

REPLINGER & ASSOCIATES LLC
TRANSPORTATION ENGINEERING

April 9, 2019

Ms. Christina Robertson-Gardiner
City of Oregon City
PO Box 3040
Oregon City, OR 97045

**SUBJECT: REVIEW OF TRANSPORTATION ANALYSIS LETTER – HIRAM AVENUE
 SUBDIVISION – GLUA18-39**

Dear Ms. Robertson-Gardiner:

In response to your request, I have reviewed the materials submitted in support of the proposed five-lot subdivision at 16362 Hiram Avenue. The site is on the east side of Hiram Avenue opposite Gains Street. The relevant materials consisted of the Transportation Analysis Letter (TAL) dated January 25, 2019 and the site plan. The TAL was prepared under the direction of Michael Ard, PE of Ard Engineering.

The proposed development consists of a five-lot subdivision on a parcel currently occupied by one single-family detached dwelling. The proposed access to the site is a local street intersecting Hiram Avenue near, but slightly offset from the intersection of Hiram Avenue and Gains Street.

The TAL provides an adequate basis upon which the proposal can be evaluated for transportation impacts.

Comments

- 1. Trip Generation.** The TAL presents information on trip generation from the construction of 4 new single-family dwellings. The trip generation rates were taken from the Institute of Transportation Engineers' *Trip Generation Manual*. The engineer used the 210 Single-Family Detached Homes land use category. The development was calculated to produce 3 new AM peak hour trips; 4 new PM peak hour trips; and 38 new weekday trips.
- 2. Access Locations.** The engineer explains that a new local residential street is proposed to intersect with Hiram Avenue with a potential connection to serve additional subdivisions to the south. The proposed access location is offset from Gains Street, which extends to the west from Hiram Avenue. The offset between the new, easterly extension of Gains Street and the existing street west of Hiram Avenue is 25 feet.

The engineer provides a detailed discussion of intersection safety of offset intersections. In addition, he provides a detailed explanation of the rationale for this access and the modification of the street standards. He argues that the new street with the offset intersection meets the intent of the code; the modification provides safe and efficient movement for users of all modes; the modification is consistent with an adopted plan; and the modification is complementary to the nearby streets.

Though offset intersections are not favored for several reasons, the low speeds, low volumes, and the opportunity this modification provides for serving additional development seem reasonable. I think the engineer provides adequate justification for the proposal. I support the granting of the modification to allow the offset intersection.

- 3. Driveway Width.** The engineer states that the proposed driveway widths for the individual lots meet the city's width standards.
- 4. Intersection Spacing.** The proposal does not result in any new intersections. It seeks to develop the Hiram Avenue/Gains Street intersection as a four-leg intersection, though with an offset of approximately 25 feet.
- 5. Sight Distance.** The engineer measured sight distance at the intersection of Hiram Avenue and Gains Street. Based on the statutory speed of 25 mph, the recommended sight distance is 280 feet. He measured sight distance to be in excess of 300 feet to the north and south. He concluded no mitigation to address sight distance is needed. I concur.
- 6. Safety Issues.** The engineer reviewed crash history in the study area for a five-year period. He found a single crash at the intersection of Holcomb Boulevard and Hiram Avenue. He notes that Hiram Avenue is a low-speed, low-volume roadway. The proposed development will provide an upgraded cross section that includes sidewalks for its Hiram Avenue frontage. The engineer identified no significant safety concerns and recommended no mitigation measures to address safety issues. I concur. There is no reason to expect the safety to be compromised by the slight addition of traffic from this development.
- 7. Consistency with the Transportation System Plan (TSP).** The engineer notes that the Hiram Avenue frontage will be upgraded to include sidewalks and the easterly extension of Gains Street will meet skinny street standards.

Conclusion and Recommendations

I find that the TAL meets city requirements and provides an adequate basis upon which impacts of the proposed development can be assessed.

I find the engineer's arguments in favor of an offset intersection at Hiram Avenue and Gains Street to be adequate justification for the proposed modification.

I find no need for mitigation measures to address transportation impacts associated with this proposal.

If you have any questions or need any further information concerning this review, please contact me at replinger-associates@comcast.net.

Sincerely,

A handwritten signature in black ink that reads "John Replinger". The signature is written in a cursive style with a large initial "J" and "R".

John Replinger, PE
Principal