City of Puyallup Traffic Scoping Worksheet

PROJECT INFORMATION

Project Title: <u>APL Tow</u>		Date: 2/23/2024				
Applicant Name: Sikan	Tel	Telephone Number: <u>425-392-0250</u>				
Project Description: 17	Apartment U1	nits		Year of Occ	upancy: <u>2026</u>	
Project Location: PN: (Project Location: PN: 0420222008 (212 Todd Rd NE) Parcel Size: 0.98-acres					
Proposed Number of Access Point(s): 1 Existing Number of Access Point(s): 1				L		
Land Use	Quantity (dwelling units)	ITE Land Use Code	Average Daily Trips	AM Peak Hour Trips*	PM Peak Hour Trips*	
Existing Use(s): LUC 210 – Single-Family Detached Housing						
Single-Family	1	210	-9.4	-0.7	-0.9	

Net New Trips			105.2	6.1	7.8			
Multifamily Housing (Low-rise)	g 17 220 114.6 6.8 8.7							
Proposed Use(s) LUC 221 – Multifamily Housing (Mid-Rise) (close to rail transit)								

Traffic Impact Fees: Net New PM Peak Hour Trips x \$4,500 = \$35,100

* The project trips shall be rounded to the nearest tenth.

* The project trips shall be estimated using the ITE's *Trip Generation*, 11th Edition.

* Trip generation regression equations shall be used when the R^2 value is 0.70 or greater.

- * For land uses that do not exist within the ITE's Trip Generation, actual field data shall be collected from three local facilities that have similar characteristics to the proposal.
- * For single-family units and offices and specialty retail smaller than 30,000 SF, use ITE's Trip Generation, 11th Edition, average rate.

Identify all intersections that will be affected by 25 new project peak hour trips or more:

1. Project Access & Todd Rd NE	_4
2	5

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Office Use Only	
	No Further Work Required 🗌

Checklist (Please make sure you have included the following information):

🖾 Completed Worksheet 🖾 Attach Site Plan 🖾 Attach Trip Assignment 🖾 Attach Trip Distribution X Mail or hand deliver to 333 South Meridian, Puyallup, WA 98371 or e-mail to broberts@puyallupWA.gov

HEATH&ASSOCIATES

Transportation Planning & Engineering

Date: February 23, 2024

<u>To</u>: Bryan Roberts, P.E., Traffic Engineer City of Puyallup

From: Aaron Van Aken, PE, PTOE

Subject: APL Townhomes - Trip Generation Memo

Project Summary

APL Townhomes proposes for the construction of 17 multifamily apartment units located within the city of Puyallup. The subject site comprises 0.98-acres within tax parcel #: 0420222008. The proposed development, with a site address of 212 Todd Road NE, is bordered to the north by Todd Road NE. One single-family dwelling unit exists on-site, which is to be demolished prior to new construction. Access to the site is proposed via one new access point extending south from Todd Road NE. Figure 1 below provides an aerial vicinity of the subject site. Figure 2 depicts a conceptual site plan which shows approximately 34 parking stalls.

Figure 1: Aerial Vicinity









APL TOWNHOMES

SITE PLAN **FIGURE 2**

Trip Generation

Trip generation is defined as the number of vehicle movements that enter or exit the respective project site during a designated time period such as the PM peak hour or an entire day. The magnitude of the anticipated vehicle trip generation for the proposed project was derived from the Institute of Transportation Engineers (ITE) publication, *Trip Generation*, 11th Edition. The proposed land use code utilized for analysis is defined under ITE's Land Use Code (LUC) 220 Multifamily Housing (Low-Rise). Dwelling units were used as the input variable with ITE average rates to determine trip ends.

The existing structure on-site is defined as LUC 210 – Single-Family Detached Housing. Dwelling units were used as the input variable and ITE average rates were used to determine trip ends. Table 1 below summarizes anticipated vehicular movements for the average weekday daily trips (AWDT) and the AM and PM peak hours.

	Dwelling		AM Peak-Hour Trips		Peak-Hour Trips			
	Units	AWDI	In	Out	Total	In	Out	Total
<u>Proposed</u> Multifamily Housing (Low-Rise)	17	115	2	5	7	5	4	9
(LUC 220)								
<u>Existing</u> Single-Family Detached (LUC 210)	1	-9	0	-1	-1	-1	0	-1
Net	New Trips	106	2	4	6	4	4	8

Table 1: Project Trip Generation

Based on ITE data, the proposed multifamily development is estimated to generate approximately 106 net new daily weekday trips with 6 net new trips (2 inbound /4 outbound) occurring in the AM peak and 8 net new trips (4 inbound /4 outbound) in the PM peak hour.

