

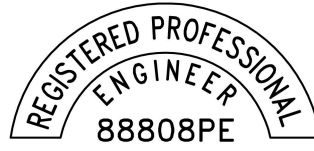
Memorandum

To: Dan Handel
City of Woodburn

From: Jessica Hajar

Date: March 30, 2022

Subject: 1030 Young Street Development
Traffic Analysis Letter



RENEWS: 6/30/2022

This memorandum evaluates the transportation impacts of the proposed 52-unit condominium to be located at 1030 Young Street in Woodburn, Oregon. Based on scoping discussions with the City of Woodburn and the requirements in the Woodburn Development Ordinance Section 3.04.05, the trip generation falls below the threshold for a full traffic impact analysis. This report provides a summary of the trip generated by the proposed development and analyzes roadway safety within the site vicinity and at the site access.

Site Vicinity

The subject property is located west of Pacific Highway, south of Young Street, and north of Cleveland Street. Figure 1 shows the site vicinity with the subject site outlined in red and has a total area of 3.75 acres. Young Street is classified as a Minor Arterial and has a posted speed limit of 35 mph.



Figure 1: Vicinity Map

Trip Generation

To estimate the number of trips that are projected to be generated by the development, trip rates from the *Trip Generation Manual*¹ were used. Specifically, data from land use code 215, Single Family Attached Housing, was used to estimate the proposed development's trip generation based on the number of units.

The trip generation calculations show that the proposed development is projected to generate 25 morning peak hour trips, 30 evening peak hour trips, and 374 new average weekday trips. The trip generation estimates are summarized in Table 1.

Table 1: Trip Generation Summary

Land Use	ITE Code	Size	Morning Peak Hour			Evening Peak Hour			Weekday
			In	Out	Total	In	Out	Total	Total
Single Family Attached Housing	215	52 units	8	17	25	17	13	30	374

Safety Analysis

Crash Data

Using Data obtained from ODOT's Crash Analysis and Reporting Unit and ODOT TransGIS, a review was performed for the most recent five years of available crash data (January 2016 through December 2020). A map showing the location and severity of crashes is shown in Figure 2.

There were two reported collisions at the intersection of Young Street at Bryan Street. A rear-end collision caused by driver inattention resulted in a crash classified as possible injury. A bicycle collision was caused by a right-turning vehicle not yielding to the right of way of the bicyclist. The cyclist suffered injuries classified non-incapacitating injury.

There were three reported collisions just west of the site frontage with the crash types listed as backing, rear-end, and fixed object. These were reported at various locations with the highest severity listed as a non-incapacitating injury.

¹ Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.



