
City Council Regular Meeting

DEPARTMENT: Development Services

FROM: Michelle McCullough, P.E., CFM – City Engineer

MEETING: December 9, 2024

SUBJECT:

Consider approval of a professional services agreement with Kimley-Horn and Associates, Inc. for \$60,000.00 to evaluate alignment options for Lakewood Drive from County Road 1020 to County Road 1021. (Staff Contact: Michelle McCullough, City Engineer)

SUMMARY:

The City of Burleson continues to experience significant growth within the city and extraterritorial jurisdiction (ETJ), creating traffic congestion in rural and urban areas. The City's adopted Master Thoroughfare Plan (MTP) includes several collector and arterial roadways that, when constructed, will provide additional capacity throughout the city and ETJ, improving traffic flow and connectivity. Roadways included in the city's MTP and considered critical to the City's roadway network are Alsbury Blvd., Hulen Street, Lakewood Drive, and SH-174.

Lakewood Drive is included on the city's MTP as an arterial roadway. A portion of Lakewood (County Road 914) is currently under construction from CR 1020 to FM 1902 as a four-lane divided roadway with a planned temporary connection to FM 1902. Lakewood Drive extension is currently under design and will serve as the area's major "through" movement. FM 1902 will ultimately be realigned to "tee" into Lakewood Drive as part of the design of the extension of Lakewood Drive. A traffic signal is anticipated at this future intersection.

As part of the design contract, a traffic study has been completed, and the schematic design has been initiated. The schematic design will serve as the 30% design with full plans and specifications to follow once TxDOT has approved the schematic design. The staff has met with TxDOT and the North Central Texas Council of Governments (NCTCOG) several times to discuss the traffic study findings. As mentioned above, Lakewood Drive was identified as the major movement through the area and is projected to have a volume of 20,000 to 24,000 cars a day in the future. Working with TxDOT, the city submitted a request to include Lakewood Drive in the Federal Functional Class System, which is required for the project to be eligible for federal funding.

The city's Mobility Plan included an analysis of roadways to determine the existing level of service. Several factors, such as speed, density, delays, etc., are evaluated to assign a service rating ranging from A to F, with F considered failing. The city's goal is for much of the roadway network to operate at a level of service of C or better, which means drivers can drive along a roadway with few delays through the corridor. The design and construction of Lakewood Drive, ultimately from SH 174 to FM 1902, will improve the future roadway connectivity through this area as Burleson continues to see development of the surrounding land.

As construction costs continue to increase every year, staff look for funding opportunities to help offset costs from residents and business owners of the city. TxDOT's Transportation Improvement Plan (TIP) is a four-year capital improvement program that serves as a short-term programming document and serves to support the long-range statewide transportation plan. Projects listed on the TIP are expected to begin construction within four years.

Projects partially or fully funded from federal sources must be included on the Federal Functional Classification System as a major collector or above and included in the TIP. This study will provide the conceptual plan required to begin discussions with staff from the North Central Texas Council of Government (NCTCOG) regarding classifying Alsbury Blvd. as an arterial roadway with inclusion in the Mobility 2050 Plan and the TIP to be eligible for federal funding.

The analysis will include an alignment study with up to four options and include the following deliverables –

- Traffic study that will evaluate up to four alignment options from County Road 1020 to County Road 1021
- Conceptual design for each option that will include centerline alignment and proposed right-of-way showing impacts to property
- Develop typical sections based on City's Mobility Plan
- Conceptual level opinion of probable cost for each alignment option
- Selected option to include the following based on LIDAR information -
 - Roadway curbs
 - Sidewalks
 - Intersection layouts
 - Potential median openings

The information prepared for this study will be submitted to NCTCOG to support the current discussions and requests for inclusion in the Federal Functional Class System and TIP program regarding the Lakewood Drive extension project from County Road 1020 to FM 1902. It is important to note that when Lakewood Drive is included in the Federal Functional Class System, future expansion of Lakewood Drive would be eligible to be included in a future TIP to receive federal funding for design and construction.

RECOMMENDATION

Approve a professional services agreement with Kimley-Horn and Associates, Inc. for \$60,000.00 to evaluate alignment options for Lakewood Drive from County Road 1020 to County Road 1021.

PRIOR ACTION/INPUT (Council, Boards, Citizens):

NA

REFERENCE:

NA

FISCAL IMPACT:

Budgeted Y/N: N

Fund Name: Non-Bond Capital Program

Full Account #s:

Amount: \$60,000

Project: DV2501

STAFF CONTACT:

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