

October 25, 2018

PK# 2816-17.460

Z178-259

TRAFFIC MANAGEMENT PLAN

Project:

DISD New Tech High School at B.F. Darrell

In Dallas, Texas

Prepared for:

City of Dallas

On behalf of:

Dallas Independent School District

Prepared by:



Hunter W. Lemley, P.E.



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

TRAFFIC MANAGEMENT PLAN DISD New Tech High School at B.F. Darrell

Dallas, Texas

TABLE OF CONTENTS

INTRODUCTION	1
<i>School Description</i>	1
<i>TMP Objectives</i>	2
<i>Methodology</i>	3
<i>Expectations</i>	4
<i>Changes to TMP</i>	5
Traffic Management Plan	5

Exhibit 1. Recommendations/Proposed Conditions

INTRODUCTION

The services of **Pacheco Koch** (PK) were retained by Masterplan, on behalf of **Dallas Independent School District**, to prepare a Traffic Management Plan (TMP) for New Tech High School at B.F. Darrell (the "School") located at 4730 S Lancaster Road in Dallas, Texas. This TMP is site-specific and relates to the peak traffic activity associated with school traffic at the site.

DISD is seeking amend the Planned Development District 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 School consists of an existing public high school with grades 9th through 12th. New Tech High School ("The School") currently is located at the A. Maceo Smith school building -- 3030 Stag Road and will relocate to the B.F. Darrell school building. The existing B.F. Darrell school building is currently occupied by the existing 430-student Barack Obama Male Leadership Academy which will swap locations with the existing New Tech High School located at A. Maceo Smith school building. The existing B.F. Darrell school building is located just south of a hospital – a driveway to the hospital is located on the east leg of the intersection of S Lancaster Road and Atlas Drive.

Site improvements include the construction of a new approximately 8,700 SF classroom building and are anticipated to be completed for the 2020-2021 school year. After the site relocation and proposed site improvements are completed, DISD anticipates enrollment will not increase.

School starts at 9:15 AM and ends at 4:15 PM. Current enrollment is 441 students with a maximum enrollment of 500 students. A summary of the existing and future school enrollment is provided in **Table 1**. Calculations for vehicle accumulation and parking numbers are based from on-site dismissal observations at the existing campus (A. Maceo Smith High School) conducted on Thursday, March 8th, 2018. Observations were also conducted at the future site on Wednesday, October 24th, 2018.

Table 1. Current Enrollment

GRADES	EXISTING	PROPOSED
9 th Grade	80	--
10 th Grade	74	--
11 th Grade	95	--

12 th Grade	98	--	
TOTAL		441	441

NOTE: The enrollment data provided above is based upon the most current and complete information available at the time of this study publication.

Access to the campus is provided on S Lancaster Road. The nearest traffic signal is located at S Lancaster Road and Atlas Drive, which fronts the northwestern corner of the property. Land uses surrounding the site are single family and multifamily residential.

An existing school zones surrounding the school is located on S Lancaster Road.

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.

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

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.

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.

Graphical summaries of recommendations and proposed conditions are depicted in **Exhibit 1**.

A summary of existing conditions is provided below:

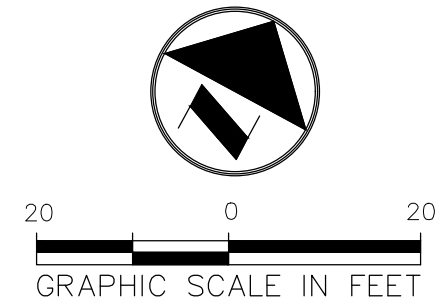
- All parent pick-up activity currently occurs on on-site at the future site.
- The intersection of S Lancaster Drive and Atlas Drive is signalized. Heavy parent vehicle occurs for the northbound U-turn maneuver.
- Traffic operations at the school minor driveway on S Lancaster Road is a minor STOP-approach and includes outbound bus traffic during pick-up and drop-off times.

END OF MEMO

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.

