FEHR PEERS

MEMORANDUM

Date: March 3, 2017

To: Mark Hofman, City of Snoqualmie

From: Carmen Kwan, and Chris Breiland, Fehr & Peers

Subject: Snoqualmie Ridge Multifamily Development on Parcel S-20 – Traffic Impact Analysis Review

SE17-0507

This memo summarizes our review of the traffic impact analysis (TIA) submitted for the proposed Snoqualmie Ridge Multifamily Development on Snoqualmie Ridge II Parcel S-20 (Dated November 1, 2016).

TRIP GENERATION, DISTRIBUTION, AND LOS OPERATIONS

Trip Generation

The proposed development consists of 200 multifamily affordable housing units on Parcel S-20 of Snoqualmie Ridge II area. The trip generation analysis used a trip generation rate for a Mid-Rise Apartment (code 223) from the ITE Trip Generation Manual, 9th Edition. This land use has a lower trip generation rate than an Apartment Building (ITE 220), however this is acceptable as affordable housing units are known to have a lower trip rate. The proposed development would generate 85 vehicle trips (49 enter/36 exit) during the PM peak hour.

Trip Distribution and Intersection LOS

The proposed development would have access to Snoqualmie Parkway via SE Jacobia Street and Frontier Avenue SE. The distribution of project generated vehicle trips for the separate land uses are reasonable based on the street network and land uses, where a little more than half of the traffic is from the south on Snoqualmie Parkway and the rest is from the north.

SE Jacobia Street & Snoqualmie Parkway LOS

While the forecasted traffic volumes shown in Figure 5 of the TIA are not consistent with the intersection operation reports in Attachment 2 and trip generation table in Attachment 3, (total trips shown used the average trip rate instead of the fitted curve equation as stated in the TIA), the overall findings of the TIA do not change. The analyzed Snoqualmie Parkway and SE Jacobia Street intersection would continue to meet City standards of LOS D or better in 2018 with the project.

We also confirmed that the 2032 PM peak hour traffic operations at the study intersection (with the additional 41 housing units not entitled on this parcel) would continue to meet City standards of LOS D or better.

Frontier Avenue Segment & SE Jacobia Street Segment LOS

A previous study completed in August 2012 evaluated if there was enough capacity on Frontier Avenue and Jacobia Street for an assumed 160 affordable housing units on Parcel S-20. The analysis found that both Frontier Avenue and Jacobia Street (classified as neighborhood collectors) would have more than enough capacity to support this proposed development. An additional 40 housing units would not change these results.

SITE ACCESS, CIRCULATION, AND PARKING

Access

Vehicular site access is proposed at one location at via Frontier Avenue SE (which ultimately provides access to SE Jacobia Street and Snoqualmie Parkway). A secondary emergency access driveway is proposed to the southwest to connect with the existing Snoqualmie Valley Hospital/ SE 99th Street. It is recommended that the Fire Department should review the emergency site access if they have not already completed it.

The site plans show the access roadway is generally 23 feet wide, or allows for 11.5 feet wide lanes. This is wide enough that some vehicles may travel at a high speed through the proposed development. Speed bumps to calm traffic are not on the site plan; however, they are recommended throughout the development access road to discourage potential speeding in this residential area (it is further recommended that the Fire Department be consulted on any traffic calming measures).

Interior Roadways / Circulation

There is one main interior roadway providing access to parking throughout the site. One concern relates to access for garbage and recycling services. The site plan shows a trash and recycling enclosure at the proposed development entrance, but is not clear whether that single enclosure serves the entire development. The applicant should verify where other trash and recycling collection enclosures would be on site, especially for the Building L proposed to the far south. If there is only one location, this may encourage unnecessary vehicle trips from the south to the north end of the site to dispose of trash.

Pedestrian Access

The plans show a wall separating Buildings E/F from Buildings G/H due to the elevation change. If possible, a connecting walkway between the two rows of buildings is suggested to facilitate more direct pedestrian access within the proposed development.

The plans also show a proposed sidewalk along the emergency access road which stops at the existing road to Snoqualmie Valley Hospital. It would be desirable for the developer to reach an agreement with Snoqualmie Valley Hospital to complete the sidewalk connection all to way to the existing sidewalk in the hospital parking lot. This would provide better recreational pedestrian access to SE 99th Street and is a natural path for people to walk.

Parking

There are a total of 328 planned parking stalls on site, which is within the required 200 to 400 parking stall range required for this development within City Code 17.65. Bike parking requirements are also detailed in Code 17.65. Upon further review of this development it should be confirmed the bicycle parking requirements are met.

SNOQUALMIE RIDGE II EIS CONSISTENCY

Per submittal letter, there are 200 affordable housing units proposed for Parcel S-20, which was originally entitled for 159 units. This is an average of 15 dwelling units per acre, and within the 8 to 16 dwelling units per acre range studied in the Snoqualmie Ridge II EIS. While the total number of units proposed is higher than what was originally entitled for this parcel, the traffic operations results match what was identified in the EIS—in other words, the additional 41 units would not result in traffic operations to degrade beyond what was anticipated in the original EIS, and City LOS

standards are met for both the intersection and the street segments (Frontier Avenue SE and SE Jacobia Street). Our review found that the study intersection would also continue to operate at an acceptable LOS with the additional 41 units during the 2032 PM peak hour.

CONCLUSION

The Snoqualmie Ridge Multifamily Apartments development consists of a 200 affordable housing units on Parcel S-20 of the Snoqualmie Ridge II area. Our review of the submitted traffic impact analysis is summarized below.

- The proposed site trip generation would be 85 PM peak hour trips (49 enter/36 exit).
- While the intersection LOS reports are for traffic forecasts that are not consistent with what was stated in the TIA report, the overall findings remain the same. The study intersection of SE Jacobia Street and Snoqualmie Parkway would meet City standards of LOS D or better under 2018 and 2032 peak hour conditions with the proposed project. Roadway segment LOS standards are also met.
- The Fire Department should review the site plan to ensure fire access requirements are met, if they have not already done so.
- The 23 feet wide access road through the development could allow for undesirably high speeds. Speed bumps are recommended throughout the access road to reduce speeds through this residential development. The Fire Department should be consulted on the design of any internal traffic calming measures.
- Trash and recycling enclosures should be identified throughout the site. One location is identified at the development entrance, but it is not clear if this serves the entire development. Insufficient trash enclosures could result in unnecessary vehicle trips on-site.
- If possible, construct a connecting walkway between the Buildings E/F and Buildings G/H to facilitate more direct pedestrian access within the proposed development. Also, consider entering into an agreement with the Snoqualmie Valley Hospital to continue the sidewalk at the development's emergency access road further south to connect with the existing sidewalk in the hospital parking lot.
- Proposed parking stalls on site meet City Code. Further review should confirm that bicycle parking requirements are met (also in City Code 17.65).
- The proposed development would include 41 additional affordable housing units than was previously entitled on this parcel. However, the approximately 15 dwelling units per acre density proposed are within the housing density range studied in the EIS. We determined

the that with project the traffic operations would not degrade beyond what was anticipated in the original EIS, and City LOS standards are met for both the intersection and the street segments. Our review found that the study intersection would also continue to operate at an acceptable LOS with the additional 41 units during the 2032 PM peak hour.