

# Preliminary Traffic Assessment

**To:** Mr. Dylan Leonoudakis, Slate Properties

**From:** Christy Lambeth, P.E., PTOE, Lambeth Engineering Associates, PLLC, F-19508

**Date:** 2/17/2023

**Re:** Preliminary Traffic Assessment for Slate EC2 at 2102 Empire Central Drive

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## Introduction

The services of Lambeth Engineering Associates, PLLC, (Lambeth Engineering) were retained to conduct a Preliminary Traffic Assessment (PTA) for the proposed development, Slate EC2 located at 2102 Empire Central Drive in Dallas, Texas. The purpose of this PTA is to evaluate the need, if any, for enhancement of safe traffic flow because of this development and to determine whether a Traffic Impact Analysis (TIA) should be provided. Below is a summary of the assessment.

- **Driveway Spacing** – There are Two (2) driveways for the site, both off Empire Central Drive. City of Dallas spacing requirements are satisfied for both driveways.
- **Sight Distance Analysis** – The City of Dallas requirements are satisfied for both driveways.
- **Parking** – Parking will meet or exceed parking requirements. (Site plan has not been finalized.)
- **Truck Loading/Unloading** – Trucks will load/unload on the property, in a designated area near the elevators and mail room.

## Project Description

The project site is located at 2102 Empire Central Drive, Dallas, Texas. The PTA is submitted to support a zoning change request from Industrial Research District (IR) to zoning to accommodate multifamily. The site is currently occupied (Google Maps notes occupied by Lopez Generators and Continental MCM Ballroom & Decorations). The development is projected to be completed in 2024 and will contain 210 mid-rise, multifamily units.

A vicinity map illustrating existing roadway configurations is provided in **Exhibit 1**. The site plan for the proposed development is attached.

## Roadway Network

Slate EC2 development is surrounded by the following roadways:

- Empire Central Drive
  - Existing Cross Section: Four-lane, undivided roadway
  - Speed Limit: 30 MPH
  - Thoroughfare Plan Designation: Community Collector, S-4-U

- Harry Hines Boulevard
  - Existing Cross Section: Six-lane, divided roadway
  - Speed Limit: 45 MPH
  - Thoroughfare Plan Designation: Principal Arterial, S-8-D
- Forest Park Road
  - Existing Cross Section: Two-lane, undivided roadway
  - Speed Limit: 30 MPH
  - Thoroughfare Plan Designation: Local Road

### **Pedestrian Connections**

There are existing sidewalks along both sides of Empire Central Drive between Harry Hines Boulevard and Forest Park Road, except just north of Harry Hines Boulevard.

## **Projected Site Traffic Volumes**

Traffic generated by the development, known as trip generation, is calculated based upon methods and rates published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual*, 11<sup>th</sup> Edition. The resulting trip generation volume for the site is shown in **Table 1**.

**Table 1. Trip Generation Summary**

ITE #	Use	Quantity	Weekday	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
221	Multifamily Housing (Mid-Rise)	210 Units	955	81	19	62	82	50	32

## **Access Spacing Review**

The City of Dallas requires driveways to be spaced a minimum distance from streets and other driveways. The June 2004 *City of Dallas Off-Street Parking and Driveways Handbook* notes, “The minimum distance between driveways, measured from edges of driveway throats, is normally 20 feet except for local streets.”

Figure 4.61 of the City of Dallas 2019 *Street Design Manual* illustrates that commercial driveways should be 100 feet from intersections.

The access spacing review for the proposed development is summarized below in **Table 2**. Both proposed driveway locations satisfy the City’s driveway spacing criteria.

