

NEWKIRK ENGINEERING, INC.

CIVIL ENGINEERING - TRANSPORTATION - CEI - LANDSCAPE ARCHITECTURE

1230 N US HWY 1, SUITE 3, ORMOND BEACH, FLORIDA 32174 386-872-7794

October 28, 2024

Lupita McClenning, City Planner

Planning Flagler Beach 800 S. Daytona Avenue Flagler Beach, FL 32136 (386) 517-2000

Re: Legacy Pointe Cottages Traffic Impact Statement

Dear Ms. McClenning:

The proposed Legacy Pointe Cottages project consists of 22 units. Site access is provided by existing paved road on Leslie Street connected to John Anderson Highway. Joyce Street will provide exist from sites one (1) way drive to John Anderson Highway.

The trip generation calculations shows that the total project generated trip to external roadway network is 146 Daily Trips, 11 AM (2 In, 9 Out and 0 Pass-By) and 14 PM Peak Hour (9 In, 5 Out and 0 Pass-By). The Daily Traffic Trips does not exceed 500 Daily Trips and is considered minimal traffic impact to John Anderson Highway, State Road 100, A1A and surrounding local road network. Florida Department of Transportation does not require full traffic studies for projects generating less than 500 Daily Trips as this traffic as these projects are considered minimal impact.

The 11 AM (2 In, 9 Out and 0 Pass-By) Peak Hour (7:00 AM – 9:00 AM) trips will not impact the adopted level of service of John Anderson Highway, State Road 100, A1A and surrounding local road network as maximum trips in any direction is less than 20. Trip distribution is as follows:

- SR 100 (In Bound): 1 east bound and 1 west bound to John Anderson Drive (minimal impact)
- SR 100 (Out Bound): 5 east bound and 4 west bound from John Anderson Drive (minimal impact)

The 14 PM (9 In, 5 Out and 0 Pass-By) Peak Hour (4:00 PM - 6:00 PM) trips will not impact the adopted level of service of John Anderson Highway, State Road 100, A1A and surrounding local road network as maximum trips in any direction is less than 20. Trip distribution is as follows:

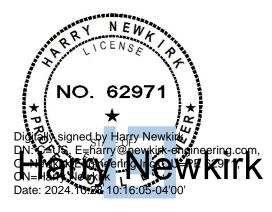
- SR 100 (In Bound): 6 east bound and 3 west bound to John Anderson Drive (minimal impact)
- SR 100 (Out Bound): 3 east bound and 2 west bound from John Anderson Drive (minimal impact)

See pages 2 and 3 for ITE Trip Generation Rate Spreadsheet.

If you have any questions or need additional information, please feel free to call or email me at Harry@Newkirk-Engineering.com.

Sincerely,

NEWKIRK ENGINEERING, INC.



Harry Newkirk, PE No. 62971 President/CEO of Newkirk Engineering, Inc.

