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TRAFFIC MANAGEMENT PLAN

Project:
Plano ISD Frankford Middle School
In Dallas, Texas

Prepared for:
City of Dallas

On behalf of:
Plano Independent School District

Prepared by:

Hunter W. Lemley, P.E.

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Plano ISD Frankford Middle School

Dallas, Texas

TABLE OF CONTENTS

INTRODUCTION

The services of **Pacheco Koch** (PK) were retained by Corgan Associates, on behalf of the **Plano Independent School District**, to prepare a Traffic Management Plan (TMP) for Frankford Middle School (the "School") located at 7706 Osaga Plaza Parkway in Dallas, Texas. This TMP is site-specific and relates to the peak traffic activity associated with school traffic at the site.

Plano ISD is seeking amend the Special Use Permit for the property from the City of Dallas (the "Approving Agency") to facilitate proposed site Improvements. Submittal of a TMP, prepared by a registered professional engineer experienced and skilled in the field of traffic/transportation engineering, is one of the requirements of Approving Agency's application process. This TMP was prepared by registered professional engineers employed by Pacheco Koch. Pacheco Koch is a licensed engineering firm based in Dallas, Texas, that provides professional services in traffic engineering, transportation planning, and other fields.

School Description

The site currently consists of an existing public middle school. Current enrollment is summarized below in **Table 1**. Proposed site improvements include the construction of a new fine arts addition in the back southeast area of the existing school building. The school is not anticipating an increase enrollment as a result of the school's addition. School starts at 8:30 AM and ends at 3:30 PM. Calculations for vehicle accumulation and parking numbers are based upon previously city-staff-approved ratios and validated by on-site dismissal observations conducted on Tuesday, February 12th and Wednesday, February 13th. Pacheco Koch performed two on-site observations each for the morning and afternoon periods.

Table 1. Current Enrollment

GRADES	EXISTING	PROPOSED
6th Grade	349	335
7th Grade	335	355
8th Grade	339	337
TOTAL	1,023	1,027

*Enrollment Data provided by *PISD*

Access to the campus is via Osage Plaza Parkway, a two-lane, median-divided Community Collector. The school is located in a predominately residential area. Directly adjacent to Osage Plaza Parkway is an existing private school with grades K through 8th – All Saints Catholic School. Due to a 30-minute separation in start/end times, it was observed that traffic from the private school had minimal impact to the traffic operations of Frankford Middle School.

The 21.24-acre subject site is currently zoned for a special use permit (SUP 1305). To facilitate implementation of the site improvements, PISD is seeking to amend the SUP for the property.

The school's improvements are planned to be completed by the 2020-2021 school year.

TMP Objectives

A Traffic Management Plan (TMP) is a site- or area-specific plan of recommended actions and strategies to manage vehicular traffic and parking, pedestrian activity, and travel by all other modes during peak demand conditions for a planned event. The "Objectives" of a TMP are to:

1. Provide a safe environment for all Users on site and the travelling public in the vicinity of the site during the Event times;

2. Minimize (and maintain within reasonable levels) travel delays and traffic congestion on site and in the vicinity of the site during the Event;

3. Ensure reasonable access and circulation is maintained on the public street system in the vicinity of the site during the Event;

4. Provide appropriate information to the travelling public in the vicinity of the site to allow for proper awareness of anticipated traffic conditions during the Event; and,

5. Promote reasonable strategies to manage travel demand to and from the site, including use of alternative modes of travel (such as walk, bike, bus, transit, etc.), when practical.

Methodology

When feasible, the Analyst should conduct first-hand observations of existing event to develop an understanding of site-specific traffic/transportation characteristics, such as: drop-off/pick-up frequency, parking needs, alternative travel mode use, safety issues, queuing, traffic congestion, site access, current traffic management strategies in use, etc. When it is not feasible to conduct such observations, interviews with staff or personnel familiar with those items is desirable. When neither option is available, the Analyst may be required to rely upon published information and/or professional judgment and experience.

