MEMORANDUM

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|---|---|
| TO: | Carla McLane, City of Boardman, Oregon |
| CC: | Bob Dayal, PNJD, Inc |
| FROM: | Larry Frostad, P.E., PTOE<br>Timothy Fisch |
| DATE: | May 1, 2025 |
| SUBJECT: | Woodspring Suites, Trip Generation & Distribution Letter |

Digitally signed by Lawrence L Frostad
Contact Info: LFrostad@ardurra.com
Date: 2025.05.06 14:15:12-07'00'

REGISTERED PROFESSIONAL ENGINEER
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DIGITALLY SIGNED
OREGON
MAY 09, 2025
LAWRENCE L. FROSTAD
EXPIRES: 12/31/2025

This report summarizes the Trip Generation and Distribution prepared for the Woodspring Suites proposed in Boardman, Oregon. The Letter provides information for use in determination of concurrency between the proposed project, applicable regulations, and the City's *Transportation System Plan*, which is currently being updated. This analysis is the initial step in addressing the City of Boardman's request to understand travel impacts in determining if further analysis is required.

The study was prepared per Traffic Impact Study guidance provided by the City (Chapter 4.10 – Traffic Impact Study, October 2002). The City of Boardman is the lead land use jurisdiction and agency that maintains access roads. Additional agencies can comment per invitation of City staff.

## Project Description

Woodspring Suites is an 84-unit extended-stay hotel proposed at the site of the existing Boardman Dog Park on Front Street near Olson Road. Zoning at the site is Commercial, with Residential zoning adjacent to the north.

Access is assumed to be from a full-access approach off Front Street. Construction would initiate following receipt of administrative approvals from Boardman officials with completion and occupancy expected by the spring of 2026.

Attached **Figure 1** provides a site location map. **Figure 2** provides the most current site plan, which shows the building and main entry oriented to access Front Street.

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# WOODSPRING SUITES
## FIGURE 1 - VICINITY MAP

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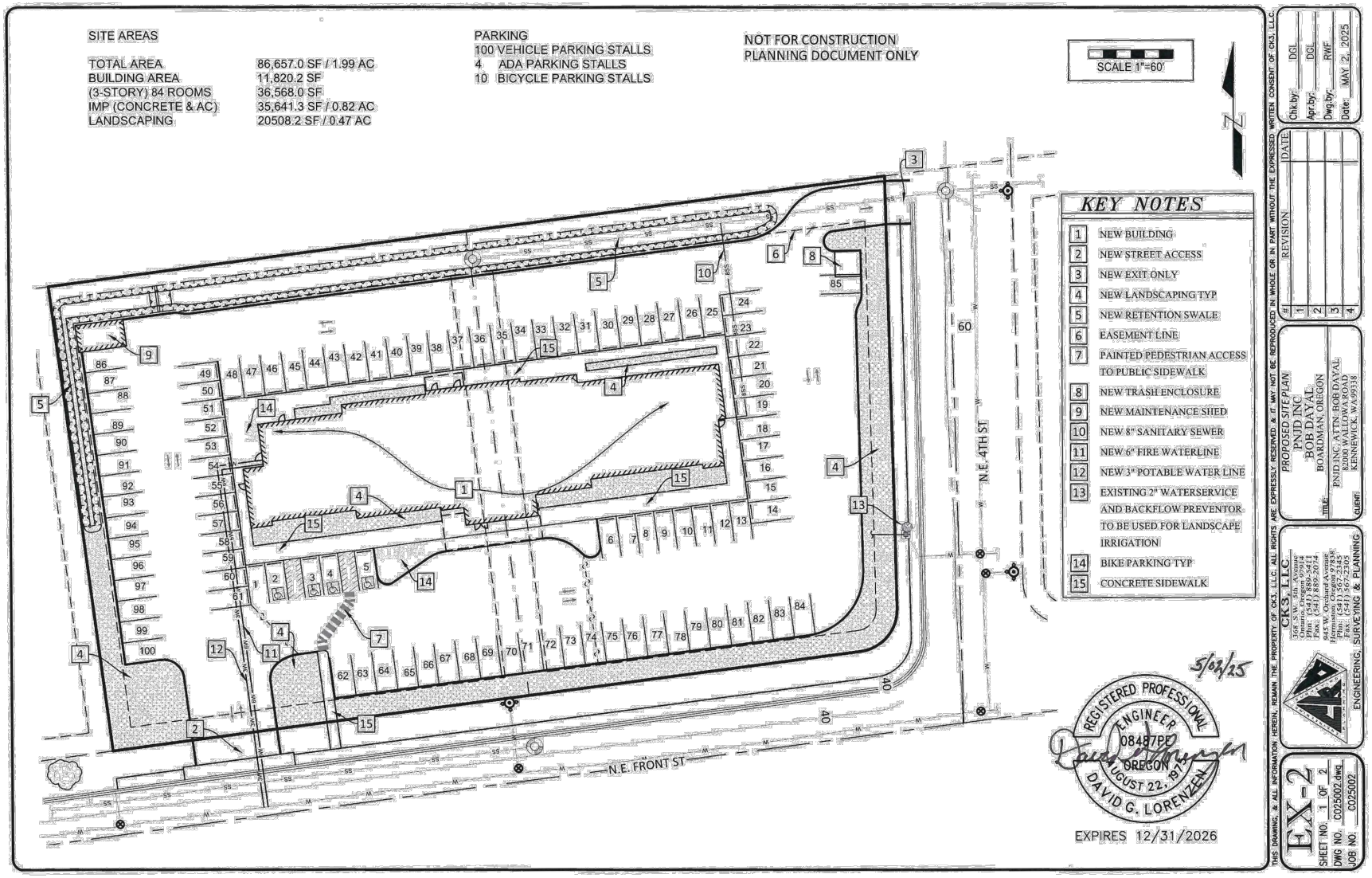


