

CITY OF WASHINGTON, ILLINOIS City Council Agenda Communication

Meeting Date: April 5, 2022

Prepared By: Dennis Carr, P.E. – City Engineer

Agenda Item: Freedom/Lakeshore Roundabout versus T-Intersection

Explanation: When the City applied for state assistance with funding the middle section of Freedom Parkway, the project had shown the use of a roundabout at the Freedom/Lakeshore intersection. The use of the roundabout added to the strength of our application and was a reason for the project being selected. Roundabouts have been constructed in several of the nearby cities so residents have most likely used them and are aware of their operation. Roundabouts reduce the severity of crashes by limiting the potential conflict areas of an intersection. Pedestrian safety is also increased by roundabouts because of pedestrian refuges between lanes that allow for pedestrians to only have to navigate a single traffic direction at a time.

Terra has previously put together a presentation for council on roundabouts and their increased safety aspects to both drivers and pedestrians during the Nofsinger realignment project. Staff wants to get a general consensus on the use of a roundabout at the Freedom/Lakeshore intersection so that Terra has proper direction in the Phase 2 design.

Operationally speaking, the T-Intersection would operate satisfactorily with Lakeshore being constructed to Bus 24. A stopped controlled intersection would not operate very well if a north leg were to be constructed to facilitate future development. This leg and potential traffic might meet warrants for a signalized intersection which can cost around ½ to ½ million dollars which would be entirely locally funded. The roundabout would perform very well regardless of the southern or northern legs of Lakeshore constructed.

The time to construct a roundabout is during the initial construction of the road. Constructing a roundabout under live traffic is extremely difficult and extremely expensive. Both intersection types are now shown over 100 ft west due to conflicts with Ameren underground vaults that were not there at the time that Austin originally surveyed this project. The vault in conflict of the original intersection location is roughly 8 ft by 13 ft by 8 ft deep and are being investigated next week by Terra for future grading purposes. The construction of Lakeshore in the future would require ROW acquisition from the southwest property owner but does better align with the Lakeshore Bus 24 intersection. With Ameren having constructed in an easement, the City would have to pay to relocate the underground facilities and the pole nearly \$500,000 to keep the intersection where it was initially shown.

Fiscal Impact: The construction of the roundabout would increase the cost of the project but was included in the previous cost estimates for Freedom used for planning.

Recommendation Summary: Staff requests City Council openly discuss the future direction of this intersection so that we can give Terra solid direction on the Phase 2 Design.

Action Requested: Discussion and Direction



