

Memorandum

To: **Brooks Bayne**
JBMAC Ventures, LLC

From: **Daniel Stumpf, PE**

Date: **April 14, 2022**

Subject: **Oregon Street Industrial Building**
Trip Generation Analysis



Introduction

This memorandum reports and evaluates the transportation impacts related to the proposed Oregon Street Industrial Building development to be located on two properties at/near 14843 SW Oregon Street in Sherwood, Oregon. The project will include the construction of a 20,000 square foot industrial building. Access to the site will be provided via a proposed driveway along SW Oregon Street, located opposite of SW Lower Roy Street.

The purpose of this memorandum is to examine the projected trip generation of the proposed development and to determine whether the preparation of a full Traffic Impact Analysis (TIA) is necessary per City of Sherwood code. Detailed information on trip generation calculations as well as supporting materials are included as an attachment to this memorandum.

Project Site/Location Description

The project site is located north of SW Oregon Street, approximately between SW Hall Street and SW Lower Roy Street, in Sherwood, Oregon. The site includes two properties (tax lots 2S129DC-00500 and 00600) which are zoned as Light Industrial and encompass an approximate total of 5.5 acres. The subject site is located in a developing industrial area of the City, with industrial/commercial service uses to the north and west, single-family detached houses to the south, and undeveloped land zoned as Light Industrial to the east.

The proposed development will include the construction of a 20,000 square foot industrial building, an outdoor, partially covered storage area, and off-street parking. The building, storage area, and parking will be located on tax lot 500. Access to the site will be provided via a proposed driveway along SW Oregon Street, located opposite of SW Lower Roy Street on tax lot 600.

Figure 1 below presents an aerial image of the nearby vicinity with the project site outlined in yellow.



Figure 1: Aerial Photo of Site Vicinity (Image from Google Earth)

Trip Generation

The proposed development will include the construction of a 20,000 square foot industrial building. To estimate the number of trips that will be generated by the proposed use, trip rates from the *Trip Generation Manual*¹ were used. Data from land use code 110, General Light Industrial, was used to estimate site trip generation based on the square footage of the gross building floor area.

The trip generation calculations show that the proposed project is projected to generate 15 morning peak hour trips, 13 evening peak hour trips, and 98 average weekday trips (inclusive of 6 daily truck trips). The trip generation estimates are summarized in a Table 1. Detailed trip generation calculations are included as an attachment to this memorandum.

Table 1: Trip Generation Summary

ITE Code		Size/Rate	Morning Peak Hour			Evening Peak Hour			Weekday Total
Name	Number		Enter	Exit	Total	Enter	Exit	Total	
Total Trips									
General Light Industrial	110	20,000 SF	13	2	15	2	11	13	98
Truck Trips									
General Light Industrial	110	20,000 SF	0	0	0	0	0	0	6

¹ Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.

In accordance with City of Sherwood code sections 16.106.040.K and 16.106.080.B², the preparation of a Transportation Impact Study (TIS) is necessary when the following criteria are met.

16.106.040.K – Traffic Controls

- 2. For all other proposed developments including commercial, industrial or institutional uses with over an estimated 400 ADT, or as otherwise required by the City Engineer, the application must include a traffic impact analysis to determine the number and types of traffic controls necessary to accommodate anticipated traffic flow.*

16.106.080.B – Applicability

A traffic impact analysis (TIA) shall be required to be submitted to the City with a land use application at the request of the City Engineer or if the proposal is expected to involve one (1) or more of the following:

- 1. An amendment to the Sherwood Comprehensive Plan or zoning map.*
- 2. A new direct property approach road to Highway 99W is proposed.*
- 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.*
- 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.*
- 5. The location of an existing or proposed access driveway does not meet minimum spacing or sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles are likely to queue or hesitate at an approach or access connection, thereby creating a safety hazard.*
- 6. A change in internal traffic patterns that may cause safety problems, such as back up onto the highway or traffic crashes in the approach area.*

As detailed in the trip generation analysis, the proposed development is projected to generate less than the City's 50 evening peak hour trip and 400 daily trip thresholds and will not generate 10 or more heavy vehicle (truck) trips per day. Additionally, none of the other aforementioned criteria are met to require the preparation of a TIA. Therefore, preparation of a full TIA is not necessary to report the transportation impacts of the proposed development.