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# WOODSPRING SUITES
# FIGURE 2 - SITE PLAN

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## Transportation Systems Plan

The City is currently updating this plan from the previous 2001 edition. The Main Street intersections at Boardman Avenue, N Front Street, and the Westbound Interstate 84 ramp terminal are shown to currently have service level issues, albeit mostly with low v/c ratios. The close spacing of these historical types of designs and the business access movements in between the intersections contribute to the operational issues. The *Boardman Main Street Interchange Area Management Plan* (IAMP) (DKS/Winterbrook Planning, April 2009) suggests access restrictions, bridge widening, and traffic signals as a way to mitigate these issues.

## Trip Generation

Trip generation was forecast based on the methodologies of the Trip Generation Manual (ITE, 11th Edition, September 2021). The manual is a nationally recognized and locally accepted resource for forecasting traffic for commercial, institutional, and residential developments. The methods were developed based on the survey of other existing land uses located with the United States.

Calculations from the Trip Generation Manual yield total trips. However, not all these trips are new to streets. Internal, Pass-by, and Diverted, are terms used to describe the trip types that make up total trips for a commercial project depending on the purpose of the trip. While hotel trips can be considered as Pass-by or Diverted trips given the assumption is that the trips will be to and from the freeway, the impact is essentially the same as considering them as New trips on the local system.

Trip generation for Woodspring Suites was developed using ITE Land Use Code 311 – All Suites Hotel as it best approximates the planned use of the site. A description of this use is provided below:

> ITE Code 311. *"An all suites hotel is a place of lodging that provides sleeping accommodations, a small restaurant and lounge, and small amounts of meeting space. Each suite includes a sitting room and separate bedroom. An in-room kitchen is often provided."*

Trip generation was determined initially based on rates that correlate traffic densities to building area. The number of studies was insufficient (<20) or had a low R-squared value to meet criteria to use Fitted Curve Equations; hence the use of Average Rates. Trips were forecast for typical weekday and then the AM and PM peak hours of adjacent streets. An adjustment for the existing use is acknowledged in the net new trips shown in **Table 1.**

