 **Traffic Management Plan**  
**Z201-155(LG)**

**IL Texas South Dallas High School**  
Dallas, Texas

April 12, 2021

Kimley-Horn and Associates, Inc.  
Dallas, Texas

Project #068908205  
Registered Firm F-928

**Kimley»»Horn**

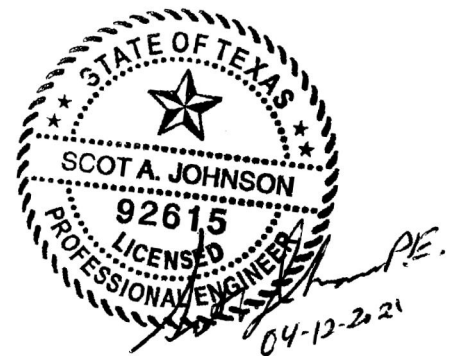
**Traffic Management Plan**

**IL Texas South Dallas High School  
Dallas, Texas**

**Prepared by:**

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April 12, 2021



## IL Texas South Dallas High School Traffic Management Plan

### A. Introduction

The Traffic Management Plan is used by the school to manage its vehicle operations and is periodically reviewed by the City to ensure the goals for safety and lack of impact on City streets are being met. The plan uses the 900-student full enrollment and adopts the single arrival and dismissal times of other IL Texas high schools (7:55 AM to 4:11 PM). The TMP identifies operations of parent vehicles, student vehicles, and major pedestrian movements which will need to be protected. The proposed TMP is shown on **Exhibit 7**.

The high school will have approximately 900 students at buildout, equally distributed as shown in **Table 1** below. The arrival and dismissal times are as shown in one group, but it should be noted that due to varied student schedules, off-campus assignments, and extracurricular activities on campus, the arrival and departure for high schoolers is more varied than the typical elementary or middle school. Based on the student ages and the availability of parking on the site, it is assumed that at least 300 students will drive themselves to campus each day.

**Table 1– Student Grade and Arrival/Dismissal Time Distribution**

Grade	Approx. Number of Students	Drop-Off Time	Dismissal Time
9 <sup>th</sup> Grade	225	7:55 AM	4:11 PM
10 <sup>th</sup> Grade	225	7:55 AM	4:11 PM
11 <sup>th</sup> Grade	225	7:55 AM	4:11 PM
12 <sup>th</sup> Grade	225	7:55 AM	4:11 PM
<b>IL Texas South Dallas High School Total:</b>	<b>900</b>		

The TMP uses standard traffic engineering and City of Dallas guidelines for developing and documenting the TMP. Intersection operational conditions are documented in the TIA report which contains this TMP.

### B. TMP Operations

The vehicle paths set by the TMP take advantage of the site layout, which has been optimized for smooth operation and ample stacking space within the campus. The pick-up and drop-off vehicle path enters from Kirnwood Drive at the West School Drive. During the TMP time period, the West School Drive will operate as inbound only. The four-lane section of Kirnwood Drive provides easy left-turning ability, and the campus will always have room to accommodate arriving vehicles. The two-lane vehicle path circulates around the athletic fields, and then proceeds north across the west face of the building in a purpose-designed loading zone. The loading zone can accommodate at least 8 loading positions. A Traffic Administrator should be present to control general loading operations in the loading zone, but specific staffed positions are not necessary at this age group.

Pick-up and drop-off vehicles then exit straight north to Kirnwood Drive via the East School Drive. During the TMP period, the East School Drive accommodates only the outbound traffic from the loading area. 1,600' of stacking distance is available in the main lane of the circulation path. During the afternoon pick-up period, the second lane could be used to form a double stacking lane, which would add another 1,320' of stacking distance. The total 2,930' of stacking space can accommodate 130 vehicles within the campus.

Student-driven vehicles are generally present only on the inbound direction during the morning and outbound direction during the afternoon. Student parking has been identified as being in the western parking field. Student drivers will enter with the other drop-off traffic at the West School Drive and follow the same path around the athletic fields. With only one stacking lane active in the morning drop-off period, arriving student vehicles can bypass the queue in the second lane of the circulating roadway. Upon reaching the student parking aisles, the student vehicles turn out of the main circulation and park. Once pedestrians, the students can cross to the school in the loading area, which is supervised by the Traffic Administrator. In the afternoon, each student parking aisle drains naturally to the north, tying into the pick-up vehicle line after the loading zone. Student vehicles then exit to Kirnwood Drive using the East School Drive.