Once the base information is assembled, the Analyst should estimate the projected traffic/transportation characteristics generated by the proposed Event. Next, the Analyst should inventory the attributes and resources of the subject site and determine how the site can best accommodate those projected conditions. Based upon that assessment, the recommended TMP Strategies shall be developed to optimally achieve the basic TMP Objectives. The recommended TMP Strategies should be reviewed by the School (ideally, the TMP Manager) for refinement and approval before formal submittal to the Approving Agency.

Expectations

NOTE TO SCHOOL: By submittal of a TMP to the Approving Agency, the School is implicitly agreeing to implement, maintain, and comply with the recommended actions presented herein subject to acceptance by Approving Agency and any

associated conditions Approving Agency may impose. It is also inferred that the School agrees to be self-accountable for these actions until and unless Approving Agency deems further measures are appropriate or the TMP is no longer required.

Recommended TMP Strategies may include one-time measures to be implemented before the Event and/or ongoing actions to be performed before, during, or after the Event. Recommended TMP Strategies involving on-site measures or actions are generally considered to be the responsibility of the School.

To ensure appropriate compliance and consistent implementation of the TMP, it is recommended that the School appoint a TMP "Manager". In general, a Manager should be a qualified and capable individual or group of individuals assigned to take responsibility of the TMP and be accountable for successful implementation in order to achieve the Objectives described earlier (see "**Exhibit 1**"). Other specific duties of the Manager include:

- Monitor effectiveness of TMP strategies and make prudent adjustments, as needed, to more effectively accomplish the TMP Objectives
- Maintain an awareness of readily-available alternative transportation modes serving the site and facilitate and promote their use during the Event when practical
- Serve as a liaison to the Approving Agency(-ies), when needed
- When applicable, provide training and direction to other personnel assigned to implement the TMP measures
- Provide instruction to Users on how to comply with the intent of the TMP

Recommended TMP Strategies were developed specifically for the period(s) of peak traffic demand and are depicted in the respective exhibit. For periods of less intense traffic demand, recommended TMP Strategies may be utilized, in part or in whole, as needed to realize the TMP Objectives.

Changes to TMP

Informal changes to any recommended TMP Strategies presented herein to improve efficiency or effectiveness may be implemented at the discretion of the School if those changes are prudent and do not compromise the TMP Objectives. It is recommended that changes implemented under such circumstances be documented and retained by the School for future reference or upon request. At the discretion of the Approving Agency, submittal of a formally revised TMP report/document or a validation study may be required on a predetermined or as-needed basis.

TRAFFIC MANAGEMENT PLAN

NOTE: Recommended TMP Strategies contained herein are based upon the best data, site-specific information, and analytical processes readily available at the time of the study. However, specific quantities related to traffic congestion at peak periods (e.g., duration, length of queue, etc.) are estimated values. Actual quantities may vary due to unknown or unquantifiable variables and other operational factors that may occur. In the event that actual, future conditions generate undue burden on Users and/or the travelling public, modifications to the TMP should be considered. (See preceding NOTE for guidance on implementing changes to the TMP.) However, in extreme conditions, TMP actions may not be capable of mitigating all traffic conditions, and it may be incumbent on the School to consider operational, institutional, or other long-term changes to address issues on a more permanent basis.

A summary of general guidance for additional practices is provided below:

- Parent drop-off/pick-up activity within public right-of-way should always be avoided to maximize personal safety. All queuing, parking, and loading/unloading should be accommodated within the school property boundaries.

- Within the school property, school employees may implement all measures identified in the Traffic Management Plan but shall not interact with motorists or manipulate traffic within the public right-of-way. Only deputized officers of the law may engage or attempt to influence traffic operations in public right-of-way.

A summary of <u>existing</u> conditions is provided below:

- The school operates with an unmanaged queue protocol (no staff assistance). Parent pick-off activity in the afternoon occurs within the site in front of the school building along Osage Plaza Parkway and to the west of the school building along Maribeth Drive. No external roadway changes are recommended at this time.

- Additionally, parent pick-up activity in the afternoon occurs adjacent to the property along Osage Plaza Parkway and along Maribeth Drive.

  NOTE: Parent drop-off activity in the morning peak has a similar protocol as the parent pick-up in the afternoon. Parent drop-off in the morning peak occurs at the pick-up/drop-off recessed area on-site in front of the school building and has negligible impact to traffic and pedestrian operations off-site. Generally, excessive traffic delays and queuing were not evident during school morning peak.

