

PRINCIPALS

Joseph W. McMahon, P.E.
Joseph J. DeSantis, P.E., PTOE
John S. DePalma
William T. Steffens
Casey A. Moore, P.E.
Gary R. McNaughton, P.E., PTOE

ASSOCIATES

John J. Mitchell, P.E.
Christopher J. Williams, P.E.
R. Trent Ebersole, P.E.
Matthew M. Kozsuch, P.E.
Maureen Chlebek, P.E., PTOE
Dean A. Carr, P.E.

November 14, 2016

Ms. Alice A. Rehrig - Township Manager
Lehigh Township
1069 Municipal Road
Walnutport, PA 18088-9801

RE: Response to Comments
Walmart – Walnutport (Lehigh Township)
Lehigh Township, Northampton County, PA
McMahon Project No. 912250.12

Dear Ms. Rehrig:

McMahon Associates, Inc. offers the following responses to the traffic-related comments contained in the review letter authored by Hanover Engineering, dated September 9, 2016 for the above referenced project. In addition, enclosed is a revised Transportation Impact Study (TIS), dated November 2016, which addresses these comments. It should be noted that this study has been revised to also reflect comments from PennDOT's most recent review letter, dated September 22, 2016 (enclosed).

Transportation Impact Study (TIS) Comments

Comment #1: The Applicant shall provide justification for using pass-by trips at the offsite intersection of Birch Drive and Maple Drive as it is located 1.4 miles from the site. The application of pass-by trips at this location does not appear justified. However, it does not appear to have a negative impact on the results of the study.

Response: The pass-by trips distributions and assignments have been revised to remove the pass-by trips from the offsite intersection at Birch Drive and Maple Drive. The pass-by trips were reassigned through the two site access intersection and Riverview Drive (S.R. 0145) and Birch Drive only. The updates to the pass-by trips are reflected in Figures 4C and 4D of the revised TIS.

Comment #2: The Applicant shall provide Intersection Sight Distance (ISD) calculations based upon AASHTO (including applicable adjustment factors) for single-unit and/or combination trucks (largest anticipated vehicle) at the intersection of Birch Drive & Riverview Drive (SR 0145). The study shall indicate any proposed truck size restrictions or limits.

Response: Will comply. A separate Table 10 was added to the TIS to show the intersection Sight Distance (ISD) calculations based upon AASHTO at the intersection of Riverview Drive (S.R. 0145) and Birch Drive. It should be noted that the Applicant is restricting combination trucks from the Birch Drive access and requiring truck to access the site via the signalized access on Riverview Drive (SR 0145). The TIS has been revised to reflect this restriction.

Comment #3: *Verify the existing available sight distances as they do not appear to match between the tables (Table 5 vs 6 and Table 7 vs 8) and M-950S forms included in the Appendix.*

Response: Will comply. The sight distance tables and their corresponding M-950S forms have been updated. It should be noted that existing available sight distances for passenger vehicles and combination trucks may not be equivalent due to driver eye height of the different vehicles.

Comment #4: *The Applicant shall verify adequate sight distance can be provided for the left turn egress of Birch Drive at Riverview Drive and investigate an alternative for excessive stop bar setbacks. Specifically, provide ISD calculations for the largest anticipated vehicle exiting Birch Drive. Verify the measurements were taken from the proposed vehicle location behind the stop bar.*

Response: The ISD calculations have been included as a separate Table 10 in the revised TIS. The sight distance measurements were taken 15 feet back from the travel way of Riverview Drive (S.R. 0145). The reason for the excessive stop bar is due to trucks making a left turn from Riverview Drive onto Birch Drive. It should also be noted that the Applicant is restricting trucks to the signalized intersection only. All trucks accessing Birch Drive (both entering and exiting) are due to existing conditions.

Comment #5: *The Applicant shall provide truck turning templates for all proposed roadway improvements. Specifically, all egress movements for Birch Drive.*

Response: Will comply. Truck turning templates are provided in the pocket folder in the back of the revised TIS. It should also be noted that the Applicant is restricting trucks to the signalized intersection only. All trucks accessing Birch Drive (entering and exiting) are due to existing conditions.

Comment #6: *Verify that the crash rates provided in the crash report should be in million entering vehicles instead of million vehicle miles/day.*

Response: Crash rates were removed from the crash summary per PennDOT's request and have been replaced with crash diagrams included in Appendix B of the revised Crash Summary Report, dated November 2016.

Comment #7: The Applicant shall clarify the justification for calculating crash rates for only two (2) intersections. Provide a calculated crash rate for the roadway segment of Riverview Drive (SR 0145) along the proposed site frontage and improvement area.

Response: Crash rates were removed from the crash summary per PennDOT's request and have been replaced with crash diagrams in the revised Crash Summary Report, dated November 2016.

Comment #8: The Applicant shall provide proof that a PennDOT Highway Occupancy Permit (HOP) application has been submitted for the proposed improvements outlined in the Transportation Impact Study. Copies of all submissions and correspondence for the TIS, HOP and signal plans shall be provided to the Township and our office.

Response: Will comply. The Applicant will continue to copy the Township and Hanover Engineering Associates, Inc. on all correspondence and submissions for the TIS, HOP, and signal plans. At this time, only submissions related to the TIS and accompanying concept plans are being submitted to all entities and agencies.

Comment #9: HOP plans for roadway improvements to be permitted in the Township's name shall be submitted for Township concurrence prior to PennDOT submissions.

Response: The Applicant will continue to copy the Township and Hanover Engineering Associates, Inc. on all correspondence and submissions for the TIS, HOP, and signal plans concurrently with PennDOT. At this time, only submissions related to the TIS and accompanying concept plans are being submitted to all entities and agencies.

We trust that these responses address your comments regarding the Transportation Impact Study. In addition, McMahon has enclosed a revised TIS, dated November 2016, for review by your office. Please feel free to contact me with any questions.

Sincerely,



John R. Wichner, P.E., PTOE
Senior Project Manager

JRW/agr/tdk

Enclosures

cc: Hanover Engineering Associates, Inc.
Adam Benosky, RLA, Bohler Engineering, Inc.

I:\eng\912250 - Walmart - Walnutport\Correspondence\Reviews\2016-11-14 Response to Township Comments – Walmart Lehigh Township.docx