

City Council Regular Meeting

| Public Works & Engineering |
|----------------------------|
| |

FROM: Errick Thompson, P.E., CFM^{®,} Director

MEETING: February 5, 2024

SUBJECT:

Consider an ordinance altering the Speed Limit along Hemphill Street between NE Alsbury Boulevard and Burleson City Limits from 45 miles per hour to 40 miles per hour; directing the City Manager or designee to erect the appropriate signage; incorporating the recitals into the body of the ordinance; finding and determining that the meeting at which this ordinance is passed is open to the public as required by law; providing a cumulative clause, a severability clause, a savings clause, a penalty clause, and an effective date. (First and Final Reading) (*Staff Presenter: Errick Thompson, Director of Public Works & Engineering*)

SUMMARY:

Hemphill Street is a major collector according to the City's Master Thoroughfare Plan (MTP). Hemphill Street connects NE Alsbury Boulevard to the City of Crowley to the north and continues to ultimately connect to FM 1187. The city's MTP includes the extension of Hemphill Street to the south in the future, eventually connecting to Hillary Street.

Kimley-Horn and Associates, Inc. (KHA) completed an initial speed study in May 2022. At that time, the posted speed limit was 35 mph from NE Alsbury Boulevard to the Burleson city limits. Data collected for the speed study conducted in 2022 was at Windridge Lane on Tuesday, May 24, 2022. Based upon the results of that study, the 85th percentile speed for northbound and southbound traffic was approximately 43 mph. Based on the speed study results, KHA recommended altering the speed limit along Hemphill Street between NE Alsbury Boulevard and the Burleson city limits from 35 mph to 45 mph to maintain continuity through the corridor. City Council approved the recommendation in October 2022.

Following the speed limit change, complaints regarding speeding along Hemphill Street north of McAlister Road between Peach Lane and Plum Drive were received. To evaluate the current speeds, KHA collected speed and traffic volume data between Peach Lane and Plum Drive and between Plum and McAlister Road on Tuesday, October 24, 2023.

Based on the results of this study, between Peach Lane and Plum Drive, the 85th percentile speed for northbound and southbound traffic was approximately 39 mph and 35 mph, respectively.

Between Plum Drive and McAlister Road, the study showed the 85th percentile speed for northbound and southbound traffic was approximately 36 mph and 37 mph, respectively. In most instances, a speed limit based on the 85th percentile speed best reflects the expectations of the largest proportion of drivers; is found by most to be a safe and comfortable limit; facilitates speed enforcement; and offers the greatest chance of achieving some uniformity in speeds on a given road.

As stated above, the 85th percentile was found to be lower from McAlister to the Burleson city limit. This may be due to roadway characteristics including a horizontal curve within the roadway and narrowing of the roadway from four (4) to two (2) lanes as drivers approach the Burleson city limit.

Based on the results of the speed study conducted in October 2023, KHA recommended reducing the speed limit from 45 mph to 40 mph from McAlister Road to the Burleson city limit. Since Hemphill Street is a major collector with mainly a residential context, for safety and pedestrian considerations, KHA recommends reducing the speed limit from 45 mph to 40 mph between NE Alsbury Boulevard to McAlister Road as well as to maintain continuity along the corridor. In addition to a reduction in speed limit, installation of radar feedback signs may also aide in mitigating speeding along the corridor.

RECOMMENDATION:

Approve an ordinance altering the Prima Facie Speed Limit along Hemphill Street between SW Alsbury Boulevard and Burleson City Limits from 45 miles per hour to 40 miles per hour; directing the City Manager or designee to erect the appropriate signage; incorporating the recitals into the body of the ordinance; finding and determining that the meeting at which this ordinance is passed is open to the public as required by law; providing a cumulative clause, a severability clause, a savings clause, a penalty clause, and an effective date.

STAFF CONTACT:

Errick Thompson, P.E., CFM[®] Director of Public Works & Engineering <u>ethompson@burlesontx.com</u> 817-426-9610