- School buses unload students along the internal roadway along the eastern side of the school building.

- Along with marked crosswalks, a crossing guard is stationed at the corner of Osage Plaza Parkway and Maribeth Drive. Pedestrian traffic was observed to be not more than 5% (not more than 51 students) of the student population. It was observed that the single crossing guard was sufficient for the demand to cross Maribeth Drive and Osage Plaza Parkway.

- Current pedestrian amenities include marked crosswalks with pedestrian ramps on the east and south legs of Osage Plaza Parkway and Maribeth Drive. Sidewalks are present on all frontage to the public right-of-way with pedestrian ramps existing on each private driveway on the property. Pedestrian routes were observed to cross and continue along Osage Plaza Parkway.

A graphical summary of specific recommendations and proposed conditions is provided below and depicted in **Exhibit 1**:

1. **Enforce Existing, On-street Parking Restrictions Fronting School Property During School Traffic Periods** -- Enforce existing, on-street parking restrictions along both curbsides of Maribeth Drive during school traffic periods. [Intent: to minimize traffic congestion on adjacent streets.]

2. **Install Parking Restrictions During School Traffic Periods** -- Install City approved signage to restrict parking and passenger loading fronting school property along eastbound curb lane of Osage Plaza Parkway.

3. **Allocate Parking Area Located Within Staff Lot to Parent Waiting/Loading Area** -- Provide parent waiting/loading area in existing staff parking lot located to the east of the school building.

4. **Provide Staff Assistance to Restrict Access to Buses Only** -- Provide staff assistance to only allow buses to enter through internal roadway for loading/unloading of students. Staff assistance is to restrict access through internal roadway from parent drop-off activity.

- Traffic is to enter the area via Osage Plaza Parkway and Maribeth Drive. Ingress traffic enters the southern-most driveway on Maribeth Drive to enter the site and exits the site via the middle driveway onto Maribeth Drive. Also, traffic enters the northern-most driveway on Maribeth Drive to enter the site and exits onto Osage Plaza Parkway.

- Traffic also is to enter the school site via Osage Plaza Parkway at the eastern-most driveway to enter the reserved parking lot, east of the school building and exit the same driveway. Traffic cones should be used to separate the reserved parking lot circulation from the bus circulation.

- Bus loading/unloading shall be located at the eastern side of the school building and separated from the queuing circulation. Buses are to enter the school site from the eastern-most driveway on Osage Plaza Parkway and exit onto Maribeth Drive. It is recommended that staff assist at the on-site conflict point between entering buses and entering/exiting parent vehicles.

Acknowledgement Statement

REVIEW AND COMMITMENT

This school traffic management plan (TMP) for Frankford Middle 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. 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. The school administration signee agrees to be familiar with the school site and its peak hour traffic operations.

Melanie Schulte 4/9/19

Signature Date

Name: Randy McDowell Melanie Schulte

Title: CFO Principal

END OF MEMO

APPENDIX

DEFINITIONS:
Terms are used in this report:

"Event"– a planned event(s), recurring or non-recurring, for which this TMP is being prepared (i.e., "school day")

"School" (a.k.a., "Event Organizer") – the person, group, or organization responsible for the Event

"TMP Manager" – a person or persons designated by the School to implement the TMP (also see additional tasks in the *Expectations* section)

"Users" – guests/patrons attending the Event

"Analyst" – the person(s) preparing the TMP for the School

"Approving Agency" – the municipality or government agency requiring the Traffic Management Plan

"Traffic Department" – the department of the public agency responsible for traffic operations for a given right-of-way

"Site" – the property at which the Event is located (generally assumed to be occupied by the School)

"TMP Strategies" – actions recommended by the Analyst to be undertaken before, during, or after the Event in order to manage traffic on or off site

"Queue Area" – the area for parent/guardian of a student to wait and load their student into the vehicle. (For an unmanaged queue protocol, the parent/guardian may wait curbside to load their student into the vehicle or may walk up to the school building to pick up their student. An unmanaged queue protocol does not require hang-tags, etc. however a by-pass lane is necessary in order to facilitate traffic.)

