

Prepared for
AKS Engineering & Forestry, LLC

River Ridge: Phase 2 *Transportation Impact Study*



Prepared by



April 2019



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April 3, 2019

Chuck Gregory
AKS Engineering & Forestry, LLC

Subject: River Ridge Phase 2 Transportation Impact Study

Dear Chuck,

DKS Associates is pleased to submit this transportation impact study for the proposed redevelopment of the parcel at 17915 SW Pacific Highway (OR 99W) in Tualatin, Oregon. Please feel free to call if you have any questions or comments regarding this study.

Sincerely,
DKS Associates

A handwritten signature in black ink, appearing to read "Lacy Brown".

Lacy Brown, Ph.D., P.E.
Transportation Engineer

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1.0 PROJECT SUMMARY

This report documents a preliminary traffic assessment related to the impacts of a proposal to remove existing residential and commercial buildings and build a 1,200 square-foot drive-thru coffee shop and overflow parking lot in the west corner of OR 99W (SW Pacific Highway) and River Ridge driveway in Tualatin, Oregon. Table 1 provides more details regarding the study area and characteristics of the proposed project.

Table 1: Study Area and Proposed Project Characteristics

Study Area	
Number of Study Intersections	One: OR 99W/River Ridge driveway
Analysis Period(s)	Weekday AM peak (peak hour between 7:00-9:00 AM) and PM peak (peak hour between 4:00-6:00 PM)
Proposed Development	
Size and Land Use	1,200 square-foot drive-thru coffee shop with indoor seating; overflow parking lot for existing apartment complex
Project Trips	678 net new average daily trips with 55 (28 in, 27 out) AM peak hour trips and 26 (13 in, 13 out) PM peak hour trips
Vehicle Access Points	One proposed access point on River Ridge driveway
Other Transportation Facilities	
Pedestrian Facilities	Existing sidewalks along OR 99W
Bicycle Facilities	Bicycle lanes on both sides of OR 99W
Transit Facilities	Existing bus routes on OR 99W in vicinity of project site

The following chapters of this report document the existing conditions of the study area, including roadway classification, bicycle and pedestrian facilities, existing traffic operations, existing safety conditions, and observations made during a field visit. The report then discusses the proposed site plan’s impact to the surrounding transportation network and provides recommendation to mitigate the impact.

The proposed development of a 1,200 square-foot drive-thru coffee shop in the west corner of OR 99W and River Ridge driveway in Tualatin, Oregon is anticipated to result in the following impacts:

Trip Generation/Intersection Operations

- The proposed development will include a 1,200 square-foot coffee shop (with drive-up window and indoor seating) as well as an overflow parking lot for the existing apartment complex. It is assumed that the parking lot will not generate any new vehicle trips that are not destined for the River Ridge apartment complex.
- The future development is estimated to generate 678 net new daily trips and 55 (28 in, 27 out) net AM peak hour trips and 26 (13 in, 13 out) net PM peak hour trips.

- The OR 99W/River Ridge driveway study intersection will continue to meet ODOT mobility standards with the addition of site generated trips.

Site Plan Evaluation

- The proposed site plan includes adequate space for two-way traffic throughout the parking area. Adequate pedestrian facilities and connections are included in the site plan.
- The proposed drive-thru storage length of 189 feet meets City of Tualatin's minimum requirement of capacity for 8 motor vehicles (about 160 feet). Based on the queuing analysis, this appears to be sufficient storage.
- The site plan shows a total of 39 parking stalls, which exceeds the maximum allowed amount for restaurant land-uses per Section 73.370(2) of TDC, however, the intent is for the northwestern portion of the parking lot to also serve as overflow parking for the adjacent apartment complex.
- The proposed site plan includes 2 accessible parking stalls, meeting ADA requirements for parking facilities with 26-50 total parking stalls.
- The proposed site plan includes 3 sheltered bicycle parking spaces, meeting City of Tualatin's minimum requirement of 2 bicycle parking spaces per 1,000 square-feet for restaurant land-uses.

Site Plan Recommendations

- The apartment complex shall continue to refrain from installing any large obstructions in the north corner of the OR 99W/River Ridge driveway intersection that could block vehicles' sight distance such as vegetation, monuments, or structural signs. Prior to occupancy, sight distance at any proposed access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer in the State of Oregon.
- "Do Not Block Intersection" signage should be installed in the vicinity of the site access to reduce the likelihood that queued vehicles will interfere with site access operations.

