

TRAFFIC MANAGEMENT PLAN FOR
**BISHOP DUNNE CATHOLIC
SCHOOL**

IN DALLAS, TEXAS

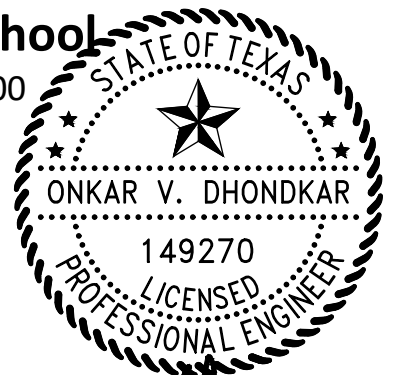
DeShazo Project No. 24057

Prepared for:

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Bishop Dunne Catholic School

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Prepared by:

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Onkar Dhondkar
05/30/2024

May 13, 2024

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SCHOOL TMP CERTIFICATION

SCHOOL REVIEW AND COMMITMENT

This plan was developed for the Bishop Dunne Catholic School with the intent of optimizing safety and efficiency related to vehicular traffic generated by the school during peak traffic periods. A concerted effort and full participation by the school administration, staff, students, and parents are essential to maintain safe and efficient traffic operations.

The Bishop Dunne Catholic School staff members have reviewed the Traffic Management Plan and support the strategies presented herein.

The Bishop Dunne Catholic School is committed to continually reviewing and assessing the effectiveness of the TMP and if warranted, will implement changes in the interest of increasing safety, and efficiency and minimizing impacts on the surrounding community.



Bishop Dunne Catholic School Principal

8/12/24

Date



Bishop Dunne Catholic School Officer (if applicable)

8-13-2024

Date

NAME AND CONTACT INFORMATION OF:

Principal Of the School: sguerrero@bdcs.org

School Officer/ Superintendent: RSUartz@BDcs.org

General School Information

School Name: Bishop Dunne Catholic School

Principal/Head of School: Stephen Guerrero: sguerrero@bdcs.org

Location: 3900 Rugged Drive, Dallas, TX 75224

Type: Private School

Existing Zoning: SUP 1393

Prior TMP Date: N/A

Observations

Dates Observed:

4/29/2024 – 6:30-8:30 AM

4/29/2024 – 2:30-4:30 PM

5/1/2024 – 2:30-4:30 PM

5/2/2024 – 2:30-4:30 PM

Peak Queue: 41 Vehicles

Available Queue: 27 Vehicles

Surplus: 14 Vehicles

INTRODUCTION

DeShazo Group, Inc. (DeShazo is an engineering consulting firm based in Dallas, Texas, that provides licensed engineers and planners skilled in the field of traffic and transportation engineering. DeShazo's services were retained by **Bishop Dunne Catholic School** (client to provide a Traffic Management Plan (TMP) for the Bishop Dunne Catholic School (private school) located at 3900 Rugged Drive, Dallas, TX.

PURPOSE

A school TMP is important to achieve an optimum safe level of traffic flow and circulation during the peak traffic periods associated with student drop-off and pick-up operations. By properly managing the vehicular traffic generated during these critical periods, the safety and efficiency of other modes of travel—including pedestrian traffic—will also inherently improve and the operational impact on the public street system should also be minimized. This plan, however, should not be considered a comprehensive set of instructions to ensure adequate safety. It should be used as a tool to facilitate a safer and more efficient mobility environment.

TRAFFIC MANAGEMENT PLAN – METHODOLOGY

As a standard TMP requirement, DeShazo observed the on-site traffic on three separate days at the following times and dates.

- Monday, April 29th – Morning Arrival
- Monday, April 29th – Afternoon dismissal
- Wednesday, May 1st – Afternoon dismissal
- Thursday, May 2nd – Afternoon dismissal

Field observations of Bishop Dunne Catholic School indicate that the current practices during the morning drop-off and afternoon pick-up periods do not present a significant obstruction to vehicular traffic in the nearby roadway. DeShazo uses these observations in combination with interviews with school personnel, imagery from Google Earth, and information provided by the school to develop a Traffic Management Plan that will result in a traffic demand that can be maintained within the school campus.

SCHOOL PROJECTION

The Bishop Dunne Catholic School is not expected to increase its student count (currently 378 students). Additional factors—such as expected student drivers, future bus operations, and afterschool activities—will be considered to determine the impact of the required queue to accommodate the additional students.

