## **REPLINGER & ASSOCIATES LLC**

TRANSPORTATION ENGINEERING

January 18, 2019

Mr. Pete Walter City of Oregon City PO Box 3040 Oregon City, OR 97045

SUBJECT: REVIEW OF TRANSPORTATION IMPACT ANALAYSIS AND TRIP
GENERATION LETTER – THE COVE PHASE 2 – GLUA18-04

Dear Mr. Walter:

In response to your request, I have reviewed the materials submitted in support of the proposed Phase 2 of The Cove Mixed-Use Development. The current proposal for Phase 2 involves a change in the uses from those original, historically-approved Master Plan in 2008 and 2009. The Trip Generation Letter (TGL), dated October 15, 2018 was prepared under the direction of Diego Arguea, PE of Kittelson & Associates. The TGL is an update of the Transportation Impact Analysis dated July 2015, which was also prepared under the direction of Diego Arguea, PE.

The new proposal for Phase 2 consists of: 404 apartments (of which 20 will be live/work units) and associated leasing office space; 5.28-acre park area; 6,800 square feet of retail space; 3,750 square feet of quality restaurant land uses; and 3,750 square feet of high-turnover sit-down restaurant land uses. This differs from the prior master plan and transportation analysis that featured office and medical office space as key elements of the development.

The TGL and TIA provide a basis upon which the revised development plan can be evaluated.

## Comments

- 1. Study Area. The study addresses the appropriate intersections. The engineer evaluated traffic patterns and traffic volumes and operations at five locations. The key intersections were:
  - 1. Highway 99E at Dunes Drive;
  - 2. Highway 99E at the I-205 Southbound Ramp Terminal;
  - 3. Highway 99E at the I-205 Northbound Ramp Terminal;

- 4. Washington Street at Highway 213;
- 5. Redland Road at Highway 213.

The study area is appropriate.

- 2. Traffic Counts. The traffic counts were conducted in 2015 and adjusted to 2020. Traffic counts were conducted during the AM and PM peak periods. The base year traffic volumes appear reasonable.
- 3. Trip Generation. The TGL presents information on trip generation for the current development proposal. It compares the original Phase 2 development scenario that was evaluated in detail in the 2015 TIA with the new development scenario. The 2015 TIA's estimate of trip generation featured general office and medical offices, for example. The 2018 TGL substitutes additional apartments in place of the offices. The original, historically-approved, development predicted Phase 1 and Phase 2 would generate 6489 weekday trips; 406 AM peak hour trips; and 609 PM peak hour trips. The revised development plan is calculated to generate 4852 weekday trips; 352 AM peak hour trips; and 447 PM peak hour trips. The new trip generation calculations presented in the 2018 TGL indicate traffic impacts will be somewhat less than analyzed in the 2015 TIA.

The trip calculation appears reasonable.

- 4. Trip Distribution. The engineer's trip distribution shows traffic using a variety of routes and distribution to major regional facilities as follows:
  - Approximately 27 percent of site trips will travel to/from the north on Highway 99E;
  - Approximately 27 percent of site trips will travel to/from the north on I-205;
  - Approximately 24 percent of site trips will travel to/from the south on I-205;
  - Approximately 5 percent of site trips will travel to/from the southwest on Highway 99E;
  - Approximately 5 percent of site trips will travel to/from the southeast along Redland Road;
  - Approximately 7 percent of site trips will travel to/from the south along Highway 213; and

 Approximately 5 percent of site trips will travel to/from the south on other streets.

The trip distribution and site access seem reasonable.

- **5. Traffic Growth.** The engineer analyzed the operations using a build-out year of 2020. Traffic growth was developed using regional model information.
- 6. Analysis. Traffic volumes were calculated for the intersections described in #1, above. The volume-to-capacity ratio (v/c), level of service, and delay calculations were provided to assess operations relative to the ODOT and city's operational standards. The analysis described in the 2015 TIA was undertaken for both the AM and PM peak hours for existing 2015 conditions; 2020 background conditions; and 2020 conditions with build-out of the development.

According to the analysis presented in the 2015 TIA, all five study area intersections identified in #1, above, are predicted to meet applicable mobility standards under 2020 conditions with or without the development. The only operational issue noted in the analysis was a queuing issue for the southbound left-turn movement at the ORE 99E /I-205 SB Ramp Terminal intersection. This movement is forecast to continue to exceed the available striped lane queue storage during the weekday AM peak hour. The engineer notes that no site-generated traffic is expected to increase the queue at this location.

Since the 2018 TGL predicts less traffic will be generated by the development, all operational conclusions presented in the 2015 TIA remain valid.

- 7. Crash Information. The TIA provides crash information for the five-year period from 2009 through 2013. Other analyses, including the TSP, have provided more recent information. Two of the intersections (Dunes/Highway 99E and Washington/Highway 213) have been reconfigured in recent years making the historic information less relevant. Projects have been identified and included in the adopted TSP to address the other three intersections analyzed in this study.
- 8. Conclusions and Recommendations. As stated in the TIA, all five study area intersections are calculated to meet applicable mobility standards in 2020 with the development. The new development scenario for Phase 2, which focuses on residential development in place of office development, generates slightly less

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traffic and, therefore, also meets mobility standards at the study area intersections.

## **Conclusions**

I find that the TIS and TGL provide an adequate basis upon which to assess the impacts of the proposed development. I agree that the TIA demonstrates that the applicable mobility standards are met through year 2020. The new development scenario for Phase 2 as described in the TGL has similar or slightly less impact than does the original development scenario that was previously approved. Therefore, no additional conditions of approval or mitigation is required for the development scenario specified in the TGL.

please contact me at replinger-associates@comcast.net.

Sincerely,

John Replinger, PE Principal

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