APPENDIX E

TRAFFIC CIRCULATION REVIEW OF HUNTINGTON MIDDLE SCHOOL, JULY 31, 2018

ALBERT GROVER & ASSOCIATES

July 31, 2018

Mrs. Julie Boucher
Assistant Superintendent, Business Services
San Marino Unified School District
1665 West Drive
San Marino, California 91108

RE: Traffic Circulation Review for Huntington Middle School

Dear Ms. Boucher:

Albert Grover & Associates (AGA) is pleased to present to you this traffic circulation review conducted for Huntington Middle School, located at 1700 Huntington Drive, on the south side of Huntington Drive between Virginia Road and West Drive. This assessment is a follow-up to a prior circulation evaluation completed by AGA in 2014.

AGA engineers, in conjunction with District staff, conducted field reviews during the busy student drop-off and pick-up periods. The review included an examination of existing crosswalks and pedestrian walkways, signage, and pavement striping as well as observations of traffic circulation, driveway access, and both driver and student behavior. Based on the field review as well as input from District staff, AGA engineers then developed recommendations to facilitate the safe, orderly, and efficient movement of vehicles and students in and around the campus. The following report is a brief summary of our observations, findings, and recommendations.

Background

Huntington Middle School is located on the south side of Huntington Drive just west of West Drive and immediately east of Valentine Elementary School. Its parking lots are located to the east of the classroom buildings, contiguous with parking facilities for the San Marino Public Library as well as the District offices. Driveway access for student drop-off and pick-up is provided via two driveways on Huntington Drive and one driveway on West Drive (**Figure 1**). An official student loading zone is marked within the southern parking lot, with ample queuing capacity in the drive aisle stretching back east toward West Drive.

Field Observations & Findings

A field review was conducted on April 19, 2018, by AGA engineers in conjunction with Mr. Gerald Schober representing the District. Field observations focused particularly on the drop-off/pick-up areas in the parking lots as well as the driveways on Huntington Drive and West Drive. The student drop-off activity was brisk for the thirty minutes before the start of classes with congestion in the parking lot peaking just prior to the tardy bell.

The official student drop-off in the southern parking lot worked well from both a safety and circulation standpoint. Although drop-off activity was brisk, the queue of vehicles waiting to enter the area was contained within the parking lot without significantly restricting traffic flows. The drop-off area wasn't as congested as might be expected based on the student population primarily due to a significant portion of drivers choosing to drop students off in the northern parking lot. If those drivers had joined the queue for the southern parking lot, traffic could have become severely congested or impassible at the drive aisle connecting the two parking lots.

Figure 1: Huntington Middle School Campus

In addition to the official student drop-off location in the southern parking lot, there were also unpermitted student drop-offs occurring in the northern parking lot as well. Drivers heading eastbound on Huntington Drive would enter the western driveway of the northern parking lot and stop along the west curb of the drive aisle that is both red zoned and striped out prohibiting travel. The section of curb where the drop-offs occurred is approximately 140 feet in length, accommodating about seven vehicles. This drop-off activity is technically not permitted by the traffic and parking controls; however, the activity generally occurred in a safe and orderly manner and provided congestion relief for the official loading zone in the southern parking lot. After dropping students off at the curb in the northern parking lot, drivers would proceed in a U-shaped circulation pattern within the parking lot to exit the eastern driveway onto

Huntington Drive, avoiding the queues in the southern parking lot entirely. This drop-off activity was contained within the parking lot until approximately fifteen minutes prior to start of classes when vehicles backed into Huntington Drive blocking the number-three through lane of traffic. During the observation period, this backup at the driveway peaked at six vehicles.

Furthermore, student drop-off and pick-up activity was also observed to occur at the back of the campus, along Sherwood Road. Huntington Middle School students can enter and exit the campus on foot via the driveway near the basketball courts or a pedestrian gate at the southern edge of the baseball fields. It was observed that traffic flows on Sherwood Road generally flowed well, with most vehicles waiting only briefly to drop off or pick up students. The moderate activity along Sherwood Road acts as a secondary congestion relief allowing drivers to drop off and pick up students without adding to the vehicle queues in the official loading zone within the southern parking lot off of West Drive. It was also observed, however, that some drivers at times stop in the travel lanes or temporarily block driveways on Sherwood Road while dropping-off or picking-up students having little regard for other drivers or residents. Although the loading activity was brisk, traffic was observed to be generally compliant with speed limits and drivers readily yielded to pedestrians crossing Sherwood Road.

Recommendations

Based on our observations of traffic and parking controls, traffic flow, and circulation, we recommend that the District consider officially creating a second student loading zone in the northern parking lot. Doing so would significantly increase the loading zone and spread the proportion of student loading activity between the two parking areas. Thus, traffic efficiency could be improved without introducing additional student safety concerns since both loading zones would provide a clear pedestrian path to the campus entrance. It is also suggested that the District consider working with the City of San Marino to provide a right-turn-only lane of approximately 120 feet on eastbound Huntington Drive to facilitate turns into the northern parking lot without impacting traffic flow on Huntington Drive. Finally, periodic random enforcement of legal stopping and parking along Sherwood Road should be arranged to ensure driver compliance and enhance pedestrian safety. As outlined in **Figure 2**, the following list of traffic and parking modifications would be necessary to effect the changes recommended:

Improvements Recommended on District Property

- Remove approximately 140 feet of red zone along the west curb of the northern parking lot and install white passenger loading zone.
- Install "DROP OFF ONLY" pavement legends within the striped lane adjacent to the west curb of the northern parking lot, to match the existing loading zone in the southern parking lot.

