

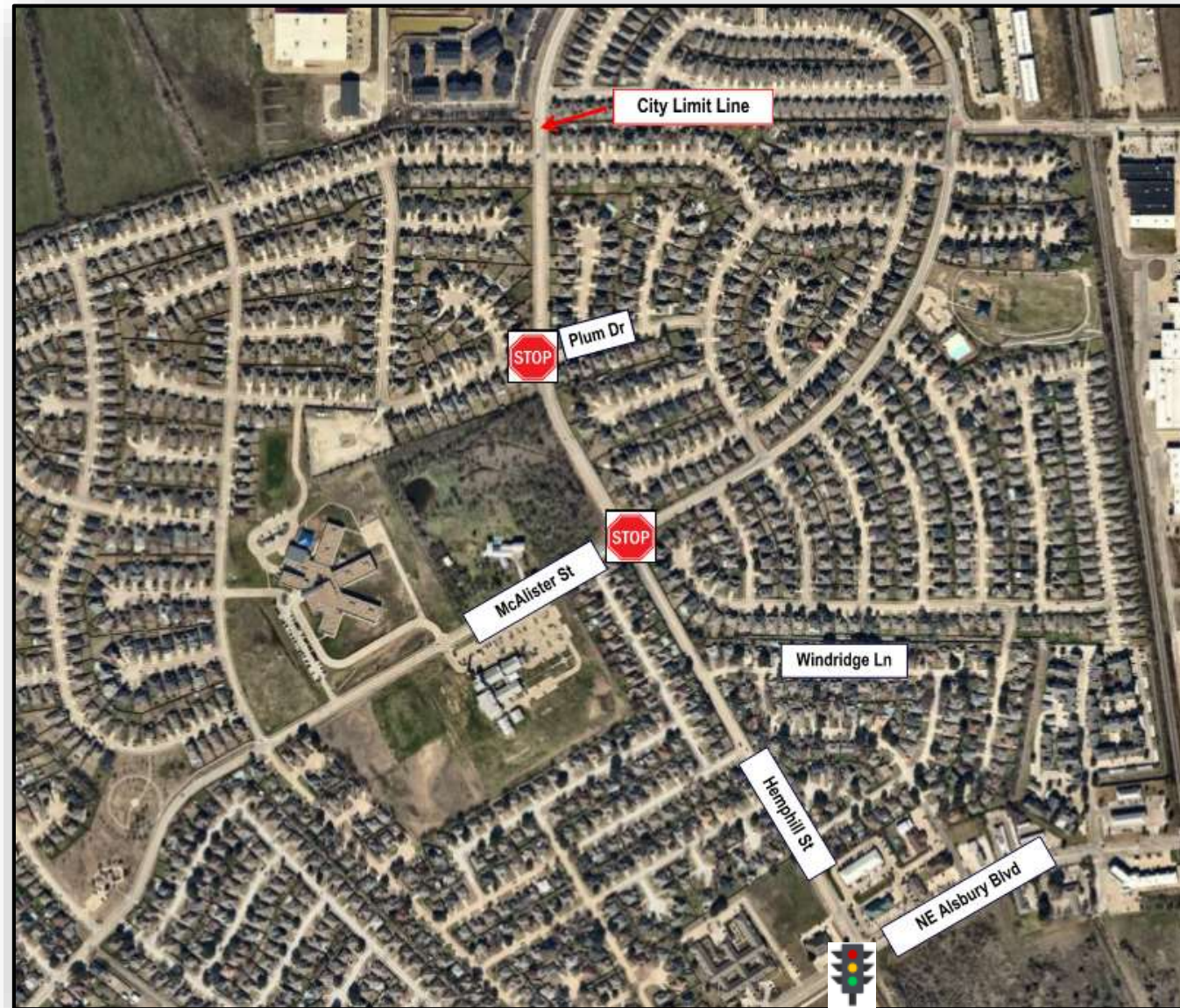
Revised Speed Zone Ordinance

Hemphill Street

City Council
February 5, 2024

Existing Conditions

- 45 mph speed limit from NE Alsbury Blvd to city limit line
- Posted speed limit for Hemphill St within Fort Worth city limit is 40 mph
- 4 - lane undivided roadway, roadway narrows to two-lane divided at city limit line
- 4 - way stop control at McAlister Rd and Plum Dr intersections



