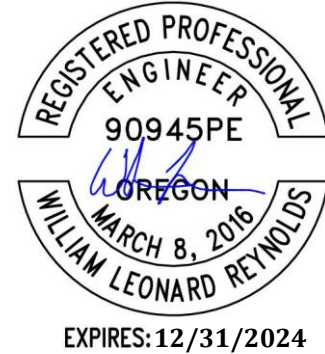




MEMORANDUM

To: Chad Nelson, Northwest Property Management
From: William Reynolds, PE (OR), AICP – RBT Consultants
Date: July 10, 2023 (Version 1)
Subject: Northwest Property Management Proposed Facility – Trip Generation Summary



Introduction

The following memo provides a summary of the potential vehicle trips associated with the proposed industrial facility located at 20861 SW Olds Place in Sherwood, Oregon.

The proposed 12,625 ft² single story building will serve up to four (4) industrial tenants with a combination of warehousing (10,180 ft²) and office space (2,445 ft²). 24 parking spaces are proposed for the building.

This memo focuses on the vehicle trip generation estimates for the new building to determine if additional traffic analysis will be required.

Project Trip Generation

The use of the proposed building most closely matches Land Use 150, Warehousing from the current version of ITE's *Trip Generation* (11th Edition):

“A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas.”

As noted in the description, the vehicle trips associated with Land Use #150 generally include some amount of office space within the overall square footage of the building. However, as a conservative estimate, vehicle trips are calculated using two approaches:

- Method #1: Warehousing Only
- Method #2: Warehousing + Small Office¹

¹ Land Use 712: Small Office Building. “A small office building is the same as a general office building (Land Use 710) but with less than or equal to 10,000 square feet of gross floor area. The building typically houses a single tenant. It is a location where affairs of a business, commercial or industrial organization, or professional person or firm are conducted.”

METHOD #1: WAREHOUSING ONLY

Within the current version of ITE's *Trip Generation Manual* (11th Edition), the following trip rates are provided for Land Use #150, Warehouse:

- Weekday
 - Warehousing: **1.71** vehicle trips per 1,000 sq. ft. GFA (50% entering / 50% exiting)
- AM Peak Hour of Adjacent Street Traffic (One Hour Between 7 and 9 a.m.)
 - Warehousing: **0.17** vehicle trips per 1,000 sq. ft. GFA (77% entering / 23% exiting)
- PM Peak Hour of Adjacent Street Traffic (One Hour Between 4 and 6 p.m.)
 - Warehousing: **0.18** vehicle trips per 1,000 sq. ft. GFA (28% entering / 72% exiting)

Table 1 shows the estimated daily, AM peak hour, and PM peak hour vehicle trips using Land Use Code 150.

Table 1: Estimated Vehicle Trips – Method #1

Land Use	ITE Code	Units	Daily Trips	AM Trips	PM Trips
Warehousing	150	12.625 ksf	22	2	2

Using the general trip rate provided for Warehousing, the proposed project is expected to generate approximately **2 PM peak hour vehicle trips**.

METHOD #2: WAREHOUSING + SMALL OFFICE

As a conservative approach, the following trip rates are also provided as an approach that estimates trips separately for the office component (including restrooms) and the warehousing component.

- Weekday
 - Warehousing: **1.71** vehicle trips per 1,000 sq. ft. GFA (50% entering / 50% exiting)
 - Small Office: **14.39** vehicle trips per 1,000 sq. ft. GFA (50% entering / 50% exiting)
- AM Peak Hour of Adjacent Street Traffic (One Hour Between 7 and 9 a.m.)
 - Warehousing: **0.17** vehicle trips per 1,000 sq. ft. GFA (77% entering / 23% exiting)
 - Small Office: **1.67** vehicle trips per 1,000 sq. ft. GFA (82% entering / 18% exiting)
- PM Peak Hour of Adjacent Street Traffic (One Hour Between 4 and 6 p.m.)
 - Warehousing: **0.18** vehicle trips per 1,000 sq. ft. GFA (28% entering / 72% exiting)
 - Small Office: **2.16** vehicle trips per 1,000 sq. ft. GFA (34% entering / 66% exiting)

Table 2 shows the estimated daily, AM peak hour, and PM peak hour vehicle trips using a combination of Land Use Code 150 (Warehousing) and Land Use 712 (Small Office Building).

Table 2: Estimated Vehicle Trips – Method #2

Land Use	ITE Code	Units	Daily Trips	AM Trips	PM Trips
Warehousing	150	10.180 ksf	17	2	2
Small Office Building	712	2.445 ksf	35	4	5
Total:			52	6	7

Using the more conservative approach that separates the office component from the warehousing component, the proposed project is expected to generate approximately **7 PM peak hour vehicle trips**.

Traffic Study Requirements

Per Sherwood Municipal Code Section 16.106.080(B) a traffic impact analysis (TIA) may be required based on new vehicle trips if the following vehicle trip threshold is met:

(3) The proposed development generates fifty (50) or more PM peak-hour trips on Highway 99W, or one hundred (100) PM peak-hour trips on the local transportation system.

Using the current version of ITE's *Trip Generation Manual* (11th Edition), the proposed project is expected to generate between **2 and 7 total PM peak-hour trips**, well below the 50-trip threshold for new trips on Highway 99W and the 100-trip threshold for the local transportation system.

Additionally, the owner is anticipating no more than four (4) truck deliveries per week (less than 1 per day for the site). This is well below the threshold of ten (10) trips per day by vehicles that exceed 20,000 pounds gross vehicle weight².

Next Steps

Based on the estimated number of new PM peak hour vehicle trips for the proposed project as well as the anticipated amount of truck activity to and from the site, **no additional traffic analysis is recommended**.

Closing

Please feel free to reach out to me to discuss the contents of this Memo.

Sincerely,



William Reynolds, PE (OR), AICP
RBT Consultants

² 16.106.080(B), Item #4: "An increase in use of any adjacent street or direct property approach road to Highway 99W by ten (10) vehicles or more per day that exceed the twenty thousand-pound gross vehicle weight."