Table 1 on the following page summarizes the school's operational characteristics used in this analysis. This information was given to us by Bishop Dunne Catholic School, if this information changes for the school we recommend having the TMP updated accordingly.

Table 1. Bishop Dunne Catholic School Operational Characteristics

	Existing Conditions	Proposed Conditions
Student Enrollment:		
Elementary:	0	0
Middle:	102	105
High:	276	295
(a)	Total: 378	Total: 400
Daily Start/End Schedule	<p>Drop Off Begins at 7:00 a.m. 8:30 a.m. school start</p> <p>Pick Up Vehicles start lining up at 3:00 p.m. All students let out at 3:30 p.m.</p>	<p>Drop Off Begins at 7:00 a.m. 8:30 a.m. school start</p> <p>Pick Up Vehicles start lining up at 3:00 p.m. All students let out at 3:30 p.m.</p>
Approximate percentage of students traveling by parent drop-off /pick-up	<u>84%</u>	<u>84%</u>
Number of Student Drivers (b)	12	14
Approximate Percentage of Student Remaining after Dismissal	15%-20%	15%-20%
Number of students remaining after dismissal	56-75	60-80
Number of students remaining after school care	5-10	5-10
Number of students traveling by bus (c)	49	51
Total number of students using the pick-up/drop-off method =a-b-c	317	335
The number of staff assisting with current TMP enforcement.	4-5	4-5

NOTE #1: To the highest degree practical, the accounts of "existing conditions" presented in this report were based upon actual on-site observations conducted by DeShazo during the typical school days/conditions and from personal interviews with school representatives. The analyses and recommendations presented in this report for "proposed" or "future" conditions were based upon evaluations of "existing conditions" and are supplemented by DeShazo's professional judgment and experience. "Proposed"/" Future" conditions are intended to reflect the anticipated day-to-day conditions at full occupancy.

NOTE #2: Occasional functions or other events may be held at the school that generate traffic outside of the traditional peak drop-off and pick-up periods. While some of the measures presented in this report may be applicable in such cases, traffic circulation plans other than those directly associated with the primary drop-off and pick-up periods are not the subject of this analysis.

NOTE #3: Bishop Dunne Catholic School stands out compared to similar schools due to this school having a much lower percentage of students that get picked up by parents. Most other schools like this one rely on 100% parent drop-off/pick-up. DeShazo believes this is due to this school's location (in a residential neighborhood).

CURRENT SITE ACCESS AND CIRCULATION

The school is located North of Loop 12 on the eastern corner of Rugged Drive and Vatican Lane intersection. Bishop Dunne Catholic School has a driveway on the school property that runs the length of the western property line along Rugged Drive into a visitor parking lot at the northern side of the property, the queue also continues inside the northern visitor parking lot. There are three access points along the property. The first access point is at the southwest corner of the property. This access point serves as the main ingress and egress point for the school as seniors and faculty park along the southern and western property lines, and parents enter to queue at drop-off and pick-up times. The second access point is roughly 470 ft north of the southernmost access point. This access point serves three purposes, first as an egress point for all vehicles parked or queued along the western property line, second it serves as an ingress point for vehicles entering the northern visitor parking lot queue, and third it serves as an egress point for the for the northern visitor queue. There are cones to divide the lanes at the access point to allow for efficient ingress and egress of the vehicles and the separate queue. Lastly, there is an egress point roughly 250 ft from the middle access point, at the northernmost point of the property that serves the northern queue in the visitor parking lot.

There is a private bus loading zone in the southern student and faculty parking lot, with the buses egressing using the southern access point. The utility loading zone is in the back of the property through the students and faculty along the eastern side of the school building. There is limited signage to indicate how traffic should flow during school hours. **Exhibit 1** shows an example of signage at the middle access point that indicates that the western queue and parking is a one-way area. **Exhibit 2** shows an example of wayfinding at the middle access point that indicates the location of campus buildings.