**Table 2. Access Driveway Spacing Summary**

Spacing Between	City of Dallas Access Spacing Distance (Feet)	Provided Access Spacing Distance (Feet)	Satisfies Spacing Criteria?
<b>Empire Central Dr.</b>			
Girls Inc. Driveway and Driveway 1	20	~185	YES
Driveway 1 and Driveway 2	20	~190	YES
Driveway 2 and Forest Park Rd.	100	~170	YES

## Truck Loading and Unloading

Trucks will not be allowed to load off Empire Central Place. A temporary moving truck parking space will be available near the elevators and delivery trucks will be able to pull in and park or temporarily park near the entry leading to the mail room.

## Sight Distance Analysis

City of Dallas' sight distance criteria were evaluated considering Table 4.6 of the September 2019 *City of Dallas Street Design Manual*. Empire Central Drive was evaluated with the posted speed limit of 30 MPH and a two-lane undivided roadway (S-2-U). Since the adjacent section of Empire Central Drive is 44 feet wide, it was also evaluated for a speed limit of 45 MPH and a four-lane undivided road (S-4-U). The higher speed limit can be considered conservative. Sight distance analysis is based upon on-site observations. The results are summarized in **Table 3**.

**Table 3. City of Dallas Sight Distance Summary**

Intersection	Speed Limit	Left Side (Feet)*				Right Side (Feet)**			
		Desirable Minimum	Safety Minimum	Provided	Criteria?	Desirable Minimum	Safety Minimum	Provided	Criteria?
Empire Central Dr. at Driveway 1	30 MPH	315	145	>500	YES	580	325	>900	YES
Empire Central Dr. at Driveway 2	30 MPH	315	145	>500	YES	580	325	>900	YES

\*Evaluated considering Local Street S-2-U 30 MPH criteria

\*\*Evaluated considering Minor Arterial S-4-U 45 MPH criteria

As illustrated in Figure 3.9 of the City of Dallas *Street Design Manual*, 20'x20' visibility triangles are required at street-driveway intersections. Visibility triangles will be provided with the Civil Engineering plans.

The City of Dallas requirements sight distance criteria are satisfied for both driveways.

## Parking Analysis

The City of Dallas Section 51A-4.209 requires parking for multifamily uses based on the number of bedrooms. If the parking is for residents only, the site is required to have a minimum of one space per bedroom, plus 0.25 spaces per dwelling unit for guests if the residential parking is restricted. There will be open spaces available for residents and guests. Therefore, additional guest parking is not required.

Will provide parking to satisfy the City's requirements.

## Traffic Operations

Lambeth Engineering conducted two (2) site visits. The following observations were made:

- Traffic flows well on all streets around the site.
- Traffic observations were conducted at each driveway location. There are many gaps in traffic throughout the day in both directions on Empire Central Drive.

The following recommendations are made to enhance traffic safety:

- City should consider repainting the pavement markings, including center line and lane lines between Harry Hines Boulevard and Forest Park Road
- City should consider repainting the crosswalks at the intersection of Empire Central Drive and Forest Park Road

## Crash Analysis

According to the CRIS Query results from 2018 - 2023, there was only one (1) reported crash in 2021 on Empire Central Drive, in vicinity of the site, with minor injuries. The CRIS Query results are provided in the **Appendix**.

