SPRINGHILLS
DEVELOPMENT OF REGIONAL IMPACT
SUBSTANTIAL DEVIATION EVALUATION REPORT
TRANSPORTATION IMPACTS EXCERPT

Prepared for the

Alachua County Board of County Commissioners

by the

North Central Florida Regional Planning Council
2009 NW 67th Place, Suite A
Gainesville, FL 32653-1603
(352) 955-2200

July 27, 2006

IMPACT ON PUBLIC TRANSPORTATION FACILITIES OF THE REGION

APPLICABLE REGIONAL GOALS/POLICIES

Regional Goal 5.1. Maintain a regional road network which operates at or above the minimum level of service standard contained in local government comprehensive plans for those segments located outside Transportation Concurrency Exception Areas.

Policy 5.1.6. Develop recommended local government orders for Developments of Regional Impact which mitigate adverse impacts of the development upon regionally significant transportation facilities.

Policy 5.1.7. Mitigate adverse impacts of development upon regional transportation facilities.

Policy 5.1.8. Mitigate impacts created by development so as to maintain the minimum level of service standard on the Florida Intrastate Highway System (FIHS) as established by the Florida Department of Transportation.

Policy 5.1.9. Mitigate impacts created by development so as to maintain the minimum adopted level of service standard on non-FIHS roads identified in this plan as significant regional transportation facilities as established in local government comprehensive plans.

Policy 5.1.12. Direct future transportation improvements to aid in the management of growth and that promotes economic development in designated areas.

Regional Goal 5.5. Increase the percentage of north central Florida residents using public transportation as a primary means of transportation.

Policy 5.5.1. Coordinate with the Gainesville Regional Transit System, the Metropolitan Transportation Planning Organization for the Gainesville Urbanized Area, the University of Florida, the City of Gainesville, and Alachua County to provide opportunities through their respective plans and programs for a greater likelihood of increased public transit ridership.

APPLICANT COMMITMENTS

(14) As indicated in the Transportation Methodology Document (Appendix 21-1), the Owner/Applicant has committed the funding for the proposed NW 98th Street Extension (NW 39th Avenue to NW 83rd Street Extension) and the NW 83rd Street Extension (NW 39th Avenue to Millhopper Road). As part of NW 98th Street Extension, SpringHills will construct a bridge over Interstate 75 that could accommodate four (4) lanes, however will be initially striped out as two (2) lanes. The NW 83rd Street Extension and the NW 98th Street Extension, shall be constructed by SpringHills within three (3) years of the initiation of the next phase of development, which is considered to be at the time of issuance of the first building permit for the next phase. The Applicant shall provide financial assurances in the form of a surety bond, performance bond, escrow agreement, letter of credit or other form of collateral to be approved by Alachua County (ADA Substantial Deviation Second Sufficiency Review Response Question 21 Update- Transportation Considerations for the SpringHills DRI Substantial Deviation Application for Development Approval February 2004, Volume 2, February 9, 2004, page 21.11).

SUMMARY OF IMPACTS

The SpringHills DRI Substantial Deviation does not have a workable transportation plan - defined as all regional roadways and intersections operating at the adopted level of service standard. Even after evaluating four tiers of additional modifications, the traffic impacts of the SpringHills DRI Substantial Deviation cause three regional intersections on State Road 222 to operate below the adopted level of service standard in the Year 2013.

IMPACT DETERMINATION

The Applicant's proposes to delete Section 4(6), Transportation Conditions, from the current SpringHills DRI local government development order and add new transportation conditions contained in Section 5.G of the Applicant's proposed amendments to the SpringHills DRI local government development order, as contained in the SpringHills DRI Substantial Deviation Second Sufficiency Response document, dated February 2004.

The Council conducted an evaluation of the transportation impacts of the project in accordance with an agreed-upon transportation methodology entitled, Final SpringHills DRI Transportation Methodology, which is contained in a document entitled SpringHills Second Sufficiency Review Response, February 2004, Volume 3, *Appendix "21-1."* The results of this evaluation are presented in the following sections.

METHODOLOGY

STANDARDS AND LEVELS OF SERVICE

Alachua County- The level of service standards that are used to evaluate the transportation impacts of this project within unincorporated Alachua County is contained in Alachua County's adopted Comprehensive Plan- Transportation Element and shown in the following chart.

TYPE OF FACILITY		LEVEL OF SERVICE STANDARDS		
		URBANIZED	TRANSITIONING	RURAL
INTRASTATE	LIMITED ACCESS HIGHWAY	C	C	B
	CONTROLLED ACCESS	C	C	B
OTHER STATE ROADS	OTHER MULTILANE	D	C	B
	TWO-LANE	D	D	D
NONSTATE ROADS	COUNTY-MAINTAINED FACILITIES	D	D	D

City of Alachua- The level of service standards that are used to evaluate the transportation impacts of this project within the City of Alachua is contained in the City of Alachua's adopted Comprehensive Plan- Transportation Element. According to this information, the standards are level of service C for all intrastate highways and State multilane highways, and level of service D on US 441 and for all other State roads and all County roads.

City of Gainesville- The level of service standards that are used to evaluate the transportation impacts of this project within the City of Gainesville is contained in the City of Gainesville's adopted Comprehensive Plan- Transportation Element. According to this information, the standards are level of service C for all intrastate highways, level of service D for all other State roads and all County roads and level of service E for City roads. In addition, significant portions of the City are included within transportation concurrency exception areas (TCEAs).

City of High Springs- The level of service standards that are used to evaluate the transportation impacts of this project within the City of High Springs is contained in the City of High Springs' adopted Comprehensive Plan- Traffic Circulation Element. According to this information, the standards are:

1. level of service C for US 27/State Road 45, US 27/US 41/State Road 20 and US 41/US 441/State Road 45;

2. the applicable FDOT and Alachua County peak hour level of service standards for arterial roadways, collectors and limited access facilities under their respective control; and

3. level of service C for two-lane paved City roads [5,000 ADT] and for two-lane unpaved City roads [2,000 ADT].

Columbia County- The level of service standards that are used to evaluate the transportation impacts of this project within Columbia County is contained in the Columbia County's adopted Comprehensive Plan- Traffic Circulation Element. According to this information, the standards are level of service B for all intrastate highways, level of service C for US 27, US 41, US 90 and US 441, level of service D for all other State roads and all County roads.

PROPOSED TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

The SpringHills DRI Substantial Deviation is required to discuss what provisions, including but not limited to sidewalks, bicycle paths, internal shuttles, ride sharing and public transit, will be made for the movement of people by means other than private automobile. According to page 21.51 of the *SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for the SpringHills DRI Substantial Deviation Application for Development Approval February 2004 (Volume 2)* submitted February 9, 2004,

> *"The SpringHills project will incorporate design elements that will encourage alternative modes of transportation for on-site and off-site movements. As previously mentioned, the development will be interconnected with an internal system of roadways, sidewalks, and bicycle facilities for the purpose of reducing traffic impacts to surrounding facilities. Roadways will be designed with wider outside lanes to accommodate bicycle travel. Enhanced pavement markings and signage will be incorporated to the design process to protect pedestrians and bicycles from conflicts with the motoring public. Bicycle racks will be provided to encourage bicycle travel throughout the project.*
>
> *As agreed to by the Transportation Methodology Document, no additional transit reductions were integrated into the technical analysis provided in Chapter 21. However, the DRI proximity to adjoining urbanized developments makes it a possible candidate to be served by bus or shuttle service in the future. Therefore, the Owner/Applicant will provide a transit stop on-site if transit is extended to service the SpringHills DRI."*

Currently, this area is served by two Regional Transit System (RTS) bus routes- Routes 10 and 43 which serve Santa Fe Community College. Route 10 travels west on NW 23rd Avenue and then north on NW 83rd Street. Route 43 travels west on NW 39th Avenue and then south on NW 83rd Street. The nearest bus service to the SpringHills DRI Substantial Deviation is Route 43 which serves the NW 39th Avenue and NW 83rd Street intersection.

It is reasonable to assume that transit service will be expanded to service this area by 2013 and will need infrastructure provided by the applicant. The above commitment to provide a single transit stop is not consistent with the proposed land use map submitted in March 2003 as part of the *SpringHills Notice of Proposed Change to the SpringHills DRI* where eight (8) stops were identified.

It will be difficult to provide cost-effective transit service to and from this development because of the project's location. Consequently, the applicant does not identify any transportation demand management strategies that are expected to significantly affect needed roadway and intersection modifications. Transportation demand management strategies should be developed to augment the proposed mitigation plan.

LAND USE MATRIX

The applicant has proposed a land use conversion matrix, or trip equivalency matrix, for the purpose of changing land uses to respond to market conditions without having to trigger the Notice of Proposed Change (NOPC) process. The matrices provided by the applicant are mathematical conversions of land uses based on trip generation rates by project area.

Currently, it is the policy of the Planning Council that the use of land use conversion tables is not an acceptable practice. Land use conversion tables provide an applicant the opportunity to change the scope and makeup of an approved project without fully considering or identifying the related transportation impacts resulting from the revisions.

Through the course of the SpringHills DRI Substantial Deviation sufficiency review, the Planning Council has maintained the policy that the application of a land use trip matrix is not an acceptable practice. As stated during the second sufficiency review comments,

> *"The North Central Florida Regional Planning Council maintains the policy that the application of a land use trip matrix is not an acceptable practice. Discussions between the Applicant and the Council were held on May 7, 2003 regarding this issue. At that meeting, the Council agreed to consider a revised trip matrix that limited land use conversions by quadrant and by quantity. After the Council's review of the Applicant's revised land use matrix, additional information was requested to clarify and document the Applicant's proposed conversion methodology."*

To date, the Applicant has not responded to the Council's request. As such, the Council has not changed the policy regarding land use conversion tables and will not approve the conversion table as provided in the Applicant's sufficiency response.

Although some of the Council's comments are incorporated in the latest submittal, our main concerns were not addressed by the applicant. Specifically, the Council requested that the applicant provide a discussion of how the conversion rates were derived and what units they represent. Additionally, more detailed information regarding internal capture, trip distribution and trip length was requested for our review, but the applicant did not respond to this request for information.

Regardless of how land use conversion tables are generated, the use of these tables do not address the nature of a converted trip. The tables may work mathematically, but only in the sense of trip generation rates. In reality, they cannot replicate impacts to the transportation network in terms of trip distribution and trip length, nor do they adequately account for changes in internal capture and pass-by trip rates.

As an example, the calculation of internal and pass-by trip rates are exponential and increase or decrease consistent with the size of retail development. However, the land use trip matrix can only show a linear relationship between uses (i.e., one dwelling unit = X commercial SF) and, therefore, does not account for the variability of the applied capture rates.

Decreases in the amount of internal capture and pass-by trips through land use conversions result in the addition of project trips that will use the external (public) roadway network. However, the facility impacts of these additional trips are not reflected in the traffic impact analysis.

Additionally, changes to the proposed land use makeup can significantly affect attraction and production rates as calculated by transportation computer models (the Florida Standard Urban Transportation Model Structure (FSUTMS) model). Land use conversion tables imply that project traffic distribution patterns remain constant, when in actuality the patterns could be significantly different and require a different set of transportation modifications to address changes in transportation demands.

Even though the applicant did not address the Council's concerns, the land use conversion matrix was evaluated as part of the Council's review of the Second Review Sufficiency Response submitted in February, 2004. In the latest submittal, the applicant proposes a minimum/maximum range for the exchange of land uses where the overall exchange is allowed up to 10 percent of the land use or no more than the state substantial deviation numerical thresholds (whichever is less) for each quadrant.

However, Section 380.06 (19 (b), Florida Statutes, does not delineate between quadrants and the entire project for land use conversions. Any conversion from one land use to another is summed together. When the cumulative totals exceeds the maximum thresholds for a given land use, a substantial deviation is triggered, regardless of what quadrant the conversion took place.

As part of the SpringHills DRI Substantial Deviation review process, the Council did agree to review this policy and to consider a restricted conversion table for the proposed development. However, our primary concerns were not addressed by the applicant and no information has been provided that supports the proposed conversion matrices. Given this, the Council staff does not agree to the use of land use conversion tables and does not support the exchange of uses within the SpringHills DRI Substantial Deviation.

TABLE 21

COMPARISON OF MAXIMUM PROPOSED LAND USE EXCHANGES TO STATE SUBSTANTIAL DEVIATION THRESHOLDS

ITE Code	Land Use	Units	% Change	Unit Change	10% of Prop LU	Florida Statutes Unit Threshold
210	Single	DU's	10.08%	52	52	10% or 55 units (total). Whichever is greater
220	Apartments	DU's	5.64%	100	172	
310	Hotel	Room	10.08%	63	62	10% or 83 units. Whichever is greater
710	Office	SF	10.00%	12,500	12,500	10% or 66K GSF. Whichever is greater
820	Commercial	SF	4.63%	72,050	155500	10% or 55K GSF. Whichever is greater
150	Warehouse	SF	10.00%	46,000	46,000	10% or 35 Acres. Whichever is greater

Source: Florida Statutes, Chapter 380.06(19)(b)
SpringHills Second Sufficiency Review Response, Appendix 21-10

PLANNED OR PROGRAMMED MODIFICATIONS OR NEW FACILITIES WHICH WILL HAVE AN INFLUENCE ON THE PROPOSED DEVELOPMENT

This section discusses planned or programmed modifications or new facilities which will have an influence on the proposed development within the study area. The document entitled *SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for the SpringHills DRI Substantial Deviation Application for Development Approval February 2004 (Volume 2)* (submitted February 9, 2004) does not identify any planned or programmed modifications or new facilities which will have an influence on the proposed development within the study area except for the commitments discussed earlier to construct the proposed extension of NW 98th Street and NW 83rd Street.

REGIONAL ROAD NETWORK - ROAD SEGMENTS

The North Central Florida Regional Planning Council's (NCFRPC) *Strategic Regional Policy Plan* defines the regional road network as including the following facilities:

- All Interstate Highways
- All U.S. Highways
- All State Roads
- Hurricane Evacuation Routes
- All local roads which link Regional Facilities or DRIs to interstate, U.S., or state highways

Illustration III shows the regional road network within the study area. This network includes all segments of regional roads that are being significantly impacted by the SpringHills DRI Substantial Deviation. These include the following:

- Interstate 75- Newberry Road north to US 441 in the City of Alachua
- US 441- Interstate 75 west to Alachua County Line
- State Road 20- US 441 west to NW 9th Street
- State Road 222- Interstate 75 east to US 441
- State Road 26- W. 154th Street east to NW 98th Street
- State Road 26- Interstate 75 east to NW 8th Avenue

Illustration IV shows the inset area that is used in some of the remaining report maps. This scale map is needed in order to adequately identify intersection information in the immediate SpringHills DRI Substantial Deviation area.

ILLUSTRATION III

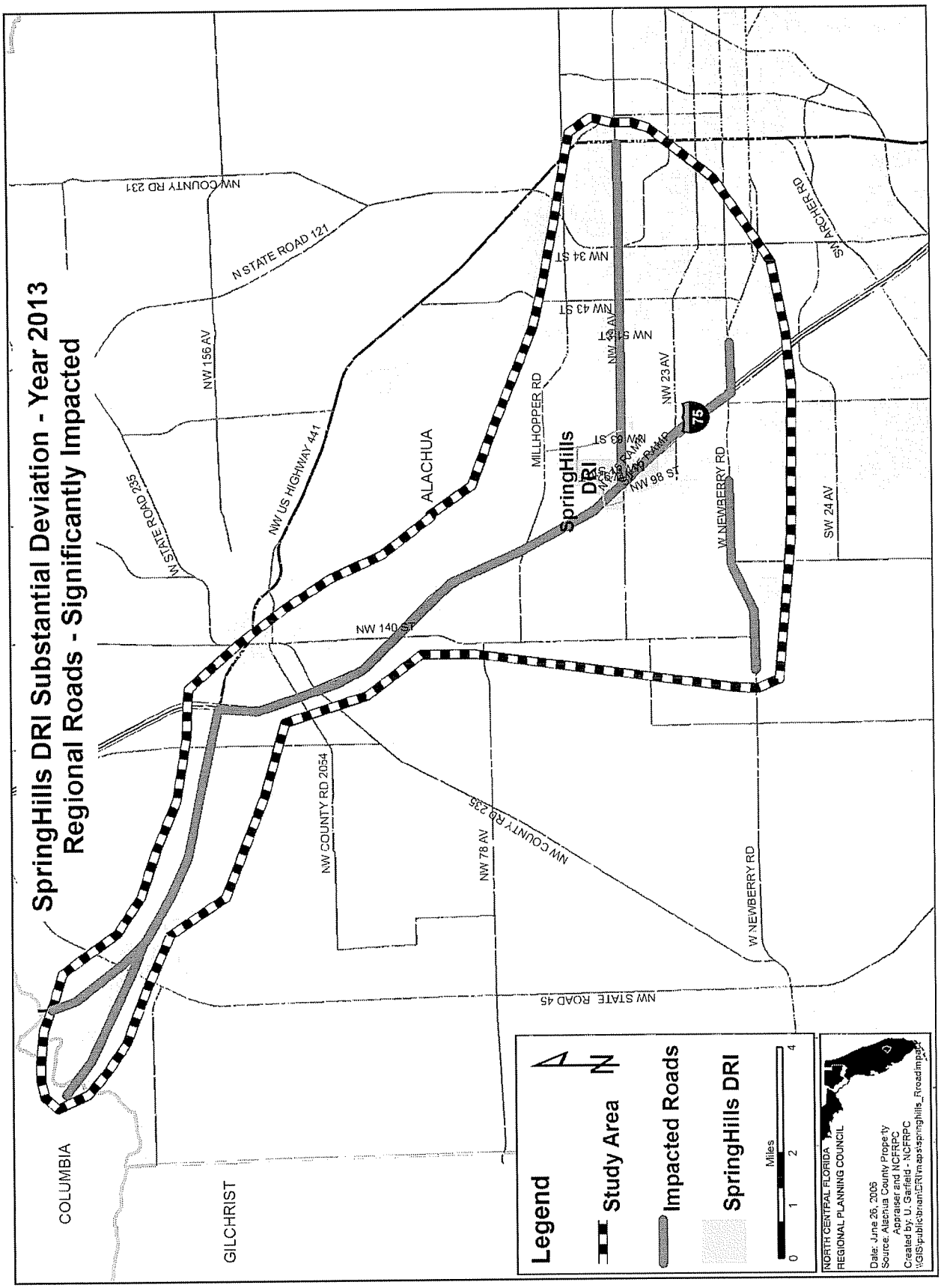
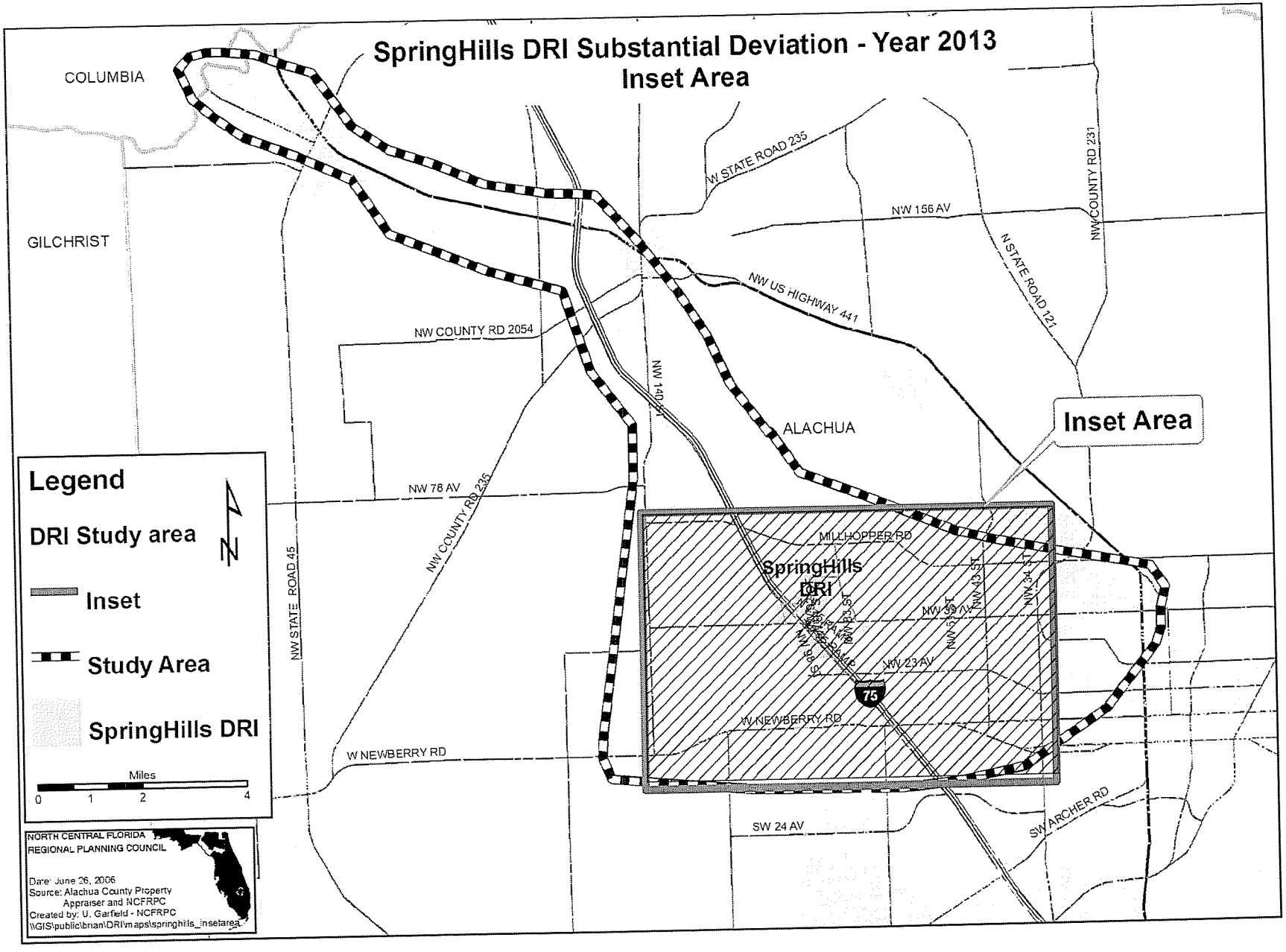


ILLUSTRATION IV



REGIONAL ROAD NETWORK - INTERSECTIONS/INTERCHANGES

The procedures that are used to determine if modifications are needed at regional intersections include testing to determine if the impacts are both significant and adverse. These terms are defined as follows:

significant- DRI traffic is determined to be *significant* if it uses five percent or more of the adopted peak hour level of service maximum service volume of the facility.

adverse- An *adverse* impact is when the facility is projected to be operating below the adopted level of service standard.

