

October 28, 2015

Dan Fowler
Historic Properties, LLC
1300 John Adams Street, Suite 100
Oregon City, OR 97045



321 SW 4th Ave., Suite 400
Portland, OR 97204
phone: 503.248.0313
fax: 503.248.9251
lancasterengineering.com

Dear Dan,

This letter is written to provide information regarding a proposed zone change for several properties located on the west side of S Maplelane Road north of Beavercreek Road in Oregon City, Oregon. The properties have been proposed for a zone change, however the zone change will be proposed with a trip cap limiting site traffic to a level that would be permitted under the existing zoning.

The subject properties currently fall under a mixture of R3.5, R6 and R10 zoning as follows:

R3.5 Zoning

14297 Maplelane Road – 0.28 acres
14289 Maplelane Road - 0.24 acres
14275 Maplelane Road – 0.25 acres
14268 Maplelane Court – 4.03 acres
14228 Maplelane Court – 2.84 acres

Total R3.5 = 7.64 acres

R6 Zoning

3391 Beavercreek Road – 3.33 acres
Tax Lot 06000 – 0.62 acres

Total R6 = 3.95 acres

R10 Zoning

Tax Lot 06000 – 1.21 acres
Tax Lot 05900 – 0.04 acres
14375 Maplelane Court – 1.17 acres
14338 Maplelane Court – 1.02 acres
14362 Maplelane Court – 0.89 acres

Total R10 = 4.33 acres



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A shadow plat was prepared for the subject properties in order to accurately assess the development potential under the existing zoning. The shadow plat is attached to this letter. Based on the plat, a total of 107 residential lots could be developed on the subject properties.

Trip Generation Analysis

In order to assess the traffic impacts of full development under the existing zonings, an estimate of trip generation was prepared for the reasonable worst case development scenario. The trip estimates were calculated using data from the *TRIP GENERATION MANUAL, 9TH EDITION*, published by the Institute of Transportation Engineers. For each lot, development of one single-family dwelling and one accessory dwelling unit was assumed, since both primary and accessory dwelling units are permitted outright under the existing zonings. The trip generation estimate for the single-family dwellings was prepared based on the equations provided for land use code 210, *Single-Family Detached Housing*. Although initially trip generation for the accessory dwelling units was intended to be calculated using trip rates for land use code 220, *Apartments*, it was noted that Oregon City requires payment of system development charges for accessory dwelling units at half the rate of single-family dwellings. This approach yields slightly lower trip estimates than utilization of apartment trip rates for the accessory dwelling units, and is therefore conservative as well as consistent with prior decisions related to trip generation of accessory dwelling units within Oregon City.

A summary of the trip generation estimate is provided in the tables below. Detailed trip generation worksheets are provided in the attached technical appendix.

WEEKDAY TRIP GENERATION SUMMARY

Existing Development Potential

	Units	AM Peak Hour			PM Peak Hour			Weekday		
		In	Out	Total	In	Out	Total	In	Out	Total
Single-Family Residential Home	107	21	64	85	71	41	112	553	553	1106
Accessory Dwelling Unit	107	11	32	43	35	21	56	276	276	552
Total		32	96	128	106	62	168	829	829	1,658

The reasonable worst case development of the subject properties would result in a total of 128 site trips during the morning peak hour, 168 site trips during the evening peak hour, and 1,658 daily trips.

Based on the analysis, a trip cap of 168 PM peak hour trips is recommended for the subject properties.



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TRANSPORTATION PLANNING RULE ANALYSIS

The Transportation Planning Rule (TPR) is in place to ensure that the transportation system is capable of supporting possible increases in traffic intensity that could result from changes to adopted plans and land use regulations. The applicable portions of the TPR are quoted in *italics* below, with responses directly following.

660-012-0060

(1) *If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:*

(a) *Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);*

The proposed zone change will not necessitate changes to the functional classification of existing or planned transportation facilities. Accordingly, this section is not triggered.

(b) *Change standards implementing a functional classification system; or*

The proposed zone change will not change any standards implementing the functional classification system. Accordingly, this section is also not triggered.

(c) *Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.*

(A) *Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;*

(B) *Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or*

(C) *Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.*

In this instance the proposed zone change cannot result in degradation of performance of area roads and intersections as compared to allowed uses in the existing zones since the proposed trip cap limits traffic levels to no greater than the levels permitted under the existing zoning.



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Based on the analysis, the proposed zone change will not result in increased traffic volumes in the site vicinity and the Transportation Planning Rule is satisfied. No additional mitigations are necessary or recommended in conjunction with the proposed zone change and trip cap.

Sincerely,



Michael Ard, PE
Senior Transportation Engineer

APPENDIX

R-6

R-8

R-3.5

R-10

R-10

R-6

R-3

LOT INFORMATION:
R-3.5: 78 LOTS
AVERAGE LOT SIZE:
3,500.04 SQ FT
R-6: 14 LOTS
AVERAGE LOT SIZE:
6,544.08 SQ FT
R-10: 15 LOTS
AVERAGE LOT SIZE:
10,606.55 SQ FT



LOT LAYOUT

HILLTOP MASTER PLAN

REVISIONS	BY

SISUL ENGINEERING
375 PORTLAND AVENUE
CLADSTONE, OREGON 97027
(503) 657-0188
DRAWING:

DATE: AUGUST 2015
SCALE: 1" = 50'
DRAWN: JDM
JOB: SCL12-045
SHEET: 1
SHEETS: 3

0" 1" SHEETS



TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing
Land Use Code: 210
Variable: Dwelling Units
Variable Value: 107

AM PEAK HOUR

Trip Equation: $T = 0.70(X) + 9.74$

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	21	64	85

PM PEAK HOUR

Trip Equation: $\ln(T) = 0.90\ln(X) + 0.51$

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	71	41	112

WEEKDAY

Trip Equation: $\ln(T) = 0.92\ln(X) + 2.72$

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	553	553	1,106

SATURDAY

Trip Equation: $\ln(T) = 0.93\ln(X) + 2.64$

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	565	565	1,130



TRIP GENERATION CALCULATIONS

Land Use: Apartment
Land Use Code: 220
Variable: Dwelling Units
Variable Value: 107

Note: These trip generation calculations are provided for reference only. Actual trip generation for the accessory dwelling units was conservatively calculated as half the trip rate for single-family homes.

AM PEAK HOUR

Trip Rate: 0.51

	Enter	Exit	Total
Directional Distribution	20%	80%	
Trip Ends	11	44	55

PM PEAK HOUR

Trip Rate: 0.62

	Enter	Exit	Total
Directional Distribution	65%	35%	
Trip Ends	43	23	66

WEEKDAY

Trip Rate: 6.65

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	356	356	712

SATURDAY

Trip Rate: 6.39

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	342	342	684