



Department Source: Public Works

To: City Council

From: City Manager & Staff

Council Meeting Date: December 18, 2017

Re: Setting a Public Hearing – Nifong Boulevard Corridor Improvement Project

## Executive Summary

Setting a public hearing for January 16, 2018 for the proposed construction of the Nifong Boulevard corridor, between Providence Road and Forum/Willowcreek, improvement project. This project includes the addition of two driving lanes, bike lanes, sidewalks, and intersection improvements. As part of this project, the bid package will include an add alternate for improvements to Forum Boulevard between Green Meadows Road and Nifong Boulevard. A Targeted Outreach meeting to discuss access management with commercial businesses located between Providence and Peachtree was held on July 27, 2017. An Interested Parties (IP) meeting for the entire Nifong Boulevard corridor improvement was held on October 26, 2017.

## Discussion

Improvement of the Nifong Boulevard corridor between Providence Road and Forum/Willowcreek was identified in the 10-year plan for the 0.25% Capital Improvement Sales Tax ballot initiative passed in August of 2015. The section of Nifong between Providence Road and Peachtree consists of mostly commercial properties; and the section between Peachtree and Willowcreek is a mix of commercial and residential properties. The Nifong Boulevard project corridor is very dynamic with many existing businesses, several developing sites, and the potential for future development of property. The two lane road is classified as a major arterial and includes some left and right turn lanes throughout most of the corridor. A site location map of the existing layout is attached as [Exhibit A](#).

A traffic study for the corridor was completed by EFK Moen Consulting Engineers, and is attached as [Exhibit B](#). EFK Moen is a sub-consultant to our prime consultant, Engineering Surveys & Services (ES&S). Traffic counts were taken using cameras at 30 different intersections and commercial drives within the project limits. Traffic counts were obtained for bicycles, pedestrians, cars, trucks and buses during January 24-26, 2017. The peak congestion periods occurred between 7:15-9:00 a.m. and between 3:45-6:15 p.m. With this information, EFK Moen analyzed traffic movement in the corridor for the existing traffic conditions and for the year 2040. They analyzed the corridor for both the existing roadway layout and with proposed corridor improvements. An annual growth rate of 1% was used for the traffic forecasting growth, and the traffic modeling was coordinated with the Nifong Boulevard Intersections Improvement project at Sinclair Road and Old Mill Creek Road.

When modeling the corridor, operating conditions were graded as a Level of Service (LOS) A through F. LOS A was considered "Free Flow" and LOS F considered "Fully Saturated". LOS C was the overall intersection target grade for peak period traffic operations. The LOS for



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each intersection, the roadway with both existing conditions, and with the proposed improvements are included in the traffic study (Exhibit B). The following summarizes the LOS.

- Existing intersection conditions, east end of corridor: LOS range of C to F.
- Existing intersection conditions, west end of corridor: LOS range of B to F.
- 2040 traffic forecast with existing intersections layout: LOS range of D to F.
- 2040 traffic forecast with proposed corridor improvements: LOS range of B to D.

As part of developing the concept plans, ES&S has analyzed intersection improvements and geometric layout of the roadway with the additional through lanes, turn lanes, bike lanes, and sidewalks. ES&S also completed the topographic survey, geotechnical investigation, and pavement analysis. Another sub-consultant, Landworks Studios, developed low maintenance landscape recommendations for the project.