Description/ITE Code		ITE Vehicle Trip Generation Rates								Expected	Total Generated Trips			Total Distribution of Generated Trips					
	Units	(peak hours are for peak hour of adjacent street traffic unless highlighted Weekday AM PM Pass-By AM In AM Out PM In PM Out								Units				AM In AM Out Pass-By PM In PM Out Pass-By					
Mataura ant/Manina Tamainal 040	1.	Weekday	AM		Pass-By						Daily	AM Hour	PM Hour	AM In NA		•	PM In		Pass-By
Vaterport/Marine Terminal 010 Vaterport/Marine Terminal 010	Acres Berths	11.93 171.52	NA NA	NA NA		NA NA	NA NA	NA NA	NA NA		0	1	NA NA	NA NA	NA NA	0	NA NA	NA NA	0
Commercial Airport 021	Employees	13.40	0.82	0.80		55%	45%	54%	46%		0	1	0	0	0	0	0	0	0
Commercial Airport 021	Avg Flights/Day	104.73	5.40	5.75		54%	46%	45%	55%		0		0	0	0	0	0	0	0
Commercial Airport 021	Com. Flights/Day	122.21	6.43	6.88		55%	45%	54%	46%		0		0	0	0	0	0	0	0
General Aviation Airport 022	Employees	14.24	0.69	1.03		83%	17%	45%	55%		0	1	0	0	0	0	0	0	0
General Aviation Airport 022	Avg. Flights/Day	1.97	0.24	0.30		NA	NA	NA	NA		0	0	0	NA	NA	0	NA	NA	0
General Aviation Airport 022	Based Aircraft	5.00	0.24	0.37		83%	17%	45%	55%		0	0	0	0	0	0	0	0	0
ruck Terminal 030	Acres	81.90	7.28	6.55		41%	59%	43%	57%		0	0	0	0	0	0	0	0	0
ruck Terminal 030	Employees	6.99	0.66	0.55		40%	60%	47%	53%		0	0	0	0	0	0	0	0	0
Park&Ride w/ Bus Service 090	Parking Spaces	4.50	0.72	0.62		81%	19%	23%	77%		0	0	0	0	0	0	0	0	0
Park&Ride w/ Bus Service 090	Acres	372.32	48.81	43.75		NA	NA	NA	NA		0		0	NA	NA	0	NA	NA	0
Park&Ride w/ Bus Service 090	Occ. Spaces	9.62	1.26	0.81		69%	31%	28%	72%		0	1	0	0	0	0	0	0	0
ight Rail Station w/ Park. 093	Parking Space	2.51	1.07	1.24		80%	20%	58%	42%		0	0	0	0	0	0	0	0	0
ight Rail Station w/ Park. 093	Occ. Spaces	3.91	1.14	1.33		80%	20%	58%	42%		0	0	0	0	0	0	0	0	0
General Light Industrial 110	KSF ²	6.97	0.92	0.97		88%	12%	12%	88%		0	0	0	0	0	0	0	0	0
General Light Industrial 110	Acres	51.80	7.51	7.26		83%	17%	22%	78%		0		0	0	0	0	0	0	0
General Light Industrial 110	Employees	3.02	0.44	0.42		83%	17%	21%	79%		0		0	0	0	0	0	0	0
Seneral Heavy Industrial 120	KSF ²	1.50	0.51	0.19		NA	NA	NA	NA		0	0	0	NA	NA	0	NA	NA	0
General Heavy Industrial 120	Acres	6.75	1 98	2.16		NA	NA	NA	NA		0		0	NA	NA NA	0	NA	NA.	0
General Heavy Industrial 120	Employees	0.73	0.51	0.88		NA	NA	NA	NA		0	1	0	NA	NA	0	NA	NA	0
ndustrial Park 130	KSF ²	6.96	0.84	0.86		82%	18%	21%	79%		0		0	0	0	0	0	0	0
ndustrial Park 130	Acres	63.11	8.55	8.84		83%	17%	21%	79%		0		0	0	0	0	0	0	0
ndustrial Park 130	Employees	3.34	0.47	0.46		86%	14%	20%	80%		0	1	0	0	0	0	0	0	0
