May 22, 2023
PK# 3003-21.551

TRAFFIC MANAGEMENT PLAN

Z212-276

DISD W.W. Samuell High School
CITY OF DALLAS

Introduction

The services of **Pacheco Koch** (PK) were retained by Masterplan on behalf of **Dallas Independent School District (DISD)** to prepare a Traffic Management Plan (TMP), as requested by the City of Dallas, for the existing W.W. Samuell High School described below. The school has an existing enrollment of 1,770 students and is anticipated to remain after improvements are complete.

As described in Appendix A6 of the City of Dallas *Street Design Manual*, a school Traffic Management Plan is a "site-specific plan providing guidelines to coordinate traffic circulation during school peak hours. TMPs should promote strategies to manage all modes of transportation and maintain student safety paramount at all times. An effective plan requires continual planning, renewed understanding and coordinated efforts by city staff, school administration and staff, neighbors, parents, and students.

This TMP was prepared by registered engineers at Pacheco Koch who are experienced in transportation and traffic engineering (the "Engineer"). Pacheco Koch is a licensed engineering firm based in Dallas, Texas, that provides professional engineering and related services.

The engineer performed most recent on-site dismissal field observations on Monday, April 4th, 2022 and Tuesday, April 5th, 2022 during morning and afternoon periods that validates all information in this report.

1. TMP EXHIBIT

(See attached Exhibit 1 - Traffic Management Plan)

Pacheco Koch
a Westwood company

7557 Rambler Road, Suite 1400
Dallas, Texas 75231-2388
(972) 235-3031 www.pkce.com
TX.REG: ENGINEERING FIRM F-469
TX. REG. SURVEYING FIRM LS-100080-00

2. SCHOOL LOCATION AND DESCRIPTION

- **School site location**: 8928 Palisade Drive, Dallas, Texas
- **Description of adjacent roadways**:
    - Adjacent Streets:
        - Prairie Creek Road:
            - Cross-section: Six lanes, two-way operation, median divided.
            - Sidewalk connectivity evident along frontage of school. *[School Zone]*
            - Speed Limit: *35 mph [School Zone of 20 mph]*
        - Palisade Drive:
            - Cross-section: Two lanes, two-way operation [eastbound one-way operational during school hours], undivided.
            - Sidewalk connectivity evident along frontage of school. *[School Zone]*
            - Speed Limit: *30 mph [School Zone of 20 mph]*
        - Greendale Drive:
            - Cross-section: Two lanes, two-way operation [northbound one-way operational during school hours], undivided.
            - Sidewalk connectivity evident along frontage of school. *[School Zone]*
            - Speed Limit: *30 mph [School Zone of 20 mph]*
    - **Adjacent Intersections**:
        - Prairie Creek Road and Palisade Drive - Marked crosswalk on south leg, barrier free ramps provided on all corners.
        - Greendale Drive Road and Palisade Drive - Marked crosswalks on the west, south, and east legs, barrier free ramps provided on all corners.

NOTE: It is generally recommended that all applicable crosswalks/barrier free ramps/sidewalks comply with current ADA accessibility requirements. Pacheco Koch is not certified to provide a full ADA compliance inspection, which is performed by licensed

inspectors during the design and permitting process. All pavement markings, traffic signs, school zones, and pedestrian infrastructure improvements are recommended to be upgraded at permitting as applicable and meet current city and TMUTCD standards.

3. INGRESS/EGRESS POINTS OF ACCESS

- **Vehicular Ingress/Egress Points**:
    - Greendale Drive: Three Driveways (Existing and Proposed)
    - The access points for the parking lot to the north of Palisade Drive are located along Greendale Drive. The access points along N Prairie Creek Road are gated.

      Faculty staff park within the west portion of the parking lot entering and exiting throughout the entire day. Students park within the east portion of the parking lot entering in the morning and exiting in the afternoon. All traffic enters from the south and exits towards the north as Greendale Drive operations as one-way northbound during school hours.
- **Student (Building) Ingress/Egress Points**:
    - Main student pedestrian access is/will be located at the main entrance on the north side of the school building.

4. QUEUING SUMMARY TABLE

The following table presents the projected queuing vehicle accumulation for the subject campus. The calculations for vehicle accumulation and parking are based upon estimated ratios – estimated linear feet of queue per student – along with the assumptions provided by DISD for this campus have been validated by on-site dismissal observations conducted on Monday, April 4th, 2022 and Tuesday, April 5th, 2022. All information provided in the table below is strictly for the afternoon student pick-up release period.