2.0 EXISTING CONDITIONS

This chapter details the existing study area conditions including the proposed site development, existing bicycle and pedestrian facilities, existing transit facilities, roadway network, future planned projects, existing traffic volumes and operations, crash analysis, and field observations. Supporting details are provided in the appendix.

Study Area

The proposed redevelopment involves the removal of existing residential and commercial buildings to construct a new 1,200 square-foot drive-thru development in the west corner of OR 99W (SW Pacific Highway) and River Ridge driveway in Tualatin, Oregon (Figure 1). The site will also include an overflow parking lot serving the existing River Ridge apartment complex. For the purpose of this study, the drive-thru development was assumed to be a coffee shop. There will be one driveway access to the site via the existing River Ridge driveway. The following sections present a summary of the roadway network including the existing characteristics of the bicycle and pedestrian facilities, public transportation services, and any future planned projects in the study area.



Figure 1: Study Area

Roadway Network

The roadways within the study area are state highways and City of Tualatin arterial roads. The transportation characteristics of the roadways within the study area are shown in Table 2. The table includes the functional classification, the number of travel lanes, posted speed, and the facilities for bicyclists and pedestrians.

Table 2: Existing Study Area Roadway Characteristics

Roadway	Functional Classification	Lanes	Posted Speed	Sidewalk	Bike Lanes
OR 99W (SW Pacific Highway)	Urban Principal Arterial	2	45	Partial ¹	Yes
SW 124th Avenue	Urban Minor Arterial	2	25	Yes	Yes

¹Sidewalk is missing for about 275 feet on northwest side of SW Pacific Highway.

The functional classification specifies the purpose of the facility and is a determining factor of applicable cross-section, access spacing, and intersection performance standards. There are transit routes along

OR 99W provided by TriMet, which connects Tualatin to Portland’s city center on weekdays.¹ There are also local transit routes on OR 99W provided by Yamhill County Transit.² The closest transit stops to the site are located at the SW Pacific Highway/SW 124th Avenue intersection, approximately 650 feet southwest of the development.

Existing Traffic Volumes and Operations

An analysis of the 2018 existing intersection operations was performed for the study intersection to ensure the transportation network meets Oregon Department of Transportation (ODOT) performance standards. Intersections are the focus of the analysis because they are the controlling bottlenecks of traffic flow and the ability of a roadway system to carry traffic efficiently is nearly always diminished in their vicinity.

Intersection operations were analyzed for the AM and PM peak hours. Turning movement counts were collected on December 6, 2018 from 7:00-9:00 AM and 4:00-6:00 PM at the following study intersection³:

- OR 99W(SW Pacific Highway)/River Ridge Driveway

Figure 2 to the right shows the peak hour turn movement volumes, intersection traffic control, and lane configurations at the study intersections.