The procedures used to analyze intersections include the following three tests:

Test 1 - Is a signalized intersection located on a portion of the State Highway System significantly impacted by a DRI?

Test 2 - Is the total DRI traffic in the intersection from Test 1 five percent or more of the total intersection capacity at the adopted level of service (LOS) standard?

Test 3 - For intersections that meet both Test 1 and 2, is a failing turn movement five percent or more of the total lane group capacity for that movement at the adopted LOS?

If the results of the above tests are a significant and adverse impact, the DRI is required to mitigate the turning movement or movements that are adversely affected.

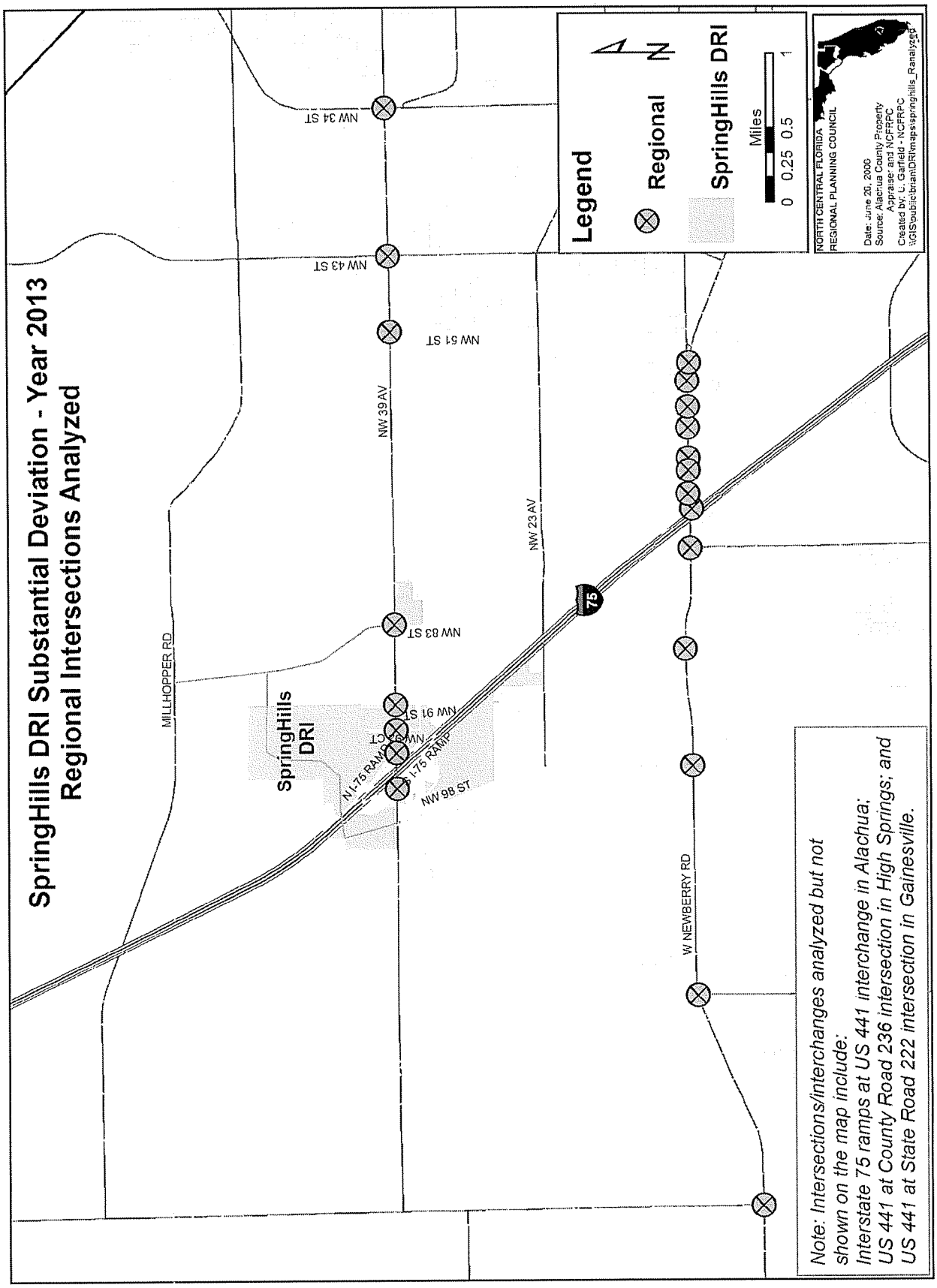
Intersections/interchanges Analyzed

A detailed traffic operations analysis has been performed for the regionally significant intersections listed below and shown in Illustration V.

Interstate 75 at US 441 (Alachua County) Northbound Ramps
at US 441 (Alachua County) Southbound Ramps
at State Road 222 (NW 39th Avenue) Northbound Ramps
at State Road 222 (NW 39th Avenue) Southbound Ramps
at State Road 26 (Newberry Road) Northbound On Ramps
at State Road 26 (Newberry Road) Northbound Off Ramps

US 441	at County Road 236 (High Springs) at State Road 222 (NW 39th Avenue)
State Road 222 (NW 39th Avenue)	at NW 92nd Court at NW 91st Street at NW 83rd Street at NW 51st Street at NW 43rd Street at State Road 121 (NW 34th Street)
State Road 26 (Newberry Road)	at County Road 241 at W. 122nd Street at W. 98th Street at Fort Clarke Boulevard at W. 75th Street at W. 69th Terrace at Oaks Mall at W. 66th Street at W. 62nd Street at W. 60th Street at W. 57th Street at W. 55th Street

ILLUSTRATION V



LOCAL ROAD NETWORK - ROADWAY SEGMENTS

Illustration VI, shows local roads which are significantly impacted by this project. This network includes all segments of local roads that are being significantly impacted by the SpringHills DRI Substantial Deviation. These include the following:

Millhopper Road	County Road 241 east to just west of NW 43rd Street
NW 39th Avenue	County Road 241 east to Interstate 75
NW 23rd Avenue	NW 98th Street east to NW 55th Street
NW 98th Street	NW 39th Avenue south to Newberry Road
Ft. Clarke Blvd	NW 23rd Avenue south to Newberry Road
NW 83rd Street	NW 39th Avenue south to NW 23rd Avenue

LOCAL ROAD NETWORK - INTERSECTIONS

A detailed traffic operations analysis has been performed for each of the locally significant intersections listed below and shown in Illustration VII.

County Road 222 (NW 39th Avenue)	at NW 98th Street
NW 23rd Avenue	at NW 98th Street
NW 23rd Avenue	at Fort Clarke Boulevard
NW 23rd Avenue	at NW 83rd Street
NW 23rd Avenue	at NW 55th Street
NW 83rd Street Extension	at Millhopper Road

ILLUSTRATION VI

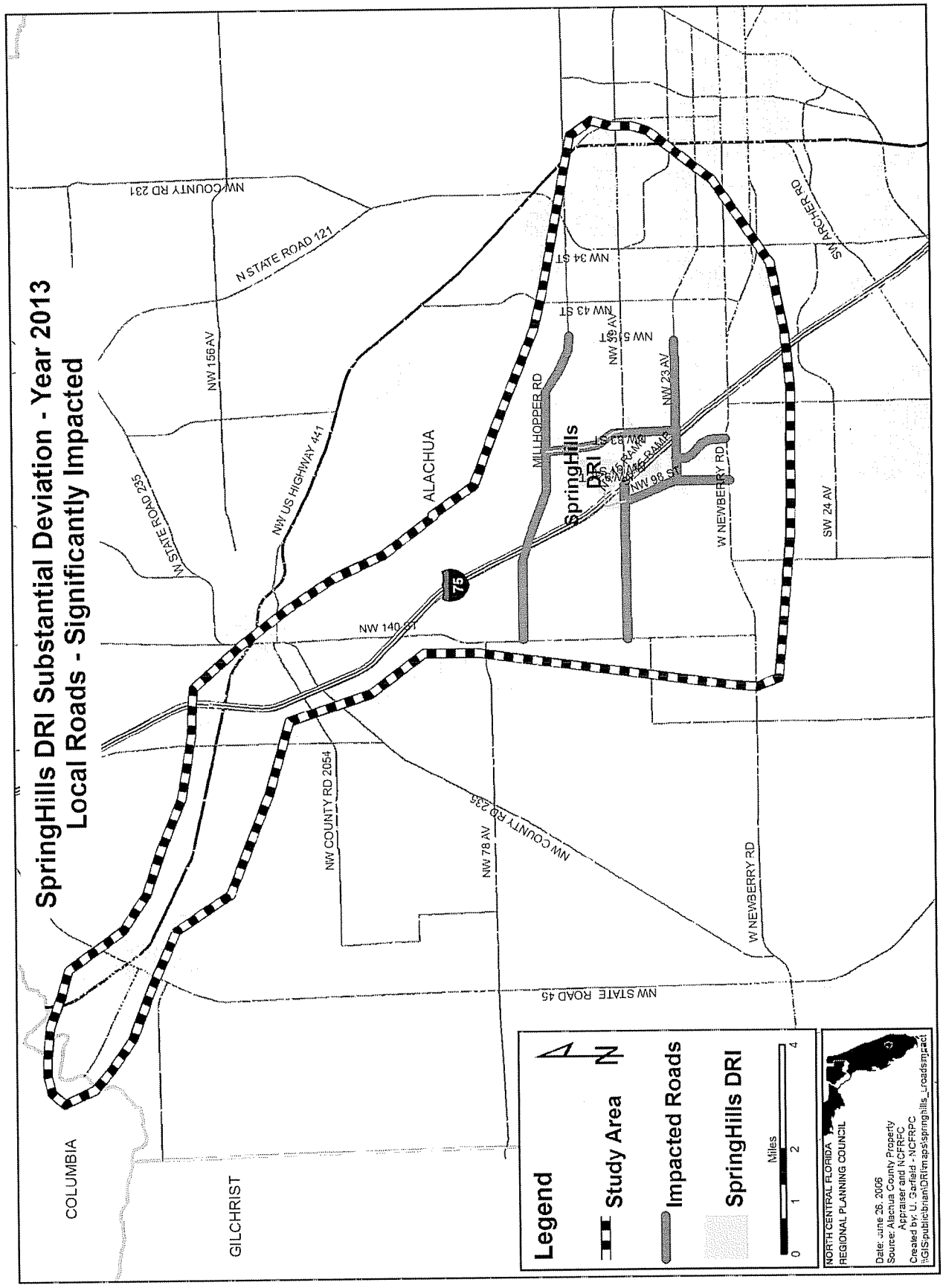
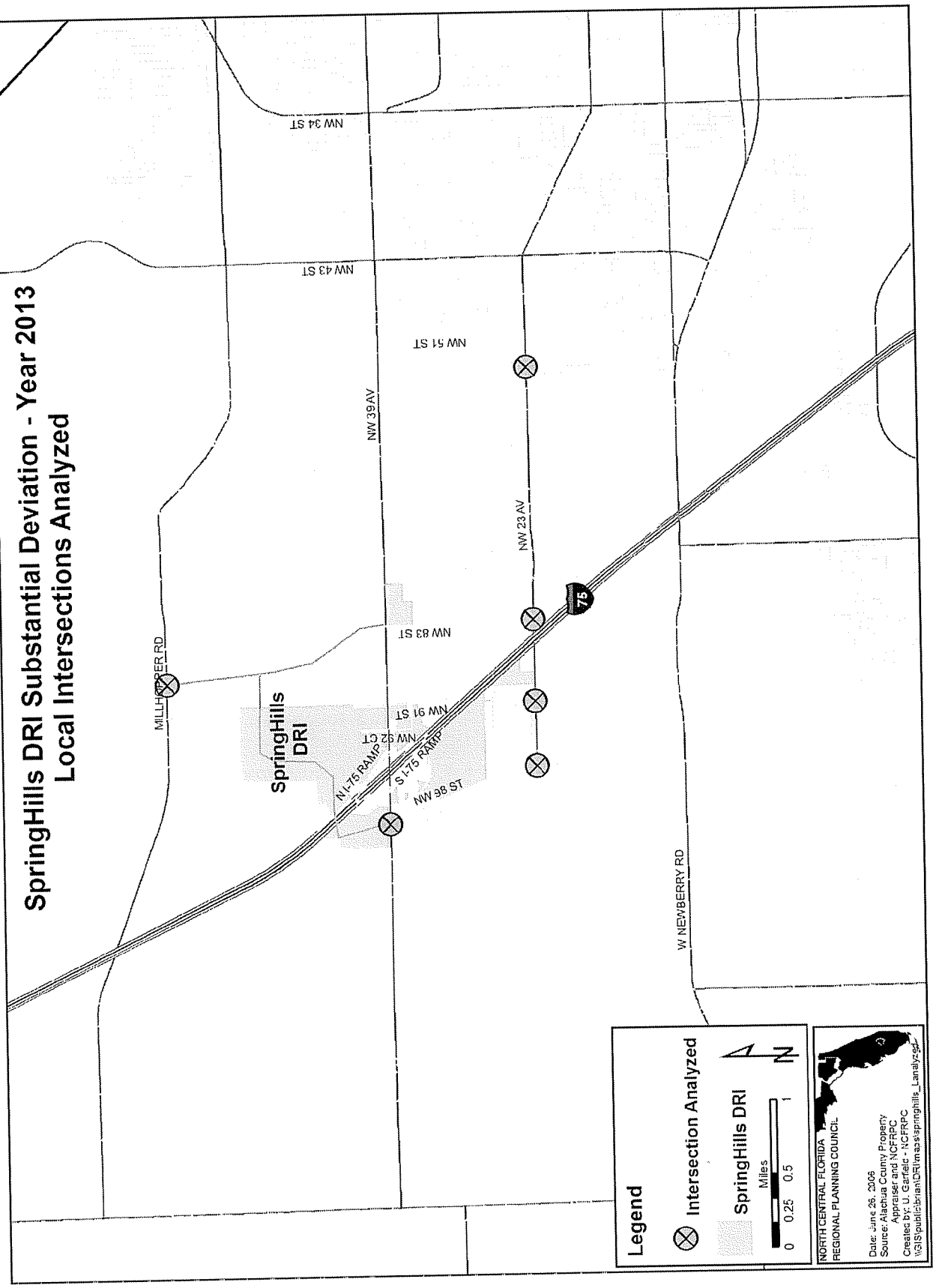


ILLUSTRATION VII



SUMMARY OF IMPACTS

TRANSPORTATION MODIFICATIONS NEEDED AS A RESULT OF THIS PROJECT

This section discusses transportation modifications that are needed to maintain an acceptable level of service for both roadway segments and intersections through the Year 2013.

REGIONAL IMPACTS - ROADWAY SEGMENTS

Illustration VIII and Table 22 identify needed roadway segment modifications on the Regional Road Network through the Year 2013. This illustration and table include modifications that have been identified earlier in this report as projects that the applicant has committed to construct.

ILLUSTRATION VIII

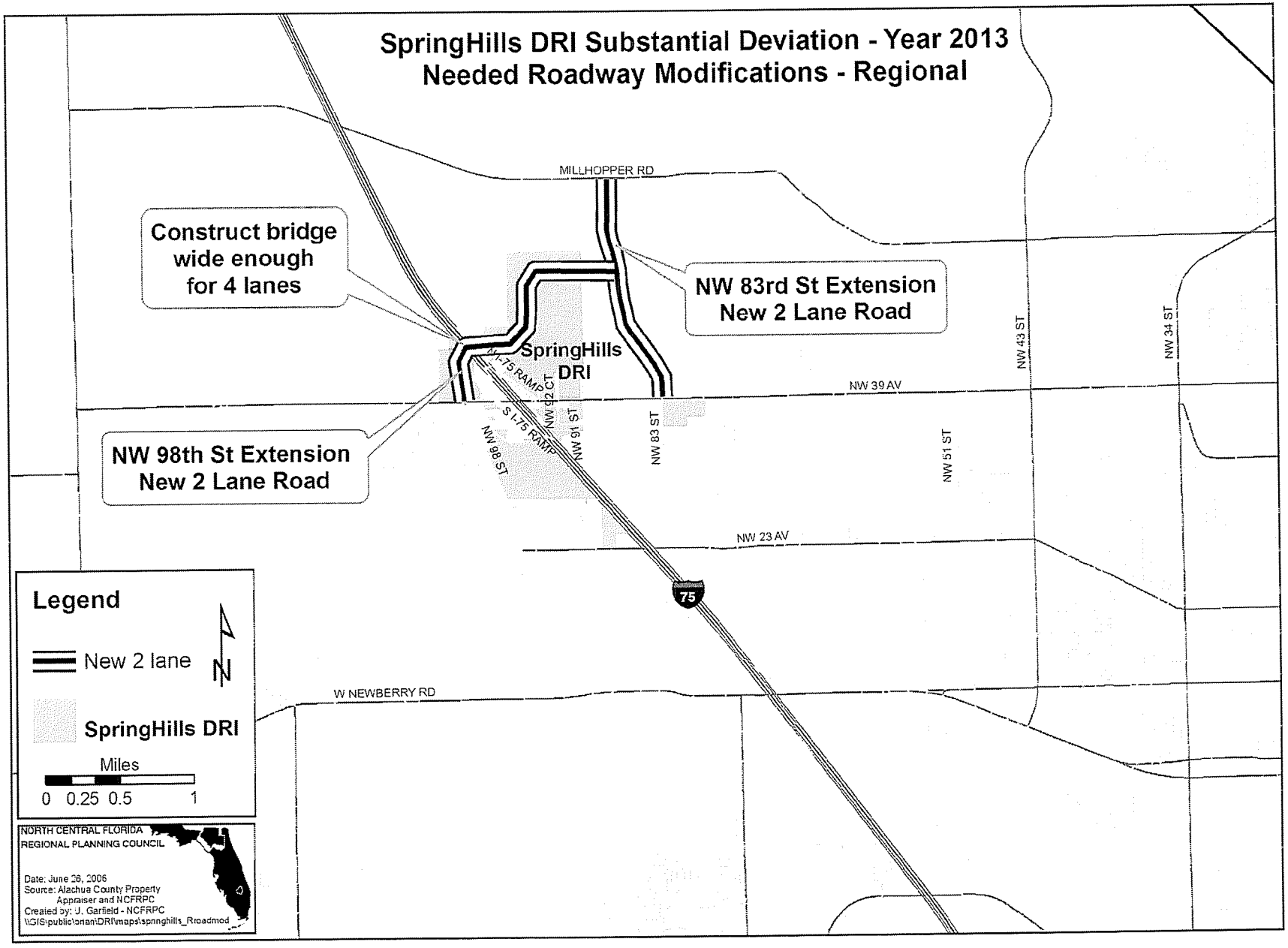


TABLE 22

NEEDED ROADWAY MODIFICATIONS- REGIONAL
SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

YEAR 2013 MODIFICATION	APPLICANT'S ESTIMATED TOTAL COST [IN 2002 DOLLARS]	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]
REGIONAL ROADWAYS- APPLICANT IDENTIFIED		
NW 98th Street Extension- NW 39th Avenue to NW 83rd Street Extension- construct two-lane roadway	$6,095,088	$14,027,909*
Construction of eastbound left and northbound thru turning lanes in the County Road 222/NW 98th Street intersection	-	**Has not been determined**
NW 98th Street Extension Overpass- construct bridge over Interstate 75	$3,600,000	$3,355,000*
NW 98th Street Extension- NW 39th Avenue to NW 83rd Street Extension- 120 feet of right-of-way	$3,822,314	**Has not been determined**
NW 83rd Street Extension- NW 39th Avenue to County Road 232- construct two-lane roadway	$5,417,856	$12,235,419*
Construction of eastbound left and northbound thru turning lanes in the State Road 222/NW 83rd Street intersection	-	**Has not been determined**

* Does not include right-of-way (ROW) for drainage or minor ROW acquisition at intersection corners.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations For the SpringHills DRI Substantial Deviation Application for Development Approval February 2004 (Volume 2) submitted February 9, 2004, page 21.47.