Exhibit 1. Middle Access Point Signage On Private Driveway Southbound

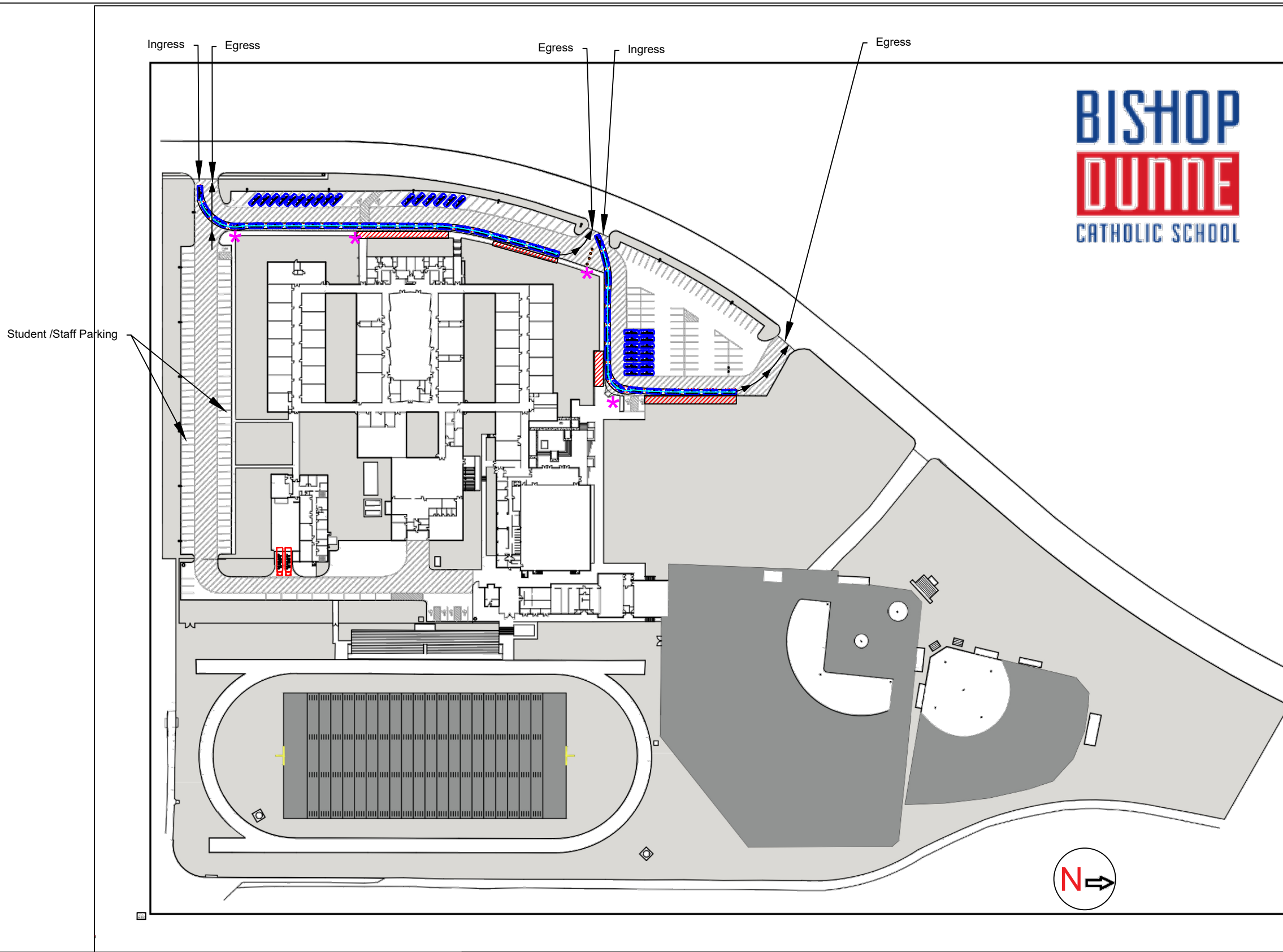


Exhibit 2. Middle Access Point Signage On Private Driveway Eastbound



There is one staff member who currently assists with drop-off and pick-up times located at the middle access point to direct traffic and assist in the ingress and egress of vehicles at the private intersection. DeShazo prepared **Exhibit 3** on the next page which shows how parents currently queue at the school.

Currently, parents enter the queue line from the southernmost access point to enter the one-way queue that exits out of the middle access point. Parents also may enter the visitor parking lot queue line from the middle access point following the path designated by signage, street cones, and staff assisting with traffic. Parents in the visitor parking lot queue may exit from either the northernmost egress point or from the middle access point they entered from.



Note:

1. The purpose of this TMP is to promote safety for the school and to prevent the queue from the school from spilling onto the nearby roadway. The school administration should continually observe the effects of this TMP and make adjustments as necessary per the recommendation section of the report.
2. A traffic cone in this report can be any approved temporary traffic control device.