Figure 3 on the following page depicts estimated PM peak hour trip distribution and assignment to and from the site.







APL TOWNHOMES PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT FIGURE 3

Conclusion

The APL Townhomes project proposes for the construction of a multifamily development comprised of 17 multifamily apartment units in the city of Puyallup. The 0.98-acre property (tax parcel #: 0420222008) has a site address of 204 4th Street SW and is bordered to the north by Todd Road NE. One single-family dwelling unit exists on-site, which is to be demolished prior to new construction. Access is proposed via one new driveway extending south from Todd Road NE. Based on ITE data, the proposed project is estimated to generate 106 net new average weekday daily trips with 6 net new AM peak hour trips and 8 net new PM peak hour trips.

Please call if you require additional information.

Aaron Van Aken, PE, PTOE



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies:	22
Avg. Num. of Dwelling Units:	229
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)			
Vehicle Trip Ends vs: On a:	Dwelling Units Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.		
Setting/Location:	General Urban/Suburban		
Number of Studies:	49		
Avg. Num. of Dwelling Units:	249		
Directional Distribution:	24% entering, 76% exiting		

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Trip Gen Manual, 11th Edition

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Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)			
Vehicle Trip Ends vs: On a:	Dwelling Units Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.		
Setting/Location:	General Urban/Suburban		
Number of Studies:	59		
Avg. Num. of Dwelling Units:	241		
Directional Distribution:	63% entering, 37% exiting		

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers



40'

80'

BUILDING DATA

SITE AREA =	39,779 SF (0.91 ACRE)	
TAX PARCEL :	42022-2008	
R.O.W DEDICATION :	1056 SF	
NET SITE AREA = ZONING :	38,723 SF RM - 20 HIGH DENSITY MF RESIDENTIAL	
BASE DENSITY :	16 DU PER ACRE = MAX UNITS ALLOWED = 14	ļ
PROPOSED DENSITY	17 DU PROVIDED PER BONUS PROVISIONS	
PER 20.25.0235 Take total acreage of property: 0.91		
Multiply gross acres (including critical areas) Determine 25% of total land area to determine $0.91 \times .25 = 0.22a <$ this is the maximum land exceeds this amount, the cap would be 15 = 3.41 units/acre (3 allowed) Determine actual allowed transfer: 0.034 acres x 15 = $0.51 = 1$ additional unit x critical areas (in acres) Max density in zone	by max allowed density: 0.91 <u>X 16 units/acre = 15</u> ne maximum allowed to transfer: and area from critical areas that can be transferred. 25% of the gross land area X max density. In this e =0.51 Allowed transfer*	If the critical area example, its .22a X
*Note: Allowed critical area density transfer i	s this number, or the 25% transfer calculation, whi	ch ever is less
Therefore, the total allowed units with densit 15 units (base max. allowed) + 1 unit (ma	y bonus option 1 is: ix. units allowed for transfer) = 16units	
BASE + 10 % FOR ADDITIONAL ADA STA	LL & UNIT: 1 UNIT	
MAX LOT COVERAGE ALLOWED =	55 % NET AREA	
ALLOWED COVERAGE =	21,297 SF	
PROPOSED COVERAGE AT GRADE =	BLDG 1 + BLDG 2 = 10,800 SF	
LANDSCAPING		
LANDSCAPING REQUIRED = 20 % OF NET	LOT AREA = 0.2 X 38,723 SF = 7,745 SF	
PERIMETER LANDSCAP 10' FRONT 6' SIDES 12' REAR	ING = 6,980 SF	
ADDITIONAL	400 SF	

OPEN SPACE COMMON - PRIVATE & AMENITY

LANDSCAPING

COMMON OPEN SPACE REQUIRED - 30 % NET SITE ARI	EA = 1	1,616 SF
COMMON OPEN SPACE PROVIDED = INCLUDES PERIMETER LANDSCAPING AREA	12	2,844 SF
COMMON OPEN SPACE PROVIDED AT GRADE OUTSIDE CLUBROOM = COMMON OPEN SPACE - CRITICAL BUFFER =	2,700 SF 10,144 SF	
REQUIRED PRIVATE OPEN SPACE FOR GROUND UNITS = 100 SF PER UNIT .	PROV REFE	IDED AREA : 130 SF R SITE PLAN
REQUIRED 10X6 PRIVATE SPACE FOR UPPER UNITS	MIN. 6 UNIT /	0 SF PRIVATE DECKS WITH EACH AT UPPER LEVEL
REQUIRED 5 % OF NET SITE AREA FOR ACTIVE AMENITY SPACE FOR ACTIVE USE = 1936		
ROVIDED AMENITY SPACE FOR ACTIVE USE OUTSIDE CLUBROOM & BUFFER AREA		