Exhibit C identifies the proposed improvements recommended for final design of the project. The existing conditions, the proposed improvement options, traffic movements, safety, and the traffic study forecast/modeling were considered in proposing the following improvements:

- Construction of  $\frac{3}{4}$ -access (right-in, right-out, left-in) at most intersections between Providence and Bethel.
- Installation of a traffic signal at Nifong Boulevard with Monterey.
- Incorporation of the previously approved traffic signal at Nifong Boulevard with proposed Aurora Dr (see Development Agreement with Jeffrey E Smith Investment Co dated 12/22/11).
- Construction of intersection improvements to the existing signalized intersections at Nifong Boulevard with Bethel and Nifong Boulevard with Forum.
- Installation of pedestrian crosswalks and pedestrian signal heads at all signalized intersections.
- Construction of an additional driving lane for eastbound and westbound traffic.
- Construction of bike lanes.
- Construction of sidewalks where there is not existing sidewalk.
- Construction of stormwater improvements including water quality improvements.
- Planting of low maintenance landscape that will enhance the change in the roadway from commercial to residential.

Installation of  $\frac{3}{4}$ -access at commercial property drives is recommended. Many of the existing drives create turning conflicts that increase congestion as traffic demands increase. Long wait times during peak hours influence drivers to take shorter gaps for a two-stage movement (left turn out of drive with having to look both right and left). The existing full-access drives make it challenging for non-motorized transportation as well. These shorter gaps create a dangerous situation for both motorized and non-motorized users. The proposed  $\frac{3}{4}$ -access removes the left-out of drives (right-in, right-out, left-in movements still may be made). A left-turn lane is designated by islands and pavement markings on Nifong Boulevard for the left-in movement. The left-out movement may be made at the proposed



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signals at Monterey and at Aurora. Improving access management will have a positive impact to traffic flow and safety.

Included with the Nifong Boulevard corridor improvement project, staff proposes to bid an add alternate for improvements along Forum Boulevard between Green Meadows Road and Nifong. This section of roadway narrows down to two lanes and includes a mix of commercial and residential properties. Proposed improvements include the addition of two driving lanes, center left turn lane, bike lanes, and sidewalks between the proposed intersection improvements at Nifong Boulevard and the roundabout at Green Meadows that is currently under design (see proposed layout in [Exhibit D](#)).

A Targeted Outreach meeting to discuss access management with commercial businesses located between Providence and Peachtree was held on July 27, 2017. Proposed improvement options included full access, ¾-access and right-in, right-out only access along Nifong Boulevard. Each option also included a signal at Monterey Drive. Twenty people signed in at the meeting and five written comments were received (see [Exhibit E](#)). Comments ranged from in favor of the ¾-access option to site specific comments by business/property owners.

An IP meeting for the entire proposed corridor improvement was held on October 26, 2017. Diagrams showing the proposed improvements were presented to the public along with the traffic study for the entire corridor. Thirty-nine people signed in at the meeting and ten written comments were received (see [Exhibit E](#)). Most of the comments consisted of general recommendations or concerns to be considered for the owner's property. ES&S is working with the property owners to address comments during the design of the project.

Construction of the proposed project is planned for spring of 2020. Acquisition of permanent street easements, permanent drainage easements, and temporary construction easements from property owners will be necessary for construction of the project. The total estimated project cost which includes design, easement acquisition, utility relocation, and construction is \$12,300,000, and will be funded by the 0.25% Capital Improvement Sales Tax.

## Fiscal Impact

Short-Term Impact: The estimated total project cost for the improvements is \$12,300,000 and will be funded from the 0.25% Capital Improvement Sales Tax.

Long-Term Impact: Routine maintenance for this improvement is estimated at \$10,100/year.

## Strategic & Comprehensive Plan Impacts

### [Strategic Plan Impacts:](#)

Primary Impact: Infrastructure, Secondary Impact: Secondary, Tertiary Impact: Tertiary

### [Comprehensive Plan Impacts:](#)

Primary Impact: Infrastructure, Secondary Impact: Mobility, Connectivity, and Accessibility, Tertiary Impact: Tertiary



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## Legislative History

Date	Action
07/27/2017	Targeted Outreach meeting held
10/26/2017	Interested Parties meeting held

## Suggested Council Action

Adopt the resolution setting a public hearing for January 16, 2018, for the proposed construction of the Nifong Boulevard Corridor Improvement project.