## Summary

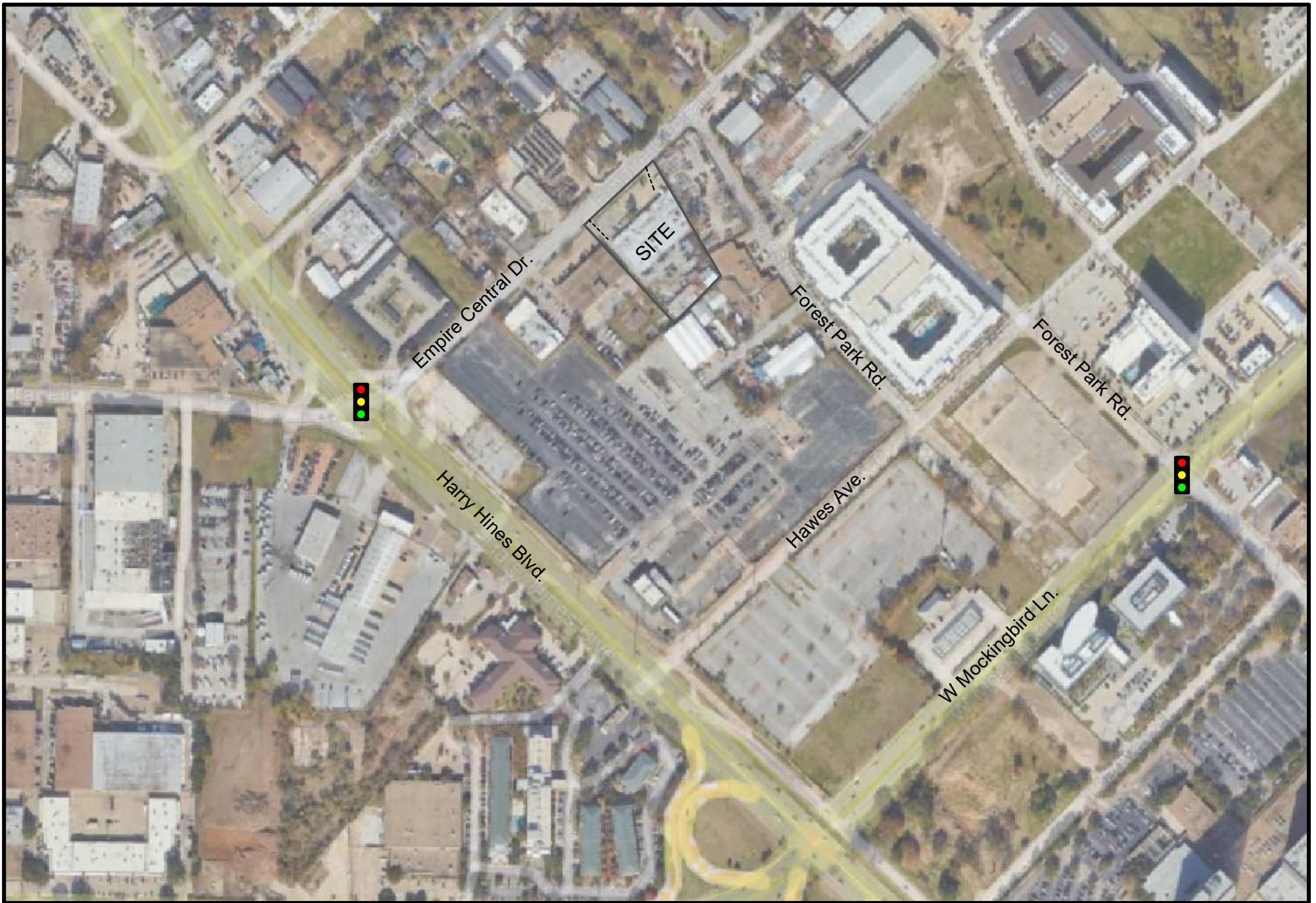
The additional site-related traffic resulting from the proposed Slate EC2 development is not expected to have a significant impact on the traffic flow in this area.

The proposed driveways satisfy the City's spacing criteria and are not expected to create traffic congestion or have a significant impact on the roadway network. All sight distances satisfy the City's requirements.

Based upon field observations, the existing roadway network is able to accommodate the projected traffic volumes generated by the proposed development. Therefore, it is recommended a TIA not be required for this site.