	KSF ²	3.82		0.73									0		0	0	0	0	
Manufacturing 140			0.73			78%	22%	36%	64%		0		_	0	0		0		0
lanufacturing 140 lanufacturing 140	Acres	38.88 2.13	7.44 0.40	8.35 0.36		93% 73%	7% 27%	53% 44%	47% 56%		0		0	0	0	0	0	0	0
· ·	Employees KSF ²																		
Varehousing 150		3.56	0.30	0.32		79%	21%	25%	75%		0	_	0	0	0	0	0	0	0
Varehousing 150	Acres	57.23	10.03	8.69		72%	28%	35%	65%		0	1	0	0	0	0	0	0	0
Varehousing 150	Employees KSF ²	3.89	0.51	0.59		72%	28%	35%	65%		0		0	0	0	0	0	0	0
Mini Warehouse 151		2.50	0.15	0.26		59%	41%	51%	49%		0		0	0	0	0	0	0	0
Mini Warehouse 151	Storage Units	0.25	0.02	0.02		67%	33%	NA	NA		0	1	0	0	0	0	NA	NA	0
Mini Warehouse 151	Acres	35.43	2.62	3.45		NA C70/	NA	52%	48%		0	1	0	NA 0	NA 0	0	0	0	0
Mini Warehouse 151	Employees	61.90	5.26	6.04		67%	33%	52%	48%		0	1	0	0	0	0		0	0
ligh-Cube Warehouse 152	KSF ²	1.44	0.09	0.10		65%	35%	33%	67%		0	0	0	0	0	0	0	0	0
Jtilities 170	KSF ²	NA	0.80	0.76		NA	NA	45%	55%		0	0	0	NA	NA	0	0	0	0
Jtilities 170	Employees	NA	0.76	0.76		90%	10%	15%	85%		0	0	0	0	0	0	0	0	0
Start Familian 242		A ==	0.75			050/	7501		0701										
Single Family Homes 210	DU	9.57	0.75	1.01		25%	75%	63%	37%		0	0	0	0	0	0	0	0	0
lingle Family Homes 210 lingle Family Homes 210	Acres	26.04 2.55	2.06 0.21	2.74 0.28		31% 31%	69% 69%	66% 66%	34% 34%		0		0	0	0	0	0	0	0
lingle Family Homes 210	Persons Vehicles	6.02	0.21	0.28		31%	69%	66%	34%		0	1	0	0	0	0	0	0	0
•															·				
partment 220	DU	6.65	0.51	0.62		20%	80%	65%	35%	22.0	146		14	2	9	0	9	5	0
partment 220	Persons	3.31	0.28	0.40		NA	NA	NA	NA		0	1	0	NA	NA	0	NA NA	NA	0
partment 220	Vehicles	5.10	0.46	0.60		NA	NA	NA	NA		0		0	NA	NA	0	NA	NA	0
ow Rise Apartment 221	Occ.DU	6.59	0.46	0.58		21%	79%	65%	35%		0	1	0	0	0	0	0	0	0
ligh Rise Apartment 222	DU	4.20	0.30	0.35		25%	75%	61%	39%		0		0	0	0	0	0	0	0
lid-Rise Apartment 223	DU	NA	0.30	0.39		31%	69%	58%	42%		0	0	0	0	0	0	0	0	0
ental Townhouse 224	DU	NA	0.70	0.72		33%	67%	51%	49%		0	0	0	0	0	0	0	0	0
tesd. Condo/Townhouse 230	DU	5.81	0.44	0.52		17%	83%	67%	33%		0		0	0	0	0	0	0	0
lesd. Condo/Townhouse 230	Persons	2.49	0.44	0.52		16%	83%	67%	33%		0		0	0	0	0	0	0	0
lesd. Condo/Townhouse 230	Vehicles	3.34	0.19	0.24		16%	84%	66%	34%		0		0	0	0	0	0	0	0
ow Rise Resd. Condo 231	DU	NA	0.24	0.32		25%	75%	58%	42%		0		0	0	0	0	0	0	0
ligh Rise Resd. Condo 232	DU	4.18	0.07	0.78		19%	81%	62%	38%		0	1	0	0	0	0	0	0	0
uxury Condo/Townhouse 233	Occ. DU	NA	0.56	0.55		23%	77%	63%	37%		0		0	0	0	0	0	0	0
,																			
Mobile Home Park 240	Occ. DU	4.99	0.44	0.59		20%	80%	62%	38%		0	0	0	0	0	0	0	0	0