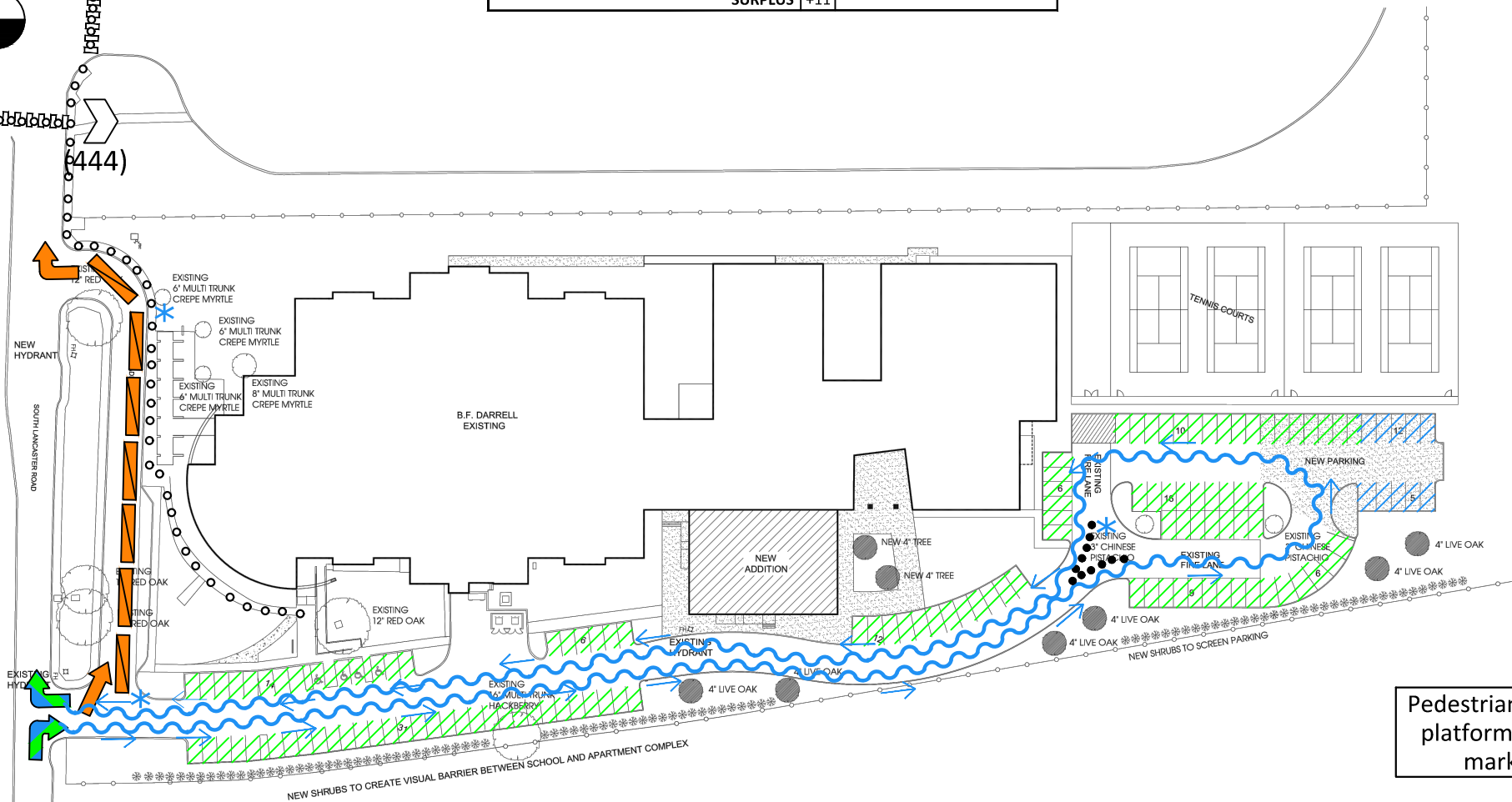
DART Rail Station located approx. 700 feet north of site property line

Vehicle Accumulation/Capacity	Notes
Projected Enrollment	500 Students
Deductions:	
By School Bus (25%)	125 Students (DISD Estimated)
By Walking (3%)	15 Students (DISD Estimated)
Other (7%)	34 Students (DISD Estimated)
Students by Pick-up/Drop-off	326 Students
Estimated Rate:	5.12 lf of max. queue per student
Average Length of Vehicle:	23.5 lf/veh (Pacheco Koch Observed)
"Projected Maximum Vehicle Accumulation":	71 Vehicles (1,669 lf)
Projected Capacity:	82 Vehicles (2,217 lf)
SURPLUS	+11



Atlas Drive

S Lancaster Road



School Zone begins just south of intersection of Lancaster and 52nd Street

Proposed Parking*	Vehicles
Parking Supply	127
Parking Demand (Observed)	111
Surplus	+16

*Observed and Calculated by Pacheco Koch

Pedestrian route to DART rail platform via sidewalks and marked crosswalk.

Queuing/Loading

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

Pedestrian/Other

- Trail/Path
- Crosswalk
- School Zone
- Traffic Cone
- Public Transit Stop
- (DART Route No.)
- Traffic Signal

Proposed Conditions

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY HUNTER W. LEMLEY, P.E. 125343 ON 10/25/2018. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

BACKGROUND:

Approving Agency: City of Dallas
 Event/Type: Public School (High School)
 School Name: New Tech High School
 Event Time(s)/Date (s): Weekday morning & evenings (seasonal)
 Event Frequency: Recurring
 On-Site Contact: Mr. Choice/Principal/(214) 932-7600

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

TX. REG. ENGINEERING FIRM F-469 PK #2816-17.460
 TX. REG. SURVEYING FIRM LS-100080-00 (HWL: 10/25/18)

EXHIBIT 1 **Z178-259**

Traffic Management Plan Proposed Conditions

DISD New Tech High School, Dallas, Texas