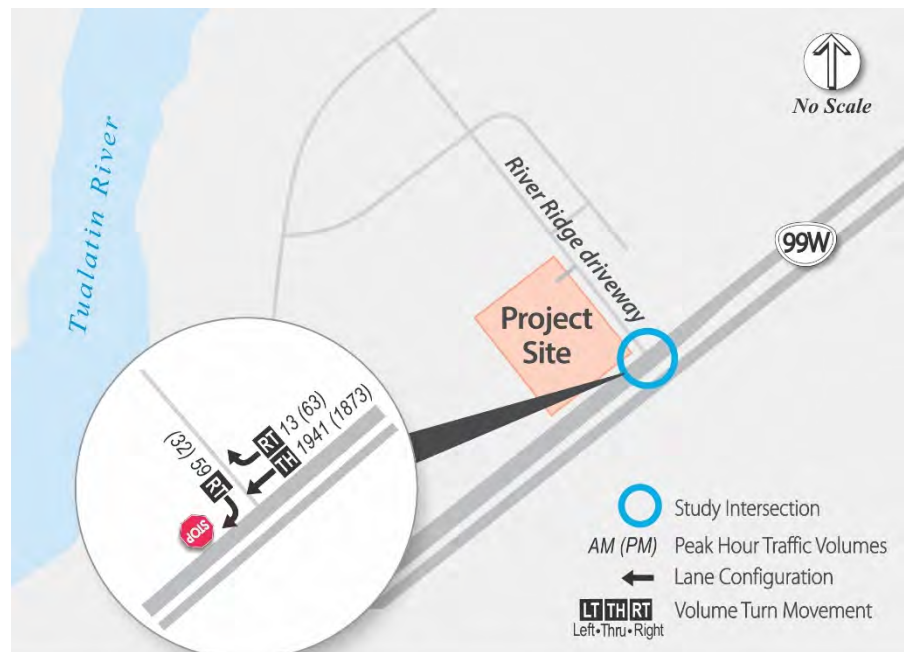


Figure 2: Existing Traffic Volumes

Sesaonal Factor Adjustment

The traffic count data collected in December 2018 represents a period where traffic volumes are lower than the average weekday conditions. Adjustments to ODOT facilities are required to reach the desired conditions using methodology from the ODOT Analysis Procedural Manual (APM).⁴ To determine when the average weekday conditions occur, data is examined from Automatic Traffic Recorder (ATR) stations that record traffic highway volumes year-round. The closest ATR to the project location on OR 99W is ATR #36-004 in Newberg, Oregon. ODOT’s ATR Characteristic Table was instead used to find an ATR station located on a state highway in a similar setting to that of the project site in Tualatin. Based on direction from the APM, it was determined the most applicable ATR station was ATR #26-003 on four-lane highway US26 in Gresham, Oregon which is another urbanized area with commuter trends

¹ More info on the TriMet transit system provided at www.trimet.org/maps/img/trimetsystem.png

² More info on the Yamhill County Transit routes and schedules provided at www.yctransitarea.org/index.php/routes-and-schedules

³ DKS coordinated with City of Tualatin and ODOT to determine appropriate study area and traffic count time periods.

⁴ *Analysis Procedural Manual Version 2*, Oregon Department of Transportation. Updated 2018.

outside of Portland, Oregon. Annual Average Daily Traffic (AADT) at this station is within 10% of AADT at the project site. The December traffic counts were adjusted by a factor of 1.08. Supporting traffic data is included in the appendix.

Intersection Performance Measures

Level of service (LOS) ratings and volume-to-capacity (v/c) ratios are two commonly used performance measures that provide a good representation of intersection operations. In addition, they are often incorporated into agency mobility standards.

- Level of service (LOS):** A “report card” rating (A through F) based on the average delay experienced by vehicles at the intersection. LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity. This condition is typically evident in long queues and delays.
- Volume-to-capacity (v/c) ratio:** A decimal representation (typically between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 0.95, congestion increases, and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays.

Since the study intersection is under ODOT jurisdiction, a v/c ratio of 0.99 or better is required for OR99W inside the Portland Metropolitan Area.⁵

The existing study intersection operations were evaluated based on the *Highway Capacity Manual 6th Edition* methodology for unsignalized intersections.⁶

Table 3 on the following page lists the study intersection’s existing volume to capacity (v/c) ratio, delay, and LOS. As shown, the study intersection currently meets operating standards and mobility targets.

Table 3: 2017 Existing Peak Hour Study Intersection Operations (Seasonally Adjusted)

Intersection	Jurisdiction	Mobility Targets/ Operating Standard	AM Peak			PM Peak		
			v/c	Delay	LOS	v/c	Delay	LOS
SW Pacific Highway/ River Ridge Driveway	ODOT	v/c < 0.99	0.28	27.0	D	0.13	21.4	C

Stop Controlled intersections:

- v/c = Volume-to-Capacity Ratio of Critical Movement (Minor Street)
- Delay = Critical Movement Approach Delay (sec)
- LOS = Level of Service of Minor Street

Bold/Highlighted: Intersection fails to meet operating standards/mobility targets

⁵ Oregon Highway Plan, Table 7. Oregon Department of Transportation. 2015.
⁶ Highway Capacity Manual, Transportation Research Board, Washington D.C., 2016.

Collision Analysis

The most recent five years (2012-2016) of available crash data for the study area was obtained from the ODOT crash database and was used to evaluate the safety performance of the roadway segment adjacent to the site. A total of 5 non-intersection related collisions occurred on the roadway segment of OR 99W between SW 124th Avenue and SW Hazelbrook Road.

No collisions resulted in a fatality and one collision resulted in a severe injury. Collision types included turning movement (2 crashes), fixed object (1 crash), rear-end (1 crash), and pedestrian (1 crash). The most common contributing factors were following too close (2 crashes) and improper driving (2 crashes). The severe injury crash occurred on a winter afternoon (around 5 PM) when a vehicle traveling northbound failed to yield and struck a jaywalking pedestrian that wasn't clearly visible.