Description/ITE Code		ITE Vehicle Trip Generation Rates Expected									Total C	enerated	Trips	Total Distribution of Generated Trips						
	Units	(peak hours are for peak hour of adjacent street traffic unless highlighted																		
		Weekday	AM	PM	Pass-By	AM In	AM Out	PM In	PM Out		Daily	AM Hour	PM Hour	AM In	AM Out	Pass-By	PM In	PM Out	Pass-By	
Fast Food w/o Drive Thru 933	Seats	42.12	NA	2.13		NA	NA	64%	36%		0	NA	0	NA	NA	0	0	0	0	
Fast Food with Drive Thru 934	KSF ²	496.12	49.35	33.48	50%	51%	49%	52%	48%		0	0	0	0	0	0	0	0	0	
Fast Food with Drive Thru 934	Seats	19.52	1.32	0.94	50%	53%	47%	53%	47%		0	0	0	0	0	0	0	0	0	
Fast Food Drive Thru Only 935	KSF ²	NA	NA	153.85	89%	NA	NA	54%	46%		0	NA	0	NA	NA	0	0	0	0	
Coffee/Donut Shop w/o Drive Thru 936	KSF ²	NA	117.23	40.75		51%	49%	50%	50%		0	0	0	0	0	0	0	0	0	
Coffee/Donut Shop w/ Drive Thru 937	KSF ²	818.58	110.75	42.93		51%	49%	50%	50%		0	0	0	0	0	0	0	0	0	
Coffee/Donut Drive Thru Only 938	KSF ²	1800.00	303.33	75.00	89%	50%	50%	50%	50%		0	0	0	0	0	0	0	0	0	
Bread/Bagel Shop w/o Drive Thru 939	KSF ²	NA	70.22	28.00		47%	53%	50%	50%		0	0	0	0	0	0	0	0	0	
Bread/Bagel Shop w/ Drive Thru 940	KSF ²	NA	36.92	19.56		50%	50%	50%	50%		0	0	0	0	0	0	0	0	0	
Quick Lube Vehicle Shop 941	Service Bays	40.00	3.00	5.19		67%	33%	55%	45%		0	0	0	0	0	0	0	0	0	
Automobile Care Center 942	Service Bays	12.48	1.52	2.17		68%	32%	NA	NA		0	0	0	0	0	0	NA	NA	0	
Automobile Care Center 942	KSF ²	15.86	2.94	3.38		65%	35%	50%	50%		0	0	0	0	0	0	0	0	0	
Automobile Parts & Service Center 94	KSF ²	NA	NA	4.46		NA	NA	42%	58%				0	NA	NA	0	0	0	0	
Gasoline/Service Station 944	Fuel. Position	168.56	12.16	13.87	42%	51%	49%	50%	50%		0	0	0	0	0	0	0	0	0	
Serv.Station w/ Conven.Mkt 945	Fuel Position	162.78	10.16	13.38	56%	50%	50%	50%	50%		0	0	0	0	0	0	0	0	0	
Serv.Stat.w/Conv.Mkt.&Carwash 946	Fuel Position	152.84	11.93	13.94		51%	49%	51%	49%		0	0	0	0	0	0	0	0	0	
Self-Service Carwash 947	Stalls	108.00	8.00	5.54		50%	50%	51%	49%		0	0	0	0	0	0	0	0	0	
Automated Car Wash 948	KSF ²	NA	NA	14.12		NA	NA	51%	49%		0	NA	0	NA	NA	0	0	0	0	
											146	11	14	2	9	0	9	5	0	

RED Rates = CAUTION - Use Carefully - Small Sample Size

Green Rates = Peak Hour of Generator - (no peak rate for the rush hour of adjacent street traffic)

Blue Rates = Saturday Daily total - (no weekday daily rate)

*Pass-By % are Rates from Weekay PM Peak Period
*The Total Pass-By Trips will be Distributed: 50% IN / 50 % OUT

NA = Not Available **KSF^{2 =}** Units of 1,000 square feet

DU = Dwelling Unit Fuel Position = the number of vehicles that could be fueled simultaneously

Occ.Room = Occupied Room