Although not assumed to occur for the TMP queuing analysis, there is intended to be a significant number of students using the adjacent UNT Dallas DART station to connect to DART trains and buses. An active pedestrian crossing across University Hills Boulevard is an important part of student and general public safety. This feature has been provided by the expectation that a signal would be built at the intersection of University Hills Boulevard and Kirnwood Drive.

There is a day care proposed on the north side of Kirnwood Drive, part of the group of community service buildings. The arriving and departing day care traffic does not operate on as fixed a schedule as the high school, so it does not have as significant effect on traffic conditions per child. However, to show how the day care can operate without overlapping any high school function, the inbound and outbound day care paths are included in the TIA. Pick-up and drop-off vehicles will enter through East Community Center Drive 1. The vehicle path circulates around the north side of the day-care building and through the parking loop at the northwest corner of the site at the loading area. Traffic then circulates back to East Community Center Drive 1 and exits to Kirnwood. This drive is separated from the high school driveways that are active during the school TMP, so there is no overlap in traffic other than the through traffic on Kirnwood Drive. The day-care traffic activity is also kept away from the other community service buildings.

**C. Queue Analysis:**

Based on observations of other high school TMP operations, a ratio of 1 vehicle per 10 arriving students was used to calculate the maximum drop-off queues for the analysis, and the vehicle spacing used is 22.5' per vehicle. **Table 2** shows the comparison between the calculated maximum queue and the available stacking space. The drop-off queue of 1,350' (60 vehicles) is able to be contained in the 1,600' (71 vehicle) queue capacity, leaving an excess of 250' of stacking space for the AM drop-off period. The maximum morning queue can be contained in a single stacking lane, letting the arriving student drivers pass by in the other lane to reach the student parking area.

During the PM pick-up period, the maximum queue was calculated using a rate of 1 vehicle per 5 dismissed students. **Table 3** shows the pick-up queueing summary for the loading area. The maximum queue is 2,700' (120 vehicles), which leaves a surplus of 230' (10 vehicles) of stacking space in the two available lanes. Since student drivers are outbound during this pick-up time period, there is no conflict between the student drivers and the double-stacked queue. The traffic plan as proposed has the capacity to handle both the AM and PM maximum queues.

**Table 2 – AM Drop-Off Queuing Summary**

Drop-Off Queuing Summary - 900 Students								
Group Grades Arriving	Start Time	Students Arriving	Bus / Bike / Walk	Student Drivers	Parent Drop-Off	Maximum Queue	Available Stacking	Surplus (Deficiency)
High School 9, 10, 11, 12	7:55 AM	900	0	300	600	60 Vehicles 1,350'	71 Vehicles 1,600'	11 Vehicles 250'

Assumed 0.1 vehicles per student, 22.5' per vehicle

**Table 3 – PM Pick-Up Queuing Summary**

Pick-Up Queuing Summary - 900 Students								
Group Grades Dismissed	Start Time	Students Dismissed	Bus / Bike / Walk	Student Drivers	Parent Pick-Up	Maximum Queue	Available Stacking	Surplus (Deficiency)
High School 9, 10, 11, 12	4:11 PM	900	0	300	600	120 Vehicles 2,700'	130 Vehicles 2,930'	10 Vehicles 230'

Assumed 0.2 vehicles per student, 22.5' per vehicle

The available queue distance is in excess of the high school queue distance recommendations found in the FHWA & TTI report #4286-2 *Operations and Safety Around Schools*.

**D. Summary**

The TMP shows the drop-off and pick-up procedures which will be applied by the IL Texas South Dallas High School. With the proposed TMP operating, the school traffic will not need to queue vehicles in the ROW of any City street. Inbound vehicles will always have an open receiving space on the campus. There may be reasonable delays from opposing traffic when making the entering or exiting maneuver, but this will not form static queues of waiting vehicles within City ROWs. The property owner/school administrator is

responsible for the administration of the TMP and minimizing the impact of the vehicle traffic on the City streets.