**END**





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Vicinity Map  
Not to Scale

**Slate Empire Central 2**  
Harry Hines Boulevard at Empire Central Plaza  
Dallas, Texas



Map Obtained from Google Earth 10.04.22

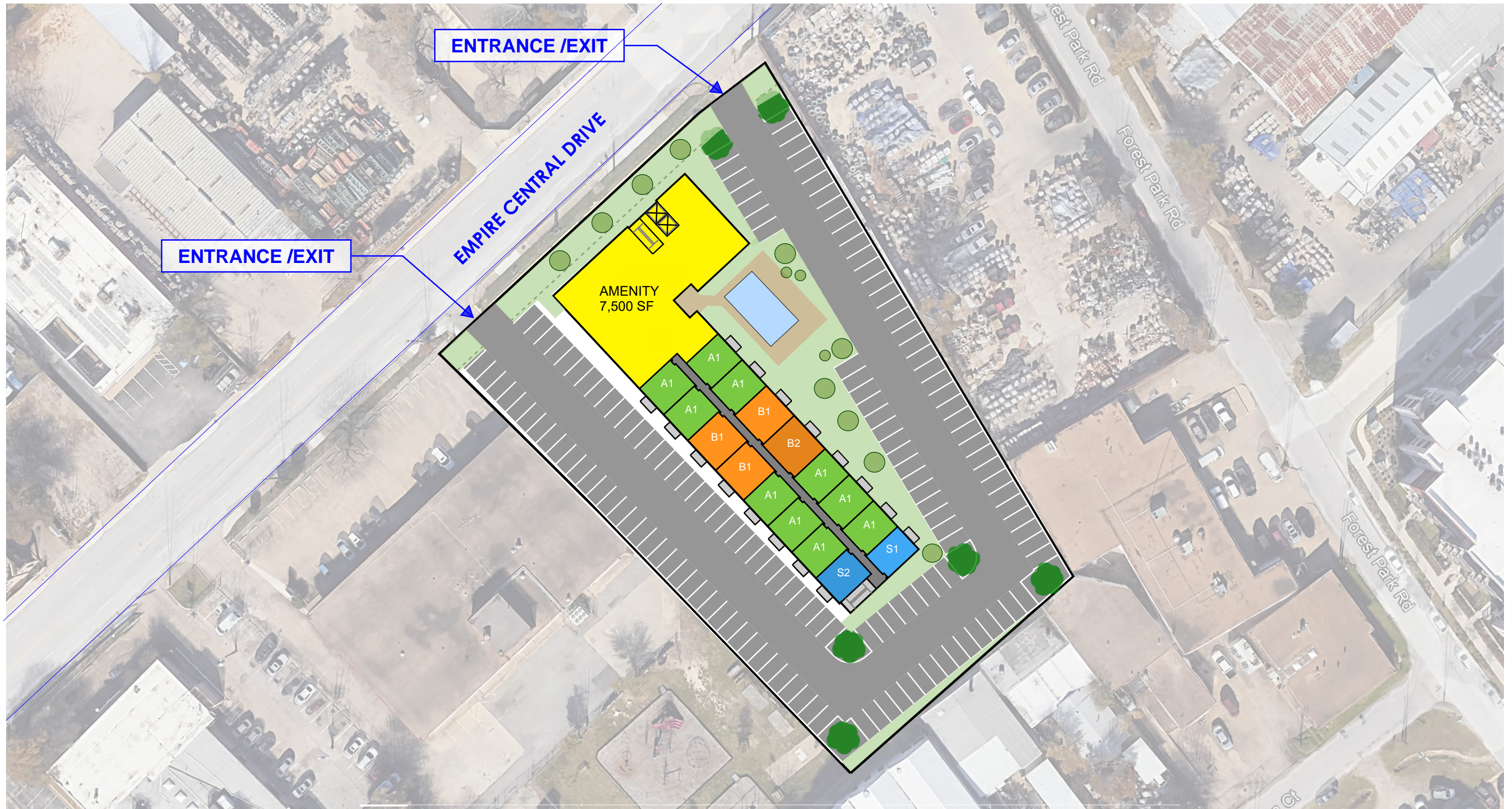
# Appendix

Site Pictures

Site Plan

CRIS Query Results





DRAFT  
Concept PLAN



# Slate Empire Central 2

## Empire Central Place

Driveway 1 — Looking Left



Driveway 1 — Looking Right



Driveway 1 — Looking Across



Driveway 2 — Looking Across



Driveway 2 — Looking Left



Driveway 2 — Looking Right





# Slate Empire Central 2

## Nearby Intersections

Harry Hines Boulevard at Empire Central Place —  
Westbound Approach



Harry Hines Boulevard at Empire Central Place —  
Southbound Approach



Empire Central Place at Forest Park Road —  
Northbound Approach



Forest Park Road at Hawes Avenue —  
Eastbound Approach



W Mockingbird Lane at Forest Park Road —  
Looking at Southbound Approach



