



GREENLIGHT ENGINEERING

June 20, 2022

City of Manzanita Planning Commission
P.O. Box 129
Manzanita, OR 97130

RE: Manzanita Lofts Transportation Impacts

Greenlight Engineering has been asked by Concerned Citizens of Manzanita to evaluate the transportation related impacts of the proposed Manzanita Lofts development in Manzanita, Oregon.

We have reviewed the applicant's April 7, 2022 Manzanita Lofts PUD Traffic Analysis (hereafter referred to as the "Traffic Analysis"), the May 6, 2022 Lancaster Mobley letter ("Mobley letter"), the May 26, 2022 site plan and the May 9, 2022 staff report.

Executive Summary

- There is little to no evidence that "The streets are adequate to support the anticipated traffic and the development will not overload the streets outside the planned area" as required.
- There is substantial evidence that the intersections of US 101/Laneda Avenue and US 101/Manzanita Avenue may already be experiencing substantial intersection delays. This development may worsen those already poor operating conditions.
- The City of Manzanita has adopted a special roadway cross section for Classic Street adjacent to the proposed development. The existing roadway does not comply with the adopted cross section. The proposed development does not proposed to construct the standard cross section and nothing in the application even addresses the adopted cross section.
- There is no evidence that adequate sight distance can be achieved at the proposed site driveway.

US 101 Intersections Possibly Operating Inadequately

In order for the city to approve this application, section 4.136.3 of Ordinance 95-4 requires "The streets are adequate to support the anticipated traffic and the development will not overload the streets outside the planned area."

The Traffic Analysis provides no intersection capacity analysis or other evidence that supports that the streets are adequate and that the proposed development won't make them worse. In fact, there is evidence that nearby streets may not be operating adequately.

The City of Manzanita Downtown Transportation Plan¹ provides evidence that at least two nearby intersections in Manzanita were expected to experience substantial transportation capacity issues by 2022. The plan analyzed the US 101/Laneda Avenue and US 101/Manzanita Avenue intersections and found that by 2022, both intersections would operate well beyond the ODOT mobility standard and that improvements were necessary for adequate operations, suggesting those intersections were expected to not operate adequately well before 2022.

TABLE 2-5
Operational Analysis of 30th-Highest-Hour Conditions (Year 2022)

Intersection	LOS	OHP Mobility Standard	Maximum V/C Ratio	Delay (seconds)
U.S. 101 and Necarney City Road Critical Movement: Northbound (Minor Approach)	A/E	0.80/0.85	0.10/0.52	2.7/45.1
U.S. 101 and Laneda Avenue Critical Movement: Eastbound (Minor Approach)	B/F	0.80/0.85	0.34/1.44	10.7/253.1
U.S. 101 and Manzanita Avenue Critical Movement: Eastbound (Minor Approach)	A/F	0.80/0.85	0.35/1.25	9.4/188.0
Laneda Avenue and Carmel Street Critical Movement: Westbound	A	0.85	0.34	9.6

Source: Synchro HCM Unsignalized Report.

LOS = level of service.

OHP = Oregon Highway Plan.

V/C = volume-to-capacity.

Table 2-5 of City of Manzanita Downtown Transportation Plan

Although ODOT constructed some improvements at these intersections, there was no increase in intersection capacity at the US 101/Laneda Avenue intersection with the improvements. At the US 101/Manzanita Avenue intersection, a northbound left turn lane was added.

The application makes no mention of these intersections and offers little to no evidence establishing that “The streets are adequate to support the anticipated traffic and the development will not overload the streets outside the planned area” as required in order to approve this application.

As noted in the Traffic Analysis, the proposed development will add approximately 309 daily vehicular trips. Certainly, this development will add turning traffic to the US 101/Laneda Avenue intersection and possibly worsen operations beyond the existing operations.

Adopted Classic Street Cross Section Ignored

The City of Manzanita Downtown Transportation Plan adopted a Classic Street cross section from Laneda Avenue to Necarney City Road which includes “A 40-foot-wide right-of-way. Two 12-foot-wide travel lanes (24-foot-wide roadway), 6-foot-wide landscaped buffer and 10-foot-wide

¹ https://www.oregon.gov/ODOT/Planning/TPOD/tsp/city/city_of_manzanita_tsp_2003.pdf

shared bicycle/pedestrian path.” The development's Classic Street frontage is not compliant with this adopted roadway cross section. The applicant's Traffic Analysis notes that the street is just 21-22 feet in width and with separated bike or pedestrian facilities.