See Section 12(b) for specific information on the methodology and calculations used in the table below. Specific separation of modes of transportation was provided by DISD and is provided in Section 6.

Table 1. Queuing Summary Table

Dismissal Period (Loading Zone)	Grades	Start/ End Times*	Total Enrollment		Maximum Vehicle Accumulation	(On-Site) Storage Capacity (veh)	Surplus /Deficit (veh)
			Existing	Proposed	Proposed (Existing)		
1	9th – 12th	9:00 AM – 4:35 PM	1,770	1,770	154 (154)	27 (27)	-127 (-127)

*All times are subject to change

5. CIRCULATION

This section provides on-site traffic circulation, including any temporary traffic control devices.

- Description of Existing Conditions

On-Site Circulation:

Parent traffic enters the area traveling from Prairie Creek Road through Tonawanda Drive and Greendale Drive. Parent traffic queues/stands on the northbound and southbound curb lanes on Prairie Creek Road. Also, queuing/standing occurs along both curbsides of Palisade Drive with traffic traveling eastbound (one-way) and queuing/standing occurs along the northbound curbside of Greendale Drive with traffic traveling northbound (one-way).

School buses load and unload students along the south curbside of Palisade Drive adjacent to the site.

Student and visitor parking lots are provided north of the school building. Staff parking is provided west of the school building. In order to cross Palisade Drive to enter into the parking lot for student drivers accessing their vehicles, three midblock crosswalks are located along Palisade Drive with applicable ADA accessible ramps.

Temporary traffic control devices:

- Temporary traffic control devices are not used for this TMP in order to facilitate drop-off/pick-up operations.

- Description of Proposed Conditions

On-Site Circulation:

Parent traffic is to enters the area traveling from Prairie Creek Road and turns into Palisade Drive. A traffic signal is proposed to be installed at the intersection of N Prairie Creek Road and Palisade Drive, resulting in a recommended removal of the one-way operations of Palisade Drive.

Before the traffic signal is to be installed, school parent traffic should be organized to queue/stand along both curbsides of Palisade Drive with traffic traveling both eastbound and westbound. In addition, parent traffic is to queue/stand along the northbound curbside of Greendale Drive with traffic traveling northbound (one-way). Parent traffic is to also use the visitor parking lot north of the site for pick-up/drop-off.

School buses load and unload students along the south curbside of Palisade Drive adjacent to the site.

Student and visitor parking lots are provided north of the school building. Staff parking is provided west of the school building. In order to cross Palisade Drive to enter into the parking lot for student drivers accessing their vehicles, three midblock crosswalks are located along Palisade Drive with appropriate ADA accessible ramps.

Temporary traffic control devices:

- Temporary traffic control devices are not proposed to be used for this TMP in order to facilitate drop-off/pick-up operations.

6. DROP-OFF/PICK-UP COORDINATION

This section provides proposed student drop-off/pick-up coordination information.

- **Passenger ID system**:
    - Conventional Loading System

    NOTE: A "conventional loading system" at schools refers to the self-regulated method of passenger loading. Designated loading areas are not established. Upon arrival motorists choose a preferred location, typically in close proximity to the building entry, to stand (such as a curbside) or park (such as in a parking lot) while waiting for their passenger. Once passengers are loaded, vehicles may exit accordingly. Vehicle arrivals and departures are not sequential and dwell times are variable.

- **Separation of modes of transportation**:
    - Bus: 30%
    - Walk: 20%
    - Student Drivers: 10%
    - Picked Up by Parent: 40%

    NOTE: Information provided by DISD and validated with field observations

- **Staggered times**:
    - 9:00 AM – 4:35 PM (9^{th}-12^{th})

7. SCHOOL STAFF ASSISTANCE

- Number:
    - Observed: 1-2 Staff Members
    - Desired: 1-2 Staff Members
- Location:
    - Observed: North of school building
    - Desired: North of school building
- Staff Requirements and expectations:
    - Staff assistance shall be present to allow students to enter and exit the school building in a safe and efficient manner.