DISCLAIMERS:

A TMP should be developed by, or in concert with, an individual familiar with the general characteristics of the Event and the associated traffic/transportation needs. For this study, PK worked with School representatives to develop the proposed recommendations.

Recommended TMP Strategies should be based upon applicable engineering principles of traffic safety and traffic operations.

Any recommended TMP Strategies involving traffic control devices in the public right-of-way (including installation or removal of signs, pavement markings, etc.) are subject to the approval of, and must be implemented under direction of, the Traffic Department.

No private individual should perform, or attempt to perform, any act of traffic control within public right-of-way; only deputized officers of the law or other authorized representatives of the Traffic Department may manipulate traffic conditions within the public right-of-way.

The recommendations presented in this report reflect Pacheco Koch's assessment of current and projected traffic needs based on observations and professional judgment and incorporate feedback from DISD representatives. Pacheco Koch is not responsible for operations at the school; however, the recommendations have been presented to on-site school personnel with authority over implementation of the Plan (see **Exhibit 1** for on-site contact information). Pacheco Koch was not involved with site selection, site design, or the current operations for this project.

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

BACKGROUND:

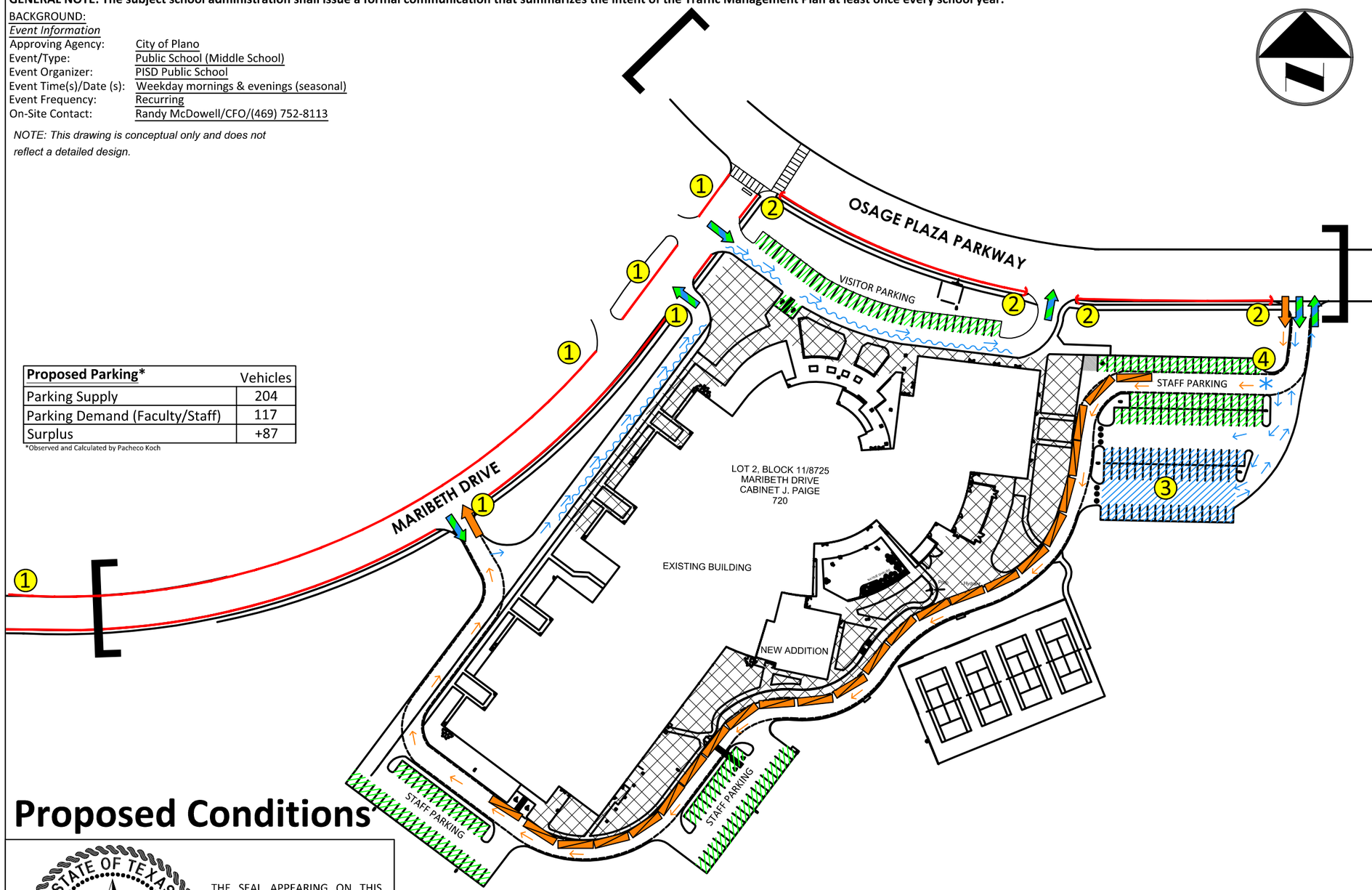
Event Information

Approving Agency:	City of Plano
Event/Type:	Public School (Middle School)
Event Organizer:	PISD Public School
Event Time(s)/Date (s):	Weekday mornings & evenings (seasonal)
