



TRAFFIC IMPACT STATEMENT

REDHAWK REBAR MANUFACTURING FACILITY FORT PIERCE

Prepared By:

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2980 S. 25th Street, Fort Pierce, FL
Authorization # 4286

Introduction:

Redhawk Rebar (Redhawk) is proposing to construct a new 40,000 square-foot, manufacturing facility on a 1.3 acre parcel of land, located west of CR 611B/Selvitz Road, approximately 1 mile south of CR 611/Edwards Road and 1.2 miles north of Midway Road in St. Lucie County, Florida. This facility will be constructed in two (2) phases, each approximately 20,000 square feet in area. Phase 1 construction is projected to begin in late 2018, and Phase two is projected to begin no sooner than 2021.

The particular property under Site Plan review is referenced as Lot 8 of the Ft. Pierce Business Park PNRD Subdivision, and was the subject of a previous Site Plan approval granted by St. Lucie County in 1990 for the commercial/industrial project referred to as Ft. Pierce Business Park, Lot 8 & 9. That particular project, included the adjoining Lot 9 of this subdivision, where the first 27,200 square feet of the project was constructed. Under St. Lucie County development guidelines, since a principal portion of this previously approved site plan was completed, the balance of the site plan project (the Ft. Pierce Business Park, Lot 8 & 9) and its associated impacts are considered to be ‘vested’ for future permitting purpose. The previously approved building on Lot 8 (totaling 32,000 sf) was never built.

This traffic statement addresses the net change in anticipated trip impacts to be generated by the operation of the Redhawk facility, after buildout, onto the local area transportation network.

Trip Generation:

Trip generation rates for the Redhawk facility are based on the ITE (Institute of Transportation Engineers) Trip Generation Manual (10th Edition), using the land use code #140, Manufacturing Use. Applying the rates under this heading to the proposed Redhawk site results in a project impact summary as follows:

TRIP RATES/ PER 1,000 SQ FEET (BY PHASE)

	<u>TRIP RATE/1,000 SF</u>			<u>ADT</u>	<u>AM PEAK HR</u>	<u>PM PEAK HR</u>
RATE/ SQ FT	3.82	PH 1	20,000	76.4		
AM PEAK	0.79		20,000		15.8	
PM PEAK	0.75		20,000			15.0
RATE/ SQ FT	2.13	PH 2	20,000	76.4		
AM PEAK	0.39		20,000		15.8	
PM PEAK	0.4		20,000			15.0
				152.8	31.6	30.0



Based on the application of these trip rates, the Average Daily Trip (ADT) generation for this particular land use category, at buildout, results in an estimated 152.8 trip impacts onto the local area network. Noting that the subject site has already received a prior site plan approval from St. Lucie County (1990) for development of up to 32,000 square feet of industrial/commercial uses, and as an existing approved development project, the trip impacts from this property are presumably already factored as part of the existing plus committed (E+C) impacts onto the area network, it may be concluded that there are no ‘new impacts’ from the *first phase and approximately half of the second phase of* development on this location onto the area network. In the case of the second phase of the proposed, since 12,000 square feet can be seen as being ‘vested’, only 6,000 square feet needs to be addressed.

Applying these same rates as shown in the above Trip Generation Table, the projected impacts from this remaining 6,000 square feet onto the local area network are estimated to be:

TRIP RATES/ PER 1,000 SQ FEET (Net New Area)

	<u>TRIP RATE/1,000 SF</u>			<u>ADT</u>	<u>AM PEAK HR</u>	<u>PM PEAK HR</u>
RATE/ SQ FT	2.13	PH 2	6,000	22.92		
AM PEAK	0.39		6,000		4.7	
PM PEAK	0.4		6,000			4.5
				22.92	4.7	4.5

Background Traffic:

Existing background traffic within the radius of impact from the project site includes CR 611/Edwards Road; CR 611B/Selvitz Road; CR 709/Glades Cutoff Road and CR 712/West Midway Road.

The existing traffic volumes provided in the Fall 2017 St. Lucie County TPO Traffic Counts and Level of Service (LOS) Report show that CR 611B/Selvitz Road has an AADT of 11,000 from CR 712/W. Midway Road to CR 611/Edwards Road. In addition, the PM peak hour directional volume of this roadway north of CR 712/W. Midway Road is 883, and south of CR 611/Edwards Road is 764.

CR 611/Edwards Road has an AADT of 10,500 west of CR 611B/Selvitz Road and 14,500 to the east. The PM peak hour directional volume west of CR 611B/Selvitz Road is 549 and east to SR 615/South 25th Street is 781.

CR 709/Glades Cutoff Road has an AADT of 9,100 from CR 712/Midway Road to Jenkins Road and 6,176 from Jenkins Road to CR 611B/Selvitz Road. The PM peak hour directional volume north of CR 712/W. Midway Road is 545 and south of CR 611B/Selvitz Road is 377.