8. ADULT SCHOOL CROSSING GUARDS AND/OR OFF-DUTY DEPUTIZED OFFICERS

- Number:
    - Observed: none
- Location:
    - Desired: N/A

9. SCHOOL ADMINISTRATION INPUT STATEMENT

The engineer collaborated with both the School District personnel and on-site staff/principal and Student Transportation Services as needed, before and during the process of creation of the Traffic Management Plan.

The site engineer, the architect and the traffic engineer have collaborated the traffic patterns of parent routes, bus routes, and recommendations of the TMP with the on-site and District personnel. The onsite and District personnel have completed a thorough review and any changes that have been discussed have been applied to this version of the plan.

REVIEW AND COMMITMENT

This school traffic management plan (TMP) for DISD W.W. Samuell High School was developed with the intent of optimizing safety and efficiently accommodating vehicular traffic generated during the school's typical student drop-off and pick-up periods. This plan was developed with direct input from individuals familiar with the general characteristics of the traffic needs of the school. It is important to note that a concerted and ongoing effort by and the full participation of the school administration are 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.

DocuSigned by:
Gabriel Guerra
4269A711FB4A4D2...
Principal Signature

5/23/2023
Date

Name: Gabriel Guerra

Title: Principal

10. ENGINEER SEAL

This report is signed, stamped, and dated by a licensed Professional Engineer in the State of Texas with specific expertise in transportation and traffic engineering.

11. REPORT FORMAT

This report follows the City of Dallas Traffic Management Plan format as described in Appendix A6 of the City of Dallas *Street Design Manual.*

12. OTHER ITEMS WHERE APPLICABLE

a) School Bus Operations: (See Section 5)

b) Methodology:

   a. Engineer Recommended Rate: 5.12 linear feet per student

   b. Average Length of Vehicle: 23.5 feet

   c. Separation of modes of transportation:

      i. Bus: 30%

      ii. Walk: 20%

      iii. Students Drivers: 10%

      iv. Picked Up by Parent: 40%

      NOTE: Information provided by DISD and validated with field observations

   d. Projected maximum vehicle accumulation: 154

   e. Projected on-site storage capacity: -27

   f. Surplus/Deficit: -127

c) Proposed Pedestrian Routes: The pedestrian routes are based on the attendance zone map when finalized. The attendance zone was not provided at the time of this study however, the anticipated (and observed) pedestrian routes include the sidewalk paths along Palisade Drive.

d) Proposed Parking Management Strategies:

   a. On-street parking restrictions: On Prairie Creek Road, on Palisade Drive during school hours