Scale

NTS

Legend

- Parent Queue
- School Bus Queue
- School Staff
- Traffic Cone
- Exit Path
- Student Loading Zone

Queuing Summary

Student Group	Middle School	High School	Total
Student Enrollment	102	276	378
School Schedule	8:30AM - 3:30PM	8:30AM - 3:30PM	
Max Observed Queue			41 vehicles
Queue Provided in the TMP			66 vehicles
Queue Surplus			25 cars

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 400 S Houston St, Ste. 330, Dallas, TX-75202

Current Traffic Management Plan

Bishop Dunne - Dallas, Texas

DGI Project #:24057

Date : May 24

Drawn by: LP

Checked by: OD

Exhibit

3

STUDENT LOADING

MORNING DROP-OFF

During the morning drop-off period, parents entered the queue as anticipated and DeShazo found that during our observations the largest queue for student arrival was 12 cars (approximately 300 LF). This queue was fully managed by the queue lanes on school property.

AFTERNOON PICK-UP

During the afternoon pick-up period, parents generally enter the queue as anticipated, and students gradually leave to meet their parents parked in the queue. DeShazo found that during our observations the largest queue for student dismissal was 41 cars (approximately 1,025 LF). This queue was made possible by several factors occurring simultaneously. The first was a queue forming from the southern access point to the middle access point. The queue was along the curb of the right-hand side of the road and parents also would temporarily park in the available parking spaces along the left-hand side of the road with vehicles using the middle lane to exit. The second was a queue forming from the middle access point to the northern exit point. The vehicles queued along the right-hand curb and parents would also temporarily park in the available visitor parking lot that made up the interior of the northern parking area. Lastly, there were also student vehicles that were seen leaving the student parking area out of the southern access point.

PROPOSED TRAFFIC CIRCULATION PLAN

According to the City of Dallas Guidelines, all traffic should be contained inside the school property. School observations consistently indicate that maximum queues occur during the afternoon peak period when students are being picked up—the morning period is typically not a significant traffic issue since drop-off activities are more temporally distributed and occur much more quickly than student pick-up. The observed peak number of vehicles during the dismissal time is provided in **Table 2**.

Table 2. Peak On-Site Vehicle Demand During Afternoon Peak-Up Period

		Peak queue time 3:30 PM
		School
Existing	Total number of students using the pick-up/drop-off method (84% of enrolled)	317
	Queue¹	41 Vehicles
	Dismissal Time	3:30 PM

¹The existing maximum queue was observed to be 41 vehicles in demand at approximately 3:30 PM.

OBSERVATIONS - QUEUING

Morning observations at Bishop Dunne Catholic School showed that there was a maximum queue of 12 vehicles (300 LF) with all vehicles being contained within the current traffic management plan. The parent cars queue in a single line along the eastern curb of the private driveway for the entire drop-off period.

Afternoon observations showed that there was a maximum queue of 41 vehicles (1,025 LF). Most of the vehicles were able to stack according to the current traffic management plan with 26 viewed in the queue, 15 vehicles parking in extra available parking spots and 1-6 vehicles queuing on the city’s right of way until the queue moved forward. Some parents were observed parking in the queue to wait for their children to arrive. This created issues where the queue extended outside of the property line and onto the city’s right of way.

During the afternoon, due to the elementary school located across the street letting out at the same time and their queuing on the city right of way. Intersections to enter the southern access point and middle access point create traffic conflicts, where vehicles are unable to ingress or egress from the property. Having ingress and egress from the southern and middle access points created instances where vehicles traveling northbound and southbound would have to self-regulate when they turn to ingress onto the property. These vehicles must self-regulate when to turn with oncoming traffic and vehicles egressing; as such, vehicles were observed as lingering at intersections for extended periods waiting for available opportunities to ingress onto the property.

The southern queue that runs from the southern access point to the middle access point is a one-way road; however, it was observed on multiple days that vehicles would travel the wrong way, against the flow of traffic to use the southern access point despite signage and traffic cones located at the middle access point. The information provided by Bishop Dunne Catholic School mentions that the school is planning on keeping the student enrollment about the same going forward. This means that the queue for the school should updated as the current traffic management plan is sufficient.

