SUBJECT:
Presentation and Final Report regarding improvements to five signalized intersections supported by span-wires.

SUMMARY:
City Council is asked to receive a report and presentation regarding recommended improvements to five signalized intersections currently supported by outdated span-wire systems at:
1. Mooring Line Drive & Crayton Road
2. Harbour Drive & Crayton Road
3. Fleischmann Blvd & 10th Street North
4. 9th Street South & 10th Avenue South
5. 8th Street South & Broad Avenue South

BACKGROUND:
The Department has been upgrading signalized intersections that rely on cable wire to support traffic signals for many years. The remaining five City-owned span wire intersections are noted above.

Span wire systems are susceptible to damage during strong wind events and do not provide the level of protection or operational durability when compared to a signal system supported by a mast-arm system. The Florida Department of Transportation (FDOT) guidance states that signalized intersections within 10-miles of the coastline be supported by a mast-arm support system to achieve safety and performance standards associated with high wind events. The FY-16-17 Capital Improvement Program allocates $50,000 for a study of the remaining span-wire systems that would consider intersection alternatives, prioritization and future capital cost.

FDOT provides significant guidance to the City through design manuals and construction standards. Compliance with FDOT’s guidance will provide high public safety standards and liability protection. Prior to moving forward with a project that would install large, rigid, industrial mast-arm infrastructure to support a signalized intersection, this study will evaluate the application of a roundabout. Current FDOT policy on roundabouts states that “Roundabouts shall be evaluated on new construction, reconstruction and safety improvement projects, as well as anytime there are proposed changes in intersection control that will be more restrictive than the existing conditions.” Roundabouts provide several advantages over signalized intersection, including safety, reduced delay, calming speeds, and aesthetics. The US Department of Transportation Technical Summary on Roundabouts indicates that:
BACKGROUND (cont.):

- Roundabouts can provide up to 35% reduction in total crashes and 76% reduction in injury crashes;
- Roundabouts have lower overall delay than signalized and all-way stop-controlled intersections;
- Roundabouts provide environmental benefits in air quality, fuel conservation, and noise reduction;
- Roundabouts can improve pedestrian crossing opportunities;
- Roundabouts provide opportunities for attractive entries or centerpieces to neighborhoods through landscaping, monuments and art.

Adeas-Q, LLC is a transportation consulting firm that has been pre-qualified by the City through RFQ-14-054 and has designed several intersection improvements in central and southwest Florida. Adeas-Q and staff will present a summary of the work and recommendations for improvements.

FUNDING SOURCE:
This study was funded by the Streets & Traffic Capital Improvement Fund for an amount of $49,994.

RECOMMENDED ACTION:
No action is requested at this time.