Memorandum

20326

To: **Craig Burgess, P.E.**
Sebago Technics, Inc

From: **Derek Caldwell, P.E., PTOE**
Sebago Technics, Inc

Date: **January 12, 2021**

Subject: **Trip Generation and Impact Fee Calculation**
Paul's Boutique Cannabis Cultivation Facility
Windham, Maine

STATE OF MAINE
DEREK H. CALDWELL
14400
LICENSED
PROFESSIONAL ENGINEER

01/12/2021

Project Understanding

Dwight Investments, LLC proposes to construct a 12,350 square foot Cannabis Cultivation Facility on Lot 3-A of the Quarry Ridge Business Park in Windham. The development proposes to construct a new driveway to Bedrock Terrace, which connects to Enterprise Drive. Enterprise Drive provides access to the park as a whole by means of the unsignalized intersection with Route 302.

Permitting History

It is our understanding that the Quarry Ridge Business Park was issued a MaineDOT Traffic Movement Permit (TMP) in 2008 for the buildout of 180,000 square feet of general business park building area. This proposed buildout assumed approximately 15,000 square feet of building area on each of twelve lots. The TMP was issued for a total 257 trips in the AM Peak Hour and 253 trips in the PM Peak Hour. Divided amongst the twelve lots, this would equate to approximately 21 AM Peak Hour trips and 21 PM Peak Hour Trips per lot.

The existing approved subdivision plan for the business park states that the if the buildout of any lots exceeds 15,000 square feet than additional traffic information should be submitted. Currently three of the lots within the park are developed, which were presumably permitted under the approved TMP for the park.

Trip Generation

Typically trip generation for developments is calculated using the *Institute of Transportation Engineers Trip (ITE) Generation Manual*. However, the specialty nature of this proposed land use does not correspond to a published land use code in the manual. Therefore, the expected trip generation is based upon the number of employees and corresponding shifts.

The facility is to anticipated to have a total of 10 employees with the following shift breakdown:

Table 1
Employee Shift Information

No. of Employees	Hours
4	6:00 AM – 3:00 PM
2	7:00 AM – 4:00 PM
4	8:00 AM – 5:00 PM

Deliveries to and from the site are expected to be minimal and occurring on a weekly to bi-weekly basis. These deliveries and shipments would therefore contribute to the Peak Hour trip generation of the site on a consistent basis. No heavy truck traffic is to be generated by the site.

Based on the above listed shift information the AM Peak Hour of trip generation would be expected to occur leading up to the 6:00 AM and 8:00 AM hours with a total of **4** entering trips. The PM Peak Hour of trip generation would be expected to occur in the 3:00 PM Hour or 5:00 PM with a total of **4** exiting trips.

Impact Fee

Section 1204 of the Town of Windham Land Use ordinance specifies the procedure for calculating the North Route 302 Road Improvements Impact Fee. Appendix A of the Land Use Ordinance states an impact fee of $382.65 be assessed per primary peak hour trip through the intersection of Route 302 with Anglers Road/Whites Bridge Drive. The subject project site is located to the north of this intersection. As stated above, the development would be expected to generate a maximum of 4 peak hour trips. Based on existing traffic patterns, it is assumed the trip distribution of the project generated traffic would be 75% to/from Route 302 to the south and 25% to/from Route 302 to the north. Therefore, the North Route 302 Road Improvement Impact Fee calculation is as follows:

Impact Fee=$382.65 ×Primary Trips

Impact Fee=$382.65 × (4 x 0.75)

Impact Fee=$1,147.95

Conclusion

The proposed Paul's Boutique Cannabis Cultivation Facility is expected to generate a total of 4 vehicular trips during both the AM and PM Peak Hours. As the original TMP for the business park allows for 21 Peak Hour Trips per lot, this development would not require any additional permitting. The proposed building area of 12,350 square feet does not exceed the established threshold of 15,000 square feet which would require further traffic impact information to be submitted as per the original approved subdivision plan. It is also noted that Lot 3-A was created as part of a subdivision amendment which divided Lot 3 of the park into two separate parcels. Therefore, any future development on Lot 3-B would need to consider this proposed use when determining adherence to existing approvals.