Safety Priority Index System (SPIS)

The Safety Priority Index System (SPIS) is a ranking system developed by ODOT to identify potential safety problems on state highways. SPIS scores are developed based upon crash frequency, crash severity, and traffic volume for a 0.10 mile or variable length segment along the state highway over a rolling three-year window (i.e., every year it is updated with the most recent three years).

A prioritized list of the top 15% of statewide SPIS sites is created for each region, and the top 5% are investigated by the five Region Traffic managers' offices. Based on crash data from 2013 to 2015, there are no SPIS locations in the vicinity of the site.

Collision Rate

The total number of crashes observed on a roadway segment is typically related to the volume of traffic traveling on said roadway segment. Because of this relationship, a commonly used measure to evaluate the safety performance of roadway is a segment crash rate, which is the number of crashes per year per million vehicle miles traveled (MVMT). ODOT has developed a list of critical crash rates which represent the expected crash rate for different types of roadways across the state. If the calculated crash rate is higher than the corresponding ODOT critical crash rate, this would indicate a potential safety concern and would warrant additional safety investigations. As shown in Table 4 below, the calculated crash rate is below the ODOT critical crash rate for the study roadway segment. Therefore, no additional safety analysis has been conducted.

Table 4: Study Segment Crashes (2012-2016)

Location	Crash Frequency (Severity)				Approximate ADT	ODOT Critical Crash Rate ²	Observed Crash Rate ³
	Severe Injury	Non-Severe Injury	PDO ¹	Total			
Segment							
OR 99W: 124th Ave to Hazelbrook Rd	1	4	0	5	30,500	3.2	0.26

¹ PDO = Property damage only

² Critical crash rate according to ODOT's 2016 Crash Report Table 2: 5 Year Comparison of State Highway Crash Rates

³ Crash rate = average annual crashes per million vehicle miles traveled (MVMT); MVMT estimates based on AADT

Bold/Highlighted: Intersection or segment is over the critical crash rate.

3.0 PROJECT IMPACTS

This section presents the anticipated number of trips generated by the proposed development, the future traffic volumes and operating conditions, the recommended mitigations, and a review of the preliminary site plan. Supporting information can be found in the appendix. The proposed development involves the construction of a 1,200 square-foot drive-thru coffee shop with indoor seating located in the west corner of OR 99W and River Ridge driveway. The development will be accessed via the existing River Ridge driveway which provides right-in/right-out access to OR 99W.

Trip Generation

Trip generation is the method used to estimate the number of vehicles a development adds to site driveways and the adjacent roadway network during a specified period (i.e., such as the PM peak hour). Trip generation estimates are performed using trip rates surveyed at similar land uses, as provided by the Institute of Transportation Engineers (ITE).⁷ Pass-by trip reductions were applied to the trip generation analysis. Pass-by trips account for vehicles that were already on adjacent streets (i.e. Highway 99W) and decided to stop at the coffee shop. ITE’s Trip Generation Handbook provides recommended pass-by percentage estimates for various land uses.⁸

The proposed development is estimated to generate 678 net new daily trips including 55 (28 in, 27 out) net new AM peak hour trips and 26 (13 in, 13 out) net new PM peak hour trips. Table 5 lists the AM and PM peak hour vehicle trip generation estimates, which were used for intersection operations and queuing analysis.

Table 5: Trip Generation Summary

Land Use (ITE Code)	Trip Generation Rate ¹		Units (KSF ¹)	AM Peak Hour			PM Peak Hour			Daily Trips
	AM Peak	PM Peak		In	Out	Total	In	Out	Total	
Coffee Shop w/ Drive-thru (937)	88.99/KSF	43.38/KSF	1.2	54	53	107	26	26	52	1,329
<i>Pass-by Trips (49%)²</i>				-26	-26	-52	-13	-13	-26	-651
Net New Trips for Future Build Scenario				28	27	55	13	13	26	678

¹KSF = 1,000 square-feet

²Pass-by rate for fast food restaurant and coffee shop (both with drive-thru) is 49% and 85%, respectively. The pass-by rate for the coffee shop is based on a very limited data set from large urban areas and may not be accurate for this location. In an effort to be conservative, the lower pass-by trip percentage for fast food restaurants was applied to the drive-thru coffee shop land use.

As mentioned previously, the overflow parking lot is not anticipated to generate any new vehicle trips that are not destined for the existing River Ridge apartment complex. Therefore, only trips associated with the drive-thru coffee shop are included in the evaluation of project impacts.

⁷ *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers, 2017.

⁸ *Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, 2017.