CR 712/W. Midway Road has an AADT of 20,500 west of CR 611B/Selvitz Road and 17,500 to the east. The PM peak hour directional volume west of CR 611B/Selvitz Road is 1,085 and east to CR 615/South 25th Street is 896.

Trip Distribution:

It is conservatively estimated that the project distribution of trips on CR 611B/Selvitz Road are such that approximately 80% of the overall trips will come from the north and 20% from the south. The distribution is based upon the assumption that the majority of employees and deliveries will be from the Fort Pierce



area. Trip distribution is the basis for determining the estimated NET NEW trips coming from this project site onto the roadway network.

Trip distribution is anticipated to be as follows:

- CR 611/Edwards Road North of Site: 75%
- CR 709/Glades Cutoff Road North of Site: 5%
- CR 712/Midway Road South of Site: 20%

Trip Assignment:

Based on the trip distribution assignments outlined above, the *net new trip* assignments are as follows:

<u>Roadway Link</u>	<u>%</u>	<u>ADT</u>	<u>PM Peak Hr. Dir.</u>
<u>Selvitz Road</u>			
North of Midway	20%	4.6 vpd	1.0 vph
South of Edwards	75%	17.3 vpd	3.8 vph
<u>Edwards Road</u>			
East of Selvitz	70%	16.1 vpd	3.5 vph
West of Selvitz	5%	1.2 vpd	.3 vph
<u>Glades Cutoff</u>			
East of Midway	5%	1.2 vpd	.3 vph
West of Selvitz	5%	1.2 vpd	.3 vph
<u>Midway Road</u>			
East of Selvitz	10%	2.3 vpd	.5 vph
West of Selvitz	10%	2.3 vpd	.5 vph

Roadway Network Capacity/LOS:

Based on the trip distribution and traffic assignment to the local roadway network, as well as both the ADT LOS and Peak Hour Service Capacity thresholds provided from the Florida FDOT 2018 Quality/Level of Service Handbook and TPO Level of Service Report, the roadway links within the radius of impact are anticipated to operate as follows:

Roadway	ADT Existing/Build-out at Horizon Year*		ADT LOS D Capacity	ADT Post-Development /LOS	Change From Existing Condition	PM Peak Hr/LOS Capacity	PM PK Hr Directional Volumes/LOS		Change From Existing Condition	
	2018	2023								
<u>Selvitz Road</u>										
N. of Midway Rd	11,110	11,700	12,510	11,700	D	No	700	942	F	No
S. of Edwards Rd	11,413	12,018	12,510	12,018	F	No	790	816	E	No
<u>Edwards Road</u>										
West of Selvitz	10,605	11,169	12,510	11,169	D	No	700	587	C	No
East of Selvitz	14,645	15,415	12,510	15,415	F	No	880	834	D	No
<u>Glades Cutoff Road</u>										



Roadway	ADT Existing/Build-out at Horizon Year*		ADT LOS D Capacity	ADT Post-Development /LOS		Change From Existing Condition	PM Peak Hr/LOS Capacity	PM PK Hr Directional Volumes/LOS		Change From Existing Condition
	2018	2023								
East of Midway Rd	9,191	9,683	12,510	9,683	D	No	790	583	D	No
West of Selvitz Rd	6,238	6,579	12,510	6,579	C	No	830	405	C	No
<u>W. Midway Road</u>										
East of Selvitz Rd	17,675	18,600	30,770	18,600	C	No	1,610	956	C	No
West of Selvitz Rd	20,705	21,784	12,510	21,784	F	No	920	1,156	F	No

*Based on applying a 1.0% growth rate factor. Project trips are based on impact change.

De Minimis Impacts:

A development which meets the following ‘de minimis’ impact threshold may be looked at as being exempt from the requirements of Sec. 22-218 – Concurrency Assessment, City of Ft. Pierce Code of Ordinances, if:

- a. An impact that would not affect more than one percent of the maximum volume at the adopted level of service of the affected transportation facility as determined by the director of transportation.
- b. An impact for which the sum of the existing roadway volumes and the projected volumes from approved projects on a transportation facility does not exceed one hundred ten (110) per cent of the maximum volume at the adopted level of service of the affected transportation facility.
- c. An impact that would not exceed the adopted level of service standard of any affected designated hurricane evacuation routes.

The proposed Redhawk Rebar facility will add a total of 24 new ADT trips to the local area transportation network. The impacts of the distribution of these trips onto this network results in a net effect of less than one (1) percent of the maximum service volume at the adopted Level of Service (LOS) for both the daily and PM peak hour traffic conditions on CR 611B/Selvitz Road, south of CR 611/Edwards Road and CR 611/Edwards Road, east of CR 61B/Selvitz Road.

Conclusions:

The development of the Redhawk Rebar facility will result in an average of 24 *net new trips* per day, at buildout. Based on the LOS D capacity for Average Daily Traffic and the adopted peak hour service capacity, there are no mitigation impacts required from this project onto the surrounding roadway network.