

Item # 30

**ADDITIONAL MATERIAL
Public Hearing
MAY 4, 2021**

**SUBMITTED AT THE REQUEST OF
PLANNING COUNCIL**

MEMORANDUM



To: Barbara Blake Boy
From: Christopher W. Heggen, P.E.
Kimley-Horn and Associates, Inc.
Date: April 26, 2021

**Subject: The Woodlands, Tamarac, FL (PC 20-02)
Summary of Proposed Off-Site Transportation System Improvements
Kimley-Horn # 140248005**

During the Broward County Commission transmittal hearing for the above-referenced Land Use Plan Amendment (LUPA) held on October 20, 2020, discussion took place related to the analysis of the maximum traffic impact potential generated by this LUPA. As noted in Attachment 4.B (“*TRAFFIC ANALYSIS – Peak (as voluntarily restricted to 398 single-family dwelling units and no non-emergency connection to Northwest 44 Street)*”) of the staff report that was prepared for the February 25, 2021 Broward County Planning Council hearing for this LUPA: “...the proposed amendment, as voluntarily restricted, is **not projected to significantly or adversely impact** the operating conditions of the regional transportation network.” This determination was based upon the thresholds adopted by Broward County in BrowardNext – Broward County Land Use Policy 2.14.9:

POLICY 2.14.9 The impact analysis for proposed amendments to the Broward County Land Use Plan shall continue to consider as significant those regional roadway segments that are projected to experience, as a result of the net effect from the proposed amendment, an impact of three percent (3%) or greater than the p.m. peak hour level of service capacity for those regional roadway segments.

As determined in the transportation evaluation for this amendment, the increase in traffic resulting from the proposed change from Commercial Recreation to Low (3) Residential is less than 3% of the PM peak hour level of service capacity on all Trafficways roadways in the vicinity of the site. Therefore, as noted above, with the voluntary restriction to 398 residential units and no non-emergency connection to NW 44th Street, the proposed LUPA is in compliance with the BrowardNext Policy 2.14.9 and other applicable policies related to off-site transportation impacts and does not require any mitigation.

Nevertheless, the proposed development is also subject to the site plan review process at the City of Tamarac in addition to the City/County LUPA review process. As a part of the City of Tamarac’s site plan review process, a detailed and comprehensive Traffic Impact Analysis (TIA) is required. Although not required as part of the LUPA review process, questions related to the comprehensive TIA were also raised during the most recent Broward County Planning Council hearing, held on February 25th, 2021. To provide further clarification on the comprehensive TIA submitted to the City as part of the site plan review process, the detailed TIA includes many elements that are not a part of the LUPA review, including Level of Service (LOS) evaluations of surrounding intersections. In addition, the City also required a review of traffic volumes and operations on internal local roads and intersections within the Woodlands community, which is above and beyond what is typically required in a site plan application.

The review process is still ongoing, but following the detailed analysis by Kimley-Horn and review by the City of Tamarac’s engineering consultant that has occurred thus far, a number of proposed off-site improvements have been identified in order to address specific elements of the City’s site plan review process. The analysis has also determined that the internal roads and intersections will all meet acceptable standards (this has also been reviewed and confirmed by the City’s traffic consultant). Below is a summary of the off-site improvements that have been identified in the detailed analyses conducted to date through the site-plan review process, and proposed for the project:

(1) Off-Site Signalized Intersection Turn Lane Improvements

- **NW 64th Avenue & Commercial Boulevard (Improvement 1.1):** Construct exclusive northbound right turn lane.
- **Woodlands Boulevard & Commercial Boulevard (Improvement 1.2):** Construct exclusive eastbound right turn lane
- **Woodlands Boulevard & Rock Island Road (Improvement 1.3):** Construct exclusive eastbound right turn lane and construct second exclusive northbound right turn lane

The locations of each of these improvements is identified on **Exhibit 1**.

(2) Signal Timing Optimization

Concurrent with development of the project and construction of the off-site improvements, the Applicant will coordinate with Broward County Traffic Engineering to optimize the signal timing at the signalized intersections to reflect the changes in capacity added by the new turn lanes and also addition of the traffic volumes associated with the project.