RECOMMENDATIONS

The school administration should continue to implement active management of student loading to expedite queueing operations and reduce the maximum accumulation of traffic. Queue pick-up participation is a challenge that schools face constantly. Generally, traffic delays or congestion during the afternoon pick-up period is notably greater than the traffic congestion experienced during the morning drop-off period due to timing and concentration characteristics. In most instances, achieving efficiency during the afternoon period is most critical; the morning traffic operations require nominal active management. Therefore, except where stated otherwise, the recommendations provided herein pertain specifically to the afternoon period operations. DeShazo recommends consideration of the following recommendations to optimize queue operations at Bishop Dunne Catholic School:

GENERAL SAFETY MEASURES

- To maximize personal safety, any passenger loading (or unloading) within the public right-of-way should be discouraged. Parents should be warned that loading children into cars on public roads can result in a citation.
- To minimize liabilities, no persons other than deputized officers of the law should engage or attempt to influence traffic operations in the public right-of-way.
- Per the Transportation Code, Section 545.4252, State law prohibits the use of wireless communication devices while operating a motor vehicle when a school zone speed restriction is in effect. Restrictions do not apply to stopped vehicles or the use of handheld free devices.
- Student safety should always remain paramount. School administration should remind students, parents, and staff continuously throughout the school year of their expectations relative to this traffic management plan.
- School administration should, in the interest of student safety, review traffic operations and address any problems concerning this traffic management plan.
- School administration should conduct annual meetings with the neighborhood to address any problems concerning traffic management for the school.

RECOMMENDED PLAN

The current TMP for Bishop Dunne Catholic School is insufficient for the current school conditions. Observations show that the maximum queue for the school is 27 cars (663 LF). This means that the current TMP will have a surplus of 14 cars (350 LF).

