



MEMO

To: Michael Kelly, P.E.
From: Frank D. Dobiszewski, P.E. PTOE
Date: August 10, 2021
Subject: RUSSO ACQUISITIONS, LLC
Preliminary and Final Site Plan Application
Proposed Industrial Warehouse
1000 MacArthur Boulevard
Block 135.01, Lot 65
Township of Mahwah
Docket No. 620
Our File No. MAES-2065

Having reviewed the documents submitted by the Applicant, I have the following comments as they relate to the traffic elements:

Traffic Impact Analysis

Prepared by: Atlantic Traffic & Design Engineering, LLC, dated May 27, 2021

- The report includes narrative and results of the roadway network in and around the proposed site. The network was created using the Synchro/SimTraffic software package. As part of the review, the files created and used by Atlantic were requested to assist in the review. These files were received and were able to be read. When imported into Synchro, the files were checked using the program's error routine. As you can see in the attached screenshot, a number of errors were flagged by the program. These should be reviewed and addressed by Atlantic, since it is not known if said errors do/will have an impact on an individual node and/or the overall network results.
- According to the NJDOT's Safety Voyager website, a number of crashes in and around the site have occurred. A crash summary is attached. The report should be revised to determine if any safety measures are needed to reduce and/or mitigate these crashes.
- The report should include an evaluation on whether or not acceleration and deceleration lanes for the site's access point are required, as stipulated under §22-6.2e. These may be required since the number of heavy vehicles projected to use the site will be prevalent.

- The trip generation methodology employed for the study follows standard and accepted industry practice and no exceptions are taken.
- The parking generation methodology employed for the study follows standard and accepted practice and no exceptions are taken.
- Split optimizations were selected as part of the analyses for all intersections. Optimization should only be selected at locations where changes are proposed. A table should be included for existing splits and proposed splits for the intersections analyzed.
- Proposed changes to the splits at intersections studied will require review, approval, and implementation by the respective agency who owns the signals.
- Lead/lag optimization should not be included in the analyses, since only lead turn phases are being used.
- The intersection phase recalls should be adjusted to reflect actual operating conditions.
- Results from the analyses indicate a number of locations where the existing and/or future queue lengths may be significant. In these instances, clarification should be provided on the impacts on the roadway network around the site. The clarification should also include if these situations can be mitigated.
- Intersection phase assignments should be checked to ensure that NEMA phasing is coded, such as dual-ring, quad-left. In reviewing the assignments, it appears that non-NEMA phasing has been coded, which is not supported in Synchro.

Plan Set

Prepared by: Bohler Engineering, dated May 27, 2021

- The location of the proposed driveway access off MacArthur Boulevard is on a curve. This is of particular concern given the amount of anticipated truck traffic. If the location remains as proposed, the applicant must demonstrate that adequate sight distances are provided. In addition, warning signs and possibly flashing beacons or similar measures should be added. These would be in addition to the proposed signing.
- Area(s) for snow stockpiling should be depicted.
- It appears that there are separate site access points for trucks and smaller vehicles (cars). Signing should be provided to direct truck traffic to the appropriate driveways.
- The proposed guiderail needs to be designed and placed in accordance with current and accepted design standards, including end treatments, length of need, etc.