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REGIONAL IMPACTS - INTERSECTIONS ON REGIONAL FACILITIES

Regional intersections are analyzed based upon the peak hour directional traffic. Intersection information is included in the following sections for two significantly impacted regional roadways- State Road 26 (Newberry Road) and State Road 222 (NW 39th Avenue).

State Road 26 (Newberry Road)

Appendix A contains detailed intersection information for State Road 26 (Newberry Road) from SW 122nd Street east to NW 66th Street. Based upon this information, Illustration IX and Table 23 identify the intersections on State Road 26 where the proposed SpringHills DRI Substantial Deviation traffic is significant on Newberry Road (where the percent of total is equal to or greater than five percent).

Table 23 also identifies the significantly and adversely (operating below the adopted level of service standard) affected turning movements, as well as the proposed modifications that are needed to allow these facilities to operate at an acceptable level of service. The applicant did not provide a ramp analysis for the State Road 26 at Interstate 75 southbound ramps. Therefore, it cannot be determined if the SpringHills DRI Substantial Deviation traffic is significant in this interstate ramp and if this ramp is adversely impacted.

In addition, there is not enough right-of-way along this portion of State Road 26 to address some of the significantly and adversely affected turning movements at the following locations:

1. State Road 26 at Interstate 75 northbound on ramps;
2. State Road 26 at NW 69th Terrace;
3. State Road 26 at Oaks Mall; and
4. State Road 26 at NW 66th Street.

Table 24 lists all of the proposed regional intersection modifications that have been identified as needed for State Road 26 where SpringHills DRI Substantial Deviation traffic is both significant and adverse. However, the SpringHills DRI Substantial Deviation is only required to mitigate for the peak hour peak direction modifications listed in Table 24 for the Interstate 75 northbound off ramps and at NW 69th Terrace. These intersection modifications are listed in Table 25.

ILLUSTRATION IX

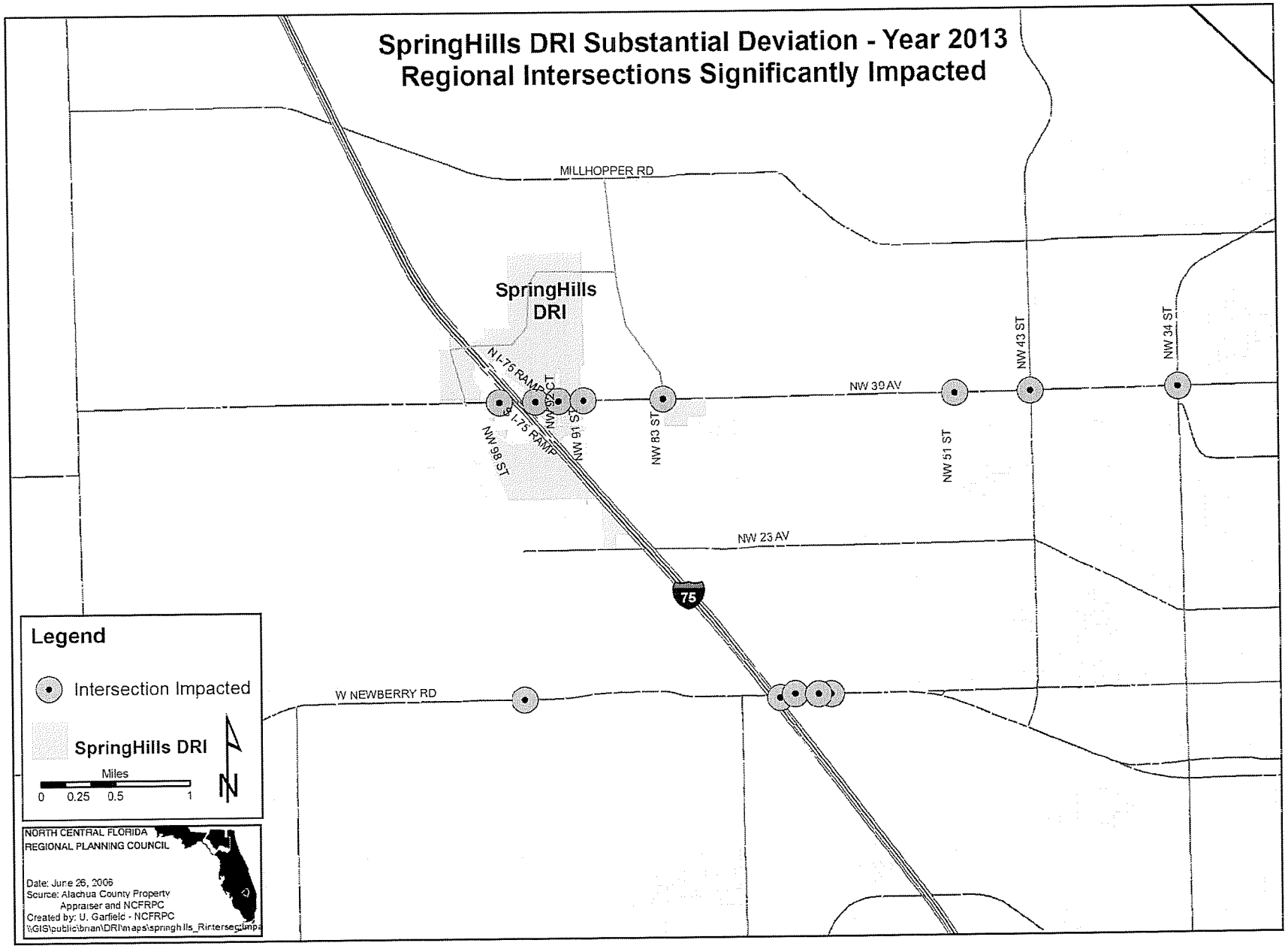

TABLE 23

INTERSECTIONS ON SIGNIFICANTLY IMPACTED ROADWAYS- STATE ROAD 26 (NEWBERRY ROAD) SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

INTERSECTION	TOTAL INTERSECTION CAPACITY	TOTAL DRI INTERSECTION VOLUME	PERCENT OF TOTAL	SIGNIFICANTLY AND ADVERSELY AFFECTED TURN MOVEMENTS	REQUIRED MODIFICATIONS
SR 26 at SW County Road 241	4,556	177	3.9%	None.	No modifications required.
SR 26 at SW 122nd St.	5,920	261	4.4%	None.	No modifications required.
SR 26 at NW 98th St.	6,419	326	6.3%	EBL, SBLT, and SBR.	Add EBL (Dual), WBR, and SBL.
SR 26 at Ft Clarke Blvd.	4,161	105	2.5%	None.	No modifications required.
SR 26 at NW 75th St.	5,612	259	4.6%	None.	No modifications required.
SR 26 at I-75 SB Ramps	7,780	Not provided by Applicant.	Unknown	Unknown.	Unknown.
SR 26 at I-75 NB Off Ramps	6,992	522	7.5%	WBT	Add NBL (Dual) and NBR (Dual).

TABLE 23 Continued

INTERSECTION	TOTAL INTERSECTION CAPACITY	TOTAL DRI INTERSECTION VOLUME	PERCENT OF TOTAL	SIGNIFICANTLY AND ADVERSELY AFFECTED TURN MOVEMENTS	REQUIRED MODIFICATIONS
SR 26 at I-75 NB On Ramps	9,257	520	5.6%	EBL.	Insufficient ROW to address deficiency.
SR 26 at NW 69th Terr.	7,723	880	11.4%	EBL, WBTR, and SBR.	Add WBR, NBL (Dual), and SBL (Dual). Insufficient ROW to address EBL.
SR 26 at Oaks Mall	7,535	685	9.1%	NBLT	Insufficient ROW to address deficiencies.
SR 26 at NW 66th St.	9,393	747	8.0%	EBL	Insufficient ROW to address deficiency.
SR 26 at NW 62nd St.	7,825	337	4.2%	None.	No modifications required.
SR 26 at NW 60th St.	7,000	238	3.4%	None.	No modifications required.
SR 26 at NW 57th St	7,119	224	3.1%	None.	No modifications required.
SR 26 at NW 55th St	8,777	225	2.6%	None.	No modifications required.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9 and NCFRPC Staff.

TABLE 24

REQUIRED REGIONAL MODIFICATIONS- STATE ROAD 26
SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

INTERSECTION	PERCENT SIGNIFICANT	SIGNIFICANT AND ADVERSE TURNING MOVEMENTS	REQUIRED MODIFICATIONS	SPRINGHILLS DRI PEAK HOUR PEAK DIRECTION MODIFICATION
NW 98th Street	6.3	EBL, SBLT, and SBR	Add EBL (Dual), WBR, and SBL	None.
Interstate 75 Southbound Ramps	SpringHills DRI trips not provided.	Unknown	Unknown	Unknown
Interstate 75 Northbound Off Ramps	7.5	WBT	Add NBL (Dual) and NBR (Dual)	Add NBL (Dual) and NBR (Dual)
Interstate 75 Northbound On Ramps	5.6	EBL	Insufficient right-of-way (ROW) to address deficiency	None.
NW 69th Terrace	11.4	EBL, WBTR, and SBR	ADD NBL (Dual) and SBL (Dual). Insufficient right-of-way to address other deficiencies	WBR- will require ROW acquisition and analysis of business impacts
Oaks Mall Road	9.1	NBLT	Insufficient ROW to address deficiency	None.
NW 66th Street	8.0	EBL	Insufficient ROW to address deficiency	None.

Source: North Central Florida Regional Planning Council, City of Gainesville Public Works, and Alachua County Public Works staff.

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TABLE 25

REQUIRED REGIONAL MODIFICATIONS- STATE ROAD 26 SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 26 INTERSECTION	REQUIRED MODIFICATIONS	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
APPLICANT/NCFRPC IDENTIFIED MODIFICATIONS		
NW 69th Terrace *Significant and Adverse Movement: WBTR*	Add WBR	-
ADDITIONAL NCFRPC IDENTIFIED MODIFICATIONS		
I-75 SB Ramps *Not provided by the applicant.*	Unknown.	Unknown.
I-75 NB Off Ramps *Significant and Adverse Movement: WBT*	Add NBL (Dual)	-
	Add NBR (Dual)	-
	TOTAL	-

* To be provided later by Alachua County Public Works Department staff.

Source: SpringHills Second Sufficiency Review Response Question 21 Update-Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council, City of Gainesville Public Works Department, and Alachua County Public Works Department staff.

State Road 222 (NW 39th Avenue)

This section analyzes intersections on State Road 222 (NW 39th Avenue) from Interstate 75 east to State Road 121 (NW 34th Street). Appendix B contains detailed intersection information for State Road 222.

The information in this section was developed by analyzing the intersections on State Road 222 in a coordinated fashion, rather than using the individual intersection approach as presented by the applicant in the February 2004 SpringHills DRI submittal. The reason this approach is used is because the signal density on State Road 222 is five intersections per mile on the segment of State Road 222 adjacent to the proposed project (I-75 to NW 83rd Street).

Coordinated intersections allow for greater efficiency of movement and lower vehicle delays as vehicles move from one end of the corridor to the other. This is accomplished through establishing a master intersection and a single cycle length for intersections within close proximity of the main intersection. By adjusting cycle offsets, there is a logical progression of movement, and the phases change in sequence to minimize delays to the turning movements. Analyzing intersections individually in a high signal density area does not allow for this efficiency of movement and may create a scenario where a 'fix' for one intersection adversely affects the operation of another intersection.

The issue of the isolated intersection approach employed by the applicant and the need for a coordinated analysis was originally pointed out in the First Sufficiency Response (April 2003). Since a coordinated analysis was not presented in the Second Sufficiency Response (February 2004), the NCFRPC staff, with assistance from City of Gainesville Public Works Department staff, re-analyzed the State Road 222 corridor with coordinated signals using the methodology described in the following sections. The applicant's consultant was provided this information and data throughout this reanalysis process.

Existing Intersection Conditions

Table 26 shows current overall intersection traffic conditions without the SpringHills DRI Substantial Deviation project. The current intersection level of service (LOS) along State Road 222 (NW 39th Avenue) without the project ranges from LOS A to F, with the intersections of NW 83rd Street, NW 43rd Street and NW 34th Street operating below the adopted level of service standard.

TABLE 26

INTERSECTION LEVEL OF SERVICE EXISTING CONDITIONS SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2003

STATE ROAD 222 INTERSECTION	OVERALL INTERSECTION LEVEL OF SERVICE
Interstate 75 Southbound Ramps *(AM Peak Period)*	B
Interstate 75 Northbound Ramps *(AM Peak Period)*	D
NW 92nd Court *(AM Peak Period)*	A
NW 91st Street *(AM Peak Period)*	B
NW 83rd Street *(AM Peak Period)*	F
NW 83rd Street *(PM Peak Period)*	D
NW 51st Street *(PM Peak Period)*	C
NW 43rd Street *(PM Peak Period)*	F
NW 34th Street *(PM Peak Period)*	E

Source: SpringHills Second Sufficiency Review Response Question 21 Update-Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council staff.

Year 2013 Intersection Conditions Without the Project

Table 27 shows what overall intersection traffic conditions will be like in the Year 2013 without the SpringHills DRI Substantial Deviation project. The entire analysis of this scenario can be found in Appendix B.

The projected intersection level of service (LOS) in Year 2013 along State Road 222 (NW 39th Avenue) without the project ranges from LOS A to F, with the intersections of NW 83rd Street, NW 43rd Street and NW 34th Street operating below the adopted level of service standard. In addition, turning movements that are operating below the adopted level of service standard are identified in the NW 51st Street intersection (northbound left and southbound left). The entire analysis of this scenario can be found in Appendix B.

TABLE 27

INTERSECTION LEVEL OF SERVICE WITHOUT SPRINGHILLS DRI SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	OVERALL INTERSECTION LEVEL OF SERVICE
Interstate 75 Southbound Ramps *(AM Peak Period)*	A
Interstate 75 Northbound Ramps *(AM Peak Period)*	B
NW 92nd Court *(AM Peak Period)*	B
NW 91st Street *(AM Peak Period)*	B
NW 83rd Street *(AM Peak Period)*	E
NW 83rd Street *(PM Peak Period)*	E
NW 51st Street *(PM Peak Period)*	D
NW 43rd Street *(PM Peak Period)*	F
NW 34th Street *(PM Peak Period)*	F

Source: North Central Florida Regional Planning Council staff.

Note: The traffic volumes used to evaluate this scenario do not include the 37.5 percent reduction in background traffic allowed in the subsequent scenarios. This reduction was employed to reduce the occurrence of double counting that may be associated with the development of the SpringHills DRI Substantial Deviation.

Year 2013 Intersection Conditions With the Project and Without Modifications

Table 28 shows what overall intersection traffic conditions will be in the Year 2013 along State Road 222 (NW 39th Avenue) with the SpringHills DRI Substantial Deviation project and without any intersection modifications. The entire analysis of this scenario can be found in Appendix B.

TABLE 28

INTERSECTION LEVEL OF SERVICE WITH SPRINGHILLS DRI*
SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	OVERALL INTERSECTION LEVEL OF SERVICE
Interstate 75 Southbound Ramps *SpringHills Intersection Significance- 12.0%* *(AM Peak Period)*	B
Interstate 75 Northbound Ramps *SpringHills Intersection Significance- 16.1%* *(AM Peak Period)*	C
NW 92nd Court *SpringHills Intersection Significance- 24.5%* *(AM Peak Period)*	D
NW 91st Street *SpringHills Intersection Significance- 11.2%* *(AM Peak Period)*	D
NW 83rd Street *SpringHills Intersection Significance- 12.9%* *(AM Peak Period)*	F
NW 83rd Street *SpringHills Intersection Significance- 28.2%* *(PM Peak Period)*	F
NW 51st Street *SpringHills Intersection Significance- 15.0%* *(PM Peak Period)*	E
NW 43rd Street *SpringHills Intersection Significance- 7.3%* *(PM Peak Period)*	F
NW 34th Street *SpringHills Intersection Significance- 6.5%* *(PM Peak Period)*	F

* Does not include any intersection modifications beyond those necessary to construct the NW 98thStreet and NW 83rd Street extensions.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council staff.

Year 2013 Intersection Conditions With the Project and With Tier 1- Minor Intersection Modifications

Table 29 shows what overall intersection traffic conditions will be in the Year 2013 with the SpringHills DRI Substantial Deviation project along State Road 222 (NW 39th Avenue) with the project and with modifications that could be made within the existing right-of-way (referred to as Tier 1). Tier 1 modifications are defined as follows:

> *Modifications that can be constructed within the existing curb line for curb and gutter street sections or pavement can be added and roadside swales reworked for non curb and gutter street sections. Tier 1 modifications require no (or minimal) right-of-way acquisitions, utility relocations and landscape removal. Also, Tier 1 modifications do not have any impact on businesses/residences adjacent to the street. Tier 1 modifications typically would not require relocation of traffic signal poles. However, the addition of traffic signal heads and/or signs on existing span wire and/or mast arm installations will require a structural review of the poles at each intersection. Replacement of traffic signal poles for Tier 1 improvements is not included in the cost estimates for this analysis. However, the replacement of traffic signal poles could be required in order to actually construct a Tier 1 improvement.*

Table 30 lists the proposed Tier 1 intersection modifications. Under Tier 1 conditions, the intersection level of service is operating below the adopted level of service standard at NW 92nd Court (LOS E), NW 83rd Street (LOS E in the morning and LOS F in the afternoon), NW 43rd Street (LOS F), and NW 34th Street (LOS F). In addition, all of the intersections along this corridor (from Interstate 75 southbound Ramps east to NW 34th Street) have failing movements except for the Interstate 75 southbound and northbound ramps. The SpringHills DRI Substantial Deviation is projected to significantly and adversely affect these intersections and a majority of the failing movements. Table 31 list the modifications that the SpringHills DRI Substantial Deviation is responsible for constructing. The entire analysis of the Tier 1 scenario can be found in Appendix B.

Tier 1 modifications do not produce a workable transportation plan- defined as all regional intersections movements (where the applicant is significant) operating at the adopted level of service standard. Therefore, the following section discusses what additional intersection modifications can be made by purchasing additional right-of-way and adding additional turn lanes (defined as Tier 2 modifications).

TABLE 29

INTERSECTION LEVEL OF SERVICE WITH TIER 1 MODIFICATIONS SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	OVERALL INTERSECTION LEVEL OF SERVICE
Interstate 75 Southbound Ramps *SpringHills Intersection Significance- 12.0%* *(AM Peak Period)*	B
Interstate 75 Northbound Ramps *SpringHills Intersection Significance- 16.1%* *(AM Peak Period)*	C
NW 92nd Court *SpringHills Intersection Significance- 24.5%* *(AM Peak Period)*	E
NW 91st Street *SpringHills Intersection Significance- 11.2%* *(AM Peak Period)*	B
NW 83rd Street *SpringHills Intersection Significance- 11.8%* *(AM Peak Period)*	E
NW 83rd Street *SpringHills Intersection Significance- 27.3%* *(PM Peak Period)*	F
NW 51st Street *SpringHills Intersection Significance- 14.5%* *(PM Peak Period)*	D
NW 43rd Street *SpringHills Intersection Significance- 7.3%* *(PM Peak Period)*	F
NW 34th Street *SpringHills Intersection Significance- 6.5%* *(PM Peak Period)*	F

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council staff.

TABLE 30

TIER 1 LIST OF NEEDED MODIFICATIONS- STATE ROAD 222 SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	PROPOSED MODIFICATION	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
NW 92nd Court *SpringHills Intersection Significance- 24.5%* *(AM Peak Period)*	Add EBL (Dual)	-
	Add WBL (Dual)	-
	Replace 2 mast arms poles	$125,000
NW 91st Street *SpringHills Intersection Significance- 11.2%* *(AM Peak Period)*	Add NBL (Dual)	-
	Add NBTR	-
	Add SBL (Dual)	-
NW 83rd Street *SpringHills Intersection Significance- 27.3%* *(PM Peak Period)*	Add EBL (Dual)	-
	Add WBL (Dual)	-
NW 51st Street *SpringHills Intersection Significance- 14.5%* *(PM Peak Period)*	Add NBL (Dual)	-
NW 43rd Street *SpringHills Intersection Significance- 7.3%* *(PM Peak Period)*	Extend SBR	-
NW 34th Street *SpringHills Intersection Significance- 6.5%* *(PM Peak Period)*	Add EBL (Dual)	-
	Add NBTR	-
	Add SBL (Dual)	-
	TIER 1 TOTAL	-

* To be provided later by Alachua County Public Works Department staff.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council, City of Gainesville Public Works Department, and Alachua County Public Works Department staff.