Table 1 below summarizes the change in level of service (LOS) and delay at each of the above-referenced intersections, as detailed in the TIA for this project, resulting from implementation of the off-site turn lane improvements and signal timing optimization. This table compares LOS and delay in the future conditions if there were no improvements constructed and no Woodlands development with future conditions if there are improvements, signal timing optimization, and Woodlands Development.

Table 1: Intersection LOS and Delay Comparison

Intersection	Future With No Improvements and No Woodlands Development				Future With Improvements and With Woodlands Development			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
NW 64 th Ave & Commercial Blvd	D	48.0	D	51.1	D	40.8	D	53.1
Woodlands Blvd & Commercial Blvd	C	28.0	C	30.2	C	21.2	C	21.2
Rock Island Rd & Commercial Blvd	F	154.1	F	122.4	F	107.5	F	86.7

Note that the level of service is not degraded at any intersection and, furthermore, the construction of the proposed improvements results in decreased overall delay in either one or both peak hours at all of

the intersections. Most notable is the significant improvement at the intersection of Rock Island Road & Commercial Boulevard (overall delay decreasing from 154.1 seconds to 107.5 seconds in the AM peak hour and from 122.4 seconds to 86.7 seconds in the PM peak hour) when comparing future conditions with no improvements and no Woodlands development to future conditions with improvements and with the Woodlands development.

(3) Site Access Modifications/Improvements

Additionally, a number of changes and improvement are proposed at the roadways that provide access to the Woodlands development, as summarized below:

- **Converting Existing Two-Way Traffic Flow to Outbound-Only:**
 - White Oak Lane & Commercial Blvd (Improvement 3.1)
 - Banyan Lane & Commercial Boulevard (Improvement (3.2)
 - Bayberry Lane & Rock Island Road (Improvement 3.3)
 - Holly Drive & Rock Island Road (Improvement 3.4)
- **Sago Palm Blvd & Rock Island Road:** Construction of exclusive southbound right turn lane (Improvement 3.5)
- **Construction of New Access on Rock Island Road south of Holly Drive** (Improvement 3.6)

These improvements are shown in *Exhibit 1*.

(4) Commercial Boulevard Advanced Transportation Management System (ATMS) Project

FDOT is undertaking a joint funded project with Broward County to design and construct Advanced Transportation Management System (ATMS) improvements along Commercial Boulevard from Rock Island Boulevard east for Federal Highway. This project (FM# 441944) is programmed in the FDOT Adopted Five Year Work Program for implementation during FY 2024. Initial discussions have been held with the City of Tamarac regarding the potential for the Applicant to contribute a share of the cost towards implementation of this project. The overall project will improve travel times in the Commercial Boulevard corridor. This is identified as Improvement 4.

Should you have any questions regarding this information, please contact me via telephone at (561) 840-0248 or via e-mail at chris.heggen@kimley-horn.com.

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McNab Road

NW 64th Ave

Rock Island Road

Improvement 1.2:
Woodlands Blvd & Commercial Blvd
Add EB Right Turn Lane

Improvement 3.1:
White Oak Lane & Commercial Blvd
Convert to Outbound-Only

Improvement 3.2:
Banyan Lane & Commercial Blvd
Convert to Outbound-Only

Improvement 1.3:
Rock Island Rd & Commercial Blvd
Add EB Right Turn Lane
Add Second NB Right Turn Lane

Improvement 1.1:
NW 64th Ave & Commercial Blvd
Add NB Right Turn Lane



Commercial Blvd

Improvement 3.3:
Bayberry Ln & Rock Island Blvd
Convert to Outbound-Only

Improvement 3.5:
Sago Palm & Rock Island Blvd
Convert to Outbound-Only

Improvement 4:
Contribute to Commercial
Blvd ATMS project

Inverrary Blvd

NW 44th St

Improvement 3.4:
Holly Dr & Rock Island Blvd
Convert to Outbound-Only

Improvement 3.6:
New Access & Rock Island Blvd
Construct New Access Road to Rock Island Blvd

LEGEND



AMENDMENT SITE



TRAFFICWAYS EVALUATED

**EXHIBIT 1
TRANSPORTATION IMPROVEMENTS
WOODLANDS
140248005**

