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To: Tom Saucier, PE, Site Design Associates

Fm: Bill Eaton, PE, Eaton Traffic Engineering

Re: Traffic and Parking Impact – Re-Use of National Guard Building for UNE Portland On-Line Graduate and Professional Studies

Dt: May 2, 2016

Per your request I have evaluated the potential traffic and parking demands associated with the re-use of the Army National Guard facility on Stevens Avenue by the University of New England. The facility will be used primarily to support the academic programming and students currently on campus. There will be classroom, meeting and study space created in the building. The classrooms will replace smaller classrooms currently used on campus. With the pedagogical trend pushing towards highly active learning environments, the smaller classrooms with lecture based, maximum capacity seating, do not support this type of learning. Larger spaces, with flexible furnishings and multiple points of media display are required, and thus will be incorporated into this renovation. The University's Simulation Center, currently housed across campus, will also be consolidated and relocated into the facility. Additionally, the facility will be home for the University's expanding College of Graduate and Professional Studies.

This newest College of the University will be an on-line operation, i.e. students will not be attending class on campus. In past traffic studies for the University, the primary trip generation variable used has been student enrollment; this variable directly relates student population to traffic demand, and indirectly incorporates the traffic demand associated with faculty, support and administrative staff (as student enrollment varies, so does faculty and staff). As the academic areas of the renovated National Guard building will support those programs already in operation on campus, there will be no increase in traffic or parking demand. In the case of the College of Graduate and Professional Studies, the faculty and support and administrative staff will increase by 38 persons from March 2016 through February 2017, but on-campus student enrollment will not.

Accordingly, use of trip generation estimation data from the publication Trip Generation (Institute of Transportation Engineers) for land use code 550 “University/College” will not yield valid results because it reflects a data base for traditional institutions where all (or nearly all) instruction takes place on campus. In essence, the area of the former National Guard building that will house the College of Graduate and Professional Studies, will become an office facility, where employees (faculty and staff) make up the majority of peak hour traffic associated with the facility, along with occasional visitation by others during the non-peak periods. Using land use code 710 “General Office Building” (Trip Generation), the traffic generation associated with the proposed College of Graduate and Professional Studies is estimated to be 126 trips daily (63 enter, 63 exit), with 18 trips (16 enter, 2 exit) during the AM peak hour, and 18 trips (3 enter, 15 exit) during the PM peak hour. Overall, this incremental increase in trip generation to the UNE Portland campus is minimal in terms of impact, and is below the threshold for a traffic study requirement, per the city technical standards.

With regard to parking, the parking demand estimation process associated with UNE historically used (and reasonably confirmed by observation at the Biddeford Campus) has been one space for each full time faculty and staff person, and one-half space per student. This is a composite variable approach and should not be construed as directly applicable to either students or staff. For the academic portion of the building, there is no increase in faculty or students, thus no additional parking would be required. With the College of Graduate and Professional Studies expanding, there will be a need for additional parking. In this case, the College of Graduate and Professional Studies will operate from 8 AM through 9 PM daily (weekdays), the application of one space for each faculty and staff member would yield a peak parking demand for 38 spaces. However, assuming that the facility behaves more like an office than a traditional campus facility, using the peak parking demand for an office facility per the publication Parking Generation (Institute of Transportation Engineers) would indicate a peak demand of 0.83 spaces per employee (faculty and staff), thus peak parking demand would be 32 spaces, and would probably occur in early to mid afternoon (when all faculty shifts would be present. This parking is available at the Bishop Street Intermodal Transportation Facility (which is served by a campus shuttle each 15 minutes of the normal school day). Thus there should be no negative impact on parking supply for the students and staff of the University.