TABLE 31

TIER 1 REQUIRED REGIONAL MODIFICATIONS- STATE ROAD 222 SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	REQUIRED MODIFICATIONS	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
APPLICANT/NCFRPC IDENTIFIED MODIFICATIONS		
NW 92nd Court *Significant and Adverse Movement: EBTR*	Add EBL (Dual)	-
	Northbound receiving lane for EBL (Dual)	-
	Add WBL (Dual)	-
	Southbound receiving lane for WBL (Dual)	-
	Replace 2 mast arm poles	$125,000
NW 91st Street *Significant and Adverse Movement: None*	Add NBL (Dual)	-
	Add SBL (Dual)	-
NW 83rd Street *Significant and Adverse Movement: EBTR*	Add EBL (Dual)	-
	Northbound receiving lane for EBL (Dual)	-
	Add WBL (Dual)	-
NW 34th Street *Significant and Adverse Movement: WBTR*	Add EBL (Dual)	-
	Northbound receiving lane for EBL (Dual)	-

* To be provided later by Alachua County Public Works Department staff.

Table 31 is continued on the next page.

TABLE 31 Continued

STATE ROAD 222 INTERSECTION	REQUIRED MODIFICATIONS	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
ADDITIONAL NCFRPC IDENTIFIED MODIFICATIONS		
NW 91st Street *Significant and Adverse Movement: None*	Add NBTR	-
NW 43rd Street *Significant and Adverse Movement: WBT*	Extend SBR	-
NW 34th Street *Significant and Adverse Movement: WBTR*	Add NBTR	-
	Add SBL (Dual)	-
	TIER 1 TOTAL	-

* To be provided later by Alachua County Public Works Department staff.

Source: SpringHills Second Sufficiency Review Response Question 21 Update-Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council, City of Gainesville Public Works Department, and Alachua County Public Works Department staff.

Year 2013 Intersection Conditions With the Project and With Tier 1- Minor Intersection Modifications and Tier 2- Major Intersection Modifications

Table 32 shows what overall intersection traffic conditions will be in the Year 2013 with the SpringHills DRI Substantial Deviation project along State Road 222 (NW 39th Avenue) with the project and with modifications that could be made within the existing right-of-way and the acquisition of additional right-of-way (referred to as Tiers 1 and Tier 2). Tier 2 modifications are defined as follows:

> *Modifications that require right-of-way acquisitions, utility relocations, landscape removals and will impact adjacent businesses/residences. Tier 2 modifications would typically require relocation of the curb and gutter and possibility storm drainage relocations. Also, Tier 2 modifications could be constructed in conjunction with new roadway construction at the intersection. Tier 2 modifications include all traffic signal modifications including replacement of concrete strain and mast arm poles. Any traffic signal reconstruction must meet Metropolitan Transportation Planning Organization design standards and traffic signal control equipment must be upgraded to Traffic Management System standards.*

Table 33 lists the proposed Tier 2 intersection modifications. Under Tiers 1 and 2 conditions, the intersection level of service is operating below the adopted level of service standard in the afternoon at NW 83rd Street (LOS E), NW 43rd Street (LOS F) and NW 34th Street (LOS F).

In addition, failing turning movements can be found in the intersections of NW 92nd Court, NW 83rd Street, NW 51st Street, NW 43rd Street and NW 34th Street. The SpringHills DRI Substantial Deviation is projected to significantly and adversely affect these intersections and many of the failing movements. Table 34 list the modifications that the SpringHills DRI Substantial Deviation is responsible for constructing. The entire analysis of the Tiers 1 and 2 scenario can be found in Appendix B.

Tiers 1 and 2 modifications do not produce a workable transportation plan- defined as all regional intersections movements (where the applicant is significant) operating at the adopted level of service standard. Therefore, the following section discusses what additional transportation modifications can be made to accommodate traffic demand on NW 39th Avenue (defined as Tier 3 modifications).

TABLE 32

INTERSECTION LEVEL OF SERVICE WITH TIER 1 AND 2 MODIFICATIONS SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	OVERALL INTERSECTION LEVEL OF SERVICE
Interstate 75 Southbound Ramps *SpringHills Intersection Significance- 12.1%* *(AM Peak Period)*	B
Interstate 75 Northbound Ramps *SpringHills Intersection Significance- 16.2%* *(AM Peak Period)*	C
NW 92nd Court *SpringHills Intersection Significance- 18.0%* *(AM Peak Period)*	C
NW 91st Street *SpringHills Intersection Significance- 8.4%* *(AM Peak Period)*	B
NW 83rd Street *SpringHills Intersection Significance- 9.2%* *(AM Peak Period)*	C
NW 83rd Street *SpringHills Intersection Significance- 17.9%* *(PM Peak Period)*	E
NW 51st Street *SpringHills Intersection Significance- 12.7%* *(PM Peak Period)*	D
NW 43rd Street *SpringHills Intersection Significance- 7.0%* *(PM Peak Period)*	F
NW 34th Street *SpringHills Intersection Significance- 5.0%* *(PM Peak Period)*	F

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council staff.

TABLE 33

TIER 2 LIST OF NEEDED MODIFICATIONS- STATE ROAD 222 SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	PROPOSED MODIFICATION	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
TOTAL TIER 1 MODIFICATIONS FROM TABLE 9		-
NW 92nd Court *SpringHills Intersection Significance- 18.0%* *(AM Peak Period)*	Add EBR	-
	Add WBR	-
	Replace 2 mast arm poles	$125,000
NW 91st Street *SpringHills Intersection Significance- 8.4%* *(AM Peak Period)*	Add EBR	-
	Add WBR	-
	Replace mast arms	$250,000
NW 83rd Street *SpringHills Intersection Significance- 17.9%* *(PM Peak Period)*	Add EBR (Dual)	-
	Add WBR (Dual)	-
	Add NBL (Dual)	-
	Add NBR	-
	Replace mast arms	$250,000
NW 51st Street *SpringHills Intersection Significance- 12.7%* *(PM Peak Period)*	Add EBR	-
	Replace mast arms	$250,000

* To be provided later by Alachua County Public Works Department staff.

Table 33 is continued on the next page.

TABLE 33 Continued

STATE ROAD 222 INTERSECTION	PROPOSED MODIFICATION	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
NW 43rd Street *SpringHills Intersection Significance- 7.0%* *(PM Peak Period)*	Add NBL (Dual)	-
	Add SBL (Dual)	-
	Replace mast arms	$250,000
NW 34th Street *SpringHills Intersection Significance- 5.0%* *(PM Peak Period)*	Add EBR	-
	Add WBR	-
	Replace mast arms	$250,000
Installation of Traffic Management System (TMS) signal controllers, cabinets, and communication equipment (fiber optic cable).		$650,000
	TIER 1 AND 2 TOTAL	-

* To be provided later by Alachua County Public Works Department staff.

Source: SpringHills Second Sufficiency Review Response Question 21 Update-Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council, City of Gainesville Public Works Department, and Alachua County Public Works Department staff.

TABLE 34

TIER 2 REQUIRED REGIONAL MODIFICATIONS- STATE ROAD 222 SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	REQUIRED MODIFICATIONS	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
APPLICANT/NCFRPC IDENTIFIED MODIFICATIONS		
NW 43rd Street *Significant and Adverse Movement: WBT*	Add NBL (Dual)	-
	Reconstruct intersection with mast arms	$250,000
NW 34th Street *Significant and Adverse Movement: WBL*	Add EBR	-
	Add WBR	-
	Reconstruct intersection with mast arms	$250,000
ADDITIONAL NCFRPC IDENTIFIED MODIFICATIONS		
NW 43rd Street *Significant and Adverse Movement: WBT*	Add SBL (Dual)	-
Installation of Traffic Management System (TMS) signal controllers, cabinets, and communication equipment (fiber optic cable).		$650,000
TOTAL TIER 1 MODIFICATIONS FROM TABLE 31		-
TIER 2 TOTAL		-

* To be provided later by Alachua County Public Works Department staff.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council, City of Gainesville Public Works Department, and Alachua County Public Works Department staff.

Year 2013 Intersection Conditions With the Project and With Tier 1- Minor Intersection Modifications, Tier 2- Major Intersection Modifications and Tier 3- Six-Lane NW 39th Avenue

Tier 3 modifications include widening State Road 222 (NW 39th Avenue) to six lanes from Interstate 75 northbound ramps to east of NW 34th Street along with the previously identified Tiers 1 and 2 modifications. Table 35 shows what overall intersection traffic conditions will be in the Year 2013 with the SpringHills DRI Substantial Deviation project along NW 39th Avenue with Tier 1, Tier 2 and Tier 3 modifications.

Table 36 lists the proposed Tier 3 intersection modifications. Under these conditions, the intersection level of service is operating below the adopted level of service standard in the afternoon at NW 43rd Street (LOS F).

In addition, failing turning movements can be found in the intersections of NW 83rd Street, NW 51st Street, NW 43rd Street and NW 34th Street. The SpringHills DRI Substantial Deviation is projected to significantly and adversely affect these intersections and many of the failing movements. The entire analysis of the Tiers 1, 2, and 3 scenario can be found in Appendix B.

Tiers 1, 2 and 3 modifications do not produce a workable transportation plan- defined as all regional intersections movements (where the applicant is significant) operating at the adopted level of service standard. Therefore, the following section discusses what additional transportation modifications can be made to accommodate traffic demand on NW 39th Avenue (defined as Tier 4 modifications).

TABLE 35

INTERSECTION LEVEL OF SERVICE WITH TIER 1, 2 AND 3 MODIFICATIONS SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	OVERALL INTERSECTION LEVEL OF SERVICE
Interstate 75 Southbound Ramps *SpringHills Intersection Significance- 12.4%* *(AM Peak Period)*	B
Interstate 75 Northbound Ramps *SpringHills Intersection Significance- 16.5%* *(AM Peak Period)*	C
NW 92nd Court *SpringHills Intersection Significance- 20.5%* *(AM Peak Period)*	C
NW 91st Street *SpringHills Intersection Significance- 9.7%* *(AM Peak Period)*	A
NW 83rd Street *SpringHills Intersection Significance- 7.7%* *(AM Peak Period)*	B
NW 83rd Street *SpringHills Intersection Significance- 15.5%* *(PM Peak Period)*	E
NW 51st Street *SpringHills Intersection Significance- 11.6%* *(PM Peak Period)*	C
NW 43rd Street *SpringHills Intersection Significance- 6.5%* *(PM Peak Period)*	F
NW 34th Street *SpringHills Intersection Significance- 4.6%* *(PM Peak Period)*	D

Source: SpringHills Second Sufficiency Review Response Question 21 Update-Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council staff.

TABLE 36

TIER 3 LIST OF NEEDED MODIFICATIONS- STATE ROAD 222 SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

FACILITY	PROPOSED MODIFICATION	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
ROADWAY MODIFICATIONS		
NW 39th Avenue	Widen to six lanes from I-75 NB Ramps to east of NW 34th Street	-
STATE ROAD 222 INTERSECTION MODIFICATIONS		
NW 92nd Court *SpringHills Intersection Significance- 20.5% (AM Peak Period)*	Tier 1 Modifications	-
NW 91st Street *SpringHills Intersection Significance- 9.7% (AM Peak Period)*	Tier 1 Modifications	-
NW 83rd Street *SpringHills Intersection Significance- 15.5% (PM Peak Period)*	Tier 1 and 2 Modifications	-
NW 51st Street *SpringHills Intersection Significance- 11.6% (PM Peak Period)*	Tier 1 and 2 Modifications	-
NW 43rd Street *SpringHills Intersection Significance- 6.5% (PM Peak Period)*	Tier 1 and 2 Modifications	-
NW 34th Street *SpringHills Intersection Significance- 4.6% (PM Peak Period)*	Tier 1 and 2 Modifications	-
Installation of TMS equipment identified in Tier 2		$650,000
TIER 1, 2, AND 3 TOTAL		-

* To be provided later by Alachua County Public Works Department staff.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council, City of Gainesville Public Works Department, and Alachua County Public Works Department staff.

Year 2013 Intersection Conditions With the Project and With Tier 1- Minor Intersection Modifications, Tier 2- Major Intersection Modifications, Tier 3- Six-Lane NW 39th Avenue and Tier 4- Extensive Intersection Modifications

Tier 4 modifications include extensive reconstruction of the intersections of NW 39th Avenue at NW 83rd Street and NW 43rd Street to increase the capacity of the intersections to accommodate high traffic volumes. The modifications that are included in Tier 4 is the construction of four thru lanes (northbound- two lanes/southbound- two lanes) with shared right turns ending just north of the intersection, the construction of eight thru lanes (eastbound- four lanes/westbound- four lanes) on NW 39th Avenue at NW 43rd Street ending just east and west of the intersection, and the construction of six thru lanes (northbound- three lanes/southbound- three lanes) on NW 43rd Street at NW 39th Avenue. Table 37 shows what overall intersection traffic conditions will be in the Year 2013 with the SpringHills DRI Substantial Deviation project along NW 39th Avenue with Tier 1, Tier 2, Tier 3 and Tier 4 modifications.

Table 38 lists the proposed Tier 4 intersection modifications. Under Tiers 1, 2, 3 and 4 conditions, every intersection along this corridor is operating at or above the adopted level of service standard in the peak periods. However, failing turn movements can be found in the intersection of NW 83rd Street (northbound left, northbound thru/right, southbound left, and southbound thru/right), the intersection of NW 51st Street (northbound left, northbound thru/right and southbound left), the intersection of NW 43rd Street (eastbound left, westbound right, northbound left, northbound thru, northbound right, southbound left, and southbound right), and the intersection of NW 34th Street (eastbound left, westbound left, and southbound thru). The SpringHills DRI Substantial Deviation is projected to significantly and adversely affect some of the failing movements. The entire analysis of the Tiers 1, 2, 3 and 4 scenario can be found in Appendix B.

Tiers 1, 2, 3 and 4 modifications produce a workable transportation plan- defined as all regional intersections movements (where the applicant is significant) operating at the adopted level of service standard.

CONCLUSIONS- REGIONAL INTERSECTIONS

This transportation analysis tried to identify needed roadway and intersection modifications that would result in a workable transportation plan for the SpringHills DRI Substantial Deviation. This included the four levels of transportation modifications discussed in the preceding sections- Tiers 1, 2, 3, and 4 modifications.

Tiers 1, 2, and 3 modifications do not produce a workable transportation plan- defined as all regional intersections (where the applicant is significant) operating at the adopted level of service standard. The Tier 4 modifications do produce a workable transportation plan. However, both Tier 3 and Tier 4 are policy constrained by the City of Gainesville with respect to the widening of NW 39th Avenue to six lanes and adding additional through lanes at the NW 39th Avenue/NW 43rd Street intersection.

TABLE 37

INTERSECTION LEVEL OF SERVICE WITH TIER 1, 2, 3 AND 4 MODIFICATIONS SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

STATE ROAD 222 INTERSECTION	OVERALL INTERSECTION LEVEL OF SERVICE
Interstate 75 Southbound Ramps *SpringHills Intersection Significance- 12.4%* *(AM Peak Period)*	B
Interstate 75 Northbound Ramps *SpringHills Intersection Significance- 16.5%* *(AM Peak Period)*	C
NW 92nd Court *SpringHills Intersection Significance- 20.1%* *(AM Peak Period)*	C
NW 91st Street *SpringHills Intersection Significance- 9.7%* *(AM Peak Period)*	A
NW 83rd Street *SpringHills Intersection Significance- 7.7%* *(AM Peak Period)*	C
NW 83rd Street *SpringHills Intersection Significance- 14.6%* *(PM Peak Period)*	D
NW 51st Street *SpringHills Intersection Significance- 11.9%* *(PM Peak Period)*	D
NW 43rd Street *SpringHills Intersection Significance- 5.7%* *(PM Peak Period)*	D
NW 34th Street *SpringHills Intersection Significance- 4.6%* *(PM Peak Period)*	D

Source: SpringHills Second Sufficiency Review Response Question 21 Update-Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council staff.

TABLE 38

TIER 4 LIST OF NEEDED MODIFICATIONS- STATE ROAD 222
SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

FACILITY	PROPOSED MODIFICATION	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
ROADWAY MODIFICATIONS		
State Road 222 (NW 39th Avenue) Modifications identified in Table 36		-
STATE ROAD 222 INTERSECTION MODIFICATIONS		
NW 92nd Court *SpringHills Intersection Significance- 20.5% (AM Peak Period)*	Tier 1 Modifications	-
NW 91st Street *SprinHills Intersection Significance- 9.7% (AM Peak Period)*	Tier 1 Modifications	-
NW 83rd Street *SpringHills Intersection Significance- 15.1% (PM Peak Period)*	Tier 1 and 2 Modifications	-
	Construct 4 thru lanes (NB- 2/SB- 2) with shared right turns ending just north of the intersection.	-
NW 51st Street *SpringHills Intersection Significance- 11.6% (PM Peak Period)*	Tier 1 and 2 Modifications	-
NW 43rd Street *SpringHills Intersection Significance- 6.5% (PM Peak Period)*	Tier 1 and 2 Modifications	-
	Construct 8 thru lanes (EB- 4/WB- 4) ending just east and west of the intersection.	-
	Construct 6 thru lanes (NB- 3/SB- 3) ending just north and south of the intersection.	-
NW 34th Street *SpringHills Intersection Significance- 4.6% (PM Peak Period)*	Tier 1 and 2 Modifications	-
Installation of TMS equipment identified in Tier 2		$650,000
TIER 1, 2, 3 AND 4 TOTAL		-

* To be provided later by Alachua County Public Works Department staff.

CONCLUSIONS- ASSURANCES

It is important that assurances are provided to guarantee that needed regional transportation facilities are constructed. As noted earlier, the applicant has stated that they have committed the funding for the proposed NW 98th Street Extension (NW 39th Avenue to NW 83rd Street Extension) and the NW 83rd Street Extension (NW 39th Avenue to Millhopper Road). This commitment also includes the construction of a bridge over Interstate 75 that could accommodate four (4) lanes of traffic.

The Federal Highway Administration (FHWA) must approve the construction of the East/West Extension over Interstate 75. According to a Florida Department of Transportation (FDOT) letter dated March 3, 2004:

> *"We are aware that the developer made sincere efforts to commit construction of the overpass (over I-75) up front. We commend the applicant for this effort. However, the process of approving and constructing the overpass will take time and coordination effort with the FDOT and FHWA are certainly necessary. We therefore, emphasize the need to provide time certain conditions in the DO to address the commitments. Specifying the time for constructing the extension of NW 98th and NW 83rd is crucial to mitigate the impacts."*

Therefore, it is recommended that proposed transportation conditions 1.b and 1.e, as presented in the recommendations section of this report be included in the SpringHills DRI Substantial Deviation local government development order.

Proposed East/West Connector, Extension of NW 83rd Street and the Extension of NW 91st Street

The Proposed East/West Connector, the Extension of NW 83rd Street and the Extension of NW 91st Street have been included in the analysis for all phases beginning with Phase II. Therefore, it is recommended that proposed transportation conditions 1.b, 1.c, 1.d, and 1.e as presented in the Recommendations section of this report be included in the SpringHills DRI Substantial Deviation local government development order.

CONCLUSIONS- COST ESTIMATES AND PROPORTIONATE SHARE

According to page 19 of a document entitled *SpringHills Development of Regional Impact Comprehensive Plan Amendment Application and Supporting Data/Analysis* dated December 2004, the applicant has proposed that Alachua County amend its Comprehensive Plan to include a new policy that would allow for the use of "proportionate share. Proposed Policy 1.1.8.1.8 states:

> *"Establish a proportionate fair share system specifically for the SpringHills DRI enabling*

payment of the proportionate share cost to mitigate the adversely impacted transportation system. This proportionate fair share system shall apply only to property located within the SpringHills DRI."

If this policy amendment is approved by Alachua County, the cost estimates that are used to calculate the applicant's proportionate share must be as accurate as possible. According to the Florida Department of Transportation, the applicant's estimated costs of modifications are underestimated.

"the Department finds the assessed costs of the intersection improvements underestimated." Since the applicant is requesting that Alachua County approve the use of proportionate share, it is important that the costs for all needed modifications be as accurate as possible. Therefore, we recommend that Alachua County require the applicant to work with the Alachua County Public Works Department and the Florida Department of Transportation to verify all project costs before the applicant's final proportionate share is approved by Alachua County."

Therefore, it is recommended that the transportation facilities cost estimates contained in the applicant-proposed amendments to the SpringHills DRI Substantial Deviation local government development order be updated as presented in the subsection of this report entitled, Other Development Order Recommendations.

IMPACTS TO LOCAL ROADWAY SEGMENTS

Illustration X and Table 39 identify needed roadway segment modifications on the Local Road Network through the Year 2013. This includes the widening of Fort Clarke Boulevard to four lanes from NW 23rd Avenue south to Newberry Road and the widening of NW 83rd Street to four lanes from NW 39th Avenue south to NW 23rd Avenue. Also included are three needed receiving lanes for dual left turns that are identified as needed in Table 39.

IMPACTS TO INTERSECTIONS ON LOCAL FACILITIES

Local intersections are analyzed based upon the peak hour directional traffic. Appendix D contains detailed intersection information for or two significantly impacted local roadways- Fort Clarke Boulevard and NW 83rd Street.

Illustration XI and Table 40 identifies the intersections on local facilities where the proposed SpringHills DRI Substantial Deviation traffic is significant (where the percent of total is equal to or greater than five percent). Table 40 also identifies the significantly and adversely affected turning movements, as well as the proposed modifications that are needed to allow these facilities to operate at the adopted level of service standard.

