



May 29, 2024

Mr. Joe Huey, PE
Land Forward Planning Manager
Lennar Homes
9191 S. Jamaica Street, Suite 401
Englewood, CO 90112

**Reference: Waterstone Filing 2 Traffic Conformance Letter
FHU Reference No. 124198-01**

Dear Mr. Huey:

Felsburg Holt & Ullevig has completed a trip generation comparison for the Filing 2 development area of the Waterstone development. The objective of this letter is to convey changes in estimated vehicle-trip generation expected from revisions in land use and densities when compared to calculations documented for the same land area in the August 2017 *Waterstone Traffic Impact Study*. As such, this report includes information on:

1. The site plan and land use quantities for the proposed Filing 2 development, and
2. A comparison of trip generation potential.

Following is more information on each of these issues.

SITE PLAN & DEVELOPMENT INFORMATION

Filing 2 of the Waterstone development area is in the eastern portion of the project site, with the eastern boundary being directly adjacent to Harvest Road. Filing 2 of the development will consist of townhomes. The current plan is consistent with the 2017 plan that called for residential condominiums/townhomes for Filing 2.

The proposed development area currently consists of 123 dwelling units (DU) compared to the 2006 plan (analyzed in August 2017 study) which had 125 DUs. Please see **Figure 1** for a representation of the proposed Filing 2 development area and site design. The site takes access via East Ohio Drive and East Ford Drive which provides the necessary two distinct points of access required for Fire/Life Safety.

TRIP GENERATION

The *Waterstone Traffic Impact Study* prepared in 2017 for the entire Waterstone site included a trip generation summary to estimate the impact of projected traffic volumes on the existing and proposed street network. That report used the Institute of Transportation Engineers' (ITE) publication *Trip Generation Manual, 9th Edition* (2012) to forecast vehicle-trips based on the land use types and sizes of the project at that time.

ITE has since updated the *Trip Generation Manual, 11th Edition* (2021), which has been used to forecast vehicle trips for the current Filing 2 development plan. The update to the *Trip Generation Manual* has eliminated Land Use Code 230 (Residential Condominiums/Townhomes) and townhomes are now included in Land Use Code 215 (Single-Family Attached Housing). **Table 1** shows the equation and rates utilized in this analysis.



Table 1. ITE Trip Generation Equations

Land Use	ITE Code	Unit	Daily	Peak	Equations & Rates	Distributions	
						In	Out
Single-family Attached Housing	215	DU	T=7.62*X-50.48	AM	T=0.52*X-5.7	25%	75%
				PM	T=0.60*X-3.93	59%	41%
DU = Dwelling Units KSF = 1,000 SF							

Table 2 summarizes the trip generation estimates for Filing 2 land uses in the 2017 plan as well as for the current Filing 2 land uses. It also displays the differences in estimated vehicle-trips between the two development plans.

Table 2. Waterstone Filing 2 Trip Generation Comparison

Land Use	Unit	Size	Daily Trips	Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Waterstone – Filing 2 (2017) ITE 9th Edition									
Residential Condominium/Townhouse	DU	125	781	10	51	61	48	24	72
Waterstone – Filing 2 (2024) ITE 11th Edition									
Single-Family Attached Housing	DU	123	887	15	43	58	41	29	70
Numerical Difference			106	5	-8	-3	-7	5	-2
Percent Difference			14%	--	--	-4.9%	--	--	-2.8%

As can be seen from this information, the most recent proposal for the Filing 2 development area is expected to:

- Generate 14% more vehicle-trips on a daily basis
- Generate fewer trips during the weekday AM and PM peak hours

Considering that the current Filing 2 development plan results in less vehicle-trips being generated on a peak hour basis, we believe that the recommendations contained in the 2017 report remain valid. The current Filing 2 plan is in conformance with the August 2017 study.

We hope the information contained in this letter supports you during your approval process with the City of Aurora. Please do not hesitate to call if you need further assistance.

Respectfully,

FELSBURG HOLT & ULLEVIG

Philip Dunham, PE, PTOE
 Transportation Engineer