



## Engineering & Planning, Inc.

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January 5, 2022

Bridget Kean, AICP

City of Port St. Lucie

121 SW Port St. Lucie Boulevard

Port St. Lucie FL 34984

Re: Cadence Phase 1 – Traffic Impact Statement (P21-171)

Bridget,

MacKenzie Engineering and Planning, Inc. performed an analysis of the traffic impacts resulting from the Phase 1 of Cadence Project. The project proposes 124 single family dwelling units in Phase 1.

### **Proposed Traffic Generation**

#### **Traffic Generation**

This analysis uses trip generation rates for Single Family Dwelling Units (Institute of Transportation Engineers (ITE) Land Use 210) published in the Institute of Transportation Engineers' (ITE) report, Trip Generation (11th Edition). Figure 1 presents the proposed project's trip generation.

The proposed phase is expected to generate the following net external and cumulative driveway trips:

- 1,230 daily, 91 AM peak hour (24 in/67 out), and 122 PM peak hour (77 in/45 out) trips.

#### **Internal Capture**

The site contains no internal capture.

#### **Pass-by Trip Capture**

The pass-by trip capture rate is 0.

**Figure 1. Trip Generation**

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
<b>Proposed Phase 1 Traffic</b>								
Single Family Detached	124 DU	1,230	91	24	67	122	77	45
<b>NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)</b>		<b>1,230</b>	<b>91</b>	<b>24</b>	<b>67</b>	<b>122</b>	<b>77</b>	<b>45</b>
<b>NET CHANGE IN DRIVEWAY VOLUMES</b>		<b>1,230</b>	<b>91</b>	<b>24</b>	<b>67</b>	<b>122</b>	<b>77</b>	<b>45</b>
Note: Trip generation was calculated using the following data:								
Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour		PM Peak Hour	
					in/out	Rate	in/out	Equation
Single Family Detached	210	DU	$\ln(T) = 0.92 \ln(X) + 2.68$	0%	26/74	$\ln(T) = 0.91 \ln(X) + 0.12$	63/37	$\ln(T) = 0.94 \ln(X) + 0.27$

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