History

2022

- Professional traffic engineering consultant conducted speed study in response to speeding concerns
 - Data collection occurred along Hemphill Street just south of Windridge Ln
 - 85th percentile speed for northbound and southbound traffic was approximately 43 mph
- Burleson Police Department conducted two speed studies - 85th percentile speeds of 43 mph in both May 2022 and Feb 2023 studies

October 2022: Staff presented and City Council approved recommendation to increase speed limit along Hemphill St from NE Alsbury Blvd to the city limit from 35 to 45 mph for consistency along the corridor



Additional Analysis



In 2023, complaints were received regarding speeding along Hemphill Street, specifically between McAlister Rd and the city limit



Burleson Police Department conducted an additional speed study in July 2023 – results were 85th Percentile Speeds between 36 and 37 mph



A new traffic speed study was conducted October 2023 by professional traffic engineering consultant



Traffic data collected at two locations along Hemphill

Between Peach Ln and Plum Dr

Between Plum Dr and McAlister Rd



Consultant Traffic Engineering Study



Conducts 24 hour traffic counts and speeds during a normal mid-week day



Reviews similar roadways



Considers adjacent land use



Analyzes engineering roadway design



Verifies 85th percentile speeds



Makes professional, data-driven recommendations



Results

Speed Study

- 85th Percentile
 - Northbound and southbound traffic speed was between 35 mph – 39 mph Between Peach Ln and Plum Dr, respectively
 - Northbound and southbound traffic speed was between 36 mph – 37 mph Between Plum Dr and McAlister Rd, respectively
- Hemphill St has a residential context and for safety of pedestrians and consistency throughout the corridor, consultant recommended reducing the speed limit from 45 mph to 40 mph from NE Alsbury Blvd to the city limit

Memorandum

To: Michelle McCullough, P.E., CFM
Assistant Director
Public Works Department
City of Burleson

From: Jeff Whitacre, P.E., AICP, PTP
Kimley-Horn and Associates, Inc.

Date: January 22, 2024

Re: Hemphill Speed Study
Burleson, Texas



PURPOSE

Kimley-Horn was retained by the City of Burleson, Texas to perform a speed study along Hemphill Street, between Peach Lane and McAlister Road. Hemphill Street runs in a general north-south direction and has a posted speed limit of 45 mph.

The purpose of this memo is to evaluate the current speed of traffic along the roadway and existing geometry and propose any speed or traffic calming measures.

EXISTING CONDITIONS

Hemphill Street is a major collector that connects to Alsbury Boulevard to the south and FM 1187 to the north. Hemphill Street is a 48-foot-wide undivided four-lane facility from the all-way stop at McAlister Road to Peach Lane to the north. The section of Hemphill Street that is in the City of Fort Worth, to the north of Peach Lane, is a three-lane undivided section. Residents have reported concerns of vehicle speeds and overall safety in the study area.

SPEED ANALYSIS

Data Collection

To evaluate the current speeds along Hemphill Street, bi-directional speed and volume data were collected for a period of 24 hours on Tuesday, October 24, 2023, in the following locations:

- Hemphill Street, midblock between Peach Lane and Plum Drive
- Hemphill Street, midblock between Plum Drive and McAlister Road

Results

Based upon the results of this study (see attached), between Peach Lane and Plum Drive, the 85th percentile speed for NB and SB traffic was approximately 39 mph and 35 mph, respectively. The results included 1,152 NB and 1,028 SB total passenger cars.

Results, continued

- Hemphill St is classified as a major collector but has a residential context
- 85th percentiles speed limits:
 - Reflect the expectations of the majority of drivers, in most instances
 - Are found by most to be a safe and comfortable limit;
 - Facilitate speed enforcement; and
 - Offer the greatest chance of achieving some uniformity in speeds on a given road
- Consultant considered previous analysis of the corridor in addition to fall 2023 data
- For pedestrian safety and consistency along the corridor, consultant recommended reducing speed limit from 45 mph to 40 mph from NE Alsbury Blvd to the city limit, consistent with the speed limit along Hemphill within the City of Fort Worth to the north

Council Action Requested

Approve an ordinance on first and final reading altering the speed limit along Hemphill Street between NE Alsbury Boulevard and the city limit from 45 miles per hour to 40 miles per hour

With approval, implementation would occur within 30 days and include ample signage including as drivers enter Hemphill from NE Alsbury Blvd from the south and the residential side streets along the corridor. This will align with the existing speed limit along Hemphill within the City of Fort Worth to the north.



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Questions/Discussion

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