Table 41 lists the proposed local intersection modifications that are needed.

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ILLUSTRATION X

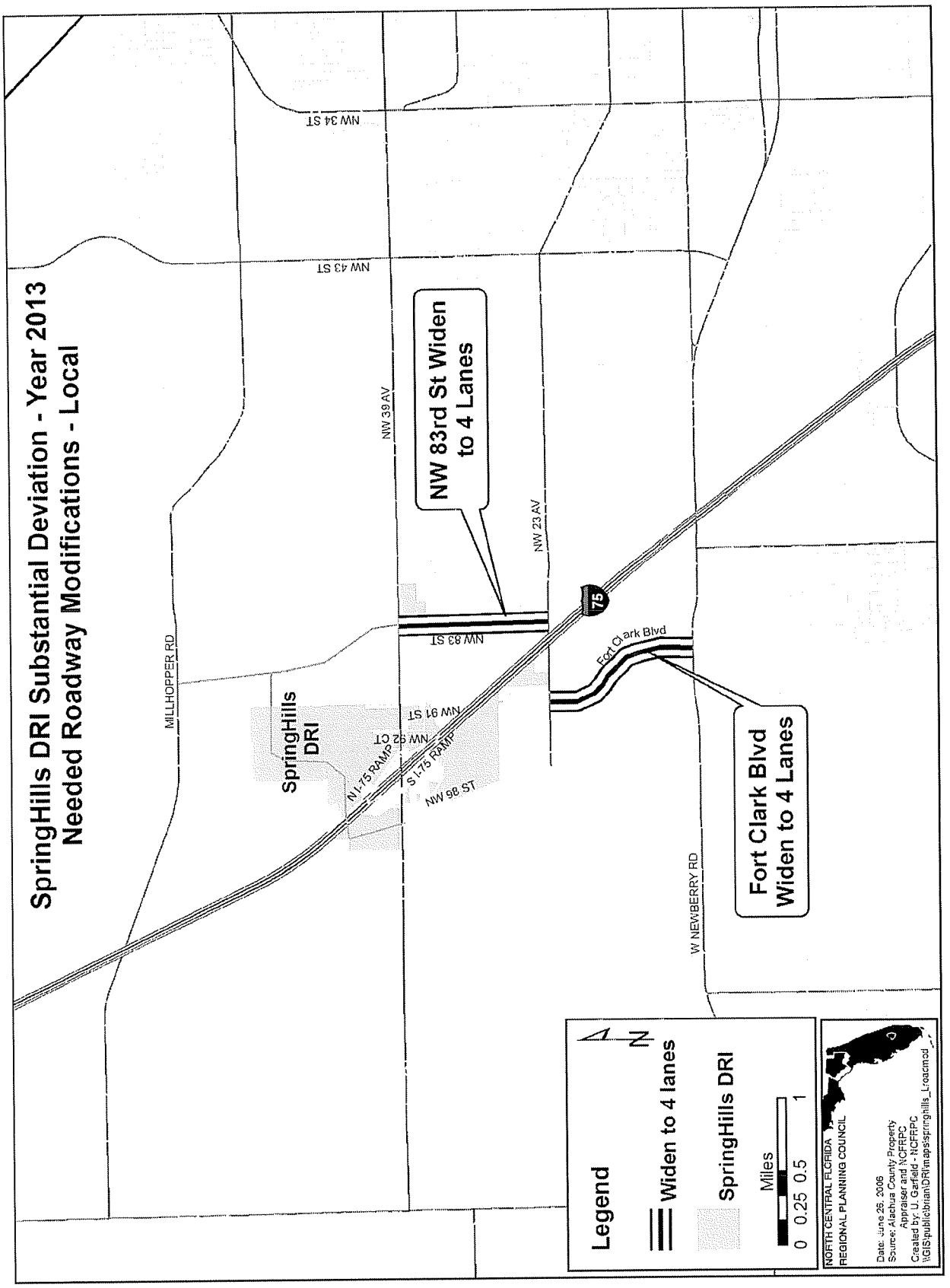

TABLE 39

NEEDED ROADWAY MODIFICATIONS- LOCAL
SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

YEAR 2013 MODIFICATION	APPLICANT'S ESTIMATED TOTAL COST [IN 2002 DOLLARS]	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]
LOCAL ROADWAYS- APPLICANT-IDENTIFIED		
NW 83rd Street- NW 23rd Avenue to NW 39th Avenue- widen from two to four lanes	$3,375,480	$8,965,121*
Fort Clark Boulevard- State Road 26 (Newberry Road) to NW 23rd Avenue- widen from two to four lanes	$3,713,028	$9,354,642*

* Does not include right-of-way (ROW) for drainage or minor ROW acquisition at intersection corners.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations For the SpringHills DRI Substantial Deviation Application for Development Approval February 2004 (Volume 2) submitted February 9, 2004, page 21.46.

Alachua County Public Works Department Staff.

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ILLUSTRATION XI

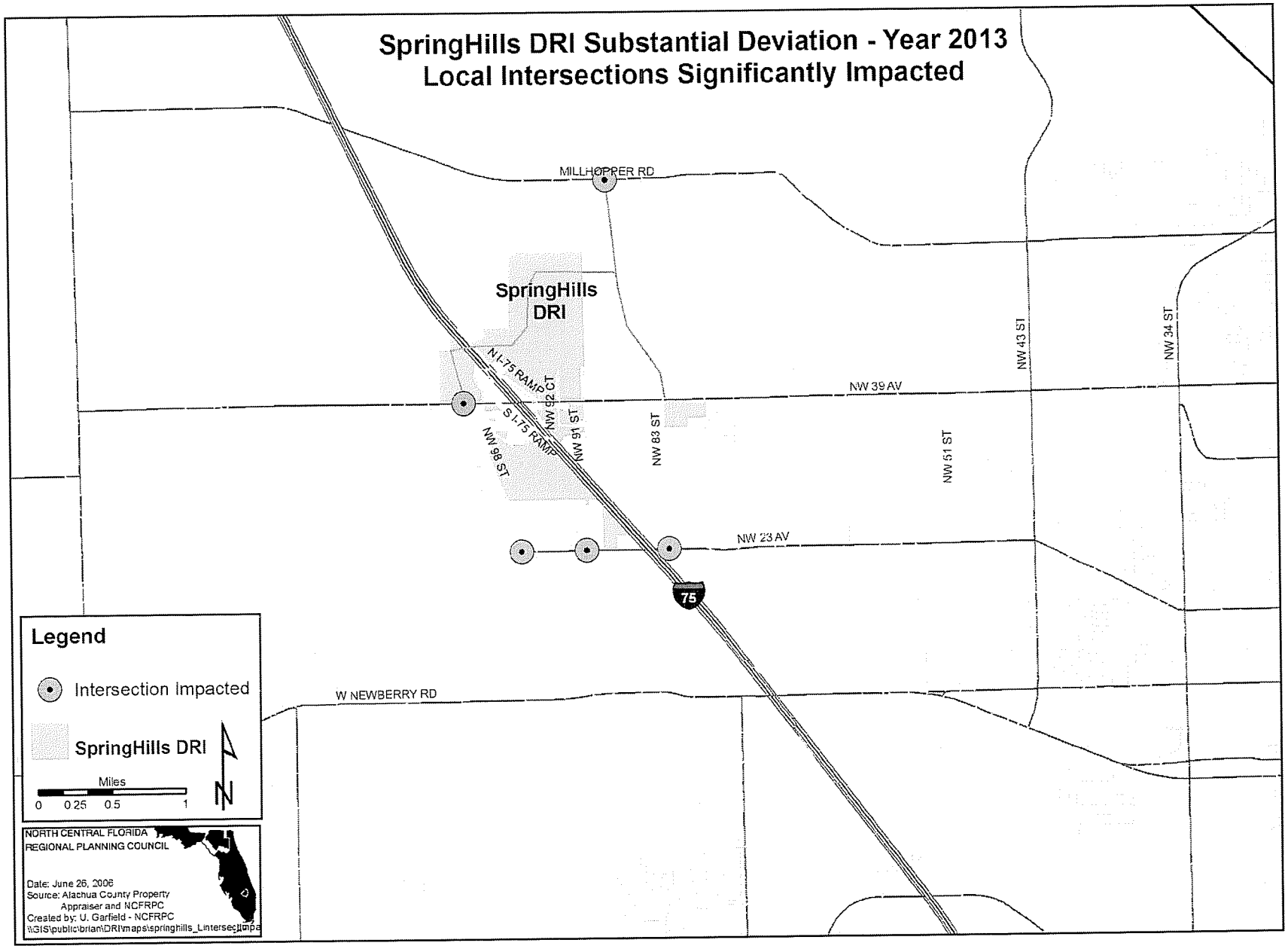

TABLE 40

INTERSECTIONS ON SIGNIFICANTLY IMPACTED ROADWAYS- LOCAL SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

INTERSECTION	TOTAL INTERSECTION CAPACITY	TOTAL DRI INTERSECTION VOLUME	PERCENT OF TOTAL	SIGNIFICANTLY AND ADVERSELY AFFECTED TURN MOVEMENTS	REQUIRED MODIFICATIONS
NW 23rd Ave at NW 98th St	3,558	721	20.3%	WBTR and SBL.	Add WBL (Dual).
NW 23rd Ave at Ft. Clarke Blvd	5,056	329	6.5%	None.	No modifications required.
NW 23rd Ave at NW 83rd St	4,028	248	6.2%	EBL, SBL, and SBR.	Add EBL (Dual), SBL (Dual), and SBR (Dual).
NW 23rd Ave at NW 55th St	4,682	107	2.3%	None.	No modifications required.
NW 39th Ave at NW 98th St	5,652	898	17.1%	EBL.	Add NBR.
Millhopper Road at NW 83rd St Ext	2,951	226	7.7%	None.	No modifications required.

Source: SpringHills Second Sufficiency Review Response Question 21 Update- Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9 and NCFRPC Staff.

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TABLE 41

REQUIRED INTERSECTION MODIFICATIONS- LOCAL ROADS SPRINGHILLS DRI SUBSTANTIAL DEVIATION- YEAR 2013

INTERSECTION	REQUIRED MODIFICATIONS	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
APPLICANT/NCFRPC IDENTIFIED MODIFICATIONS		
State Road 222 at NW 92nd Court *Significant and Adverse Movements: SBL and SBR.*	Add EBR	-
	Add WBR	-
	Reconstruct intersection with mast arms	$125,000
State Road 222 at NW 91st Street *Significant and Adverse Movement: SBL*	Add EBR	-
	Add WBR	-
	Reconstruct intersection with mast arms	$250,000
State Road 222 at NW 83rd Street *Significant and Adverse Movements: SBL and SBTR*	Add EBR	-
	Add WBR	-
	Add NBL (Dual)	-
	Reconstruct intersection with mast arms	$250,000
State Road 222 at NW 51st Street *Significant and Adverse Movements: NBL*	Add EBR	-
	Reconstruct intersection with mast arms	$250,000

* To be provided later by Alachua County Public Works Department staff.

Table 41 is continued on the next page.

TABLE 41 Continued

INTERSECTION	REQUIRED MODIFICATIONS	ALACHUA COUNTY ESTIMATED COST [IN 2006 DOLLARS]*
ADDITIONAL NCFRPC IDENTIFIED MODIFICATIONS		
State Road 26 at NW 69th Terrace *Significant and Adverse Movement: SBR*	Add SBR (Dual)	-
State Road 26 at Oaks Mall *Significant and Adverse Movements: NBLT*	Insufficient right-of-way to address deficiencies.	Costs cannot be determined.
NW 23rd Avenue at NW 98th Street *Significant and Adverse Movement: WBL*	Add WBL (Dual)	-
	Southbound receiving lane for WBL (Dual)	-
State Road 222 at NW 83rd Street *Significant and Adverse Movements: SBL and SBTR*	Add NBR	-
	Add SBL (Dual)	-
	Add SBR	-
State Road 222 at NW 51st Street *Significant and Adverse Movements: NBL*	Add NBL (Dual)	-
	TOTAL	-

* To be provided later by Alachua County Public Works Department staff.

Source: SpringHills Second Sufficiency Review Response Question 21 Update-Transportation Considerations for SpringHills DRI Substantial Deviation Application for Development Approval February (2004) submitted February 9, 2004, Appendix 21-9.

North Central Florida Regional Planning Council, City of Gainesville Public Works Department, and Alachua County Public Works Department staff.

IMPACT ON HOUSING OF THE REGION

APPLICABLE REGIONAL GOALS/POLICIES

REGIONAL GOAL 1.1. Reduce the percentage of the region's very low-, low-, and moderate-income households spending 30.0 percent or more of their annual household income on housing.

Policy 1.1.1. Encourage the development of policies within local government comprehensive plans which provide incentives or otherwise provide for the construction of affordable housing units in a manner which results in a dispersal of affordable housing units throughout the urban areas of the local government's jurisdiction.

Policy 1.1.8. Encourage the use of the East Central Florida Housing Methodology in lieu of the Adequate Housing Standard Rule 9J-2.048, FAC, for the determination of adequate (affordable) housing demand and supply in the review of developments of regional impact.

APPLICANT COMMITMENTS

None.

SUMMARY OF IMPACTS

As per Rule 9J-2.048, Florida Administrative Code, and The East Central Florida Regional Planning Council Housing Methodology, published June 1999, the direct impacts of Phase II of the SpringHills DRI Substantial Deviation will create a significant affordable housing impact of 206 dwelling units affordable to households of various salary income ranges identified as very low-income households. This significant impact can be mitigated in accordance with Rule 0J-2.048, Florida Administrative Code, and The East Central Florida Regional Planning Council Housing Methodology, published June 1999, by deleting the Applicant's proposed affordable housing condition (Condition H) from the amended local government development order and replacing it with the affordable housing condition contained in the Recommendations section of this report.

IMPACT DETERMINATION

The Applicant's proposed amendments to the SpringHills DRI local government development order deletes Condition 7 addressing affordable housing, and replaces it with Condition H, which reads as follows:

H. Condition: Housing

(1) As part of the ADA process, the Applicant has determined, using the ECFRPC's affordable housing demand, supply, and need methodology (Fishkind 2003) that the affordable housing demand is met by offsite for-sale and rental units. Therefore, no onsite mitigation will be necessary.

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APPENDIX A

SPRINGHILLS DRI SUBSTANTIAL DEVIATION SIGNIFICANCE TESTING STATE ROAD 26 (NEWBERRY ROAD)

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SpringHills Significance Testing - State Road 26 (Newberry Road) PM PEAK

			No Modifications				Modifications				
			Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Modifications Added
SW 122nd Street	**EB**						No Modifications needed. SpringHills does not represent a significant percentage of the total intersection capacity, nor are any movements operating below the adopted LOS.				
		Left	87	**B**	0	0.00%					
		Thru	2,264	**B**	111	4.90%					
		Right			0						
	WB										
		Left	418	**D**	19	4.55%					
		Thru	2,983	**A**	112	3.75%					
		Right			0						
	NB										
		Left	56	**D**	0	0.00%					
		Thru	56	**D**	19	33.93%					
		Right			0						
	SB										
		Left	56	**D**	0	0.00%					
		Thru			0						
		Right			0						
		TOTAL	5,920	**B**	261	4.41%					
NW 98th Street	**EB**										Add EBL (Dual), WBR, SBL.
		Left	450	**F**	143	**31.78%**	689	**D**	143	20.75%	
		Thru	2,300	**B**	0	0.00%	2,004	**B**	0	0.00%	
		Right			0				0		
	WB										
		Left	290	**C**	0	0.00%	135	**E**	0	0.00%	
		Thru	1,624	**F**	0	1.11%	1,572	**D**	0	0.00%	
		Right			18		703	**C**	18	2.56%	
	NB										
		Left	106	**E**	0	0.00%	133	**D**	0	0.00%	
		Thru			0				0		
		Right			0				0		
	SB										
		Left	238	**E**	10	**8.40%**	330	**D**	10	3.03%	
		Thru			10		459	**C**	10	2.18%	
		Right	211	**F**	145	**68.72%**	390	**D**	145	37.18%	
		TOTAL	5,219	**F**	326	6.25%	6,415	**D**	326	5.08%	

SpringHills Significance Testing - State Road 26 (Newberry Road) PM PEAK

			No Modifications				Modifications				
			Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Modifications Added
I-75 SB Ramps	**EB**				Not Analyzed by SpringHills DRI		The intersection was not analyzed by SpringHills DRI. Sufficient Right-of-Way may not exist to address deficiencies to East-West movements.				
		Left	88	**E**							
		Thru	2,761	**E**							
		Right									
	WB										
		Left	413	**E**							
		Thru	3,755	**A**							
		Right									
	NB										
		Left	185	**F**							
		Thru	185	**F**							
		Right	253	**E**							
	SB										
		Left									
		Thru	140	**E**							
		Right									
		TOTAL	7,780	**F**							
I-75 NB Off Ramp	**EB**										Add NBL (Dual) and NBR (Dual)
		Thru	2,848	**A**	18	0.63%	3,543	**A**	18	0.51%	
	WB										
		Thru	2,848	**F**	501	**17.59%**	3,543	**A**	501	14.14%	
	NB										
		Left	684	**F**	3	0.44%	864	**E**	3	0.35%	
		Right	612	**E**	0	0.00%	701	**E**	0	0.00%	
		TOTAL	6,992	**E**	522	7.47%	8,651	**B**	522	6.03%	
I-75 NB On Ramp	**EB**										Insufficient ROW to address deficiencies to East/West Movements. No modifications proposed
		Left	378	**F**	91	**24.07%**	376	**F**	91	**24.20%**	
		Thru	5,085	**A**	411	8.08%	5,085	**A**	411	8.08%	
	WB										
		Thru	3,794	**A**	18	0.47%	3,803	**A**	18	0.47%	
		Right			0				0		
		TOTAL	9,257	**D**	520	5.62%	9,264	**A**	520	5.61%	

SpringHills Significance Testing - State Road 26 (Newberry Road) PM PEAK

			No Modifications				Modifications				
			Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Modifications Added
NW 69th Terrace	**EB**										Add WBR and SBR (Dual)
		Left	203	**F**	35	**17.24%**	185	**F**	35	**18.92%**	
		Thru	3,137	**B**	407	12.97%	3,101	**B**	407	13.12%	
		Right			0				0		
	WB										
		Left	191	**C**	0	0.00%	185	**D**	0	0.00%	
		Thru	3,107	**E**	403	**12.97%**	3,117	**D**	403	12.93%	
		Right			0		970	**A**	0	0.00%	
	NB										
		Left	139	**E**	0	0.00%	156	**E**	0	0.00%	
		Thru	348	**D**	0	0.00%			0		
		Right			0		368	**D**	0	0.00%	
	SB										
		Left	250	**F**	0	0.00%	265	**F**	0	0.00%	
		Thru			0				0		
		Right	348	**F**	35	**10.06%**	647	**D**	35	**5.41%**	
		TOTAL	7,723	**D**	880	11.39%	8,994	**D**	880	9.78%	
Oaks Mall	**EB**										Insufficient ROW to address deficiencies.
		Left	142	**F**	0	0.00%	148	**F**	0	0.00%	
		Thru	2,925	**B**	344	11.76%	2,959	**B**	344	11.63%	
		Right			0				0		
	WB										
		Left	94	**F**	0	0.00%	91	**F**	0	0.00%	
		Thru	2,839	**D**	183	6.45%	2,845	**C**	183	6.43%	
		Right			0				0		
	NB										
		Left	349	**D**	79	22.64%	345	**E**	79	**22.90%**	
		Left/Thru	358	**F**	79	**22.07%**	353	**F**	79	**22.38%**	
		Right	443	**D**	0	0.00%	439	**D**	0	0.00%	
	SB										
		Left	153	**E**	0	0.00%	149	**E**	0	0.00%	
		Thru			0				0		
		Right	232	**E**	0	0.00%	235	**E**	0	0.00%	
		TOTAL	7,535	**D**	685	9.09%	7,564	**D**	685	9.06%	

SpringHills Significance Testing - State Road 26 (Newberry Road) PM PEAK

			No Modifications				Modifications				
			Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Modifications Added
NW 66th Street (North Central Florida Regional Medical Center Entrance)	**EB**										Insufficient ROW to address deficiencies.
		Left	191	**E**	64	**33.51%**	187	**E**	64	**34.22%**	
		Thru	3,085	**A**	343	11.12%	3,084	**A**	343	11.12%	
		Right	960	**A**	0	0.00%	960	**A**	0	0.00%	
	WB										
		Left	215	**E**	0	0.00%	222	**E**	0	0.00%	
		Thru	3,138	**C**	340	10.83%	3,167	**C**	340	10.74%	
		Right			0				0		
	NB										
		Left	260	**E**	0	0.00%	258	**E**	0	0.00%	
		Thru	358	**D**	0	0.00%	356	**D**	0	0.00%	
		Right	304	**D**	0	0.00%	302	**D**	0	0.00%	
	SB										
		Left	524	**E**	0	0.00%	521	**E**	0	0.00%	
		Thru	358	**D**	0	0.00%	356	**D**	0	0.00%	
		Right			0				0		
		TOTAL	9,393	**C**	747	7.95%	9,413	**C**	747	7.94%	

