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TECHNICAL MEMO

STATE OF TEXAS
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LICENSED
PROFESSIONAL ENGINEER
07/31/2024

To: *Mr. Travis K. Hodges* —**Big Outdoor Texas, LLC**

From: *Mr. Onkar Dhondkar, P.E.* — **DeShazo Group, Inc.**

Date: July 31, 2024

Re: **Updated Traffic Analysis for Existing "Non-Premise District Activity Videoboard Sign" at 1302 Elm Street (North Field Street Side) in Downtown Dallas**
DeShazo Project No. 24032

BACKGROUND

This analysis is provided to update the previous technical memorandum used to satisfy the requirement for a traffic study in a request for a Specific Use Permit (SUP) for a non-premise district activity videoboard sign (a.k.a, electronic messaging board, etc.), or "sign," located at the N Field Street of the building at 1302 Elm Street in Downtown Dallas, Texas. The scope of the requisite study, as outlined in Section 51A-7.909(d)(2) of the Dallas Development Code, is to update the report of the results of implementing the sign as observed within 300 feet of its location.

This report was prepared by traffic engineers from **DeShazo Group, Inc.** (DeShazo) of Dallas, Texas—an engineering consulting firm providing licensed engineers skilled in the field of traffic/transportation engineering. DeShazo updated studies using existing field data and observations conducted on July 30th, 2024. An illustration of the existing sign installation location considered in this analysis is provided in **Exhibit 1**.

[NOTE: This analysis is specifically intended for this existing sign location as illustrated and does not apply to any other sign location. It is also assumed that the sign installation and operational parameters outlined in the respective City of Dallas sign ordinance and any other applicable regulations shall be in effect.]

STUDY SCOPE

The ordinance mandates that the sign must not interfere with the effectiveness of traffic control devices within 300 feet. The sign's visibility to northbound and southbound traffic on N Field Street was assessed. **Exhibit 1** graphically summarizes the existing sign location and the relevant traffic control devices within 300 feet.

ANALYSIS

Electronic message boards are relatively new, with few specific design and application standards. Thus, this evaluation relies primarily on engineering judgment and discretion.

The primary traffic-related concern is whether the electronic message board could interfere with the regular operation of existing traffic control devices, potentially leading to accidents. This evaluation included the following considerations. Given this evaluation parameter, DeShazo's analysis consisted of the considerations listed and described below. Each of these analysis parameters are subjective and require field inspection.

- Line of site of existing traffic control devices — this evaluation considered whether the existing location of the sign is aligned with the line of sight of a motorist and an existing traffic control device to a degree that obscures or diminishes the effectiveness of the traffic control device.
- Spacing/proximity with existing traffic control devices — this evaluation considered whether the existing location of the sign is in such close proximity to an existing traffic control device that it diminishes the effectiveness of the traffic control device.
- Visual "competition" with existing traffic control devices — this evaluation considered whether the existing location of the sign is otherwise situated in such a manner to distract a motorist from becoming cognizant of an existing traffic control device.

Other assumptions:

- Only motorists traveling on N Field Street were considered. (i.e., no cross streets or parallel streets were considered)
- The analysis applies to all vehicle types, including bicycles.
- Direct effects on pedestrians were not considered.

The following findings, summarized in **Table 1**, reflect DeShazo's evaluations based upon field observations. The detailed field visit documentation of the analysis parameters is presented in **Exhibits 1, 2,** and **3** of this memo.