**Table 1. Woodspring Suites, Forecast Trip Generation**

| Land Use: | Units | Weekday | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|
| | | | In | Out | Total | In | Out | Total |
| Code 311 – All Suites Hotel | 84 Rooms | 370 | 15 | 14 | 29 | 15 | 15 | 30 |
| ITE Code 411 Public (Dog) Park – (Existing Use) | 1 Acre | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net New Trips | | 369 | 15 | 14 | 29 | 15 | 15 | 30 |

Source: ITE Trip Generation Manual (11th Edition) & Trip Generation Handbook (3rd Edition)

As shown, the Woodspring Suites project is forecast to generate 370 weekday driveway trips (primarily passenger vehicle) with 29 generated during the AM peak hour and 30 PM peak hour. It should be noted here that the proposed 84-unit project is lower than the 200 rooms and associated trips estimated for this vicinity in the Future Conditions Analysis (Kittelson & Associates, January 2025) for the *Transportation Systems Plan* update. As such, they should not be added to the volumes shown in Figures 1 and 2 of Future Conditions Analysis Attachment A for 2045 Trip Assignment.

### Trip Distribution and Assignment

Trip distribution and assignment is the process of forecasting the likely travel routes for development-related traffic to identify the impacts of a project on area streets. For this study, trip distribution was based on the existing network as well as the location of primary destination centers in relation to the development, such as Interstate 84, residential, work centers, shopping/entertainment areas, etc. Figures 16 and 17 of the Draft Existing Traffic Conditions document (Kittelson & Associates, January 2025) was also reviewed.

Trips will access the site via either the Laurel Lane or Main Street Interchanges then utilizing Columbia and Olson from Laurel Lane, or Front Street from Main Street. Existing volumes indicate the Main Street Interchange to be most likely used by drivers, although this can be somewhat influenced by Motorist Information Signing or by trip routing applications.

Trips were distributed to the network as shown with **Table 2.** The entering and exiting assignments overall are also shown for the street network described above. The existing trip is not included in **Table 2**.

**Table 2. Trip Distribution and Trip Assignments**

| Origin/Destination | Distribution | Trip Assignments | | |
|---|---|---|---|---|
| | | Weekday | AM Peak | PM Peak |
| Interstate 84 via Front / Main Street | | | | |
| - Westbound Ramps | 35% | 130 | 10 | 11 |
| - Eastbound Ramps | 35% | 129 | 10 | 10 |
| Interstate 84 via Olson, Columbia, and Laurel Lane | | | | |
| - Westbound Ramps | 15% | 56 | 4 | 4 |
| - Eastbound Ramps | 15% | 55 | 5 | 5 |
| Trip Distribution Totals | 100% | 370 | 29 | 30 |

Trips were assigned based on the described distribution pattern with a summary of results shown with **Figure 3**. Intersections forecast to support more than 20 new trips are noted below:

Front Street / Main Street: 20 AM/21 PM peak hour trips
Main Street / Interstate 84 Westbound Ramps: 20 AM/21 PM peak hour trips

## Impact Fees

Boardman does not currently charge a transportation impact fee as part of the project permitting process.

## SUMMARY

Woodspring Suites is an 84-unit extended-stay hotel proposed at the location of the existing Boardman Dog Park in Boardman, Oregon. Access is assumed to be from Front Street. Completion and occupancy of the site is expected by the spring of 2026.

Trip generation was calculated using ITE Code 311 for All Suites Hotel. The project is forecast to generate 371 weekday trips that impact the street network. About 29 of these trips would be generated during the AM peak hour and 30 during the PM peak hour.

The adjacent roadways of Main Street, Front Street, Olson Road, Columbia Avenue, and Laurel Lane would provide routes for the majority of approaching and departing trips from Interstate 84. To that end, the Front Street / Main Street and Main Street / Interstate 84 Westbound Ramps intersections are anticipated to support the majority of site trips, both supporting around 20 trips during the AM and PM peak hours.

