two years in the amount of \$335,000

Approve a Cooperative Purchase Customer Agreement for replacement parts for traffic signal systems from Consolidated Traffic Control, Inc., through BuyBoard Cooperative Purchasing (Contract #703-23), for two years in the amount of \$150,000



Questions / Discussion

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