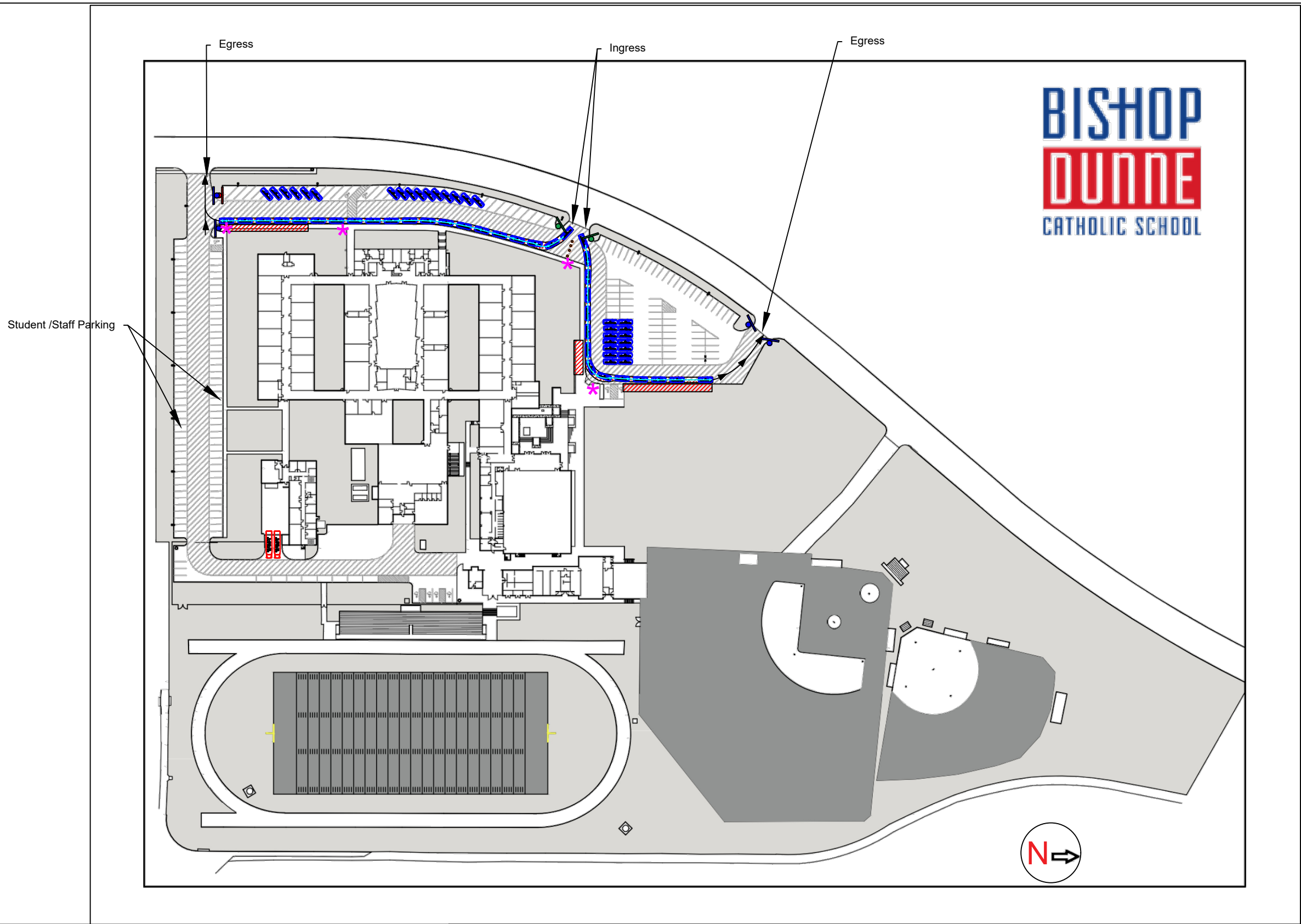
NECESSARY ACTIONS

1. Bishop Dunne Catholic School should have a staff member assist in the vehicle queues, ensuring that vehicles continuously pull forward to ensure that as many vehicles are queueing on the property as possible.

RECOMMENDED ACTIONS

1. Bishop Dunne Catholic School should implement a new queuing strategy to solve traffic issues observed at the southern access point and middle access point.
 - a. One strategy to solve observed traffic issues would be to make the middle access point the only ingress point and have the northern and southern access points be the egress points. This strategy would allow for consistent flow as vehicles are traveling in the same direction at the northern and southern intersections. In order to implement this strategy however, the striping that runs along the western curb between the southern and middle access points would have to be reversed to allow vehicles traveling southbound from the middle access point to easily park.
 - b. Another strategy would be to close the middle access point and have vehicles ingress only from the southern access point and egress only from the northern access point. The queues would run along the eastern curb of the parking lot and a second queue could form in the middle lane from the middle access point to the southern access point. Similarly, this strategy would solve intersection conflict issues while also allowing for all the parking striping to remain the same.
2. Bishop Dunne Catholic School should also implement better one-way signage at the middle access point, preferably with a visible one-way sign for vehicles ingressing from this point as well as do-not-enter signage that is identifiable and on both sides of the driveway. This is to prevent vehicles from either making a right-hand turn into oncoming traffic or having vehicles from the northern queue try to use the southernmost access point to egress from the property.
3. Left turns from the property onto the city's right of way should not be allowed. While trying to egress from the property, waiting for an opening in the city's right of way while vehicles are trying to also ingress onto the property creates traffic at the intersection since the vehicle trying to leave must wait for two lanes of traffic to be available thus creating unnecessary traffic in the school queues.

Exhibit 4 on the following page shows the proposed TMP for Bishop Dunne.



- Note:**
1. The purpose of this TMP is to promote safety for the school and to prevent the queue from the school from spilling onto the nearby roadway. The school administration should continually observe the effects of this TMP and make adjustments as necessary per the recommendation section of the report.
 2. A traffic cone in this report can be any approved temporary traffic control device.

Scale

NTS

- Legend**
- Parent Queue
 - School Bus Queue
 - School Staff
 - Traffic Cone
 - Exit Path
 - Proposed "One Way" Sign
 - Proposed "Stop" Sign
 - Proposed "Do Not Enter" Sign
 - Student Loading Zone

Queuing Summary

Student Group	Middle School	High School	Total
Student Enrollment	102	276	378
School Schedule	8:30AM - 3:30PM	8:30AM - 3:30PM	
Max Observed Queue			43 vehicles
Queue Provided in the TMP			64 vehicles
Queue Surplus			21 cars

Proposed Traffic Management Plan

Bishop Dunne - Dallas, Texas

DGI Project #:24057
 Date : May 24
 Drawn by: LP
 Checked by: OD

Exhibit
4

SUMMARY

The above-recommended actions are meant to create a safer, more efficient environment for vehicles that will inevitably queue on the public right-of-way. Overall, the full cooperation of all school staff members, students, and parents is crucial for the success of any traffic management plan. Proper training of school staff on duties and expectations about the plan is recommended. Sufficient communication at the beginning of each school term (and otherwise, as needed) with students and parents about their duties and expectations is also recommended. Details of the TMP shall be reviewed by the school regularly to confirm its effectiveness and compliance and to consider any adjustments needed to provide overall safety.

(NOTE: In this report, the term “parent” refers to any parent, family member, legal guardian, or another individual who is involved in the pick-up or drop-off of one or more students at the school.)

END OF REPORT