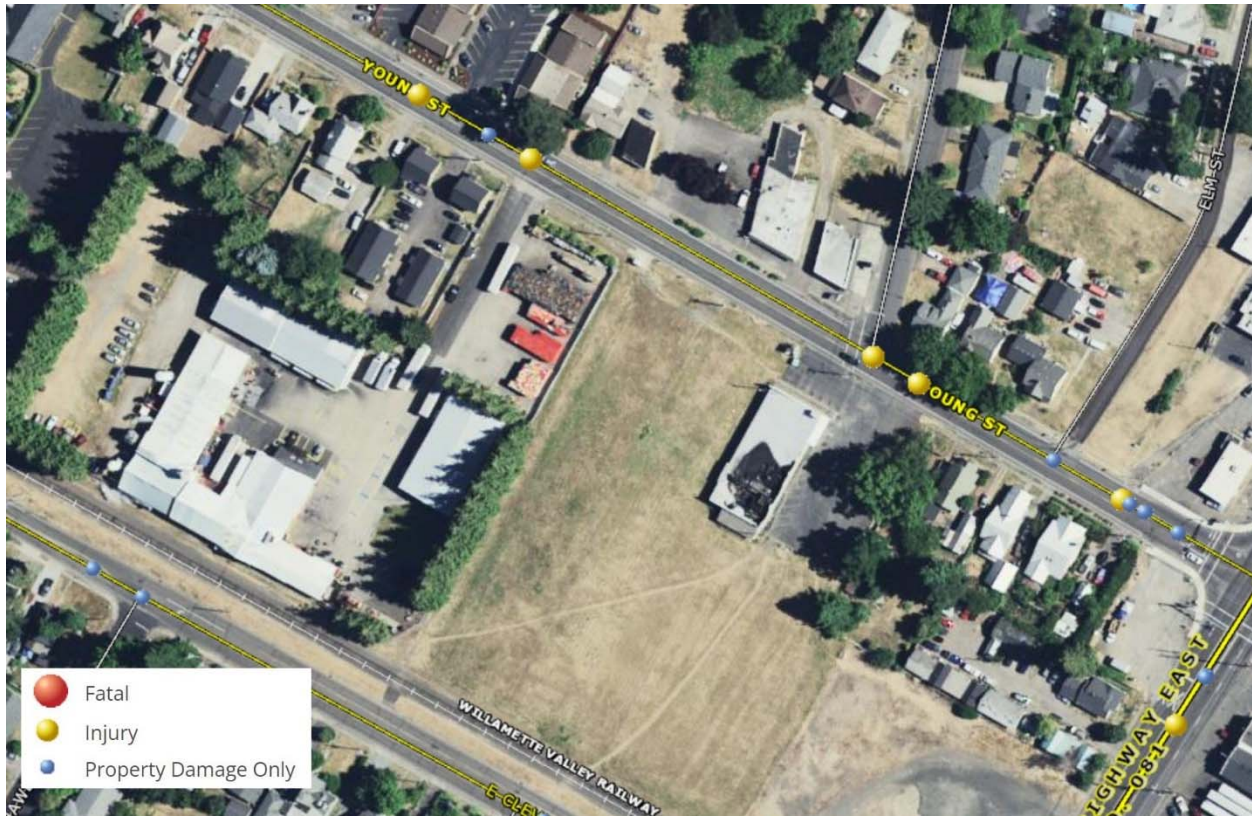


Figure 2: Crash Data (ODOT TransGIS)

Based on a review of the most recent five years of available crash data, no significant trends or crash patterns were identified along the study corridor which are indicative of specific safety concerns.

Sight Distance

Intersection sight distance was measured and evaluated in accordance with the standards established in *A Policy on Geometric Design of Highways and Streets*². Intersection sight distance is an operational measure, intended to provide sufficient line of sight along the major street so that a driver can turn from the minor street without impeding traffic flow. To measure intersection sight distance, the driver’s eye is assumed to be 14.5 feet from the near edge of the nearest travel lane of the intersecting street and at a height of 3.5 feet above the approach street pavement. The oncoming vehicle driver’s eye height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement.

Young Street has a flat grade within the site vicinity. There are no existing obstructions to sight lines from 14.5 feet behind the edge of the travel lane. Based on the posted speed limit of 35 mph, there is a recommended intersection sight distance of 390 feet. Sight distance was measured to be in excess of 400 feet to the east and west of the proposed site access.

² American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 7th Edition, 2018

Access Spacing

Based on the access requirements shown in Table 3.04A in the Woodburn Development Ordinance, minor arterials have a minimum driveway separation of 245 feet. Figure 3.04B shows that driveway spacing is measured nearside to nearside on the same side of the street. The driveway for the property to the west is located approximately 245 feet to the west from the site access, measured nearside to nearside. The site plan includes a 12-foot dedication at the eastern property line for a potential future driveway to be shared with a planned future multifamily development on a property to the east of the project site. The potential future driveway is located 245 feet east of the proposed site access, measured nearside to nearside, and opposite of Bryan Street. The City's access spacing standard is met.

Pedestrian Connection

The City has requested the applicant install an 8-foot bicycle and pedestrian path along the southern property line which fronts an active railroad line, Willamette Valley Railway. This is not included in the City of Woodburn's Transportation System Plan as a planned pedestrian project. There are no connections for this path available at adjacent properties. The property to the west is fully built out and the property to the east is vacant, with a multifamily development planned for construction. Connectivity to the future multifamily development to the east is provided via an internal pedestrian path along the eastern property line near the playground.

While it appears to be a small section of improved path along the railway west of Gatch Street, the connecting local roads do not have sidewalks or protected paths to connect to. Approximately half a mile to the west and east of the property the rail lines diverge and cross, creating a safety concern for pedestrians if directed here with no protected pedestrian connection.

Conclusions

Due to the existing site constraints, the applicant proposes to omit the pedestrian and bicycle path along the southern property line. The minimum required intersection sight distance is available at the proposed site access location and the minimum driveway standard is met. Based on a review of the most recent five years of available crash data, no significant trends or crash patterns were identified along the study corridor which are indicative of specific safety concerns.