   b. Faculty Parking: west of school building

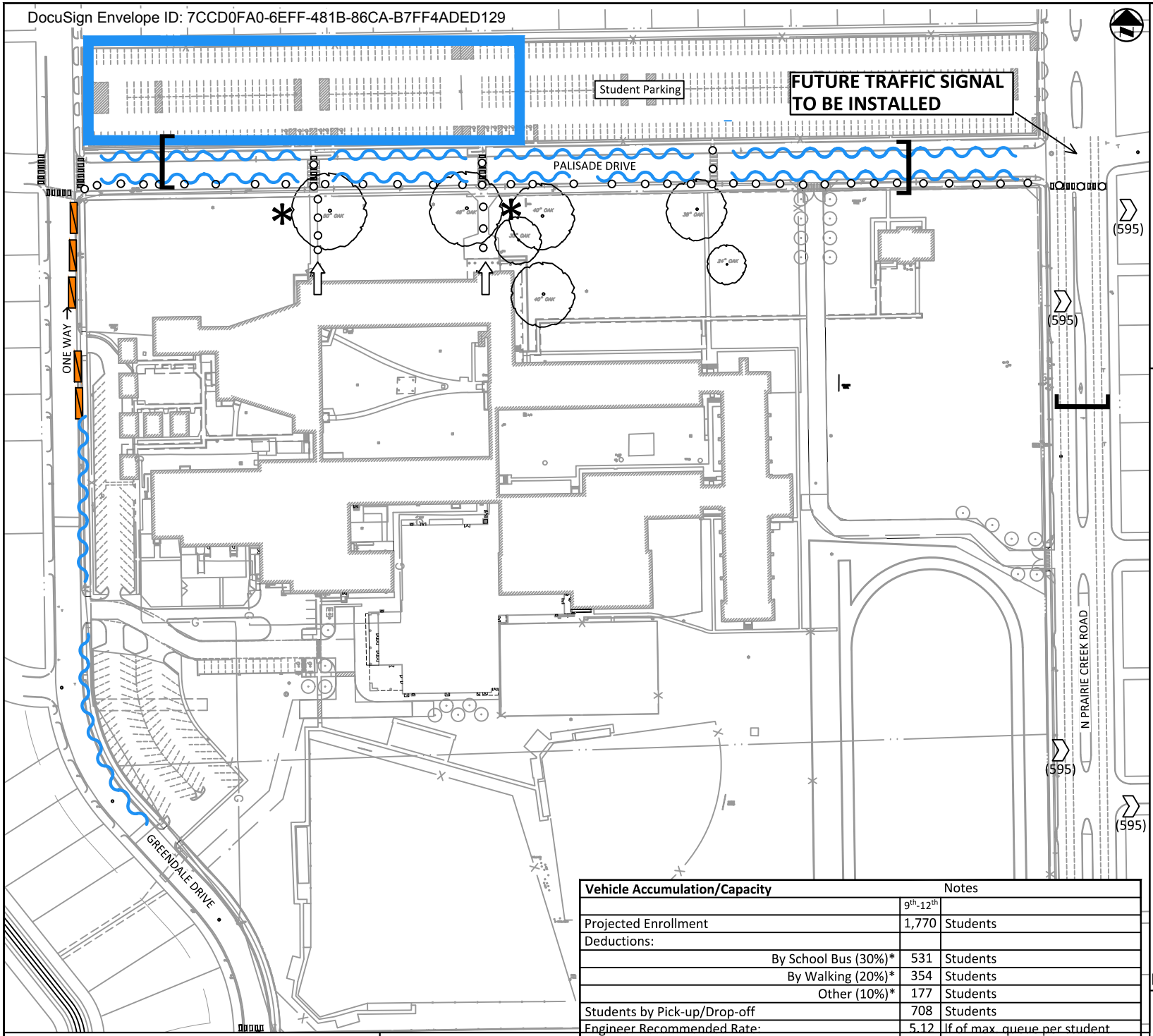
   c. Visitor Parking: north of school building

   d. Student Parking: north of school building

e) Recommendations (if applicable) for walking/biking: (See **Exhibit 1**)

f) Other Recommendations: (See **Exhibit 1**)

END OF MEMO



LEGEND

- Queue Area (Conventional Loading)
- Parent Loading/Waiting Area
- School Bus Loading/Unloading
- Pedestrian Access Point
- Parent Vehicle Access Point
- Crosswalk
- Pedestrian Route
- School Zone
- (###) - Public Transit Stop (DART Route No.)
- * - Staff Assistance

GENERAL NOTES:

1. The subject school administration shall issue a formal communication that summarizes the intent of the Traffic Management Plan at least once every school year.

2. Parent drop-off activity in the morning has a similar protocol as the parent pick-up in the afternoon. Generally, excessive traffic delays and queuing were not evident during the morning peak.

3. This drawing is conceptual only and does not reflect a detailed design. Site plan designed and provided by others.

4. Queues are not to obstruct crosswalks at intersections.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY HUNTER W. LEMLEY, P.E. 125343 ON 05/22/23. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

TX. REG: ENGINEERING FIRM F-469
TX. REG. SURVEYING FIRM LS-100080-00

STATE OF TEXAS
HUNTER W. LEMLEY
125343
LICENSED
PROFESSIONAL ENGINEER

PK #3003-21.551 (HWL: 05/22/23)

Vehicle Accumulation/Capacity		Notes
	9th-12th	
Projected Enrollment	1,770	Students
Deductions:		
By School Bus (30%)*	531	Students
By Walking (20%)*	354	Students
Other (10%)*	177	Students
Students by Pick-up/Drop-off	708	Students
Engineer Recommended Rate:	5.12	lf of max. queue per student
Average Length of Vehicle:	23.5	lf/veh (Pacheco Koch Observed)
"Projected Maximum Vehicle Accumulation":	154	Vehicles (3,625 lf)
Projected On-Site Capacity:	27	Vehicles (641 lf)
SURPLUS/DEFICIT	-127	

*Information given by school district

TMP MANAGEMENT STRATEGIES

Student ID System: *Conventional Loading System*
# of Staff Assistance: *1-2*
# of Crossing Guards: *None*

EXHIBIT **1** Z212-276

Traffic Management Plan

DISD W.W. Samuell High School, Dallas, Texas

Pacheco Koch