

McDonough & Rea Associates, Inc.

Traffic and Transportation Consulting

1431 Lakewood Road, Suite C, Manasquan, NJ 08738 • (732) 528-7076 • Fax (732) 528-8673 105 Elm Street, Lower Level, Westfield, NJ 07090 • (908) 789-7180 • Fax (908) 789-7181

MEMORANDUM

To:

James J. Damato, Esq., Union Township Board of Education

From:

Scott T. Kennel

Date:

August 5, 2015

Re:

Traffic Engineering Investigation Hannah Caldwell Elementary School Union Township-Union County

MRA File No. 15-165

McDonough & Rea Associates (MRA) has undertaken a traffic engineering investigation and reviewed vehicular and pedestrian activity at the *Hannah Caldwell Elementary School* located on Commerce Avenue, Union Township. Numerous site visits have been made by myself during school arrival and dismissal hours as well as meetings with school and Board of Education personnel.

The following is a summary of recommendations to enhance traffic conditions to/from the school as well as the adjacent roadways while optimizing pedestrian accessibility and safety on school property. The recommendations are detailed as short term and long term proposals based on the requirements to implement the recommendations as well as the time to memorialize some of the recommendations via ordinance through the Township committee.

SHORT TERM PROPOSAL

 Restripe at the preschool parking lot in accordance with the attached sketch to increase the parking supply from 14 spaces to 22 spaces which will accommodate the parking needs of the school administration, school staff and staff the recreation center. In addition, it is recommended to implement a 1-way traffic flow eastbound with the traffic entering from Hendricks Drive and exiting onto Commerce Avenue.



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- 2. Restrict all vehicular activity in the courtyard/playground/delivery area north of the school bus drop-off area adjacent to the Board of Education supply building from 7:15 AM to 8:45 AM and from 2:30 PM to 3:30 PM. Enforcement of this recommendation can be immediately implemented by the use of movable barricades and ultimately managed with a permanently installed swing gate that is locked with a knox box and provides a 5 foot wide pedestrian opening adjacent to the school building.
- 3. Stripe a 6 to 8 foot wide pedestrian walkway from the school bus drop-off area along the west side of the school building to the playground area.
- 4. Modify the parking practices of Commerce Avenue south of Kent Road to provide 5 to 6 school permit parking spaces from 7:00 AM to 3:00 PM, Monday through Friday to accommodate school staff.
- 5. Install a 4 foot high fence parallel to Hendricks Drive from the Board of Education storage/warehouse building to the southwest corner of the recreation center. The fence construction installation shall provide a pedestrian opening, via gate, south of the recreation department office where appropriate based on existing topography and location of trees.
- 6. Add a 5 to 6 foot wide pedestrian sidewalk from Hendricks Drive to the courtyard area in conjunction with Item #5.
- 7. To enhance enforcement of the Hendricks Drive closure during school hours it is recommended to plant shrubs on the north side of the gate to prohibit vehicular movement between Hendricks Drive and the school parking lot when the gates are closed.
- 8. Provide 1 or 2 traffic directors/monitors in the south parking field to manage the vehicular and pedestrian traffic.
- 9. Designate the 16 parking spaces south of the handicapped spaces in the south lot as employee only in order to minimize the parking activity in the drive aisle during the peak morning drop-off and afternoon pick-up time frames.



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LONG TERM RECOMMENDATIONS

- 1. Relocate the buses from the south side of the main school building to the east side of Hendricks Drive adjacent to the recreation department.
- 2. Convert the bus drop-off area to a parent drop-off/pick-up area. Designating this area as a student drop-off/pick-up area will require it to be managed by parking lot monitors in such a fashion where during peak times 5 to 7 vehicles are staged to discharge and pick-up students and then have them released simultaneously rather than on a random basis. This proposal should reduce the number of parents and children traversing the larger southern parking lot to the courtyard area.
- 3. Restrict Hendricks Drive to a 1-way northbound traffic flow from the school parking lot to the entrance of the preschool parking lot. The 1-way traffic flow proposal should eliminate the number of cut through traffic from Hendricks Drive to Commerce Avenue as well as enhance vehicular and pedestrian safety along Hendricks Drive adjacent to the school.



McDONOUGH & REA ASSOCIATES

FIGURE

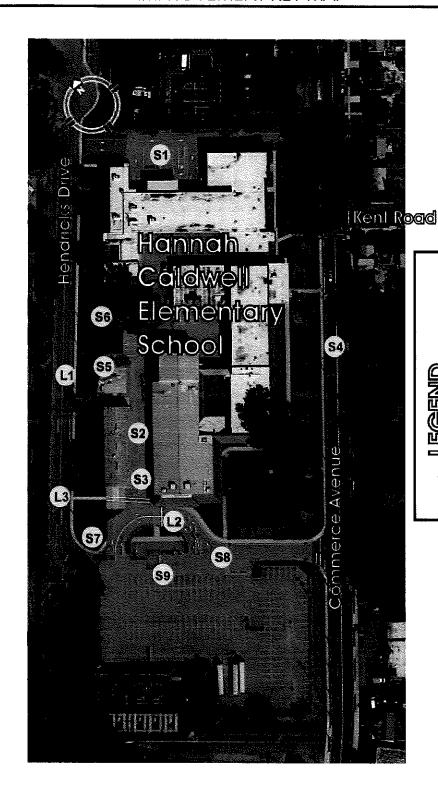
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TRAFFIC AND TRANSPORTATION CONSULTING

JOB NO. 15-165

DATE: AUG 2015

SUBJECT: HANNAH CALDWELL ELEM SCHOOL - UNION TWP, UNION COUNTY IMPROVEMENT KEY MAP



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S1→ Short Term Improvement

L1→ Long Term Improvement