Appendix





SITE PLAN GENERAL NOTES: --REVIEW--

- REFER TO LANDSCAPE PLANS FOR ADDITIONAL PEDESTRIAN WALKS AND PLANTING INFORMATION.
- ANY GRADING AND UTILITIES (BOTH EXISTING AND NEW) ARE SHOWN FOR REFERENCE ONLY - REFER TO CIVIL DRAWINGS.
- SITE PAVEMENT MATERIAL AND DESIGN PER CIVIL. MAX. SPACE BETWEEN JOINTS TO BE 10'-0".
- REFER TO PLUMBING DRAWINGS FOR HOSE BIB LOCATIONS.
- LIGHTING TO BE INSTALLED AT PATHS ALONG THE REQUIRED EXIT WAYS - REFER TO ELECTRICAL SITE PLAN.
- ALL GROUND MOUNTED UTILITY EQUIPMENT SHALL BE SCREENED FROM THE STREET AND THE BUILDING WITH LANDSCAPE - VERIFY LOCATION WITH EACH UTILITY PROVIDER AND COORDINATE WITH LANDSCAPING AS NEEDED.
- ANY WALL PACK LIGHTING PROVIDED TO BE SHIELDED.
- THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48.
- PARKING SPACES AND ACCESS AISLES SHALL HAVE A SURFACE SLOPES NOT STEEPER THAN 1:50 (2%) PER IBC.
- ANY RETAINING WALLS, BERMS, SWALES, ETC. SHOWN FOR REFERENCE ONLY - REFER TO CIVIL DRAWINGS.
- ALL WALL MOUNTED UTILITIES AND ASSOCIATED EQUIPMENT SHALL BE PAINTED TO MATCH ADJACENT BUILDING COLOR.

SITE PLAN LEGEND

(NOTE: SEE A0 SHEETS FOR ADDITIONAL GENERAL LEGEND INFORMATION)

OBJECT/PATTERN	DESCRIPTION(S)
---	PROPERTY LINE
---	SETBACK LINES
---	ROOF OUTLINE
x x x	FENCE LINE
---	ACCESSIBLE PATH FROM BUILDING TO PUBLIC WAY
W	WATER LINE
FS	FIRE SERVICE LINE
ST	STORM SEWER LINE
SS	SANITARY SEWER LINE
GW	GREASE WASTE LINE
GAS	NATURAL GAS LINE
E	ELECTRICAL SERVICE LINE
█	BUILDING FOOTPRINT
●	PROPERTY DATUM POINT
○ LB	LIGHT BOLLARD
○ PL	POLE LIGHT
⊕ FH	FIRE HYDRANT
● DS	DOWNSPOUT

DISCUSS USE OF UTILITY LINES IN ARCHITECTURAL SITE PLAN

APPLY SPECIALTY TAG, *TAG BY CATEGORY TO MODELED DOWNSPOUTS (LEADER VISIBLE WITH DOT FOR LEADER TIP)

SITE STATISTICS		
DESCRIPTION	AREA (SF)	% OF SITE
BUILDING FOOTPRINT	48,728	30%
PAVING	53,866	33%
SIDEWALKS	10,246	6%
LANDSCAPE AREA	50,162	31%
TOTAL SITE AREA	163,002	

REVIEW REQUIREMENTS AND FILL IN DATA

PARKING STATISTICS		
DESCRIPTION	# REQUIRED	# PROVIDED
FULL-SIZE PARKING STALLS	N/A	N/A
GARAGE STALLS	52	91
DRIVEWAY STALLS	52	91
TOTAL ON-SITE PARKING	104*	182

* BASED ON PARKING RATIO OF 0.8 / 1,000 SQ. FT.

KEYNOTES		

NOT FOR CONSTRUCTION

SD
SCHEMATIC DESIGN

CBTWO
ARCHITECTS ^{LLC}
500 Liberty Street, SE, Suite 100 / Salem, Oregon 97301
PH: 503.480.9700 / FX: 503.480.9701

OWNER
Name:
PH:

CONTRACTOR
Company name:
PH:

CIVIL ENGINEER
Company name:
PH:

STRUCTURAL ENGINEER
Company name:
PH:

MECH / ELECT / PLUMBING
Company Name:
PH:

INTERIOR DESIGN
Company Name:
PH:

KITCHEN CONSULTANT
Company name:
PH:

LANDSCAPE ARCHITECT
Company name:
PH:

JURISDICTION
Company name:
PH:

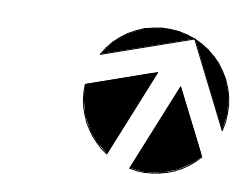
WEST COAST HOME SOLUTIONS
WOODBURN, OREGON

CLIENT LOGO

Issue: issue name
Date: xx.xx.xxxx
Rev: Description Date:

BUILDING A SITE PLAN

A1.0A





TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use: Single-Family Attached Housing
Land Use Code: 215
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: Dwelling Units
Trip Type: Vehicle
Variable Quantity: 52

AM PEAK HOUR

Trip Rate: 0.48

	Enter	Exit	Total
Directional Split	31%	69%	
Trip Ends	8	17	25

PM PEAK HOUR

Trip Rate: 0.57

	Enter	Exit	Total
Directional Split	57%	43%	
Trip Ends	17	13	30

WEEKDAY

Trip Rate: 7.2

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	187	187	374

SATURDAY

Trip Rate: 8.76

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	228	228	456