In order to ensure that all queuing of vehicles is completely accommodated on school property, IL Texas South Dallas High School administrative officials should implement the Traffic Management Plan, monitor the operation on a continuing basis, and if any vehicle queuing should begin to occur on public right-of-way, take the necessary action to mitigate it.

**SCHOOL TMP REVIEW AND COMMITMENT**

The school traffic management plan (TMP) for IL Texas South Dallas High School was developed with the intent of optimizing safety and efficiently accommodating vehicle traffic generated during the school’s typical student drop-off and pick-up periods. It is important to note that a concerted and ongoing effort with the full participation of the school administration is essential to accomplish these goals.

By the endorsement provided below, the school administration hereby agrees to implement, adhere to, and support the strategies presented in this TMP for which the school is held responsible until or unless the City of Dallas deems those strategies are no longer necessary or that other measures are more appropriate.

_____	_____
Signature	Date
_____	_____
Name	Title

GRAPHIC SCALE  
1" = 150' on 11x17" Plot

Drop-Off Queuing Summary - 900 Students								
Group	Start Time	Students Arriving	Bus / Bike / Walk	Student Drivers	Parent Drop-Off	Maximum Queue	Available Stacking	Surplus (Deficiency)
High School 9, 10, 11, 12	7:55 AM	900	0	300	600	60 Vehicles 1,350'	71 Vehicles 1,600'	11 Vehicles 250'

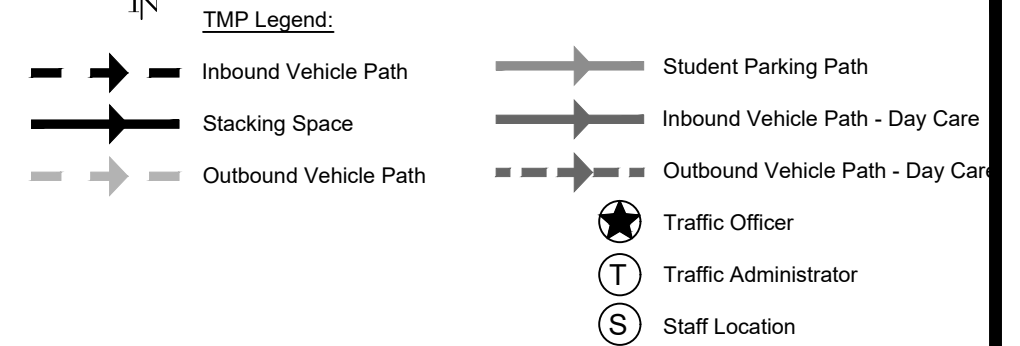
Pick-Up Queuing Summary - 900 Students								
Group	Start Time	Students Dismissed	Bus / Bike / Walk	Student Drivers	Parent Pick-Up	Maximum Queue	Available Stacking	Surplus (Deficiency)
High School 9, 10, 11, 12	4:11 PM	900	0	300	600	120 Vehicles 2,700'	130 Vehicles 2,930'	10 Vehicles 230'

Assumed 0.2 vehicles per student, 22.5' per vehicle

Maximum Enrollment: Approx 900 Students

School Hours:

Grade	Approx. Student #	Start	End
9-12	900	7:55 AM	4:11 PM



Drop-off/Pick-up assignments and times should be actively managed in response to conditions, including changes in busing, activities, or sports schedules.

