3501 South Main Street Suite 2 Gainesville, FL 32601 352.372.9594 Fax 352.371.3988 gainesville@volkert.com



Engineers • Land Surveyors • Architects • Planners

		Letter of	Transmittal		
Date:	_4/	6/05	From: <u>Jea</u>	uifr Christm	
To:	Brian Kanely		Project No.	Project No	
•			Re: Wilo		
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		Dept.	<del></del>		
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Copies	Date	No.	Description		
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# Wildflower Apartments PD

Supplemental Traffic Information April 6, 2005



Civil & Environmental Engineering • Land Surveying • Planning • Architecture

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# Wildflower Apartments PD Report Supplemental Information for Traffic Distribution

#### **EXECUTIVE SUMMARY**

- This project is being marketed towards the interns at Shands and the VA hospital, as well as the graduate students at the University of Florida. Based on interns' rotating shift schedules, their "peak" traffic hours will be at 7am, 2pm, and 7pm; therefore, their traffic patterns will not impact the SW 13<sup>th</sup> Street / SW 11<sup>th</sup> Avenue intersection traffic during the "normal" peak hours.
- This property has the Rails to Trails as a northern boundary and is proposing bicycle and pedestrian access to the trail. The developer is also proposing an RTS bus shelter on the northeast corner of SW 13<sup>th</sup> Street and SW 11<sup>th</sup> Avenue intersection. With these listed improvements, the developer is proposing only 60% of the trips to and from the complex will be via cars, thus not impacting the local roads as much as most of the apartment complexes currently located in the City.
- Based on the Trip Distribution and Trip Generation cited below, the total trips leaving the development will be 1330 total with 798 car trips (60% of 1330). The proposed daily trips making the movement along SW 13<sup>th</sup> Street from the north to and from the development will be 322.

## **Transportation Study**

The following information was taken from the ITE Trip Generation Manual, 7<sup>th</sup> Edition. Land Use 220 —Apartments was used to find the trip distribution rates. Land Use 210 — Single Family Detached Housing was used to calculate the trip credits. The multi-modal trip distribution was modeled after the Oakbrook Walk apartment complex, as well as from discussions with Brian Kanely of Public Works on October 10, 2003. The Oakbrook distribution was provided to us from Debbie Leistner of the City of Gainesville via phone conversation on August 27, 2003. This development is located in Zone A of the City of Gainesville Transportation Concurrency Exception Area (TCEA).

#### TRIP DISTRIBUTION

95% of traffic will enter and exit from US 441 (SW 13<sup>th</sup> Street) 5% of traffic will enter and exit from SW 11<sup>th</sup> Terrace

US 441 (SW 13<sup>th</sup> Street) 85% of traffic will be to and from the north

#### 15% of traffic will be to and from the south

## **TRIP GENERATION** (Using 33% Non-Automobile Traffic)

#### A.) 201 proposed apartments

- AM Peak =
   201 x 0.55 = 111 (0.77 x 2) (0.77 x 2) x 0.10 = 109 trips
   Trip Gen. SSDU Credit Redev. Credit
- PM Peak =
   201 x 0.67 = 135 (1.02 x 2) (1.02 x 2) x 0.10 = 132 trips
   Trip Gen. SSDU Credit Redev. Credit
- Total Trips (weekday) =
   6.72 x 201=1351- (9.57 x 2)-(9.57 x 2) x 0.10=1330 trips
   Trip Gen. SSDU Credit Redev. Credit

## **B.)** Generation by Modes

Bicycle = 106 (8%)
Bus = 173 (13%)
Pedestrian = 160 (12%)
Non-Automobile Traffic = 33%
Car = 891 (67%)

## TRIP GENERATION (Using 40% Non-Automobile Traffic)

# A.) 201 proposed apartments

- AM Peak =
   201 x 0.55 = 111 (0.77 x 2) (0.77 x 2) x 0.10 = 109 trips
   Trip Gen. SSDU Credit Redev. Credit
- PM Peak =
   201 x 0.67 = 135 (1.02 x 2) (1.02 x 2) x 0.10 = 132 trips
   Trip Gen. SSDU Credit Redev. Credit
- Total Trips (weekday) =
   6.72 x 201=1351- (9.57 x 2)-(9.57 x 2) x 0.10=1330 trips
   Trip Gen. SSDU Credit Redev. Credit

## B.) Generation by Modes

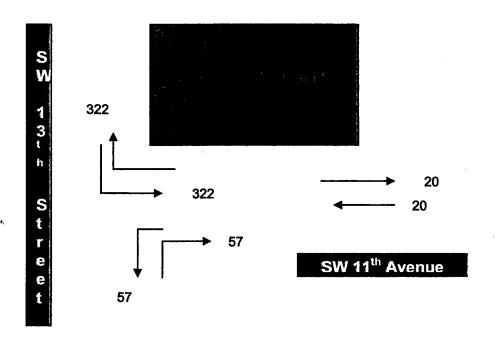
Bicycle = 133 (10%)
Bus = 173 (13%)
Pedestrian = 226 (17%)
Non-Automobile Traffic = 40%
Car = 798 (60%)