Trip Distribution

Trip distribution provides an estimation of where project-related trips would be coming from and going to. It is given as percentages at key gateways to the study area and is used to route project trips through the study intersections. The site can only be accessed via the existing right-in/right-out driveway, meaning that all vehicle trips will be making the same movements. The project trips and total trips are shown in Figure 3 to the right.



Figure 3: Project Trips

Future Traffic Volumes

The future traffic volumes for the 2018 Build scenario include two types of traffic: existing traffic and project generated trips. Figure 4 to the right shows the expected future volumes for project build conditions.



Figure 4: Existing + Project Trips

Traffic Operations

Intersection operations analysis was performed for the 2018 future build scenario. The traffic conditions at the study intersection were determined based on the *Highway Capacity Manual 6th Edition* methodology for unsignalized intersections. The estimated level of service (LOS) and volume to capacity ratio (v/c) of the study intersection is shown in

Table 6 on the following page. As shown, the study intersection will continue to meet operating standards and mobility targets.

Table 6: Existing + Project Intersection Operations

Intersection	Jurisdiction	Mobility Targets/ Operating Standard	AM Peak			PM Peak		
			v/c	Delay	LOS	v/c	Delay	LOS
OR 99W/River Ridge Driveway	ODOT	v/c < 0.99	0.52	36.4	E	0.23	23.4	C

Stop Controlled intersections:

- v/c = Volume-to-Capacity Ratio of Critical Movement (Minor Street)
- Delay = Critical Movement Approach Delay (sec)
- LOS = Level of Service of Minor Street

Bold/Highlighted: Intersection fails to meet operating standards/mobility targets

Site Plan Review

A preliminary site plan showing the proposed development can be found in the appendix. The site plan's internal site circulation, vehicle queuing, parking, and bicycle and pedestrian facilities were evaluated based on transportation engineering judgement as well as City of Tualatin's Community Design Standards.⁹ The site plan evaluation is detailed in the following sections.

Site Circulation and Vehicle Queuing

The site plan shows sufficient space and adequate turning radii to allow for safe two-way motor vehicle circulation throughout the parking area. There is currently no parking proposed along the River Ridge driveway, allowing for safer right-turn maneuvers off of OR 99W and into the complex.

A 95th percentile queuing analysis was conducted at the OR 99W/River Ridge driveway intersection based on recommended ODOT methodology to determine if there was potential of vehicle queuing blocking the site access.¹⁰ During the AM peak hour, a 95th percentile queue of 122 feet (about 6 personal vehicles) was estimated at OR 99W/River Ridge driveway. This vehicle queuing includes existing traffic from the nearby apartment complex plus project trips, which make up about half (47%) of the total driveway trips. The preliminary site plan shows the site access spaced approximately 100 feet away from the study intersection. On the rare occasion that the queue extends beyond 100 feet, the site access will only be blocked if the 6th vehicle does not originate from the proposed site (roughly half of those occasions, on average). However, "Do Not Block Intersection" signage could also be installed to help minimize potential impacts to driveway operations. If the driveway is blocked, there are alternate methods of accessing the site that drivers could utilize. During the PM peak hour, the estimated 95th percentile queue length is approximately 61 feet (about 3 personal vehicles), which will not impact site access operations.

Per Section 73.160(2)(a)(ii) of Tualatin's Developmental Code (TDC), restaurant drive-thru lanes shall provide a minimum capacity for 8 vehicles (about 160 feet). The preliminary site plan shows a drive-thru storage length of approximately 189 feet (about 9 vehicles). Based on the queuing analysis, this appears to be sufficient storage.

Parking

The site plan shows a total of 39 parking spaces. Per Section 73.370(2) of TDC, restaurant land-uses requires a minimum of 10 parking spaces per 1,000 square-feet and maximum of 23 parking spaces per 1,000 square-feet for restaurant land-uses located in Zone B of Tualatin (zone map included in appendix). The proposed 39 parking spaces exceeds the maximum parking allowed, however, the intent is for the northwestern portion of the parking lot to also serve as overflow parking for the adjacent apartment complex.

Per Section 73.380(2) of TDC, compact car parking spaces shall not exceed 35% of the total provided parking spaces. There are currently 10 proposed parking spaces shown on the site plan (about 26%), meeting City of Tualatin's requirements.