APPENDIX B

SPRINGHILLS DRI SUBSTANTIAL DEVIATION SIGNIFICANCE TESTING STATE ROAD 222 (NW 39TH AVENUE)

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SpringHills Significance Testing - State Road 222 (NW 39th Avenue) AM PEAK

			Without	No Modifications				Tier I Modifications				Tier II Modifications				Tier III				Tier IV			
			SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills
			LOS*	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance
I-75 SB Ramps	EB																						
		Thru	A	2,043	A	189	9.25%	2,053	A	189	9.21%	2,022	A	189	9.35%	1,873	B	189	10.09%	1,873	B	189	10.09%
		Right	A	1,583	A	103	6.51%	1,583	A	103	6.51%	1,583	A	103	6.51%	1,583	A	103	6.51%	1,583	A	103	6.51%
	WB																						
		Thru	A	1,913	B	225	11.76%	1,922	B	225	11.71%	1,893	B	225	11.89%	1,873	B	225	12.01%	1,873	B	225	12.01%
	SB																						
		Left	D	620	D	189	30.48%	620	D	189	30.48%	624	D	189	30.29%	644	C	189	29.35%	644	C	189	29.35%
		Right	C	554	C	103	18.59%	555	C	103	18.56%	558	C	103	18.46%	576	B	103	17.88%	576	B	103	17.88%
		TOTAL	A	6,713	B	809	12.05%	6,733	B	809	12.02%	6,680	B	809	12.11%	6,549	B	809	12.35%	6,549	B	809	12.35%
I-75 NB Ramps	EB																						
		Left	A	135	C	28	20.74%	130	C	28	21.54%	142	C	28	19.72%	198	C	28	14.14%	198	C	28	14.14%
		Thru	B	1,737	C	258	14.85%	1,723	D	258	14.97%	1,719	C	258	15.01%	1,840	B	258	14.02%	1,840	B	258	14.02%
	WB																						
		Thru	B	1,474	B	366	24.83%	1,471	C	366	24.88%	1,443	C	366	25.36%	1,453	B	366	25.19%	1,453	B	366	25.19%
		Right	A	659	A	126	19.12%	658	A	126	19.15%	645	A	126	19.53%	650	A	126	19.38%	650	A	126	19.38%
	NB																						
		Left	B	1,498	B	68	4.54%	1,522	B	68	4.47%	1,504	B	68	4.52%	1,282	B	68	5.30%	1,282	B	68	5.30%
		Right	C	1,424	D	269	18.89%	1,435	D	269	18.75%	1,439	D	269	18.69%	1,345	D	269	20.00%	1,345	D	269	20.00%
		TOTAL	B	6,927	C	1,115	16.10%	6,939	C	1,115	16.07%	6,892	C	1,115	16.18%	6,768	C	1,115	16.47%	6,768	C	1,115	16.47%
NW 92nd Ct	EB																						
		Left	A	571	B	248	43.43%	567	D	248	43.74%	562	D	248	44.13%	577	C	248	42.98%	577	C	248	42.98%
		Thru	B	2,304	E	155	**12.11%**	2,355	D	155	11.85%	2,238	D	155	6.93%	2,740	C	155	10.18%	2,740	C	155	10.18%
		Right				124				124		1,001	A	124	12.39%			124				124	
	WB																						
		Left	C	161	D	27	16.77%	173	D	27	15.61%	190	D	27	14.21%	211	B	27	12.80%	211	C	27	12.80%
		Thru	A	1,718	B	87	8.67%	1,939	A	87	7.68%	1,854	B	87	4.69%	2,188	A	87	6.81%	2,188	B	87	6.81%
		Right				62				62		829	A	62	7.48%			62				62	
	NB																						
		Left	D	148	F	129	**87.16%**	123	F	129	**104.88%**	245	D	129	52.65%	241	C	129	53.53%	241	C	129	53.53%
		Thru	-	120	E	87	**72.50%**	118	F	87	**73.73%**	177	D	87	49.15%	134	D	87	64.93%	134	D	87	64.93%
		Right	D	102	D	62	60.78%	100	D	62	62.00%	151	D	62	41.06%	114	C	62	54.39%	114	C	62	54.39%
	SB																						
		Left	D	138	F	129	**93.48%**	129	F	129	**100.00%**	222	D	129	58.11%	290	C	129	44.48%	290	C	129	44.48%
		Thru	-	110	D	18	16.36%	125	D	18	14.40%	179	D	18	10.06%	186	C	18	9.68%	186	C	18	9.68%
		Right	D	94	E	277	**294.68%**	106	F	277	**261.32%**	152	E	277	**182.24%**	158	C	277	175.32%	158	C	277	175.32%
		TOTAL	B	5,466	D	1,405	25.70%	5,735	E	1,405	24.50%	7,800	C	1,405	18.01%	6,839	C	1,405	20.54%	6,839	C	1,405	20.54%
NW 91st St	EB																						
		Left	A	342	A	76	22.22%	366	A	76	20.77%	417	A	76	18.23%	301	A	76	25.25%	301	A	76	25.25%
		Thru	B	2,090	D	131	7.75%	2,311	A	131	7.01%	2,167	A	131	6.05%	2,584	A	131	6.27%	2,584	A	131	6.27%
		Right				31				31		969	A	31	3.20%			31				31	
	WB																						
		Left	D	164	E	16	**9.76%**	157	E	16	**10.19%**	213	B	16	7.51%	217	C	16	7.37%	217	C	16	7.37%
		Thru	B	2,139	B	131	10.00%	2,365	A	131	9.05%	2,248	B	131	5.83%	2,647	A	131	8.08%	2,647	A	131	8.08%
		Right				83				83		1,006	A	83	8.25%			83				83	
	NB																						
		Left	D	93	E	19	**20.43%**	236	D	19	8.05%	284	D	19	6.69%	279	C	19	6.81%	279	C	19	6.81%
		Thru	D	89	D	19	52.81%	84	E	19	**55.95%**	103	D	19	45.63%	128	C	19	36.72%	128	C	19	36.72%
		Right				28				28				28				28				28	
	SB																						
		Left	E	228	F	94	**41.23%**	260	E	94	**36.15%**	324	D	94	29.01%	384	C	94	24.48%	384	C	94	24.48%
		Thru	D	240	D	16	6.67%	105	D	16	15.24%	135	D	16	11.85%	199	C	16	8.04%	199	C	16	8.04%
		Right	D	204	D	26	12.75%	69	D	26	29.21%	115	D	26	22.61%	169	C	26	15.38%	169	C	26	15.38%
		TOTAL	B	5,589	D	670	11.99%	5,973	B	670	11.22%	7,981	B	670	8.39%	6,908	A	670	9.70%	6,908	A	670	9.70%
NW 83rd St	EB																						
		Left	-	253	D	27	10.67%	239	E	27	**11.30%**	203	D	27	13.30%	265	C	27	10.19%	270	C	27	10.00%
		Thru	D	1,038	F	186	**21.68%**	1,285	D	186	17.51%	1,097	C	186	16.96%	2,081	A	186	8.94%	2,163	A	186	8.60%
		Right				39				39		491	C	39	7.94%	648	A	39	6.02%	673	B	39	5.79%
	WB																						
		Left	F	679	F	0	0.00%	866	F	0	0.00%	1,015	D	0	0.00%	288	C	0	0.00%	298	C	0	0.00%
		Thru	A	2,022	B	171	9.50%	1,958	B	171	9.81%	1,934	B	171	8.84%	2,115	B	171	8.09%	2,204	B	171	7.76%
		Right	-			21				21		865	A	21	2.43%	659	B	21	3.19%	686	B	21	3.06%
	NB																						
		Left	F	197	F	32	**16.24%**	219	E	32	**14.61%**	242	D	32	13.22%	471	C	32	6.79%	494	C	32	6.48%
		Thru	-	246	F	48	**19.92%**	294	F	48	**16.67%**	184	E	48	**26.09%**	306	C	48	15.69%	466	C	48	10.52%
		Right	D			1				1		156	C	1	0.64%	260	C	1	0.38%			1	
	SB																						
		Left	-	164	F	21	**12.80%**	157	F	21	**13.38%**	242	D	21	8.68%	444	C	21	4.73%	444	C	21	4.73%
		Thru	-	219	F	49	**34.70%**	239	F	49	**31.80%**	184	D	49	26.63%	291	C	49	16.84%	427	C	49	17.80%
		Right	-			27				27		156	D	27	17.31%	247	C	27	10.93%			27	
		TOTAL	E	4,818	F	622	12.91%	5,257	E	622	11.83%	6,769	C	622	9.19%	8,075	B	622	7.70%	8,125	C	622	7.66%

* Volumes tested do not included the 37.5% reduction in background traffic to reduce double counting that may be associated with the SpringHills DRI.

SpringHills Significance Testing - State Road 222 (NW 39th Avenue) PM PEAK

			Without	No Modifications				Tier I Modifications				Tier II Modifications				Tier III				Tier IV			
			SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills	Lane	Movement	SpringHills	SpringHills
			LOS*	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance	Capacity	LOS	Trips	Significance
NW 83rd St	EB																						
		Left	-	204	D	58	28.43%	215	D	58	26.98%	217	D	58	26.73%	309	D	58	18.77%	299	D	58	19.40%
		Thru	E	1,285	F	391	**36.61%**	1,370	F	391	**34.53%**	1,490	F	391	**26.24%**	1,780	D	391	21.97%	1,990	C	391	19.65%
		Right				82				82		667	A	82	12.29%	554	B	82	14.80%	691	B	82	11.87%
	WB																						
		Left	F	403	F	0	0.00%	472	F	0	0.00%	578	F	0	0.00%	755	E	0	0.00%	806	E	0	0.00%
		Thru	A	1,691	C	359	23.83%	1,648	D	359	24.45%	1,863	C	359	19.27%	2,441	C	359	14.71%	2,741	B	359	13.10%
		Right	-			44				44		833	B	44	5.28%	760	B	44	5.79%	853	B	44	5.16%
	NB																						
		Left	F	270	F	67	**24.81%**	270	F	67	**24.81%**	398	F	67	**16.83%**	446	E	67	**15.02%**	427	F	67	**15.69%**
		Thru	-	309	F	101	**33.01%**	330	F	101	**30.91%**	353	D	101	28.61%	373	D	101	27.08%	517	F	101	**19.73%**
		Right	D			1				1		300	F	1	0.33%	317	F	1	0.32%			1	
	SB																						
		Left	-	204	F	44	**21.57%**	204	F	44	**21.57%**	181	F	44	**24.31%**	240	F	44	**18.33%**	239	F	44	**18.41%**
		Thru	-	262	F	103	**61.07%**	284	F	103	**56.34%**	235	E	103	**43.83%**	261	E	103	**39.46%**	366	E	103	**43.72%**
		Right	-			57				57		200	D	57	28.50%	222	D	57	25.68%			57	
		TOTAL	E	4,628	F	1,307	28.24%	4,793	F	1,307	27.27%	7,315	E	1,307	17.87%	8,458	E	1,307	15.45%	8,929	D	1,307	14.64%
NW 51st St	EB																						
		Left	C	160	D	0	0.00%	158	C	0	0.00%	155	D	0	0.00%	185	C	0	0.00%	179	D	0	0.00%
		Thru	D	1,736	E	296	**22.98%**	1,822	E	296	**21.90%**	1,772	D	296	16.70%	2,248	D	296	17.75%	2,150	D	296	18.56%
		Right				103				103		793	C	103	12.99%			103				103	
	WB																						
		Left	E	390	E	0	0.00%	412	D	0	0.00%	425	D	0	0.00%	479	B	0	0.00%	480	D	0	0.00%
		Thru	A	2,216	A	292	13.18%	2,350	A	292	12.43%	2,298	A	292	12.71%	3,115	A	292	9.37%	3,038	A	292	9.61%
		Right				0				0				0				0				0	
	NB																						
		Left	F	312	F	102	**32.69%**	343	F	102	**29.74%**	359	F	102	**28.41%**	343	F	102	**29.74%**	328	F	102	**31.10%**
		Thru	F	249	D	0	0.00%	187	F	0	0.00%	208	F	0	0.00%	198	E	0	0.00%	208	E	0	0.00%
		Right				0				0				0				0				0	
	SB																						
		Left	F	146	F	0	0.00%	100	F	0	0.00%	103	F	0	0.00%	123	F	0	0.00%	125	F	0	0.00%
		Thru	F	95	F	0	0.00%	116	F	0	0.00%	133	F	0	0.00%	150	E	0	0.00%	169	D	0	0.00%
		Right				0				0				0				0				0	
		TOTAL	D	5,304	E	793	14.95%	5,488	D	793	14.45%	6,246	D	793	12.70%	6,841	C	793	11.59%	6,677	D	793	11.88%
NW 43rd Street	EB																						
		Left	F	579	F	33	**5.70%**	579	F	33	**5.70%**	598	F	33	**5.52%**	687	F	33	4.80%	836	D	33	3.95%
		Thru	D	1,416	C	205	14.48%	1,416	C	205	14.48%	1,416	C	205	14.48%	1,807	C	205	11.34%	2,173	B	205	9.43%
		Right	B	633	A	57	9.00%	633	A	57	9.00%	633	A	57	9.00%	563	B	57	10.12%	537	A	57	10.61%
	WB																						
		Left	E	386	F	0	0.00%	386	F	0	0.00%	399	F	0	0.00%	470	E	0	0.00%	597	D	0	0.00%
		Thru	F	1,217	F	203	**16.68%**	1,217	F	203	**16.68%**	1,210	F	203	**16.78%**	1,486	F	203	**13.66%**	1,727	D	203	11.75%
		Right	D	544	C	0	0.00%	544	C	0	0.00%	541	E	0	0.00%	463	E	0	0.00%	427	F	0	0.00%
	NB																						
		Left	F	301	F	57	**18.94%**	301	F	57	**18.94%**	332	F	57	**17.17%**	396	F	57	**14.39%**	418	F	57	**13.64%**
		Thru	F	1,062	F	0	0.00%	1,062	F	0	0.00%	1,119	F	0	0.00%	1,143	F	0	0.00%	1,371	E	0	0.00%
		Right	E	475	F	0	0.00%	475	F	0	0.00%	500	E	0	0.00%	511	D	0	0.00%	427	E	0	0.00%
	SB																						
		Left	F	201	F	0	0.00%	201	F	0	0.00%	221	F	0	0.00%	211	F	0	0.00%	269	F	0	0.00%
		Thru	E	863	F	0	0.00%	863	F	0	0.00%	1,005	E	0	0.00%	853	D	0	0.00%	1,150	D	0	0.00%
		Right	F	386	F	32	**8.29%**	386	F	32	**8.29%**	449	F	32	**7.13%**	426	F	32	**7.51%**	358	E	32	**8.94%**
		TOTAL	F	8,063	F	587	7.28%	8,063	F	587	7.28%	8,423	F	587	6.97%	9,016	F	587	6.51%	10,290	D	587	5.70%
NW 34th Street	EB																						
		Left	F	337	F	15	4.45%	386	F	15	3.89%	389	F	15	3.86%	491	E	15	3.05%	491	E	15	3.05%
		Thru	C	1,453	D	117	10.87%	1,410	E	117	**11.21%**	1,345	D	117	8.70%	1,441	C	117	8.12%	1,441	C	117	8.12%
		Right				41				41		602	C	41	6.81%	644	B	41	6.37%	644	B	41	6.37%
	WB																						
		Left	E	226	F	0	0.00%	199	F	0	0.00%	236	F	0	0.00%	264	F	0	0.00%	264	F	0	0.00%
		Thru	F	1,265	F	116	**9.17%**	1,440	F	116	**8.06%**	1,416	F	116	**8.19%**	1,734	D	116	6.69%	1,734	D	116	6.69%
		Right				0				0		633	C	0	0.00%	540	C	0	0.00%	540	C	0	0.00%
	NB																						
		Left	F	292	F	40	**13.70%**	343	F	40	**11.66%**	354	F	40	**11.30%**	453	D	40	8.83%	453	D	40	8.83%
		Thru	F	466	F	0	0.00%	766	E	0	0.00%	1,113	D	0	0.00%	970	C	0	0.00%	970	C	0	0.00%
		Right	C	396	C	0				0				0				0				0	
	SB																						
		Left	D	182	D	0	0.00%	172	D	0	0.00%	183	E	0	0.00%	189	D	0	0.00%	189	D	0	0.00%
		Thru	F	349	F	0	0.00%	326	F	0	0.00%	335	F	0	0.00%	387	E	0	0.00%	387	E	0	0.00%
		Right	C	297	C	15	5.05%	277	C	15	5.42%	285	E	15	**5.26%**	329	C	15	4.56%	329	C	15	4.56%
		TOTAL	F	5,263	F	344	6.54%	5,319	F	344	6.47%	6,891	F	344	4.99%	7,442	D	344	4.62%	7,442	D	344	4.62%

* Volumes tested do not included the 37.5% reduction in background traffic to reduce double counting that may be associated with the SpringHills DRI.

APPENDIX C

STATE ROAD 222 (NW 39TH AVENUE) DESCRIPTION AND ILLUSTRATION OF TIER 1 AND TIER 2 MODIFICATIONS

Source: City of Gainesville Public Works Department

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NW 39th Avenue Intersection Modifications – Springhills DRI

The Springhills DRI will require intersection modifications at the signalized intersections on NW 39th Avenue (State Road 222) from NW 34th Street to NW 98th Street. These modifications fall into two categories:

1. Addition of left and/or right turn lanes and traffic signal reconstruction
2. Traffic Management System construction

Addition of Left and/or Right Turn Lanes and Traffic Signal Reconstruction

The following is a list of intersection modifications on NW 39th Avenue from NW 34th Street to NW 98th Street. The modifications are classified as Tier 1 and Tier 2, which are defined as follows:

- Tier 1 Modifications – Modifications that can be constructed within the existing curb line for curb and gutter street sections or pavement can be added and roadside swales reworked for non curb and gutter street sections. Tier 1 modifications require no (or minimal) right of way acquisitions, utility relocations and landscape removal. Also, Tier 1 modifications do not have any impact on businesses/residences adjacent to the street. Tier 1 modifications typically would not require relocation of traffic signal poles. However, the addition of traffic signal heads and/or signs on existing span wire and/or mast arm installations will require a structural review of the poles at each intersection. Replacement of traffic signal poles for Tier 1 improvements is not included in the cost estimates for this analysis. However, the replacement of traffic signal poles could be required in order to actually construct a Tier 1 improvement.
- Tier 2 Modifications – Modifications that require right of way acquisitions, utility relocations, landscape removals and will impact adjacent businesses/residences. Tier 2 modifications would typically require relocation of the curb and gutter and possibility storm drainage relocations. Also, Tier 2 modifications could be constructed in conjunction with new roadway construction at the intersection. Tier 2 modifications include all traffic signal modifications including replacement of concrete strain and mast arm poles. Any traffic signal reconstruction must meet Metropolitan Transportation Planning Organization design standards and traffic signal control equipment must be upgraded to Traffic Management System standards.

NW 34th Street

Tier 1:

- EB dual lefts (need to provide 2nd NB receiving lane)
- SB dual lefts
- NB dual lefts + shared through/right or NB single left + single through + single shared through/right

Tier 2:

- EB right turn lane
- WB right turn lane
- Reconstruct traffic signal with mast arms, add $250,000 to intersection construction costs

NW 43rd Street

Tier 1:

- SB right turn lane – increase length of existing bay by 100 – 150 feet

Tier 2:

- NB dual lefts
- SB dual lefts
- Reconstruct traffic signal with mast arms, add $250,000 to intersection reconstruction costs

NW 51st Street

Tier 1:

- NB dual lefts

Tier 2:

- EB right turn lane, 150 ft bay
- Reconstruct traffic signal with mast arms, add $250,000 to intersection reconstruction costs

NW 83rd Street

Tier 1:

- EB dual lefts (requires new street construction on north side of intersection)
- WB dual lefts (need to provide 2nd SB receiving lane)

Tier 2:

- NB dual lefts
- SB dual lefts (requires new street construction on north side of intersection)
- EB/WB/NB/SB right turn lanes
- Reconstruct traffic signal with mast arms, add $250,000 to intersection reconstruction costs

NW 91st Street

Note – all modifications require elimination of NB/SB traffic signal split phasing

Tier 1:

- NB dual lefts
- NB shared through + right
- SB dual lefts

Tier 2:

- EB right turn lane
- WB right turn lane
- Reconstruct traffic signal with mast arms, add $250,000 to intersection reconstruction costs

NW 92nd Court

Tier 1:

- EB dual lefts
- WB dual lefts
- Replace 2 mast arm poles, add $125,000 to intersection reconstruction costs

Tier 2:

- WB right turn lane
- EB right turn lane
- Reconstruct traffic signal with 4 new mast arm poles, add $250,000 to intersection reconstruction costs (if intersection reconstructed, the tier 1 costs would be included in the $250,000, the costs are not added together)

I – 75 NB Off Ramps
No modifications practical

I – 75 SB Off Ramps
No modifications practical

NW 98th Street
Tier 1:

- EB dual lefts (requires new road construction on north side of intersection)
- WB dual lefts (requires 2nd SB receiving lane)
- Replace 1 mast arm poles, add $50,000 to intersection reconstruction costs

Tier 2

- NB dual lefts
- SB dual lefts (requires new road construction on north side of intersection)
- EB/WB/NB/SB right turn lanes
- Reconstruct traffic signal with 3 new mast arm poles, add $200,000 to intersection reconstruction costs (if intersection reconstructed, the tier 1 costs would be included in the $200,000, the costs are not added together)

Traffic Management System Construction
In November of 2005, the Metropolitan Transportation Planning Organization approved the Year 2025 Livable Community Reinvestment Plan – Cost Feasible Plan. The top ranked project in the Year 2025 Plan was the Gainesville Traffic Management System (TMS). The primary goals of the TMS are to move traffic effectively, facilitate congestion management and assist with incident management. The TMS will be implemented along the major highway corridors throughout the Gainesville urban area.