# Traffic Distribution - Daily

- Per the calculations above, the **Total Daily Trips = 1330**.
- Of that 1330, we are assuming 60% car traffic: 1330 x 0.60 = 798 (cars)
- Assuming 95% entering and exiting from the site onto 13<sup>th</sup> Street, 798 x 0.95 = 758 (13<sup>th</sup> Street)
  - With 85% from the north and 15% from the south:
     758 x 0.85 = 644 (to and from north)
     758 x 0.15 = 114 (to and from south)

Total = 758

 With 5% to and from 11<sup>th</sup> Avenue: 798 x 0.05 = 40 (11<sup>th</sup> Avenue)



#### Traffic Distribution - AM Peak

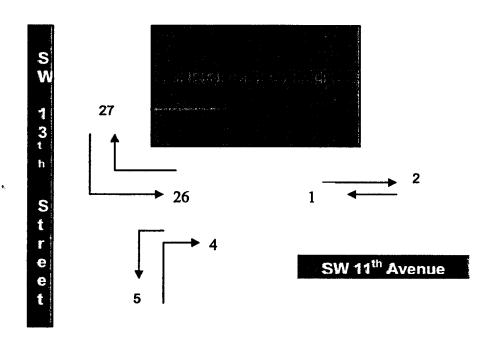
- Per the calculations above, the Total AM Peak Trips = 109.
- Of that 109, we are assuming 60% car traffic: 109 x 0.60 = 65 (cars)
- Assuming 95% entering and exiting from the site onto 13<sup>th</sup> Street:
   65 x 0.95 = 62 (13<sup>th</sup> Street)
  - o With 85% from the north and 15% from the south:

 $62 \times 0.85 = 53$  (to and from north)

 $62 \times 0.15 = 9$  (to and from south)

**Total = 62** 

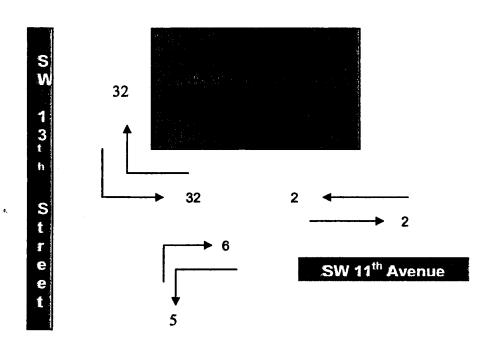
• With 5% to and from 11<sup>th</sup> Avenue: 65 x 0.05 = **3** (11<sup>th</sup> Avenue)



### Traffic Distribution - PM Peak

- Per the calculations above, the **Total PM Peak Trips = 132**.
- Of that 109, we are assuming 60% car traffic: 132 x 0.60 = 79 (cars)
- Assuming 95% entering and exiting from the site onto 13<sup>th</sup> Street: 79 x 0.95 = 75 (13<sup>th</sup> Street)
  - o With 85% from the north and 15% from the south:  $75 \times 0.85 = 64$  (to and from north)  $75 \times 0.15 = 11$  (to and from south)
- 75 x 0.15 = **11** (to and from south)

   With 5% to and from 11<sup>th</sup> Avenue:
  79 x 0.05 = **4** (11<sup>th</sup> Avenue)



#### **BACKGROUND INFORMATION**

The PD for this 201-unit apartment complex was unanimously approved by the City Commission on November 22, 2004. Since that date, there have been minor changes to the plans and PD report on numerous occasions per Carolyn Morgan's requests. The PD package was not sent to the City Attorney to write the ordinance until the City of Gainesville Public Works Department could evaluate the possible addition of a southbound left turn lane on SW 13<sup>th</sup> Street. Ms. Morgan referred Volkert to discuss the traffic on SW 13<sup>th</sup> Street (US 441) with Brian Kanely of the City Public Works Department.

Gene Quinn and Jennifer Christman of Volkert met with Mr. Kanely on Tuesday, March 22, 2005. Volkert stated that the proposed plan never included any improvements along SW 13<sup>th</sup> Street. Volkert did evaluate the possibility of the southbound left turn lane on SW 13<sup>th</sup> Street in the beginning stages of the design, but deemed it unfeasible because of the right-of-way constraints and the limited width between the existing curb lines. The left turn lane along SW 13<sup>th</sup> Street was later confirmed to be unfeasible by the City of Gainesville's Public Works Department.

The above transportation study has been on the PD plans and in the PD report since October 2004. Upon review of the study, Mr. Kanely noted that the percentage used for car traffic (67%) was very conservative for this type of site. The northern property boundary abuts the Rails to Trails Connector. The proposed plan is proposing two pedestrian accesses to this trail. There are also numerous proposed bike racks within the project limits, with the goal of encouraging bicycle use to and from the site. These apartments are being designed with the graduate students and interns at Shands and the VA Hospitals in mind. It is estimated that at least 40% of the daily trips to and from the site will be of some mode other than car.