Table 1: Northbound N Field Street Proposed Sign Location Evaluation

Parameter	Summary of Evaluation	Recommendation
Line of Sight	The proposed sign location does not directly obstruct the view of any existing traffic control device within a critical distance.	None
Spacing/Proximity	The sign is at a height of 20 feet from the sidewalk, 50 feet from the nearest traffic signal, with a vertical offset of 10-12 feet.	None
Visual Competition	The sign does not visually compete with existing traffic control devices within the critical distance.	None

Table 2: Southbound N Field Street Proposed Sign Location Evaluation

Parameter	Summary of Evaluation	Recommendation
Line of Sight	The proposed sign location does not directly obstruct the view of any existing traffic control device within a critical distance.	None
Spacing/Proximity	The sign is beyond the traffic signals for southbound traffic, offset to the left of the motorist's line of sight.	None
Visual Competition	The sign does not visually compete with existing traffic control devices within the critical distance.	None

FINDINGS: DeShazo's evaluation concluded that the proposed non-premise district activity videoboard sign on the N Field Street side of 1302 Elm Street does not significantly interfere with the effectiveness of traffic control devices within 300 feet of the sign.

GENERAL RECOMMENDATIONS

- In accordance with the City regulations and industry standards, the sign image should not rapidly change or display images containing motion or flashing content (unless the street is closed to vehicular traffic).
- The sign shall not display images that intentionally or unintentionally depict or resemble an image of a traffic control device or the content of a traffic control device. This includes but is not limited to: red, yellow, or green circles.
- The sign should not have a bright flashing light during emergencies when the signal operates in safe mode due to breakdown or malfunction.
- It is generally recommended that the agency should consider providing a signal head backplate framed with a retroreflective border for the signal heads if it is not already provided.

RECENT CRASH DATA ANALYSIS

To provide a comprehensive understanding of the impact of the proposed videoboard sign, recent crash data for the adjacent intersections was analyzed. The data includes the frequency, types, and causes of accidents over the past three years. This information is crucial for assessing any potential increase in traffic incidents due to the new sign.

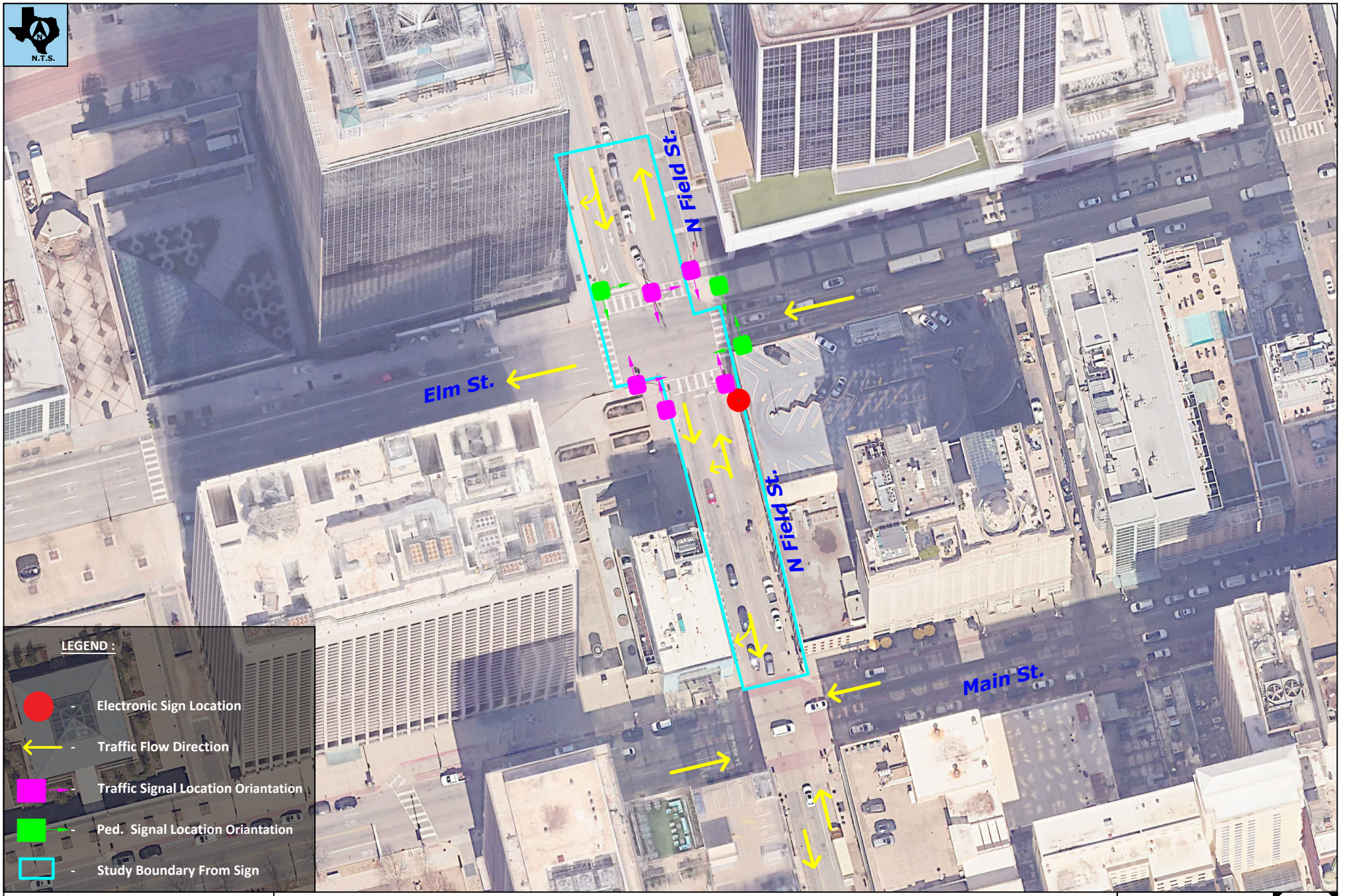
After analyzing the crash data from 2022 through 2024, the results of the analysis can be found below:

