TRANSPORTATION ENGINEERS & PLANNERS



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MEMORANDUM

TO: Rick Lincoln, Coneco Engineers and Scientists

FROM: Jeffrey T. Bandini, P.E., PTOE

DATE: February 14, 2022

RE: Proposed Residential Development

Rockland, Massachusetts

McMahon Associates (McMahon) has prepared this supplemental memorandum for the proposed residential development to be located at 75-79 Pond Street in Rockland, MA. McMahon previously completed a Traffic Impact Study (TIS) dated November 2019, and the updated proposed project reflects the number of proposed dwelling units has decreased from 236 units to 211 units. The purpose of this memorandum is to evaluate the trip generation for the proposed residential development based on the most recent Site Layout Plan, prepared by Coneco Engineers and Scientists and dated February 14, 2022.

The proposed project calls for the development of two five-story residential buildings. One building is proposed to consist of 111 dwelling units, and the second building is proposed to consist of 100 dwelling units, for a total of 211 dwelling units. The site is also proposed to include a 3,129 square foot community building to be used by residents of the development. As part of the proposed project, a total of 317 surface parking spaces are to be provided on site. The proposed access to the residential development is consistent with what was presented in the TIS and would be provided via a full-access driveway on the southwest side of Pond Street, approximately 330 feet northwest of Longwater Drive.

A summary of the review and our findings is presented below.

Trip Generation

The November 2019 TIS estimated the trip generation for the proposed residential development based on data presented in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation Manual, 10th Edition* for Land Use Code (LUC) 221 (Mid-Rise Multifamily Housing), which was the most recent edition available during production of the TIS. Since submission of the TIS, the ITE publication, *Trip Generation Manual, 11th Edition* was released in September 2021. The residential land uses were reorganized to update the trip generation based on modernized data collected prior to the COVID-19 pandemic.

The number of vehicle trips associated with the proposed residential development based the most recent Site Layout Plan were estimated based on data presented in the ITE publication, *Trip Generation Manual*, 11th Edition for LUC 221 (Mid-Rise Multifamily Housing). A comparison of the updated trip generation estimates to the trip generation presented in the November 2019 TIS is provided in Table 1 below.

Table 1: Proposed Project Trip Generation

	Weekday AM Peak			Weekday PM Peak		
	Hour			Hour		
Description	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
November 2021 TIS - Proposed Residential Development ⁽¹⁾	21	59	80	62	39	101
February 2022 - Proposed Residential Development ⁽²⁾	19	63	82	50	32	82
Change	-2	4	2	-12	-7	-19

⁽¹⁾ ITE 10th Edition LUC 221 (Mid-Rise Multifamily Housing) based on 236 units.

As shown in Table 1, the proposed residential development using the ITE 11th edition with 211 dwelling units would result in a total of two additional vehicle trips generated in the weekday morning peak hour and 19 fewer vehicle trips generated in the weekday afternoon peak hour in comparison to the trip generation estimates presented in the November 2019 TIS using ITE 10th edition.

The trip generation estimates developed based on the updated number of proposed units and the latest data are not anticipated to have an impact on the capacity analysis results presented in the November 2019 TIS. The increase in the total number of trips generated by the site during the weekday morning peak hour is considered negligible and would not have an appreciable impact on the average vehicle delays and vehicle queuing within the study area during the Build condition when compared to the November 2019 TIS. The number of trips anticipated to be generated by the proposed site during the weekday afternoon peak hour have decreased as a result of the reduced number of proposed units, and the resultant average vehicle delays and vehicle queuing within the study area during the Build condition would be less than what was presented in the November 2019 TIS

⁽²⁾ ITE 11th Edition LUC 221 (Mid-Rise Multifamily Housing) based on 211 units.