Event Frequency:	Recurring
On-Site Contact:	Randy McDowell/CFO/(469) 752-8113

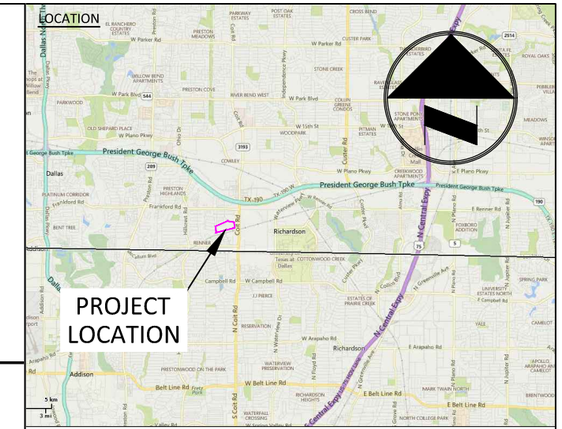
NOTE: This drawing is conceptual only and does not reflect a detailed design.

Proposed Parking*	Vehicles
Parking Supply	204
Parking Demand (Faculty/Staff)	117
Surplus	+87

*Observed and Calculated by Pacheco Koch



Proposed Conditions



Parking

- No On-Street Parking Allowed (Existing)
- No On-Street Parking Allowed (Proposed)
- Off-Street Allowed
- Access Point

Queuing/Loading

- Parent Waiting and Loading Area
- Queue Area (Unmanaged)
- Circulation/Flow
- Access Point
- School Bus Loading/Unloading
- School Bus Access Point
- School Bus Circulation/Flow
- Staff Assistance

Pedestrian/Other

- Crosswalk
- Student Waiting Area
- School Zone
- Traffic Cone
- Stop Line

STATE OF TEXAS
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PK 4229-19.072
(AJV: 04/08/19)

RECOMMENDATIONS

1. Enforce Existing, On-street Parking Restrictions During School Traffic Periods
2. Install Parking Restrictions During School Traffic Periods
3. Allocate Parking Area Located Within Staff Parking Lot to Parent Waiting/Loading Area
4. Provide Staff Assistance to Restrict Access to Buses Only

Vehicle Accumulation/Capacity		Notes
Projected Enrollment	1,027	Students
Deductions:		
By School Bus (65%)	668	Students (PISD Estimated)
By Walking (5%)	51	Students (PISD Estimated)
Other (0%)	0	Students (PISD Estimated)
Students by Pick-up/Drop-off	308	Students
City-Approved Rate:	5.12	lf of max. queue per student
Average Length of Vehicle:	23.5	lf/veh (Pacheco Koch Observed)
"Projected Maximum Vehicle Accumulation":	67	Vehicles (1,575 lf)
Projected Capacity:	80	Vehicles (1,880 lf)
SURPLUS	+13	

EXHIBIT 1 Z189-214

Traffic Management Plan
Proposed Conditions

PISD Public School, Dallas, Texas

Pacheco Koch