- There were no abnormal increases in crashes between 2022 and 2024.
- Of the crashes reported, there was no indication that any signage or public advertising was part of the contributing factors or driver distraction.
- Of the crashes reported, an overwhelming number had either no injury or minor injuries.

CONCLUSION

Based upon **DeShazo**'s evaluation of the existing non-premise district activity videoboard sign, or electronic message board located at 1302 Elm Street (North Field Street side), the installation location, as illustrated in **Exhibits 2 and 3,** does not significantly interfere with the effectiveness of traffic control devices within 300 feet of the sign.

END OF MEMO



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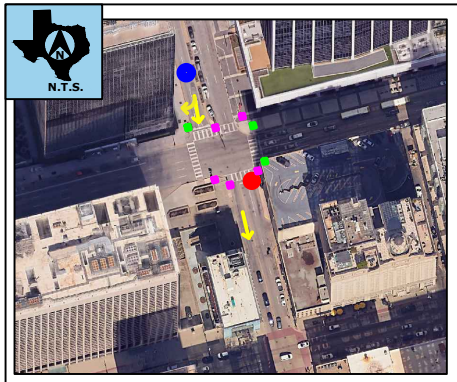
PROJECT LOCATION AND SURROUNDINGS MAP

Downtown Electronic Message Board, Dallas, Texas

DGI PROJECT #:24032
DATE : July 2024
PREPARED BY: DN

EXHIBIT 1



KEY MAP

LEGEND :

- Electronic Sign Location
- Traffic Flow Direction
- Traffic Signal Location Oriantation
- Ped. Signal Location Oriantation
- Location of View

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Sign Location - N Field St. and Elm St.

Downtown Electronic Message Board, Dallas, Texas

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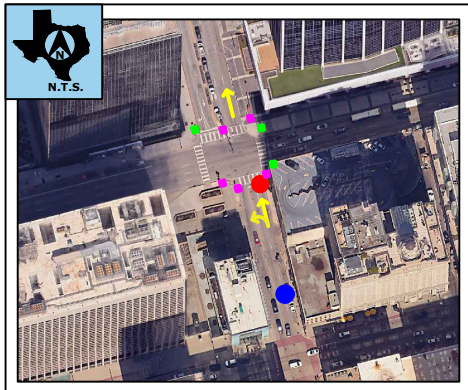
EXHIBIT 2



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Sign Location - N Field st.

Downtown Electronic Message Board, Dallas, Texas

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EXHIBIT 3