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Memorandum Department of Public Works

- **TO:** Michael O. Geisel, P.E. City Administrator
- **FROM:** James A. Eckrich, P.E. Public Works Director City Engineer
- **DATE:** April 19, 2024



RE: Wilson Avenue Asphalt Overlay

As you know, on April 16 the City of Chesterfield City Council approved funding for the 2024 Asphalt Overlay Project and authorized the City Administrator to execute a contract with the low bidder, E Meier Contracting. The streets originally included as part of this project are: Edison Avenue, RHL Drive, Chesterfield Commons Drive, and Chesterfield East Drive. The scope of the work will include milling the top layer of asphalt, base repairs (as necessary) and a new two-inch asphalt surface course.

Due to the favorable pricing provided by E Meier (\$944,238) the City Staff recommended (and City Council approved) that the concrete section (the southern portion of Wilson Avenue from Clarkson Road to Wilson Manor Drive) be added to this project. While the City of Chesterfield does not typically overlay asphalt onto concrete streets, it makes sense to do so in this case for five reasons:

- There is a longitudinal crack in both lanes of Wilson Avenue which is causing the street to deteriorate prematurely. Treating that crack will allow us to extend the life of Wilson Avenue and avoid a costly reconstruction. However, the mastic material used to treat the crack will function best if it is subsequently overlaid with asphalt.
- Most concrete streets in the City of Chesterfield contain three-inch rolled curb. When those streets are overlaid the asphalt reduces the curb capacity to one-inch or less. This can be detrimental during heavy storm events. The concrete curb on Wilson Avenue is a full six-inch curb that can accommodate a two inch overlay, with four inches of curb remaining.
- While the City of Chesterfield overall has indicated a preference for concrete streets, we have data on Wilson Avenue that the residents in that area prefer that Wilson Avenue have the appearance of a rural / country road comprised of asphalt. The survey conducted prior to the recent grant application showed 75% of the residents in the area prefer Wilson Avenue as an asphalt road.

- Overlaying Wilson Avenue from Wilson Manor to Clarkson is estimated to cost \$200,000 and will extend the life of the pavement ten to twelve years. A concrete reconstruction is estimated to cost \$1,350,000.
- The remainder of Wilson Avenue is comprised of an asphalt driving surface.

As referenced above, the longitudinal cracks on Wilson Avenue will be treated prior application of the asphalt surface course. E Meier has offered to perform this mastic treatment, which is a relatively new technology, at no cost to the City of Chesterfield. Once overlaid the cracks will no longer be visible and the southern portion of Wilson Avenue will have an asphalt surface course that matches the remainder of Wilson Avenue.

Action Recommended

No action is required at this time. This matter is being presented to the Planning and Public Works Committee solely for informational purposes and to explain why the City Engineering Staff has recommended an asphalt overlay on the southern portion of Wilson Avenue.

Should you have questions or require additional information, please let me know.

Please forward to PPW for information and to affirm management's direction.

2024-4-22