# **EXHIBIT E-1**

# TRAFFIC IMPACT ANALYSIS SENECA WEST AREA – 205 NEW HOMES

In this PDD application, we rely on four previous TIA's conducted for this Seneca Area, by Mr. Joe Nix, Traffic Engineer. Mr. Nix has conducted 4 different TIA's for these Seneca West properties starting back in 2007:

- 1. 2007 TIA commissioned by the City for 359 homes ATTACHED AS EXHIBIT E-2
- 2. 2007 TIA commissioned by the City for 275 homes ATTACHED AS EXHIBIT E-3
- 3. 2024-01-31 TIA commissioned by our Group for 314 homes ATTACHED AS EXHIBIT E-4
- 4. 2024-02-22 TIA commissioned by our Group for 166 homes ATTACHED AS EXHIBIT E-5

In his recent 2024-01-31 TIA for the development of 314 new homes, here are excerpts form his TIA showing Mr. Nix' calculations:

#### **EXCERPT START**

#### **TRIP GENERATION**

TRIP GENERATION							
ITE Code		kday lours	Weekday AM Peak		Weekday PM Peak		
210	Single-Family Detached Housing						
Rate / Unit	9.43		0.70		0.94		
Units	314		314		314		
Trips	2961		220		295		
% Enter/Exit	50%	50%	25%	75%	63%	37%	
# Enter/Exit	1480	1481	55	165	186	109	

Table 1. Trip Generation for proposed development with 314 Lots

Source: ITE Trip Generation Manual, Eleventh Edition, web-based

### **TRIP DISTRIBUTION**

Trip distribution for trips generated by the proposed development would be onto Seneca Drive and onto Grass Hill Drive. Due to the accessibility of Seneca Drive at Bandera Road, and the nature of the roadway, 75% of the trips would be expected to use Seneca Drive and 25% use Grass Hill Drive. Table 2 indicates the trip distribution to Bandera Road via Seneca Drive and Grass Hill Drive.

TRIP DISTRIBUTION							
Street		AM Di	rection	PM Direction			
		Enter	Exit	Enter	Exit		
Seneca Drive	75%	41	124	140	82		
<b>Grass Hill Drive</b>	25%	14	41	47	27		

# Table 2. Trip Distribution for proposed development with 314 Lots

Mr. Nix' conclusion and Analysis was:

"Seneca drive and Grass Hill Drive can easily accommodate the additional traffic expected to be generated by the proposed development with as many as 314 lots. The additional traffic on Grass Hill Drive would be an average of less than one vehicle per minute. The traffic movements entering and exiting Grass Hill Drive at Bander Road. During the morning peak period on Seneca Drive, the anticipated additional traffic load would be an average of two vehicles approaching the signalized intersection. During the evening., the average number of vehicles entering Seneca Drive from Bandera Road would be just more than 2 vehicles per minute."

#### EXCERPT END

We hereby rely on Mr. Nix' most recent traffic analysis of this particular area, his calculations methods, and the *ITE TRIP GENERATION MANUAL*, *Eleventh Edition*. The Trip Generation and Trip Distribution calculations for 205 new homes are as follows:

TRIP GENERATION							
ITE Code	Weekday 24 Hours		Weekday AM Peak		Weekday PM Peak		
210	Single-Family Detached Housing						
Rate / Unit	9.43		0.7		0.94		
Units	205		205		205		
Trips	1933		144		193		
% Enter/Exit	50%	50%	25%	75%	63%	37%	
# Enter/Exit	967	967	36	108	121	71	

 Table 1. Trip Generation for proposed development (205 lots)

Calculated as per ITE TRIP GENERATION MANUAL, Eleventh Edition

TRIP DISTRIBUTION							
Street		AM Di	rection	PM Direction			
		Enter	Exit	Enter	Exit		
Seneca Drive	75%	27	81	91	53		
Grass Hill Drive	25%	9	27	30	18		

# Table 1. Trip Distribution for proposed development with 205 Lots

Calculated as per ITE TRIP GENERATION MANUAL, Eleventh Edition

We believe these numbers to be correct. We also believe that Mr. Nix conclusion in January of this year, which is consistent with all his TIA conclusions since 2007, also remains true today. We look forward to the City Engineer's validation and comments.