There are two key components for construction and operation of the TMS:

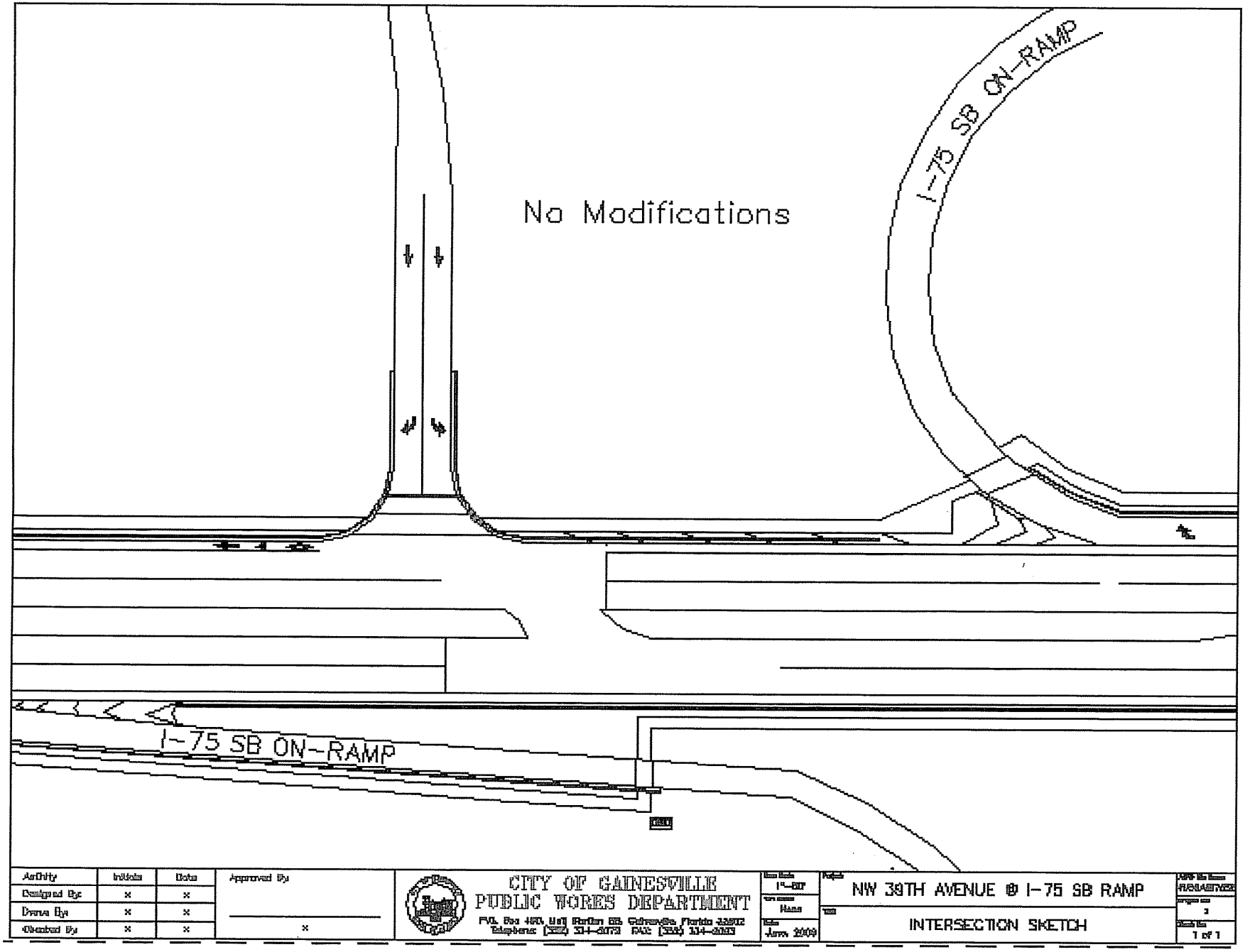
1. Traffic signal controllers and cabinets – All intersections in the highway corridor must operate with TMS approved controllers and cabinets. If any traffic signal is reconstructed, the reconstruction includes installation of the TMS control equipment. In order to maintain traffic signal coordination through the corridor, all the intersections in the corridor must operate with TMS control equipment, changing just one intersection requires changing all the intersections in the corridor. (The existing traffic control equipment is outdated technology and cannot communicate with the new TMS technology.) For the Springhills DRI, any Tier 2 improvements that involve reconstruction of a traffic signal will require installation of the TMS control equipment at that intersection. Therefore, the installation of TMS control equipment at any single intersection will require

installation of TMS control equipment at all the intersections. This has been included in the TMS cost estimate for the Springhills DRI.

2. Communication equipment – The TMS requires fiber optic communication cable for system communication. The cost to install the appropriate fiber optic communication cable along NW 39th Avenue from NW 34th Street to NW 98th Street has been included in the TMS cost estimate for the Springhills DRI.

The Traffic Management System cost estimate for the Springhills DRI (NW 39th Avenue corridor) is $650,000. This includes the traffic signal controllers/cabinets, fiber optic communications cable, other associated equipment and construction costs. This cost is triggered if any Tier 2 modification involves reconstruction of a traffic signal. Any questions concerning the TMS should be referred to the City of Gainesville Public Works Department.

CofG – PWD
6/16/06



Authority	Initials	Date
Designed By:	x	x
Drawn By:	x	x
Checked By:	x	x

Approved By:

x

CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
P.O. Box 490, Sta 58 Station 58 Gainesville, Florida 32602
Telephone: (352) 334-2073 FAX: (352) 334-2083

1"=50'