The trips estimated for this project have already been accounted for in the forecasting by Kittelson & Associates for the City's ongoing Transportation Systems Plan update. The site impacts of the project are addressed by extending frontage improvements, such as sidewalk, anticipated to be prescribed by the City.

## RECOMMENDATIONS

Further study of this project in a Traffic Impact Analysis is not recommended as it will unnecessarily duplicate work already documented in the *Transportation Systems Plan* update.

The following recommendations are offered for consideration in the current planning efforts:

Update the travel forecast for the *Transportation System Plan* (Lot 5) as needed to incorporate the Woodspring Suites project.

Our recommendation for the City's *Transportation System Plan* update to address current and forecast performance issues is to prioritize the implementation of roundabouts over traffic signals. This is for several reasons:

- Roundabouts were not mentioned as an alternative in the April 2009 *IAMP.* Understanding of the benefits of roundabouts has increased in the past 16 years. Oregon now has 271

documented roundabouts in the Kittelson Roundabouts Database, which includes the two in Boardman.

- Roundabouts do not need to wait for a signal warrant for consideration of implementation and thus can be constructed as soon as funding is available.
- Stated goals for multimodal safety performance favor roundabouts over signals.
- Favorable roadway grades
- The "wide node / narrow link" concept afforded by roundabouts may preserve the Interstate 84 bridge without need for widening for a left turn lane. Replacement of a bridge that is still in fair condition (per ODOT) is likely not a priority in comparison to other needs, and options that do not require widening are available.
- Reduction in pedestrian crossing distances
- Reduction in intersection queuing (as identified in the *IAMP*) due to signals, which may allow operations without access restrictions.
- Boardman does not currently have traffic signals and thus would have to consider ongoing signal operations and maintenance costs (including equipment rehabilitation and replacement projects) that the City does not currently budget for.

No further recommendations are provided. Please contact us if you have any questions on these recommendations.

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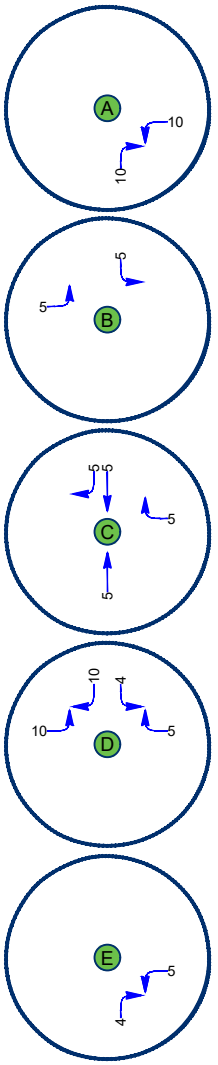
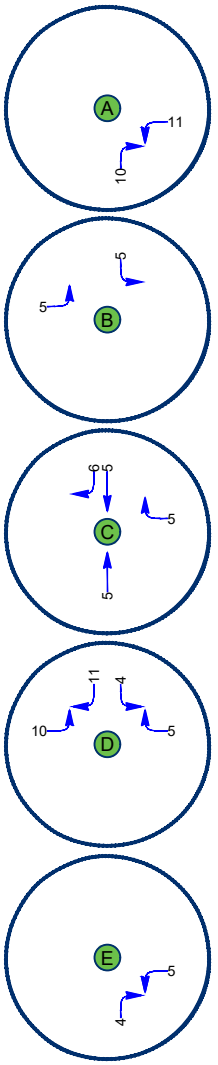
AM PEAK




PM PEAK

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**LEGEND**

MAJOR COLLECTOR

INTERSTATE

INTERSECTION TURNING MOVEMENTS

# WOODSPRING SUITES
## FIGURE 3 - TRIP DISTRIBUTION
## AM AND PM PEAK HOURS

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