Improvements Recommended in City Right-of-Way

- Widen Huntington Drive by approximately 5 feet on the southern curb approaching the western driveway of the northern parking lot in order to install a 120 foot right-turn pocket.
- Relocate one street light pole five feet southerly to accommodate the roadway widening.
- Prohibit parking within the newly created right-turn pocket.
- Install appropriate lane line striping and arrows creating the right turn pocket.
- Install a "Right Lane Must Turn Right" sign (R3-7R) indicating that all traffic in the right lane must turn into the northerly parking lot.

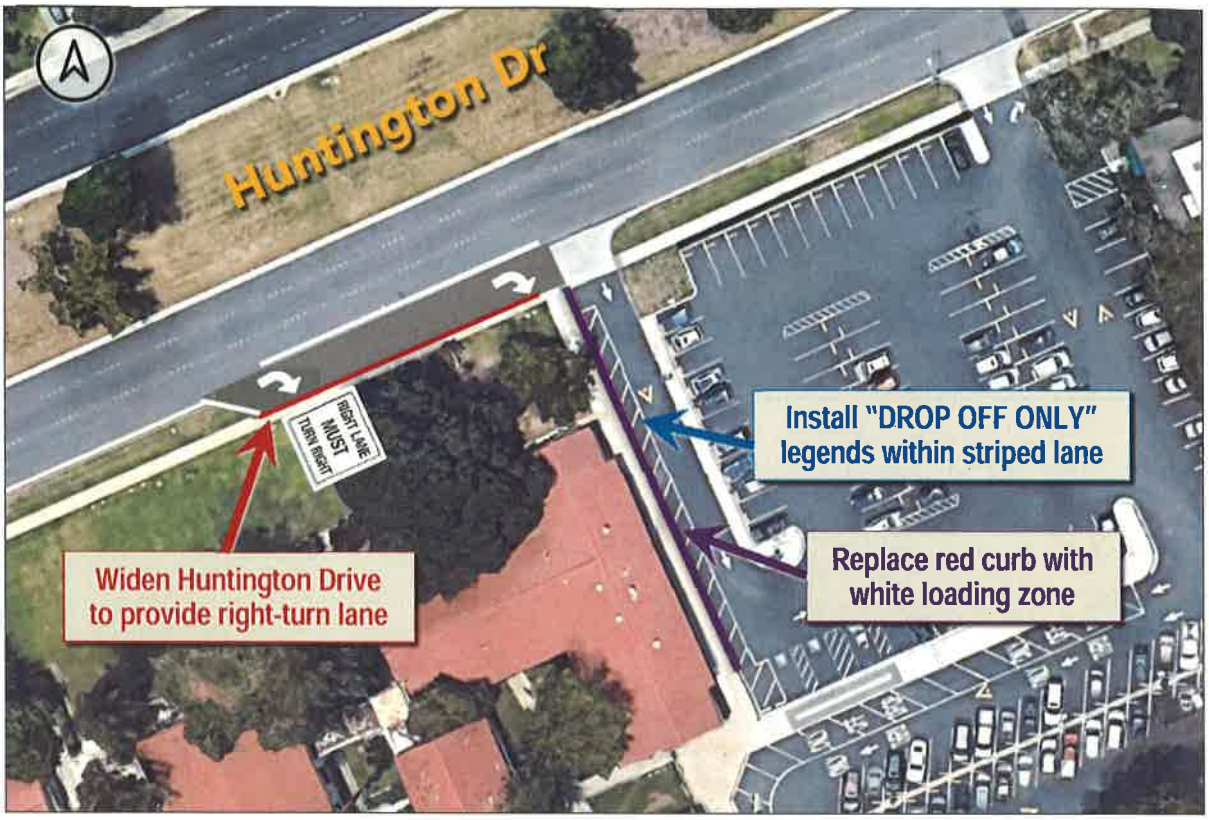

Figure 2: Huntington Middle School Recommended Improvements.

While the District could implement just the improvements within the campus, it is suggested that the District work with the City of San Marino to obtain concurrence and participation in implementing the recommended improvements. It is estimated that the improvements could cost from $18,000 to $35,000 depending on the final design.

We at Albert Grover & Associates trust that our observations, assessments, and findings contained in this report provide the District with a clear understanding of the reasoning that led to the development of the recommendations contained herein. It is our belief that the changes in parking and traffic controls outlined in the recommendations will improve efficiency and access while enhancing traffic and student safety. Should you have any questions regarding this report and the opinions expressed within, please do not hesitate to contact us at (714) 992-2990.

Respectfully submitted,

ALBERT GROVER & ASSOCIATES

David A. Roseman, TE
Principal Transportation Engineer

Kawai C. Mang, EIT
Associate Transportation Engineer I

\San Marino School District\212-002\Huntington Circulation Letter Report.docx

ALBERT GROVER & ASSOCIATES