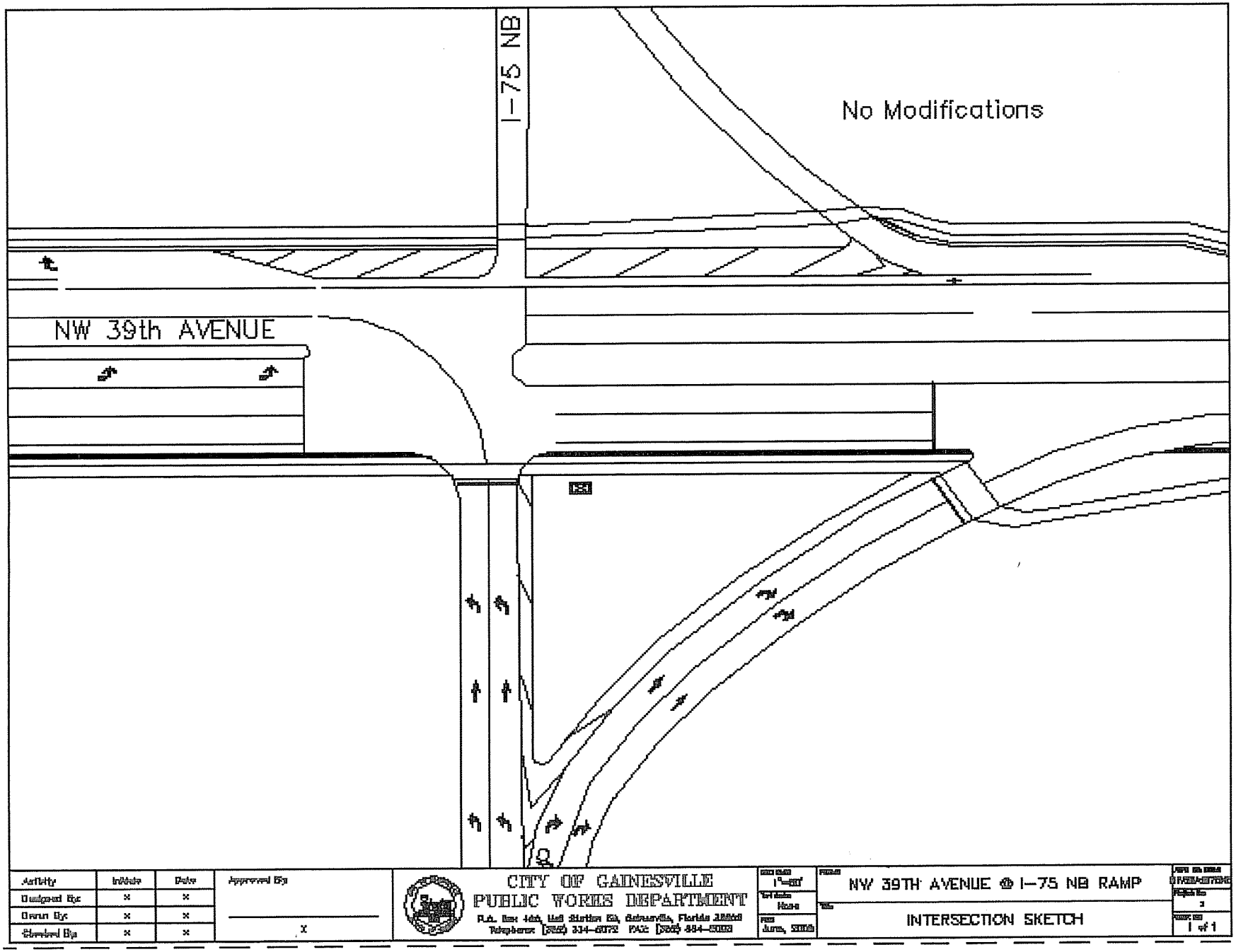
Hand

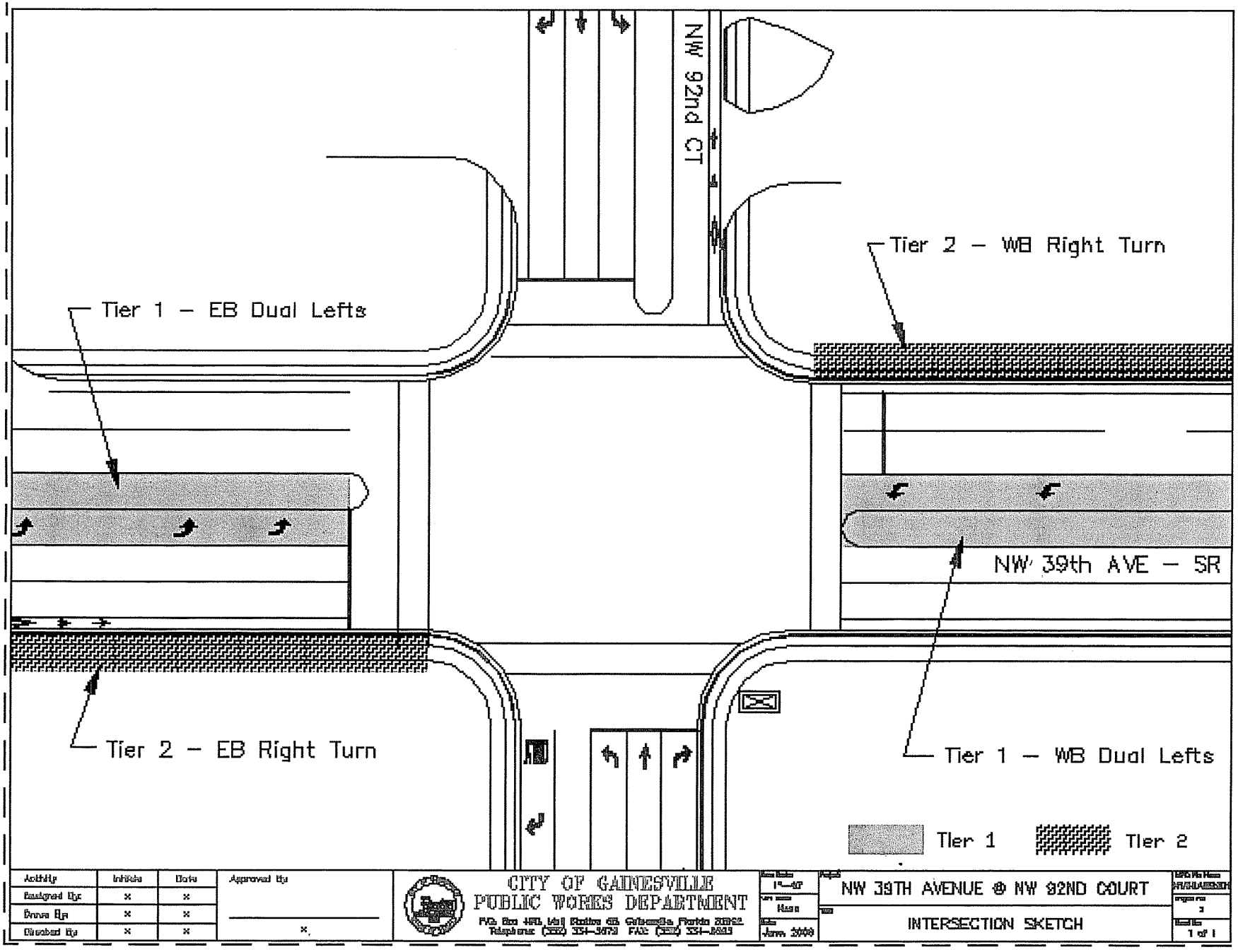
June 2009

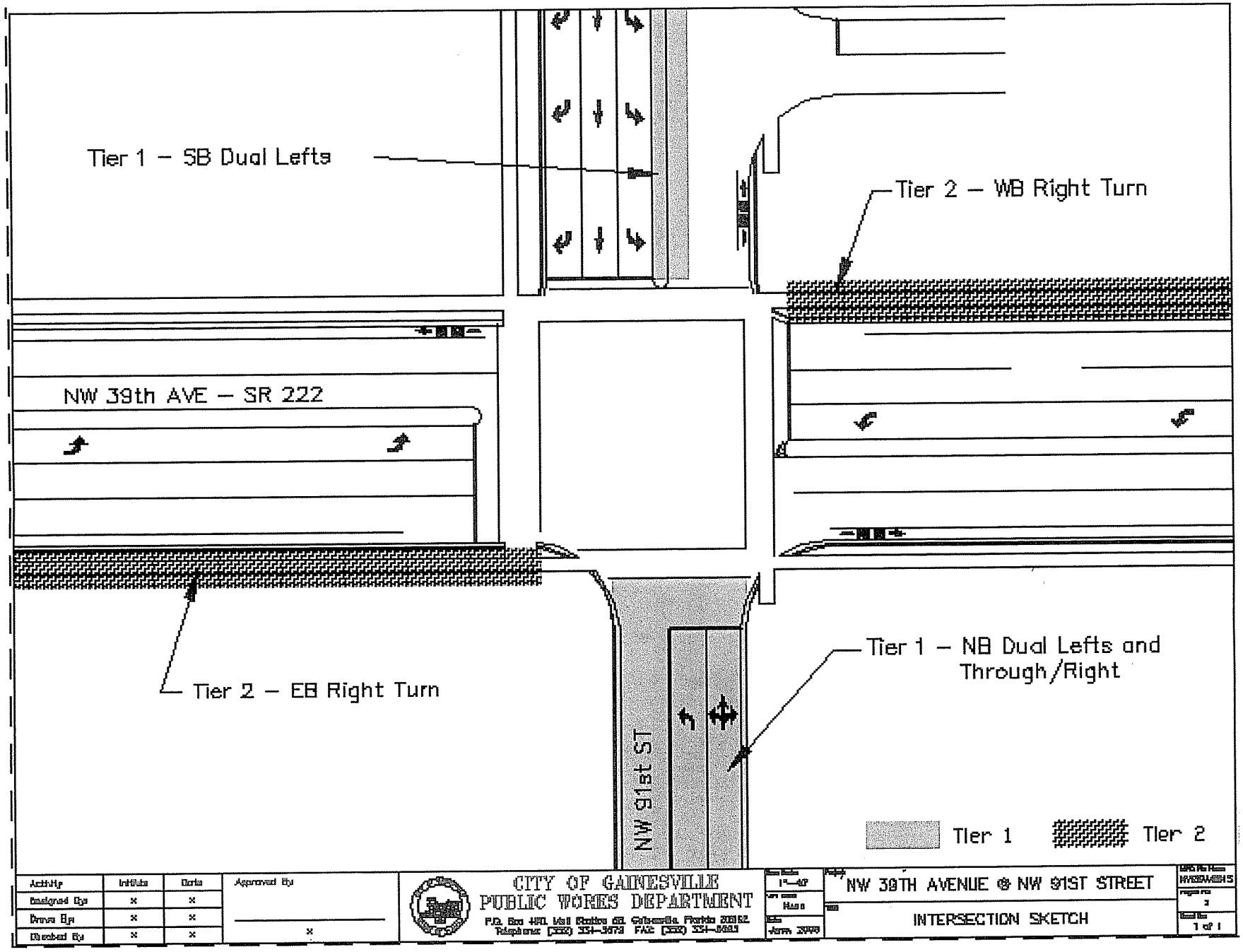
NW 39TH AVENUE @ I-75 SB RAMP

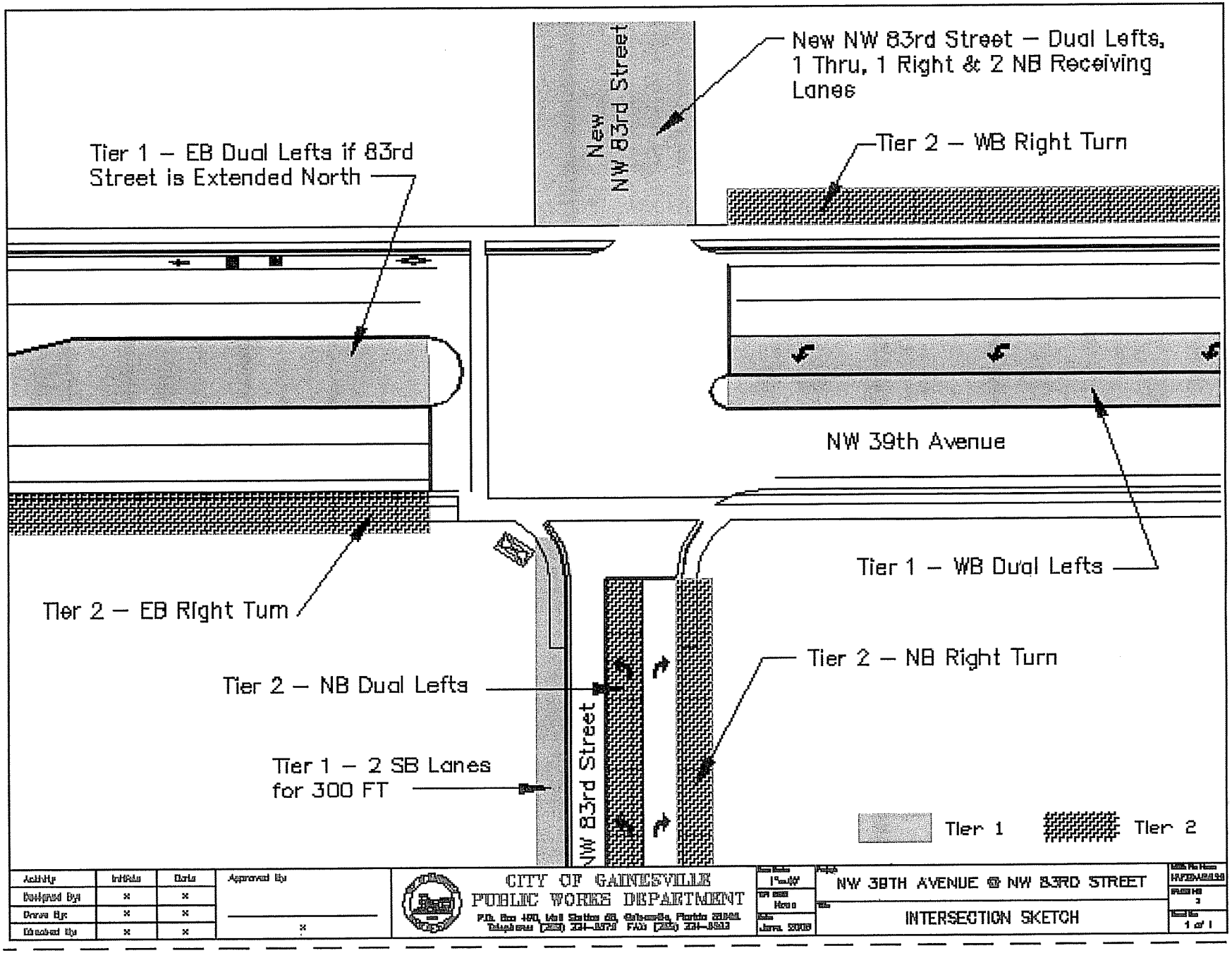
INTERSECTION SKETCH

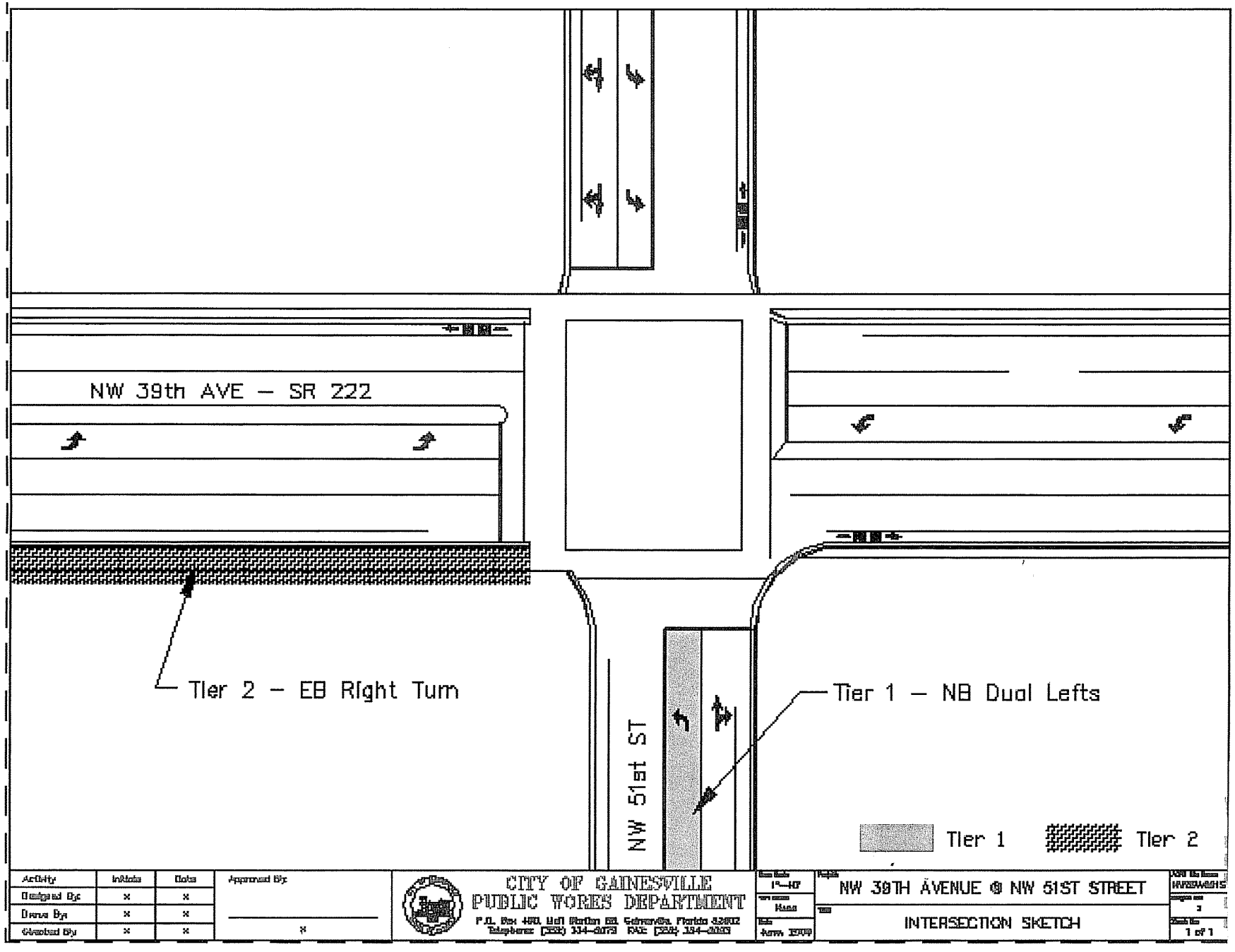
1 of 1

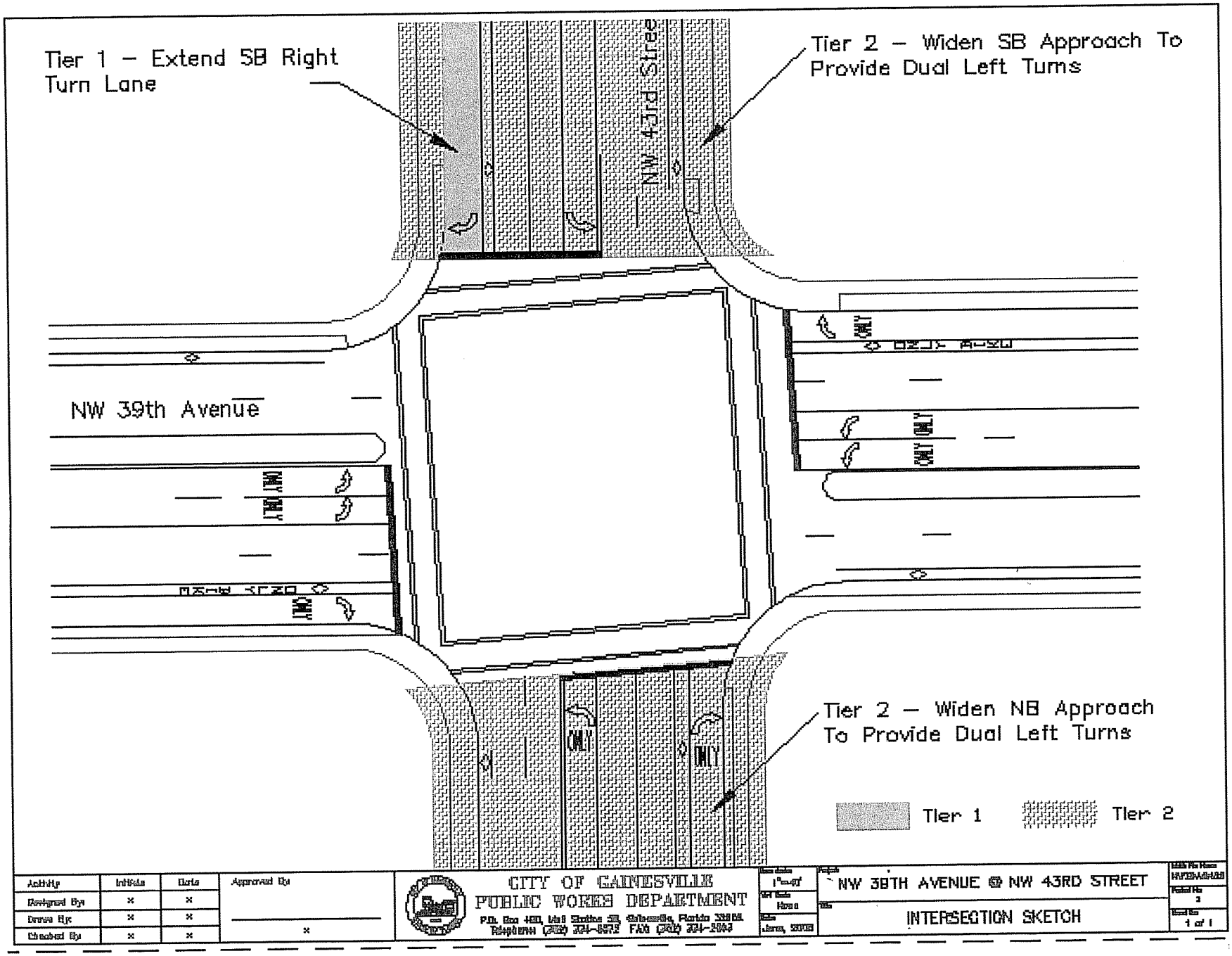

I-75 NB
No Modifications
NW 39th AVENUE
CSX
Activity
Initials
Date
Designed By
Drawn By
Checked By
Approved By
CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
NW 39TH AVENUE @ I-75 NB RAMP
INTERSECTION SKETCH
1 of 1


NW 92nd CT
Tier 2 – WB Right Turn
Tier 1 – EB Dual Lefts
NW 39th AVE – SR
Tier 2 – EB Right Turn
Tier 1 – WB Dual Lefts
Tier 1
Tier 2
Activity
Initials
Date
Approval By
Designed By
Drawn By
Checked By
CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
NW 39TH AVENUE @ NW 92ND COURT
INTERSECTION SKETCH
1"=40'
June 2008
1 of 1


Tier 1 – SB Dual Lefts
Tier 2 – WB Right Turn
NW 39th AVE – SR 222
Tier 2 – EB Right Turn
NW 91st ST
Tier 1 – NB Dual Lefts and Through/Right
Tier 1
Tier 2
Activity
Initials
Date
Designed By
Drawn By
Checked By
Approved By
CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
P.O. Box 490, Mail Station 68, Gainesville, Florida 32602
Telephone: (352) 334-3979 FAX: (352) 334-3993
1"=40'
None
June 2009
NW 39TH AVENUE @ NW 91ST STREET
INTERSECTION SKETCH
1 of 1


New NW 83rd Street
New NW 83rd Street – Dual Lefts, 1 Thru, 1 Right & 2 NB Receiving Lanes
Tier 1 – EB Dual Lefts if 83rd Street is Extended North
Tier 2 – WB Right Turn
NW 39th Avenue
Tier 1 – WB Dual Lefts
Tier 2 – EB Right Turn
Tier 2 – NB Right Turn
Tier 2 – NB Dual Lefts
Tier 1 – 2 SB Lanes for 300 FT
NW 83rd Street
Tier 1
Tier 2
Activity
Initials
Date
Approved By
Designed By
Drawn By
Checked By
CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
NW 39TH AVENUE @ NW 83RD STREET
INTERSECTION SKETCH


NW 39th AVE – SR 222
Tier 2 – EB Right Turn
NW 51st ST
Tier 1 – NB Dual Lefts
Tier 1
Tier 2
CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
NW 39TH AVENUE @ NW 51ST STREET
INTERSECTION SKETCH



Activity	Initials	Date
Designed By	×	×
Drawn By	×	×
Checked By	×	×

Approved By

×

CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
P.O. Box 490, Mail Station 30, Gainesville, Florida 32602
Telephone (352) 334-5072 FAX (352) 334-2043

1"=40'

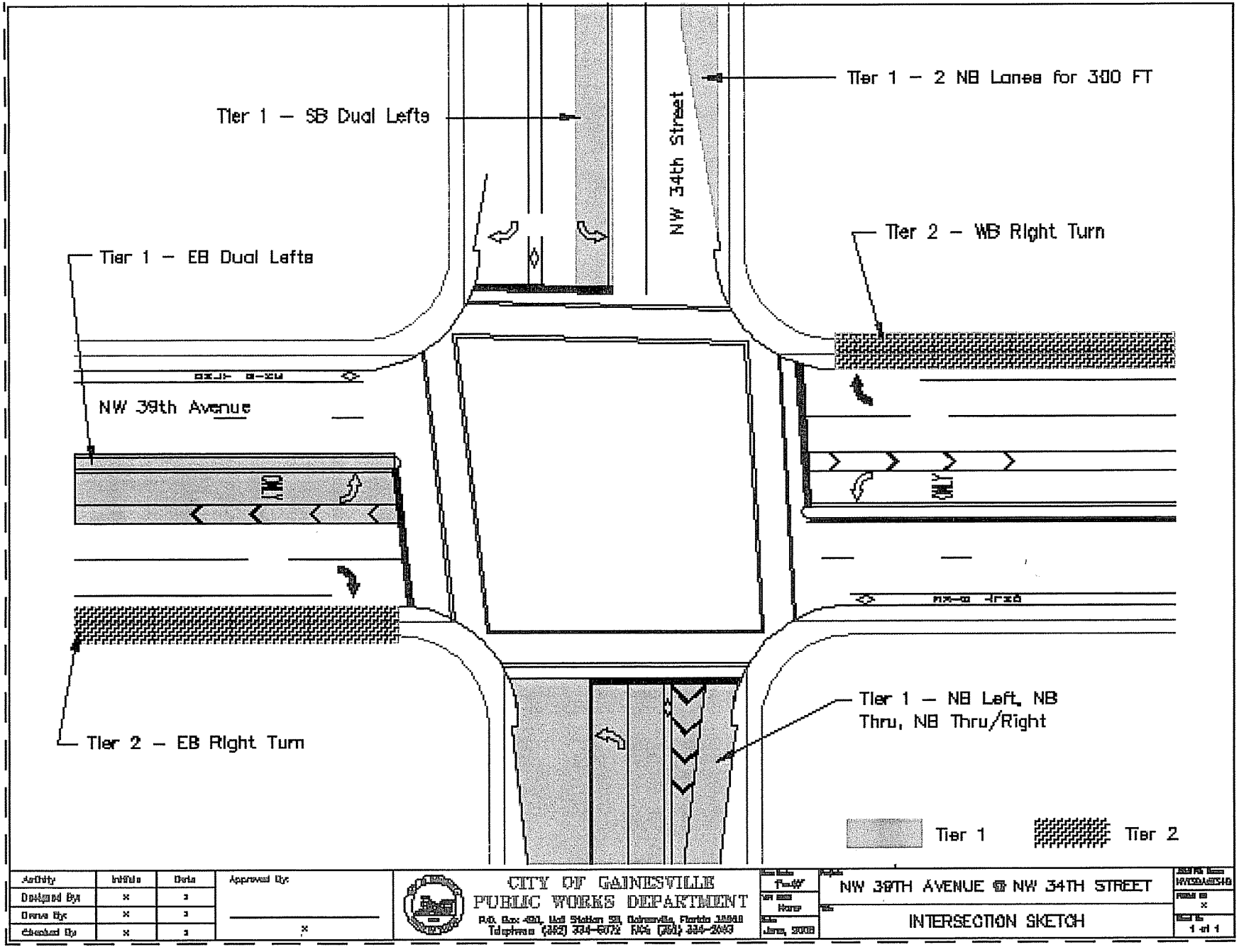
Horiz.

June, 2003

NW 39TH AVENUE @ NW 43RD STREET

INTERSECTION SKETCH

1 of 1



Activity	Initials	Date
Designed By	x	x
Drawn By	x	x
Checked By	x	x

Approved By: x

CITY OF GAINESVILLE
PUBLIC WORKS DEPARTMENT
P.O. Box 490, Mail Station 58, Gainesville, Florida 32648
Telephone (352) 334-5022 FAX (352) 334-2649

Project: NW 39TH AVENUE @ NW 34TH STREET

Title: INTERSECTION SKETCH

Date: June, 2008

Sheet No.: 1 of 1

APPENDIX D

SPRINGHILLS DRI SUBSTANTIAL DEVIATION SIGNIFICANCE TESTING LOCAL INTERSECTIONS

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SpringHills Significance Testing - Local Intersections PM PEAK

			No Modifications				Modifications				
			Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Modifications Added
NW 23rd Avenue at Fort Clarke Boulevard	**EB**						No Modifications needed.				
		Thru	1,335	**A**	54	4.04%					
		Right	1,134	**A**	97	8.55%					
	WB										
		Left	644	**C**	11	1.71%					
		Thru	1,335	**A**	58	4.34%					
	NB										
		Left	321	**D**	94	29.28%					
		Right	287	**C**	15	5.23%					
		TOTAL	5,056	**B**	329	6.51%					
NW 23rd Avenue at NW 83rd Street	**EB**										Add EBL (Dual), SBL (Dual), SBR (Dual). These modifications are subject to available ROW.
		Left	401	**F**	45	**11.22%**	554	**D**	45	8.12%	
		Thru	1,211	**B**	26	2.15%	1,303	**A**	26	2.00%	
	WB										
		Thru	792	**F**	29	3.66%	909	**D**	29	3.19%	
		Right	673	**C**	43	6.39%	773	**B**	43	5.56%	
	SB										
		Left	502	**E**	64	**12.75%**	687	**D**	64	9.32%	
		Right	449	**F**	41	**9.13%**	558	**C**	41	7.35%	
		TOTAL	4,028	**F**	248	6.16%	4,784	**C**	248	5.18%	
NW 23rd Avenue at NW 98th Street	**EB**										Add WBL (Dual)
		Left	61	**E**	0	0.00%	14	**D**	0	0.00%	
		Thru	44	**E**	0	0.00%	24	**D**	0	0.00%	
		Right			0				0		
	WB										
		Left	693	**F**	154	22.22%	893	**D**	154	17.25%	
		Thru	608	**C**	3	0.49%	427	**C**	3	0.70%	
		Right			0				0		
	NB										
		Left	326	**C**	0	0.00%	378	**B**	0	0.00%	
		Thru	622	**E**	205	**33.28%**	719	**C**	205	28.79%	
		Right			2				2		
	SB										
		Left	300	**F**	150	**50.00%**	344	**D**	150	43.60%	
		Thru	904	**C**	207	22.90%	1,001	**B**	207	20.68%	
		Right			0				0		
		TOTAL	3,558	**E**	721	20.26%	3,800	**C**	721	18.97%	

SpringHills Significance Testing - Local Intersections PM PEAK

			No Modifications				Modifications				
			Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Lane Capacity	Movement LOS	SpringHills Trips	SpringHills Significance	Modifications Added
NW 39th Avenue at NW 98th Street	**EB**										Add NBR.
		Left	233	**E**	138	**59.23%**	229	**C**	138	60.26%	
		Thru	742	**D**	82	13.75%	690	**D**	82	14.78%	
		Right			20				20		
	WB										
		Left	395	**C**	0	0.00%	354	**C**	0	0.00%	
		Thru	1,021	**C**	81	7.93%	965	**C**	81	8.39%	
		Right			0				0		
	NB										
		Left	473	**C**	20	4.23%	469	**C**	20	4.26%	
		Left/Thru	797	**C**	213	26.73%	843	**B**	213	25.27%	
		Right			0		717	**B**	0	0.00%	
	SB										
		Left	292	**C**	0	0.00%	363	**C**	0	0.00%	
		Thru	484	**D**	206	71.07%	499	**D**	206	68.94%	
		Right			138				138		
		TOTAL	4,437	**D**	760	17.13%	5,129	**C**	760	14.82%	
NW 53rd Avenue at NW 83rd Street Extension	**EB**										No Modifications needed.
		Thru	1,339	**A**	0	3.88%					
		Right			52						
	WB										
		Left	1,150	**A**	61	5.30%					
		Thru			0						
	NB										
		Left	244	**C**	52	21.31%					
		Right	218	**C**	61	27.98%					
		TOTAL	2,951	**A**	226	7.66%					

APPENDIX E

SPRINGHILLS DRI SUBSTANTIAL DEVIATION
ALACHUA COUNTY PUBLIC WORKS DEPARTMENT
COST ESTIMATES

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SPRINGHILLS DRI
Estimated Project Costs

NW 83rd Street (NW 23rd Avenue to NW 39th Avenue): 1.0 Mile
2011 Build: reconstruct existing 2-lane facility to a 4-lane facility
Inflation Factor (1.31)
Construction: $3,087,400 x 1.31 = $4,044,494
Signals (4): $250,000 x 1.31 = $1,310,000
Intersections (2): $300,000 x 1.31 = $786,000
Subtotal: $6,140,494
Engineering (1.46) x $6,140,494 = **$8,965,121** (**NOTE:** No Right-of-Way for drainage or corners included)

Fort Clarke Boulevard (Newberry Road to NW 23rd Avenue): 1.1 Mile
2012 Build: reconstruct existing 2-lane facility to a 4-lane facility
Inflation Factor (1.35)
Construction: $3,087,400 x 1.1 mile x 1.35 = $4,584,789
Signals (3): $250,000 x 1.35 = $1,012,500
Intersections (2): $300,000 x 1.35 = $810,000
Subtotal: $6,407,289
Engineering (1.46) x $6,407,289 = **$9,354,642** (**NOTE:** No Right-of-Way for drainage or corners included)

NW 83rd Street Extension (NW 39th Avenue to Millhopper Road): 1.6 Miles
2009 Build: construct new 2-lane divided facility
Inflation Factor: (1.22)
Construction: $3,449,500 x 1.6 miles x 1.22 = $6,733,424
Signals (3): $250,000 x 1.22 = $915,000
Intersections (2): $300,000 x 1.22 = $732,000
Subtotal: $8,380,424
Engineering (1.46) x $8,380,424 = **$12,235,419** (**NOTE:** No Right-of-Way for drainage or corners included)

NW 98th Street Extension (NW 39th Avenue to NW 83rd Street): 1.8 Miles
2009 Build: construct new 2-lane divided facility with Bridge (4-lane)
Inflation Factor: (1.22)
Construction: $3,449,500 x 1.8 miles x 1.22 = $7,575,102
Signals (2): $250,000 x 1.22 = $610,000
Intersections (1): $300,000 x 1.22 = $366,000
Bridge: 250 feet (length) x 100 feet (wide) = 25,000 Square Feet x $110/SF x 1.22 = $3,355,000
Subtotal: $11,906,102
Engineering (1.46) x $11,906,102 = **$17,382,909** (**NOTE:** No Right-of-Way for drainage or corners included)

Source: FDOT 2004 Construction Costs and Alachua County Public Works Department

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