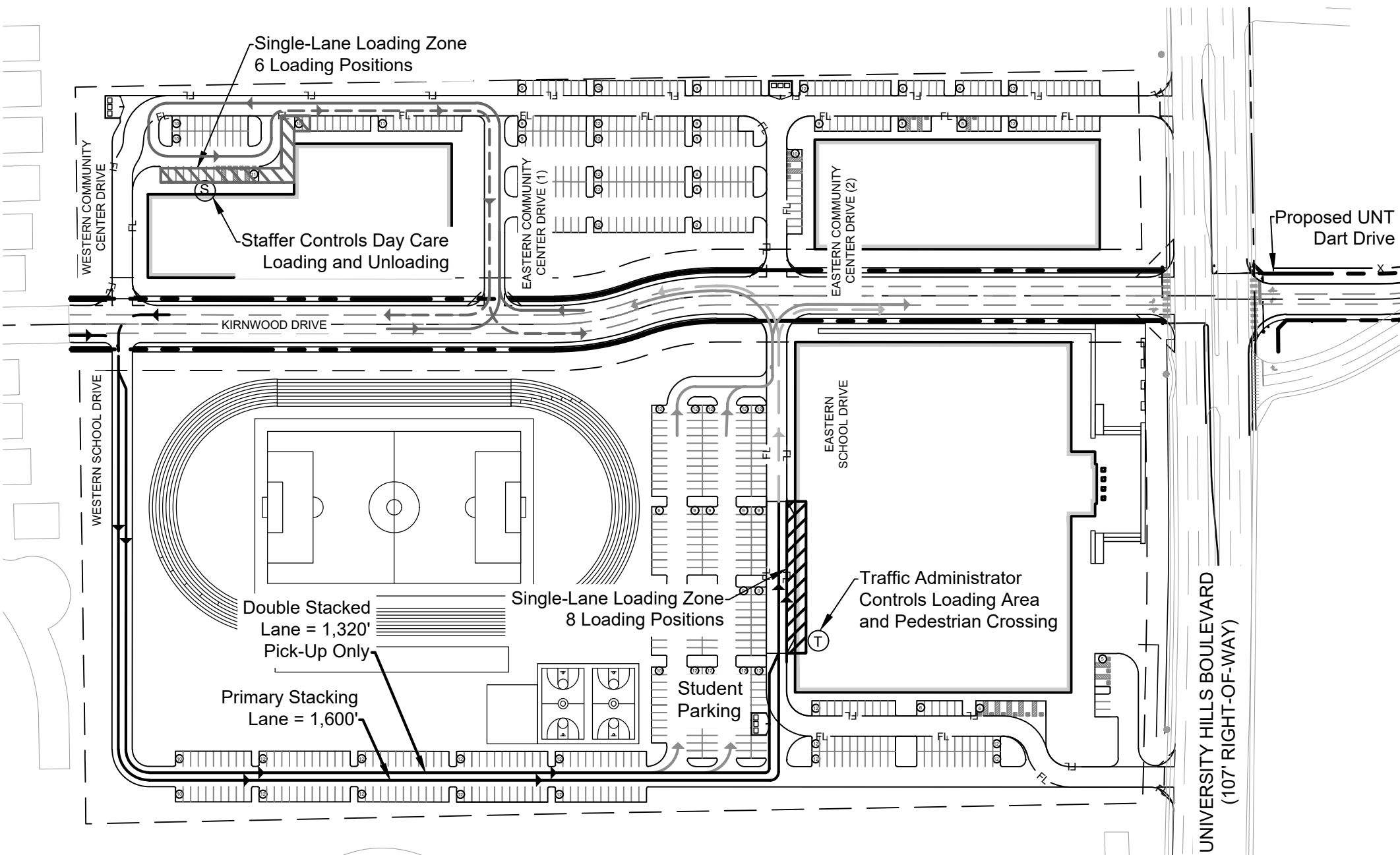
Available stacking distance is 1,600' (71 vehicles) in the drop-off period and 2,930' (130 vehicles) in the pick-up period. Single-stacked operation in the drop-off period allows student vehicles to bypass the drop-off queue in the second lane.

The projected maximum queue demand would occur in the pick-up time period. The dismissal of 900 students would generate a total queue of 120 vehicles (2,700'). This vehicle queue can be accommodated within the 2,930' of available stacking space in the pick-up period.

In order to ensure that all queuing of vehicles is completely accommodated on school property, high school administrative officials should implement the proposed Traffic Management Plan, monitor the operation on a continuing basis, and if any vehicle queuing should begin to occur on public right-of-way, take the necessary action to mitigate it.

Only uniformed police officers should be allowed to direct and control traffic operating within the public right-of-way.

*Note:*  
Queue calculations are made using linear feet.



Z201-155

IL Texas South Dallas High School  
Preliminary Traffic Management Plan (TMP)

May 21, 2021

EXHIBIT 7

Sheet No. **TMP-1**