Per Section 73.380(10) of TDC, accessible parking spaces shall be provided in accordance with applicable federal and state requirements. Both Oregon's Structural Specialty Code and Americans

⁹ City of Tualatin Development Code, Chapter 73: Community Design Standards

¹⁰ *Analysis Procedural Manual Version 1, Chapter 8*. Oregon Department of Transportation, November 2018.

with Disabilities Act (ADA) standards require a minimum of 2 accessible parking spaces (1 standard and 1 van) for parking facilities with 26-50 total parking stalls.^{11,12} There are currently two identified accessible parking spaces (both meeting van requirements) on the preliminary site plan, meeting federal and state standards.

Bicycle and Pedestrian Facilities

The site plan shows a new 6-foot sidewalk along the side fronting OR 99W and meets Section 73.160(1)(a)(i) of TDC's requirement of providing a 6-foot minimum accessible walkway from the main building entrance to any abutting public right-of-way. The site plan also shows an existing ADA curb ramp at the OR 99W/River Ridge driveway intersection.

Bike lanes currently exist on both sides of OR 99W in the vicinity of the site. Per Section 73.370(2) of TDC, a minimum of 2 bicycle parking spaces per 1,000 square-feet are required for restaurant land-uses. There are currently 3 sheltered bicycle parking spaces shown on the site plan, meeting City of Tualatin's requirements.

Sight Distance

A preliminary sight distance evaluation was conducted for the right-turn movement onto OR 99W from the existing River Ridge driveway. OR 99W has a posted speed of 45 miles per hour, requiring an intersection sight distance of at least 430 feet.¹³ This sight distance requirement is currently met at the River Ridge driveway. However, the apartment complex should continue to refrain from installing any large obstructions in the north corner of the OR 99W/River Ridge driveway intersection that could block sight distance such as vegetation, monuments, or structural signs. Prior to occupancy, sight distance at any proposed access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer in the State of Oregon.

Site Plan Recommendations

The following site plan improvements are recommended:

- The apartment complex shall continue to refrain from installing any large obstructions in the north corner of the OR 99W/River Ridge driveway intersection that could block vehicles' sight distance such as vegetation, monuments, or structural signs. Prior to occupancy, sight distance at any proposed access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer in the State of Oregon.
- "Do Not Block Intersection" signage should be installed in the vicinity of the site access to reduce the likelihood that queued vehicles will interfere with site access operations.

Project Summary

¹¹ Oregon Structural Specialty Code, Chapter 11, 2014.

¹² Americans with Disabilities Act, Chapter 5.

¹³ *A Policy of Geometric Design of Highways and Streets*, 6th Edition, Table 9-8, AASHTO, 2011

The proposed development of a 1,200 square-foot drive-thru coffee shop and overflow parking lot in the west corner of OR 99W and River Ridge driveway in Tualatin, Oregon is anticipated to result in the following impacts:

Trip Generation/Intersection Operations

- The proposed development will include a 1,200 square-foot coffee shop (with drive-up window and indoor seating) as well as an overflow parking lot for the existing apartment complex.
- The future development is estimated to generate 678 net new daily trips and 55 (28 in, 27 out) net AM peak hour trips and 26 (13 in, 13 out) net PM peak hour trips.
- The OR 99W/River Ridge driveway study intersection will continue to meet ODOT mobility standards with the addition of site generated trips.

Site Plan Evaluation

- The proposed site plan includes adequate space for two-way traffic throughout the parking area. Adequate pedestrian facilities and connections are included in the site plan.
- The proposed drive-thru storage length of 189 feet meets City of Tualatin's minimum requirement of capacity for 8 motor vehicles (about 160 feet). Based on the queuing analysis, this appears to be sufficient storage.
- The site plan shows a total of 39 parking stalls, which exceeds the maximum allowed amount for restaurant land-uses per Section 73.370(2) of TDC, however, the intent is for the northwestern portion of the parking lot to also serve as overflow parking for the adjacent apartment complex.
- The proposed site plan includes 2 accessible parking stalls, meeting ADA requirements for parking facilities with 26-50 total parking stalls.
- The proposed site plan includes 3 sheltered bicycle parking spaces, meeting City of Tualatin's minimum requirement of 2 bicycle parking spaces per 1,000 square-feet for restaurant land-uses.

Site Plan Recommendations

- The apartment complex shall continue to refrain from installing any large obstructions in the north corner of the OR 99W/River Ridge driveway intersection that could block vehicles' sight distance such as vegetation, monuments, or structural signs. Prior to occupancy, sight distance at any proposed access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer in the State of Oregon.
- "Do Not Block Intersection" signage should be installed in the vicinity of the site access to reduce the likelihood that queued vehicles will interfere with site access operations.