

RE: Pointe Trip Memo – 3718 Wolf Creek Drive (SR 158) Weber County, UT

The following is a trip generation memo for a proposed 48 condo development of Pointe at Wolf Creek development in Weber County, UT. Figure 1 identifies the site location and Figure 2 shows the proposed site layout. The site accesses SR 158 through and existing accesses. SR 158 is a Category 7 UDOT roadway and does not have separate left or right turn lanes through this area.

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Figure 1: Site Location





Figure 2: Proposed Site

<u>Trip Generation</u>
Trip generation for the site is projected using the Institute of Transportation Engineers (ITE) *Trip* Generation Manual. Based on the land use assumptions and size of the building, the projected traffic generated by the site is determined.

**Table 1: Site Trip Generation** 

			Trip Rate				Trips		
ITE 10th Ed	Size	Land Use	AM	PM	Daily	AM	PM	Daily	
Condos	48	220	0.46	0.56	7.32	22	27	351	
Condos (Vacation)	48	260	0.22	0.28	3.47	11	13	167	

The table indicates possible different land use types for the development. Much of the condos in the Wolf Creek area are vacation homes and those have lower land use demands than full time residential condo usage. The results indicate that the proposed development is projected to generate 11-22 AM peak, 13-27 PM peak trips and 167-351 daily trips. When inbound and outbound directional flow is considered, Table 2 indicates the expected inbound peak hour traffic is 5 to 7 in the AM and 5 to 17 in the PM peak. The need for turn lanes (left and right turn auxiliary lanes) there are typically thresholds.

**Table 2: Site Trip Generation by Directional Flow** 

Land Use	New					
	AM IN	AM Out	PM IN	PM OUT		
Condos	5	17	17	10		
Condos (Vacation)	7	4	5	8		

## **Access Category**

Wolf Creek Road is also SR 158 and is a two lane road and has a UDOT 2019 average daily traffic rate of 3,600 trips a day. A two lane rural roadway has a capacity of 12,000 ADT. Therefore, the roadway has the capacity to accommodate the proposed traffic.

As a Category 7 roadway, the following from UDOT Administrative Rule R930-6 applies.

"Any of the following apply for an access to an access category 6, 7, 8, or 9 highway

- (I) A left turn lane with storage length plus taper is required for any access with a projected peak hour left ingress turning volume greater than 25 vehicles per hour. If the posted speed is greater than 40 mph, a deceleration lane and taper is required for any access with a projected peak hour left ingress turning volume greater than 10 vehicles per hour. The taper length must be included in the deceleration length.
- (II) A right turn lane with storage length plus taper is required for any access with a projected peak hour right ingress turning volume greater than 50 vehicles per hour. If the posted speed is greater than 40 mph, a right turn deceleration lane and taper is required for any access with a projected peak hour right ingress turning volume greater than 25 vehicles per hour. The taper length must be included in the deceleration length."

Based on these thresholds, the proposed development would not (by itself) reach these thresholds even if all the traffic is assumed to come to and from the south. However, it must be noted that no counts have been collected at the multiple existing access locations that serve the site.

Please let me know if you have any questions.

Sincerely,

**A-Trans Engineering** 

Joseph Perrin, PhD, PE, PTOE

Principal