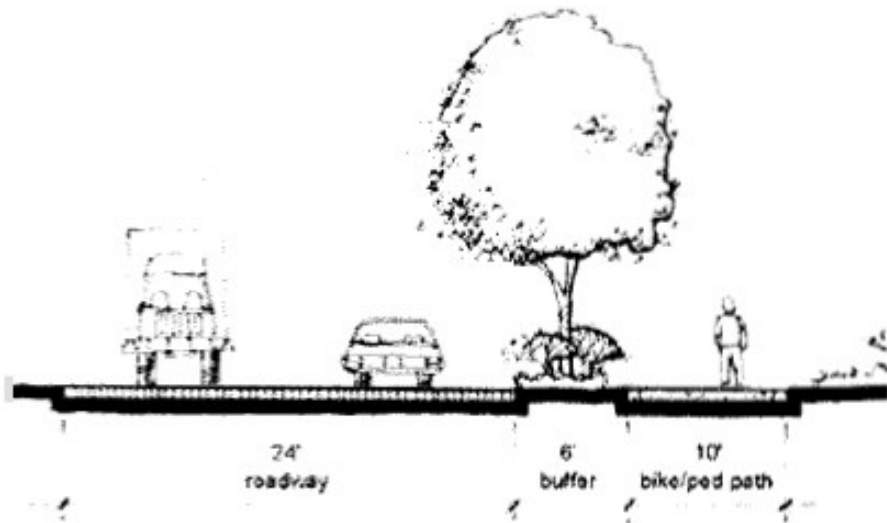


Figure 4.3 of City of Manzanita Downtown Transportation Plan, Classic Street Cross Section

It is common to require development to improve its own roadway frontage to be compliant with jurisdictional cross section standards when a site develops with an increase in traffic generation. This development certainly increases the traffic generation of the site and is anticipated to generate up to 309 daily vehicles.

Operations at Classic Street/Dorcas Lane Speculative

The applicant's Traffic Analysis of the Classic Street/Dorcas Lane intersection notes that “Volumes are typically low on these streets, even during peak season” and “While a detailed analysis has not been prepared for this review, it is expected the intersection operates at a level of service “A” with very low delays with the exiting (sic) two-way stop control.”

It should be noted that these statements are speculative. The applicant's engineer may not have even performed a field visit or reviewed photos of the area. The Mobley letter points out that “The traffic analysis does indicate that the intersection is controlled with stop signs on the Classic Street approaches. It is noted that the intersection was converted from two-way stop to four-way stop in the past and there are currently stop signs in place on all four approaches.”

Indeed, the intersection was converted from two way stop control to all way stop control some time ago. Based on this, it is possible that no actual observations of the intersection were performed by the applicant's engineer. The applicant's traffic engineer collected no traffic count data, performed no intersection analysis and possibly didn't even visit the site.

In order to approve this application, the city must conclude that “The streets are adequate to support the anticipated traffic and the development will not overload the streets outside the planned area.” There is not substantial evidence that establishes this to be the case. In fact, there is little to no evidence that addresses this requirement.

Sight Distance at the Proposed Driveway

As noted above, the applicant's engineer may not have conducted a site visit. However, the Traffic Analysis states:

“At the intersection of Classic Street with Dorcas Lane, sight distances can be met on each approach, although brush at the northeast corner of the intersection may need to be trimmed to meet the recommendations. Sight distance of 280 ft can be met at the proposed site access on Dorcas Lane with trimming of brush to the west of the driveway.”

Without a site visit, it would be difficult to conclude that sight distance requirements can be met. Sight distance adequacy should be determined via a site visit and it should be established that it is feasible to “...clear vegetation west of the site driveway location to achieve at least 280 feet of intersection sight distance, measured from a point 14.5 feet behind the edge of the traveled way on Dorcas Lane...” as recommended in the Mobley letter and the proposed conditions of approval. Otherwise, the proposed condition of approval D.4 of the staff report may not be feasible to achieve.

It should be noted that the proposed driveway is located near the western property line of the subject property. It is possible that in order to meet sight distance requirements that vegetation located on private property that is not under the control of the applicant or the city may be required to be removed and maintained in order to achieve adequate sight distance, thereby possibly requiring a sightline easement.

Based on a conversation with a nearby resident, the existing vegetation along Dorcas Lane is used as a buffer to keep golf balls from the nearby golf course from entering Dorcas Lane and other properties, so any vegetation clearing must be carefully performed and maintained.

Omissions of the Traffic Analysis and Mobley Letter

The publicly available version of the Manzanita Lofts PUD Traffic Analysis dated April 7, 2022 is not stamped by a professional engineer, not signed and not printed on letterhead. It also fails to include the referenced crash data. It seems unlikely that this is the final version of this report.

The Mobley letter contains a “DRAFT” watermark and also is seemingly unlikely the final version of this report.

These issues should be resolved.

Conclusion

- There is substantial evidence that nearby intersections, that were not studied as part of the Traffic Analysis, may operate inadequately. These intersections may operate worse if this development is approved.
- The Classic Street adopted roadway cross section requiring a wider street section with a separated bicycle/pedestrian path was ignored although the development fronts directly on this street.

- The Traffic Analysis did not include the collection of any traffic counts, perform any intersection traffic analysis and the applicant's traffic engineer may not have even conducted any visual observations of the area while concluding that traffic volumes are low and nearest intersection is operating adequately.
- There is no evidence that adequate sight distance can be achieved at the site driveway.
- There is little to no evidence that "The streets are adequate to support the anticipated traffic and the development will not overload the streets outside the planned area."

Sincerely,

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RENEWS: 12/31/2022