**Date:** April 19, 2021

**Request:** Coho Point Transportation Impact Study Review

**Reviewer:** Reah Flisakowski and Amanda Deering, DKS Associates P14167-017

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DKS Associates has reviewed the initial transportation impact analysis (TIA) for the Coho Point Development[1] and an updated report to address reviewer comments[2]. The proposed development is located along SE Washington Street, between OR 99E and SE Main Street in Milwaukie, Oregon. The project would construct a six-story building consisting of 195 apartment units and up to 6,733 square feet of ground floor retail space. The general comments and listing of recommendations are based on review of the updated transportation impact analysis (TIA) materials.

## TRANSPORTATION IMPACT ANALYSIS SUMMARY

Key findings from the transportation impact analysis include:

- The proposed project would result in the following estimated increase in motor vehicle trip generation: 58 (11 in/47 out) net weekday AM peak hour vehicle trips and 86 (54 in/32 out) net weekday PM peak hour trips. The daily traffic generation estimate is 1,046 net new trips. The estimates are based on applying ITE trips rates to the proposed 195 residential apartment units (ITE 221) and 6,733 square feet of retail shopping center (ITE 820) and reducing the trips by the existing 7,706 square feet of office (ITE 710) on the site.
- The trip generation estimate was reduced by 10% for the residential portion of the project to account for transit in the area. This rate is consistent with the rate applied for the nearby Axeltree (Project Galaxy) development and is reasonable for the site.
- Traffic operations were analyzed for existing conditions (year 2020) and forecasted conditions in year 2022, when construction of the proposed development is anticipated to be complete. Operations analysis was performed for the AM and PM peak hours at five study intersections.
- Traffic count data was collected on March 5, 2019. During the period, the segment of SE Main Street between SE Adams Street and SE 21st Avenue was closed for construction. The TIA makes note of this occurrence and adjusts the traffic volumes to account for it. Also, the 2019 count data was factored to 2020 volumes by using the same rates use for the background traffic growth for one year.

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[1] Coho Point Mixed-Use Building – Transportation Impact Analysis, Lancaster Engineering, December 14, 2020.

[2] Coho Point Mixed-Use Building – Transportation Impact Study, Lancaster Mobley, April 9, 2021.

- A background traffic growth rate of 2 percent per year was applied to existing traffic volumes to estimate background traffic volumes for year 2022 traffic operations analysis for non-ODOT facilities. For traffic along OR 99E, 0.70 percent per year growth rate was applied based on data from the ODOT Future Volume Tables.
- Additional trips from the following in-process developments were addressed: Axeltree (Project Galaxy) Mixed-Use Building, Northwest Housing Alternatives, Cereghino Farms, Waverly Woods Apartments, and Monroe Apartments were also included in background growth. Potential in-process trips or travel pattern impacts from construction at Milwaukie High School were also addressed in the text.
- The trip distribution estimate for the site shows 40% of site trips traveling to or from the north via OR 99E and 30% of site trips traveling to or from the south via OR 99E. Another 20% of trips are estimated to travel to/from the east via SE Washington Road. The remaining 10% of trips are estimated to travel to/from SE Lake Road. The locations of likely trip destinations, locations of major transportation facilities in the site vicinity, and existing travel patterns at the study intersections were offered as rationale for the trip distribution estimate.
- All study intersections were found to operate at an acceptable level of service through the 2022 AM and PM peak hours with full buildout of the proposed redevelopment. It is appropriate to use HCM 2000 methodologies when HCM 6$^{th}$ methodologies cannot provide capacity results for non-standard intersections. Where not provided by the software, v/c ratios of signalized intersections (for HCM 6$^{th}$ methodologies) were calculated based on guidance in the Analysis Procedures Manual, as appropriate.
- The worst-case traffic operations were reported at the SE Harrison Street/OR 99E intersection during the 2022 PM peak hour (LOS E with 0.96 v/c ratio), which is within minimum acceptable mobility standards identified by ODOT. All study intersections in Milwaukie are estimated to operate at LOS B or better during the peak hours through 2022.
- Proposed site access would be modified by closing the existing access to OR-99E and relocating the existing access along SE Washington Street slightly to the east to serve the proposed residential parking garage. The proposed driveway would not be consistent with City of Milwaukie's 300-foot minimum spacing standard for collector streets given the small block size. An access spacing standard modification will need to be requested.
- Given the limited spacing of the proposed driveway on SE Washington Street from OR 99E and SE Main Street, the study evaluated it with turning-movements restrictions, including full-movement, restricted left-turn out of the site, and right-in/right-out only. The study does not recommend a configuration, but none of the options significantly impact intersection operations. Given the limited spacing between the nearby intersections and high level of roadway connectivity and alternative travel routes nearby, it is recommended that the driveway be limited to right-in, right-out, left-in movements only (left-turn out should be restricted).
- Queuing analysis at the parking garage access indicates that queues entering the garage during the AM and PM peak hour will rarely exceed one car. The typically applied 95$^{th}$ percentile queue

length would be 1 vehicle or less. Delays to traffic as a result of parking garage access are expected to be infrequent.

- The study identifies the adjacent roadways as collectors and notes that they their configurations are consistent with applicable roadway standard cross-sections.
- The study states that 101 vehicle parking spaces are to be provided in the garage for the residential units and 232 bicycle parking spaces will be provided. It proposes that the vehicle trips from retail uses will use the existing street parking.
- The study addresses safe routes to school and discusses pedestrian and bicycle access.
- Transit service quality is high with a nearby MAX stop and several bus route stops in the vicinity.
- No significant safety issues were found from review of the last five years of available collision data at study intersections.

## RECOMMENDATIONS

The following recommendations should be considered in developing conditions of approval for the proposed development:

- Minimum AASHTO sight distance requirements should be met at the proposed driveway access. These should be approved by the City Engineer prior to final site plan approval.
- Safety mirrors should be installed at the parking garage entrance so that exiting drivers can see approaching pedestrian traffic around the garage threshold.
- The final site plan should be approved by the City Engineer prior to construction.