W Mockingbird Lane at Forest Park Road —  
Eastbound Approach



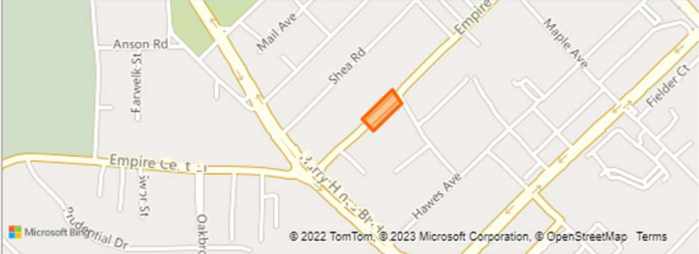
# CRIS Crash Data

## Empire Central Place between Forest Park Road and Girls Inc. of Metropolitan Dallas Driveway

**Filters Applied to Query**

Crash Year Is In 2018 or 2019 or 2020 or 2021 or 2022 or 2023

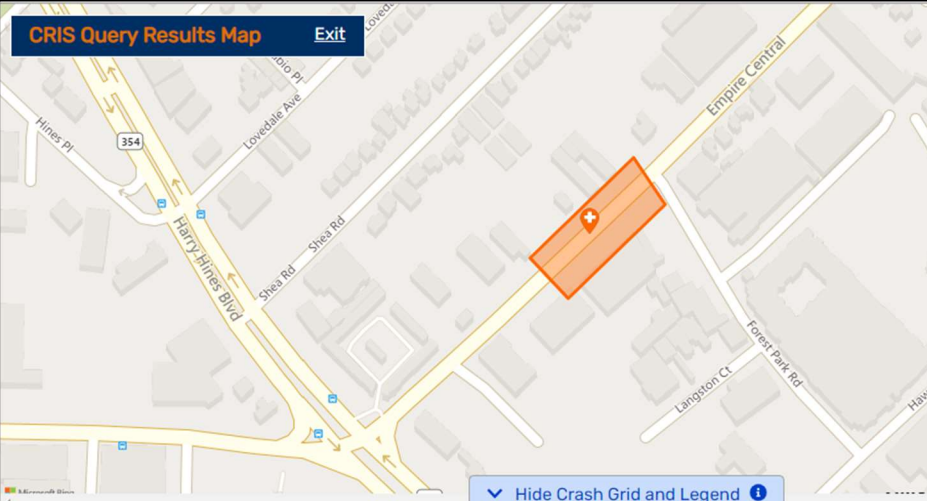
**Query Search Area**



Defined Search Coordinates

Latitude: 32.828, Longitude -96.853  
Latitude: 32.827, Longitude -96.853  
Latitude: 32.828, Longitude -96.852  
Latitude: 32.828, Longitude -96.852

**CRIS Query Results Map** [Exit](#)



Map Tools

**Zoom:**  
[In](#) | [Out](#) | [Show All of Texas](#)

**Crash View:**  
[Standard](#) | [Cluster](#) | [Heat Map](#)

**Map View:**  
[Map](#) | [Satellite](#)

**Map Mode:**  
[Navigate](#) | [Measure](#)


**Filter Results By Year:**  
[Filter](#) | [Clear](#)

1 of 1 Crashes Mapped

[Hide Crash Grid and Legend](#)

**Crashes**

**Legend**

 2021 and Suspected Minor Injury