



MEMORANDUM

To: Ernesto Pino, Interim Public Works Director, City of Coral Gables
Eric Riel, Director of Planning, City of Coral Gables

From: Charles Hart, P.E., PTOE, Marlin Engineering, Inc.

CC: Eric Penfield, P.E., Marlin Engineering, Inc.

Date: May 26, 2010

Re: Review of Gulliver Academy Special Events Traffic Management Plan (May 18, 2010)

MEI Project No.: 2007013.001

Marlin Engineering was tasked by the City of Coral Gables with reviewing Gulliver Academy's Special Events Traffic Management Plan (SETMP), as it relates to their Master Plan Revision application. The SETMP, dated May 18, 2010, was requested by the City of Coral Gables to address parking capacity concerns and related on-site traffic movements during school events. Through the school's Master Plan Revision, several new buildings will be added to the campus to replace existing outdoor facilities. However, the Applicant has stated that student enrollment will not be increased because of the master plan changes, and as a result, there is no expectation of increased parking demand or school-generated traffic volume.

Summary of Parking Supply and Demand Estimates

A key component of the SETMP is the assurance that the anticipated parking demand will be met or exceeded by the available on-site parking supply. The following provides an overview of the available on-site parking supply and estimated parking demand as provided by the Applicant.

With the implementation of the changes proposed under the revised Master Plan, there will be a total of 293 on-site parking spaces at Gulliver Academy. Of this total, 77 spaces will be set aside for school staff, leaving 216 spaces for parents and visitors. According to the estimate of event attendance per the submitted SETMP, the worst case scenario would involve a maximum of 500 attendees. Given this attendance, which is assumed to not include school staff and the number of parent/visitor parking spaces, the average vehicle occupancy rate equates to 2.31 people per parking space. Since the school's events will involve students, parents, and other possible friends or family arriving for an event in one vehicle, it is highly probable that the actual average vehicle occupancy rate will be higher than 2.31. (This ratio implies a vehicle would have one driver and 1.31 passengers

indicating that most vehicles would only have one parent and one child in it.) However, even if such a conservative average vehicle occupancy rate of 2.31 were realized, the on-site parking supply is sufficient to accommodate an event with an attendance of 500 people or less.

Please note that one additional event, which was not discussed in the Applicant's SETMP, has been recently identified by School and City officials with a potential attendance in excess of 500 people. It is the Gulliver Academy's middle-school graduation ceremony, where School officials estimate that approximately 800 attendees would be present at this once-a-year event. At the City's request, Marlin Engineering conducted an evaluation to assess if the parking demand for this 800-person special event could also be accommodated by the on-site parking supply.

At an event such as a middle school graduation ceremony, an average vehicle occupancy rate over 3.0 persons per vehicle would not be unreasonable. (This could represent one driver, a second parent, and one child for a total of 3 people.) However, using the previously calculated and conservative estimate of only 2.31 persons per vehicle, an event serving 800 attendees would require parking for 347 vehicles (800 attendees divided by 2.31 persons per vehicle). Given that the on-site parking supply for parents/visitors is 216 parking spaces, it is estimated that a parking overflow of 131 vehicles would exist. For this particular event, the Applicant has proposed that vehicles could also be parked on the ball fields located at the rear of the property, thus increasing the overall parking supply. Following a general review of the ball field area, an extremely conservative estimation revealed that over 300 vehicles could be parked on the grass areas of the ball field given the vehicles are parked in an orderly manner. Therefore, the resulting parking demands associated with an event of up to 800 attendees could be accommodated on the school's property.

Traffic Control

As proposed in the Applicant's SETMP, school security staff and police officers will be used to assist with on-site traffic circulation, as well as site ingress and egress via Old Cutler Road, as needed. The use of professionally trained traffic control personnel is proposed to incrementally increase depending on the number of attendees anticipated for a special event. The number of trained personnel and their proposed locations on-site are adequate to ensure steady parking operations.

Conclusion

Upon review of the Applicant's SETMP, the proposed parking supply is able to accommodate the expected parking demand for special events at Gulliver Academy of up to 800 attendees. Additionally, the Applicant's proposed traffic control plan to employ trained security staff and police officers is adequate to ensure a steady circulation pattern.