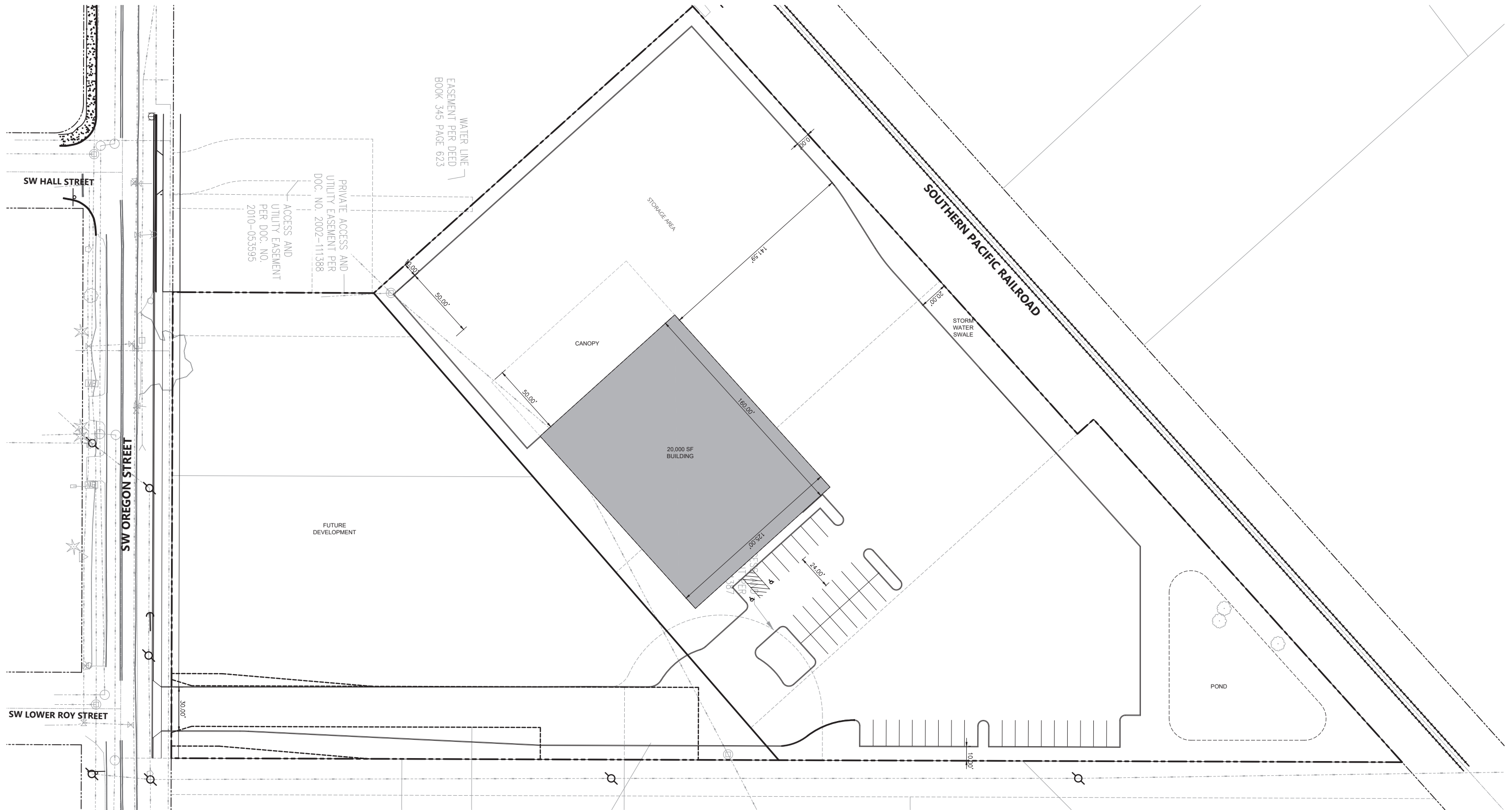
Conclusions

The proposed Oregon Street Industrial Building is projected to generate a 15 morning peak hour trips, 13 evening peak hour trips, and 98 average weekday trips (inclusive of 6 daily truck trips). Given the relatively low number of trips projected to be generated by the proposed development, the trip generation thresholds and other criteria in the City of Sherwood code for requiring the preparation of a full Traffic Impact Analysis are not met. Accordingly, the project is not expected to cause any significant traffic impacts to the transportation system within the site vicinity upon buildout and occupancy.

If you have any questions or concerns regarding this analysis or need further assistance, please don't hesitate to contact us.

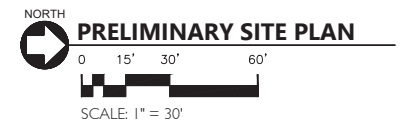
² [Division VI - PUBLIC INFRASTRUCTURE | Code of Ordinances | Sherwood, OR | Municode Library](#)





**JB MAC - OREGON STREET
SHERWOOD, OREGON**

210129.01
3/28/22
15895 SW 72ND AVE SUITE 200
PORTLAND, OREGON 97224
TEL: 503.226.1285
FAX: 503.226.1670





TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Total Trip Generation

Land Use: General Light Industrial
Land Use Code: 110
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Variable Quantity: 20

AM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Split	88%	12%	
Trip Ends	13	2	15

PM PEAK HOUR

Trip Rate: 0.65

	Enter	Exit	Total
Directional Split	14%	86%	
Trip Ends	2	11	13

WEEKDAY

Trip Rate: 4.87

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	49	49	98

SATURDAY

Trip Rate: 0.69

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	7	7	14



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Truck Trip Generation

Land Use: General Light Industrial
Land Use Code: 110
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Truck
Variable Quantity: 20

AM PEAK HOUR

Trip Rate: 0.01

	Enter	Exit	Total
Directional Split	60%	40%	
Trip Ends	0	0	0

PM PEAK HOUR

Trip Rate: 0.01

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	0	0	0

WEEKDAY

Trip Rate: 0.25

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	3	3	6

SATURDAY

Trip Rate: 0

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	NA	NA	NA